R0173

Denis L. Brown

Shell Oil Products US
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October 17, 2005

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

Re: Third Quarter 2005 Monitoring Report
Shell-branded Service Station
2120 Montana Street
Oakland, California
SAP Code 135675
Incident No. 98995740

Dear Mr. Wickham:

Attached for your review and comment is a copy of the *Third 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

October 17, 2005

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

Re: **Third Quarter 2005 Monitoring Report**
Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident #98995740
Cambria Project #247-0733-002
ACHCSA Case # RO-0173

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. The site is located at the northwest corner of Montana Street and Fruitvale Avenue in Oakland, California (Figures 1 and 2).

REMEDIATION SUMMARY

Mobile Groundwater Extraction (GWE): As recommended in our August 15, 2001 *Agency Response*, Cambria began weekly GWE in August 2001 from wells MW-1 and TBW-N using a vacuum truck. Mobile GWE ended on March 5, 2003 due to construction of the fixed GWE system. As discussed below, weekly mobile GWE from wells MW-1 and TBW-N resumed on August 19, 2003 and stopped on January 6, 2004. The cumulative estimated mass of total petroleum hydrocarbons as gasoline (TPHg) and methyl tertiary butyl ether (MTBE) removed by mobile GWE at the site is 25.3 pounds and 8.13 pounds, respectively, from a total of approximately 55,711 gallons of extracted groundwater. Additionally, approximately 2.68 pounds of separate-phase hydrocarbons (SPH) have been removed at the site through manual bailing and GWE.

Fixed GWE System Installation: Our September 4, 2002 work plan proposed installing a fixed GWE system at the site. Alameda County Health Care Services Agency (ACHCSA) approved this work plan in a September 19, 2002 letter. System construction began in early February 2003, and system start-up occurred on April 2, 2003.

Cambria Environmental Technology, Inc.

5900 Hollis Street
Suite A
Emeryville, CA 94608
Tel (510) 420-0700
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On July 23, 2003, Cambria observed SPH within the GWE system. The GWE system was not operating at that time and had not operated since July 18, 2003. Cambria measured approximately 2 feet of SPH in the GWE system's transfer tank. Cambria also measured approximately 0.15 feet of SPH in tank backfill well TBW-N and 2.25 feet in monitoring well MW-1. On August 8, 2003, a vacuum truck removed SPH from wells TBW-N and MW-1. Once the SPH was removed, the GWE system was cleaned, flushed, and rinsed. The SPH and groundwater mixture was off-hauled to the Martinez Refining Company in Martinez, California for disposal. Weekly mobile GWE (VacOps) resumed on August 19, 2003 to further address SPH, and continued until January 6, 2004.

Cambria monitored SPH thickness in wells TBW-N and MW-1 prior to several VacOps events. SPH had not been detected in backfill well TBW-N as of December 8, 2003, although 3.49 feet of SPH were measured in well MW-1 on that day. Blaine Tech Services, Inc. (Blaine) of San Jose, California also measured no SPH in TBW-N and 0.07 feet of SPH in MW-1 during the quarterly sampling event on December 29, 2003.

In November 2003, Able Maintenance (Able) of Santa Rosa, California exposed the regular grade underground storage tank for inspection by the tank manufacturer (Xerxes Company). Xerxes Company found a small crack on the bottom of the tank. The crack was investigated, repaired with fiberglass resin, and then air tested for the City of Oakland Fire department by the Xerxes Company. After the Xerxes Company completed their air test, Able called in a third-party tank tester to precision test the tank. Afford-a-Test completed that test, and the tank was certified as tight. Able has monitored the tank through Shell's Veeder-Root monitoring system since the repair, and it has passed the associated pressure tests.

Cambria supplemented the GWE system with an oil-water separator in March 2004. The system was restarted on April 21, 2004 to collect samples to verify discharge compliance. The system's effluent was not discharged, but was instead captured in a storage tank. The results of this sampling event demonstrated compliance with the discharge permit. On May 25, 2004, following completion of a fuel system upgrade for this site, Cambria restarted the GWE system to operate continuously.

THIRD QUARTER 2005 ACTIVITIES

Groundwater Monitoring: Blaine gauged and sampled the site wells, calculated groundwater elevations, and compiled the analytical data. Cambria prepared a vicinity map that includes previously submitted well survey information (Figure 1) and a groundwater elevation contour

map (Figure 2). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

Oxygenate Analysis: At Shell's request, samples collected from all wells were also analyzed for oxygenates di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME), and tert-butyl alcohol (TBA). No DIPE, ETBE or TAME were detected in any samples. TBA was detected in samples from wells MW-1, MW-2 and TBW-N at concentrations ranging from 1,700 parts per billion (ppb) in TBW-N to 13,000 ppb in MW-1.

Remedial Activities: GWE system analytical data is summarized in Table 1. GWE system operational data and mass removal calculations are presented in Table 2. As of September 2, 2005, a total of 386,832 gallons of groundwater has been extracted. A total of 16.7 pounds of TPHg, 0.654 pounds of benzene, and 4.04 pounds of MTBE has been recovered.

Figure 2 does not demonstrate the typical effects of continuous GWE from MW-1 on the groundwater gradient because due to an air compressor malfunction, the GWE system was not pumping water when samples were collected.

Site Investigation Activities: During the third quarter 2005, Cambria completed the site investigation activities proposed in our January 18, 2005 *Interim Remediation Report,* including soil vapor sampling and a survey of neighboring residences' building structures.

ANTICIPATED FOURTH QUARTER 2005 ACTIVITIES

Groundwater Monitoring: Blaine will gauge and sample all wells, and tabulate the data. Cambria will prepare a monitoring report.

Oxygenate Analysis: Due to repeated detection of TBA in site wells, Shell recommends adding TBA to the analytical suite for future samples collected from wells MW-1, MW-2 and TBW-N.

Remedial Activities: Per Cambria's standard operating procedures and East Bay Municipal Utilities District (EBMUD) treatment-system monitoring requirements, Cambria will perform routine operation and maintenance of the GWE system. Cambria will monitor concentration trends and GWE system effectiveness. Cambria will prepare a semi-annual discharge compliance report in accordance with the EBMUD wastewater discharge permit. Operational data will be provided in the fourth quarter 2005 quarterly monitoring report.

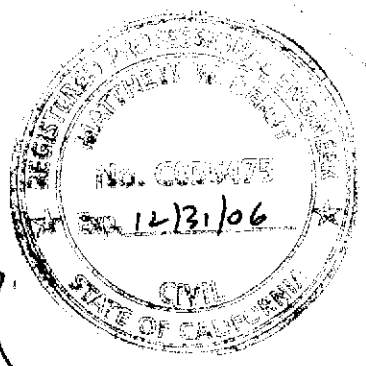
Site Investigation Activities: Cambria will submit a report describing the recent site investigation activities to ACHCSA by October 24, 2005.

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



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

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

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

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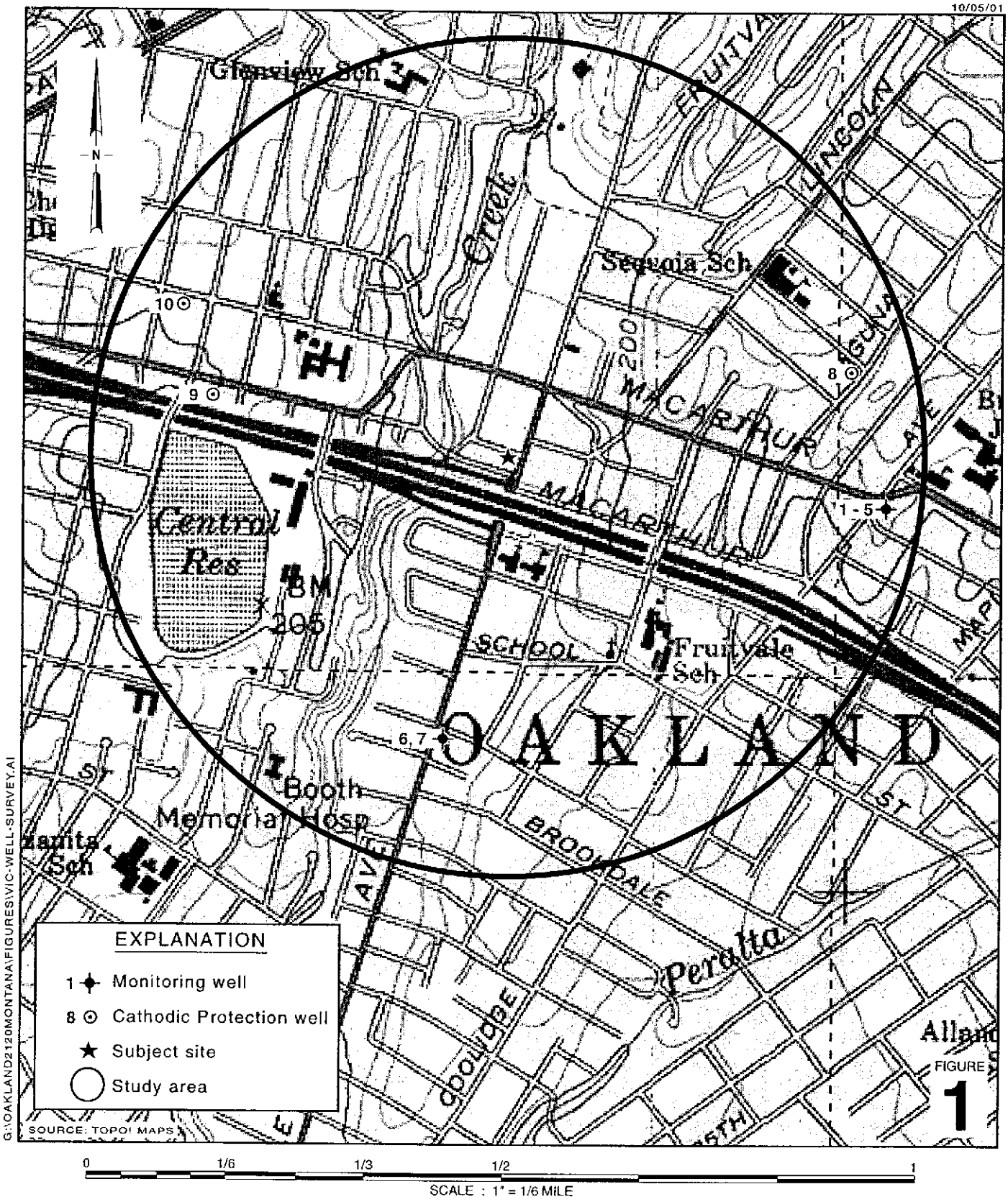

Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident #98995740

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Vicinity / Area Well Survey Map
(1/2-Mile Radius)

09/23/05

EXPLANATION

- SB-4 ◉ Soil boring location (06/14-16/05)
- SV-D ✚ Soil vapor sampling location (06/14-16/05)
- SB-7 ▪ Attempted soil boring location (6/15/05)
- SV-A ✶ Attempted soil vapor sampling location (6/14/05)
- MW-1 ✚ Well used for groundwater extraction
- MW-2 ✚ Monitoring well location
- TBW-N ✚ Tank backfill well location
- SB-1 ◉ Cambria soil boring location (10/99)
- D-1 ● Cambria soil sampling location (11/97)
- INF ● GWE system sampling location
- → Groundwater flow direction
- xx.xx Groundwater elevation contour, in feet above mean sea level (msl), 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.
- Electrical and overhead electric line (E, OE)
- Sanitary sewer (SS)
- Water line (W)
- Telecommunications line (T)
- Remediation piping (R)
- Discharge line (D)
- Product dispenser number

Groundwater Gradient Direction
(1Q01 through 3Q05)

Commercial property

Sausal Creek
(730 ft. SW)

Location of Sensitive Receptor Relative to Site

sidewalk
power pole
10"Ø SS
SLOAN STREET
planter
Fenced trash Enclosure
storage
INF EFF
Remediation Compound
SV-A
SB-8
SV-B
148.50
TBW-N 148.87 <10 47
TBW-W
TBW-E
USTs
SV-C
148.00
SB-7
SV-D
SB-6
MW-1 147.37 73 2,400
147.50
TBW-S
2116 Montana
2106 Montana
147.00
SB-4
SB-5
SV-E
146.50
MW-3 148.56 <0.50 0.54
148.50
148.00
SB-1
D-1
D-2
D-3
kiosk
dispensers
147.50
SB-2
SB-3
147.00
canopy
Shell Station
2120 Montana St.
MW-4 146.09 <13 36
146.50
planter
sidewalk
driveway
146.00
MW-5 145.95 5.3 <2.5
MW-2 145.90 490 110
OE
T
power poles
MONTANA STREET
FRUITVALE AVENUE
INTERSTATE 580 ON-RAMP

0 15 30 60
Scale (ft)

G:\OAKLAND 2120 MONTANA\FIGURES\3QM05.DWG

Groundwater Elevation Contour Map

September 1, 2005

CAMBRIA

FIGURE
2

Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident No.98995740

Table 1: Groundwater Extraction - System Analytical Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Sample Date (mm/dd/yy)	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)
04/02/2003	51,000	1,300	7,100	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
04/08/2003	45,000	1,200	8,600	1,600	5.3	3.2	220	<0.50	<0.50	<50	<0.50	<0.50
04/22/2003	<50	<25	1,700	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
05/01/2003	45,000	1,600	8,300	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
05/21/2003	12,000	370	1,500	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/03/2003	10,000	470	1,900	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/17/2003	1,200	42	29	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
04/21/2004	10,000	540	950	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/08/2004	970	26	290	<50	<0.50	<0.50	<50	<0.50	<0.50	94	<0.50	<0.50
06/30/2004	NS	NS	NS	NS	NS	NS	NS	NS	NS	<50	<0.50	<0.50
07/07/2004	1,700	71	500	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
08/03/2004	1,000	52	390	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
09/14/2004	4,100	230	1,100	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
10/12/2004	140	3.9	140	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
11/12/2004	2,600	180	680	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
12/02/2004	690	41	340	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
01/03/2005	<500	17	1,500	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
02/14/2005	<100	<1.0	120	<50	<0.50	<0.50	<50	<0.50	<0.50	150 a	<0.50	<0.50
03/02/2005	4,900	190	1,000	<50	<0.50	<0.50	<50 b	<0.50	<0.50	<50 b	<0.50	<0.50
04/11/2005	440	6.7	320	<50 b	<0.50	<0.50	<50	<0.50	<0.50	<50 b	<0.50	<0.50
05/09/2005	120	<0.50	79	<50 b	<0.50	<0.50	<50 b	<0.50	<0.50	<50 b	<0.50	<0.50
06/09/2005	<500	<0.50	<0.50	<500	<5.0	<5.0	<50	<0.50	<0.50	<50	<0.50	<0.50
07/15/2005	480	18	220	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50

Table 1: Groundwater Extraction - System Analytical Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

08/04/2005	290	18	130	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50

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
TPHg, benzene, and MTBE analyzed by EPA Method 8260B
a = TPHg contains a discreet peak of ethylhexanol, which are not believed to be gasoline related
b = Siloxane peaks were found is sample which are not believed to be gasoline related

Table 2: Groundwater Extraction - Operation and Mass Removal Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Site Visit (mm/dd/yy)	Hour Meter hours	Flow Meter Reading (gal)	Period Volume (gal)	Period Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (ppb)	TPHg Period Removal (pounds)	TPHg Cumulative Removal (pounds)	Benzene Conc. (ppb)	Benzene Period Removal (pounds)	Benzene Cumulative Removal (pounds)	MTBE Conc. (ppb)	MTBE Period Removal (pounds)	MTBE Cumulative Removal (pounds)
04/02/2003	0.0	393	0	0	0		0.000	0.000		0.000	0.000		0.000	0.000
04/02/2003	5.3	1,006	613	1.93	613	51,000	0.261	0.261	1,300	0.007	0.007	7,100	0.036	0.036
04/08/2003	11.4	2,010	1,004	2.74	1,617	45,000	0.377	0.638	1,200	0.010	0.017	8,600	0.072	0.108
04/22/2003	303.0	15,640	13,630	0.78	15,247	<50	0.003	0.641	<25	0.001	0.018	1,700	0.193	0.302
05/01/2003	399.0	17,840	2,200	0.38	17,447	45,000	0.826	1.47	1,600	0.029	0.047	8,300	0.152	0.454
05/20/2003	784.0	43,320	25,480	1.10	42,927		9.568	11.0		0.340	0.388		1.765	2.22
05/21/2003	808.5	44,639	1,319	0.90	44,246	12,000	0.132	11.2	370	0.004	0.392	1,500	0.017	2.24
06/03/2003	1116.9	59,813	15,174	0.82	59,420	10,000	1.266	12.4	470	0.060	0.451	1,900	0.241	2.48
06/17/2003	1455.5	64,741	4,928	0.24	64,348	1,200	0.049	12.5	42	0.002	0.453	29	0.001	2.48
07/01/2003	1697.4	68,668	3,927	0.27	68,275		0.039	12.5		0.001	0.454		0.001	2.48
07/18/2003	1867.0	69,099	431	0.04	68,706		0.004	12.5		0.000	0.455		0.000	2.48
	System Shutdown due to presence of SPH													
04/21/2004	1984.4	1,516.3	0	0.00	68,706	10,000	0.000	12.5	540	0.000	0.455	950	0.000	2.48
05/25/2004	1984.4	1,516.3	0	0.00	68,706		0.000	12.5		0.000	0.455		0.000	2.48
06/08/2004	2,107.5	4,798.2	3,282	0.44	71,988	970	0.027	12.6	26	0.001	0.455	290	0.008	2.49
06/22/2004	2280.6	10,108	5,310	0.51	77,298		0.043	12.6		0.001	0.456		0.013	2.50
06/30/2004	2475.2	18,527.5	8,420	0.72	85,717		0.068	12.7		0.002	0.458		0.020	2.52
07/07/2004	2494.5	19,377	850	0.73	86,567	1,700	0.012	12.7	71	0.001	0.459	500	0.004	2.52
07/22/2004	2861.5	34,214	14,837	0.67	101,404		0.210	12.9		0.009	0.468		0.062	2.58
08/03/2004	3142.1	59,767	25,553	1.52	126,957	1,000	0.213	13.1	52	0.011	0.479	390	0.083	2.67
08/17/2004	3501.3	81,350	21,583	1.00	148,540		0.180	13.3		0.009	0.488		0.070	2.74
08/31/2004	3813.2	81,571	221	0.01	148,761		0.002	13.3		0.000	0.488		0.001	2.74
09/14/2004	4153.4	101,123	19,552	0.96	168,313	4,100	0.669	13.9	230	0.038	0.526	1,100	0.179	2.92
09/29/2004	4513.1	120,885	19,762	0.92	188,075		0.676	14.6		0.038	0.564		0.181	3.10
10/12/2004	4824.1	134,612	13,727	0.74	201,802	140	0.016	14.6	3.9	0.000	0.564	140	0.016	3.12
10/22/2004	4990.6	145,220	10,608	1.06	212,410		0.012	14.7		0.000	0.564		0.012	3.13
11/02/2004	5021.0	147,500	2,280	1.25	214,690		0.003	14.7		0.000	0.564		0.003	3.13
11/12/2004	5263.0	163,212	15,712	1.08	230,402	2,600	0.341	15.0	180	0.024	0.588	680	0.089	3.22
11/22/2004	5498.2	164,899	1,687	0.12	232,089		0.037	15.0		0.003	0.590		0.010	3.23
12/02/2004	5734.9	172,940	8,041	0.57	240,130	690	0.046	15.1	41	0.003	0.593	340	0.023	3.25
12/13/2004	6001.6	178,400	5,460	0.34	245,590		0.031	15.1		0.002	0.595		0.015	3.27
12/27/2004	6338.4	180,207	1,807	0.09	247,397		0.010	15.1		0.001	0.596		0.005	3.27
01/03/2005	6501.9	182,474	2,267	0.23	249,664	<500	0.005	15.1	17	0.000	0.596	1,500	0.028	3.30

Table 2: Groundwater Extraction - Operation and Mass Removal Data
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

Site Visit (mm/dd/yy)	Hour Meter hours	Flow Meter Reading (gal)	Period Volume (gal)	Period Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (ppb)	TPHg Period Removal (pounds)	TPHg Cumulative Removal (pounds)	Benzene Conc. (ppb)	Benzene Period Removal (pounds)	Benzene Cumulative Removal (pounds)	MTBE Conc. (ppb)	MTBE Period Removal (pounds)	MTBE Cumulative Removal (pounds)
01/21/2005	6941.6	197,770	15,296	0.58	264,960		0.032	15.2		0.002	0.598		0.191	3.49
01/31/2005	7172.4	209,951	12,181	0.88	277,141		0.025	15.2		0.002	0.600		0.152	3.65
02/14/2005	7512.9	210,719	768	0.04	277,909	<100	0.000	15.2	<1.0	0.000	0.600	120	0.001	3.65
03/02/2005	7897.9	231,103	20,384	0.88	298,293	4,900	0.833	16.0	190	0.032	0.632	1,000	0.170	3.82
03/17/2005	7901.2	231,419	316	1.60	298,609		0.013	16.0		0.001	0.633		0.003	3.82
03/29/2005	8042.9	241,058	9,639	1.13	308,248		0.394	16.4		0.015	0.648		0.080	3.90
04/11/2005	8168.4	249,172	8,114	1.08	316,362	440	0.030	16.5	6.7	0.000	0.649	320	0.022	3.92
04/25/2005	8503.2	269,805	20,633	1.03	336,995		0.076	16.5		0.001	0.650		0.055	3.98
05/09/2005	8841.9	283,739	13,934	0.69	350,929	120	0.014	16.5	<0.50	0.000	0.650	79	0.009	3.99
05/27/2005	9271.3	290,449	6,710	0.26	357,639		0.007	16.6		0.000	0.650		0.004	3.99
06/09/2005	9581.5	290,688	239	0.01	357,878	<500	0.000	16.6	<0.50	0.000	0.650	<0.50	0.000	3.99
06/20/2005	9682.4	291,021	333	0.06	358,211		0.001	16.6		0.000	0.650		0.000	3.99
07/15/2005	10283.3	306,225	15,204	0.42	373,415	480	0.061	16.6	18	0.002	0.652	220	0.028	4.02
07/29/2005	10621.9	313,437	7,212	0.35	380,627		0.029	16.6		0.001	0.653		0.013	4.03
08/04/2005	10762.1	315,854	2,417	0.29	383,044	290	0.006	16.6	18	0.000	0.653	130	0.003	4.03
08/23/2005	11213.3	319,640	3,786	0.14	386,830		0.009	16.7		0.001	0.654		0.004	4.04
09/02/2005	11452.0	319,642	2	0.00	386,832		0.000	16.7		0.000	0.654		0.000	4.04
			Total Extracted Volume =		**386,832**	**Total Pounds Removed:**		**16.7**	**Total Pounds Removed:**		**0.654**	**Total Pounds Removed:**		**4.04**
			Average Operational Flow Rate =		**0.563**	**Total Gallons Removed:**		**2.73**	**Total Gallons Removed:**		**0.089**	**Total Gallons Removed:**		**0.654**

Abbreviations & Notes:

TPHg = Total purgeable hydrocarbons as gasoline
MTBE = Methyl tertiary butyl ether
Conc. = Concentration
ppb = Parts per billion, equivalent to mg/L
mg/L = Micrograms per liter
L = Liter
gal = Gallon
gpm = Gallons per minute
g = Gram
Mass removed based on the formula: volume extracted (gal) x Concentration (mg/L) x ($g/10^6 mg$) 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

ATTACHMENT A

Blaine Groundwater Monitoring Report and Field Notes

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

September 23, 2005

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

Third Quarter 2005 Groundwater Monitoring at
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Monitoring performed on September 1, 2005

Groundwater Monitoring Report **050901-DW-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
2120 Montana Street
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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-1	3/19/3001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	12.14	147.45	ND
MW-1	3/23/2001	16,600	753	1,720	407	2,330	NA	27,500	NA	NA	NA	NA	159.59	12.25	147.34	ND
MW-1	5/31/2001	<20,000d	1,000d	920d	490d	2,000d	NA	54,000d	NA	NA	NA	NA	161.13	12.22	148.91	ND
MW-1	6/27/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.00b	NA	ND
MW-1	7/9/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.17	146.67	0.31
MW-1	9/25/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	14.27	145.66	0.43
MW-1	11/20/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.49	146.14	0.05
MW-1	12/5/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	11.32	148.31	0.05
MW-1	3/1/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.22	146.56	0.24
MW-1	6/6/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	12.99	147.00	0.50
MW-1	7/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.59	13.37	146.22	ND
MW-1	9/6/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.57	13.30	146.70	0.54
MW-1	12/12/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.57	13.78	146.61	1.03
MW-1	3/31/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.57	11.21	148.38	0.03
MW-1	6/30/2003	7,800	<25	37	<25	380	NA	2,000	NA	NA	NA	NA	159.57	12.20	147.37	ND
MW-1	9/9/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.08	15.70	145.28	2.38
MW-1	12/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.08	11.25	147.89	0.07
MW-1	3/17/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.08	11.80	147.40	0.15
MW-1	5/24/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.08	12.42	146.71	0.06
MW-1	9/17/2004	8,000	530	380	330	960	NA	1,100	<20	<20	<20	4,100	159.08	15.95	143.13	ND
MW-1	12/6/2004	2,800	150	<5.0	120	120	NA	300	NA	NA	NA	NA	159.08	13.15	145.93	ND
MW-1	3/2/2005	13,000	490	710	360	2,200	NA	5,000	NA	NA	NA	NA	159.08	12.14	146.94	ND
MW-1	6/10/2005	5,600	210	120	120	910	NA	3,100	NA	NA	NA	NA	159.08	NA	NA	<0.01
MW-1	**9/1/2005**	**<1,300**	**73**	**<13**	**30**	**42**	**NA**	**2,400**	**<50**	**<50**	**<50**	**13,000**	**159.08**	**11.71**	**147.37**	**ND**
MW-2	3/19/3001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	158.03	11.60	146.43	ND
MW-2	3/23/2001	4,450	280	41.0	62.1	63.0	NA	16,600	NA	NA	NA	NA	158.03	11.76	146.27	ND
MW-2	5/31/2001	<20,000a	820a	<200a	<200a	<200a	NA	63,000a	NA	NA	NA	NA	158.03	11.40	146.63	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-2	6/27/2001	<50,000	610	4.0	13	9.2	NA	47,000	NA	NA	NA	NA	158.03	12.65	145.38	ND
MW-2	9/25/2001	<2,000	41	<20	<20	<20	NA	6,400	NA	NA	NA	NA	158.03	12.89	145.14	ND
MW-2	12/5/2001	<2,000	74	<20	<20	<20	NA	8,400	NA	NA	NA	NA	158.03	10.40	147.63	ND
MW-2	3/1/2002	<1,000	<10	<10	<10	<10	NA	2,900	NA	NA	NA	NA	158.03	11.52	146.51	ND
MW-2	6/6/2002	<5,000	210	<50	<50	<50	NA	23,000	NA	NA	NA	NA	158.03	12.15	145.88	ND
MW-2	7/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	158.03	12.25	145.78	ND
MW-2	9/6/2002	<2,000	56	<20	<20	<20	NA	11,000	NA	NA	NA	NA	158.01	12.44	145.57	ND
MW-2	12/12/2002	<2,500	80	<25	<25	<25	NA	13,000	NA	NA	NA	NA	158.01	12.53	145.48	ND
MW-2	3/31/2003	<5,000	230	1,200	95	150	NA	13,000	NA	NA	NA	NA	158.01	11.98	146.03	ND
MW-2	6/30/2003	<12,000	780	<120	170	250	NA	9,000	NA	NA	NA	NA	158.01	12.10	145.91	ND
MW-2	9/9/2003	140,000	4,600	40,000	4,800	32,000	NA	11,000	NA	NA	NA	NA	158.01	12.94	145.07	ND
MW-2	12/29/2003	220,000	240	4,800	2,900	19,000	NA	1,000	NA	NA	NA	NA	158.01	11.20	146.81	ND
MW-2	3/17/2004	25,000	170	390	280	1,400	NA	1,500	NA	NA	NA	NA	158.01	11.40	146.61	ND
MW-2	5/24/2004	140,000	<25	220	1,200	6,800	NA	320	NA	NA	NA	NA	158.01	12.28	145.73	ND
MW-2	9/17/2004	64,000	2,900	230	2,300	9,700	NA	6,300	<100	<100	<100	4,100	158.01	12.90	145.11	ND
MW-2	12/6/2004	47,000	1,200	46	1,300	6,000	NA	3,900	NA	NA	NA	NA	158.01	13.02	144.99	ND
MW-2	3/2/2005	85,000	1,600	81	1,900	6,900	NA	2,500	NA	NA	NA	NA	158.01	11.06	146.95	ND
MW-2	6/10/2005	100,000	450	<25	440	800	NA	300	NA	NA	NA	NA	158.01	11.71	146.30	ND
MW-2	**9/1/2005**	**140,000 g**	**490**	**<25**	**550**	**850**	**NA**	**110**	**<100**	**<100**	**<100**	**1,900**	**158.01**	**12.11**	**145.90**	**ND**
MW-3	3/19/3001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	161.13	11.42	149.71	ND
MW-3	3/23/2001	<50.0	<0.500	<0.500	<0.500	<0.500	NA	1.26	NA	NA	NA	NA	161.13	11.42	149.71	ND
MW-3	5/31/2001	<50e	<0.50e	<0.50e	<0.50e	<0.50e	NA	<5.0e	NA	NA	NA	NA	159.59	13.00	146.59	ND
MW-3	6/27/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	NA	NA	NA	NA	161.13	12.32	148.81	ND
MW-3	9/25/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	NA	NA	NA	NA	161.13	12.50	148.63	ND
MW-3	12/5/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	161.13	10.13	151.00	ND
MW-3	3/1/2002	<50	<0.50	<0.50	<0.50	0.73	NA	<5.0	NA	NA	NA	NA	161.13	11.63	149.50	ND
MW-3	6/6/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	161.13	11.55	149.58	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-3	7/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	161.13	11.72	149.41	ND
MW-3	9/6/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	161.11	12.24	148.87	ND
MW-3	12/12/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	161.11	12.18	148.93	ND
MW-3	3/31/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	0.78	NA	NA	NA	NA	161.11	11.94	149.17	ND
MW-3	6/30/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	161.11	12.50	148.61	ND
MW-3	9/9/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	161.11	12.55	148.56	ND
MW-3	12/29/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	0.70	NA	NA	NA	NA	161.11	10.90	150.21	ND
MW-3	3/17/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	2.1	NA	NA	NA	NA	161.11	11.63	149.48	ND
MW-3	5/24/2004	<50	<0.50	<0.50	<0.50	1.0	NA	0.96	NA	NA	NA	NA	161.11	11.32	149.79	ND
MW-3	9/17/2004	<50	<0.50	<0.50	<0.50	1.0	NA	2.6	<2.0	<2.0	<2.0	<5.0	161.11	12.13	148.98	ND
MW-3	12/6/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	6.1	NA	NA	NA	NA	161.11	12.28	148.83	ND
MW-3	3/2/2005	<50 f	<0.50	<0.50	<0.50	<1.0	NA	2.4	NA	NA	NA	NA	161.11	10.42	150.69	ND
MW-3	6/10/2005	<50 f	<0.50	<0.50	<0.50	<1.0	NA	1.6	NA	NA	NA	NA	161.11	11.15	149.96	ND
MW-3	**9/1/2005**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**0.54**	**<2.0**	**<2.0**	**<2.0**	**<5.0**	**161.11**	**12.55**	**148.56**	**ND**
MW-4	7/10/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NM	13.19	NA	ND
MW-4	7/16/2002	800	1.1	1.1	2.6	2.4	NA	450	NA	NA	NA	NA	NM	13.56	NA	ND
MW-4	9/6/2002	1,100	3.0	1.8	8.0	4.6	NA	110	NA	NA	NA	NA	160.09	13.67	146.42	ND
MW-4	12/12/2002	130	<0.50	<0.50	<0.50	<0.50	NA	940	NA	NA	NA	NA	160.09	14.06	146.03	ND
MW-4	3/31/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	500	NA	NA	NA	NA	160.09	13.69	146.40	ND
MW-4	6/30/2003	3,100	5.3	<5.0	7.1	<10	NA	420	NA	NA	NA	NA	160.09	14.12	145.97	ND
MW-4	9/9/2003	1,400	2.4	2.0	2.6	3.2	NA	140	NA	NA	NA	NA	160.09	14.92	145.17	ND
MW-4	12/29/2003	2,700	10	6.2	20	11	NA	420	NA	NA	NA	NA	160.09	12.71	147.38	ND
MW-4	3/17/2004	1,900	6.9	3.0	33	22	NA	290	NA	NA	NA	NA	160.09	13.24	146.85	ND
MW-4	5/24/2004	1,800	<2.5	<2.5	<2.5	11	NA	44	NA	NA	NA	NA	160.09	14.03	146.06	ND
MW-4	9/17/2004	3,300	57	10	47	32	NA	310	<10	<10	<10	700	160.09	13.58	146.51	ND
MW-4	12/6/2004	4,700	9.4	3.8	34	12	NA	150	NA	NA	NA	NA	160.09	14.65	145.44	ND
MW-4	3/2/2005	<1,300	<13	<13	<13	<25	NA	150	NA	NA	NA	NA	160.09	12.67	147.42	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-4	6/10/2005	2,600	4.1	1.9	25	5.6	NA	61	NA	NA	NA	NA	160.09	13.11	146.98	ND
MW-4	**9/1/2005**	**4,000 g**	**<13**	**<13**	**22**	**<25**	**NA**	**36**	**<50**	**<50**	**<50**	**<130**	**160.09**	**14.00**	**146.09**	**ND**
MW-5	7/10/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NM	12.22	NA	ND
MW-5	7/16/2002	6,100	65	7.2	100	130	NA	410	NA	NA	NA	NA	NM	12.50	NA	ND
MW-5	9/6/2002	5,900	100	8.1	41	32	NA	230	NA	NA	NA	NA	158.25	12.77	145.48	ND
MW-5	12/12/2002	4,900	70	5.7	25	17	NA	280	NA	NA	NA	NA	158.25	12.71	145.54	ND
MW-5	3/31/2003	6,400	61	4.9	23	13	NA	330	NA	NA	NA	NA	158.25	11.93	146.32	ND
MW-5	6/30/2003	3,400	18	<2.5	17	5.5	NA	47	NA	NA	NA	NA	158.25	11.97	146.28	ND
MW-5	9/9/2003	6,800	46	23	39	42	NA	67	NA	NA	NA	NA	158.25	12.44	145.81	ND
MW-5	12/29/2003	8,400	44	6.2	36	16	NA	60	NA	NA	NA	NA	158.25	11.38	146.87	ND
MW-5	3/17/2004	7,100	120	22	42	27	NA	300	NA	NA	NA	NA	158.25	11.68	146.57	ND
MW-5	5/24/2004	6,100	72	17	34	23	NA	110	NA	NA	NA	NA	158.25	12.30	145.95	ND
MW-5	9/17/2004	5,700	27	5.3	35	<10	NA	28	<20	<20	<20	<50	158.25	12.15	146.10	ND
MW-5	12/6/2004	4,500	11	<5.0	22	<10	NA	7.5	NA	NA	NA	NA	158.25	12.85	145.40	ND
MW-5	3/2/2005	6,500	14	<2.5	18	<5.0	NA	6.0	NA	NA	NA	NA	158.25	10.83	147.42	ND
MW-5	6/10/2005	5,300	19	2.4	17	4.3	NA	7.2	NA	NA	NA	NA	158.25	12.00	146.25	ND
MW-5	**9/1/2005**	**1,900 g**	**5.3**	**<2.5**	**6.9**	**<5.0**	**NA**	**<2.5**	**<10**	**<10**	**<10**	**<25**	**158.25**	**12.30**	**145.95**	**ND**
TBW-N	09/25/2001 c	120,000	3,200	2,800	4,000	18,000	NA	31,000	NA	NA	NA	NA	NM	12.25	NM	ND
TBW-N	11/20/2001	72,000	2,200	3,600	2,600	14,000	NA	35,000	NA	NA	NA	NA	NM	12.13	NM	ND
TBW-N	12/5/2001	76,000	1,600	3,200	2,900	15,000	NA	30,000	NA	NA	NA	NA	NM	11.51	NM	ND
TBW-N	3/1/2002	91,000	1,200	4,200	2,800	14,000	NA	29,000	NA	NA	NA	NA	NM	11.88	NM	ND
TBW-N	6/6/2002	100,000	2,100	8,200	3,400	17,000	NA	18,000	NA	NA	NA	NA	NM	12.48	NM	ND
TBW-N	7/16/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NM	12.39	NM	ND
TBW-N	9/6/2002	69,000	870	4,800	2,300	11,000	NA	17,000	NA	NA	NA	NA	161.26	12.36	148.90	ND
TBW-N	12/12/2002	Well inaccessible		NA	NA	NA	NA	NA	NA	NA	NA	NA	161.26	NA	NA	NA
TBW-N	12/19/2002	110,000	1,900	13,000	3,100	18,000	NA	19,000	NA	NA	NA	NA	161.26	10.82	150.44	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
TBW-N	3/31/2003	62,000	1,600	6,500	2,200	11,000	NA	11,000	NA	NA	NA	NA	161.26	10.63	150.63	ND
TBW-N	6/30/2003	260,000	7,700	<120	5,800	40,000	NA	8,400	NA	NA	NA	NA	161.26	11.51	149.75	ND
TBW-N	9/9/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	159.92	11.37	148.64	0.11
TBW-N	12/29/2003	130,000	840	8,200	2,400	18,000	NA	5,400	NA	NA	NA	NA	159.92	10.40	149.52	ND
TBW-N	3/17/2004	32,000	440	1,500	580	4,500	NA	3,700	NA	NA	NA	NA	159.92	10.49	149.44	0.01
TBW-N	5/24/2004	110,000	380	2,600	1,600	11,000	NA	3,100	NA	NA	NA	NA	159.92	10.72	149.20	ND
TBW-N	9/17/2004	25,000	120	490	570	3,900	NA	490	<200	<200	<200	4,500	159.92	10.80	149.12	ND
TBW-N	12/6/2004	15,000	33	11	410	1,500	NA	200	NA	NA	NA	NA	159.92	11.00	148.92	ND
TBW-N	3/2/2005	7,900	15	<10	120	610	NA	460	NA	NA	NA	NA	159.92	10.58	149.34	ND
TBW-N	6/10/2005	1,200	<5.0	<5.0	13	25	NA	93	NA	NA	NA	NA	159.92	10.68	149.24	ND
TBW-N	**9/1/2005**	**3,500 g**	**<10**	**<10**	**86**	**330**	**NA**	**47**	**<40**	**<40**	**<40**	**1,700**	**159.92**	**11.05**	**148.87**	**ND**

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to May 31, 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

TBW-N = tank backfill well-north

NA = Not analyzed

ND = Not detected

NM = Not measured

ug/L = parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)

Notes:

a = Resampled on June 27, 2001, due to possible mislabeling.

b = Separate phase hydrocarbons encountered during purge; groundwater elevation may not be accurate.

c = Sample TBW-N was analyzed once within hold time, but the analyte concentrations all exceeded the instrument working ranges. The sample was diluted and re-analyzed out of hold time. The diluted analysis is reported because it more accurately reflects the concentrations present.

d = These results are listed as MW-3 on analytical report due to possible mislabeling in field or laboratory. Resampled on June 27, 2001, to confirm mislabeling.

e = These results are listed as MW-1 on analytical report due to possible mislabeling in field or laboratory. Resampled on June 27, 2001, to confirm mislabeling.

f= The concentration reported reflect(s) individual or discrete unidentified peaks not matching a typical fuel pattern.

g = Quantit. of unknown hydrocarbon(s) in sample based on gasoline.

Survey data provided by Cambria Environmental Technology, May 2001.

Site surveyed February 12, 2002 and June 26, 2002 by Virgil Chavez Land Surveying of Vallejo, CA.

Wells MW-1 and TBW-N surveyed September 23, 2003 by Virgil Chavez Land Surveying of Vallejo, CA.

When separate phase hydrocarbons are present, ground water elevation is adjusted using the relation:

Corrected groundwater elevation = Top-of-casing elevation - Depth to water + (0.8 x Hydrocarbon thickness).

SEVERN TRENT STL

Submission#: 2005-09-0062

Blaine Tech Services, Inc.

September 21, 2005

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

Project#: BTS#050901-DW-2
Project: 98995740
Site: 2120 Montana Street, Oakland

Dear Mr.Gearhart,

Attached is our report for your samples received on 09/02/2005 14:41
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 10/17/2005 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: 2005-09-0062

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	09/01/2005 15:30	Water	1
MW-2	09/01/2005 15:03	Water	2
MW-3	09/01/2005 13:50	Water	3
MW-4	09/01/2005 14:30	Water	4
MW-5	09/01/2005 14:47	Water	5
TBW-N	09/01/2005 14:08	Water	6

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

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

Sample ID: **MW-1**
Lab ID: 2005-09-0062 - 1

Sampled: 09/01/2005 15:30
Extracted: 9/14/2005 21:54

Matrix: Water
QC Batch#: 2005/09/14-2B.64

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

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1300	ug/L	25.00	09/14/2005 21:54	
Benzene	73	13	ug/L	25.00	09/14/2005 21:54	
Toluene	ND	13	ug/L	25.00	09/14/2005 21:54	
Ethylbenzene	30	13	ug/L	25.00	09/14/2005 21:54	
Total xylenes	42	25	ug/L	25.00	09/14/2005 21:54	
tert-Butyl alcohol (TBA)	13000	130	ug/L	25.00	09/14/2005 21:54	
Methyl tert-butyl ether (MTBE)	2400	13	ug/L	25.00	09/14/2005 21:54	
Di-isopropyl Ether (DIPE)	ND	50	ug/L	25.00	09/14/2005 21:54	
Ethyl tert-butyl ether (ETBE)	ND	50	ug/L	25.00	09/14/2005 21:54	
tert-Amyl methyl ether (TAME)	ND	50	ug/L	25.00	09/14/2005 21:54	
Surrogate(s)						
1,2-Dichloroethane-d4	109.6	73-130	%	25.00	09/14/2005 21:54	
Toluene-d8	105.5	81-114	%	25.00	09/14/2005 21:54	

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

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

Sample ID: **MW-2**
Lab ID: 2005-09-0062 - 2

Sampled: 09/01/2005 15:03
Extracted: 9/14/2005 22:15

Matrix: Water
QC Batch#: 2005/09/14-2B.64

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

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	140000	2500	ug/L	50.00	09/14/2005 22:15	Q1
Benzene	490	25	ug/L	50.00	09/14/2005 22:15	
Toluene	ND	25	ug/L	50.00	09/14/2005 22:15	
Ethylbenzene	550	25	ug/L	50.00	09/14/2005 22:15	
Total xylenes	850	50	ug/L	50.00	09/14/2005 22:15	
tert-Butyl alcohol (TBA)	1900	250	ug/L	50.00	09/14/2005 22:15	
Methyl tert-butyl ether (MTBE)	110	25	ug/L	50.00	09/14/2005 22:15	
Di-isopropyl Ether (DIPE)	ND	100	ug/L	50.00	09/14/2005 22:15	
Ethyl tert-butyl ether (ETBE)	ND	100	ug/L	50.00	09/14/2005 22:15	
tert-Amyl methyl ether (TAME)	ND	100	ug/L	50.00	09/14/2005 22:15	
Surrogate(s)						
1,2-Dichloroethane-d4	113.7	73-130	%	50.00	09/14/2005 22:15	
Toluene-d8	108.5	81-114	%	50.00	09/14/2005 22:15	

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Prep(s): 5030B
Sample ID: **MW-3**
Sampled: 09/01/2005 13:50
Matrix: Water
pH: <2

Test(s): 8260B
Lab ID: 2005-09-0062 - 3
Extracted: 9/15/2005 15:57
QC Batch#: 2005/09/15-1A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	09/15/2005 15:57	
Benzene	ND	0.50	ug/L	1.00	09/15/2005 15:57	
Toluene	ND	0.50	ug/L	1.00	09/15/2005 15:57	
Ethylbenzene	ND	0.50	ug/L	1.00	09/15/2005 15:57	
Total xylenes	ND	1.0	ug/L	1.00	09/15/2005 15:57	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	09/15/2005 15:57	
Methyl tert-butyl ether (MTBE)	0.54	0.50	ug/L	1.00	09/15/2005 15:57	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	09/15/2005 15:57	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	09/15/2005 15:57	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	09/15/2005 15:57	
Surrogate(s)						
1,2-Dichloroethane-d4	127.5	73-130	%	1.00	09/15/2005 15:57	
Toluene-d8	106.8	81-114	%	1.00	09/15/2005 15:57	

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

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

Sample ID: **MW-4**
Lab ID: 2005-09-0062 - 4

Sampled: 09/01/2005 14:30
Extracted: 9/14/2005 22:36

Matrix: Water
QC Batch#: 2005/09/14-2B.64

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

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	4000	1300	ug/L	25.00	09/14/2005 22:36	Q1
Benzene	ND	13	ug/L	25.00	09/14/2005 22:36	
Toluene	ND	13	ug/L	25.00	09/14/2005 22:36	
Ethylbenzene	22	13	ug/L	25.00	09/14/2005 22:36	
Total xylenes	ND	25	ug/L	25.00	09/14/2005 22:36	
tert-Butyl alcohol (TBA)	ND	130	ug/L	25.00	09/14/2005 22:36	
Methyl tert-butyl ether (MTBE)	36	13	ug/L	25.00	09/14/2005 22:36	
Di-isopropyl Ether (DIPE)	ND	50	ug/L	25.00	09/14/2005 22:36	
Ethyl tert-butyl ether (ETBE)	ND	50	ug/L	25.00	09/14/2005 22:36	
tert-Amyl methyl ether (TAME)	ND	50	ug/L	25.00	09/14/2005 22:36	
Surrogate(s)						
1,2-Dichloroethane-d4	113.1	73-130	%	25.00	09/14/2005 22:36	
Toluene-d8	105.3	81-114	%	25.00	09/14/2005 22:36	

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

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

Sample ID: **MW-5**
Lab ID: 2005-09-0062 - 5

Sampled: 09/01/2005 14:47
Extracted: 9/14/2005 22:57

Matrix: Water
QC Batch#: 2005/09/14-2B.64

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

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	1900	250	ug/L	5.00	09/14/2005 22:57	Q1
Benzene	5.3	2.5	ug/L	5.00	09/14/2005 22:57	
Toluene	ND	2.5	ug/L	5.00	09/14/2005 22:57	
Ethylbenzene	6.9	2.5	ug/L	5.00	09/14/2005 22:57	
Total xylenes	ND	5.0	ug/L	5.00	09/14/2005 22:57	
tert-Butyl alcohol (TBA)	ND	25	ug/L	5.00	09/14/2005 22:57	
Methyl tert-butyl ether (MTBE)	ND	2.5	ug/L	5.00	09/14/2005 22:57	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	5.00	09/14/2005 22:57	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	5.00	09/14/2005 22:57	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	5.00	09/14/2005 22:57	
Surrogate(s)						
1,2-Dichloroethane-d4	117.8	73-130	%	5.00	09/14/2005 22:57	
Toluene-d8	108.0	81-114	%	5.00	09/14/2005 22:57	

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

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

Sample ID: **TBW-N**
Lab ID: 2005-09-0062 - 6

Sampled: 09/01/2005 14:08
Extracted: 9/15/2005 02:26

Matrix: Water
QC Batch#: 2005/09/14-2B.64

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

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	3500	1000	ug/L	20.00	09/15/2005 02:26	Q1
Benzene	ND	10	ug/L	20.00	09/15/2005 02:26	
Toluene	ND	10	ug/L	20.00	09/15/2005 02:26	
Ethylbenzene	86	10	ug/L	20.00	09/15/2005 02:26	
Total xylenes	330	20	ug/L	20.00	09/15/2005 02:26	
tert-Butyl alcohol (TBA)	1700	100	ug/L	20.00	09/15/2005 02:26	
Methyl tert-butyl ether (MTBE)	47	10	ug/L	20.00	09/15/2005 02:26	
Di-isopropyl Ether (DIPE)	ND	40	ug/L	20.00	09/15/2005 02:26	
Ethyl tert-butyl ether (ETBE)	ND	40	ug/L	20.00	09/15/2005 02:26	
tert-Amyl methyl ether (TAME)	ND	40	ug/L	20.00	09/15/2005 02:26	
Surrogate(s)						
1,2-Dichloroethane-d4	120.6	73-130	%	20.00	09/15/2005 02:26	
Toluene-d8	103.6	81-114	%	20.00	09/15/2005 02:26	

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Water** — **QC Batch # 2005/09/14-2B.64**

MB: 2005/09/14-2B.64-036 — Date Extracted: 09/14/2005 18:36

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	09/14/2005 18:36	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	09/14/2005 18:36	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	09/14/2005 18:36	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	09/14/2005 18:36	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	09/14/2005 18:36	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	09/14/2005 18:36	
Benzene	ND	0.5	ug/L	09/14/2005 18:36	
Toluene	ND	0.5	ug/L	09/14/2005 18:36	
Ethylbenzene	ND	0.5	ug/L	09/14/2005 18:36	
Total xylenes	ND	1.0	ug/L	09/14/2005 18:36	
Surrogates(s)					
1,2-Dichloroethane-d4	100.2	73-130	%	09/14/2005 18:36	
Toluene-d8	103.4	81-114	%	09/14/2005 18:36	

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2005/09/15-1A.64

MB: 2005/09/15-1A.64-055

Date Extracted: 09/15/2005 08:55

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	09/15/2005 08:55	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	09/15/2005 08:55	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	09/15/2005 08:55	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	09/15/2005 08:55	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	09/15/2005 08:55	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	09/15/2005 08:55	
Benzene	ND	0.5	ug/L	09/15/2005 08:55	
Toluene	ND	0.5	ug/L	09/15/2005 08:55	
Ethylbenzene	ND	0.5	ug/L	09/15/2005 08:55	
Total xylenes	ND	1.0	ug/L	09/15/2005 08:55	
Surrogates(s)					
1,2-Dichloroethane-d4	99.0	73-130	%	09/15/2005 08:55	
Toluene-d8	106.8	81-114	%	09/15/2005 08:55	

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

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San Jose, CA 95112-1105
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Project: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/09/14-2B.64**

LCS 2005/09/14-2B.64-015 Extracted: 09/14/2005 Analyzed: 09/14/2005 18:15

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)	25.7		25	102.8			65-165	20		
Benzene	24.8		25	99.2			69-129	20		
Toluene	26.1		25	104.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	456		500	91.2			73-130			
Toluene-d8	527		500	105.4			81-114			

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/09/15-1A.64**

LCS 2005/09/15-1A.64-034 Extracted: 09/15/2005 Analyzed: 09/15/2005 08:34

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)	24.5		25	98.0			65-165	20		
Benzene	26.0		25	104.0			69-129	20		
Toluene	25.9		25	103.6			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	453		500	90.6			73-130			
Toluene-d8	518		500	103.6			81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/09/14-2B.64**

MS/MSD

Lab ID: 2005-09-0317 - 003

MS: 2005/09/14-2B.64-052 Extracted: 09/14/2005 Analyzed: 09/14/2005 20:52

Dilution: 1.00

MSD: 2005/09/14-2B.64-013 Extracted: 09/14/2005 Analyzed: 09/14/2005 21:13

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	27.4	26.3	ND	25	109.6	105.2	4.1	65-165	20		
Benzene	28.1	26.1	ND	25	112.4	104.4	7.4	69-129	20		
Toluene	28.8	27.3	ND	25	115.2	109.2	5.3	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	503	487		500	100.6	97.4		73-130			
Toluene-d8	531	545		500	106.2	109.0		81-114			

Gas/BTEX Fuel Oxygenates 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: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/09/15-1A.64**

MS/MSD

Lab ID: 2005-09-0317 - 001

MS: 2005/09/15-1A.64-004 Extracted: 09/15/2005 Analyzed: 09/15/2005 11:04
Dilution: 5.00

MSD: 2005/09/15-1A.64-025 Extracted: 09/15/2005 Analyzed: 09/15/2005 11:25
Dilution: 5.00

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	115	141	13	125	81.6	112.8	32.1	65-165	20		R1
Benzene	124	134	ND	125	99.2	107.2	7.8	69-129	20		
Toluene	123	137	ND	125	98.4	109.6	10.8	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	413	457		500	82.6	91.4		73-130			
Toluene-d8	532	511		500	106.4	102.2		81-114			

Gas/BTEX Fuel Oxygenates by 8260B (C6-C12)

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Project: BTS#050901-DW-2
98995740

Received: 09/02/2005 14:41

Site: 2120 Montana Street, Oakland

Legend and Notes

Analysis Flag

L2

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

Result Flag

Q1

Quantit. of unknown hydrocarbon(s) in sample based on gasoline.

R1

Analyte RPD was out of QC limits.

SHELL Chain of Custody Record

9 1101

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

Denis Brown

2005-09-0062

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 4 0

SAP or CRMT NUMBER (TS/CRMT):

DATE: 9-1-05

PAGE: 1 of 1

SAMPLING COMPANY	LOG CODE	SITE ADDRESS (Street and City)	GLOBAL ID NO.
Blaine Tech Services	BTSS	2120 Montana Street, Oakland	T0600101805

ADDRESS	CDF DELIVERABLE TO (Responsible Party or Designee)	PHONE NO.	E-MAIL	CONSULTANT PROJECT NO.
1680 Rogers Avenue, San Jose, CA 95112	Anni Kreml	510-420-3335	ShellOaklandEDF@cambria-env.com	050901-DW-2

PROJECT CONTACT (Hardcopy or PDF Report to)	SAMPLER NAME(S) (Print)	LAB USE ONLY
Leon Gearhart	Dave Walter	

TELEPHONE	FAX	E-MAIL
408-573-0555	408-573-7771	lgearhart@blainetech.com

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

GOOGLE MTBE CONFIRMATION: HIGHEST: _____ HIGHEST per SCRIPPS _____ ALL _____

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

REQUESTED ANALYSIS

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)									
	MW-1	9-1	1530	W	3	X	X			X															
	MW-2		1503			X	X			X															
	MW-3		1350			X	X			X															
	MW-4		1430			X	X			X															
	MW-5		1447			X	X			X															
	TBW-N		1408			X	X			X															

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

TEMPERATURE ON RECEIPT C°: 4.9

Relinquished by (Signature)	Received by (Signature)	Date	Time
David C Holt	David C Holt (sample custodian)	9-1-05	1800
Relinquished by (Signature)	Received by (Signature)	Date	Time
Matthew Sample Custodian		9/1/05	1441
Relinquished by (Signature)	Received by (Signature)	Date	Time
		9/2/05	1650

White with shipment; Yellow with report(s)

WELL GAUGING DATA

Project # 050901-BW-2 Date 9-1-05 Client Shell

Site 2120 Montana St. Oakland

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	Removed pump to gauge. No SPH detected.				11.91	27.45		
MW-2	2					12.11	19.85		
MW-3	2					12.55	19.83		
MW-4	4					14.00	19.80		
MW-5	2					12.30	19.60		
TBW-1	4					11.05	13.15		

SHELL WELL MONITORING DATA SHEET

BTS #: 050901-DW-2	Site: 2120 Montana St
Sampler: DW	Date: 9-1-05
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 27.45	Depth to Water (DTW): 11.71
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]: 14.85	

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

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

2.5 (Gals.) X 3 = 7.5 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
1520	71.5	6.6	1056	71	2.5	
1523	70.0	6.6	1120	45	5.0	
1526	68.6	6.7	1113	38	7.5	

Did well dewater? Yes (No) Gallons actually evacuated: 7.5

Sampling Date: 9-1-05 Sampling Time: 1530 Depth to Water: 13.02

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

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's

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 #: 050901-DW-2	Site: 2120 Montana St
Sampler: DW	Date: 9-1-05
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 19.85	Depth to Water (DTW): 12.4
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]: 13.65	

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: _____

1.2 (Gals.) X	3	= 3.6 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
1454	66.7	6.7	849	178	1.2	odor
1456	66.3	6.6	823	398	2.4	" /grey/sheen
1458	66.2	6.6	889	437	3.6	" " "

Did well dewater? Yes (No) Gallons actually evacuated: 3.6

Sampling Date: 9-1-05 Sampling Time: 1503 Depth to Water: 13.60

Sample I.D.: MW-2 Laboratory: (STL) Other_____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's

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 #: 050901-DW-2	Site: 2120 Montana St
Sampler: DW	Date: 9-1-05
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 19.83	Depth to Water (DTW): 12.55
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]: 14.00	

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

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

1.2 (Gals.) X	3 =	3.6 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	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1343	71.9	6.3	621	>1000	1.2	grey
1345	70.9	6.5	621	351	2.4	"
1346	70.8	6.6	619	137	3.6	"

Did well dewater? Yes (No) Gallons actually evacuated: 3.6

Sampling Date: 9-1-05 Sampling Time: 1350 Depth to Water: 14.00

Sample I.D.: MW-3 Laboratory: (STL) Other

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's

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 #: 050901-DW-2	Site: 2120 Montana St
Sampler: DW	Date: 9-1-05
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 19.80	Depth to Water (DTW): 14.00
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]: 15.16	

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

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

3.8 (Gals.) X 3 = 11.4 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
1417	67.5	7.1	552	24	3.8	
1421	67.6	7.0	547	7	7.6	
1425	67.4	6.8	546	4	11.4	

Did well dewater? Yes (No) Gallons actually evacuated: 11.4

Sampling Date: 9-1-05 Sampling Time: 1430 Depth to Water: 15.15

Sample I.D.: MW-4 Laboratory: (STL) Other ____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's

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 #: 050901-DW-2	Site: 2120 Montana St
Sampler: DW	Date: 9-1-05
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 19.60	Depth to Water (DTW): 12.30
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]: 13.76	

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

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

1.2 (Gals.) X	3	= 3.6 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
1438	68.1	6.7	570	>1000	1.2	gray
1440	66.9	6.7	562	>1000	2.4	"
1442	66.5	6.7	559	>1000	3.6	"

Did well dewater? Yes (No) Gallons actually evacuated: 3.6

Sampling Date: 9-1-05 Sampling Time: 1447 Depth to Water: 12.40

Sample I.D.: MW-5 Laboratory: (STL) Other ____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's

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 #: 050901-DW-2	Site: 2120 Montana St
Sampler: DW	Date: 9-1-05
Well I.D.: TBW-N	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 13.15	Depth to Water (DTW): 11.05
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]: 11.47	

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

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

1.4 (Gals.) X	3	= 4.2 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
1359	69.6	6.6	947	>1000	1.4	gray
1401	69.7	6.6	1137	252	2.8	
1403	69.8	6.7	1189	88	4.2	

Did well dewater? Yes (No) Gallons actually evacuated: 4.2

Sampling Date: 9-1-05 Sampling Time: 1408 Depth to Water: 11.25

Sample I.D.: TBW-N Laboratory: (STL) Other____

Analyzed for: (TPH-G) (BTEX) MTBE TPH-D Other: Oxy's

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