



Shell Oil Products US

Re 343

August 30, 2003

Mr. Barney Chan  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Alameda County  
SEP 03 2003  
Environmental Health

**Subject: Former Shell Service Station**  
461 8<sup>th</sup> Street  
Oakland, California

Dear Mr. Chan:

Attached for your review and comment is a copy of the *Third Quarter 2003 Monitoring Report* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

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

Sincerely,

Shell Oil Products US

*Karen Petryna*

Karen Petryna  
Sr. Environmental Engineer

# C A M B R I A

August 30, 2003

Mr. Barney Chan  
Alameda County Health Care Services Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Re: **Groundwater Monitoring Report - Third Quarter 2003**  
Former Shell Service Station  
461 8th Street  
Oakland, California  
SAP Code 129453  
Incident #97093399



Dear Mr. Chan:

Cambria Environmental Technology, Inc. (Cambria) prepared this report on behalf of Equilon Enterprises LLC dba Shell Oil Products US (Shell) in accordance with the quarterly reporting requirements of 23 CCR 2652d.

## **THIRD QUARTER 2003 ACTIVITIES**

**Groundwater Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged all site wells and sampled selected wells and prepared a summary table of field data and petroleum hydrocarbon and methyl tertiary butyl ether concentrations. Cambria prepared a site vicinity and area well survey map (Figure 1) and a groundwater contour/chemical concentration map (Figure 2). Blaine's report, presenting the laboratory report, is included as Appendix A.

**Monitoring Well Purging/Mass Removal Data:** Blaine resumed well purging activities. Blaine purged 100 gallons from well S-5 and 150 gallons from well S-6 this quarter. Cumulative groundwater purge volume and estimated mass removal data are presented in Table 1. The cumulative estimated mass of total petroleum hydrocarbons as gasoline and benzene removed to date is 2.52 pounds and 0.578 pounds, respectively.

Oakland, CA  
San Ramon, CA  
Sonoma, CA

**Cambria  
Environmental  
Technology, Inc.**

270 Perkins Street  
P.O. Box 259  
Sonoma, CA 95476  
Tel (707) 935-4850  
Fax (707) 935-6649

# C A M B R I A

## ANTICIPATED FOURTH QUARTER 2003 ACTIVITIES

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

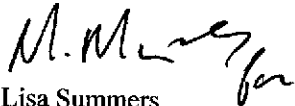
**Monitoring Well Purging/Mass Removal Data:** Blaine will continue to purge monitoring wells MW-5 and MW-6. Cambria will tabulate the mass removed.


**Subsurface Investigation Status:** We are currently in the process of obtaining an updated access agreement for the former Shell-branded service station property. Cambria will notify the ACHCSA when the access agreement has been secured. In the mean time, Cambria has scheduled the offsite activities for the week of October 13, 2003.

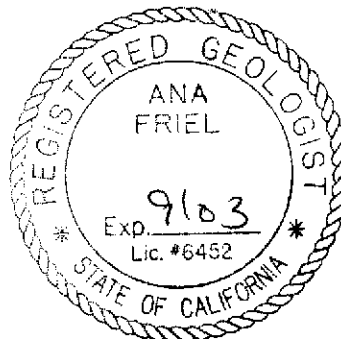
### CLOSING

If you have any questions regarding this document, please call Ana Friel at (707) 442-2700.

Sincerely,  
**Cambria Environmental Technology, Inc**

  
Lisa Summers  
Staff Scientist

  
Ana Friel, RG  
Senior Project Geologist  
RG 6452



### Attachments:

- Table 1. Groundwater Extraction Mass Removal Data
- Figure 1. Site Vicinity/Area Well Survey Map
- Figure 2. Groundwater Contour/Chemical Concentration Map
- Appendix A. Blaine Tech Services, Inc. - Groundwater Monitoring Report

# C A M B R I A

cc: Karen Petryna, Shell Oil Products US  
Leah Goldberg, Hanson, Bridgett, Marcus, Vlahos, & Rudy  
Wells Fargo Bank National Association, Tr. (Property Owners)  
R. Casteel & Co.  
Leroy Griffin, City of Oakland Fire Prevention Bureau



**Table 2. Groundwater Extraction Mass Removal Data, Former Shell Service Station, 461 Eighth Street, Oakland, California**

Date Purged	Well ID	Cumulative		Date Sampled	TPHg			Benzene		Benzene		MTBE	
		Volume Pumped (gal)	Volume Pumped (gal)		TPHg Concentration (ppb)	TPHg Removed (pounds)	TPHg Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE Removed (pounds)	MTBE Removed To Date (pounds)
05/13/93	S-5	0	0	07/31/90	53,000	0.00000	0.00000	14,000	0.00000	0.00000	NA	0.00000	0.00000
07/22/93	S-5	200	200	07/31/90	53,000	0.08845	0.08845	14,000	0.02336	0.02336	NA	0.00000	0.00000
10/20/93	S-5	200	400	07/31/90	53,000	0.08845	0.17690	14,000	0.02336	0.04673	NA	0.00000	0.00000
01/25/94	S-5	150	550	07/31/90	53,000	0.06634	0.24324	14,000	0.01752	0.06425	NA	0.00000	0.00000
04/25/94	S-5	36	586	07/31/90	53,000	0.01592	0.25916	14,000	0.00421	0.06846	NA	0.00000	0.00000
05/26/94	S-5	130	716	07/31/90	53,000	0.05749	0.31665	14,000	0.01519	0.08364	NA	0.00000	0.00000
06/16/94	S-5	50	766	07/31/90	53,000	0.02211	0.33876	14,000	0.00584	0.08948	NA	0.00000	0.00000
07/21/94	S-5	50	816	07/31/90	53,000	0.02211	0.36088	14,000	0.00584	0.09533	NA	0.00000	0.00000
08/25/94	S-5	80	896	07/31/90	53,000	0.03538	0.39626	14,000	0.00935	0.10467	NA	0.00000	0.00000
09/22/94	S-5	45	941	07/31/90	53,000	0.01990	0.41616	14,000	0.00526	0.10993	NA	0.00000	0.00000
10/24/94	S-5	40	981	07/31/90	53,000	0.01769	0.43385	14,000	0.00467	0.11460	NA	0.00000	0.00000
11/29/94	S-5	85	1,066	07/31/90	53,000	0.03759	0.47144	14,000	0.00993	0.12453	NA	0.00000	0.00000
12/22/94	S-5	0	1,066	07/31/90	53,000	0.00000	0.47144	14,000	0.00000	0.12453	NA	0.00000	0.00000
01/03/95	S-5	40	1,106	07/31/90	53,000	0.01769	0.48913	14,000	0.00467	0.12920	NA	0.00000	0.00000
02/22/95	S-5	60	1,166	07/31/90	53,000	0.02654	0.51566	14,000	0.00701	0.13621	NA	0.00000	0.00000
03/31/95	S-5	40	1,206	07/31/90	53,000	0.01769	0.53335	14,000	0.00467	0.14089	NA	0.00000	0.00000
04/20/95	S-5	60	1,266	07/31/90	53,000	0.02654	0.55989	14,000	0.00701	0.14790	NA	0.00000	0.00000
05/26/95	S-5	50	1,316	07/31/90	53,000	0.02211	0.58200	14,000	0.00584	0.15374	NA	0.00000	0.00000
06/30/95	S-5	60	1,376	07/31/90	53,000	0.02654	0.60854	14,000	0.00701	0.16075	NA	0.00000	0.00000
10/04/95	S-5	0	1,376	07/31/90	53,000	0.00000	0.60854	14,000	0.00000	0.16075	NA	0.00000	0.00000
01/03/96	S-5	0	1,376	07/31/90	53,000	0.00000	0.60854	14,000	0.00000	0.16075	NA	0.00000	0.00000
04/11/96	S-5	0	1,376	07/31/90	53,000	0.00000	0.60854	14,000	0.00000	0.16075	NA	0.00000	0.00000
07/11/96	S-5	0	1,376	07/31/90	53,000	0.00000	0.60854	14,000	0.00000	0.16075	NA	0.00000	0.00000
10/02/96	S-5	0	1,376	07/31/90	53,000	0.00000	0.60854	14,000	0.00000	0.16075	NA	0.00000	0.00000
01/22/97	S-5	0	1,376	07/31/90	53,000	0.00000	0.60854	14,000	0.00000	0.16075	NA	0.00000	0.00000
07/21/97	S-5	75	1,451	07/31/90	53,000	0.03317	0.64171	14,000	0.00876	0.16951	NA	0.00000	0.00000
10/29/97	S-5	60	1,511	07/31/90	53,000	0.02654	0.66824	14,000	0.00701	0.17652	NA	0.00000	0.00000
01/22/98	S-5	60	1,571	07/31/90	53,000	0.02654	0.69478	14,000	0.00701	0.18353	NA	0.00000	0.00000
05/01/98	S-5	50	1,621	07/31/90	53,000	0.02211	0.71689	14,000	0.00584	0.18937	NA	0.00000	0.00000
07/08/98	S-5	100	1,721	07/31/90	53,000	0.04423	0.76111	14,000	0.01168	0.20105	NA	0.00000	0.00000
10/26/98	S-5	100	1,821	07/31/90	53,000	0.04423	0.80534	14,000	0.01168	0.21273	NA	0.00000	0.00000

**Table 2. Groundwater Extraction Mass Removal Data, Former Shell Service Station, 461 Eighth Street, Oakland, California**

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPHg	TPHg	TPHg	Benzene	Benzene	Benzene	MTBE	MTBE	MTBE
					Concentration (ppb)	Removed (pounds)	Removed To Date (pounds)	Concentration (ppb)	Removed (pounds)	Removed To Date (pounds)	Concentration (ppb)	Removed (pounds)	Removed To Date (pounds)
01/28/99	S-5	100	1,921	01/28/99	51,000	0.04256	0.84790	13,000	0.01085	0.22358	2,400	0.00200	0.00200
04/23/99	S-5	100	2,021	04/23/99	65,600	0.05474	0.90263	2,540	0.00212	0.22570	<1,000	0.00042	0.00242
07/29/99	S-5	0	2,021	07/29/99	61,400	0.00000	0.90263	3,320	0.00000	0.22570	<1,000	0.00000	0.00242
11/01/99	S-5	100	2,121	11/01/99	48,200	0.04022	0.94285	2,700	0.00225	0.22795	<40.0	0.00002	0.00244
01/07/00	S-5	100	2,221	01/07/00	39,000	0.03254	0.97540	3,900	0.00325	0.23121	1,500	0.00125	0.00369
04/11/00	S-5	100	2,321	04/11/00	29,300	0.02445	0.99985	1,680	0.00140	0.23261	<250	0.00010	0.00379
07/19/00	S-5	100	2,421	07/19/00	6,420	0.00536	1.00520	2,110	0.00176	0.23437	253	0.00021	0.00400
10/12/00	S-5	100	2,521	10/12/00	41,500	0.03463	1.03983	2,940	0.00245	0.23682	<66.7	0.00003	0.00403
01/09/01	S-5	100	2,621	01/09/01	142,000	0.11849	1.15832	7,030	0.00587	0.24269	779	0.00065	0.00468
04/13/01	S-5	100	2,721	04/13/01	59,800	0.04990	1.20822	4,810	0.00401	0.24670	<10.0	0.00000	0.00469
07/25/01	S-5	50	2,771	07/25/01	71,000	0.02962	1.23784	2,900	0.00121	0.24791	<250	0.00005	0.00474
08/13/01	S-5	50	2,821	07/25/01	71,000	0.02962	1.26747	2,900	0.00121	0.24912	<250	0.00005	0.00479
11/01/01	S-5*	0	2,821	07/25/01	71,000	0.00000	1.26747	2,900	0.00000	0.24912	<250	0.00000	0.00479
01/17/02	S-5	100	2,921	01/17/02	58,000	0.04840	1.31586	460	0.00038	0.24950	<200	0.00008	0.00487
05/08/02	S-5	100	3,021	05/08/02	60,000	0.05007	1.36593	650	0.00054	0.25005	<100	0.00004	0.00492
07/18/02	S-5	100	3,121	07/18/02	53,000	0.04423	1.41015	240	0.00020	0.25025	<100	0.00004	0.00496
04/15/03	S-5	100	3,221	04/15/03	3,600	0.00300	1.41316	29	0.00002	0.25027	<5.0	0.00000	0.00496
07/14/03	S-5	100	3,321	07/14/03	21,000	0.01752	1.43068	210	0.00018	0.25045	<10.0	0.00000	0.00496
05/13/93	S-6	0	0	05/13/93	58,000	0.00000	0.00000	21,000	0.00000	0.00000	NA	0.00000	0.00000
07/22/93	S-6	0	0	07/22/93	70,000	0.00000	0.00000	31,000	0.00000	0.00000	NA	0.00000	0.00000
10/20/93	S-6	0	0	10/20/93	48,000	0.00000	0.00000	28,000	0.00000	0.00000	NA	0.00000	0.00000
01/25/94	S-6	0	0	01/25/94	70,000	0.00000	0.00000	23,000	0.00000	0.00000	NA	0.00000	0.00000
04/25/94	S-6	0	0	04/25/94	61,000	0.00000	0.00000	16,000	0.00000	0.00000	NA	0.00000	0.00000
05/26/94	S-6	0	0	04/25/94	61,000	0.00000	0.00000	16,000	0.00000	0.00000	NA	0.00000	0.00000
06/16/94	S-6	0	0	04/25/94	61,000	0.00000	0.00000	16,000	0.00000	0.00000	NA	0.00000	0.00000
07/21/94	S-6	0	0	07/21/94	44,000	0.00000	0.00000	8,200	0.00000	0.00000	NA	0.00000	0.00000
08/25/94	S-6	0	0	07/21/94	44,000	0.00000	0.00000	8,200	0.00000	0.00000	NA	0.00000	0.00000
09/22/94	S-6	0	0	07/21/94	44,000	0.00000	0.00000	8,200	0.00000	0.00000	NA	0.00000	0.00000
10/24/94	S-6	0	0	10/24/94	2,936	0.00000	0.00000	1,184	0.00000	0.00000	NA	0.00000	0.00000
11/29/94	S-6	0	0	10/24/94	2,936	0.00000	0.00000	1,184	0.00000	0.00000	NA	0.00000	0.00000

# CAMBRIA

**Table 2. Groundwater Extraction Mass Removal Data, Former Shell Service Station, 461 Eighth Street, Oakland, California**

Date Purged	Well ID	Cumulative		Date Sampled	TPHg		TPHg Removed To Date (pounds)	Benzene		Benzene Removed To Date (pounds)	MTBE		MTBE Removed To Date (pounds)
		Volume Pumped (gal)	Volume Pumped (gal)		TPHg Concentration (ppb)	TPHg Removed (pounds)		Benzene Concentration (ppb)	Benzene Removed (pounds)		MTBE Concentration (ppb)	MTBE Removed (pounds)	
12/22/94	S-6	0	0	12/22/94	32,000	0.00000	0.00000	7,000	0.00000	0.00000	NA	0.00000	0.00000
01/03/95	S-6	0	0	12/22/94	32,000	0.00000	0.00000	7,000	0.00000	0.00000	NA	0.00000	0.00000
02/22/95	S-6	0	0	12/22/94	32,000	0.00000	0.00000	7,000	0.00000	0.00000	NA	0.00000	0.00000
03/31/95	S-6	0	0	12/22/94	32,000	0.00000	0.00000	7,000	0.00000	0.00000	NA	0.00000	0.00000
04/20/95	S-6	0	0	04/20/95	56,000	0.00000	0.00000	15,000	0.00000	0.00000	NA	0.00000	0.00000
05/26/95	S-6	0	0	04/20/95	56,000	0.00000	0.00000	15,000	0.00000	0.00000	NA	0.00000	0.00000
06/30/95	S-6	0	0	04/20/95	56,000	0.00000	0.00000	15,000	0.00000	0.00000	NA	0.00000	0.00000
10/04/95	S-6	0	0	10/04/95	49,000	0.00000	0.00000	8,400	0.00000	0.00000	NA	0.00000	0.00000
01/03/96	S-6	0	0	01/03/96	52,000	0.00000	0.00000	9,100	0.00000	0.00000	NA	0.00000	0.00000
04/11/96	S-6	0	0	04/11/96	59,000	0.00000	0.00000	11,000	0.00000	0.00000	<500	0.00000	0.00000
07/11/96	S-6	0	0	07/11/96	72,000	0.00000	0.00000	18,000	0.00000	0.00000	<1,000	0.00000	0.00000
10/02/96	S-6	0	0	10/02/96	57,000	0.00000	0.00000	11,000	0.00000	0.00000	<500	0.00000	0.00000
01/22/97	S-6	0	0	01/22/97	67,000	0.00000	0.00000	15,000	0.00000	0.00000	<1,000	0.00000	0.00000
07/21/97	S-6	0	0	07/21/97	61,000	0.00000	0.00000	15,000	0.00000	0.00000	1,900	0.00000	0.00000
10/29/97	S-6	40	40	07/21/97	61,000	0.02036	0.02036	15,000	0.00501	0.00501	1,900	0.00063	0.00063
01/22/98	S-6	60	100	01/22/98	46,000	0.02303	0.04339	14,000	0.00701	0.01202	<500	0.00013	0.00076
05/01/98	S-6	200	300	01/22/98	46,000	0.07677	0.12016	14,000	0.02336	0.03538	<500	0.00042	0.00118
07/08/98	S-6	150	450	07/08/98	74,000	0.09262	0.21278	26,000	0.03254	0.06792	<1,000	0.00063	0.00180
10/26/98	S-6	100	550	07/08/98	74,000	0.06175	0.27453	26,000	0.02170	0.08962	<1,000	0.00042	0.00222
01/28/99	S-6	150	700	01/28/99	120,000	0.15020	0.42473	9,000	0.01126	0.10088	3,700	0.00463	0.00685
04/23/99	S-6	150	850	04/23/99	58,500	0.07322	0.49795	15,900	0.01990	0.12078	<2,500	0.00156	0.00842
07/29/99	S-6	0	850	07/29/99	36,200	0.00000	0.49795	10,300	0.00000	0.12078	<1,000	0.00000	0.00842
11/01/99	S-6	150	1,000	11/01/99	36,000	0.04506	0.54301	11,700	0.01464	0.13543	<40.0	0.00003	0.00844
01/07/00	S-6	0	1,000	01/07/00	36,000	0.00000	0.54301	7,600	0.00000	0.13543	<1,000	0.00000	0.00844
04/11/00	S-6	150	1,150	04/11/00	14,600	0.01827	0.56128	7,540	0.00944	0.14487	621	0.00078	0.00922
07/19/00	S-6	150	1,300	07/19/00	2,590	0.00324	0.56452	629	0.00079	0.14565	72.7	0.00009	0.00931
10/28/00	S-6	45	1,345	10/12/00	32,900	0.01235	0.57688	14,200	0.00533	0.15099	<100	0.00002	0.00933
02/05/01	S-6	150	1,495	01/09/01	27,600	0.03455	0.61142	11,200	0.01402	0.16500	1,430	0.00179	0.01112
04/06/01	S-6	150	1,645	04/06/01	16,900	0.02115	0.63258	7,800	0.00976	0.17477	<20.0	0.00001	0.01113
07/25/01	S-6	150	1,795	07/25/01	29,000	0.03630	0.66888	9,800	0.01227	0.18703	<250	0.00016	0.01129
11/01/01	S-6	150	1,945	11/01/01	41,000	0.05132	0.72019	15,000	0.01877	0.20581	<500	0.00031	0.01160

# CAMBRIA

**Table 2. Groundwater Extraction Mass Removal Data, Former Shell Service Station, 461 Eighth Street, Oakland, California**

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPHg	TPHg	TPHg	Benzene	Benzene	Benzene	MTBE	MTBE	MTBE
					Concentration (ppb)	Removed (pounds)	Removed To Date (pounds)	Concentration (ppb)	Removed (pounds)	Removed To Date (pounds)	Concentration (ppb)	Removed (pounds)	Removed To Date (pounds)
01/17/02	S-6	150	2,095	01/17/02	38,000	0.04756	0.76776	11,000	0.01377	0.21958	<500	0.00031	0.01191
05/08/02	S-6	150	2,245	05/08/02	72,000	0.09012	0.85787	21,000	0.02628	0.24586	<1,000	0.00063	0.01254
07/18/02	S-6	150	2,395	07/18/02	71,000	0.08887	0.94674	17,000	0.02128	0.26714	<1,000	0.00063	0.01316
04/15/03	S-6	150	2,545	04/15/03	64,000	0.08011	1.02685	29,000	0.03630	0.30344	<1,000	0.00063	0.01379
07/14/03	S-6	150	2,695	07/14/03	47,000	0.05883	1.08568	19,000	0.02378	0.32722	<100	0.00006	0.01385
<b>Total Gallons Extracted:</b>			<b>6,016</b>	<b>Total Pounds Removed:</b>			<b>2.52</b>	<b>Total Gallons Removed:</b>			<b>0.578</b>	<b>0.019</b>	
							<b>0.413</b>				<b>0.079</b>	<b>0.003</b>	

**Abbreviations and Notes:**

TPHg = Total purgeable hydrocarbons as gasoline

MTBE = Methyl tert-butyl ether

ppb = Parts per billion

gal = Gallon

NA = Not available/not analyzed

Mass removed based on the formula: volume extracted (gal) x Concentration (µg/L) x (g/10<sup>6</sup>µg) x (pound/453.6g) x (3.785 L/gal)

Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxlbs/gmsxgals)

TPPH, benzene analyzed by EPA Method 8015/8020 or equivalent.

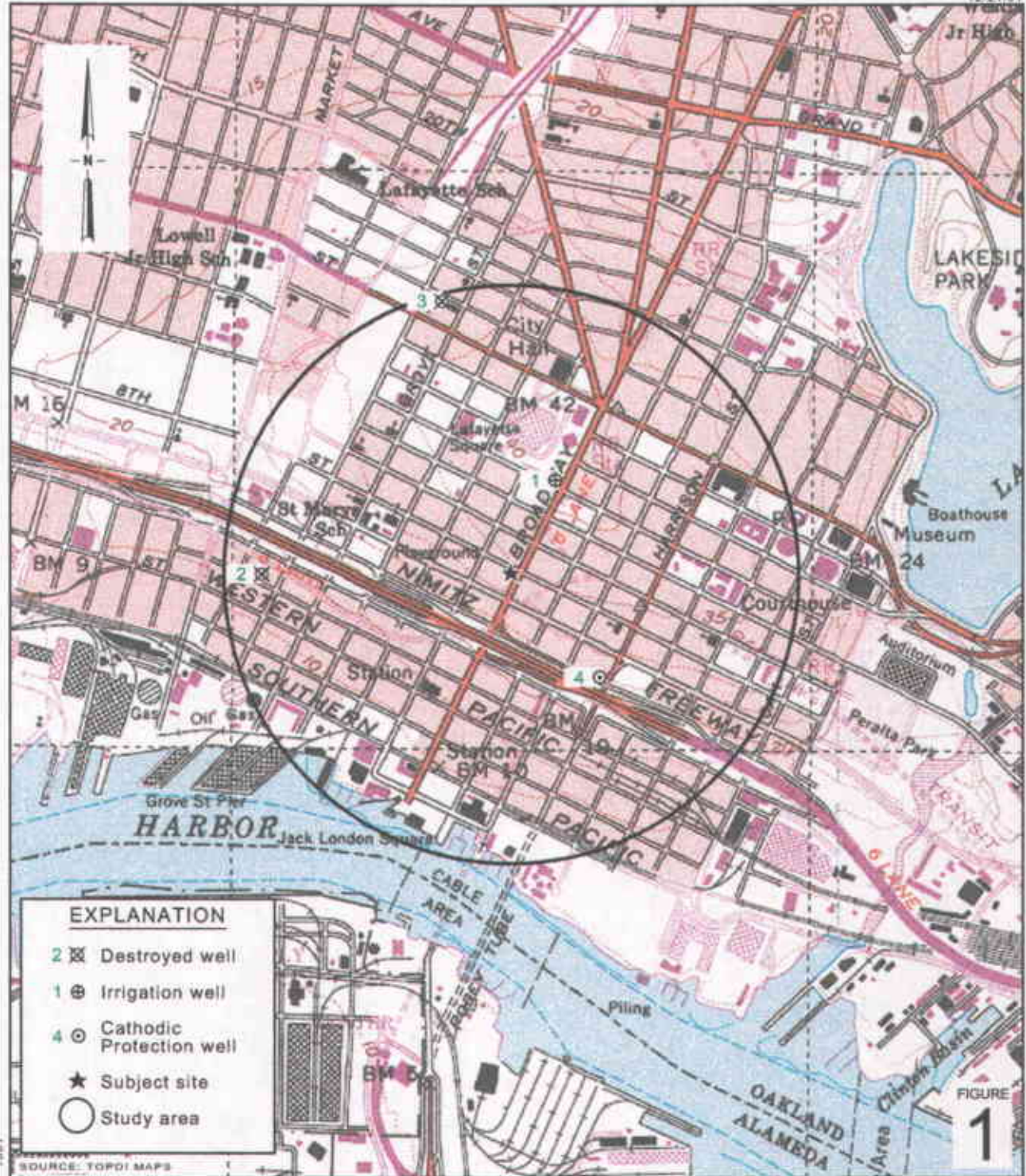
MTBE results in italics analyzed by EPA Method 8020. All other MTBE results analyzed by EPA Method 8260.

Purging performed by Blaine Tech Services of San Jose, California

If concentration is less than the laboratory detection limit, one half of the detection limit concentration is used in the mass removal calculation.

\* = Well inaccessible





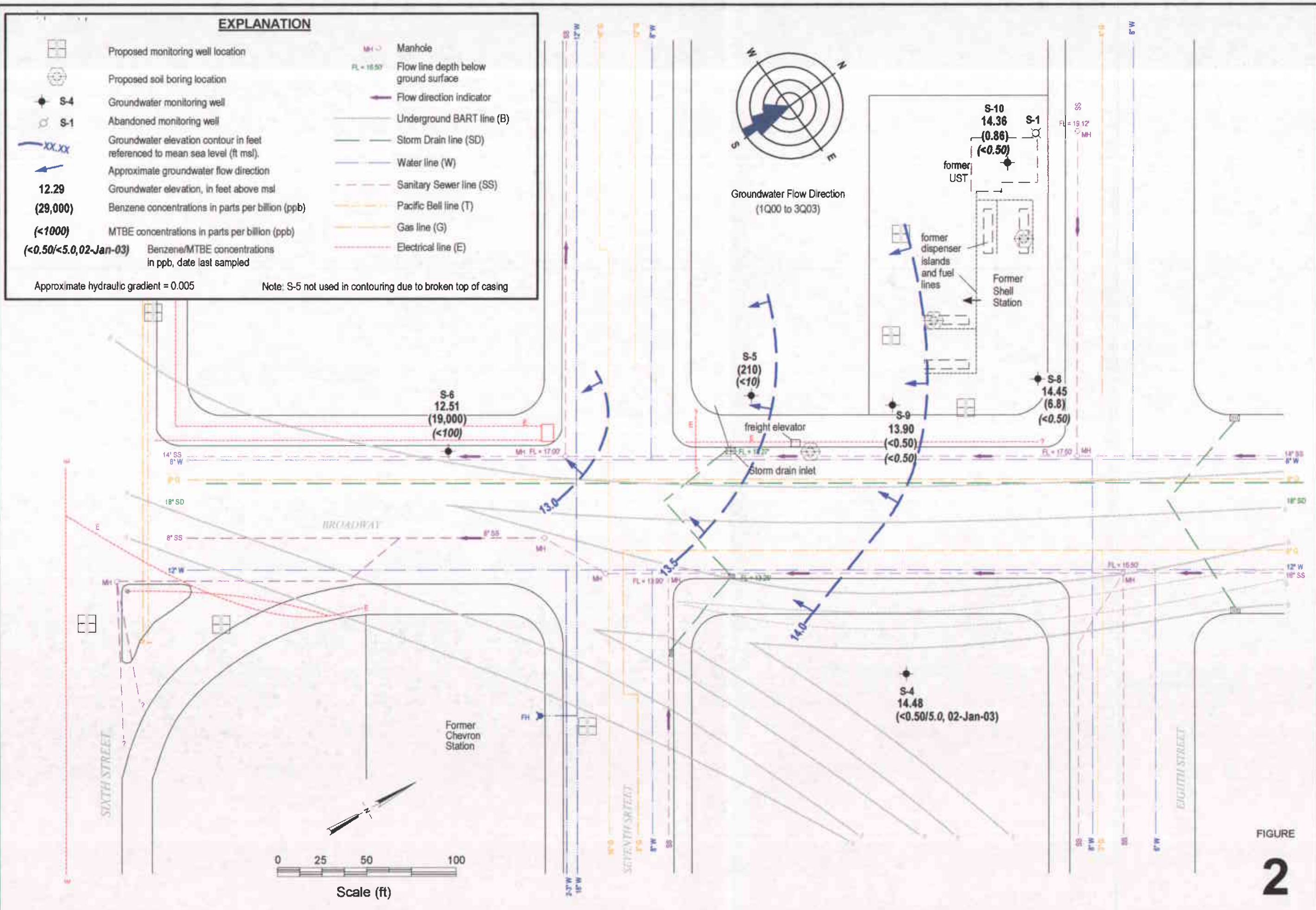
**Former Shell Service Station**  
 461 Eighth Street  
 Oakland, California



C A M B R I A

**Vicinity / Area Well  
 Survey Map**

1/2 Mile Radius



**EXPLANATION**

	Proposed monitoring well location		Manhole
	Proposed soil boring location		Flow line depth below ground surface
	Groundwater monitoring well		Flow direction indicator
	Abandoned monitoring well		Underground BART line (B)
	Groundwater elevation contour in feet referenced to mean sea level (ft msl).		Storm Drain line (SD)
	Approximate groundwater flow direction		Water line (W)
12.29	Groundwater elevation, in feet above msl		Sanitary Sewer line (SS)
(29,000)	Benzene concentrations in parts per billion (ppb)		Pacific Bell line (T)
(<1000)	MTBE concentrations in parts per billion (ppb)		Gas line (G)
(<0.50/<5.0,02-Jan-03)	Benzene/MTBE concentrations in ppb, date last sampled		Electrical line (E)

Approximate hydraulic gradient = 0.005      Note: S-5 not used in contouring due to broken top of casing

**Groundwater Contour/Chemical Concentration Map**

July 14, 2003

CAMBRIA

**Former Shell Service Station**

461 Eighth Street  
Oakland, California

FIGURE  
**2**

**APPENDIX A**

**Blaine Tech Services, Inc.  
Groundwater Monitoring Report**

**BLAINE**  
TECH SERVICES INC.



1680 ROGERS AVENUE  
SAN JOSE, CA 95112-1105  
(408) 573-7771 FAX  
(408) 573-0555 PHONE  
CONTRACTOR'S LICENSE #746684  
www.blainetech.com

July 31, 2003

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

Third Quarter 2003 Groundwater Monitoring at  
Former Shell Service Station  
461 8<sup>th</sup> Street  
Oakland, CA

Monitoring performed on July 14, 2003

---

**Groundwater Monitoring Report 030714-SS-1**

This report covers the routine monitoring of groundwater wells at this Former Shell 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/ad

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

cc: Ana Friel  
Cambria Environmental Technology, Inc.  
P.O. Box 259  
Sonoma, CA 95476-0259

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-4	10/26/1988	130	3.8	13	4.0	30	NA	NA	93.51 (TOC)	NA	NA	NA
S-4	02/14/1989	<50	0.5	<1	<1	3.0	NA	NA	93.51 (TOC)	12.82	80.69	NA
S-4	05/01/1989	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	16.48	77.03	NA
S-4	07/27/1989	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.84	77.67	NA
S-4	10/05/1989	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.98	77.53	NA
S-4	01/09/1990	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.86	77.65	NA
S-4	04/30/1990	<50	<0.5	<0.5	<0.5	<1	NA	NA	93.51 (TOC)	14.48	79.03	NA
S-4	07/31/1990	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA
S-4	10/30/1990	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA
S-4	05/06/1991	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.23	78.28	NA
S-4	06/27/1991	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	93.51 (TOC)	13.54	79.97	NA
S-4	09/24/1991	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.85	77.66	NA
S-4	11/07/1991	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	15.60	77.91	NA
S-4	02/13/1992	<50	<0.5	<0.5	<0.5	3.0	NA	NA	93.51 (TOC)	14.27	79.24	NA
S-4	05/11/1992	Well dry	NA	NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA
S-4	12/03/1992	Well inaccessible		NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA
S-4	05/13/1993	Well inaccessible		NA	NA	NA	NA	NA	93.51 (TOC)	14.81	78.70	NA
S-4	07/22/1993	Well inaccessible		NA	NA	NA	NA	NA	93.51 (TOC)	14.42	79.09	NA
S-4	10/20/1993	Well inaccessible		NA	NA	NA	NA	NA	93.51 (TOC)	NA	NA	NA
S-4	01/25/1994	Well inaccessible		NA	NA	NA	NA	NA	93.51 (TOC)	14.60	78.91	NA
S-4	04/25/1994	Well inaccessible		NA	NA	NA	NA	NA	93.51 (TOC)	14.39	79.12	NA
S-4	07/21/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	93.51 (TOC)	22.29	71.22	NA
S-4	10/24/1994	<500	<0.3	<0.3	<0.3	<0.6	NA	NA	93.51 (TOC)	22.72	70.79	NA
S-4	12/22/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	25.77*	22.25	3.52	NA
S-4	04/20/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	25.77	21.16	4.61	NA
S-4	10/04/1995	<50	1.2	0.7	<0.5	<0.5	NA	NA	25.77	22.25	3.52	NA
S-4	01/03/1996	<50	0.6	<0.5	<0.5	1.7	NA	NA	25.77	23.28	2.49	NA
S-4	04/11/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	25.77	21.58	4.19	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-4	07/11/1996	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	25.77	21.60	4.17	NA
S-4	10/02/1996	<50	<0.50	<0.50	<0.50	<0.50	2.6	NA	25.77	22.46	3.31	NA
S-4	01/22/1997	<50	0.73	<0.50	<0.50	0.63	<2.5	NA	25.77	20.06	5.71	NA
S-4	07/21/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	25.77	22.10	3.67	NA
S-4	01/22/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	25.77	20.50	5.27	NA
S-4	07/08/1998	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	25.77	20.86	4.91	NA
S-4	10/26/1998	NA	NA	NA	NA	NA	NA	NA	25.77	21.41	4.36	NA
S-4	01/28/1999	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	25.77	22.34	3.43	NA
S-4	04/23/1999	NA	NA	NA	NA	NA	NA	NA	25.77	21.43	4.34	NA
S-4	07/29/1999	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	25.77	21.45	4.32	NA
S-4	11/01/1999	NA	NA	NA	NA	NA	NA	NA	25.77	22.08	3.69	NA
S-4	01/07/2000	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	25.77	22.29	3.48	NA
S-4	04/11/2000	NA	NA	NA	NA	NA	NA	NA	25.77	21.11	4.66	NA
S-4	07/19/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	25.77	21.19	4.58	NA
S-4	10/12/2000	NA	NA	NA	NA	NA	NA	NA	25.77	22.22	3.55	NA
S-4	01/09/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	25.77	22.17	3.60	NA
S-4	04/06/2001	NA	NA	NA	NA	NA	NA	NA	25.77	21.50	4.27	NA
S-4	07/25/2001	<50	2.0	0.52	<0.50	1.0	NA	<5.0	25.77	21.50	4.27	NA
S-4	11/01/2001	NA	NA	NA	NA	NA	NA	NA	25.77	21.95	3.82	NA
S-4	01/17/2002 d	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	25.77	21.13	4.64	NA
S-4	05/08/2002	NA	NA	NA	NA	NA	NA	NA	25.77	21.35	4.42	NA
S-4	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	34.41	21.19	13.22	NA
S-4	10/15/2002	NA	NA	NA	NA	NA	NA	NA	34.41	21.42	12.99	NA
S-4	01/02/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	34.41	20.75	13.66	NA
S-4	04/15/2003	NA	NA	NA	NA	NA	NA	NA	34.41	21.08	13.33	NA
S-4	07/14/2003	NA	NA	NA	NA	NA	NA	NA	34.41	19.93	14.48	NA
S-5	04/16/1987	130000	15000	16000	NA	14000a	NA	NA	99.36 (TOC)	NA	NA	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-5	10/26/1988	110000	20000	25000	2300	10000	NA	NA	99.36 (TOC)	NA	NA	NA
S-5	02/14/1989	94000	16000	21000	1800	10000	NA	NA	99.36 (TOC)	19.87	79.49	NA
S-5	05/01/1989	120000	29000	35000	3100	15000	NA	NA	99.36 (TOC)	21.23	78.13	NA
S-5	07/27/1989	110000	20000	29000	2400	14000	NA	NA	99.36 (TOC)	20.41	78.95	NA
S-5	10/05/1989	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.43	78.94	0.01
S-5	01/09/1990	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.16	78.21	0.01
S-5	04/30/1990	100000	13000	22000	2100	11000	NA	NA	99.36 (TOC)	20.96	78.40	NA
S-5	07/31/1990	53000	8300	14000	1200	7400	NA	NA	99.36 (TOC)	20.88	78.48	NA
S-5	10/30/1990	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.96	77.42	0.03
S-5	05/06/1991	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	23.00	76.46	0.13
S-5	06/27/1991	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.53	78.85	0.03
S-5	09/24/1991	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.40	78.01	0.06
S-5	11/07/1991	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.33	78.23	0.25
S-5	02/13/1992	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.52	77.09	0.31
S-5	05/11/1992	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.46	77.36	0.58
S-5	12/03/1992	Well inaccessible		NA	NA	NA	NA	NA	99.36 (TOC)	NA	NA	NA
S-5	05/13/1993	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.22	77.36	0.27
S-5	07/22/1993	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.68	77.88	0.25
S-5	10/20/1993	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.51	79.03	0.23
S-5	01/25/1994	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.93	77.57	0.18
S-5	04/25/1994	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.97	77.67	0.35
S-5	05/26/1994	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	20.84	78.80	0.35
S-5	06/10/1994	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	21.01	78.61	0.32
S-5	07/21/1994	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.18	77.56	0.47
S-5	08/25/1994	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.01	77.70	0.44
S-5	09/22/1994	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.00	77.48	0.15
S-5	10/24/1994	NA	NA	NA	NA	NA	NA	NA	99.36 (TOC)	22.28	77.53	0.56
S-5	12/22/1994	NA	NA	NA	NA	NA	NA	NA	22.94*	22.88	0.85	0.99



**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-5	04/20/1995	NA	NA	NA	NA	NA	NA	NA	22.94	21.66	1.54	0.33
S-5	10/04/1995	NA	NA	NA	NA	NA	NA	NA	22.94	22.18	0.76	NA
S-5	01/03/1996	NA	NA	NA	NA	NA	NA	NA	22.94	22.80	0.80	0.83
S-5	04/11/1996	NA	NA	NA	NA	NA	NA	NA	22.94	21.15	2.33	0.67
S-5	07/11/1996	NA	NA	NA	NA	NA	NA	NA	22.94	22.62	1.04	0.90
S-5	10/02/1996	NA	NA	NA	NA	NA	NA	NA	22.94	23.07	0.38	0.64
S-5	01/22/1997	NA	NA	NA	NA	NA	NA	NA	22.94	20.83	2.24	0.16
S-5	07/21/1997	NA	NA	NA	NA	NA	NA	NA	22.94	21.16	1.82	0.05
S-5	01/22/1998	NA	NA	NA	NA	NA	NA	NA	22.94	20.04	2.93	0.04
S-5	07/08/1998	220	14	40	5.8	34	3.3	NA	22.94	18.61	4.33	NA
S-5	10/26/1998	NA	NA	NA	NA	NA	NA	NA	22.94	17.31	5.63	NA
S-5	01/28/1999	51000	13000	1200	1200	2400	2400	NA	22.94	20.11	2.83	NA
S-5	04/23/1999	65600	2540	7300	1790	9840	<1000	NA	22.94	19.21	3.73	NA
S-5	07/29/1999	61400	3320	6980	1520	7700	<1000	NA	22.94	14.77	8.17	NA
S-5	11/01/1999	48200	2700	5740	1290	7850	<500	<40.0	22.94	15.56	7.38	NA
S-5	01/07/2000	39000	3900	8500	790	8300	1500	NA	22.94	15.82	7.12	NA
S-5	04/11/2000	29300	1680	5060	1130	6220	<250	NA	22.94	18.19	4.75	NA
S-5	07/19/2000	6420	2110	207	252	681	355	253b	22.94	19.01	3.93	NA
S-5	10/12/2000	41500	2940	4940	1520	7770	<250	<66.7	22.94	19.62	3.32	NA
S-5	01/09/2001	142000	7030	9550	2340	12600	779	NA	22.94	19.94	3.00	NA
S-5	04/06/2001	Well inaccessible		NA	NA	NA	NA	NA	22.94	NA	NA	NA
S-5	04/13/2001	59800	4810	10800	1950	10100	842	<10.0	22.94	14.72	8.22	NA
S-5	07/25/2001	71000	2900	6800	1700	9100	NA	<250	22.94	14.91	8.03	NA
S-5	08/13/2001	NA	NA	NA	NA	NA	NA	NA	22.94	19.43	3.51	NA
S-5	11/01/2001	Unable to locate		NA	NA	NA	NA	NA	22.94	NA	NA	NA
S-5	01/17/2002 d	58000	460	3300	1900	8400	NA	<200	c	14.27	NA	NA
S-5	05/08/2002 d	60000	650	2700	1800	8800	NA	<100	22.94	18.40	4.54	NA
S-5	07/18/2002	53000	240	1200	1500	6400	NA	<100	27.36	14.25	13.11	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	--------------	----------------------------	--------------------------	---------------------------

S-5	10/15/2002	Well inaccessible		NA	NA	NA	NA	NA	27.36	NA	NA	NA
S-5	10/17/2002	42000	420	1100	1200	5500	NA	<10	27.36	14.90	12.46	NA
S-5	01/02/2003	26000	680	1500	780	3800	NA	<5.0	27.36	14.72	12.64	NA
S-5	04/15/2003	3600	29	38	65	370	NA	<5.0	e	14.45	NA	NA
S-5	07/14/2003	21000	210	460	650	2900	NA	<10	e	14.10	NA	NA

S-6	04/16/1987	81000	16000	9000	NA	6400a	NA	NA	100.58 (TOC)	NA	NA	NA
S-6	10/26/1988	110000	29000	18000	2500	8200	NA	NA	100.58 (TOC)	NA	NA	NA
S-6	02/14/1989	54000	18000	4500	1400	4000	NA	NA	100.58 (TOC)	20.87	79.71	NA
S-6	05/01/1989	93000	43000	9900	3000	8000	NA	NA	100.58 (TOC)	20.49	80.09	NA
S-6	07/27/1989	52000	20000	3200	1700	5500	NA	NA	100.58 (TOC)	21.01	79.57	NA
S-6	10/05/1989	55000	20000	2900	1600	5500	NA	NA	100.58 (TOC)	21.24	79.34	NA
S-6	01/09/1990	76000	35000	9100	2300	8600	NA	NA	100.58 (TOC)	22.62	77.96	SHEEN
S-6	04/30/1990	39000	13000	2300	900	2800	NA	NA	100.58 (TOC)	22.10	78.48	NA
S-6	07/31/1990	48000	20000	4600	1500	4900	NA	NA	100.58 (TOC)	22.00	78.58	NA
S-6	10/30/1990	27000	7400	900	600	1400	NA	NA	100.58 (TOC)	22.14	78.44	NA
S-6	05/06/1991	35000	3900	2700	2300	3500	NA	NA	100.58 (TOC)	22.40	78.18	NA
S-6	06/27/1991	51000	19000	5600	1700	6300	NA	NA	100.58 (TOC)	21.21	79.37	NA
S-6	09/24/1991	42000	14000	4300	1200	4000	NA	NA	100.58 (TOC)	22.26	78.32	NA
S-6	11/07/1991	39000	11000	2000	800	2300	NA	NA	100.58 (TOC)	22.35	78.23	NA
S-6	02/13/1992	64000	21000	6200	1600	5100	NA	NA	100.58 (TOC)	22.28	78.30	NA
S-6	05/11/1992	57000	22000	7600	2200	7700	NA	NA	100.58 (TOC)	22.10	78.48	NA
S-6	12/03/1992	110000	26000	9400	2100	8700	NA	NA	100.58 (TOC)	22.14	78.44	NA
S-6	05/13/1993	58000	21000	6800	2500	9800	NA	NA	100.58 (TOC)	22.16	78.42	NA
S-6	07/22/1993	70000	31000	14000	3000	13000	NA	NA	100.58 (TOC)	21.64	78.94	NA
S-6	10/20/1993	48000	28000	9800	3200	12000	NA	NA	100.58 (TOC)	21.62	78.96	NA
S-6	01/25/1994	70000	23000	7500	2500	8000	NA	NA	100.58 (TOC)	21.80	78.78	NA
S-6	04/25/1994	61000	16000	4000	1800	5100	NA	NA	100.58 (TOC)	21.68	78.90	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-6	07/21/1994	44000	8200	3600	1400	3900	NA	NA	100.58 (TOC)	21.78	78.80	NA
S-6 (D)	07/21/1994	32000	7800	3400	1300	3700	NA	NA	22.08	NA	NA	NA
S-6	10/24/1994	2936	1184	440.6	163	648.4	NA	NA	100.58 (TOC)	22.06	78.52	NA
S-6 (D)	10/24/1994	2968	770.8	325.3	144	622	NA	NA	22.08	NA	NA	NA
S-6	12/22/1994	32000	7000	2900	790	2400	NA	NA	22.08*	21.91	0.17	NA
S-6 (D)	12/22/1994	32000	8000	3800	1100	3400	NA	NA	22.08	NA	NA	NA
S-6	04/20/1995	56000	15000	3800	1900	4900	NA	NA	22.08	21.38	0.70	NA
S-6 (D)	04/20/1995	49000	13000	3500	1800	4700	NA	NA	22.08	NA	NA	NA
S-6	10/04/1995	49000	8400	4700	1800	4800	NA	NA	22.08	21.80	0.28	NA
S-6 (D)	10/04/1995	41000	8400	4100	1400	4400	NA	NA	22.08	NA	NA	NA
S-6	01/03/1996	52000	9100	7100	1800	5800	NA	NA	22.08	21.70	0.38	NA
S-6	04/11/1996	59000	11000	7100	2100	6400	<500	NA	22.08	21.62	0.46	NA
S-6 (D)	04/11/1996	59000	11000	6800	1900	6400	<500	NA	22.08	NA	NA	NA
S-6	07/11/1996	72000	18000	6600	2500	8400	<1000	NA	22.08	21.65	2.78	NA
S-6	10/02/1996	57000	11000	6500	1500	5100	<500	NA	22.08	21.80	2.63	NA
S-6	01/22/1997	67000	15000	5000	1800	5400	<1000	NA	22.08	19.95	2.13	NA
S-6 (D)	01/22/1997	63000	15000	4800	1800	5200	<1000	NA	22.08	NA	NA	NA
S-6	07/21/1997	61000	15000	2100	1100	3500	1900	NA	22.08	20.61	1.47	NA
S-6	01/22/1998	46000	14000	3200	1300	3400	<500	NA	22.08	19.82	2.26	NA
S-6	07/08/1998	74000	26000	7500	2200	6200	<1000	NA	22.08	18.20	3.88	NA
S-6	10/26/1998	NA	NA	NA	NA	NA	NA	NA	22.08	18.81	3.27	NA
S-6	01/28/1999	120000	9000	14000	2700	14000	3700	NA	22.08	19.73	2.35	NA
S-6	04/23/1999	58500	15900	1360	1640	3030	<2500	NA	22.08	17.58	4.50	NA
S-6	07/29/1999	36200	10300	760	930	1360	<1000	NA	22.08	21.35	0.73	NA
S-6	11/01/1999	36000	11700	767	865	1670	<1250	<40.0	22.08	19.23	2.85	NA
S-6	01/07/2000	36000	7600	4600	840	3600	<1000	NA	22.08	19.53	2.55	NA
S-6	04/11/2000	14600	7540	205	306	609	621	NA	22.08	18.16	3.92	NA
S-6	07/19/2000	2590	629	63.9	99.6	267	124	72.7b	22.08	18.40	3.68	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	--------------	----------------------------	--------------------------	---------------------------

S-6	10/12/2000	32900	14200	966	1060	1790	<500	<100	22.08	19.52	2.56	NA
S-6	01/09/2001	27600	11200	675	666	1580	1430	<10.0b	22.08	19.69	2.39	NA
S-6	02/05/2001	NA	NA	NA	NA	NA	NA	NA	22.08	19.20	2.88	NA
S-6	04/06/2001	16900	7800	343	172	966	809	<20.0	22.08	18.25	3.83	NA
S-6	07/25/2001	29000	9800	1700	1000	1800	NA	<250	22.08	18.27	3.81	NA
S-6	11/01/2001	41000	15000	2400	1100	2500	NA	<500	22.08	19.30	2.78	NA
S-6	01/17/2002 d	38000	11000	1700	990	2200	NA	<500	22.08	18.51	3.57	NA
S-6	05/08/2002	72000	21000	4400	2200	5300	NA	<1000	22.08	18.30	3.78	NA
S-6	07/18/2002	71000	17000	4300	1700	4800	NA	<1000	30.56	18.19	12.37	NA
S-6	10/15/2002	55000	16000	4600	1500	4600	NA	<100	30.56	18.77	11.79	NA
S-6	01/02/2003	75000	21000	5000	2400	6400	NA	<50	30.56	18.60	11.96	NA
S-6	04/15/2003	64000	29000	6400	2700	5600	NA	<1000	30.56	18.27	12.29	NA
S-6	07/14/2003	47000	19000	4300	1500	4300	NA	<100	30.56	18.05	12.51	NA

S-8	12/22/1994	600	120	32	5.2	34	NA	NA	27.21	24.87	2.34	NA
S-8	04/20/1995	460	180	23	5.2	21	NA	NA	27.21	23.90	3.31	NA
S-8	10/04/1995	830	210	38	11	42	NA	NA	27.21	24.48	2.73	NA
S-8	01/03/1996	350	61	12	2.5	12	NA	NA	27.21	24.62	2.59	NA
S-8 (D)	01/03/1996	340	54	12	2.4	12	NA	NA	27.21	NA	NA	NA
S-8	04/11/1996	570	140	37	12	47	<6.2	NA	27.21	24.32	2.89	NA
S-8	07/11/1996	980	98	32	9.1	160	<12	NA	27.21	24.10	3.11	NA
S-8	10/02/1996	280	62	13	3.3	25	15	NA	27.21	25.38	1.83	NA
S-8 (D)	10/02/1996	490	110	24	7.0	45	22	<2.0	27.21	NA	NA	NA
S-8	01/22/1997	400	90	13	4.9	25	12	NA	27.21	23.91	3.30	NA
S-8	07/21/1997	2900	380	110	26	260	85	NA	27.21	23.62	3.59	NA
S-8 (D)	07/21/1997	3200	420	120	32	300	130	NA	27.21	NA	NA	NA
S-8	01/22/1998	3800	790	140	42	330	160	NA	27.21	23.52	3.69	NA
S-8 (D)	01/22/1998	3500	780	120	33	300	160	NA	27.21	NA	NA	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	--------------	----------------------------	--------------------------	---------------------------

S-8	07/08/1998	3600	1800	<25	<25	<25	<125	NA	27.21	21.52	5.69	NA
S-8 (D)	07/08/1998	4000	1800	<25	<25	31	<125	NA	27.21	NA	NA	NA
S-8	10/26/1998	NA	NA	NA	NA	NA	NA	NA	27.21	22.01	5.20	NA
S-8	01/28/1999	2000	630	6.2	24	51	43	NA	27.21	23.03	4.18	NA
S-8	04/23/1999	1050	408	<5.00	<5.00	6.65	<50.0	NA	27.21	22.15	5.06	NA
S-8	07/29/1999	955	344	<2.50	6.90	16.2	<25.0	NA	27.21	21.95	5.26	NA
S-8	11/01/1999	1800	550	6.45	15	40.4	<50.0	NA	27.21	22.55	4.66	NA
S-8	01/07/2000	1300	600	11	29	48	<13	NA	27.21	22.87	4.34	NA
S-8	04/11/2000	342	101	4.42	4.24	14.7	21.4	NA	27.21	21.86	5.35	NA
S-8	07/19/2000	579	228	6.37	6.45	25.0	<12.5	NA	27.21	21.93	5.28	NA
S-8	10/12/2000	947	340	8.64	3.26	38.3	<12.5	<2.00	27.21	22.92	4.29	NA
S-8	01/09/2001	1090	394	<10.0	<10.0	33.3	57.6	NA	27.21	23.19	4.02	NA
S-8	04/06/2001	671	182	12.5	16.4	47.1	42.5	NA	27.21	22.46	4.75	NA
S-8	07/25/2001	500	70	6.7	11	23	NA	<5.0	27.21	22.50	4.71	NA
S-8	11/01/2001	1900	250	28	39	180	NA	<5.0	27.21	22.44	4.77	NA
S-8	01/17/2002 d	830	140	11	12	89	NA	<5.0	27.21	21.82	5.39	NA
S-8	05/08/2002 d	210	34	1.7	4.1	15	NA	<5.0	27.21	21.35	5.86	NA
S-8	07/18/2002	650	68	2.8	9.7	42	NA	<5.0	35.85	21.53	14.32	NA
S-8	10/15/2002	1000	160	4.2	7.7	74	NA	<0.50	35.85	21.97	13.88	NA
S-8	01/02/2003	440	55	1.8	2.9	31	NA	<0.50	35.85	21.95	13.90	NA
S-8	04/15/2003	NA	NA	NA	NA	NA	NA	NA	35.85	21.73	14.12	NA
S-8	07/14/2003	60	6.8	<0.50	0.98	4.9	NA	<0.50	35.85	21.40	14.45	NA

S-9	12/22/1994	2600	400	150	42	310	NA	NA	26.06	24.37	1.69	NA
S-9	04/20/1995	1900	400	130	51	200	NA	NA	26.06	23.49	2.57	NA
S-9	10/04/1995	3200	590	260	68	280	NA	NA	26.06	24.01	2.05	NA
S-9	01/03/1996	Well inaccessible		NA	NA	NA	NA	NA	26.06	NA	NA	NA
S-9	04/11/1996	2100	440	1500	42	210	<25	NA	26.06	23.61	2.45	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-9	07/11/1996	5200	940	450	120	520	<50	NA	26.06	23.78	2.28	NA
S-9 (D)	07/11/1996	4800	890	430	110	500	<50	NA	26.06	NA	NA	NA
S-9	10/02/1996	3000	680	220	56	270	<62	NA	26.06	24.31	1.75	NA
S-9	01/22/1997	1500	230	71	36	130	<12	NA	26.06	23.08	2.98	NA
S-9	07/21/1997	3400	590	57	19	210	96	NA	26.06	22.83	3.23	NA
S-9	01/22/1998	2600	300	46	<10	270	62	NA	26.06	21.96	4.10	NA
S-9	07/08/1998	820	150	6.2	8	57	<10	NA	26.06	20.85	5.21	NA
S-9	10/26/1998	NA	NA	NA	NA	NA	NA	NA	26.06	21.39	4.67	NA
S-9	01/28/1999	<50	1.0	<0.50	<0.50	<0.50	<2.5	NA	26.06	22.32	3.74	NA
S-9	04/23/1999	NA	NA	NA	NA	NA	NA	NA	26.06	21.41	4.65	NA
S-9	07/29/1999	117	7.77	0.817	0.683	5.05	<5.00	NA	26.06	21.25	4.81	NA
S-9	11/01/1999	NA	NA	NA	NA	NA	NA	NA	26.06	21.92	4.14	NA
S-9	01/07/2000	<50	1.2	<0.50	<0.50	<0.50	<2.5	NA	26.06	22.11	3.95	NA
S-9	04/11/2000	NA	NA	NA	NA	NA	NA	NA	26.06	21.14	4.92	NA
S-9	07/19/2000	Well inaccessible		NA	NA	NA	NA	NA	26.06	NA	NA	NA
S-9	10/12/2000	NA	NA	NA	NA	NA	NA	NA	26.06	22.24	3.82	NA
S-9	01/09/2001	<50.0	1.45	<0.500	<0.500	<0.500	<2.50	NA	26.06	22.52	3.54	NA
S-9	04/06/2001	NA	NA	NA	NA	NA	NA	NA	26.06	23.61	2.45	NA
S-9	07/25/2001	Well inaccessible		NA	NA	NA	NA	NA	26.06	NA	NA	NA
S-9	08/13/2001	Well inaccessible		NA	NA	NA	NA	NA	26.06	NA	NA	NA
S-9	11/01/2001	NA	NA	NA	NA	NA	NA	NA	26.06	21.78	4.28	NA
S-9	01/17/2002 d	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	26.06	21.15	4.91	NA
S-9	05/08/2002	NA	NA	NA	NA	NA	NA	NA	26.06	20.56	5.50	NA
S-9	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	34.70	20.88	13.82	NA
S-9	10/15/2002	NA	NA	NA	NA	NA	NA	NA	34.70	21.41	13.29	NA
S-9	01/02/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	34.70	21.35	13.35	NA
S-9	04/15/2003	NA	NA	NA	NA	NA	NA	NA	34.70	21.14	13.56	NA
S-9	07/14/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	34.70	20.80	13.90	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-10	12/22/1994	420	27	8.0	18	45	NA	NA	28.04	25.84	2.20	NA
S-10	04/20/1995	820	49	3.7	97	52	NA	NA	28.04	24.92	3.12	NA
S-10	10/04/1995	240	6.5	1.1	16	12	NA	NA	28.04	25.47	2.57	NA
S-10	01/03/1996	1100	27	4.9	110	70	NA	NA	28.04	25.60	2.44	NA
S-10	04/11/1996	530	19	1.6	82	52	<5.0	NA	28.04	25.27	2.77	NA
S-10	07/11/1996	570	16	3.2	53	53	<2.5	NA	28.04	25.46	2.58	NA
S-10	10/02/1996	270	8.2	0.77	24	23	3.3	NA	28.04	25.81	2.23	NA
S-10	01/22/1997	160	4.8	0.73	16	11	<2.5	NA	28.04	24.74	3.30	NA
S-10	07/21/1997	530	5.7	0.70	29	69	<2.5	NA	28.04	24.50	3.54	NA
S-10	01/22/1998	1500	15	<5.0	88	130	<25	NA	28.04	24.44	3.60	NA
S-10	07/08/1998	530	4.8	1.1	47	51	<2.5	NA	28.04	22.36	5.68	NA
S-10	10/26/1998	NA	NA	NA	NA	NA	NA	NA	28.04	22.81	5.23	NA
S-10	01/28/1999	630	4.6	0.98	<0.50	59	<2.5	NA	28.04	23.82	4.22	NA
S-10	04/23/1999	NA	NA	NA	NA	NA	NA	NA	28.04	22.96	5.08	NA
S-10	07/29/1999	728	3.40	<1.00	41.8	38.0	<10.0	NA	28.04	22.63	5.41	NA
S-10	11/01/1999	NA	NA	NA	NA	NA	NA	NA	28.04	23.02	5.02	NA
S-10	01/07/2000	870	8.5	1.3	110	110	<2.5	NA	28.04	23.33	4.71	NA
S-10	04/11/2000	NA	NA	NA	NA	NA	NA	NA	28.04	22.64	5.40	NA
S-10	07/19/2000	612	3.75	<0.500	41.6	43.6	<2.50	NA	28.04	23.04	5.00	NA
S-10	10/12/2000	NA	NA	NA	NA	NA	NA	NA	28.04	23.92	4.12	NA
S-10	01/09/2001	647	7.62	1.01	66.2	42.4	<2.50	NA	28.04	24.13	3.91	NA
S-10	04/06/2001	NA	NA	NA	NA	NA	NA	NA	28.04	25.37	2.67	NA
S-10	07/25/2001	340	1.5	<0.50	42	19	NA	<5.0	28.04	25.35	2.69	NA
S-10	11/01/2001	NA	NA	NA	NA	NA	NA	NA	28.04	23.22	4.82	NA
S-10	01/17/2002 d	1100	3.5	<0.50	55	46	NA	<5.0	28.04	22.72	5.32	NA
S-10	05/08/2002	NA	NA	NA	NA	NA	NA	NA	28.04	22.35	5.69	NA
S-10	07/18/2002	750	1.8	<0.50	42	26	NA	<5.0	36.35	22.05	14.30	NA

**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
S-10	10/15/2002	NA	NA	NA	NA	NA	NA	NA	36.35	22.51	13.84	NA
S-10	01/02/2003	440	1.8	<0.50	14	24	NA	<5.0	36.35	22.50	13.85	NA
S-10	04/15/2003	NA	NA	NA	NA	NA	NA	NA	36.35	22.32	14.03	NA
S-10	07/14/2003	210	0.86	<0.50	13	12	NA	<0.50	36.35	21.99	14.36	NA

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to July 25, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to July 25, 2001, analyzed by EPA Method 8020

MTBE = Methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

TOB = Top of Wellbox Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

NA = Not applicable



**WELL CONCENTRATIONS**  
**Former Shell Service Station**  
**461 8th 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)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	------------------------	--------------	----------------------------	--------------------------	---------------------------

Notes:

a = Ethylbenzene and xylenes combined.

b = This sample analyzed outside of EPA recommended holding time.

c = Depth to water measured from Top of Casing; elevation unknown.

d = Grab sampled.

e = Casing broken; Top of Casing elevation unknown.

\* = Prior to December 22, 1994, well elevations taken from Top of Casing.

Beginning July 18, 2002, well elevations taken from Top of Casing.

Site surveyed March 5, 2002, by Virgil Chavez Land Surveying of Vallejo, California.

**Blaine Tech Services, Inc.**

July 28, 2003

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attn.: Leon Gearhart  
Project#: 030714-SS1  
Project: 97093399  
Site: 461 8th Street, Oakland

Dear Mr. Gearhart,

Attached is our report for your samples received on 07/15/2003 16:00

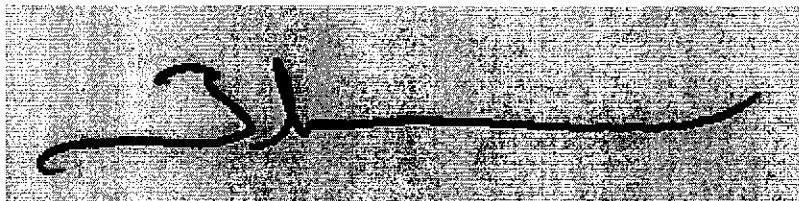
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 08/29/2003 unless you have requested otherwise.

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

You can also contact me via email. My email address is: [tgranicher@stl-inc.com](mailto:tgranicher@stl-inc.com)

Sincerely,



Tod Granicher  
Project Manager

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

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

Project: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland

**Samples Reported**

Sample Name	Date/Time	Matrix	Count
S-5	07/14/2003 10:40	Water	1
S-6	07/14/2003 09:42	Water	2
S-9	07/14/2003 09:22	Water	3
S-8	07/14/2003 08:30	Water	4
S-10	07/14/2003 09:18	Water	5

Severn Trent Laboratories, Inc.

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

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

07/25/2003 18:37

Page 1 of 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: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	21000	1000	ug/L	20.00	07/23/2003 18:30	
Benzene	210	10	ug/L	20.00	07/23/2003 18:30	
Toluene	460	10	ug/L	20.00	07/23/2003 18:30	
Ethylbenzene	650	10	ug/L	20.00	07/23/2003 18:30	
Total xylenes	2900	20	ug/L	20.00	07/23/2003 18:30	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L	20.00	07/23/2003 18:30	
<b>Surrogates(s)</b>						
1,2-Dichloroethane-d4	122.2	76-130	%	20.00	07/23/2003 18:30	
Toluene-d8	103.6	78-115	%	20.00	07/23/2003 18:30	

**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: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	47000	10000	ug/L	200.00	07/23/2003 18:53	
Benzene	19000	100	ug/L	200.00	07/23/2003 18:53	
Toluene	4300	100	ug/L	200.00	07/23/2003 18:53	
Ethylbenzene	1500	100	ug/L	200.00	07/23/2003 18:53	
Total xylenes	4300	200	ug/L	200.00	07/23/2003 18:53	
Methyl tert-butyl ether (MTBE)	ND	100	ug/L	200.00	07/23/2003 18:53	
<b>Surrogates(s)</b>						
1,2-Dichloroethane-d4	122.9	76-130	%	200.00	07/23/2003 18:53	
Toluene-d8	104.3	78-115	%	200.00	07/23/2003 18:53	

**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: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	60	50	ug/L	1.00	07/23/2003 17:23	
Benzene	6.8	0.50	ug/L	1.00	07/23/2003 17:23	
Toluene	ND	0.50	ug/L	1.00	07/23/2003 17:23	
Ethylbenzene	0.98	0.50	ug/L	1.00	07/23/2003 17:23	
Total xylenes	4.9	1.0	ug/L	1.00	07/23/2003 17:23	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	07/23/2003 17:23	
<b>Surrogates(s)</b>						
1,2-Dichloroethane-d4	129.6	76-130	%	1.00	07/23/2003 17:23	
Toluene-d8	104.4	78-115	%	1.00	07/23/2003 17:23	

**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: 030714-SS1

97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	07/25/2003 00:11	
Benzene	ND	0.50	ug/L	1.00	07/25/2003 00:11	
Toluene	ND	0.50	ug/L	1.00	07/25/2003 00:11	
Ethylbenzene	ND	0.50	ug/L	1.00	07/25/2003 00:11	
Total xylenes	ND	1.0	ug/L	1.00	07/25/2003 00:11	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	07/25/2003 00:11	
<b>Surrogates(s)</b>						
1,2-Dichloroethane-d4	112.2	76-130	%	1.00	07/25/2003 00:11	
Toluene-d8	103.4	78-115	%	1.00	07/25/2003 00:11	

**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: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	210	50	ug/L	1.00	07/23/2003 19:37	
Benzene	0.86	0.50	ug/L	1.00	07/23/2003 19:37	
Toluene	ND	0.50	ug/L	1.00	07/23/2003 19:37	
Ethylbenzene	13	0.50	ug/L	1.00	07/23/2003 19:37	
Total xylenes	12	1.0	ug/L	1.00	07/23/2003 19:37	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	07/23/2003 19:37	
<b>Surrogates(s)</b>						
1,2-Dichloroethane-d4	109.8	76-130	%	1.00	07/23/2003 19:37	
Toluene-d8	100.7	78-115	%	1.00	07/23/2003 19:37	



**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: 030714-SS1

97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	07/23/2003 10:41	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	07/23/2003 10:41	
Benzene	ND	0.5	ug/L	07/23/2003 10:41	
Toluene	ND	0.5	ug/L	07/23/2003 10:41	
Ethylbenzene	ND	0.5	ug/L	07/23/2003 10:41	
Total xylenes	ND	1.0	ug/L	07/23/2003 10:41	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	100.3	76-130	%	07/23/2003 10:41	
Toluene-d8	105.2	78-115	%	07/23/2003 10:41	

**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: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland

*(This section contains a very faint, low-contrast header table with columns for Compound, Conc., RL, Unit, Analyzed, and Flag. The text is illegible due to the image quality.)*

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	07/24/2003 22:20	
Benzene	ND	0.5	ug/L	07/24/2003 22:20	
Toluene	ND	0.5	ug/L	07/24/2003 22:20	
Ethylbenzene	ND	0.5	ug/L	07/24/2003 22:20	
Total xylenes	ND	1.0	ug/L	07/24/2003 22:20	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	07/24/2003 22:20	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	102.4	76-130	%	07/24/2003 22:20	
Toluene-d8	105.0	78-115	%	07/24/2003 22:20	

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

Blaine Tech Services, Inc.

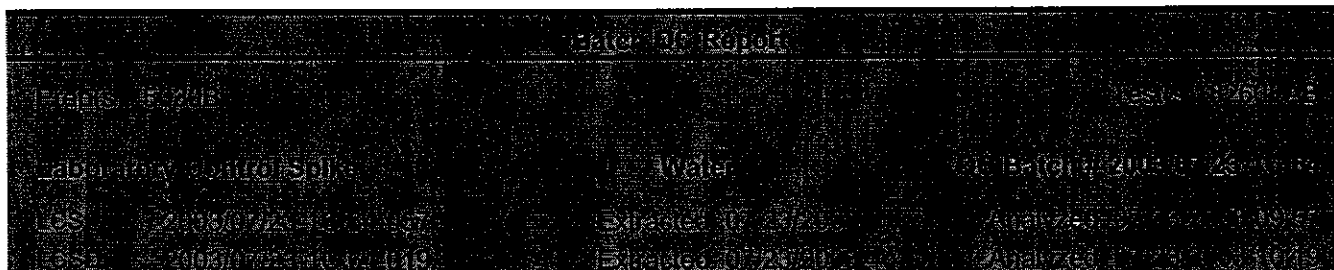
Attn.: Leon Gearhart

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

Project: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	22.5	21.7	25	90.0	86.8	3.6	65-165	20		
Benzene	18.4	19.5	25	73.6	78.0	5.8	69-129	20		
Toluene	19.2	20.1	25	76.8	80.4	4.6	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	525	494	500	105.0	98.8		76-130			
Toluene-d8	516	523	500	103.2	104.6		78-115			

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

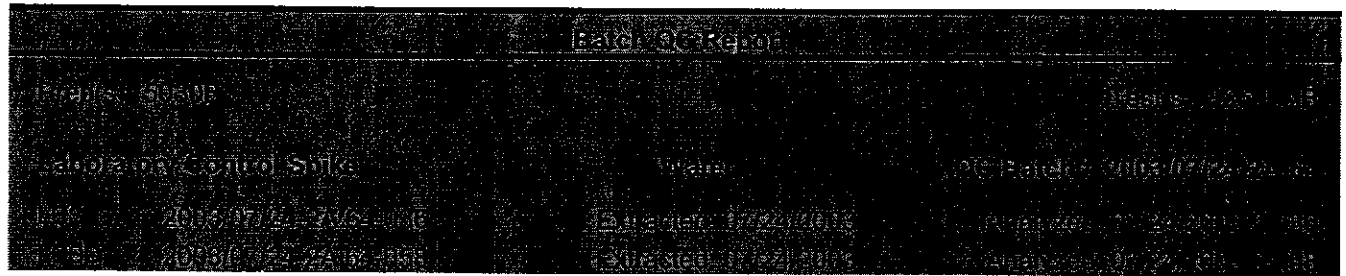
Blaine Tech Services, Inc.  
Attn.: Leon Gearhart

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

Project: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	19.4	19.7	25	77.6	78.8	1.5	69-129	20		
Toluene	20.4	20.8	25	81.6	83.2	1.9	70-130	20		
Methyl tert-butyl ether (MTBE)	23.2	24.5	25	92.8	98.0	5.5	65-165	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	541	545	500	108.2	109.0		76-130			
Toluene-d8	534	523	500	106.8	104.6		78-115			

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

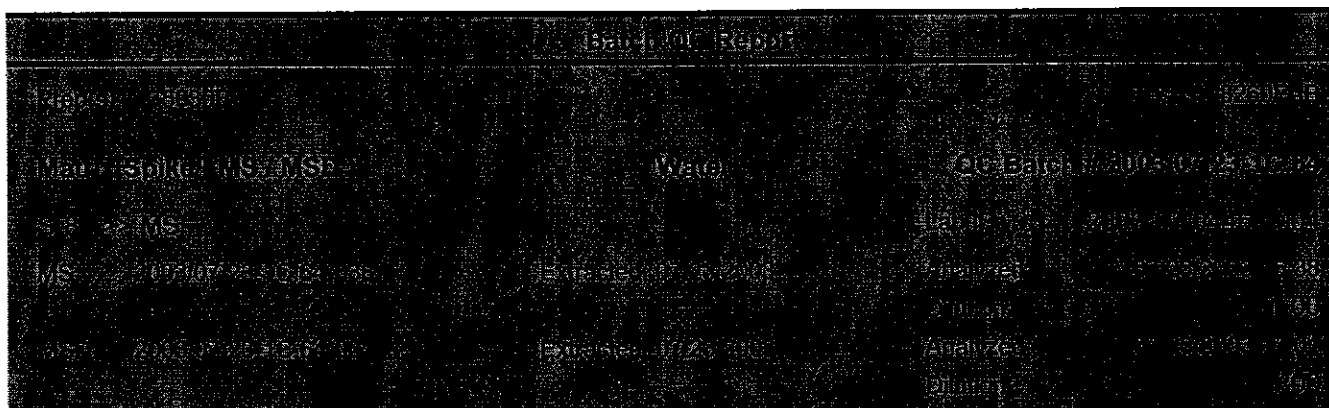
San Jose, CA 95112-1105

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

Project: 030714-SS1  
97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland



Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	31.5	33.1	6.82	25	98.7	105.1	6.3	69-129	20		
Toluene	21.6	22.3	ND	25	86.4	89.2	3.2	70-130	20		
Methyl tert-butyl ether	25.0	26.3	ND	25	100.0	105.2	5.1	65-165	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	557	555		500	111.4	111.0		76-130			
Toluene-d8	519	510		500	103.8	102.0		78-115			

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

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

Project: 030714-SS1

97093399

Received: 07/15/2003 16:00

Site: 461 8th Street, Oakland

**Legend and Notes**

**Analysis Flag**

o

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

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quamy Lane, Pleasanton, CA 94566

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

07/25/2003 18:37

Page 12 of 12

LAB: STL

# SHELL Chain Of Custody Record

76052

Lab Identification (if necessary)

Address:  
City, State, Zip:

Shell Project Manager to be involved:  
 SCIENCE & ENGINEERING  
 TECHNICAL SERVICES  
 OAKRIDGE  
**Karen Petryna**  
2003.07.0446

INCIDENT NUMBER (SAE ONLY)  
**9 7 0 9 3 3 9 9**  
 SAP or CRKT NUMBER (ITS/CRM)

DATE: 7/14/03  
 PAGE: 1 of 1

SAMPLING COMPANY <b>Blaine Tech Services</b>	LOG CODE <b>BTSS</b>	SITE ADDRESS (Street and City) <b>461 8th Street, Oakland</b>	ACCOUNT NO. <b>T0600101263</b>
ADDRESS <b>1880 Rogers Avenue, San Jose, CA 95112</b>	EDD DELIVERABLE TO (Responsible Party or Company)	PHONE NO. <b>(707) 442-2700</b>	CONSULTANT PROJECT NO. <b>STS#030714-SS</b>
PROJECT CONTACT (Party or POF Report to) <b>Leon Gearhart</b>	SAMPLER NAME (Print) <b>Suction Sampling</b>	EMAIL <b>sonomaedf@cambris-erm.com</b>	LAB USE ONLY
TELEPHONE <b>408-573-0555</b>	FAX <b>408-573-7771</b>	LAB <b>gearhart@blaintech.com</b>	

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

CA - RWQCR REPORT FORMAT  LIST AGENCY

GC/MS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ FINEST 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
TPH - Gas Permeable	BTX	MTBE (hex 18 - 5000 RL)	MTBE (hex 18 - 5000 RL)	Chlorinated (H) by (acclm)	Ethanol (2000)	Methanol	1,2-DCA (acclm)	EDB (renew)	TPH - Diesel, Extractable (reclm)	
										47°C TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	VOL. OF CONT.	TPH - Gas Permeable	BTX	MTBE (hex 18 - 5000 RL)	MTBE (hex 18 - 5000 RL)	Chlorinated (H) by (acclm)	Ethanol (2000)	Methanol	1,2-DCA (acclm)	EDB (renew)	TPH - Diesel, Extractable (reclm)
		DATE	TIME												
	S-5	7/14/03	1040	GW	3	X	X	X							
	S-6		902			X	X	X							
	S-7		922			X	X	X							
	S-8		830			X	X	X							
	S-10		918			X	X	X							

Released by (Signature) <i>[Signature]</i>	Received by (Signature) <i>Alex Taborek</i>	Date: <u>7-15-03</u>	Time: <u>16:00</u>
Released by (Signature) <i>Alex Taborek</i>	Received by (Signature) <i>[Signature]</i>	Date: <u>7-15-03</u>	Time: <u>17:30</u>
Released by (Signature)	Received by (Signature)	Date:	Time: