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**Shell Oil Products US**

April 5, 2004

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

Alameda County  
APR 07 2004  
Environmental Health  
Department of Health

**Subject:**      **Shell-branded Service Station**  
                        4255 MacArthur Boulevard  
                        Oakland, California

Dear Mr. Hwang:

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

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

Sincerely,

**Shell Oil Products US**

*Karen Petryna*

Karen Petryna  
Sr. Environmental Engineer

# C A M B R I A

April 5, 2004

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

Re: **First Quarter 2004 Monitoring Report**  
Former Shell-branded Service Station  
4255 MacArthur Boulevard  
Oakland, California  
Incident #98995758  
Cambria Project #246-0524-002



Dear Mr. Hwang:

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.

## HYDROCARBON REMOVAL SUMMARY

**Groundwater Extraction (GWE):** Monthly GWE using a vacuum truck has been conducted intermittently at the site since April 1999. Mobile GWE vacuum operations consist of lowering dedicated stingers into selected monitoring wells and extracting fluids using a vacuum truck. The volume of extracted fluid is recorded and used to calculate the quantity of aqueous-phase hydrocarbon removed from the subsurface. To date, an estimated 15.1 pounds of liquid-phase hydrocarbons and 26.8 pounds of liquid-phase methyl tert-butyl ether (MTBE) have been removed from the site. GWE was discontinued at the site after September 2003 due to low pumping volumes. Liquid-phase mass removal data for the site are presented in Table 1.

**Dual Phase Vapor Extraction (DVE):** DVE is the process of applying high vacuum through an airtight well seal to simultaneously extract soil vapors from the vadose zone and enhance GWE from the saturated zone. For mobile DVE, a vacuum truck is used to create the vacuum and contain extracted fluids. Mobile DVE augmented hydrocarbon removal efforts from November 2000 to June 2001, from April 2002 through September 2003, and from July 2003 through September 2003. DVE was discontinued after September 2003 due to decreased mass removal. To date, the system has removed an estimated 26.4 pounds of vapor-phase hydrocarbons. Vapor-phase mass removal data for the site are presented in Table 2.

Cambria  
Environmental  
Technology, Inc.

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

**Separate Phase Hydrocarbons (SPH):** SPH were observed periodically in wells MW-2 and MW-3 between 1994 and 1997. During that time, an estimated total of 21.8 pounds of SPH was removed from monitoring wells by manual bailing. SPH were observed in well MW-3 in the third quarter of 2002 and the first quarter of 2003. During the first quarter of 2004, SPH were observed in wells MW-2 and MW-3.

The table below summarizes the aqueous-, separate-, and vapor-phase hydrocarbon removal data for the site.

Mass Removal	Cumulative MTBE (lbs)	Cumulative Hydrocarbons (lbs)
Aqueous-Phase	26.8	15.1
Separate-Phase	0.0	21.8
Vapor-Phase	0.3	26.4
Total	27.1	63.3

## FIRST QUARTER 2004 ACTIVITIES

**Groundwater Monitoring:** Blaine Tech Services, Inc. (Blaine) of San Jose, gauged and sampled the site wells, calculated groundwater elevations and compiled the gasoline constituents analytical data. Cambria prepared a vicinity map which includes previously submitted well survey information (Figure 1) and a groundwater elevation contour map (Figure 2). Blaine's report, presenting the laboratory report and supporting field documents, is included as Attachment A.

**Joint Groundwater Sampling:** Cambria coordinated joint groundwater sampling with the adjacent ConocoPhillips (COP) service station #1156, located at the corner of High and MacArthur, and used the coordinated sampling data to determine the groundwater elevation contours shown on Figure 2. The COP groundwater monitoring data and analytical results tables are included as Attachment B.

**Additional Oxygenate Analysis:** In addition to the regular quarterly analysis for total petroleum hydrocarbons as gasoline, benzene, toluene, ethylbenzene, xylenes and MTBE, groundwater samples were analyzed for tert-butyl alcohol (TBA). Analytical results for MTBE, di-isopropyl ether, ethyl tert-butyl ether, tert-amyl methyl ether, TBA, and ethanol are presented in Attachment A.

**Potential Off-Site Source:** MTBE concentrations in upgradient COP wells MW-2 and MW-7 and in Shell's well MW-2 are depicted graphically in Figure 3. Wells MW-2 and MW-3 contained SPH during the fourth quarter 2003. An elevated MTBE concentration was observed in Shell well MW-2 in the second quarter of 2000; however, it declined steadily until the second quarter of 2002. The current rebound in MTBE concentrations in MW-2 might be attributed to the observed upgradient COP plume: beginning with COP well MW-2 in the third quarter of 2000, progressing to COP well MW-7 in the fourth quarter of 2001, and appearing to influence Shell well MW-2 beginning in the third quarter of 2002. It is clear from the concentrations observed in COP wells MW-2 and MW-7 that the COP plume has migrated in the direction of the former Shell station. Shell has inquired of COP about their plans to address their migrating plume, but has not yet received any information.



## **ANTICIPATED SECOND QUARTER 2004 ACTIVITIES**

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

**Joint Groundwater Sampling:** Cambria will continue to coordinate joint sampling with the adjacent COP site and use the coordinated sampling data to determine groundwater elevation contours.

**Work Plan Revision:** Cambria will submit a revision of its September 22, 2003 *Subsurface Investigation Work Plan* to address the SPH discussed above.

**CLOSING**

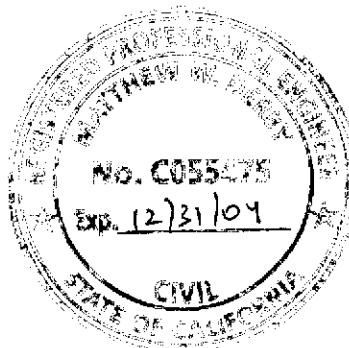
We appreciate the opportunity to work with you on this project. Please call Caryl Weekley at (510) 420-3324 if you have any questions or comments.

Sincerely,  
**Cambria Environmental Technology, Inc**



*Caryl A. Weekley*  
Caryl A. Weekley, R.G.  
Senior Project Geologist

*Matthew W. Derby*  
Matthew W. Derby, P.E.  
Senior Project Engineer



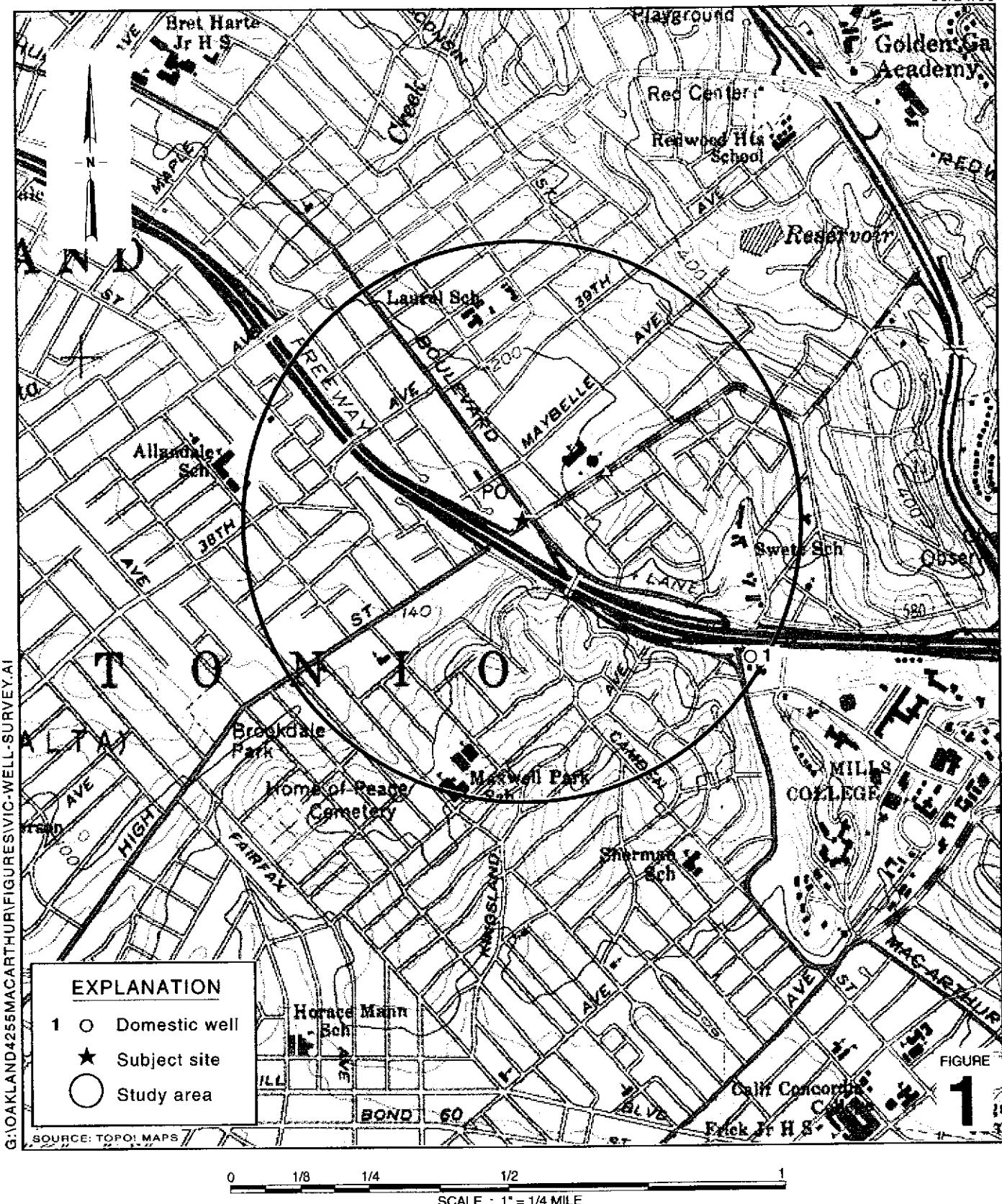
Figures:     1 - Vicinity/Area Well Survey Map  
              2 - Groundwater Elevation Contour Map  
              3 - MTBE Concentrations – MacArthur and High Streets, Oakland

Tables:     1 - Groundwater Extraction - Mass Removal Data  
              2 - Vapor Extraction - Mass Removal Data

Attachments:     A - Blaine Groundwater Monitoring Report and Field Notes  
                  B - COP 76 Service Station #1156 Groundwater Monitoring Data and Analytical Results

cc:     Karen Petryna, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810  
          Roland C. Malone, Jr., PO Box 2744, Castro Valley, CA 94546  
          Walt Parrish, MacArthur/High Trailer Park, P.O. Box 5561, Eugene, OR 97405  
          Thomas H. Kosel, ConocoPhillips, 1232 Phillips Building, Bartlesville, OK 74004 (w/o Attachment B)

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**Former Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**Oakland, California**  
**Incident #98995758**

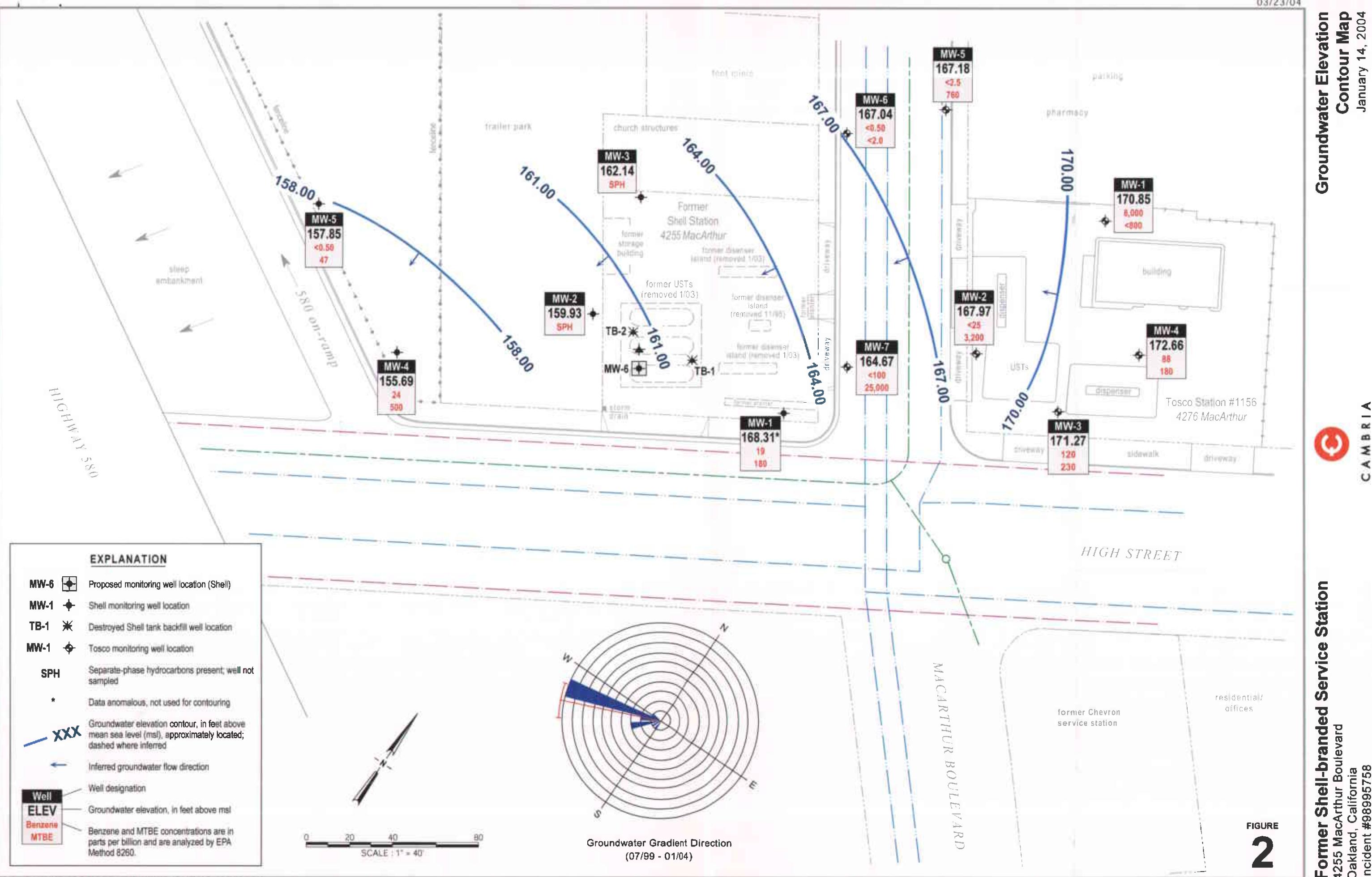


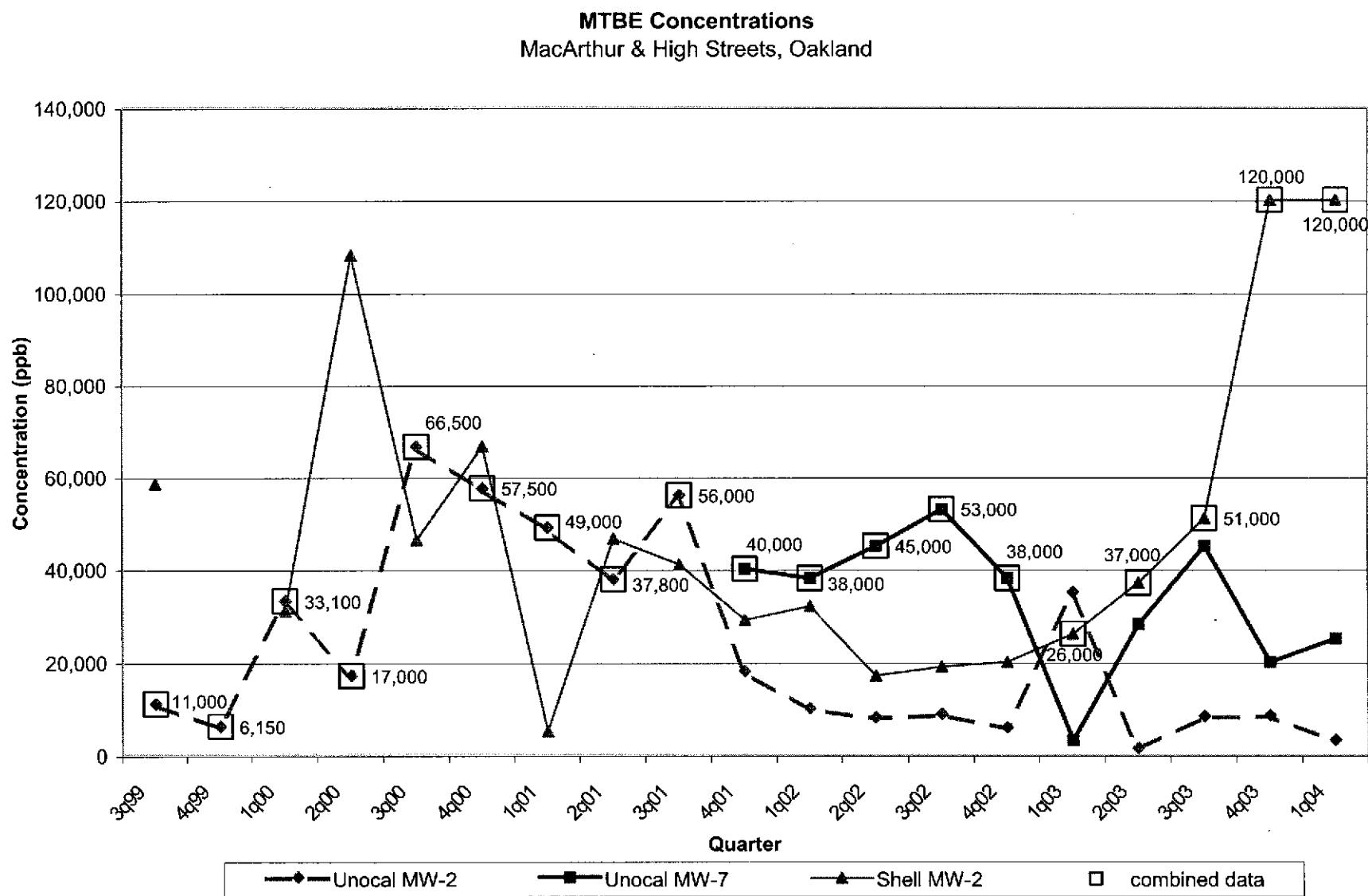
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**Vicinity/Area Well Survey Map**  
(1/2 Mile Radius)

## Groundwater Elevation Contour Map

January 14, 2004





**Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995758, 4255 MacArthur Boulevard, Oakland, CA**

Date Purged	Well ID	Cumulative			TPPH			Benzene			MTBE		
		Volume Pumped (gal)	Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
04/23/99	MW-2	200	200	04/13/98	180,000	0.30040	0.30040	2,800	0.00467	0.00467	71,000	0.11849	0.11849
05/24/99	MW-2	200	400	04/13/98	180,000	0.30040	0.60079	2,800	0.00467	0.00935	71,000	0.11849	0.23698
06/28/99	MW-2	200	600	04/13/98	180,000	0.30040	0.90119	2,800	0.00467	0.01402	71,000	0.11849	0.35547
07/30/99	MW-2	200	800	07/23/99	65,800	0.10981	1.01100	6,500	0.01085	0.02487	46,600	0.07777	0.43324
08/24/99	MW-2	100	900	07/23/99	65,800	0.05491	1.06591	6,500	0.00542	0.03029	46,600	0.03888	0.47212
10/29/99	MW-2	100	1,000	07/23/99	65,800	0.05491	1.12081	6,500	0.00542	0.03571	46,600	0.03888	0.51101
11/30/99	MW-2	100	1,100	07/23/99	65,800	0.05491	1.17572	6,500	0.00542	0.04114	46,600	0.03888	0.54989
02/02/00	MW-2	200	1,300	01/17/00	46,000	0.07677	1.25249	6,000	0.01001	0.05115	31,000	0.05174	0.60163
11/16/00	MW-2	150	1,450	10/12/00	63,200	0.07910	1.33159	5,840	0.00731	0.05846	66,600	0.08336	0.68499
02/23/01	MW-2	200	1,650	01/15/01	59,700	0.09963	1.43122	2,630	0.00439	0.06285	5,080	0.00848	0.69347
03/14/01	MW-2	300	1,950	01/15/01	59,700	0.14945	1.58067	2,630	0.00658	0.06943	5,080	0.01272	0.70618
04/20/01*	MW-2	200	2,150	04/09/01	56,900	0.09496	1.67563	1,860	0.00310	0.07254	46,600	0.07777	0.78395
05/30/01	MW-2	200	2,350	04/09/01	56,900	0.09496	1.77059	1,860	0.00310	0.07564	46,600	0.07777	0.86172
06/12/01	MW-2	100	2,450	04/09/01	56,900	0.04748	1.81807	1,860	0.00155	0.07719	46,600	0.03888	0.90061
11/06/01	MW-2	1,350	3,800	10/31/01	45,000	0.50692	2.32499	2,200	0.02478	0.10198	29,000	0.32668	1.22729
11/23/01	MW-2	1,000	4,800	10/31/01	45,000	0.37550	2.70048	2,200	0.01836	0.12033	29,000	0.24199	1.46927
12/04/01	MW-2	20	4,820	10/31/01	45,000	0.00751	2.70799	2,200	0.00037	0.12070	29,000	0.00484	1.47411
12/20/01	MW-2	50	4,870	10/31/01	45,000	0.01877	2.72677	2,200	0.00092	0.12162	29,000	0.01210	1.48621
01/14/02	MW-2	10	4,880	01/10/02	28,000	0.00234	2.72911	840	0.00007	0.12169	32,000	0.00267	1.48888
02/11/02	MW-2	62	4,942	01/10/02	28,000	0.01449	2.74359	840	0.00043	0.12212	32,000	0.01656	1.50544
02/25/02	MW-2	100	5,042	01/10/02	28,000	0.02336	2.76696	840	0.00070	0.12282	32,000	0.02670	1.53214
03/08/02*	MW-2	125	5,167	01/10/02	28,000	0.02921	2.79616	840	0.00088	0.12370	32,000	0.03338	1.56552
03/22/02	MW-2	125	5,292	01/10/02	28,000	0.02921	2.82537	840	0.00088	0.12458	32,000	0.03338	1.59890
04/10/02	MW-2	53	5,345	01/10/02	28,000	0.01238	2.83775	840	0.00037	0.12495	32,000	0.01415	1.61305
04/16/02	MW-2	100	5,445	01/10/02	28,000	0.02336	2.86111	840	0.00070	0.12565	32,000	0.02670	1.63975
04/24/02	MW-2	100	5,545	01/10/02	28,000	0.02336	2.88448	840	0.00070	0.12635	32,000	0.02670	1.66645
05/08/02	MW-2	29	5,574	04/25/02	41,000	0.00992	2.89440	1,900	0.00046	0.12681	17,000	0.00411	1.67057
05/22/02	MW-2	300	5,874	04/25/02	41,000	0.10264	2.99703	1,900	0.00476	0.13157	17,000	0.04256	1.71312
05/29/02	MW-2	122	5,996	04/25/02	41,000	0.04174	3.03877	1,900	0.00193	0.13350	17,000	0.01731	1.73043

**Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995758, 4255 MacArthur Boulevard, Oakland, CA**

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH			Benzene			MTBE		
					TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
06/05/02	MW-2	30	6,026	04/25/02	41,000	0.01026	3.04904	1,900	0.00048	0.13398	17,000	0.00426	1.73468
06/19/02	MW-2	500	6,526	04/25/02	41,000	0.17106	3.22010	1,900	0.00793	0.14190	17,000	0.07093	1.80561
06/26/02	MW-2	50	6,576	04/25/02	41,000	0.01711	3.23720	1,900	0.00079	0.14270	17,000	0.00709	1.81270
07/10/02	MW-2	900	7,476	04/25/02	41,000	0.30791	3.54511	1,900	0.01427	0.15696	17,000	0.12767	1.94037
07/17/02	MW-2	400	7,876	04/25/02	41,000	0.13685	3.68196	1,900	0.00634	0.16331	17,000	0.05674	1.99711
08/21/02	MW-2	100	7,976	07/18/02	87,000	0.07260	3.75455	2,000	0.00167	0.16498	19,000	0.01585	2.01297
08/27/02	MW-2	50	8,026	07/18/02	87,000	0.03630	3.79085	2,000	0.00083	0.16581	19,000	0.00793	2.02089
09/25/02	MW-2	178	8,204	07/18/02	87,000	0.12922	3.92007	2,000	0.00297	0.16878	19,000	0.02822	2.04912
10/22/02	MW-2	50	8,254	10/07/02	110,000	0.04589	3.96596	3,900	0.00163	0.17041	20,000	0.00834	2.05746
11/01/02	MW-2	152	8,406	10/07/02	110,000	0.13952	4.10548	3,900	0.00495	0.17535	20,000	0.02537	2.08283
11/02/02	MW-2	56	8,462	10/07/02	110,000	0.05140	4.15688	3,900	0.00182	0.17718	20,000	0.00935	2.09217
01/13/03	MW-2	40	8,502	01/06/03	65,000	0.02170	4.17858	2,400	0.00080	0.17798	26,000	0.00868	2.10085
02/12/03	MW-2	0	8,502	01/06/03	65,000	0.00000	4.17858	2,400	0.00000	0.17798	26,000	0.00000	2.10085
03/12/03	MW-2	30	8,532	01/06/03	65,000	0.01627	4.19485	2,400	0.00060	0.17858	26,000	0.00651	2.10736
04/15/03	MW-2	70	8,602	04/07/03	57,000	0.03329	4.22814	1,900	0.00111	0.17969	37,000	0.02161	2.12897
07/22/03	MW-2	200	8,802	07/07/03	34,000	0.05674	4.28489	4,000	0.00668	0.18636	51,000	0.08511	2.21408
07/30/03	MW-2	125	8,927	07/07/03	34,000	0.03546	4.32035	4,000	0.00417	0.19054	51,000	0.05320	2.26728
08/05/03	MW-2	175	9,102	07/07/03	34,000	0.04965	4.37000	4,000	0.00584	0.19638	51,000	0.07447	2.34175
08/19/03	MW-2	127	9,229	07/07/03	34,000	0.03603	4.40603	4,000	0.00424	0.20062	51,000	0.05405	2.39580
09/02/03	MW-2	159	9,388	07/07/03	34,000	0.04511	4.45114	4,000	0.00531	0.20592	51,000	0.06766	2.46346
09/16/03	MW-2	156	9,544	07/07/03	34,000	0.04426	4.49540	4,000	0.00521	0.21113	51,000	0.06639	2.52985
09/30/03	MW-2	126	9,670	07/07/03	34,000	0.03575	4.53114	4,000	0.00421	0.21534	51,000	0.05362	2.58347
05/30/01	MW-3	50	50	04/09/01	33,800	0.01410	0.01410	7,100	0.00296	0.00296	13,000	0.00542	0.00542
06/12/01	MW-3	50	100	04/09/01	33,800	0.01410	0.02820	7,100	0.00296	0.00592	13,000	0.00542	0.01085
08/27/02	MW-3	300	400	07/18/02	56,000	0.14019	0.16839	3,300	0.00826	0.01419	8,400	0.02103	0.03188
09/25/02	MW-3	200	600	07/18/02	56,000	0.09346	0.26185	3,300	0.00551	0.01969	8,400	0.01402	0.04589
10/22/02	MW-3	125	725	07/18/02	56,000	0.05841	0.32026	3,300	0.00344	0.02313	8,400	0.00876	0.05466
11/01/02	MW-3	100	825	07/18/02	56,000	0.04673	0.36698	3,300	0.00275	0.02589	8,400	0.00701	0.06166

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					TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
11/02/02	MW-3	250	1,075	07/18/02	56,000	0.11682	0.48381	3,300	0.00688	0.03277	8,400	0.01752	0.07919
01/13/03	MW-3	60	1,135	01/06/03	57,000	0.02854	0.51234	3,200	0.00160	0.03437	5,100	0.00255	0.08174
02/12/03	MW-3	0	1,135	01/06/03	57,000	0.00000	0.51234	3,200	0.00000	0.03437	5,100	0.00000	0.08174
03/12/03	MW-3	52	1,187	01/06/03	57,000	0.02473	0.53708	3,200	0.00139	0.03576	5,100	0.00221	0.08395
04/15/03	MW-3	14	1,201	04/07/03	57,000	0.00666	0.54373	6,200	0.00072	0.03649	8,200	0.00096	0.08491
07/22/03	MW-3	66	1,267	07/07/03	28,000	0.01542	0.55916	4,900	0.00270	0.03919	7,900	0.00435	0.08926
07/30/03	MW-3	156	1,423	07/07/03	28,000	0.03645	0.59560	4,900	0.00638	0.04556	7,900	0.01028	0.09955
08/05/03	MW-3	74	1,497	07/07/03	28,000	0.01729	0.61289	4,900	0.00303	0.04859	7,900	0.00488	0.10442
08/19/03	MW-3	127	1,624	07/07/03	28,000	0.02967	0.64257	4,900	0.00519	0.05378	7,900	0.00837	0.11280
09/02/03	MW-3	100	1,724	07/07/03	28,000	0.02336	0.66593	4,900	0.00409	0.05787	7,900	0.00659	0.11939
09/16/03	MW-3	100	1,824	07/07/03	28,000	0.02336	0.68929	4,900	0.00409	0.06196	7,900	0.00659	0.12598
09/30/03	MW-3	126	1,950	07/07/03	28,000	0.02944	0.71873	4,900	0.00515	0.06711	7,900	0.00831	0.13429
09/05/01	TB-1	300	300	10/31/01	1,000	0.00250	0.00250	85	0.00021	0.00021	4,100	0.01026	0.01026
09/19/01	TB-1	1,400	1,700	10/31/01	1,000	0.01168	0.01419	85	0.00099	0.00121	4,100	0.04790	0.05816
10/16/01	TB-1	1,200	2,900	10/31/01	1,000	0.01001	0.02420	85	0.00085	0.00206	4,100	0.04105	0.09921
04/16/02	TB-1	1,111	4,011	10/31/01	5,000	0.04635	0.07055	410	0.00380	0.00586	9,000	0.08344	0.18265
04/23/99	TB-2	4,800	4,800	08/24/99	6,240	0.24993	0.24993	400	0.01602	0.01602	86,100	3.44856	3.44856
05/24/99	TB-2	4,800	9,600	08/24/99	6,240	0.24993	0.49986	400	0.01602	0.03204	86,100	3.44856	6.89711
06/28/99	TB-2	4,800	14,400	08/24/99	6,240	0.24993	0.74979	400	0.01602	0.04806	86,100	3.44856	10.34567
07/30/99	TB-2	4,800	19,200	08/24/99	6,240	0.24993	0.99972	400	0.01602	0.06408	86,100	3.44856	13.79422
08/24/99	TB-2	2,400	21,600	08/24/99	6,240	0.12497	1.12469	400	0.00801	0.07210	86,100	1.72428	15.51850
10/29/99	TB-2	2,255	23,855	10/29/99	7,460	0.14037	1.26506	656	0.01234	0.08444	442	0.00832	15.52682
11/30/99	TB-2	3,800	27,655	10/29/99	7,460	0.23655	1.50160	656	0.02080	0.10524	442	0.01402	15.54083
02/02/00	TB-2	4,500	32,155	01/31/00	2,070	0.07773	1.57933	108	0.00406	0.10930	6,550	0.24595	15.78678
11/16/00	TB-2	974	33,129	11/16/00	107,000	0.86963	2.44896	3,390	0.02755	0.13685	16,800	0.13654	15.92332
02/23/01	TB-2	2,506	35,635	02/23/01	80,600	1.68542	4.13439	2,410	0.05040	0.18724	38,100	0.79671	16.72003
03/14/01	TB-2	1,075	36,710	02/23/01	80,600	0.72300	4.85738	2,410	0.02162	0.20886	38,100	0.34176	17.06179

**Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995758, 4255 MacArthur Boulevard, Oakland, CA**

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH			Benzene			MTBE		
					TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
04/20/01*	TB-2	1,760	38,470	04/09/01	46,600	0.68437	5.54175	1,240	0.01821	0.22707	31,300	0.45967	17.52147
05/30/01	TB-2	2,100	40,570	04/09/01	46,600	0.81658	6.35833	1,240	0.02173	0.24880	31,300	0.54847	18.06994
06/12/01	TB-2	2,400	42,970	04/09/01	46,600	0.93323	7.29156	1,240	0.02483	0.27363	31,300	0.62683	18.69677
08/07/01	TB-2	2,510	43,080	07/24/01	11,000	0.23039	7.52195	630	0.01319	0.28683	11,000	0.23039	18.92716
08/21/01	TB-2	2,700	45,670	07/24/01	11,000	0.24783	7.76978	630	0.01419	0.30102	11,000	0.24783	19.17499
09/05/01	TB-2	2,100	45,180	07/24/01	11,000	0.19275	7.96253	630	0.01104	0.31206	11,000	0.19275	19.36774
09/19/01	TB-2	1,500	47,170	07/24/01	11,000	0.13768	8.10022	630	0.00789	0.31995	11,000	0.13768	19.50542
10/16/01	TB-2	1,750	46,930	07/24/01	11,000	0.16063	8.26085	630	0.00920	0.32915	11,000	0.16063	19.66605
11/06/01	TB-2	1,500	48,670	10/31/01	7,500	0.09387	8.35472	530	0.00663	0.33578	2,500	0.03129	19.69734
11/23/01	TB-2	1,500	48,430	10/31/01	7,500	0.09387	8.44859	530	0.00663	0.34241	2,500	0.03129	19.72863
10/04/01	TB-2	2,900	51,570	10/31/01	7,500	0.18149	8.63008	530	0.01283	0.35524	2,500	0.06050	19.78913
12/20/01	TB-2	2,950	51,380	10/31/01	7,500	0.18462	8.81470	530	0.01305	0.36829	2,500	0.06154	19.85067
01/14/02	TB-2	2,542	54,112	01/10/02	<5,000	0.05303	8.86773	480	0.01018	0.37847	12,000	0.25454	20.10521
02/11/02	TB-2	1,300	52,680	01/10/02	<5,000	0.02712	8.89485	480	0.00521	0.38367	12,000	0.13017	20.23538
02/25/02	TB-2	2,400	56,512	01/10/02	<5,000	0.05007	8.94492	480	0.00961	0.39329	12,000	0.24032	20.47570
03/08/02*	TB-2	3,052	55,732	01/10/02	<5,000	0.06367	9.00858	480	0.01222	0.40551	12,000	0.30560	20.78130
03/22/02	TB-2	2,234	58,746	01/10/02	<5,000	0.04660	9.05519	480	0.00895	0.41446	12,000	0.22370	21.00499
04/10/02	TB-2	2,156	57,888	01/10/02	<5,000	0.04498	9.10016	480	0.00864	0.42309	12,000	0.21589	21.22088
04/24/02	TB-2	1,308	60,054	01/10/02	<5,000	0.02729	9.12745	480	0.00524	0.42833	12,000	0.13097	21.35185
05/08/02	TB-2	1,400	59,288	04/27/02	4,700	0.05491	9.18235	470	0.00549	0.43382	7,400	0.08645	21.43830
05/22/02	TB-2	1,707	61,761	04/27/02	4,700	0.06695	9.24930	470	0.00669	0.44052	7,400	0.10540	21.54370
05/29/02	TB-2	900	60,188	04/27/02	4,700	0.03530	9.28460	470	0.00353	0.44405	7,400	0.05557	21.59928
06/05/02	TB-2	1,615	63,376	04/27/02	4,700	0.06334	9.34793	470	0.00633	0.45038	7,400	0.09972	21.69900
06/19/02	TB-2	400	60,588	04/27/02	4,700	0.01569	9.36362	470	0.00157	0.45195	7,400	0.02470	21.72370
06/26/02	TB-2	1,027	64,403	04/27/02	4,700	0.04028	9.40390	470	0.00403	0.45598	7,400	0.06342	21.78712
07/10/02	TB-2	165	60,753	04/27/02	4,700	0.00647	9.41037	470	0.00065	0.45662	7,400	0.01019	21.79730
07/17/02	TB-2	315	64,718	04/27/02	4,700	0.01235	9.42272	470	0.00124	0.45786	7,400	0.01945	21.81676
08/21/02	TB-2	634	61,387	07/18/02	7,500	0.03968	9.46240	630	0.00333	0.46119	44,000	0.23277	22.04953
08/27/02	TB-2	34	64,752	07/18/02	7,500	0.00213	9.46453	630	0.00018	0.46137	44,000	0.01248	22.06201

**Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995758, 4255 MacArthur Boulevard, Oakland, CA**

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH			Benzene			MTBE		
					TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
09/25/02	TB-2	1,200	62,587	07/18/02	7,500	0.07510	9.53963	630	0.00631	0.46768	<b>44,000</b>	0.44058	22.50259
10/22/02	TB-2	1,520	66,272	10/07/02	<10,000	0.06342	9.60305	580	0.00736	0.47504	<b>30,000</b>	0.38050	22.88310
11/01/02	TB-2	1,952	64,539	10/07/02	<10,000	0.08144	9.68449	580	0.00945	0.48448	<b>30,000</b>	0.48865	23.37174
11/02/02	TB-2	2,000	68,272	10/07/02	<10,000	0.08344	9.76793	580	0.00968	0.49416	<b>30,000</b>	0.50066	23.87240
01/13/03	TB-2	2,616	67,155	01/06/03	120	0.00262	9.77055	4.8	0.00010	0.49427	<b>220</b>	0.00480	23.87721
02/12/03	TB-2	0	68,272	01/06/03	120	0.00000	9.77055	4.8	0.00000	0.49427	<b>220</b>	0.00000	23.87721
<b>Total Gallons Extracted:</b>		<b>110,488</b>			<b>Total Pounds Removed:</b>			<b>15,09098</b>			<b>0.79257</b>		<b>26,77761</b>
					<b>Total Gallons Removed:</b>			<b>2,47393</b>			<b>0.10720</b>		<b>4,31897</b>

**Abbreviations & Notes:**

TPPH = Total purgeable hydrocarbons as gasoline, analyzed by EPA Method 8015

MTBE = Methyl tert-butyl ether by EPA Method 8020; MTBE results in bold are analyzed by EPA Method 8260

ppb = Parts per billion

lb = Pound

gal = Gallon

\* = Purge volume estimated

Mass removed based on the formula: volume extracted (gal) x Concentration ( $\mu\text{g}/\text{L}$ ) x ( $\text{g}/10^6\mu\text{g}$ ) 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)

Benzene analyzed by EPA Method 8020

**Table 2: Vapor Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995758, 4255 MacArthur Boulevard, Oakland, CA**

Date	Well	ID	Interval Hours of Operation (hours)	System Flow (CFM)	Hydrocarbon Concentrations (Concentrations in ppmv)			TPHg		Benzene		MTBE	
					TPHg Rate	Cumulative TPHg Removed	Benzene	Benzene Removal Rate (#/hour)	Benzene Removed (#)	MTBE Removal Rate (#/hour)	MTBE Removed (#)		
							Removal Rate (#/hour)						
11/16/00	MW-2	0.67	0.5	663.0	7.00	42.0	0.004	0.003	0.000	0.000	0.000	0.000	
02/23/01	MW-2	7.00	3.2	24.1	0.93	11.9	0.001	0.010	0.000	0.000	0.001	0.004	
03/14/01	MW-2	6.00	4.0	203	4.13	51.9	0.011	0.075	0.000	0.001	0.003	0.021	
04/20/01*	MW-2	4.00	6.2	310	4.4	49	0.026	0.178	0.000	0.003	0.004	0.037	
05/30/01	MW-2	3.00	7.7	360	4.4	50	0.037	0.289	0.000	0.004	0.005	0.053	
06/12/01	MW-2	3.00	5.1	56	0.33	2.0	0.004	0.301	0.000	0.004	0.000	0.054	
04/16/02	MW-2	6.00	7.7	1,600	7.2	47	0.165	1.289	0.001	0.008	0.005	0.083	
05/22/02	MW-2	2.00	7.5	160	1.3	13	0.016	1.321	0.000	0.008	0.001	0.086	
06/19/02	MW-2	5.00	11.5	95	0.94	10	0.015	1.394	0.000	0.009	0.002	0.094	
07/17/02	MW-2	6.00	10.0	420	3.2	18	0.056	1.731	0.000	0.011	0.002	0.109	
09/25/02	MW-2	4.00	27.3	980	4.0	20	0.358	3.161	0.001	0.017	0.007	0.139	
07/22/03	MW-2	3.00	NA	NA	NA	NA	0.000	3.161	0.000	0.017	0.000	0.139	
07/30/03	MW-2	3.00	4.1	3,500	23	140	0.192	3.737	0.001	0.020	0.008	0.162	
08/05/03	MW-2	2.83	5.8	8,000	57	110	0.620	5.492	0.004	0.031	0.009	0.187	
08/19/03	MW-2	3.17	6.9	3,300	11	71	0.304	6.457	0.001	0.034	0.007	0.208	
09/02/03	MW-2	3.00	6.9	2,400	13	81	0.221	7.121	0.001	0.038	0.008	0.231	
09/16/03	MW-2	3.00	2.9	2,000	14	71	0.078	7.354	0.000	0.039	0.003	0.239	
09/30/03	MW-2	3.17	2.9	3,500	14	46	0.136	7.784	0.000	0.041	0.002	0.245	
05/30/01	MW-3	3.00	4.0	4,200	7.1	14	0.225	0.674	0.000	0.001	0.001	0.002	
06/12/01	MW-3	3.00	3.3	2,400	5.8	9.8	0.106	0.991	0.000	0.002	0.000	0.004	
09/25/02	MW-3	3.00	18.7	8,800	11	14	2.200	7.591	0.002	0.009	0.004	0.014	
07/22/03	MW-3	3.00	NA	NA	NA	NA	0.000	7.591	0.000	0.009	0.000	0.014	
07/30/03	MW-3	3.00	5.2	17,000	60	18	1.182	11.136	0.004	0.021	0.001	0.018	
08/05/03	MW-3	3.00	5.3	18,000	84	35	1.275	14.962	0.005	0.037	0.003	0.026	

**Table 2: Vapor Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995758, 4255 MacArthur Boulevard, Oakland, CA**

Date	Well	ID	Interval Hours of Operation (hours)	System Flow Rate (CFM)	Hydrocarbon Concentrations			TPHg		Benzene		MTBE	
					TPHg	Benzene	MTBE	TPHg Removal Rate (#/hour)	Cumulative TPHg Removed (#)	Benzene Removal Rate (#/hour)	Cumulative Benzene Removed (#)	MTBE Removal Rate (#/hour)	Cumulative MTBE Removed (#)
08/19/03	MW-3		3.33	6.1	6,800	12	14	0.554	16.808	0.001	0.040	0.001	0.030
09/02/03	MW-3		3.50	6.1	2,200	15	120	0.179	17.436	0.001	0.044	0.010	0.065
09/16/03	MW-3		2.92	3.0	4,800	21	15	0.192	17.998	0.001	0.046	0.001	0.067
09/30/03	MW-3		3.25	3.0	4,800	13	9.9	0.192	18.624	0.000	0.047	0.000	0.068
<b>Total Pounds Removed:</b>								<b>TPHg =</b>	<b>26.408</b>	<b>Benzene =</b>	<b>0.088</b>	<b>MTBE =</b>	<b>0.313</b>

**Abbreviations and Notes:**

CFM = Cubic feet per minute

TPHg = Total petroleum hydrocarbons as gasoline (C6-C12) by modified EPA Method 8015 in 1 liter tedlar bag samples

ppmv = Parts per million by volume

# = Pounds

TPHG, Benzene, and MTBE analyzed by EPA Method 8015/8020 in 1 liter tedlar bag samples

TPHg / Benzene / MTBE removal rate = Rate based on Bay Area Air Quality Management District's Manual of Procedures for Soil Vapor Extraction dated July 17, 1991.

(Rate = Concentration (ppmv) x system flow rate (cfm) x (1lb-mole/386ft<sup>3</sup>) x molecular weight (86 lb/lb-mole for TPHg, 78 lb/lb-mole for benzene, 88 lb/lb-mole for MTBE)  
 x 60 min/hour x 1/1,000,000)

Cumulative TPHg / Benzene / MTBE removal = Previous removal rate multiplied by the hour-interval of operation plus the previous total

\* = Interval hours of operation estimated.

**ATTACHMENT A**

Blaine Groundwater Monitoring Report  
and Field Notes

**BLAINE**  
TECH SERVICES



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SAN JOSE, CA 95112-1105  
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February 17, 2004

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

First Quarter 2004 Groundwater Monitoring at  
Shell-branded Service Station  
4255 MacArthur Boulevard  
Oakland, CA

Monitoring performed on January 14, 2004

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**Groundwater Monitoring Report 040114-JP-1**

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

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

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

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft)	Depth to SPH (ft)	GW Elevation (MSL)	SPH Thickness (ft)	DO Reading (ppm)	ORP Reading (mV)
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MW-1	11/17/1993	410	21	11	7.9	47	NA	NA	NA	NA	NA	NA	NA	175.79	8.59	NA	167.20	NA	NA	NA
MW-1	01/20/1994	1,200	180	19	48	47	NA	NA	NA	NA	NA	NA	NA	175.79	8.22	NA	167.57	NA	NA	NA
MW-1	04/25/1994	3,100	610	<10	130	27	NA	NA	NA	NA	NA	NA	NA	175.79	7.63	NA	168.16	NA	NA	NA
MW-1	07/07/1994	2,400	1,000	10	250	20	NA	NA	NA	NA	NA	NA	NA	175.79	8.31	NA	167.48	NA	NA	NA
MW-1	10/27/1994	2,200	500	3.1	72	1.8	NA	NA	NA	NA	NA	NA	NA	175.79	8.84	NA	166.95	NA	NA	NA
MW-1	11/17/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	175.79	7.60	NA	168.19	NA	NA	NA
MW-1	11/28/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	175.79	7.56	NA	168.23	NA	NA	NA
MW-1	01/13/1995	570	75	2.5	6.7	11	NA	NA	NA	NA	NA	NA	NA	175.79	7.11	NA	168.68	NA	NA	NA
MW-1	04/12/1995	1,800	480	<5.0	79	<5.0	NA	NA	NA	NA	NA	NA	NA	175.79	7.08	NA	168.71	NA	NA	NA
MW-1	07/25/1995	120	15	1.1	2.1	2.9	NA	NA	NA	NA	NA	NA	NA	175.79	7.73	NA	168.06	NA	NA	NA
MW-1 (D)	07/25/1995	300	88	2.4	11	6.5	NA	NA	NA	NA	NA	NA	NA	175.79	7.73	NA	168.06	NA	NA	NA
MW-1	10/18/1995	130	9.5	0.8	1.3	1.7	NA	NA	NA	NA	NA	NA	NA	175.79	8.42	NA	167.37	NA	NA	NA
MW-1 (D)	10/18/1995	120	11	0.8	1.4	1.8	NA	NA	NA	NA	NA	NA	NA	175.79	8.42	NA	167.37	NA	NA	NA
MW-1	01/17/1996	250	22	0.9	1.6	2.3	NA	NA	NA	NA	NA	NA	NA	175.79	7.83	NA	167.96	NA	NA	NA
MW-1	04/25/1996	<50	4.6	<0.5	<0.5	0.6	500b	NA	NA	NA	NA	NA	NA	175.79	7.35	NA	168.44	NA	NA	NA
MW-1	07/17/1996	<250	15	<2.5	<2.5	<2.5	540	NA	NA	NA	NA	NA	NA	175.79	7.70	NA	168.09	NA	NA	NA
MW-1	10/01/1996	1,200	500	12	57	82	1,900	NA	NA	NA	NA	NA	NA	175.79	8.07	NA	167.72	NA	NA	NA
MW-1	01/22/1997	640	170	4.3	33	33	1,200	NA	NA	NA	NA	NA	NA	175.79	7.21	NA	168.58	NA	NA	NA
MW-1	04/08/1997	<200	34	<2.0	3.3	4.3	950	NA	NA	NA	NA	NA	NA	175.79	7.75	NA	168.04	NA	NA	NA
MW-1 (D)	04/08/1997	<200	66	<2.0	6.4	8	740	NA	NA	NA	NA	NA	NA	175.79	7.75	NA	168.04	NA	NA	NA
MW-1	07/08/1997	190	49	1.2	5.8	8.6	560	NA	NA	NA	NA	NA	NA	175.79	8.01	NA	167.78	NA	NA	NA
MW-1	10/08/1997	<100	7	<1.0	<1.0	<1.0	620	NA	NA	NA	NA	NA	NA	175.79	8.10	NA	167.69	NA	NA	NA
MW-1	01/09/1998	970	390	12	48	71	1,200	NA	NA	NA	NA	NA	NA	175.79	7.14	NA	168.65	NA	NA	NA
MW-1	04/13/1998	<50	136	<0.50	1.5	1.8	170	NA	NA	NA	NA	NA	NA	175.79	6.78	NA	169.01	NA	NA	NA
MW-1	07/17/1998	2,500	750	11	88	67	150	NA	NA	NA	NA	NA	NA	175.79	7.28	NA	168.51	NA	NA	NA
MW-1	10/02/1998	8,000	970	36	270	440	35	NA	NA	NA	NA	NA	NA	175.79	7.77	NA	168.02	NA	NA	NA
MW-1	02/03/1999	210	56	0.82	<0.50	3.2	220	NA	NA	NA	NA	NA	NA	175.79	7.45	NA	168.34	NA	1.4	NA
MW-1	04/29/1999	<50	4.5	<0.50	0.56	<0.50	140	196	NA	NA	NA	NA	NA	175.79	7.58	NA	168.21	NA	1.2	140
MW-1	07/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	120	111*	NA	NA	NA	NA	NA	175.79	8.51	NA	167.28	NA	1.0	NA
MW-1	11/01/1999	<50.0	<0.500	<0.500	<0.500	<0.500	2,90	NA	NA	NA	NA	NA	NA	175.79	8.30	NA	167.49	NA	1.4	-71
MW-1	01/17/2000	<50	<0.50	<0.50	<0.50	<0.50	3,30	NA	NA	NA	NA	NA	NA	175.79	8.04	NA	167.75	NA	16.9	64
MW-1	04/17/2000	<50.0	1.08	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	175.79	8.00	NA	167.79	NA	1.8	112
MW-1	07/26/2000	125	54.3	2.16	5.45	9.86	33.1	NA	NA	NA	NA	NA	NA	175.79	7.52	NA	168.27	NA	13.2	-140
MW-1	10/12/2000	101	40.7	2.68	3.00	5.18	25.0	NA	NA	NA	NA	NA	NA	175.79	7.71	NA	168.08	NA	>20	534

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	Dipe (ug/L)	Etbe (ug/L)	Tame (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft)	Depth to SPH (ft)	GW Elevation (MSL)	SPH Thickness (ft)	DO Reading (ppm)	ORP Reading (mV)
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MW-1	01/15/2001	<50.0	0.633	<0.500	0.505	1.74	<2.50	NA	NA	NA	NA	NA	NA	175.79	7.33	NA	168.46	NA	16.9	-127
MW-1	04/09/2001	<50.0	<0.500	<0.500	<0.500	0.927	<2.50	NA	NA	NA	NA	NA	NA	175.79	7.68	NA	168.11	NA	12.8	-117
MW-1	07/24/2001	<50	4.0	0.65	0.53	1.3	NA	<5.0	NA	NA	NA	NA	NA	175.79	8.00	NA	167.79	NA	>20	43
MW-1	10/31/2001	<50	4.4	<0.50	<0.50	0.98	NA	<5.0	NA	NA	NA	NA	NA	175.79	7.94	NA	167.85	NA	13.6	123
MW-1	01/10/2002	<50	2.2	<0.50	<0.50	1.2	NA	6.1	NA	NA	NA	NA	NA	175.79	7.63	NA	168.16	NA	0.1	63
MW-1	04/25/2002	<50	2.0	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	175.79	7.76	NA	168.03	NA	0.3	54
MW-1	07/18/2002	<50	6.1	<0.50	<0.50	0.98	NA	<5.0	NA	NA	NA	NA	NA	175.79	8.29	NA	167.50	NA	1.1	32
MW-1	10/07/2002	500	17	14	11	60	NA	9.0	NA	NA	NA	NA	NA	175.76	8.34	NA	167.42	NA	2.8	-26
MW-1	01/06/2003	<50	12	<0.50	0.73	0.58	NA	14	NA	NA	NA	NA	NA	175.76	7.18	NA	168.58	NA	0.5	-22
MW-1	04/07/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	12	NA	NA	<5.0	NA	NA	175.76	7.75	NA	168.01	NA	0.7	-24
MW-1	07/07/2003	<50	6.6	<0.50	<0.50	<1.0	NA	8.1	NA	NA	<5.0	NA	NA	175.76	7.75	NA	168.01	NA	0.5	16
MW-1	10/09/2003	<50	1.9	<0.50	<0.50	<1.0	NA	22	NA	NA	<5.0	NA	NA	175.76	8.45	NA	167.31	NA	0.7	80
MW-1	01/14/2004	<100	19	<1.0	<1.0	<2.0	NA	NA	NA	NA	63	NA	NA	175.76	7.45	NA	168.31	NA	0.8	242

MW-2	11/17/1993	31,000	9,400	4,600	1,000	3,900	NA	170.91	12.31	NA	158.60	NA	NA	NA						
MW-2	01/20/1994	40,000	6,900	5,600	780	4,100	NA	170.91	11.48	NA	159.43	NA	NA	NA						
MW-2 (D)	01/20/1994	41,000	7,200	6,200	900	4,800	NA	170.91	11.48	NA	159.43	NA	NA	NA						
MW-2	04/25/1994	60,000	9,300	6,100	1,400	6,200	NA	170.91	10.84	NA	160.07	NA	NA	NA						
MW-2	07/07/1994	280,000a	40,000	26,000	8,100	32,000	NA	170.91	11.89	NA	159.02	NA	NA	NA						
MW-2 (D)	07/07/1994	53,000	13,000	6,600	2,000	8,400	NA	170.91	11.89	NA	159.02	NA	NA	NA						
MW-2	10/27/1994	130,000	14,000	12,000	2,400	13,000	NA	170.91	12.89	NA	158.02	NA	NA	NA						
MW-2 (D)	10/27/1994	390,000	8,800	7,000	1,700	11,000	NA	170.91	12.89	NA	158.02	NA	NA	NA						
MW-2	11/17/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	9.11	NA	161.80	NA	NA	NA
MW-2	11/28/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	9.22	NA	161.69	NA	NA	NA
MW-2	01/13/1995	75,000	5,900	12,000	3,100	17,000	NA	170.91	8.10	NA	162.81	NA	NA	NA						
MW-2	04/12/1995	100,000	8,500	11,000	2,400	12,000	NA	170.91	10.12	NA	160.79	NA	NA	NA						
MW-2 (D)	04/12/1995	80,000	4,200	9,300	2,500	12,000	NA	170.91	10.12	NA	160.79	NA	NA	NA						
MW-2	07/25/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	11.53	NA	159.80	0.52	NA	NA
MW-2	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	14.02	NA	156.99	0.13	NA	NA
MW-2	01/17/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	10.27	NA	160.78	0.17	NA	NA
MW-2	04/25/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	11.68	NA	159.25	0.03	NA	NA
MW-2	07/17/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	12.78	NA	158.81	0.48	NA	NA
MW-2	10/01/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	14.21	NA	156.70	0.28	NA	NA
MW-2	01/22/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	10.92	NA	160.08	0.11	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**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)	DPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft)	Depth to SPH (ft)	GW Elevation (MSL)	SPH Thickness (ft)	DO Reading (ppm)	ORP Reading (mV)
MW-2	04/08/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	14.12	NA	156.95	0.20	NA	NA
MW-2	07/08/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	14.98	NA	156.08	0.19	NA	NA
MW-2	10/08/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	12.97	NA	157.98	0.05	NA	NA
MW-2	01/08/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	12.54	NA	158.43	0.08	NA	NA
MW-2	04/13/1998	180,000	2,800	5,200	2,400	13,000	71,000	NA	NA	NA	NA	NA	NA	170.91	10.05	NA	160.86	NA	NA	NA
MW-2	07/17/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	11.75	NA	159.24	0.10	NA	NA
MW-2	10/02/1998	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	16.78	NA	154.22	0.11	NA	NA
MW-2	02/03/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	9.90	9.82	161.07	0.08	NA	NA
MW-2	04/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	9.86	9.81	161.09	0.05	NA	NA
MW-2	07/23/1999	65,800	6,500	4,480	1,960	8,960	46,600	58,500*	NA	NA	NA	NA	NA	170.91	14.45	NA	156.46	NA	1.4	NA
MW-2	11/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.91	11.84	11.81	159.09	0.03	NA	NA
MW-2	01/17/2000	46,000	6,000	2,400	1,500	5,500	50,000	31,000	NA	NA	NA	NA	NA	170.91	11.00	NA	159.91	NA	1.3	-54
MW-2	04/17/2000	96,300	8,150	10,200	2,820	14,900	112,000	108,000	NA	NA	NA	NA	NA	170.91	11.06	NA	159.85	NA	2.6	125
MW-2	07/26/2000	72,400	8,680	5,620	2,810	13,400	66,200	46,300	NA	NA	NA	NA	NA	170.91	12.82	NA	158.09	NA	2.2	113
MW-2	10/12/2000	63,200	5,840	4,180	2,310	11,100	61,200	66,600	NA	NA	NA	NA	NA	170.91	11.32	NA	159.59	NA	0.4	55
MW-2	01/15/2001	59,700	2,630	4,800	2,050	11,500	44,400	5,080	NA	NA	NA	NA	NA	170.91	10.19	NA	160.72	NA	1.1	-22
MW-2	04/09/2001	56,900	1,860	2,550	1,810	9,720	40,000	46,600	NA	NA	NA	NA	NA	170.91	11.15	NA	159.76	NA	1.0	-55
MW-2	07/24/2001	84,000	3,000	4,600	2,500	13,000	NA	41,000	NA	NA	NA	NA	NA	170.91	11.67	NA	159.24	NA	0.2	53
MW-2	10/31/2001	45,000	2,200	3,000	1,500	7,700	NA	29,000	<50	<50	<50	51,000	<500	170.91	11.04	NA	159.87	NA	1.2	-17
MW-2	01/10/2002	28,000	840	740	760	3,300	NA	32,000	NA	NA	NA	NA	NA	170.91	9.58	NA	161.33	NA	2.1	-76
MW-2	04/25/2002	41,000	1,900	2,000	1,200	6,900	NA	17,000	NA	NA	NA	NA	NA	170.91	11.40	NA	159.51	NA	0.8	-95
MW-2	07/18/2002	87,000	2,000	2,200	1,400	10,000	NA	19,000	NA	NA	NA	NA	NA	170.91	12.68	NA	158.23	NA	0.7	-34
MW-2	10/07/2002	110,000	3,900	6,700	2,700	15,000	NA	20,000	NA	NA	NA	NA	NA	170.88	11.58	NA	159.30	NA	1.4	-52
MW-2	01/06/2003	65,000	2,400	3,500	1,400	8,600	NA	26,000	NA	NA	NA	NA	NA	170.88	9.09	NA	161.79	NA	0.4	40
MW-2	04/07/2003	57,000	1,900	2,500	1,700	8,600	NA	37,000	NA	NA	NA	34,000	NA	170.88	11.08	NA	159.80	NA	1.0	60
MW-2	07/07/2003	34,000	4,000	4,200	1,600	8,500	NA	51,000	NA	NA	NA	44,000	NA	170.88	11.27	NA	159.61	NA	1.3	-17
MW-2	10/09/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.88	11.64	11.61	159.26	0.03	NA	NA
MW-2	10/20/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.88	11.88	11.84	159.03	0.04	NA	NA
MW-2	01/14/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	170.88	10.96	10.95	159.93	0.01	NA	NA
MW-3	11/17/1993	18,000	5,400	660	720	2,200	NA	NA	NA	NA	NA	NA	NA	174.61	15.40	NA	159.21	NA	NA	NA
MW-3	01/20/1994	55,000	13,000	2,600	2,200	6,500	NA	NA	NA	NA	NA	NA	NA	174.61	14.61	NA	160.00	NA	NA	NA
MW-3	04/25/1994	96,000	11,000	1,600	3,100	9,900	NA	NA	NA	NA	NA	NA	NA	174.61	13.12	NA	161.49	NA	NA	NA
MW-3 (D)	04/25/1994	78,000	12,000	1,900	2,600	7,300	NA	NA	NA	NA	NA	NA	NA	174.61	13.12	NA	161.49	NA	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft)	Depth to SPH (ft)	GW Elevation (MSL)	SPH (ft)	DO Reading (ppm)	ORP Reading (mV)
MW-3	07/07/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	14.54	NA	160.07	0.02	NA	NA
MW-3	10/27/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	15.62	NA	159.03	0.05	NA	NA
MW-3	11/17/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	13.83	NA	160.78	NA	NA	NA
MW-3	11/28/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	14.02	NA	160.59	NA	NA	NA
MW-3	01/13/1995	180,000	3,200	2,700	1,700	5,200	NA	NA	NA	NA	NA	NA	NA	174.61	12.13	NA	162.48	NA	NA	NA
MW-3 (D)	01/13/1995	23,000	4,000	690	960	3,000	NA	NA	NA	NA	NA	NA	NA	174.61	12.13	NA	162.48	NA	NA	NA
MW-3	04/12/1995	56,000	8,700	1,500	2,100	6,300	NA	NA	NA	NA	NA	NA	NA	174.61	12.96	NA	161.65	NA	NA	NA
MW-3	07/25/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	14.28	NA	160.38	0.06	NA	NA
MW-3	10/18/1995	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	15.88	NA	158.77	0.05	NA	NA
MW-3	01/17/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	13.86	NA	160.94	0.24	NA	NA
MW-3	04/25/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	13.82	NA	160.81	0.02	NA	NA
MW-3	07/17/1996	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	16.11	NA	158.52	0.03	NA	NA
MW-3	10/01/1996	46,000	7,300	530	1,700	3,900	3,200	NA	NA	NA	NA	NA	NA	174.61	16.56	NA	158.05	NA	NA	NA
MW-3 (D)	10/01/1996	47,000	7,100	530	1,700	4,000	2,900	NA	NA	NA	NA	NA	NA	174.61	16.56	NA	158.05	NA	NA	NA
MW-3	01/22/1997	82,000	5,200	1,300	2,800	8,900	1,100	NA	NA	NA	NA	NA	NA	174.61	13.07	NA	161.54	NA	NA	NA
MW-3 (D)	01/22/1997	61,000	8,400	1,100	2,300	7,000	2,700	NA	NA	NA	NA	NA	NA	174.61	13.07	NA	161.54	NA	NA	NA
MW-3	04/08/1997	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.61	17.09	NA	157.54	0.03	NA	NA
MW-3	07/08/1997	56,000	8,800	580	2,000	4,900	2,800	NA	NA	NA	NA	NA	NA	174.61	15.85	NA	158.76	NA	NA	NA
MW-3	10/08/1997	48,000	8,000	590	1,700	3,400	5,100	NA	NA	NA	NA	NA	NA	174.61	16.22	NA	158.39	NA	NA	NA
MW-3	01/08/1998	47,000	9,400	810	2,300	4,700	6,300	NA	NA	NA	NA	NA	NA	174.61	13.80	NA	160.81	NA	NA	NA
MW-3 (D)	01/08/1998	48,000	8,100	750	2,000	4,100	5,800	NA	NA	NA	NA	NA	NA	174.61	13.80	NA	160.81	NA	NA	NA
MW-3	04/13/1998	32,000	6,800	540	1,400	3,400	4,000	NA	NA	NA	NA	NA	NA	174.61	12.97	NA	161.64	NA	NA	NA
MW-3 (D)	04/13/1998	36,000	7,300	660	1,600	3,700	4,000	NA	NA	NA	NA	NA	NA	174.61	12.97	NA	161.64	NA	NA	NA
MW-3	07/17/1998	71,000	11,000	590	2,200	6,900	3,900	NA	NA	NA	NA	NA	NA	174.61	11.51	NA	163.10	NA	NA	NA
MW-3 (D)	07/17/1998	76,000	12,000	700	2,600	8,000	3,000	NA	NA	NA	NA	NA	NA	174.61	11.51	NA	163.10	NA	NA	NA
MW-3	10/02/1998	66,000	8,900	510	2,000	4,900	4,600	NA	NA	NA	NA	NA	NA	174.61	16.50	NA	158.11	NA	NA	NA
MW-3 (D)	10/02/1998	59,000	9,400	460	2,000	4,900	4,700	NA	NA	NA	NA	NA	NA	174.61	16.50	NA	158.11	NA	NA	NA
MW-3	02/03/1999	36,000	6,800	300	1,600	2,900	18,000	NA	NA	NA	NA	NA	NA	174.61	15.21	NA	159.40	NA	1.3	NA
MW-3	04/29/1999	45,000	8,100	580	2,200	5,800	4,700	5,150	NA	NA	NA	NA	NA	174.61	15.43	NA	159.18	NA	1.5	-68
MW-3	07/23/1999	29,400	3,540	215	810	3,800	4,720	6,950*	NA	NA	NA	NA	NA	174.61	14.95	NA	159.66	NA	1.3	NA
MW-3	11/01/1999	20,000	4,190	294	1,060	1,740	5,540	8,590	NA	NA	NA	NA	NA	174.61	14.66	NA	159.95	NA	0.6	-110
MW-3	01/17/2000	17,000	3,900	89	1,100	1,200	7,900	NA	NA	NA	NA	NA	NA	174.61	13.94	NA	160.67	NA	1.3	-40
MW-3	04/17/2000	28,100	5,240	247	1,540	2,750	16,600	NA	NA	NA	NA	NA	NA	174.61	14.00	NA	160.61	NA	1.1	-86
MW-3	07/26/2000	24,300	6,680	159	1,610	1,640	17,100	NA	NA	NA	NA	NA	NA	174.61	13.72	NA	160.89	NA	0.9	-70

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft)	Depth to SPH (ft)	GW Elevation (MSL)	SPH Thickness (ft)	DO Reading (ppm)	ORP Reading (mV)
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MW-3	10/12/2000	14,300	2,630	86.7	241	1,360	16,300	NA	NA	NA	NA	NA	NA	174.61	14.15	NA	160.46	NA	0.9	50
MW-3	01/15/2001	22,100	4,400	266	977	2,890	13,200	NA	NA	NA	NA	NA	NA	174.61	13.05	NA	161.56	NA	1.3	-40
MW-3	04/09/2001	33,800	7,100	147	1,700	2,660	13,000	NA	NA	NA	NA	NA	NA	174.61	13.59	NA	161.02	NA	0.6	-56
MW-3	07/24/2001	220,000	5,600	1,900	4,400	19,000	NA	12,000	NA	NA	NA	NA	NA	174.61	14.43	NA	160.18	NA	0.4	29
MW-3	10/31/2001	65,000	2,700	510	1,800	7,200	NA	9,800	<20	<20	<20	5,200	<500	174.61	14.59	NA	160.02	NA	0.9	-27
MW-3	01/10/2002	66,000	2,400	490	1,700	6,600	NA	5,500	NA	NA	NA	NA	NA	174.61	12.65	NA	161.96	NA	1.7	-76
MW-3	04/25/2002	55,000	4,600	460	2,400	6,900	NA	8,100	NA	NA	NA	NA	NA	174.61	14.13	NA	160.48	NA	1.2	-96
MW-3	07/18/2002	56,000	3,300	270	1,700	5,000	NA	8,400	NA	NA	NA	NA	NA	174.61	15.48	15.45	159.15	0.03	0.8	-41
MW-3	10/07/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.59	14.60	14.40	160.15	0.20	NA	NA
MW-3	01/06/2003	57,000	3,200	330	1,800	5,400	NA	5,100	NA	NA	NA	NA	NA	174.59	11.62	11.60	162.99	0.02	0.4	33
MW-3	04/07/2003	57,000	6,200	500	2,400	6,700	NA	8,200	NA	NA	NA	3,900	NA	174.59	13.80	NA	160.79	NA	0.5	61
MW-3	07/07/2003	28,000	4,900	300	1,500	4,100	NA	7,900	NA	NA	NA	4,700	NA	174.59	14.00	NA	160.59	NA	1.0	-11
MW-3	10/09/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.59	14.44	14.36	160.21	0.08	NA	NA
MW-3	10/20/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.59	14.68	14.61	159.97	0.07	NA	NA
MW-3	01/14/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	174.59	12.47	12.46	162.14	0.02	NA	NA

MW-4	11/17/1994	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	164.06	6.62	NA	157.44	NA	NA	NA
MW-4	11/28/1994	2,900	200	17	76	260	NA	NA	NA	NA	NA	NA	NA	164.06	6.11	NA	157.95	NA	NA	NA
MW-4	01/13/1995	1,900	130	5.6	13	40	NA	NA	NA	NA	NA	NA	NA	164.06	6.05	NA	158.01	NA	NA	NA
MW-4	04/12/1995	680	150	<2.0	10	13	NA	NA	NA	NA	NA	NA	NA	164.06	6.31	NA	157.75	NA	NA	NA
MW-4	07/25/1995	340	100	0.8	8.8	3	NA	NA	NA	NA	NA	NA	NA	164.06	7.36	NA	156.70	NA	NA	NA
MW-4	10/18/1995	150	31	<0.5	3.5	0.8	NA	NA	NA	NA	NA	NA	NA	164.06	8.54	NA	155.52	NA	NA	NA
MW-4	01/17/1996	290	14	<0.5	1.8	0.8	NA	NA	NA	NA	NA	NA	NA	164.06	8.48	NA	155.58	NA	NA	NA
MW-4	04/25/1996	<500	65	<5	<5	<5	1,700	NA	NA	NA	NA	NA	NA	164.06	7.40	NA	156.66	NA	NA	NA
MW-4 (D)	04/25/1996	<500	66	<5	8.7	<5	1,500	NA	NA	NA	NA	NA	NA	164.06	7.40	NA	156.66	NA	NA	NA
MW-4	07/17/1996	<500	84	<5.0	6.5	<5.0	1,500	NA	NA	NA	NA	NA	NA	164.06	7.75	NA	156.31	NA	NA	NA
MW-4 (D)	07/17/1996	<500	54	<5.0	<5.0	<5.0	1,700	2,100	NA	NA	NA	NA	NA	164.06	7.75	NA	156.31	NA	NA	NA
MW-4	10/01/1996	<500	1.9	<5.0	<5.0	<5.0	3,000	NA	NA	NA	NA	NA	NA	164.06	8.82	NA	155.24	NA	NA	NA
MW-4	01/22/1997	580	130	<2.5	18	5.2	1,200	NA	NA	NA	NA	NA	NA	164.06	7.51	NA	156.55	NA	NA	NA
MW-4	04/08/1997	770	200	7	26	55	1,500	8	NA	NA	NA	NA	NA	164.06	7.18	NA	156.88	NA	NA	NA
MW-4	07/08/1997	570	78	<5.0	14	11	1,200	NA	NA	NA	NA	NA	NA	164.06	9.00	NA	155.06	NA	NA	NA
MW-4 (D)	07/08/1997	640	81	<5.0	16	19	1,600	NA	NA	NA	NA	NA	NA	164.06	9.00	NA	155.06	NA	NA	NA
MW-4	10/08/1997	<500	40	<5.0	7.4	5.4	1,400	NA	NA	NA	NA	NA	NA	164.06	8.97	NA	155.09	NA	NA	NA
MW-4 (D)	10/08/1997	<500	36	<5.0	5.9	<5.0	1,400	NA	NA	NA	NA	NA	NA	164.06	8.97	NA	155.09	NA	NA	NA

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft)	Depth to SPH (ft)	GW Elevation (MSL)	SPH Thickness (ft)	DO Reading (ppm)	ORP Reading (mV)
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MW-4	01/08/1998	<1,000	55	<10	13	<10	2,000	NA	NA	NA	NA	NA	NA	164.06	7.90	NA	156.16	NA	NA	NA
MW-4	04/13/1998	350	110	2.4	20	26	<2.5	NA	NA	NA	NA	NA	NA	164.06	7.35	NA	156.71	NA	NA	NA
MW-4	07/17/1998	210	66	0.78	5.4	9.8	1,700	NA	NA	NA	NA	NA	NA	164.06	6.95	NA	157.11	NA	NA	NA
MW-4	10/02/1998	<50	0.69	<0.50	<0.50	<0.50	2,900	NA	NA	NA	NA	NA	NA	164.06	7.35	NA	156.71	NA	NA	NA
MW-4	02/03/1999	560	120	2.5	29	34	6,800	NA	NA	NA	NA	NA	NA	164.06	7.71	NA	156.35	NA	0.9	NA
MW-4	04/29/1999	380	80	1.9	13	19	7,000	8,360	NA	NA	NA	NA	NA	164.06	7.83	NA	156.23	NA	1.1	-125
MW-4	07/23/1999	460	93.6	8.40	25.2	28.8	3,760	6,000*	NA	NA	NA	NA	NA	164.06	11.33	NA	152.73	NA	0.9	NA
MW-4	11/01/1999	77.3	0.520	<0.500	<0.500	<0.500	539	NA	NA	NA	NA	NA	NA	164.06	10.66	NA	153.40	NA	2.8	3
MW-4	01/17/2000	160	27	<0.50	12	6.3	12,000	NA	NA	NA	NA	NA	NA	164.06	10.15	NA	153.91	NA	3.9	-17
MW-4	04/17/2000	<500	26	6.38	9.35	10.4	9,070	NA	NA	NA	NA	NA	NA	164.06	10.10	NA	153.96	NA	1.7	-129
MW-4	07/26/2000	<500	22.7	<5.00	7.59	6.96	7,660	NA	NA	NA	NA	NA	NA	164.06	10.09	NA	153.97	NA	1.4	-137
MW-4	10/12/2000	172	19.8	<0.500	7.47	4.50	8,290	NA	NA	NA	NA	NA	NA	164.06	9.35	NA	154.71	NA	3.5	529
MW-4	01/15/2001	53.6	1.50	<0.500	2.45	1.80	9,260	NA	NA	NA	NA	NA	NA	164.06	8.77	NA	155.29	NA	2.3	53
MW-4	04/09/2001	<500	<5.00	<5.00	<5.00	5.52	10,300	NA	NA	NA	NA	NA	NA	164.06	7.75	NA	156.31	NA	1.0	-133
MW-4	07/24/2001	58	3.8	<0.50	3.2	2.9	NA	1,700	NA	NA	NA	NA	NA	164.06	10.07	NA	153.99	NA	0.5	106
MW-4	10/31/2001	<1,000	<10	<10	<10	<10	NA	7,400	NA	NA	NA	NA	NA	164.06	9.97	NA	154.09	NA	0.8	22
MW-4	01/10/2002	<2,000	<20	<20	<20	<20	NA	12,000	NA	NA	NA	NA	NA	164.06	8.53	NA	155.53	NA	8.9	224
MW-4	04/25/2002	<2,000	<20	<20	<20	<20	NA	7,900	NA	NA	NA	NA	NA	164.06	7.33	NA	156.73	NA	3.6	-84
MW-4	07/18/2002	<2,000	<20	<20	<20	<20	NA	7,200	NA	NA	NA	NA	NA	164.06	9.05	NA	155.01	NA	1.7	120
MW-4	10/07/2002	<1,000	<10	<10	<10	<10	NA	3,300	NA	NA	NA	NA	NA	164.03	9.06	NA	154.97	NA	2.5	33
MW-4	01/06/2003	<500	21	<5.0	<5.0	<5.0	NA	2,500	NA	NA	NA	NA	NA	164.03	7.09	NA	156.94	NA	0.5	55
MW-4	04/07/2003	<2,500	<25	<25	<25	<50	NA	1,700	NA	NA	NA	NA	NA	164.03	8.26	NA	155.77	NA	1.2	69
MW-4	07/07/2003	<2,500	<25	<25	<25	<50	NA	860	NA	NA	NA	NA	NA	164.03	8.92	NA	155.11	NA	0.5	-3
MW-4	10/09/2003	<500	<5.0	<5.0	<5.0	<10	NA	420	NA	NA	NA	NA	NA	164.03	8.91	NA	155.12	NA	0.7	171
MW-4	01/14/2004	<1,000	24	<10	<10	<20	NA	600	NA	NA	NA	NA	NA	164.03	8.34	NA	156.69	NA	1.2	140

MW-5	01/04/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.62	NA	NA	NA	NA	NA	
MW-5	01/10/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	110	NA	NA	NA	NA	NA	NA	164.06	5.88	NA	158.18	NA	3.3	172
MW-5	04/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	73	NA	NA	NA	NA	NA	NA	164.06	6.81	NA	157.25	NA	0.3	-44
MW-5	07/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	75	NA	NA	NA	NA	NA	NA	164.06	7.38	NA	156.68	NA	0.4	170
MW-5	10/07/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	41	NA	NA	NA	NA	NA	NA	164.14	6.75	NA	157.39	NA	1.5	16
MW-5	01/06/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	81	NA	NA	NA	NA	NA	NA	164.14	5.96	NA	158.18	NA	0.6	166
MW-5	04/07/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	77	NA	NA	NA	NA	NA	NA	164.14	6.51	NA	157.63	NA	0.8	174
MW-5	07/07/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	32	NA	NA	NA	NA	NA	NA	164.14	6.44	NA	157.70	NA	0.3	-17

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft)	Depth to SPH (ft)	GW Elevation (MSL)	SPH Thickness (ft)	DO Reading (ppm)	ORP Reading (mV)
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MW-5	10/09/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	59	NA	NA	NA	40	NA	164.14	7.05	NA	157.09	NA	0.9	17
MW-5	01/14/2004	<50	<0.50	0.76	<0.50	<1.0	NA	47	NA	NA	NA	17	NA	164.14	6.29	NA	157.85	NA	1.6	209

TB-1	04/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.00	NA	NA	NA	3.8	-132
TB-1	11/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.65	NA	NA	NA	0.2	-165
TB-1	01/17/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.72	NA	NA	NA	0.8	-178
TB-1	04/17/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.65	NA	NA	NA	0.5	-152
TB-1	07/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.13	NA	NA	NA	1.0	-124
TB-1	10/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.20	NA	NA	NA	0.7	-73
TB-1	01/15/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.09	NA	NA	NA	1.2	-118
TB-1	04/09/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.96	NA	NA	NA	1.0	-72
TB-1	07/24/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.03	NA	NA	NA	1.4	31
TB-1	10/31/2001	1,000	85	<10	<10	42	NA	4,100	NA	NA	NA	NA	NA	NA	5.89	NA	NA	NA	1.8	88
TB-1	01/10/2002	5,000	410	390	65	620	NA	9,000	NA	NA	NA	NA	NA	NA	7.47	NA	NA	NA	2.0	95
TB-1	04/25/2002	5,000	780	60	49	91	NA	6,000	NA	NA	NA	NA	NA	NA	11.71	NA	NA	NA	1.7	-136
TB-1	07/18/2002	Insufficient water	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	13.50	NA	NA	NA	NA	NA
TB-1	10/07/2002	4,600	480	36	98	200	NA	4,000	NA	NA	NA	NA	NA	NA	12.95	NA	NA	NA	1.6	-48
TB-1	01/06/2003	130	30	<0.50	<0.50	0.78	NA	330	NA	NA	NA	NA	NA	NA	5.56	NA	NA	NA	0.4	-20

TB-2	04/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.76	NA	NA	NA	4.2	-108
TB-2	11/01/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.33	NA	NA	NA	0.5	-148
TB-2	01/17/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.79	NA	NA	NA	0.7	-162
TB-2	04/17/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.75	NA	NA	NA	0.9	-121
TB-2	07/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.73	NA	NA	NA	0.9	-85
TB-2	10/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	4.05	NA	NA	NA	0.6	-47
TB-2	01/15/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	3.87	NA	NA	NA	0.7	-91
TB-2	04/09/2001	46,600	1,240	1,310	1,110	12,100	31,300	NA	NA	NA	NA	NA	NA	NA	3.76	NA	NA	NA	0.8	-24
TB-2	07/24/2001	11,000	630	<25	310	200	NA	11,000	NA	NA	NA	NA	NA	NA	4.75	NA	NA	NA	0.4	-51
TB-2	10/31/2001	7,500	530	1,500	100	500	NA	2,500	NA	NA	NA	NA	NA	NA	4.24	NA	NA	NA	0.6	-7
TB-2	01/10/2002	<5,000	480	47	34	110	NA	12,000	NA	NA	NA	NA	NA	NA	6.26	NA	NA	NA	1.3	-81
TB-2	04/25/2002	4,700	470	140	<20	80	NA	7,400	NA	NA	NA	NA	NA	NA	11.78	NA	NA	NA	0.9	-107
TB-2	07/18/2002	7,500	630	650	<25	390	NA	44,000	NA	NA	NA	NA	NA	NA	12.34	NA	NA	NA	0.9	-67
TB-2	10/07/2002	<10,000	580	<100	<100	180	NA	30,000	NA	NA	NA	NA	NA	NA	11.62	NA	NA	NA	1.0	-41
TB-2	01/06/2003	120	4.8	<0.50	<0.50	2.0	NA	220	NA	NA	NA	NA	NA	NA	4.35	NA	NA	NA	0.5	-515

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**4255 MacArthur Boulevard**  
**Oakland, CA**

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft)	Depth to SPH (ft)	GW Elevation (MSL)	SPH Thickness (ft)	DO Reading (ppm)	ORP Reading (mV)
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**Abbreviations:**

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to July 24, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to July 24, 2001, analyzed by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether

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

ETBE = Ethyl tert-butyl ether, analyzed by EPA Method 8260

TAME = Tert-amyl methyl ether, analyzed by EPA Method 8260

TBA = Tert-butyl alcohol, analyzed by EPA Method 8260

TOC = Top of Casing 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

DO = Dissolved Oxygens

ppm = Parts per million

ORP = Oxidation Reduction Potential

mV = Millivolts

**Notes:**

\* = Sample analyzed outside the EPA recommended holding time.

a = Ground water surface had a sheen when sampled.

b = MTBE value is estimated by Sequoia Analytical of Redwood City, California.

Site surveyed March 14, 2002, by Virgil Chavez Land Surveying of Vallejo, California.

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

Corrected ground water elevation = Top-of-casing elevation - depth to water + (0.8 x hydrocarbon thickness).

**Blaine Tech Services, Inc.**

January 29, 2004

1680 Rogers Avenue  
San Jose, CA 95112-1105

Attn.: Leon Gearhart

Project#: 040114-JP1

Project: 98995758

Site: 4255 MacArthur Blvd., Oakland

Dear Mr.Gearhart,

Attached is our report for your samples received on 01/15/2004 16:58

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 02/29/2004 unless you have requested otherwise.

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

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

Sincerely,



Vincent Vancil  
Project Manager

**Gas/BTEX 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) 573-7771Project: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-1	01/14/2004 12:05	Water	1
MW-4	01/14/2004 11:40	Water	2
MW-5	01/14/2004 11:40	Water	3

**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: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-1	Lab ID:	2004-01-0419-1
Sampled:	01/14/2004 12:05	Extracted:	1/24/2004 13:31
Matrix:	Water	QC Batch#:	2004/01/24-01-64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	100	ug/L	2.00	01/24/2004 13:31	
Benzene	19	1.0	ug/L	2.00	01/24/2004 13:31	
Toluene	ND	1.0	ug/L	2.00	01/24/2004 13:31	
Ethylbenzene	ND	1.0	ug/L	2.00	01/24/2004 13:31	
Total xylenes	ND	2.0	ug/L	2.00	01/24/2004 13:31	
tert-Butyl alcohol (TBA)	63	10	ug/L	2.00	01/24/2004 13:31	
Methyl tert-butyl ether (MTBE)	180	1.0	ug/L	2.00	01/24/2004 13:31	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	92.4	76-130	%	2.00	01/24/2004 13:31	
Toluene-d8	90.2	78-115	%	2.00	01/24/2004 13:31	

**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: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

Prep(s): 5030B

Test(s): 8260B

Sample ID: MW-4

Lab ID: 2004-01-0419-2

Sampled: 01/14/2004 11:40

Extracted: 1/24/2004 19:20

Matrix: Water

QC Batch#: 2004/01/24-1B.66

Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	1000	ug/L	20.00	01/24/2004 19:20	
Benzene	24	10	ug/L	20.00	01/24/2004 19:20	
Toluene	ND	10	ug/L	20.00	01/24/2004 19:20	
Ethylbenzene	ND	10	ug/L	20.00	01/24/2004 19:20	
Total xylenes	ND	20	ug/L	20.00	01/24/2004 19:20	
tert-Butyl alcohol (TBA)	7200	100	ug/L	20.00	01/24/2004 19:20	
Methyl tert-butyl ether (MTBE)	500	10	ug/L	20.00	01/24/2004 19:20	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	100.8	76-130	%	20.00	01/24/2004 19:20	
Toluene-d8	95.6	78-115	%	20.00	01/24/2004 19:20	

## 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: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-5	Lab ID:	2004-01-0419 - 3
Sampled:	01/14/2004 11:40	Extracted:	1/24/2004 19:44
Matrix:	Water	QC Batch#:	2004/01/24-1B.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	01/24/2004 19:44	
Benzene	ND	0.50	ug/L	1.00	01/24/2004 19:44	
Toluene	0.76	0.50	ug/L	1.00	01/24/2004 19:44	
Ethylbenzene	ND	0.50	ug/L	1.00	01/24/2004 19:44	
Total xylenes	ND	1.0	ug/L	1.00	01/24/2004 19:44	
tert-Butyl alcohol (TBA)	17	5.0	ug/L	1.00	01/24/2004 19:44	
Methyl tert-butyl ether (MTBE)	47	0.50	ug/L	1.00	01/24/2004 19:44	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	99.9	76-130	%	1.00	01/24/2004 19:44	
Toluene-d8	100.7	78-115	%	1.00	01/24/2004 19:44	

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

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

Project: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2004/01/24-01.64

MB: 2004/01/24-01.64-019

Date Extracted: 01/24/2004 09:19

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	01/24/2004 09:19	
Benzene	ND	0.5	ug/L	01/24/2004 09:19	
Toluene	ND	0.5	ug/L	01/24/2004 09:19	
Ethylbenzene	ND	0.5	ug/L	01/24/2004 09:19	
Total xylenes	ND	1.0	ug/L	01/24/2004 09:19	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	01/24/2004 09:19	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	01/24/2004 09:19	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	85.1	76-130	%	01/24/2004 09:19	
Toluene-d8	90.2	78-115	%	01/24/2004 09:19	

## 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: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Method Blank

QC Batch # 2004/01/24-1B-66

MB: 2004/01/24-1B-66-050

Date Extracted: 01/24/2004 10:50

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	01/24/2004 10:50	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	01/24/2004 10:50	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	01/24/2004 10:50	
Benzene	ND	0.5	ug/L	01/24/2004 10:50	
Toluene	ND	0.5	ug/L	01/24/2004 10:50	
Ethylbenzene	ND	0.5	ug/L	01/24/2004 10:50	
Total xylenes	ND	1.0	ug/L	01/24/2004 10:50	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	98.8	76-130	%	01/24/2004 10:50	
Toluene-d8	97.4	78-115	%	01/24/2004 10:50	

## 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: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

## Laboratory Control Spike

## Water

QC Batch # 2004/01/24-01.64

LCS 2004/01/24-01.64-035

Extracted: 01/24/2004

Analyzed: 01/24/2004 08:35

LCSD 2004/01/24-01.64-057

Extracted: 01/24/2004

Analyzed: 01/24/2004 08:57

Compound	Conc.	ug/L	Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	26.9	26.8	25.0	107.6	107.2	0.4	69-129	20		
Toluene	27.7	26.8	25.0	110.8	107.2	3.3	70-130	20		
Methyl tert-butyl ether (MTBE)	26.0	25.7	25.0	104.0	102.8	1.2	65-165	20		
<i>Surrogates(s)</i>										
1,2-Dichloroethane-d4	415	403	500	83.0	80.6		76-130			
Toluene-d8	449	453	500	89.8	90.6		78-115			

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

Blaine Tech Services, Inc.  
Attn.: Leon Gearhart

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

Project: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

Batch QC Report												
Prep(s): 5030B		Test(s): 8260B										
Laboratory Control Spike			Water			QC Batch # 2004/01/24-1B-66						
LCS	2004/01/24-1B-66-014				Extracted: 01/24/2004				Analyzed: 01/24/2004 11:14			
LCSD	2004/01/24-1B-66-039				Extracted: 01/24/2004				Analyzed: 01/24/2004 11:39			
Compound	Conc.		ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD	LCS	LCSD	%	LCS	LCSD	Rec.	RPD	LCS	LCSD	
Methyl tert-butyl ether (MTBE)	23.3	22.0	25	93.2	88.0	5.7	65-165	20				
Benzene	22.9	23.0	25	91.6	92.0	0.4	69-129	20				
Toluene	25.6	25.4	25	102.4	101.6	0.8	70-130	20				
<i>Surrogates(s)</i>												
1,2-Dichloroethane-d4	437	429	500	87.4	85.8		76-130					
Toluene-d8	507	507	500	101.4	101.4		78-115					

**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: 040114-JP1  
98995758

Received: 01/15/2004 16:58

Site: 4255 MacArthur Blvd., Oakland

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**Legend and Notes**

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**Analysis Flag**

0

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

LAB: S+L

## SHELL Chain Of Custody Record

82033

Lab Identification (if necessary):  
Address:  
City, State, Zip:

## Shell Project Manager to be Invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT HOUSTON

Karen Petryna

INCIDENT NUMBER (S&amp;E ONLY)

9 8 9 9 5 7 5 8

SAP or CRMT NUMBER (TS/CRMT)

DATE: 1/14/04

PAGE: 1 of 1

## SAMPLING COMPANY:

Blaine Tech Services

100% GOC

## SITE ADDRESS (Street and City):

BTSS

4255 MacArthur Boulevard, Oakland

40% GOC

T0600101261

## ADDRESS:

1880 Rogers Avenue, San Jose, CA 95112

## PROJECT CONTACT (NAME): PPL Rep: SPC

Leon Gearhart

## TELEPHONE:

408-573-0555

FAX  
408-573-7771EMAIL:  
lgearth@btstech.com

## TURNAROUND TIME (BUSINESS DAYS):

 10 DAYS  5 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS LA - SWCCB REPORT FORMAT  UST AGENCY:

## BCINS MTBE CONFIRMATION HIGHEST: HIGHEST per BORING: ALL

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

2004-01-0419

Ann Kremi

SAMPLER NAME(S) (if any):

(510)420-3335

Shell Oakland/EDF@cambrica-env.com

BITS #

04014-JP1

LAB USE ONLY

Matthew Lynch / Pete Cornish

## REQUESTED ANALYSIS

## FIELD NOTES:

Contaminant/Preservative  
or PID Readings  
or Laboratory Notes.

2.5

TEMPERATURE ON RECEIPT: °C

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	TEST - Gas Purgeable	TEST	MTBE (002/B + 50ppm RL)	MTBE (0200B + 0.5ppm RL)	Oxygenates (S) by (1200B)	ETHANOL (1200B)	Methanol	1,2-DCA (1200B)	EDB (1200B)	THM: Chloro, Extractable (0.015mg)	Total Alkalinity	Foulous Icon	Nitrate as Nitrate	Subsite	MTBE (1200B) Confirmation, Site Name			
		DATE	TIME																				
	MW-1	1/14/04	1205	W	3	X X	X								X	TBA							
	MW-4	1/14/04	1		1	X X	Y								X								
	MW-5	1/14/04	1658		↓	X X	X								X								

Received by (Signature):

Received by (Signature):

Released by (Signature):

Received by (Signature):

Rejected by (Signature):

Received by (Signature):

DISTRIBUTION: White with final copies; Green to File; Yellow and Pink to Client

Date: 01/15/04  
Time: 1530  
Date: 01/15/04  
Time: 1658Date: 01/15/04  
Time: 1658  
Date: 01/15/04  
Time: 1658

10/16/00 Revision

## WELL GAUGING DATA

Project # 040114-3P1 Date 1/14/04 Client 98995758

Site 4255 MacArthur Blvd, 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	4					7.45	22.18	TOC	
* MW-2	4	O/S	10.93	0.01	25	10.96	19.71		FP
* MW-3	4	O/S	12.45	0.02	50	12.47	21.94		FP
MW-4	2					8.34	30.49		
MW-5	2	odor				6.29	20.07	↓	
*- Gauged w/ stinger in well									

# SHELL WELL MONITORING DATA SHEET

BTS #: 040114-JP)	Site: 98995758
Sampler: M. Pyrch	Date: 1/14/04
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): 22.18	Depth to Water (DTW): 7.45
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.40	

Purge Method:	Bailer	Waterra	Sampling Method:	Bailer
	Disposable Bailer	Peristaltic		Disposable Bailer
	Positive Air Displacement	Extraction Pump		Extraction Port
	Electric Submersible	Other _____		Dedicated Tubing
9.5 (Gals.) X 3 = 28.5 Gals.	1 Case Volume Specified Volumes Calculated Volume		Well Diameter Multiplier Well Diameter Multiplier	Other: _____
			1" 0.04 4" 0.65	
			2" 0.16 6" 1.47	
			3" 0.37 Other radius <sup>2</sup> * 0.163	

Time	Temp (°F)	pH	Cond. (mS or $\mu\text{S}$ )	Turbidity (NTUs)	Gals. Removed	Observations
1057	61.5	7.3	1060	15	9.5	clear
1059	64.5	7.5	1122	18	19	↓
1100	Well Dewatered		DTW - 19.93 @ 102			
					Sampled @ Site Departure	
1205					-	

Did well dewater? Yes No Gallons actually evacuated: 23

Sampling Date: 1/14/04 Sampling Time: 1205 Depth to Water: 15.55 ft

Sample I.D.: MW-1 Laboratory: STL Other: \_\_\_\_\_

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

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: 0.8 mg/L Post-purge: mg/L

O.R.P. (if req'd): Pre-purge: 242 mV Post-purge: mV

# SHELL WELL MONITORING DATA SHEET

BTS #: 040114 -JPI	Site: 4/14/04 * 98995758
Sampler: M. Pyrk	Date: 1/14/04
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): 19.71	Depth to Water (DTW): 10.96
Depth to Free Product: 10.95	Thickness of Free Product (feet): 0.01
Referenced to: PVC	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method:	Bailer Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other _____	Sampling Method:	Bailer Disposable Bailer Extraction Port Dedicated Tubing																
			Other: _____																	
— (Gals.) X — = — Gals.		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </tbody> </table>			Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier																	
1"	0.04	4"	0.65																	
2"	0.16	6"	1.47																	
3"	0.37	Other	radius <sup>2</sup> * 0.163																	
1 Case Volume		Specified Volumes	Calculated Volume																	

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	Bailed	25 ml of	free product			

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: STL Other \_\_\_\_\_

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

EB I.D. (if applicable): @ \_\_\_\_\_ 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
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# SHELL WELL MONITORING DATA SHEET

BTS #: 040114-JP1	Site: 98995758			
Sampler: M. Pyrch	Date: 1/14/04			
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8			
Total Well Depth (TD): 21.94	Depth to Water (DTW): 12.47			
Depth to Free Product: 12.45	Thickness of Free Product (feet): 0.02			
Referenced to: PVC	Grade	D.O. Meter (if req'd):	YSI	HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:				

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

(Gals.) X		=	Gals.	Well Diameter	Multiplier	Well Diameter	Multiplier
1 Case Volume	Specified Volumes	Calculated Volume		1"	0.04	4"	0.65
				2"	0.16	6"	1.47
				3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
Bailed	50 ml of free product					

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: Sampling Time: Depth to Water:

Sample I.D.: Laboratory: STL Other

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

EB I.D. (if applicable): @ time Duplicate I.D. (if applicable):

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

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

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

# SHELL WELL MONITORING DATA SHEET

BTS #: 040114-JP1	Site: 98995758
Sampler: M. Pyrch	Date: 1/14/04
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8
Total Well Depth (TD): 30.49	Depth to Water (DTW): 8.34
Depth to Free Product:	Thickness of Free Product (feet): / .34
Referenced to: PVC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.77	

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

$$\frac{3.5 \text{ (Gals.)}}{1 \text{ Case Volume}} \times \frac{3}{\text{Specified Volumes}} = \frac{10.5 \text{ Gals.}}{\text{Calculated Volume}}$$

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <del>µS</del> )	Turbidity (NTUs)	Gals. Removed	Observations
1059	64.7	6.3	1059	>200	3.5	Cloudy
1120	64.3	7.1	1063	>200	7.0	"
1129	61.5	6.7	1076		10.5	"

Did well dewater? Yes  No  Gallons actually evacuated: 10.5

Sampling Date: 1/14/04 Sampling Time: 1140 Depth to Water: 8.36

Sample I.D.: MW-4 Laboratory:  STL  Other \_\_\_\_\_

Analyzed for:  TPH-G  BTEX  MTBE  TPH-D Other: 784

EB I.D. (if applicable): <sup>@</sup>  Time Duplicate I.D. (if applicable):

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

D.O. (if req'd): <input checked="" type="checkbox"/> Pre-purge:	1.2	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): <input checked="" type="checkbox"/> Pre-purge:	140	mV	Post-purge:	mV

# SHELL WELL MONITORING DATA SHEET

BTS #: 040114-JPI	Site: 98995758
Sampler: M. Pyrch	Date: 1/14/04
Well I.D.: MW-5	Well Diameter: 3 4 6 8
Total Well Depth (TD): 20.07	Depth to Water (DTW): 6.29
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: PVC Grade	D.O. Meter (if req'd): YSD HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.05	

Purge Method:	Waterra Peristaltic Extraction Pump Other _____	Sampling Method:	Bailer Disposable Bailer Extraction Port Dedicated Tubing Other: _____
2.2 (Gals.) X 3 = 6.6 Gals.			
1 Case Volume	Specified Volumes	Calculated Volume	
Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or <del>mg</del> )	Turbidity (NTUs)	Gals. Removed	Observations
1123	60.3	7.8	682	>1000	2.2	brown, muddy
1128	61.5	7.3	678.9	>1000	4.4	↓
1132	61.6	7.2	672	>1000	6.6	

Did well dewater? Yes  Gallons actually evacuated: 6.6

Sampling Date: 1/14/04 Sampling Time: 1140 Depth to Water: 8.95

Sample I.D.: MW-5 Laboratory: STL Other: \_\_\_\_\_

Analyzed for: TPH-G BTEX MTBE TPH-D Other: 784

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: 1.6 mg/L Post-purge: mg/L

O.R.P. (if req'd): Pre-purge: 209 mV Post-purge: mV

**ATTACHMENT B**

COP 76 Service Station #1156

Groundwater Monitoring Data and Analytical Results

**Table 1**  
**SUMMARY OF GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS**

January 14, 2004

76 Station 1156

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>MW-1 (Screen Interval in feet: 5.0-25.0)</b>														
1/14/04	177.54	6.69	0.00	170.85	1.16	98000	--	8000	21000	2600	15000	ND<1300	ND<800	
<b>MW-2 (Screen Interval in feet: 5.0-25.0)</b>														
1/14/04	173.50	5.53	0.00	167.97	1.63	3200	--	ND<25	ND<25	ND<25	ND<25	2600	3200	
<b>MW-3 (Screen Interval in feet: 5.0-25.0)</b>														
1/14/04	178.13	6.86	0.00	171.27	2.53	5100	--	120	240	310	720	190	230	
<b>MW-4 (Screen Interval in feet: 5.0-25.0)</b>														
1/14/04	178.96	6.30	0.00	172.66	1.67	530	--	88	4.1	9.9	11	150	180	
<b>MW-5 (Screen Interval in feet: DNA)</b>														
1/14/04	169.18	2.00	0.00	167.18	0.72	560	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5	670	760	
<b>MW-6 (Screen Interval in feet: DNA)</b>														
1/14/04	169.04	2.00	0.00	167.04	0.71	ND<50	--	ND<0.50	0.57	ND<0.50	0.64	ND<5.0	ND<2.0	
<b>MW-7 (Screen Interval in feet: DNA)</b>														
1/14/04	171.64	6.97	0.00	164.67	0.75	19000	--	ND<100	ND<100	ND<100	ND<100	20000	25000	

**Table 2**  
**HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS**  
**July 1999 Through January 2004**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	76 Station 1156						Comments	
							TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-1 (Screen Interval in feet: 5.0-25.0)</b>														
1/7/00	174.86	9.05	0.02	165.82	—	7870	--	7410	13900	2070	9620	ND	--	
3/31/00	174.86	7.18	0.00	167.68	1.86	3600	--	10000	23000	3200	14000	ND	--	
7/14/00	174.86	7.68	0.00	167.18	-0.50	8580	--	8250	18700	3750	17800	ND	--	
10/3/00	174.86	7.99	0.00	166.87	-0.31	9260	--	8,760	20,000	3,350	15,600	ND	--	
1/3/01	174.86	9.18	0.00	165.68	-1.19	11000	--	5,800	13,000	1,700	8,100	2,200	--	
4/4/01	174.86	8.05	0.00	166.81	1.13	14000	--	7780	18500	2470	11800	ND	481	
7/17/01	174.86	7.01	0.00	167.85	1.04	2,200	--	5,600	11,000	2,800	12,000	ND	230	
10/3/01	177.54	7.89	0.00	169.65	1.80	—	—	8200	18000	3000	16000	ND<2,500	--	
10/5/01	177.54	7.91	0.00	169.63	-0.02	13000	--	--	--	--	--	--	--	
1/28/02	177.54	5.98	0.00	171.56	1.93	4400	--	8900	19000	2600	12000	3000	440	
4/25/02	177.54	6.19	0.00	171.35	-0.21	9,000	--	8100	18000	3000	15000	810	670	
7/18/02	177.54	6.99	0.00	170.55	-0.80	9,200	--	5,400	10,000	2,100	10,000	ND<500	620	
10/7/02	177.54	7.73	0.00	169.81	-0.74	3,400	--	9,200	20,000	2,600	13,000	1,300	760	
1/6/03	177.54	5.48	0.00	172.06	2.25	5,100	--	6,500	18,000	2,700	11,000	ND<1,000	790	
4/7/03	177.54	6.30	0.00	171.24	-0.82	2,800	--	7,000	15,000	2,400	11,000	1,000	800	
7/7/03	177.54	6.47	0.00	171.07	-0.17	7,000	--	6,400	11,000	2,600	11,000	600	530	
10/9/03	177.54	7.85	0.00	169.69	-1.38	91000	81000	8100	17000	3200	14000	--	660	
1/14/04	177.54	6.69	0.00	170.85	1.16	98000	--	8000	21000	2600	15000	ND<1300	ND<800	
<b>MW-2 (Screen Interval in feet: 5.0-25.0)</b>														
7/20/99	173.01	5.40	--	167.61	--	--	--	ND	ND	ND	ND	4500	11,000	
9/28/99	173.01	5.60	0.00	167.41	-0.20	--	--	124	ND	62.9	43.1	5280	6150	
1/7/00	173.01	5.92	0.00	167.09	-0.32	--	--	99	ND	23.8	16	33100	--	
3/31/00	173.01	5.23	0.00	167.78	0.69	--	--	42	ND	ND	ND	17000	--	
7/14/00	173.01	5.52	0.00	167.49	-0.29	--	--	44.7	ND	ND	ND	66,500	--	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethyl-benzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
<b>MW-2 continued</b>														
10/3/00	173.01	6.04	0.00	166.97	-0.52	--	--	56.7	ND	ND	ND	57,500	--	
1/3/01	173.01	6.42	0.00	166.59	-0.38	--	--	ND	ND	ND	ND	49,000	--	
4/4/01	173.01	6.14	0.00	166.87	0.28	--	--	ND	ND	ND	ND	38700	37800	
7/17/01	173.01	5.30	0.00	167.71	0.84	--	--	ND	ND	ND	ND	65000	56000	
10/3/01	173.50	7.38	0.00	166.12	-1.59	--	--	2.7	ND<2.5	ND<2.5	ND<2.5	14000	18000	
1/28/02	173.50	5.68	0.00	167.82	--	--	--	2.5	4.4	2.8	7.4	11000	10000	
4/25/02	173.50	5.82	0.00	167.68	-0.14	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	8400	8100	
7/18/02	173.50	6.90	0.00	166.60	-1.08	--	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	4300	8800	
10/7/02	173.50	7.54	0.00	165.96	-0.64	--	--	ND<10	27	21	75	7100	5900	
1/6/03	173.50	6.79	0.00	166.71	0.75	--	--	ND<5.0	ND<5.0	ND<5.0	ND<5.0	31000	35000	
4/7/03	173.50	6.49	0.00	167.01	0.30	--	--	ND<10	14	11	38	2000	1500	
7/7/03	173.50	6.72	0.00	166.78	-0.23	--	--	ND<25	ND<25	ND<25	ND<25	5500	8300	
10/9/03	173.50	7.16	0.00	166.34	-0.44	3500	ND<5000	ND<50	ND<50	ND<50	ND<100	--	8500	Sampled for TPH-G by 8015M on 11/14/03.
1/14/04	173.50	5.53	0.00	167.97	1.63	3200	--	ND<25	ND<25	ND<25	ND<25	2600	3200	
<b>MW-3</b> (Screen Interval in feet: 5.0-25.0)														
7/20/99	178.44	8.50	--	169.94	--	--	--	76	52	79	76	330	--	
9/28/99	178.44	8.31	0.00	170.13	0.19	--	--	174	95.4	71.8	135	443	288	
1/7/00	178.44	8.56	0.00	169.88	-0.25	--	--	2450	3090	1560	3910	1940	--	
3/31/00	178.44	8.42	0.00	170.02	0.14	--	--	1300	2900	2600	3500	2800	--	
7/14/00	178.44	8.61	0.00	169.83	-0.19	--	--	1850	2630	2750	3900	548	--	
10/3/00	178.44	9.14	0.00	169.30	-0.53	--	--	1,910	2,020	2,400	2,680	965	--	
1/3/01	178.44	9.06	0.00	169.38	0.08	--	--	1,600	1,100	2,300	1,400	3,300	--	
4/4/01	178.44	8.98	0.00	169.46	0.08	--	--	1150	1470	2100	1820	1050	450	
7/17/01	178.44	7.46	0.00	170.98	1.52	--	--	1,500	2,100	2,100	3,400	ND	350	
10/3/01	178.13	9.81	0.00	168.32	-2.66	--	--	830	1,900	1,700	3,000	ND<1,000	--	
1/28/02	178.13	7.39	0.00	170.74	--	--	--	880	2,600	1,800	4,300	3200	210	
4/25/02	178.13	7.86	0.00	170.27	-0.47	--	--	500	2,000	1,300	3,800	500	260	
7/18/02	178.13	8.83	0.00	169.30	-0.97	--	--	1,800	3,800	2,200	8,000	ND<250	270	

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ( $\mu\text{g/l}$ )	TPPH 8260B ( $\mu\text{g/l}$ )	Benzene ( $\mu\text{g/l}$ )	Toluene ( $\mu\text{g/l}$ )	Ethylbenzene ( $\mu\text{g/l}$ )	Total Xylenes ( $\mu\text{g/l}$ )	MTBE 8021B ( $\mu\text{g/l}$ )	MTBE 8260B ( $\mu\text{g/l}$ )	Comments
<b>MW-3 continued</b>														
10/7/02	178.13	9.71	0.00	168.42	-0.88	--	--	600	2,000	1,800	6,400	ND<120	ND<200	
1/6/03	178.13	7.40	0.00	170.73	2.31	--	--	800	2,100	2,000	6,400	440	110	
4/7/03	178.13	8.17	0.00	169.96	-0.77	--	--	660	2,200	1,900	6,300	440	100	
7/7/03	178.13	8.35	0.00	169.78	-0.18	--	--	1,200	2,500	2,700	8,300	280	100	
10/9/03	178.13	9.39	0.00	168.74	-1.04	3800	6000	120	260	390	1200	--	190	Sampled for TPH-G by 8015M on 11/14/03.
1/14/04	178.13	6.86	0.00	171.27	2.53	5100	--	120	240	310	720	190	230	
<b>MW-4 (Screen Interval in feet: 5.0-25.0)</b>														
7/20/99	179.10	7.40	--	171.70	--	--	--	2.7	0.77	ND	7.1	100	--	
9/28/99	179.10	7.19	0.00	171.91	0.21	--	--	1250	72	51.3	133	416	459	
1/7/00	179.10	8.98	0.00	170.12	-1.79	--	--	2260	167	271	276	764	--	
3/31/00	179.10	7.26	0.00	171.84	1.72	--	--	1800	230	330	400	1000	--	
7/14/00	179.10	7.67	0.00	171.43	-0.41	--	--	2810	332	450	247	1530	--	
10/3/00	179.10	8.12	0.00	170.98	-0.45	--	--	3,110	437	519	816	1,040	--	
1/3/01	179.10	9.10	0.00	170.00	-0.98	--	--	2,500	340	480	960	850	--	
4/4/01	179.10	8.63	0.00	170.47	0.47	--	--	2380	126	416	725	1140	819	
7/17/01	179.10	6.49	0.00	172.61	2.14	--	--	2,300	110	410	800	1200	900	
10/3/01	178.96	7.01	0.00	171.95	-0.66	--	--	2,100	85	380	390	580	820	
1/28/02	178.96	6.21	0.00	172.75	--	--	--	2,100	130	350	670	1100	500	
4/25/02	178.96	5.49	0.00	173.47	0.72	--	--	1,300	42	270	250	680	600	
7/18/02	178.96	8.28	0.00	170.68	-2.79	--	--	1,300	71	290	220	530	760	
10/7/02	178.96	7.49	0.00	171.47	0.79	--	--	1,400	110	330	380	650	540	
1/6/03	178.96	6.36	0.00	172.60	1.13	--	--	1,100	57	260	320	370	520	
4/7/03	178.96	6.24	0.00	172.72	0.12	--	--	1,100	55	190	370	550	420	
7/7/03	178.96	6.43	0.00	172.53	-0.19	--	--	920	28	170	330	480	450	
10/9/03	178.96	7.97	0.00	170.99	-1.54	530	700	100	2.2	5.4	14	--	270	Sampled for TPH-G by 8015M on 11/14/03.
1/14/04	178.96	6.30	0.00	172.66	1.67	530	--	88	4.1	9.9	11	150	180	
<b>MW-5 (Screen Interval in feet: DNA)</b>														
10/3/01	169.18	2.81	0.00	166.37	--	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1800	2100	

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>MW-5 continued</b>														
1/28/02	169.18	1.88	0.00	167.30	--	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	650	550	
4/25/02	169.18	1.99	0.00	167.19	-0.11	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2200	2400	
7/18/02	169.18	2.49	0.00	166.69	-0.50	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	530	690	
10/7/02	169.18	2.80	0.00	166.38	-0.31	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	300	330	
1/6/03	169.18	1.86	0.00	167.32	0.94	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	410	350	
4/7/03	169.18	2.15	0.00	167.03	-0.29	--	--	0.53	ND<0.50	ND<0.50	ND<0.50	450	420	
7/7/03	169.18	2.26	0.00	166.92	-0.11	--	--	ND<1.2	ND<1.2	ND<1.2	ND<1.2	220	200	
10/9/03	169.18	2.72	0.00	166.46	-0.46	560	210	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	290	Sampled for TPH-G by 8015M on 11/14/03.
1/14/04	169.18	2.00	0.00	167.18	0.72	560	--	ND<2.5	ND<2.5	ND<2.5	ND<2.5	670	760	
<b>MW-6 (Screen Interval in feet: DNA)</b>														
10/3/01	169.04	2.87	0.00	166.17	--	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	200	270	
1/28/02	169.04	1.82	0.00	167.22	--	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
4/25/02	169.04	2.01	0.00	167.03	-0.19	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
7/18/02	169.04	2.44	0.00	166.60	-0.43	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	ND<2.0	
10/7/02	169.04	2.72	0.00	166.32	-0.28	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	ND<2.0	
1/6/03	169.04	1.90	0.00	167.14	0.82	--	--	0.62	1.2	1.2	3.5	ND<2.0	ND<2.0	
4/7/03	169.04	2.02	0.00	167.02	-0.12	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	46	--	
7/7/03	169.04	2.21	0.00	166.83	-0.19	--	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<2.0	
10/9/03	169.04	2.71	0.00	166.33	-0.50	ND<50	ND<50	0.95	3.0	1.4	5.5	--	ND<2.0	Sampled for TPH-G by 8015M on 11/14/03.
1/14/04	169.04	2.00	0.00	167.04	0.71	ND<50	--	ND<0.50	0.57	ND<0.50	0.64	ND<5.0	ND<2.0	
<b>MW-7 (Screen Interval in feet: DNA)</b>														
10/3/01	171.64	7.62	0.00	164.02	--	--	--	210	ND<50	ND<50	800	35000	40000	
1/28/02	171.64	7.21	0.00	164.43	--	--	--	ND<10	ND<10	ND<10	ND<10	42000	38000	
4/25/02	171.64	7.25	0.00	164.39	-0.04	--	--	660	ND<50	ND<50	ND<50	42000	45000	
7/18/02	171.64	8.12	0.00	163.52	-0.87	--	--	130	ND<50	ND<50	ND<50	51000	53000	
10/7/02	171.64	7.71	0.00	163.93	0.41	--	--	ND<50	ND<50	ND<50	ND<50	33000	38000	
1/6/03	171.64	7.63	0.00	164.01	0.08	ND<50	--	0.61	1.0	0.89	2.9	3900	3100	
4/7/03	171.64	7.58	0.00	164.06	0.05	--	--	ND<20	ND<20	ND<20	ND<20	32000	28000	

Date Sampled	TOC	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
		(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	

<b>MW-7 continued</b>														
7/7/03	171.64	7.56	0.00	164.08	0.02	--	--	8.2	ND<0.50	1.2	ND<0.50	36000	45000	
10/9/03	171.64	7.72	0.00	163.92	-0.16	6800	ND<13000	ND<130	ND<130	ND<130	ND<250	--	20000	Sampled for TPH-G by 8015M on 11/14/03.
1/14/04	171.64	6.97	0.00	164.67	0.75	19000	--	ND<100	ND<100	ND<100	ND<100	20000	25000	

**Table 3**  
**SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS**  
**76 Station 1156**

Date Sampled	TPH-D (µg/l)	EDC (µg/l)	Chloro-benzene (µg/l)	cis-1,2-DCE (µg/l)	EDB (µg/l)	Naphth-alene (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8015B (mg/l)	Ethanol 8260B (µg/l)	Bis(2-ethylhexyl)-phthalate (µg/l)	2-Methyl-phenol (µg/l)	4-Methyl-phenol (µg/l)
<b>MW-1</b>															
1/7/00	72700	--	--	--	--	--	--	--	--	--	--	--	--	--	
3/31/00	92000	--	--	--	--	--	--	--	--	--	--	--	--	--	
7/14/00	108000	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/00	96000	--	--	--	--	--	--	--	--	--	--	--	--	--	
1/3/01	37000	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/4/01	86900	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	
7/17/01	79,000	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	
10/3/01	99000	--	--	--	--	--	--	--	--	--	--	--	--	--	
1/28/02	110000	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/25/02	93000	--	--	--	--	--	--	--	--	--	--	--	--	--	
7/18/02	69,000	--	5.9	1.3	ND<10	910	ND<10	ND<100	ND<10	ND<10	ND<2,500	--	120	13	25
10/7/02	82,000	--	--	--	ND<200	--	ND<200	ND<10,000	ND<200	ND<200	ND<50,000	--	--	--	--
1/6/03	82,000	--	--	--	ND<400	--	ND<400	ND<20,000	ND<400	ND<400	ND<100,000	--	--	--	--
4/7/03	74,000	--	--	--	ND<200	--	ND<200	ND<10,000	ND<200	ND<200	ND<50,000	--	--	--	--
7/7/03	60,000	--	ND<120	ND<120	ND<500	850	ND<500	ND<25,000	ND<500	ND<500	ND<120,000	--	70	ND<5.0	22
10/9/03	4300	ND<400	--	--	ND<400	--	ND<400	ND<20000	ND<400	ND<400	--	ND<100000	--	--	--
1/14/04	6200	ND<800	--	--	ND<800	--	ND<800	ND<40000	ND<800	ND<800	--	ND<200000	--	--	--
<b>MW-2</b>															
7/20/99	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	
9/28/99	1390	--	--	--	--	--	ND	ND	ND	ND	--	--	--	--	
1/7/00	1450	--	--	--	--	--	--	--	--	--	--	--	--	--	
3/31/00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	
7/14/00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/3/00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	
1/3/01	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	
4/4/01	ND	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	

Date Sampled	TPH-D	EDC	Chloro-benzene	cis-1,2-DCE	EDB	Naphthalene	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8015B	Ethanol 8260B	Bis(2-ethylhexyl)-phthalate	2-Methyl-phenol	4-Methyl-phenol
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
<b>MW-2 continued</b>															
7/17/01	ND	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	--
10/3/01	ND<250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/28/02	ND<250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/25/02	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/18/02	ND<500	--	--	--	ND<100	--	ND<100	ND<1,000	ND<100	ND<100	ND<25,000	--	--	--	--
10/7/02	4,300	--	--	--	ND<400	--	ND<400	ND<20,000	ND<400	ND<400	ND<100,000	--	--	--	--
1/6/03	5,900	--	--	--	ND<1,000	--	ND<1,000	ND<50,000	ND<1,000	ND<1,000	ND<250,000	--	--	--	--
4/7/03	1,500	--	--	--	ND<40	--	ND<40	ND<2,000	ND<40	ND<40	ND<10,000	--	--	--	--
7/7/03	ND<2,500	--	--	--	ND<100	--	ND<100	ND<5,000	ND<100	ND<100	ND<25,000	--	--	--	--
10/9/03	--	ND<200	--	--	ND<200	--	ND<200	ND<10000	ND<200	ND<200	ND<50000	--	--	--	--
1/14/04	--	ND<50	--	--	ND<50	--	ND<50	ND<2500	ND<50	ND<50	ND<13000	--	--	--	--
<b>MW-3</b>															
7/20/99	1000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/28/99	1860	--	--	--	--	--	8.8	ND	ND	ND	--	--	--	--	--
1/7/00	28400	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/31/00	26000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/14/00	24500	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/00	22000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/3/01	14000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/4/01	19600	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	--
7/17/01	26000	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	--
10/3/01	22000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/28/02	30000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/25/02	18,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/18/02	37,000	--	--	--	ND<5.0	--	ND<5.0	ND<50	ND<5.0	ND<5.0	ND<1,200	--	--	--	--
10/7/02	26,000	--	--	--	ND<200	--	ND<200	ND<10,000	ND<200	ND<200	ND<50,000	--	--	--	--
1/6/03	27,000	--	--	--	ND<80	--	ND<80	ND<4,000	ND<80	ND<80	23000	--	--	--	--
4/7/03	28,000	--	--	--	ND<80	--	ND<80	ND<4,000	ND<80	ND<80	ND<20,000	--	--	--	--
7/7/03	33,000	--	--	--	ND<40	--	ND<40	ND<2,000	ND<40	ND<40	ND<10,000	--	--	--	--

Date Sampled	TPH-D ( $\mu\text{g/l}$ )	EDC ( $\mu\text{g/l}$ )	Chloro-benzene ( $\mu\text{g/l}$ )	cis-1,2-DCE ( $\mu\text{g/l}$ )	EDB ( $\mu\text{g/l}$ )	Naphth-alene ( $\mu\text{g/l}$ )	TAME 8260B ( $\mu\text{g/l}$ )	TBA 8260B ( $\mu\text{g/l}$ )	DIPE 8260B ( $\mu\text{g/l}$ )	ETBE 8260B ( $\mu\text{g/l}$ )	Ethanol 8015B (mg/l)	Ethanol 8260B ( $\mu\text{g/l}$ )	Bis(2-ethylhexyl)-phthalate ( $\mu\text{g/l}$ )	2-Methyl-phenol ( $\mu\text{g/l}$ )	4-Methyl-phenol ( $\mu\text{g/l}$ )
<b>MW-3 continued</b>															
10/9/03	--	ND<20	--	--	ND<20	--	ND<20	ND<1000	ND<20	ND<20	--	ND<5000	--	--	--
1/14/04	--	ND<20	--	--	ND<20	--	ND<20	ND<1000	ND<20	ND<20	--	ND<5000	--	--	--
<b>MW-4</b>															
7/20/99	69	--	--	--	--	--	--	--	--	--	--	--	--	--	--
9/28/99	4050	--	--	--	--	--	ND	ND	ND	ND	--	--	--	--	--
1/7/00	7010	--	--	--	--	--	--	--	--	--	--	--	--	--	--
3/31/00	5500	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/14/00	7940	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/3/00	11400	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/3/01	8600	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/4/01	9950	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	--
7/17/01	10000	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	--
10/3/01	7800	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/28/02	12000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/25/02	3,300	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/18/02	4,800	--	--	--	ND<10	--	ND<10	ND<100	ND<10	ND<10	ND<2,500	--	--	--	--
10/7/02	5,100	--	--	--	ND<200	--	ND<200	ND<10,000	ND<200	ND<200	ND<50,000	--	--	--	--
1/6/03	5,600	--	--	--	ND<20	--	ND<20	ND<1,000	ND<20	ND<20	ND<5,000	--	--	--	--
4/7/03	5,100	--	--	--	ND<20	--	ND<20	ND<1,000	ND<20	ND<20	ND<5,000	--	--	--	--
7/7/03	3,000	--	--	--	ND<20	--	ND<20	ND<1,000	ND<20	ND<20	ND<5,000	--	--	--	--
10/9/03	--	ND<4.0	--	--	ND<4.0	--	ND<4.0	ND<200	ND<4.0	ND<4.0	--	ND<1000	--	--	--
1/14/04	--	6.5	--	--	ND<4.0	--	ND<4.0	ND<200	ND<4.0	ND<4.0	--	ND<1000	--	--	--
<b>MW-5</b>															
10/3/01	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/28/02	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/25/02	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/18/02	ND<50	--	--	--	ND<2.0	--	ND<2.0	ND<20	ND<2.0	ND<2.0	ND<500	--	--	--	--
10/7/02	140	--	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	--	--	--
1/6/03	120	--	ND<0.50	ND<0.50	ND<2.0	ND<10	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	ND<5.0	ND<5.0	ND<5.0

Date Sampled	TPH-D	EDC	Chloro-benzene	cis-1,2-DCE	EDB	Naphth-alene	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8015B	Ethanol 8260B	Bis(2-ethylhexyl)-phthalate	2-Methyl-phenol	4-Methyl-phenol
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
<b>MW-5 continued</b>															
4/7/03	220	--	--	--	ND<10	--	ND<10	ND<500	ND<10	ND<10	ND<2,500	--	--	--	--
7/7/03	120	--	--	--	ND<4.0	--	ND<4.0	ND<200	ND<4.0	ND<4.0	ND<1,000	--	--	--	--
10/9/03	--	ND<4.0	--	--	ND<4.0	--	ND<4.0	ND<200	ND<4.0	ND<4.0	--	ND<1000	--	--	--
1/14/04	--	ND<40	--	--	ND<40	--	ND<40	ND<2000	ND<40	ND<40	--	ND<10000	--	--	--
<b>MW-6</b>															
10/3/01	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/28/02	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/25/02	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/18/02	ND<50	--	--	--	ND<2.0	--	ND<2.0	ND<20	ND<2.0	ND<2.0	ND<500	--	--	--	--
10/7/02	ND<50	--	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	--	--	--
1/6/03	ND<50	--	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	--	--	--
4/7/03	ND<50	--	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	--	--	--
7/7/03	ND<50	--	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	--	--	--
10/9/03	--	ND<2.0	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	--	ND<500	--	--	--
1/14/04	--	ND<2.0	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	--	ND<500	--	--	--
<b>MW-7</b>															
10/3/01	10000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/28/02	ND<1,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
4/25/02	ND<5,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
7/18/02	ND<5,000	--	--	--	ND<20	--	ND<20	33,000	ND<20	ND<20	ND<5,000	--	--	--	--
10/7/02	18,000	--	--	--	ND<400	--	ND<400	26,000	ND<400	ND<400	ND<100,000	--	--	--	--
1/6/03	410	--	ND<50	ND<50	ND<200	ND<10	ND<200	ND<10,000	ND<200	ND<200	ND<50,000	--	ND<5.0	ND<5.0	ND<5.0
4/7/03	13,000	--	--	--	ND<800	--	ND<800	ND<40,000	ND<800	ND<800	ND<200,000	--	--	--	--
7/7/03	990	--	--	--	ND<400	--	ND<400	27,000	ND<400	ND<400	ND<100,000	--	--	--	--
10/9/03	--	ND<500	--	--	ND<500	--	ND<500	ND<25000	ND<500	ND<500	--	ND<130000	--	--	--
1/14/04	--	ND<800	--	--	ND<800	--	ND<800	ND<40000	ND<800	ND<800	--	ND<200000	--	--	--

**Table 3b**  
**SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS**  
**76 Station 1156**

Date Sampled	1,2 DCE ( $\mu\text{g/l}$ )	2-Methylnaphthalene ( $\mu\text{g/l}$ )
<b>MW-1</b>		
1/7/00	--	--
3/31/00	--	--
7/14/00	--	--
10/3/00	--	--
1/3/01	--	--
4/4/01	ND	--
7/17/01	ND	--
10/3/01	--	--
1/28/02	--	--
4/25/02	--	--
7/18/02	ND<1.6	420
10/7/02	ND<200	--
1/6/03	ND<400	--
4/7/03	ND<200	--
7/7/03	ND<120	260
10/9/03	--	--
1/14/04	--	--
<b>MW-2</b>		
7/20/99	--	--
9/28/99	--	--
1/7/00	--	--
3/31/00	--	--
7/14/00	--	--
10/3/00	--	--
1/3/01	--	--
4/4/01	ND	--

Date Sampled	1,2 DCE ( $\mu\text{g/l}$ )	2-Methylnap h-thalene ( $\mu\text{g/l}$ )
<b>MW-2 continued</b>		
7/17/01	ND	--
10/3/01	--	--
1/28/02	--	--
4/25/02	--	--
7/18/02	ND<100	--
10/7/02	ND<400	--
1/6/03	ND<1,000	--
4/7/03	ND<40	--
7/7/03	ND<100	--
10/9/03	--	--
1/14/04	--	--
<b>MW-3</b>		
7/20/99	--	--
9/28/99	--	--
1/7/00	--	--
3/31/00	--	--
7/14/00	--	--
10/3/00	--	--
1/3/01	--	--
4/4/01	ND	--
7/17/01	ND	--
10/3/01	--	--
1/28/02	--	--
4/25/02	--	--
7/18/02	ND<5.0	--
10/7/02	ND<200	--
1/6/03	ND<80	--
4/7/03	ND<80	--
7/7/03	ND<40	--

Date Sampled	1,2 DCE ( $\mu\text{g/l}$ )	2-Methylnaphthalene ( $\mu\text{g/l}$ )
<b>MW-3 continued</b>		
10/9/03	--	--
1/14/04	--	--
<b>MW-4</b>		
7/20/99	--	--
9/28/99	--	--
1/7/00	--	--
3/31/00	--	--
7/14/00	--	--
10/3/00	--	--
1/3/01	--	--
4/4/01	ND	--
7/17/01	ND	--
10/3/01	--	--
1/28/02	--	--
4/25/02	--	--
7/18/02	49	--
10/7/02	ND<200	--
1/6/03	ND<20	--
4/7/03	ND<20	--
7/7/03	ND<20	--
10/9/03	--	--
1/14/04	--	--
<b>MW-5</b>		
10/3/01	--	--
1/28/02	--	--
4/25/02	--	--
7/18/02	ND<2.0	--
10/7/02	ND<2.0	--
1/6/03	1.4	ND<5.0

Date Sampled	1,2 DCE ( $\mu\text{g/l}$ )	2-Methylnaphthalene ( $\mu\text{g/l}$ )
<b>MW-5 continued</b>		
4/7/03	ND<10	--
7/7/03	ND<4.0	--
10/9/03	--	--
1/14/04	--	--
<b>MW-6</b>		
10/3/01	--	--
1/28/02	--	--
4/25/02	--	--
7/18/02	ND<2.0	--
10/7/02	ND<2.0	--
1/6/03	ND<2.0	--
4/7/03	ND<2.0	--
7/7/03	ND<2.0	--
10/9/03	--	--
1/14/04	--	--
<b>MW-7</b>		
10/3/01	--	--
1/28/02	--	--
4/25/02	--	--
7/18/02	ND<20	--
10/7/02	ND<400	--
1/6/03	ND<50	ND<5.0
4/7/03	ND<800	--
7/7/03	ND<400	--
10/9/03	--	--
1/14/04	--	--