

RO 486



Shell Oil Products US

July 6, 2004

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

Alameda County  
JUL 09 2004  
Environmental 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 *Second Quarter 2004 Monitoring Report* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

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

Sincerely,

Shell Oil Products US

A handwritten signature in cursive script that reads "Karen Petryna".

Karen Petryna  
Sr. Environmental Engineer

July 6, 2004

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

Re: **Second 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. Table 1 presents liquid-phase mass removal data for the site.

**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. Table 2 presents vapor-phase mass removal data for the site.

Cambria  
Environmental  
Technology, Inc.

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Suite A  
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Tel (510) 420-0700  
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**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 fourth quarter of 2003 and 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

**SECOND 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 and first quarter of 2004. 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 Shell well MW-2 might be attributed to the observed upgradient COP MTBE plume. Increasing MTBE concentrations appeared, beginning with COP well MW-2 in the third quarter of 2000 and progressing to COP well MW-7 in the fourth quarter of 2001, and appeared 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. Upon inquiry, COP has informed Shell they intend to conduct periodic groundwater extraction from some of their monitoring wells.

**Work Plan Revision:** Cambria submitted a May 17, 2004 *Subsurface Investigation Work Plan Addendum*, revising the September 22, 2003 work plan to address the SPH discussed above. In the addendum, Cambria proposed advancing up to 12 soil borings with a cone penetration testing drill rig equipped with an ultraviolet induced fluorescence module to horizontally and vertically delineate the SPH plume in the vicinity of wells MW-2 and MW-3 (Figure 2).

## ANTICIPATED THIRD 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.

**Subsurface Investigation:** Upon approval by the Alameda County Health Care Services Agency, Cambria will perform the activities detailed in the May 17, 2004 *Subsurface Investigation Work Plan Addendum*. Cambria will contact the County directly by phone to ascertain the status of review of this work plan.

**CLOSING**

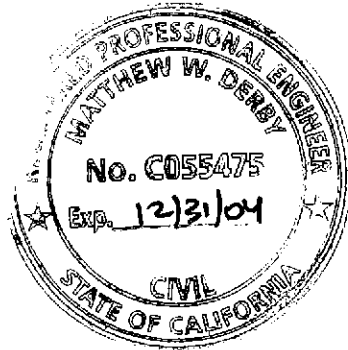
We appreciate the opportunity to work with you on this project. Please call Caryl Weekley at (510) 420-3324 if you have any questions or comments.

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



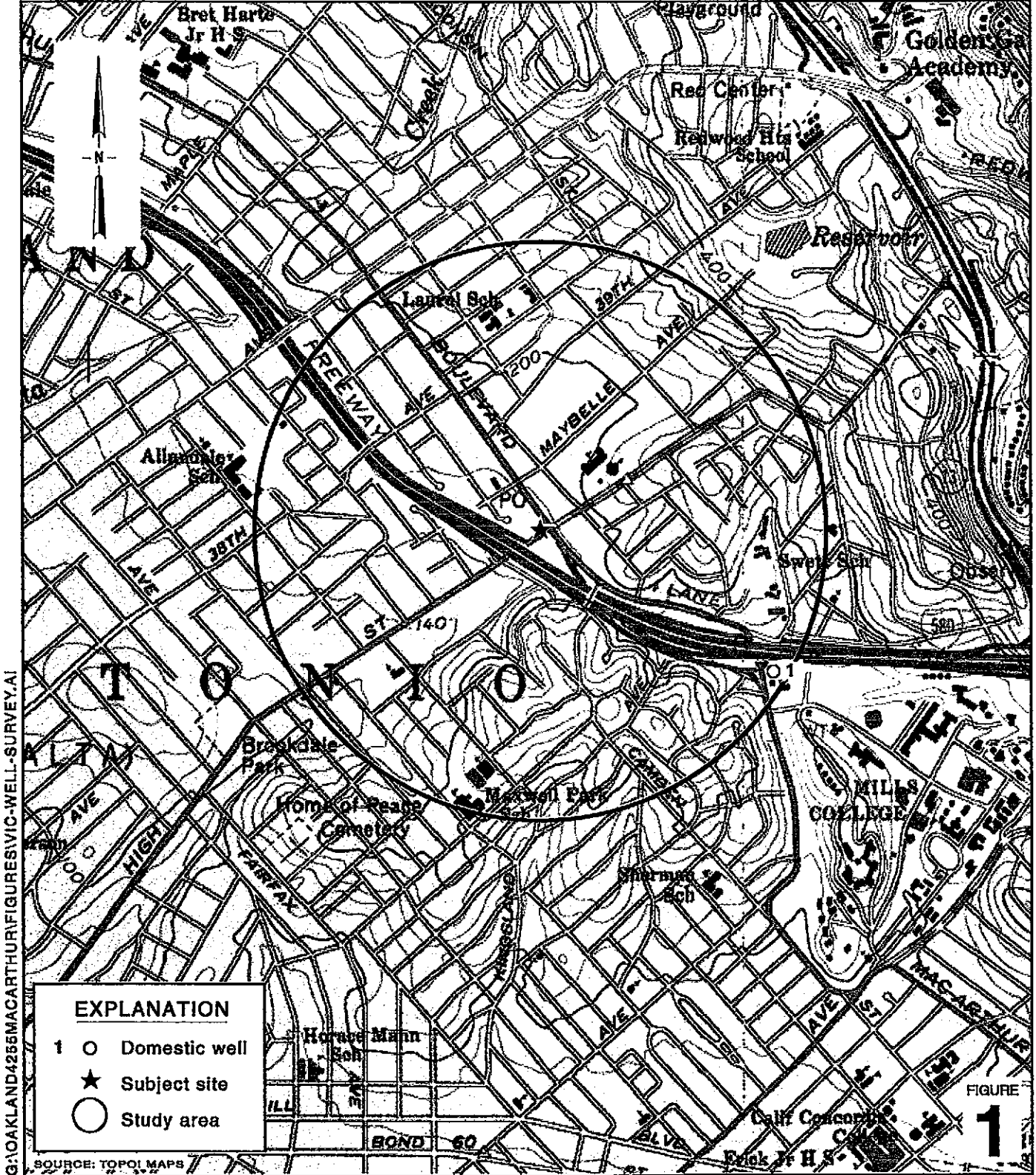
- Figures:
- 1 - Vicinity/Area Well Survey Map
  - 2 - Groundwater Elevation Contour Map
  - 3 - MTBE Concentrations – MacArthur and High Streets, Oakland

- 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

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



C A M B R I A

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

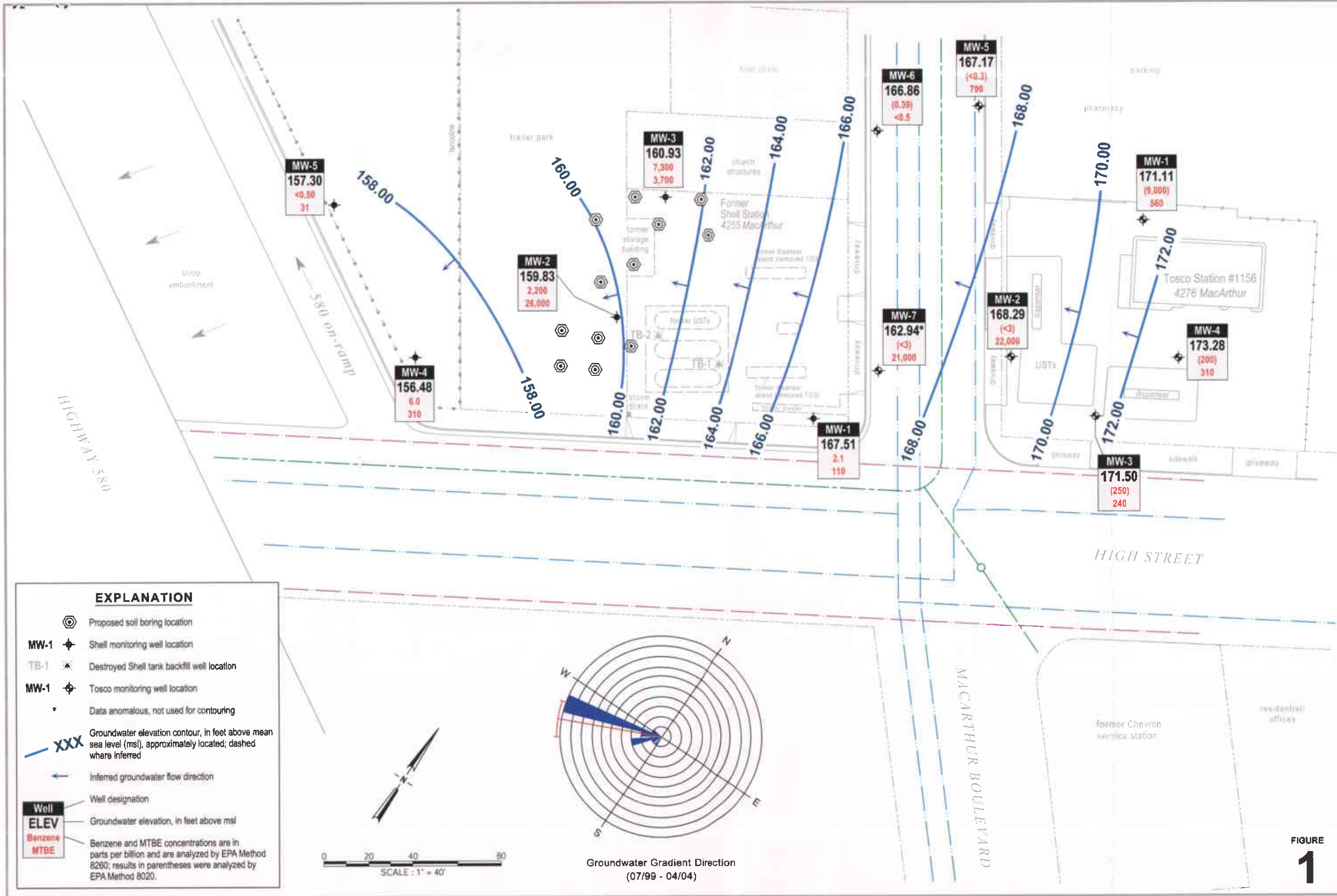
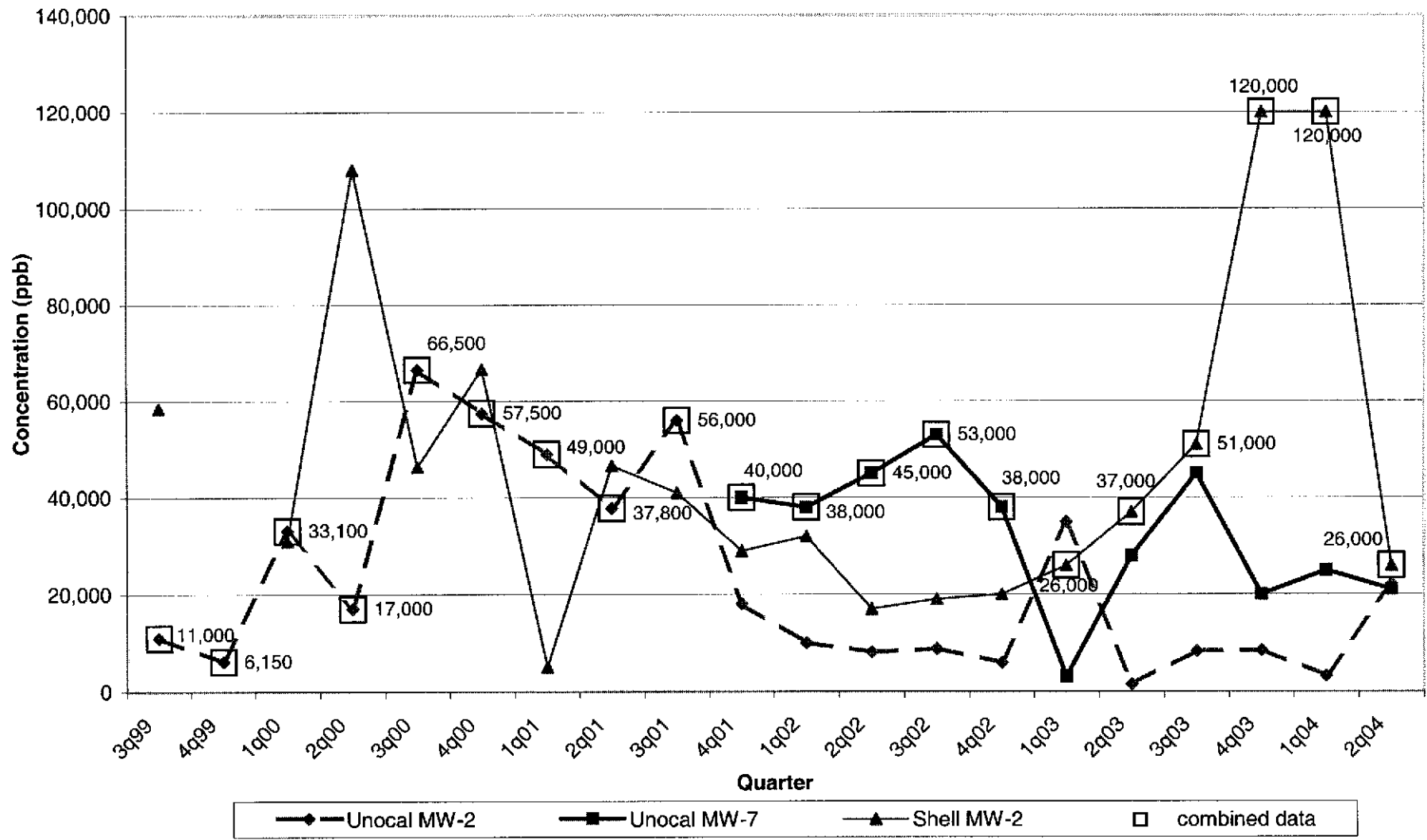


FIGURE 1

**MTBE Concentrations**  
MacArthur & High Streets, Oakland





**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)
04/23/99	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>Total Pounds Removed:</b>			<b>0.78257</b>	<b>Total Pounds Removed:</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 (µg/L) x (g/10<sup>6</sup>µg) x (pound/453.6g) x (3.785 L/gal)  
 Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxlbs/gmsxgals)  
 Benzene analyzed by EPA Method 8020

# CAMBRIA

**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 (#)
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

**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	Removal Rate (#/hour)	Cumulative TPHg Removed (#)	Removal Rate (#/hour)	Cumulative Benzene Removed (#)	Removal Rate (#/hour)	Cumulative MTBE Removed (#)
				(Concentrations in ppmv)								
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
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/386ft3) 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

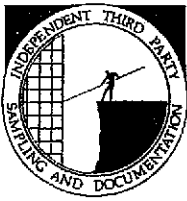
\* = Interval hours of operation estimated.

**ATTACHMENT A**

Blaine Groundwater Monitoring Report  
and Field Notes



**BLAINE**  
TECH SERVICES, INC.



1680 ROGERS AVENUE  
SAN JOSE, CA 95112-1105  
(408) 573-7771 FAX  
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May 27, 2004

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

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

Monitoring performed on April 28, 2004

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Groundwater Monitoring Report **040428-DA-1**

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

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

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

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

Please call if you have any questions.

Yours truly,

Leon Gearhart  
Project Coordinator

LG/ks

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

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

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**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)
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)
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	NA	<5.0	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	NA	<5.0	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	NA	<5.0	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	180	NA	NA	NA	63	NA	175.76	7.45	NA	168.31	NA	0.8	242
MW-1	04/28/2004	<50	2.1	<0.50	<0.50	<1.0	NA	110	NA	NA	NA	33	NA	175.76	8.25	NA	167.51	NA	0.5	64
MW-2	11/17/1993	31,000	9,400	4,600	1,000	3,900	NA	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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	NA	NA	NA	NA	NA	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

**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)
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
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	-85
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-2	04/28/2004	35,000	2,200	2,200	2,300	8,200	NA	26,000	NA	NA	NA	28,000	NA	170.88	11.05	NA	159.83	NA	0.1	-96
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

**WELL CONCENTRATIONS**  
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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)
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
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

**WELL CONCENTRATIONS**  
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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)
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
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	2,990	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	12.45	162.14	0.02	NA	NA
MW-3	04/28/2004	32,000	7,300	190	2,100	4,300	NA	3,700	NA	NA	NA	2,500	NA	174.59	13.66	NA	160.93	NA	0.1	-16
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

**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)
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
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	390	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	5,900	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	6,900	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	6,700	NA	164.03	8.91	NA	155.12	NA	0.7	171
MW-4	01/14/2004	<1,000	24	<10	<10	<20	NA	500	NA	NA	NA	7,200	NA	164.03	8.34	NA	155.69	NA	1.2	140
MW-4	04/28/2004	<500	6.0	<5.0	<5.0	<10	NA	310	NA	NA	NA	5,200	NA	164.03	7.55	NA	156.48	NA	0.4	69
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	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	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	164.06	7.38	NA	156.68	NA	0.4	170



**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)
MW-5	10/07/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	41	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	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	28	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	23	NA	164.14	6.44	NA	157.70	NA	0.3	-17
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
MW-5	04/28/2004	<50	<0.50	<0.50	<0.50	<1.0	NA	31	NA	NA	NA	11	NA	164.14	6.84	NA	157.30	NA	0.4	136
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	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

**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)
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

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 tertiary butyl ether, analyzed by EPA Method 8260

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

TBA = Tertiary 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

**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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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.**

May 13, 2004

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attn.: Leon Gearhart  
Project#: BTS# 040428-DA1  
Project: 98995758  
Site: 4255 MacArthur Boulevard, Oakland

Dear Mr.Gearhart,

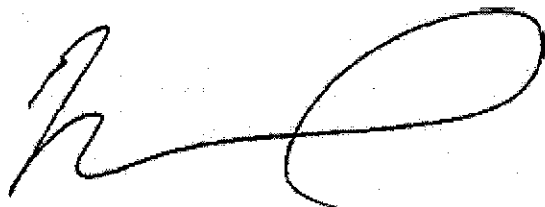
Attached is our report for your samples received on 04/29/2004 15:47  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
06/13/2004 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](mailto: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) 573-7771

Project: BTS# 040428-DA1

98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-1	04/28/2004 14:59	Water	1
MW-2	04/28/2004 15:40	Water	2
MW-3	04/28/2004 15:48	Water	3
MW-4	04/28/2004 14:25	Water	4
MW-5	04/28/2004 14:03	Water	5

Severn Trent Laboratories, Inc.

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

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

05/13/2004 16:37

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-1	Lab ID:	2004-04-0956 - 1
Sampled:	04/28/2004 14:59	Extracted:	5/12/2004 04:11
Matrix:	Water	QC Batch#:	2004/05/11-02.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	05/12/2004 04:11	
Benzene	2.1	0.50	ug/L	1.00	05/12/2004 04:11	
Toluene	ND	0.50	ug/L	1.00	05/12/2004 04:11	
Ethylbenzene	ND	0.50	ug/L	1.00	05/12/2004 04:11	
Total xylenes	ND	1.0	ug/L	1.00	05/12/2004 04:11	
tert-Butyl alcohol (TBA)	33	5.0	ug/L	1.00	05/12/2004 04:11	
Methyl tert-butyl ether (MTBE)	110	0.50	ug/L	1.00	05/12/2004 04:11	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	109.8	76-130	%	1.00	05/12/2004 04:11	
Toluene-d8	98.5	78-115	%	1.00	05/12/2004 04:11	

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-2	Lab ID: 2004-04-0956 - 2
Sampled: 04/28/2004 15:40	Extracted: 5/12/2004 08:57
Matrix: Water	QC Batch#: 2004/05/12-1A.65
Analysis Flag: b ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	35000	25000	ug/L	500.00	05/12/2004 08:57	
Benzene	2200	250	ug/L	500.00	05/12/2004 08:57	
Toluene	2200	250	ug/L	500.00	05/12/2004 08:57	
Ethylbenzene	2300	250	ug/L	500.00	05/12/2004 08:57	
Total xylenes	8200	500	ug/L	500.00	05/12/2004 08:57	
tert-Butyl alcohol (TBA)	28000	2500	ug/L	500.00	05/12/2004 08:57	
Methyl tert-butyl ether (MTBE)	26000	250	ug/L	500.00	05/12/2004 08:57	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	97.7	76-130	%	500.00	05/12/2004 08:57	
Toluene-d8	97.1	78-115	%	500.00	05/12/2004 08:57	

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

Blaine Tech Services, Inc.

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

Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-3	Lab ID: 2004-04-0956 - 3
Sampled: 04/28/2004 15:48	Extracted: 5/12/2004 09:21
Matrix: Water	QC Batch#: 2004/05/12-1A.65
Analysis Flag: o ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	32000	10000	ug/L	200.00	05/12/2004 09:21	
Benzene	7300	100	ug/L	200.00	05/12/2004 09:21	
Toluene	190	100	ug/L	200.00	05/12/2004 09:21	
Ethylbenzene	2100	100	ug/L	200.00	05/12/2004 09:21	
Total xylenes	4300	200	ug/L	200.00	05/12/2004 09:21	
tert-Butyl alcohol (TBA)	2500	1000	ug/L	200.00	05/12/2004 09:21	
Methyl tert-butyl ether (MTBE)	3700	100	ug/L	200.00	05/12/2004 09:21	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	77.8	76-130	%	200.00	05/12/2004 09:21	
Toluene-d8	92.0	78-115	%	200.00	05/12/2004 09:21	



**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: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-4	Lab ID: 2004-04-0956 - 4
Sampled: 04/28/2004 14:25	Extracted: 5/12/2004 09:45
Matrix: Water	QC Batch#: 2004/05/12-1A.65
Analysis Flag: o ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	500	ug/L	10.00	05/12/2004 09:45	
Benzene	6.0	5.0	ug/L	10.00	05/12/2004 09:45	
Toluene	ND	5.0	ug/L	10.00	05/12/2004 09:45	
Ethylbenzene	ND	5.0	ug/L	10.00	05/12/2004 09:45	
Total xylenes	ND	10	ug/L	10.00	05/12/2004 09:45	
tert-Butyl alcohol (TBA)	5200	50	ug/L	10.00	05/12/2004 09:45	
Methyl tert-butyl ether (MTBE)	310	5.0	ug/L	10.00	05/12/2004 09:45	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	99.7	76-130	%	10.00	05/12/2004 09:45	
Toluene-d8	98.2	78-115	%	10.00	05/12/2004 09:45	

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

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

Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-5	Lab ID:	2004-04-0956 - 5
Sampled:	04/28/2004 14:03	Extracted:	5/12/2004 10:09
Matrix:	Water	QC Batch#:	2004/05/12-1A.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	05/12/2004 10:09	
Benzene	ND	0.50	ug/L	1.00	05/12/2004 10:09	
Toluene	ND	0.50	ug/L	1.00	05/12/2004 10:09	
Ethylbenzene	ND	0.50	ug/L	1.00	05/12/2004 10:09	
Total xylenes	ND	1.0	ug/L	1.00	05/12/2004 10:09	
tert-Butyl alcohol (TBA)	11	5.0	ug/L	1.00	05/12/2004 10:09	
Methyl tert-butyl ether (MTBE)	31	0.50	ug/L	1.00	05/12/2004 10:09	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	89.7	76-130	%	1.00	05/12/2004 10:09	
Toluene-d8	95.8	78-115	%	1.00	05/12/2004 10:09	

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

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

Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Batch QC Report		
Prep(s): 5030B		Test(s): 8260B
Method Blank	Water	QC Batch # 2004/05/11-02.62
MB: 2004/05/11-02.62-040		Date Extracted: 05/11/2004 20:40

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/11/2004 20:40	
Benzene	ND	0.5	ug/L	05/11/2004 20:40	
Toluene	ND	0.5	ug/L	05/11/2004 20:40	
Ethylbenzene	ND	0.5	ug/L	05/11/2004 20:40	
Total xylenes	ND	1.0	ug/L	05/11/2004 20:40	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	05/11/2004 20:40	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/11/2004 20:40	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	109.6	76-130	%	05/11/2004 20:40	
Toluene-d8	86.2	78-115	%	05/11/2004 20:40	

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

Blaine Tech Services, Inc.

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

Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Batch QC Report					
Prep(s): 5030B				Test(s): 8260B	
Method Blank		Water		QC Batch # 2004/05/12-1A.65	
MB: 2004/05/12-1A.65-023				Date Extracted: 05/12/2004 07:23	

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	05/12/2004 07:23	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	05/12/2004 07:23	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	05/12/2004 07:23	
Benzene	ND	0.5	ug/L	05/12/2004 07:23	
Toluene	ND	0.5	ug/L	05/12/2004 07:23	
Ethylbenzene	ND	0.5	ug/L	05/12/2004 07:23	
Total xylenes	ND	1.0	ug/L	05/12/2004 07:23	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	108.8	76-130	%	05/12/2004 07:23	
Toluene-d8	97.2	78-115	%	05/12/2004 07:23	

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

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Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Batch QC Report									
Prep(s): 5030B					Test(s): 8260B				
Laboratory Control Spike			Water			QC Batch # 2004/05/11-02.62			
LCS	2004/05/11-02.62-010		Extracted: 05/11/2004			Analyzed: 05/11/2004 21:10			
LCSD	2004/05/11-02.62-056		Extracted: 05/11/2004			Analyzed: 05/11/2004 21:56			

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	21.8	21.1	25.0	87.2	84.4	3.3	69-129	20		
Toluene	21.7	21.6	25.0	86.8	86.4	0.5	70-130	20		
Methyl tert-butyl ether (MTBE)	25.1	25.4	25.0	100.4	101.6	1.2	65-165	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	511	534	500	102.2	106.8		76-130			
Toluene-d8	437	430	500	87.4	86.0		78-115			

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

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Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

Batch QC Report									
Prep(s): 5030B					Test(s): 8260B				
Laboratory Control Spike			Water			QC Batch # 2004/05/12-1A.65			
LCS	2004/05/12-1A.65-040		Extracted: 05/12/2004			Analyzed: 05/12/2004 07:48			
LCSD	2004/05/12-1A.65-001		Extracted: 05/12/2004			Analyzed: 05/12/2004 07:01			

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	19.9	21.5	25	79.6	86.0	7.7	65-165	20		
Benzene	23.2	24.9	25	92.8	99.6	7.1	69-129	20		
Toluene	21.7	22.1	25	86.8	88.4	1.8	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	451	457	500	90.2	91.4		76-130			
Toluene-d8	483	490	500	96.6	98.0		78-115			

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

Blaine Tech Services, Inc.

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Project: BTS# 040428-DA1  
98995758

Received: 04/29/2004 15:47

Site: 4255 MacArthur Boulevard, Oakland

**Legend and Notes**

**Analysis Flag**

o

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

Lab Identification (if necessary):

Address:

City, State, Zip:

Shall Project Manager to be Invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT HOUSTON

Karen Petryna

2004.04.0956

INCIDENT NUMBER (S&E ONLY)

9 8 9 9 5 7 5 8

SAP or CRMT NUMBER (SICRMT)

DATE: 4/29/04

PAGE: 1 of 1

SAMPLING COMPANY: <b>Blaine Tech Services</b>		COX CODE: <b>BTSS</b>	SITE ADDRESS (Street and City): <b>4255 MacArthur Boulevard, Oakland</b>		GLOBAL ID NO. <b>T0600101261</b>
ADDRESS: <b>1680 Rogers Avenue, San Jose, CA 95112</b>		EDF DELIVERABLE TO (Invoiced to Party or Designer): <b>Anni Krenl</b>		PHONE NO. <b>(510)420-3335</b>	CONTRACTANT PROJECT NO.: <b>040425-DA1</b>
PROJECT CONTACT (Hardcopy or PDF Report to): <b>Leon Gearhart</b>		SAFETY NUMBER(S) (Print): <b>David Allert</b>		E-MAIL: <b>ShallOaklandEDF@cambria-env.com</b>	
TELEPHONE: <b>408-573-0355</b>	FAX: <b>408-573-7771</b>	E-MAIL: <b>lgearhart@blainetech.com</b>		LAB USE ONLY	

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

LA - RWQCB REPORT FORMAT  LIST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST per BORING \_\_\_\_\_ ALL \_\_\_\_\_

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

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	REQUESTED ANALYSIS													FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes  5.0C TEMPERATURE ON RECEIPT							
		DATE	TIME			TPH - Gas, Purgeable	BTEX	MTBE (8221B - 9ppb RL)	MtBE (8260B - 9.5ppb RL)	Oxyphenates (B) by (8260B)	Ethanol (8280B)	Methanol	1,2-DCA (8280B)	EDB (8280B)	TBA (8260)	TPH - Diesel, Extractable (8015m)	Total Alkalinity	Ferrous Iron		Nitrate as Nitrate	Sulfate	MTBE (8260B) Confirmation, See Note				
	MW-1	4/29/04	1559	W	3	X	X	X					X													
	MW-2		1540			X	X	X					X													
	MW-3		1548			X	X	X					X													
	MW-4		1425			X	X	X					X													
	MW-5		1403			X	X	X					X													

Requisitioned by (Signature): <i>David Allert</i>	Received by (Signature): <i>[Signature]</i>	Date: 4/29/04	Time: 1547
Requisitioned by (Signature): <i>[Signature]</i>	Received by (Signature): <i>[Signature]</i>	Date: 4/29/04	Time: 1724
Requisitioned by (Signature): <i>[Signature]</i>	Received by (Signature): <i>Nouzak</i>	Date: 4-29-04	Time: 1724



### WELL GAUGING DATA

Project # 040428-DA1 Date 9/28/04 Client Shell

Site 4255 MacArthur Blvd. Oakland, CA

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC
MW-1	4					8.25	23.50	TOC
+ MW-2	4	o/s				11.05	21.94	 ↓
+ MW-3	4	o/s	No SPH detected			13.66	21.94	
MW-4	2					7.55	30.73	
MW-5	2					6.84	20.02	
+ checked for SPH w/ interface probe								

## SHELL WELL MONITORING DATA SHEET

BTS #: 040428-DA1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: DA	Date: 4/28/04
Well I.D.: MW-1	Well Diameter: 2 3 ④ 6 8 "
Total Well Depth (TD): 23.50	Depth to Water (DTW): 8.25
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): <u>(YS)</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 11.30	

Purge Method: Bailer  
 Disposable Bailer  
 Positive Air Displacement  
 Electric Submersible

Waters  
 Peristaltic  
 Extraction Pump  
 Other \_\_\_\_\_

Sampling Method: Bailer  
 Disposable Bailer  
 Extraction Port  
 Dedicated Tubing  
 Other: \_\_\_\_\_

$9.9 \text{ (Gals.)} \times 3 = 29.7 \text{ Gals.}$			
I 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	$\text{radius}^2 \times 0.163$

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1449	70.2	6.9	1165	22	10	clear
1449	well dewatered @ 10g.					
1454	68.2	7.1	1136	25	-	"

Did well dewater? <u>(Yes)</u> No	Gallons actually evacuated: 10	
Sampling Date: <u>4/28/04</u> <del>MW</del>	Sampling Time: 1459	Depth to Water: 18.78 "traffic well"
Sample I.D.: <u>4/28/04 MW-1</u>	Laboratory: <u>(STI)</u> Other _____	
Analyzed for: <del>(TPH-G BTEX MTBE)</del> TPH-D	Other: TBA	
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: 0.5 <sup>mg/L</sup>	Post-purge: _____ <sup>mg/L</sup>	
O.R.P. (if req'd): Pre-purge: 64 mV	Post-purge: _____ mV	

## SHELL WELL MONITORING DATA SHEET

BTS #: 040428-DA1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: DA	Date: 4/28/04
Well I.D.: MW-2	Well Diameter: 2 3 <u>4</u> 6 8
Total Well Depth (TD): 19.71	Depth to Water (DTW): 11.05
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>XSD</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.78	

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: \_\_\_\_\_

$\frac{5.6 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{16.8}{\text{Calculated Volume}} \text{ Gals.}$	<table border="1" style="width: 100%; border-collapse: collapse; text-align: center;"> <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														

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1524	79.0	6.5	1407	7200	5.75	grey, cloudy, heavy sheen; fuel odor
1524	well dewatered @ 5.75 g.					
1538	78.7	6.5	1421	37	-	clear, sheen
			SPH on reel			

Did well dewater?  Yes  No      Gallons actually evacuated: 5.75

Sampling Date: 4/28/04      Sampling Time: 1540      Depth to Water: 12.78

Sample I.D.: MW-2      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:	0.1 <sup>mg/L</sup>	Post-purge:		
O.R.P. (if req'd):	Pre-purge:	-96 mV	Post-purge:		mV

**Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558**

## SHELL WELL MONITORING DATA SHEET

BTS #: 040428-DA1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: PA	Date: 4/28/04
Well I.D.: MW-3	Well Diameter: 2 3 <b>(4)</b> 6 8
Total Well Depth (TD): 21.94	Depth to Water (DTW): 13.66
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <b>(PVO)</b> Grade	D.O. Meter (if req'd): <b>(S)</b> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 15.32	

Purge Method: Bailer	Water: Peristaltic	Sampling Method: Bailer
Disposable Bailer	Extraction Pump	Disposable Bailer
Positive Air Displacement	Other _____	Extraction Port
<input checked="" type="checkbox"/> Electric Submersible		Dedicated Tubing
		Other: _____

$5.7 \text{ (Gals.)} \times 3 = 16.2 \text{ Gals.}$ 1 Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse; font-size: small;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <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														

Time	Temp (°F)	pH	Cond. (mS or <del>µS</del> )	Turbidity (NTUs)	Gals. Removed	Observations
1507	77.8	7.9	291	6	5.5	clear, strong fuel odor
1508	76.1	6.8	955	176	11	cloudy, shimmer
1510	75.5	6.6	1021	7200	16.25	"
			SPH on Reel			

Did well dewater? Yes  No  Gallons actually evacuated: 16.25

Sampling Date: 4/28/04    Sampling Time: 1548    Depth to Water: 13.66

Sample I.D.: MW-3    Laboratory: **(STD)** 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:	0.1 mg/L	Post-purge:	mg/L
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O.R.P. (if req'd):	Pre-purge:	-16 mV	Post-purge:	mV
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**Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558**

## SHELL WELL MONITORING DATA SHEET

BTS #: 040428-DA1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: DA	Date: 4/28/04
Well I.D.: MW-4	Well Diameter: <u>2</u> 3 4 6 8
Total Well Depth (TD): 30.73	Depth to Water (DTW): 7.55
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): <u>YSP</u> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.19	

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

Other: \_\_\_\_\_

$$\frac{3.7 \text{ (Gals.)} \times 3}{\text{Specified Volumes}} = \frac{11.1}{\text{Calculated Volume}} \text{ Gals.}$$

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
1412	70.5	6.5	1084	7200	4	grey; slight fuel odor
1413	70.2	6.7	1083	7200	8	
1423	69.5	6.8	1048	7200	11.25	

Did well dewater? Yes  No      Gallons actually evacuated: 11.25

Sampling Date: 4/28/04      Sampling Time: 1425      Depth to Water: 7.55

Sample I.D.: MW-4      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:	0.4	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	69	mV	Post-purge:	mV

## SHELL WELL MONITORING DATA SHEET

BTS#: 040428-DA1	Site: 4255 MacArthur Blvd. Oakland, CA
Sampler: OA	Date: 4/28/04
Well I.D.: MW-5	Well Diameter: <input checked="" type="radio"/> 2 3 4 6 8
Total Well Depth (TD): 20.02	Depth to Water (DTW): 6.89
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC Grade	D.O. Meter (if req'd): <input checked="" type="radio"/> ST HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.48	

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

$2.1 \text{ (Gals.)} \times 3 = 6.3 \text{ Gals.}$	<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 $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1354	68.1	6.7	699	7200	2.25	tan, turbid
1357	64.1	6.6	676	7200	4.5	"
1400	64.1	6.6	664	7200	6.5	"

Did well dewater? Yes  No      Gallons actually evacuated: 6.5

Sampling Date: 4/28/04      Sampling Time: 1403      Depth to Water: 10.18 "traffic well"

Sample I.D.: MW-5      Laboratory:  ST 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:	0.4	mg/L	Post-purge:	mg/L
O.R.P. (if req'd):	Pre-purge:	136	mV	Post-purge:	mV

**Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (800) 545-7558**

**ATTACHMENT B**

COP 76 Service Station #1156

Groundwater Monitoring Data and Analytical Results

## TABLE KEY

### ABBREVIATIONS / SYMBOLS

LPH	= liquid-phase hydrocarbons
µg/l	= micrograms per liter
mg/l	= milligrams per liter
ND	= not detected at or above laboratory detection limit
DTSC	= Department of Toxic Substances Control
N/A	= not applicable
Trace	= less than 0.01 foot of LPH in well
USTs	= underground storage tanks
-	= not analyzed, measured, or collected
TPH-G	= total petroleum hydrocarbons with gasoline distinction
BTEX	= benzene, toluene, ethylbenzene, and total xylenes
TPH-D	= total petroleum hydrocarbons with diesel distinction
TRPH	= total recoverable petroleum hydrocarbons
MTBE	= methyl tertiary butyl ether
TAME	= tertiary amyl methyl ether
ETBE	= ethyl tertiary butyl ether
DIPE	= di-isopropyl ether
TBA	= tertiary butyl alcohol
1,1-DCA	= 1,1-Dichloroethane
1,2-DCA	= 1,2-Dichloroethane
1,1-DCE	= 1,1-Dichloroethene
1,2-DCE	= cis- and trans-1,2-Dichloroethene
PCE	= tetrachloroethene
TCA	= trichloroethane
TCE	= trichloroethene
PCB	= polychlorinated biphenyls
TPPH	= total purgeable petroleum hydrocarbons

### NOTES

Elevations are in feet above mean sea level.

Groundwater elevation for wells with LPH is calculated as follows:

$$\text{Surface elevation} - \text{depth to water} + (0.75 \times \text{LPH thickness}).$$

Concentration Graphs have been modified to plot non-detect results at the reporting limit stated in the official laboratory report. All non-detect results prior to the Second Quarter 2000 were plotted at 0.1 µg/l for graphical display.

J = estimated concentration, value is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL)

### REFERENCE

TRC began groundwater monitoring and sampling activities in October 2003. Historical data 76 Station 1156 was provided by Gettler-Ryan Inc., Dublin, California, in an excel table received in September 2003.



**Table 1**  
**SUMMARY OF GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS**  
**April 28, 2004**  
**76 Station 1156**

Date Sampled	TOC Elevation (feet)	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
MW-1	(Screen Interval in feet: 5.0-25.0)													
4/28/04	177.54	6.43	0.00	171.11	0.26	93000	--	9000	20000	1300	10000	1400	560	
MW-2	(Screen Interval in feet: 5.0-25.0)													
4/28/04	173.50	5.21	0.00	168.29	0.32	22000	--	ND<3	9.2	ND<3	ND<6	35000	22000	
MW-3	(Screen Interval in feet: 5.0-25.0)													
4/28/04	178.13	6.63	0.00	171.50	0.23	7300	--	250	440	580	1300	740	240	
MW-4	(Screen Interval in feet: 5.0-25.0)													
4/28/04	178.96	5.68	0.00	173.28	0.62	1200	--	200	5.3	21	13	490	310	
MW-5	(Screen Interval in feet: DNA)													
4/28/04	169.18	2.01	0.00	167.17	-0.01	760	--	ND<0.3	1.8	ND<0.3	ND<0.6	1200	790	
MW-6	(Screen Interval in feet: DNA)													
4/28/04	169.04	2.18	0.00	166.86	-0.18	ND<50	--	0.39	0.78	ND<0.3	ND<0.6	ND<1	ND<0.5	
MW-7	(Screen Interval in feet: DNA)													
4/28/04	171.64	8.70	0.00	162.94	-1.73	19000	--	ND<3	ND<3	ND<3	ND<6	30000	21000	

**Table 2**  
**HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS**

July 1999 Through April 2004

76 Station 1156

Date Sampled	TOC Elevation (feet)	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>														
1/7/00	174.86	9.05	0.02	165.82	--	7870	--	7410	13900	2070	9620	ND	--	GWE corrected
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	Sampled for TPH-G by 8015M on 11/14/03.
1/14/04	177.54	6.69	0.00	170.85	1.16	98000	--	8000	21000	2600	15000	ND<1300	ND<800	
4/28/04	177.54	6.43	0.00	171.11	0.26	93000	--	9000	20000	1300	10000	1400	560	
<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	--	

Date Sampled	TOC Elevation (feet)	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
MW-2 continued														
7/14/00	173.01	5.52	0.00	167.49	-0.29	--	--	44.7	ND	ND	ND	66,500	--	
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	
4/28/04	173.50	5.21	0.00	168.29	0.32	22000	--	ND<3	9.2	ND<3	ND<6	35000	22000	
MW-3 (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	

Date Sampled	TOC Elevation (feet)	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
MW-3 continued														
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	
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	
4/28/04	178.13	6.63	0.00	171.50	0.23	7300	--	250	440	580	1300	740	240	
MW-4 (Screen Interval in feet: 5.0-25.0)														
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.

Date Sampled	TOC Elevation (feet)	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
MW-4 continued														
1/14/04	178.96	6.30	0.00	172.66	1.67	530	--	88	4.1	9.9	11	150	180	
4/28/04	178.96	5.68	0.00	173.28	0.62	1200	--	200	5.3	21	13	490	310	
MW-5 (Screen Interval in feet: DNA)														
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	
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	
4/28/04	169.18	2.01	0.00	167.17	-0.01	760	--	ND<0.3	1.8	ND<0.3	ND<0.6	1200	790	
MW-6 (Screen Interval in feet: DNA)														
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	
4/28/04	169.04	2.18	0.00	166.86	-0.18	ND<50	--	0.39	0.78	ND<0.3	ND<0.6	ND<1	ND<0.5	
MW-7 (Screen Interval in feet: DNA)														
10/3/01	171.64	7.62	0.00	164.02	--	--	--	210	ND<50	ND<50	800	35000	40000	

Date Sampled	TOC Elevation (feet)	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
MW-7 continued														
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	
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	
4/28/04	171.64	8.70	0.00	162.94	-1.73	19000	--	ND<3	ND<3	ND<3	ND<6	30000	21000	

**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	--	--	--
4/28/04	--	ND<50	--	--	ND<50	--	ND<1	800	ND<1	ND<1	--	ND<1000	--	--	--
<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	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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)
MW-2 continued															
4/4/01	ND	--	--	--	ND	--	ND	ND	ND	ND	ND	--	--	--	--
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	--	--	--
4/28/04	--	ND<0.5	--	--	ND<0.5	--	11	13000	ND<1	ND<1	--	ND<1000	--	--	--
MW-3															
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	--	--	--	--



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-3 continued</b>															
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	--	--	--	--
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	--	--	--
4/28/04	--	ND<3	--	--	ND<3	--	ND<1	ND<12	ND<1	ND<1	--	ND<1000	--	--	--
<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	--	--	--
4/28/04	--	ND<0.5	--	--	ND<0.5	--	ND<1	150	ND<1	ND<1	--	ND<1000	--	--	--
<b>MW-5</b>															
10/3/01	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
1/28/02	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--

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)
MW-5 continued															
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
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	--	--	--
4/28/04	--	1.8	--	--	ND<0.5	--	ND<1	ND<12	ND<1	ND<1	--	ND<1000	--	--	--
MW-6															
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	--	--	--
4/28/04	--	ND<0.5	--	--	ND<0.5	--	ND<1	ND<12	ND<1	ND<1	--	ND<1000	--	--	--
MW-7															
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	--	--	--	--

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)
MW-7 continued															
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	--	--	--
4/28/04	--	6.8	--	--	ND<0.5	--	12	9200	ND<1	ND<1	--	ND<1000	--	--	--

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

Date Sampled	1,2 DCE (µg/l)	2- Methylnap h-thalene (µg/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	--	--
4/28/04	--	--
<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	--	--

Date Sampled	1,2 DCE (µg/l)	2- Methylnap h-thalene (µg/l)
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MW-2 continued

4/4/01	ND	--
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	--	--
4/28/04	--	--

MW-3

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	--

Date Sampled	1,2 DCE (µg/l)	2- Methylnap h-thalene (µg/l)
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MW-3 continued

4/7/03	ND<80	--
7/7/03	ND<40	--
10/9/03	--	--
1/14/04	--	--
4/28/04	--	--

MW-4

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	--	--
4/28/04	--	--

MW-5

10/3/01	--	--
1/28/02	--	--

Date Sampled	1,2 DCE (µg/l)	2-Methylnaphthalene (µg/l)
<b>MW-5 continued</b>		
4/25/02	--	--
7/18/02	ND<2.0	--
10/7/02	ND<2.0	--
1/6/03	1.4	ND<5.0
4/7/03	ND<10	--
7/7/03	ND<4.0	--
10/9/03	--	--
1/14/04	--	--
4/28/04	--	--
<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	--	--
4/28/04	--	--
<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	--

Date Sampled	1,2 DCE (µg/l)	2- Methylnap h-thalene (µg/l)
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MW-7 continued

7/7/03	ND<400	--
10/9/03	--	--
1/14/04	--	--
4/28/04	--	--



# FIELD MONITORING DATA SHEET

 Technician: MPD

 Job #/Task #: 41050001/FA20

 Date: 4/28/04

 Site # 1156

 Project Manager A COLLINS

 Page 1 of 1

Well #	Grade	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-2		✓	25.38	5.21	0	0	0925	2"
MW-7		✓	25.43	8.70	0	0	0850	2"
MW-6		✓	24.87	2.18	0	0	0758	2"
MW-5		✓	25.10	2.01	0	0	0730	2"
MW-3		✓	24.97	6.83	0	0	0912	2"
MW-4		✓	25.25	5.68	0	0	0920	2"
MW-1		✓	25.65	6.43	0	0	0934	2"
FIELD DATA COMPLETE		QA/QC		COC	WELL BOX/CONDITION SHEETS			
WTT CERTIFICATE		MANIFEST		DRUM INVENTORY	TRAFFIC CONTROL			

GROUNDWATER SAMPLING FIELD NOTES

Technician: LYNELL

Site: 1156

Project No.: 41058001

Date: 4/28/04

Well No.: MW-4

Purge Method: 0

Depth to Water (feet): 5.68

Depth to Product (feet): 0

Total Depth (feet): 25.25

LPH & Water Recovered (gallons): 0

Water Column (feet): 19.57

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 9.59

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F.C)	pH	Turbidity	D.O.
0642			3	781	18.9	6.65		
			6	789	19.1	6.64		
	0647		9	792	19.5	6.63		
Static at Time Sampled		Total Gallons Purged		Time Sampled				
9:25		9		0920				
Comments: <u>DID NOT RECOVER WITHIN 2HR.</u>								

Well No.: MW-31

Purge Method: 0

Depth to Water (feet): 6.43

Depth to Product (feet): 0

Total Depth (feet): 25.05

LPH & Water Recovered (gallons): 0

Water Column (feet): 18.62

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 16.15

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F.C)	pH	Turbidity	D.O.
0701			3	860	17.9	6.96		
			6	869	18.1	7.04		
	0705		9	866	18.2	7.06		
Static at Time Sampled		Total Gallons Purged		Time Sampled				
7:50		9		0939				
Comments:								

GROUNDWATER SAMPLING FIELD NOTES

Technician: LYDIA

Site: 1156

Project No.: 41050001

Date: 4/28/04

Well No.: MW-2

Purge Method: 0

Depth to Water (feet): 5.21

Depth to Product (feet): 0

Total Depth (feet): 25.38

LPH & Water Recovered (gallons): 0

Water Column (feet): 20.17

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 9.24

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
0618			3	800	17.9	6.97		
			4	782	18.1	6.84		
	0621		9	784	18.2	6.70		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
10.73		9			0905			
Comments: <u>DID NOT RETURN WITHIN 2HR.</u>								

Well No.: MW-3

Purge Method: 0

Depth to Water (feet): 6.63

Depth to Product (feet): 0

Total Depth (feet): 24.97

LPH & Water Recovered (gallons): 0

Water Column (feet): 18.34

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 10.29

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
0630			3	750	18.5	6.72		
			6	734	19.0	6.67		
	0634		9	708	18.9	6.70		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
8.70		9			0912			
Comments:								

GROUNDWATER SAMPLING FIELD NOTES

Technician: LYDELL

Site: 1156

Project No.: 41050001

Date: 4/28/04

Well No.: MW-5

Purge Method: 0

Depth to Water (feet): 2.01

Depth to Product (feet): 0

Total Depth (feet): 25.10

LPH & Water Recovered (gallons): 0

Water Column (feet): 23.09

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 6.62

1 Well Volume (gallons): 4

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
0717			4	738	17.8	7.21		
			8	737	18.0	7.13		
	0722		12	736	18.2	7.08		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
5.87		12			0730			
Comments:								

Well No.: MW-6

Purge Method: 0

Depth to Water (feet): 2.18

Depth to Product (feet): 0

Total Depth (feet): 24.87

LPH & Water Recovered (gallons): 0

Water Column (feet): 22.69

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): ~~15.87~~ 6.71

1 Well Volume (gallons): 4

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
0744			4	630	17.3	7.26		
			8	632	17.2	7.19		
	0749		12	655	17.4	7.10		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
6.31		12			0758			
Comments:								

**GROUNDWATER SAMPLING FIELD NOTES**

Technician: W. D. ELL

Site: 1156

Project No.: 41050001

Date: 4/28/04

Well No.: MU-7

Purge Method: 0

Depth to Water (feet): 8.70

Depth to Product (feet): 0

Total Depth (feet): 25.43

LPH & Water Recovered (gallons): 0

Water Column (feet): 16.73

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 12.64

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
0813			3	887	18.3	6.38		
			6	891	17.9	6.41		
	0818		9	899	18.2	6.52		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
12.00		9			0850			
Comments: <u>WAIT FOR WELL TO RECHARGE 80% 25 MIN.</u>								

Well No.: \_\_\_\_\_

Purge Method: \_\_\_\_\_

Depth to Water (feet): \_\_\_\_\_

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet): \_\_\_\_\_

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): \_\_\_\_\_

Casing Diameter (Inches): \_\_\_\_\_

80% Recharge Depth (feet): \_\_\_\_\_

1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
Static at Time Sampled		Total Gallons Purged			Time Sampled			
Comments: _____								