Shell Oil Products US

July 9, 2003

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

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 2003 Monitoring Report* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

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

Sincerely,

Shell Oil Products US

Karen Petryna

Karen Petryna
Sr. Environmental Engineer

P.O. Box 7869 Burbank, CA 91510-7869 Phone (559) 645-9306 Facsimile (559) 645-5643

CAMBRIA

July 9, 2003

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

Re: **Second Quarter 2003 Monitoring Report**
Former Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, California
Incident #98995758
Cambria Project #245-0524-002

Dear Mr. Hwang:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, 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 14.6 pounds of liquid-phase hydrocarbons and 26.3 pounds of liquid-phase methyl tert-butyl ether (MTBE) have been removed from the site.

Dual Phase Vapor Extraction (DVE): From November 2000 to June 2001, mobile DVE augmented hydrocarbon removal efforts. 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. The system removed an estimated 1.3 pounds of vapor-phase hydrocarbons.

Cambria Environmental Technology, Inc.

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

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

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	26.3	14.6
Separate-Phase	0.0	21.8
Vapor-Phase	0.1	1.3
Total	26.4	37.7

SECOND QUARTER 2003 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 TOSCO 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 TOSCO groundwater monitoring data and analytical results table is 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 on Table 2.

GWE: During this quarter, Onyx Industrial Services of Benicia, California conducted one mobile GWE event using monitoring wells MW-2 and tank backfill well TB-2. Due to the low extraction volumes and mass removal rates from the existing wells Cambria discontinued mobile GWE events as of April 2003. Mass-removal data for the site are presented in Table 1. GWE, DVE and quarterly monitoring data for MW-2 are depicted graphically in Figure 3.

Tank Closure and Soil Excavation: All USTs, fuel dispensers, and associated product piping were removed from the site between January 27 and February 7, 2003. Cambria submitted a *Tank Closure and Soil Excavation Report* on April 28, 2003. Based on the analytical results for groundwater sampled from the tank pit during the tank removal activities, Cambria recommended installing one additional groundwater monitoring well in the southern corner of the former tank pit (Figure 2). In addition to monitoring chemical concentrations in groundwater, Cambria will also be able to include this well in periodic mobile GWE events.

ANTICIPATED THIRD QUARTER 2003 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 TOSCO site and use the coordinated sampling data to determine groundwater elevation contours.

DVE: Cambria will reinstate DVE using wells MW-2 and MW-3 in an effort to remove additional MTBE in the vicinity of those wells. Events will be conducted weekly for three events and then every two weeks until the next monitoring and sampling event.

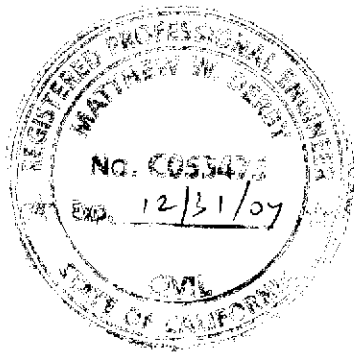
Groundwater Monitoring Well Installation Work Plan: Cambria will submit a work plan to install one monitoring well in the southern corner of the former tank pit, as recommended in the *Tank Closure and Soil Excavation Report*. Upon approval of the work plan by Alameda County Health Care Services Agency, Cambria will schedule drilling.

CLOSING

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

Sincerely,
Cambria Environmental Technology, Inc

Melody Munz
Project Engineer



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

Figures:
1 - Vicinity/Area Well Survey Map
2 - Groundwater Elevation Contour Map
3 - VacOps/DVE Effect on MTBE Concentration (MW-2)

Tables:
1 - Groundwater Extraction - Mass Removal Data
2 - Groundwater Analytical Data - Oxygenates

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

cc: Karen Petryna, Shell Oil Products US, P.O.Box 7869, Burbank, CA 91510-7869
Roland C. Malone, Jr., PO Box 2744, Castro Valley, CA 94546

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06/24/03

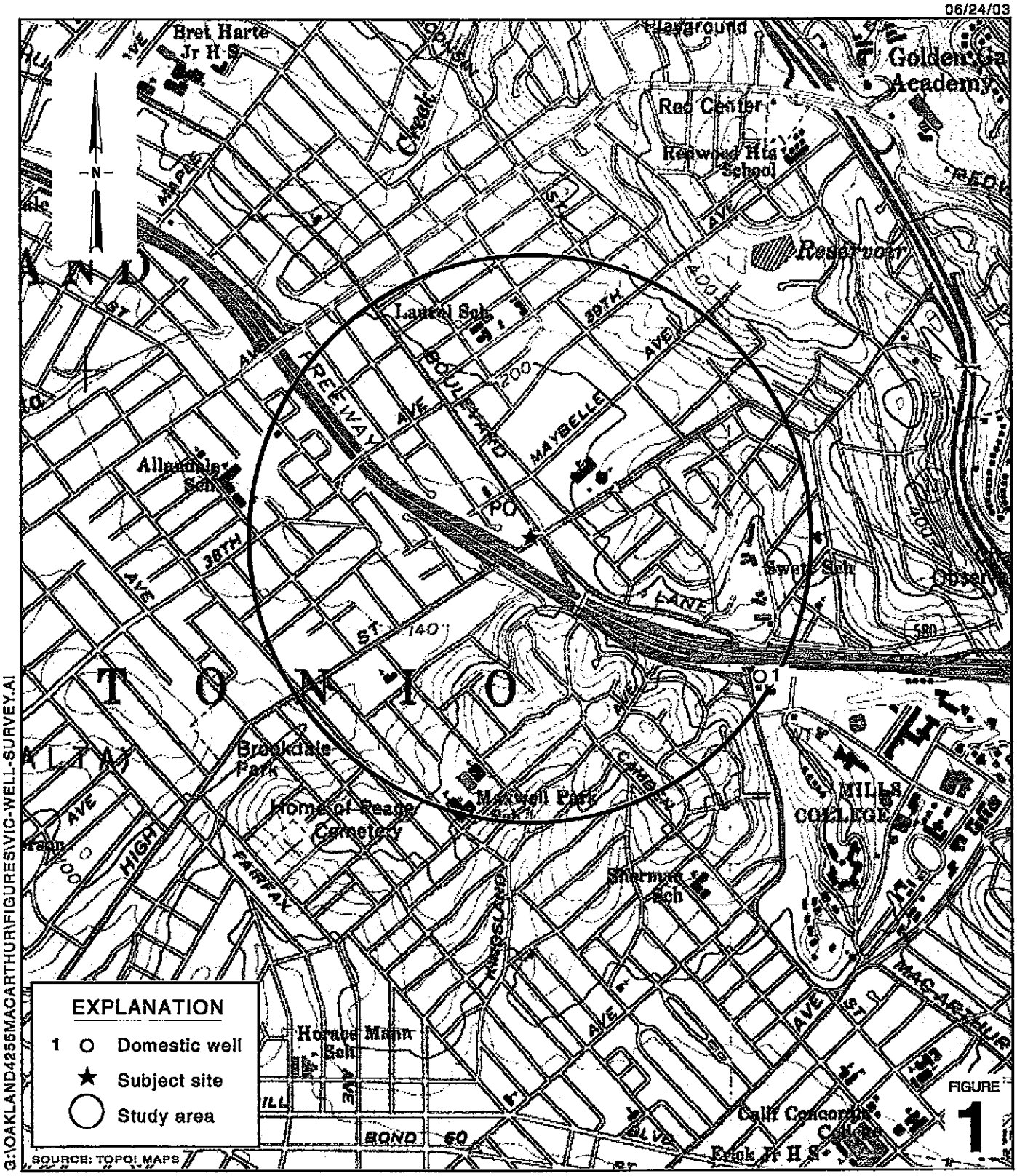

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FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

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

CAMBRIA

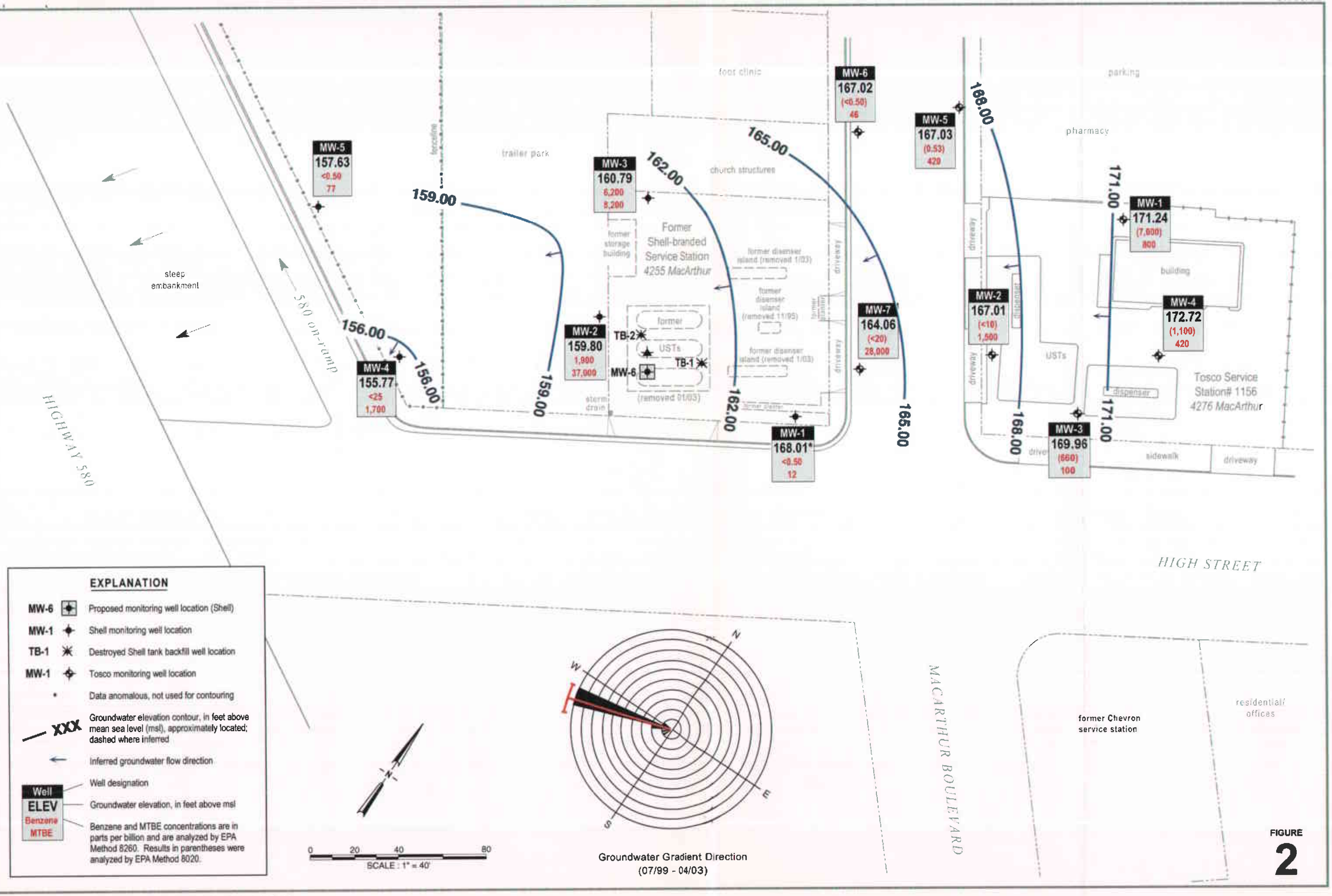
Vicinity/Area Well Survey Map
(1/2 Mile Radius)

07/09/03

Groundwater Elevation Contour Map

April 7, 2003

CAMBRIA



EXPLANATION

- MW-6 — Proposed monitoring well location (Shell)
- MW-1 — Shell monitoring well location
- TB-1 — Destroyed Shell tank backfill well location
- MW-1 — Tosco monitoring well location
- • — Data anomalous, not used for contouring
- XXX — Groundwater elevation contour, in feet above mean sea level (msl), approximately located; dashed where inferred
- ← — Inferred groundwater flow direction
- Well designation
- ELEV — Groundwater elevation, in feet above msl
- Benzene / MTBE — Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260. Results in parentheses were analyzed by EPA Method 8020.

0 20 40 80

SCALE : 1" = 40'

Groundwater Gradient Direction
(07/99 - 04/03)

FIGURE

2

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

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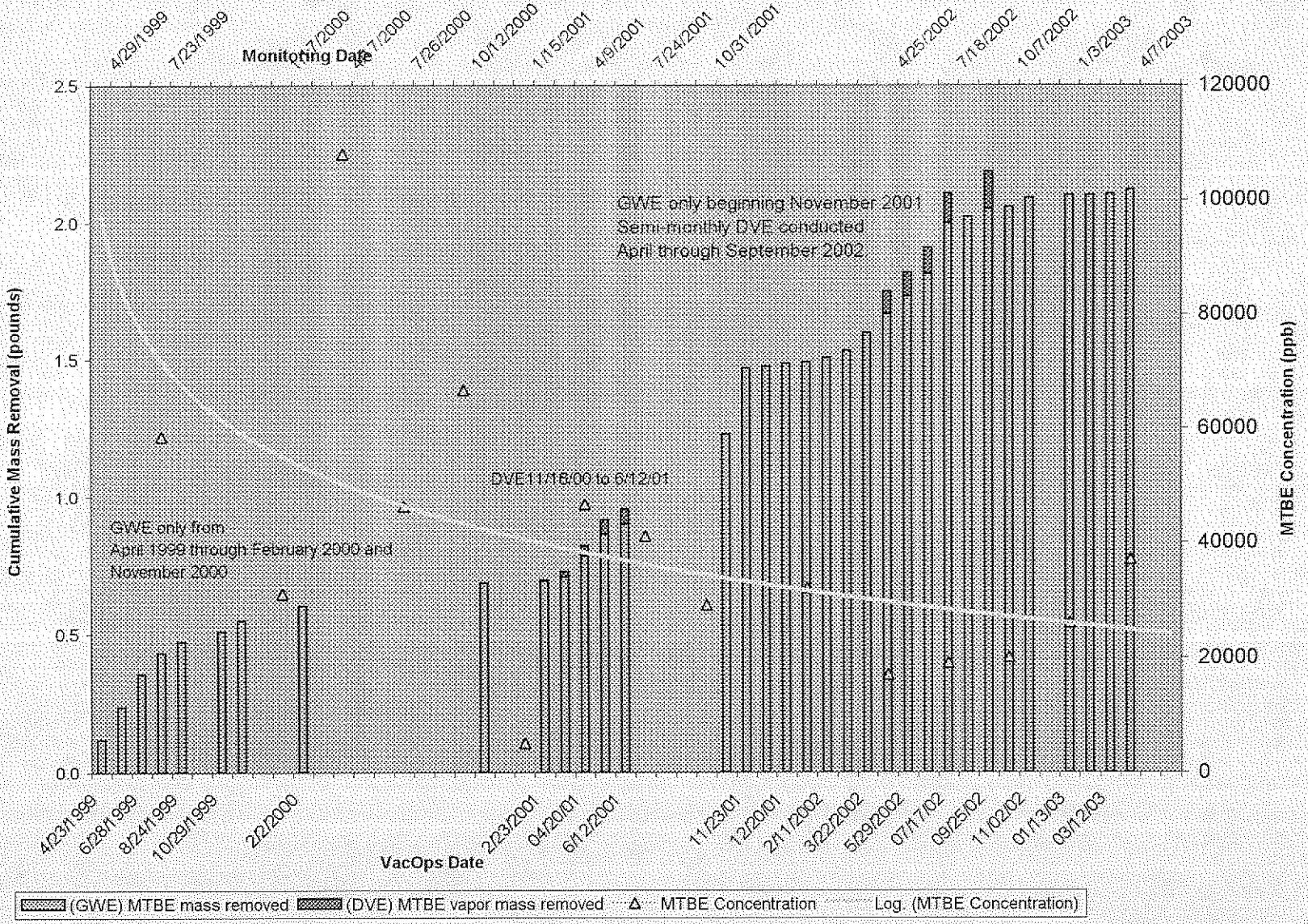
VacOps/DVE Effect on MTBE Concentration
4255 MacArthur, Oakland MW-2

Date	DTW
4/29/99	9.86
7/23/99	14.45
11/01/99	11.84
1/17/00	11.00
4/17/00	11.06
7/26/00	12.82
10/12/00	11.32
1/15/01	10.19
4/09/01	11.15
7/24/01	11.67
10/31/01	11.04
01/10/02	9.58
4/25/02	11.40
7/18/02	12.68
10/7/02	11.58
1/06/03	9.09
4/7/03	11.08



G:\Oakland 4255 MacArthur\QM\2q03\4255 MacArhtur 2q03 graph.pdf

Figure 3

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

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

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

					TPPH			Benzene			MTBE		
Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
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
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	01/06/03	65,000	0.03797	4.23282	2,400	0.00140	0.17998	26,000	0.01519	2.12255
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
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	01/06/03	57,000	0.00666	0.54373	3,200	0.00037	0.03614	5,100	0.00060	0.08455

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

					TPPH			Benzene			MTBE		
Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
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
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

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

					TPPH			Benzene			MTBE		
Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)
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
09/25/02	TB-2	1,200	62,587	07/18/02	7,500	0.07510	9.53963	630	0.00631	0.46768	44,000	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	30,000	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	30,000	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	30,000	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	220	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	220	0.00000	23.87721
Total Gallons Extracted:			**108,671**		**Total Pounds Removed:**		**14.61765**			**0.71624**			**26.26695**
					Total Gallons Removed:		**2.39634**			**0.09812**			**4.23661**

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

					TPPH			Benzene			MTBE		
Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (lb)	TPPH Removed To Date (lb)	Benzene Concentration (ppb)	Benzene Removed (lb)	Benzene Removed to Date (lb)	MTBE Concentration (ppb)	MTBE Removed (lb)	MTBE Removed To Date (lb)

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/10^6µg) x (pound/453.6g) x (3.785 L/gal)
Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxlbs/gmsxgals)
Benzene analyzed by EPA Method 8020

Table 2. **Groundwater Analytical Data - Oxygenates** - Shell-branded Service Station, Incident #98995758, 4255 MacArthur, Oakland, California

Sample ID	Date Sampled	MTBE	DIPE	ETBE	TAME	TBA	Ethanol
		← (Concentrations in ppb) →					
MW-1	**4/7/03**	**12**	**NA**	**NA**	**NA**	**<5.0**	**NA**
MW-2	10/31/01	29,000	<50	<50	<50	51,000	<500
	4/7/03	**37,000**	**NA**	**NA**	**NA**	**34,000**	**NA**
MW-3	10/31/01	9,800	<20	<20	<20	5,200	<500
	4/7/03	**8,200**	**NA**	**NA**	**NA**	**3,900**	**NA**
MW-4	**4/7/03**	**1,700**	**NA**	**NA**	**NA**	**5,900**	**NA**
MW-5	**4/7/03**	**77**	**NA**	**NA**	**NA**	**28**	**NA**

Abbreviations:

MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260
DIPE = Di-isopropyl ether, analyzed by EPA Method 8260
ETBE = Ethyl tert-butyl ether, analyzed by EPA Method 8260
TAME = Tert-amyl methyl ether, analyzed by EPA Method 8260
TBA = Tert-butyl alcohol, analyzed by EPA Method 8260
Ethanol analyzed by EPA Method 8260
ppb = Parts per billion
NA = not analyzed

ATTACHMENT A

Blaine Groundwater Monitoring Report
and Field Notes

BLAINE
TECH SERVICES INC.

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May 15, 2003

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

Second Quarter 2003 Groundwater Monitoring at
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA

Monitoring performed on April 7, 2003

Groundwater Monitoring Report **030407-AC-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/jt

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

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

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

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	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	175.79	8.59	NA	167.20	NA	NA	NA
MW-1	01/20/1994	1,200	180	19	48	47	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	175.79	7.63	NA	168.16	NA	NA	NA
MW-1	07/07/1994	2,400	1,000	10	250	20	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	175.79	8.84	NA	166.95	NA	NA	NA
MW-1	11/17/1994	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	175.79	7.56	NA	168.23	NA	NA	NA
MW-1	01/13/1995	570	75	2.5	6.7	11	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	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	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	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	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	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	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	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	175.79	7.70	NA	168.09	NA	NA	NA
MW-1	10/01/1996	1,200	500	12	57	82	1,900	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	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	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	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	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	175.79	8.10	NA	167.69	NA	NA	NA
MW-1	01/09/1998	970	390	12	48	71	1,200	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	175.79	6.78	NA	169.01	NA	NA	NA
MW-1	07/17/1998	2,500	750	11	88	67	150	NA	175.79	7.28	NA	168.51	NA	NA	NA
MW-1	10/02/1998	8,000	970	36	270	440	35	NA	175.79	7.77	NA	168.02	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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-1	02/03/1999	210	56	0.82	<0.50	3.2	220	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	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*	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	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	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	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	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	175.79	7.71	NA	168.08	NA	>20	534
MW-1	01/15/2001	<50.0	0.633	<0.500	0.505	1.74	<2.50	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	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	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	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	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	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	175.79	8.29	NA	167.50	NA	1.1	32
MW-1	10/07/2002	500	17	14	11	60	NA	9.0	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	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**	**175.76**	**7.75**	**NA**	**168.01**	**NA**	**0.7**	**-24**
MW-2	11/17/1993	31,000	9,400	4,600	1,000	3,900	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	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	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	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	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	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	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	170.91	12.89	NA	158.02	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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-2	11/17/1994	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	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	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	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	170.91	10.12	NA	160.79	NA	NA	NA
MW-2	07/25/1995	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	170.91	14.02	NA	156.99	0.13	NA	NA
MW-2	01/17/1996	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	170.91	11.68	NA	159.25	0.03	NA	NA
MW-2	07/17/1996	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	170.91	14.21	NA	156.70	0.28	NA	NA
MW-2	01/22/1997	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	170.91	14.12	NA	156.95	0.20	NA	NA
MW-2	07/08/1997	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	170.91	12.97	NA	157.98	0.05	NA	NA
MW-2	01/08/1998	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	170.91	10.05	NA	160.86	NA	NA	NA
MW-2	07/17/1998	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	170.91	16.78	NA	154.22	0.11	NA	NA
MW-2	02/03/1999	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	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*	170.91	14.45	NA	156.46	NA	1.4	NA
MW-2	11/01/1999	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	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	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	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	170.91	11.32	NA	159.59	NA	0.4	55

WELL CONCENTRATIONS
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4255 MacArthur Boulevard
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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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-2	01/15/2001	59,700	2,630	4,800	2,050	11,500	44,400	5,080	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	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	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	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	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	170.91	11.40	NA	159.51	NA	0.8	-95
MW-2	07/18/2002	87,000	2,000	2,200	1,400	10,000	NA	19,000	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	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	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**	**170.88**	**11.08**	**NA**	**159.80**	**NA**	**1.0**	**60**
MW-3	11/17/1993	18,000	5,400	660	720	2,200	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	174.61	14.61	NA	160.00	NA	NA	NA
MW-3	04/25/1994	96,000	11,000	1,600	3,100	9,900	NA	NA	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	174.61	13.12	NA	161.49	NA	NA	NA
MW-3	07/07/1994	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	174.61	15.62	NA	159.03	0.05	NA	NA
MW-3	11/17/1994	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	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	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	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	174.61	12.96	NA	161.65	NA	NA	NA
MW-3	07/25/1995	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	174.61	15.88	NA	158.77	0.05	NA	NA
MW-3	01/17/1996	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	174.61	13.82	NA	160.81	0.02	NA	NA
MW-3	07/17/1996	NA	NA	NA	NA	NA	NA	NA	174.61	16.11	NA	158.52	0.03	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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-3	10/01/1996	46,000	7,300	530	1,700	3,900	3,200	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	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	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	174.61	13.07	NA	161.54	NA	NA	NA
MW-3	04/08/1997	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	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	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	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	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	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	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	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	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	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	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	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	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*	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	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	174.61	13.94	NA	160.67	NA	1.3	-40
MW-3	04/17/2000	28,100	5,240	247	1,540	2,750	16,600	NA	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	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	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	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	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	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	174.61	14.59	NA	160.02	NA	0.9	-27

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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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-3	01/10/2002	66,000	2,400	490	1,700	6,600	NA	5,500	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	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	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	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	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**	**174.59**	**13.80**	**NA**	**160.79**	**NA**	**0.5**	**61**
MW-4	11/17/1994	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	164.06	6.11	NA	157.95	NA	NA	NA
MW-4	01/13/1995	1,900	130	5.6	13	40	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	164.06	6.31	NA	157.75	NA	NA	NA
MW-4	07/25/1995	340	100	0.8	8.8	3	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	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	164.06	8.48	NA	155.58	NA	NA	NA
MW-4	04/25/1996	<500	65	<5	<5	<5	1,700	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	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	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	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	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	164.06	7.51	NA	156.55	NA	NA	NA
MW-4	04/08/1997	770	200	7	26	55	1,500	8	164.06	7.18	NA	156.88	NA	NA	NA
MW-4	07/08/1997	570	78	<5.0	14	11	1,200	NA	164.06	9.00	NA	155.06	NA	NA	NA
MW-4 (D)	07/08/1997	640	81	<5.0	16	19	1,600	NA	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	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	164.06	8.97	NA	155.09	NA	NA	NA
MW-4	01/08/1998	<1,000	55	<10	13	<10	2,000	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	164.06	7.35	NA	156.71	NA	NA	NA

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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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-4	07/17/1998	210	66	0.78	5.4	9.8	1,700	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	164.06	7.35	NA	156.71	NA	NA	NA
MW-4	02/03/1999	560	120	2.5	29	34	6,800	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	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*	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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**	**164.03**	**8.26**	**NA**	**155.77**	**NA**	**1.2**	**69**
MW-5	01/04/2002	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	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	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	164.06	7.38	NA	156.68	NA	0.4	170
MW-5	10/07/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	41	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	164.14	5.96	NA	158.18	NA	0.6	166

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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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-5	**04/07/2003**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**77**	**164.14**	**6.51**	**NA**	**157.63**	**NA**	**0.8**	**174**
TB-1	04/29/1999	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	12.65	NA	NA	NA	0.2	-165
TB-1	01/17/2000	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	7.65	NA	NA	NA	0.5	-152
TB-1	07/26/2000	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	5.20	NA	NA	NA	0.7	-73
TB-1	01/15/2001	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	4.96	NA	NA	NA	1.0	-72
TB-1	07/24/2001	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	5.89	NA	NA	NA	1.8	88
TB-1	01/10/2002	5,000	410	390	65	620	NA	9,000	NA	7.47	NA	NA	NA	2.0	95
TB-1	04/25/2002	5,000	780	60	49	91	NA	6,000	NA	11.71	NA	NA	NA	1.7	-136
TB-1	07/18/2002	Insufficient water		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	12.95	NA	NA	NA	1.6	-48
TB-1	01/06/2003	130	30	<0.50	<0.50	0.78	NA	330	NA	5.56	NA	NA	NA	0.4	-20
TB-2	04/29/1999	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	11.33	NA	NA	NA	0.5	-148
TB-2	01/17/2000	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	9.75	NA	NA	NA	0.9	-121
TB-2	07/26/2000	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	4.05	NA	NA	NA	0.6	-47
TB-2	01/15/2001	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	3.76	NA	NA	NA	0.8	-24
TB-2	07/24/2001	11,000	630	<25	310	200	NA	11,000	NA	4.75	NA	NA	NA	0.4	-51

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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
TB-2	10/31/2001	7,500	530	1,500	100	500	NA	2,500	NA	4.24	NA	NA	NA	0.6	-7
TB-2	01/10/2002	<5,000	480	47	34	110	NA	12,000	NA	6.26	NA	NA	NA	1.3	-81
TB-2	04/25/2002	4,700	470	140	<20	80	NA	7,400	NA	11.78	NA	NA	NA	0.9	-107
TB-2	07/18/2002	7,500	630	650	<25	390	NA	44,000	NA	12.34	NA	NA	NA	0.9	-67
TB-2	10/07/2002	<10,000	580	<100	<100	180	NA	30,000	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	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
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)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)

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).

SEVERN TRENT STL

Submission#: 2003-04-0212

Blaine Tech Services, Inc.

April 21, 2003

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

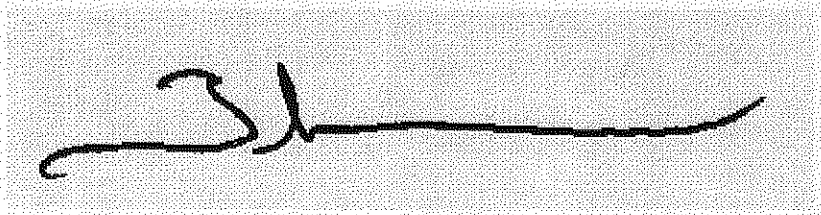
Project#: 030407-AC1
Project: 98995758
Site: 4255 MacArthur Blvd.
Oakland, CA

Dear Mr.Gearhart,

Attached is our report for your samples received on 04/08/2003 13:58
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 05/23/2003 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: tgranicher@stl-inc.com

Sincerely,



Tod Granicher
Project Manager

SEVERN TRENT STL

Submission #: 2003-04-0212

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	04/07/2003 11:10	Water	1
MW-2	04/07/2003 12:20	Water	2
MW-3	04/07/2003 11:40	Water	3
MW-4	04/07/2003 10:30	Water	4
MW-5	04/07/2003 09:30	Water	5

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**MW-1**	Lab ID:	2003-04-0212 - 1
Sampled:	04/07/2003 11:10	Extracted:	4/19/2003 03:39
Matrix:	Water	QC Batch#:	2003/04/18-V3.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	04/19/2003 03:39	
Benzene	ND	0.50	ug/L	1.00	04/19/2003 03:39	
Toluene	ND	0.50	ug/L	1.00	04/19/2003 03:39	
Ethylbenzene	ND	0.50	ug/L	1.00	04/19/2003 03:39	
Total xylenes	ND	1.0	ug/L	1.00	04/19/2003 03:39	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	04/19/2003 03:39	
Methyl tert-butyl ether (MTBE)	12	5.0	ug/L	1.00	04/19/2003 03:39	
Surrogates(s)						
1,2-Dichloroethane-d4	104.5	76-114	%	1.00	04/19/2003 03:39	
Toluene-d8	91.9	88-110	%	1.00	04/19/2003 03:39	

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**MW-2**	Lab ID:	2003-04-0212 - 2
Sampled:	04/07/2003 12:20	Extracted:	4/20/2003 14:59
Matrix:	Water	QC Batch#:	2003/04/20-01.64

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	57000	25000	ug/L	500.00	04/20/2003 14:59	
Benzene	1900	250	ug/L	500.00	04/20/2003 14:59	
Toluene	2500	250	ug/L	500.00	04/20/2003 14:59	
Ethylbenzene	1700	250	ug/L	500.00	04/20/2003 14:59	
Total xylenes	8600	500	ug/L	500.00	04/20/2003 14:59	
tert-Butyl alcohol (TBA)	34000	2500	ug/L	500.00	04/20/2003 14:59	
Methyl tert-butyl ether (MTBE)	37000	2500	ug/L	500.00	04/20/2003 14:59	
Surrogates(s)						
1,2-Dichloroethane-d4	107.0	76-114	%	500.00	04/20/2003 14:59	
Toluene-d8	100.9	88-110	%	500.00	04/20/2003 14:59	

Gas/BTEX Fuel Oxygenates by 8260B

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: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**MW-3**	Lab ID:	2003-04-0212 - 3
Sampled:	04/07/2003 11:40	Extracted:	4/20/2003 15:21
Matrix:	Water	QC Batch#:	2003/04/20-01.64

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	57000	25000	ug/L	500.00	04/20/2003 15:21	
Benzene	6200	250	ug/L	500.00	04/20/2003 15:21	
Toluene	500	250	ug/L	500.00	04/20/2003 15:21	
Ethylbenzene	2400	250	ug/L	500.00	04/20/2003 15:21	
Total xylenes	6700	500	ug/L	500.00	04/20/2003 15:21	
tert-Butyl alcohol (TBA)	3900	2500	ug/L	500.00	04/20/2003 15:21	
Methyl tert-butyl ether (MTBE)	8200	2500	ug/L	500.00	04/20/2003 15:21	
Surrogates(s)						
1,2-Dichloroethane-d4	105.4	76-114	%	500.00	04/20/2003 15:21	
Toluene-d8	99.1	88-110	%	500.00	04/20/2003 15:21	

Gas/BTEX Fuel Oxygenates by 8260B

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: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**MW-4**	Lab ID:	2003-04-0212 - 4
Sampled:	04/07/2003 10:30	Extracted:	4/20/2003 15:42
Matrix:	Water	QC Batch#:	2003/04/20-01.64

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	2500	ug/L	50.00	04/20/2003 15:42	
Benzene	ND	25	ug/L	50.00	04/20/2003 15:42	
Toluene	ND	25	ug/L	50.00	04/20/2003 15:42	
Ethylbenzene	ND	25	ug/L	50.00	04/20/2003 15:42	
Total xylenes	ND	50	ug/L	50.00	04/20/2003 15:42	
tert-Butyl alcohol (TBA)	5900	250	ug/L	50.00	04/20/2003 15:42	
Methyl tert-butyl ether (MTBE)	1700	250	ug/L	50.00	04/20/2003 15:42	
Surrogates(s)						
1,2-Dichloroethane-d4	105.4	76-114	%	50.00	04/20/2003 15:42	
Toluene-d8	100.2	88-110	%	50.00	04/20/2003 15:42	

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**MW-5**	Lab ID:	2003-04-0212 - 5
Sampled:	04/07/2003 09:30	Extracted:	4/20/2003 16:04
Matrix:	Water	QC Batch#:	2003/04/20-01.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	04/20/2003 16:04	
Benzene	ND	0.50	ug/L	1.00	04/20/2003 16:04	
Toluene	ND	0.50	ug/L	1.00	04/20/2003 16:04	
Ethylbenzene	ND	0.50	ug/L	1.00	04/20/2003 16:04	
Total xylenes	ND	1.0	ug/L	1.00	04/20/2003 16:04	
tert-Butyl alcohol (TBA)	28	5.0	ug/L	1.00	04/20/2003 16:04	
Methyl tert-butyl ether (MTBE)	77	5.0	ug/L	1.00	04/20/2003 16:04	
Surrogates(s)						
1,2-Dichloroethane-d4	105.8	76-114	%	1.00	04/20/2003 16:04	
Toluene-d8	99.7	88-110	%	1.00	04/20/2003 16:04	

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260FAB

Method Blank — **Water** — **QC Batch # 2003/04/18-V3.64**

MB: 2003/04/18-V3.64-058 — Date Extracted: 04/18/2003 23:59

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/18/2003 23:59	
Benzene	ND	0.5	ug/L	04/18/2003 23:59	
Toluene	ND	0.5	ug/L	04/18/2003 23:59	
Ethylbenzene	ND	0.5	ug/L	04/18/2003 23:59	
Total xylenes	ND	1.0	ug/L	04/18/2003 23:59	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	04/18/2003 23:59	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/18/2003 23:59	
Surrogates(s)					
1,2-Dichloroethane-d4	99.0	76-114	%	04/18/2003 23:59	
Toluene-d8	92.0	88-110	%	04/18/2003 23:59	

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Water** — **QC Batch # 2003/04/20-01.64**

MB: 2003/04/20-01.64-048 — Date Extracted: 04/20/2003 12:25

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/20/2003 12:25	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	04/20/2003 12:25	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/20/2003 12:25	
Benzene	ND	0.5	ug/L	04/20/2003 12:25	
Toluene	ND	0.5	ug/L	04/20/2003 12:25	
Ethylbenzene	ND	0.5	ug/L	04/20/2003 12:25	
Total xylenes	ND	1.0	ug/L	04/20/2003 12:25	
Surrogates(s)					
1,2-Dichloroethane-d4	106.6	76-114	%	04/20/2003 12:25	
Toluene-d8	101.4	88-110	%	04/20/2003 12:25	

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2003/04/18-V3.64**

LCS 2003/04/18-V3.64-059 Extracted: 04/18/2003 Analyzed: 04/18/2003 23:15

LCSD 2003/04/18-V3.64-003 Extracted: 04/18/2003 Analyzed: 04/18/2003 23:37

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	22.2	22.3	25	88.8	89.2	0.4	69-129	20		
Toluene	22.7	22.7	25	90.8	90.8	0.0	70-130	20		
Methyl tert-butyl ether (MTBE)	28.4	29.7	25	113.6	118.8	4.5	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	520	517	500	104.0	103.4		76-114			
Toluene-d8	465	456	500	93.0	91.2		88-110			

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2003/04/20-01.64**

LCS 2003/04/20-01.64-049 Extracted: 04/20/2003 Analyzed: 04/20/2003 11:41

LCSD 2003/04/20-01.64-001 Extracted: 04/20/2003 Analyzed: 04/20/2003 12:03

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	26.5	26.3	25.0	106.0	105.2	0.8	65-165	20		
Benzene	22.0	21.7	25.0	88.0	86.8	1.4	69-129	20		
Toluene	22.7	23.0	25.0	90.8	92.0	1.3	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	541	536	500	108.2	107.2		76-114	0		
Toluene-d8	499	507	500	99.8	101.4		88-110	0		

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Matrix Spike (MS / MSD) **Water** **QC Batch # 2003/04/20-01.64**

MW-5 >> MS

Lab ID: 2003-04-0212 - 005

MS: 2003/04/20-01.64-046 Extracted: 04/20/2003

Analyzed: 04/20/2003 16:26

Dilution: 1.00

MSD: 2003/04/20-01.64-047 Extracted: 04/20/2003

Analyzed: 04/20/2003 16:48

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	22.2	21.1	ND	25.0	88.8	84.4	5.1	69-129	20		
Toluene	22.3	22.0	ND	25.0	89.2	88.0	1.4	70-130	20		
Methyl tert-butyl ether	101	103	77.2	25.0	95.2	103.2	8.1	65-165	20		
Surrogate(s)											
1,2-Dichloroethane-d4	514	543		500	102.8	108.6		76-114			
Toluene-d8	507	502		500	101.4	100.4		88-110			

Gas/BTEX Fuel Oxygenates by 8260B

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 030407-AC1
98995758

Received: 04/08/2003 13:58

Site: 4255 MacArthur Blvd.
Oakland, CA

Legend and Notes

Analysis Flag

o

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

SHELL Chain Of Custody Record 75265

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

Shell Project Manager to be invoiced:
☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON

Karen Petryna

2003-04-0212

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 5 8
SAP or CRMT NUMBER (TS/CRMT): [redacted]

DATE: 4-7-03
PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services	LOG CODE: BTSS	SITE ADDRESS (Street and City): 4255 MacArthur Boulevard, Oakland	GLOBAL ID NO.: T0600101261
ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112		EDF DELIVERABLE TO (Responsible Party or Designee): Anni Kreml	PHONE NO.: (510)420-3335
PROJECT CONTACT (Hardcopy or PDF Report to): Leon Gearhart		E-MAIL: ShellOaklandEDF@cambria-env.com	CONSULTANT PROJECT NO.: BTS # 030407-AC1
TELEPHONE: 408-573-0555	FAX: 408-573-7771	E-MAIL: lgearhart@blainetech.com	SAMPLER NAME(S) (Print): Aaron Costa

LAB USE ONLY

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: ______

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

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

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TBA by 8260	TPH - Diesel, Extractable (8015m)		Total Alkalinity	Ferrous Iron	Nitrate as Nitrate	Sulfate		MTBE (8260B) Confirmation, See Note			FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	MW-1	4/7	1110	W	3	x	x	x							x											
	MW-2	4/7	1220	↓	3	x	x	x							x											
	MW-3	4/7	1140	↓	3	x	x	x							x											
	MW-4	4/7	1030	↓	3	x	x	x							x											
	MW-5	4/7	0930	↓	3	x	x	x							x											

TEMPERATURE ON RECEIPT C°: 2.6 °C

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Aaron Costa	[signature]	4/8/03	1358
[signature] 1518 4/8/03			
	[signature]	4/8/03	1514

DISTRIBUTION: White with final report, Green to File, Yellow and Pink to Client.

10/16/00 Revision

GMO Graphic (714) 986-9702

WELL GAUGING DATA

Project # 030407-AC1 Date 4-7-03 Client Shell

Site 4255 MacArthur Blvd. Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	✓ SPH	CTD
MW-1	4					7.75	23.32	TOC		1
MW-2	4	odor	NO SPH Detected			11.08	19.71		✓	5
MW-3	4	odor	NO SPH Detected			13.80	21.94		✓	4
MW-4	2					8.26	30.50			3
MW-5	2					6.51	19.96			2
*gauged w/ stinger in well										

SHELL WELL MONITORING DATA SHEET

BTS #: 030407-AC1	Site: 4255 MacArthur Blvd. Oakland
Sampler: AC	Date: 4-7-03
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 23.32	Depth to Water (DTW): 7.75
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 10.86	

Purge Method: Bailer; Disposable Bailer; Middleburg; *Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

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

10.1 (Gals.) X 3 = 30.3 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1059	68.9	7.5	1156	17	10.5	clear
1102	69.1	7.4	1128	19	21	"
1102	69.3	7.4	1164	29	31.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 31.5

Sampling Date: 4-7-03 Sampling Time: 1110 Depth to Water: 9.44

Sample I.D.: MW-1 Laboratory: Kiff SPL *Other STL

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other: TBA by 8260

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)	0.7 mg/L	Post-purge:		mg/L
O.R.P. (if req'd): (Pre-purge)	-24 mV	Post-purge:		mV

SHELL WELL MONITORING DATA SHEET

BTS #: 030407-AC1	Site: 4255 MacArthur Blvd. Oakland
Sampler: AC	Date: 4-7-03
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 19.71	Depth to Water (DTW): 11.08
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.80	

Purge Method: Bailer, Disposable Bailer, Middleburg, X Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other_____

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

5.6 (Gals.) X 3 = 16.8 Gals.
Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
NO SPH Detected						
1201	67.3	6.9	981	34	6	clear, strong odor
1202	67.4	6.8	952	22	12	" "
well dewatered @ 13 gal						DTW = 16.04
1220	67.4	6.8	989	19	—	clear, strong odor

Did well dewater? (Yes) No Gallons actually evacuated: 13

Sampling Date: 4-7-03 Sampling Time: 1220 Depth to Water: 12.80

Sample I.D.: MW-2 Laboratory: Kiff SPL X Other STL

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other: TBA by 8260

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

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

D.O. (if req'd): (Pre-purge)	1.0	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): (Pre-purge)	60	mV	Post-purge:	mV

SHELL WELL MONITORING DATA SHEET

BTS #: 030407-AC1	Site: 4255 MacArthur Blvd. Oakland
Sampler: AC	Date: 4-7-03
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 21.94	Depth to Water (DTW): 13.90
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 15.42	

Purge Method: Bailer; Disposable Bailer; Middleburg; X Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other ____

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

5.2 (Gals.) X 3 = 15.6 Gals.
Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
NO SPH Detected						
1125	68.2	6.8	1439	48	5.5	clear, odor
	well dewatered @ 6 gal					DTW = 19.35
1140	68.7	6.9	1404	22	—	clear, odor

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

Sampling Date: 4-7-03 Sampling Time: 1140 Depth to Water: 15.42

Sample I.D.: MW-3 Laboratory: Kiff SPL X Other STL

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other: TBA by 8260

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)	0.5 mg/L	Post-purge:		mg/L
O.R.P. (if req'd): (Pre-purge)	61 mV	Post-purge:		mV

SHELL WELL MONITORING DATA SHEET

BTS #: 030407-AC1	Site: 4255 MacArthur Blvd. Oakland
Sampler: AC	Date: 4-7-03
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 30.50	Depth to Water (DTW): 8.26
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 12.70	

Purge Method: Bailer; Disposable Bailer; X Middleburg; Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

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

3.5 (Gals.) X 3 = 10.5 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1013	69.8	6.7	1079	327	3.5	cloudy
1017	68.3	6.8	1120	117	7	clear
1021	67.5	6.9	1125	81	10.5	"

Did well dewater? Yes (No) Gallons actually evacuated: 10.5

Sampling Date: 4-7-03 Sampling Time: 1030 Depth to Water: 10.82

Sample I.D.: MW-4 Laboratory: Kiff SPL X Other STL

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other: TBA by 8260

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

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

D.O. (if req'd): (Pre-purge)	1.2	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 #: 030407-AC1	Site: 4255 MacArthur Blvd. Oakland
Sampler: AC	Date: 4-7-03
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 19.86	Depth to Water (DTW): 6.51
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): (YSI) HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.20	

Purge Method: Bailer / Disposable Bailer / X Middleburg / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other____

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

2.1 (Gals.) X	3	=	6.3 Gals.
Case Volume	Specified Volumes		Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
0917	62.3	7.0	733	542	2.5	cloudy
0919	61.4	6.7	728	665	5	cloudy
0922	61.4	6.7	715	608	7.5	"

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

Sampling Date: 4-7-03 Sampling Time: 0930 Depth to Water: 7.23

Sample I.D.: MW-5 Laboratory: Kiff SPL X Other STL

Analyzed for: (TPH-G) (BTEX) (MTBE) TPH-D Other: TBA by 8260

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

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

D.O. (if req'd): (Pre-purge)	0.8	mg/L	Post-purge:	mg/L
O.R.P. (if req'd): (Pre-purge)	174	mV	Post-purge:	mV

ATTACHMENT B

TOSCO 76 Service Station #1156

Groundwater Monitoring Data and Analytical Results

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1												
174.86	07/20/99[5]	7.50	5.0-25.0	167.36	--	16,000[2]	120,000	11,000	27,000	3,300	18,000	ND[1]
	09/28/99	8.75		166.11	<0.01	2,410[2]	6,020[6]	1,030	1,040	68.5	412	321/333[3]
	01/07/00	9.05		165.83**	0.02	7,870[2,4]	72,700[6]	7,410	13,900	2,070	9,620	ND[1]
	03/31/00	7.18		167.68	0.00	3,600[2]	92,000[6]	10,000	23,000	3,200	14,000	ND[1]
	07/14/00	7.68		167.18	0.00	8,580[2]	108,000[6]	8,250	18,700	3,750	17,800	ND[1]
	10/03/00	7.99		166.87	0.00	9,260[2]	96,000[6]	8,760	20,000	3,350	15,600	ND[1]
	01/03/01	9.18		165.68	0.00	11,000[8]	37,000[6]	5,800	13,000	1,700	8,100	2,200
	04/04/01	8.05		166.81	0.00	14,000[8]	86,900[6]	7,780	18,500	2,470	11,800	[1]ND/481[3]
	07/17/01	7.01		167.85	0.00	2,200[8]	79,000[6]	5,600	11,000	2,800	12,000	[1]ND/230[3]
177.54	10/03/01	7.89		169.65	0.00	--	99,000[6]	8,200	18,000	3,000	16,000	<2,500
	10/05/01	7.91		169.63	0.00	13,000[2]	--	--	--	--	--	--
	01/28/02	5.98		171.56	0.00	4,400[11]	110,000[12]	8,900	19,000	2,600	12,000	3,000/440[3]
	04/25/02	6.19		171.35	0.00	9,000[13]	93,000	8,100	18,000	3,000	15,000	810/670[3]
	07/18/02	6.99		170.55	0.00	9,200[13]	69,000	5,400	10,000	2,100	10,000	<500/620[3]
	10/07/02	7.73		169.81	0.00	3,400	82,000	9,200	20,000	2,600	13,000	1,300/760[3]
	01/06/03	5.48		172.06	0.00	5,100[13]	82,000	6,500	18,000	2,700	11,000	<1,000/790[3,4]
	04/07/03	**6.30**		**171.24**	**0.00**	**2,800[13]**	**74,000**	**7,000**	**15,000**	**2,400**	**11,000**	**1,000/800[3]**
MW-2												
173.01	07/20/99	5.40	5.0-25.0	167.61	--	--	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]	4,500/11,000[3,4]
	09/28/99	5.60		167.41	0.00	--	1,390[6]	124	ND[1]	62.9	43.1	5,280/6,150[3]
	01/07/00	5.92		167.09	0.00	--	1,450[6]	99.0	ND[1]	23.8	16.0	33,100
	03/31/00	5.23		167.78	0.00	--	ND[1]	42	ND[1]	ND[1]	ND[1]	17,000
	07/14/00	5.52		167.49	0.00	--	ND[1]	44.7	ND[1]	ND[1]	ND[1]	66,500
	10/03/00	6.04		166.97	0.00	--	ND[1]	56.7	ND[1]	ND[1]	ND[1]	57,500
	01/03/01	6.42		166.59	0.00	--	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]	49,000

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156

4276 MacArthur Boulevard

Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-2	04/04/01	6.14	5.0-25.0	166.87	0.00	--	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]	38,700/37,800[3]
(cont)	07/17/01	5.30		167.71	0.00	--	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]	65,000/56,000[3]
173.50	10/03/01	7.38		166.12	0.00	--	<250	2.7	<2.5	<2.5	<2.5	14,000/18,000[3]
	01/28/02	5.68		167.82	0.00	--	<250	2.5	4.4	2.8	7.4	11,000/10,000[3]
	04/25/02	5.82		167.68	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	8,400/8,100[3]
	07/18/02	6.90		166.60	0.00	--	<500	<5.0	<5.0	<5.0	<5.0	4,300/8,800[3]
	10/07/02	7.54		165.96	0.00	--	4,300	<10	27	21	75	7,100/5,900[3]
	01/06/03	6.79		166.71	0.00	--	5,900	<5.0	<5.0	<5.0	<5.0	31,000/35,000[3]
	04/07/03	**6.49**		**167.01**	**0.00**	--	**1,500**	**<10**	**14**	**11**	**38**	**2,000/1,500[3]**
MW-3												
178.44	07/20/99	8.50	5.0-25.0	169.94	--	--	1,000	76	52	79	76	330
	09/28/99	8.31		170.13	0.00	--	1,860[6]	174	95.4	71.8	135	443/288[3]
	01/07/00	8.56		169.88	0.00	--	28,400[6]	2,450	3,090	1,560	3,910	1,940
	03/31/00	8.42		170.02	0.00	--	26,000[6]	1,300	2,900	2,600	3,500	2,800
	07/14/00	8.61		169.83	0.00	--	24,500[6]	1,850	2,630	2,750	3,900	548
	10/03/00	9.14		169.30	0.00	--	22,000[6]	1,910	2,020	2,400	2,680	965
	01/03/01	9.06		169.38	0.00	--	14,000[6]	1,600	1,100	2,300	1,400	3,300
	04/04/01	8.98		169.46	0.00	--	19,600[6]	1,150	1,470	2,100	1,820	1,050/450[3]
	07/17/01	7.46		170.98	0.00	--	26,000[6]	1,500	2,100	2,100	3,400	[1]ND/350[3]
178.13	10/03/01	9.81		168.32	0.00	--	22,000[6]	830	1,900	1,700	3,000	<1,000
	01/28/02	7.39		170.74	0.00	--	30,000[12]	880	2,600	1,800	4,300	3,200/210[3]
	04/25/02	7.86		170.27	0.00	--	18,000	500	2,000	1,300	3,800	500/260[3]
	07/18/02	8.83		169.30	0.00	--	37,000	1,800	3,800	2,200	8,000	<250/270[3]
	10/07/02	9.71		168.42	0.00	--	26,000	600	2,000	1,800	6,400	<120/<200[3]
	01/06/03	7.40		170.73	0.00	--	27,000	800	2,100	2,000	6,400	440/110[3]
	04/07/03	**8.17**		**169.96**	**0.00**	--	**28,000**	**660**	**2,200**	**1,900**	**6,300**	**440/100[3]**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-4												
179.10	07/20/99	7.40	5.0-25.0	171.70	--	--	69	2.7	0.77	ND	7.1	100
	09/28/99	7.19		171.91	0.00	--	4,050[6]	1,250	72.0	51.3	133	416/459[3]
	01/07/00	8.98		170.12	0.00	--	7,010[6]	2,260	167	271	276	764
	03/31/00	7.26		171.84	0.00	--	5,500[6]	1,800	230	330	400	1,000
	07/14/00	7.67		171.43	0.00	--	7,940[6]	2,810	332	450	247	1,530
	10/03/00	8.12		170.98	0.00	--	11,400[6]	3,110	437	519	816	1,040
	01/03/01[7]	9.10		170.00	0.00	--	8,600[6]	2,500	340	480	960	850
	04/04/01	8.63		170.47	0.00	--	9,950[6]	2,380	126	416	725	1,140/819[3]
	07/17/01	6.49		172.61	0.00	--	10,000[6]	2,300	110	410	800	1,200/900[3]
178.96	10/03/01	7.01		171.95	0.00	--	7,800[6]	2,100	85	380	390	580/820[3]
	01/28/02	6.21		172.75	0.00	--	12,000[12]	2,100	130	350	670	1,100/500[3]
	04/25/02	5.49		173.47	0.00	--	3,300	1,300	42	270	250	680/600[3]
	07/18/02	8.28		170.68	0.00	--	4,800	1,300	71	290	220	530/760[3]
	10/07/02	7.49		171.47	0.00	--	5,100	1,400	110	330	380	650/540[3]
	01/06/03	6.36		172.60	0.00	--	5,600	1,100	57	260	320	370/520[3]
	04/07/03	**6.24**		**172.72**	**0.00**	--	**5,100**	**1,100**	**55**	**190**	**370**	**550/420[3]**
MW-5												
169.18	10/03/01[10]	2.81	--	166.37	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	1,800/2,100[3]
	01/28/02	1.88		167.30	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	650/550[3]
	04/25/02	1.99		167.19	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	2,200/2,400[3]
	07/18/02	2.49		166.69	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	530/690[3]
	10/07/02	2.80		166.38	0.00	--	140	<0.50	<0.50	<0.50	<0.50	300/330[3]
	01/06/03	1.86		167.32	0.00	<50	120[13]	<0.50	<0.50	<0.50	<0.50	410/350[3]
	04/07/03	**2.15**		**167.03**	**0.00**	--	**220[14]**	**0.53**	**<0.50**	**<0.50**	**<0.50**	**450/420[3]**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-6												
169.04	10/03/01[10]	2.87	--	166.17	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	200/270[3]
	01/28/02	1.82		167.22	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	04/25/02	2.01		167.03	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/18/02	2.44		166.60	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0[3]
	10/07/02	2.72		166.32	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0[3]
	01/06/03	1.90		167.14	0.00	--	<50	0.62	1.2	1.2	3.5	<2.0/<2.0[3]
	04/07/03	**2.02**		**167.02**	**0.00**	--	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**46/46[3]**
MW-7												
171.64	10/03/01[10]	7.62	--	164.02	0.00	--	10,000[9]	210	<50	<50	800	35,000/40,000[3]
	01/28/02	7.21		164.43	0.00	--	<1,000	<10	<10	<10	<10	42,000/38,000[3]
	04/25/02	7.25		164.39	0.00	--	<5,000	660	<50	<50	<50	42,000/45,000[3]
	07/18/02	8.12		163.52	0.00	--	<5,000	130	<50	<50	<50	51,000/53,000[3]
	10/07/02	7.71		163.93	0.00	--	18,000	<50	<50	<50	<50	33,000/38,000[3]
	01/06/03	7.63		164.01	0.00	<50	410	0.61	1.0	0.89	2.9	3,900/3,100[3]
	04/07/03	**7.58**		**164.06**	**0.00**	--	**13,000[14]**	**<20**	**<20**	**<20**	**<20**	**32,000/28,000[3]**
Trip Blank												
TB-LB	07/20/99	--	--	--	--	--	--	--	--	--	--	--
	09/28/99	--		--	--	--	ND	ND	ND	ND	ND	ND
	01/07/00	--		--	--	--	ND	ND	ND	ND	ND	ND
	03/31/00	--		--	--	--	ND	ND	ND	ND	ND	ND
	07/14/00	--		--	--	--	ND	ND	ND	ND	ND	ND
	10/03/00	--		--	--	--	ND	ND	ND	ND	ND	ND
	01/03/01	--		--	--	--	ND	ND	ND	ND	ND	ND
	04/04/01	--		--	--	--	ND	ND	ND	ND	ND	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	Product Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
TB-LB	07/17/01	--	--	--	--	--	ND	ND	ND	ND	ND	ND
(cont)	10/03/01	--		--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	10/05/01	--		--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	01/28/02	--		--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	04/25/02	--		--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/18/02	--		--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA	10/07/02	--		--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/06/03	--		--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	04/07/03	--		--	--	--	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.0**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to September 28, 1999, were compiled from reports prepared by Environmental Resolutions, Inc.

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
S.I. = Screen Interval
(ft. bgs) = Feet Below Ground Surface
GWE = Groundwater Elevation
(msl) = Mean sea level

TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion
ND = Not Detected
-- = Not Measured/Not Analyzed
QA =Quality Assurance/Trip Blank

* TOC elevations were resurveyed in September 2001, by Morrow Surveying. TOC elevations are based on City of Oakland Benchmark No. 3967, (Elevation = 174.40 feet, msl).

** GWE has been corrected due to the presence of free product; correction factor: [(TOC - DTW) + (Product Thickness x 0.77)].

1 Detection limit raised. Refer to analytical reports.

2 Laboratory report indicates unidentified hydrocarbons C9-C24.

3 MTBE by EPA Method 8260.

4 Laboratory report indicates sample was analyzed past EPA recommended holding time.

5 Total Recoverable Petroleum Oil was ND.

6 Laboratory report indicates gasoline C6-C12.

7 This sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.

8 Laboratory report indicates unidentified hydrocarbons <C16.

9 Laboratory report indicates weathered gasoline C6-C12.

10 Well development performed.

11 Laboratory report indicates unidentified hydrocarbons C10-C28.

12 Laboratory report indicates gasoline C6-C10.

13 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but it does not resemble the pattern of the requested fuel.

14 Laboratory report indicates discrete peak @ MTBE.