RO487 new CW

Shell Oil Products US

July 15, 2004

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

Subject: **Shell-branded Service Station**
105 Fifth Street
Oakland, California

Dear Mr. Chan:

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

Karen Petryna

Karen Petryna
Sr. Environmental Engineer

20945 S. Wilmington Ave., Carson, CA 90810 Phone (559) 645-9306 Facsimile (559) 645-5643

CAMBRIA

July 15, 2004

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

Re: **Second Quarter 2004 Monitoring Report**
Shell-branded Service Station
105 Fifth Street
Oakland, California
Incident #98995757
Cambria Project #246-0472-002

Dear Mr. Chan:

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.

HISTORICAL REMEDIATION SUMMARY

Mobile dual-phase vacuum extraction (DVE) was performed at the site from April to November 2000 and once in March 2001. Mobile DVE is the process of applying a high vacuum through an airtight well seal to simultaneously extract soil vapors from the vadose zone and enhance groundwater extraction (GWE) from the saturated zone. Between April 2000 and March 2001, the DVE process removed an estimated 14.59 pounds (lbs) of total petroleum hydrocarbons as gasoline (TPHg) and 14.50 lbs of methyl tertiary butyl ether (MTBE) from monitoring wells MW-2 and MW-3. DVE was discontinued due to limited chemical recovery.

SECOND QUARTER 2004 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled the site wells, calculated groundwater elevations, and compiled the analytical data. Cambria prepared a vicinity map showing well survey data (Figure 1) and a groundwater elevation contour map (Figure 2). Blaine's report, presenting the laboratory report and

Cambria Environmental Technology, Inc.

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

supporting field documents, is included as Attachment A. Well MW-3 was also sampled for oxygenates di-isopropyl ether, tert-amyl methyl ether, and tert-butanol, and for lead scavengers 1,2-dichloroethane and 1,2-dibromomethane. Results of this analysis are presented in the Well Concentrations table included in Blaine's report.

GWE: Beginning in November 2001, Phillips Services Corporation of Benicia, California conducted semi-monthly mobile GWE events from tank backfill well T-1. 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. These events were temporarily discontinued in anticipation of installation of a fixed GWE system, and then resumed in May 2003. In June 2003, well MW-3 was added to the extraction program, and well MW-2 was added in July 2003. We obtained an encroachment permit from the City of Oakland and began including off-site well MW-6 in the extraction program on August 21, 2003. Extraction from well MW-6 was discontinued after the October 2, 2003 event due to low groundwater production. Due to minimal remaining MTBE concentrations, well T-1 was removed from the extraction program after the September 18, 2003 event and well MW-2 was removed after the November 20, 2003 event. Table 1 presents mass removal data from the GWE events. Through June 4, 2004, a total of 155,675 gallons of water has been extracted, resulting in removal of 8.0 lbs. of TPHg and 71.1 lbs. of MTBE.

GWE System Installation: We have received all necessary permits for construction of a fixed GWE system. Consistent with the sampling results from the previous three quarters, groundwater monitoring results presented in this report display trends which show a continued substantial decrease in MTBE concentrations. The concentration in tank backfill well T-1 has decreased from 29,000 parts per billion (ppb) during the fourth quarter of 2002 to 9.0 ppb this quarter. The concentration in well MW-3 increased from 4,700 ppb last quarter to 23,000 ppb this quarter, but still demonstrates an overall decreasing trend.

Shell will continue to maintain the permits for installation of the GWE system, but will not install it at this time, pending evaluation of additional quarterly groundwater monitoring data.

ANTICIPATED THIRD QUARTER 2004 ACTIVITIES

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

GWE: Semi-monthly extraction events from well MW-3 will continue. We will continue to evaluate future groundwater sampling data and adjust the extraction program as warranted.

CLOSING

We appreciate the opportunity to work with you on this project. Please call Diane Lundquist at (510) 420-3334 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Diane Lundquist, P.E.
Principal Engineer

Figures: 1 - Vicinity/Well Survey Map
2 - Groundwater Elevation Contour Map

Table: 1 - Groundwater Extraction – Mass Removal Data

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Shell Oil Products US, 20945 S. Wilmington Ave., Carson, CA 90810
Arthur R. and Mary A. Hansen, Trs., et al, 820 Loyola Drive, Los Altos, CA 94024

G:\Oakland 105 Fifth\Qm\2q04\2q04qm.doc

09/28/01

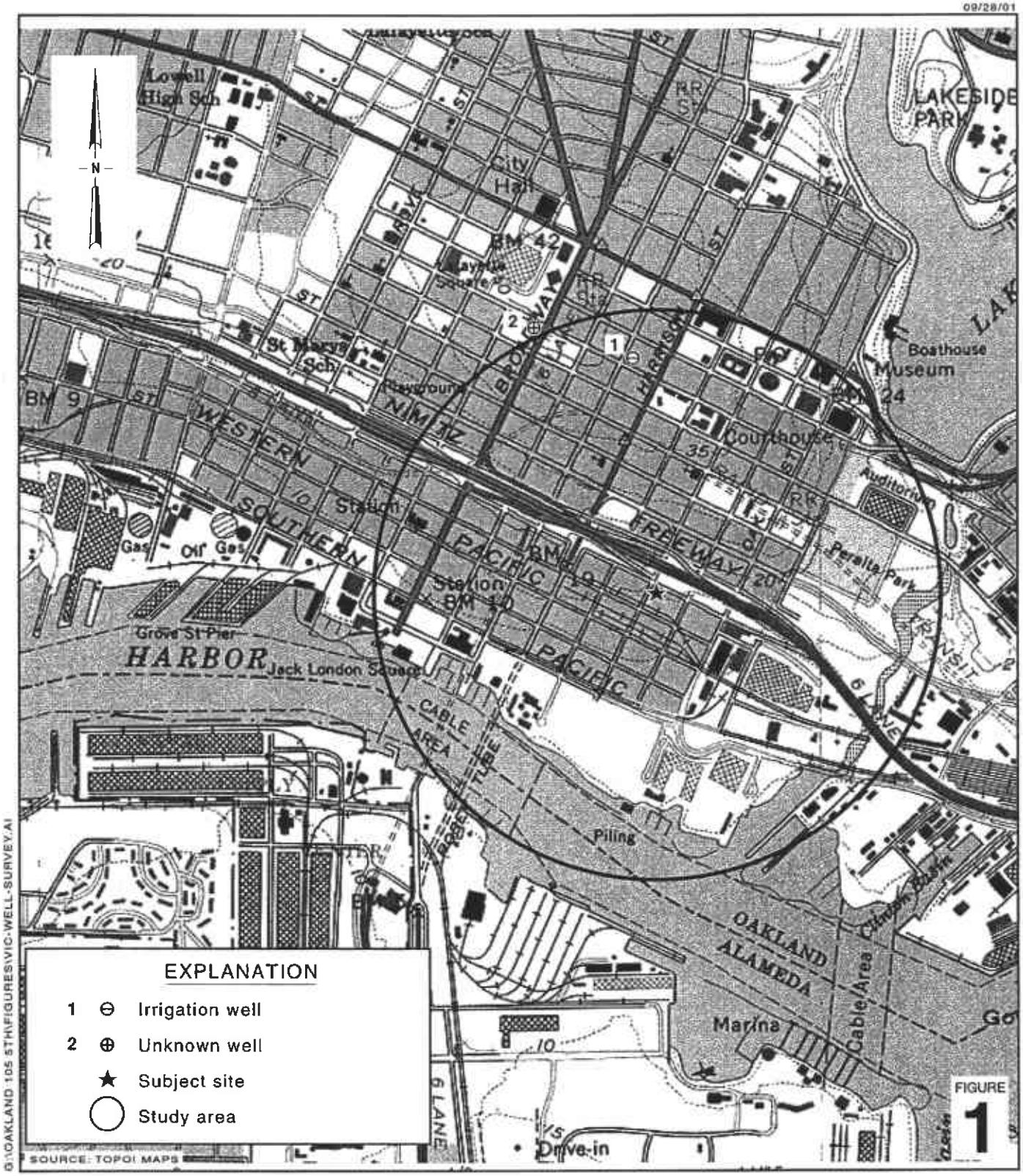


FIGURE 1

0 1/8 1/4 1/2 1

SCALE : 1" = 1/4 MILE

Shell-branded Service Station
105 Fifth Street
Oakland, California
Incident# 98995757

CAMBRIA

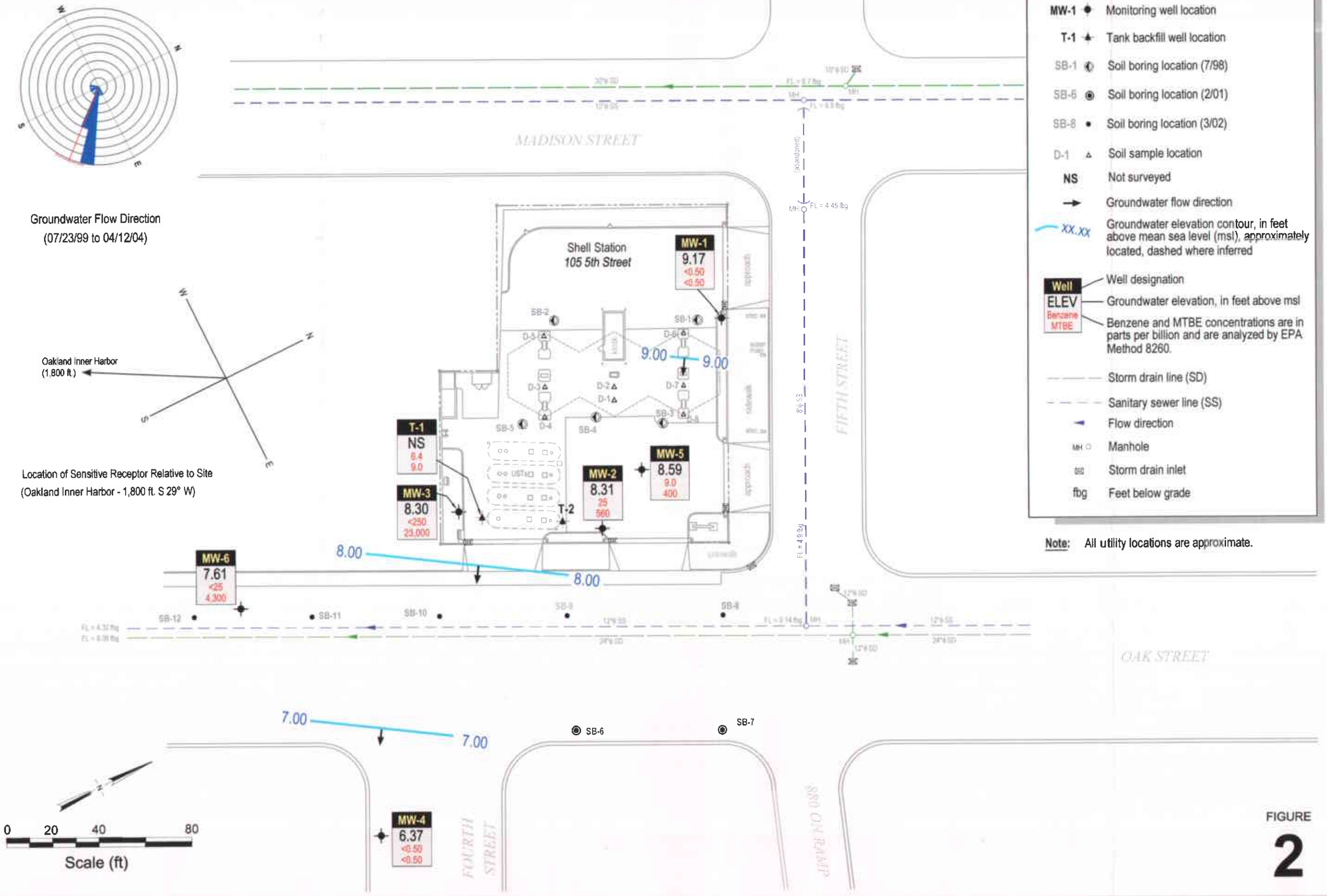
Vicinity / Well Survey Map

(1/2 Mile Radius)

07/15/04

Groundwater Flow Direction
(07/23/99 to 04/12/04)

Location of Sensitive Receptor Relative to Site
(Oakland Inner Harbor - 1,800 ft. S 29° W)



EXPLANATION

MW-1 ●	Monitoring well location
T-1 ▲	Tank backfill well location
SB-1 ◐	Soil boring location (7/98)
SB-6 ◉	Soil boring location (2/01)
SB-8 •	Soil boring location (3/02)
D-1 △	Soil sample location
NS	Not surveyed
→	Groundwater flow direction
XX.XX	Groundwater elevation contour, in feet above mean sea level (msl), approximately located, dashed where inferred

Well
ELEV
Benzene
MTBE

- Well designation
- Groundwater elevation, in feet above msl
- Benzene and MTBE concentrations are in parts per billion and are analyzed by EPA Method 8260.

	Storm drain line (SD)
	Sanitary sewer line (SS)
	Flow direction
MH ○	Manhole
SD	Storm drain inlet
fbg	Feet below grade

Note: All utility locations are approximate.

0 20 40 80
Scale (ft)

Groundwater Elevation Contour Map

April 12, 2004

CAMBRIA

Shell-branded Service Station
105 Fifth Street
Oakland, California
Incident #9899577

FIGURE
2

G:\OAKLAND\105-5TH\FIGURES\2QM04.DWG

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995757, 105 Fifth Street, Oakland, California

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH			Benzene			MTBE		
					TPPH Concentration (ppb)	TPPH Removed (pounds)	TPPH Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE Removed (pounds)	MTBE Removed To Date (pounds)
04/21/00	MW-2	150	150	04/07/00	4,940	0.00618	0.00618	659	0.00082	0.00082	41,800	0.05232	0.05232
04/28/00	MW-2	100	250	04/07/00	4,940	0.00412	0.01031	659	0.00055	0.00137	41,800	0.03488	0.08720
05/05/00	MW-2	310	560	04/07/00	4,940	0.01278	0.02308	659	0.00170	0.00308	41,800	0.10813	0.19532
05/12/00	MW-2	350	910	04/07/00	4,940	0.01443	0.03751	659	0.00192	0.00500	41,800	0.12208	0.31740
06/02/00	MW-2	257	1,167	04/07/00	4,940	0.01059	0.04811	659	0.00141	0.00642	41,800	0.08964	0.40704
07/06/00	MW-2	334	1,501	04/07/00	4,940	0.01377	0.06187	659	0.00184	0.00825	41,800	0.11650	0.52354
09/12/00	MW-2	312	1,813	07/26/00	5,010	0.01304	0.07492	409	0.00106	0.00932	54,300	0.14137	0.66491
10/26/00	MW-2	56	1,869	07/26/00	5,010	0.00234	0.07726	409	0.00019	0.00951	54,300	0.02537	0.69028
07/29/03	MW-2	500	2,369	07/22/03	2,300	0.00960	0.08685	76	0.00032	0.00983	3,700	0.01544	0.70572
08/09/03	MW-2	250	2,619	07/22/03	2,300	0.00480	0.09165	76	0.00016	0.00999	3,700	0.00772	0.71344
08/21/03	MW-2	150	2,769	07/22/03	2,300	0.00288	0.09453	76	0.00010	0.01008	3,700	0.00463	0.71807
09/04/03	MW-2	687	3,456	07/22/03	2,300	0.01318	0.10771	76	0.00044	0.01052	3,700	0.02121	0.73928
09/18/03	MW-2	200	3,656	07/22/03	2,300	0.00384	0.11155	76	0.00013	0.01064	3,700	0.00617	0.74545
10/02/03	MW-2	234	3,890	07/22/03	2,300	0.00449	0.11604	76	0.00015	0.01079	3,700	0.00722	0.75268
10/16/03	MW-2	250	4,140	10/09/03	150	0.00031	0.11636	3.9	0.00001	0.01080	210	0.00044	0.75311
11/06/03	MW-2	250	4,390	10/09/03	150	0.00031	0.11667	3.9	0.00001	0.01081	210	0.00044	0.75355
11/20/03	MW-2	275	4,665	10/09/03	150	0.00034	0.11701	3.9	0.00001	0.01082	210	0.00048	0.75403
04/21/00	MW-3	100	100	04/07/00	<1,000	0.00042	0.00042	853	0.00071	0.00071	283,000	0.23615	0.23615
04/28/00	MW-3	100	200	04/07/00	<1,000	0.00042	0.00083	853	0.00071	0.00142	283,000	0.23615	0.47229
05/05/00	MW-3	50	250	04/07/00	<1,000	0.00021	0.00104	853	0.00036	0.00178	283,000	0.11807	0.59036
05/12/00	MW-3	150	400	04/07/00	<1,000	0.00063	0.00167	853	0.00107	0.00285	283,000	0.35422	0.94458
06/02/00	MW-3	550	950	04/07/00	<1,000	0.00229	0.00396	853	0.00391	0.00676	283,000	1.29880	2.24338
07/06/00	MW-3	528	1,478	04/07/00	<1,000	0.00220	0.00617	853	0.00376	0.01052	283,000	1.24685	3.49023
08/16/00	MW-3	849	2,327	07/26/00	<20,000	0.07084	0.07701	<200	0.00071	0.01123	**320,000**	2.26699	5.75722
09/12/00	MW-3	188	2,515	07/26/00	<20,000	0.01569	0.09270	<200	0.00016	0.01139	**320,000**	0.50200	6.25922
10/26/00	MW-3	156	2,671	07/26/00	<20,000	0.01302	0.10571	<200	0.00013	0.01152	**320,000**	0.41655	6.67577
05/27/03	MW-3	0	2,671	04/30/03	<25,000	0.00000	0.10571	<250	0.00000	0.01152	**14,000**	0.00000	6.67577

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995757, 105 Fifth Street, Oakland, California

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH			Benzene			MTBE		
					TPPH Concentration (ppb)	TPPH Removed (pounds)	TPPH Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE Removed (pounds)	MTBE Removed To Date (pounds)
06/10/03	MW-3	200	2,871	04/30/03	<25,000	0.02086	0.12658	<250	0.00021	0.01172	**14,000**	0.02336	6.69913
06/24/03	MW-3	800	3,671	04/30/03	<25,000	0.08344	0.21002	<250	0.00083	0.01256	**14,000**	0.09346	6.79259
07/09/03	MW-3	990	4,661	04/30/03	<25,000	0.10326	0.31328	<250	0.00103	0.01359	**14,000**	0.11565	6.90824
07/29/03	MW-3	600	5,261	07/22/03	<5,000	0.01252	0.32580	<50	0.00013	0.01372	**17,000**	0.08511	6.99335
08/09/03	MW-3	500	5,761	07/22/03	<5,000	0.01043	0.33623	<50	0.00010	0.01382	**17,000**	0.07093	7.06428
08/21/03	MW-3	250	6,011	07/22/03	<5,000	0.00522	0.34144	<50	0.00005	0.01387	**17,000**	0.03546	7.09975
09/04/03	MW-3	687	6,698	07/22/03	<5,000	0.01433	0.35577	<50	0.00014	0.01402	**17,000**	0.09745	7.19720
09/18/03	MW-3	600	7,298	07/22/03	<5,000	0.01252	0.36829	<50	0.00013	0.01414	**17,000**	0.08511	7.28231
10/02/03	MW-3	233	7,531	07/22/03	<5,000	0.00486	0.37315	<50	0.00005	0.01419	**17,000**	0.03305	7.31536
10/16/03	MW-3	604	8,135	10/09/03	<5,000	0.01260	0.38575	<50	0.00013	0.01432	**14,000**	0.07056	7.38592
11/06/03	MW-3	459	8,594	10/09/03	<5,000	0.00958	0.39533	<50	0.00010	0.01441	**14,000**	0.05362	7.43954
11/20/03	MW-3	322	8,916	10/09/03	<5,000	0.00672	0.40204	<50	0.00007	0.01448	**14,000**	0.03762	7.47716
12/04/03	MW-3	590	9,506	10/09/03	<5,000	0.01231	0.41435	<50	0.00012	0.01460	**14,000**	0.06892	7.54609
12/18/03	MW-3	561	10,067	10/09/03	<5,000	0.01170	0.42605	<50	0.00012	0.01472	**14,000**	0.06554	7.61162
01/02/04	MW-3	496	10,563	10/09/03	<5,000	0.01035	0.43640	<50	0.00010	0.01482	**14,000**	0.05794	7.66956
01/15/04	MW-3	578	11,141	01/05/04	<5,000	0.01206	0.44846	<50	0.00012	0.01494	**4,700**	0.02267	7.69223
02/05/04	MW-3	475	11,616	01/05/04	<5,000	0.00991	0.45837	<50	0.00010	0.01504	**4,700**	0.01863	7.71086
02/19/04	MW-3	650	12,266	01/05/04	<5,000	0.01356	0.47193	<50	0.00014	0.01518	**4,700**	0.02549	7.73635
03/04/04	MW-3	592	12,858	01/05/04	<5,000	0.01235	0.48428	<50	0.00012	0.01530	**4,700**	0.02322	7.75957
03/18/04	MW-3	631	13,489	01/05/04	<5,000	0.01316	0.49744	<50	0.00013	0.01543	**4,700**	0.02475	7.78432
04/01/04	MW-3	532	14,021	01/05/04	<5,000	0.01110	0.50854	<50	0.00011	0.01554	**4,700**	0.02086	7.80518
04/15/04	MW-3	592	14,613	04/12/04	<25,000	0.06175	0.57029	<250	0.00062	0.01616	**23,000**	0.11362	7.91880
05/06/04	MW-3	552	15,165	04/12/04	<25,000	0.05758	0.62786	<250	0.00058	0.01674	**23,000**	0.10594	8.02474
05/20/04	MW-3	432	15,597	04/12/04	<25,000	0.04506	0.67292	<250	0.00045	0.01719	**23,000**	0.08291	8.10765
06/04/04	MW-3	614	16,211	04/12/04	<25,000	0.06404	0.73697	<250	0.00064	0.01783	**23,000**	0.11784	8.22549
08/21/03	MW-6	50	50	07/22/03	<500	0.00010	0.00010	<5.0	0.00000	0.00000	**1,300**	0.00054	0.00054
09/04/03	MW-6	683	733	07/22/03	<500	0.00142	0.00153	<5.0	0.00001	0.00002	**1,300**	0.00741	0.00795

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995757, 105 Fifth Street, Oakland, California

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH			Benzene			MTBE		
					TPPH Concentration (ppb)	TPPH Removed (pounds)	TPPH Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE Removed (pounds)	MTBE Removed To Date (pounds)
10/02/03	MW-6	234	967	07/22/03	<500	0.00049	0.00202	<5.0	0.00000	0.00002	**1,300**	0.00254	0.01049
10/16/03	MW-6	0	967	10/09/03	<1,000	0.00000	0.00202	<10	0.00000	0.00002	**3,000**	0.00000	0.01049
11/26/01	T-1[a]	2,700	2,700	10/23/01	**<50,000**	0.56324	0.56324	**<250**	0.00282	0.00282	**180,000**	4.05536	4.05536
12/10/01	T-1[a]	2,750	5,450	10/23/01	**<50,000**	0.57367	1.13692	**<250**	0.00287	0.00568	**180,000**	4.13046	8.18581
12/26/01	T-1[a]	2,800	8,250	10/23/01	**<50,000**	0.58410	1.72102	**<250**	0.00292	0.00861	**180,000**	4.20556	12.39137
01/09/01	T-1	5,184	13,434	01/07/02	**<20,000**	0.43257	2.15359	**310**	0.01341	0.02201	**92,000**	3.97966	16.37103
01/23/02	T-1	4,250	17,684	01/07/02	**<20,000**	0.35464	2.50823	**310**	0.01099	0.03301	**92,000**	3.26264	19.63367
02/06/02	T-1	4,000	21,684	01/07/02	**<20,000**	0.33377	2.84200	**310**	0.01035	0.04336	**92,000**	3.07072	22.70439
02/20/02	T-1	3,000	24,684	01/07/02	**<20,000**	0.25033	3.09233	**310**	0.00776	0.05112	**92,000**	2.30304	25.00743
03/06/02	T-1	4,500	29,184	01/07/02	**<20,000**	0.37550	3.46783	**310**	0.01164	0.06276	**92,000**	3.45456	28.46200
03/20/02	T-1	5,000	34,184	01/07/02	**<20,000**	0.41722	3.88505	**310**	0.01293	0.07569	**92,000**	3.83840	32.30040
04/03/02	T-1	5,200	39,384	01/07/02	**<20,000**	0.43391	4.31896	**310**	0.01345	0.08914	**92,000**	3.99194	36.29234
04/17/02	T-1	4,800	44,184	04/12/02	**<5,000**	0.10013	4.41909	**230**	0.00921	0.09835	**57,000**	2.28302	38.57536
06/03/02	T-1	3,539	47,723	04/12/02	**<5,000**	0.07383	4.49291	**230**	0.00679	0.10515	**57,000**	1.68325	40.25861
06/17/02	T-1	5,000	52,723	04/12/02	**<5,000**	0.10430	4.59722	**230**	0.00960	0.11474	**57,000**	2.37814	42.63675
07/01/02	T-1	2,873	55,596	04/12/02	**<5,000**	0.05993	4.65715	**230**	0.00551	0.12026	**57,000**	1.36648	44.00323
07/15/02	T-1	4,000	59,596	07/10/02	**<20,000**	0.33377	4.99093	**260**	0.00868	0.12893	**69,000**	2.30304	46.30627
08/12/02	T-1	3,900	63,496	07/10/02	**<20,000**	0.32543	5.31636	**260**	0.00846	0.13739	**69,000**	2.24547	48.55174
08/26/02	T-1	2,367	65,863	07/10/02	**<20,000**	0.19751	5.51387	**260**	0.00514	0.14253	**69,000**	1.36283	49.91456
09/09/02	T-1	1,959	67,822	07/10/02	**<20,000**	0.16347	5.67733	**260**	0.00425	0.14678	**69,000**	1.12791	51.04248
09/23/02	T-1	5,000	72,822	07/10/02	**<20,000**	0.41722	6.09455	**260**	0.01085	0.15763	**69,000**	2.87880	53.92128
10/09/02	T-1	4,500	77,322	07/10/02	**<20,000**	0.37550	6.47005	**260**	0.00976	0.16739	**69,000**	2.59092	56.51220
10/22/02	T-1	4,500	81,822	10/15/02	**<5,000**	0.09387	6.56392	**150**	0.00563	0.17302	**29,000**	1.08894	57.60114
11/05/02	T-1	2,384	84,206	10/15/02	**<5,000**	0.04973	6.61365	**150**	0.00298	0.17601	**29,000**	0.57690	58.17804
11/19/02	T-1	4,375	88,581	10/15/02	**<5,000**	0.09127	6.70492	**150**	0.00548	0.18148	**29,000**	1.05869	59.23673
12/09/02	T-1	2,341	90,922	10/15/02	**<5,000**	0.04884	6.75376	**150**	0.00293	0.18441	**29,000**	0.56649	59.80322
12/23/02	T-1	2,341	93,263	10/15/02	**<5,000**	0.04884	6.80259	**150**	0.00293	0.18734	**29,000**	0.56649	60.36971

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995757, 105 Fifth Street, Oakland, California

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH Removed (pounds)	TPPH Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE Removed (pounds)	MTBE Removed To Date (pounds)
					TPPH			**Benzene**			**MTBE**		
01/06/03	T-1[b]	2,341	95,604	10/15/02	**<5,000**	0.04884	6.85143	**1.5**	0.00003	0.18737	**29,000**	0.56649	60.93620
01/28/03	T-1[b]	4,500	100,104	10/15/02	**<5,000**	0.09387	6.94530	**1.5**	0.00006	0.18743	**29,000**	1.08894	62.02514
02/10/03	T-1	4,500	104,604	01/29/03	**1,300**	0.04881	6.99411	**67**	0.00252	0.18994	**820**	0.03079	62.05593
03/10/03	T-1	3,539	108,143	01/29/03	**1,300**	0.03839	7.03250	**67**	0.00198	0.19192	**820**	0.02422	62.08014
04/08/03	T-1	300	108,443	01/29/03	**1,300**	0.00325	7.03576	**67**	0.00017	0.19209	**820**	0.00205	62.08219
05/05/03	T-1	3,500	111,943	04/30/03	**360**	0.01051	7.04627	**45**	0.00131	0.19340	**89**	0.00260	62.08479
05/27/03	T-1	4,500	116,443	04/30/03	**360**	0.01352	7.05979	**45**	0.00169	0.19509	**89**	0.00334	62.08814
06/10/03	T-1	4,600	121,043	04/30/03	**360**	0.01382	7.07361	**45**	0.00173	0.19682	**89**	0.00342	62.09155
06/24/03	T-1	1,428	122,471	04/30/03	**360**	0.00429	7.07790	**45**	0.00054	0.19736	**89**	0.00106	62.09261
07/09/03	T-1	2,600	125,071	04/30/03	**360**	0.00781	7.08571	**45**	0.00098	0.19833	**89**	0.00193	62.09454
07/29/03	T-1	2,492	127,563	07/22/03	**1,200**	0.02495	7.11066	**170**	0.00354	0.20187	**150**	0.00312	62.09766
08/09/03	T-1	2,082	129,645	07/22/03	**1,200**	0.02085	7.13151	**170**	0.00295	0.20482	**150**	0.00261	62.10027
08/21/03	T-1	2,500	132,145	07/22/03	**1,200**	0.02503	7.15654	**170**	0.00355	0.20837	**150**	0.00313	62.10340
09/04/03	T-1	687	132,832	07/22/03	**1,200**	0.00688	7.16342	**170**	0.00097	0.20934	**150**	0.00086	62.10426
09/18/03	T-1	1,000	133,832	07/22/03	**1,200**	0.01001	7.17343	**170**	0.00142	0.21076	**150**	0.00125	62.10551
Total Gallons Extracted:			**155,675**		**Total Pounds Removed:**		**8.02943**			**0.23943**			**71.09552**
					Total Gallons Removed:		**1.31630**			**0.03280**			**11.46702**

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995757, 105 Fifth Street, Oakland, California

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

Abbreviations & Notes:

TPPH = Total purgeable hydrocarbons as gasoline
MtBE = Methyl tert-butyl ether
ppb = Parts per billion
gal = Gallon
a = Concentrations for tank backfill well T-1 estimated from nearest monitoring well MW-3.
b = Tank backfill well T-1 sampled for BTEX (including benzene) on 1/2/03.
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)
TPPH, benzene analyzed by EPA Method 8015/8020
TPPH, benzene MTBE analyzed by EPA Method 8260 are in bold font, all other results analyzed by EPA Method 8020.
Concentrations based on most recent groundwater monitoring results
Groundwater extracted by vacuum trucks provided by Phillips Services. Water disposed of at a Martinez Refinery.
If concentration is less than the laboratory detection limit, one half of the detection limit concentration is used in the mass removal calculation.

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
(408) 573-0555 PHONE
CONTRACTOR'S LICENSE #746684
www.blainetech.com

May 7, 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
105 5th Street
Oakland, CA

Monitoring performed on April 12, 2004

Groundwater Monitoring Report **040412-PC-3**

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
105 5th Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	TEPH (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)	1,2-DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
MW-1	07/20/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.22	17.56	-5.34	NA
MW-1	07/23/1999	<50.0	NA	<0.500	<0.500	<0.500	<0.500	<2.50	<2.00	NA	NA	NA	NA	NA	NA	NA	12.22	6.45	5.77	NA
MW-1	11/01/1999	100	NA	15.6	3.12	4.04	12.6	6.69	NA	NA	NA	NA	NA	NA	NA	NA	12.22	6.59	5.63	0.5/0.7
MW-1	01/05/2000	<50.0	<20.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	NA	12.22	6.38	5.84	1.2/1.4
MW-1	04/07/2000	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	NA	12.22	5.83	6.39	1.6/2.4
MW-1	07/26/2000	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	NA	12.22	6.10	6.12	1.1/1.4
MW-1	10/28/2000	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	NA	12.22	14.08	-1.86	2.2/2.7
MW-1	01/30/2001	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	NA	12.22	10.71	1.51	1.2/1.6
MW-1	04/17/2001	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	NA	12.22	6.61	5.61	2.4/4.4
MW-1	07/09/2001	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	12.22	6.31	5.91	1.4/3.4
MW-1	10/23/2001	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	12.22	6.24	5.98	2.6/4.1
MW-1	01/07/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	12.22	5.25	6.97	NA
MW-1	04/12/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	14.92	5.54	9.38	NA
MW-1	07/10/2002	<50	74	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	14.92	5.98	8.94	NA
MW-1	10/15/2002	<50	51	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	14.92	5.46	9.46	NA
MW-1	01/29/2003	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	14.92	5.03	9.89	NA
MW-1	04/30/2003	<50	110	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	14.92	4.70	10.22	NA
MW-1	07/22/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	NA	14.92	6.05	8.87	NA
MW-1	10/09/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	NA	14.92	6.13	8.79	NA
MW-1	01/05/2004	<50	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	NA	14.92	5.44	9.48	NA
MW-1	**04/12/2004**	**<50**	**1,000 c**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**<0.50**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**14.92**	**5.75**	**9.17**	**NA**
MW-2	07/20/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10.87	18.24	-7.37	NA
MW-2	07/23/1999	13,800	NA	1,790	<100	<100	682	29,900	29,400	NA	NA	NA	NA	NA	NA	NA	10.87	5.98	4.89	NA
MW-2	11/01/1999	2,420	NA	316	10.8	119	44.2	17,000	NA	NA	NA	NA	NA	NA	NA	NA	10.87	6.03	4.84	0.5/0.3
MW-2	01/05/2000	2,120a	687	301a	<5.00a	116a	84.4à	14,700	NA	NA	NA	NA	NA	NA	NA	NA	10.87	5.90	4.97	2.1/2.6
MW-2	04/07/2000	4,940b	1,300	659b	<25.0b	214b	314b	41,800b	NA	NA	NA	NA	NA	NA	NA	NA	10.87	5.37	5.50	0.4/0.2
MW-2	07/26/2000	5,010	1,520	409	<50.0	302	307	54,300	NA	NA	NA	NA	NA	NA	NA	NA	10.87	5.81	5.06	2.1/2.2
MW-2	10/28/2000	1,720	412	82.2	<10.0	46.0	102	9,800	NA	NA	NA	NA	NA	NA	NA	NA	10.87	14.59	-3.72	0.7/0.7
MW-2	01/30/2001	1,640	574	14.7	<5.00	40.1	58.1	3,670	NA	NA	NA	NA	NA	NA	NA	NA	10.87	10.31	0.56	1.8/2.0
MW-2	04/17/2001	598	179	21.8	<2.00	16.9	10.8	5,630	NA	NA	NA	NA	NA	NA	NA	NA	10.87	6.08	4.79	1.5/2.6
MW-2	07/09/2001	<1,000	<500	19	<10	33	15	NA	6,200	NA	NA	NA	NA	NA	NA	NA	10.87	5.70	5.17	1.1/2.0
MW-2	10/23/2001	<5,000	<500	50	<25	92	<25	NA	13,000	<25	<25	<25	820	<500	NA	NA	10.87	5.72	5.15	2.0/3.2
MW-2	01/07/2002	<1,000	<200	<10	<10	<10	<10	NA	4,500	NA	NA	NA	NA	NA	NA	NA	10.87	4.87	6.00	NA
MW-2	04/12/2002	<1,000	<100	14	<10	27	13	NA	6,200	NA	NA	NA	NA	NA	NA	NA	13.57	5.14	8.43	NA

WELL CONCENTRATIONS
Shell-branded Service Station
105 5th Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	TEPH (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)	1,2-DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	DO Reading (ppm)
MW-2	07/22/2003	2,300	1,000 c	76	<10	140	<20	NA	3,700	NA	NA	NA	NA	NA	NA	NA	13.57	5.61	7.96	NA
MW-2	10/09/2003	150	120 c	3.9	<1.0	6.4	<2.0	NA	210	NA	NA	NA	NA	NA	NA	NA	13.57	5.59	7.98	NA
MW-2	01/05/2004	1,300	450 c	34	<5.0	53	<10	NA	700	NA	NA	NA	NA	NA	NA	NA	13.57	5.04	8.53	NA
MW-2	**04/12/2004**	**820**	**320 c**	**25**	**<5.0**	**33**	**<10**	**NA**	**560**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**13.57**	**5.26**	**8.31**	**NA**
MW-3	07/20/1999	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11.27	19.07	-7.80	NA
MW-3	07/23/1999	128	NA	<0.500	<0.500	<0.500	<0.500	404,000	324,000	NA	NA	NA	NA	NA	NA	NA	11.27	6.43	4.84	NA
MW-3	11/01/1999	<1,000	NA	<10.0	<10.0	<10.0	<10.0	169,000	224,000	NA	NA	NA	NA	NA	NA	NA	11.27	6.48	4.79	0.5/0.3
MW-3	01/05/2000	137	322	<1.00	<1.00	<1.00	<1.00	165,000	219,000	NA	NA	NA	NA	NA	NA	NA	11.27	6.35	4.92	2.4/2.2
MW-3	04/07/2000	<1,000	264	853	<10.0	<10.0	<10.0	283,000	196,000a	NA	NA	NA	NA	NA	NA	NA	11.27	5.91	5.36	04/0.2
MW-3	07/26/2000	<20,000	585	<200	<200	<200	<200	437,000	320,000	NA	NA	NA	NA	NA	NA	NA	11.27	5.83	5.44	1.9/1.7
MW-3	10/26/2000	<12,500	441	<125	<125	<125	<125	266,000	308,000	NA	NA	NA	NA	NA	NA	NA	11.27	17.51	-6.24	1.1/1.4
MW-3	01/30/2001	<5,000	555	<50.0	<50.0	<50.0	<50.0	248,000	167,000a	NA	NA	NA	NA	NA	NA	NA	11.27	11.43	-0.16	2.0/2.2
MW-3	04/17/2001	<5,000	347	<50.0	<50.0	<50.0	<50.0	134,000	133,000	NA	NA	NA	NA	NA	NA	NA	11.27	6.57	4.70	1.3/1.2
MW-3	07/09/2001	<20,000	250	<200	<200	<200	<200	NA	170,000	NA	NA	NA	NA	NA	NA	NA	11.27	6.12	5.15	1.2/1.9
MW-3	10/23/2001	<50,000	260	<250	<250	<250	<250	NA	180,000	<250	<250	<250	53,000	<5,000	NA	NA	11.27	6.25	5.02	2.2/1.6
MW-3	01/07/2002	<10,000	160	<100	<100	<100	<100	NA	96,000	NA	NA	NA	NA	NA	NA	NA	11.27	5.29	5.98	NA
MW-3	04/12/2002	<10,000	87	<100	<100	<100	<100	NA	78,000	NA	NA	NA	NA	NA	NA	NA	13.96	5.43	8.53	NA
MW-3	07/10/2002	<20,000	150	<200	<200	<200	<200	NA	64,000	NA	NA	NA	NA	NA	NA	NA	13.96	6.33	7.63	NA
MW-3	10/15/2002	<10,000	120	<100	<100	<100	<100	NA	44,000	<100	NA	<100	9,100	NA	<100	<100	13.96	5.96	8.00	NA
MW-3	01/02/2003	NA	NA	<5.0	<5.0	<5.0	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	13.96	5.40	8.56	NA
MW-3	01/29/2003	<2,500	96	<25	<25	<25	<25	NA	19,000	<25	NA	<25	14,000	NA	<25	<25	13.96	5.68	8.28	NA
MW-3	04/30/2003	<25,000	360	<250	<250	<250	<500	NA	14,000	<1,000	NA	<1,000	24,000	NA	<250	<250	13.96	5.34	8.62	NA
MW-3	07/22/2003	<5,000	230 c	<50	<50	<50	<100	NA	17,000	<200	NA	<200	21,000	NA	<50	<50	13.96	6.15	7.81	NA
MW-3	10/09/2003	<5,000	150 c	<50	<50	<50	<100	NA	14,000	<200	NA	<200	11,000	NA	<50	<50	13.96	5.98	7.98	NA
MW-3	01/05/2004	<5,000	790 c	<50	<50	<50	<100	NA	4,700	<200	NA	<200	11,000	NA	<50	<50	13.96	5.45	8.51	NA
MW-3	**04/12/2004**	**<25,000**	**270 c**	**<250**	**<250**	**<250**	**<500**	**NA**	**23,000**	**<1,000**	**NA**	**<1,000**	**12,000**	**NA**	**<250**	**<250**	**13.96**	**5.66**	**8.30**	**NA**
MW-4	03/23/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.50	8.21	1.29	NA
MW-4	04/17/2001	<50.0	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	NA	NA	NA	NA	NA	NA	NA	NA	9.50	5.08	4.42	2.4/2.6
MW-4	07/09/2001	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	9.50	4.64	4.86	2.0/1.5
MW-4	10/23/2001	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	9.50	7.90	1.60	2.8/1.8
MW-4	01/07/2002	<50	64	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	9.50	5.00	4.50	NA
MW-4	04/12/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	12.17	7.49	4.68	NA
MW-4	07/10/2002	<50	67	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	12.17	4.75	7.42	NA
MW-4	10/15/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	12.17	4.56	7.61	NA
MW-4	01/29/2003	<50	73	<0.50	<0.50	<0.50	<0.50	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	12.17	4.34	7.83	NA
MW-4	04/30/2003	<50	140	<0.50	<0.50	<0.50	<1.0	NA	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	12.17	5.45	6.72	NA
MW-4	07/22/2003	<50	63 c	<0.50	<0.50	<0.50	<1.0	NA	3.1	NA	NA	NA	NA	NA	NA	NA	NA	12.17	6.46	5.71	NA

WELL CONCENTRATIONS
Shell-branded Service Station
105 5th Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	TEPH (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)	1,2-DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	DO Reading (ppm)
MW-4	10/09/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	NA	12.17	7.11	5.06	NA
MW-4	01/05/2004	<50	66 c	<0.50	<0.50	<0.50	<1.0	NA	<0.50	NA	NA	NA	NA	NA	NA	NA	12.17	7.72	4.45	NA
MW-4	**04/12/2004**	**<50**	**110 c**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**<0.50**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**12.17**	**5.80**	**6.37**	**NA**
MW-5	03/29/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	14.78	5.86	8.92	NA
MW-5	04/12/2002	1,600	<50	25	3.5	44	110	NA	570	NA	NA	NA	NA	NA	NA	NA	14.78	5.96	8.82	NA
MW-5	07/10/2002	930	<400	36	<2.0	93	8.8	NA	630	NA	NA	NA	NA	NA	NA	NA	14.78	6.57	8.21	NA
MW-5	10/15/2002	200	90	9.9	<0.50	19	5.5	NA	180	NA	NA	NA	NA	NA	NA	NA	14.78	6.17	8.61	NA
MW-5	01/29/2003	120	85	6.0	<0.50	2.9	2.6	NA	220	NA	NA	NA	NA	NA	NA	NA	14.78	5.85	8.93	NA
MW-5	04/30/2003	<250	160	5.5	<2.5	7.2	7.7	NA	250	NA	NA	NA	NA	NA	NA	NA	14.78	5.53	9.25	NA
MW-5	07/22/2003	520	190 c	63	<5.0	41	14	NA	810	NA	NA	NA	NA	NA	NA	NA	14.78	6.45	8.33	NA
MW-5	10/09/2003	160	86 c	3.2	<1.0	7.0	3.9	NA	250	NA	NA	NA	NA	NA	NA	NA	14.78	6.54	8.24	NA
MW-5	01/05/2004	290	95 c	11	<2.5	8.5	<5.0	NA	380	NA	NA	NA	NA	NA	NA	NA	14.78	5.90	8.88	NA
MW-5	**04/12/2004**	**280**	**54 c**	**9.0**	**<2.5**	**12**	**<5.0**	**NA**	**400**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**14.78**	**6.19**	**8.59**	**NA**
MW-6	09/25/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.91	5.50	7.41	NA
MW-6	10/15/2002	<500	72	<5.0	<5.0	<5.0	<5.0	NA	2,600	NA	NA	NA	NA	NA	NA	NA	12.91	5.45	7.46	NA
MW-6	01/29/2003	<250	350	<2.5	<2.5	<2.5	<2.5	NA	1,600	NA	NA	NA	NA	NA	NA	NA	12.91	5.20	7.71	NA
MW-6	04/30/2003	<2,500	220	<25	<25	<25	<50	NA	5,900	NA	NA	NA	NA	NA	NA	NA	12.91	5.11	7.80	NA
MW-6	07/22/2003	<500	<50	<5.0	<5.0	<5.0	<10	NA	1,300	NA	NA	NA	NA	NA	NA	NA	12.91	5.46	7.45	NA
MW-6	10/09/2003	<1,000	<50	<10	<10	<10	<20	NA	3,000	NA	NA	NA	NA	NA	NA	NA	12.91	5.51	7.40	NA
MW-6	01/05/2004	<2,500	78 c	<25	<25	<25	<50	NA	3,600	NA	NA	NA	NA	NA	NA	NA	12.91	5.11	7.80	NA
MW-6	**04/12/2004**	**<2,500**	**<50**	**<25**	**<25**	**<25**	**<50**	**NA**	**4,300**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**12.91**	**5.30**	**7.61**	**NA**
T-1	01/07/2002	<20,000	2,600	310	<200	<200	<200	NA	92,000	NA	NA	NA	NA	NA	NA	NA	NA	4.86	NA	NA
T-1	04/12/2002	<5,000	1,000	230	<50	<50	<50	NA	57,000	NA	NA	NA	NA	NA	NA	NA	NA	5.05	NA	NA
T-1	07/10/2002	<20,000	3,700	260	<200	<200	<200	NA	69,000	NA	NA	NA	NA	NA	NA	NA	NA	5.84	NA	NA
T-1	10/15/2002	<5,000	2,100	150	62	<50	75	NA	29,000	NA	NA	NA	NA	NA	NA	NA	NA	5.77	NA	NA
T-1	01/02/2003	NA	NA	1.5	<0.50	<0.50	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.10	NA	NA
T-1	01/29/2003	1,300	1,200	67	6.5	<2.0	5.2	NA	820	NA	NA	NA	NA	NA	NA	NA	NA	5.49	NA	NA
T-1	04/30/2003	360	1,000	45	0.60	<0.50	2.3	NA	89	NA	NA	NA	NA	NA	NA	NA	NA	4.91	NA	NA
T-1	07/22/2003	1,200	940 c	170	4.8	<2.5	18	NA	150	NA	NA	NA	NA	NA	NA	NA	NA	5.70	NA	NA
T-1	10/09/2003	700	880 c	32	2.0	<1.0	9.8	NA	140	NA	NA	NA	NA	NA	NA	NA	NA	5.79	NA	NA
T-1	01/05/2004	450	790 c	24	2.1	<1.0	3.2	NA	29	NA	NA	NA	NA	NA	NA	NA	NA	5.16	NA	NA
T-1	**04/12/2004**	**210**	**530 c**	**6.4**	**<1.0**	**<1.0**	**<2.0**	**NA**	**9.0**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**5.40**	**NA**	**NA**

Abbreviations:

WELL CONCENTRATIONS
Shell-branded Service Station
105 5th Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	TEPH (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)	1,2-DCA (ug/L)	EDB (ug/L)	TOC (MSL)	Depth to Water (ft)	GW Elevation (MSL)	DO Reading (ppm)

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to July 9, 2001, analyzed by EPA Method 8015.
TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to July 9, 2001, analyzed by EPA Method 8020.
MTBE = Methyl-tertiary-butyl ether
DIPE = Di-isopropyl ether, analyzed by EPA Method 8260
ETBE = Ethyl tert-butyl ether, analyzed by EPA Method 8260
TAME = Tert-amyl methyl ether, analyzed by EPA Method 8260
TBA = Tert-butyl alcohol, analyzed by EPA Method 8260
1,2-DCA = 1,2-dichloroethane, analyzed by EPA Method 8260
EDB = 1,2-dibromomethane or ethlyene dibromide, analyzed by EPA Method 8260
TOC = Top of Casing Elevation
GW = Groundwater
DO = Dissolved Oxygen
ug/L = Parts per billion
ppm = Parts per million
MSL = Mean sea level
ft = Feet
<n = Below detection limit
NA = Not applicable
n/n = Pre-purge/Post-purge

Notes:
a = Sample was analyzed outside of the EPA recommended holding time.
b = Result was generated out of hold time.
c = Hydrocarbon does not match pattern of laboratory's standard.
Top of casing for well MW-4 provided by Cambria Environmental Technology, Inc.
Wells MW-1 through MW-5 surveyed April 12, 2002, by Virgil Chavez Land Surveying of Vallejo, California.
Site surveyed Spetember 26, 2002, by Virgil Chavez Land Surveying of Vallejo, California.

SEVERN TRENT STL

Submission#: 2004-04-0425

Blaine Tech Services, Inc.

April 27, 2004

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

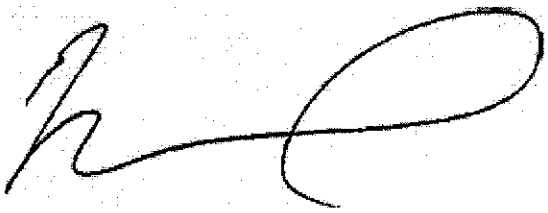
Project#: 040412-PL3
Project: 98995757
Site: 105 5th Street, Oakland

Dear Mr.Gearhart,

Attached is our report for your samples received on 04/13/2004 17:01
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 05/28/2004 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: vvancil@stl-inc.com

Sincerely,



Vincent Vancil
Project Manager

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	04/12/2004 13:45	Water	1
MW-2	04/12/2004 14:58	Water	2
MW-3	04/12/2004 15:15	Water	3
MW-4	04/12/2004 12:55	Water	4
MW-5	04/12/2004 13:58	Water	5
MW-6	04/12/2004 12:30	Water	6
T-1	04/12/2004 14:45	Water	7

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: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-1**	Lab ID:	2004-04-0425 - 1
Sampled:	04/12/2004 13:45	Extracted:	4/22/2004 20:32
Matrix:	Water	QC Batch#:	2004/04/22-01.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	04/22/2004 20:32	
Benzene	ND	0.50	ug/L	1.00	04/22/2004 20:32	
Toluene	ND	0.50	ug/L	1.00	04/22/2004 20:32	
Ethylbenzene	ND	0.50	ug/L	1.00	04/22/2004 20:32	
Total xylenes	ND	1.0	ug/L	1.00	04/22/2004 20:32	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/22/2004 20:32	
Surrogate(s)						
1,2-Dichloroethane-d4	88.0	76-130	%	1.00	04/22/2004 20:32	
Toluene-d8	83.7	78-115	%	1.00	04/22/2004 20:32	

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: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-2**	Lab ID:	2004-04-0425 - 2
Sampled:	04/12/2004 14:58	Extracted:	4/22/2004 20:51
Matrix:	Water	QC Batch#:	2004/04/22-01.68

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	820	500	ug/L	10.00	04/22/2004 20:51	
Benzene	25	5.0	ug/L	10.00	04/22/2004 20:51	
Toluene	ND	5.0	ug/L	10.00	04/22/2004 20:51	
Ethylbenzene	33	5.0	ug/L	10.00	04/22/2004 20:51	
Total xylenes	ND	10	ug/L	10.00	04/22/2004 20:51	
Methyl tert-butyl ether (MTBE)	560	5.0	ug/L	10.00	04/22/2004 20:51	
Surrogate(s)						
1,2-Dichloroethane-d4	94.9	76-130	%	10.00	04/22/2004 20:51	
Toluene-d8	87.6	78-115	%	10.00	04/22/2004 20:51	

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: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-3**	Lab ID:	2004-04-0425 - 3
Sampled:	04/12/2004 15:15	Extracted:	4/23/2004 14:35
Matrix:	Water	QC Batch#:	2004/04/23-1A.66

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	25000	ug/L	500.00	04/23/2004 14:35	
Benzene	ND	250	ug/L	500.00	04/23/2004 14:35	
Toluene	ND	250	ug/L	500.00	04/23/2004 14:35	
Ethylbenzene	ND	250	ug/L	500.00	04/23/2004 14:35	
Total xylenes	ND	500	ug/L	500.00	04/23/2004 14:35	
tert-Butyl alcohol (TBA)	12000	2500	ug/L	500.00	04/23/2004 14:35	
Methyl tert-butyl ether (MTBE)	23000	250	ug/L	500.00	04/23/2004 14:35	
Di-isopropyl Ether (DIPE)	ND	1000	ug/L	500.00	04/23/2004 14:35	
tert-Amyl methyl ether (TAME)	ND	1000	ug/L	500.00	04/23/2004 14:35	
1,2-DCA	ND	250	ug/L	500.00	04/23/2004 14:35	
EDB	ND	250	ug/L	500.00	04/23/2004 14:35	
Surrogate(s)						
1,2-Dichloroethane-d4	106.3	76-130	%	500.00	04/23/2004 14:35	
Toluene-d8	98.2	78-115	%	500.00	04/23/2004 14:35	

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: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-4	Lab ID:	2004-04-0425 - 4
Sampled:	04/12/2004 12:55	Extracted:	4/22/2004 21:29
Matrix:	Water	QC Batch#:	2004/04/22-01.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	04/22/2004 21:29	
Benzene	ND	0.50	ug/L	1.00	04/22/2004 21:29	
Toluene	ND	0.50	ug/L	1.00	04/22/2004 21:29	
Ethylbenzene	ND	0.50	ug/L	1.00	04/22/2004 21:29	
Total xylenes	ND	1.0	ug/L	1.00	04/22/2004 21:29	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	04/22/2004 21:29	
Surrogate(s)						
1,2-Dichloroethane-d4	86.7	76-130	%	1.00	04/22/2004 21:29	
Toluene-d8	84.3	78-115	%	1.00	04/22/2004 21:29	

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: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-5**	Lab ID:	2004-04-0425 - 5
Sampled:	04/12/2004 13:58	Extracted:	4/22/2004 21:48
Matrix:	Water	QC Batch#:	2004/04/22-01.68

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	280	250	ug/L	5.00	04/22/2004 21:48	
Benzene	9.0	2.5	ug/L	5.00	04/22/2004 21:48	
Toluene	ND	2.5	ug/L	5.00	04/22/2004 21:48	
Ethylbenzene	12	2.5	ug/L	5.00	04/22/2004 21:48	
Total xylenes	ND	5.0	ug/L	5.00	04/22/2004 21:48	
Methyl tert-butyl ether (MTBE)	400	2.5	ug/L	5.00	04/22/2004 21:48	
Surrogate(s)						
1,2-Dichloroethane-d4	91.7	76-130	%	5.00	04/22/2004 21:48	
Toluene-d8	88.6	78-115	%	5.00	04/22/2004 21:48	

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: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-6	Lab ID:	2004-04-0425 - 6
Sampled:	04/12/2004 12:30	Extracted:	4/22/2004 22:07
Matrix:	Water	QC Batch#:	2004/04/22-01.68

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	2500	ug/L	50.00	04/22/2004 22:07	
Benzene	ND	25	ug/L	50.00	04/22/2004 22:07	
Toluene	ND	25	ug/L	50.00	04/22/2004 22:07	
Ethylbenzene	ND	25	ug/L	50.00	04/22/2004 22:07	
Total xylenes	ND	50	ug/L	50.00	04/22/2004 22:07	
Methyl tert-butyl ether (MTBE)	4300	25	ug/L	50.00	04/22/2004 22:07	
Surrogate(s)						
1,2-Dichloroethane-d4	100.4	76-130	%	50.00	04/22/2004 22:07	
Toluene-d8	85.4	78-115	%	50.00	04/22/2004 22:07	

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: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	T-1	Lab ID:	2004-04-0425 - 7
Sampled:	04/12/2004 14:45	Extracted:	4/22/2004 22:26
Matrix:	Water	QC Batch#:	2004/04/22-01.68

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	210	100	ug/L	2.00	04/22/2004 22:26	
Benzene	6.4	1.0	ug/L	2.00	04/22/2004 22:26	
Toluene	ND	1.0	ug/L	2.00	04/22/2004 22:26	
Ethylbenzene	ND	1.0	ug/L	2.00	04/22/2004 22:26	
Total xylenes	ND	2.0	ug/L	2.00	04/22/2004 22:26	
Methyl tert-butyl ether (MTBE)	9.0	1.0	ug/L	2.00	04/22/2004 22:26	
Surrogate(s)						
1,2-Dichloroethane-d4	100.4	76-130	%	2.00	04/22/2004 22:26	
Toluene-d8	88.5	78-115	%	2.00	04/22/2004 22:26	

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Water** — **QC Batch # 2004/04/22-01.68**

MB: 2004/04/22-01.68-019 — Date Extracted: 04/22/2004 15:19

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/22/2004 15:19	
Benzene	ND	0.5	ug/L	04/22/2004 15:19	
Toluene	ND	0.5	ug/L	04/22/2004 15:19	
Ethylbenzene	ND	0.5	ug/L	04/22/2004 15:19	
Total xylenes	ND	1.0	ug/L	04/22/2004 15:19	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	04/22/2004 15:19	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/22/2004 15:19	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	04/22/2004 15:19	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	04/22/2004 15:19	
1,2-DCA	ND	0.5	ug/L	04/22/2004 15:19	
EDB	ND	0.5	ug/L	04/22/2004 15:19	
Surrogates(s)					
1,2-Dichloroethane-d4	86.8	76-130	%	04/22/2004 15:19	
Toluene-d8	82.8	78-115	%	04/22/2004 15:19	

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Water** — **QC Batch # 2004/04/23-1A.66**

MB: 2004/04/23-1A.66-034 — Date Extracted: 04/23/2004 13:34

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/23/2004 13:34	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	04/23/2004 13:34	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	04/23/2004 13:34	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	04/23/2004 13:34	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	04/23/2004 13:34	
1,2-DCA	ND	0.5	ug/L	04/23/2004 13:34	
EDB	ND	0.5	ug/L	04/23/2004 13:34	
Benzene	ND	0.5	ug/L	04/23/2004 13:34	
Toluene	ND	0.5	ug/L	04/23/2004 13:34	
Ethylbenzene	ND	0.5	ug/L	04/23/2004 13:34	
Total xylenes	ND	1.0	ug/L	04/23/2004 13:34	
Surrogates(s)					
1,2-Dichloroethane-d4	111.8	76-130	%	04/23/2004 13:34	
Toluene-d8	100.2	78-115	%	04/23/2004 13:34	

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: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Batch QC Report

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

Laboratory Control Spike **Water** **QC Batch # 2004/04/22-01.68**

LCS 2004/04/22-01.68-041 Extracted: 04/22/2004 Analyzed: 04/22/2004 14:41

LCSD 2004/04/22-01.68-000 Extracted: 04/22/2004 Analyzed: 04/22/2004 15:00

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	21.5	22.4	25.0	86.0	89.6	4.1	69-129	20		
Toluene	19.9	22.4	25.0	79.6	89.6	11.8	70-130	20		
Methyl tert-butyl ether (MTBE)	22.8	23.8	25.0	91.2	95.2	4.3	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	395	406	500	79.0	81.2		76-130			
Toluene-d8	439	427	500	87.8	85.4		78-115			

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2004/04/23-1A.66**

LCS 2004/04/23-1A.66-046 Extracted: 04/23/2004 Analyzed: 04/23/2004 12:46

LCSD 2004/04/23-1A.66-058 Extracted: 04/23/2004 Analyzed: 04/23/2004 13:58

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	26.3	26.2	25	105.2	104.8	0.4	65-165	20		
Benzene	27.2	27.6	25	108.8	110.4	1.5	69-129	20		
Toluene	25.3	25.3	25	101.2	101.2	0.0	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	523	478	500	104.6	95.6		76-130			
Toluene-d8	491	526	500	98.2	105.2		78-115			

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Legend and Notes

Analysis Flag

o

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

SEVERN TRENT STL

Submission #: 2004-04-0425

Diesel (C9-C24)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	04/12/2004 13:45	Water	1
MW-2	04/12/2004 14:58	Water	2
MW-3	04/12/2004 15:15	Water	3
MW-4	04/12/2004 12:55	Water	4
MW-5	04/12/2004 13:58	Water	5
MW-6	04/12/2004 12:30	Water	6
T-1	04/12/2004 14:45	Water	7

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	3511	Test(s):	8015M
Sample ID:	**MW-1**	Lab ID:	2004-04-0425 - 1
Sampled:	04/12/2004 13:45	Extracted:	4/21/2004 11:10
Matrix:	Water	QC Batch#:	2004/04/21-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	1000	50	ug/L	1.00	04/21/2004 18:43	edr
Surrogate(s)						
o-Terphenyl	133.8	50-150	%	1.00	04/21/2004 18:43	

Diesel (C9-C24)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	3511	Test(s):	8015M
Sample ID:	MW-2	Lab ID:	2004-04-0425 - 2
Sampled:	04/12/2004 14:58	Extracted:	4/21/2004 11:10
Matrix:	Water	QC Batch#:	2004/04/21-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	320	50	ug/L	1.00	04/21/2004 19:10	edr
Surrogate(s)						
o-Terphenyl	114.6	50-150	%	1.00	04/21/2004 19:10	

Diesel (C9-C24)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	3511	Test(s):	8015M
Sample ID:	**MW-3**	Lab ID:	2004-04-0425-3
Sampled:	04/12/2004 15:15	Extracted:	4/21/2004 11:10
Matrix:	Water	QC Batch#:	2004/04/21-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	270	50	ug/L	1.00	04/21/2004 19:37	ndp
Surrogate(s)						
o-Terphenyl	108.0	50-150	%	1.00	04/21/2004 19:37	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	3511	Test(s):	8015M
Sample ID:	**MW-4**	Lab ID:	2004-04-0425 - 4
Sampled:	04/12/2004 12:55	Extracted:	4/21/2004 11:10
Matrix:	Water	QC Batch#:	2004/04/21-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	110	50	ug/L	1.00	04/21/2004 20:04	edr
Surrogate(s)						
o-Terphenyl	131.5	50-150	%	1.00	04/21/2004 20:04	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	3511	Test(s):	8015M
Sample ID:	**MW-5**	Lab ID:	2004-04-0425 - 5
Sampled:	04/12/2004 13:58	Extracted:	4/21/2004 11:10
Matrix:	Water	QC Batch#:	2004/04/21-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	54	50	ug/L	1.00	04/21/2004 20:31	ndp
Surrogate(s)						
o-Terphenyl	127.1	50-150	%	1.00	04/21/2004 20:31	

Diesel (C9-C24)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	3511	Test(s):	8015M
Sample ID:	**MW-6**	Lab ID:	2004-04-0425 - 6
Sampled:	04/12/2004 12:30	Extracted:	4/21/2004 11:10
Matrix:	Water	QC Batch#:	2004/04/21-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	04/21/2004 20:58	
Surrogate(s)						
o-Terphenyl	130.1	50-150	%	1.00	04/21/2004 20:58	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Prep(s):	3511	Test(s):	8015M
Sample ID:	T-1	Lab ID:	2004-04-0425 - 7
Sampled:	04/12/2004 14:45	Extracted:	4/21/2004 11:10
Matrix:	Water	QC Batch#:	2004/04/21-03.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	530	50	ug/L	1.00	04/21/2004 21:25	ndp
Surrogate(s)						
o-Terphenyl	120.0	50-150	%	1.00	04/21/2004 21:25	

Diesel (C9-C24)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Batch QC Report

Prep(s): 3511 Test(s): 8015M

Method Blank **Water** **QC Batch # 2004/04/21-03.10**

MB: 2004/04/21-03.10-001 Date Extracted: 04/21/2004 11:10

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	04/21/2004 17:22	
Surrogates(s)					
o-Terphenyl	122.9	50-150	%	04/21/2004 17:22	

Diesel (C9-C24)

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Batch QC Report

Prep(s): 3511 Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2004/04/21-03.10**

LCS 2004/04/21-03.10-002 Extracted: 04/21/2004 Analyzed: 04/21/2004 17:49

LCSD 2004/04/21-03.10-003 Extracted: 04/21/2004 Analyzed: 04/21/2004 18:16

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	467	412	680	68.7	60.6	12.5	60-150	25		
Surrogates(s)										
o-Terphenyl	1.53	1.47	1.25	122.4	117.3		50-150	0		

Diesel (C9-C24)

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: 040412-PL3
98995757

Received: 04/13/2004 17:01

Site: 105 5th Street, Oakland

Legend and Notes

Result Flag

edr

Hydrocarbon reported is in the early Diesel range, and does not match our Diesel standard

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

SHELL Chain of Custody Record

84TPD

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

Karen Petryna

2004-04-0425

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

SAP or CRMT NUMBER (TS/CRMT):

DATE: 4/12/04

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services	LOG CODE: BTSS	SITE ADDRESS (Street and City): 105 5th Street, Oakland	GLOBAL ID (SAP): T0600102116
ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112		SHIP/DELIVER TO (Responsible Party or Consultant): 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.: 040412-R3
TELEPHONE: 408-573-0555	FAX: 408-573-7771	E-MAIL: lgearhart@blainetech.com	BTS #:
SAMPLER NAME(S) (Print): P. Cornish			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:

GCMS 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, DIPE, TAME by 8260	TPH - Diesel, Extractable (8015m)	
	MW-1	4/12/04	1345	W	6	X	X						X	X		X	
	MW-2		1458		6	X	X									X	
	MW-3		1515		6	X	X						X	X	X	X	
	MW-4		1255		6	X	X									X	
	MW-5		1358		6	X	X									X	
	MW-6		1230		6	X	X									X	
	T-1		1445		6	X	X									X	

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

2.0

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date: 4/13/04	Time: 1231
Relinquished by: (Signature) 4/13/04 1701	Received by: (Signature)	Date: 04/13/04	Time: 1701
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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

TOP (400) Revision

QAQ Graphic (714) 368-5703

Lab Certification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced: Karen Petryna

☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ OUTF HOUSTON

INCIDENT NUMBER (SAP ONLY): 98995757

SAP or CRMT NUMBER (TS/CRMT):

DATE: 4/12/04

PAGE: 1 of 1

REPORT COMPANY: Delta Tech Services

LOG CODE: BTSS

SITE ADDRESS (Street and City): 105 5th Street, Oakland

GLOBAL ID NO.: T0600102116

COMPANY: 660 Rogers Avenue, San Jose, CA 95112

EDF DELIVERABLE TO (Name/Co./Key or Designator): Anni Kraml

PHONE NO.: (510) 420-3335

E-MAIL: ShellOaklandEDF@cambria-env.com

CONSULTANT PROJECT NO.: 640412-R3

PROJECT CONTACT (Hardcopy or PDF Report to): Jean Gearhart

SAMPLER NAME(S) (Print): P. Cornish

CAB USE ONLY

TELEPHONE: 08-573-0555

FAX: 408-573-7771

E-MAIL: jgearhart@deltatechco.com

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

REQUESTED ANALYSIS

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY: _____

SCINS MTBE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

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

CAB 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, DIPE, TAME by 8260	TPH - Diesel, Extractable (8015m)	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	MW-1	4/12/04	1345	W	6	X	X		X				X	X		X	
	MW-2		1458		6	X	X		X							O	
	MW-3		1515		6	X	X		X				X	X	X	X	
	MW-4		1255		6	X	X		X							X	
	MW-5		1358		6	X	X		X							X	
	MW-6		1230		6	X	X		X							X	
	T-1		1445		6	X	X		X							X	

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
MW-1 thru MW-6, T-1			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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

10/15/00 Revision

QEO Graphic (714) 895-9702

WELL GAUGING DATA

Project # 040412-PC3 Date 4/12/04 Client shell

Site 105 5th St., Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-1	4					5.75	23.56		
MW-2	4	Gauged w/stinger in well				5.26	23.55		
MW-3	4	Gauged w/stinger in well				5.66	25.00		VR
MW-4	2					5.80	19.94		
MW-5	4					6.19	24.20		
MW-6	2					5.30	24.10		T.R.
T-1	12	Gauged w/stinger in well				5.40	11.55		

SHELL WELL MONITORING DATA SHEET

BTS #: 040412-PC-3	Site: 1055 54th St., Oakland
Sampler: PC	Date: 4/12/04
Well I.D.: MW-1	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 23.56	Depth to Water (DTW): 5.75
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]: 9.31	

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: ____

11.6 (Gals.) X 3 = 34.8 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1327	67.3	7.3	567	41	11.6	clear
1329	66.8	6.9	460	73	23.2	↓
1332	66.7	7.0	414	47	34.8	

Did well dewater? Yes (No) Gallons actually evacuated: 35

Sampling Date: 4/12/04 Sampling Time: 1345 Depth to Water: 9.21

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 040412-8C3	Site: 1055 5th St., Oakland
Sampler: PC	Date: 4/12/04
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 23.55	Depth to Water (DTW): 5.26
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]: 8.92	

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: ____

11.9 (Gals.) X 3 = 35.7 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1438	68.4	6.8	519	14	12	clear
1441	68.7	6.8	516	15	24	↓
1444	68.9	6.8	495	18	36	↓

Did well dewater? Yes (No) Gallons actually evacuated: 36

Sampling Date: 4/12/04 Sampling Time: 1458 Depth to Water: 8.78

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 040412-PC3	Site: 1055 14th St., Oakland
Sampler: PC	Date: 4/12/04
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 25.00	Depth to Water (DTW): 5.66
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]: 9.53	

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: ___

12.6 (Gals.) X 3 = 37.8 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 (Ø))	Turbidity (NTUs)	Gals. Removed	Observations
1452	65.0	6.8	1130	28	12.6	clear
1455	65.3	6.7	1238	42	25.2	↓
1458	64.8	6.7	1184	33	37.8	

Did well dewater? Yes (No) Gallons actually evacuated: 38

Sampling Date: 4/12/04 Sampling Time: 1515 Depth to Water: 7.48

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 040412-PC3	Site: 1055 4th St., Oakland
Sampler: PC	Date: 4/12/04
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 19.94	Depth to Water (DTW): 5.80
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]: 8.63	

Purge Method: (Bailer) Waterra
Disposable Bailer Peristaltic
Positive Air Displacement Extraction Pump
Electric Submersible Other____

Sampling Method: (Bailer)
Disposable Bailer
Extraction Port
Dedicated Tubing
Other: ____

2.3 (Gals.) X 3 = 6.9 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
1742	65.4	6.6	1579	428	2.3	brown
1745	64.5	6.6	1644	708	4.6	↓
1748	64.7	6.7	1648	>1000	6.9	

Did well dewater? Yes (No) Gallons actually evacuated: 7

Sampling Date: 4/12/04 Sampling Time: 1255 Depth to Water: 11.85 Tr. well

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 040412-PC3	Site: 1055 5th St., Oakland
Sampler: PC	Date: 4/12/04
Well I.D.: MW-5	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 24.20	Depth to Water (DTW): 6.19
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]: 9.79	

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: ____

11.7 (Gals.) X 3 = 35.1 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
1348	68.2	6.6	620	69	12	clear
1350	69.4	6.6	626	85	24	↓
1353	69.3	6.6	611	121	36	↓

Did well dewater? Yes (No) Gallons actually evacuated: 36

Sampling Date: 4/12/04 Sampling Time: 1358 Depth to Water: 9.68

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 040412-RC3	Site: 1055 5th St., Oakland
Sampler: RC	Date: 4/12/04
Well I.D.: MW-6	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 24.10	Depth to Water (DTW): 5.30
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 9.06

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: ____

3 (Gals.) X 3 = 9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1215	68.1	6.1	339	71000	3	brown
1219	67.1	6.4	306	294	6	↓
1225	68.0	6.8	302	222	9	

Did well dewater? Yes (No) Gallons actually evacuated: 9

Sampling Date: 4/12/04 Sampling Time: 12.30 Depth to Water: 7.80

Sample I.D.: MW-6 Laboratory: (STL) Other____

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 040412-PC3	Site: 1055 5th St., Oakland
Sampler: PC	Date: 4/12/04
Well I.D.: T-1	Well Diameter: 2 3 4 6 8 12
Total Well Depth (TD): 11.55	Depth to Water (DTW): 5.40
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]: 6.63	

Purge Method: Bailer; Disposable Bailer; Positive Air Displacement; (A) Electric Submersible; Waterra; Peristaltic; Extraction Pump; Other_____

Sampling Method: (A) Bailer; Disposable Bailer; Extraction Port; Dedicated Tubing; Other:_____

35 (Gals.) X 3 = 105 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1414	67.9	6.7	961	25	35	clear
1422	68.0	6.7	967	23	70	"
1430	68.2	6.7	970	18	105	"

Did well dewater? Yes (No) Gallons actually evacuated: 105

Sampling Date: 4/12/04 Sampling Time: 1445 Depth to Water: 5.80

Sample I.D.: T-1 Laboratory: (STD) Other_____

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

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

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

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