R173

Shell Oil Products US

March 4, 2003

Alameda County
MAR 07 2003
Environmental Health

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

Subject: **Shell-branded Service Station**
2120 Montana Street
Oakland, California 94602

Dear Mr. Gholami:

Attached for your review and comment is a copy of the *Fourth Quarter 2002 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

R173

Shell Oil Products US

January 13, 2003

Alameda County
JAN 16 2003
Environmental Health

Mr. Bennett K. Horenstein
East Bay Municipal Utilities District
Environmental Services Division
PO Box 24055
Oakland, California 94623-1055

Subject: **Shell-branded Service Station**
2120 Montana Street
Oakland, California
Fourth Quarter 2002 Self-Monitoring Report
EBMUD Discharge Permit No. 5050670-1

94602

Dear Mr. Horenstein:

During the current reporting period, the groundwater treatment and extraction system at the site referenced above did not operate. Therefore, the discharge was in compliance with the conditions specified in the above-referenced East Bay Municipal Utilities District Wastewater Discharge Permit.

I certify under penalty of law that this document and all attachments are prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete.

I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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
Shell Oil Products US

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

CAMBRIA

January 13, 2003

Mr. Bennett K. Horenstein
Source Control Manager
c/o Mr. Florencio C. Gonzalez
East Bay Municipal Utilities District
Environmental Services Division
PO Box 24055
Oakland, California 94623-1055

Re: **Fourth Quarter 2002 Self-Monitoring Report**
Shell-branded Service Station
2120 Montana Street
Oakland, California
EBMUD Discharge Permit # 5050670-1
Cambria Project # 245-0733-004

Dear Mr. Horenstein:

On behalf of Equilon Enterprises LLC dba Shell Oil Products US, Cambria Environmental Technology, Inc. (Cambria), is providing an update of activities for the groundwater extraction (GWE) system at the referenced site, in lieu of the Fourth Quarter 2002 Self-Monitoring Report. Discharge from the GWE system under the EBMUD wastewater discharge permit # 5050670-1 has not yet begun. Therefore, there is no data to report at this time, as specified by the permit. Cambria anticipates starting the GWE system by the end of February 2003. Cambria will provide the required notifications prior to start-up. The start-up information will be provided in the *First Quarter 2003 Self-Monitoring Report.*

Please contact Jacquelyn Jones at (510) 420-3316 if you require any additional information.

Sincerely,
Cambria Environmental Technology, Inc.

Jacquelyn Jones
Project Geologist

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

Oakland, CA
San Ramon, CA
Sonoma, CA

Cambria Environmental Technology, Inc.

1144 65th Street
Suite B
Oakland, CA 94608
Tel (510) 420-0700
Fax (510) 420-9170

cc: Karen Petryna, Shell Oil Products US, P.O. Box 7869, Burbank, CA 91510-7869
Amir Gholami, Alameda County Health Care Services Agency, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502-6577

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CAMBRIA

March 4, 2003

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

Re: **Fourth Quarter 2002 Monitoring Report**
Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident #98995740
Cambria Project #245-0733-002

Dear Mr. Gholami:

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. The site is located at the northwest corner of Montana Street and Fruitvale Avenue in Oakland, California (Figures 1 and 2).

REMEDIATION SUMMARY

Mobile Groundwater Extraction (GWE): As recommended in our August 15, 2001 *Agency Response*, Cambria began weekly GWE in August 2001 from wells MW-1 and TBW-N using a vacuum truck. Based on the lack of significant separate-phase hydrocarbons (SPH) in the wells, the mobile GWE frequency was reduced from weekly to biweekly in November 2001 and to monthly in January 2002. Cumulative groundwater purge volume and estimated mass removal data are presented in Table 1. Figures 3 and 4 show methyl tertiary butyl ether (MTBE) concentrations and mass removal estimates over time for wells MW-1 and TBW-N, respectively. The cumulative estimated mass of total petroleum hydrocarbons as gasoline and MTBE removed by GWE to date at the site is 11.99 pounds and 6.92 pounds, respectively. Additionally, approximately 2.68 pounds of SPH have been removed at the site through manual bailing and GWE.

Cambria Environmental Technology, Inc.

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

FOURTH QUARTER 2002 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 that 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.

ANTICIPATED FIRST QUARTER 2003 ACTIVITIES

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

Fixed GWE System Installation: Our September 4, 2002 work plan proposed the installation of a fixed GWE system at the site. This work plan was approved in a September 19, 2002 Alameda County Health Care Services Agency letter. System construction began in early February 2003, and system start-up is currently planned for early March 2003.

Mobile GWE: Mobile GWE will be continued pending fixed GWE system installation at the site.

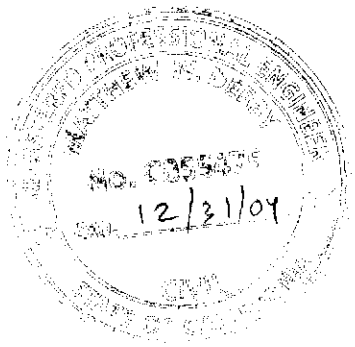
CLOSING

We appreciate the opportunity to work with you on this project. Please call Jacquelyn Jones at (510) 420-3316 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Jacquelyn L. Jones
Project Geologist

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



Figures: 1 - Vicinity/Area Well Survey Map
2 - Groundwater Elevation Contour Map
3 - MTBE and Mass Removal – Well MW-1
4 - MTBE and Mass Removal – Well TBW-N

Table: 1 - Groundwater Extraction – Mass Removal Data

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

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

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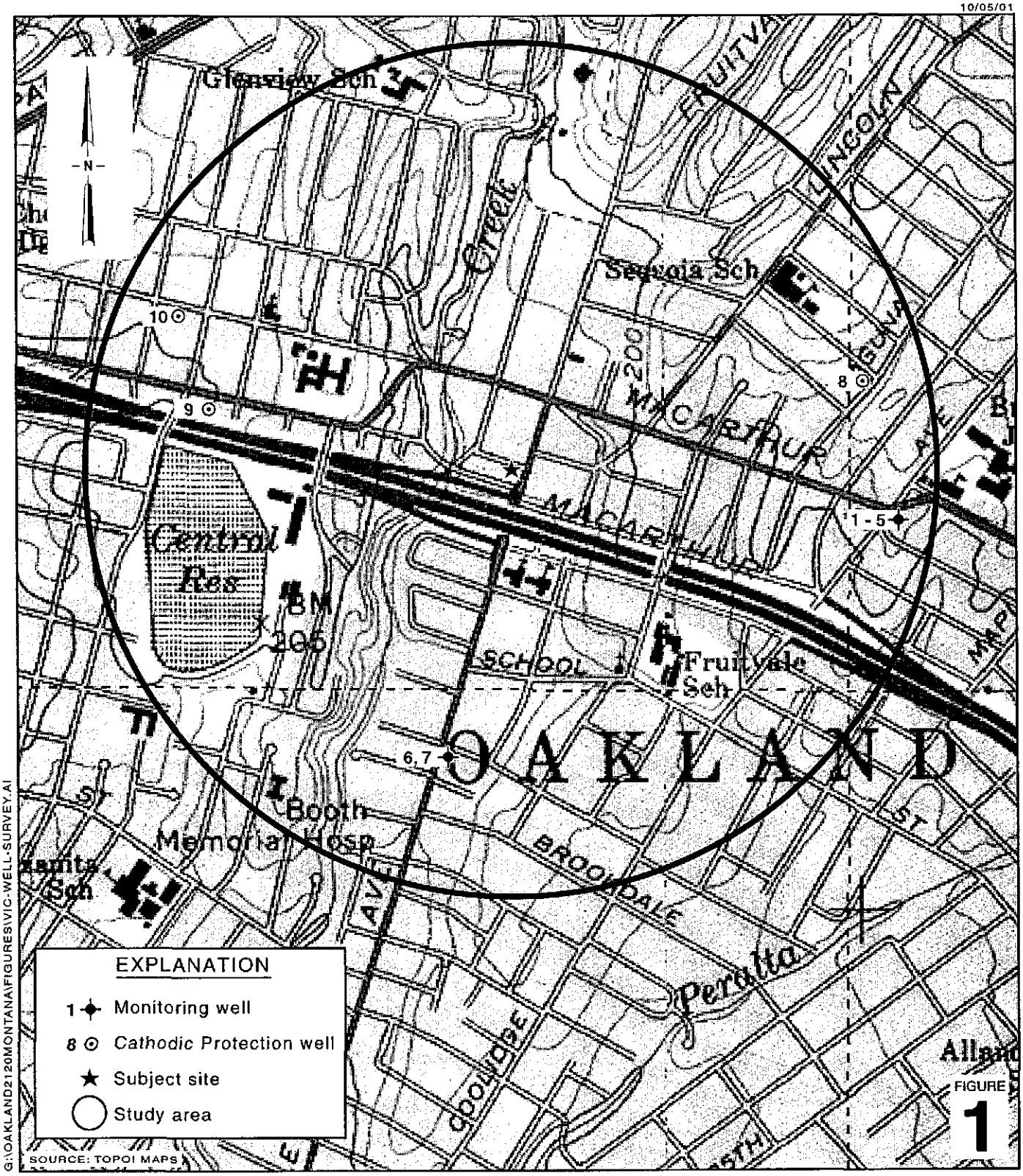
10/05/01



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0 1/6 1/3 1/2 1

SCALE : 1" = 1/6 MILE

FIGURE 1

Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident #98995740

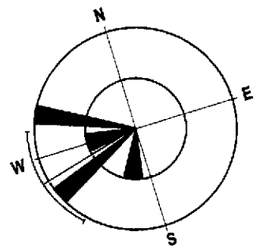
CAMBRIA

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

03/03/03

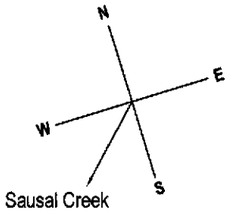
EXPLANATION

- MW-1 — Monitoring well location
- TBW-N — Tank backfill well location
- SB-1 — Cambria soil boring location (10/99)
- D-1 — Cambria soil sampling location (11/97)
- SPH — Separate-phase hydrocarbons present in well, not sampled
- NA — Not available
- → — Groundwater flow direction
- XX.XX — Groundwater elevation contour, in feet above mean sea level (msl), 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.



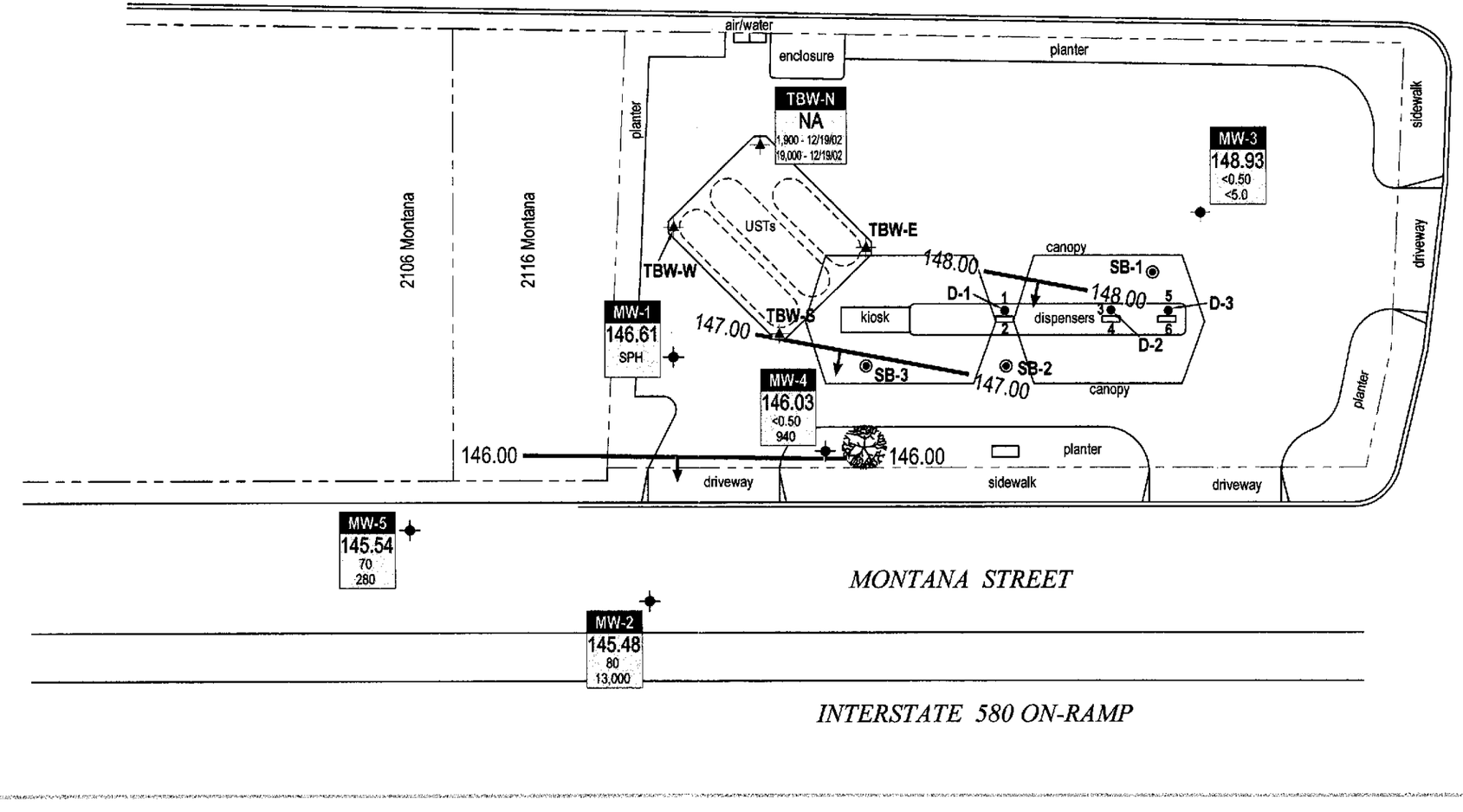
Groundwater Gradient Direction
(1Q01 through 4Q02)

Commercial property



Sausal Creek
(730 ft. SW)

Location of Sensitive Receptor Relative to Site



0 15 30 60
Scale (ft)

G:\OAKLAND2120MONTANA\FIGURES\4QM02-MP.DWG

Groundwater Elevation Contour Map

December 12, 2002

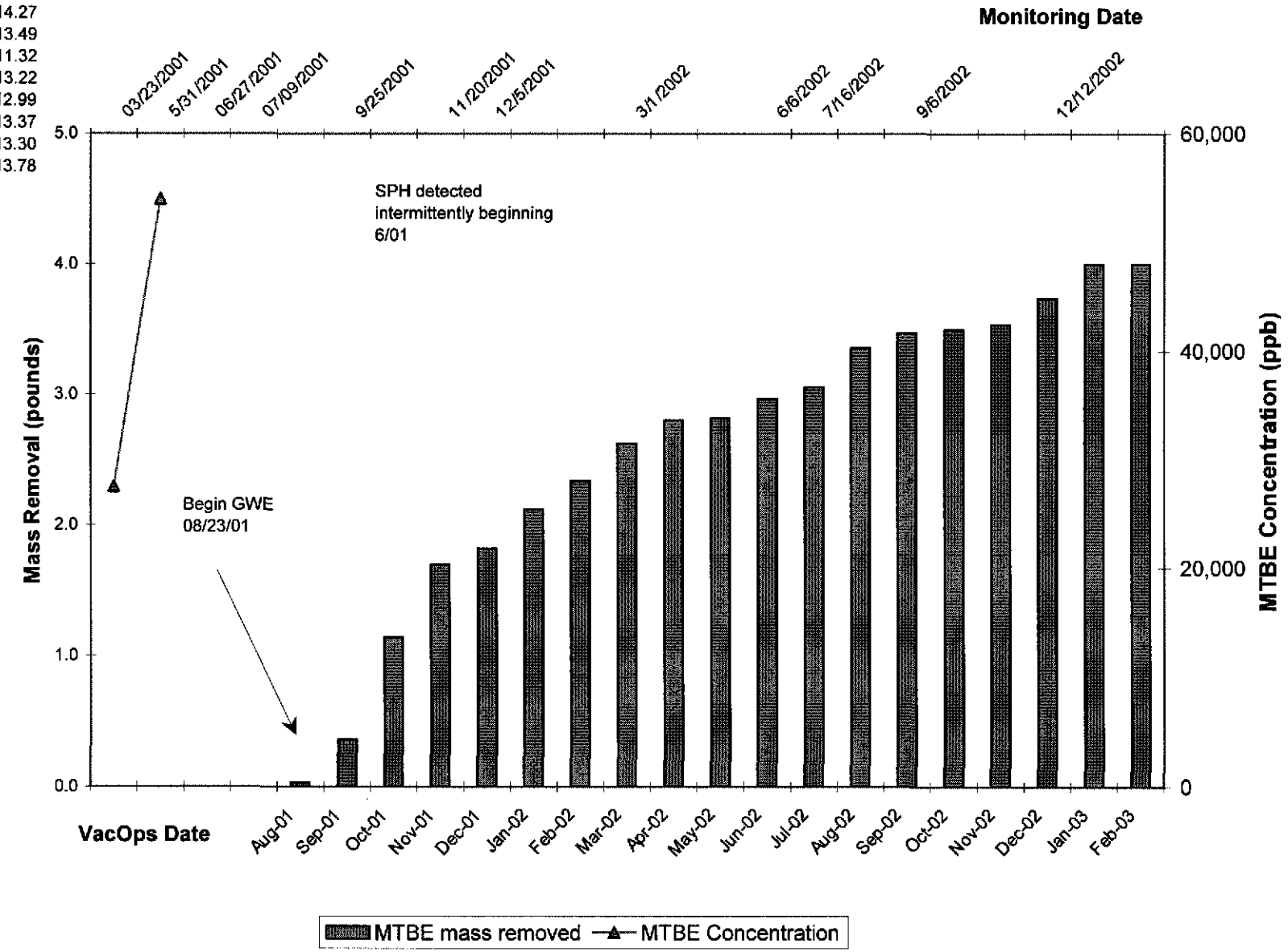
CAMBRIA

Shell-branded Service Station
2120 Montana Street
Oakland, California
Incident #98995740

FIGURE
2

Date	DTW - ft
03/23/01	12.25
05/31/01	12.22
06/27/01	13.00
070/9/01	13.17
09/25/01	14.27
11/20/01	13.49
12/05/01	11.32
03/01/02	13.22
06/06/02	12.99
07/16/02	13.37
09/06/02	13.30
12/12/03	13.78

Figure 3
MTBE and Mass Removal
Well MW-1



2120 Montana Street, Oakland

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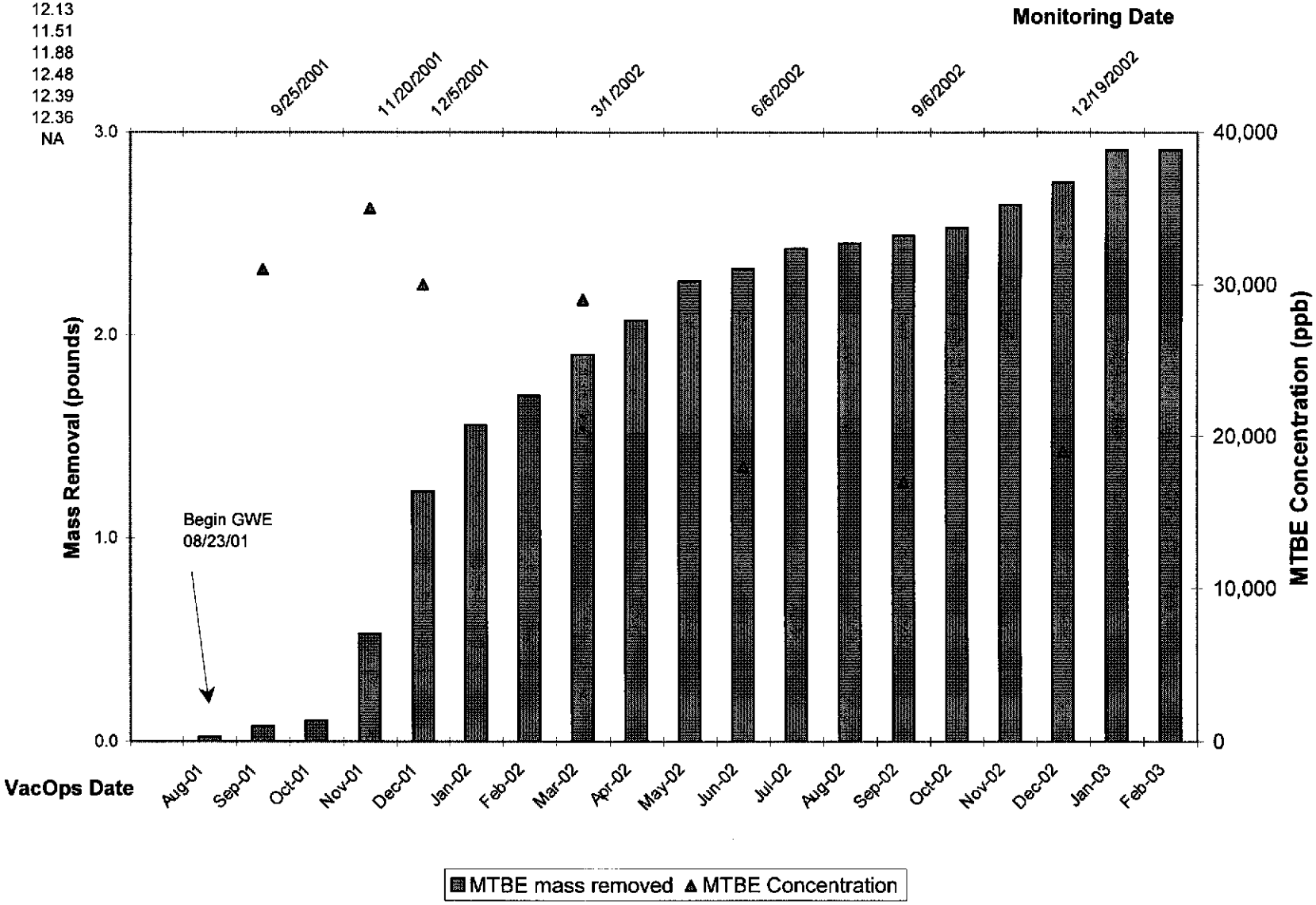
Figure 4
MTBE and Mass Removal
Well TBW-N

Date	DTW - ft
09/25/01	12.25
11/20/01	12.13
12/05/01	11.51
03/01/02	11.88
06/06/02	12.48
07/16/02	12.39
09/06/02	12.36
12/12/02	NA



2120 Montana Street, Oakland

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Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995740, 2120 Montana St., Oakland, California

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Date Sampled	TPPH Concentration (ppb)	TPPH TPPH Removed (pounds)	TPPH Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE MTBE Removed (pounds)	MTBE Removed To Date (pounds)
					TPPH			Benzene			MTBE		
08/23/01	MW-1	100	100	03/23/01	16,600	0.01385	0.01385	753	0.00063	0.00063	27,500	0.02295	0.02295
08/30/01	MW-1	40	140	03/23/01	16,600	0.00554	0.01939	753	0.00025	0.00088	27,500	0.00918	0.03213
09/09/01	MW-1	500	640	03/23/01	16,600	0.06926	0.08865	753	0.00314	0.00402	27,500	0.11473	0.14686
09/21/01	MW-1	320	960	03/23/01	16,600	0.04433	0.13298	753	0.00201	0.00603	27,500	0.07343	0.22029
09/29/01	MW-1	600	1,560	03/23/01	16,600	0.08311	0.21609	753	0.00377	0.00980	27,500	0.13768	0.35797
10/05/01	MW-1	362	1,922	03/23/01	16,600	0.05014	0.26623	753	0.00227	0.01208	27,500	0.08307	0.44104
10/12/01	MW-1	700	2,622	03/23/01	16,600	0.09696	0.36319	753	0.00440	0.01647	27,500	0.16063	0.60167
10/19/01	MW-1	350	2,972	03/23/01	16,600	0.04848	0.41167	753	0.00220	0.01867	27,500	0.08031	0.68198
10/29/01	MW-1	1,995	4,967	03/23/01	16,600	0.27634	0.68801	753	0.01254	0.03121	27,500	0.45779	1.13978
11/02/01	MW-1	700	5,667	03/23/01	16,600	0.09696	0.78497	753	0.00440	0.03561	27,500	0.16063	1.30041
11/16/01	MW-1	800	6,467	03/23/01	16,600	0.11081	0.89579	753	0.00503	0.04063	27,500	0.18358	1.48398
11/30/01	MW-1	900	7,367	03/23/01	16,600	0.12466	1.02045	753	0.00565	0.04629	27,500	0.20652	1.69050
12/14/01	MW-1	300	7,667	03/23/01	16,600	0.04155	1.06200	753	0.00188	0.04817	27,500	0.06884	1.75934
12/28/01	MW-1	250	7,917	03/23/01	16,600	0.03463	1.09663	753	0.00157	0.04974	27,500	0.05737	1.81671
01/12/02	MW-1	1,300	9,217	03/23/01	16,600	0.18007	1.27670	753	0.00817	0.05791	27,500	0.29831	2.11502
02/14/02	MW-1	950	10,167	03/23/01	16,600	0.13159	1.40830	753	0.00597	0.06388	27,500	0.21800	2.33302
03/11/02*	MW-1	1,258	11,425	03/23/01	16,600	0.17425	1.58255	753	0.00790	0.07179	27,500	0.28867	2.62169
04/01/02	MW-1	791	12,216	03/23/01	16,600	0.10957	1.69212	753	0.00497	0.07676	27,500	0.18151	2.80320
05/01/02	MW-1	60	12,276	03/23/01	16,600	0.00831	1.70043	753	0.00038	0.07713	27,500	0.01377	2.81697
06/05/02	MW-1	643	12,919	03/23/01	16,600	0.08907	1.78949	753	0.00404	0.08117	27,500	0.14755	2.96452
07/11/02	MW-1	400	13,319	03/23/01	16,600	0.05541	1.84490	753	0.00251	0.08369	27,500	0.09179	3.05631
08/12/02	MW-1	1,300	14,619	03/23/01	16,600	0.18007	2.02497	753	0.00817	0.09186	27,500	0.29831	3.35462
09/09/02	MW-1	500	15,119	03/23/01	16,600	0.06926	2.09423	753	0.00314	0.09500	27,500	0.11473	3.46935
10/08/02	MW-1	117	15,236	03/23/01	16,600	0.01621	2.11043	753	0.00037	0.09536	27,500	0.02685	3.49620
11/09/02	MW-1	173	15,409	03/23/01	16,600	0.02396	2.13440	753	0.00054	0.09591	27,500	0.03970	3.53590
12/13/02	MW-1	885	16,294	03/23/01	16,600	0.12259	2.25698	753	0.00278	0.09869	27,500	0.20308	3.73898
01/08/03	MW-1	1,151	17,445	03/23/01	16,600	0.15943	2.41642	753	0.00362	0.10230	27,500	0.26412	4.00310
02/05/03	MW-1	0	17,445	03/23/01	16,600	0.00000	2.41642	753	0.00000	0.10230	27,500	0.00000	4.00310

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995740, 2120 Montana St., 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)
08/23/01	TBW-N	85	85	09/25/01	120,000	0.08511	0.08511	3,200	0.00227	0.00227	31,000	0.02199	0.02199
08/30/01	TBW-N	0	85	09/25/01	120,000	0.00000	0.08511	3,200	0.00000	0.00227	31,000	0.00000	0.02199
09/09/01	TBW-N	0	85	09/25/01	120,000	0.00000	0.08511	3,200	0.00000	0.00227	31,000	0.00000	0.02199
09/21/01	TBW-N	200	285	09/25/01	120,000	0.20026	0.28538	3,200	0.00534	0.00761	31,000	0.05174	0.07372
09/29/01	TBW-N	0	285	09/25/01	120,000	0.00000	0.28538	3,200	0.00000	0.00761	31,000	0.00000	0.07372
10/05/01	TBW-N	0	285	09/25/01	120,000	0.00000	0.28538	3,200	0.00000	0.00761	31,000	0.00000	0.07372
10/12/01	TBW-N	100	385	09/25/01	120,000	0.10013	0.38551	3,200	0.00267	0.01028	31,000	0.02587	0.09959
10/19/01	TBW-N	0	385	09/25/01	120,000	0.00000	0.38551	3,200	0.00000	0.01028	31,000	0.00000	0.09959
10/29/01	TBW-N	5	390	09/25/01	120,000	0.00501	0.39052	3,200	0.00013	0.01041	31,000	0.00129	0.10088
11/02/01	TBW-N	10	400	09/25/01	120,000	0.01001	0.40053	3,200	0.00027	0.01068	31,000	0.00259	0.10347
11/16/01	TBW-N	400	800	09/25/01	120,000	0.40053	0.80106	3,200	0.01068	0.02136	31,000	0.10347	0.20694
11/30/01	TBW-N	1,100	1,900	11/20/01	72,000	0.66087	1.46193	2,200	0.02019	0.04155	35,000	0.32126	0.52820
12/14/01	TBW-N	2,000	3,900	12/05/01	76,000	1.26834	2.73027	1,600	0.02670	0.06826	30,000	0.50066	1.02886
12/28/01	TBW-N	800	4,700	12/05/01	76,000	0.50734	3.23761	1,600	0.01068	0.07894	30,000	0.20026	1.22912
01/12/02	TBW-N	1,300	6,000	12/05/01	76,000	0.82442	4.06203	1,600	0.01736	0.09629	30,000	0.32543	1.55455
02/14/02	TBW-N	582	6,582	12/05/01	76,000	0.36909	4.43112	1,600	0.00777	0.10406	30,000	0.14569	1.70025
03/11/02*	TBW-N	838	7,420	03/01/02	91,000	0.63632	5.06744	1,200	0.00839	0.11246	29,000	0.20278	1.90303
04/01/02	TBW-N	700	8,120	03/01/02	91,000	0.53154	5.59898	1,200	0.00701	0.11946	29,000	0.16939	2.07242
05/01/02	TBW-N	801	8,921	03/01/02	91,000	0.60823	6.20721	1,200	0.00802	0.12749	29,000	0.19383	2.26625
06/05/02	TBW-N	400	9,321	06/06/02	100,000	0.33377	6.54098	2,100	0.00701	0.13449	18,000	0.06008	2.32633
07/11/02	TBW-N	672	9,993	06/06/02	100,000	0.56074	7.10172	2,100	0.01178	0.14627	18,000	0.10093	2.42726
08/12/02	TBW-N	165	10,158	06/06/02	100,000	0.13768	7.23940	2,100	0.00289	0.14916	18,000	0.02478	2.45205
09/09/02	TBW-N	272	10,430	09/06/02	69,000	0.15661	7.39601	870	0.00197	0.15114	17,000	0.03858	2.49063
10/08/02	TBW-N	272	10,702	09/06/02	69,000	0.15661	7.55262	870	0.00197	0.15311	17,000	0.03858	2.52922
11/09/02	TBW-N	800	11,502	09/06/02	69,000	0.46061	8.01323	870	0.00581	0.15892	17,000	0.11348	2.64270
12/13/02	TBW-N	700	12,202	12/19/02	110,000	0.64252	8.65574	1,900	0.01110	0.17002	19,000	0.11098	2.75368
01/08/03	TBW-N	1,000	13,202	12/19/02	110,000	0.91788	9.57362	1,900	0.01585	0.18587	19,000	0.15854	2.91222
02/05/03	TBW-N	0	13,202	12/19/02	110,000	0.00000	9.57362	1,900	0.00000	0.18587	19,000	0.00000	2.91222

Table 1: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995740, 2120 Montana St., 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)
Total Gallons Extracted:			**30.647**		**Total Pounds Removed:**		**11.99004**			**0.28818**			**6.91532**
					Total Gallons Removed:		**1.96558**			**0.03948**			**1.11537**

Abbreviations & Notes:

TPPH = Total purgeable hydrocarbons as gasoline
MtBE = Methyl tert-butyl ether
ppb = Parts per billion
gal = Gallons
* = Volume pumped estimated.
Mass removed based on the formula: volume extracted (gal) x concentration (µg/L) x ($g/10^6 µg$) x (pound/453.6g) x (3.785 L/gal)
Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxlbs/gmsxgals)
TPPH, benzene, and MTBE analyzed by EPA Method 8260
Concentrations based on most recent groundwater monitoring results
If concentration is less than the laboratory detection limit, one half of the detection limit concentration is used in the mass removal calculation.
Groundwater extracted by vacuum trucks provided by Onyx. Water disposed of at a Martinez Refinery.

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

January 16, 2003

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

Fourth Quarter 2002 Groundwater Monitoring at
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Monitoring performed on December 12 and 19, 2002

Groundwater Monitoring Report **021212-SS-2**

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.
1144 65th Street, Suite C
Oakland, CA 94608-2411

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-1	03/19/3001	NA	NA	NA	NA	NA	NA	NA	159.59	12.14	147.45	ND
MW-1	03/23/2001	16,600	753	1,720	407	2,330	NA	27,500	159.59	12.25	147.34	ND
MW-1	05/31/2001	<20,000d	1,000d	920d	490d	2,000d	NA	54,000d	161.13	12.22	148.91	ND
MW-1	06/27/2001	NA	NA	NA	NA	NA	NA	NA	159.59	13.00b	NA	ND
MW-1	07/09/2001	NA	NA	NA	NA	NA	NA	NA	159.59	13.17	146.67	0.31
MW-1	09/25/2001	NA	NA	NA	NA	NA	NA	NA	159.59	14.27	145.66	0.43
MW-1	11/20/2001	NA	NA	NA	NA	NA	NA	NA	159.59	13.49	146.14	0.05
MW-1	12/05/2001	NA	NA	NA	NA	NA	NA	NA	159.59	11.32	148.31	0.05
MW-1	03/01/2002	NA	NA	NA	NA	NA	NA	NA	159.59	13.22	146.56	0.24
MW-1	06/06/2002	NA	NA	NA	NA	NA	NA	NA	159.59	12.99	147.00	0.50
MW-1	07/16/2002	NA	NA	NA	NA	NA	NA	NA	159.59	13.37	146.22	ND
MW-1	09/06/2002	NA	NA	NA	NA	NA	NA	NA	159.57	13.30	146.70	0.54
MW-1	**12/12/2002**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**159.57**	**13.78**	**146.61**	**1.03**
MW-2	03/19/3001	NA	NA	NA	NA	NA	NA	NA	158.03	11.60	146.43	ND
MW-2	03/23/2001	4,450	280	41.0	62.1	63.0	NA	16,600	158.03	11.76	146.27	ND
MW-2	05/31/2001	<20,000a	820a	<200a	<200a	<200a	NA	63,000a	158.03	11.40	146.63	ND
MW-2	06/27/2001	<50,000	610	4.0	13	9.2	NA	47,000	158.03	12.65	145.38	ND
MW-2	09/25/2001	<2,000	41	<20	<20	<20	NA	6,400	158.03	12.89	145.14	ND
MW-2	12/05/2001	<2,000	74	<20	<20	<20	NA	8,400	158.03	10.40	147.63	ND
MW-2	03/01/2002	<1,000	<10	<10	<10	<10	NA	2,900	158.03	11.52	146.51	ND
MW-2	06/06/2002	<5,000	210	<50	<50	<50	NA	23,000	158.03	12.15	145.88	ND
MW-2	07/16/2002	NA	NA	NA	NA	NA	NA	NA	158.03	12.25	145.78	ND
MW-2	09/06/2002	<2,000	56	<20	<20	<20	NA	11,000	158.01	12.44	145.57	ND
MW-2	**12/12/2002**	**<2,500**	**80**	**<25**	**<25**	**<25**	**NA**	**13,000**	**158.01**	**12.53**	**145.48**	**ND**
MW-3	03/19/3001	NA	NA	NA	NA	NA	NA	NA	161.13	11.42	149.71	ND
MW-3	03/23/2001	<50.0	<0.500	<0.500	<0.500	<0.500	NA	1.26	161.13	11.42	149.71	ND

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
MW-3	05/31/2001	<50e	<0.50e	<0.50e	<0.50e	<0.50e	NA	<5.0e	159.59	13.00	146.59	ND
MW-3	06/27/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	161.13	12.32	148.81	ND
MW-3	09/25/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<0.50	161.13	12.50	148.63	ND
MW-3	12/05/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	161.13	10.13	151.00	ND
MW-3	03/01/2002	<50	<0.50	<0.50	<0.50	0.73	NA	<5.0	161.13	11.63	149.50	ND
MW-3	06/06/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	161.13	11.55	149.58	ND
MW-3	07/16/2002	NA	NA	NA	NA	NA	NA	NA	161.13	11.72	149.41	ND
MW-3	09/06/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	161.11	12.24	148.87	ND
MW-3	**12/12/2002**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**<5.0**	**161.11**	**12.18**	**148.93**	**ND**
MW-4	07/10/2002	NA	NA	NA	NA	NA	NA	NA	NM	13.19	NA	ND
MW-4	07/16/2002	800	1.1	1.1	2.6	2.4	NA	450	NM	13.56	NA	ND
MW-4	09/06/2002	1,100	3.0	1.8	8.0	4.6	NA	110	160.09	13.67	146.42	ND
MW-4	**12/12/2002**	**130**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**940**	**160.09**	**14.06**	**146.03**	**ND**
MW-5	07/10/2002	NA	NA	NA	NA	NA	NA	NA	NM	12.22	NA	ND
MW-5	07/16/2002	6,100	65	7.2	100	130	NA	410	NM	12.50	NA	ND
MW-5	09/06/2002	5,900	100	8.1	41	32	NA	230	158.25	12.77	145.48	ND
MW-5	**12/12/2002**	**4,900**	**70**	**5.7**	**25**	**17**	**NA**	**280**	**158.25**	**12.71**	**145.54**	**ND**
TBW-N	09/25/2001 c	120,000	3,200	2,800	4,000	18,000	NA	31,000	NM	12.25	NM	ND
TBW-N	11/20/2001	72,000	2,200	3,600	2,600	14,000	NA	35,000	NM	12.13	NM	ND
TBW-N	12/05/2001	76,000	1,600	3,200	2,900	15,000	NA	30,000	NM	11.51	NM	ND
TBW-N	03/01/2002	91,000	1,200	4,200	2,800	14,000	NA	29,000	NM	11.88	NM	ND
TBW-N	06/06/2002	100,000	2,100	8,200	3,400	17,000	NA	18,000	NM	12.48	NM	ND
TBW-N	07/16/2002	NA	NA	NA	NA	NA	NA	NA	NM	12.39	NM	ND
TBW-N	09/06/2002	69,000	870	4,800	2,300	11,000	NA	17,000	161.26	12.36	148.90	ND
TBW-N	**12/12/2002**	**Well inaccessible**		**NA**	**NA**	**NA**	**NA**	**NA**	**161.26**	**NA**	**NA**	**NA**

WELL CONCENTRATIONS
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)
TBW-N	12/19/2002	110,000	1,900	13,000	3,100	18,000	NA	19,000	161.26	10.82	150.44	NA

Abbreviations:
TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8015.
BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to May 31, 2001, analyzed by EPA Method 8020.
MTBE = Methyl-tertiary-butyl ether
TOC = Top of Casing Elevation
GW = Groundwater
TBW-N = tank backfill well-north
NA = Not analyzed
ND = Not detected
NM = Not measured
ug/L = parts per billion
MSL = Mean sea level
ft = Feet
<n = Below detection limit

Notes:
a = Resampled on June 27, 2001, due to possible mislabeling.
b = Separate phase hydrocarbons encountered during purge; groundwater elevation may not be accurate.
c = Sample TBW-N was analyzed once within hold time, but the analyte concentrations all exceeded the instrument working ranges. The sample was diluted and re-analyzed out of hold time. The diluted analysis is reported because it more accurately reflects the concentrations present.
d = These results are listed as MW-3 on analytical report due to possible mislabeling in field or laboratory. Resampled on June 27, 2001, to confirm mislabeling.
e = These results are listed as MW-1 on analytical report due to possible mislabeling in field or laboratory. Resampled on June 27, 2001, to confirm mislabeling.
Survey data provided by Cambria Environmental Technology, May 2001.
Site surveyed February 12 and June 26, 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).

KIFF ANALYTICAL LLC

Report Number : 30525
Date : 12/27/02

Leon Gearhart
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 1 Water Sample
Project Name : 2120 Montana Street, Oakland
Project Number : 021219-RH3
P.O. Number : 98995740

Dear Mr. Gearhart,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 30525
Date : 12/27/02

Project Name : **2120 Montana Street, Oakland**
Project Number : **021219-RH3**

Sample : **TBW-N** Matrix : Water Lab Number : 30525-01
Sample Date :12/19/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**1900**	50	ug/L	EPA 8260B	12/27/02
Toluene	**13000**	50	ug/L	EPA 8260B	12/27/02
Ethylbenzene	**3100**	50	ug/L	EPA 8260B	12/27/02
Total Xylenes	**18000**	50	ug/L	EPA 8260B	12/27/02
Methyl-t-butyl ether (MTBE)	**19000**	500	ug/L	EPA 8260B	12/27/02
TPH as Gasoline	**110000**	5000	ug/L	EPA 8260B	12/27/02
Toluene - d8 (Surr)	97.3		% Recovery	EPA 8260B	12/27/02
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	12/27/02

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30525

Date : 12/27/02

QC Report : Method Blank Data

Project Name : **2120 Montana Street, Oakland**

Project Number : **021219-RH3**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/26/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/26/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/26/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	12/26/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/26/02
Toluene - d8 (Surr)	97.3		%	EPA 8260B	12/26/02
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	12/26/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St. Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30525

Date : 12/27/02

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : **2120 Montana Street,**

Project Number : **021219-RH3**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	30566-04	<0.50	40.0	40.0	40.7	39.4	ug/L	EPA 8260B	12/26/02	102	98.5	3.22	70-130	25
Toluene	30566-04	<0.50	40.0	40.0	40.2	39.2	ug/L	EPA 8260B	12/26/02	100	97.9	2.57	70-130	25
Tert-Butanol	30566-04	<5.0	200	200	209	201	ug/L	EPA 8260B	12/26/02	104	101	3.58	70-130	25
Methyl-t-Butyl Ether	30566-04	<0.50	40.0	40.0	48.4	46.8	ug/L	EPA 8260B	12/26/02	121	117	3.46	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30525

QC Report : Laboratory Control Sample (LCS)

Date : 12/27/02

Project Name : **2120 Montana Street,**

Project Number : **021219-RH3**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	12/26/02	98.7	70-130
Toluene	40.0	ug/L	EPA 8260B	12/26/02	97.4	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/26/02	108	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/26/02	116	70-130

KIFF ANALYTICAL, LLC

Approved By: Joel Kiff

SHELL Chain of Custody Record

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced: Karen Petryna

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

30525

INCIDENT NUMBER (S&E ONLY): 98995740

SAP or CRMT NUMBER (TS/CRMT):

DATE: 12/19/02

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services

LOG CODE: BTSS

ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112

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

TELEPHONE: 408-573-0555 FAX: 408-573-7771 E-MAIL: lgearhart@blainetech.com

SITE ADDRESS (Street and City): 2120 Montana Street, Oakland

GLOBAL ID NO.: T0600101805

EDF DELIVERABLE TO (Responsible Party or Designee): Anni Kreml PHONE NO.: 510-420-3335 E-MAIL: ShellOaklandEDF@cambria-env.com CONSULTANT PROJECT NO.: BTS # 021219-RH3

SAMPLER NAME(S) (Print): Ryan Hanstedt

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)		TPH - Diesel, Extractable (8015m)	TEMPERATURE ON RECEIPT C°
	~~DUP-W~~ TBW-N	12/19/02	1340	GW	3	X	X	X									-01
	LR 12-20-02																

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

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John Cuttle / Kiff Analytical	Date: 12/20/02	Time: 1116

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

10/16/00 Revision

Q&Q Graphic (714) 898-9702

KIFF ANALYTICAL LLC

Report Number : 30382
Date : 12/24/02

Leon Gearhart
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 4 Water Samples
Project Name : 2120 Montana Street, Oakland
Project Number : 021212-SS2
P.O. Number : 98995740

Dear Mr. Gearhart,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 30382

Date : 12/24/02

Project Name : **2120 Montana Street, Oakland**

Project Number : **021212-SS2**

Sample : **MW-2** Matrix : Water Lab Number : 30382-01

Sample Date :12/12/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**80**	25	ug/L	EPA 8260B	12/21/02
Toluene	**< 25**	25	ug/L	EPA 8260B	12/21/02
Ethylbenzene	**< 25**	25	ug/L	EPA 8260B	12/21/02
Total Xylenes	**< 25**	25	ug/L	EPA 8260B	12/21/02
Methyl-t-butyl ether (MTBE)	**13000**	250	ug/L	EPA 8260B	12/21/02
TPH as Gasoline	**< 2500**	2500	ug/L	EPA 8260B	12/21/02
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	12/21/02
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	12/21/02

Sample : **MW-3** Matrix : Water Lab Number : 30382-02

Sample Date :12/12/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/16/02
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/16/02
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/16/02
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/16/02
Methyl-t-butyl ether (MTBE)	**< 5.0**	5.0	ug/L	EPA 8260B	12/16/02
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	12/16/02
Toluene - d8 (Surr)	96.6		% Recovery	EPA 8260B	12/16/02
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	12/16/02

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 30382
Date : 12/24/02

Project Name : **2120 Montana Street, Oakland**
Project Number : **021212-SS2**

Sample : **MW-4** Matrix : Water Lab Number : 30382-03
Sample Date :12/12/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/16/02
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	12/16/02
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/16/02
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	12/16/02
Methyl-t-butyl ether (MTBE)	**940**	25	ug/L	EPA 8260B	12/18/02
TPH as Gasoline	**130**	50	ug/L	EPA 8260B	12/16/02
Toluene - d8 (Surr)	97.0		% Recovery	EPA 8260B	12/16/02
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	12/16/02

Sample : **MW-5** Matrix : Water Lab Number : 30382-04
Sample Date :12/12/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**70**	2.0	ug/L	EPA 8260B	12/21/02
Toluene	**5.7**	2.0	ug/L	EPA 8260B	12/21/02
Ethylbenzene	**25**	2.0	ug/L	EPA 8260B	12/21/02
Total Xylenes	**17**	2.0	ug/L	EPA 8260B	12/21/02
Methyl-t-butyl ether (MTBE)	**280**	20	ug/L	EPA 8260B	12/21/02
TPH as Gasoline	**4900**	200	ug/L	EPA 8260B	12/21/02
Toluene - d8 (Surr)	93.5		% Recovery	EPA 8260B	12/21/02
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	12/21/02

Approved By: Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30382

Date : 12/24/02

QC Report : Method Blank Data

Project Name : **2120 Montana Street, Oakland**

Project Number : **021212-SS2**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/19/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/19/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/19/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/19/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	12/19/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/19/02
Toluene - d8 (Surr)	112		%	EPA 8260B	12/19/02
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	12/19/02
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/16/02
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/16/02
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/16/02
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/16/02
Methyl-t-butyl ether (MTBE)	< 5.0	5.0	ug/L	EPA 8260B	12/16/02
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/16/02
Toluene - d8 (Surr)	97.3		%	EPA 8260B	12/16/02
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	12/16/02

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St. Suite 300 Davis. CA 95616 530-297-4800

Report Number : 30382

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/24/02

Project Name : **2120 Montana Street,**

Project Number : **021212-SS2**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	30430-01	63	40.0	39.8	97.5	93.6	ug/L	EPA 8260B	12/19/02	86.5	77.1	11.5	70-130	25
Toluene	30430-01	0.60	40.0	39.8	37.5	37.1	ug/L	EPA 8260B	12/19/02	92.2	91.9	0.390	70-130	25
Tert-Butanol	30430-01	25	200	199	211	210	ug/L	EPA 8260B	12/19/02	93.2	93.4	0.210	70-130	25
Methyl-t-Butyl Ether	30430-01	1.7	40.0	39.8	34.9	35.3	ug/L	EPA 8260B	12/19/02	82.9	84.3	1.67	70-130	25
Benzene	30364-02	<0.50	40.0	40.0	39.2	38.2	ug/L	EPA 8260B	12/16/02	98.0	95.5	2.58	70-130	25
Toluene	30364-02	<0.50	40.0	40.0	39.1	38.2	ug/L	EPA 8260B	12/16/02	97.7	95.5	2.28	70-130	25
Tert-Butanol	30364-02	380	200	200	582	594	ug/L	EPA 8260B	12/16/02	103	109	5.50	70-130	25
Methyl-t-Butyl Ether	30364-02	<0.50	40.0	40.0	39.6	39.3	ug/L	EPA 8260B	12/16/02	99.0	98.3	0.735	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 30382

QC Report : Laboratory Control Sample (LCS)

Date : 12/24/02

Project Name : **2120 Montana Street,**

Project Number : **021212-SS2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	12/19/02	97.2	70-130
Toluene	20.0	ug/L	EPA 8260B	12/19/02	93.3	70-130
Tert-Butanol	100	ug/L	EPA 8260B	12/19/02	93.8	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	12/19/02	76.0	70-130
Benzene	40.0	ug/L	EPA 8260B	12/16/02	95.8	70-130
Toluene	40.0	ug/L	EPA 8260B	12/16/02	95.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	12/16/02	90.1	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	12/16/02	96.3	70-130

KIFF ANALYTICAL, LLC

Approved By: Joel Kiff

SHELL Chain Of Custody Record

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

Shell Project Manager to be Invoiced:

- [x] SCIENCE & ENGINEERING
- [ ] TECHNICAL SERVICES
- [ ] CRMT HOUSTON

Karen Petryna

30382

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 4 0

SAP or CRMT NUMBER (TS/CRMT): [redacted]

DATE: 12/12/02

PAGE: 1 of 1

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS (Street and City):	GLOBAL ID NO.:
Blaine Tech Services	BTSS	2120 Montana Street, Oakland	T0600101805

ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112

EDF DELIVERABLE TO (Responsible Party or Designee): Anni Kreml — PHONE NO.: 510-420-3335 — E-MAIL: ShellOaklandEDF@cambria-env.com — CONSULTANT PROJECT NO.: BTS # 021212-552

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

SAMPLER NAME(S) (Print): Suchen Sung

TELEPHONE: 408-573-0555 — FAX: 408-573-7771 — E-MAIL: lgearhart@blainetech.com

LAB USE ONLY

TURNAROUND TIME (BUSINESS DAYS): [x] 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)		TPH - Diesel, Extractable (8015m)										FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes / TEMPERATURE ON RECEIPT C°
	MW-2	12/12/02	1112	GW	3	X	X	X																		-01
	MW-3	↓	1142	↓	↓	X	X	X																		-02
	MW-4	↓	1150	↓	↓	X	X	X																		-03
	MW-5	↓	1058	↓	↓	X	X	X																		-04

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]			
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) John [signature] Kiff Analytical	Date: 121302	Time: 1111

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

10/16/00 Revision

Q&Q Graphic (714) 898-9702

WELL GAUGING DATA

Project # 021219-RH3 Date 12/19/02 Client Shell

Site 2120 Montana 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	
TBW-N ~~TWB-N~~	4	Sheen/ odor	gauged w/ finger in well			10.72	13.23	↓	

SHELL WELL MONITORING DATA SHEET

BTS #: 021219-RH3	Site: 2120 Montana St, Oakland
Sampler: Ryan H	Date: 12/19/02
Well I.D.: ~~FWB-N~~ TBW-N	Well Diameter: 2 3 (4) 6 8 ____
Total Well Depth (TD): 13.23	Depth to Water (DTW): 10.82
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]: 11.30	

Purge Method: (Bailer) / Disposable Bailer / Middleburg / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

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

1.6 (Gals.) X	3	=	4.8 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
1330	65.3	5.6	1346	> 200	1.6	blackish, sheen, odor
1342	67.2	5.9	1350	> 200	3.2	" " "
1354	67.3	5.9	1346	> 200	4.8	" " "

Did well dewater? Yes (No) Gallons actually evacuated: 4.8

Sampling Date: 12/19/02 Sampling Time: 1340 Depth to Water: 10.85

Sample I.D.: ~~FWB-N~~ TBW-N Laboratory: (Kiff) SPL 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

WELL GAUGING DATA

Project # 021212-SS2 Date 12/12/02 Client SHELL

Site 2120 MONTANA 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	2	ODOR	12.75	1.03		13.78	28.32		
MW-2	2					12.53	20.00		
MW-3	2					12.18	20.11		
MW-4	4					14.06	19.85		
MW-5	2					12.71	19.90		
TBW-N	4	VEHICLE	W/ FLAT TIRE	PARKED OVER		———	13.23		

SHELL WELL MONITORING DATA SHEET

BTS #: 021212-552	Site: SHELL
Sampler: SCOTT	Date: 12/12/02
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 28.56	Depth to Water (DTW): 13.78
Depth to Free Product: 12.75	Thickness of Free Product (feet): 1.03
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

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

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

_____(Gals.) X 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 µS)	Turbidity (NTUs)	Gals. Removed	Observations
1.03' OF PRODUCT PRESENT. UNABLE TO SAMPLE.						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 12/12/02 Sampling Time: Depth to Water:

Sample I.D.: MW-1 Laboratory: (Kiff) SPL 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 #: 021212-552	Site: SHELL
Sampler: SCOTT	Date: 12/12/02
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 20.00	Depth to Water (DTW): 12.53
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]: ———	

Purge Method: (Bailer) / Disposable Bailer / Middleburg / Electric Submersible / Waterra / Peristaltic / Extraction Pump / Other_____

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

1.2 (Gals.) X 3 (Specified Volumes) = 3.6 (Calculated Volume) Gals.

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
1106	18.5	7.0	780	>200	1.2	cloudy
1108	18.6	6.9	800	>200	2.4	"
1110	18.6	6.9	850	>200	3.6	"

Did well dewater? Yes (No) Gallons actually evacuated: 3.6

Sampling Date: 12/12/02 Sampling Time: 1112 Depth to Water: 15.15 (TRAFFIC NOISE)

Sample I.D.: MW-2 Laboratory: (Kiff) SPL 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

NO LOCK

SHELL WELL MONITORING DATA SHEET

BTS #: 021212-552	Site: SHELL
Sampler: SOOCHT	Date: 12/12/02
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 20.11	Depth to Water (DTW): 12.18
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]: 13.77	

Purge Method: (Bailer) Waterra Sampling Method: (Bailer)
Disposable Bailer Peristaltic Disposable Bailer
Middleburg Extraction Pump Extraction Port
Electric Submersible Other_____ Dedicated Tubing
Other: _____

1.3 (Gals.) X 3 = 3.9 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
1120	20.1	7.0	680	>200	1.3	cloudy
1122	20.6	7.0	667	>200	2.6	"
1124	20.6	7.0	685	>200	4.0	"

Did well dewater? Yes (No) Gallons actually evacuated: 4

Sampling Date: 12/12/02 Sampling Time: 1142 Depth to Water: 14.70 @ SITE DEPART.

Sample I.D.: MW-3 Laboratory: (Kiff) SPL 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 #: 021212-552	Site: SHELL
Sampler: SCOTT	Date: 12/12/02
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 19.85	Depth to Water (DTW): 14.06
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]: 15.22	

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

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

4 (Gals.) X 3 = 12 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 (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1132	19.5	7.0	760	89	4	ALMOST CLEAR
WELL DEWATERED @ 5 gal.						DTW = 17.70
1148	19.6	7.0	775	>200	———	TMPB 10

Did well dewater? (Yes) No Gallons actually evacuated: 5

Sampling Date: 12/12/02 Sampling Time: 1150 Depth to Water: 17.03 @ SITE DEPART.

Sample I.D.: MW-4 Laboratory: (Kiff) SPL 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

NO LOCK BAILED WATER

SHELL WELL MONITORING DATA SHEET

BTS #: 021212-552	Site: SHELL
Sampler: SCOTT	Date: 12/12/02
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 19.90	Depth to Water (DTW): 12.71
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]: ———	

Purge Method: (Bailer) Waterra Sampling Method: (Bailer)
Disposable Bailer Peristaltic Disposable Bailer
Middleburg Extraction Pump Extraction Port
Electric Submersible Other_____ Dedicated Tubing
Other: _____

1.2 (Gals.) X 3 = 3.6 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 (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1050	17.9	6.5	848	~~848~~ >200	1.2	BROWN / GAS ODOR
WELL DEWATERED @ 1.5 gal.						DTW = 18.10
1057	17.8	6.7	837	>200	———	BROWN

Did well dewater? (Yes) No Gallons actually evacuated: 1.5

Sampling Date: 12/12/02 Sampling Time: 1058 Depth to Water: 17.85 (TRAFFIC WELL)

Sample I.D.: MW-5 Laboratory: (Kiff) SPL 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

NO LOCK

SHELL WELL MONITORING DATA SHEET

BTS #: 021212-SS2	Site: SHELL
Sampler: SCOTT	Date: 12/12/02
Well I.D.: ~~MW-~~ TBW-N	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 13.23	Depth to Water (DTW): ~~~~
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]:	

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

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

_____(Gals.) X 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 µS)	Turbidity (NTUs)	Gals. Removed	Observations
WELL PARKED OVER. VEHICLE HAS TWO FLAT TIRES.						
UNABLE TO GAUGE + SAMPLE.						

Did well dewater? Yes No Gallons actually evacuated:

Sampling Date: 12/12/02 Sampling Time: Depth to Water:

Sample I.D.: MW- Laboratory: (Kiff) SPL 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