CAMBRIA

MAR 06 2002

March 1, 2002

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

Re: **Fourth Quarter 2001 Monitoring Report**
Shell-branded Service Station
5755 Broadway
Oakland, California
Incident #98995756
Cambria Project #244-0483-002

Dear Ms. Drogos:

On behalf of Equiva Services LLC, Cambria Environmental Technology, Inc. (Cambria) is submitting this groundwater monitoring report in accordance with the reporting requirements of 23 CCR 2652d.

REMEDIATION SUMMARY

The site location is shown on Figures 1 and 2. Mobile groundwater extraction (GWE) was conducted periodically at the site using a vacuum truck from April to November 2000. A single dual-phase vacuum extraction (DVE) event was performed at the site on February 7, 2001, and monthly mobile DVE was conducted at the site from May to November 2001. Mobile DVE is the process of using a vacuum truck to apply high vacuum through an airtight well seal to simultaneously extract soil vapors from the vadose zone and enhance groundwater extraction from the saturated zone. GWE and DVE have collectively extracted approximately 20,038 gallons of groundwater from wells S-2, H-1, and T-2, and removed 0.46 pounds of methyl tertiary-butyl ether (MTBE).

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

FOURTH QUARTER 2001 ACTIVITIES

Groundwater Monitoring: Blaine Tech Services, Inc. (Blaine) of San Jose, California gauged and sampled selected 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.

Additional Oxygenate Analysis: In addition to the regular quarterly analysis for TPHg, benzene, toluene, ethylbenzene, xylenes, and MTBE, groundwater samples from monitoring wells S-1 and S-2 were analyzed for five extra oxygenates. Analytical results for MTBE, di-isopropyl ether, ethyl tertiary-butyl ether, tertiary-amyl methyl ether, tertiary-butyl alcohol, and ethanol are summarized in Table 1.

DVE: On October 24, 2001 Advanced Cleanup Technologies Inc. of Benicia, California conducted a mobile DVE event at the site using a vacuum truck. The DVE was performed on wells S-2 and H-1 (Figure 2). After extracting groundwater and vapors from well S-2 for 6 hours, the truck extracted groundwater from well H-1 for 2 hours. Mass removal data from this event are presented in Tables 2 and 3. Subsequent to Alameda County Health Care Services Agency (ACHCSA) notification in our November 7, 2001 *Third Quarter 2001 Monitoring Report*, Cambria suspended monthly DVE from wells S-2 and H-1. Concentrations have remained the same in well S-2 for the last three quarters, and DVE has removed only 450 gallons of groundwater from well S-2 during the last four events. Remedial options will be evaluated following our proposed subsurface investigation.

ANTICIPATED FIRST QUARTER 2002 ACTIVITIES

Groundwater Monitoring: Blaine will gauge and sample all wells, including the horizontal well (without purging), and tabulate the data. Cambria will prepare a monitoring report.

On/Offsite Subsurface Investigation: On January 24, 2002, Cambria submitted an *On/Offsite Subsurface Investigation Work Plan* to the ACHCSA. In the work plan, Cambria proposed defining the source area and downgradient impact of MTBE by advancing soil borings to collect soil and groundwater samples in the locations proposed on Figure 3. In a March 1, 2002 phone conversation with the ACHCSA, Donna Drogos stated that Susan Hugo is no longer the

ACHCSA case worker, the site has not been re-assigned to a new case worker, and the work plan has not been reviewed. Cambria will call the ACHCSA in mid March to determine the status of review, and upon approval, Cambria will proceed with the investigation.

CLOSING

We appreciate the opportunity to work with you on this project. Please call James Loetterle at (510) 420-3136 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

James Loetterle
Project Geologist

Stephan A. Bork, C.E.G., C.HG
Associate Geologist

REGISTERED GEOLOGIST
STEPHAN A. BORK
No. EG 2058
CERTIFIED
ENGINEERING
GEOLOGIST
STATE OF CALIFORNIA

Figures: 1 - Vicinity/Well Survey Map
2 - Groundwater Elevation Contour Map
3 - Proposed Soil Boring Locations

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

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

cc: Karen Petryna, Equiva Services LLC, P.O. Box 7869, Burbank, CA, 91510-7869
Zimskigutman Enterprises, 6046 Lawton, Oakland, CA 94618-1803

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02/13/02

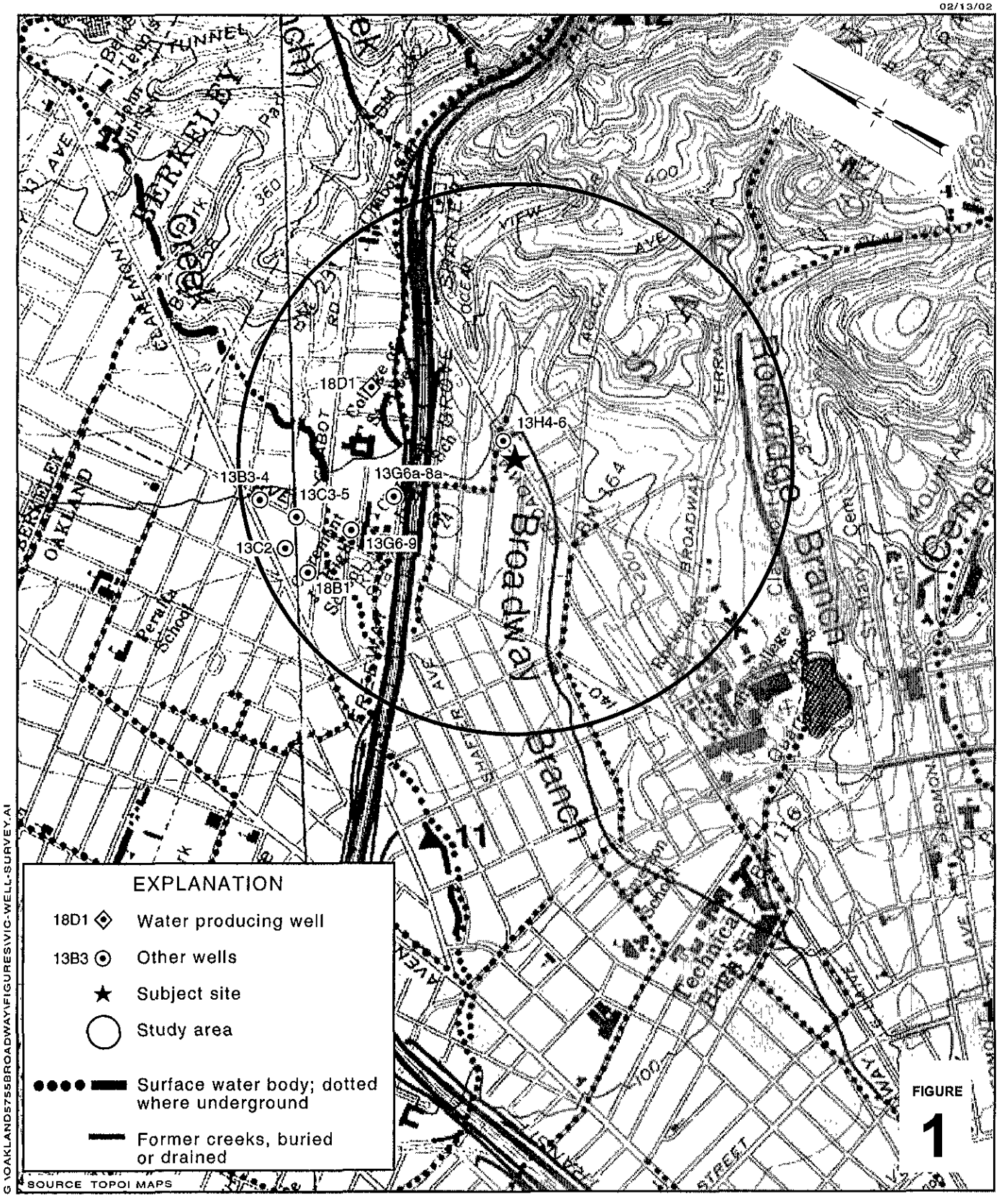

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FIGURE
1

Shell-branded Service Station

5755 Broadway

Oakland, California

Incident #98995756

CAMBRIA

Vicinity / Well Survey Map

(1/2-Mile Radius)

02/07/02

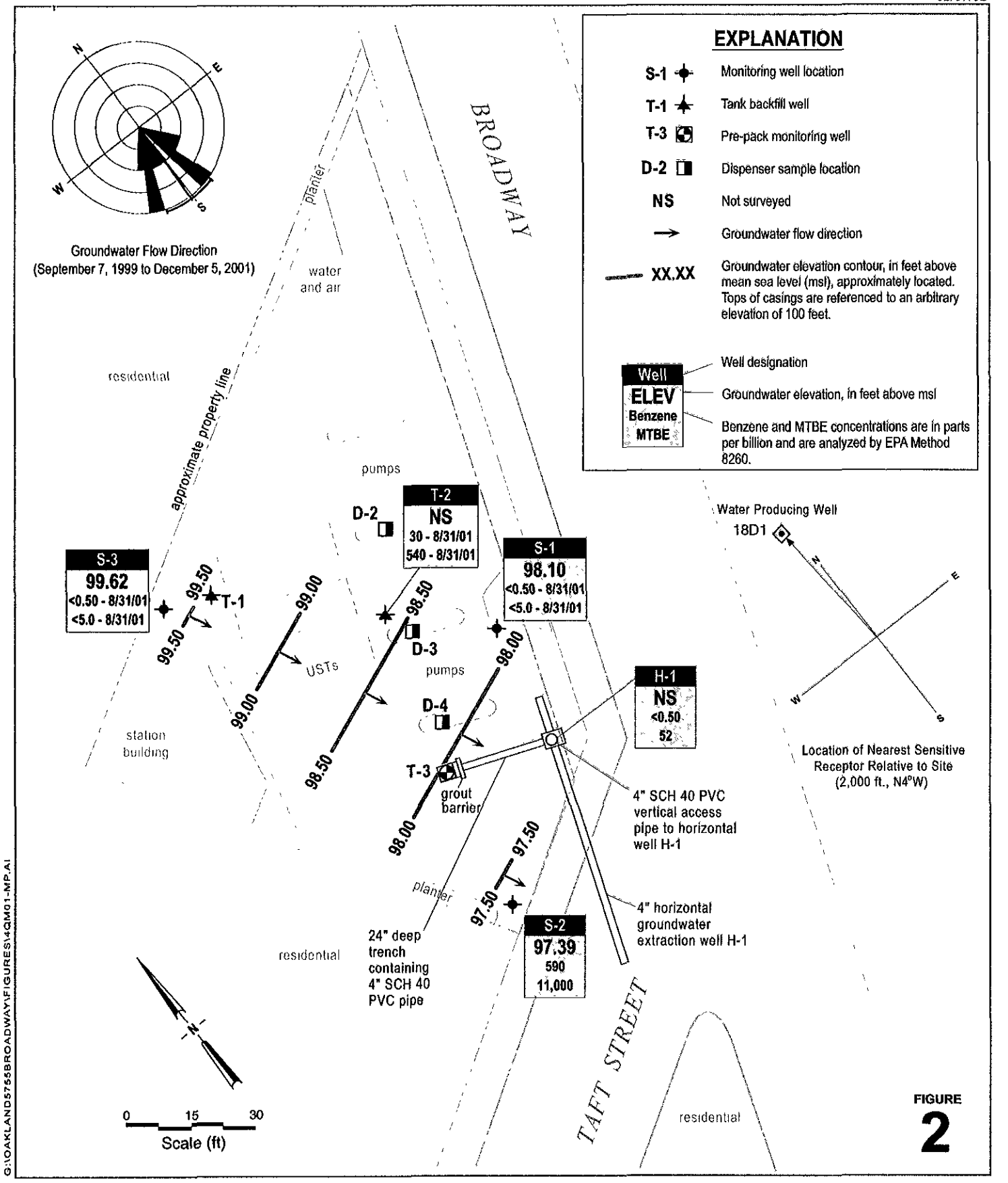

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FIGURE
2

Shell-branded Service Station

5755 Broadway
Oakland, California
Incident #98995756

CAMBRIA

Groundwater Elevation Contour Map

December 5, 2001

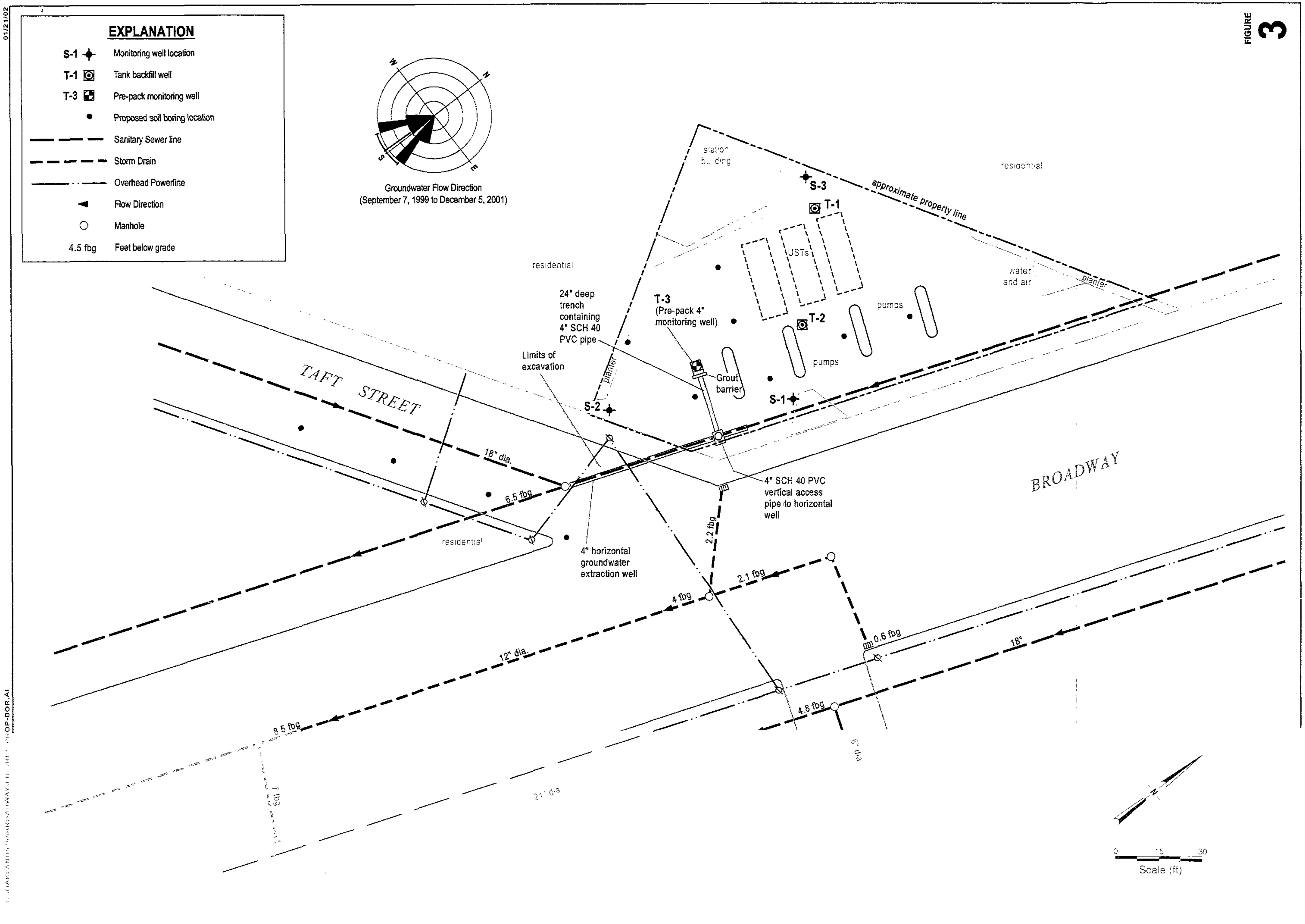
EXPLANATION
S-1 Monitoring well location
T-1 Tank backfill well
T-3 Pre-pack monitoring well
Proposed soil boring location
Sanitary Sewer line
Storm Drain
Overhead Powerline
Flow Direction
Manhole
4.5 fbg Feet below grade
W
N
S
E
Groundwater Flow Direction
(September 7, 1999 to December 5, 2001)
S-3
T-1
approximate property line
residential
USTs
water
and air
planter
T-3
(Pre-pack 4"
monitoring well)
T-2
pumps
pumps
24" deep
trench
containing
4" SCH 40
PVC pipe
Limits of
excavation
planter
Grout
barrier
S-1
S-2
residential
TAFT STREET
18" dia.
6.5 fbg
residential
4" horizontal
groundwater
extraction well
4" SCH 40 PVC
vertical access
pipe to horizontal
well
BROADWAY
2.2 fbg
2.1 fbg
4 fbg
12" dia.
0.6 fbg
18"
8.5 fbg
4.8 fbg
6" dia
7 fbg
21" dia
N
0
15
30
Scale (ft)

FIGURE 3

Proposed Soil Boring Locations

CAMBRIA

Shell-branded Service Station
5755 Broadway
Oakland, California
Incident #98995756

Table 1. **Groundwater Analytical Data - Oxygenates** - Shell-branded Service Station, Incident #98995756, 5755 Broadway, Oakland, California

Sample ID	Date Sampled	MTBE	DIPE	ETBE	TAME	TBA	Ethanol
		← (Concentrations in ppb) →					
S-1	12/05/01	2.6	<2.0	<2.0	<2.0	<50	<500
S-2	12/05/01	11,000	<5.0	<5.0	9.5	1,100	<500

Abbreviations:

MTBE = Methyl tert-butyl ether, analyzed by EPA Method 8260
DIPE = Di-isopropyl ether, analyzed by EPA Method 8260
ETBE = Ethyl tert-butyl ether, analyzed by EPA Method 8260
TAME = Tert-amyl methyl ether, analyzed by EPA Method 8260
TBA = Tert-butyl alcohol, analyzed by EPA Method 8260
Ethanol analyzed by EPA Method 8260
ppb = Parts per billion

Table 2: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995756, 5755 Broadway, 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		
04/21/00	S-2	30	30	02/02/00	103	0.00003	0.00003	0.825	0.00000	0.00000	**10,500**	0.00263	0.00263
05/23/00	S-2	50	80	04/26/00	4,040	0.00169	0.00171	799	0.00033	0.00033	19,000	0.00793	0.01056
07/12/00	S-2	1,007	1,087	04/26/00	4,040	0.03395	0.03566	799	0.00671	0.00705	19,000	0.15965	0.17021
08/12/00	S-2	50	1,137	07/25/00	1,120	0.00047	0.03613	195	0.00008	0.00713	**21,100**	0.00880	0.17901
09/14/00	S-2	0	1,137	07/25/00	1,120	0.00000	0.03613	195	0.00000	0.00713	**21,100**	0.00000	0.17901
10/11/00	S-2	0	1,137	07/25/00	1,120	0.00000	0.03613	195	0.00000	0.00713	**21,100**	0.00000	0.17901
10/30/00	S-2	32	1,169	07/25/00	1,120	0.00030	0.03642	195	0.00005	0.00718	**21,100**	0.00563	0.18465
11/06/00	S-2	35	1,204	07/25/00	1,120	0.00033	0.03675	195	0.00006	0.00724	**21,100**	0.00616	0.19081
11/15/00	S-2	12	1,216	11/15/00	613	0.00006	0.03681	35.6	0.00000	0.00724	**17,800**	0.00178	0.19259
02/07/01	S-2	35	1,251	11/15/00	613	0.00018	0.03699	35.6	0.00001	0.00725	**17,800**	0.00520	0.19779
05/31/01	S-2	200	1,451	02/12/01	9,010	0.01504	0.05203	1,430	0.00239	0.00964	**17,000**	0.02837	0.22616
06/13/01	S-2	200	1,651	06/07/01	31,000	0.05174	0.10376	1,000	0.00167	0.01131	**17,000**	0.02837	0.25453
07/20/01	S-2	200	1,851	06/07/01	31,000	0.05174	0.15550	1,000	0.00167	0.01298	**17,000**	0.02837	0.28290
08/21/01	S-2	100	1,951	06/07/01	31,000	0.02587	0.18137	1,000	0.00083	0.01381	**17,000**	0.01419	0.29709
09/14/01	S-2	50	2,001	06/07/01	31,000	0.01293	0.19430	1,000	0.00042	0.01423	**17,000**	0.00709	0.30418
10/24/01	S-2	100	2,101	08/31/01	50,000	0.04172	0.23602	950	0.00079	0.01502	**17,000**	0.01419	0.31836
04/21/00	Horizontal	700	700	NA	NA	0.00000	0.00000	NA	0.00000	0.00000	NA	0.00000	0.00000
05/23/00	Horizontal	2,155	2,855	05/23/00	750	0.01349	0.01349	72.8	0.00131	0.00131	**406**	0.00730	0.00730
07/12/00	Horizontal	44	2,899	05/23/00	750	0.00028	0.01376	72.8	0.00003	0.00134	**406**	0.00015	0.00745
08/12/00*	Horizontal	2,000	4,899	05/23/00	750	0.01252	0.02628	72.8	0.00121	0.00255	**406**	0.00678	0.01423
09/14/00	Horizontal	1,044	5,943	05/23/00	750	0.00653	0.03281	72.8	0.00063	0.00318	**406**	0.00354	0.01776
10/11/00	Horizontal	800	6,743	05/23/00	750	0.00501	0.03782	72.8	0.00049	0.00367	**406**	0.00271	0.02047
05/31/01	Horizontal	1,500	8,243	05/23/00	750	0.00939	0.04721	72.8	0.00091	0.00458	**406**	0.00508	0.02555
06/13/01	Horizontal	1,104	9,347	05/23/00	750	0.00691	0.05412	72.8	0.00067	0.00525	**406**	0.00374	0.02929
07/20/01	Horizontal	1,800	11,147	05/23/00	750	0.01126	0.06538	72.8	0.00109	0.00635	**406**	0.00610	0.03539
08/21/01	Horizontal	1,400	12,547	05/23/00	750	0.00876	0.07414	72.8	0.00085	0.00720	**406**	0.00474	0.04014
10/24/01	Horizontal	1,350	13,897	05/23/00	750	0.00845	0.08259	72.8	0.00082	0.00802	**406**	0.00457	0.04471
02/07/01	T-2	2,890	2,890	07/25/00	815	0.01965	0.01965	17.6	0.00042	0.00042	133	0.00321	0.00321
07/20/01	T-2	0	2,890	02/12/01	310	0.00000	0.01965	7.48	0.00000	0.00042	301	0.00000	0.00321

Table 2: Groundwater Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995756, 5755 Broadway, 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**		
08/21/01	T-2	0	2,890	02/12/01	310	0.00000	0.01965	7.48	0.00000	0.00042	301	0.00000	0.00321
09/14/01	T-2	1,150	2,890	02/12/01	310	0.00297	0.02263	7.48	0.00007	0.00050	301	0.00289	0.00610
10/24/01	T-2	0	2,890	08/31/01	720	0.00000	0.02263	30	0.00000	0.00050	**540**	0.00000	0.00610
Total Gallons Extracted:			**20,038**		**Total Pounds Removed:**		**0.34124**			**0.02353**			**0.36917**
					Total Gallons Removed:		***0.05594***			***0.00322***			***0.05954***

Abbreviations & Notes:

TPPH = Total purgeable hydrocarbons as gasoline
MtBE = Methyl tert-butyl ether
ppb = Parts per billion
gal = Gallon
* = Purge volume estimated
Mass removed based on the formula: volume extracted (gal) x Concentration (µg/L) x (g/10^6µg) x (pound/453.6g) x (3.785 L/gal)
Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxlbs/gmsxgals)
TPPH, benzene analyzed by EPA Method 8015/8020
MTBE analyzed by EPA Method 8260 in bold font, all other MTBE analyzed by EPA Method 8020
Concentrations based on most recent groundwater monitoring results
Groundwater extracted by vacuum trucks provided by ACTI. Water disposed of at a Martinez Refinery.

Table 3: Vapor Extraction - Mass Removal Data - Shell-branded Service Station, Incident #98995756, 5755 Broadway, Oakland, CA

Date	Well ID	Interval Hours of Operation (hours)	System Flow Rate (CFM)	Hydrocarbon Concentrations (Concentrations in ppmv) TPHg	Benzene	MTBE	TPHg Removal Rate (#/hour)	TPHg Cumulative TPHg Removed (#)	Benzene Removal Rate (#/hour)	Benzene Cumulative Benzene Removed (#)	MTBE Removal Rate (#/hour)	MTBE Cumulative MTBE Removed (#)
							TPHg		**Benzene**		**MTBE**	
02/07/01	S-2	8.00	4.3	136	2.82	8.56	0.008	0.063	0.000	0.001	0.001	0.004
05/31/01	S-2	6.00	1.0	73	7.7	56	0.001	0.068	0.000	0.002	0.001	0.009
06/13/01	S-2	6.00	7.4	360	7.2	9.0	0.036	0.282	0.001	0.006	0.001	0.014
07/20/01	S-2	4.50	5.3	<5.0	<0.050	1.9	0.000	0.283	0.000	0.006	0.000	0.015
08/21/01	S-2	6.00	1.9	1,200	11	9.7	0.030	0.466	0.000	0.007	0.000	0.016
09/14/01	S-2	6.00	5.4	500	9.2	8.0	0.036	0.682	0.001	0.011	0.001	0.020
10/24/01	S-2	6.00	13.6	4,500	60	41	0.818	5.591	0.010	0.070	0.008	0.066
05/31/01	H-1	1.80	1.2	420	1.4	5.3	0.007	0.012	0.000	0.000	0.000	0.000
06/13/01	H-1	2.00	1.8	170	0.31	10	0.004	0.020	0.000	0.000	0.000	0.001
07/20/01	H-1	3.50	NA	260	0.37	11	0.000	0.020	0.000	0.000	0.000	0.001
08/21/01	H-1	2.75	3.3	240	2.7	110	0.011	0.049	0.000	0.000	0.005	0.014
09/14/01	H-1	1.50	6.1	190	0.94	21	0.015	0.073	0.000	0.000	0.002	0.017
10/24/01	H-1	2.00	7.8	800	2.1	13	0.083	0.239	0.000	0.001	0.001	0.020
Total Pounds Removed:							**TPHg =**	**5.830**	**Benzene =**	**0.071**	**MTBE =**	**0.085**

Abbreviations and Notes:

CFM = Cubic feet per minute

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

ppmv = Parts per million by volume

= Pounds

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

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

(Rate = Concentration (ppmv) x system flow rate (cfm) x (1lb-mole/386ft3) x molecular weight (86 lb/lb-mole for TPHg, 78 lb/lb-mole for benzene, 88 lb/lb-mole for MTBE) x 60 min/hour x 1/1,000,000)

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

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 9, 2002

Karen Petryna
Equiva Services LLC
P.O. Box 7869
Burbank, CA 91510-7869

Fourth Quarter 2001 Groundwater Monitoring at
Shell-branded Service Station
5755 Broadway
Oakland, CA

Monitoring performed on December 5, 2001

Groundwater Monitoring Report **011205-MM-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, appropriate 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/mrb

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
5755 Broadway
Oakland, CA
Wic #204-5510-0303

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)	DO Reading (ppm)
S-1	01/25/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	100.00	3.88	96.12	NA
S-1	06/03/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	100.00	3.51	96.49	NA
S-1	08/30/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	100.00	4.24	95.76	NA
S-1	11/22/1991	<30	2.3	<0.46	0.3	<0.65	NA	NA	100.00	4.29	95.71	NA
S-1	03/13/1992	<30	<0.52	<0.3	<0.3	<0.3	NA	NA	100.00	2.87	97.13	NA
S-1	05/28/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.79	96.21	NA
S-1	08/19/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	4.43	95.57	NA
S-1	11/18/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	4.34	95.66	NA
S-1	02/10/1993	51	1.4	<0.5	<0.5	<0.5	NA	NA	100.00	4.20	95.80	NA
S-1 (D)	02/10/1993	<50	1.2	<0.5	<0.5	<0.5	NA	NA	100.00	4.20	95.80	NA
S-1	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.39	96.61	NA
S-1	08/03/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.69	96.31	NA
S-1	11/02/1993	70a	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	4.26	95.74	NA
S-1	12/16/1993	NA	NA	NA	NA	NA	NA	NA	100.00	2.73	97.27	NA
S-1	02/01/1994	60a	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.38	96.62	NA
S-1	05/04/1994	<50	1.1	<0.5	<0.5	<0.5	NA	NA	100.00	3.00	97.00	NA
S-1	08/18/1994	<50	0.6	<0.5	<0.5	<0.5	NA	NA	100.00	3.70	96.30	NA
S-1 (D)	08/18/1994	60a	0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.70	96.30	NA
S-1	11/09/1994	<50	4	<0.5	<0.5	<0.5	NA	NA	100.00	2.52	97.48	NA
S-1	02/22/1995	50	0.8	0.7	<0.5	1.3	NA	NA	100.00	4.08	95.92	NA
S-1	05/02/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	2.58	97.42	NA
S-1	08/30/1995	<50	1.7	<0.5	<0.5	<0.5	NA	NA	100.00	3.48	96.52	NA
S-1	11/28/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.99	96.01	NA
S-1	02/02/1996	<50	11	<0.5	0.9	<0.5	NA	NA	100.00	2.00	98.00	NA
S-1	03/09/1996	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	100.00	3.38	99.62	NA
S-1	08/22/1996	<50	1.5	<0.5	<0.5	<0.5	130	NA	100.00	3.43	96.57	NA

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Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8020 (ug/L)	MTBE 8260 (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)	DO Reading (ppm)
S-1	11/07/1996	<50	<0.5	<0.5	<0.5	<0.5	57	NA	100.00	3.70	96.30	4.33
S-1	02/20/1997	<50	0.64	<0.50	<0.50	1.6	6.5	NA	100.00	3.60	96.40	2
S-1	05/30/1997	<50	<0.50	<0.50	<0.50	<0.50	46	NA	100.00	3.47	96.53	7
S-1 (D)	05/30/1997	<50	<0.50	<0.50	<0.50	<0.50	47	NA	100.00	3.47	96.53	7
S-1	08/21/1997	<50	<0.50	<0.50	<0.50	0.84	26	NA	100.00	3.01	96.99	3.1
S-1	11/03/1997	<50	<0.50	1.1	<0.50	1.3	190	NA	100.00	3.66	96.34	2
S-1	01/20/1998	110	7.9	2.8	4.4	13	53	NA	100.00	1.84	98.16	4.6
S-1 (D)	01/20/1998	130	9.2	6.9	5.2	15	93	NA	100.00	1.84	98.16	4.6
S-1	02/16/1999	<50	<0.50	<0.50	<0.50	<0.50	8.6	NA	100.00	2.43	97.57	2.2
S-1	09/07/1999	NA	NA	NA	NA	NA	NA	NA	100.00	2.84	97.16	NA
S-1	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	202	NA	100.00	3.10	96.90	2.1
S-1	04/26/2000	NA	NA	NA	NA	NA	NA	NA	100.00	2.91	97.09	NA
S-1	07/25/2000	<50.0	<0.500	<0.500	<0.500	<0.500	811	NA	100.00	3.21	96.79	1.8
S-1	11/15/2000	NA	NA	NA	NA	NA	NA	NA	100.00	3.18	96.82	NA
S-1	02/12/2001	<50.0	<0.500	<0.500	<0.500	<0.500	209	NA	100.00	1.34	98.66	2.2
S-1	06/07/2001	NA	NA	NA	NA	NA	NA	NA	100.00	1.27	98.73	NA
S-1	08/31/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	100.00	3.16	96.84	4.0
S-1	**12/05/2001**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**2.6**	**100.00**	**1.90**	**98.10**	**NA**
S-2	01/25/1991	450	140	1.8	6.2	15	NA	NA	98.92	4.52	94.40	NA
S-2	06/03/1991	490	150	2.7	8.2	7	NA	NA	98.92	4.02	94.90	NA
S-2	08/30/1991	70	0.37	<0.3	<0.3	<0.3	NA	NA	98.92	4.70	94.22	NA
S-2	11/22/1991	1,600	110	9.3	29	150	NA	NA	98.92	4.72	94.20	NA
S-2	03/13/1992	1,300	210	5.7	34	79	NA	NA	98.92	3.47	95.45	NA
S-2	05/28/1992	100	28	<0.5	<0.5	<0.5	NA	NA	98.92	4.45	94.45	NA
S-2	08/19/1992	470	42	<0.5	8.3	4	NA	NA	98.92	4.84	94.08	NA

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S-2	11/18/1992	490	43	39	17	29	NA	NA	98.92	4.73	94.19	NA
S-2	02/10/1993	19,000	710	760	80	370	NA	NA	98.92	4.83	94.09	NA
S-2	06/11/1993	33,000	3,100	1,600	370	1,100	NA	NA	98.92	3.74	95.18	NA
S-2	08/03/1993	18,000	1,400	130	81	130	NA	NA	98.92	4.23	94.69	NA
S-2 (D)	08/03/1993	19,000	1,400	140	86	150	NA	NA	98.92	4.23	94.69	NA
S-2	11/02/1993	12,000a	470	47	31	92	NA	NA	98.92	4.72	94.20	NA
S-2 (D)	11/02/1993	13,000a	530	47	35	96	NA	NA	98.92	4.72	94.20	NA
S-2	12/16/1993	NA	NA	NA	NA	NA	NA	NA	98.92	3.00	95.92	NA
S-2	02/01/1994	31,000a	430	46	50	130	NA	NA	98.92	3.48	95.44	NA
S-2 (D)	02/01/1994	31,000a	300	33	30	100	NA	NA	98.92	3.48	95.44	NA
S-2	05/04/1994	3,900	1,200	31	53	71	NA	NA	98.92	3.26	95.66	NA
S-2 (D)	05/04/1994	4,500	1,200	37	57	110	NA	NA	98.92	3.26	95.66	NA
S-2	08/18/1994	24,000	600	8.3	15	27	NA	NA	98.92	3.98	94.94	NA
S-2	11/09/1994	1,400a	240	9.3	13	20	NA	NA	98.92	3.10	95.82	NA
S-2 (D)	11/09/1994	1,800	260	8.5	13	21	NA	NA	98.92	3.10	95.82	NA
S-2	02/22/1995	29,000	550	18	12	63	NA	NA	98.92	4.02	94.90	NA
S-2 (D)	02/22/1995	28,000	530	17	10	60	NA	NA	98.92	4.02	94.90	NA
S-2	05/02/1995	4,400	1,000	25	38	77	NA	NA	98.92	2.86	96.06	NA
S-2 (D)	05/02/1995	4,400	1,000	26	41	83	NA	NA	98.92	2.86	96.06	NA
S-2	08/30/1995	800	350	20	6.7	16	NA	NA	98.92	4.06	94.86	NA
S-2 (D)	08/30/1995	960	220	22	12	48	NA	NA	98.92	4.06	94.86	NA
S-2	11/28/1995	2,000	230	220	50	230	NA	NA	98.92	4.48	94.44	NA
S-2 (D)	11/28/1995	2,100	240	230	51	230	NA	NA	98.92	4.48	94.44	NA
S-2	02/02/1996	18,000	540	18	12	22	NA	NA	98.92	1.99	96.93	NA
S-2 (D)	02/02/1996	11,000	600	18	13	28	NA	NA	98.92	1.99	96.93	NA
S-2	03/09/1996	3,800	1,500	27	30	58	NA	NA	98.92	3.27	95.65	NA

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S-2 (D)	03/09/1996	3,500	1,300	24	21	53	NA	NA	98.92	3.27	95.65	NA
S-2	08/22/1996	<20,000	490	<200	<200	<200	43,000	NA	98.92	3.85	95.07	NA
S-2 (D)	08/22/1996	<20,000	570	<200	<200	<200	59,000	51,000	98.92	3.85	95.07	NA
S-2	11/07/1996	<5,000	290	<50	<50	<50	32,000	NA	98.92	4.00	94.92	3.51
S-2 (D)	11/07/1996	<5,000	290	<50	<50	<50	32,000	NA	98.92	4.00	94.92	3.51
S-2	02/20/1997	<10,000	520	<100	<100	<100	28,000	NA	98.92	3.20	95.72	1
S-2 (D)	02/20/1997	<10,000	520	<100	<100	<100	35,000	NA	98.92	3.20	95.72	1
S-2	05/30/1997	150	15	11	3.5	15	11	NA	98.92	3.87	95.05	6
S-2	08/21/1997	1,600	220	<10	20	<10	18,000	NA	98.92	3.29	95.63	3.3
S-2 (D)	08/21/1997	1,500	180	<10	16	<10	21,000	NA	98.92	3.29	95.63	3.3
S-2	11/03/1997	1,000	94	<10	<10	<10	<50	NA	98.92	4.02	94.90	1.8
S-2	01/20/1998	590	110	8.3	18	23	7,800	NA	98.92	1.54	97.38	3.2
S-2	07/23/1998	2,600	840	<10	44	22	15,000	NA	98.92	2.89	96.03	NA
S-2	02/16/1999	680	140	6.1	10	18	19,000	NA	98.92	1.86	97.06	2.0
S-2	09/07/1999	<2,000	248	<20.0	<20.0	<20.0	22,800	NA	98.92	3.66	95.26	1.8
S-2	02/02/2000	103	0.825	<0.500	<0.500	<0.500	11,700	10,500	98.92	4.02	94.90	2.0
S-2	04/26/2000	4,040	799	<20.0	40.9	255	19,000	17,100b	98.92	2.63	96.29	2.3
S-2	07/25/2000	1,120	195	5.94	5.62	11.3	26,600	21,100	98.92	3.42	95.50	0.6
S-2b	11/15/2000	613	35.6	<5.00	<5.00	7.36	18,100	17,800	98.92	3.31	95.61	1.8
S-2	02/12/2001	9,010	1,430	<20.0	219	848	28,300	17,000	98.92	1.47	97.45	2.0
S-2	06/07/2001	31,000	1,000	<25	630	3,200	NA	17,000	98.92	3.43	95.49	10.4
S-2	08/31/2001	50,000	950	<20	1,500	6,000	NA	17,000	98.92	4.72	94.20	0.9
S-2	**12/05/2001**	**49,000**	**590**	**7.2**	**1,400**	**4,900**	**NA**	**11,000**	**98.92**	**1.53**	**97.39**	**NA**
S-3	01/25/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	101.67	3.84	97.83	NA
S-3	06/03/1991	<30	<0.3	0.3	0.3	0.3	NA	NA	101.67	3.25	98.42	NA

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S-3	08/03/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	101.67	4.73	96.94	NA
S-3	11/22/1991	<30	<0.3	<0.3	<0.3	<0.3	NA	NA	101.67	4.81	96.86	NA
S-3	03/13/1992	<30	<0.3	0.3	0.3	0.3	NA	NA	101.67	2.29	99.38	NA
S-3	05/28/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.62	98.05	NA
S-3	08/19/1992	<50	<0.5	<0.5	<0.5	0.5	NA	NA	101.67	4.66	97.01	NA
S-3	11/18/1992	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	4.51	97.16	NA
S-3	02/10/1993	30	1.9	3.2	2.4	5.6	NA	NA	101.67	4.36	97.31	NA
S-3	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.91	98.76	NA
S-3 (D)	06/11/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.91	98.76	NA
S-3	08/03/1993	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.70	97.97	NA
S-3	11/02/1993	Well inaccessible		NA	NA	NA	NA	NA	101.67	NA	NA	NA
S-3	12/16/1993	NA	NA	NA	NA	NA	NA	NA	101.67	2.12	99.55	NA
S-3	02/01/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.90	98.77	NA
S-3	05/04/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.54	99.13	NA
S-3	08/18/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.51	98.16	NA
S-3	11/09/1994	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.44	99.23	NA
S-3	02/22/1995	80	<0.5	0.5	<0.5	0.5	NA	NA	101.67	4.12	97.55	NA
S-3	05/02/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.83	98.84	NA
S-3	08/30/1995	<50	0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.16	98.51	NA
S-3	11/28/1995	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.87	97.80	NA
S-3	02/02/1996	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	2.24	99.43	NA
S-3	03/09/1996	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	101.67	3.05	98.62	NA
S-3	08/22/1996	<50	0.8	<0.5	<0.5	<0.5	<2.5	NA	101.67	2.85	98.82	4.6
S-3	11/07/1996	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NA	101.67	3.35	98.32	4.6
S-3	02/20/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	101.67	3.00	98.67	1
S-3	05/30/1997	140	14	10	3.3	14	8.6	NA	101.67	3.00	98.67	8

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S-3	08/21/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	101.67	2.94	98.73	3.3
S-3	11/03/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	101.67	3.36	98.31	2.4
S-3 (D)	11/03/1997	<50	<0.50	<0.50	<0.50	<0.50	<2.5	NA	101.67	3.36	98.31	2.4
S-3	01/20/1998	Well inaccessible		NA	NA	NA	NA	NA	101.67	NA	NA	NA
S-3	07/23/1998	NA	NA	NA	NA	NA	NA	NA	101.67	2.69	98.98	NA
S-3	02/16/1999	<50	<0.50	0.92	0.59	3.9	3.7	NA	101.67	2.20	99.47	2.8
S-3	09/07/1999	NA	NA	NA	NA	NA	NA	NA	101.67	2.81	98.86	NA
S-3	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	101.67	3.97	97.70	2.7
S-3	04/26/2000	NA	NA	NA	NA	NA	NA	NA	101.67	2.96	98.71	NA
S-3	07/25/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	101.67	3.00	98.67	0.8
S-3	11/15/2000	NA	NA	NA	NA	NA	NA	NA	101.67	2.86	98.81	NA
S-3	02/12/2001	<50.0	<0.500	<0.500	<0.500	<0.500	<2.50	NA	101.67	2.47	99.20	2.3
S-3	06/07/2001	NA	NA	NA	NA	NA	NA	NA	101.67	2.78	98.89	NA
S-3	08/31/2001	<50	<0.50	<0.50	<0.50	<0.50	NA	<5.0	101.67	3.94	97.73	0.5
S-3	**12/05/2001**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**101.67**	**2.05**	**99.62**	**NA**
H-1	**12/05/2001**	**150**	**<0.50**	**8.3**	**1.6**	**16**	**NA**	**52**	**NA**	**1.43**	**NA**	**NA**
T-1	05/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	2.65	NA	NA
T-1	08/21/1997	NA	NA	NA	NA	NA	NA	NA	NA	2.69	NA	NA
T-1	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	3.09	NA	NA
T-1	01/20/1998	NA	NA	NA	NA	NA	NA	NA	NA	0.61	NA	NA
T-1	07/23/1998	NA	NA	NA	NA	NA	NA	NA	NA	2.32	NA	NA
T-1	02/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	1.95	NA	NA
T-1	09/07/1999	NA	NA	NA	NA	NA	NA	NA	NA	2.48	NA	NA
T-1	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	2.66	NA	2.5

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T-1	04/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	2.56	NA	NA
T-1	07/25/2000	NA	NA	NA	NA	NA	NA	NA	NA	2.60	NA	NA
T-1	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	2.47	NA	NA
T-1	02/12/2001	NA	NA	NA	NA	NA	NA	NA	NA	1.20	NA	NA
T-1	06/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	2.36	NA	NA
T-1	08/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	3.45	NA	NA
T-2	05/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	1.81	NA	NA
T-2	08/21/1997	NA	NA	NA	NA	NA	NA	NA	NA	1.89	NA	NA
T-2	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	2.25	NA	NA
T-2	01/20/1998	NA	NA	NA	NA	NA	NA	NA	NA	0.55	NA	NA
T-2	07/23/1998	NA	NA	NA	NA	NA	NA	NA	NA	1.21	NA	NA
T-2	02/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	1.08	NA	NA
T-2	09/07/1999	NA	NA	NA	NA	NA	NA	NA	NA	0.72	NA	NA
T-2	02/02/2000	1,540	53.4	20.8	11.4	21.8	1,330	NA	NA	0.98	NA	3.0
T-2	04/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	1.02	NA	NA
T-2	07/25/2000	815	17.6	10.8	1.63	3.47	133	NA	NA	1.80	NA	0.8
T-2	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	1.68	NA	NA
T-2	02/12/2001	310	7.48	7.76	0.693	2.28	301	NA	NA	1.45	NA	1.6
T-2	06/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	1.57	NA	NA
T-2	08/31/2001	720	30	0.67	<0.50	2.3	NA	540	NA	2.69	NA	0.8
T-2	**12/05/2001**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**0.58**	**NA**	**NA**
T-3	05/30/1997	NA	NA	NA	NA	NA	NA	NA	NA	2.31	NA	NA
T-3	08/21/1997	NA	NA	NA	NA	NA	NA	NA	NA	1.57	NA	NA
T-3	11/03/1997	NA	NA	NA	NA	NA	NA	NA	NA	3.50	NA	NA

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Oakland, CA
Wic #204-5510-0303

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)	DO Reading (ppm)
T-3	01/20/1998	NA	NA	NA	NA	NA	NA	NA	NA	0.76	NA	NA
T-3	07/23/1998	NA	NA	NA	NA	NA	NA	NA	NA	0.82	NA	NA
T-3	02/16/1999	NA	NA	NA	NA	NA	NA	NA	NA	0.55	NA	NA
T-3	09/07/1999	NA	NA	NA	NA	NA	NA	NA	NA	2.89	NA	NA
T-3	02/02/2000	<50.0	<0.500	<0.500	<0.500	<0.500	<5.00	NA	NA	3.02	NA	2.9
T-3	04/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	2.81	NA	NA
T-3	07/25/2000	NA	NA	NA	NA	NA	NA	NA	NA	3.00	NA	NA
T-3	11/15/2000	NA	NA	NA	NA	NA	NA	NA	NA	1.70	NA	NA
T-3	02/12/2001	NA	NA	NA	NA	NA	NA	NA	NA	2.11	NA	NA
T-3	06/07/2001	NA	NA	NA	NA	NA	NA	NA	NA	1.68	NA	NA
T-3	08/31/2001	NA	NA	NA	NA	NA	NA	NA	NA	3.14	NA	NA

WELL CONCENTRATIONS
Shell-branded Service Station
5755 Broadway
Oakland, CA
Wic #204-5510-0303

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)	DO Reading (ppm)

Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; proir to June 7, 2001, analyzed by EPA Method 8015.

BTEX = benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to June 7, 2001, analyzed by EPA Method 8020.

MTBE = methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

DO = Dissolved Oxygen

ug/L = parts per billion

ppm = parts per million

msl = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

NA = Not applicable

Notes:

a = Chromatogram pattern indicated an unidentified hydrocarbon.

b = This sample analyzed outside of EPA recommended hold time.

Top of casing elevations referenced to arbitrary elevation of 100 ft.

KIFF ANALYTICAL LLC

Report Number : 23720
Date : 12/19/2001

Nick Sudano
Blaine Tech Services
1680 Rogers Avenue
San Jose, CA 95112-1105

Subject : 3 Water Samples
Project Name : 5755 Broadway, Oakland
Project Number : 011205-MM2
P.O. Number : 98995756

Dear Mr. Sudano,

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 : 23720
Date : 12/19/2001

Project Name : **5755 Broadway, Oakland**
Project Number : **011205-MM2**

Sample : **S-1** Matrix : Water Lab Number : 23720-01
Sample Date :12/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Methyl-t-butyl ether (MTBE)	**2.6**	0.50	ug/L	EPA 8260B	12/15/2001
Diisopropyl ether (DIPE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/15/2001
Ethyl-t-butyl ether (ETBE)	**< 2.0**	2.0	ug/L	EPA 8260B	12/15/2001
Tert-amyl methyl ether (TAME)	**< 2.0**	2.0	ug/L	EPA 8260B	12/15/2001
Tert-Butanol	**< 50**	50	ug/L	EPA 8260B	12/15/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	12/15/2001
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	12/15/2001
1,2-Dichlorobenzene - d4 (Surr)	100		% Recovery	EPA 8260B	12/15/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 23720
Date : 12/19/2001

Project Name : **5755 Broadway, Oakland**
Project Number : **011205-MM2**

Sample : **S-2** Matrix : Water Lab Number : 23720-02
Sample Date :12/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**590**	5.0	ug/L	EPA 8260B	12/13/2001
Toluene	**7.2**	5.0	ug/L	EPA 8260B	12/13/2001
Ethylbenzene	**1400**	5.0	ug/L	EPA 8260B	12/13/2001
Total Xylenes	**4900**	25	ug/L	EPA 8260B	12/19/2001
Methyl-t-butyl ether (MTBE)	**11000**	25	ug/L	EPA 8260B	12/19/2001
Diisopropyl ether (DIPE)	**< 5.0**	5.0	ug/L	EPA 8260B	12/13/2001
Ethyl-t-butyl ether (ETBE)	**< 5.0**	5.0	ug/L	EPA 8260B	12/13/2001
Tert-amyl methyl ether (TAME)	**9.5**	5.0	ug/L	EPA 8260B	12/13/2001
Tert-Butanol	**1100**	50	ug/L	EPA 8260B	12/13/2001
Ethanol	**< 500**	500	ug/L	EPA 8260B	12/13/2001
TPH as Gasoline	**49000**	5000	ug/L	EPA 8260B	12/19/2001
Toluene - d8 (Surr)	97.9		% Recovery	EPA 8260B	12/13/2001
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	12/13/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 23720
Date : 12/19/2001

Project Name : **5755 Broadway, Oakland**
Project Number : **011205-MM2**

Sample : **H-1** Matrix : Water Lab Number : 23720-03
Sample Date :12/5/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	12/14/2001
Toluene	**8.3**	0.50	ug/L	EPA 8260B	12/14/2001
Ethylbenzene	**1.6**	0.50	ug/L	EPA 8260B	12/14/2001
Total Xylenes	**16**	0.50	ug/L	EPA 8260B	12/14/2001
Methyl-t-butyl ether (MTBE)	**52**	5.0	ug/L	EPA 8260B	12/14/2001
TPH as Gasoline	**150**	50	ug/L	EPA 8260B	12/14/2001
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	12/14/2001
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	12/14/2001

Approved By: Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23720

Date : 12/19/2001

QC Report : Method Blank Data

Project Name : **5755 Broadway, Oakland**

Project Number : **011205-MM2**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/13/2001
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/13/2001
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/13/2001
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/13/2001
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	12/13/2001
Diisopropyl ether (DIPE)	< 2.0	2.0	ug/L	EPA 8260B	12/13/2001
Ethyl-t-butyl ether (ETBE)	< 2.0	2.0	ug/L	EPA 8260B	12/13/2001
Tert-amyl methyl ether (TAME)	< 2.0	2.0	ug/L	EPA 8260B	12/13/2001
Tert-Butanol	< 50	50	ug/L	EPA 8260B	12/13/2001
Ethanol	*< 500*	*500*	*ug/L*	*EPA 8260B*	*12/13/2001*
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/13/2001
Toluene - d8 (Surr)	98.9		%	EPA 8260B	12/13/2001
4-Bromofluorobenzene (Surr)	104		%	EPA 8260B	12/13/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23720

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 12/19/2001

Project Name : **5755 Broadway, Oakland**

Project Number : **011205-MM2**

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	23719-08	<0.50	19.4	19.2	19.5	18.9	ug/L	EPA 8260B	12/12/200	100	98.3	2.06	70-130	25
Toluene	23719-08	<0.50	19.4	19.2	18.9	18.5	ug/L	EPA 8260B	12/12/20	097.2	96.4	0.775	70-130	25
Tert-Butanol	23719-08	<5.0	97.1	96.2	90.4	91.0	ug/L	EPA 8260B	12/12/20	093.1	94.7	1.69	70-130	25
Methyl-t-Butyl Ether	23719-08	0.60	19.4	19.2	19.6	19.9	ug/L	EPA 8260B	12/12/20	097.8	100	2.84	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Report Number : 23720

QC Report : Laboratory Control Sample (LCS)

Date : 12/19/2001

Project Name : **5755 Broadway, Oakland**

Project Number : **011205-MM2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	20.0	ug/L	EPA 8260B	12/12/200	99.6	70-130
Toluene	20.0	ug/L	EPA 8260B	12/12/200	97.4	70-130
Tert-Butanol	100	ug/L	EPA 8260B	12/12/200	96.8	70-130
Methyl-t-Butyl Ether	20.0	ug/L	EPA 8260B	12/12/200	85.9	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

LAB: KIFF

Lab Identification (if necessary):

Address:

City, State, Zip:

EQUIVA Services LLC Chain Of Custody Record

Equiva Project Manager to be invoiced: 23720

☑ SCIENCE & ENGINEERING
☐ TECHNICAL SERVICES
☐ CRMT HOUSTON

Karen Petryna

INCIDENT NUMBER (S&E ONLY): 9 8 9 9 5 7 5 6

SAP or CRMT NUMBER (TS/CRMT):

DATE: 12/5/01

PAGE: 1 of 1

SAMPLING COMPANY:	Blaine Tech Services
LOG CODE:	BTSS
SITE ADDRESS (Street and City):	5755 Broadway, Oakland
GLOBAL ID NO.:	T0600101270
ADDRESS:	1680 Rogers Avenue, San Jose, CA 95112
EDF DELIVERABLE TO (Responsible Party or Designee):	Anni Kreml
PHONE NO.:	510-420-3335
E-MAIL:	akreml@cambria-env.com
CONSULTANT PROJECT NO.:	BTS # 011205-MM2
PROJECT CONTACT (Hardcopy or PDF Report to):	Nick Sudano
SAMPLER NAME(S) (Print):	Matthew Miller
TELEPHONE:	408-573-0555
FAX:	408-573-7771
E-MAIL:	nsudano@blainetech.com

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:

TEMPERATURE ON RECEIPT C°

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)		MTBE (8260B) Confirmation, See Note						FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	S-1	12/5	1520	W	3	~~X~~	~~X~~	~~X~~		X	X													only Oxy's + Ethanol 01
	S2	↓	1600	W	3	X	X	X		X	X													02
	H-1	↓	1505	W	3	X	X	X																03

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Matthew Miller	—	—	—
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	—	—	—
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
—	Nikole Brewer Kiff	120601	1115

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

10/16/00 Revision

Q&Q Graphic (714) 898-8702

WELL GAUGING DATA

Project # 011205-mm2 Date 12/5/01 Client Equiva

Site 5755 Broadway

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
S-1	3					1.90	11.68	
S-2	4	slight sheen in well				1.53	9.63	
S-3	4					2.05	9.71	
H-1	12	slight sheen in well				1.43	13.09 ~~13.07~~	
T-2	12	no product in well				0.58	13.02	

EQUIVA WELL MONITORING DATA SHEET

BTS #: 011205-MM2	Site: 5755 Broadway Oakland
Sampler: MTM	Date: 12/5/01
Well I.D.: S-1	Well Diameter: 2 (3) 4 6 8 ___
Total Well Depth: 11.68	Depth to Water: 1.90
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

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

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

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

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

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1521	62.5	7.35	437	>200	3.5	4 brown
1522	64.0	7.35	452	>200	7	"
1523	63.6	7.35	444	>200	10.5	"

Did well dewater? Yes (No)	Gallons actually evacuated: 10.5
Sampling Time: 1528	Sampling Date: 12/5/01
Sample I.D.: S-1	Laboratory: (Kiff) Sequoia Other_____
Analyzed for: ~~TPH-G~~ ~~BTEX~~ ~~MTBE~~ TPH-D @	Other: oxygenates + ethanol
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

BLAINE TECH SERVICES 1680 ROGERS AVE. • SAN JOSE, CA 95112-1105 • (408) 573-0555 • FAX (408) 573-7771 • CONTRACTOR'S LICENSE #746884

EQUIVA WELL MONITORING DATA SHEET

Project #: 011205-mm2	Job # 989957556
Sampler: MTM	Date: 12/5/01
Well I.D.: S-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 9.63	Depth to Water: 1.53
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius² * 0.163

Purge Method: Bailer / Middleburg / (Electric Submersible) / Extraction Pump / Other: ___

Sampling Method: (Bailer) / Extraction Port / Other: ___

5 (1 Case Volume (Gals.)) x 3 (Specified Volumes) = 15 (Calculated Volume) Gals.

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1537	67.9	6.87	969	40	5	odor/clear
1538	well	dewatered	@ 7 gal		~~10~~ dtw	7.35
					15	
1600	62.5	6.90	1133	7200		dtw = 3.15

Did well dewater? (Yes) / No — Gallons actually evacuated: ~~15~~ 7

Sampling Time: 1600		Sampling Date: 12/5/01	
Sample I.D.: S-2		Laboratory: Sequoia BC Other KEF	
Analyzed for: (TPH-G BTEX MTBE) TPH-D		Other: oxygenate + ethanol	
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

EQUIVA WELL MONITORING DATA SHEET

Project #: 011205-MM7	Job # 5755 Broadway, Oakland
Sampler: MTM	Date: 12/5/01
Well I.D.: H-1	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 12.04	Depth to Water: 1.43
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Well Diameter	Multiplier	Well Diameter	Multiplier
2"	0.16	5"	1.02
3"	0.37	6"	1.47
4"	0.65	Other	radius² * 0.163

Purge Method: Bailer / Middleburg / Electric Submersible / Extraction Pump / Other: ___

Sampling Method: X Bailer Disposable / Extraction Port / Other: ___

No Purge grab sample ___ Gals.
1 Case Volume (Gals.) Specified Volumes Calculated Volume

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1805	54.9	7.28	223		0	clear

Did well dewater? Yes (No)		Gallons actually evacuated: 0	
Sampling Time: 1505		Sampling Date:	
Sample I.D.: H-1		Laboratory: Sequoia BC Other ___	
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