Shell Oil Products US

August 19, 2003

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

Dear Mr. Gholami:

Attached for your review and comment is a copy of the *Second Quarter 2003 Monitoring Report* for the above referenced site. Upon information and belief, I declare, under penalty of perjury, that the information contained in the attached document is true and correct.

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

Sincerely,

Shell Oil Products US

Karen Petryna

Karen Petryna
Sr. Environmental Engineer

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

CAMBRIA

August 19, 2003

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

Re: **Second Quarter 2003 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 (Shell), 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. Mobile GWE ended on March 5, 2003 due to construction of the fixed GWE system. The cumulative estimated mass of total petroleum hydrocarbons as gasoline (TPHg) and methyl tertiary butyl ether (MTBE) removed by mobile GWE at the site is 13.3 pounds and 7.49 pounds, respectively. Additionally, approximately 2.68 pounds of SPH have been removed at the site through manual bailing and GWE.

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 occurred on April 2, 2003.

Cambria Environmental Technology, Inc.

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

SECOND QUARTER 2003 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.

Remedial Activities: Cambria started operation of the fixed GWE system on April 2, 2003. Wells MW-1 and TBW-N are used as extraction wells. System analytical data are summarized in Table 1. Groundwater level measurements and flow meter readings have been recorded at various times of operation to assess system production. Table 2 summarizes the field data and system operation and calculates mass removal. Based on the field data, the GWE system operated at average flow rate of approximately 0.45 gallons per minute.

As of July 18, 2003, a total of 68,706 gallons of groundwater has been extracted. A total of 12.5 pounds of TPHg, 0.455 pounds of benzene, and 2.48 pounds of MTBE has been recovered. Mass removal data are presented in Table 2.

On July 23, 2003, Cambria observed separate-phase hydrocarbons (SPH) within the GWE system. The GWE system was not operating at this time. Cambria measured approximately 2 feet of SPH in the GWE system's transfer tank. Cambria also measured approximately 0.15 feet of SPH in tank backfill well TBW-N, and 2.25 feet in monitoring well MW-1. Cambria collected an SPH sample from the transfer tank. Cambria also collected fuel product samples from each fuel grade in the product dispenser for comparative "fingerprinting" by Shell's laboratory. Final results of this analysis are pending, and the GWE system remains shut down as discussed below.

ANTICIPATED THIRD QUARTER 2003 ACTIVITIES

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

Remedial Activities: Cambria will prepare a quarterly discharge compliance report in accordance with the East Bay Municipal Utility District wastewater discharge permit. SPH was removed from the GWE system and wells TBW-N and MW-1 on August 8, 2003 by means of a vacuum truck. Once the SPH was removed, the GWE system was cleaned, flushed, and rinsed. The SPH and groundwater mixture was off-hauled to the Martinez Refining Company in Martinez, California for disposal. Weekly mobile GWE (VacOps) has been coordinated to further address

SPH. Cambria will monitor SPH thickness prior to the VacOps events. The GWE system will remain off, as Cambria evaluates supplementing the groundwater treatment system with an oil/water separator.

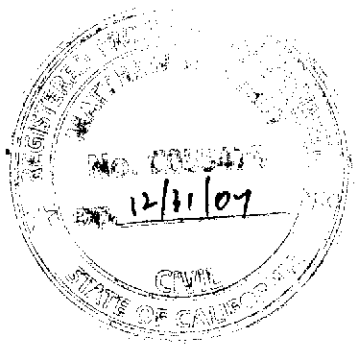
CLOSING

We appreciate the opportunity to work with you on this project. Please call Dan Lescure at (510) 420-3306 if you have any questions or comments.

Sincerely,
Cambria Environmental Technology, Inc

Dan Lescure
Senior Project Engineer

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



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

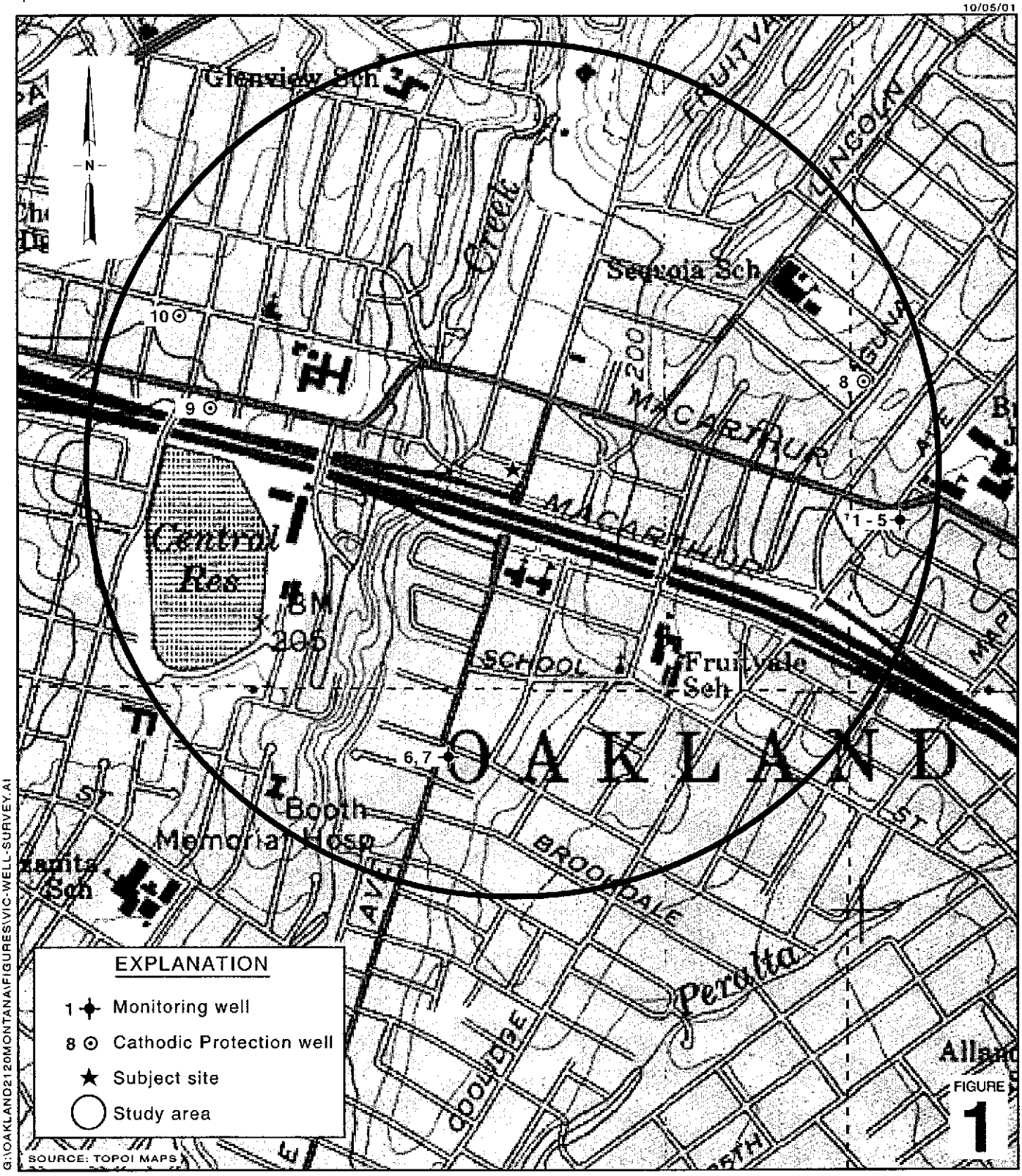
Tables: 1 - Groundwater Extraction – System Analytical Data
2 - Groundwater Extraction – Operation and Mass Removal Data

Attachment: A - Blaine Groundwater Monitoring Report and Field Notes

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

G:\Oakland 2120 Montana\Qm\2q03\2q03qm.doc

10/05/01



G:\OAKLAND\2120MONTANA\FIGURES\VIC-WELL-SURVEY.AI

FIGURE 1

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

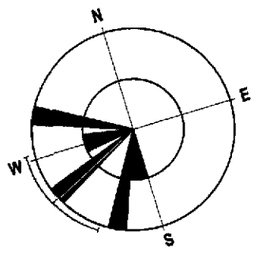
CAMBRIA

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

08/18/03

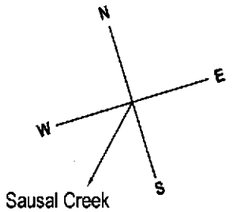
EXPLANATION

- 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)
- → 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 2Q03)

Commercial property



Sausal Creek
(730 ft. SW)

Location of Sensitive Receptor Relative to Site

sidewalk

sidewalk

SLOAN STREET

FRUITVALE AVENUE

air/water
enclosure
planter
planter
sidewalk
driveway
TBW-N
149.75
7,700
8,400
MW-3
148.61
<0.50
<0.50
149.00
TBW-W
149.00
USTs
TBW-E
canopy
148.00
SB-1
D-1
dispensers
D-2
D-3
kiosk
148.00
MW-1
147.37
<25
2,000
TBW-S
SB-3
147.00
SB-2
canopy
147.00
planter
146.00
sidewalk
driveway
driveway
MW-4
145.97
5.3
420
MW-5
146.28
18
47
146.00
MW-2
145.91
780
9,000
2106 Montana
2116 Montana

MONTANA STREET

INTERSTATE 580 ON-RAMP

0 15 30 60
Scale (ft)

G:\OAKLAND2120MONTANA\FIGURES\2QM03-MP.DWG

Groundwater Elevation Contour Map

June 30, 2003

CAMBRIA

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

FIGURE
2

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

Sample Date (mm/dd/yy)	Influent			Midfluent 1			Midfluent 2			Effluent		
	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc (ppb)	TPHg Conc. (ppb)	Benzene Conc (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc (ppb)	MTBE Conc. (ppb)	TPHg Conc. (ppb)	Benzene Conc. (ppb)	MTBE Conc (ppb)
04/02/2003	51,000	1,300	7,100	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
04/08/2003	45,000	1,200	8,600	1,600	5.3	3.2	220	<0.50	<0.50	<50	<0.50	<0.50
04/22/2003	<50	<25	1,700	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
05/01/2003	45,000	1,600	8,300	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
05/21/2003	12,000	370	1,500	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/03/2003	10,000	470	1,900	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50
06/17/2003	1,200	42	29	<50	<0.50	<0.50	<50	<0.50	<0.50	<50	<0.50	<0.50

Abbreviations & Notes:

TPHg = Total purgeable hydrocarbons as gasoline
MTBE = Methyl tert-butyl ether
Conc. = Concentration
ppb = parts per billion, equivalent to µg/l
TPHg, benzene, and MTBE analyzed by EPA Method 8260B

Table 2: **Groundwater Extraction - Operation and Mass Removal Data**
Shell-branded Service Station, Incident #98995740, 2120 Montana Street, Oakland, California

		Period				TPHg			Benzene			MTBE		
Site Visit (mm/dd/yy)	Hour Meter hours	Flow Meter Reading (gal)	Period Volume (gal)	Operational Flow Rate (gpm)	Cumulative Volume (gal)	TPHg Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)	Benzene Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)	MTBE Conc. (ppb)	Period Removal (pounds)	Cumulative Removal (pounds)
04/02/2003	0.0	393	0	0	0		0.000	0.000		0.000	0.000		0.000	0.000
04/02/2003	5.3	1,006	613	1.93	613	51,000	0.261	0.261	1,300	0.007	0.007	7,100	0.036	0.036
04/08/2003	11.4	2,010	1,004	2.74	1,617	45,000	0.377	0.638	1,200	0.010	0.017	8,600	0.072	0.108
04/22/2003	303.0	15,640	13,630	0.78	15,247	<50	0.003	0.641	<25	0.001	0.018	1,700	0.193	0.302
05/01/2003	399.0	17,840	2,200	0.38	17,447	45,000	0.826	1.47	1,600	0.029	0.047	8,300	0.152	0.454
05/20/2003	784.0	43,320	25,480	1.10	42,927		9.568	11.0		0.340	0.388		1.765	2.22
05/21/2003	808.5	44,639	1,319	0.90	44,246	12,000	0.132	11.2	370	0.004	0.392	1,500	0.017	2.24
06/03/2003	1116.9	59,813	15,174	0.82	59,420	10,000	1.266	12.4	470	0.060	0.451	1,900	0.241	2.48
06/17/2003	1455.5	64,741	4,928	0.24	64,348	1,200	0.049	12.5	42	0.002	0.453	29	0.001	2.48
07/01/2003	1697.4	68,668	3,927	0.27	68,275		0.039	12.5		0.001	0.454		0.001	2.48
07/18/2003	1867.0	69,099	431	0.04	68,706		0.004	12.5		0.000	0.455		0.000	2.48
		Total Extracted Volume=			**68,706**	**Total Pounds Removed:**		**12.5**	**Total Pounds Removed:**		**0.455**	**Total Pounds Removed:**		**2.48**
		Average Period Operational Flow Rate=			**0.45**	**Total Gallons Removed:**		**2.06**	**Total Gallons Removed:**		**0.063**	**Total Gallons Removed:**		**0.401**

Abbreviations & Notes:

TPHg = Total purgeable hydrocarbons as gasoline
MTBE = Methyl tert-butyl ether
Conc. = Concentration
ppb = Parts per billion, equivalent to µg/L
µg/L = Micrograms per liter
L = Liter gal = Gallon g = Gram
Mass removed based on the formula: volume extracted (gal) x Concentration (µg/L) x ($g/10^6 \mu g$) x (pound/453.6g) x (3.785 L/gal)
When constituents are not detected, the concentration is assumed to be equal to half the detection limit in subsequent calculations.
Volume removal data based on the formula: mass (pounds) x $(density)^{-1}$ (cc/g) x 453.6 (g/pound) x (L/1000 cc) * (gal/3.785 L)
Density inputs: TPHg = 0.73 g/cc, TPHd = 0.87 g/cc, MTBE = 0.74 g/cc
TPHg, BTEX, and MTBE analyzed by EPA Method 8260B

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

July 18, 2003

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

Second Quarter 2003 Groundwater Monitoring at
Shell-branded Service Station
2120 Montana Street
Oakland, CA

Monitoring performed on June 30, 2003

Groundwater Monitoring Report **030630-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, calculated purge volume (if applicable), elapsed evacuation time (if applicable), total volume of water removed (if applicable), and standard water parameter instrument readings. Sample material is collected, contained, stored, and transported to the laboratory in conformance with EPA standards. Purgewater (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

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

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

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

Please call if you have any questions.

Yours truly,

Leon Gearhart
Project Coordinator

LG/jt

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

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

WELL CONCENTRATIONS
Shell-branded Service Station
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-1	03/31/2003	NA	NA	NA	NA	NA	NA	NA	159.57	11.21	148.38	0.03
MW-1	**06/30/2003**	**7,800**	**<25**	**37**	**<25**	**380**	**NA**	**2,000**	**159.57**	**12.20**	**147.37**	**ND**
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-2	03/31/2003	<5,000	230	1,200	95	150	NA	13,000	158.01	11.98	146.03	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-2	**06/30/2003**	**<12,000**	**780**	**<120**	**170**	**250**	**NA**	**9,000**	**158.01**	**12.10**	**145.91**	**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
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-3	03/31/2003	<50	<0.50	<0.50	<0.50	<1.0	NA	0.78	161.11	11.94	149.17	ND
MW-3	**06/30/2003**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**NA**	**<0.50**	**161.11**	**12.50**	**148.61**	**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-4	03/31/2003	<250	<2.5	<2.5	<2.5	<5.0	NA	500	160.09	13.69	146.40	ND
MW-4	**06/30/2003**	**3,100**	**5.3**	**<5.0**	**7.1**	**<10**	**NA**	**420**	**160.09**	**14.12**	**145.97**	**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
MW-5	03/31/2003	6,400	61	4.9	23	13	NA	330	158.25	11.93	146.32	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-5	**06/30/2003**	**3,400**	**18**	**<2.5**	**17**	**5.5**	**NA**	**47**	**158.25**	**11.97**	**146.28**	**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
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
TBW-N	03/31/2003	62,000	1,600	6,500	2,200	11,000	NA	11,000	161.26	10.63	150.63	NA
TBW-N	**06/30/2003**	**260,000**	**7,700**	**<120**	**5,800**	**40,000**	**NA**	**8,400**	**161.26**	**11.51**	**149.75**	**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.)

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).

SEVERN TRENT STL

Submission#: 2003-07-0003

Blaine Tech Services, Inc.

July 16, 2003

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

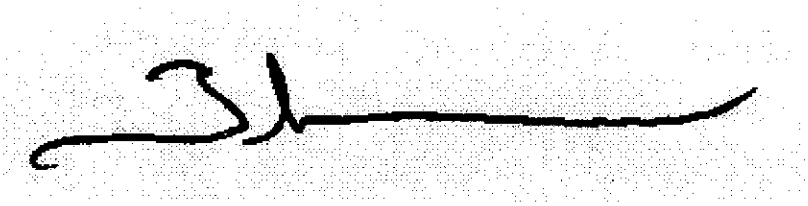
Project#: 030630-MM2
Project: 98995740
Site: 2120 Montana Street, Oakland

Dear Mr.Gearhart,

Attached is our report for your samples received on 06/30/2003 17:08
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 08/14/2003 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: tgranicher@stl-inc.com

Sincerely,



Tod Granicher
Project Manager

SEVERN TRENT STL

July 14, 2003

STL LOT NUMBER: **E3G070133**
PO/CONTRACT: 2003-07-0003

Tod Granicher
STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Dear Mr. Granicher,

This report contains the analytical results for the six samples received under chain of custody by STL Los Angeles on July 3, 2003. These samples are associated with your NA T0600101805 project.

STL Los Angeles certifies that the test results provided in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in the case narrative. The case narrative is an integral part of the report. NELAP Certification Number for STL Los Angeles is 01118CA.

Any matrix related anomaly is footnoted within the report. A cooler receipt temperature between 2-6 degrees Celsius is within EPA acceptance criteria. The temperature(s) of the cooler received for this project can be found on the Project Receipt Checklist. Historical control limits for the LCS are used to define the estimate of uncertainty for a method. All applicable quality control procedures met method-specified acceptance criteria.

This report contains 000027 pages.

If you have any questions, please feel free to call me at (714) 258-8610.

Sincerely,

Marisol Tabirara

Marisol Tabirara
Project Manager

cc: Project File

Chain of Custody

From:

STL San Francisco (CL)
1220 Quarry Lane
Pleasanton, CA 94566-4756

Project Manager:	Tod Granicher		
Phone:	(925) 484-1919	Ext:	
Fax:	(925) 484-1096		
Email:	tgranicher@stl-inc.com		

To: EBG070133

STL Los Angeles - Sub contract
1721 South Grand Avenue
Santa Ana, CA 92705

Phone:	(714) 258-8610
Fax:	(714) 258-0921
Contact:	.
Phone:	(714) 258-8610

CL Submission #: **2003-07-0003**
CL PO #:

Project #: 030630-MM2
Project Name: 98995740

Client Sample ID / Analysis	CL#	Sampled	Matrix / Method	TAT
MW-1	001	06/30/2003 11:00	Water	Due 07/14/03
Gas/BTEX/MTBE by 8260B			8260B	5 Day
MW-2	002	06/30/2003 12:37	Water	
Gas/BTEX/MTBE by 8260B			8260B	5 Day
MW-3	003	06/30/2003 13:15	Water	
Gas/BTEX/MTBE by 8260B			8260B	5 Day
MW-4	004	06/30/2003 13:35	Water	
Gas/BTEX/MTBE by 8260B			8260B	5 Day
MW-5	005	06/30/2003 12:00	Water	
Gas/BTEX/MTBE by 8260B			8260B	5 Day
TBW-N	006	06/30/2003 13:50	Water	
Gas/BTEX/MTBE by 8260B			8260B	5 Day

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS
***TPH-GAS, PURGEABLE, BTEX,MTBE (8260B-0.5PPB RL)
**DUE 07-14-03

RELINQUISHED BY: 1. Signature: Nduna K. Time: 1130 Printed Name: Nduna K. Date: 7/2/03 Company: STL-SF	RELINQUISHED BY: 2. Signature Time / Printed Name Date / Company	RELINQUISHED BY: Signature Time / Printed Name Date / Company
RECEIVED BY: 1. Signature Time: 1022 Printed Name: Andrew Date: 07/03/03 Company: STL-LA	RECEIVED BY: 2. Signature Time / Printed Name Date / Company	RECEIVED BY: 3. Signature Time / Printed Name Date / Company

STL LOS ANGELES
PROJECT RECEIPT CHECKLIST

Date: 07/07/03

Quantims Lot #: EBG070133
Client Name: SFL
Received by: AB
Quote #:
Project: SFCL
Date/Time Received: 07/03/03 @ 1000
Delivered by : ☐Client ☐Airborne ☒Fed Ex ☐DHL ☐In-House Courier ☐Rey B.
☐UPS ☐DES ☐Other

Initial / Date

Custody Seal Status: ☐Intact ☐Broken ☒None ..... AB 07/07/03
Custody Seal #(s): ☒No Seal # .....
Sample Container(s): ☐STL-LA ☒Client ☐N/A .....
Temperature(s) (Cooler/blank) in °C: 2.9 Correction factor -0.2°c (Corrected Temp.) 2.7 .....
Thermometer Used : ID: B ☒IR (Infra-red) ☐Digital (Probe) .....
Samples: ☒Intact ☐Broken ☐Other _____ .....
Anomalies: ☒No ☐Yes (See Clouseau) .....
Labeled by .....
Labeling checked by .....

Turn Around Time: ☐RUSH-24HR ☐RUSH-48HR ☐RUSH-72HR ☒NORMAL .....
Short-Hold Notification: ☐Ph ☐Wet Chem ☐Metals (Filter/Pres) ☐Encore ☒N/A ...
Outside Analysis(es) (Test/Lab/Date Sent Out) :

_____ .....
_____ .....
_____ .....
_____ .....

********** LEAVE NO BLANK SPACES ; USE N/A **********

Fraction	P-G											PH N/A
VOAh /*	3											

h:HCl na:Sodium Hydoxide znna:Zinc Acetate/Sodium Hydroxide s: H2SO4 n:HNO3 n/f:HNO3-Field filtered n/fl:HNO3-Lab filtered
CGJ:Clear Glass Jar CGB:Clear Glass Bottle AGJ:Amber Glass Jar AGB:Amber Glass Bottle PB: Poly Bottle E:Encore Sampler V:VOA SL:Sleeve
* Number of VOA's w/ Headspace present

LOGGED BY/DATE: AB 07/07/03 REVIEWED BY/DATE: MM 7/7/03

SEVERN TRENT STL

Analytical Report

ANALYTICAL REPORT

PROJECT NO. #030630-MM2/98995740

NA T0600101805

Lot #: E3G070133

Tod Granicher

STL San Francisco

SEVERN TRENT LABORATORIES, INC.

Marisol Tabirara
Project Manager

July 14, 2003

EXECUTIVE SUMMARY - Detection Highlights

E3G070133

PARAMETER	RESULT	REPORTING LIMIT	UNITS	ANALYTICAL METHOD
MW-1 06/30/03 11:00 001				
Methyl tert-butyl ether (MTBE)	2000	25	ug/L	SW846 8260B
Toluene	37	25	ug/L	SW846 8260B
TPH (as Gasoline)	7800	2500	ug/L	SW846 8260B
Xylenes (total)	380	50	ug/L	SW846 8260B
MW-2 06/30/03 12:37 002				
Ethylbenzene	170	120	ug/L	SW846 8260B
Benzene	780	120	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	9000	120	ug/L	SW846 8260B
Xylenes (total)	250	250	ug/L	SW846 8260B
MW-4 06/30/03 13:35 004				
Benzene	5.3	5.0	ug/L	SW846 8260B
Ethylbenzene	7.1	5.0	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	420	5.0	ug/L	SW846 8260B
TPH (as Gasoline)	3100	500	ug/L	SW846 8260B
MW-5 06/30/03 12:00 005				
Benzene	18	2.5	ug/L	SW846 8260B
Ethylbenzene	17	2.5	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	47	2.5	ug/L	SW846 8260B
TPH (as Gasoline)	3400	250	ug/L	SW846 8260B
Xylenes (total)	5.5	5.0	ug/L	SW846 8260B
TBW-N 06/30/03 13:50 006				
Benzene	7700	120	ug/L	SW846 8260B
Ethylbenzene	5800	120	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	8400	120	ug/L	SW846 8260B
TPH (as Gasoline)	260000	12000	ug/L	SW846 8260B
Xylenes (total)	40000	250	ug/L	SW846 8260B

METHODS SUMMARY

E3G070133

PARAMETER	ANALYTICAL METHOD	PREPARATION METHOD
Volatile Organics by GC/MS	SW846 8260B	

References:

SW846 "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 and its updates.

SAMPLE SUMMARY

E3G070133

WO #	SAMPLE#	CLIENT SAMPLE ID	SAMPLED DATE	SAMP TIME
FRTP9	001	MW-1	06/30/03	11:00
FRTQC	002	MW-2	06/30/03	12:37
FRTQD	003	MW-3	06/30/03	13:15
FRTQE	004	MW-4	06/30/03	13:35
FRTQF	005	MW-5	06/30/03	12:00
FRTQG	006	TBW-N	06/30/03	13:50

NOTE(S):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.

STL SAN FRANCISCO

Client Sample ID: MW-1

GC/MS Volatiles

Lot-Sample #...:	E3G070133-001	Work Order #...:	FRTP91AA	Matrix.....:	WATER
Date Sampled...:	06/30/03 11:00	Date Received..:	07/03/03 10:00	MS Run #.....:	3189213
Prep Date.....:	07/07/03	Analysis Date..:	07/07/03		
Prep Batch #...:	3189435	Analysis Time..:	20:26		
Dilution Factor:	50				
Analyst ID.....:	004648	Instrument ID..:	MSK		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	25	ug/L
Ethylbenzene	ND	25	ug/L
Methyl tert-butyl ether (MTBE)	2000	25	ug/L
Toluene	37	25	ug/L
TPH (as Gasoline)	7800	2500	ug/L
Xylenes (total)	380	50	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	102	(65 - 135)
Toluene-d8	108	(80 - 130)

STL SAN FRANCISCO

Client Sample ID: MW-2

GC/MS Volatiles

Lot-Sample #...:	E3G070133-002	Work Order #...:	FRTQC1AA	Matrix.....:	WATER
Date Sampled...:	06/30/03 12:37	Date Received..:	07/03/03 10:00	MS Run #.....:	3189213
Prep Date.....:	07/07/03	Analysis Date..:	07/07/03		
Prep Batch #...:	3189435	Analysis Time..:	18:53		
Dilution Factor:	250				
Analyst ID.....:	004648	Instrument ID..:	MSK		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Ethylbenzene	**170**	**120**	**ug/L**
Benzene	**780**	**120**	**ug/L**
Methyl tert-butyl ether (MTBE)	**9000**	**120**	**ug/L**
Toluene	ND	120	ug/L
TPH (as Gasoline)	ND	12000	ug/L
Xylenes (total)	**250**	**250**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	106	(65 - 135)
Toluene-d8	110	(80 - 130)

STL SAN FRANCISCO

Client Sample ID: MW-3

GC/MS Volatiles

Lot-Sample #...:	E3G070133-003	**Work Order #...:**	FRTQD1AA	**Matrix.....:**	WATER
Date Sampled...:	06/30/03 13:15	**Date Received..:**	07/03/03 10:00	**MS Run #.....:**	3189213
Prep Date.....:	07/07/03	**Analysis Date..:**	07/07/03		
Prep Batch #...:	3189435	**Analysis Time..:**	19:16		
Dilution Factor:	1				
Analyst ID.....:	004648	**Instrument ID..:**	MSK		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	ND	0.50	ug/L
Ethylbenzene	ND	0.50	ug/L
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L
Toluene	ND	0.50	ug/L
TPH (as Gasoline)	ND	50	ug/L
Xylenes (total)	ND	1.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	103	(65 - 135)
Toluene-d8	109	(80 - 130)

STL SAN FRANCISCO

Client Sample ID: MW-4

GC/MS Volatiles

Lot-Sample #...:	E3G070133-004	Work Order #...:	FRTQE1AA	Matrix.....:	WATER
Date Sampled...:	06/30/03 13:35	Date Received..:	07/03/03 10:00	MS Run #.....:	3189213
Prep Date.....:	07/07/03	Analysis Date..:	07/07/03		
Prep Batch #...:	3189435	Analysis Time..:	19:39		
Dilution Factor:	10				
Analyst ID.....:	004648	Instrument ID..:	MSK		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	5.3	5.0	ug/L
Ethylbenzene	7.1	5.0	ug/L
Methyl tert-butyl ether (MTBE)	420	5.0	ug/L
Toluene	ND	5.0	ug/L
TPH (as Gasoline)	3100	500	ug/L
Xylenes (total)	ND	10	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	108	(65 - 135)
Toluene-d8	110	(80 - 130)

STL SAN FRANCISCO

Client Sample ID: MW-5

GC/MS Volatiles

Lot-Sample #...:	E3G070133-005	Work Order #...:	FRTQF1AA	Matrix.....:	WATER
Date Sampled...:	06/30/03 12:00	Date Received..:	07/03/03 10:00	MS Run #.....:	3189327
Prep Date.....:	07/08/03	Analysis Date..:	07/08/03		
Prep Batch #...:	3189602	Analysis Time..:	12:33		
Dilution Factor:	5				
Analyst ID.....:	015590	Instrument ID..:	MSK		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	18	2.5	ug/L
Ethylbenzene	17	2.5	ug/L
Methyl tert-butyl ether (MTBE)	47	2.5	ug/L
Toluene	ND	2.5	ug/L
TPH (as Gasoline)	3400	250	ug/L
Xylenes (total)	5.5	5.0	ug/L

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	111	(65 - 135)
Toluene-d8	109	(80 - 130)

STL SAN FRANCISCO

Client Sample ID: TBW-N

GC/MS Volatiles

Lot-Sample #...:	E3G070133-006	Work Order #...:	FRTQG1AA	Matrix.....:	WATER
Date Sampled...:	06/30/03 13:50	Date Received..:	07/03/03 10:00	MS Run #.....:	3189213
Prep Date.....:	07/08/03	Analysis Date..:	07/08/03		
Prep Batch #...:	3189435	Analysis Time..:	02:37		
Dilution Factor:	250				
Analyst ID.....:	004648	Instrument ID..:	MSK		
		Method.....:	SW846 8260B		

PARAMETER	RESULT	REPORTING LIMIT	UNITS
Benzene	**7700**	**120**	**ug/L**
Ethylbenzene	**5800**	**120**	**ug/L**
Methyl tert-butyl ether (MTBE)	**8400**	**120**	**ug/L**
Toluene	ND	120	ug/L
TPH (as Gasoline)	**260000**	**12000**	**ug/L**
Xylenes (total)	**40000**	**250**	**ug/L**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	102	(65 - 135)
Toluene-d8	102	(80 - 130)

SEVERN TRENT STL

QA/QC

QC DATA ASSOCIATION SUMMARY

E3G070133

Sample Preparation and Analysis Control Numbers

SAMPLE#	MATRIX	ANALYTICAL METHOD	LEACH BATCH #	PREP BATCH #	MS RUN#
001	WATER	SW846 8260B		3189435	3189213
002	WATER	SW846 8260B		3189435	3189213
003	WATER	SW846 8260B		3189435	3189213
004	WATER	SW846 8260B		3189435	3189213
005	WATER	SW846 8260B		3189602	3189327
006	WATER	SW846 8260B		3189435	3189213

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E3G070133 Work Order #...: FRWLT1AA Matrix.....: WATER
MB Lot-Sample #: E3G080000-435

Prep Date.....: 07/07/03 Analysis Time..: 17:19
Analysis Date..: 07/07/03 Prep Batch #...: 3189435 Instrument ID..: MSK
Dilution Factor: 1

Analyst ID.....: 004648

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.50	ug/L	SW846 8260B
Ethylbenzene	ND	0.50	ug/L	SW846 8260B
Toluene	ND	0.50	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
TPH (as Gasoline)	ND	50	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	106	(65 - 135)
Toluene-d8	94	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

METHOD BLANK REPORT

GC/MS Volatiles

Client Lot #...: E3G070133
MB Lot-Sample #: E3G080000-602
Work Order #...: FRXA11AA
Matrix.....: WATER
Prep Date.....: 07/08/03
Analysis Time..: 09:57
Analysis Date..: 07/08/03
Prep Batch #...: 3189602
Instrument ID..: MSK
Dilution Factor: 1
Analyst ID.....: 015590

PARAMETER	RESULT	REPORTING LIMIT	UNITS	METHOD
Benzene	ND	0.50	ug/L	SW846 8260B
Ethylbenzene	ND	0.50	ug/L	SW846 8260B
Toluene	ND	0.50	ug/L	SW846 8260B
Xylenes (total)	ND	1.0	ug/L	SW846 8260B
TPH (as Gasoline)	ND	50	ug/L	SW846 8260B
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	SW846 8260B

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	99	(65 - 135)
Toluene-d8	98	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E3G070133 Work Order #...: FRWLT1AC Matrix.....: WATER
LCS Lot-Sample#: E3G080000-435
Prep Date.....: 07/07/03 Analysis Date..: 07/07/03
Prep Batch #...: 3189435 Analysis Time..: 16:33
Dilution Factor: 1 Instrument ID..: MSK
Analyst ID.....: 004648

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**105**	**(75 - 125)**	**SW846 8260B**
Toluene	**121**	**(75 - 125)**	**SW846 8260B**
Ethylbenzene	**111**	**(70 - 130)**	**SW846 8260B**
Methyl tert-butyl ether (MTBE)	**141**	**(65 - 165)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	96	(65 - 135)
Toluene-d8	102	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E3G070133 Work Order #...: FRWLT1AC Matrix.....: WATER
LCS Lot-Sample#: E3G080000-435
Prep Date.....: 07/07/03 Analysis Date..: 07/07/03
Prep Batch #...: 3189435 Analysis Time..: 16:33
Dilution Factor: 1 Instrument ID..: MSK
Analyst ID.....: 004648

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	**10.0**	**10.5**	**ug/L**	**105**	**SW846 8260B**
Toluene	**10.0**	**12.1**	**ug/L**	**121**	**SW846 8260B**
Ethylbenzene	**10.0**	**11.1**	**ug/L**	**111**	**SW846 8260B**
Methyl tert-butyl ether (MTBE)	**10.0**	**14.1**	**ug/L**	**141**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	96	(65 - 135)
Toluene-d8	102	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...: E3G070133 Work Order #...: FRXA11AC Matrix.....: WATER
LCS Lot-Sample#: E3G080000-602
Prep Date.....: 07/08/03 Analysis Date..: 07/08/03
Prep Batch #...: 3189602 Analysis Time..: 09:34
Dilution Factor: 1 Instrument ID..: MSK
Analyst ID.....: 015590

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
Benzene	**88**	**(75 - 125)**	**SW846 8260B**
Toluene	**99**	**(75 - 125)**	**SW846 8260B**
Ethylbenzene	**88**	**(70 - 130)**	**SW846 8260B**
Methyl tert-butyl ether (MTBE)	**105**	**(65 - 165)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	101	(65 - 135)
Toluene-d8	104	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

LABORATORY CONTROL SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...: E3G070133 Work Order #...: FRXA11AC Matrix.....: WATER
LCS Lot-Sample#: E3G080000-602
Prep Date.....: 07/08/03 Analysis Date..: 07/08/03
Prep Batch #...: 3189602 Analysis Time..: 09:34
Dilution Factor: 1 Instrument ID..: MSK
Analyst ID.....: 015590

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECOVERY	METHOD
Benzene	**10.0**	**8.82**	**ug/L**	**88**	**SW846 8260B**
Toluene	**10.0**	**9.91**	**ug/L**	**99**	**SW846 8260B**
Ethylbenzene	**10.0**	**8.78**	**ug/L**	**88**	**SW846 8260B**
Methyl tert-butyl ether (MTBE)	**10.0**	**10.5**	**ug/L**	**105**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	101	(65 - 135)
Toluene-d8	104	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E3G070133	**Work Order #...:**	FRTQD1AC-MS	**Matrix.....:**	WATER
MS Lot-Sample #:	E3G070133-003		FRTQD1AD-MSD		
Date Sampled...:	06/30/03 13:15	**Date Received..:**	07/03/03 10:00	**MS Run #.....:**	3189213
Prep Date.....:	07/08/03	**Analysis Date..:**	07/08/03		
Prep Batch #...:	3189435	**Analysis Time..:**	01:50		
Dilution Factor:	1	**Analyst ID.....:**	004648	**Instrument ID..:**	MSK

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**100**	**(75 - 125)**			**SW846 8260B**
	100	**(75 - 125)**	**0.10**	**(0-25)**	**SW846 8260B**
Toluene	**108**	**(75 - 125)**			**SW846 8260B**
	101	**(75 - 125)**	**6.7**	**(0-25)**	**SW846 8260B**
Ethylbenzene	**107**	**(70 - 130)**			**SW846 8260B**
	104	**(70 - 130)**	**2.8**	**(0-20)**	**SW846 8260B**
Methyl tert-butyl ether (MTBE)	**115**	**(65 - 165)**			**SW846 8260B**
	121	**(65 - 165)**	**5.0**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	102	(65 - 135)
	107	(65 - 135)
Toluene-d8	110	(80 - 130)
	111	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...:	E3G070133	**Work Order #...:**	FRTQD1AC-MS	**Matrix.....:**	WATER
MS Lot-Sample #:	E3G070133-003		FRTQD1AD-MSD		
Date Sampled...:	06/30/03 13:15	**Date Received..:**	07/03/03 10:00	**MS Run #.....:**	3189213
Prep Date.....:	07/08/03	**Analysis Date..:**	07/08/03		
Prep Batch #...:	3189435	**Analysis Time..:**	01:50		
Dilution Factor:	1	**Analyst ID.....:**	004648	**Instrument ID..:**	MSK

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzene	**ND**	**10.0**	**10.0**	**ug/L**	**100**		**SW846 8260B**
	ND	**10.0**	**9.99**	**ug/L**	**100**	**0.10**	**SW846 8260B**
Toluene	**ND**	**10.0**	**10.8**	**ug/L**	**108**		**SW846 8260B**
	ND	**10.0**	**10.1**	**ug/L**	**101**	**6.7**	**SW846 8260B**
Ethylbenzene	**ND**	**10.0**	**10.7**	**ug/L**	**107**		**SW846 8260B**
	ND	**10.0**	**10.4**	**ug/L**	**104**	**2.8**	**SW846 8260B**
Methyl tert-butyl ether (MTBE)	**ND**	**10.0**	**11.5**	**ug/L**	**115**		**SW846 8260B**
	ND	**10.0**	**12.1**	**ug/L**	**121**	**5.0**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	102	(65 - 135)
	107	(65 - 135)
Toluene-d8	110	(80 - 130)
	111	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE EVALUATION REPORT

GC/MS Volatiles

Client Lot #...:	E3G070133	**Work Order #...:**	FRTNC1AC-MS	**Matrix.....:**	WATER
MS Lot-Sample #:	E3G070130-001		FRTNC1AD-MSD		
Date Sampled...:	06/27/03 12:55	**Date Received..:**	07/03/03 10:00	**MS Run #.....:**	3189327
Prep Date.....:	07/08/03	**Analysis Date..:**	07/08/03		
Prep Batch #...:	3189602	**Analysis Time..:**	18:21		
Dilution Factor:	1	**Analyst ID.....:**	015590	**Instrument ID..:**	MSK

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD
Benzene	**98**	**(75 - 125)**			**SW846 8260B**
	102	**(75 - 125)**	**4.3**	**(0-25)**	**SW846 8260B**
Toluene	**101**	**(75 - 125)**			**SW846 8260B**
	106	**(75 - 125)**	**4.9**	**(0-25)**	**SW846 8260B**
Ethylbenzene	**102**	**(70 - 130)**			**SW846 8260B**
	110	**(70 - 130)**	**7.7**	**(0-20)**	**SW846 8260B**
Methyl tert-butyl ether (MTBE)	**104**	**(65 - 165)**			**SW846 8260B**
	110	**(65 - 165)**	**5.9**	**(0-20)**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	116	(65 - 135)
	103	(65 - 135)
Toluene-d8	111	(80 - 130)
	110	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

MATRIX SPIKE SAMPLE DATA REPORT

GC/MS Volatiles

Client Lot #...:	E3G070133	**Work Order #...:**	FRTNC1AC-MS	**Matrix.....:**	WATER
MS Lot-Sample #:	E3G070130-001		FRTNC1AD-MSD		
Date Sampled...:	06/27/03 12:55	**Date Received..:**	07/03/03 10:00	**MS Run #.....:**	3189327
Prep Date.....:	07/08/03	**Analysis Date..:**	07/08/03		
Prep Batch #...:	3189602	**Analysis Time..:**	18:21		
Dilution Factor:	1	**Analyst ID.....:**	015590	**Instrument ID..:**	MSK

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD
Benzene	**ND**	**10.0**	**9.82**	**ug/L**	**98**		**SW846 8260B**
	ND	**10.0**	**10.2**	**ug/L**	**102**	**4.3**	**SW846 8260B**
Toluene	**ND**	**10.0**	**10.1**	**ug/L**	**101**		**SW846 8260B**
	ND	**10.0**	**10.6**	**ug/L**	**106**	**4.9**	**SW846 8260B**
Ethylbenzene	**ND**	**10.0**	**10.2**	**ug/L**	**102**		**SW846 8260B**
	ND	**10.0**	**11.0**	**ug/L**	**110**	**7.7**	**SW846 8260B**
Methyl tert-butyl ether (MTBE)	**ND**	**10.0**	**10.4**	**ug/L**	**104**		**SW846 8260B**
	ND	**10.0**	**11.0**	**ug/L**	**110**	**5.9**	**SW846 8260B**

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
1,2-Dichloroethane-d4	116	(65 - 135)
	103	(65 - 135)
Toluene-d8	111	(80 - 130)
	110	(80 - 130)

NOTE(S):

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

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

2003.07-0005

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

SAP or CRMT NUMBER (TS/CRMT):

DATE: 6/30/03

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			
PROJECT CONTACT (Hardcopy or PDF Report to)	**EDF DELIVERABLE TO (Responsible Party or Designee)**	**PHONE NO.**	**E-MAIL** / **CONSULTANT PROJECT NO.**
Leon Gearhart	Anni Kreml	510-420-3335	ShellOaklandEDF@cambria-env.com / BTS # 030675-MA-12
TELEPHONE / **FAX** / **E-MAIL**	**SAMPLER NAME(S) (Print)**	**CAS USE ONLY**	
408-573-0555 / 408-573-7771 / kgearhart@blainetech.com	MIKE McNAMARA		

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

CAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	Ethanol (8260B)	Methanol	1,2-DCA (8260B)	EDB (8260B)	TPH - Diesel, Extractable (8015m)
1	MW-1	6/30/03	1100	GW	3	X	X		X						
2	MW-2	"	1237	"	3	X	X		X						
3	MW-3	"	1315	"	3	X	X		X						
4	MW-4	"	1335	"	3	X	X		X						
5	MW-5	"	1200	"	3	X	X		X						
6	TBW-N	"	1250	"	3	X	X		X						

FIELD NOTES:

Container/Preservative or PID Readings or Laboratory Notes

4.6°C

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		6/30/03	1708
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
		6/30/03	1817
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

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

10/15/00 Revision

C&D Graphics (714) 898-9702

WELL GAUGING DATA

Project # 030030-NM2 Date 6/30/03 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		EXT. Pump			12.20	27.44	TOC	
MW-2	2					12.10	20.00		
MW-3	2					12.50	20.11		
MW-4	4					14.12	19.85		
MW-5	2					11.97	20.00		
TBW-N	4	Strong Odor	EXT. Pump			11.51	—		
	*	removed pump to gauge with interface probe							

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

SHELL WELL MONITORING DATA SHEET

BTS #: 030630-MM2	Site: 2120 Mountain St., Oakland
Sampler: MM	Date: 6/30/03
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 27.44	Depth to Water (DTW): 12.20
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]: 15.24 15.25	

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

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

2.4 (Gals.) X	3	=	7.2 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
1043	72.6	7.6	806	131	2.5	slightly cloudy (cle
1049	68.4	7.3	808	41	5.0	gas odor, clear
1055	67.7	7.1	809	27	7.5	

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

Sampling Date: 6/30/03 Sampling Time: 1100 Depth to Water: 12.65

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030630-MM2	Site: 2120 Mountain St., Oakland
Sampler: MM	Date: 6/30/03
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 20.00	Depth to Water (DTW): 12.10
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 7.9 x 0.20) + DTW]: 13.68	

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

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

1.3 (Gals.) X	3 =	3.9 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1228	67.4	7.4	965	>1000	1.5	cloudy, dark grey
1231	65.9	7.3	985	>1000	3.0	
1233	66.1	7.2	1003	390	4.5	slightly cloudy

Did well dewater? Yes (No) Gallons actually evacuated: 4.5

Sampling Date: 6/30/03 Sampling Time: 1237 Depth to Water: 13.59

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030630-MM2	Site: 2120 Mountain St., Oakland
Sampler: MM	Date: 6/30/03
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 20.11	Depth to Water (DTW): 12.50
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]: 14.02 (7.61)	

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 =	3.6 Gals.
1 Case Volume	Specified Volumes	Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1304	72.2	7.7	670	668	1.2	slightly cloudy
1307	70.1	7.7	642	371	2.4	clearing
1310	70.6	8.0	642	419	3.6	

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

Sampling Date: 6/30/03 Sampling Time: 1315 Depth to Water: 13.90

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030630-MM2	Site: 2120 Mountain St., Oakland
Sampler: MM	Date: 6/30/03
Well I.D.: MW-4	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth (TD): 19.85	Depth to Water (DTW): 14.12
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 5.73 x 0.20) + DTW]: 15.27	

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

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

3.7 (Gals.) X 3 = 11.1 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
	dewatered		@ 2.0	Gal's		
1331	70.2	7.0	710	113	2.0	clear odor
1334	68.2	7.0	703	70		odor, clear

Did well dewater? (Yes) No Gallons actually evacuated: 2.0

Sampling Date: 6/30/03 Sampling Time: 1335 Depth to Water: 15.14

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

Analyzed for: (TPH-G) (BTEX) (MTBE) @ Time TPH-D Other:

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030630-MM2	Site: 2120 Mountain St., Oakland
Sampler: m m	Date: 6/30/03
Well I.D.: MW-5	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 20.00	Depth to Water (DTW): 11.97
Depth to Free Product:	Thickness of Free Product (feet): 13.58
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column 8.03 x 0.20) + DTW]: 12.39	

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

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

1.7 (Gals.) X	3 =	39 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
1148	69.2	7.6	605	>1000	1.5	cloudy, dark grey
1152	65.5	7.4	603	>1000	3.0	
1154	64.8	7.3	603	>1000	4.5	

Did well dewater? Yes (No) Gallons actually evacuated: 4.5

Sampling Date: 6/30/03 Sampling Time: 1200 Depth to Water: 12.39

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

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

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

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

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

SHELL WELL MONITORING DATA SHEET

BTS #: 030630-MM2	Site: 2120 Mountain St., Oakland
Sampler: MM	Date: 6/30/03
Well I.D.: MW-TBW-N	Well Diameter: 2 3 (4) 6 8
Total Well Depth (TD): —	Depth to Water (DTW): 11.51
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]:	

Purge Method: Bailer, Disposable Bailer, Middleburg, Electric Submersible, Waterra, Peristaltic, Extraction Pump, Other ____ — Grab Sample

Sampling Method: (Bailer) MM, Disposable Bailer, Extraction Port, Dedicated Tubing, Other: 0 in Bailer

____ (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
	Grab Sample					Strong odor from ac
1110	71.5	6.9	1194	>1000 *	—	Sheen, odor, clo
				* - water for parameter was		
					much cloudier	than in HCl vials

Did well dewater? Yes No Gallons actually evacuated: —

Sampling Date: 6/30/03 Sampling Time: 1350 Depth to Water: 11.51

Sample I.D.: TBW-N Laboratory: (STL) Other ____

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

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

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

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