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Alameda County
MAR - 7 2005
Environmental Health

March 4, 2005
Project No. SJ80-9ST-1.2005

Mr. Bob Schultz
Environmental Health Services – Environmental Protection
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Re: **Semi-Annual Monitoring Report – First Quarter 2005**
Shell-branded Service Station
809 East Stanley Blvd.
Livermore, California

Dear Mr. Schultz:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared the following first quarter 2005 groundwater monitoring and sampling report for the above referenced site. A site location map is included as Figure 1.

On March 7, 2003, Shell received a notice of responsibility letter from the Alameda County Health Care Services Agency placing the site in the Local Oversight Program due to the presence of methyl tert-butyl ether (MTBE) in groundwater beneath the site. In a work plan, dated May 27, 2003, Delta proposed to continue quarterly sampling of site wells for the remainder of 2003 in order to monitor MTBE concentrations. During the fourth quarter 2003, Delta recommended reducing the sampling frequency from quarterly to semi-annually in the first and third quarters.

QUARTERLY GROUND WATER MONITORING PROGRAM

Groundwater monitoring wells were gauged and sampled by Blaine Tech Services (Blaine), at the direction of Delta, on January 6, 2005. Depth to groundwater was measured in Wells MW-1 through MW-4. Groundwater elevation data and contours are presented on Figure 2.

A member of:



Groundwater samples were collected from Wells MW-1 through MW-4. Samples were submitted by Blaine to Severn Trent Laboratories, Inc. (STL) in Pleasanton, California for analysis of total purgeable petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds) and the fuel oxygenates methyl tert-butyl ether (MTBE), di-isopropyl ether (DIPE), ethyl tertiary butyl ether (ETBE), tertiary amyl methyl ether (TAME), and tertiary butyl alcohol (TBA) using EPA Method 8260B.

Blaine's groundwater monitoring and sampling report, which includes historical and current groundwater elevation data, historical and current analytical results, and field data records for the current monitoring event, is included as Attachment A.

DISCUSSION

Depth to groundwater has decreased an average of 2.16 feet in site wells since the last monitoring event in July 2004. The groundwater gradient on January 6, 2005 was toward the northeast at a magnitude of 0.006 feet/feet, consistent with previous data.

All analytes tested were below laboratory detection limits for samples collected on January 6, 2005. The MTBE concentration in Well MW-3 has been below 1.0 micrograms per liter since July 2002. Delta, on behalf of Shell, will submit a request for case closure.

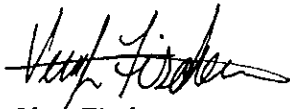
REMARKS

The information contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were performed. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

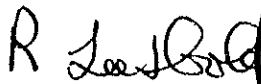
Please call if you have any questions regarding the contents of this letter.

Sincerely,

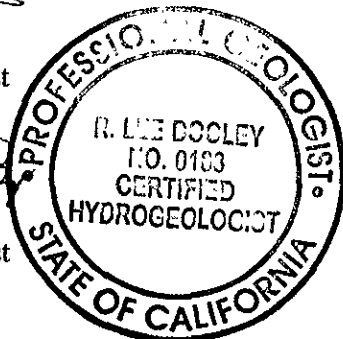
Delta Environmental Consultants, Inc.



Vera Fischer
Senior Staff Geologist



R. Lee Dooley
Senior Hydrogeologist
CHG 0183



March 4, 2005

Page 3

Attachments:

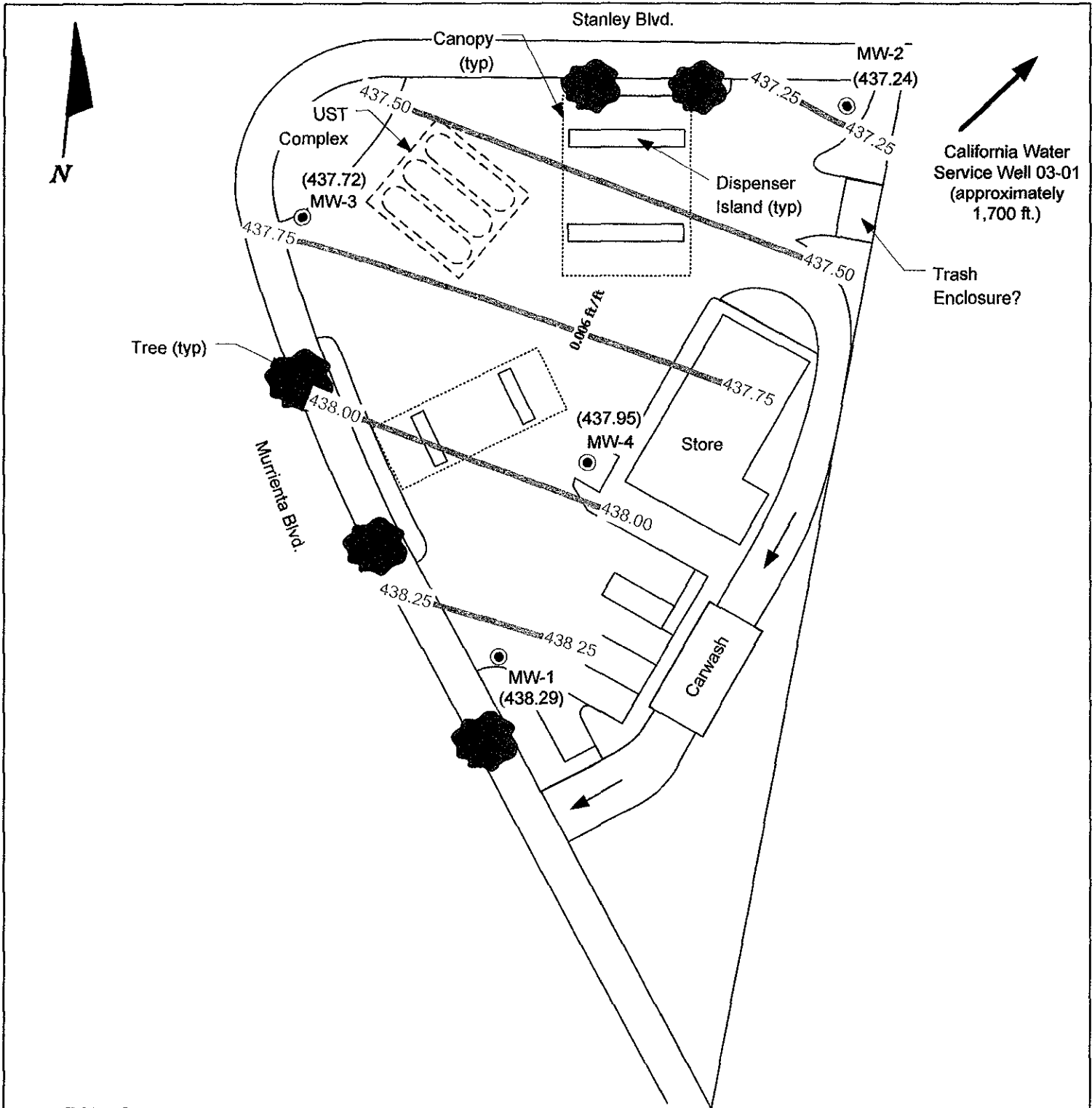
Figure 1 – Site Location Map

Figure 2 – Groundwater Elevation Contour Map, January 6, 2005

Figure 3 – Benzene and MTBE Concentrations Map, January 6, 2005

Attachment A – Groundwater Monitoring and Sampling Report, February 16, 2005

cc: Karen Petryna, Shell Oil Products US, Carson
Betty Graham, RWQCB – Oakland



LEGEND

- MW-1 ● **GROUNDWATER MONITORING WELL**
- (436.37) **GROUNDWATER ELEVATION (FEET-MSL), 1/6/05**
- 436.20 — **GROUNDWATER ELEVATION CONTOUR**
- 0.005 ft./ft. **APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT**

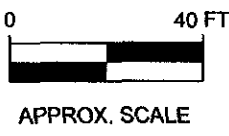
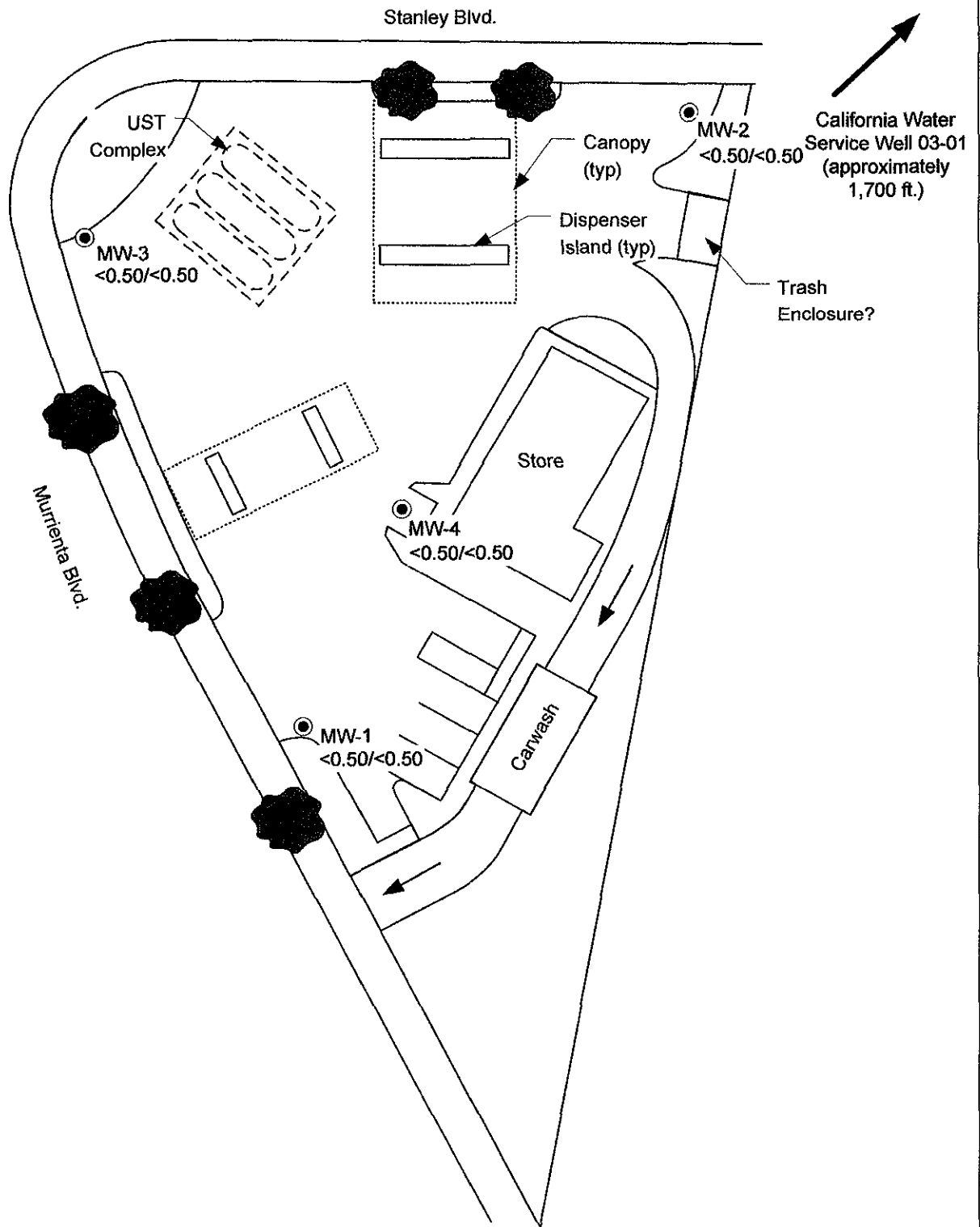


FIGURE 2
GROUNDWATER ELEVATION CONTOUR MAP,
JANUARY 6, 2005

Shell-branded Service Station
 809 East Stanley Ave.
 Livermore, California

PROJECT NO. SJ80-9ST-1 2005	DRAWN BY VF 12/01/03
FILE NO. SJ8-09ST-1.2005	PREPARED BY VF
REVISION NO. 1	REVIEWED BY DA

Delta
Environmental
Consultants, Inc.



LEGEND

MW-1 ● **GROUNDWATER MONITORING WELL**

$<0.50/<0.50$ **BENZENE/MTBE CONCENTRATIONS IN GROUNDWATER (ug/l), 1/6/05**

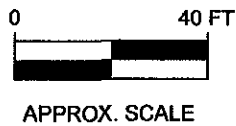


FIGURE 3
BENZENE AND MTBE CONCENTRATION MAP,
JANUARY 6, 2005
 Shell-branded Service Station
 809 East Stanley Ave.
 Livermore, California

PROJECT NO. SJ80-9ST-1 2005	DRAWN BY VF
FILE NO. SJ8-09ST-1 2005	PREPARED BY VF
REVISION NO. 1	REVIEWED BY DA



Attachment A

GROUNDWATER MONITORING AND SAMPLING REPORT

BLAINE
TECH SERVICES INC

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

February 16, 2005

Karen Petryna
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

First Quarter 2005 Groundwater Monitoring at
Shell-branded Service Station
809 East Stanley Boulevard
Livermore, CA

Monitoring performed on January 6, 2005

Groundwater Monitoring Report **050106-DA-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/ks

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

cc: Debbie Arnold
Delta Environmental
175 Bernal Road, Suite 200
San Jose, CA 95119

WELL CONCENTRATIONS
Shell-branded Service Station
809 East Stanley Boulevard
Livermore, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/l)	ETBE (ug/l)	TAME (ug/l)	TBA (ug/l)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-1	09/25/2001	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	NA	NA	NA
MW-1	07/09/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	455.49	20.06	435.43
MW-1	10/25/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	455.49	19.71	435.78
MW-1	01/24/2003	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	455.49	18.05	437.44
MW-1	04/21/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	455.49	17.57	437.92
MW-1	07/17/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	455.49	18.76	436.73
MW-1	10/20/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	5.0	455.49	20.01	435.48
MW-1	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	455.49	16.58	438.91
MW-1	07/27/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	455.49	19.43	436.06
MW-1	01/06/2005	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	455.49	17.20	438.29
MW-2	09/25/2001	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	NA	NA	NA
MW-2	07/09/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	454.84	20.40	434.44
MW-2	10/25/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	454.84	20.17	434.67
MW-2	01/24/2003	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	454.84	18.30	436.54
MW-2	04/21/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	454.84	17.93	436.91
MW-2	07/17/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	454.84	19.01	435.83
MW-2	10/20/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	454.84	20.36	434.48
MW-2	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	454.84	16.99	437.85
MW-2	07/27/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	454.84	19.64	435.20
MW-2	01/06/2005	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	454.84	17.60	437.24
MW-3	09/25/2001	NA	<0.50	<0.50	<0.50	<0.50	3.6	<2.0	<2.0	<2.0	<50	NA	NA	NA
MW-3	07/09/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	454.87	19.95	434.92
MW-3	10/25/2002	<50	<0.50	<0.50	<0.50	<0.50	0.83	<2.0	<2.0	<2.0	<50	454.87	19.63	435.24
MW-3	01/24/2003	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	454.87	17.90	436.97

WELL CONCENTRATIONS
Shell-branded Service Station
809 East Stanley Boulevard
Livermore, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/l)	ETBE (ug/l)	TAME (ug/l)	TBA (ug/l)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
MW-3	04/21/2003	<50	<0.50	<0.50	<0.50	<1.0	0.71	<2.0	<2.0	<2.0	<5.0	454.87	17.45	437.42
MW-3	07/17/2003	<50	<0.50	<0.50	<0.50	<1.0	0.69	<2.0	<2.0	<2.0	<5.0	454.87	18.69	436.18
MW-3	10/20/2003	<50	<0.50	<0.50	<0.50	<1.0	0.64	<2.0	<2.0	<2.0	<5.0	454.87	19.90	434.97
MW-3	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	454.87	16.50	438.37
MW-3	07/27/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	454.87	19.31	435.56
MW-3	01/06/2005	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	454.87	17.15	437.72
MW-4	09/25/2001	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	NA	NA	NA
MW-4	07/09/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	456.24	21.15	435.09
MW-4	10/25/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	456.24	20.85	435.39
MW-4	01/24/2003	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	456.24	19.15	437.09
MW-4	04/21/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	456.24	18.65	437.59
MW-4	07/17/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	456.24	19.87	436.37
MW-4	10/20/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	456.24	21.12	435.12
MW-4	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	456.24	17.65	438.59
MW-4	07/27/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	456.24	20.50	435.74
MW-4	01/06/2005	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	456.24	18.29	437.95

WELL CONCENTRATIONS
Shell-branded Service Station
809 East Stanley Boulevard
Livermore, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/l)	ETBE (ug/l)	TAME (ug/l)	TBA (ug/l)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
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Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B.

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B

TBA = Tertiary butyl alcohol or tertiary butanol, analyzed by EPA Method 8260B

TOC = Top of Casing Elevation

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

NA = Not applicable

Notes:

Survey data provided by KHM Environmental Management, Inc.

Blaine Tech Services, Inc.

January 21, 2005

1680 Rogers Avenue
San Jose, CA 95112-1105
Attn.: Leon Gearhart
Project#: BTS#050106-DA2
Project: 97461964
Site: 809 E. Stanley Blvd., Livermore

Dear Mr. Gearhart,

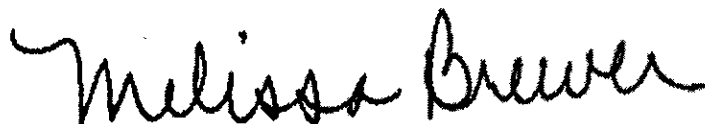
Attached is our report for your samples received on 01/07/2005 13:29
This report has been reviewed and approved for release. Reproduction of this report
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after
02/21/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions,

You can also contact me via email. My email address is: mbrewer@stl-inc.com

Sincerely,



Melissa Brewer
Project Manager

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: BTS#050106-DA2
97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	01/06/2005 13:35	Water	1
MW-2	01/06/2005 13:26	Water	2
MW-3	01/06/2005 13:52	Water	3
MW-4	01/06/2005 14:01	Water	4

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566
Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

01/21/2005 15:27

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: BTS#050106-DA2
97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-1	Lab ID: 2005-01-0220 - 1
Sampled: 01/06/2005 13:35	Extracted: 1/13/2005 08:49
Matrix: Water	QC Batch#: 2005/01/13-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	01/13/2005 08:49	
Benzene	ND	0.50	ug/L	1.00	01/13/2005 08:49	
Toluene	ND	0.50	ug/L	1.00	01/13/2005 08:49	
Ethylbenzene	ND	0.50	ug/L	1.00	01/13/2005 08:49	
Total xylenes	ND	1.0	ug/L	1.00	01/13/2005 08:49	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	01/13/2005 08:49	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	01/13/2005 08:49	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	01/13/2005 08:49	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	01/13/2005 08:49	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	01/13/2005 08:49	
Surrogate(s)						
1,2-Dichloroethane-d4	97.6	73-130	%	1.00	01/13/2005 08:49	
Toluene-d8	93.0	81-114	%	1.00	01/13/2005 08:49	

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: BTS#050106-DA2
97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-2	Lab ID: 2005-01-0220 - 2
Sampled: 01/06/2005 13:26	Extracted: 1/13/2005 09:11
Matrix: Water	QC Batch#: 2005/01/13-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	01/13/2005 09:11	
Benzene	ND	0.50	ug/L	1.00	01/13/2005 09:11	
Toluene	ND	0.50	ug/L	1.00	01/13/2005 09:11	
Ethylbenzene	ND	0.50	ug/L	1.00	01/13/2005 09:11	
Total xylenes	ND	1.0	ug/L	1.00	01/13/2005 09:11	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	01/13/2005 09:11	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	01/13/2005 09:11	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	01/13/2005 09:11	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	01/13/2005 09:11	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	01/13/2005 09:11	
Surrogate(s)						
1,2-Dichloroethane-d4	94.2	73-130	%	1.00	01/13/2005 09:11	
Toluene-d8	92.3	81-114	%	1.00	01/13/2005 09:11	

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: BTS#050106-DA2
97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-3	Lab ID: 2005-01-0220 - 3
Sampled: 01/06/2005 13:52	Extracted: 1/13/2005 10:16
Matrix: Water	QC Batch#: 2005/01/13-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	01/13/2005 10:16	
Benzene	ND	0.50	ug/L	1.00	01/13/2005 10:16	
Toluene	ND	0.50	ug/L	1.00	01/13/2005 10:16	
Ethylbenzene	ND	0.50	ug/L	1.00	01/13/2005 10:16	
Total xylenes	ND	1.0	ug/L	1.00	01/13/2005 10:16	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	01/13/2005 10:16	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	01/13/2005 10:16	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	01/13/2005 10:16	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	01/13/2005 10:16	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	01/13/2005 10:16	
Surrogate(s)						
1,2-Dichloroethane-d4	96.5	73-130	%	1.00	01/13/2005 10:16	
Toluene-d8	90.5	81-114	%	1.00	01/13/2005 10:16	

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

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

Project: BTS#050106-DA2
97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-4	Lab ID: 2005-01-0220 - 4
Sampled: 01/06/2005 14:01	Extracted: 1/13/2005 10:37
Matrix: Water	QC Batch#: 2005/01/13-1A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	01/13/2005 10:37	
Benzene	ND	0.50	ug/L	1.00	01/13/2005 10:37	
Toluene	ND	0.50	ug/L	1.00	01/13/2005 10:37	
Ethylbenzene	ND	0.50	ug/L	1.00	01/13/2005 10:37	
Total xylenes	ND	1.0	ug/L	1.00	01/13/2005 10:37	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	01/13/2005 10:37	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	01/13/2005 10:37	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	01/13/2005 10:37	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	01/13/2005 10:37	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	01/13/2005 10:37	
Surrogate(s)						
1,2-Dichloroethane-d4	103.8	73-130	%	1.00	01/13/2005 10:37	
Toluene-d8	92.1	81-114	%	1.00	01/13/2005 10:37	

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

Blaine Tech Services, Inc.

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

Project: BTS#050106-DA2
97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Batch QC Report

Prep(s): 5030B

Method Blank

MB: 2005/01/13-1A.62-023

Water

Test(s): 8260B

QC Batch # 2005/01/13-1A.62

Date Extracted: 01/13/2005 07:23

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	01/13/2005 07:23	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	01/13/2005 07:23	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	01/13/2005 07:23	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	01/13/2005 07:23	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	01/13/2005 07:23	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	01/13/2005 07:23	
Benzene	ND	0.5	ug/L	01/13/2005 07:23	
Toluene	ND	0.5	ug/L	01/13/2005 07:23	
Ethylbenzene	ND	0.5	ug/L	01/13/2005 07:23	
Total xylenes	ND	1.0	ug/L	01/13/2005 07:23	
Surrogates(s)					
1,2-Dichloroethane-d4	101.0	73-130	%	01/13/2005 07:23	
Toluene-d8	93.8	81-114	%	01/13/2005 07:23	

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

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

Project: BTS#050106-DA2
97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2005/01/13-1A.62

LCS 2005/01/13-1A.62-001
LCSD

Extracted: 01/13/2005

Analyzed: 01/13/2005 07:01

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	23.9		25	95.6			65-165	20		
Benzene	21.7		25	86.8			69-129	20		
Toluene	22.6		25	90.4			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	457		500	91.4			73-130			
Toluene-d8	450		500	90.0			81-114			

Severn Trent Laboratories, Inc.

STL San Francisco * 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 * www.stl-inc.com * CA DHS ELAP# 2496

01/21/2005 15:27

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

Blaine Tech Services, Inc.
Attn.: Leon Gearhart

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

Project: BTS#050106-DA2
97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD)

Water

QC Batch # 2005/01/13-1A.62

MW-2 >> MS

Lab ID: 2005-01-0220 - 002

MS: 2005/01/13-1A.62-032

Extracted: 01/13/2005

Analyzed: 01/13/2005 09:32

Dilution: 1.00

MSD: 2005/01/13-1A.62-054

Extracted: 01/13/2005

Analyzed: 01/13/2005 09:54

Dilution: 1.00

Compound	Conc. ug/L		Spk.Level	Recovery %			Limits %		Flags		
	MS	MSD		Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS
Methyl tert-butyl ether	26.1	32.5	ND	25	104.4	130.0	21.8	65-165	20		R1
Benzene	23.3	25.1	ND	25	93.2	100.4	7.4	69-129	20		
Toluene	24.2	26.1	ND	25	96.8	104.4	7.6	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	471	501		500	94.2	100.2		73-130			
Toluene-d8	452	481		500	90.4	96.2		81-114			

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

Blaine Tech Services, Inc.

Attn.: Leon Gearhart

1680 Rogers Avenue

San Jose, CA 95112-1105

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

Project: BTS#050106-DA2

97461964

Received: 01/07/2005 13:29

Site: 809 E. Stanley Blvd., Livermore

Legend and Notes

Result Flag

R1

Analyte RPD was out of QC limits.

LAB: STL

SHELL Chain Of Custody Record

99360

Lab Identification of materials
Address
City, State, Zip

Shell Project Manager to be invoiced:
 SCIENCE & ENGINEERING
 TECHNICAL SERVICES
 CRMT HOUSTON
Karen Petryna
2005-01-0220

INCIDENT NUMBER (S&E ONLY)
 9 7 4 6 1 9 6 4
SAP or CRMT NUMBER (TS/CRMT)

DATE 1/6/05
 PAGE 1 of 1

Blaine Tech Services (BTSS) | **809 E. Stanley Blvd., Livermore** | **T0600101276**
 1688 Rogers Avenue, San Jose, CA 95112
Leon Garhart
 408-573-0555 | 408-573-7771 | lgarhart@blainetech.com
Vera Fischer | 408-244-4724 | vfischer@deltaenv.com
 David Allbut

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

LA - AVOID REPORT FORMAT USE AGENCY:

GC/MS METE CONFIRMATION: HIGHEST _____ HIGHEST per BORING _____ ALL _____

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EGD IS NOT NEEDED

REQUESTED ANALYSIS

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

 20C

TEMPERATURE ON RECEIPT (C)

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8021B - Sppt RL)	MTRB (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)
		DATE	TIME							
✓	MW-1	1/6/05	1335	W	3	✓	✓	×	×	×
✓	MW-2		1326			✓	×	×	×	×
✓	MW-3		1352			×	×	×	×	×
✓	MW-4		1401			×	×	×	×	×

Requested by: (Signature) <i>David Allbut</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>1/7/05</u>	Time: <u>1328</u>
Requested by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>01/07/05</u>	Time: <u>1548</u>

