Shell Oil Products US

March 7, 2005

Re: **Former Shell-branded Service Station**
1155 Portola Avenue
Livermore, California

Dear Mr. Jerry Wickham:

I declare, under penalty of perjury, that the information and/or recommendations contained in the attached document or report is true and correct to the best of my knowledge.

Sincerely,
Shell Oil Products US

Denis L. Brown
Project Manager

20945 S. Wilmington Avenue, Carson, CA 90810 P: (559) 645-9306; F: (559) 645-5643

Delta Environmental Consultants, Inc.

Solving environment-related business problems worldwide

www.deltaenv.com

175 Bernal Road • Suite 200
San Jose, California 95119 USA

800.477.7411
Fax 408.225.8506

March 7, 2006
Project No. SJ11-55P-1
SAP: 135441

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

Re: **Quarterly Monitoring Report – Third and Fourth Quarter 2005**
Shell-branded Service Station
1155 Portola Avenue
Livermore, California

Dear Mr. Wickham:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared the following groundwater monitoring and sampling report for third and fourth quarter 2005 for the above referenced site. Groundwater sampling was performed by Blaine Tech Services (Blaine) at the direction of Delta. A site location map is included as Figure 1.

BACKGROUND

In October 2002, KHM Environmental Management, Inc. (now Delta) supervised the installation of Wells MW-1 through MW-4 as part of Shell's GRoundwater ASsessment Program (GRASP). GRASP is a voluntary initiative by SHELL to install groundwater monitoring wells at numerous retail service stations nationwide that do not have any active release cases but have been identified to be in close proximity to one or more public water supply wells. The purpose of this program is to proactively monitor the groundwater beneath these sites and, in the event of a subsurface release, to respond quickly to protect public wells from this impact.

An Unauthorized Release Report (URR) was previously submitted for this site in June 2003 based on detections of methyl tert-butyl ether (MTBE) in groundwater

Shell subsequently received a notice of responsibility letter dated July 10, 2003 from the Alameda County Health Care Services Agency (ACHCSA) placing the site in the Local Oversight Program.

QUARTERLY GROUND WATER MONITORING PROGRAM

Groundwater monitoring wells were gauged and sampled by Blaine on September 19 and December 7, 2005. Depth to groundwater was measured in Wells MW-1 through MW-4 on both events. Groundwater elevation data and contours are presented on Figures 2 and 3.

Quarterly groundwater samples were collected from Wells MW-1 through MW-4. Samples collected on September 19, 2005 were submitted by Blaine to Severn Trent Laboratories, Inc. in Pleasanton, California and samples collected on December 7, 2005 were submitted by Blaine to Sequoia Analytical in Morgan Hill, California. The samples were analyzed for total purgeable petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds); MTBE, and tertiary butyl alcohol (TBA) by EPA Method 8260B. Benzene, MTBE, and TBA concentrations are presented on Figures 4 and 5.

Blaine's groundwater monitoring and sampling reports, which includes historical and current groundwater elevation data, historical and current analytical results, and field data records for the third and fourth quarter monitoring events, are included as Attachment A.

DISCUSSION

Depth to groundwater at the site typically fluctuates by about 10 feet annually. Depth to groundwater increased by an average of 4.1 feet in site wells during third quarter. Depth to groundwater decreased by an average of 1.49 feet during fourth quarter. The groundwater gradient on September 19, 2005 was towards the west at a magnitude less than 0.01 ft/ft. The groundwater gradient on December 29, 2005 was towards the southwest at a magnitude of 0.01 ft/ft. The groundwater gradient at the site has ranged between northwest and south-southwest since fourth quarter 2002 (initial gauging event).

Concentrations of MTBE continue to decrease in site wells. During both monitoring events, MTBE was only detected in Wells MW-1 and MW-2 at concentrations ranging from 0.56 and 8.6 ug/l. Xylenes were detected in Well MW-3 for the second time at a concentration of 0.54 ug/l, just above the laboratory reporting limit of 0.5 ug/l. All other analytes tested were below laboratory detection limits during both events.

Based on consistently decreasing and stable groundwater concentrations, Shell proposes to reduce the monitoring and sampling frequency at the site from quarterly to semi-annual pending submittal of a case closure report to the Alameda County Health Care Services Agency.

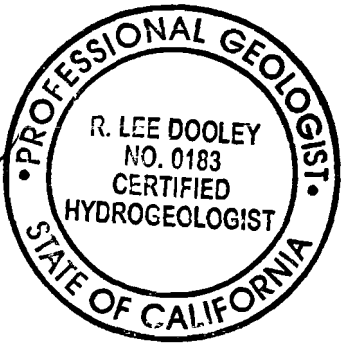
REMARKS

The information and recommendations 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.

Heather Buckingham
Senior Staff Geologist

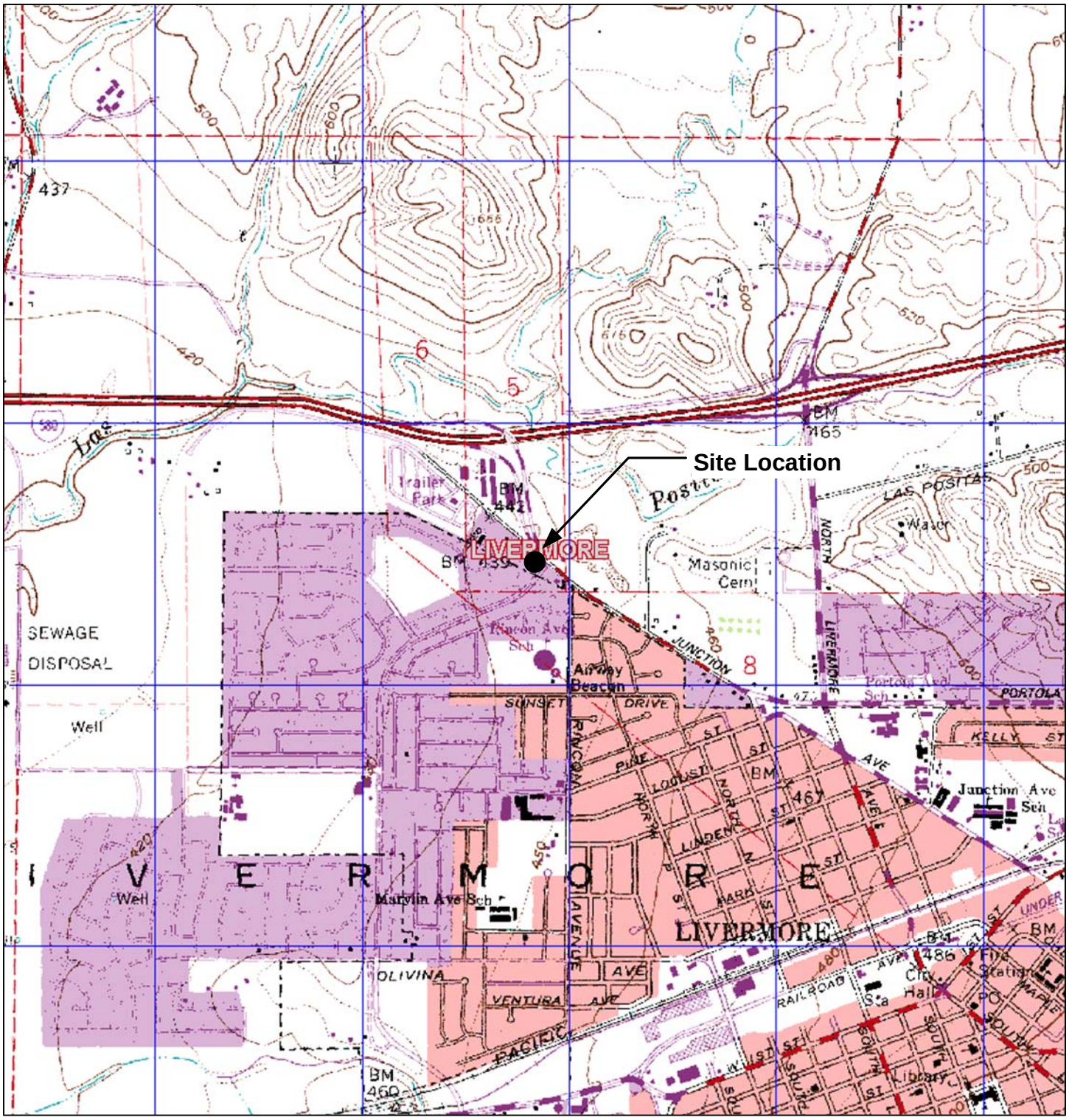


Lee Dooley
Senior Hydrogeologist
CHG 0183

Attachments: Figure 1 – Site Location Map
Figure 2 – Groundwater Elevation Contour Map, September 19, 2005
Figure 3 – Groundwater Elevation Contour Map, December 7, 2005
Figure 4 – Benzene, MTBE, and TBA Concentration Map, September 19, 2005
Figure 5 – Benzene, MTBE, and TBA Concentration Map, December 7, 2005

Attachment A – Groundwater Monitoring and Sampling Reports, December 29, 2005

cc: Denis Brown, Shell Oil Products US, Carson
Danielle Stefani, Livermore-Pleasanton Fire Department, Livermore
Terrell & Kimberley Bass, Danville



GENERAL NOTES:
Base Map from: DeLorme Yarmouth, ME 04096
Source Data: USGS

QUADRANGLE LOCATION

North

0 1,800 3,600

Scale, Feet

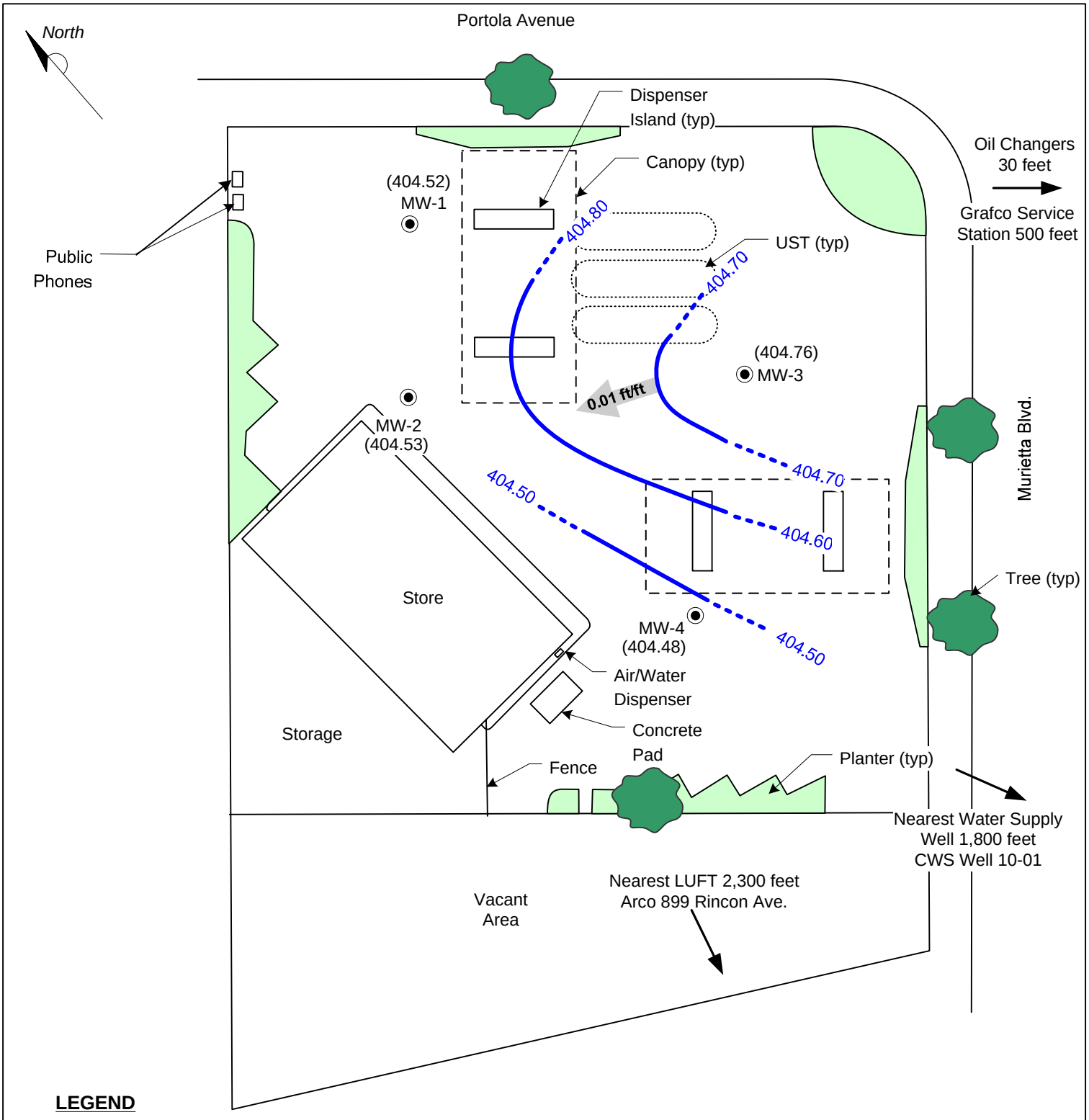
FIGURE 1

SITE LOCATION MAP

SHELL-BRANDED SERVICE STATION
1155 Portola Avenue
Livermore, California

PROJECT NO. SJ11-55P-1.2005	DRAWN BY VF 10/22/03
FILE NO. SJ11-55P-1.2005	PREPARED BY VF
REVISION NO.	REVIEWED BY

Delta
Environmental
Consultants, Inc.



LEGEND

MW-4 **GROUNDWATER MONITORING WELL**

(404.53) **GROUNDWATER ELEVATION (FEET - MSL), 09/19/05**

404.60 **GROUNDWATER ELEVATION CONTOUR**

<0.01 ft/ft **APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT**

0 30 FT

APPROX. SCALE

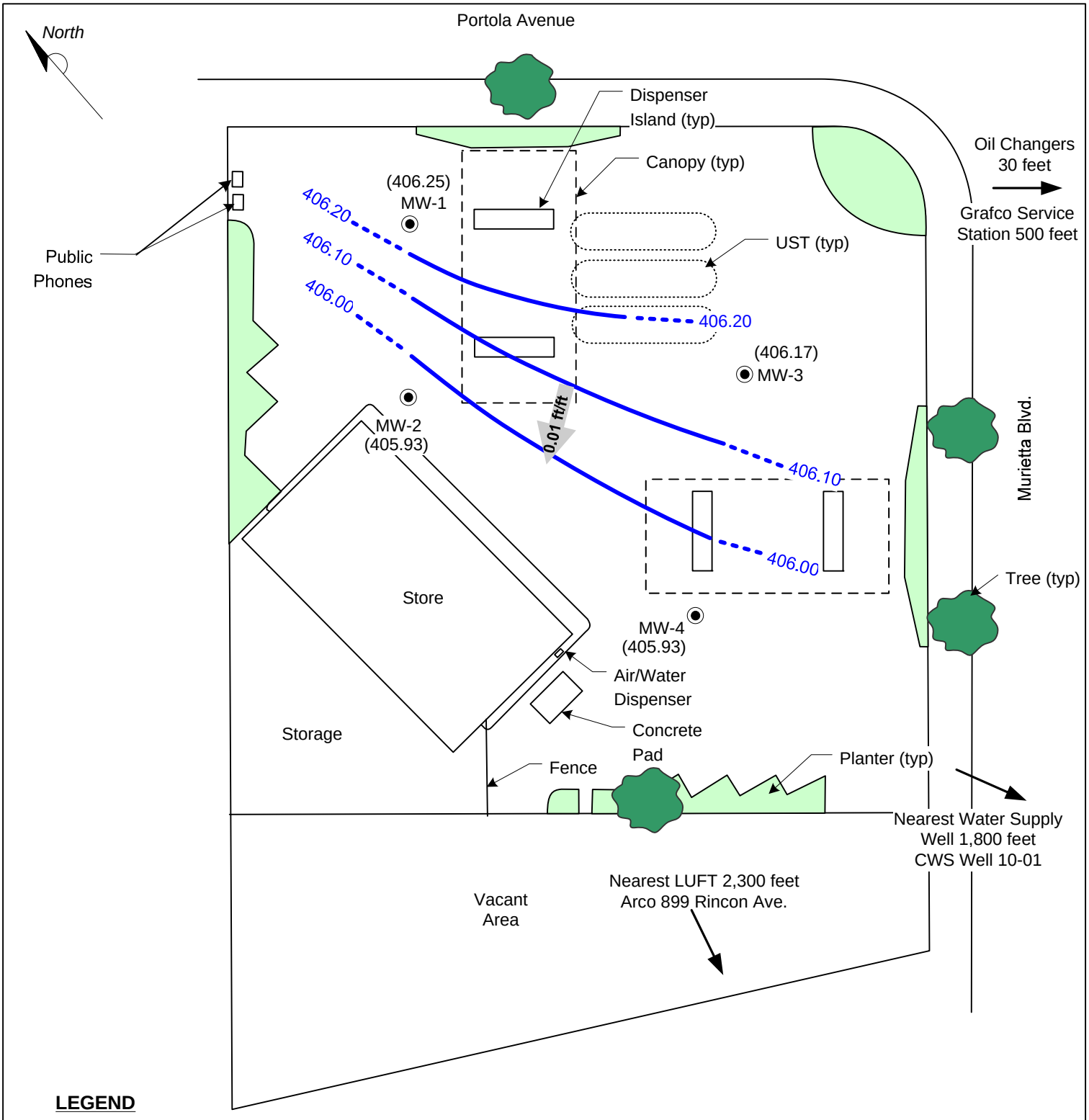
FIGURE 2

GROUNDWATER ELEVATION CONTOUR MAP, SEPTEMBER 19, 2005

SHELL-BRANDED SERVICE STATION
1155 Portola Avenue
Livermore, California

PROJECT NO. SJ11-55P-1.2005	DRAWN BY JL 11/14/05
FILE NO. SJ11-55P-1.2005	PREPARED BY JL
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



LEGEND

MW-4 **GROUNDWATER MONITORING WELL**

(4065.93) **GROUNDWATER ELEVATION (FEET - MSL), 12/29/05**

406.00 **GROUNDWATER ELEVATION CONTOUR**

<0.01 ft/ft **APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT**

0 30 FT

APPROX. SCALE

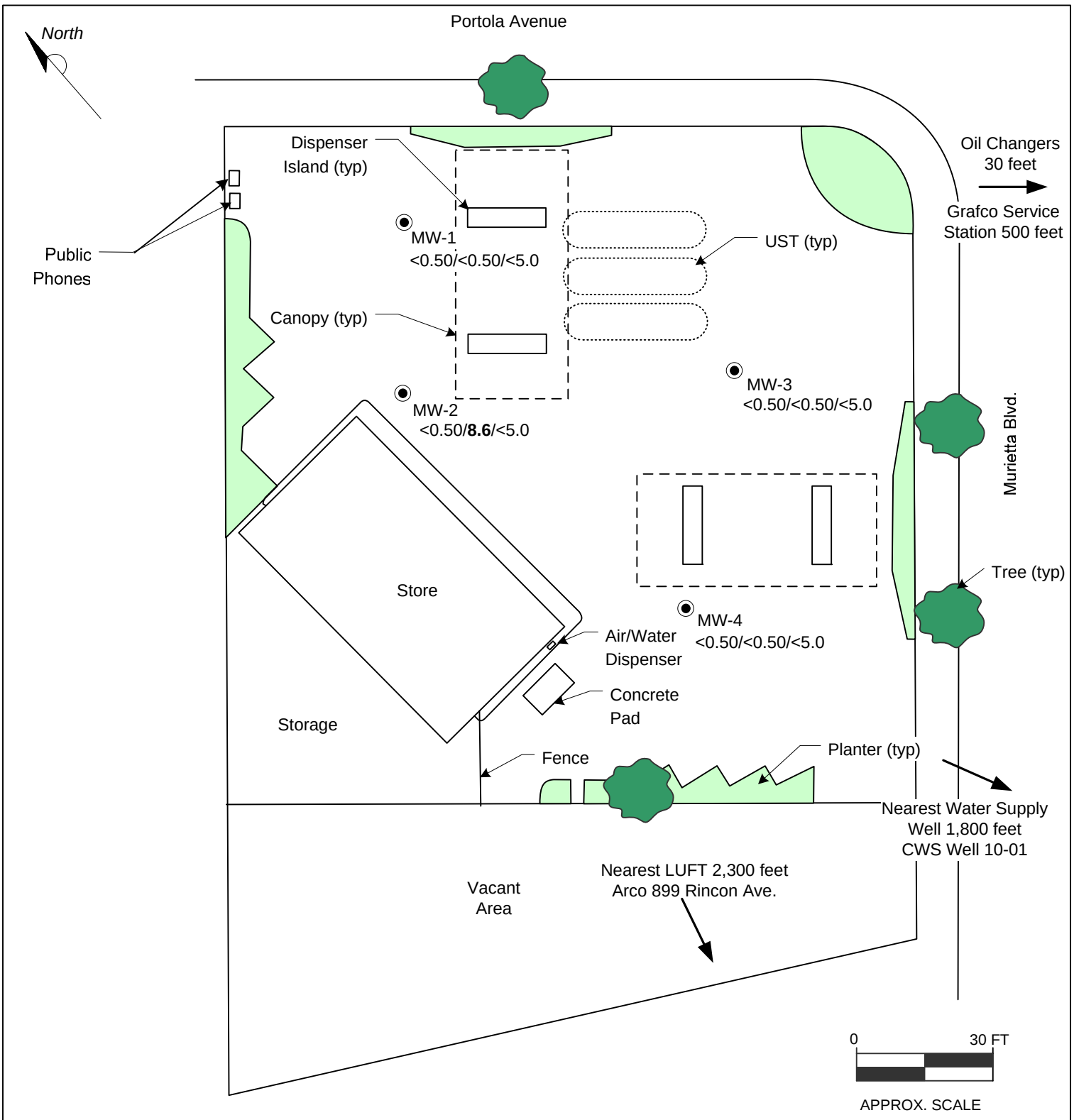
FIGURE 3

GROUNDWATER ELEVATION CONTOUR MAP, DECEMBER 29, 2005

SHELL-BRANDED SERVICE STATION
1155 Portola Avenue
Livermore, California

PROJECT NO. SJ11-55P-1.2005	DRAWN BY JL 01/11/06
FILE NO. SJ11-55P-1.2005	PREPARED BY JL
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



LEGEND

MW-4 ◉ **GROUNDWATER MONITORING WELL**

<0.50/**8.6**/<5.0 **BENZENE/MTBE/TBA CONCENTRATIONS (UG/L), 09/19/05**

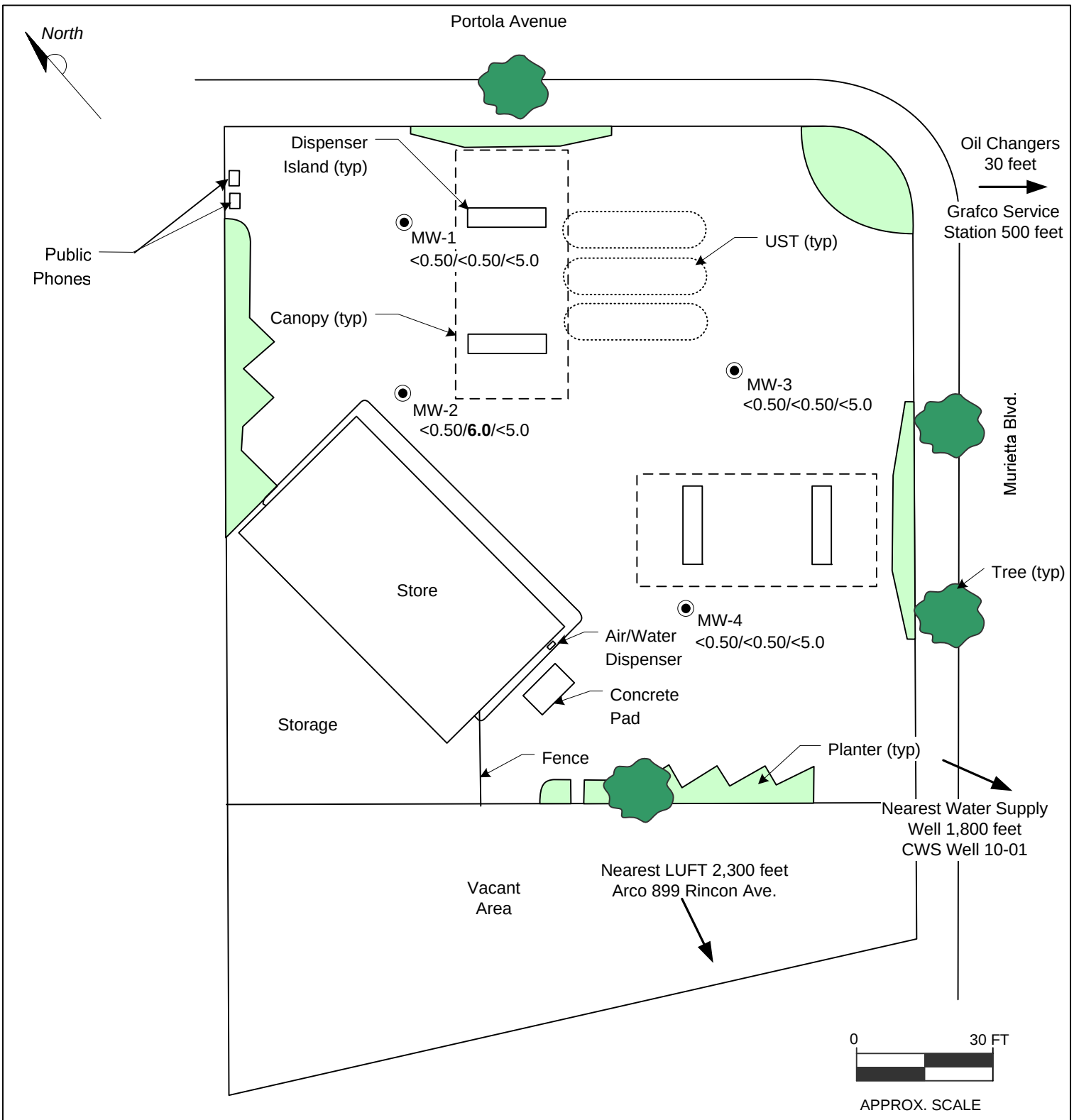
FIGURE 4

BENZENE, MTBE, AND TBA CONCENTRATIONS MAP, SEPTEMBER 19, 2005

SHELL-BRANDED SERVICE STATION
1155 Portola Avenue
Livermore, California

PROJECT NO. SJ11-55P-1.2005	DRAWN BY JL 11/14/05
FILE NO. SJ11-55P-1.2005	PREPARED BY JL
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



LEGEND

MW-4 ◉ **GROUNDWATER MONITORING WELL**

<0.50/**6.0**/<5.0 **BENZENE/MTBE/TBA CONCENTRATIONS (UG/L), 12/29/05**

FIGURE 5

BENZENE, MTBE, AND TBA CONCENTRATIONS MAP, DECEMBER 29, 2005

SHELL-BRANDED SERVICE STATION
1155 Portola Avenue
Livermore, California

PROJECT NO. SJ11-55P-1.2005	DRAWN BY JL 01/11/06
FILE NO. SJ11-55P-1.2005	PREPARED BY JL
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

Attachment A

GROUNDWATER MONITORING AND SAMPLING REPORTS

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

December 29, 2005

Denis Brown
Shell Oil Products US
20945 South Wilmington Avenue
Carson, CA 90810

Fourth Quarter 2005 Groundwater Monitoring at
Shell-branded Service Station
1155 Portola Avenue
Livermore, CA

Monitoring performed on December 7, 2005

Groundwater Monitoring Report **051207-DW-1**

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,

Mike Ninokata
Project Coordinator

MN/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
1155 Portola Avenue
Livermore, CA

Well ID	Date	TPPH (ug/L)	TEPH (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.)	Screened Interval (ft.)	GW Elevation (MSL)
MW-1	12/05/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.12	40-59	NA
MW-1	12/20/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	78	<2.0	<2.0	<2.0	<50	NA	38.40	40-59	NA
MW-1	03/28/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	7.0	<2.0	<2.0	<2.0	<5.0	443.81	36.25	40-59	407.56
MW-1	06/26/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	1.4	<2.0	<2.0	<2.0	<5.0	443.81	39.53	40-59	404.28
MW-1	08/25/2003	64	NA	<0.50	<0.50	<0.50	<1.0	53	<2.0	<2.0	<2.0	<5.0	443.81	42.52	40-59	401.29
MW-1	12/09/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	443.81	36.84	40-59	406.97
MW-1	03/08/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	3.9	<2.0	<2.0	<2.0	<5.0	443.81	31.75	40-59	412.06
MW-1	06/07/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	0.91	<2.0	<2.0	<2.0	<5.0	443.81	38.24	40-59	405.57
MW-1	09/01/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	4.7	NA	NA	NA	NA	443.81	44.66	40-59	399.15
MW-1	12/23/2004	<50 c	NA	<0.50	2.3	1.4	3.6	<0.50	NA	NA	NA	NA	443.81	39.14	40-59	404.67
MW-1	02/28/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	0.54	NA	NA	NA	NA	443.81	32.95	40-59	410.86
MW-1	06/13/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	6.8	443.81	35.00	40-59	408.81
MW-1	09/19/2005	<50	NA	<0.50	<0.50	<0.50	1.2	<0.50	NA	NA	NA	<5.0	443.81	39.29	40-59	404.52
MW-1	**12/07/2005**	**<50**	**NA**	**<0.50**	**<0.50**	**<0.50**	**0.56**	**<0.50**	**NA**	**NA**	**NA**	**<5.0**	**443.81**	**37.56**	**40-59**	**406.25**
MW-2	12/05/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.57	40-60	NA
MW-2	12/20/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	190	<2.0	<2.0	<2.0	<50	NA	40.00	40-60	NA
MW-2	03/28/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	46	<2.0	<2.0	<2.0	<5.0	444.61	37.40	40-60	407.21
MW-2	06/26/2003	<500	<50	<5.0	<5.0	<5.0	<10	330	<20	<20	<20	<50	444.61	40.51	40-60	404.10
MW-2	08/25/2003	<500	NA	<5.0	<5.0	<5.0	<10	400	<20	<20	<20	<50	444.61	43.38	40-60	401.23
MW-2	12/09/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	27	<2.0	<2.0	<2.0	<5.0	444.61	37.92	40-60	406.69
MW-2	03/08/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	444.61	33.40	40-60	411.21
MW-2	06/07/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	85	<2.0	<2.0	<2.0	<5.0	444.61	39.18	40-60	405.43
MW-2	09/01/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	140	NA	NA	NA	NA	444.61	45.03	40-60	399.58
MW-2	12/23/2004	<50	NA	<0.50	1.7	0.75	2.6	32	NA	NA	NA	NA	444.61	39.97	40-60	404.64
MW-2	02/28/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	0.74	NA	NA	NA	NA	444.61	34.20	40-60	410.41

WELL CONCENTRATIONS
Shell-branded Service Station
1155 Portola Avenue
Livermore, CA

Well ID	Date	TPPH (ug/L)	TEPH (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.)	Screened Interval (ft.)	GW Elevation (MSL)
MW-2	06/13/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	6.0	444.61	36.00	40-60	408.61
MW-2	09/19/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	8.6	NA	NA	NA	<5.0	444.61	40.08	40-60	404.53
MW-2	**12/07/2005**	**<50**	**NA**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**6.0**	**NA**	**NA**	**NA**	**<5.0**	**444.61**	**38.68**	**40-60**	**405.93**
MW-3	12/05/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	40.49	40-55	NA
MW-3	12/20/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	8.7	<2.0	<2.0	<2.0	<50	NA	36.00	40-55	NA
MW-3	03/28/2003	<50	56	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	443.84	36.47	40-55	407.37
MW-3	06/26/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	443.84	38.70	40-55	405.14
MW-3	08/25/2003	76 a	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	443.84	41.12	40-55	402.72
MW-3	12/09/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	443.84	37.27	40-55	406.57
MW-3	03/08/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	120	<2.0	<2.0	<2.0	<5.0	443.84	32.49	40-55	411.35
MW-3	06/07/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	74	<2.0	<2.0	<2.0	<5.0	443.84	37.75	40-55	406.09
MW-3	09/01/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	443.84	43.29	40-55	400.55
MW-3	12/23/2004	<50 c	NA	<0.50	2.3	1.5	4.3	<0.50	NA	NA	NA	NA	443.84	38.64	40-55	405.20
MW-3	02/28/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	443.84	33.70	40-55	410.14
MW-3	06/13/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	12	443.84	35.03	40-55	408.81
MW-3	09/19/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	<5.0	443.84	39.08	40-55	404.76
MW-3	**12/07/2005**	**<50**	**NA**	**<0.50**	**<0.50**	**<0.50**	**0.54**	**<0.50**	**NA**	**NA**	**NA**	**<5.0**	**443.84**	**37.67**	**40-55**	**406.17**
MW-4	12/05/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41.45	41-61	NA
MW-4	12/20/2002	<50	61	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	NA	40.61	41-61	NA
MW-4	03/28/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	444.18	37.16	41-61	407.02
MW-4	06/26/2003	<50	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	444.18	40.05	41-61	404.13
MW-4	08/25/2003	67 a	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	444.18	43.04	41-61	401.14
MW-4	12/09/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	444.18	37.62	41-61	406.56
MW-4	03/08/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	444.18	32.80	41-61	411.38

WELL CONCENTRATIONS
Shell-branded Service Station
1155 Portola Avenue
Livermore, CA

Well ID	Date	TPPH (ug/L)	TEPH (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.)	Screened Interval (ft.)	GW Elevation (MSL)
MW-4	06/07/2004	58 b	NA	0.82	1.2	<0.50	1.1	<0.50	<2.0	<2.0	<2.0	<5.0	444.18	38.94	41-61	405.24
MW-4	09/01/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	444.18	44.18	41-61	400.00
MW-4	12/23/2004	<50 c	NA	0.55	3.8	2.2	7.0	<0.50	NA	NA	NA	NA	444.18	39.83	41-61	404.35
MW-4	02/28/2005	<50 c	NA	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	444.18	34.01	41-61	410.17
MW-4	06/13/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	444.18	35.70	41-61	408.48
MW-4	09/19/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	<5.0	444.18	39.70	41-61	404.48
MW-4	**12/07/2005**	**<50**	**NA**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**NA**	**NA**	**NA**	**<5.0**	**444.18**	**38.25**	**41-61**	**405.93**

Abbreviations:
TPPH = Total petroleum hydrocarbons as gasoline by EPA Method 8260B.
TEPH = Total petroleum hydrocarbons as diesel by modified EPA Method 8015.
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

WELL CONCENTRATIONS
Shell-branded Service Station
1155 Portola Avenue
Livermore, CA

Well ID	Date	TPPH (ug/L)	TEPH (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.)	Screened Interval (ft.)	GW Elevation (MSL)

Notes:

a = Hydrocarbon does not match pattern of laboratory's standard.

b = Sample contains discrete peak in addition to gasoline.

c = The concentration reported reflects individual or discrete unidentified peaks not matching a typical fuel pattern.

Site surveyed November 25, 2002 by Mid Coast Engineers.

Submission#: 2005-09-0554

Blaine Tech Services, Inc.

September 28, 2005

1680 Rogers Avenue
San Jose, CA 95112-1105

Attn.: Leon Gearhart

Project#: 050919-BA2
Project: 97495539
Site: 1155 Portola Ave., Livermore

Dear Mr.Gearhart,

Attached is our report for your samples received on 09/20/2005 16:19
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 11/04/2005 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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-1	09/19/2005 13:18	Water	1
MW-2	09/19/2005 12:53	Water	2
MW-3	09/19/2005 13:40	Water	3
MW-4	09/19/2005 12:25	Water	4

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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-1**	Lab ID:	2005-09-0554 - 1
Sampled:	09/19/2005 13:18	Extracted:	9/23/2005 10:56
Matrix:	Water	QC Batch#:	2005/09/23-1A.64
pH: <2			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	09/23/2005 10:56	.
Benzene	ND	0.50	ug/L	1.00	09/23/2005 10:56	
Toluene	ND	0.50	ug/L	1.00	09/23/2005 10:56	
Ethylbenzene	ND	0.50	ug/L	1.00	09/23/2005 10:56	
Total xylenes	1.2	1.0	ug/L	1.00	09/23/2005 10:56	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	09/23/2005 10:56	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	09/23/2005 10:56	
Surrogate(s)						
1,2-Dichloroethane-d4	96.8	73-130	%	1.00	09/23/2005 10:56	
Toluene-d8	105.0	81-114	%	1.00	09/23/2005 10:56	

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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-2**	Lab ID:	2005-09-0554 - 2
Sampled:	09/19/2005 12:53	Extracted:	9/23/2005 09:54
Matrix:	Water	QC Batch#:	2005/09/23-1A.64
pH: <2			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	09/23/2005 09:54	
Benzene	ND	0.50	ug/L	1.00	09/23/2005 09:54	
Toluene	ND	0.50	ug/L	1.00	09/23/2005 09:54	
Ethylbenzene	ND	0.50	ug/L	1.00	09/23/2005 09:54	
Total xylenes	ND	1.0	ug/L	1.00	09/23/2005 09:54	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	09/23/2005 09:54	
Methyl tert-butyl ether (MTBE)	8.6	0.50	ug/L	1.00	09/23/2005 09:54	
Surrogate(s)						
1,2-Dichloroethane-d4	99.4	73-130	%	1.00	09/23/2005 09:54	
Toluene-d8	107.0	81-114	%	1.00	09/23/2005 09:54	

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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-3**	Lab ID:	2005-09-0554 - 3
Sampled:	09/19/2005 13:40	Extracted:	9/23/2005 11:17
Matrix:	Water	QC Batch#:	2005/09/23-1A.64
pH: <2			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	09/23/2005 11:17	
Benzene	ND	0.50	ug/L	1.00	09/23/2005 11:17	
Toluene	ND	0.50	ug/L	1.00	09/23/2005 11:17	
Ethylbenzene	ND	0.50	ug/L	1.00	09/23/2005 11:17	
Total xylenes	ND	1.0	ug/L	1.00	09/23/2005 11:17	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	09/23/2005 11:17	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	09/23/2005 11:17	
Surrogate(s)						
1,2-Dichloroethane-d4	98.1	73-130	%	1.00	09/23/2005 11:17	
Toluene-d8	105.1	81-114	%	1.00	09/23/2005 11:17	

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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-4**	Lab ID:	2005-09-0554 - 4
Sampled:	09/19/2005 12:25	Extracted:	9/23/2005 11:38
Matrix:	Water	QC Batch#:	2005/09/23-1A.64
pH: <2			

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	09/23/2005 11:38	
Benzene	ND	0.50	ug/L	1.00	09/23/2005 11:38	
Toluene	ND	0.50	ug/L	1.00	09/23/2005 11:38	
Ethylbenzene	ND	0.50	ug/L	1.00	09/23/2005 11:38	
Total xylenes	ND	1.0	ug/L	1.00	09/23/2005 11:38	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	09/23/2005 11:38	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	09/23/2005 11:38	
Surrogate(s)						
1,2-Dichloroethane-d4	101.9	73-130	%	1.00	09/23/2005 11:38	
Toluene-d8	106.3	81-114	%	1.00	09/23/2005 11:38	

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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Batch QC Report

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

Method Blank | **Water** | **QC Batch # 2005/09/23-1A.64**

MB: 2005/09/23-1A.64-014 | Date Extracted: 09/23/2005 09:14

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	09/23/2005 09:14	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	09/23/2005 09:14	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	09/23/2005 09:14	
Benzene	ND	0.5	ug/L	09/23/2005 09:14	
Toluene	ND	0.5	ug/L	09/23/2005 09:14	
Ethylbenzene	ND	0.5	ug/L	09/23/2005 09:14	
Total xylenes	ND	1.0	ug/L	09/23/2005 09:14	
Surrogates(s)					
1,2-Dichloroethane-d4	98.9	73-130	%	09/23/2005 09:14	
Toluene-d8	107.6	81-114	%	09/23/2005 09:14	

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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2005/09/23-1A.64**

LCS 2005/09/23-1A.64-054 Extracted: 09/23/2005 Analyzed: 09/23/2005 08:54
LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	24.5		25	98.0			65-165	20		
Benzene	27.6		25	110.4			69-129	20		
Toluene	28.0		25	112.0			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	446		500	89.2			73-130			
Toluene-d8	540		500	108.0			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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Matrix Spike (MS / MSD) **Water** **QC Batch # 2005/09/23-1A.64**

MW-2 >> MS

Lab ID: 2005-09-0554 - 002

MS: 2005/09/23-1A.64-015 Extracted: 09/23/2005

Analyzed: 09/23/2005 10:15

Dilution: 1.00

MSD: 2005/09/23-1A.64-036 Extracted: 09/23/2005

Analyzed: 09/23/2005 10:36

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	33.1	36.7	8.64	25	97.8	112.2	13.7	65-165	20		
Benzene	24.6	31.0	ND	25	98.4	124.0	23.0	69-129	20		R1
Toluene	25.2	30.9	ND	25	100.8	123.6	20.3	70-130	20		R1
Surrogate(s)											
1,2-Dichloroethane-d4	496	460		500	99.2	92.0		73-130			
Toluene-d8	534	536		500	106.8	107.2		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: 050919-BA2
97495539

Received: 09/20/2005 16:19

Site: 1155 Portola Ave., Livermore

Legend and Notes

Result Flag

.

-

R1

Analyte RPD was out of QC limits.

SHELL Chain Of Custody Record

LAB: STL

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced:

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

Denis Brown

2005-09-0554

INCIDENT NUMBER (S&E ONLY): 9 7 4 9 5 5 3 9

SAP or CRMT NUMBER (TS/CRMT):

99727

PAGE: 1 of 1

SAMPLING COMPANY:	LOG CODE:	SITE ADDRESS (Street and City):	GLOBAL ID NO.:
Blaine Tech Services	BTSS	1155 Portola Ave., Livermore	T0600194367

ADDRESS:	EDF DELIVERABLE TO (Responsible Party or Designee):	PHONE NO.:	E-MAIL:	CONSULTANT PROJECT NO.:
1680 Rogers Avenue, San Jose, CA 95112	Heather Buckingham	(408)224-4724	hbuckingham@deltaenv.com	050919-BM2

PROJECT CONTACT (Hardcopy or PDF Report to):	TELEPHONE:	FAX:	E-MAIL:	BTS #
Leon Gearhart	408-573-0555	408-573-7771	lgearhart@blainetech.com	

SAMPLER NAME(S) (Print): Brian Alcorn

LAB USE ONLY

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

☐ LA - RWQCB REPORT FORMAT ☐ UST AGENCY:

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

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

REQUESTED ANALYSIS

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

TEMPERATURE ON RECEIPT C°: 2

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)	TBA
	MW-1	9/19	1318	W	3	X	X		X		X
	MW-2		1253			X	X		X		X
	MW-3		1340			X	X		X		X
	MW-4		1225			X	X		X		X

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
	Sample Custodian	9/19/05	1552
Sample Custodian		9/20/05	1619
9/20/05		9/20/05	1805

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

10/16/00 Revision

Q&Q Graphic (714) 898-9702

WELLHEAD INSPECTION CHECKLIST

Date 9/19/05 Client Shell

Site Address 1155 Portola Ave, Livermore

Job Number 050919-BA2 Technician Brian Alcom

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	X							
MW-2		2 of 2 tabs stripped						
MW-3	X							
MW-4	X							

NOTES:

WELL GAUGING DATA

Project # 050919-BAZ Date 9/19/05 Client Shell

Site 1155 Portola Ave, Livermore

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					39.29	58.96	TOC	
MW-2	2					40.08	59.11	↓	
MW-3	2					39.08	54.13	↓	
MW-4	2					39.70	58.98	↓	

SHELL WELL MONITORING DATA SHEET

BTS #: 050919-BA2	Site: 1155 Portola Ave, Livermore
Sampler: Brian Alcom	Date: 9/19/05
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 58.96	Depth to Water (DTW): 39.29
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]: 43.22	

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

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

3.2 (Gals.) X 3 = 9.6 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
1308	70.6	7.2	892	>1,000	3.2	cloudy no brown, odor
1311	70.0	7.2	895	>1,000	6.4	" "
1315	70.2	7.2	901	>1,000	9.6	" "

Did well dewater? Yes (No) Gallons actually evacuated: 9.6

Sampling Date: 9/19/05 Sampling Time: 1318 Depth to Water: 40.44

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

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

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 #: 050919-BA2	Site: 1155 Portola Ave, Livermore
Sampler: Brian Alcorn	Date: 9/19/05
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 59.11	Depth to Water (DTW): 40.08
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]: 43.88	

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

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

3.1 (Gals.) X 3 = 9.3 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	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1241	72.2	7.2	917	>1,000	3.1	cloudy, no brown, odor
1245	70.9	7.1	923	>1,000	6.2	" "
1250	70.9	7.1	921	547	9.3	" "

Did well dewater? Yes (No) Gallons actually evacuated: 9.3

Sampling Date: 9/19/05 Sampling Time: ~~1248~~ 1253 Depth to Water: 42.30

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

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

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 #: 050919-BAZ	Site: 1155 Portola Ave, Livermore
Sampler: Brian Alcom	Date: 9/19/05
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 54.13	Depth to Water (DTW): 39.08
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]: 42.09	

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

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

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
1331	73.0	7.2	957	>1,000	2.4	clouds no brown, odor
1334	72.2	7.1	986	>1,000	4.8	" "
1337	72.1	7.1	981	>1,000	7.2	" "

Did well dewater? Yes (No) Gallons actually evacuated: 7.2

Sampling Date: 9/19/05 Sampling Time: 1340 Depth to Water: 39.65

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

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

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 #: 050919-BAZ	Site: 1155 Portola Ave, Livermore
Sampler: Brian Alcom	Date: 9/19/05
Well I.D.: MW-4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 58.98	Depth to Water (DTW): 39.70
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]: 43.55	

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

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

3.1 (Gals.) X 3 = 9.3 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	radius^2 * 0.163

Time	Temp (°F)	pH	Cond. (mS or (mS))	Turbidity (NTUs)	Gals. Removed	Observations
1210	76.4	7.6	1,099	>1,000	3.1	cloudy no brown, odor
1215	74.5	7.5	1,091	998	6.2	" "
1219	73.4	7.5	1,094	725	9.3	" "

Did well dewater? Yes (No) Gallons actually evacuated: 9.3

Sampling Date: 9/19/05 Sampling Time: 1225 Depth to Water: 39.80

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

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

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

Sequoia Analytical

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www.sequoialabs.com

27 December, 2005

Michael Ninokata
Blaine Tech Services - San Jose (Shell)
1680 Rogers Avenue
San Jose, CA 95112

RE: 1155 Portola Ave., Livermore
Work Order: MOL0453

Enclosed are the results of analyses for samples received by the laboratory on 12/08/05 13:34. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen
Project Manager

CA ELAP Certificate #1210

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Blaine Tech Services - San Jose (Shell)	Project:1155 Portola Ave., Livermore	MOL0453
1680 Rogers Avenue	Project Number:051207-DW1	**Reported:**
San Jose CA, 95112	Project Manager:Michael Ninokata	12/27/05 12:05

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MOL0453-01	Water	12/07/05 11:50	12/08/05 13:34
MW-2	MOL0453-02	Water	12/07/05 11:10	12/08/05 13:34
MW-3	MOL0453-03	Water	12/07/05 10:32	12/08/05 13:34
MW-4	MOL0453-04	Water	12/07/05 12:26	12/08/05 13:34

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Blaine Tech Services - San Jose (Shell)	Project:1155 Portola Ave., Livermore	MOL0453
1680 Rogers Avenue	Project Number:051207-DW1	**Reported:**
San Jose CA, 95112	Project Manager:Michael Ninokata	12/27/05 12:05

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (MOL0453-01) Water Sampled: 12/07/05 11:50 Received: 12/08/05 13:34									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	5L20003	12/20/05	12/20/05	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	**0.56**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	5.0	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*60-135*		"	"	"	"	
MW-2 (MOL0453-02) Water Sampled: 12/07/05 11:10 Received: 12/08/05 13:34									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	5L20003	12/20/05	12/20/05	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	**6.0**	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	5.0	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*80 %*	*60-135*		"	"	"	"	
MW-3 (MOL0453-03) Water Sampled: 12/07/05 10:32 Received: 12/08/05 13:34									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	5L20003	12/20/05	12/20/05	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	**0.54**	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	5.0	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*79 %*	*60-135*		"	"	"	"	

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Blaine Tech Services - San Jose (Shell)	Project: 1155 Portola Ave., Livermore	MOL0453
1680 Rogers Avenue	Project Number: 051207-DW1	**Reported:**
San Jose CA, 95112	Project Manager: Michael Ninokata	12/27/05 12:05

Volatile Organic Compounds by EPA Method 8260B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (MOL0453-04) Water Sampled: 12/07/05 12:26 Received: 12/08/05 13:34									
Gasoline Range Organics (C4-C12)	ND	50	ug/l	1	5L20003	12/20/05	12/20/05	EPA 8260B	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	0.50	"	"	"	"	"	"	
tert-Butyl alcohol	ND	5.0	"	"	"	"	"	"	
Surrogate: 1,2-Dichloroethane-d4		*68 %*		*60-135*	"	"	"	"	

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Blaine Tech Services - San Jose (Shell)	Project:1155 Portola Ave., Livermore	MOL0453
1680 Rogers Avenue	Project Number:051207-DW1	**Reported:**
San Jose CA, 95112	Project Manager:Michael Ninokata	12/27/05 12:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5L20003 - EPA 5030B P/T / EPA 8260B										
Blank (5L20003-BLK1)				Prepared & Analyzed: 12/20/05						
Gasoline Range Organics (C4-C12)	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
tert-Butyl alcohol	ND	5.0	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Ethanol	ND	100	"							
Surrogate: 1,2-Dichloroethane-d4	*1.55*		*"*	*2.50*		*62*	*60-135*			
Laboratory Control Sample (5L20003-BS1)				Prepared & Analyzed: 12/20/05						
Gasoline Range Organics (C4-C12)	524	50	ug/l	440		119	60-140			
Benzene	5.47	0.50	"	5.16		106	65-115			
Toluene	38.2	0.50	"	37.2		103	85-120			
Ethylbenzene	6.62	0.50	"	7.54		88	75-135			
Xylenes (total)	38.7	0.50	"	41.2		94	85-125			
Methyl tert-butyl ether	7.10	0.50	"	7.02		101	65-125			
Di-isopropyl ether	16.2	0.50	"	15.1		107	75-125			
Ethyl tert-butyl ether	16.6	0.50	"	15.0		111	75-130			
tert-Amyl methyl ether	14.7	0.50	"	15.0		98	80-115			
tert-Butyl alcohol	159	5.0	"	143		111	75-150			
1,2-Dichloroethane	15.1	0.50	"	14.7		103	85-130			
1,2-Dibromoethane (EDB)	16.2	0.50	"	14.9		109	85-120			
Ethanol	148	100	"	142		104	70-135			
Surrogate: 1,2-Dichloroethane-d4	*2.33*		*"*	*2.50*		*93*	*60-135*			

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Blaine Tech Services - San Jose (Shell)	Project:1155 Portola Ave., Livermore	MOL0453
1680 Rogers Avenue	Project Number:051207-DW1	**Reported:**
San Jose CA, 95112	Project Manager:Michael Ninokata	12/27/05 12:05

Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 5L20003 - EPA 5030B P/T / EPA 8260B										
Matrix Spike (5L20003-MS1)	**Source: MOL0335-01**			Prepared & Analyzed: 12/20/05						
Gasoline Range Organics (C4-C12)	497	50	ug/l	440	ND	113	60-140			
Benzene	5.74	0.50	"	5.16	ND	111	65-115			
Toluene	40.2	0.50	"	37.2	ND	108	85-120			
Ethylbenzene	6.94	0.50	"	7.54	ND	92	75-135			
Xylenes (total)	40.1	0.50	"	41.2	0.53	96	85-125			
Methyl tert-butyl ether	7.29	0.50	"	7.02	1.2	87	65-125			
Di-isopropyl ether	16.2	0.50	"	15.1	ND	107	75-125			
Ethyl tert-butyl ether	14.6	0.50	"	15.0	ND	97	75-130			
tert-Amyl methyl ether	12.7	0.50	"	15.0	0.28	83	80-115			
tert-Butyl alcohol	189	5.0	"	143	34	108	75-120			
1,2-Dichloroethane	13.3	0.50	"	14.7	ND	90	85-130			
1,2-Dibromoethane (EDB)	14.5	0.50	"	14.9	ND	97	85-120			
Ethanol	445	100	"	142	80	257	70-135			QM01
Surrogate: 1,2-Dichloroethane-d4	*1.91*		*"*	*2.50*		*76*	*60-135*			
Matrix Spike Dup (5L20003-MSD1)	**Source: MOL0335-01**			Prepared & Analyzed: 12/20/05						
Gasoline Range Organics (C4-C12)	486	50	ug/l	440	ND	110	60-140	2	25	
Benzene	5.46	0.50	"	5.16	ND	106	65-115	5	20	
Toluene	38.0	0.50	"	37.2	ND	102	85-120	6	20	
Ethylbenzene	6.56	0.50	"	7.54	ND	87	75-135	6	15	
Xylenes (total)	38.0	0.50	"	41.2	0.53	91	85-125	5	20	
Methyl tert-butyl ether	7.40	0.50	"	7.02	1.2	88	65-125	1	20	
Di-isopropyl ether	15.8	0.50	"	15.1	ND	105	75-125	3	15	
Ethyl tert-butyl ether	15.1	0.50	"	15.0	ND	101	75-130	3	25	
tert-Amyl methyl ether	13.2	0.50	"	15.0	0.28	86	80-115	4	15	
tert-Butyl alcohol	197	5.0	"	143	34	114	75-120	4	25	
1,2-Dichloroethane	12.9	0.50	"	14.7	ND	88	85-130	3	20	
1,2-Dibromoethane (EDB)	14.6	0.50	"	14.9	ND	98	85-120	0.7	15	
Ethanol	324	100	"	142	80	172	70-135	31	35	QM01
Surrogate: 1,2-Dichloroethane-d4	*1.94*		*"*	*2.50*		*78*	*60-135*			

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Blaine Tech Services - San Jose (Shell)	Project:1155 Portola Ave., Livermore	MOL0453
1680 Rogers Avenue	Project Number:051207-DW1	**Reported:**
San Jose CA, 95112	Project Manager:Michael Ninokata	12/27/05 12:05

Notes and Definitions

QM01	The spike recovery was above control limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

LAB: (Test America) STL Other ______

SHELL Chain Of Custody Record

Lab Identification (if necessary):

- ☐ TA - Irvine, California
- ☐ TA - Morgan Hill, California
- ☐ TA - Nashville, Tennesee
- ☐ STL
- ☐ Other (location) ______

Shell Project Manager to be invoiced:

- ☑ ENVIRONMENTAL SERVICES
- ☐ TECHNICAL SERVICES
- ☐ CRMT HOUSTON

Denis Brown

☐ NOT FOR ENV. REMEDIATION - NO ETIM - SEND PAPER INVOICE

INCIDENT NUMBER (ES ONLY): 9 7 4 9 5 5 3 9

SAP or CRMT NUMBER (TS/CRMT):

PAGE: 1 of 1

SAMPLING COMPANY:	Blaine Tech Services
LOG CODE:	BTSS
SITE ADDRESS: Street and City	1155 Portola Ave., Livermore
State	CA
GLOBAL ID NO.:	T0600194367
ADDRESS:	1680 Rogers Avenue, San Jose, CA 95112
EDF DELIVERABLE TO (Responsible Party or Designee):	Heather Buckingham
PHONE NO.:	(408)224-4724
E-MAIL:	hbuckingham@deltaenv.com
CONSULTANT PROJECT NO.:	BTS # 051207-DW1
PROJECT CONTACT (Hardcopy or PDF Report to):	Michael Ninokata
SAMPLER NAME(S) (Print):	Devin Ragnal
TELEPHONE:	408-573-0555
FAX:	408-573-7771
E-MAIL:	mninokata@blainetech.com

LAB USE ONLY

TURNAROUND TIME (STANDARD IS 10 CALENDAR DAYS): ☑ STD ☐ 5 DAY ☐ 3 DAY ☐ 2 DAY ☐ 24 HOURS ☐ RESULTS NEEDED ON WEEKEND

☐ 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 ☐

RECEIPT VERIFICATION REQUESTED ☑

REQUESTED ANALYSIS (MOL0453)

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Purgeable (8260B)	TPH - Extractable (8015M)	BTEX (8260B)	5 Oxygenates (8260B)	MTBE (8260B)	TBA (8260B)	DIPE (8260B)	TAME (8260B)	ETBE (8260B)	1,2 DCA (8260B)	EDB (8260B)	Ethanol (8260B)	Methanol (8015M)	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes
	MW-1 01	12/7/05	1150	W	3	X		X		X	X								
	MW-2 02	↓	1110	↓	↓	X		X		X	X								
	MW-3 03	↓	1032	↓	↓	X		X		X	X								
	MW-4 04	↓	1226	↓	↓	X		X		X	X								

TEMPERATURE ON RECEIPT C°

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
[signature]	[signature] SAMPLE CUSTODIAN	12/7/05	1650
[signature]	[signature]	12/8/05	1255
[signature]	[signature]	12/8/05	1334

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

Q&Q Graphic (714) 898-9702

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: Shell (Test America)
REC. BY (PRINT) JT
WORKORDER: MOL6453

DATE REC'D AT LAB: 12/08/07
TIME REC'D AT LAB: 1334
DATE LOGGED IN: 12-11-05

For Regulatory Purposes?
DRINKING WATER YES / (NO)
WASTE WATER YES / (NO)

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	pH	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) Present / (Absent) Intact / Broken*									
2. Chain-of-Custody (Present) / Absent*									
3. Traffic Reports or Packing List: Present / (Absent)									
4. Airbill: Airbill / Sticker Present / (Absent)									
5. Airbill #:									
6. Sample Labels: (Present) / Absent									
7. Sample IDs: (Listed) / Not Listed on Chain-of-Custody									
8. Sample Condition: (Intact) / Broken* / Leaking*									
9. Does information on chain-of-custody, traffic reports and sample labels agree? (Yes) / No*									
10. Sample received within hold time? (Yes) / No*									
11. Adequate sample volume received? (Yes) / No*									
12. Proper preservatives used? (Yes) / No*									
13. Trip Blank / Temp Blank Received? (circle which, if yes) Yes / (No)*									
14. Read Temp: 2.1°C Corrected Temp: 2.1°C Is corrected temp 4 +/-2°C? (Yes) / No** (Acceptance range for samples requiring thermal pres.)									
**Exception (if any): METALS / DFF ON ICE or Problem COC									

12/08/05 or COC

*IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.

WELLHEAD INSPECTION CHECKLIST

Date 12/7/05 Client Shell

Site Address 1155 Portola Ave., Livermore

Job Number 051207-DW1 Technician Dave W.

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Debris Removed From Wellbox	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)
MW-1	X							
MW-2				X		X		
MW-3	X							
MW-4	X							

NOTES:

Repair Data Sheet

Client Shell Date 11-21-05

Site Address 1155 Portola Ave, Livermore

Job Number 051121AA2 Technician Andrew Adinolfi

Inspection Point (Well ID or description of location)	Well Inspected, Cleaned, Labeled - No Further Corrective Action Required	Replaced Cap	Replaced Lock	Replaced Lid Seal	Check Indicates deficiency: Casing	Annular Seal	Tabs / Bolts	Box Structure	Apron	Trip Hazard	Below Grade	Not Securable by Design (12" diameter or less)	Lid not marked with words "MONITORING WELL"	Other Deficiency	Not Securable by Design (greater than 12" diameter)	Well Not Inspected (explain in notes)	Deficiency Logged on Repair Order	Deficiency Remains Uncorrected/Logged on Site Inspection Checklist	Partial Repair Completed/Outstanding Deficiency Logged on Repair Order	All Repairs Completed
MW-1																				
Notes: tag well																				
MW-2							X													X
Notes: 2 of 2, stripped, rtnp tag well																				
MW-3																				
Notes: tag well																				
MW-4																				
Notes: tag well																				
Notes:																				
Notes:																				

WELL GAUGING DATA

Project # 051207-DW1 Date 12/7/05 Client Shell

Site 1155 Portola Ave., Livermore

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					37.56	58.94		
MW-2	2					38.68	59.15		
MW-3	2					37.67	54.22		
MW-4	2					38.25	58.90		

SHELL WELL MONITORING DATA SHEET

BTS #: 051207-DW1	Site: Shell 9749553 9
Sampler: DW	Date: 12/7/05
Well I.D.: MW1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 58.94	Depth to Water (DTW): 37.56
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]: 41.84	

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

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

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

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1137	62.5	7.0	948	>1000	3.5	cloudy, brown
1141	65.2	6.9	954	>1000	7.0	" "
1145	66.1	6.8	958	> 1000	10.5	" "

Did well dewater? Yes (No) Gallons actually evacuated: 10.5

Sampling Date: 12/7/05 Sampling Time: 1150 Depth to Water: 37.76

Sample I.D.: MW1 Laboratory: STL Other Test America

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

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 #: 051207-DW1	Site: Shell 97495539
Sampler: DW	Date: 12/7/05
Well I.D.: MW-2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 59.15	Depth to Water (DTW): 38.68
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]: 42.77	

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

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

3.3 (Gals.) X 3 = 9.9 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
10:59	62.5	6.9	1030	>1000	3.3	very cloudy, brown
11:02	65.8	6.9	1021	>1000	6.6	" "
11:05	66.4	6.9	1009	>1000	9.9	" "

Did well dewater? Yes (No) Gallons actually evacuated: 9.9

Sampling Date: 12/7/05 Sampling Time: 1110 Depth to Water: 39.38

Sample I.D.: MW2 Laboratory: STL Other Test America

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

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 #: 051207 - BW1	Site: Shell 9749S539
Sampler: JW	Date: 12/7/05
Well I.D.: MW3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 54.22	Depth to Water (DTW): 37.67
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]: 40.98	

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

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

2.5 (Gals.) X	3	=	7.5 Gals.
1 Case Volume	Specified Volumes		Calculated Volume

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

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
1021	63.8	6.4	1050	>1000	2.5	very cloudy, brown
1024	65.6	6.6	1030	>1000	5.0	" "
1027	66.7	6.7	1026	>1000	7.5	" "

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

Sampling Date: 12/7/05 Sampling Time: 1032 Depth to Water: 38.76

Sample I.D.: MW3 Laboratory: STL Other Test America

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

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 #: 051207 - DW1	Site: Shell 97495539
Sampler: MW	Date: 12/7/05
Well I.D.: MW4	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 58.90	Depth to Water (DTW): 38.25
Depth to Free Product:	Thickness of Free Product (feet): ~~42.38~~
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: ~~45.68~~ 42.38	

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

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

3.5 (Gals.) X 3 = 10.5 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
1213	62.5	7.0	1067	>1000	3.5	brown, cloudy
1217	65.4	7.1	1089	>1000	7	" "
1221	66.1	7.1	1075	>1000	10.5	" "

Did well dewater? Yes (No) Gallons actually evacuated: 10.5

Sampling Date: 12/7/05 Sampling Time: 1226 Depth to Water: 38.30

Sample I.D.: MW4 Laboratory: STL Other Test America

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

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	