R0 2523

Shell Oil Products US

October 6, 2005

Re: **Quarterly Monitoring Report – Second Quarter 2005**
Shell-branded Service Station
4530 Las Positas Road
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

408.224.4724 800.477.7411
Fax 408.225.8506

October 6, 2005
Project No. SJ45-30L-1.2005

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

Re: **Quarterly Monitoring Report – Second Quarter 2005**
Shell-branded Service Station
4530 Las Positas Road
Livermore, California

Dear Mr. Wickham:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared the following second quarter 2005 groundwater monitoring and sampling report 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 September 2001, IT Corporation (IT) installed four site groundwater monitoring wells (MW-1 through MW-4, Figure 2). No soil samples were submitted for laboratory analysis during well installation activities. The wells were installed 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 water supply wells. Delta has field verified the nearest water supply wells as agricultural well 3S/2E 3H1, located approximately 2,500 feet northeast of the site; and unknown well 3S/2E 3M1, located approximately 1,800 feet northwest.

Following submittal of the third quarter 2002 GRASP Groundwater Monitoring Report, the Alameda County Health Care Services (ACHCSA) placed the site in the Local Oversight Program in a letter to Shell dated October 10, 2002.

QUARTERLY GROUND WATER MONITORING PROGRAM

Groundwater monitoring wells were gauged and sampled by Blaine on April 13, 2005. Depth to groundwater was measured in Wells MW-1 through MW-4. Groundwater elevation data is presented on Figure 2.

Groundwater samples were collected from Wells MW-1 through MW-4. Samples were submitted by Blaine to Kiff Analytical LLC (Kiff) in Davis, California for analysis for total purgeable petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethylbenzene, and total xylenes (BTEX); and the five fuel oxygenates methyl tert-butyl ether (MTBE), diisopropyl ether (DIPE), ethyl-t-butyl ether (ETBE), tert-amyl methyl ether (TAME), and tert-butanol (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 increased in Wells MW-1, MW-2, and MW-3 by an average of 0.32 feet since last quarter, while depth to groundwater decreased in Well MW-4 by 0.29 feet. The groundwater gradient at the site is complex. As in previous monitoring events, no clear groundwater flow direction could be established based on the April 13, 2005 gauging data. In general, the flow direction at the site consistently appears to be towards both the northeast and the southwest, at a gradient of 0.01 ft/ft (essentially flat). The regional groundwater flow direction in this area of the Livermore Valley is towards the southeast.

All analytes tested were below laboratory detection limits for all site wells during the second quarter 2005. MTBE has been below laboratory detection limits in all site wells for the past six monitoring events. The maximum historic concentration of MTBE was 470 ug/L in Well MW-4 (July 2002). No other analytes have been detected in site wells since sampling began in 2001.

RECOMMENDATIONS

Delta is currently preparing a comprehensive site conceptual model (SCM) for submittal to the ACHCSA. The report will include recommendations for possible additional soil and groundwater investigation activities at the site in order to move towards case closure.

Delta plans to submit a comprehensive site conceptual model (SCM) spreadsheet for submittal to the ACHCSA during fourth quarter 2005. The SCM, in electronic report format, will include recommendations for possible additional soil and groundwater investigation activities at the site in order to move towards case closure. Meanwhile, Delta proposes to reduce the monitoring and sampling frequency at the site to semi-annual during the first and third quarters.

REMARKS

The 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.

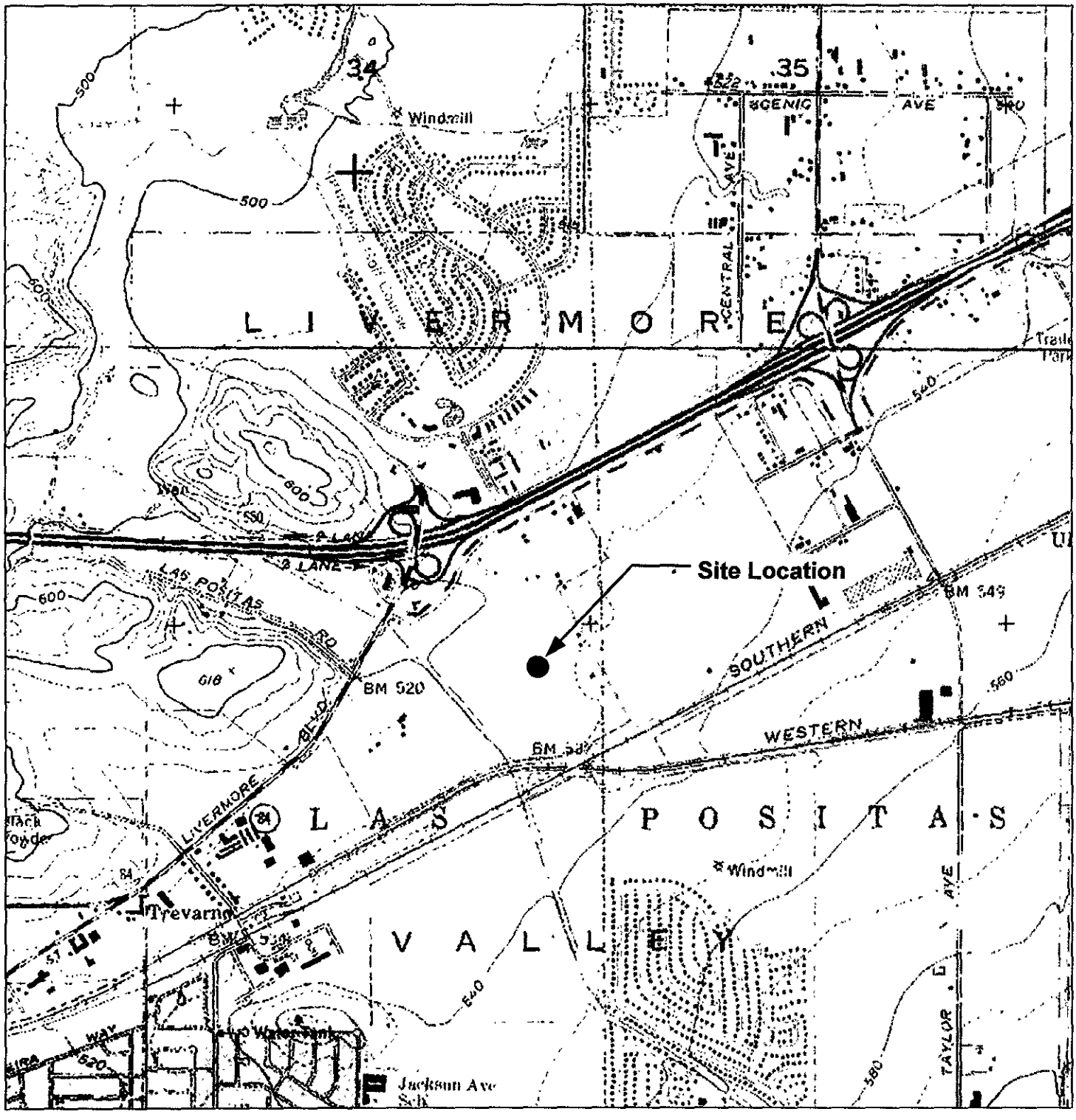
Sincerely,
Delta Environmental Consultants, Inc.

Heather Buckingham
Senior Staff Geologist

Debbie Arnold
Project Manager
PG 7745

Attachments: Figure 1 – Site Location Map
Figure 2 – Groundwater Elevation Contour Map, April 13, 2005
Figure 3 – TPH-G, Benzene, and MTBE Concentrations Map, April 13, 2005
Attachment A – Groundwater Monitoring and Sampling Report, May 5, 2005

cc: Denis Brown, Shell Oil Products US



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

North

QUADRANGLE LOCATION

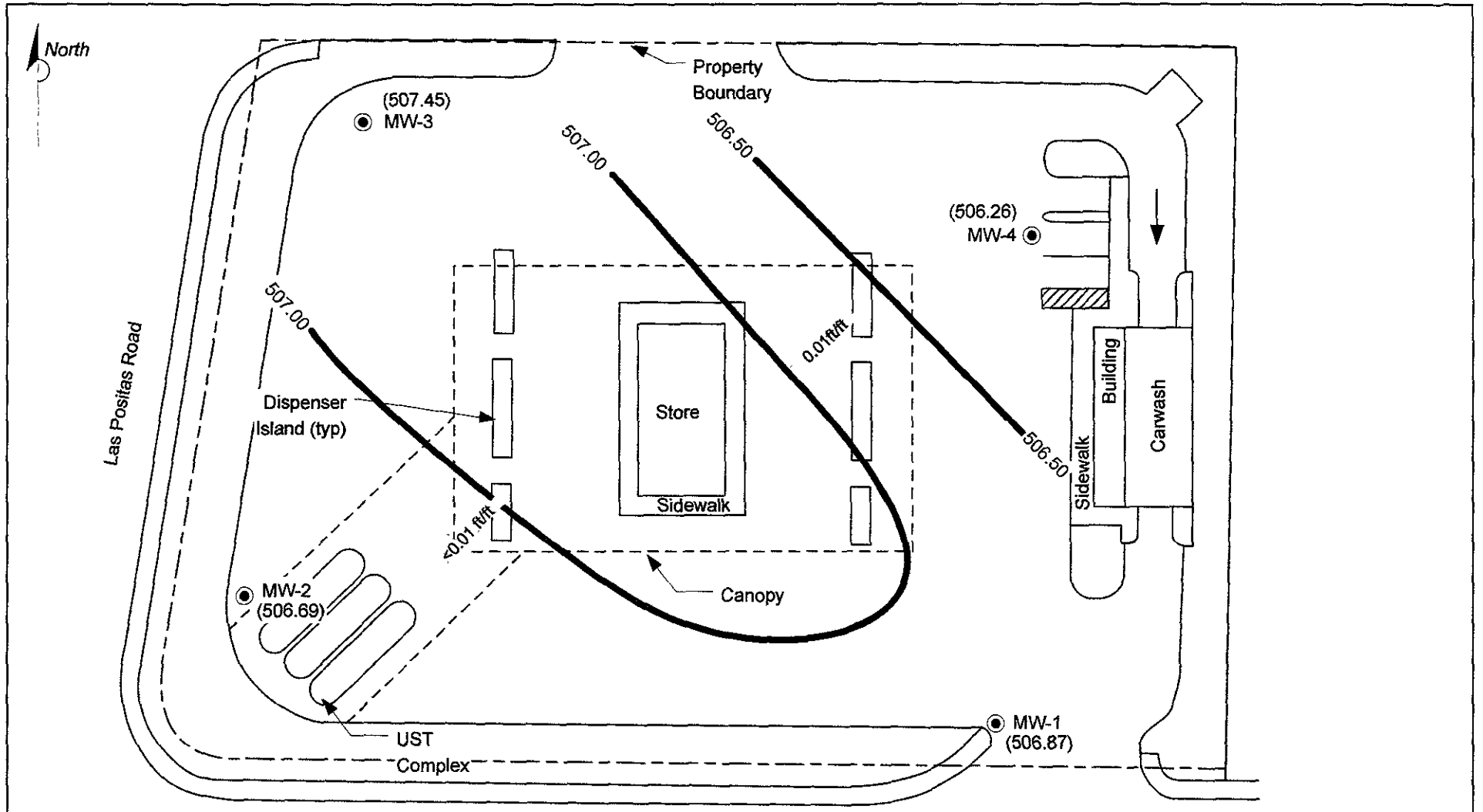
0 1,800 3,600
Scale, Feet

FIGURE 1
SITE LOCATION MAP

SHELL-BRANDED SERVICE STATION
4530 Las Positas Roas
Livermore, California

PROJECT NO SJ45-30L-1 2004	DRAWN BY VF 9/26/03
FILE NO. SJ45-30L-1.2004	PREPARED BY VF
REVISION NO.	REVIEWED BY

Delta
Environmental
Consultants, Inc.



LEGEND

MW-2 ◉ **GROUNDWATER MONITORING WELL**

(506.69) **GROUNDWATER ELEVATION (FEET-MSL), 4/13/05**

507.00 **GROUNDWATER ELEVATION CONTOUR**

0.01 ft/ft **APPROXIMATE GROUNDWATER FLOW DIRECTION**

0 40 FT

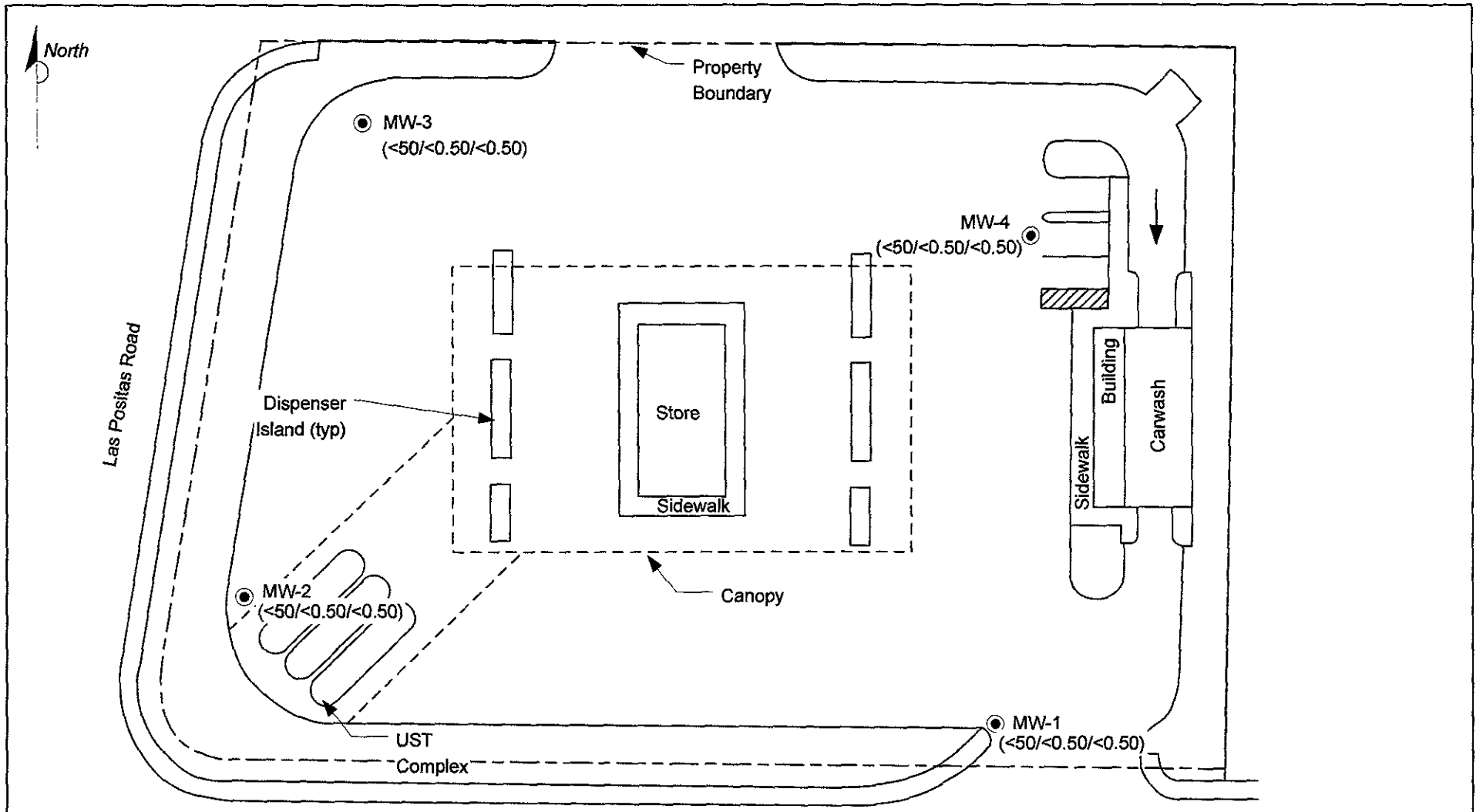
APPROX. SCALE

FIGURE 2
GROUNDWATER ELEVATION CONTOUR MAP
APRIL 13, 2005

SHELL-BRANDED SERVICE STATION
4530 Las Positas Road
Livermore, California

PROJECT NO. SJ45-30L-1.2005	DRAWN BY JL 07/21/05
FILE NO SJ45-30-1.2005	PREPARED BY HB
REVISION NO. 1	REVIEWED BY

Delta
Environmental Consultants, Inc.



LEGEND

MW-2 (<50/<0.50/<0.50) **GROUNDWATER MONITORING WELL**

TPH-G, BENZENE, AND MTBE CONCENTRATIONS (UG/L), 4/13/05

0 40 FT

APPROX. SCALE

FIGURE 3

TPH-G, BENZENE AND MTBE CONCENTRATIONS MAP
APRIL 13, 2005

SHELL-BRANDED SERVICE STATION
4530 Las Positas Road
Livermore, California

PROJECT NO SJ45-30L-1.2005	DRAWN BY JL 09/01/05
FILE NO. SJ45-30-1 2005	PREPARED BY HB
REVISION NO 1	REVIEWED BY

Delta
Environmental
Consultants, Inc.

Attachment A

GROUNDWATER MONITORING AND SAMPLING REPORT

BLAINE
TECH SERVICES INC.

GROUNDWATER SAMPLING SPECIALISTS
SINCE 1985

May 5, 2005

Denis Brown
Shell Oil Products US
20945 S. Wilmington Ave.
Carson, CA 90810

Second Quarter 2005 Groundwater Monitoring at
Shell-branded Service Station
4530 Las Positas Road
Livermore, CA

Monitoring performed on April 13, 2005

Groundwater Monitoring Report **050413-PC-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/jn

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

cc: Garrett Haertel
Delta Environmental
175 Bernal Road, Suite 200
San Jose, CA 95119

WELL CONCENTRATIONS
Shell-branded Service Station
4530 Las Positas Road
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	09/20/2001	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	519.86	13.13	506.73
MW-1	10/25/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	519.86	13.17	506.69
MW-1	01/24/2003	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	519.86	12.80	507.06
MW-1	04/15/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	519.86	12.64	507.22
MW-1	07/17/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	519.86	13.25	506.61
MW-1	10/21/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	519.86	13.43	506.43
MW-1	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	519.86	13.15	506.71
MW-1	04/07/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	519.86	13.04	506.82
MW-1	07/14/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	519.86	13.28	506.58
MW-1	**04/13/2005**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**519.86**	**12.99**	**506.87**
MW-2	09/20/2001	NA	<0.50	<0.50	<0.50	<0.50	0.6	<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	518.50	12.41	506.09
MW-2	10/25/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	518.50	12.34	506.16
MW-2	01/24/2003	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	518.50	11.56	506.94
MW-2	04/15/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	518.50	11.38	507.12
MW-2	07/17/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	518.50	13.45	505.05
MW-2	10/21/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	518.50	12.64	505.86
MW-2	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	518.50	11.97	506.53
MW-2	04/07/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	518.50	11.91	506.59
MW-2	07/14/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	518.50	12.44	506.06
MW-2	**04/13/2005**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**518.50**	**11.81**	**506.69**
MW-3	09/20/2001	NA	<0.50	<0.50	<0.50	<0.50	<0.50	<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	518.93	11.58	507.35

WELL CONCENTRATIONS
Shell-branded Service Station
4530 Las Positas Road
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	10/25/2002	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	518.93	11.17	507.76
MW-3	01/24/2003	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	518.93	11.18	507.75
MW-3	04/15/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	518.93	11.25	507.68
MW-3	07/17/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	518.93	11.39	507.54
MW-3	10/21/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	518.93	11.54	507.39
MW-3	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	518.93	11.27	507.66
MW-3	04/07/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	518.93	11.34	507.59
MW-3	07/14/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	518.93	11.43	507.50
MW-3	**04/13/2005**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**518.93**	**11.48**	**507.45**
MW-4	11/06/2001	NA	<0.50	<0.50	<0.50	<0.50	16.0	<2.0	<2.0	<2.0	<50	NA	NA	NA
MW-4	07/09/2002	<50	<0.50	<0.50	<0.50	<0.50	470	<2.0	<2.0	<2.0	<50	519.44	13.42	506.02
MW-4	10/25/2002	<50	<0.50	<0.50	<0.50	<0.50	22	<2.0	<2.0	<2.0	<50	519.44	13.42	506.02
MW-4	01/24/2003	<50	<0.50	<0.50	<0.50	<0.50	<0.50	<2.0	<2.0	<2.0	<50	519.44	13.07	506.37
MW-4	04/15/2003	<50	<0.50	<0.50	<0.50	<1.0	2.0	<2.0	<2.0	<2.0	<5.0	519.44	12.93	506.51
MW-4	07/17/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	519.44	13.51	505.93
MW-4	10/21/2003	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	519.44	13.69	505.75
MW-4	01/13/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	<2.0	<2.0	<2.0	<5.0	519.44	13.48	505.96
MW-4	04/07/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	519.44	13.36	506.08
MW-4	07/14/2004	<50	<0.50	<0.50	<0.50	<1.0	<0.50	NA	NA	NA	NA	519.44	13.47	505.97
MW-4	**04/13/2005**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<5.0**	**519.44**	**13.18**	**506.26**

WELL CONCENTRATIONS
Shell-branded Service Station
4530 Las Positas Road
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)

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, 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.

KIFF ANALYTICAL LLC

Report Number : 43409
Date : 4/26/2005

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

Subject : 4 Water Samples
Project Name : 4530 Las Positas Rd., Livermore
Project Number : 050413-PC2
P.O. Number : 97464710

Dear Mr. Gearhart,

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

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

Sincerely,

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 43409
Date : 4/26/2005

Project Name : **4530 Las Positas Rd., Livermore**
Project Number : **050413-PC2**

Sample : **MW-1** Matrix : Water Lab Number : 43409-01
Sample Date :4/13/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	4/25/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	4/25/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	4/25/2005
4-Bromofluorobenzene (Surr)	96.7		% Recovery	EPA 8260B	4/25/2005

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 43409
Date : 4/26/2005

Project Name : **4530 Las Positas Rd., Livermore**
Project Number : **050413-PC2**

Sample : **MW-2** Matrix : Water Lab Number : 43409-02
Sample Date :4/13/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	4/25/2005
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	4/25/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	4/25/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	4/25/2005
4-Bromofluorobenzene (Surr)	96.1		% Recovery	EPA 8260B	4/25/2005

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 43409
Date : 4/26/2005

Project Name : **4530 Las Positas Rd., Livermore**
Project Number : **050413-PC2**

Sample : **MW-3** Matrix : Water Lab Number : 43409-03
Sample Date :4/13/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	4/26/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	4/26/2005
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	4/26/2005
4-Bromofluorobenzene (Surr)	95.4		% Recovery	EPA 8260B	4/26/2005

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 43409
Date : 4/26/2005

Project Name : **4530 Las Positas Rd., Livermore**
Project Number : **050413-PC2**

Sample : **MW-4** Matrix : Water Lab Number : 43409-04
Sample Date :4/13/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Toluene	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Total Xylenes	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Diisopropyl ether (DIPE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Ethyl-t-butyl ether (ETBE)	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Tert-amyl methyl ether (TAME)	**< 0.50**	0.50	ug/L	EPA 8260B	4/26/2005
Tert-Butanol	**< 5.0**	5.0	ug/L	EPA 8260B	4/26/2005
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	4/26/2005
Toluene - d8 (Surr)	100		% Recovery	EPA 8260B	4/26/2005
4-Bromofluorobenzene (Surr)	94.9		% Recovery	EPA 8260B	4/26/2005

Approved By: Joel Kiff

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

Report Number : 43409

Date : 4/26/2005

QC Report : Method Blank Data

Project Name : **4530 Las Positas Rd., Livermore**

Project Number : **050413-PC2**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/25/2005
Toluene	< 0 50	0.50	ug/L	EPA 8260B	4/25/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/25/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/25/2005
Methyl-t-butyl ether (MTBE)	< 0 50	0.50	ug/L	EPA 8260B	4/25/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	4/25/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	4/25/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	4/25/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	4/25/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/25/2005
Toluene - d8 (Surr)	99.9		%	EPA 8260B	4/25/2005
4-Bromofluorobenzene (Surr)	97.4		%	EPA 8260B	4/25/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 43409

QC Report : Matrix Spike/ Matrix Spike Duplicate

Date : 4/26/2005

Project Name : **4530 Las Positas Rd.,**

Project Number : **050413-PC2**

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
Benzene	43386-05	<0.50	40.0	40.0	41.9	40.4	ug/L	EPA 8260B	4/25/05	105	101	3.70	70-130	25
Toluene	43386-05	0.70	40.0	40.0	43.0	41.7	ug/L	EPA 8260B	4/25/05	106	102	3.31	70-130	25
Tert-Butanol	43386-05	<5.0	200	200	208	206	ug/L	EPA 8260B	4/25/05	104	103	0.972	70-130	25
Methyl-t-Butyl Ether	43386-05	<0.50	40.0	40.0	42.7	41.9	ug/L	EPA 8260B	4/25/05	107	105	1.82	70-130	25

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 43409

QC Report : Laboratory Control Sample (LCS)

Date : 4/26/2005

Project Name : **4530 Las Positas Rd.,**

Project Number : **050413-PC2**

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	4/25/05	99.4	70-130
Toluene	40.0	ug/L	EPA 8260B	4/25/05	104	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/25/05	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/25/05	104	70-130

Approved By: Joel Kiff

KIFF ANALYTICAL, LLC

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

Delta
Environmental
Consultants, Inc.

Solving environment-related business problems worldwide

www.deltaenv.com

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

408.224.4724 800.477.7411
Fax 408.225.8506

Letter of Transmittal

To:	Alameda County Health Care Services Agenecy	Date: 10/7/2005
	Environmental Health Service - Environmental Protection	
	1131 Harbor Bay Parkway, Suite 250	Job No: SJ45-30L-1.2005
	Alameda, California 94502-6577	
Attn:	Jerry Wickham	

We are sending the following items:

Date	Copies	Description
6-Oct-05	1	**Quarterly Monitoring Report - Second Quarter 2005**
		Shell-branded Service Station
		4530 Las Positas Road
		Livermore, California

Alameda County
Environmental Health
OCT 17 2005

These are transmitted:

☐ For your Information ☐ For action specified below ☐ For review and comment ☐ For your use ☐ As requested

Remarks

Copies to:

By: Heather Buckingham

Title: Seenior Staff Geologist

SHELL Chain Of Custody Record 43407 114212

Lab Identification (if necessary):

Address:

City, State, Zip.

Shell Project Manager to be invoiced: Karen Petryna

☑ SCIENCE & ENGINEERING ☐ TECHNICAL SERVICES ☐ CRMT HOUSTON

2005-04-0493

INCIDENT NUMBER (S&E ONLY): 9 7 4 6 4 7 1 0

BAP or CRMT NUMBER (TS/CRMT):

DATE: 4/13/05

PAGE: 1 of 1

SAMPLING COMPANY: Blaine Tech Services	LOG CODE: BTSS	SITE ADDRESS (Street and City): 4530 Las Positas Rd., Livermore	GLOBAL ID NO.: T0600194179
ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112			
PROJECT CONTACT (Hardcopy or PDF Report to): Leon Gearhart		EDF DELIVERABLE TO (Responsible Party or Designee): Garrett Haertel	PHONE NO.: (408)224-4724
TELEPHONE: 408-573-0555	FAX: 408-573-7771	E-MAIL: lgearhart@blainetech.com	E-MAIL: ghaertel@deltaenv.com
SAMPLER NAME(S) (Print): P. Cornish			CONSULTANT PROJECT NO.: 050413-PC2 BTS #

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 ☐

LAB USE ONLY

REQUESTED ANALYSIS

LAB USE ONLY	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTEX	MTBE (8021B - 5ppb RL)	MTBE (8260B - 0.5ppb RL)	Oxygenates (5) by (8260B)	TEMPERATURE ON RECEIPT C°
	MW-1	4/13/05	1340	W	3	X	X			X	-01
	MW-2	"	1405	"	3	X	X			X	-02
	MW-3	"	1420	"	3	X	X			X	-03
	MW-4	"	1320	"	3	X	X			X	-04

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

4°C

SAMPLES ARRIVED ON WET ICE AT 1600
VIA STL COOLER TEMPERATURES WERE 4.3°C
VIA IR-1. RCVD 042505 AT 1645

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	[signature]	4/14/05	1435
[signature] 1723 4/14/05	[signature]	04/14/05	1723
[signature] 4/25/05 1340	Robert C Pechl KIFF ANALYTICAL	042505	1645

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

Client Shell Date 4/13/05

Site Address 4530 Las Positas, Livermore

Job Number 050413-PC2 Technician P. Cornish

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

NOTES:

WELL GAUGING DATA

Project # 050413-RC2 Date 4/13/05 Client Shell

Site 4530 Las Positas Rd., 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					12.99	22.38	TOC	
MW-2	2					11.81	22.75	"	
MW-3	2					11.48	22.29	"	
MW-4	2					13.18	22.60	"	

SHELL WELL MONITORING DATA SHEET

BTS #: 050413-RC2	Site: 97464710
Sampler: RC	Date: 4/13/05
Well I.D.: MW-1	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 22.38	Depth to Water (DTW): 12.99
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]: 14.87	

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

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

1.5 (Gals.) X 3 = 4.5 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
1328	62.5	7.2	1197	>1000	1.5	
1330	62.8	7.2	1198	>1000	3	
1332	62.6	7.1	1199	>1000	4.5	

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

Sampling Date: 4/13/05 Sampling Time: 1340 Depth to Water: 14.29

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

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

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 #: 050413	Site: 97464710
Sampler: PC	Date: 4/13/05
Well I.D.: MW2	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 22.75	Depth to Water (DTW): 11.81
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]: 14.00	

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: _____

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

1.8 (Gals.) X 3 = 5.4 Gals.
1 Case Volume / Specified Volumes / Calculated Volume

Time	Temp (°F)	pH	Cond. (mS or µS)	Turbidity (NTUs)	Gals. Removed	Observations
1350	63.8	7.2	1115	>1000	1.8	
1353	64.9	7.2	1110	71000	3.6	
1358	64.8	7.2	1106	>1000	5.4	

Did well dewater? Yes (NO) Gallons actually evacuated: ~~13.80~~ 5.4

Sampling Date: 4/13/05 Sampling Time: 1405 Depth to Water: 13.80

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

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

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 #: 050413-RL2	Site: 97464710
Sampler: PC	Date: 4/13/05
Well I.D.: MW-3	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth (TD): 22.29	Depth to Water (DTW): 11.48
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 13.64	

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

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

1.7 (Gals.) X	3	=	5.1 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 (uS))	Turbidity (NTUs)	Gals. Removed	Observations
1410	66.6	7.4	1078	>1000	1.7	
1412	65.3	7.4	1071	>1000	3.4	
1418	65.9	7.4	1070	>1000	5.1	

Did well dewater? Yes (No) Gallons actually evacuated: 5.1

Sampling Date: 4/13/05 Sampling Time: 1420 Depth to Water: 13.39

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

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

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 #: 050413-PC2	Site: 9746710
Sampler: PC	Date: 4/13/05
Well I.D.: MW4	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth (TD): 22.60	Depth to Water (DTW): 13.18
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: 15.06	

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: _____

1.5 (Gals.) X	3	=	4.5 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
1300	61.5	7.3	1149	>1000	1.5	
1304	62.8	7.2	1137	>1000	3	
1308	63.3	7.2	1128	>1000	4.5	

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

Sampling Date: 4/13/05 Sampling Time: 1320 Depth to Water: 15.00

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

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

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