

R0 2522 G



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

Alameda County  
JUL 20 2005  
Environmental Health

July 15, 2005  
Project No. SJ67-50S-1.2005

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

Re: **Quarterly Groundwater Monitoring and Remediation Status Report – Second Quarter 2005**  
**Shell Service Station**  
**6750 Santa Rita Road**  
**Pleasanton, 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, sampling, and remediation status 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.

**QUARTERLY GROUND WATER MONITORING PROGRAM**

Groundwater monitoring Wells MW-1 through MW-5 were gauged and sampled by Blaine on April 14, 2005. Depth to groundwater was measured in Wells MW-1 through MW-5. Groundwater elevation data and contours are presented on Figure 2.

Groundwater samples were submitted by Blaine to Severn Trent Laboratories, Inc. in Pleasanton, California for analysis for total purgeable petroleum hydrocarbons as gasoline (TPH-G); benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds); and fuel oxygenates methyl tert-butyl ether (MTBE), and tert-butanol (TBA) using EPA Method 8260B. Benzene and MTBE concentrations are presented on Figure 3.

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.

#### PREVIOUS REMEDIATION SUMMARY

Monthly batch extraction on Wells MW-2 and MW-3 was initiated during third quarter 2003, and continued through fourth quarter 2003. Over the course of six months, the MTBE concentration in Well MW-3 was lowered from a historic high of 15,000 micrograms per liter (ug/l) to 9,800 ug/l. However, on average, less than 40 gallons of water could be extracted from each well during a two-hour period, and Delta/Shell did not continue monthly groundwater batch extractions during first quarter 2004.

Due to increasing MTBE groundwater concentrations during first and second quarter 2004, Delta/Shell initiated an extended groundwater batch extraction event during third quarter 2004 utilizing Wells MW-1, MW-2 and MW-3. Approximately 4,705 gallons of groundwater were extracted during a six-week period, and an overall decrease in concentrations was observed in site wells during the extraction activities indicating the successful mass removal of oxygenates.

Due to increasing MTBE groundwater concentrations again during fourth quarter 2004, Delta/Shell initiated a second extended groundwater batch extraction event during first quarter 2005 utilizing Well MW-2. Approximately 2,950 gallons of groundwater were extracted during a two week period, and the concentration of MTBE in Well MW-2 decreased from 5,200 ug/l to 1,300 ug/l. The total mass of MTBE removed from groundwater beneath the site to date is approximately 0.274 pounds.

#### DISCUSSION

Depth to groundwater in site area wells has decreased by an average of 0.47 feet since last quarter. Batch extraction activities (operating during the first quarter 2005 sampling event) resulted in an apparent 7.57 foot depth to water decrease in Well MW-2 since last quarter. With the exception of second quarter 2004 (northwest), previous site data has indicated that the groundwater flow direction at the site varies from southeast to southwest. The groundwater gradient on April 14, 2005 was toward the south at an average magnitude of 0.02 feet/feet.

MTBE continues to be detected in all on-site site wells (MW-1 through MW-4). With the exception of Well MW-4, MTBE concentrations have increased since last quarter. The MTBE concentration in Well MW-4 decreased from a historic high of 450 ug/l last quarter to 210 ug/l during second quarter 2005. MTBE was not detected at or above the laboratory reporting limit in off-site Well MW-5. TBA was detected in Wells MW-1 through MW-3 at concentrations ranging from 260 ug/l to 1,100 ug/l. The TBA concentrations in Wells MW-1 and MW-3 have increased, while the TBA concentration in Well MW-2 decreased from 2,300 ug/l last quarter to 1,100 ug/l. TPH-G and BTEX compounds remain below the laboratory detection limits in all site wells.

Delta/Shell will continue quarterly groundwater monitoring at the site, and will evaluate the need for additional groundwater extraction activities based on MTBE concentration trends in site wells.

Meanwhile, the Alameda County Health Care Services Agency has requested that Shell submit a workplan for an additional soil and groundwater investigation at the site. Delta is currently preparing this workplan on behalf of Shell for submittal by August 16, 2005.

**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 report.

Sincerely,  
**Delta Environmental Consultants, Inc.**



Heather Buckingham  
Senior Staff Geologist

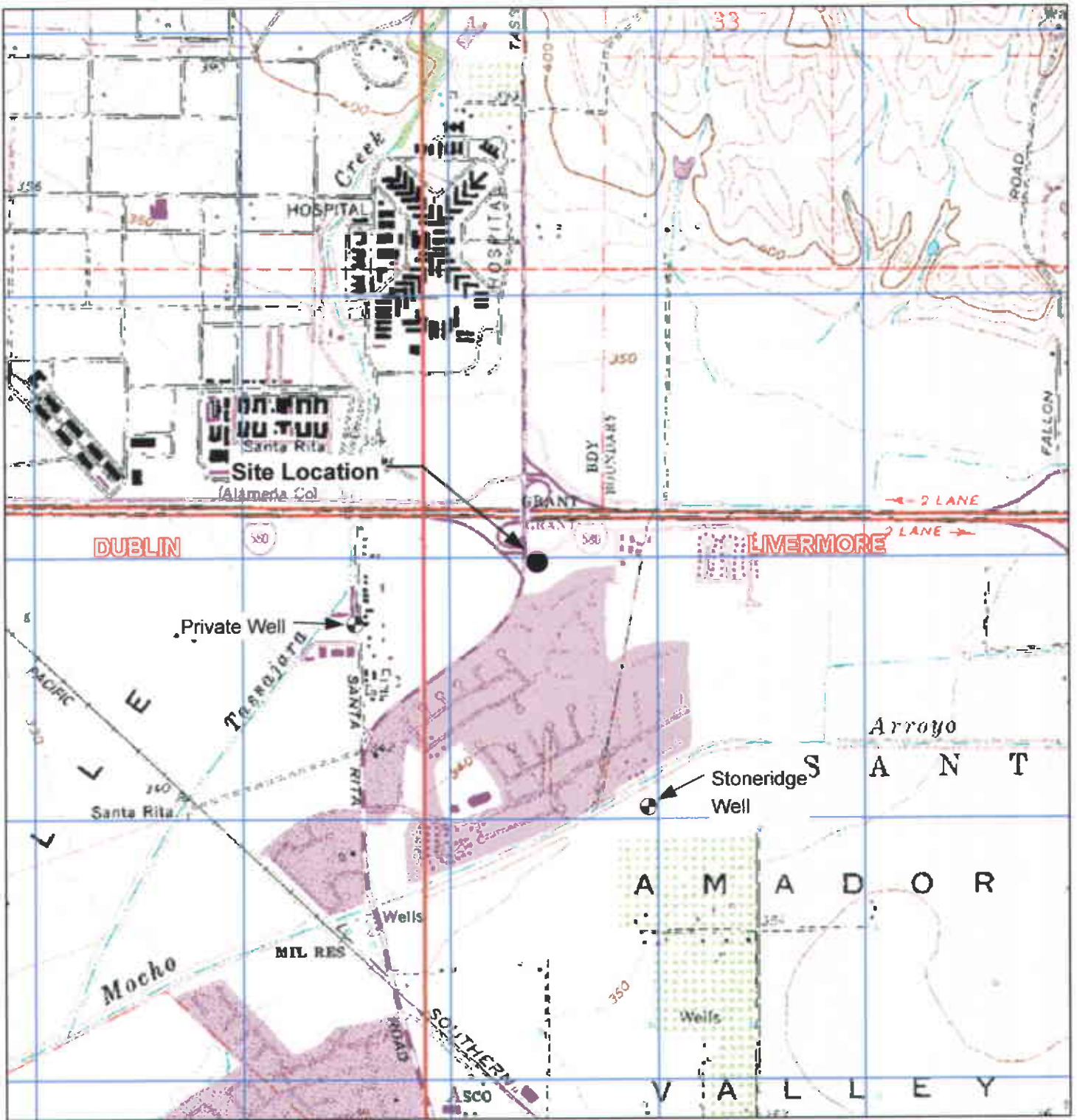


Debbie Arnold  
Project Manager  
PG 7745



- Attachments:** Figure 1 – Site Location and Well Survey Map  
Figure 2 – Groundwater Elevation Contour Map, April 14, 2005  
Figure 3 – Benzene and MTBE Concentrations Map, April 14, 2005  
Attachment A – Groundwater Monitoring and Sampling Report, May 5, 2005

cc: Denis Brown, Shell Oil Products US  
Betty Graham, Regional Water Quality Control Board, San Francisco Bay Region



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



QUADRANGLE LOCATION

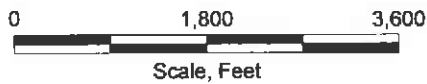


FIGURE 1  
 SITE LOCATION AND WELL SURVEY MAP  
 SHELL-BRANDED SERVICE STATION  
 6750 Santa Rita Road  
 Pleasanton, California

PROJECT NO. SJ87-50S-1.2004	DRAWN BY VF 12/04/03
FILE NO. SJ87-50S-1.2004	PREPARED BY VF
REVISION NO.	REVIEWED BY



Pimlico Drive



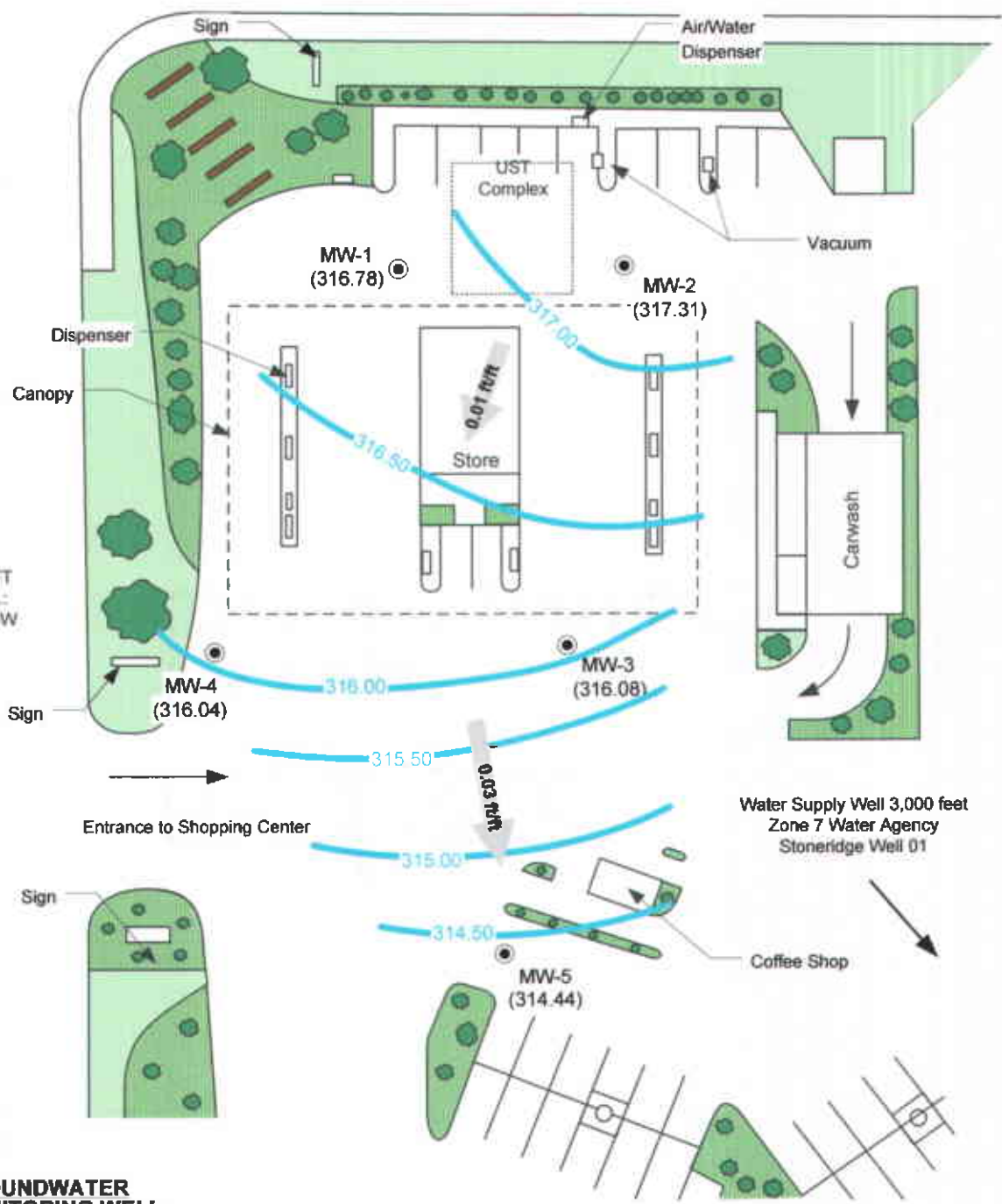
Santa Rita Road

Nearest LUFT site 2,100 ft.: East Bay BMW

Domestic Well 1870 feet Well 3S/1E 5R1

Entrance to Shopping Center

Water Supply Well 3,000 feet Zone 7 Water Agency Stoneridge Well 01



**LEGEND**

- MW-1 ● **GROUNDWATER MONITORING WELL**
- (315.84) **GROUNDWATER ELEVATION (FEET-MSL), 4/14/05**
- 315.00 — **GROUNDWATER ELEVATION CONTOUR**
- 0.03 ft/ft **APPROXIMATE GROUNDWATER FLOW DIRECTION AND GRADIENT**



**FIGURE 2**  
**GROUNDWATER ELEVATION CONTOUR MAP,**  
**APRIL 14, 2005**  
**SHELL-BRANDED SERVICE STATION**  
**6750 Santa Rita Road**  
**Pleasanton, California**

PROJECT NO. SJ67-505-1.2005	DRAWN BY J.L.
FILE NO. SJ67-505-1.2005	PREPARED BY J.L.
REVISION NO. 1	REVIEWED BY



Pimlico Drive



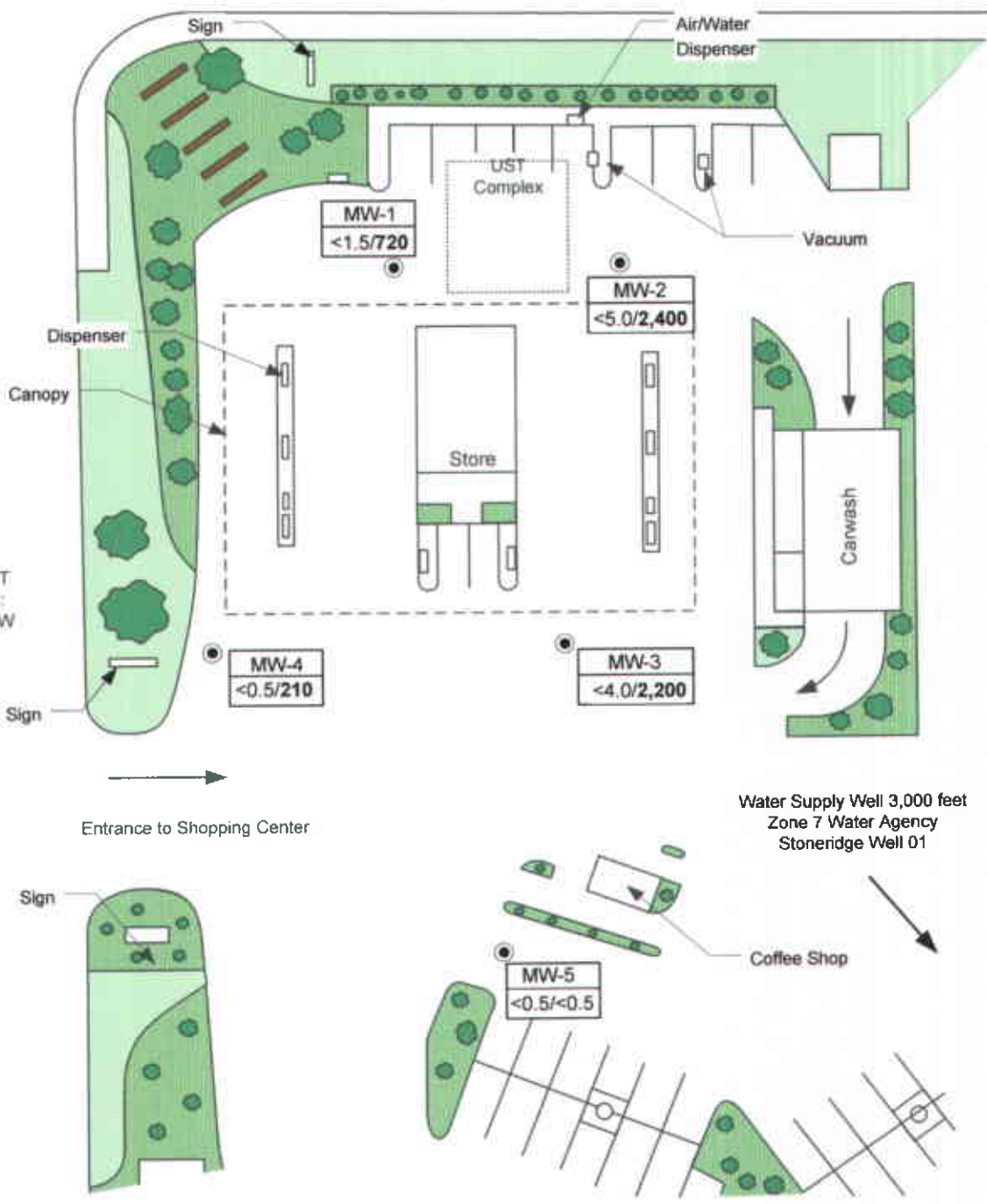
Santa Rita Road

Nearest LUFT site 2,100 ft.: East Bay BMW

Domestic Well 1870 feet Well 3S/1E 5R1

Entrance to Shopping Center

Water Supply Well 3,000 feet Zone 7 Water Agency Stoneridge Well 01



**LEGEND**

● **GROUNDWATER MONITORING WELL**

MW-5  
<0.5/<0.5 **BENZENE/MTBE CONCENTRATIONS (UG/L)**



APPROX. SCALE

**FIGURE 3**  
**BENZENE & MTBE CONCENTRATION MAP**  
**APRIL 14, 2005**

**SHELL-BRANDED SERVICE STATION**  
**6750 Santa Rita Road**  
**Pleasanton, California**

PROJECT NO. SJ67-50S-1 2005	DRAWN BY J.L.
FILE NO. SJ67-50S-1 2005	PREPARED BY J.L.
REVISION NO. 1	REVIEWED BY



**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 South Wilmington Avenue  
Carson, CA 90810

Second Quarter 2005 Groundwater Monitoring at  
Shell-branded Service Station  
6750 Santa Rita Road  
Pleasanton, CA

Monitoring performed on April 14, 2005

---

Groundwater Monitoring Report **050414-MP-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,

Leon Gearhart  
Project Coordinator

LG/np

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**  
**6750 Santa Rita Road**  
**Pleasanton, 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.)	GW Elevation (MSL)
---------	------	----------------	----------------	-------------	-------------	-------------	-------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------

MW-1	12/04/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.75	NA
MW-1	12/22/2002	<50	81	<0.50	<0.50	<0.50	<0.50	62	<2.0	<2.0	<2.0	<50	NA	31.93	NA
MW-1	03/28/2003	<50	70	<0.50	<0.50	<0.50	<1.0	130	<2.0	<2.0	<2.0	43	343.48	31.59	311.89
MW-1	05/09/2003	<250	NA	<2.5	<2.5	<2.5	<5.0	280	<10	<10	<10	200	343.48	31.10	312.38
MW-1	06/30/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.48	31.65	311.83
MW-1	07/08/2003	<250	NA	<2.5	<2.5	<2.5	<5.0	160	<10	<10	<10	170	343.48	30.90	312.58
MW-1	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.48	31.53	311.95
MW-1	07/31/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.48	29.95	313.53
MW-1	08/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.48	29.99	313.49
MW-1	09/23/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.48	30.02	313.46
MW-1	10/03/2003	<500	NA	<5.0	<5.0	<5.0	<10	810	<20	<20	<20	540	343.48	29.89	313.59
MW-1	10/28/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.48	31.38	312.10
MW-1	11/24/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.48	29.71	313.77
MW-1	12/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.48	29.72	313.76
MW-1	01/06/2004	<250	NA	<2.5	<2.5	<2.5	<5.0	400	<10	<10	<10	280	343.48	29.16	314.32
MW-1	04/06/2004	<1,300	NA	<13	<13	<13	<25	3,300	NA	NA	NA	3,500	343.48	31.38	312.10
MW-1	07/30/2004	<1,300	NA	<13	<13	<13	<25	1,000	NA	NA	NA	600	343.48	28.51	314.97
MW-1	10/07/2004	<250	NA	<2.5	<2.5	<2.5	<5.0	530	NA	NA	NA	390	343.48	28.55	314.93
MW-1	01/26/2005	<250	NA	<2.5	<2.5	<2.5	<5.0	320	<10	<10	<10	130	343.48	27.35	316.13
MW-1	04/14/2005	<150	NA	<1.5	<1.5	<1.5	<1.5	720	NA	NA	NA	260	343.48	26.70	316.78

MW-2	12/04/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.25	NA
MW-2	12/22/2002	<200	120	<2.0	<2.0	<2.0	<2.0	660	<2.0	<2.0	<2.0	<50	NA	30.70	NA
MW-2	03/28/2003	<2,500	60	<25	<25	<25	<50	4,200	<100	<100	<100	2,500	342.86	30.30	312.56
MW-2	05/09/2003	<2,500	NA	<25	<25	<25	<50	4,000	<100	<100	<100	3,200	342.86	29.83	313.03
MW-2	06/30/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.86	30.45	312.41

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**6750 Santa Rita Road**  
**Pleasanton, 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.)	GW Elevation (MSL)
MW-2	07/08/2003	<2,000	NA	<20	<20	<20	<40	2,800	<80	<80	<80	2,900	342.86	29.86	313.00
MW-2	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.86	30.33	312.53
MW-2	07/31/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.86	29.33	313.53
MW-2	08/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.86	29.98	312.88
MW-2	09/23/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.86	30.21	312.65
MW-2	10/03/2003	<2,000	NA	<20	<20	<20	<40	3,600	<80	<80	<80	3,000	342.86	30.43	312.43
MW-2	10/28/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.86	29.79	313.07
MW-2	11/24/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.86	30.00	312.86
MW-2	12/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.86	30.14	312.72
MW-2	01/06/2004	<5,000	NA	<50	<50	<50	<100	4,500	<200	<200	<200	1,900	342.86	30.05	312.81
MW-2	04/06/2004	<2,000	NA	<20	<20	<20	<40	4,600	NA	NA	NA	5,100	342.86	29.30	313.56
MW-2	07/30/2004	<500	NA	<5.0	<5.0	<5.0	<10	1,000	NA	NA	NA	950	342.86	28.80	314.06
MW-2	10/07/2004	<2,500	NA	<25	<25	<25	<50	6,300	NA	NA	NA	6,500	342.86	28.02	314.84
MW-2	01/26/2005	<1,300	NA	<13	<13	<13	<25	2,100	<50	<50	<50	2,300	342.86	33.12	309.74
MW-2	04/14/2005	<500	NA	<5.0	<5.0	<5.0	<5.0	2400	NA	NA	NA	1100	342.86	25.55	317.31

MW-3	12/04/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31.65	NA
MW-3	12/22/2002	<2,000	72	<20	<20	<20	<20	8,000	<20	<20	<20	1,500	NA	31.10	NA
MW-3	03/28/2003	<5,000	89	<50	<50	<50	<100	10,000	<200	<200	<200	6,100	342.23	30.76	311.47
MW-3	05/09/2003	11,000	NA	<100	<100	<100	<200	15,000	<400	<400	<400	9,300	342.23	30.04	312.19
MW-3	06/30/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.23	30.23	312.00
MW-3	07/08/2003	<10,000	NA	<100	<100	<100	<200	9,500	<400	<400	<400	2,500	342.23	30.11	312.12
MW-3	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.23	29.80	312.43
MW-3	07/31/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.23	29.94	312.29
MW-3	08/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.23	30.05	312.18
MW-3	09/23/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.23	29.95	312.28

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**6750 Santa Rita Road**  
**Pleasanton, 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.)	GW Elevation (MSL)
---------	------	----------------	----------------	-------------	-------------	-------------	-------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------

MW-3	10/03/2003	<10,000	NA	<100	<100	<100	<200	8,800	<400	<400	<400	6,600	342.23	29.97	312.26
MW-3	10/28/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.23	29.97	312.26
MW-3	11/24/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.23	29.94	312.29
MW-3	12/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	342.23	29.43	312.80
MW-3	01/06/2004	<5,000	NA	<50	<50	<50	<100	9,800	<200	<200	<200	3,800	342.23	29.25	312.98
MW-3	04/06/2004	<5,000	NA	<50	<50	<50	<100	4,200	NA	NA	NA	2,100	342.23	28.82	313.41
MW-3	07/30/2004	<2,500	NA	<25	<25	<25	<50	3,000	NA	NA	NA	1,200	342.23	28.73	313.50
MW-3	10/07/2004	<1,000	NA	<10	<10	<10	<20	860	NA	NA	NA	320	342.23	28.72	313.51
MW-3	01/26/2005	<500	NA	<5.0	<5.0	<5.0	<10	820	<20	<20	<20	250	342.23	26.50	315.73
MW-3	04/14/2005	<400	NA	<4.0	<4.0	<4.0	<4.0	2200	NA	NA	NA	590	342.23	26.15	316.08

MW-4	12/04/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32.92	NA
MW-4	12/22/2002	<50	<50	<0.50	<0.50	<0.50	<0.50	93	<2.0	<2.0	<2.0	<50	NA	32.20	NA
MW-4	03/28/2003	<50	67	<0.50	<0.50	<0.50	<1.0	2.4	<2.0	<2.0	<2.0	<5.0	343.44	32.07	311.37
MW-4	05/09/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	75	<2.0	<2.0	<2.0	<5.0	343.44	31.35	312.09
MW-4	06/30/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.44	31.42	312.02
MW-4	07/08/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	18	<2.0	<2.0	<2.0	<5.0	343.44	31.42	312.02
MW-4	07/17/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.44	31.20	312.24
MW-4	07/31/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.44	31.05	312.39
MW-4	08/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.44	31.20	312.24
MW-4	09/23/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.44	31.15	312.29
MW-4	10/03/2003	<50	NA	<0.50	<0.50	<0.50	<1.0	23	<2.0	<2.0	<2.0	<5.0	343.44	31.10	312.34
MW-4	10/28/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.44	31.14	312.30
MW-4	11/24/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.44	30.92	312.52
MW-4	12/29/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	343.44	30.82	312.62
MW-4	01/06/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	40	<2.0	<2.0	<2.0	<5.0	343.44	30.24	313.20

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**6750 Santa Rita Road**  
**Pleasanton, 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.)	GW Elevation (MSL)
MW-4	04/06/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	16	NA	NA	NA	<5.0	343.44	30.10	313.34
MW-4	07/30/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	25	NA	NA	NA	<5.0	343.44	29.75	313.69
MW-4	10/07/2004	<50	NA	<0.50	<0.50	<0.50	<1.0	35	NA	NA	NA	<5.0	343.44	29.79	313.65
MW-4	01/26/2005	<250	NA	<2.5	<2.5	<2.5	<5.0	450	<10	<10	<10	43	343.44	27.60	315.84
MW-4	04/14/2005	<50	NA	<0.50	<0.50	<0.50	<0.50	210	NA	NA	NA	<5.0	343.44	27.40	316.04
MW-5	02/08/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	340.88	26.83	314.05
MW-5	02/10/2005	<50	NA	<0.50	<0.50	<0.50	<1.0	5.1	<2.0	<2.0	<2.0	<5.0	340.88	27.13	313.75
MW-5	04/14/2005	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50	NA	NA	NA	<5.0	340.88	26.44	314.44

**WELL CONCENTRATIONS**  
**Shell-branded Service Station**  
**6750 Santa Rita Road**  
**Pleasanton, 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.)	GW Elevation (MSL)
---------	------	----------------	----------------	-------------	-------------	-------------	-------------	------------------------	----------------	----------------	----------------	---------------	--------------	----------------------------	--------------------------

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

Notes:

- Site surveyed November 22, 2002 by Mid Coast Engineers.
- MW-5 surveyed January 31, 2005 by Mid Coast Engineers of Watsonville, CA.

**Blaine Tech Services, Inc.**

April 29, 2005

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attn.: Leon Gearhart  
Project#: 050414-MD2  
Project: 97464711  
Site: 6750 Santa Rita Rd., Pleasanton

Dear Mr. Gearhart,

Attached is our report for your samples received on 04/15/2005 15:53  
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  
05/30/2005 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](mailto:mbrewer@stl-inc.com)

Sincerely,



Melissa Brewer  
Project Manager



Report Number : 43450

Date : 4/28/2005

Melissa Brewer  
STL San Francisco  
1220 Quarry Lane  
Pleasanton, CA 94566-4756

Subject : 5 Water Samples  
Project Name : 6750 Santa Rita Rd., Pleasanton  
Project Number : 050414-JD2  
P.O. Number : 97464711

Dear Ms. Brewer,

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,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff





Report Number : 43450

Date : 4/28/2005

Project Name : 6750 Santa Rita Rd., Pleasanton

Project Number : 050414-JD2

Sample : MW-1

Matrix : Water

Lab Number : 43450-01

Sample Date : 4/14/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 1.5	1.5	ug/L	EPA 8260B	4/28/2005
Toluene	< 1.5	1.5	ug/L	EPA 8260B	4/28/2005
Ethylbenzene	< 1.5	1.5	ug/L	EPA 8260B	4/28/2005
Total Xylenes	< 1.5	1.5	ug/L	EPA 8260B	4/28/2005
Methyl-t-butyl ether (MTBE)	720	1.5	ug/L	EPA 8260B	4/28/2005
Tert-Butanol	260	7.0	ug/L	EPA 8260B	4/28/2005
TPH as Gasoline	< 150	150	ug/L	EPA 8260B	4/28/2005
Toluene - d8 (Surr)	90.2		% Recovery	EPA 8260B	4/28/2005
4-Bromofluorobenzene (Surr)	98.4		% Recovery	EPA 8260B	4/28/2005

Approved By:

Joel Kiff



Report Number : 43450

Date : 4/28/2005

Project Name : 6750 Santa Rita Rd., Pleasanton

Project Number : 050414-JD2

Sample : MW-2

Matrix : Water

Lab Number : 43450-02

Sample Date : 4/14/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 5.0	5.0	ug/L	EPA 8260B	4/28/2005
Toluene	< 5.0	5.0	ug/L	EPA 8260B	4/28/2005
Ethylbenzene	< 5.0	5.0	ug/L	EPA 8260B	4/28/2005
Total Xylenes	< 5.0	5.0	ug/L	EPA 8260B	4/28/2005
Methyl-t-butyl ether (MTBE)	2400	5.0	ug/L	EPA 8260B	4/28/2005
Tert-Butanol	1100	25	ug/L	EPA 8260B	4/28/2005
TPH as Gasoline	< 500	500	ug/L	EPA 8260B	4/28/2005
Toluene - d8 (Surr)	88.5		% Recovery	EPA 8260B	4/28/2005
4-Bromofluorobenzene (Surr)	97.1		% Recovery	EPA 8260B	4/28/2005

Approved By:

Joel Kiff



Report Number : 43450

Date : 4/28/2005

Project Name : 6750 Santa Rita Rd., Pleasanton

Project Number : 050414-JD2

Sample : MW-3

Matrix : Water

Lab Number : 43450-03

Sample Date : 4/14/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 4.0	4.0	ug/L	EPA 8260B	4/28/2005
Toluene	< 4.0	4.0	ug/L	EPA 8260B	4/28/2005
Ethylbenzene	< 4.0	4.0	ug/L	EPA 8260B	4/28/2005
Total Xylenes	< 4.0	4.0	ug/L	EPA 8260B	4/28/2005
Methyl-t-butyl ether (MTBE)	2200	4.0	ug/L	EPA 8260B	4/28/2005
Tert-Butanol	590	20	ug/L	EPA 8260B	4/28/2005
TPH as Gasoline	< 400	400	ug/L	EPA 8260B	4/28/2005
Toluene - d8 (Surr)	87.6		% Recovery	EPA 8260B	4/28/2005
4-Bromofluorobenzene (Surr)	97.8		% Recovery	EPA 8260B	4/28/2005

Approved By:

Joel Kiff



Report Number : 43450

Date : 4/28/2005

Project Name : 6750 Santa Rita Rd., Pleasanton

Project Number : 050414-JD2

Sample : MW-4

Matrix : Water

Lab Number : 43450-04

Sample Date : 4/14/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Methyl-t-butyl ether (MTBE)	210	0.50	ug/L	EPA 8260B	4/28/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	4/28/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/28/2005
Toluene - d8 (Surr)	88.5		% Recovery	EPA 8260B	4/28/2005
4-Bromofluorobenzene (Surr)	98.5		% Recovery	EPA 8260B	4/28/2005

Approved By:

Joel Kiff



Report Number : 43450

Date : 4/28/2005

Project Name : 6750 Santa Rita Rd., Pleasanton

Project Number : 050414-JD2

Sample : MW-5

Matrix : Water

Lab Number : 43450-05

Sample Date :4/14/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	4/28/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/28/2005
Toluene - d8 (Surr)	88.5		% Recovery	EPA 8260B	4/28/2005
4-Bromofluorobenzene (Surr)	98.2		% Recovery	EPA 8260B	4/28/2005

Approved By:

Joel Kiff

Report Number : 43450

Date : 4/28/2005

**QC Report : Method Blank Data**

Project Name : **6750 Santa Rita Rd., Pleasanton**

Project Number : **050414-JD2**

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	4/28/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/28/2005
Toluene - dB (Surr)	98.0		%	EPA 8260B	4/28/2005
4-Bromofluorobenzene (Surr)	102		%	EPA 8260B	4/28/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	4/28/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	4/28/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	4/28/2005
Toluene - dB (Surr)	91.0		%	EPA 8260B	4/28/2005
4-Bromofluorobenzene (Surr)	100		%	EPA 8260B	4/28/2005

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 : 43450


Date : 4/28/2005

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : 6750 Santa Rita Rd.,

Project Number : 050414-JD2

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	43447-01	<0.50	39.5	39.1	36.4	38.5	ug/L	EPA 8260B	4/27/05	92.1	98.3	6.44	70-130	25
Toluene	43447-01	<0.50	39.5	39.1	36.2	38.8	ug/L	EPA 8260B	4/27/05	91.6	99.3	8.05	70-130	25
Tert-Butanol	43447-01	8.6	198	196	187	205	ug/L	EPA 8260B	4/27/05	90.4	101	10.6	70-130	25
Methyl-t-Butyl Ether	43447-01	9.6	39.5	39.1	43.0	43.4	ug/L	EPA 8260B	4/27/05	84.3	86.2	2.28	70-130	25
Benzene	43463-02	<0.50	40.0	40.0	44.2	43.6	ug/L	EPA 8260B	4/28/05	111	109	1.58	70-130	25
Toluene	43463-02	<0.50	40.0	40.0	39.6	39.1	ug/L	EPA 8260B	4/28/05	99.0	97.7	1.34	70-130	25
Tert-Butanol	43463-02	<5.0	200	200	202	207	ug/L	EPA 8260B	4/28/05	101	103	2.14	70-130	25
Methyl-t-Butyl Ether	43463-02	<0.50	40.0	40.0	33.1	32.8	ug/L	EPA 8260B	4/28/05	82.8	81.9	1.11	70-130	25

Approved By:  Joel Kiff

KIFF ANALYTICAL, LLC

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

Report Number : 43450

Date : 4/28/2005

QC Report : Laboratory Control Sample (LCS)

Project Name : 6750 Santa Rita Rd.,

Project Number : 050414-JD2

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	4/27/05	99.1	70-130
Toluene	40.0	ug/L	EPA 8260B	4/27/05	98.7	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/27/05	102	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/27/05	89.7	70-130
Benzene	40.0	ug/L	EPA 8260B	4/28/05	107	70-130
Toluene	40.0	ug/L	EPA 8260B	4/28/05	106	70-130
Tert-Butanol	200	ug/L	EPA 8260B	4/28/05	107	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	4/28/05	84.2	70-130

KIFF ANALYTICAL, LLC

Approved By:  Joel Kiff



Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT HOUSTON

Denis Brown

2005-04-0544

INCIDENT NUMBER (S&E ONLY)

9 7 4 6 4 7 1 1

SAP or CRMT NUMBER (TS/CRMT)

DATE: 4/14/05

PAGE: 1 of 1

SAMPLING COMPANY: <b>Blaine Tech Services</b>		LOG CODE: <b>BTSS</b>	SITE ADDRESS (Street and City): <b>6750 Santa Rita Rd., Pleasanton</b>		GLOBAL ID NO.: <b>T0600102532</b>
ADDRESS: <b>1680 Rogers Avenue, San Jose, CA 95112</b>		EDF DELIVERABLE TO (Responsible Party or Designee): <b>Vera Fischer</b>		PHONE NO.: <b>(408)224-4724</b>	E-MAIL: <b>vfischer@deltaenv.com</b>
PROJECT CONTACT (Hardcopy or PDF Report to): <b>Leon Gearhart</b>		SAMPLER NAME(S) (Print): <b>John DeJoy</b>		CONSULTANT PROJECT NO.: <b>050414-001</b>	
TELEPHONE: <b>408-573-0555</b>	FAX: <b>408-573-7771</b>	E-MAIL: <b>lgearhart@blainetech.com</b>	LAB USE ONLY		

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

REQUESTED ANALYSIS

LA - RWQCB REPORT FORMAT  UST AGENCY:

FORM NUMBER OR TRIANGULAR IDENTIFICATION NUMBER LIST PERIODS: ALL

SPECIAL INTERESTS (PHYSICAL PROPERTIES, TOXICITY, etc.):

FIELD NOTES:  
 Container/Preservative  
 or PID Readings  
 or Laboratory Notes  
 3  
 TEMPERATURE ON RECEIPT C°

LAB USE ONLY	Field Sample Identification	SAMPLING		MATRX	NO. OF CONT.	TPH - Gas, Purgeable	BTX	MTBE (8021B - 6ppb RL)	MTBE (9290B - 0.5ppb RL)	Oxygenates (6) by (8260B)	TBA	TPH - Diesel, Extractable										
		DATE	TIME																			
	MW-1	4/15/05	1305	W	3	X	X	X	X	X	X											-01
	MW-2		1410		3	X	X	X	X	X	X											-02
	MW-3		1400		3	X	X	X	X	X	X											-03
	MW-4		1330		3	X	X	X	X	X	X											-04
	MW-5		1350		3	X	X	X	X	X	X											-05

Relinquished by: (Signature) <i>John DeJoy</i>	Received by: (Signature) <i>[Signature]</i>	Date: 4/15/05	Time: 1330
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: 04/15/05	Time: 1035
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>B.S.A.B.</i>	Date: 4-27-05	Time: 1355

C&G Graphic (714) 898-9702

# SHELL Chain Of Custody Record

114671

Lab Identification (if necessary)

Address

City, State, Zip

Shell Project Manager to be invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT HOUSTON

Denis Brown

2005-04-0544

INCIDENT NUMBER (S&E ONLY)

9 7 4 6 4 7 1 1

SAP or CRMT NUMBER (TS/CRMT)

DATE: 4/14/05

PAGE: 1 of 1

<b>SAMPLING COMPANY:</b> Blaine Tech Services ADDRESS: 1680 Rogers Avenue, San Jose, CA 95112 TELEPHONE: 408-573-0555 FAX: 408-573-7771 EMAIL: gearhart@blainetech.com			<b>LAB CODE:</b> BTSS		<b>SITE ADDRESS (Street and City):</b> 6750 Santa Rita Rd., Pleasanton				<b>GLOBAL ID#:</b> T0600102532					
<b>LABORATORY PROJECT:</b> Leon Gearhart TELEPHONE: 408-573-0555 FAX: 408-573-7771 EMAIL: gearhart@blainetech.com			<b>LABORATORY PROJECT NO.:</b> 050414-100		<b>LABORATORY PROJECT:</b> Vers Fischer (408) 573-4724				<b>LABORATORY PROJECT:</b> electronic@blainetech.com					
PURCHASING/INVOICE INFORMATION: <input checked="" type="checkbox"/> DELIVERY <input type="checkbox"/> RETAIL <input type="checkbox"/> FULL SERVICE <input type="checkbox"/> REPAIRS <input type="checkbox"/> IN SERVICE <input type="checkbox"/> LAST FROM IN SERVICE <input type="checkbox"/> LA - SERVICE REPORT FORMAT <input type="checkbox"/> NET AGENCY			<b>REQUESTED ANALYSIS</b>							<b>FIELD NOTES:</b> Calibration/Preservation or FID Readings or Laboratory Notes  <p style="font-size: 2em; text-align: center;">3</p>				
Lab Use Only	Field Sample Identification	SAMPLING DATE	SAMPLING TIME	MATRIX	LIT. OF CONT.	TPH - Gas, Purgeable	BTX	MTBE (0.0218 - 5ppb RL)	MTBE (0.2088 - 0.5ppb RL)	Oxygenates (B) by (2008)	TBA	TPH - Diesel, Extractable		
	MW-1	4/14/05	1305	W	3	X	✓	X		X				
	MW-2		1410		3	X	✓	X		X				
	MW-3		1400		3	X	✓	X		X				
	MW-4		1330		3	X	✓	X		X				
	MW-5		1350		3	X	✓			X				
Requested by (Signature)	Requested by (Signature): <i>Denis Brown</i>				Received by (Signature)	Received by (Signature): <i>John DeJony</i>				Date	Date: 4/15/05			
Retransmitted by (Signature)	Retransmitted by (Signature): <i>Denis Brown</i>				Received by (Signature)	Received by (Signature): <i>John DeJony</i>				Date	Date: 4/15/05			
Retransmitted by (Signature)	Retransmitted by (Signature): <i>Denis Brown</i>				Received by (Signature)	Received by (Signature): <i>John DeJony</i>				Date	Date: 4/15/05			

## SITE DEPARTURE CHECKLIST

Client Shell Date 4/14/07

Site Address 6750 Santa Rita Rd., Pleasanton

Job Number 050414-M01 Technician MJD

- |   |                                     |  |     |
|---|-------------------------------------|--|-----|
| <b>Caps, Locks and Wellbox Bolts Secured at all Accessed Wells<br/>(except as noted on Wellhead Repair Order)</b> | <input checked="" type="checkbox"/> |  |     |
| <b>Drum(s) Labeled and Secured</b>  | <input type="checkbox"/>            |  | N/A |
| <b>Equipment Decontaminated</b>   | <input checked="" type="checkbox"/> |  | N/A |
| <b>Housekeeping of Site Checked (clean or cleaner)</b>  | <input checked="" type="checkbox"/> |  | N/A |
| <b>Scope Of Work (SOW) Reviewed for Completion</b>  | <input checked="" type="checkbox"/> |  |     |
| <b>Sample Container Set(s) Complete, Present and Secure</b>   | <input checked="" type="checkbox"/> |  | N/A |
| <b>Bill of Lading Completed</b>   | <input checked="" type="checkbox"/> |  | N/A |
| <b>Chain of Custody Completed</b>   | <input checked="" type="checkbox"/> |  | N/A |
| <b>Call In to Project Coordinator / Base Completed</b>  | <input checked="" type="checkbox"/> |  | N/A |
| <b>Route to Next Destination Known, Mapped and Understood</b>   | <input checked="" type="checkbox"/> |  |     |
| <b>Traffic Control Devices Collected</b>  | <input checked="" type="checkbox"/> |  | N/A |
| <b>Cargo Secured on Truck</b>   | <input checked="" type="checkbox"/> |  | N/A |
| <b>Check Out of Facility / Site</b>   | <input checked="" type="checkbox"/> |  | N/A |
| <b>Secure Site / Close and Lock Gate</b>  | <input type="checkbox"/>            |  | N/A |

If Checklist Task cannot be completed, explain: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

**PROJECT COORDINATOR ONLY**

<b>Checklist Reviewed</b>	_____ <small>Initial/Date</small>	<b>Notes</b>
---------------------------	--------------------------------------	--------------

# WELLHEAD INSPECTION CHECKLIST

Date 4/14/05 Client Shell  
 Site Address 6750 Santa Rita Rd., Pleasanton  
 Job Number 050414-MDI Technician MJD

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	X						
MW-4	X							
MW-5		X					①	

NOTES: ①

---



---



---



---



---

## WELL GAUGING DATA

Project # 050414-MPI Date 4/14/05 Client Shell

Site 6750 Santa Rita Rd., Pleasanton

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					26.70	41.72	↓
MW-2	2					25.55	41.81	
MW-3	2					26.15	44.03	
MW-4	2					27.40	43.98	
MW-5	2					26.44	31.94	

## SHELL WELL MONITORING DATA SHEET

BTS #: <u>OS0414-MD1</u>	Site: <u>97464711</u>
Sampler: <u>BA</u>	Date: <u>4/14/05</u>
Well I.D.: <u>MW-1</u>	Well Diameter: <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8
Total Well Depth (TD): <u>41.72</u>	Depth to Water (DTW): <u>26.70</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVC <input type="radio"/> Grade	D.O. Meter (if req'd): <input type="radio"/> YSI <input type="radio"/> HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>29.70</u>	

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	radius <sup>2</sup> * 0.163

2.5 (Gals.) X 3 = 7.5 Gals.

1 Case Volume      Specified Volumes      Calculated Volume

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1253</u>	<u>65.4</u>	<u>7.2</u>	<u>2,091</u>	<u>&gt;1,000</u>	<u>2.5</u>	<u>gray</u>
<u>1257</u>	<u>66.4</u>	<u>7.0</u>	<u>2,294</u>	<u>&gt;1,000</u>	<u>5.0</u>	<u>"</u>
<u>1300</u>	<u>66.5</u>	<u>7.0</u>	<u>2,333</u>	<u>&gt;1,000</u>	<u>7.5</u>	<u>"</u>

Did well dewater?    Yes     No    Gallons actually evacuated: 7.5

Sampling Date: 4/14/05    Sampling Time: 1305    Depth to Water: 29.70

Sample I.D.: MW-1    Laboratory:  STL    Other \_\_\_\_\_

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

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

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

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

## SHELL WELL MONITORING DATA SHEET

BTS #: <u>050414-MW1</u>	Site: <u>97464711</u>
Sampler: <u>MW</u>	Date: <u>4/14/05</u>
Well I.D.: <u>MW-2</u>	Well Diameter: 2 3 4 6 8 _____
Total Well Depth (TD): <u>41.81</u>	Depth to Water (DTW): <u>25.55</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>28.80</u>	

Purge Method: Bailer <input checked="" type="checkbox"/> Disposable Bailer Positive Air Displacement Electric Submersible	Waterra Peristaltic Extraction Pump Other: _____	Sampling Method: Bailer <input checked="" type="checkbox"/> Disposable Bailer Extraction Port Dedicated Tubing Other: _____
--	---	---

$\underline{2.6} \text{ (Gals.)} \times \underline{3} = \underline{7.8} \text{ Gals.}$ I Case Volume      Specified Volumes      Calculated Volume	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1328	65.2	7.3	2555	71000	2.6	cloudy
1333	65.3	7.0	2605	71000	5.2	rc
1337	65.2	7.0	2619	71000	7.8	cloudy
						3/33

Did well dewater? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Gallons actually evacuated: <u>7.8</u>
Sampling Date: <u>4/14/05</u> Sampling Time: <u>1410</u> Depth to Water: <u>27.32</u>	
Sample I.D.: <u>MW-2</u> Laboratory: <u>STD</u> Other: _____	
Analyzed for: <u>(TPH-G) (BTEX) (MTBE)</u> TPH-D Other: <u>TBA</u>	
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 #: <u>250414-MW1</u>	Site: <u>97464711</u>
Sampler: <u>MW</u>	Date: <u>4/14/05</u>
Well I.D.: <u>MW-3</u>	Well Diameter: <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 6 <input type="checkbox"/> 8 <input type="checkbox"/> _____
Total Well Depth (TD): <u>44.03</u>	Depth to Water (DTW): <u>26.15</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>(PVC)</u> Grade	D.O. Meter (if req'd):    YSI    HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>29.72</u>	

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	radius <sup>2</sup> * 0.163

2.9 (Gals.) X 3 = 8.7 Gals.  
 1 Case Volume      Specified Volumes      Calculated Volume

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
<u>1304</u>	<u>66.5</u>	<u>7.4</u>	<u>4196</u>	<u>762</u>	<u>2.9</u>	<u>cloudy</u>
<u>1309</u>	<u>66.6</u>	<u>7.0</u>	<u>4042</u>	<u>71000</u>	<u>5.8</u>	<u>"</u>
<u>1315</u>	<u>65.9</u>	<u>7.0</u>	<u>3854</u>	<u>71000</u>	<u>8.7</u>	<u>cloudy</u>
						<u>34.81</u>

Did well dewater?    Yes     No    Gallons actually evacuated: 8.7

Sampling Date: 4/14/05    Sampling Time: 1900    Depth to Water: 26.81

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 #: 0509/4-MD/	Site: 974647/1
Sampler: BA	Date: 4/14/05
Well I.D.: MW-4	Well Diameter: 2 3 4 6 8
Total Well Depth (TD): 43.98	Depth to Water (DTW): 27.40
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]: 30.71	

Purge Method: Bailer      Waterra      Sampling Method: Bailer  
 Disposable Bailer      Peristaltic      Disposable Bailer  
 Positive Air Displacement      Extraction Pump      Extraction Port  
 Electric Submersible      Other \_\_\_\_\_      Dedicated Tubing

$2.75$ (Gals.) X	<u>3</u> Specified Volumes	$= 8.25$ Gals. 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 <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1316	67.5	7.0	2,122	781	2.75	gray
1321	67.4	6.8	2,213	>1,000	5.5	"
1324	67.8	6.8	2,285	>1,000	8.25	"

Did well dewater? Yes  No  Gallons actually evacuated: 8.25

Sampling Date: 4/14/05      Sampling Time: 1330      Depth to Water: 30.70

Sample I.D.: MW-4      Laboratory: STL Other \_\_\_\_\_

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

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

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

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

## SHELL WELL MONITORING DATA SHEET

BTS #: <u>050414-MW-1</u>	Site: <u>97464711</u>
Sampler: <u>M</u>	Date: <u>4/14/05</u>
Well I.D.: <u>MW-5</u>	Well Diameter: <u>3</u> 4 6 8
Total Well Depth (TD): <u>31.94</u>	Depth to Water (DTW): <u>26.44</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>27.54</u>	

Purge Method:  Bailer  Disposable Bailer  Positive Air Displacement  Electric Submersible

Water:  Peristaltic  Extraction Pump  Other \_\_\_\_\_

Sampling Method:  Bailer  Disposable Bailer  Extraction Port  Dedicated Tubing

Other: \_\_\_\_\_

$\underline{.9} \text{ (Gals.)} \times \underline{3} = \underline{2.7} \text{ Gals.}$ <p style="font-size: small; margin: 0;">1 Case Volume      Specified Volumes      Calculated Volume</p>	<table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> <tr> <td>1"</td> <td>0.04</td> <td>4"</td> <td>0.65</td> </tr> <tr> <td>2"</td> <td>0.16</td> <td>6"</td> <td>1.47</td> </tr> <tr> <td>3"</td> <td>0.37</td> <td>Other</td> <td>radius<sup>2</sup> * 0.163</td> </tr> </table>	Well Diameter	Multiplier	Well Diameter	Multiplier	1"	0.04	4"	0.65	2"	0.16	6"	1.47	3"	0.37	Other	radius <sup>2</sup> * 0.163
Well Diameter	Multiplier	Well Diameter	Multiplier														
1"	0.04	4"	0.65														
2"	0.16	6"	1.47														
3"	0.37	Other	radius <sup>2</sup> * 0.163														

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1252	68.5	7.2	3627	71000	.9	cloudy
1253	68.3	6.9	3632	>1000	1.8	"
1256	68.8	6.9	3623	>1000	2.7	cloudy
						<u>27.15</u>

Did well dewater? Yes  No  Gallons actually evacuated: 2.7

Sampling Date: 4/14/05 Sampling Time: 1350 Depth to Water: 27.41

Sample I.D.: MW-5 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