



RO-2522 6

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

January 14, 2005  
Project No. SJ67-50S-1.2004

Alameda County  
JAN 19 2005  
Environmental Health

Mr. Bob Schultz  
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 – Fourth Quarter 2004**  
**Shell Service Station**  
**6750 Santa Rita Road**  
**Pleasanton, California**

Dear Mr. Schultz:

Delta Environmental Consultants, Inc. (Delta), on behalf of Shell Oil Products US (Shell), has prepared the following fourth quarter 2004 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 were gauged and sampled by Blaine on October 7, 2004. Depth to groundwater was measured in Wells MW-1 through MW-4. 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); 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. This remedial action was taken to address the presence of MTBE in groundwater. 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 discharge samples, collected periodically through out the extraction event, were analyzed for TPH-G, BTEX compounds, MTBE and TBA. With the exception of an increase of MTBE in Well MW-3, an overall decrease in concentrations was observed in site wells during the extraction activities indicating the successful mass removal of oxygenates.

## GROUNDWATER EXTRACTION ACTIVITIES

During the fourth quarter 2004, no groundwater extraction activities were conducted due to low groundwater concentrations. Table 1 presents the total gallons extracted and hydrocarbon mass removal estimates from monthly extraction events during the third and fourth quarters 2003, and the recent third quarter 2004 batch extraction activities.

## DISCUSSION

Depth to groundwater in Wells MW-1 and MW-4 increased by an average of 0.04 feet since last quarter, while the depth to groundwater in Wells MW-2 and MW-3 decreased by 0.78 feet and 0.01 feet, respectively. 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 October 7, 2004 was toward the south-southeast at a magnitude of 0.02 feet/feet.

MTBE continues to be detected in all site wells, current concentrations range from 35 ug/l to 6,300 ug/l. The MTBE concentrations in Wells MW-1 and MW-3 decreased from 1,000 ug/l to 530 ug/l, and from 3,000 ug/l to 860 ug/l, respectively. MTBE concentrations in Wells MW-2 and MW-4 have increased since last quarter. The concentration of MTBE in Well MW-2 increased from 1,000 ug/l to 6,300 ug/l. A concentration of 6,300 ug/l is a historic high for Well MW-2, but is still below the MTBE historic high (15,000 ug/l) for the site. The TBA concentration in Well MW-2 has also increased to a historic high (6,500 ug/l) for this well. TBA concentrations in Wells MW-1 (390 ug/l) and MW-3 (320 ug/l) continue to decrease. TBA has never been detected in Well MW-4. TPH-G and BTEX compounds remain below the laboratory detection limits in all site wells.

In the first quarter 2005 Blaine will gauge and sample site wells and tabulate the data. In order to address this increase in groundwater oxygenate concentrations, Delta plans to initiate further batch extraction activities on Well MW-2 during January 2005. Delta will prepare a first quarter 2005 monitoring, sampling, and remediation status report for submittal to the Alameda County Health Care Services Agency.

**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.

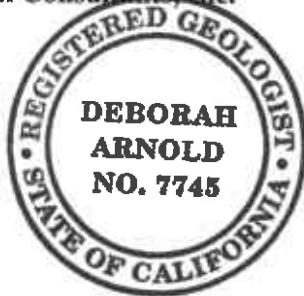
Please call if you have any questions regarding the contents of this report.

Sincerely,

**Delta Environmental Consultants, Inc.**



Debbie Arnold  
Project Manager  
RG 7745



Attachments: Table 1 – Groundwater Extraction – Mass Removal Data

Figure 1 – Site Location and Well Survey Map

Figure 2 – Groundwater Elevation Contour Map

Figure 3 – Benzene and MTBE Concentrations Map

Attachment A – Groundwater Monitoring and Sampling Report, November 10, 2004

cc: Karen Petryna, Shell Oil Products US, Carson  
Betty Graham, Regional Water Quality Control Board, San Francisco Bay Region

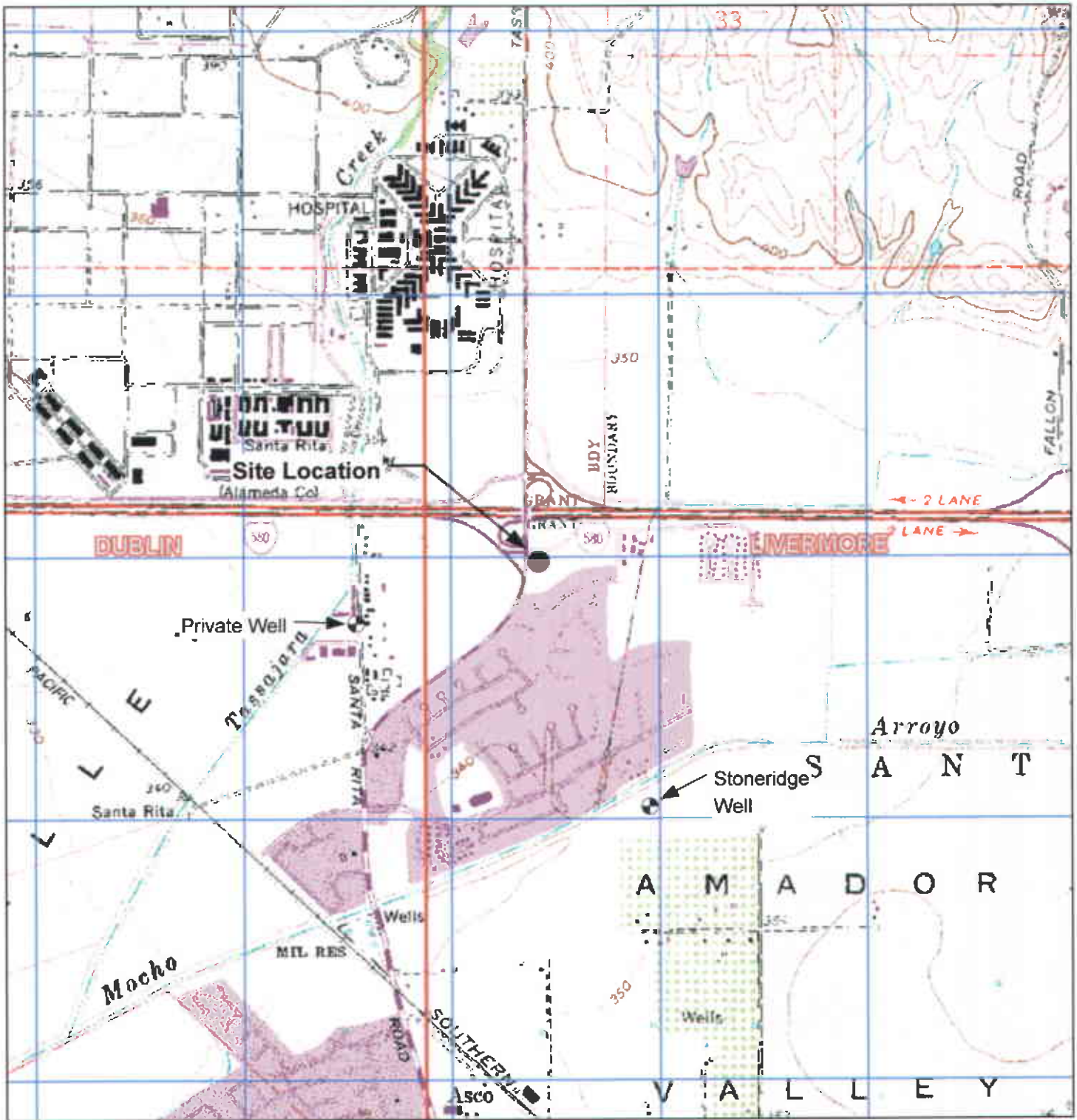
**TABLE 1**  
**Groundwater Extraction - Mass Removal Data**  
 Shell-Branded Service Station, Incident #97464711  
 6750 Santa Rita Rd, Pleasanton, California

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Sample Date	TPH-G			Benzene			MTBE		
					TPH-g Concentration (ppb)	TPH-g Removed (pounds)	TPH-g Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE Removed (pounds)	MTBE Removed To Date (pounds)
07/30/04	MW-1	6	5	07/30/04	<1,000	0.00002	0.00002	<10	0.00000	0.00000	1,400	0.00006	0.00006
08/02/04	MW-1	120	125	08/02/04	<500	0.00025	0.00027	<5.0	0.00000	0.00000	840	0.00084	0.00090
08/05/04	MW-1	50	175	08/05/04	<500	0.00010	0.00038	<5.0	0.00000	0.00000	770	0.00032	0.00122
08/11/04	MW-1	105	280	08/11/04	<500	0.00022	0.00059	<5.0	0.00000	0.00001	770	0.00067	0.00190
05/19/03	MW-2/MW-3	67	347	05/09/03	6,125	0.00342	0.00402	<75	0.00002	0.00003	9,500	0.00531	0.00721
05/31/03	MW-2/MW-3	38	385	05/09/03	6,125	0.00194	0.00596	<75	0.00001	0.00004	9,500	0.00301	0.01022
06/13/03	MW-2/MW-3	58	443	05/09/03	6,125	0.00296	0.00893	<75	0.00002	0.00006	9,500	0.00480	0.01482
06/26/03	MW-2/MW-3	48	491	05/09/03	6,125	0.00245	0.01138	<75	0.00002	0.00007	9,500	0.00381	0.01862
06/30/03	MW-2	20	511	05/09/03	<2,500	0.00021	0.01159	<25	0.00000	0.00007	4,000	0.00067	0.01929
07/31/03	MW-2	80	571	07/08/03	<2,000	0.00050	0.01209	<20	0.00001	0.00008	2,800	0.00140	0.02069
08/29/03	MW-2	25	586	07/08/03	<2,000	0.00021	0.01230	<20	0.00000	0.00008	2,800	0.00058	0.02128
09/22/03	MW-2	25	621	07/08/03	<2,000	0.00021	0.01251	<20	0.00000	0.00008	2,800	0.00058	0.02186
10/28/03	MW-2	45	666	10/03/03	<2,000	0.00038	0.01288	<20	0.00000	0.00009	3,600	0.00135	0.02321
11/24/03	MW-2	21	687	10/03/03	<2,000	0.00018	0.01306	<20	0.00000	0.00009	3,600	0.00083	0.02384
12/29/03	MW-2	43	730	10/03/03	<2,000	0.00036	0.01341	<20	0.00000	0.00009	3,600	0.00129	0.02513
07/20/04	MW-2	26	755	07/20/04	<2,500	0.00026	0.01368	<25	0.00000	0.00009	3,500	0.00073	0.02586
07/23/04	MW-2	575	1,330	07/23/04	<2,500	0.00600	0.01967	<25	0.00006	0.00015	3,300	0.01583	0.04170
07/27/04	MW-2	700	2,030	07/27/04	<2,500	0.00730	0.02697	<25	0.00007	0.00023	2,800	0.01635	0.05805
07/30/04	MW-2	825	2,655	07/30/04	<2,000	0.00622	0.03219	<20	0.00005	0.00028	2,000	0.01043	0.06848
06/30/03	MW-3	95	2,750	05/09/03	11,000	0.00872	0.04091	<100	0.00004	0.00032	15,000	0.01189	0.08037
07/31/03	MW-3	180	2,930	07/08/03	<10,000	0.00751	0.04842	<100	0.00008	0.00039	9,500	0.01427	0.09464
08/29/03	MW-3	180	3,110	07/08/03	<10,000	0.00751	0.05593	<100	0.00008	0.00047	9,500	0.01427	0.10891
09/22/03	MW-3	126	3,236	07/08/03	<10,000	0.00526	0.06119	<100	0.00005	0.00052	9,500	0.00999	0.11890
10/28/03	MW-3	123	3,359	10/03/03	<10,000	0.00511	0.06630	<100	0.00005	0.00057	8,800	0.00900	0.12789
11/24/03	MW-3	153	3,512	10/03/03	<10,000	0.00638	0.07268	<100	0.00006	0.00064	8,800	0.01123	0.13913
12/29/03	MW-3	107	3,619	10/03/03	<10,000	0.00446	0.07714	<100	0.00004	0.00068	8,800	0.00786	0.14699
09/02/04	MW-3	30	3,849	09/02/04	<1,300	0.00016	0.07731	<1,300	0.00016	0.00084	2,000	0.00050	0.14749
09/03/04	MW-3	220	3,869	09/03/04	<1,300	0.00119	0.07860	<1,300	0.00119	0.00204	2,600	0.00477	0.15226
09/07/04	MW-3	2,050	5,919	09/07/04	<1,000	0.00855	0.08705	<1,000	0.00855	0.01059	2,600	0.04448	0.19674
09/10/04	MW-3	200	6,119	09/10/04	<1,000	0.00083	0.08789	<1,000	0.00083	0.01143	3,600	0.00601	0.20274
<b>Total Gallons Extracted:</b>				<b>6,119</b>	<b>Total Pounds Removed:</b>		<b>0.068</b>	<b>Total Pounds Removed:</b>		<b>0.0114</b>	<b>Total Pounds Removed:</b>		<b>0.203</b>
<b>Total Gallons Extracted This Reporting Period:</b>				<b>4,705</b>	<b>Total Gallons Removed:</b>		<b>0.014</b>	<b>Total Gallons Removed:</b>		<b>0.00157</b>	<b>Total Gallons Removed:</b>		<b>0.033</b>

**TABLE 1**  
**Groundwater Extraction - Mass Removal Data**  
 Shell-Branded Service Station, Incident #97484711  
 6750 Santa Rita Rd, Pleasanton, California

Date Purged	Well ID	Volume Pumped (gal)	Cumulative Volume Pumped (gal)	Sample Date	TPH-G			Benzene			MTBE		
					TPH-g Concentration (ppb)	TPH-g Removed (pounds)	TPH-g Removed To Date (pounds)	Benzene Concentration (ppb)	Benzene Removed (pounds)	Benzene Removed To Date (pounds)	MTBE Concentration (ppb)	MTBE Removed (pounds)	MTBE Removed To Date (pounds)
<b>Abbreviations and Notes:</b>													
TPH-G = Total purgeable hydrocarbons as gasoline													
MTBE = Methyl tert-butyl ether													
ppb = Parts per billion, equivalent to micrograms per liter (ug/l)													
gal = Gallon													
Mass removed based on the formula: volume extracted (gal) x Concentration (mg/L) x (g/10 <sup>6</sup> mg) x (pound/453.6g) x (3.785 L/gal)													
Volume removal data based on the formula: density (in gms/cc) x 9.339 (ccxiba/gmsxgals)													
TPH-G, benzene analyzed by EPA Method 8015/8020													
Concentrations based on most recent groundwater monitoring results													
If concentration is less than the laboratory detection limit, one half of the detection limit concentration is used in the mass removal calculation.													
For combined well numbers, the average concentration was used assuming 1/2 the detection limit for samples less than the detection limit.													





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



QUADRANGLE LOCATION



Scale, Feet

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

PROJECT NO. SJB7-505-1.2004	DRAWN BY VF 12/04/03
FILE NO. SJB7-505-1.2004	PREPARED BY VF
REVISION NO.	REVIEWED BY



Pimlico Drive



Concrete Block

Retaining Wall

Air/Water Dispenser

Trash Compound

Entrance to Shopping Center

Wooden Step (typ)

Trees and Shrubs (typ)

Santa Rita Road

Planter

Dispenser (typ)

Grass

USTs

Vacuum

Canopy

Store

Storage

Carwash

Restrooms

Private Well 2,200 feet  
Zone 7 Water Agency  
(Well 3S/1E 5R1)

Nearest LUFT  
2,100 feet  
East BayBMW

Entrance to Shopping Center

Nearest Water Supply  
Well 3,200 feet  
Zone 7 Water Agency  
Stoneridge Well 01

(314.93) MW-1

(314.84) MW-2

(313.65) MW-4

MW-3  
(313.51)

314.80

314.80

314.80

314.40

314.40

314.00

314.00

313.60

313.60

**LEGEND**

MW-4 ● **GROUNDWATER MONITORING WELL**

(312.09) **GROUNDWATER ELEVATION (FEET-MSL), 10/7/04**

312.25 — **GROUNDWATER ELEVATION CONTOUR**

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

0 40 FT

APPROX. SCALE

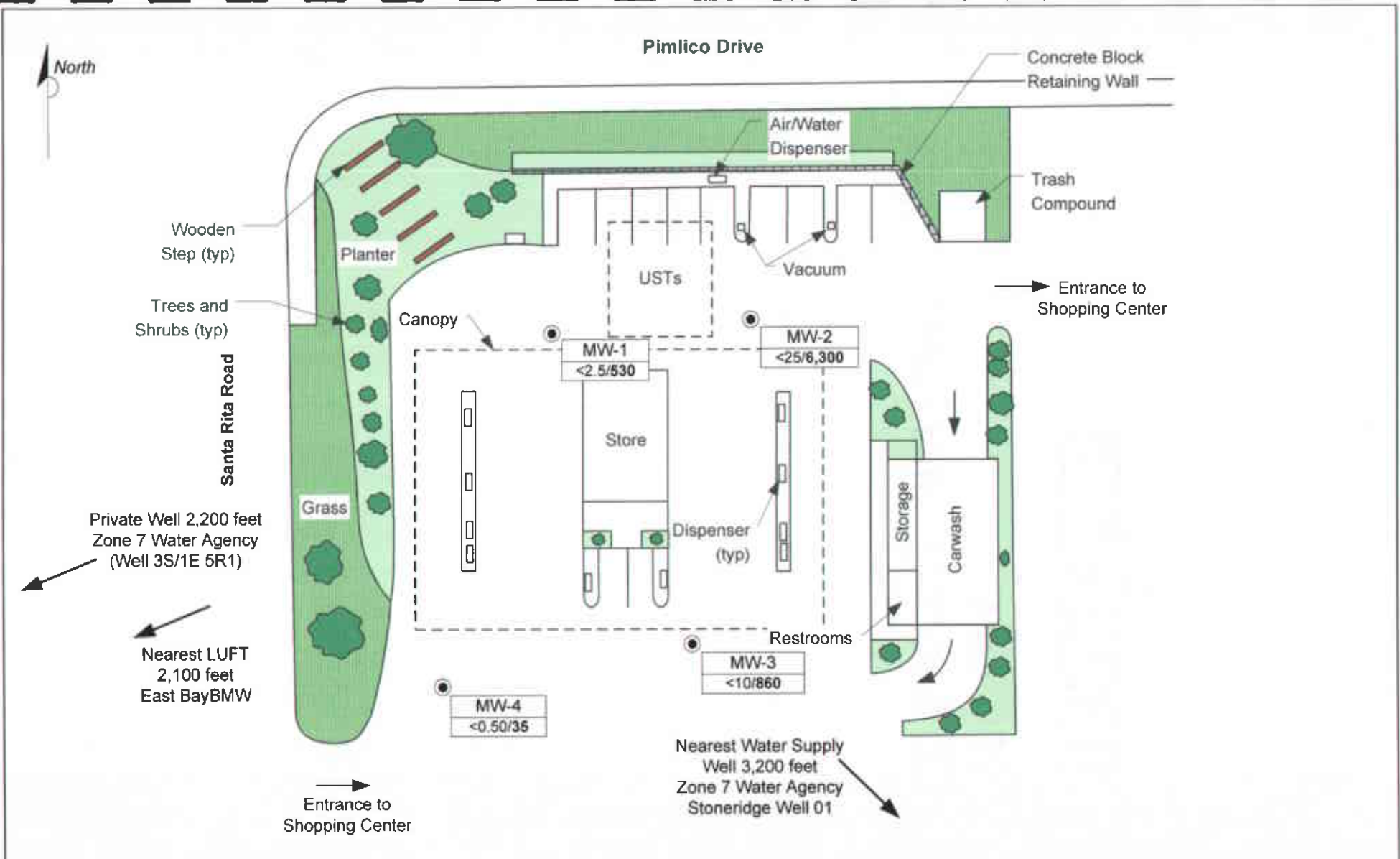
**FIGURE 2**  
**GROUNDWATER ELEVATION CONTOUR MAP,**  
**OCTOBER 7, 2004**

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

PROJECT NO.  
SJB7-505-1.2004  
FILE NO.  
SJB7-505-1.2004  
REVISION NO.  
1

DRAWN BY  
VF  
PREPARED BY  
VF  
REVIEWED BY

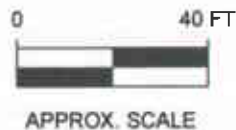




**LEGEND**

MW-4 ● **GROUNDWATER MONITORING WELL**

MW-4	<b>WELL ID</b>
<0.50/75	<b>BENZENE/MTBE CONCENTRATIONS (UG/L), 10/7/04</b>



**FIGURE 3**  
**BENZENE AND MTBE CONCENTRATIONS MAP,**  
**OCTOBER 7, 2004**

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

PROJECT NO. SJ57-50S-1.2004	DRAWN BY VF
FILE NO. SJ57-50S-1.2004	PREPARED BY VF
REVISION NO. 1	REVIEWED BY





**Attachment A**

---

**GROUNDWATER MONITORING AND SAMPLING REPORT**

---

**BLAINE**  
**TECH SERVICES** INC.

---

GROUNDWATER SAMPLING SPECIALISTS  
SINCE 1985

November 10, 2004

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

Fourth Quarter 2004 Groundwater Monitoring at  
Shell-branded Service Station  
6750 Santa Rita Road  
Pleasanton, CA

Monitoring performed on October 7, 2004

---

**Groundwater Monitoring Report 041007-WC-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. Purge water (if applicable) is, likewise, collected and transported to the Martinez Refining Company.

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

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

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

Please call if you have any questions.

Yours truly,

Leon Gearhart  
Project Coordinator

LG/ks

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

cc: 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-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
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



**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	07/31/2003	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-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
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

**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	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-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
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

**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.

Blaine Tech Services, Inc.

October 22, 2004

1680 Rogers Avenue  
San Jose, CA 95112-1105  
Attn.: Leon Gearhart  
Project#: 041007-WC2  
Project: 97464711  
Site: 6750 Santa Rita Rd., Pleasanton

Dear Mr. Gearhart,

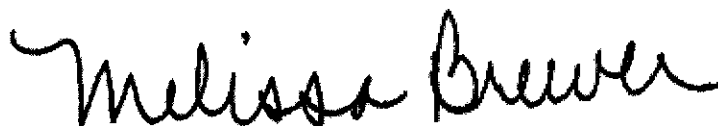
Attached is our report for your samples received on 10/08/2004 13:30  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
11/22/2004 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



**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: 041007-WC2

97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-1	10/07/2004 15:54	Water	1
MW-2	10/07/2004 15:45	Water	2
MW-3	10/07/2004 16:06	Water	3
MW-4	10/07/2004 15:34	Water	4

Severn Trent Laboratories, Inc.

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

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

10/21/2004 18:37

**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: 041007-WC2  
97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

Prep(s): 5030B Test(s): 8260B  
 Sample ID: MW-1 Lab ID: 2004-10-0312 - 1  
 Sampled: 10/07/2004 15:54 Extracted: 10/21/2004 11:01  
 Matrix: Water QC Batch#: 2004/10/21-1A.65  
 Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	250	ug/L	5.00	10/21/2004 11:01	
Benzene	ND	2.5	ug/L	5.00	10/21/2004 11:01	
Toluene	ND	2.5	ug/L	5.00	10/21/2004 11:01	
Ethylbenzene	ND	2.5	ug/L	5.00	10/21/2004 11:01	
Total xylenes	ND	5.0	ug/L	5.00	10/21/2004 11:01	
tert-Butyl alcohol (TBA)	390	25	ug/L	5.00	10/21/2004 11:01	
Methyl tert-butyl ether (MTBE)	530	2.5	ug/L	5.00	10/21/2004 11:01	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	102.8	76-130	%	5.00	10/21/2004 11:01	
Toluene-d8	90.9	78-115	%	5.00	10/21/2004 11:01	

**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: 041007-WC2

97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

Prep(s): 5030B

Test(s): 8260B

Sample ID: MW-2

Lab ID: 2004-10-0312 - 2

Sampled: 10/07/2004 15:45

Extracted: 10/21/2004 11:25

Matrix: Water

QC Batch#: 2004/10/21-1A.65

Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	2500	ug/L	50.00	10/21/2004 11:25	
Benzene	ND	25	ug/L	50.00	10/21/2004 11:25	
Toluene	ND	25	ug/L	50.00	10/21/2004 11:25	
Ethylbenzene	ND	25	ug/L	50.00	10/21/2004 11:25	
Total xylenes	ND	50	ug/L	50.00	10/21/2004 11:25	
tert-Butyl alcohol (TBA)	6500	250	ug/L	50.00	10/21/2004 11:25	
Methyl tert-butyl ether (MTBE)	6300	25	ug/L	50.00	10/21/2004 11:25	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	101.4	76-130	%	50.00	10/21/2004 11:25	
Toluene-d8	93.4	78-115	%	50.00	10/21/2004 11:25	

Severn Trent Laboratories, Inc.

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

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

10/21/2004 18:37

**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: 041007-WC2  
97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

Prep(s): 5030B Test(s): 8260B  
Sample ID: MW-3 Lab ID: 2004-10-0312 - 3  
Sampled: 10/07/2004 16:06 Extracted: 10/20/2004 22:06  
Matrix: Water QC Batch#: 2004/10/20-2C.65  
Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	1000	ug/L	20.00	10/20/2004 22:06	
Benzene	ND	10	ug/L	20.00	10/20/2004 22:06	
Toluene	ND	10	ug/L	20.00	10/20/2004 22:06	
Ethylbenzene	ND	10	ug/L	20.00	10/20/2004 22:06	
Total xylenes	ND	20	ug/L	20.00	10/20/2004 22:06	
tert-Butyl alcohol (TBA)	320	100	ug/L	20.00	10/20/2004 22:06	
Methyl tert-butyl ether (MTBE)	860	10	ug/L	20.00	10/20/2004 22:06	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	97.8	76-130	%	20.00	10/20/2004 22:06	
Toluene-d8	90.9	78-115	%	20.00	10/20/2004 22:06	

Severn Trent Laboratories, Inc.

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

10/21/2004 18:37



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: 041007-WC2  
97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-4	Lab ID:	2004-10-0312 - 4
Sampled:	10/07/2004 15:34	Extracted:	10/20/2004 22:30
Matrix:	Water	QC Batch#:	2004/10/20-2C.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	1.00	10/20/2004 22:30	
Benzene	ND	0.50	ug/L	1.00	10/20/2004 22:30	
Toluene	ND	0.50	ug/L	1.00	10/20/2004 22:30	
Ethylbenzene	ND	0.50	ug/L	1.00	10/20/2004 22:30	
Total xylenes	ND	1.0	ug/L	1.00	10/20/2004 22:30	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	10/20/2004 22:30	
Methyl tert-butyl ether (MTBE)	35	0.50	ug/L	1.00	10/20/2004 22:30	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	101.5	76-130	%	1.00	10/20/2004 22:30	
Toluene-d8	92.8	78-115	%	1.00	10/20/2004 22:30	

**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: 041007-WC2  
97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

**Batch QC Report**

Prep(s): 5030B  
Method Blank  
MB: 2004/10/20-2C:65-017

Water

Test(s): 8260B  
QC Batch # 2004/10/20-2C.65  
Date Extracted: 10/20/2004 19:17

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	10/20/2004 19:17	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	10/20/2004 19:17	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	10/20/2004 19:17	
Benzene	ND	0.5	ug/L	10/20/2004 19:17	
Toluene	ND	0.5	ug/L	10/20/2004 19:17	
Ethylbenzene	ND	0.5	ug/L	10/20/2004 19:17	
Total xylenes	ND	1.0	ug/L	10/20/2004 19:17	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	95.4	76-130	%	10/20/2004 19:17	
Toluene-d8	92.6	78-115	%	10/20/2004 19:17	

**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: 041007-WC2  
97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2004/10/21-1A.65-043

Water

Test(s): 8260B

QC Batch # 2004/10/21-1A.65

Date Extracted: 10/21/2004 07:43

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline [Shell]	ND	50	ug/L	10/21/2004 07:43	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	10/21/2004 07:43	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	10/21/2004 07:43	
Benzene	ND	0.5	ug/L	10/21/2004 07:43	
Toluene	ND	0.5	ug/L	10/21/2004 07:43	
Ethylbenzene	ND	0.5	ug/L	10/21/2004 07:43	
Total xylenes	ND	1.0	ug/L	10/21/2004 07:43	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	101.2	76-130	%	10/21/2004 07:43	
Toluene-d8	91.8	78-115	%	10/21/2004 07:43	

Severn Trent Laboratories, Inc.

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

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

10/21/2004 18:37

Page 7 of 10

**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: 041007-WC2  
97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/10/20-2C.65**

LCS 2004/10/20-2C.65-031

Extracted: 10/20/2004

Analyzed: 10/20/2004 18:31

LCSD 2004/10/20-2C.65-053

Extracted: 10/20/2004

Analyzed: 10/20/2004 18:53

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	23.2	23.2	25	92.8	92.8	0.0	65-165	20		
Benzene	21.1	21.2	25	84.4	84.8	0.5	69-129	20		
Toluene	23.1	22.4	25	92.4	89.6	3.1	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	444	450	500	88.8	90.0		76-130			
Toluene-d8	467	456	500	93.4	91.2		78-115			

Sewern Trent Laboratories, Inc.

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

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

10/21/2004 18:37

**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: 041007-WC2  
97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/10/21-1A.65**

LCS 2004/10/21-1A.65-057

Extracted: 10/21/2004

Analyzed: 10/21/2004 06:57

LCSD 2004/10/21-1A.65-020

Extracted: 10/21/2004

Analyzed: 10/21/2004 07:20

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	23.1	25.3	25	92.4	101.2	9.1	65-165	20		
Benzene	23.9	21.8	25	95.6	87.2	9.2	69-129	20		
Toluene	25.8	23.4	25	103.2	93.6	9.8	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	428	458	500	85.6	91.6		76-130			
Toluene-d8	502	454	500	100.4	90.8		78-115			

Severn Trent Laboratories, Inc.

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

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

10/21/2004 18:37

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: 041007-WC2

97464711

Received: 10/08/2004 13:30

Site: 6750 Santa Rita Rd., Pleasanton

---

Legend and Notes

---

Analysis Flag

o

Reporting limits were raised due to high level of analyte present in the sample.

Severn Trent Laboratories, Inc.

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

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

10/21/2004 18:37

Page 10 of 10

LAB: STL

**SHELL Chain Of Custody Record**

89642

Lab Identification (if necessary):

Address:

City, State, Zip:

Shell Project Manager to be invoiced:

- SCIENCE & ENGINEERING
- TECHNICAL SERVICES
- CRMT HOUSTON

Karen Patryna

**2004-10-0312**

INCIDENT NUMBER (S&E ONLY)

9 7 4 6 4 7 1 1

SAP or CRMT NUMBER (TS/CRMT)

DATE: 10/7/04

PAGE: 1 of 1

BLFINE TECH SERVICES **BTSS** **6750 Santa Rita Rd., Pleasanton** **pending**

1680 Rogers Avenue, San Jose, CA 95112  
 Garrett Haertel (408)224-4724 ghaertel@deltaenv.com  
 CONSULTANT PROJECT NO: **041007-402**

Leon Gearhart  
 408-573-0555 408-573-7771 lgeahart@blfinetech.com  
**Will Crow**

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

REQUESTED ANALYSIS

IA - RWQCB REPORT FORMAT  LIST AGENCY:

GC/MS MTBE CONFIRMATION: HIGHEST \_\_\_\_\_ HIGHEST per BORING \_\_\_\_\_ ALL \_\_\_\_\_

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

FIELD NOTES:

Container/Preservative  
 or PID Readings  
 or Laboratory Notes

4<sup>al</sup>

TEMPERATURE ON RECEIPT C\*

LAB USE ONLY	Field Sample Identification		SAMPLING		MATRIX	NO. OF CONT.	TPH - Gas, Purgeable	BTX	MTBE (R021B - 5ppb RL)	MTBE (P260B - 0.5ppb RL)	Oxygenates (S) by (B260B)	TBA	TPH - Diesel, Extractable
	DATE	TIME	DATE	TIME									
	MW-1		10/7	1554	H <sub>2</sub> O BULK		X	X	X	X	X	X	
	MW-2			1545			X	X	X	X	X	X	
	MW-3			1606			X	X	X	X	X	X	
	MW-4			1537			X	X	X	X	X	X	

Prepared by (signature): Will Crow Date: 10-8-04 Time: 1330  
 Received by (signature): [Signature] Date: 10-8-04 Time: 1700  
 Released by (signature): [Signature]

# WELLHEAD INSPECTION CHECKLIST

Page 1 of 1

Client Shell Date 10/7/04  
 Site Address 6750 Santa Rita, Pleasanton  
 Job Number 041007-WC2 Technician Will

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
MW-2	X							
MW-3								X
MW-4	X							

NOTES: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_



WELL GAUGING DATA

Project # 041007-WC1 Date 10/7/04 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 TOE	Net OFB
MW-1	2					28.55	41.78		41.75
MW-2	2					28.02	41.88		41.90
MW-3	2					28.72	44.06		44.08
MW-4	2					29.79	44.07	↓	43.98

## SHELL WELL MONITORING DATA SHEET

BTS#: 041007-we2	Site: 6750 Santa Rita Rd, Pleasanton
Sampler: we	Date:
Well I.D.: MW-1	Well Diameter: <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8
Total Well Depth (TD): 41.78	Depth to Water (DTW): 28.55
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="radio"/> PVS Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <sup>13.23</sup> 31.20	

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

2.1 (Gals.) X 3 = 6.3 Gals.	Well Diameter    Multiplier    Well Diameter    Multiplier	
1 Case Volume      Specified Volumes      Calculated Volume	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 µS)	Turbidity (NTUs)	Gals. Removed	Observations
1450	68.2	7.3	2492	>1000	2.5	
1455	68.2	7.2	2529	>1000	5	
1459	67.6	7.1	2565	>1000	7	DTW=35.73

Did well dewater? Yes  No  Gallons actually evacuated: 7

Sampling Date: 10/7/04    Sampling Time: 1554    Depth to Water: 31.06

Sample I.D.: MW-1    Laboratory:  SM    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 #: <u>0411007-WC2</u>	Site: <u>6750 Santa Rita Rd., Pleasanton</u>
Sampler: <u>WC</u>	Date: <u>10/7/04</u>
Well I.D.: <u>MW-2</u>	Well Diameter: <u>3</u> 4 6 8
Total Well Depth (TD): <u>41.88</u>	Depth to Water (DTW): <u>28.02</u>
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <u>PVC</u> Grade <u>15.86</u>	D.O. Meter (if req'd): <u>YSI</u> <u>HACH</u>
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <u>30.79</u>	

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

2.2 (Gals.) X 3 = 6.6 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	radius <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or (µS))	Turbidity (NTUs)	Gals. Removed	Observations
<u>1428</u>	<u>66.0</u>	<u>7.0</u>	<u>2678</u>	<u>253</u>	<u>2.5</u>	
<u>1433</u>	<u>67.9</u>	<u>7.0</u>	<u>2784</u>	<u>71000</u>	<u>5</u>	<u>Brown</u>
<u>1438</u>	<u>67.7</u>	<u>7.0</u>	<u>2863</u>	<u>71000</u>	<u>7</u>	<u>DTW=35.14</u>

Did well dewater? Yes  No  Gallons actually evacuated: 7

Sampling Date: 10/7/04 Sampling Time: 1545 Depth to Water: 28.12

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 #: 041007-WC2	Site: 6750 Santa Rita Rd, Pleasanton
Sampler: WC	Date: 10/7/04
Well I.D.: MW-3	Well Diameter: <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 6 <input type="radio"/> 8
Total Well Depth (TD): 44.06	Depth to Water (DTW): 28.72
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):    YSI    HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <sup>15.34</sup> 31.79	

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

<u>2.5</u> (Gals.) X <u>3</u> = <u>7.5</u> Gals.		
I 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 <sup>2</sup> * 0.163

Time	Temp (°F)	pH	Cond. (mS or $\mu$ S)	Turbidity (NTUs)	Gals. Removed	Observations
1513	69.0	7.0	3893	>1000	2.5	Brown
1518	68.8	7.0	4308	>1000	5	
1523	70.3	7.1	4271	>1000	7.5	DTW=37.34

Did well dewater?    Yes <input checked="" type="checkbox"/> No	Gallons actually evacuated: 7.5
Sampling Date: 10/7/04    Sampling Time: 1606	Depth to Water: 28.87
Sample I.D.: MW-3	Laboratory: <input checked="" type="checkbox"/> STB    Other _____
Analyzed for: <input checked="" type="checkbox"/> TPH-G <input checked="" type="checkbox"/> BTEX <input checked="" type="checkbox"/> MTBE <input type="checkbox"/> 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 #: 041007-WC2	Site: 6750 Santa Rita Rd, Pleasanton
Sampler: WC	Date: 10/7/04
Well I.D.: MW-4	Well Diameter: $\varnothing$ 3 4 6 8
Total Well Depth (TD): 44.07	Depth to Water (DTW): 29.79
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: <input checked="" type="checkbox"/> VC Grade	D.O. Meter (if req'd): YSI HACH
DTW with 80% Recharge [(Height of Water Column x 0.20) + DTW]: <sup>14.28</sup> 32.67	

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

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

$\frac{2.3 \text{ (Gals.)} \times 3}{1 \text{ Case Volume Specified Volumes}} = 6.9 \text{ Gals. Calculated Volume}$	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Well Diameter</th> <th>Multiplier</th> <th>Well Diameter</th> <th>Multiplier</th> </tr> </thead> <tbody> <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> </tbody> </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
1402	75.0	7.0	2026	>1000	2.5	greyish/brown
1409	68.7	7.0	2447	>1000	5	
1413	68.1	7.0	2558	>1000	7	DTW = 35.19

Did well dewater? Yes  No  Gallons actually evacuated: 7

Sampling Date: 10/7/04      Sampling Time: 1534      Depth to Water: 29.87

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