RECEIVED

By dehloptoxic at 8:52 am, Jan 19, 2007



76 Broadway Sacramento, California 95818

January 12, 2007

Mr. Jerry Wickham Alameda County Health Agency 1131 Harbor Bay Parkway Alameda, California 94502

Re:

Report Transmittal Quarterly Report Fourth Quarter – 2006 76 Service Station #4186 1771 First Street Livermore, CA

Dear Mr. Wickham:

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

If you have any questions or need additional information, please contact

Shelby S. Lathrop (Contractor) ConocoPhillips Risk Management & Remediation 76 Broadway Sacramento, CA 95818 Phone: 916-558-7609

Fax: 916-558-7639

Sincerely,

Thomas Kosel

Risk Management & Remediation

a K. Koal

Attachment

January 15, 2007

Mr. Jerry Wickham Alameda County Health Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Re: Quarterly Summary Report - Fourth Quarter 2006

And Sensitive Receptor SurveyDelta Project Number: C104186041



Dear Mr. Wickham:

On behalf of ConocoPhillips (COP), Delta Consultants (Delta) is forwarding the quarterly summary report for the following location:

Service Station

Location

ONAL

DENNIS SHANNON DETTLOFF No. 7480

76 Service Station No. 4186

1771 First Street Livermore, California

Sincerely,

Delta Consultants

Ben Wright Staff Geologist

Dennis S. Dettloff, P.G. Senior Project Manager

California Registered Professional Geologist No. 7480

cc: Ms. Shelby Lathrop, ConocoPhillips (electronic copy)



QUARTERLY SUMMARY REPORT Sensitive Receptor Survey Fourth Quarter 2006 76 Station No. 4186 1771 First Street Livermore, California

PREVIOUS ASSESSMENT

This site is an operating Union 76 service station located on First Street between N Street and O Street in Livermore, California. The facility property contains the station building, four product dispenser islands, and two gasoline underground storage tanks (USTs).

On June 6, 1996, six soil samples were collected from beneath the fuel dispensers and product delivery lines during dispenser and piping replacement activities. Analytical data indicated that total petroleum hydrocarbons as gasoline (TPH-G) and benzene, toluene, ethyl-benzene, and total xylenes (BTEX) were below the laboratories indicated reporting limits for each sample collected beneath the dispenser islands and product delivery lines.

On September 10, 1997, a soil gas survey was conducted as part of a baseline site evaluation associated with transfer of the property from Unocal Corporation to Tosco. Six soil gas probes were advanced and samples collected at 3 or 15 feet below ground surface (bgs) in the vicinity of the UST complex, dispenser islands, and product lines. Analytical data from the gas probes indicated that TPH-G was present at concentrations ranging from 41 to 4,500 parts per billion by volume (ppb-v), benzene was present at concentrations ranging from below the laboratories indicated reporting limits to 110 ppb-v, and methyl tertiary butyl ether (MTBE) was present at concentrations ranging from below the laboratories indicated reporting limits to 8,000 ppb-v. The area of highest soil vapor concentration was localized around the UST complex.

On April 8, 1998, the Alameda County Zone 7 Water Agency files were reviewed to identify water supply wells located within a one-half mile radius from the site. Two municipal wells were identified approximately 1,500 feet and 1,800 feet northwest of the site, and two domestic wells were located approximately 1,900 feet southwest and 2,800 feet west of the site, respectively.

On June 16, 1998, three 2-inch diameter groundwater monitor wells (U-1 through U-3) were installed. The wells were each constructed to a depth of approximately 34 feet bgs. Soil samples collected from the three well borings indicated that TPH-G, benzene, and MTBE were not present above the laboratories indicated reporting limits.

In May 2000, a site conceptual model (SCM) was completed for the site. In the SCM, groundwater flow velocity was calculated to determine the plume travel time to the nearest receptor. Ground water velocity was calculated at 46 feet per year. The SCM concluded that hydrocarbon impact to groundwater appears to fluctuate with the rise and fall of the groundwater surface beneath the site.

Page 3

On February 21, 2001, two 2-inch diameter off-site groundwater monitor wells (U-4 and U-5) were installed. The wells were constructed to depths of approximately 47 feet bgs. Analytical data from soil samples collected for analysis indicated that TPH-G, BTEX, and MTBE were not present in above the laboratories indicated reporting limits. TPH-G and benzene were reported to be below the laboratories indicated reporting limits in the groundwater samples analyzed from wells U-4 and U-5. Analytical data from the groundwater samples collected from monitoring wells U-4 and U-5 indicated that MTBE was present at concentrations of 38.2 micrograms per liter (μ g/L) and 55.4 μ g/L, respectively. The other fuel oxygenates were reported at or below laboratories indicated reporting limits. Groundwater monitoring and sampling of the wells was initiated in July 1998 and has continued on a quarterly basis to the present time. Historically, groundwater flow directions have varied from north to southwest. Depth to groundwater has varied from approximately 23 to 46 feet below top of casing.

On December 5 through 7, 2001, two monitoring wells (U-6 and U-7) and eight ozone microsparge points (SP-1 through SP-8) were installed. The monitor wells were each constructed to a depth of 46 feet bgs using 8-inch diameter hollow stem augers. Borings SP-1 through SP-8 were completed as sparge wells with the installation of 2-inch diameter KVA sparge points attached to 3/4-inch diameter blank schedule 80 PVC casing through the hollow-stem augers. The sparge points are composed of 30-inch long microporous plastic. Sparge points SP-1 through SP-4 were constructed to depths of 45 feet bgs. Sparge points SP-6S and SP-7S were constructed to depths of 25 feet bgs. The remaining two sparge locations contain nested sparge points (SP-5, SP-5S, SP-8 and SP-8S) constructed to 25 and 45 feet bgs in each boring. Upon completion of the sparge point installation, an interim remediation system was installed consisting of a K-V Associates, Inc. (KVA) "C-Sparge" ozone microsparge system.

On April 19 through 26, 2006 seven soil borings (B-1 through B-7) were advanced. Three boreholes were advanced for each soil boring location. The initial borehole was advanced to record a cone penetrometer (CPT) log of subsurface lithology. The second borehole was advanced for the purpose of collecting soil samples for identification and laboratory analysis, and to collect a depth-discrete groundwater samples at depths of approximately 38 feet to 44 feet bgs. The third borehole was drilled to collect a depth-discrete groundwater sample at approximately 57 feet to 65 feet bgs. Three general stratigraphic zones were identified – An upper zone from 36 to 43 feet bgs, a middle clay zone from 43 to 55 feet bgs, and a lower zone from 55 to the maximum depths of 65.5 feet bgs explored.

Soil samples from selected depths were submitted for analysis. Soil analytical results were as follows: Gasoline range organics (GRO) was reported in five upper zone, six clay zone, and three lower zone samples. MTBE was reported in three upper zone, three clay zone, and two lower zone samples. Benzene was reported in three clay zone samples.

Groundwater analytical results were as follows: GRO was reported in each of the 14 groundwater samples. Benzene was reported in five upper zone, and six lower zone samples. MTBE was reported in four upper zone, and six lower zone samples.

Page 4

SENSITIVE RECEPTORS

2006 – A survey entailing a visit to the DWR office in Sacramento was conducted to examine well log records and to identify domestic wells within the survey area. The DWR survey provided 53 potential receptors within one mile of the site; eleven municipal wells, five irrigation wells, two domestic wells, one domestic/irrigation well, and seventeen with an unknown well type. Seventeen additional potential receptors were identified although the specific addresses could not be located.

The 2006 sensitive receptor survey data are presented in Attachment A.

MONITORING AND SAMPLING

Groundwater is currently monitored and sampled on a quarterly basis. During the November 21, 2006 monitoring and sampling event, depth to groundwater ranged from 25.85 feet (U-2) to 33.43 feet (U-4) below top of casing (TOC). The groundwater flow direction was calculated to be to the north to southwest with a gradient of 0.08 foot per foot (ft/ft). Historic groundwater flow directions are shown in Attachment B.

Maximum dissolved groundwater concentrations were present as follows: total petroleum hydrocarbons as gasoline (TPH-G) (3,000 μ g/L in U-7), benzene (22 μ g/L in U-3), and MTBE (180 μ g/L in U-3).

REMEDIATION STATUS

The ozone sparge system, manufactured by KVA, was placed into operation on December 19, 2001. Remediation system operation and maintenance is conducted by Environ Strategy Consultants, Inc. (ES) under direct contract to ConocoPhillips.

During the Fourth Quarter 2006, the ozone system was shut down, to evaluate whether dissolved gasoline concentrations would rebound or remain stable in the absence of ozone injection with the current well and system configuration. Subsequent groundwater monitoring data will be used with existing well construction data to determine if the remediation system should be revised.

CHARACTERIZATION STATUS

The furthest up-gradient monitor well, U-3, contained 180 μ g/L MTBE and 1,500 μ g/L TPH-G during the fourth quarter 2006 sampling event. The furthest off-site downgradient well, U-5, contained 25 μ g/L of MTBE this quarter. MTBE appears to be migrating onto the site from an upgradient source.

RECENT CORRESPONDENCE

Delta received technical comments from Alameda County Health Care Services (ACHCS) and a request to perform the proposed work in the October 31, 2006 revised work plan.

THIS QUARTER ACTIVITIES (Fourth Quarter 2006)

- 1. TRC conducted the quarterly monitoring and sampling at the site.
- 2. ES shut down the ozone injection system to allow Delta to evaluate potential effects on groundwater hydrocarbon concentrations.
- 3. Delta submitted a revised work plan to address regulatory agency technical comments and propose additional assessment to complete delineation of the extent of vertical contamination at the site.

WASTE DISPOSAL SUMMARY

June 1996 - A total of 25 cubic yards of soils was excavated and disposed.

<u>April 2006</u> - A total of 2.2 cubic yards of soil cuttings generated during a soil investigation was disposed of from the site.

NEXT QUARTER ACTIVITIES (First Quarter 2007)

- 1. TRC will conduct quarterly groundwater monitoring and sampling at the site.
- 2. Delta will schedule additional assessment work in accordance with the approved revised work plan and ACHCS technical comments.

CONSULTANT: Delta Consultants

Attachment A - Sensitive Receptor Survey Data

Attachment B - Historic Groundwater Flow Directions

Attachment A Sensitive Receptor Survey Data

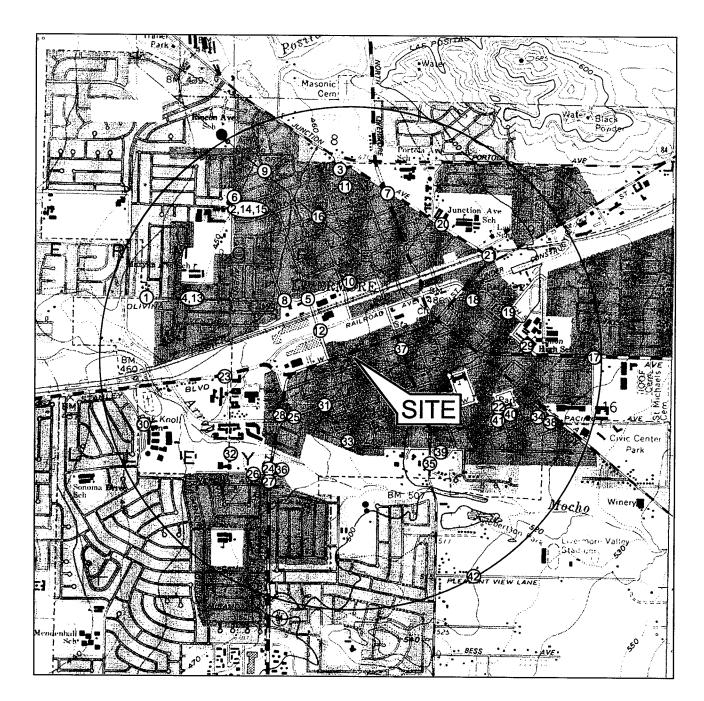








FIGURE 1

SITE LOCATOR SENSITIVE RECEPTOR MAP

76 STATION NO. 4186 1771 FIRST STREET LIVERMORE, CA

PROJECT NO.	DRAWN BY
C104-186	JH 12/13/06
FILE NO.	PREPARED BY
Site Locator 4186	JH
REVISION NO.	REVIEWED BY



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, CALABASAS QUADRANGLE, 1967

Table 1
One-Mile Agency Receptor Survey
ConocoPhillips Station No.4186
1771 First Street, Livermore, California

DWR ¹ Well No.	Address	City	State	Zip	Owner	Well Type	Distance from Site (miles)	Direction Relative to Site
1-3S/2E-7R3	732 Olivina Avenue	Livermore	CA		California Water Service Co.	Public/Production Well	0.9	NW
2- 3S/2E- 8E80?	Pine St. at Rincon Ave.	Livermore	CA		City of Livermore	T UDITOT TOUGHTON TYCH	0.8	NW
3- 3S/2E-8F1?	Pine Street at Arroyo Road	Livermore	CA		California Water Service Co.	Municipal	0.7	NW
4- 3S/2E-8N2?	40' south of Olivina St., 200' west of Albatross	Livermore	CA		California Water Service Co.		0.8	NW
5- 3S/2E-2P1	sw of corner of Olivina and P st.	Livermore	CA		California Water Service Co.		0.3	NW
6- 3S/2E-8E1	951 Rincon Ave	Livermore	CA		City of Livermore		0.8	NW
7- 3S/2E-8H1	sw of North Livermore Avenue at Elm Street	Livermore	CA		California Water Service Co.	Municipal	0.7	NE
8- 3S/2E-8P1	se of Olivina Avenue at Adelle Street	Livermore	CA		California Water Service Co.		0.3	NW
9- 3S/2E-8F1?	sw of Juniper Street at N P Street	Livermore	CA		California Water Service Co.	Municipal	0.8	NW
10- 3S/2E-8K1	1830 Chestnut St.	Livermore	CA		PG&E	Cathodic protection	0.3	N
11- 3S/2E-8G2	L St. at Locust St.	Livermore	CA		PG&E	Cathodic protection	0.7	N
12- 3S/2E-8P2	sw of N P St. at Railroad Avenue	Livermore	CA		California Water Service Co.	Municipal	0.3	NW
13- 3S/2E-8N2	se of Olivina Avenue at Albatross Avenue	Livermore	CA		California Water Service Co.	Municipal	0.7	NW
14- 3S/2E-8E9	899 Rincon Avenue	Livermore	CA		ARCO Products, Co.	Recovery Well	0.8	NW
15- 3S/2E-8E10 16- 3S/2E-8G1	899 Rincon Avenue	Livermore	CA		ARCO Products, Co.	Vapor Extraction	0.8	NW
17- 3S/2E-9Q1	sw of Elm Street at N N Street	Livermore	CA		California Water Service Co.	Municipal	0.6	NW
18- 3S/2E-9Q1	north of East Avenue at Dolores Street Maple Street at Second Street	Livermore	CA		California Water Service Co.	Domestic/Municipal	1.0	E
19- 3S/2E-9P1	2778 Fourth Street	Livermore	CA		PG&E	Cathodic protection	0.5	SW
20- 3S/2E-9M1	403 Junction	Livermore	CA CA		California Water Service Co.	Municipal	0.7	NE
21- 3S/2E-9L1	south side of First St. at Junction Ave.	Livermore	CA		Victor Baldi	Irrigation	0.6	NE
22- 3S/2E-18C81	811 South H.	Livermore Livermore	CA		California Water Service Co. Leslie Holm	Municipal	0.7	NE
23- 3S/2E-17C1	985 E. Stanley Blvd.	Livermore	CA		Fred Holdener		0.6 0.5	SE SW
24- 3S/2E-17E1	south side Mocho Street, 0.3 mi west of Vallecitos Road	Livermore	CA		W. J. Wagoner		0.5	SW
	0.2 mi west of Holmes St. at College Ave.	Livermore	CA		U.S. Veterans Hospital		0.6	SW
	0.2 mi west of Vallecitos Rd. on Mocho St. 10' south of Mocho	Livermore	CA		W. J. Wagoner		0.8	SW
	0.45 mi south of Mocho St on east side of Vallecitos Rd.	Livermore	CA		Adele Colldeweih (formerly C.A. Smith)		1.0	SW
28- 3S/2E-17B1	Fourth St. at College Ave.	Livermore	CA		California Water Service Co.		0.4	SW
29-3S/2E-17E5	Livermore High School, 600 Maple St.	Livermore	CA		Livermore School District	Domestic/ Irrigation	0.7-0.8	NE NE
	Granada High School, 400 Wall St.	Livermore	CA		Livermore Valley School District	Irrigation/Test Well	0.7-0.8	SW
31- 3S/2E-17B3	4th St. at Q St.	Livermore	CA		PG&E	Cathodic protection	0.3	SW
32-3S/2E-17J?	1000' west of Arroyo Rd., 150' south of Arroyo Mocho Creek	Livermore	CA		R. A. Hansen	Irrigation	0.6	SE
33- 3S/2E-17?	1531 College Ave.	Livermore	CA		Don Benton	Domestic	0.4	SW
34- 3S/2E-16B1	Palm Ave. between Livermore and Almond	Livermore	CA		California Water Service Co.	2011100110	0.6-0.8	SE
35-3S/2E-16E1	954 South L. St.	Livermore	CA		Livermore Sanitarium		0.5	SE
36- 3S/2E-16E2	300' east of Arroyo Rd., 150' north of Mocho Creek	Livermore	CA		Livermore Sanitarium		0.6	SE
37- 3S/2E-16?	Ferrario Winery, 2nd St. and L St.	Livermore	CA		Ferrario Winery		0.2	E
38- 3S/2E-16B1	sw of Palm Avenue and South Livermore Avenue	Livermore	CA		California Water Service Co.		0.8	SE
39- 3S/2E-16E6	300' se of College St. at L St.	Livermore	CA		First Baptist Church	Irrigation	0.6	SE
40- 3S/2E-16C3	Eighth St. at S H St.	Livermore	CA		PG&E	Cathodic protection	0.6	SE
41- 3S/2E-16C1	787 S H Street	Livermore	CA		Ben F. Mingoia	Municipal	0.6	SE

Table 1
One-Mile Agency Receptor Survey
ConocoPhillips Station No.4186
1771 First Street, Livermore, California

	DWR ¹ Well No.	Address	City State Zip			Owner	Well Type	Distance from Site (miles)	Direction Relative to Site
42-	3S/2E-1681?	2486 Pleasant View Lane	Livermore	CA		George Sharp	Domestic	1.0	SE
	3S/2E-17D81	near Ventura Ct.	Livermore	CA		Richard Woelffel	Irrigation	0.6	W
		East Ave (former Rasmussen property)	Livermore	CA		L. Oddon	Domestic	1	
	3S/2E-7?	Dow Airport, Highway 50 between Livermore and Dublin	Livermore	CA		Conrad Molt	Domestic		
² 46-	3S/2E-7N1	0.5 mi south of Kittyhawk at Las Positas, west of Livermore		CA		Alameda County Flood Control	Test Well/Other		
	3S/2E-7P2	west end of Olivina Road	Livermore	CA		Herb Hageman			
	3\$/2E-8B1	Joesrilli?	Livermore	CA		A.P. Caratti			
	3S/2E-8M80	1936 Olovina Ave.	Livermore	CA		Jean Eyherabide			
	3S/2E-8N1	Star Route 5	Pleasanton	CA		John Fenrich	Irrigation		
	3S/2E-9Q80	East Avenue	Livermore	CA		Frydendel	Domestic		
	3S/2E-18R	Vallecitos Road	Livermore	CA		W. J. Wagoner			
	3S/2E-18A1	Elsie Johnson Ranch	Livermore	CA		Richard Woelefel			
	3S/2E-17B2	West Fourth Street	Livermore	CA		R. A. Hansen	Domestic		
	3S/2E-17?	Kaiser Site	Livermore	CA		Veterans Administration Hospital	Domestic		
	3S/2E-17J1	Creek Bank Ranch	Livermore	CA		R. A. Hansen			
² 57-	3S/2E-17R1	Creek Bank Ranch	Livermore	CA		R. A. Hansen			
² 58-	3S/2E-17F2	Vallecitos Road	Livermore	CA		W. J. Wagoner			
² 59-	3S/2E-16A5	East Avenue	Livermore	CA		St. Michael's Cemetary	Irrigation		
	3S/2E-16?	Church St. and L Street	Livermore	CA		Livermore Sanitarium	Domestic/Irrigation		
² 61-	3S/2E-16R2	Wente at Stadium Way	Livermore	CA		Gene A. Matyevich	Domestic		

DWR: Department of Water Resources

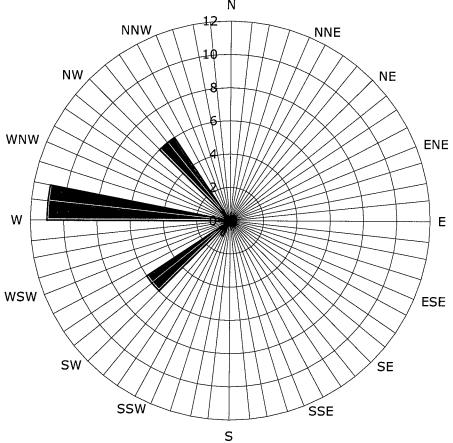
¹ Well Locations shown on Figure 1.

² Specific address cannot be located on map.

Attachment B
Historic Groundwater Flow Directions

Historic Groundwater Flow Directions ConocoPhillips Site No. 4186

1771 First Street Livermore, California



■ Groundwater Flow Direction

Legend
Concentric circles represent
quarterly montoring events
Fourth Quarter 2000 through Fourth
Quarter 2006
24 data points shown



December 22, 2006

ConocoPhillips Company 76 Broadway Sacramento, California 95818

ATTN:

MS. SHELBY LATHROP

SITE:

76 STATION 4186

1771 FIRST STREET

LIVERMORE, CALIFORNIA

RE:

QUARTERLY MONITORING REPORT OCTOBER THROUGH DECEMBER 2006

Dear Ms. Lathrop:

Please find enclosed our Quarterly Monitoring Report for 76 Station 4186, located 1771 First Street, Livermore, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan

QMS Operations Manager

CC: Mr. Dennis Dettloff, Delta Environmental Consultants, Inc. (1 copies)

Enclosures 20-0400/4186R13.QMS.doc



QUARTERLY MONITORING REPORT OCTOBER THROUGH DECEMBER 2006

76 STATION 4186 1771 First Street Livermore, California

Prepared For:

Ms. Shelby Lathrop CONOCOPHILLIPS COMPANY 76 Broadway Sacramento, California 95818

By:

Senior Project Geologist, Irvine Operations December 14, 2006

	LIST OF ATTACHMENTS
Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key
	Contents of Tables
	Table 1: Current Fluid Levels and Selected Analytical Results
	Table 1a: Additional Current Analytical Results
	Table 2: Historic Fluid Levels and Selected Analytical Results
	Table 2a: Additional Historic Analytical Results
Figures	Figure 1: Vicinity Map
	Figure 2: Groundwater Elevation Contour Map
	Figure 3: Dissolved-Phase TPH-G (GC/MS) Concentration Map
	Figure 4: Dissolved-Phase Benzene Concentration Map
	Figure 5: Dissolved-Phase MTBE Concentration Map
Graphs	Groundwater Elevations vs. Time
	Benzene Concentrations vs. Time
Field Activities	General Field Procedures
	Field Monitoring Data Sheet – 11/21/06
	Groundwater Sampling Field Notes – 11/21/06
Laboratory	Official Laboratory Reports
Reports	Quality Control Reports
	Chain of Custody Records
Statements	Purge Water Disposal
	Limitations

Summary of Gauging and Sampling Activities October 2006 through December 2006

76 Station 4186 1771 First Street Livermore, CA

Sample Points Groundwater wells: 5 onsite, 2 offsite Wells gauged: 7 Wells sampled: 7 Purging method: Bailer/submersible pump Purge water disposal: Onyx/Rodeo Unit 100 Other Sample Points: 0 Type: n/a Liquid Phase Hydrocarbons (LPH) Wells with LPH: 0 Maximum thickness (feet): n/a LPH removal frequency: n/a Method: n/a Treatment or disposal of water/LPH: n/a Hydrogeologic Parameters Depth to groundwater (below TOC): Minimum: 25.85 feet Maximum: 33.43 feet Average groundwater elevation (relative to available local datum): 447.74 feet Average change in groundwater elevation since previous event: 1.59 feet Interpreted groundwater gradient and flow direction: Current event: 0.08 ft/ft, north to southwest Previous event: 0.05 ft/ft, north, west and south (09/26/06) Selected Laboratory Results Wells with detected Benzene: 3 Wells above MCL (1.0 μg/l): 3 Maximum reported benzene concentration: 22 μg/l (U-3)	reiephone.	Shelby Lathrop 916-558-7609	Water Sampling Contractor: <i>TRC</i> Compiled by: Christina Carrillo
Groundwater wells: 5 onsite, 2 offsite Wells gauged: 7 Wells sampled: 7 Purging method: Bailer/submersible pump Purge water disposal: Onyx/Rodeo Unit 100 Other Sample Points: 0 Type: n/a Liquid Phase Hydrocarbons (LPH) Wells with LPH: 0 Maximum thickness (feet): n/a LPH removal frequency: n/a Method: n/a Treatment or disposal of water/LPH: n/a Hydrogeologic Parameters Depth to groundwater (below TOC): Minimum: 25.85 feet Maximum: 33.43 feet Average groundwater elevation (relative to available local datum): 447.74 feet Average change in groundwater elevation since previous event: 1.59 feet Interpreted groundwater gradient and flow direction: Current event: 0.08 ft/ft, north to southwest Previous event: 0.05 ft/ft, north, west and south (09/26/06) Selected Laboratory Results Wells with detected Benzene: 3 Wells above MCL (1.0 µg/l): 3 Maximum reported benzene concentration: 22 µg/l (U-3)	Date(s) of Gauging/Sa	mpling Event: 11/21/06)
Purging method: Bailer/submersible pump Purge water disposal: Onyx/Rodeo Unit 100 Other Sample Points: O Type: n/a Liquid Phase Hydrocarbons (LPH) Wells with LPH: O Maximum thickness (feet): n/a LPH removal frequency: n/a Method: n/a Treatment or disposal of water/LPH: n/a Hydrogeologic Parameters Depth to groundwater (below TOC): Minimum: 25.85 feet Maximum: 33.43 feet Average groundwater elevation (relative to available local datum): 447.74 feet Average change in groundwater elevation since previous event: 1.59 feet Interpreted groundwater gradient and flow direction: Current event: 0.08 ft/ft, north to southwest Previous event: 0.05 ft/ft, north, west and south (09/26/06) Selected Laboratory Results Wells with detected Benzene: 3 Wells above MCL (1.0 µg/l): 3 Maximum reported benzene concentration: 22 µg/l (U-3)	Sample Points		
Wells with LPH: 0 Maximum thickness (feet): n/a LPH removal frequency: n/a Method: n/a Treatment or disposal of water/LPH: n/a Hydrogeologic Parameters Depth to groundwater (below TOC): Minimum: 25.85 feet Maximum: 33.43 feet Average groundwater elevation (relative to available local datum): 447.74 feet Average change in groundwater elevation since previous event: 1.59 feet Interpreted groundwater gradient and flow direction: Current event: 0.08 ft/ft, north to southwest Previous event: 0.05 ft/ft, north, west and south (09/26/06) Selected Laboratory Results Wells with detected Benzene: 3 Wells above MCL (1.0 µg/l): 3 Maximum reported benzene concentration: 22 µg/l (U-3)	Purging method: Bail Purge water disposal:	er/submersible pump Onyx/Rodeo Unit 100	Wells gauged: 7 Wells sampled: 7
Wells with LPH: 0 Maximum thickness (feet): n/a LPH removal frequency: n/a Method: n/a Treatment or disposal of water/LPH: n/a Hydrogeologic Parameters Depth to groundwater (below TOC): Minimum: 25.85 feet Maximum: 33.43 feet Average groundwater elevation (relative to available local datum): 447.74 feet Average change in groundwater elevation since previous event: 1.59 feet Interpreted groundwater gradient and flow direction: Current event: 0.08 ft/ft, north to southwest Previous event: 0.05 ft/ft, north, west and south (09/26/06) Selected Laboratory Results Wells with detected Benzene: 3 Wells above MCL (1.0 µg/l): 3 Maximum reported benzene concentration: 22 µg/l (U-3)	Liquid Phase Hydrod	carbons (LPH)	
Depth to groundwater (below TOC): Minimum: 25.85 feet Maximum: 33.43 feet Average groundwater elevation (relative to available local datum): 447.74 feet Average change in groundwater elevation since previous event: 1.59 feet Interpreted groundwater gradient and flow direction: Current event: 0.08 ft/ft, north to southwest Previous event: 0.05 ft/ft, north, west and south (09/26/06) Selected Laboratory Results Wells with detected Benzene: 3 Wells above MCL (1.0 μg/l): 3 Maximum reported benzene concentration: 22 μg/l (U-3)	LPH removal frequency	/: n/a	
Average groundwater elevation (relative to available local datum): 447.74 feet Average change in groundwater elevation since previous event: 1.59 feet Interpreted groundwater gradient and flow direction: Current event: 0.08 ft/ft, north to southwest Previous event: 0.05 ft/ft, north, west and south (09/26/06) Selected Laboratory Results Wells with detected Benzene: 3 Wells above MCL (1.0 µg/l): 3 Maximum reported benzene concentration: 22 µg/l (U-3)	Hydrogeologic Parar	neters	
Selected Laboratory Results Wells with detected Benzene: 3 Wells above MCL (1.0 μg/l): 3 Maximum reported benzene concentration: 22 μg/l (U-3)	Average groundwater e Average change in grou Interpreted groundwate	elevation (relative to availal undwater elevation since po er gradient and flow directi O8 ft/ft, north to south	ble local datum): 447.74 feet revious event: 1.59 feet ion:
Maximum reported benzene concentration: 22 μg/l (U-3)	Current event: 0.0	05 ft/ft, north, west and	d south (09/26/06)
Wells with TDH-G by CC/MC 2	Current event: 0.0 Previous event: 0.0 Selected Laboratory	Results	d south (09/26/06)
Wells with TPH-G by GC/MS 3 Maximum: 3,000 µg/l (U-7) Wells with MTBE 4 Maximum: 180 µg/l (U-3)	Current event: 0.0 Previous event: 0.0 Selected Laboratory Wells with detected Be	Results nzene: 3	d south (09/26/06) Wells above MCL (1.0 μg/l): 3

TABLES

TABLE KEY

STANDARD ABBREVIATIONS

-- e not analyzed, measured, or collected

LPH = liquid-phase hydrocarbons

Trace = less than 0.01 foot of LPH in well

μg/l = micrograms per liter (approx. equivalent to parts per billion, ppb)
mg/l = milligrams per liter (approx. equivalent to parts per million, ppm)

ND < = not detected at or above laboratory detection limit
TOC = top of casing (surveyed reference elevation)

ANALYTES

BTEX = benzene, toluene, ethylbenzene, and (total) xylenes

DIPE = di-isopropyl ether

ETBE = ethyl tertiary butyl ether

MTBE = methyl tertiary butyl ether

PCB = polychlorinated biphenyls

PCE = tetrachloroethene

TBA = tertiary butyl alcohol
TCA = trichloroethane
TCE = trichloroethene

TPH-G = total petroleum hydrocarbons with gasoline distinction

TPH-G (GC/MS) = total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B

TPH-D = total petroleum hydrocarbons with diesel distinction

TRPH = total recoverable petroleum hydrocarbons

TAME = tertiary amyl methyl ether 1,1-DCA = 1,1-dichloroethane

1,2-DCA = 1,2-dichloroethane (same as EDC, ethylene dichloride)

1,1-DCE = 1,1-dichloroethene

1,2-DCE = 1,2-dichloroethene (cis- and trans-)

NOTES

- 1. Elevations are in feet above mean sea level. Depths are in feet below surveyed top-of-casing.
- 2. Groundwater elevations for wells with LPH are calculated as: Surface Elevation Measured Depth to Water + (Dp x LPH Thickness), where Dp is the density of the LPH, if known. A value of 0.75 is used for gasoline and when the density is not known. A value of 0.83 is used for diesel.
- 3. Wells with LPH are generally not sampled for laboratory analysis (see General Field Procedures).
- 4. Comments shown on tables are general. Additional explanations may be included in field notes and laboratory reports, both of which are included as part of this report.
- 5. A "J" flag indicates that a reported analytical result is an estimated concentration value between the method detection limit (MDL) and the practical quantification limit (PQL) specified by the laboratory.
- 6. Other laboratory flags (qualifiers) may have been reported. See the official laboratory report (attached) for a complete list of laboratory flags.
- 7. Concentration graphs based on tables (presented following Figures) show non-detect results prior to the Second Quarter 2000 plotted at fixed values for graphical display. Non-detect results reported since that time are plotted at reporting limits stated in the official laboratory report.
- 8. Groundwater vs. Time graphs may be corrected for apparent level changes due to re-survey.

REFERENCE

TRC began groundwater monitoring and sampling for 76 Station 4186 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

Contents of Tables Site: 76 Station 4186

Cu	rrei	nt.	E,	an	4
υu		IŁ	Εv	/CII	L

Table 1	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
Table 1a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP		
Historic Da	ata													
Table 2	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
Table 2a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP		

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
November 21, 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	
U-1		(Screen In	nterval in fe	et: 14.0-3	4.0)									
11/21/0	6 478.27	28.27	0.00	450.00	1.92		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
U-2		(Screen I	nterval in fe	et: 13.0-3	4.0)									
11/21/0	6 477.44	25.85	0.00	451.59	2.67		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
U-3		(Screen In	iterval in fe	et: 14.0-3	4.0)									
11/21/06	6 478.46	27.23	0.00	451.23	0.85		1500	22	ND<5.0	5.8	ND<5.0		180	
U-4		(Screen In	iterval in fe	et: 35.0-4	5.0)									
	476.93		0.00	443.50			ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
U-5		(Screen In	iterval in fe	et: 37.0-4	7.0)									
11/21/06	476.51		0.00	444.08	-		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		25	
U-6		(Screen In	iterval in fe	et: DNA)										
11/21/06	478.38	31.65	0.00	446.73	1.66		1500	5.5	ND<0.50	37	2.4		1.4	
U-7		(Screen In	iterval in fe	et: DNA)										
	478.74	31.66	0.00	447.08	1.81		3000	15	1.1	26	2.2		69	

Table 1 a
ADDITIONAL CURRENT ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP	
 	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(mg/l)	(mg/l)	(mV)	(mV)	
U-1 11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.24	4.56	1.97	2.00	
U-2 11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.70	3.45	-29	-20	
U-3 11/21/06	33000	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	1.04	1.10	-83	-96	
U-4 11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.38	1.13	-60	-10	
U-5 11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.12	0.79	41	47	
U-6 11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.83	1.05	-65	-69	
U-7 11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.88	0.98	-43	-59	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through November 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	in	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
<u> </u>	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	
U-1	(5	Screen Inte	erval in feet	t: 14.0-34.0)									
07/13/9	8 478.27	23.28	0.00	454.99		ND		ND	ND	ND	ND	ND		
10/07/9	8 478.27	26.43	0.00	451.84	-3.15	ND		ND	ND	ND	ND	ND	 ,	
01/15/9	9 478.27	30.42	0.00	447.85	-3.99	ND		ND	ND	ND	1.1	7.3		
04/14/9	9 478.27	24.21	0.00	454.06	6.21	ND		ND	ND	ND	ND	160		
07/19/9	9 478.27	27.10	0.00	451.17	-2.89	ND		ND	ND	ND	ND	92		
10/12/9	9 478.27	29.40	0.00	448.87	-2.30	ND		ND	ND	ND	ND	37		
01/24/0	0 478.27	27.90	0.00	450.37	1.50	ND		ND	ND	ND	ND	28		
04/10/0	0 478.27	26.16	0.00	452.11	1.74	ND		ND `	0.930	ND	ND	ND		•
07/17/0	0 478.27	28.04	0.00	450.23	-1.88	ND		ND	ND	ND	ND	160		
10/02/0	0 478.27	28.41	0.00	449.86	-0.37	ND	***	ND	ND	ND	ND	120		
01/08/0	1 478.27	28.68	0.00	449.59	-0.27	ND		ND	ND	ND	ND	103		
04/03/0	1 478.27	25.74	0.00	452.53	2.94	ND		ND	ND	ND	ND	55.1		
07/02/0		30.67	0.00	447.60	-4.93	ND		ND	ND	ND	ND	ND		
10/08/0	1 478.27	33.13	0.00	445.14	-2.46	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
01/03/0	2 478.27	27.67	0.00	450.60	5.46	160		ND<0.50	0.51	ND<0,50	0.69	31		
04/05/0		29.40	0.00	448.87	-1.73	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	60		
07/02/0		31.17	0.00	447.10	-1.77		1100	ND<0.50	1.7	0.73	130		35	
10/01/0			0.00	445.27	-1.83		120	ND<0.50	ND<0.50	ND<0.50	8.8		28	
12/30/0			0.00	456.24	10.97		ND<50	ND<0.50	ND<0.50	ND<0.50	1.2		90	
05/02/0			0.00	454.14	-2.10		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		50	
07/01/0			0.00	452.92	-1.22		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
10/03/0		27.24	0.00	451.03	-1.89		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
01/08/0	4 478.27	22.67	0.00	455.60	4.57		54	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.5	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through November 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	•
U-1 co														
04/15/0				452.94	-2.66		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
07/15/0			0.00	451.80	-1.14		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	. •
12/08/0			0.00	447.10	-4.70		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
03/23/0		22.47	0.00	455.80	8.70		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
06/28/0	5 478.27	25.37	0.00	452.90	-2.90		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
09/23/0	5 478.27	29.15	0.00	449.12	-3.78		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
12/30/0	5 478.27	23.69	0.00	454.58	5.46		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	·
03/24/0	6 478.27	22,54	0.00	455.73	1.15		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.6	
06/26/0	6 478.27	24.99	0.00	453.28	-2.45		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
09/26/0	6 478.27	30.19	0.00	448.08	-5.20		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
11/21/0	6 478.27	28.27	0.00	450.00	1.92		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
U-2	(S	Screen Inte	rval in feet	: 13.0-34.0)									
07/13/9	8 477.44	23.52	0.00	453.92		1200		130	12	62	180	1100		
10/07/98	8 477.44	25.31	0.00	452.13	-1.79	ND		ND	ND	ND	ND	160		
01/15/99	9 477.44	30.22	0.00	447.22	-4.91	ND		ND	ND	ND	ND	280		
04/14/99	9 477.44	24.50	0.00	452.94	5.72	ND		ND	ND	ND	ND	460		
07/19/99	9 477.44	28.54	0.00	448.90	-4.04	ND		ND	ND	ND	ND	220		
10/12/99	9 477.44	30.48	0.00	446.96	-1.94	ND	·	ND	ND	ND	ND	160		
01/24/00	0 477.44	24.52	0.00	452.92	5.96	ND		ND	ND	ND	ND	150		
04/10/00	0 477.44	23.68	0.00	453.76	0.84	ND		ND	ND	ND	ND	177		
07/17/00	0 477.44	28.35	0.00	449.09	-4.67	ND		ND	ND	ND	ND	62.7		
10/02/00	0 477.44	28.72	0.00	448.72	-0.37	ND		ND	ND	ND	ND	52		
01/08/01	1 477.44	29.11	0.00	448.33	-0.39	ND		ND	ND	ND	ND	57.3		
04/03/01	1 477.44	25.95	0.00	451.49	3.16	ND		ND	ND	ND	ND	30.2		

Page 2 of 9

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through November 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
· · · · · · · · · · · · · · · · · · ·	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	
U-2 co	ontinued	,										0		
07/02/0	1 477.44	29.01	0.00	448.43	-3.06	ND		ND	ND	ND	ND	16		
10/08/0	1 477.44	30.94	0.00	446.50	-1.93	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	82		
01/03/0	2 477.44	27.33	0.00	450.11	3.61	260		7.7	11	1.7	15	42		
04/05/0	2 477.44	30.02	0.00	447.42	-2.69	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	25		
07/02/0	2 477.44	31.23	0.00	446.21	-1.21		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
10/01/0		32.00	0.00	445.44	-0.77		ND<50	ND<0.50	0.62	ND<0.50	ND<1.0		ND<2.0	
12/30/0	2 477.44	22.32	0.00	455.12	9.68		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
05/02/0		25.92	0.00	451.52	-3.60		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
07/01/0		24.99	0.00	452.45	0.93		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
10/03/0		25.31	0.00	452.13	-0.32		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
01/08/0		21.94	0.00	455.50	3.37		ND<50	ND<0.50	ND<0.50	0.51	ND<1.0		ND<2.0	
04/15/0		25.20	0.00	452.24	-3.26		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
07/15/0		24.45	0.00	452.99	0.75		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
12/08/0		29.89	0.00	447.55	-5.44		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
03/23/0		22.00	0.00	455.44	7.89		ND<50	ND<0.50	ND<0.50	ND<0.50	1.1		ND<0.50	
06/28/0		25.30	0.00	452.14	-3.30		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
09/23/0		28.25	0.00	449.19	-2.95		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
12/30/0		24.33	0.00	453.11	3.92		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
03/24/0		22.34	0.00	455.10	1.99		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
06/26/0		23.15	0.00	454.29	-0.81		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
09/26/0		28.52	0.00	448.92	-5.37		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
11/21/0	6 477.44	25.85	0.00	451.59	2.67		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
U-3	(S	creen Inte	rval in feet:	: 14.0-34.0))									·
07/13/98	3 478.46	23.82	0.00	454.64		70000		3100	5500	2700	16000	7500		
4186								Page 3	of 9					

Table 2 HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS July 1998 Through November 2006 **76 Station 4186**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	
U-3 cc	ntinued													
10/07/9	8 478.46	25.64	0.00	452.82	-1.82	54000		5000	1100	3100	14000	6100	·	
01/15/9	9 478.46	30.92	0.00	447.54	-5.28	41000	:	3100	ND	1800	3800	15000		
04/14/9	9 478.46	24.48	0.00	453.98	6.44	33000		86	290	2200	7800	39000		·
07/19/9	9 478.46	28.46	0.00	450.00	-3.98	48000		3900	2500	3600	14000	12000	16000	
10/12/9	9 478.46	30.39	0.00	448.07	-1.93	35000	 .	4200	ND	2300	1800	22000	8300	
01/24/0		23.43	0.00	455.03	6.96	13000		260	ND	770	3200	53000	42000	
04/10/0		23.31	0.00	455.15	0.12	35200		1070	241	2820	8850	35600	40900	
07/17/0		27.53	0.00	450.93	-4.22	29000		3570	525	3180	5660	22500	21000	
10/02/0		28.19	0.00	450.27	-0.66	11000	~-	2100	31	2000	780	25000	28000	
01/08/0		29.85	0.00	448.61	-1.66	33600		3060	427	3040	4190	24700	30900	
04/03/0		24.98	0.00	453.48	4.87	5390		660	10.8	304	356	15200	19300	
07/02/0		31.35	0.00	447.11	-6.37	13000		1200	58	1300	930	25000	26000	
10/08/0		32.69	0.00	445.77	-1.34	6100		500	ND<10	570	130	23000	22000	
01/03/02		23.73	0.00	454.73	8.96	9900		700	130	24	1000	14000	12000	
04/05/02		28.27	0.00	449.17	-5.56	9800		1100	180	220	1400	16000	30000	
07/02/02		29.71	0.00	448.75	-0.42		ND<25000	ND<250	ND<250	ND<250	ND<500	12000	12000	
10/01/02		31.18	0.00	447.28	-1.47	,	ND<25000	ND<250	ND<250	ND<250	ND<500	12000	12000	
12/30/02		21.62	0.00	456.84	9.56		23000	330	170	870	4900	18000	18000	
05/02/03		23.11	0.00	455.35	-1.49		19000	280	ND<50	880	1500	15000	15000	
07/01/03		24.89	0.00	453.57	-1.78		19000	120	ND<100	180	880	22000	22000	
10/03/03		26.59	0.00	451.87	-1.70	·	20000	170	ND<50	250	730		16000	
01/08/04		21.92	0.00	456.54	4.67		17000	250	ND<100	770	1500		9700	
04/15/04		23.59	0.00	454.87	-1.67		4600	ND<25	ND<25	36	100		3700	
07/15/04	478.46	24.80	0.00	453.66	-1.21		2700	ND<25	ND<25	ND<25	ND<50		3400	
4186								Page 4	of 9					

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through November 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene .	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	(μg/l)	(µg/l)	(µg/l)	
	ontinued													
12/08/0			0.00	449.33	-4.33		12000	ND<50	ND<50	250	140		13000	
03/23/0		21.64	0.00	456.82	7.49		21000	94	ND<50	630	1200		6200	
06/28/0		24.57	0.00	453.89	-2.93		6600	24	0.64	150	70		4700	
09/23/0			0.00	450.82	-3.07		6000	31	ND<25	150	ND<50		8900	
12/30/0		23.96	0.00	454.50	3.68		390	ND<0.50	ND<0.50	ND<0.50	ND<1.0		840	
03/24/0		22.52	0.00	455.94	1.44		2700	28	ND<5.0	57	120		690	
06/26/0			0.00	454.57	-1.37		2000	51	0.77	84	45		560	
09/26/0			0.00	450.38	-4.19		1200	20	ND<2.5	5.2	2.8		170	
11/21/0	6 478.46	27.23	0.00	451.23	0.85		1500	22	ND<5.0	5.8	ND<5.0		180	
U-4			rval in feet)									
04/03/0			0.00	445.30		ND		ND	ND	ND	ND	37.8	38.2	
07/02/0			0.00	438.97	-6.33	ND		ND	ND	ND	ND	ND	5.3	
10/08/0		44.24	0.00	432.69	-6.28									Not enough water to sample
01/03/0			0.00	440.78	8.09	100		ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	8.5	
04/05/0		37.64	0.00	439.29	-1.49	ND<50		0.50	ND<0.50	ND<0.50	ND<0.50	4.1		
07/02/0		36.85	0.00	440.08	0.79		67	ND<0.50	ND<0.50	ND<0.50	ND<1.0		12	
10/01/0		38.54	0.00	438.39	-1.69		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		9.8	
12/30/0		32.64	0.00	444.29	5.90		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		25	
05/02/0		31.40	0.00	445.53	1.24		ND<50		ND<0.50		ND<1.0		4.1	
07/01/0		33.60	0.00	443.33	-2.20		ND<50		ND<0.50		ND<1.0		2.1	
10/03/0		37.63	0.00	439.30	-4.03		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		9.1	
01/08/0		29.23	0.00	447.70	8.40		ND<50	0.55	ND<0.50	1.6	3.7		2.5	
04/15/0		29.80	0.00	447.13	-0.57		ND<50		ND<0.50		ND<1.0		5.2	
07/15/0	4 476.93	35.05	0.00	441.88	-5.25		ND<50		ND<0.50	ND<0.50	ND<1.0		5.1	•
4186								Page 5	of 9					

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through November 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	
U-4 co						-								
12/08/0		35.10	0.00	441.83	-0.05		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.0	
03/23/0		25.38	0.00	451.55	9.72		ND<50	ND<0.50	ND<0.50	1.3	1.2		0.65	
06/28/0	5 476.93	28.67	0.00	448.26	-3.29		34J	ND<0.50	0.15J	ND<0.50	ND<1.0		0.23J	
09/23/0	•	32.25	0.00	444.68	-3.58		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		11	
12/30/0		31.02	0.00	445.91	1.23		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		17	
03/24/0		26.51	0.00	450.42	4.51		ND<50	ND<0.50	ND<0.50	ND<0.50	4.4		21	
06/26/0		27.98	0.00	448.95	-1.47		63	ND<0.50	ND<0.50	0.56	ND<1.0	-	11	
09/26/0		33.72	0.00	443.21	-5.74		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		13	
11/21/0	6 476.93	33.43	0.00	443.50	0.29		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
U-5			rval in feet	: 37.0-47.0)									
04/03/0		31.75	0.00	444.76		ND		ND	0.728	ND	0.993	54.8	55.4	
07/02/0		38.68	0.00	437.83	-6.93	ND	~-	ND	ND	ND	ND	88	94	
10/08/0		46.31	0.00	430.20	-7.63	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	37	54	
01/03/03		36.55	0.00	439.96	9.76	ND<50		ND<0.50	0.59	ND<0.50	0.91	51	53	
04/05/02		37.83	0.00	438.68	-1.28	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	37		
07/02/02		36.92	0.00	439.59	0.91		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		43	
10/01/02														Inaccessible - truck parked over well
12/30/02														Inaccessible - car parked over well
05/02/03		31.55	0.00	444.96			ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		18	
07/01/03		33.83	0.00	442.68	-2.28		73	ND<0.50	ND<0.50	ND<0.50	ND<1.0		46	
10/03/03		37.72	0.00	438.79	-3.89		58	ND<0.50	ND<0.50	ND<0.50	ND<1.0		44	
01/08/04	476.51	29.21	0.00	447.30	8.51		ND<50	ND<0.50	ND<0.50	1.1	2.7		17	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through November 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(μg/l)	$(\mu g/l)$	(µg/l)	(μg/l)	(μg/l)	(μg/l)	
U-5 co	ntinued													
04/15/0	4 476.51	30.05	0.00	446.46	-0.84		57	ND<0.50	ND<0.50	ND<0.50	ND<1.0		37	
07/15/0	4 476.51	35.15	0.00	441.36	-5.10		60	ND<0.50	ND<0.50	ND<0.50	ND<1.0	<u>.</u>	27	
12/08/04	4 476.51	35.33	0.00	441.18	-0.18		62	ND<0.50	ND<0.50	ND<0.50	ND<1.0		39	
03/23/0	5 476.51	25.45	0.00	451.06	9.88		ND<50	ND<0.50	ND<0.50	0.51	ND<1.0		4.5	
06/28/0	5 476.51	28.90	0.00	447.61	-3.45		73	ND<0.50	ND<0.50	ND<0.50	ND<1.0		40	
09/23/0	5 476.51	33.01	0.00	443.50	-4.11		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		53	
12/30/0	5 476.51	30.96	0.00	445.55	2.05		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		72	
03/24/0	6 476.51	22.42	0.00	454.09	8.54		2400	13	ND<5.0	48	58		54	
06/26/0	6 476.51	29.31	0.00	447.20	-6.89		72	ND<0.50	ND<0.50	ND<0.50	ND<1.0		82	
09/26/0		34.35	0.00	442.16	-5.04		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		51	
11/21/0	6 476.51	32.43	0.00	444.08	1.92		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		25	
U-6			rval in feet	:: DNA)										
01/03/02		33.99	0.00	444.39		5000		36	ND<25	260	450	ND<250	ND<10	
04/05/02		36.18	0.00	442.20	-2.19	1300		16	ND<5.0	54	ND<5.0	ND<25		
07/02/02		36.33	0.00	442.05	-0.15		1100	1.4	ND<0.50	16	ND<1.0		0.94	
10/01/02		37.70	0.00	440.68	-1.37		2000	5.4	ND<0.50	62	ND<1.0		2.6	
12/30/02		31.63	0.00	446.75	6.07		130	ND<0.50	ND<0.50	2.3	ND<1.0		ND<2.0	•
05/02/03			0.00	446.89	0.14		150	ND<0.50	ND<0.50	1.8	1.7		82	
07/01/03		32.88	0.00	445.50	-1.39		190	1.8	ND<0.50	9.4	8.7		36	
10/03/03		36.54	0.00	441.84	-3.66		ND<10000	140	ND<100	940	560		ND<400	
01/08/04		30.45	0.00	447.93	6.09		3500	29	32	90	89		27	
04/15/04			0.00	448.90	0.97		2400	19	ND<2.5	91	53		16	
07/15/04			0.00	444.08	-4.82		8500	150	5.7	970	560		24	
12/08/04	478.38	34.80	0.00	443.58	-0.50		2700	16	ND<2.5	28	ND<5.0		10	
4186								Page 7	7 of 9					

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through November 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	
U-6 co	ntinued			-									,	
03/23/0	5 478.38	25.08	0.00	453.30	9.72		960	2.7	ND<0.50	9.6	4.8		2.5	
06/28/0	5 478.38	28.75	0.00	449.63	-3.67		12000	120	4.9	930	780		21	
09/23/0	5 478.38	32.38	0.00	446.00	-3.63		5200	78	ND<25	540	230		34	
12/30/0	5 478.38	30.43	0.00	447.95	1.95		2400	15	0.67	99	12		3.5	
03/24/0	6 478.38	25.94	0.00	452.44	4.49		4300	52	ND<5.0	440	160		11	
06/26/0	6 478.38	28.07	0.00	450.31	-2.13		5300	59	ND<5.0	520	300		ND<5.0	
09/26/00	6 478.38	33.31	0.00	445.07	-5.24		7400	78	ND<5.0	490	160		6.4	
11/21/06	6 478.38	31.65	0.00	446.73	1.66		1500	5.5	ND<0.50	37	2.4		1.4	
U-7	(S	creen Inte	rval in feet	: DNA)										
01/03/02	2 478.74	32.43	0.00	446.31		3100		93	ND<10	35	73	140	130	
04/05/02	2 478.74	34.06	0.00	444.68	-1.63	630		22	0.53	2.6	ND<0.50	45		
07/02/02	2 478.74	35.28	0.00	443.46	-1.22		1100	21	ND<0.50	6.9	ND<1.0		60	
10/01/02	2 478.74	37.70	0.00	441.04	-2.42		1700	11	ND<0.50	3.1	ND<1.0		25	
12/30/02	2 478.74	31.93	0.00	446.81	5.77		4600	41	5.3	32	13		34	
05/02/03		31.81	0.00	446.93	0.12		3000	17	2.7	14	5.1		42	
07/01/03	3 478.74	33.47	0.00	445.27	-1.66		2300	11	0.53	8.0	1.5		35	
10/03/03		35.84	0.00	442.90	-2.37		6500	30	ND<5.0	41	ND<10		53	
01/08/04	4 478.74	30.35	0.00	448.39	5.49		1600	4.0	ND<1.0	4.2	8.7		56	
04/15/04	4 478.74	29.03	0.00	449.71	1.32		3600	22	1.3	64	40		57	·
07/15/04	4 478.74	33.52	0.00	445.22	-4.49		4700	15	1.2	59	57		50	
12/08/04	4 478.74	34.68	0.00	444.06	-1.16		5800	26	1.9	63	27		52	
03/23/05		24.49	0.00	454.25	10.19		5600	18	1.3	42	14		39	
06/28/05		28.83	0.00	449.91	-4.34		5400	16	1.1	35	10		45	
09/23/05	5 478.74	32.35	0.00	446.39	-3.52		2400	13	1.3	3.1	6.9		46	
4186								Page 8	of 9					

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through November 2006
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation		TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	
U-7 c	ontinued						-							
12/30/0)5 478.74	30.18	0.00	448.56	2.17		2500	11	1.1	28	4.3		35	
03/24/0	06 478.74	25.06	0.00	453.68	5.12		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		32	
06/26/0	6 478.74	28.30	0.00	450.44	-3.24		2500	11	1.1	45	15		55	
09/26/0	6 478.74	33.47	0.00	445.27	-5.17		2300	7.8	0.84	17	2.1		61	
11/21/0	6 478.74	31.66	0.00	447.08	1.81		3000	15	1.1	26	2.2		69	

Table 2 a ADDITIONAL HISTORIC ANALYTICAL RESULTS **76 Station 4186**

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ЕТВЕ	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP	
	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(mg/l)	(mg/l)	(mV)	(mV)	
U-1											<u> </u>	_
10/02/00	ND											
12/30/02								0.60			91	
05/02/03								0.50			90	
07/01/03		ND<500000						0.60			110	
10/03/03		ND<500						3.79			329	
01/08/04		ND<500						12.36			184	
04/15/04		ND<50						10.56			213	
07/15/04		ND<50						6.62			251	
12/08/04		ND<50						2.66			68	
03/23/05	~-	ND<50			***			3.12			091	
06/28/05	***	ND<1000				***		8.84			153	
09/23/05		ND<1000						2.26			187	
12/30/05		ND<250						7.74			159	
03/24/06		ND<250							3.88	036		
06/26/06		ND<250							5.50	008		
09/26/06		ND<250						4.24	4.66	203	200	
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.24	4.56	1.97	2.00	
U-2												
10/02/00	ND											
10/01/02								1.40				
12/30/02								2.80			120	
05/02/03		·						150.00			120	
07/01/03		ND<500000						1.20			110	
10/03/03		ND<500						5.61			321	
01/08/04		ND<500					 ,	12.11			- 6	
04/15/04		ND<50						11.39			259	
4186							Page 1					

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)		DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP		
	(μg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	(mg/l)	(mg/l)	(mV)	(mV)		
U-2 соп	tinued												
07/15/04		ND<50						7.46			238		
12/08/04		ND<50						3.57			132		
03/23/05		730						4.57			024		
06/28/05		ND<1000	**					8.08	·		230		
09/23/05		ND<1000						5.47			188		
12/30/05		ND<250						8.33			177		
03/24/06		ND<250							6.20	-004			
06/26/06		ND<250							4.51	040			
09/26/06	~~	ND<250						3.70	3.49	-31	-17		
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.70	3.45	-29	-20		
U-3													
10/02/00	63000												
01/08/01	49300	ND	ND	ND	ND	ND	ND						
04/03/01	22200	ND	ND	ND	ND	ND	ND						
07/02/01	27000	ND	ND	ND	ND	ND	ND	, 			· _		
10/08/01	33000	ND<140000000	ND<290	ND<290	ND<290	ND<290	ND<290						
01/03/02	17000	ND<50000000	ND<100	ND<100	ND<100	ND<100	ND<100						
04/05/02	66000	ND<25000000	ND<100	ND<100	ND<100	ND<100	ND<100						
07/02/02	47000	ND<13000000	ND<250	ND<250	ND<500	ND<250	ND<250						
10/01/02	ND<50000	ND<250000000 (ND<1000	ND<1000	ND<1000	ND<1000	ND<1000	0.50			- 47		
12/30/02	23000	۷D<100000000	ND<400	ND<400	ND<400	ND<400	ND<400	0.20			106		
05/02/03	25000	ND<50000000	ND<200	ND<200	ND<200	ND<200	ND<200	0.50			85		
07/01/03	32000	4D<100000000	ND<400	ND<400	ND<400	ND<400	ND<400	0.50			90		
10/03/03	39000	ND<50000	ND<200	ND<200	ND<2.0	ND<200	ND<200	3.80			- 27		
01/08/04	ND<20000	ND<100000	ND<400	ND<400	ND<400	ND<400	ND<400	12.82		H=	133		
04/15/04	18000	ND<2500	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<0.5	3.11			24		

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ЕТВЕ	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	$(\mu g/l)$	(mg/l)	(mg/l)	(mV)	(mV)
	tinued		•								
07/15/04	15000	ND<2500	ND<25	ND<25	ND<50	ND<25 ·	ND<25	1.90			53
12/08/04	34000	ND<5000	ND<50	ND<50	ND<100	ND<50	ND<50	1.30			-81
03/23/05		ND<5000				, 		0.52			-087
06/28/05	<u></u>	ND<1000						1.47			-151
09/23/05		ND<50000						1.40			-80
12/30/05	2000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.58	1.45			-068
03/24/06		ND<2500							.79	003	
06/26/06	18000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		3.56	015	
09/26/06		ND<1200						1.06	1.10	-72	-95
11/21/06	33000	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	1.04	1.10	-83	-96
U-4											
04/03/01	ND	ND	ND	ND	ND	ND	ND				
07/02/01	ND	ND	ND	ND	ND	ND	ND				
01/03/02	ND<20	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0				
10/01/02								1.00			83
12/30/02								0.40			126
05/02/03								0.70			120
07/01/03		ND<500000						0.60			130
10/03/03		ND<500						2.06			3.05
01/08/04		ND<500				•••		11.90		min.	76
04/15/04		ND<50						3.30			116
07/15/04		ND<50						2.50			32
12/08/04		ND<50						2.09			47
03/23/05		ND<50						0.04			021
06/28/05		ND<1000						2.24			120
09/23/05		ND<1000						3.01			176

Page 3 of 6

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)		DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP		
	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(mg/l)	(mg/l)	(mV)	(mV)		
	continued			÷									
12/30/		ND<250						1.96			175		
03/24/		ND<250							1.48	015			
06/26/		ND<250							1.31	031			
09/26/	06	ND<250	<u></u>					1.38	1.23	-54	-7		
11/21/	06 ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.38	1.13	-60	-10		
U-5													
04/03/)1 ND	ND	ND	ND	ND	ND	ND						
07/02/)1 ND	ND	ND	ND	ND	ND	ND						
10/08/0	01 ND<100	ND<1000000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0						
01/03/0)2 ND<20	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0						
05/02/0)3							0.60			120		
07/01/0)3	ND<500						0.90			145		•
10/03/0)3	ND<500						2.21			3.13		
01/08/0)4	ND<500				~~		11.27			104		
04/15/0)4	ND<50						3.35	~-		65		
07/15/0)4	ND<50						2.87		,	66		
12/08/0	94	ND<50						1.67			102		
03/23/0)5	ND<50						0.75			131		
06/28/0	5	ND<1000						2.29			103		
09/23/0	5	ND<1000					**	2.05			172		
12/30/0	5	ND<250						1.39			171		
03/24/0	6	ND<2500							.97	011			
06/26/0	6	ND<250							7.23	091			
09/26/0	6	ND<250						1.19	0.80	44	44		
11/21/0	6 ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.12	0.79	41	47		

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	ТВА	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(mg/l)	(mg/l)	(mV)	(mV)
U-6 com											
	ND<200	ND<5000000	ND<10	ND<10	ND<10	ND<10	ND<10				
10/01/02								0.90			
12/30/02								0.20			88
05/02/03							····w	0.90			145
07/01/03		ND<500000					i n mi	0.70			120
10/03/03		ND<100000						2.26			12
01/08/04		ND<5000						11.95			- 37
04/15/04		ND<250						3.47			- 20
07/15/04		ND<250			. 			3.25			- 43
12/08/04		ND<250						0.94	~=		-91
03/23/05		ND<50						0.55			-077
06/28/05		ND<1000						0.86			-129
09/23/05		ND<50000	~~					1.97			-82
12/30/05		ND<250				<u></u>		1.01			-66
03/24/06		ND<2500							1.25	011	****
06/26/06		ND<2500							5.48	015	
09/26/06		ND<2500						6.97	7.05	-67	-69
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.83	1.05	-65	-69
U-7											
01/03/02	30	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0				
10/01/02				· 				1.80			- 60
12/30/02								0.10			121
05/02/03	. ==							0.40			105
07/01/03		ND<500000						0.50			95
10/03/03		ND<5000						2.91			- 21
01/08/04		ND<1000						11.85			- 51

Page 5 of 6

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ЕТВЕ	TAME		Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP			
	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(mg/l)	(mg/l)	(mV)	(mV)			
U-7 con	tinued							*				 	 	-
04/15/04		ND<100						4.68			- 16			
07/15/04		ND<100						2.55			- 52			
12/08/04		ND<100						1.20			-88			
03/23/05		ND<100						0.21			-088			
06/28/05		ND<1000	,					1.32			-160			
09/23/05		ND<1000						2.25			108			
12/30/05		ND<250						1.12			105			
03/24/06		ND<250							.99	008				
06/26/06		ND<250							1.27	025				
09/26/06		ND<250					<u>.</u>	0.78	1.02	-47	-63			
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.88	0.98	-43	-59			

FIGURES

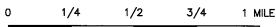


SOURCE:

= 1:1 L: \ V | C | N | T Y M A P S\4186vm.DWG Jul 12,

United States Geological Survey 7.5 Minute Topographic Map: Livermore Quadrangle





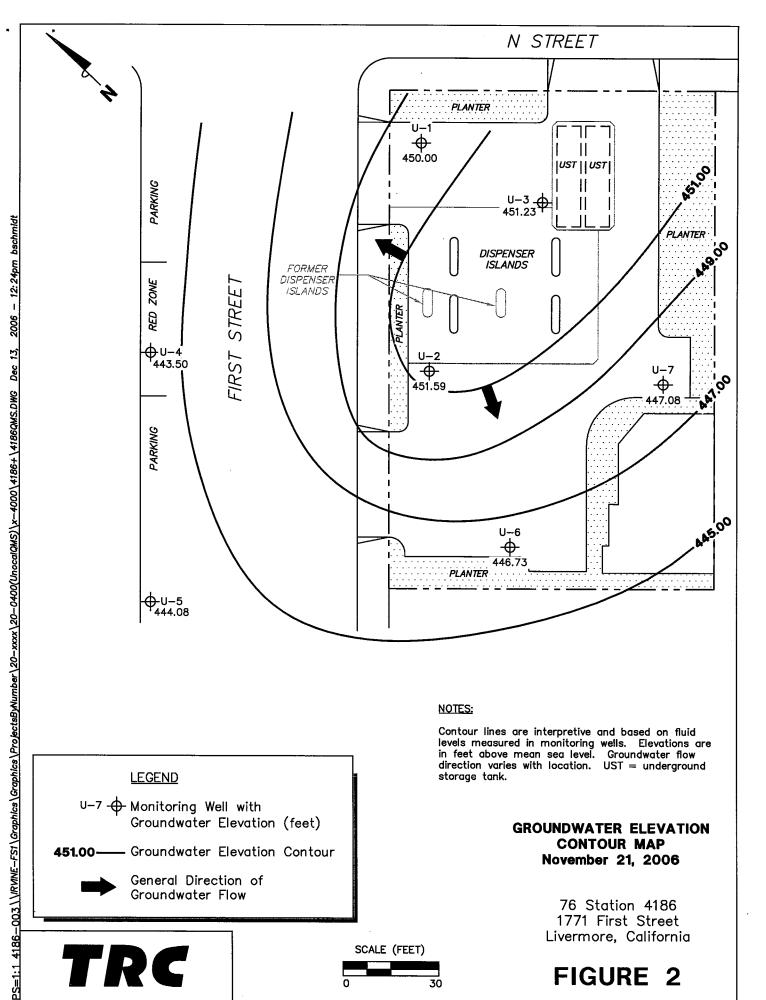
SCALE 1:24,000



VICINITY MAP

76 Station 4186 1771 First Street Livermore, California

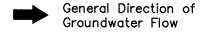
FIGURE 1



LEGEND

U-7 - → Monitoring Well with Groundwater Elevation (feet)

Groundwater Elevation Contour



NOTES:

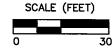
Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. Groundwater flow direction varies with location. UST = underground storage tank.

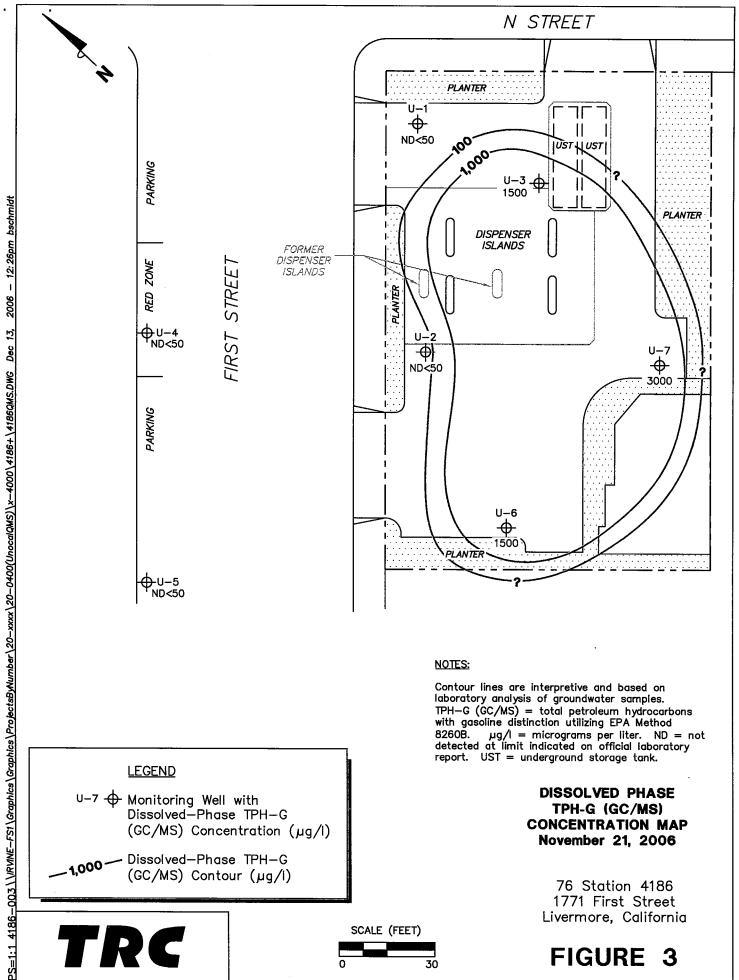
GROUNDWATER ELEVATION CONTOUR MAP November 21, 2006

76 Station 4186 1771 First Street Livermore, California

FIGURE 2

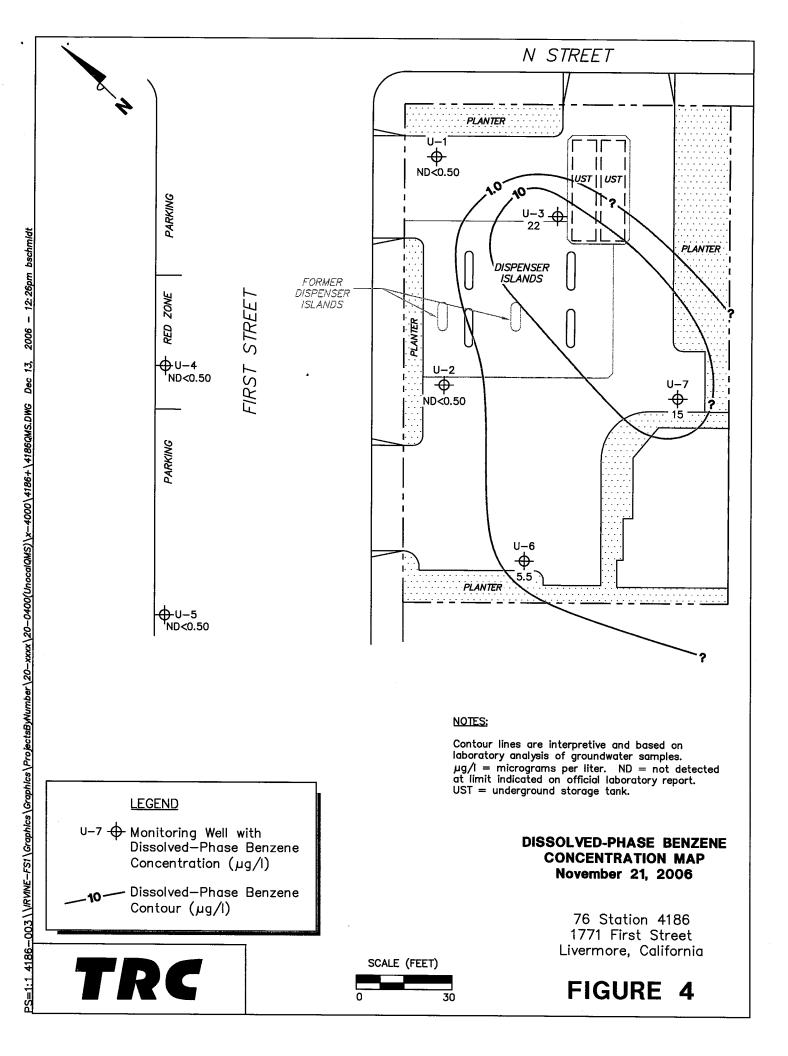


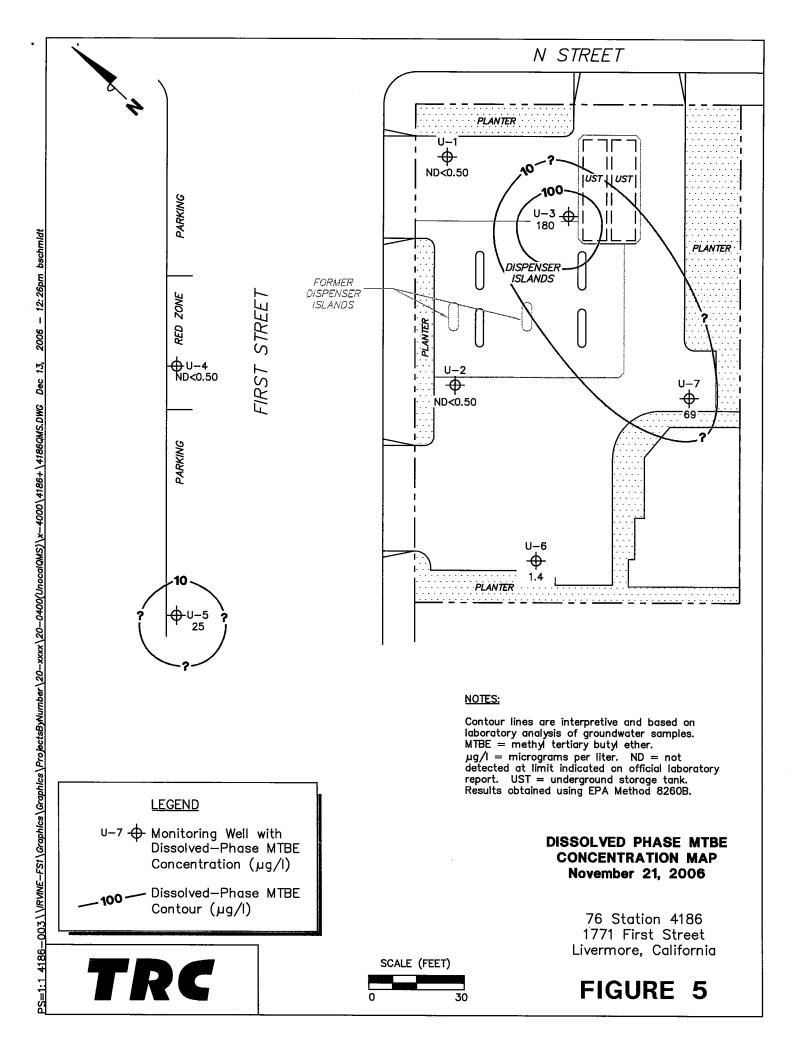




<u>30</u>

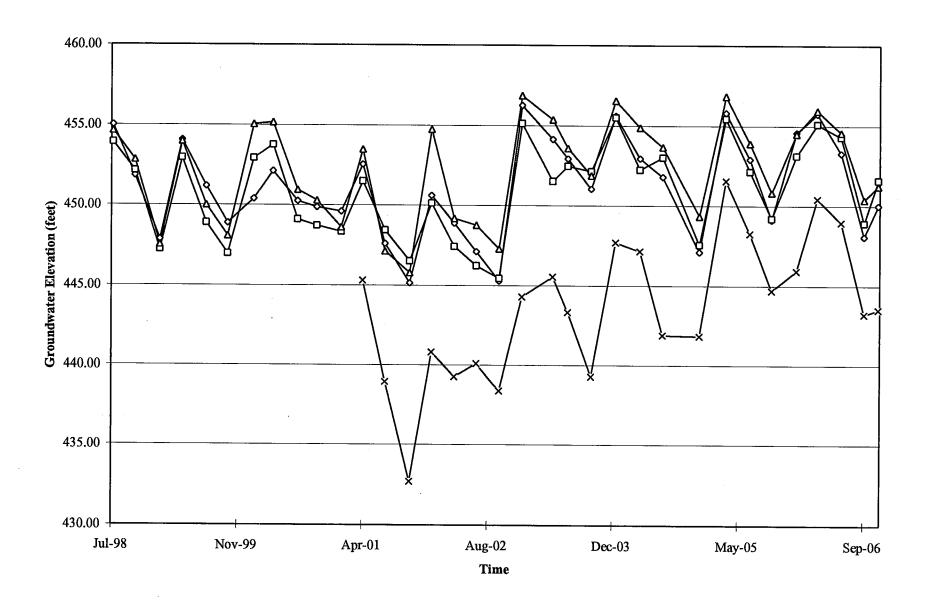
FIGURE





GRAPHS

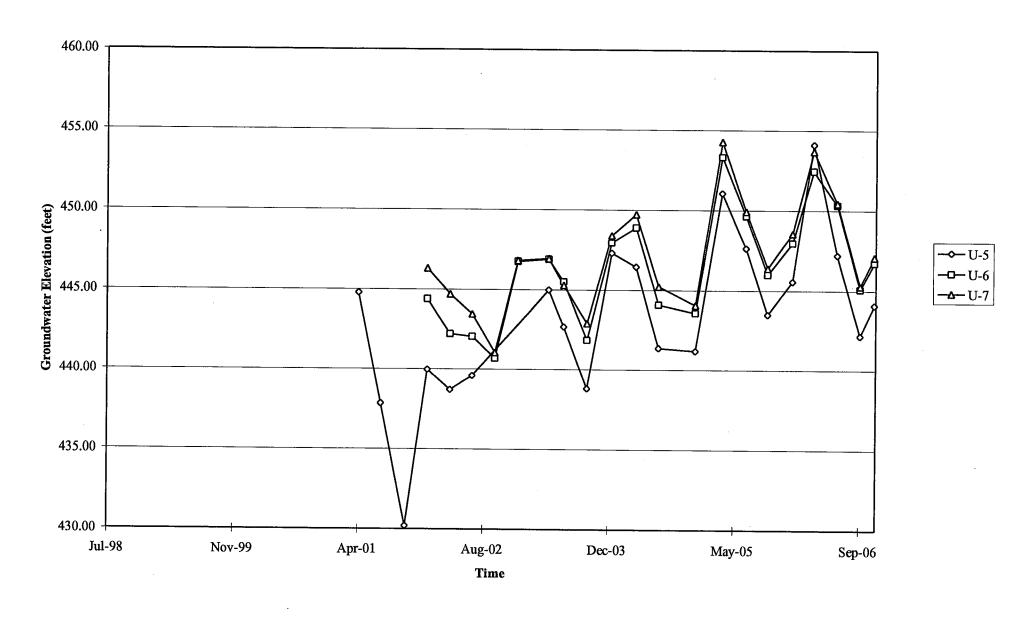
Groundwater Elevations vs. Time 76 Station 4186





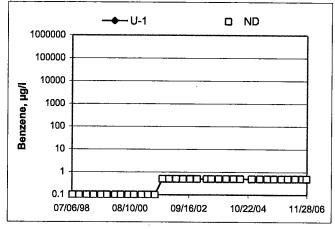
Elevations may have been corrected for apparent changes due to resurvey

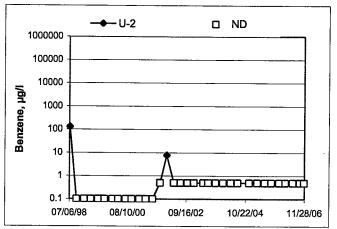
Groundwater Elevations vs. Time 76 Station 4186

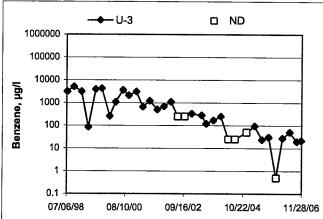


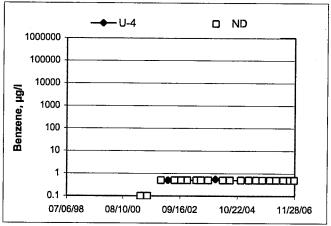
Elevations may have been corrected for apparent changes due to resurvey

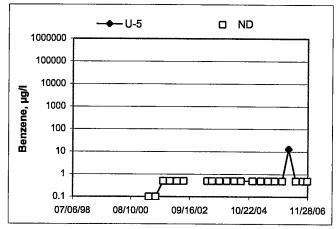
Benzene Concentrations vs Time 76 Station 4186

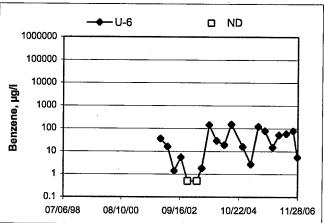


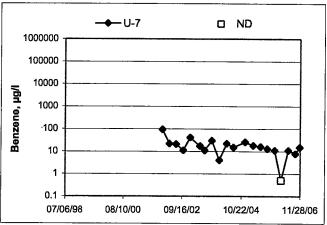












GENERAL FIELD PROCEDURES

Groundwater Monitoring and Sampling Assignments

For each site, TRC technicians are provided with a Technical Service Request (TSR) that specifies activities required to complete the groundwater monitoring and sampling assignment for the site. TSRs are based on client directives, instructions from the primary environmental consultant for the site, regulatory requirements, and TRC's previous experience with the site.

Fluid Level Measurements

Initial site activities include determination of well locations based on a site map provided with the TSR. Well boxes are opened and caps are removed. Indications of well or well box damage or of pressure buildup in the well are noted.

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depth to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (surveyo rs mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

Wells that are found to contain LPH are not purged or sampled. Instead, one casing volume of fluid is bailed from the well and the well is re-sealed. Bailed fluids are placed in a container separate from normal purge water, and properly disposed.

Purging and Groundwater Parameter Measurement

TSR instructions may specify that a well not be purged (no-purge sampling), be purged using low-flow methods, or be purged using conventional pump and/or bail methods. Conventional purging generally consists of pumping or bailing until a minimum of three casing volumes of water have been removed or until the well has been pumped dry. Pumping is generally accomplished using submersible electric or pneumatic diaphragm pumps.

During conventional purging, three groundwater parameters (temperature, pH, and conductivity) are measured after removal of each casing volume. Stabilization of these parameters, to within 10 percent, confirm that sufficient purging has been completed. In some cases, the TSR indicates that other parameters are also to be measured during purging. TRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurements are calibrated daily according to manufacturer's instructions.

Low-flow purging utilizes a bladder or peristaltic pump to remove water from the well at a low rate. Groundwater parameters specified by the TSR are measured continuously until they become stable in general accordance with EPA guidelines.

Purge water is generally collected in labeled drums for disposal. Drums may be left on site for disposal by others, or transported to a collection location for eventual transfer to a licensed treatment or recycling facility. In some cases, purge water may be collected directly from the site by a licensed vacuum truck company, or may be treated on site by an active remediation system, if so directed.

Groundwater Sample Collection

After wells are purged, or not purged, according to TSR instructions, samples are collected for laboratory analysis. For wells that have been purged using conventional pump or bail methods, sampling is conducted after the well has recovered to 80 percent of its original volume or after two hours if the well does not recover to at least 80 percent. If there is insufficient recharge of water in the well after two hours, the well is not sampled.

Samples are collected by lowering a new, disposable, ½-inch to 4-inch polyethylene bottom-fill bailer to just below the water level in the well. The bailer is retrieved and the water sample is carefully transferred to containers specified for the laboratory analytical methods indicated by the TSR. Particular care is given to containers for volatile organic analysis (VOAs) which require filling to zero headspace and fitting with Teflon-sealed caps.

After filling, all containers are labeled with project number (or site number), well designation, sample date, sample time, and the sampler's initials, and placed in an insulated chest with ice. Samples remain chilled prior to and during transport to a state-certified laboratory for analysis. Sample container descriptions and requested analyses are entered onto a chain-of-custody form in order to provide instructions to the laboratory. The chain-of-custody form accompanies the samples during transportation to provide a continuous record of possession from the field to the laboratory. If a freight or overnight carrier transports the samples, the carrier is noted on the form.

For wells that have been purged using low-flow methods, sample containers are filled from the effluent stream of the bladder or peristaltic pump. In some cases, if so specified by the TSR, samples are taken from the sample ports of actively pumping remediation wells.

Sequence of Gauging, Purging and Sampling

The sequence in which monitoring activities are conducted are specified on the TSR. In general, wells are gauged beginning with the least affected well and ending with the well that has the highest concentration based on previous analytic results. After all gauging for the site is completed, wells are purged and/or sampled from the least-affected to the most-affected well.

Decontamination

In order to reduce the possibility of cross contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated to a particular wells, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liqui-nox and water and rinsing twice. The final rinse is in deionized water.

Exceptions

Additional tasks or non-standard procedures, if any, that may be requested or required for a particular site, and noted on the site TSR, are documented in field notes on the following pages.

1/5/04 version

FIELD MONITORING DATA SHEET

Technician: MIKE T	Job #/Task #: 4/06000	Date: 11-21-06
Site # 4/196	Project Manager A. COLLING	Page _ / _ of _ /

Well #	Time Gauged	тос	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	i i Misc. Well Notes
u-1	0551	/	33.91	24.27			0753	_2"
4-2	0559	۷	33.10	25.45		_	0823	2"
U-6 ·	0605	V	44.57	31-65	-		0938	2"
U-4	0619	V	4502			-	1004	2"
u-5	0627	V	47.40	32-43			1034	2"
U-7	0635	V	44.37	31.66		-	1110	2^
U-3	0642	V	3350	27.23			6900	2"
								_
						·		
				· .				
	·							
								
	 							,
								
<u> </u>		7						
FIELD DATA	A COMPLI	I	QA/QC		COC	127		ONDITION CUESTS
LED DATE	. OOWII EL		unuo		000	VV	ELL BOX C	ONDITION SHEETS
WTT CERT	IFICATE '		MANIFES	ST	DRUM IN	/ENTORY	TOM	FIC CONTROL
			muti Li		DITOWIN.	LICIONI	InAl	THO CONTINUE

		Ted	chnician: _	Mike 3				٠	
Site: <u>५१४४</u>	<u>, </u>	Pro	ject No.:	11060001		77	/ Date:	11-21-	-06
Well No	<u>u-1</u>			Purge Metho	od: HB				
Depth to W	ater (feet):_	28-27		Depth to Pro	oduct (feet):				
Total Depth	(feet)	33.91			er Recovered (g				
Water Colu	mn (feet):	5-64			neter (Inches):_;				
80% Recha	rge Depth(fe	eet):_29-39			ne (gallons):ຬ				
					,				•
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F,Ø)	рН	D.O.	ORP	Turbidity
9742			6,9	1487	16.2	7.01	4-56	1-97	
			1.8	1474	14-3	7-21	4.34	199	
	0750		2.3	1490	18-9	7.25	4.24	2.00	
Stati	c at Time Sa	ampled	Tota	l Gallons Pur			لبيا		
	30.10		100	2-3	ged		Sample		
Comments:							0753		

Well No. 4-2	Purge Method: Sun
Depth to Water (feet): 25-85	Depth to Product (feet):
Total Depth (feet) 33-10	LPH & Water Recovered (gallons):
Water Column (feet): 7-25	Casing Diameter (Inches): 2
80% Recharge Depth(feet): 27-30	1 Well Volume (gallons):

Comments	omments:		<u> </u>	<u>`</u>	<u></u>		0423			
	29.86			6						
		in thico	1003	l Gallons Pu	rged		Sample	Time		
Stat	ic at Time Sa	moled	Tota	10-11 0	<u> </u>		1	L		
							 		ļ	
<u> </u>					5	7.01	3-70	20	 	
	0815		3	1030	18-5	7-01	 	- 20		
			2	1043	18-3	702	3-74	- 19		
0811			1	1034	17-6	6-94	3-45	:29		
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F,C)	рΗ	D.O	ORP	Turbidit	

Technician: nike J Site: 4196 Project No.: 41060001 Date: 11-21-06 Well No. U6 Sus Purge Method: Depth to Water (feet): 3 + 65 Depth to Product (feet):_ Total Depth (feet) 44.52 LPH & Water Recovered (gallons):___ Water Column (feet): 12-87 Casing Diameter (Inches):____ 80% Recharge Depth(feet): 34-22 1 Well Volume (gallons):

Comments	s:						 _			
	32.89		<u> </u>	6		0938				
Otal			I ota	I Gallons Pu	rged	Sample Time				
Stat	ic at Time S	ampled	T-4-	10 " 5	I			<u></u>		
								ļ		
	0174		6	1353	19.4	6.93	0.83	- 69		
	0934		ļ <u>-</u>		18-6	6.99	1-13	- 60		
with Fr			4	1307	·		1.05	 	 	
0925			2	1235	17.1	701	105	- 65	 	
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F,Ø)	pН	D.O.	ORP	Turbidit	

Well No.
U - 4

Depth to Water (feet):
33-43

Depth to Product (feet):

Total Depth (feet)
45.02

LPH & Water Recovered (gallons):

Water Column (feet):
11-59

Recharge Depth(feet):
35-74

1 Well Volume (gallons):

Time	Time	Depth to	Volume	Conduc-	T	1	1	T		
Start	Time Stop	Water	Purged	tivity	Temperature	pН	D.O.	ORP	Tunkidit.	
	Оюр	(feet)	(gallons)	(uS/cm)	(F,C)	Pii	0.0.	UKP	Turbidity	
0958			1	1248	17.8	6-96	1.13	-60		
			2	864	19-2	7.05	1-68	- 32		
	1005		3	938	19-5	7.27	1.38	-10	 	
					<i>V</i> , <i>S</i>	117	1	10	 	
							1			
Stat	ic at Time Sa	ımpled	Total Gallons Purged			Sample Time				
	33.43			3			<u> </u>			
omments:						1009				

Technician: Mike

80% Recharge Depth(feet): 35.42

Site: 4196

Project No.: 41060001

Date: 11-21-08

Well No. 4-S

Purge Method: 5u3

Depth to Water (feet): 33-43

Depth to Product (feet): 5u3

LPH & Water Recovered (gallons): 2

Water Column (feet): 14-97

Casing Diameter (Inches): 2

1 Well Volume (gallons):_

Comments	: :					· · · · · · · · · · · · · · · · · · ·	- 77			
	35-88			6		1034				
Otal		arripieu	Total Gallons Purged			Sample Time				
Stat	ic at Time S	ampled	T-1	10 " 0	<u> </u>					
							ļ			
				. , , ,	ar,	726	1-12	47		
	1026		6	932	21-8					
*** * *;			4	906	20-1	7.28	1.08	43	 	
1023			а	947	19.8	7-31	0.79	41	 	
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F, \mathcal{O})	pН	D.O.	ORP	Turbidit	

Well No. U- 7	Purge Method: Sun
Depth to Water (feet): 31-66	Depth to Product (feet):
Total Depth (feet) 44.37	LPH & Water Recovered (gallons):
Water Column (feet): 12-71	Casing Diameter (Inches): 2
80% Recharge Depth(feet): 34・20	1 Well Volume (gallons): 2

Comments	:						1170		
	40.35	_		6		II/O			
Stat	ic at Time Sa	mpled	Total Gallons Purged			Sample Time			
					7-10	7.20	0.88	- 59	
	1059		Ь	1273	14-3	7.26	088	 -	
			4	1/83	13-9	7.19	1.03	- 62	ļ — — —
1052	ļ		2	1021	13-0	7.38	0.98	~ 43	
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F,C)	рН	D.O.	ORP	Turbidit

Technician: Mike J Site: 41% Project No.: 41060001 Date: 11-21-06 Well No. 4-3 Purge Method: 548 Depth to Water (feet): 27-23 Depth to Product (feet): Total Depth (feet) 33-50 LPH & Water Recovered (gallons):____ Water Column (feet): 6.27 Casing Diameter (Inches): 2 80% Recharge Depth(feet): 28.48 1 Well Volume (gallons): Depth to Volume Conduc-Time Time Temperature Water Purged tivity рΗ Start D.O. Stop ORP Turbidity (F, \mathcal{O}) (feet) (gallons) (uS/cm) 0842 17.9 1019 1.10 - 83 7.20 18-7 1.00 1086 7-25 - 79 3 0849 1100 19.6 -96 7-24 1.04 Static at Time Sampled **Total Gallons Purged** Sample Time 3013 0900 Comments: Well No.____ Purge Method: Depth to Water (feet):_____ Depth to Product (feet):_____ Total Depth (feet)_____ LPH & Water Recovered (gallons):_____ Water Column (feet):_____ Casing Diameter (Inches): 80% Recharge Depth(feet): 1 Well Volume (gallons):_____ Depth to Volume Conduc-Time Time Temperature Water Purged tivity Start ρH Stop Turbidity D.O. ORP (F,C)(feet) (gallons) (uS/cm) Static at Time Sampled **Total Gallons Purged** Sample Time Comments: 1



Date of Report: 12/04/2006

Anju Farfan

TRC Alton Geoscience

21 Technology Drive Irvine, CA 92618-2302

RE: 4186

BC Lab Number: 0612354

Enclosed are the results of analyses for samples received by the laboratory on 11/28/06 00:39. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Hooker

Client Service Rep

Authorized Signature

Project: 4186
Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information								
0612354-01	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 U-1 Mike	Receive Date: Sampling Date: Sample Depth: Sample Matrix:		Delivery Work Order: Global ID: Matrix: Samle QC Type (SACode): Cooler ID:				
0612354-02	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 U-2 Mike	Receive Date: Sampling Date: Sample Depth: Sample Matrix:		Delivery Work Order: Global ID: Matrix: Samle QC Type (SACode): Cooler ID:				
0612354-03	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 U-6 Mike	Receive Date: Sampling Date: Sample Depth: Sample Matrix:		Delivery Work Order: Global ID: Matrix: Samle QC Type (SACode): Cooler ID:				
0612354-04	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 U-4 Mike	Receive Date: Sampling Date: Sample Depth: Sample Matrix:		Delivery Work Order: Global ID: Matrix: Samle QC Type (SACode): Cooler ID:				
0612354-05	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 U-5 Mike	Receive Date: Sampling Date: Sample Depth: Sample Matrix:		Delivery Work Order: Global ID: Matrix: Samle QC Type (SACode): Cooler ID:				

Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Informa	tion		
0612354-06	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 U-7 Mike	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	 Delivery Work Order: Global ID: Matrix: Samle QC Type (SACode): Cooler ID:
0612354-07	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 U-3 Mike	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	 Delivery Work Order: Global ID: Matrix: Samle QC Type (SACode): Cooler ID:

Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

BCL Sample ID: 06123	354-01	Client Samp	ole Nam	e: U-1, 11/2	21/2006	7:53:00	AM, Mike)						
						V~	Prep	Run	1711	Instru-		QC	MB	Lab
Constituent		Result	Units	PQL	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
1,2-Dibromoethane		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
1,2-Dichtoroethane		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	· · • · · · · · · · · · · · · · · ·
Ethylbenzene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
Toluene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	,
Ethanol		ND	ug/L	250		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50		EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683	ND	
1,2-Dichloroethane-d4 (Surrog	ate)	101	%	76 - 114 (LCL	- UCL)	EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683		
Toluene-d8 (Surrogate)		98.3	%	88 - 110 (LCL	- UCL)	EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683		
4-Bromofluorobenzene (Surrog	gate)	99.8	%	86 - 115 (LCL	- UCL)	EPA-8260	11/29/06	11/30/06 03:44	DKC	MS-V12	1	BPK1683		



Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

BCL Sample ID: 06	312354-02	Client Sam	ole Nam	e: U-2, 1	1/21/200	6 8:23:00	AM, Mike)						
0		P 14					Prep	Run		Instru-		QC	MB	Lab
Constituent	1	Result	Units	PQL	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
1,2-Dibromoethane		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
1,2-Dichloroethane		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
Ethylbenzene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
Toluene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
Ethanol		ND	ug/L	250		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
Total Purgeable Petroleun Hydrocarbons	n	ND	ug/L	50		EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683	ND	
1,2-Dichloroethane-d4 (Su	urrogate)	96.7	%	76 - 114 (L	.CL - UCL)	EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683		
Toluene-d8 (Surrogate)		97.5	%	88 - 110 (L	CL - UCL)	EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683		
4-Bromofluorobenzene (S	urrogate)	96.9	%	86 - 115 (L	CL - UCL)	EPA-8260	11/29/06	11/30/06 04:09	DKC	MS-V12	1	BPK1683		



Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

BCL Sample ID: 06	312354-03	Client Sam	ole Nam	e: U-6, 11/21/20	06 9:38:00	AM, Mike)			-			
_						Prep	Run		Instru-		QC	MB	Lab
Constituent		Result	Units	PQL MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		5.5	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND ·	
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	•
Ethylbenzene		37	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
Methyl t-butyl ether		1.4	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
Toluene		ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	,
Total Xylenes		2.4	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
t-Butyl alcohol		ND	ug/L	10	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
Ethanol		ND	ug/L	250	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	· · · · · · · · · · · · · · · · · · ·
Total Purgeable Petroleum Hydrocarbons	n	1500	ug/L	50	EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683	ND	
1,2-Dichloroethane-d4 (Su	ırrogate)	96.9	%	76 - 114 (LCL - UCL) EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683		
Toluene-d8 (Surrogate)		99.1	%	88 - 110 (LCL - UCL) EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683		
4-Bromofluorobenzene (Si	urrogate)	102	%	86 - 115 (LCL - UCL) EPA-8260	11/29/06	11/30/06 13:26	DKC	MS-V12	1	BPK1683		

Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

BCL Sample ID:	0612354-04	Client Sam	ole Nam	e: U-4, 1	11/21/200	3 10:08:00	OAM, Mik	е						
Constituent		Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
1,2-Dibromoethane		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
1,2-Dichloroethane		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
Ethylbenzene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
Toluene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	. 1	BPK1683	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
Ethanol		ND	ug/L	250		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	
Total Purgeable Petroles Hydrocarbons	ım	ND	ug/L	50		EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683	ND	A53
1,2-Dichloroethane-d4 (S	Surrogate)	96.8	%	76 - 114 (I	LCL - UCL)	EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683		
Toluene-d8 (Surrogate)		98.0	%	88 - 110 (I	LCL - UCL)	EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683		
4-Bromofluorobenzene (Surrogate)	97.6	%	86 - 115 (I	LCL - UCL)	EPA-8260	11/29/06	11/30/06 04:34	DKC	MS-V12	1	BPK1683		

Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

BCL Sample ID:	0612354-05	Client Sam	ole Nam	e: U-5,	11/21/200	3 10:34:00	DAM, Mik	e						,
					 		Prep	Run		Instru-	· ·	QC	MB	Lab
Constituent	· · · · · · · · · · · · · · · · · · ·	Result	Units	PQL	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
1,2-Dibromoethane		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
1,2-Dichloroethane		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
Ethylbenzene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
Methyl t-butyl ether		25	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	***************************************
Toluene		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
Ethanol		ND	ug/L	250		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	
Total Purgeable Petrole Hydrocarbons	um	ND	ug/L	50		EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683	ND	A53
1,2-Dichloroethane-d4 (Surrogate)	97.6	%	76 - 114	(LCL - UCL)	EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683		
Toluene-d8 (Surrogate)		97.4	%	88 - 110 ((LCL - UCL)	EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683		
4-Bromofluorobenzene	(Surrogate)	98.0	%	86 - 115 ((LCL - UCL)	EPA-8260	11/29/06	11/30/06 08:46	DKC	MS-V12	1	BPK1683		



Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

BCL Sample ID: 0612354-06	Client Sam	ple Nam	e: U-7, 11/21/20	06 11:10:0	OAM, Mik	е						
					Prep	Run		Instru-		QC	MB	Lab
Constituent	Result	Units	PQL MDL	. Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene	15	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1 .	BPK1683	ND	
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
Ethylbenzene	26 ·	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
Methyl t-butyl ether	69	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
Toluene	1.1	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
Total Xylenes	2.2	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
t-Butyl alcohol	ND	ug/L	10	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	. "
Ethanol	ND	ug/L	250	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	ND	
Total Purgeable Petroleum Hydrocarbons	3000	ug/L	100	EPA-8260	11/29/06	11/30/06 14:42	DKC	MS-V12	2	BPK1683	ND	A01
1,2-Dichloroethane-d4 (Surrogate)	96.1	%	76 - 114 (LCL - UCI	.) EPA-8260	11/29/06	11/30/06 14:42	DKC	MS-V12	2	BPK1683	-	
1,2-Dichloroethane-d4 (Surrogate)	98.0	%	76 - 114 (LCL - UCI	.) EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCI	.) EPA-8260	11/29/06	11/30/06 14:42	DKC	MS-V12	2	BPK1683		
Toluene-d8 (Surrogate)	98.7	%	88 - 110 (LCL - UCI	.) EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683		
4-Bromofluorobenzene (Surrogate)	104	%	86 - 115 (LCL - UCI	.) EPA-8260	11/29/06	11/30/06 09:11	DKC	MS-V12	1	BPK1683	 ,	
4-Bromofluorobenzene (Surrogate)	100	%	86 - 115 (LCL - UCI	.) EPA-8260	11/29/06	11/30/06 14:42	DKC	MS-V12	2	BPK1683		



Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

BCL Sample ID:	0612354-07	Client Sam	ole Nam	e: U-3, 11/21/	/2006	9:00:00	AM, Mike	9			_			
0							Prep	Run		Instru-		QC	МВ	Lab
Constituent		Result	Units	PQL M	IDL_	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		22	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
1,2-Dibromoethane		ND	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
1,2-Dichloroethane		ND	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
Ethylbenzene		5.8	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
Methyl t-butyl ether		180	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
Toluene		ND	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
Total Xylenes		ND	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
t-Amyl Methyl ether		ND	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
t-Butyl alcohol		33000	ug/L	100	1	EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
Diisopropyl ether		ND	ug/L	5.0	l	EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
Ethanol		ND	ug/L	2500		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
Ethyl t-butyl ether		ND	ug/L	5.0		EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
Total Purgeable Petrole Hydrocarbons	um	1500	ug/L	500	l	EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683	ND	A01
1,2-Dichloroethane-d4 (Surrogate)	92.4	%	76 - 114 (LCL - L	JCL) I	EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683		**************************************
Toluene-d8 (Surrogate)		99.1	%	88 - 110 (LCL - L	JCL) I	EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683		
4-Bromofluorobenzene	(Surrogate)	101	%	86 - 115 (LCL - L	JCL) I	EPA-8260	11/29/06	11/29/06 19:06	DKC	MS-V12	10	BPK1683		



Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

										Contr	ol Limits
			Source	Source		Spike			Percent		Percent
Constituent	Batch ID	QC Sample Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery Lab Quals
Benzene	BPK1683	Matrix Spike	0612269-03	0.58000	26.910	25.000	ug/L		105		70 - 130
		Matrix Spike Duplicate	0612269-03	0.58000	26.930	25.000	ug/L	0.0759	105	20	70 - 130
Toluene	BPK1683	Matrix Spike	0612269-03	ND	24.770	25.000	ug/L		99.1		70 - 130
		Matrix Spike Duplicate	0612269-03	ND	24.480	25.000	ug/L	1.18	97.9	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BPK1683	Matrix Spike	0612269-03	ND	10.240	10.000	ug/L		102		76 - 114
		Matrix Spike Duplicate	0612269-03	ND	10.250	10.000	ug/L		102		76 - 114
Toluene-d8 (Surrogate)	BPK1683	Matrix Spike	0612269-03	ND	9.9500	10.000	ug/L		99.5		88 - 110
		Matrix Spike Duplicate	0612269-03	ND	9.9500	10.000	ug/L		99.5		88 - 110
4-Bromofluorobenzene (Surrogate)	BPK1683	Matrix Spike	0612269-03	ND	10.020	10.000	ug/L		100		86 - 115
		Matrix Spike Duplicate	0612269-03	ND	10.280	10.000	ug/L		103		86 - 115



TRC Alton Geoscience 21 Technology Drive

Irvine CA, 92618-2302

Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

								Contro	l Limits	
Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery		RPD	Lab Quals
BPK1683	BPK1683-BS1	LCS	27.870	25.000	0.50	ug/L	111	70 - 130		
BPK1683	BPK1683-BS1	LCS	26.090	25.000	0.50	ug/L	104	70 - 130	-	
BPK1683	BPK1683-BS1	LCS	9.5700	10.000		ug/L	95.7	76 - 114		
BPK1683	BPK1683-BS1	LCS	9.8800	10.000	KARANA .	ug/L	98.8	88 - 110		
BPK1683	BPK1683-BS1	LCS	9.9700	10.000		ug/L	99.7	86 - 115		
	BPK1683 BPK1683 BPK1683 BPK1683	BPK1683 BPK1683-BS1 BPK1683 BPK1683-BS1 BPK1683 BPK1683-BS1 BPK1683 BPK1683-BS1	BPK1683 BPK1683-BS1 LCS BPK1683 BPK1683-BS1 LCS BPK1683 BPK1683-BS1 LCS BPK1683 BPK1683-BS1 LCS	BPK1683 BPK1683-BS1 LCS 27.870 BPK1683 BPK1683-BS1 LCS 26.090 BPK1683 BPK1683-BS1 LCS 9.5700 BPK1683 BPK1683-BS1 LCS 9.8800	Batch ID QC Sample ID QC Type Result Level BPK1683 BPK1683-BS1 LCS 27.870 25.000 BPK1683 BPK1683-BS1 LCS 26.090 25.000 BPK1683 BPK1683-BS1 LCS 9.5700 10.000 BPK1683 BPK1683-BS1 LCS 9.8800 10.000	Batch ID QC Sample ID QC Type Result Level PQL BPK1683 BPK1683-BS1 LCS 27.870 25.000 0.50 BPK1683 BPK1683-BS1 LCS 26.090 25.000 0.50 BPK1683 BPK1683-BS1 LCS 9.5700 10.000 BPK1683 BPK1683-BS1 LCS 9.8800 10.000	Batch ID QC Sample ID QC Type Result Level PQL Units BPK1683 BPK1683-BS1 LCS 27.870 25.000 0.50 ug/L BPK1683 BPK1683-BS1 LCS 26.090 25.000 0.50 ug/L BPK1683 BPK1683-BS1 LCS 9.5700 10.000 ug/L BPK1683 BPK1683-BS1 LCS 9.8800 10.000 ug/L	Batch ID QC Sample ID QC Type Result Level PQL Units Recovery BPK1683 BPK1683-BS1 LCS 27.870 25.000 0.50 ug/L 111 BPK1683 BPK1683-BS1 LCS 26.090 25.000 0.50 ug/L 104 BPK1683 BPK1683-BS1 LCS 9.5700 10.000 ug/L 95.7 BPK1683 BPK1683-BS1 LCS 9.8800 10.000 ug/L 98.8	Batch ID QC Sample ID QC Type Result Level PQL Units Percent Recovery RPD Percent Recovery BPK1683 BPK1683-BS1 LCS 27.870 25.000 0.50 ug/L 111 70 - 130 BPK1683 BPK1683-BS1 LCS 26.090 25.000 0.50 ug/L 104 70 - 130 BPK1683 BPK1683-BS1 LCS 9.5700 10.000 ug/L 95.7 76 - 114 BPK1683 BPK1683-BS1 LCS 9.8800 10.000 ug/L 98.8 88 - 110	Batch ID QC Sample ID QC Type Result Level PQL Units Recovery RPD Recovery RPD BPK1683 BPK1683-BS1 LCS 27.870 25.000 0.50 ug/L 111 70 - 130 BPK1683 BPK1683-BS1 LCS 26.090 25.000 0.50 ug/L 104 70 - 130 BPK1683 BPK1683-BS1 LCS 9.5700 10.000 ug/L 95.7 76 - 114 BPK1683 BPK1683-BS1 LCS 9.8800 10.000 ug/L 98.8 88 - 110

Project: 4186

Project Number: [none]

Project Manager: Anju Farfan

Reported: 12/04/06 11:56

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Benzene	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.14	
1,2-Dibromoethane	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.22	
1,2-Dichloroethane	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.15	
Ethylbenzene	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.094	
Methyl t-butyl ether	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.13	
Toluene	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.31	
t-Amyl Methyl ether	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.34	
t-Butyl alcohol	BPK1683	BPK1683-BLK1	ND	ug/L	10	9.3	 .
Diisopropyl ether	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.34	7770
Ethanol	BPK1683	BPK1683-BLK1	ND	ug/L	250	85	
Ethyl t-butyl ether	BPK1683	BPK1683-BLK1	ND	ug/L	0.50	0.32	
Total Purgeable Petroleum Hydrocarbons	BPK1683	BPK1683-BLK1	ND	ug/L	50	16	
1,2-Dichloroethane-d4 (Surrogate)	BPK1683	BPK1683-BLK1	94.0	%	76 - 114 (L		
Toluene-d8 (Surrogate)	BPK1683	BPK1683-BLK1	97.8	%	88 - 110 (L	i	
4-Bromofluorobenzene (Surrogate)	BPK1683	BPK1683-BLK1	97.7	%	86 - 115 (L	 	



Project: 4186

Project Number: [none]
Project Manager: Anju Farfan

Reported: 12/04/06 11:56

Notes and Definitions

J	Estimated value
A53	Chromatogram not typical of gasoline.
A01	PQL's and MDL's are raised due to sample dilution.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

BC LABORATORIES INC.		SAN	IPLE REC	EIPT FO	RM	Rev. No.	10 01/2	1/04	Page)	Of						
Submission #:010-12354	F	Project C	ode:	TB Batch # SHIPPING CONTAINER Ice Chest												
SHIPPING INFOR	RMATION			TB Batch # SHIPPING CONTAINER Ice Chest												
Federal Express □ UPS □	Hand De	livery 🛘			Ice Ches											
BC Lab Field Service 2 Other	☐ (Specif	y)			Box	: 0	Othe	er 🗆 (Šį	pecify)							
				<u> </u>												
Refrigerant: Ice 🗆 Blue Ice 🗆			ther 🗆	Comme	ents: No	Icein	Confai	ner a	time of	Recon						
Custody Seals: Ice Chest ☐ Intact? Yes ☐ No ☐	Containe	ers 🗌 s 🖸 No 🗖	None 🛭	Comme	ents:											
					\ <i>I</i>		· · · · · · · · · · · · · · · · · · ·		10							
All samples received? Yes ☑ No □	All sample				/			7		0						
COC Received			hest ID rature:8	KIW			0.98	Date/	Time _///2	8/6						
ØYES □ NO		Thermome		<u> </u>	Cont	ainer — (++	Analy	st Init A	M						
					SAMPLE	MIMBEDS			INER (Specify) OCC? Yes No Date/Time 1//28/C Analyst Init ANA							
SAMPLE CONTAINERS	1	2	3	4			7	8	T	T 10						
QT GENERAL MINERAL/ GENERAL PHYSICAL	[<u> </u>						<u> </u>	 " -						
PT PE UNPRESERVED						L										
OT INORGANIC CHEMICAL METALS	 	 														
PT INORGANIC CHEMICAL METALS		-														
PT CYANIDE							ļ.,	-	 	ļ						
PT NITROGEN FORMS									 	<u> </u>						
PT TOTAL SULFIDE										ļ						
202 NITRATE / NITRITE 100ml TOTAL ORGANIC CARBON										 						
OT TOX									 	 						
PT CHEMICAL OXYGEN DEMAND	1								 	<u> </u>						
PtA PHENOLICS	<u> </u>							· · · · · · · · · · · · · · · · · · ·	 	 						
40ml VOA VIAL TRAVEL BLANK									 	 						
40ml VOA VIAL	A 13	A 13.	A 3.	A 3	A 13	A 13,	15. A	1	, ,	1						
OT EPA 413.1, 413.2, 418.1							7									
PT ODOR																
RADIOLOGICAL																
BACTERIOLOGICAL																
40 ml VOA VIAL- 504																
OT EPA 508/608/8080									ļ	<u> </u>						
QT EPA 515.1/8150									 	<u> </u>						
OT EPA 525 OT EPA 525 TRAVEL BLANK									 							
100ml EPA 547								· ····································	 	 						
100ml EPA 531.1									 	 						
OT EPA 548									 	<u> </u>						
OT EPA 549									<u> </u>	***						
OT EPA 632									 							
OT EPA 8015M									 							
OT OA/OC																
OT AMBER																
B OZ. JAR																
2 OZ. JAR					•											
SOIL SLEEVE																
CB VIAL																
PLASTIC BAG																
ERROUS IRON	·															
NCORE																
omments: VOCA Sect -1				1	14					ليسييا						

Date/Time: 118806 08:55

Sample Numbering Completed By:

[H:\DOCS\WP80\LAB_DOCS\FORMS\SAMREC2.WPI

06-12354

BC LABORATORIES, INC.

4100 Atlas Court □ Bakersfield, CA 93308 (661) 327-4911 □ FAX (661) 327-1918

CHK BY	DISTRIBUTION
7LR	DKR I I I
CHAI	N OF CUSTODY

							An	aly	sis	Red	que	ste	đ		
Circle one: Phillips 66 / Unocal Address: 171 First Street City: Livermore State: CA Zip:		Consultant Firm: TRC 21 Techology Drive Irvine, CA 92618-2302 Attn: Anju Farfan		MATRIX (GW) Ground- water (S) Soil	BTEX/MTBE by 8021B, Gas by 8015	TPH GAS by 8015M	TPH DIESEL by 8015	8260 full list w/ MTBE & oxygenates	BTEX/MTBE/OXYS BY 8260B	ETHANOL by 8260B	TPH -G by GC/MS	EDB/EDC by \$2600		nested	
		4-digit site#: 4166 Workorder#61237-4566956772 Project#: 41060001/FAZO											(WW)		Turnaround Time Requested
Phillips 66 /Unocal Mgr:		Sampler Name: Nike T		Sludge										aroui	
Lab#	ab# Sample Description		Point Name	Date & Time Sampled		BTEX	TPH (TPH	8260	BTE	ETH/	TPH	EDB,		Turn
		(1-1		11221-06 075	3 Gu					X	>	\times	X		STO
	-2	U-2		11-21-06 082	3 GW					X	X	X	X		STI
	-3	4-6		11-21-06 093	8 GW				ļ	X	\geq	X	X		STI
	- A	U-4		11-21-06 1009	, GW					X	X	X	X		ST
	-5	4-5		11-21-06 1034	6w	ļ				X	X	X	X		51
	-6	U-7		11-21-06 1110	GW					X	X	X	X		STI
	-7	u-3	, , , , , , , , , , , , , , , , , , , 	11-21-06 0900	GV .					X	X	X			STO
Comments: Relinquishe 72 P		Relinquished by: (: (Signature)			Received by: Recay RATEL					Date & Time				
CLOBAL ID			Relinquished by:	Signature) 19. 3	Series				d by:	,			e & Tin	1358	?
GLOBAL ID: TOGOOI (1777			Relinquished by (Signature) Relinquished by (Signature) Relinquished by (Signature) (P) = PRESERVATIVE				Received by: Tem Oba Feni					Date & Time 11/28/06 0039			

STATEMENTS

Purge Water Disposal

Non-hazardous groundwater produced during purging and sampling of monitoring was accumulated at TRC's groundwater monitoring facility at Concord, California, for trans portation by Onyx Transportation, Inc., to the ConocoPhillips Refinery at Rodeo, California. Disposal at the Rodeo facility was authorized by ConocoPhillips in accordance with "ESD Standard Operating Procedures – Water Quality and Compliance", as revised on February 7, 2003. Documentation of compliance with ConocoPhillips requirements is provided by an ESD Form R -149, which is on file at TRC's Concord Office. Purge water containing a significant amount of liquid -phase hydrocarbons was accumulated separately in drums for transportation and disposal by Filter Recycling, Inc.

Limitations

The fluid level monitoring and groundwater sampling activities summarized in this report have been performed under the responsible charge of a California Registered Geologis t or Registered Civil Engineer and have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. No warranty, express or implied, is made regarding the conclusions and professional opinions presented in this report. The conclusions are based solely upon an analysis of the observed conditions. If actual conditions differ from those described in this report, our office should be notified.