#### RECEIVED

By dehloptoxic at 9:24 am, Nov 07, 2006



76 Broadway Sacramento, California 95818

October 26, 2006

Mr. Barney Chan Alameda County Health Agency 1131 Harbor Bay Parkway Alameda, California 94502

Re:

Report Transmittal Quarterly Report Third Quarter – 2006 76 Service Station #7176 7850 Amador Valley Boulevard Dublin, California

Dear Mr. Chan:

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: 916-558-7609

Sincerely,

**Thomas Kosel** 

**Risk Management & Remediation** 

mar H. Koal

**Attachment** 

October 26, 2006

Mr. Barney Chan Alameda County Health Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Re: Quarterly Summary Report -Third Quarter 2006

Delta Project No. C107176021

Dear Mr. Chan:

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

#### **Service Station**

#### **Location**

DANIEL J. DAVIS

No. 6435

76 Service Station No. 7176

7850 Amador Valley Boulevard Dublin, California

Sincerely,

**Delta Consultants** 

Ben Wright Staff Geologist

Forward:

Daniel J. Davis, R.G.

Senior Project Manager

TRC - Semi-Annual Monitoring Report

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



## QUARTERLY SUMMARY REPORT Third Quarter 2006 76 Service Station No. 7176 7850 Amador Valley Road Dublin, California

#### PREVIOUS ASSESSMENT

November 1994 - Unocal Corporation (Unocal) replaced the fuel underground storage tanks (USTs), removed the used-oil UST and associated product piping, and removed the oil/water separator. No holes or signs of leakage were observed in the fuel USTs, however, eight holes up to 0.5-inches in diameter were observed in the used oil UST.

October 1995 - Six soil borings (B1 through B6) and three onsite monitor wells (U1 through U3) were completed.

<u>March 1998</u> - Tosco Marketing Company (Tosco, now ConocoPhillips) conducted an offsite soil and groundwater investigation that included the installation of two offsite groundwater monitoring wells (MW4 and MW5).

June 2001 - The Addendum to Request and Work Plan for Case Closure was completed.

November 2004 – Four soil borings (SB-1 through SB-4) were completed. The site data is documented in the December 10, 2004 *Limited Phase II Environmental Site Assessment* report. Based on report findings, residual concentrations of total petroleum hydrocarbons as diesel (TPH-D) (7.1 mg/kg) were detected in the vicinity of SB-3. Dissolved hydrocarbon concentrations were detected in each soil boring with the exception of SB-4. Maximum concentrations were detected as follows: TPH-D (1,100  $\mu$ g/l in SB-1), total petroleum hydrocarbons as gasoline (TPH-G) (9,700  $\mu$ g/l in SB-3) and methyl tertiary butyl ether (MTBE) (3.0  $\mu$ g/l in SB-1). Benzene was not detected above the laboratory detection limit of 2.5  $\mu$ g/l /l.

January 2005 - ATC became the new site lead consultant.

<u>September 2005</u> – Site environmental consulting responsibilities were transferred to Delta Consultants.

#### **SENSITIVE RECEPTORS**

<u>August 2000</u> - A *Request and Work Plan for Case Closure* was submitted that presented results of a groundwater receptor survey, risk-based corrective action Tier II analysis and requested environmental closure. No active groundwater production wells were positively identified within the survey radius during the agency and field groundwater receptor surveys.

#### **GROUNDWATER MONITORING AND SAMPLING**

This site is on a semi-annual monitoring program. During the most recent groundwater monitoring event, conducted on September 11, 2006, depth to groundwater ranged from 14.91 feet (MW-5) to 17.49 feet (U-3) below top of casing (TOC). The

groundwater flow direction was southeast at a gradient of 0.005 foot per foot (ft/ft). Historic groundwater flow directions are shown in Attachment A.

During the September 2006 sampling event, maximum detectable hydrocarbon concentrations in groundwater samples were as follows: total petroleum hydrocarbons with gasoline distinction (TPH-G) (2,700  $\mu$ g/l in U-1), petroleum hydrocarbons with diesel distinction (TPH-D) (1,200  $\mu$ g/l in U-1), and MTBE (2.7  $\mu$ g/l in U-2).

#### **REMEDIATION STATUS**

Approximately 5,000 gallons of groundwater were removed from the fuel UST excavation during the 1994 UST replacement activities. A total of 15,511 gallons of groundwater have been removed historically from the site through periodic groundwater purging of the UST cavity. Approximately 1,863 tons of hydrocarbonimpacted soil were excavated and removed from the site during the 1994 UST replacement activities.

#### **CHARACTERIZATION STATUS**

Hydrocarbon concentrations in the soil and groundwater are limited to a small area surrounding the UST cavity and dispenser islands. Groundwater beneath the site is delineated with the exception of TPH-G and TPH-D concentrations in MW-4. These concentrations have shown a decreasing trend since 2001; however, the TPH-G plume may not be stable at this time.

#### RECENT CORRESPONDENCE

No recent correspondence was documented during this reporting period.

#### THIS QUARTER ACTIVITIES (Third Quarter 2006)

1. TRC conducted the semi-annual monitoring and sampling event at the site.

#### **WASTE DISPOSAL SUMMARY**

No waste was disposed of from the site during this reporting period.

#### **NEXT QUARTER ACTIVITIES (Fourth Quarter 2006)**

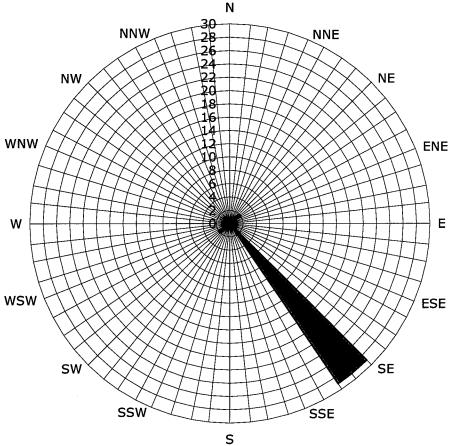
1. Discuss site closure requirements and strategy with Alameda County Health Agency.

**CONSULTANT:** Delta Consultants

Attachment A - Historic Groundwater Flow Directions

#### Historic Groundwater Flow Directions ConocoPhillips Site No. 7176

7850 Amador Valley Boulevard Dublin, California



■ Groundwater Flow Direction

Legend
Concentric circles represent
quarterly montoring events
Fourth Quarter 1995 through Third
Quarter 2006
35 data points shown

## TRC



October 6, 2006

ConocoPhillips Company 76 Broadway Sacramento, CA 95818

ATTN:

MRS. SHELBY LATHROP

SITE:

**76 STATION 7176** 

7850 AMADOR VALLEY BLVD.

DUBLIN, CALIFORNIA

RE:

SEMI-ANNUAL MONITORING REPORT

APRIL THROUGH SEPTEMBER 2006

Dear Mrs. Lathrop:

Please find enclosed our Semi-Annual Monitoring Report for 76 Station 7176, located at 7850 Amador Valley Blvd., Dublin, 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. Daniel Davis, Delta Environmental Consultants, Inc. (3 copies)

Enclosures 20-0400/7176R06.QMS



#### SEMI-ANNUAL MONITORING REPORT APRIL THROUGH SEPTEMBER 2006

76 STATION 7176 7850 Amador Valley Blvd. Dublin, California

Prepared For:

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

By:

Senior Project Geologist, Irvine Operations October 5, 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
	Figure 6: Dissolved-Phase TPH-D Concentration Map
Graphs	Groundwater Elevations vs. Time
	Benzene Concentrations vs. Time
	MTBE Concentrations vs. Time
Field Activities	General Field Procedures
	Field Monitoring Data Sheet – 9/11/06
	Groundwater Sampling Field Notes – 9/11/06
Laboratory	Official Laboratory Reports
Reports	Quality Control Reports
	Chain of Custody Records
Statements	Purge Water Disposal
	Limitations

# Summary of Gauging and Sampling Activities April through September 2006 76 Station 7176 7850 Amador Valley Boulevard Dublin, CA

Project Coordinator: <b>Shelby L</b> Telephone: <b>916-558</b>	_	Water Sampling Compiled by: <b>Da</b>	
Date(s) of Gauging/Sampling E	vent: <b>09/11/06</b>		
Sample Points			•
Groundwater wells: 3 on Purging method: <b>Diaphragm</b> Purge water disposal: <b>Onyx/F</b> Other Sample Points: <b>0</b>	pump/bailer	Wells gauged: 5	Wells sampled: 5
Liquid Phase Hydrocarbons	(LPH)		
Wells with LPH: <b>0</b> Maximu LPH removal frequency: <b>n/a</b> Treatment or disposal of water,	m thickness (feet): <b>n</b> /LPH: <b>n/a</b>	/a Method: <b>n/a</b>	
Hydrogeologic Parameters			
Depth to groundwater (below T Average groundwater elevation Average change in groundwater Interpreted groundwater gradie Current event: 0.005 ft/s Previous event: 0.003 ft/s	(relative to available lor relevation since previon ent and flow direction: ft, southeast	ocal datum): <b>340.48</b> ous event: <b>-0.50 fee</b>	
Selected Laboratory Results	3		
Wells with detected <b>Benzene:</b> Maximum reported benzene		lls above MCL (1.0 μ	g/l): <b>n/a</b>
	<b>3</b> Max		
Wells with <b>TPH-G by GC/MS</b> Wells with <b>MTBE</b>		ximum: <b>2,700 µg/l</b> ximum: <b>2.7 µg/l (U</b>	• •

### **TABLES**

#### TABLE KEY

#### **STANDARD ABBREVIATIONS**

-- = 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: <u>Surface Elevation Measured Depth to Water + (Dp x LPH Thickness)</u>, 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 resurvey.

#### REFERENCE

TRC began groundwater monitoring and sampling for site 76 Station 7176 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

#### Contents of Tables Site: 76 Station 7176

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

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
September 11, 2006
76 Station 7176

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-D	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)	(µg/l)	
MW-4		(Screen I	nterval in fe	et: 10.0-25	5.0)										
09/11/0	6 356.41	16.16	0.00	340.25	-0.57	ND<50		110	ND<0.50	ND<0.50	ND<0.50	ND<0.50		1.0	
MW-5 (Screen Interval in feet: 10.0-25.0)															
09/11/0	6 355.03	14.91	0.00	340.12	-0.58	ND<50		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	-	ND<0.50	
U-1		(Screen I	aterval in fe	et: 10.0-30	0.0)										
09/11/0	6 355.59	15.11	0.00	340.48	-0.47	1200		2700	ND<0.50	ND<0.50	2.0	0.79		1.6	
U-2		(Screen I	nterval in fe	et: 10.0-30	0.0)										
09/11/0	6 356.55	15.62	0.00	340.93	-0.32	790		2300	ND<0.50	ND<0.50	1.0	1.0		2.7	
U-3		(Screen In	iterval in fe	et: 10.0-30	0.0)										
09/11/0	6 358.09	17.49	0.00	340.60	-0.55	ND<50		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	

Table 1 a
ADDITIONAL CURRENT ANALYTICAL RESULTS
76 Station 7176

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)
<b>MW-4</b> 09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>MW-5</b> 09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>U-1</b> 09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>U-2</b> 09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>U-3</b> 09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

Date Sample	TOC d Elevatio	Depth to on Water	LPH Thickness		Change in Elevation	TPH-D	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)	(μg/l)	
MW-4		(Screen Int	erval in fee	t: 10.0-25.0	))						-				
04/2:	3/98 356	.41 12.11	0.00	344.30			2500		5.9	6.4	16	31	ND		
07/0	8/98 356	.41 13.70	0.00	342.71	-1.59	1400	1000		ND	ND	ND	ND	ND		
10/0:	5/98 356	.41 15.18	0.00	341.23	-1.48		890		ND	ND	ND	14	ND	~=	
01/04		.41 16.39	0.00	340.02	-1.21	71	230		0.56	1.3	1.4	1.8	10		
D 01/04	4/99 356	.41 16.39	0.00	340.02	-1.21	71									
04/0:		.41 14.61	0.00	341.80	1.78	340	620		ND	1.8	2.1	ND	6	9.3	
D 04/0:		.41 14.61	0.00	341.80	1.78	210									
07/0		.41 15.43	0.00	340.98	-0.82	260	700		2.1	ND	1.9	2.4	ND	21	
D 07/0				340.98	-0.82	310									
09/30				340.14	-0.84	420	582		2.6	1.30	1.98	ND	23.1	22.5	
D 09/30	0/99 356	.41 16.27	0.00	340.14	-0.84	220									
01/03		.41 17.50	0.00	338.91	-1.23	250	800		4.2	4.6	3.3	11	31	17	
D 01/03		.41 17.50		338.91	-1.23	260									
04/04		.41 13.91	0.00	342.50	3.59	460	710		2	1.3	4.4	2.0	21	22	
D 04/04	1/00 356	.41 13.91	0.00	342.50	3.59	340								***	•
07/14		.41 15.58	0.00	340.83	-1.67	220	490		0.89	1.3	0.85	1.8	21	12	
D 07/14		.41 15.58	0.00	340.83	-1.67	76									
10/27		41 16.96	0.00	339.45	-1.38	160	598	40.74	ND	1.56	4.65	ND	15.4	14	
D 10/27				339.45	-1.38	120									
01/08	3/01 356	41 16.64	0.00	339.77	0.32		522		4.09	1.69	2.53	1.26	17.2	14.3	
04/03			0.00	340.95	1.18	180	575		ND	ND	ND	ND	14.0	11.6	
D 04/03				340.95	1.18	ND					-				
07/0€	5/01 356	41 16.63	0.00	339.78	-1.17	230	720		4.7	1.5	2.5	0.74	10	7.1	

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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

Date Sampled		Depth to Water	LPH Thickness		Change in Elevation	TPH-D	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)	(µg/l)	
D <b>MW-4</b>	continued														
D 07/06/	356.41	16.63	0.00	339.78	-1.17	200									
10/05/	01 356.41	17.38	0.00	339.03	-0.75	180	650		4.3	1.2	1.1	1.8	5.9	5.4	
D 10/05/	01 356.41	17.38	0.00	339.03	-0.75	140									
01/03/	02 356.41	15.10	0.00	341.31	2.28	390	340		2.9	1.4	1.7	ND<1.0	ND<10/	3.1	
D 01/03/	02 356.41	15.10	0.00	341.31	2.28	360									
04/01/		14.85	0.00	341.56	0.25	160	340		ND<0.50	2.7	ND<0.50	0.66	ND<5.0	2.2	
D 04/01/	02 356.41	14.85	0.00	341.56	0.25	100		~							
07/01/		15.53	0.00	340.88	-0.68	130		280	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.58	
D 07/01/		15.53	0.00	340.88	-0.68	97									
01/24/		14.52	0.00	341.89	1.01	52		· 170	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
D 01/24/	356.41	14.52	0.00	341.89	1.01	ND<50									
07/28/		15.47	0.00	340.94	-0.95	110		380	ND<0.50	ND<0.50	ND<0.50	ND<1	ND<2	ND<2	
D 07/28/	356.41	15.47	0.00	340.94	-0.95	130			-~		M-4				
02/04/		15.55	0.00	340.86	-0.08	94		270	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
07/02/		16.52	0.00	339.89	-0.97	ND<200		170	ND<0.5	ND<0.5	ND<0.5	ND<1		0.83	
01/11/		14.83	0.00	341.58	1.69	110		460	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.87	
D 01/11/	356.41	14.83	0.00	341.58	1.69	85									
07/08/		14.33	0.00	342.08	0.50	67		120	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.60	
D 07/08/		14.33	0.00	342.08	0.50	67									
01/06/		15.59	0.00	340.82	-1.26	ND<200		130	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.3	
09/11/	356.41	16.16	0.00	340.25	-0.57	ND<50		110	ND<0.50	ND<0.50	ND<0.50	ND<0.50		1.0	
MW-5			erval in feet	: 10.0-25.0	))										
04/23/		11.15		343.88			120		0.53	0.90	1.0	3.8	13		
07/08/	98 355.03	12.63	0.00	342.40	-1.48	170	ND		ND	ND	ND	ND	12		
7176	-							Page 2	of 10						

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-D	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)	(μg/l)	
MW-5	continued														
10/05/	98 355.03	14.00	0.00	341.03	-1.37		ND		ND	ND	ND	ND	12		
01/04/	99 355.03	15.21	0.00	339.82	-1.21	ND	ND		ND	ND	ND	ND	ND		
04/05/	99 355.03	13.76	0.00	341.27	1.45	ND	ND		ND	ND	ND	ND	ND	ND	
07/01/	99 355.03	14.48	0.00	340.55	-0.72	ND	ND		ND	ND	ND	ND	ND	2.3	
09/30/		15.15	0.00	339.88	-0.67	60.4	50.8		ND	ND	ND	ND	ND	ND	
D 09/30/	99 355.03	15.15	0.00	339.88	-0.67	ND									
01/03/	00 355.03	16.34	0.00	338.69	-1.19	ND	ND		ND	ND	ND	ND	ND	ND	
04/04/0		12.90	0.00	342.13	3.44	69	ND		ND	ND	ND	ND	ND	ND	
D 04/04/0				342.13	3.44	ND								m m	
07/14/			0.00	340.55	-1.58	ND	ND		ND	ND	ND	ND	ND	ND	
10/27/0				339.28	-1.27	ND	ND		ND	ND	ND	ND	ND	ND	
01/08/0				339.78	0.50		ND		ND	ND	ND	ND	ND	ND	
04/03/0			0.00	340.62		ND	ND	на	ND	ND	ND	ND	ND	ND	
07/06/0			0.00	339.51		ND	ND		ND	ND	ND	ND	ND	ND	
10/05/0			0.00	338.75		ND<50	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	
01/03/0			0.00	341.02		ND<51	ND<50		ND<0.50			ND<0.50	ND<5.0	1.6	
04/01/0			0.00	341.39		ND<50	ND<50		,			ND<0.50	ND<5.0	3.5	
07/01/0			0.00	340.52		ND<60	-	ND<50		ND<0.50		ND<1.0		2.3	
01/24/0			0.00	341.50		ND<50		ND<50		ND<0.50		ND<1.0		4.3	
07/28/0			0.00	340.63	-0.87	ND<50		ND<50	ND<0.50		ND0.50	ND<1.0		3.4	
02/04/0 07/02/0			0.00	340.62		ND<50		ND<50		ND<0.50	ND<0.50	ND<1.0		2.6	
			0.00	339.62		ND<200		80	ND<0.5	ND<0.5	ND<0.5	ND<1		2.0	
01/11/(			0.00	341.29		ND<50		ND<50		ND<0.50		ND<1.0		0.64	
07/08/0	)5 355.03	13.24	0.00	341.79	0.50	220		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	

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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-D	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)	(µg/l)	
D <b>MW-5</b>	continued	 [													
D 07/08	05 355.03	3 13.24	0.00	341.79	0.50	ND<50			M=						
01/06	06 355.03	3 14.33	0.00	340.70	-1.09	ND<200		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
09/11	06 355.03	3 14.91	0.00	340.12	-0.58	ND<50	Pr 100	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
U-1	(	Screen Inte	erval in feet	: 10.0-30.0	))										
07/08	95 355.62	2 12.59	0.00	343.03		9400	39000		1500	19	1600	5200		'	
10/12	95 355.62	2 15.38	0.00	340.24	-2.79	4200	33000		1400	ND	1400	3100			
01/11	96 355.62	2 16.33	0.00	339.29	-0.95	8200	8300		690	11	680	1500			
04/11.	96 355.62	2 12.20	0.00	343.42	4.13	5630	3200		110	ND	180	290	790		
07/10	96 355.62	2 13.84	0.00	341.78	-1.64	2200	2600		81	4.4	210	230	510		
10/30	96 355.62	2 15.85	0.00	339.77	-2.01	560	2200		67	19	140	150	360		
01/27	97 355.62	2 12.20	0.00	343.42	3.65	2300	4600		98	ND	360	290	150		
04/08	97 355.62	2 13.46	0.00	342.16	-1.26	1300	2800		50	ND	220	140	ND		
07/17/	97 355.62	2 15.30	0.00	340.32	-1.84	460	2300		30	4.5	140	94	190		
10/17/	97 355.62	2 16.33	0.00	339.29	-1.03	510	1500		31	6.7	110	88	220		
01/19/	98 355.62	2 14.34	0.00	341.28	1.99	1900	3100		46	3.4	310	200	170		
D 01/19/	98 355.62	2 14.34	0.00	341.28	1.99	1300									
04/23/	98 355.59	11.16	0.00	344.43	3.15		3400		72	3.8	470	350	280		
07/08/	98 355.59	12.67	0.00	342.92	-1.51	2000	4500		51	ND	590	430	190		
10/05/	98 355.59	14.57	0.00	341.02	-1.90		7500		53	ND	680	350	190	180	
01/04/	99 355.59	15.35	0.00	340.24	-0.78	2700	10000	No. MI	ND	ND	1200	540		ND	
D 01/04/	99 355.59	15.35	0.00	340.24	-0.78	2500									
04/05/		13.64	0.00	341.95	1.71	920	4900		34	ND	350	150	150	55	
D 04/05/	99 355.59	13.64	0.00	341.95	1.71	570									
07/01/	99 355.59	14.39	0.00	341.20	-0.75	2700	10000		45	ND	850	420	260	110	
7470								D 4	- 610						

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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-D	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)	(µg/l)	
D U-1 c	ontinued														
D 07/01/	99 355.59	14.39	0.00	341.20	-0.75	3600									
09/30/	99 355.59	15.32	0.00	340.27	-0.93	2360	7150		ND	ND	415	84.4	ND	195	
D 09/30/	99 355.59	15.32	0.00	340.27	-0.93	1680									
01/03/	00 355.59	16.51	0.00	339.08	-1.19	2000	5400		28	8.4	180	33	160	120	
D 01/03/	00 355.59	16.51	0.00	339.08	-1.19	1700									
04/04/		12.89	0.00	342.70	3.62	990	4800		30	ND	210	93	170	160	
D 04/04/		12.89	0.00	342.70	3.62	1400		~~							
07/14/		14.56	0.00	341.03	-1.67	2800	6200		41	16	170	32	170	120	
D 07/14/		14.56	0.00	341.03	-1.67	1200									
10/27/			0.00	339.63	-1.40	1400	3830		16.8	ND	68.6	7.99	55.2	38	
D 10/27/		15.96	0.00	339.63	-1.40	1300									
01/08/			0.00	339.87	0.24		2410		14.7	4.30	30.5	5.04	34.5	9.33	
04/03/		14.46	0.00	341.13	1.26	1500	3330		15.8	5.96	74.8	7.06	ND	13.3	
D 04/03/			0.00	341.13	1.26	830									
07/06/		15.65	0.00	339.94	-1.19	1600	4300		23	6.4	57	6.8	58	36	
D 07/06/		15.65	0.00	339.94	-1.19	1200									
10/05/			0.00	339.14	-0.80	2500	3800		19	ND<5.0	19	ND<5.0	64	36	
D 10/05/			0.00	339.14	-0.80	2300									
01/03/			0.00	341.41	2.27	2200	4500		25	ND<10	24	ND<10	ND<100	23	
D 01/03/			0.00	341.41	2.27	2200									
04/01/			0.00	341.87	0.46	1800	5300		36	6.7	48	12	93	59	
D 04/01/			0.00	341.87	0.46	1200								H=	
07/01/			0.00	340.98	-0.89	2100		3900	ND<0.50	ND<0.50	ND<0.50	3.9		23	
D 07/01/	02 355.59	14.61	0.00	340.98	-0.89	2100									

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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

	Date ampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-D	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)	(μg/l)	
	U-1 co	ntinued														
	01/24/0	3 355.59	13.82	0.00	341.77	0.79	2100		3400	ND<2.5	ND<2.5	37	ND<5.0		21	
D	01/24/0	3 355.59	13.82	0.00	341.77	0.79	1700									
	07/28/0	3 355.59	14.51	0.00	341.08	-0.69	2100		7100	ND<2.5	ND<2.5	12	ND<5	13	13	
D	07/28/0	3 355.59	14.51	0.00	341.08	-0.69	1200									
	02/04/0	4 355.59	14.66	0.00	340.93	-0.15	1300		4000	ND<0.50	ND<0.50	13	ND<1.0		9.6	
	07/02/0	4 355.59	16.57	0.00	339.02	-1.91	400		2600	0.56	ND<0.5	5.3	ND<1		5.4	
	01/11/0		13.91	0.00	341.68	2.66	2000		5000	0.59	ND<0.50	7.8	ND<1.0		4.2	
D	01/11/0	5 355.59	13.91	0.00	341.68	2.66	1500									
	07/08/0		13.26	0.00	342.33	0.65	1300		3100	ND<0.50	ND<0.50	4.3	ND<1.0		2.2	
	01/06/0		14.64	0.00	340.95	-1.38	1200		2200	ND<0.50	ND<0.50	3.1	ND<1.0		2.8	
	09/11/0	6 355.59	15.11	0.00	340.48	-0.47	1200		2700	ND<0.50	ND<0.50	2.0	0.79		1.6	
U-2			creen Inte	rval in feet	: 10.0-30.0	<b>)</b> )	•									
	07/08/9			0.00	343.91		4700	17000		430	ND	2200	590			
	10/12/9		16.01	0.00	340.58	-3.33	3600	24000		310	60	1900	190			
	01/11/9		17.06	0.00	339.53	-1.05	8600	10000		210	55	1400	240			
	04/11/9	6 356.59	12.75	0.00	343.84	4.31	1900	7700		130	27	1100	110	340		
	07/10/9	6 356.59	14.42	0.00	342.17	-1.67	2300	5600		59	15	610	42	250		
	10/30/9	6 356.59	16.82	0.00	339.77	-2.40	1800	7700		67	35	1000	54	260		
	01/27/9		12.91	0.00	343.68	3.91	660	1600		14	ND	130	7.0	100		
	04/08/9		14.07	0.00	342.52	-1.16	2000	4300		35	ND	400	16	ND		
	07/17/9		15.96	0.00	340.63	-1.89	1300	6200		17	22	410	ND	130		
	10/17/9		17.03	0.00	339.56		1400	7100		71	26	520	50	ND		
	01/19/9		15.10	0.00	341.49	1.93	2100	5300		46	11	350	16	110		
D	01/19/9	8 356.59	15.10	0.00	341.49	1.93	1500	46								

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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

	Date ampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-D	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)	(µg/l)	
	U-2 co	ntinued								-						
	04/23/98	356.55	11.74	0.00	344.81	3.32		3200		23	11	210	38	160		
	07/08/98	356.55	13.27	0.00	343.28	-1.53	1100	1600		34	8.5	100	7.4	190		
	10/05/98	8 356.55	14.90	0.00	341.65	-1.63		2900		37	8.4	110	7.3	78		
	01/04/99	9 356.55	15.94	0.00	340.61	-1.04	670	2200		35	ND	17	ND	86		
D	01/04/99		15.94	0.00	340.61	-1.04	250								ger No.	
	04/05/99		14.19	0.00	342.36	1.75	660	4900		21	77	130	310	100	6.9	
D	04/05/99		14.19	0.00	342.36	1.75	490									
	07/01/99	9 356.55	14.98	0.00	341.57	-0.79	210	1500		7.6	ND	ND	ND	ND	35	
D	07/01/99		14.98	0.00	341.57	-0.79	440							trim		
	09/30/99		16.00	0.00	340.55	-1.02	483	256		1.85	ND	2.42	ND	26.3	29.8	
D	09/30/99		16.00	0.00	340.55	-1.02	340									
	01/03/00		17.20	0.00	339.35	-1.20	2400	3400		23	13	ND	44	46	14	
D	01/03/00		17.20	0.00	339.35	-1.20	1900							**		
	04/04/00	356.55	13.50	0.00	343.05	3.70	1000	3600		34	17	56	ND	59	25	
D	04/04/00	356.55		0.00	343.05	3.70	1000									
	07/14/00		15.23	0.00	341.32	-1.73	1000	3100		16	13	15	10	100	19	
D	07/14/00			0.00	341.32	-1.73	350									
_	10/27/00			0.00	339.81	-1.51	2000	4180	~~	30.4	10.2	14.6	ND	55.5	15	
D	10/27/00			0.00	339.81	-1.51	1900									
	01/08/01			0.00	339.87	0.06		3300		33.5	7.32	3.49	ND	66.7	7.49	
_	04/03/01			0.00	341.43	1.56	1500	4290		32.4	9.91	20.1	ND	66.6	18.1	
D	04/03/01			0.00	341.43	1.56	830									
	07/06/01			0.00	340.23	-1.20	1400	4700		35	11	12	5.3	62	19	
D	07/06/01	356.55	16.32	0.00	340.23	-1.20	1100									

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Table 2 HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS July 1995 Through September 2006 **76 Station 7176** 

Date Sample	TOC d Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-D	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)	(µg/l)	
U-2	continued														
10/05	5/01 356.5	5 17.15	0.00	339.40	-0.83	3200	3600		31	9.6	8.7	6.9	62	13	
D 10/05	5/01 356.5	5 17.15	0.00	339.40	-0.83	1900				***					
01/03		5 14.90	0.00	341.65	2.25	2300	4600		34	11	15	5.8	62	7.5	
D 01/03		5 14.90	0.00	341.65	2.25	2100	·								
04/01		5 14.38		342.17	0.52	1400	3500		38	9.3	10	6.5	87	18	
D 04/01	1/02 356.5	5 14.38	0.00	342.17	0.52	470									
07/01				341.31		ND<50		4500	ND<0.50	ND<0.50	5.0	1.7		ND<0.50	
01/24				342.24		860		2300	1.1	1.5	6.9	2.4		5.9	
D 01/24				342.24		570									
07/28				341.37	-0.87	1300		5600	ND<2.5	ND<2.5	3.4	ND<5	ND<10	ND<10	
D 07/28				341.37		710									
02/04				341.19		1300		4400	ND<5.0	ND<5.0	7.0	ND<10		ND<20	
07/02				340.27		380		5700	1.4	2.8	6.6	5.5		6.6	
01/11			0.00	341.96	1.69	1800		5800	0.99	2.5	5.4	5.1		ND<5.0	
D 01/11			0.00	341.96	1.69	1100									
07/08		5 13.97	0.00	342.58	0.62	1100		3000	0.56	1.9	3.0	3.2		5.0	
D 07/08		5 13.97	0.00	342.58	0.62	960									
01/06				341.25		1100		1600	ND<0.50	ND<0.50	0.97	ND<1.0		2.1	
09/11	/06 356.5	5 15.62	0.00	340.93	-0.32	790		2300	ND<0.50	ND<0.50	1.0	1.0		2.7	
U-3		-	erval in feet	: 10.0-30.0	0)										
07/08				343.55		710	1100		0.57	2.1	1.7	2.4			
10/12				340.53		470	560		ND	0.87	0.7	1.1			
01/11				339.48		260	230		0.62	0.91	0.97	1.9			
04/11	/96 358.1	3 13.20	0.00	344.93	5.45	ND	68		ND	ND	ND	ND	ND		
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

S	Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-D	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)	$(\mu g/l)$	(μg/l)	
	U-3 co	ntinued														
	07/10/9	5 358.13	15.98	0.00	342.15	-2.78	ND	ND		ND	ND	ND	ND	ND		
	10/30/9	358.13	18.24	0.00	339.89	-2.26	ND	70		ND	ND	ND	ND	ND		
	01/27/9	7 358.13	14.41	0.00	343.72	3.83	ND	ND		ND	ND	ND	ND	ND		
	04/08/9	7 358.13	15.73	0.00	342.40	-1.32	ND	ND		ND	ND	ND	ND	ND		•
	07/17/9	7 358.13	17.54	0.00	340.59	-1.81	ND	ND		ND	ND	ND	ND	ND		
	10/17/9	7 358.13	18.64	0.00	339.49	-1.10	63	ND		ND	ND	ND	ND	ND		
	01/19/9		16.67	0.00	341.46	1.97	68	ND		ND	ND	ND	ND	ND		
D	01/19/9	358.13	16.67	0.00	341.46	1.97	ND									
	04/23/9	358.09	13.28	0.00	344.81	3.35		ND		ND	ND	ND	ND	ND		
	07/08/9	358.09	14.90	0.00	343.19	-1.62	80	ND		ND	ND	ND	ND	ND		
	10/05/98	358.09	16.50	0.00	341.59	-1.60		ND		ND	ND	ND	ND	ND		
	01/04/99	358.09	17.70	0.00	340.39	-1.20	ND	ND		ND	ND	ND	ND	ND		
	04/05/99	358.09	15.67	0.00	342.42	2.03	ND	ND		ND	ND	ND	ND	ND	ND	
	07/01/99	358.09	16.79	0.00	341.30	-1.12	ND	ND		ND	ND	ND	ND	ND	ND	
	09/30/99	358.09	17.60	0.00	340.49	-0.81	ND	ND	*	ND	ND	ND	ND	ND	ND	
	01/03/0	358.09	18.86	0.00	339.23	-1.26	ND	ND		ND	ND	ND	ND	ND	ND	
	04/04/0	358.09	15.10	0.00	342.99	3.76	ND	ND		ND	ND	ND	ND	ND	ND	
	07/14/0	358.09	16.85	0.00	341.24	-1.75	ND	ND		ND	ND	ND	ND	ND	ND	
	10/27/00	358.09	18.35	0.00	339.74	-1.50	ND	ND	Bed (see	ND	ND	ND	ND	ND	ND	
	01/08/0	358.09	18.31	0.00	339.78	0.04		ND		ND	ND	ND	ND	ND	ND ·	
	04/03/0	358.09	16.70	0.00	341.39	1.61	ND	ND		ND	ND	ND	ND	ND	ND	
	07/06/0	358.09	17.90	0.00	340.19	-1.20	ND	ND		ND	ND	ND	ND	ND	. ND	
	10/05/0	358.09	18.71	0.00	339.38	-0.81	ND<50	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	
	01/03/02	358.09	16.41	0.00	341.68	2.30	ND<52	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<1.0	

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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1995 Through September 2006
76 Station 7176

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-D	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)	(µg/l)	
U-3 c	ontinued														
04/01/0	02 358.09	15.87	0.00	342.22	0.54	ND<50	ND<50		ND<0.50	1.1	ND<0.50	1.2	ND<5.0	ND<2.0	
07/01/0	02 358.09	16.77	0.00	341.32	-0.90	1500		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
01/24/0	358.09	15.75	0.00	342.34	1.02	ND<50		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<5.0	ND<2.019	
07/28/0	358.09	16.74	0.00	341.35	-0.99	ND<50		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1	ND<2	ND<2	
02/04/0	04 358.09	16.87	0.00	341.22	-0.13	90		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	**	ND<2.0	
07/02/0	04 358.09	17.87	0.00	340.22	-1.00	ND<200		ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1		ND<0.5	
01/11/0	05 358.09	16.10	0.00	341.99	1.77	ND<50		52	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
07/08/0	05 358.09	15.57	0.00	342.52	0.53	ND<50		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
01/06/0	06 358.09	16.94	0.00	341.15	-1.37	ND<200		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
09/11/0	06 358.09	17.49	0.00	340.60	-0.55	ND<50		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7176

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)
MW-4							
04/05/99	ND	ND	ND	ND	ND	ND	ND
07/01/99	ND	ND	ND	ND	ND	ND	ND
09/30/99	ND	ND	ND	ND	ND	ND	ND
01/03/00	ND	ND	ND	ND	ND	ND	ND
04/04/00	ND	ND	ND	ND	ND	ND	ND
07/14/00	ND	ND	ND	ND	ND	ND	ND
10/27/00	ND	ND	ND	ND	ND	ND	ND
01/08/01	ND	ND	ND	ND	ND	ND	ND
04/03/01	ND	ND	ND	ND	ND	ND	ND
07/06/01	ND	ND	ND	ND	ND	ND	ND
10/05/01	ND<100	ND<1000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/03/02	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
04/01/02	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
07/01/02	ND<5.0	ND<25	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
01/24/03	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
07/28/03	ND<100	ND<500	ND<2	ND<2	ND<2	ND<2	ND<2
02/04/04	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
07/02/04	ND<12	ND<800	ND<0.5	ND<0.5	ND<1	ND<1	ND<1
01/11/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
07/08/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/06/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-5	٠						
04/05/99	ND	ND	ND	ND	ND	ND	ND
07/01/99	ND	ND	ND	ND	ND	ND	ND
09/30/99	ND	ND	ND	ND	ND	ND	ND

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7176

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)		DIPE	ETBE	TAME	
	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	
MW-5								
01/03/00		ND	ND	ND	ND	ND	ND	
04/04/00	ND	ND	ND	ND	ND	ND	ND	
07/14/00	ND	ND	ND	ND	ND	ND	ND	
10/27/00	ND	ND	ND	ND	ND	ND	ND	
01/08/01	ND	ND	ND	ND	ND	ND	ND	
04/03/01	ND	ND	ND	ND	ND	ND	ND	
07/06/01	ND	ND	ND	ND	ND	ND	ND	
10/05/01	ND<100	ND<1000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	
01/03/02	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
04/01/02	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	
07/01/02	ND<5.0	ND<25	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	
01/24/03	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	
07/28/03	ND<100	ND<500	ND<2	ND<2	ND<2	ND<2	ND<2	
02/04/04	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	
07/02/04	ND<12	ND<800	ND<0.5	ND<0.5	ND<1	ND<1	ND<1	
01/11/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	
07/08/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
01/06/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
09/11/06	ND<10	ND<250	ND<0.50	ND<0,50	ND<0.50	ND<0.50	ND<0.50	
U <b>-1</b>								
04/05/99	ND	ND	ND	ND	ND	ND	ND	
07/01/99	ND	ND	ND	ND	ND	ND	ND	
09/30/99	ND	ND	ND	ND	ND	ND	ND	
01/03/00	ND	ND	ND	ND	ND	ND	ND	
04/04/00	ND	ND	ND	ND	ND	ND	ND	
07/14/00	ND	ND	ND	ND	ND	ND	ND	

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7176

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME			
	(µg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)			
U-1 con	tinued									
10/27/00	ND	ND	ND	ND	· ND	ND	ND			
01/08/01	ND	ND	ND ·	ND	ND	ND	ND			
04/03/01	ND	ND	ND	ND	ND	ND	ND			
07/06/01	ND	ND	ND	ND	ND	ND	ND			
10/05/01	ND<100	ND<1000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0			
01/03/02	ND<100	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0			
04/01/02	ND<500	ND<2500	ND<10	ND<10	ND<10	ND<10	ND<10			
07/01/02	ND<5.0	ND<25	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50			
01/24/03	ND<500	ND<2500	ND<10	ND<10	ND<10	ND<10	ND<10			
07/28/03	ND<500	ND<2500	ND<10	ND<10	ND<10	ND<10	ND<10			
02/04/04	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0			
07/02/04	ND<12	ND<800	ND<0.5	ND<0.5	ND<1	ND<1	ND<1			
01/11/05	5.2	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50			
07/08/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50			
01/06/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50			
09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50			
U- <b>2</b>										
04/05/99	ND	ND	ND	ND	ND	ND	ND		,	
07/01/99	ND	ND	ND	ND	ND	ND	ND			
09/30/99	ND	ND	ND	ND	ND	ND	ND			
01/03/00	ND	ND	ND	ND	ND	ND	ND			
04/04/00	ND	ND	ND	ND	ND	ND	ND			
07/14/00	ND	ND	ND	ND	ND	ND	ND			
10/27/00	ND	ND	ND	ND	ND	ND	ND		•	
01/08/01	ND	ND	ND	ND	ND	ND	ND			
04/03/01	ND	ND	ND	ND	ND	ND	ND			

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7176

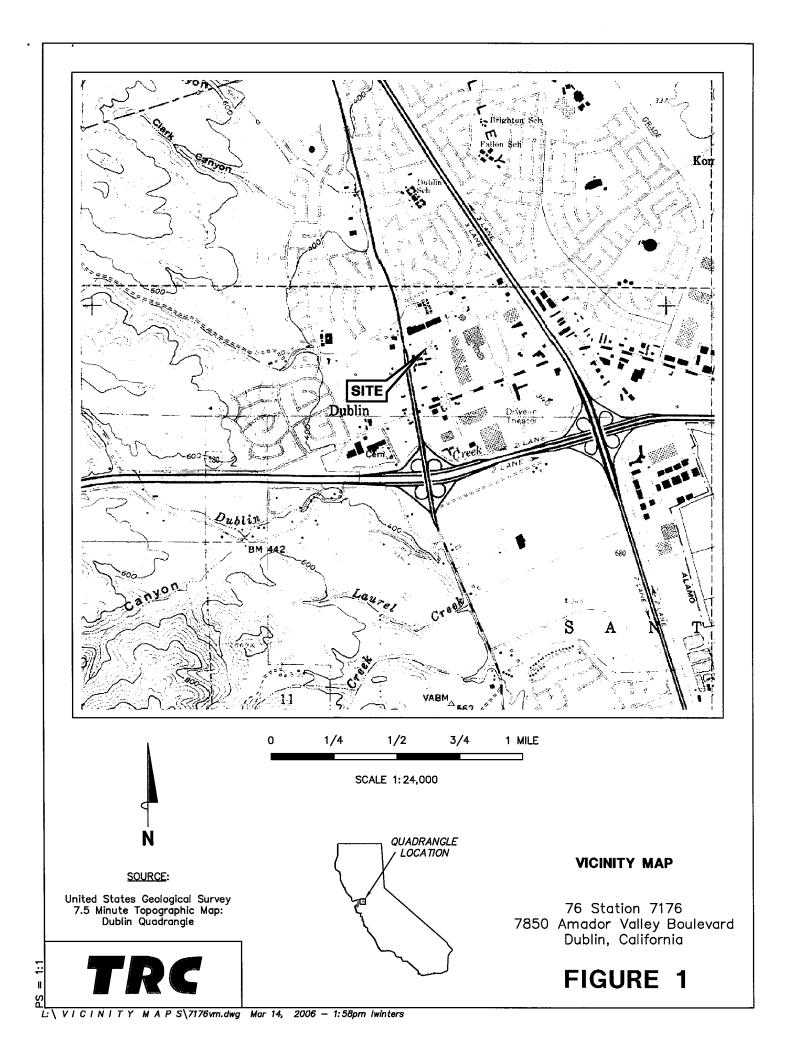
Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
<u></u>	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)
U-2 con	tinued				•		
07/06/01	ND	ND	ND	ND	ND	ND	ND
10/05/01	ND<100	ND<1000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/03/02	ND<100	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
04/01/02	ND<200	ND<1000	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0
07/01/02	ND<5.0	ND<25	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
01/24/03	ND<200	ND<1000	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0
07/28/03	ND<500	ND<2500	ND<10	ND<10	ND<10	ND<10	ND<10
02/04/04	ND<1000	ND<5000	ND<20	ND<20	ND<20	ND<20	ND<20
07/02/04	ND<12	ND<800	ND<0.5	ND<0.5	ND<1	ND<1	ND<1
01/11/05	ND<50	ND<500	ND<5.0	ND<5.0	ND<10	ND<5.0	ND<5.0
07/08/05	ND<50	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
01/06/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
U-3							
04/05/99	ND	ND	ND	ND	ND	ND	ND
07/01/99	ND	ND	ND	ND	ND ·	ND	ND
09/30/99	ND	ND	ND	ND	ND	ND	ND
01/03/00	ND	ND	ND	ND	ND	ND	ND
04/04/00	ND	ND	ND	ND	ND	ND	ND
07/14/00	ND	ND	ND	ND	ND	ND	ND
10/27/00	ND	ND	ND	ND	ND	ND	ND
01/08/01	ND	ND	ND	ND	ND	ND	ND
04/03/01	ND	ND	ND	ND	ND	·ND	ND
07/06/01	ND	ND	ND	ND	ND	ND	ND
10/05/01	ND<100	ND<1000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/03/02	ND<20	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0

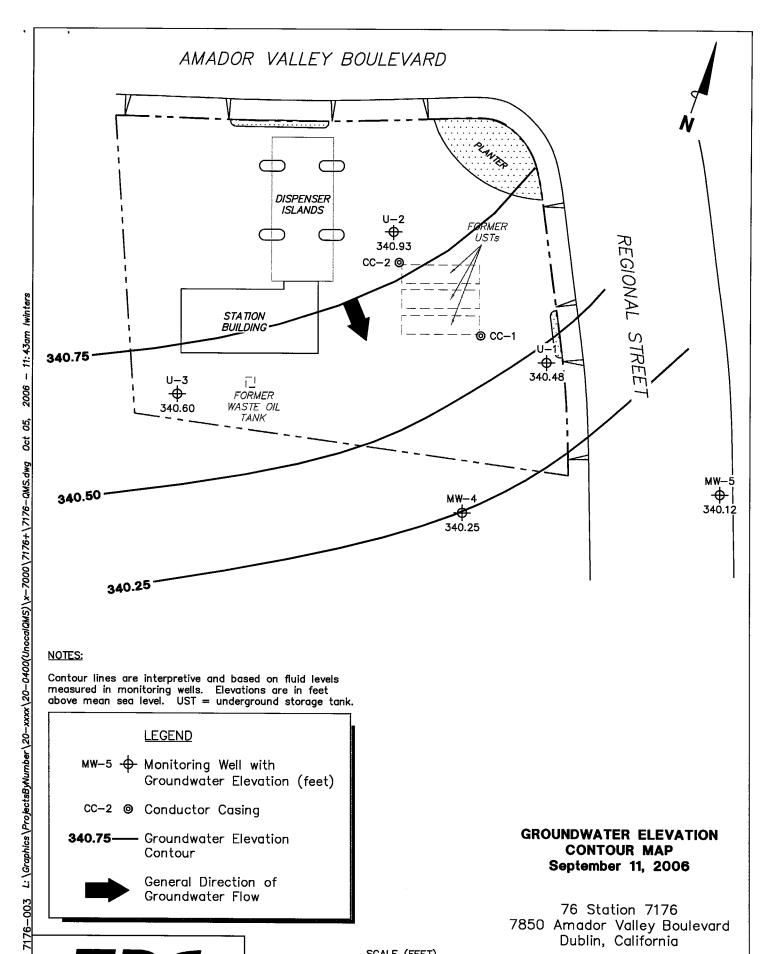
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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7176

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide	1,2-DCA (EDC)	DIPE	ETBE	TAME
			. (EDB)		•		
_	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)
U-3 co	ntinued						
04/01/02	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
07/01/02	ND<5.0	ND<25	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
01/24/03	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
07/28/03	ND<100	ND<500	ND<2	ND<2	ND<2	ND<2	ND<2
02/04/04	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
07/02/04	ND<12	ND<800	ND<0.5	ND<0.5	ND<1	ND<1	ND<1
01/11/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
07/08/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/06/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/11/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50





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

#### **LEGEND**

MW-5 + Monitoring Well with Groundwater Elevation (feet)

CC-2 @ Conductor Casing

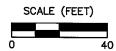
340.75-- Groundwater Elevation Contour

General Direction of Groundwater Flow

#### **GROUNDWATER ELEVATION** CONTOUR MAP September 11, 2006

76 Station 7176 7850 Amador Valley Boulevard Dublin, California





7176-003 L:\Graphics\ProjectsByNumber\20-xxxx\20-0400(UnocalQMS)\x-7000\7176+\7176-QMS.dwg Oct 05,

PS=1:1

2006 - 11:43am lwinters

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPH-G (GC/MS) = total purgeable petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B.  $\mu$ g/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.

#### **LEGEND**

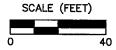
MW-5 + Monitoring Wellwith
Dissolved-Phase TPH-G
(GC/MS)Concentration (μg/l)

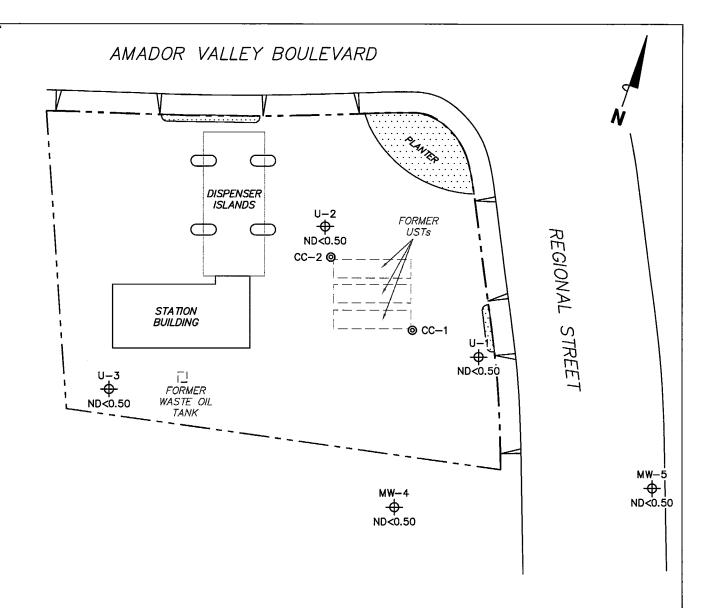
CC-2 ⊚ Conductor Casing

\_1,000— Dissolved-Phase TPH-G (GC/MS) Contour (µg/l) DISSOLVED-PHASE TPH-G (GC/MS) CONCENTRATION MAP September 11, 2006

76 Station 7176 7850 Amador Valley Boulevard Dublin, California

TRC





7176-003 L: \Graphics\ProjectsByNumber\20-xxxx\20-0400(UnocalQMS)\x-7000\7176+\7176-QMS.dwg Oct 05, 2006 - 11:43am lwinters

PS=1:1

µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank.

#### **LEGEND**

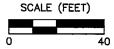
MW-5 + Monitoring Well with
Dissolved-Phase Benzene
Concentration (μg/l)

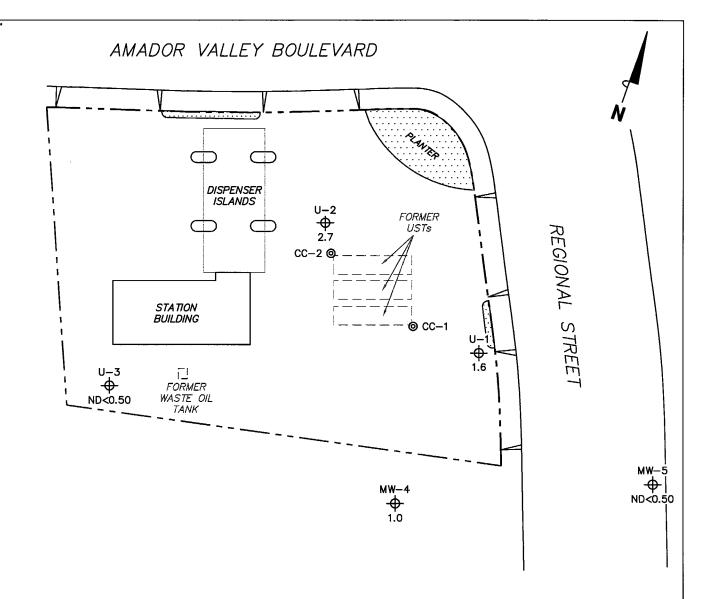
CC-2 ⊚ Conductor Casing

DISSOLVED-PHASE BENZENE CONCENTRATION MAP September 11, 2006

76 Station 7176 7850 Amador Valley Boulevard Dublin, California

TRC





7176-003 L:\Graphics\ProjectsByNumber\20-xxxx\20-0400(UnocalQMS)\x-7000\7176+\7176-QMS.dwg Oct 05, 2006 - 11:43am lwinters

MTBE = methyl tertiary butyl ether.  $\mu g/l$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8260B.

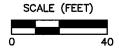
#### **LEGEND**

CC-2 ⊚ Conductor Casing

DISSOLVED-PHASE MTBE CONCENTRATION MAP September 11, 2006

76 Station 7176 7850 Amador Valley Boulevard Dublin, California

TRC



7176--003 L: \Graphics\ProjectsByNumber\20-xxxx\20-0400(UnocalQMS)\x-7000\7176+\7176-QMS.dwg Oct 05, 2006 - 11:43am lwinters

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPH-D = total petroleum hydrocarbons as diesel.  $\mu g/l =$  micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8015M.

#### **LEGEND**

MW-5 + Monitoring Well with
Dissolved-Phase TPH-D
Concentration (μg/l)

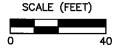
CC-2 Conductor Casing

**\_1,000** Dissolved—Phase TPH—D Contour (µg/I)

DISSOLVED-PHASE TPH-D CONCENTRATION MAP September 11, 2006

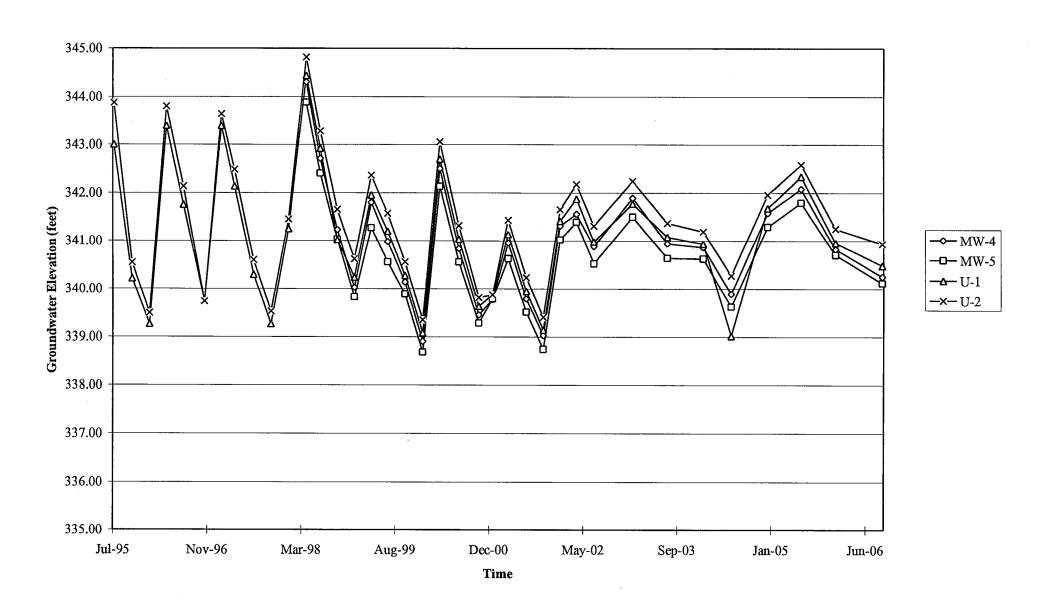
76 Station 7176 7850 Amador Valley Boulevard Dublin, California

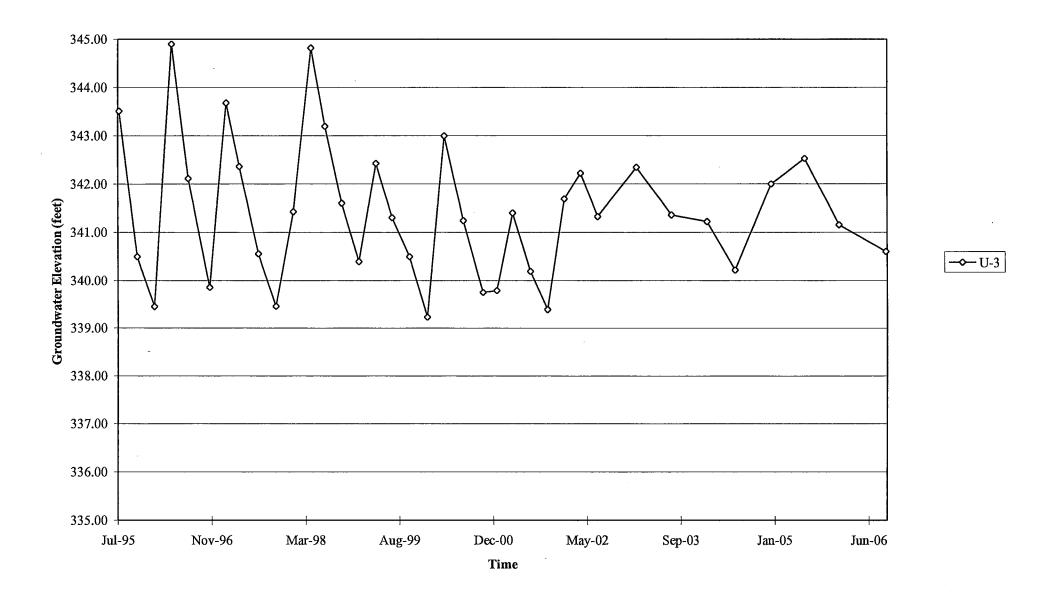
TRC



# **GRAPHS**

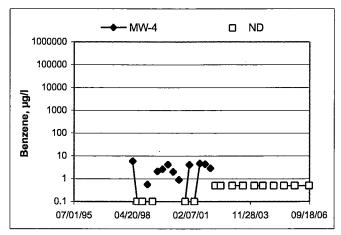
# Groundwater Elevations vs. Time 76 Station 7176

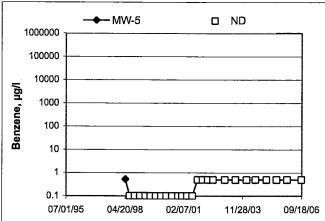


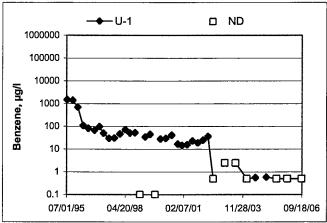


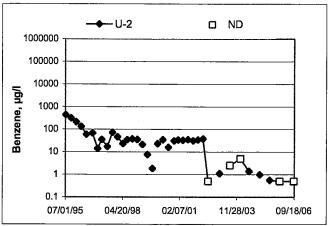
Elevations may have been corrected for apparent changes due to resurvey

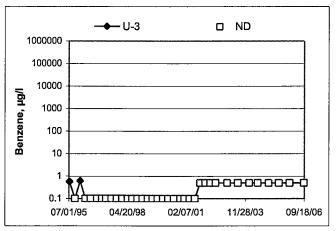
### Benzene Concentrations vs Time 76 Station 7176



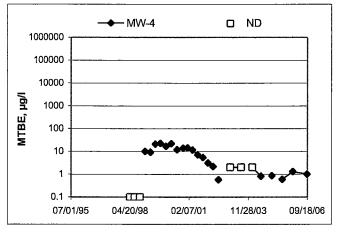


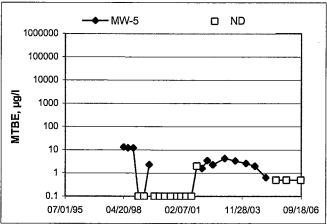


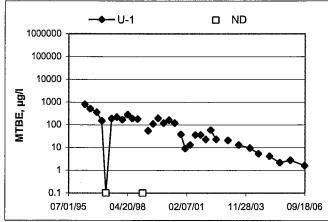


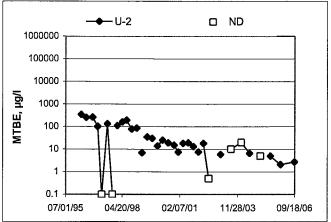


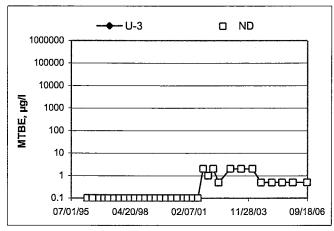
### MTBE Concentrations vs Time 76 Station 7176











#### 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 (surveyors 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: <u>TOE</u> Job #/Task #: <u>41060001</u>

Date: 09-11-06

Site # 7176 Project Manager A. Collins

Page \_/\_\_of \_\_\_\_

	T			Depth	Depth	Product		
	Time		Total	to	to	Thickness	Time	Misc. Well Notes
Well#	Gauged	TOC	Depth	Water	Product	(feet)	Sampled	
人-3	1040	X		13:19			1200	2"
W-5	1057	X	24.49	14.91			1223	2"
44	1107	X	25.33	16.16			1253	2"
1-Z	1113	X	26.32	15.62			1315	2"
W4 L-Z V-1	1120	X	28.54	15.11			1342	2
	1010	-		-				
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FIELD D	ATA COMF	PLETE	ako	OC		<u>k                                      </u>	WELL BOX	CONDITION SHEETS
WTT CE	RTIFICATI	<u> </u>	MANIF	EST	DRUM	INVENTORY	TF	RAFFIC CONTROL
				<u> </u>				/

### **GROUNDWATER SAMPLING FIELD NOTES**

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F	pH _	7 D.O.	ORP	Turbidity
1147			2	1110	26.3	7.92			
			4	1129	24.0	7.46			
	1149		6	1129	25.0	740			
Stati	c at Time Sa		Tota	al Gallons Pu	rged	<u> </u>	l Sample	Time	1
	17.53		6			12	00		
Comments	:								
						· · · · · · · · · · · · · · · · · · ·			

omments	:		•		<del></del>		<u> </u>				
	14.47			0		1223					
Stat	ic at Time Sa	ampled	Tota	al Gallons Pu	rged		Sample	Time	<u> </u>		
	1214		6	1067	24.8	7.20					
			4	1061	24.1	7.12					
1213			2,	1074	26.1	7.31					
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F,C)	рН	D.O.	ORP	Turbidi		

### **GROUNDWATER SAMPLING FIELD NOTES**

TOE Technician: Project No.:\_ 4 106000) Site:\_7176 Date: 69-11-06 HB Well No. MW-4 Purge Method: Depth to Water (feet): 16.16 Depth to Product (feet): 25.33 Total Depth (feet) LPH & Water Recovered (gallons):\_\_\_\_ 9.17 Water Column (feet): Casing Diameter (Inches): 80% Recharge Depth(feet): 17.99 1 Well Volume (gallons): Depth to Volume Conduc-Time Time Temperature Water Purged tivity рН Start D.O. ORP **Turbidity** Stop (F,C) (feet) (gallons) (uS/cm) 1240 1136 24.4 7.10 1138 23.2 7.08 1246 1145 22.9 7.06 Static at Time Sampled Total Gallons Purged Sample Time 16.89 753 Comments: u-2 DIA Well No. Purge Method: Depth to Water (feet): 15.62 Depth to Product (feet): Total Depth (feet) 26.32 LPH & Water Recovered (gallons): Water Column (feet): 10.7 Casing Diameter (Inches): 80% Recharge Depth(feet): 17.76 1 Well Volume (gallons):\_\_\_

omments	:								
<u>_</u>	5,90		6				13/5		
Siai	ic at Time Sa	mpled	Tota	l Gallons Pu	rged		Sample	Time	
Ctot	io et Time C								
			<u> </u>						
	1308		b	1195	27.1	7.05			
<del></del>	1700		4	1179	26.7	7.03			
1306			2	1149	28,4	7.04			
Time Start	Time Stop 3	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F(C)	pН	D.O.	ORP	Turbid

### **GROUNDWATER SAMPLING FIELD NOTES**

Technician: JoE Project No.: 4106006/ Date: 09-11-06 Site: 12-1 Well No.\_ U-1 Purge Method: DFA Depth to Water (feet): 15.1/ Depth to Product (feet): Total Depth (feet) 28,54 LPH & Water Recovered (gallons):\_\_\_\_ Casing Diameter (Inches): 2 // Water Column (feet): 13.43 80% Recharge Depth(feet): 17.79 1 Well Volume (gallons): Depth to Volume Conduc-Time Time Temperature Water Purged tivity рН D.O. ORP Start **Turbidity** Stop (F (C) (feet) (gallons) (uS/cm) 327 425.6 24.7 7.15 953.1 24.8 7.13 1329 975.1 24.7 7.01 Static at Time Sampled Total Gallons Purged Sample Time 15.19 6 1342 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 Stop Temperature Water Purged tivity рН Start D.O. ORP **Turbidity** (F,C) (feet) (gallons) (uS/cm) Static at Time Sampled Total Gallons Purged Sample Time Comments:



Date of Report: 09/26/2006

Anju Farfan

TRC Alton Geoscience 21 Technology Drive

Irvine, CA 92618-2302

RE: 7176

BC Lab Number: 0609423

Enclosed are the results of analyses for samples received by the laboratory on 09/12/06 21:50. 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: 7176

Project Number: [none]
Project Manager: Anju Farfan

Reported: 09/26/06 09:11

## **Laboratory / Client Sample Cross Reference**

Laboratory	Client Sample Informa	tion		
0609423-01	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 7176 U-1 U-1 TRCI	Receive Date: 09/12/06 21: Sampling Date: 09/11/06 13: Sample Depth: Sample Matrix: Water	
0609423-02	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	7176 U-2 U-2 TRCI	Receive Date: 09/12/06 21: Sampling Date: 09/11/06 13: Sample Depth: Sample Matrix: Water	
0609423-03	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 7176 U-3 U-3 TRCI	Receive Date: 09/12/06 21: Sampling Date: 09/11/06 12: Sample Depth: Sample Matrix: Water	
0609423-04	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	7176 MW-4 MW-4 TRCI	Receive Date: 09/12/06 21:: Sampling Date: 09/11/06 12:: Sample Depth: Sample Matrix: Water	
0609423-05	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 7176 MW-5 MW-5 TRCI	Receive Date: 09/12/06 21:: Sampling Date: 09/11/06 12:: Sample Depth: Sample Matrix: Water	



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan Reported: 09/26/06 09:11

# **Volatile Organic Analysis (EPA Method 8260)**

BCL Sample ID: 0609423-01	Client Sam	ple Name	e: 7176, U-1, U-1,	9/11/2006								
					Prep	Run		Instru-	<b>5</b> :	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	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BPI0802	ND	
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BPI0802	ND	
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BPI0802	ND	
Ethylbenzene	2.0	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC.	MS-V12	' 1	BP10802	ND	
Methyl t-butyl ether	1.6	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BP10802	ND	
Toluene	ND	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BPI0802	ND	
Total Xylenes	0.79	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BPI0802	ND	
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BP10802	ND	
t-Butyl alcohol	ND	ug/L	10	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BP10802	ND	
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BPI0802	ND	
Ethanol	ND	ug/L	250	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BP10802	ND	
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BP10802	ND	
Total Purgeable Petroleum Hydrocarbons	2700	ug/L	100	EPA-8260	09/18/06	09/19/06 14:34	DKC	MS-V12	2	BP10802	ND	A01
1,2-Dichloroethane-d4 (Surrogate)	94.6	%	76 - 114 (LCL - UCL)	EPA-8260	09/18/06	09/19/06 14:34	DKC	MS-V12	2	BP10802	, , , , , , , , , , , , , , , , , , , ,	
1,2-Dichloroethane-d4 (Surrogate)	94.6	%	76 - 114 (LCL - UCL)	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BP10802		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BPI0802		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)	EPA-8260	09/18/06	09/19/06 14:34	DKC	MS-V12	2	BPI0802	· · · · · · · · · · · · · · · · · · ·	COMMISSION OF A STATE OF STATE AND A STATE OF STATE OF THE STATE OF STATE O
4-Bromofluorobenzene (Surrogate)	98.0	%	86 - 115 (LCL - UCL)	EPA-8260	09/18/06	09/19/06 14:34	DKC	MS-V12	2	BPI0802	**************************************	yay dagaaya waddanda gaalaagaan a ibbaar ah ka ahaan ib ahaa aan a
4-Bromofluorobenzene (Surrogate)	100	%	86 - 115 (LCL - UCL)	EPA-8260	09/18/06	09/19/06 09:27	DKC	MS-V12	1	BP10802		



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Total Petroleum Hydrocarbons**

BCL Sample ID: 0609423-0	1 Client Sam	ple Name	e: 7176, l	J-1, U-1,	9/11/2006	1:42:0	OPM .						******
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	1200	ug/L	100	······································	Luft/TPHd	09/14/06	09/25/06 11:56	VTR	GC-13A	2	BPI0920	ND	A01, A52
Tetracosane (Surrogate)	83.3	%	42 - 125 (LC	CL - UCL)	Luft/TPHd	09/14/06	09/25/06 11:56	VTR	GC-13A	2	BPI0920		



Project: 7176

Project Number: [none]
Project Manager: Anju Farfan

# **Volatile Organic Analysis (EPA Method 8260)**

BCL Sample ID: 0	609423-02	Client Sam	ole Name	e: 7176, U	-2, U-2,	9/11/2006	1:15:00	OPM						
						······	Prep	Run		Instru-	<del></del>	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	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
1,2-Dibromoethane		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BP10802	ND	
1,2-Dichloroethane		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	· · · · · · · · · · · · · · · · · · ·
Ethylbenzene		1.0	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
Methyl t-butyl ether		2.7	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
Toluene		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BP10802	ND	
Total Xylenes		1.0	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BP10802	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
Ethanol	, ,	ND	ug/L	250		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
Total Purgeable Petroleu Hydrocarbons	ım	2300	ug/L	50		EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802	ND	
1,2-Dichloroethane-d4 (S	Surrogate)	98.6	%	76 - 114 (LCI	UCL)	EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802		
Toluene-d8 (Surrogate)		102	%	88 - 110 (LCI	UCL)	EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802		
4-Bromofluorobenzene (S	Surrogate)	108	%	86 - 115 (LCI	UCL)	EPA-8260	09/18/06	09/19/06 09:53	DKC	MS-V12	1	BPI0802		

Reported: 09/26/06 09:11



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Total Petroleum Hydrocarbons**

BCL Sample ID: 0609423-0	2 Client Sam	ple Nam	<b>e:</b> 7176, l	J-2, U-2,	9/11/2006	1:15:00	OPM						
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	790	ug/L	50		Luft/TPHd	09/14/06	09/20/06 20:10	VTR	GC-2	1	BPI0920	ND	A52
Tetracosane (Surrogate)	88.9	%	42 - 125 (LC	CL - UCL)	Luft/TPHd	09/14/06	09/20/06 20:10	VTR	GC-2	1	BP10920		



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Volatile Organic Analysis (EPA Method 8260)**

BCL Sample ID: 060	09423-03	Client Sam	ple Name	e: 7176, U-3,	, U-3,	9/11/2006	12:00:0	0PM	,				·-····································	
							Prep	Run		Instru-		QC	МВ	Lab
Constituent		Result	Units	PQL N	/IDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
1,2-Dibromoethane		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
1,2-Dichloroethane		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
Ethylbenzene		ND	ug/L	0.50	•	EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	<b>*************************************</b>
Toluene		ND	ug/L	0.50	1/	EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BP10802	ND	<del></del>
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
Diisopropyl ether	<del></del>	ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	<del></del>
Ethanol		ND	ug/L	250		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
Total Purgeable Petroleum Hydrocarbons	•	ND	ug/L	50		EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802	ND	
1,2-Dichloroethane-d4 (Sur	rrogate)	94.3	%	76 - 114 (LCL -	UCL)	EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802		
Toluene-d8 (Surrogate)		99.7	%	88 - 110 (LCL -	UCL)	EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802		
4-Bromofluorobenzene (Su	rrogate)	98.0	%	86 - 115 (LCL -	UCL)	EPA-8260	09/18/06	09/19/06 10:18	DKC	MS-V12	1	BPI0802		



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Total Petroleum Hydrocarbons**

<b>BCL Sample ID:</b> 0609423-03	Client Sam	ple Nam	e: 7176, U-3, U-3	3, 9/11/2006	12:00:0	00PM						
Constituent	Result	Units	PQL MDL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	ND	ug/L	50	Luft/TPHd	09/14/06	09/20/06 20:34	VTR	GC-2	1	BPI0920	ND	
Tetracosane (Surrogate)	86.8	%	42 - 125 (LCL - UCL)	) Luft/TPHd	09/14/06	09/20/06 20:34	VTR	GC-2	1	BP10920		



Project: 7176

Project Number: [none]
Project Manager: Anju Farfan

**Reported:** 09/26/06 09:11

# **Volatile Organic Analysis (EPA Method 8260)**

BCL Sample ID: 0609	423-04	Client Sam	ole Name	e: 7176, M\	N-4, M	W-4, 9/11	/2006 12	::53:00PM				· ·		
	· · · · · · · · · · · · · · · · · · ·						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	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
1,2-Dibromoethane	· · · · · · · · · · · · · · · · · · ·	ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
1,2-Dichloroethane		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
Ethylbenzene		ND	ug/L	0.50	***************************************	EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
Methyl t-butyl ether		1.0	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
Toluene		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BP10802	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	*****
t-Amyl Methyl ether		ND	ug/L	0.50	•	EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	<del></del>
t-Butyl alcohol		ND	ug/L	10		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	net in the lay and applicables, and all the side in a common in .
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
Ethanol		ND	ug/L	250		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
Total Purgeable Petroleum Hydrocarbons		110	ug/L	50		EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	ND	
1,2-Dichloroethane-d4 (Surrog	gate)	95.3	%	76 - 114 (LCL	- UCL)	EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802		
Toluene-d8 (Surrogate)		99.8	%	88 - 110 (LCL	- UCL)	EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802		·
4-Bromofluorobenzene (Surro	gate)	100	%	86 - 115 (LCL	- UCL)	EPA-8260	09/18/06	09/19/06 10:44	DKC	MS-V12	1	BPI0802	-	



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan Reported: 09/26/06 09:11

# **Total Petroleum Hydrocarbons**

BCL Sample ID: 0609423-04	Client Sam	ple Nam	e: 7176,	MW-4, N	IW-4, 9/11	/2006 12	::53:00PM				<del></del>		
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Diesel Range Organics (C12 - C24)	ND	ug/L	50		Luft/TPHd	09/14/06	09/20/06 20:58	VTR	GC-2	1	BPI0920	ND	A52
Tetracosane (Surrogate)	88.1	%	42 - 125 (L	.CL - UCL)	Luft/TPHd	09/14/06	09/20/06 20:58	VTR	GC-2	1	BPI0920	······································	



Project: 7176

Project Number: [none]
Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Volatile Organic Analysis (EPA Method 8260)**

BCL Sample ID: 0	609423-05	Client Sam	ole Nam	e: 7176, M	W-5, M	W-5, 9/11/	/2006 12	:23:00PM						
						<del></del>	Prep	Run		Instru-		QC	МВ	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	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802	ND	
1,2-Dibromoethane		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BP10802	ND	
1,2-Dichloroethane		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802	ND	
Ethylbenzene		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802	ND	
Methyl t-butyl ether		· ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BP10802	ND	
Toluene		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	. 1	BP10802	ND	AL-MAN AND AND AND AND AND AND AND AND AND A
Ethanol		ND	ug/L	250	•••	EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BP10802	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BP10802	ND	
Total Purgeable Petroleu Hydrocarbons	ım	ND	ug/L	50		EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BP10802	ND	
1,2-Dichloroethane-d4 (S	Surrogate)	95.0	%	76 - 114 (LC	L - UCL)	EPA-8260	09/18/06	09/19/06 11:09	DKÇ	MS-V12	1	BP10802		
Toluene-d8 (Surrogate)		98.8	%	88 - 110 (LC	L - UCL)	EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802		
4-Bromofluorobenzene (S	Surrogate)	98.3	%	86 - 115 (LC	L - UCL)	EPA-8260	09/18/06	09/19/06 11:09	DKC	MS-V12	1	BPI0802		



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Total Petroleum Hydrocarbons**

BCL Sample ID: 0609423-05	Client Sam	ple Nam	<b>e:</b> 7176,	MW-5, N	IW-5, 9/11	/2006 12	::23:00PM						
						Prep	Run	,	Instru-		QC	MB	Lab
Constituent	Result	Units	PQL	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Diesel Range Organics (C12 - C24)	ND	ug/L	50		Luft/TPHd	09/14/06	09/20/06 21:22	VTR	GC-2	1	BPI0920	ND	
Tetracosane (Surrogate)	91.1	%	42 - 125 (L	CL - UCL)	Luft/TPHd	09/14/06	09/20/06 21:22	VTR	GC-2	1	BPI0920		



Project: 7176

Project Number: [none]
Project Manager: Anju Farfan

Reported: 09/26/06 09:11

## **Volatile Organic Analysis (EPA Method 8260)**

## **Quality Control Report - Precision & Accuracy**

								•		Contro	ol Limits
Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery Lab Quals
Benzene	BPI0802	Matrix Spike	0609481-01	ND	30.710	25.000	ug/L		123	***	70 - 130
		Matrix Spike Duplicate	0609481-01	ND	31.990	25.000	ug/L	3.98	128	20	70 - 130
Toluene	BPI0802	Matrix Spike	0609481-01	ND	28.850	25.000	ug/L		115		70 - 130
		Matrix Spike Duplicate	0609481-01	ND	29.420	25.000	ug/L	2.58	118	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BP10802	Matrix Spike	0609481-01	ND	9.4200	10.000	ug/L		94.2		76 - 114
		Matrix Spike Duplicate	0609481-01	ND	9.3600	10.000	ug/L		93.6		76 - 114
Toluene-d8 (Surrogate)	BPI0802	Matrix Spike	0609481-01	ND	10.080	10.000	ug/L		. 101		88 - 110
		Matrix Spike Duplicate	0609481-01	ND	10.010	10.000	ug/L		100		88 - 110
4-Bromofluorobenzene (Surrogate)	BPI0802	Matrix Spike	0609481-01	ND	9.6600	10.000	ug/L		96.6		86 - 115
		Matrix Spike Duplicate	0609481-01	ND	9.8200	10.000	ug/L		98.2		86 - 115



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Total Petroleum Hydrocarbons**

## **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
Diesel Range Organics (C12 - C24)	BPI0920	Matrix Spike	0606841-85	ND	407.66	500.00	ug/L		81.5		41 - 139
		Matrix Spike Duplicate	0606841-85	ND	408.79	500.00	ug/L	0.367	81.8	30	41 - 139
Tetracosane (Surrogate)	BP10920	Matrix Spike	0606841-85	ND	22.768	20.000	ug/L		114		42 - 125
		Matrix Spike Duplicate	0606841-85	ND	21.940	20.000	ug/L		110		42 - 125



TRC Alton Geoscience

Project: 7176

21 Technology Drive

Project Number: [none]

Irvine CA, 92618-2302

Project Manager: Anju Farfan

# **Volatile Organic Analysis (EPA Method 8260)**

**Quality Control Report - Laboratory Control Sample** 

			<u> </u>						Conf	rol Lin	<u>nits</u>	
Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	Perce RPD Recove		PD	Lab Quals
Benzene	BPI0802	BPI0802-BS1	LCS	31.350	25.000	0.50	ug/L	125	70 - 13	0		
Toluene	BPI0802	BPI0802-BS1	LCS	28.700	25.000	0.50	ug/L	115	70 - 13	0		
1,2-Dichloroethane-d4 (Surrogate)	BPI0802	BPI0802-BS1	LCS	9.3100	10.000		ug/L	93.1	76 - 11	4		
Toluene-d8 (Surrogate)	BP10802	BPI0802-BS1	LCS	10.020	10.000		ug/L	100	88 - 11	0		AND THE RESIDENCE OF THE PROPERTY OF THE PROPE
4-Bromofluorobenzene (Surrogate)	BPI0802	BPI0802-BS1	LCS	9.6500	10.000		ug/L	96.5	86 - 11	5		

Reported: 09/26/06 09:11



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Total Petroleum Hydrocarbons**

**Quality Control Report - Laboratory Control Sample** 

									<u>Control</u>	Limits	
Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	Percent RPD Recovery	RPD	Lab Quals
Diesel Range Organics (C12 - C24)	BP10920	BP10920-BS1	LCS	379.68	500.00	50	ug/L	75.9	62 - 101		
Tetracosane (Surrogate)	BPI0920	BPI0920-BS1	LCS	21.162	20.000		ug/L	106	42 - 125		



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan Reported: 09/26/06 09:11

## **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	BPI0802	BPI0802-BLK1	ND	. ug/L	0.50	0.14	
1,2-Dibromoethane	BP10802	BPI0802-BLK1	ND	ug/L	0.50	0.22	
1,2-Dichloroethane	BPI0802	BPI0802-BLK1	ND	ug/L	0.50	0.15	
Ethylbenzene	BPI0802	BPI0802-BLK1	ND	ug/L	0.50	0.094	
Methyl t-butyl ether	BPI0802	BPI0802-BLK1	ND	ug/L	0.50	0.13	
Toluene	BP10802	BPI0802-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BPI0802	BPI0802-BLK1	ND	ug/L	0.50	0.31	
t-Amyl Methyl ether	BPI0802	BPI0802-BLK1	ND	ug/L	0.50	0.34	
t-Butyl alcohol	BPI0802	BPI0802-BLK1	ND	ug/L	10	9.3	
Diisopropyl ether	BPI0802	BPI0802-BLK1	ND	ug/L	0.50	0.34	
Ethanol	BP10802	BPI0802-BLK1	ND	ug/L	250	85	
Ethyl t-butyl ether	BPI0802	BPI0802-BLK1	ND	ug/L	0.50	0.32	
Total Purgeable Petroleum Hydrocarbons	BPI0802	BPI0802-BLK1	ND	ug/L	50	16	
1,2-Dichloroethane-d4 (Surrogate)	BPI0802	BPI0802-BLK1	98.2	%	76 - 114 (	LCL - UCL)	
Toluene-d8 (Surrogate)	BP10802	BPI0802-BLK1	98.9	%	88 - 110 (	_CL - UCL)	
4-Bromofluorobenzene (Surrogate)	BPI0802	BPI0802-BLK1	100	%	86 - 115 (	LCL - UCL)	



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

# **Total Petroleum Hydrocarbons**

## **Quality Control Report - Method Blank Analysis**

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Diesel Range Organics (C12 - C24)	BPI0920	BPI0920-BLK1	ND	ug/L	50	26	
Tetracosane (Surrogate)	BP10920	BPI0920-BLK1	94.0	%	42 - 125 (1	_CL - UCL)	



Project: 7176

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/26/06 09:11

#### **Notes and Definitions**

J	Estimated value
A52	Chromatogram not typical of diesel.
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.	-	SAMPLE RECEIPT FORM	EIPT FORM	Rev. No. 10	01/21/04 Page	Of
Submission #: ()6-09423	<b> </b>	Project Code:		TB Batch	h #	
SAMPPING D sse	MATION Hand Delivery	ry D	lce	SHIPPING	CONTAINER None	
DC Lab Field Selvice D State	Other L. (apacin )			(	Caron Li repositi	
Refrigerant: Ice 🖒 Blue Ice 🗆	None 🗆	Other □	Comments:			
Custody Seals: Ice Chest  Intact? Yes  Intact? Yes  Intact? Yes	Containers   Intact? Yes   No	None Z	Comments:			
	All samples co	All samples containers intact?	Yes & No O	Description(s	Description(s) match COC? Yes & No D	° 0
COC Received			#15 °C	Emissivity 0.90 Container OLA	Date/Time 1/12/66	12/06
SAMPLE CONTAINERS	-	2 3	<b>-</b>	SAMPLE NUMBERS	7 8 9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL PT PE UNPRESERVED						
OT INORGANIC CHEMICAL METALS						
PT INORGANIC CHEMICAL METALS						
PT NITROGEN FORMS			,			
PT TOTAL SULFIDE		,				
100ml TOTAL ORGANIC CARBON						
OT TOX						
PtA PHENOLICS						
40ml VOA VIAL TRAVEL BLANK	\$ \$\tilde{\chi}\$	サルサル	<b>P</b>	P	-	-
OT EPA 413.1, 413.2, 418.1	1	1 1				
PTODOR						
BACTERIOLOGICAL						
40 ml VOA VIAL- 504						
OTEPA 508/608/8080			\  - 			
OT EPA 525						
OT EPA 525 TRAVEL BLANK						
100ml EPA 531.1						
OT EPA 548						
OT EPA 549 OT EPA 632					1	
OT EPA 8015M						
OT AMBER	ρ ,	のくなっ	P. / P	7		
8 OZ. JAR			<del>                                     </del>			
32 OZ. JAR						
PCB VIAL						
PLASTIC BAG						
FERROUS IRON						
PICONE						
Comments:	90	Date/Time:	alis/06	000		SAMPECT WOOT
	(				IDOCSIWPBOILAB DOCSIFORMSISAMRECZ.WPD]	SAMRECZ.WPD]

CHK BY DISTRIBUTION

SUB-OUT

## **BC LABORATORIES, INC.**

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

### **CHAIN OF CUSTODY**

DC LAD	ORATORIES, INC.	(661) 327-491	1 □ FAX (661) 327-191	8		CH	AIN (	OF C	JST	OD	Y		
			3-09425	Ć		Ana	alys	is Re	qu	esto	ed		
Circle one:	: Phillips 66 / Unocal	Consultant Firm: TF	RC	MATRIX	5			2					
Address:.7 Blvd.	850 Amador Valley	21 Technology Driv Irvine, CA 92618-23 Attn: Anju Farfan		(GW) Ground- water (S) Soil	Gas by 8015			8260B					Reguested
City: Dubli	n	4-digit site#: 7176		(WW)	8021B,	M		BY F	0B		В		
		Work Order# 1635T	RC502	Waste- water	by 8	8015M	by 8		826	MS	8260B		<u> </u>
State: CA	Zip:	Project #: 41060001	/FA20	(SL)		by 8		SE/C	b S	GC/MS	by 8		P
COP Mana	ger: Shelby Lathrop	Sampler Name:		Sludge	TW/	GAS	DIESEL		S	by l	ည္ထု		rour
Lab#	Sample Description	Field Point Name	Date & Time Sampled		BTEX/MTBE	TPHO	TPH DIESEL by 8015	BTEX/MTBE/OXYs	ETHANOL by 8260B	TPH-g	EDB/E		Turnaround Time
		U-1	09-11-06 1342	GW			х	х	X	Х	Х		S1
	-2	U-2	1315	GW			x	х	X	Х	Х		ST
	-3	U-3	1200	GW			Х	Х	Х	Х	Х		SI
	- 4	, , MW-4	1253	GW			x	Х	Х	Х	Х		ST
	-5	MW-5	1223	GW			X	Х	Х	Х	Х		ST
												_	_
Comments: R lits.	un TPH-d w/silica gel clean-	up on Relinquished by	D. Sewis	0			ved by:	erato		Date	& Tim	ne: 16 15	'3 <i>5</i>
		Retinquished by (S				Regel	ved by:	ichos		Dațe	& Tim 2/06	e:	
lobal ID: T06		Relinquished by (S	1800 Vie	hag/n/o	6	-	ved by: l <i>a Ca</i>	//		Date	& Tim	r	[ <del>30</del>
= ANALYS	(C) = CC	ONTAINER (P)	= PRESERVATIVE (acc) 9/11/0-	6 2150	-	Te	む (	Dba	fen	,	1/12	106	215

#### **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 transportation 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 Geologist 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.