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By lopprojectop at 10:47 am, Feb 21, 2006



76 Broadway
Sacramento, California 95818

February 10, 2006

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

Re: **Report Transmittal
Quarterly Report
Fourth Quarter – 2005
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,

A handwritten signature in black ink that appears to read "Thomas Kosek".

Thomas Kosek
Risk Management & Remediation

Attachment



Solving environment-related business problems worldwide

3164 Gold Camp Drive • Suite 200
Rancho Cordova, California 95670 USA

916.638.2085 800.477.7411
Fax 916.638.8385

RECEIVED

By lopprojector at 10:47 am, Feb 21, 2006

www.deltaenv.com

February 15, 2006

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

Re: Quarterly Summary Report – Fourth Quarter 2005
Delta Project Number: C104186011

Dear Mr. Wickham:

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

<u>Service Station</u>	<u>Location</u>
76 Service Station No. 4186	1771 First Street Livermore, California

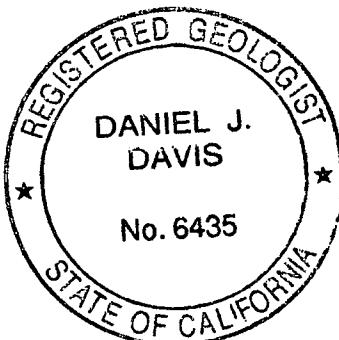
Sincerely,
Delta Environmental Consultants, Inc.

A handwritten signature in black ink that appears to read "Ben Wright".

Ben Wright
Staff Geologist

A handwritten signature in black ink that appears to read "Daniel J. Davis".

Daniel J. Davis, R.G.
Project Manager



Forward: TRC - Quarterly Monitoring Report
SECOR - Quarterly Remedial Performance Summary Report

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

A member of:



QUARTERLY SUMMARY REPORT
Fourth Quarter 2005
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 (UST).

On June 6, 1996, six soil samples were collected from beneath the fuel dispensers and product delivery piping during dispenser and piping replacement activities. Results of soil sample analyses were reported as not detected (ND) for total petroleum hydrocarbons as gasoline (TPH-G), and benzene, toluene, ethylbenzene and total xylenes (BTEX) for each sample collected beneath the dispenser islands and product delivery piping.

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 results from the gas probes ranged from 41 to 4,500 parts per billion by volume (ppb-v) for TPHG, ND to 110 ppb-v for benzene and ND to 8,000 ppb-v for methyl tertiary butyl ether (MTBE). 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 and 2,800 feet southwest and west of the site.

On June 16, 1998, three 2-inch diameter groundwater monitor wells (U-1 through U-3) were installed. The wells were each installed to a depth of approximately 34 feet bgs. Soil samples collected from the three well borings were reported as ND for TPH-G, benzene, and MTBE.

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.

On February 21, 2001, two 2-inch diameter off-site groundwater monitor wells (U-4 and U-5) were installed. The wells were installed to depths of approximately 47 feet bgs. TPH-G, BTEX and MTBE were not detected in the soil samples analyzed. TPH-G and benzene were ND in groundwater samples analyzed from wells U-4 and U-5. MTBE was detected in groundwater samples from wells U-4 and U-5 at concentrations of 38.2

micrograms per liter ($\mu\text{g/l}$) and 55.4 $\mu\text{g/l}$, respectively; other fuel oxygenates were non-detectable. 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 – 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 installed to 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 $\frac{3}{4}$ -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 installed to depths of 45 feet bgs. Sparge points SP-6S and SP-7S were installed to depths of 25 feet bgs. The remaining two sparge locations contain nested sparge points (SP-5, SP-5S, SP-8 and SP-8S) installed 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.

MONITORING AND SAMPLING

Groundwater is currently monitored and sampled on a quarterly basis. During the December 30, 2005 monitoring and sampling event, depths to groundwater ranged from 23.69 feet (U-1) to 31.02 feet (U-4) below top of casing (TOC). The groundwater flow direction was northwest and southwest at a gradient of 0.10 foot per foot (ft/ft). Maximum dissolved groundwater concentrations were present as follows: total purgeable petroleum hydrocarbons (TPPH) (2,500 $\mu\text{g/L}$ in U-7), benzene (15 $\mu\text{g/L}$ in U-6), and MTBE (840 $\mu\text{g/L}$ in U-3). Groundwater monitoring and sampling is conducted by TRC under direct contract to ConocoPhillips.

REMEDIATION STATUS

The ozone sparge system, manufactured by KVA, was placed into operation on December 19, 2001 and is designed to cycle the ozone/oxygen injection between 10 sparge points. A typical injection schedule for this site was designed to operate at 18 times a day at 5 and 15 minutes per point per cycle. The system's current cycle frequency is 8 minutes. Remediation system operation and maintenance is conducted by SECOR International Inc. (SECOR) under direct contract to ConocoPhillips.

For the fourth quarter 2005, the ozone sparge system operated for 801 hours, equivalent to 43% of the programmed runtime, and injected 7.2 pounds of ozone. System operation and maintenance (O&M) activity is conducted on a monthly to semi-monthly basis.

On November 7, 2005 the ozone sparge tubing was replaced due to leaks caused by mice chewing the lines. The system was found non-operational on December 2, 2005 due to a tripped ozone sensor. It was reset and restarted. The panel and enclosure was moved on December 14, 2005 to the street side of the trash enclosure.

CHARACTERIZATION STATUS

The furthest up-gradient monitor well, U-3, contained 840 µg/l MTBE and 390 µg/l TPPH during the fourth quarter 2005 sampling event. The furthest offsite down-gradient well, U-5, contained 72 µg/l of MTBE this quarter.

RECENT CORRESPONDENCE

No recent correspondence for this site was documented during the fourth quarter 2005.

THIS QUARTER ACTIVITIES (Fourth Quarter 2005)

1. TRC conducted quarterly monitoring and sampling at the site.
2. SECOR conducted system operation and maintenance activities at the site.

WASTE DISPOSAL SUMMARY

No waste was generated this quarter.

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

NEXT QUARTER ACTIVITIES (First Quarter 2006)

1. SECOR will continue operation and maintenance on the ozone/oxygen sparge system at the site.
2. TRC will sample and monitor the well network.
3. Delta will conduct an assessment to determine the extent of contamination at the site.

CONSULTANT: Delta Environmental Consultants, Inc.



January 16, 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 2005

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

A handwritten signature in black ink, appearing to read "Anju Farfan".

Anju Farfan
QMS Operations Manager

CC: Mr. Eric Hetrick, Delta Environmental Consultants, Inc. (3 copies)

Enclosures
20-0400/4186R09.QMS.doc





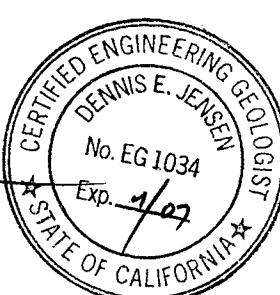
**QUARTERLY MONITORING REPORT
OCTOBER THROUGH DECEMBER 2005**

76 STATION 4186
1771 First Street
Livermore, California

Prepared For:

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

By:



A handwritten signature of "Dennis E. Jensen" is positioned above a circular official seal. The seal is for a Certified Engineering Geologist in the State of California. It contains the text "CERTIFIED ENGINEERING GEOLOGIST", "DENNIS E. JENSEN", "No. EG 1034", "Exp. 1/07", and "STATE OF CALIFORNIA".

Senior Project Geologist, Irvine Operations
January 13, 2006



LIST OF ATTACHMENTS

Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Table 1: Current Fluid Levels and Selected Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 3: Additional Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPPH 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 Groundwater Sampling Field Notes
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

Summary of Gauging and Sampling Activities
October 2005 through December 2005
76 Station 4186
1771 First Street
Livermore, CA

Project Coordinator: **Shelby Lathrop** Water Sampling Contractor: **TRC**
Telephone: **916-558-7609** Compiled by: **Daniel Lee**

Date(s) of Gauging/Sampling Event: **12/30/05**

Sample Points

Groundwater wells: **5** onsite, **2** offsite Wells gauged: **7** Wells sampled: **7**
Purging method: **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: **23.69 feet** Maximum: **31.02 feet**
Average groundwater elevation (relative to available local datum): **450.02 feet**
Average change in groundwater elevation since previous event: **2.92 feet**
Interpreted groundwater gradient and flow direction:
 Current event: ***see notes**
 Previous event: **0.04 ft/ft, west to south (09/23/05)**

Selected Laboratory Results

Wells with detected **Benzene**: **2** Wells above MCL (1.0 µg/l): **2**
 Maximum reported benzene concentration: **15 µg/l (U-6)**

Wells with **TPPH 8260B** **3** Maximum: **2,500 µg/l (U-7)**
Wells with **MTBE** **5** Maximum: **840 µg/l (U-3)**

Notes:

*Groundwater gradient is 0.1 ft/ft northwest to southwest.

TABLES

TABLE KEY

STANDARD ABBREVIATIONS

--	= not analyzed, measured, or collected
LPH	= liquid-phase hydrocarbons
Trace	= less than 0.01 foot of LPH in well
$\mu\text{g/l}$	= 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-D	= total petroleum hydrocarbons with diesel distinction
TPPH	= total purgeable petroleum hydrocarbons
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.

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

December 30, 2005

76 Station 4186

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-1 (Screen Interval in feet: 14.0-34.0)														
12/30/05	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	
U-2 (Screen Interval in feet: 13.0-34.0)														
12/30/05	477.44	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	
U-3 (Screen Interval in feet: 14.0-34.0)														
12/30/05	478.46	23.96	0.00	454.50	3.68	--	390	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	840	
U-4 (Screen Interval in feet: 35.0-45.0)														
12/30/05	476.93	31.02	0.00	445.91	1.23	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	17	
U-5 (Screen Interval in feet: 37.0-47.0)														
12/30/05	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	
U-6 (Screen Interval in feet: DNA)														
12/30/05	478.38	30.43	0.00	447.95	1.95	--	2400	15	0.67	99	12	--	3.5	
U-7 (Screen Interval in feet: DNA)														
12/30/05	478.74	30.18	0.00	448.56	2.17	--	2500	11	1.1	28	4.3	--	35	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2005
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	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 Interval in feet: 14.0-34.0)														
07/13/98	478.27	23.28	0.00	454.99	--	ND	--	ND	ND	ND	ND	ND	--	
10/07/98	478.27	26.43	0.00	451.84	-3.15	ND	--	ND	ND	ND	ND	ND	--	
01/15/99	478.27	30.42	0.00	447.85	-3.99	ND	--	ND	ND	ND	1.1	7.3	--	
04/14/99	478.27	24.21	0.00	454.06	6.21	ND	--	ND	ND	ND	ND	160	--	
07/19/99	478.27	27.10	0.00	451.17	-2.89	ND	--	ND	ND	ND	ND	92	--	
10/12/99	478.27	29.40	0.00	448.87	-2.30	ND	--	ND	ND	ND	ND	37	--	
01/24/00	478.27	27.90	0.00	450.37	1.50	ND	--	ND	ND	ND	ND	28	--	
04/10/00	478.27	26.16	0.00	452.11	1.74	ND	--	ND	0.930	ND	ND	ND	--	
07/17/00	478.27	28.04	0.00	450.23	-1.88	ND	--	ND	ND	ND	ND	160	--	
10/02/00	478.27	28.41	0.00	449.86	-0.37	ND	--	ND	ND	ND	ND	120	--	
01/08/01	478.27	28.68	0.00	449.59	-0.27	ND	--	ND	ND	ND	ND	103	--	
04/03/01	478.27	25.74	0.00	452.53	2.94	ND	--	ND	ND	ND	ND	55.1	--	
07/02/01	478.27	30.67	0.00	447.60	-4.93	ND	--	ND	ND	ND	ND	ND	--	
10/08/01	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	--	
01/03/02	478.27	27.67	0.00	450.60	5.46	160	--	ND<0.50	0.51	ND<0.50	0.69	31	--	
04/05/02	478.27	29.40	0.00	448.87	-1.73	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	60	--	
07/02/02	478.27	31.17	0.00	447.10	-1.77	--	1100	ND<0.50	1.7	0.73	130	--	35	
10/01/02	478.27	33.00	0.00	445.27	-1.83	--	120	ND<0.50	ND<0.50	ND<0.50	8.8	--	28	
12/30/02	478.27	22.03	0.00	456.24	10.97	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.2	--	90	
05/02/03	478.27	24.13	0.00	454.14	-2.10	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	50	
07/01/03	478.27	25.35	0.00	452.92	-1.22	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/03/03	478.27	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	
01/08/04	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	
04/15/04	478.27	25.33	0.00	452.94	-2.66	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2005
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ($\mu\text{g/l}$)	TPPH 8260B ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE 8021B ($\mu\text{g/l}$)	MTBE 8260B ($\mu\text{g/l}$)	Comments
U-1 continued														
07/15/04	478.27	26.47	0.00	451.80	-1.14	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/08/04	478.27	31.17	0.00	447.10	-4.70	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/23/05	478.27	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	
06/28/05	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	
09/23/05	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	
12/30/05	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	
U-2 (Screen Interval in feet: 13.0-34.0)														
07/13/98	477.44	23.52	0.00	453.92	--	1200	--	130	12	62	180	1100	--	
10/07/98	477.44	25.31	0.00	452.13	-1.79	ND	--	ND	ND	ND	ND	160	--	
01/15/99	477.44	30.22	0.00	447.22	-4.91	ND	--	ND	ND	ND	ND	280	--	
04/14/99	477.44	24.50	0.00	452.94	5.72	ND	--	ND	ND	ND	ND	460	--	
07/19/99	477.44	28.54	0.00	448.90	-4.04	ND	--	ND	ND	ND	ND	220	--	
10/12/99	477.44	30.48	0.00	446.96	-1.94	ND	--	ND	ND	ND	ND	160	--	
01/24/00	477.44	24.52	0.00	452.92	5.96	ND	--	ND	ND	ND	ND	150	--	
04/10/00	477.44	23.68	0.00	453.76	0.84	ND	--	ND	ND	ND	ND	177	--	
07/17/00	477.44	28.35	0.00	449.09	-4.67	ND	--	ND	ND	ND	ND	62.7	--	
10/02/00	477.44	28.72	0.00	448.72	-0.37	ND	--	ND	ND	ND	ND	52	--	
01/08/01	477.44	29.11	0.00	448.33	-0.39	ND	--	ND	ND	ND	ND	57.3	--	
04/03/01	477.44	25.95	0.00	451.49	3.16	ND	--	ND	ND	ND	ND	30.2	--	
07/02/01	477.44	29.01	0.00	448.43	-3.06	ND	--	ND	ND	ND	ND	16	--	
10/08/01	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	--	
01/03/02	477.44	27.33	0.00	450.11	3.61	260	--	7.7	11	1.7	15	42	--	
04/05/02	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	--	
07/02/02	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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2005
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	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 continued														
10/01/02	477.44	32.00	0.00	445.44	-0.77	--	ND<50	ND<0.50	0.62	ND<0.50	ND<1.0	--	ND<2.0	
12/30/02	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	
05/02/03	477.44	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	
07/01/03	477.44	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	
10/03/03	477.44	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	
01/08/04	477.44	21.94	0.00	455.50	3.37	--	ND<50	ND<0.50	ND<0.50	0.51	ND<1.0	--	ND<2.0	
04/15/04	477.44	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	
07/15/04	477.44	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	
12/08/04	477.44	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	
03/23/05	477.44	22.00	0.00	455.44	7.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	1.1	--	ND<0.50	
06/28/05	477.44	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	
09/23/05	477.44	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	
12/30/05	477.44	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	
U-3 (Screen Interval in feet: 14.0-34.0)														
07/13/98	478.46	23.82	0.00	454.64	--	70000	--	3100	5500	2700	16000	7500	--	
10/07/98	478.46	25.64	0.00	452.82	-1.82	54000	--	5000	1100	3100	14000	6100	--	
01/15/99	478.46	30.92	0.00	447.54	-5.28	41000	--	3100	ND	1800	3800	15000	--	
04/14/99	478.46	24.48	0.00	453.98	6.44	33000	--	86	290	2200	7800	39000	--	
07/19/99	478.46	28.46	0.00	450.00	-3.98	48000	--	3900	2500	3600	14000	12000	16000	
10/12/99	478.46	30.39	0.00	448.07	-1.93	35000	--	4200	ND	2300	1800	22000	8300	
01/24/00	478.46	23.43	0.00	455.03	6.96	13000	--	260	ND	770	3200	53000	42000	
04/10/00	478.46	23.31	0.00	455.15	0.12	35200	--	1070	241	2820	8850	35600	40900	
07/17/00	478.46	27.53	0.00	450.93	-4.22	29000	--	3570	525	3180	5660	22500	21000	
10/02/00	478.46	28.19	0.00	450.27	-0.66	11000	--	2100	31	2000	780	25000	28000	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2005
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	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 continued														
01/08/01	478.46	29.85	0.00	448.61	-1.66	33600	--	3060	427	3040	4190	24700	30900	
04/03/01	478.46	24.98	0.00	453.48	4.87	5390	--	660	10.8	304	356	15200	19300	
07/02/01	478.46	31.35	0.00	447.11	-6.37	13000	--	1200	58	1300	930	25000	26000	
10/08/01	478.46	32.69	0.00	445.77	-1.34	6100	--	500	ND<10	570	130	23000	22000	
01/03/02	478.46	23.73	0.00	454.73	8.96	9900	--	700	130	24	1000	14000	12000	
04/05/02	477.44	28.27	0.00	449.17	-5.56	9800	--	1100	180	220	1400	16000	30000	
07/02/02	478.46	29.71	0.00	448.75	-0.42	--	ND<25000	ND<250	ND<250	ND<250	ND<500	12000	12000	
10/01/02	478.46	31.18	0.00	447.28	-1.47	--	ND<25000	ND<250	ND<250	ND<250	ND<500	12000	12000	
12/30/02	478.46	21.62	0.00	456.84	9.56	--	23000	330	170	870	4900	18000	18000	
05/02/03	478.46	23.11	0.00	455.35	-1.49	--	19000	280	ND<50	880	1500	15000	15000	
07/01/03	478.46	24.89	0.00	453.57	-1.78	--	19000	120	ND<100	180	880	22000	22000	
10/03/03	478.46	26.59	0.00	451.87	-1.70	--	20000	170	ND<50	250	730	--	16000	
01/08/04	478.46	21.92	0.00	456.54	4.67	--	17000	250	ND<100	770	1500	--	9700	
04/15/04	478.46	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	
12/08/04	478.46	29.13	0.00	449.33	-4.33	--	12000	ND<50	ND<50	250	140	--	13000	
03/23/05	478.46	21.64	0.00	456.82	7.49	--	21000	94	ND<50	630	1200	--	6200	
06/28/05	478.46	24.57	0.00	453.89	-2.93	--	6600	24	0.64	150	70	--	4700	
09/23/05	478.46	27.64	0.00	450.82	-3.07	--	6000	31	ND<25	150	ND<50	--	8900	
12/30/05	478.46	23.96	0.00	454.50	3.68	--	390	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	840	
U-4 (Screen Interval in feet: 35.0-45.0)														
04/03/01	476.93	31.63	0.00	445.30	--	ND	--	ND	ND	ND	ND	37.8	38.2	
07/02/01	476.93	37.96	0.00	438.97	-6.33	ND	--	ND	ND	ND	ND	ND	5.3	
10/08/01	476.93	44.24	0.00	432.69	-6.28	--	--	--	--	--	--	--	--	Not enough water to sample

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2005
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ($\mu\text{g/l}$)	TPPH 8260B ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE 8021B ($\mu\text{g/l}$)	MTBE 8260B ($\mu\text{g/l}$)	Comments
U-4 continued														
01/03/02	476.93	36.15	0.00	440.78	8.09	100	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10	8.5	
04/05/02	476.93	37.64	0.00	439.29	-1.49	ND<50	--	0.50	ND<0.50	ND<0.50	ND<0.50	4.1	--	
07/02/02	476.93	36.85	0.00	440.08	0.79	--	67	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	12	
10/01/02	476.93	38.54	0.00	438.39	-1.69	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.8	
12/30/02	476.93	32.64	0.00	444.29	5.90	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	25	
05/02/03	476.93	31.40	0.00	445.53	1.24	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.1	
07/01/03	476.93	33.60	0.00	443.33	-2.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.1	
10/03/03	476.93	37.63	0.00	439.30	-4.03	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.1	
01/08/04	476.93	29.23	0.00	447.70	8.40	--	ND<50	0.55	ND<0.50	1.6	3.7	--	2.5	
04/15/04	476.93	29.80	0.00	447.13	-0.57	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.2	
07/15/04	476.93	35.05	0.00	441.88	-5.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.1	
12/08/04	476.93	35.10	0.00	441.83	-0.05	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3.0	
03/23/05	476.93	25.38	0.00	451.55	9.72	--	ND<50	ND<0.50	ND<0.50	1.3	1.2	--	0.65	
06/28/05	476.93	28.67	0.00	448.26	-3.29	--	34J	ND<0.50	0.15J	ND<0.50	ND<1.0	--	0.23J	
09/23/05	476.93	32.25	0.00	444.68	-3.58	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11	
12/30/05	476.93	31.02	0.00	445.91	1.23	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	17	
U-5 (Screen Interval in feet: 37.0-47.0)														
04/03/01	476.51	31.75	0.00	444.76	--	ND	--	ND	0.728	ND	0.993	54.8	55.4	
07/02/01	476.51	38.68	0.00	437.83	-6.93	ND	--	ND	ND	ND	ND	88	94	
10/08/01	476.51	46.31	0.00	430.20	-7.63	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	37	54	
01/03/02	476.51	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	476.51	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	476.51	36.92	0.00	439.59	0.91	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	43	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2005
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G ($\mu\text{g/l}$)	TPPH 8260B ($\mu\text{g/l}$)	Benzene ($\mu\text{g/l}$)	Toluene ($\mu\text{g/l}$)	Ethyl-benzene ($\mu\text{g/l}$)	Total Xylenes ($\mu\text{g/l}$)	MTBE 8021B ($\mu\text{g/l}$)	MTBE 8260B ($\mu\text{g/l}$)	Comments
U-5 continued														
10/01/02	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible - truck parked over well
12/30/02	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible - car parked over well
05/02/03	476.51	31.55	0.00	444.96	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	18	
07/01/03	476.51	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	476.51	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	
04/15/04	476.51	30.05	0.00	446.46	-0.84	--	57	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	37	
07/15/04	476.51	35.15	0.00	441.36	-5.10	--	60	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	27	
12/08/04	476.51	35.33	0.00	441.18	-0.18	--	62	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	39	
03/23/05	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	
06/28/05	476.51	28.90	0.00	447.61	-3.45	--	73	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	40	
09/23/05	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	
12/30/05	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	
U-6 (Screen Interval in feet: DNA)														
01/03/02	478.38	33.99	0.00	444.39	--	5000	--	36	ND<25	260	450	ND<250	ND<10	
04/05/02	478.38	36.18	0.00	442.20	-2.19	1300	--	16	ND<5.0	54	ND<5.0	ND<25	--	
07/02/02	478.38	36.33	0.00	442.05	-0.15	--	1100	1.4	ND<0.50	16	ND<1.0	--	0.94	
10/01/02	478.38	37.70	0.00	440.68	-1.37	--	2000	5.4	ND<0.50	62	ND<1.0	--	2.6	
12/30/02	478.38	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	478.38	31.49	0.00	446.89	0.14	--	150	ND<0.50	ND<0.50	1.8	1.7	--	82	
07/01/03	478.38	32.88	0.00	445.50	-1.39	--	190	1.8	ND<0.50	9.4	8.7	--	36	
10/03/03	478.38	36.54	0.00	441.84	-3.66	--	ND<10000	140	ND<100	940	560	--	ND<400	
01/08/04	478.38	30.45	0.00	447.93	6.09	--	3500	29	32	90	89	--	27	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2005
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G	TPPH 8260B	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-6 continued														
04/15/04	478.38	29.48	0.00	448.90	0.97	--	2400	19	ND<2.5	91	53	--	16	
07/15/04	478.38	34.30	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	
03/23/05	478.38	25.08	0.00	453.30	9.72	--	960	2.7	ND<0.50	9.6	4.8	--	2.5	
06/28/05	478.38	28.75	0.00	449.63	-3.67	--	12000	120	4.9	930	780	--	21	
09/23/05	478.38	32.38	0.00	446.00	-3.63	--	5200	78	ND<25	540	230	--	34	
12/30/05	478.38	30.43	0.00	447.95	1.95	--	2400	15	0.67	99	12	--	3.5	
U-7 (Screen Interval in feet: DNA)														
01/03/02	478.74	32.43	0.00	446.31	--	3100	--	93	ND<10	35	73	140	130	
04/05/02	478.74	34.06	0.00	444.68	-1.63	630	--	22	0.53	2.6	ND<0.50	45	--	
07/02/02	478.74	35.28	0.00	443.46	-1.22	--	1100	21	ND<0.50	6.9	ND<1.0	--	60	
10/01/02	478.74	37.70	0.00	441.04	-2.42	--	1700	11	ND<0.50	3.1	ND<1.0	--	25	
12/30/02	478.74	31.93	0.00	446.81	5.77	--	4600	41	5.3	32	13	--	34	
05/02/03	478.74	31.81	0.00	446.93	0.12	--	3000	17	2.7	14	5.1	--	42	
07/01/03	478.74	33.47	0.00	445.27	-1.66	--	2300	11	0.53	8.0	1.5	--	35	
10/03/03	478.74	35.84	0.00	442.90	-2.37	--	6500	30	ND<5.0	41	ND<10	--	53	
01/08/04	478.74	30.35	0.00	448.39	5.49	--	1600	4.0	ND<1.0	4.2	8.7	--	56	
04/15/04	478.74	29.03	0.00	449.71	1.32	--	3600	22	1.3	64	40	--	57	
07/15/04	478.74	33.52	0.00	445.22	-4.49	--	4700	15	1.2	59	57	--	50	
12/08/04	478.74	34.68	0.00	444.06	-1.16	--	5800	26	1.9	63	27	--	52	
03/23/05	478.74	24.49	0.00	454.25	10.19	--	5600	18	1.3	42	14	--	39	
06/28/05	478.74	28.83	0.00	449.91	-4.34	--	5400	16	1.1	35	10	--	45	
09/23/05	478.74	32.35	0.00	446.39	-3.52	--	2400	13	1.3	31	6.9	--	46	
12/30/05	478.74	30.18	0.00	448.56	2.17	--	2500	11	1.1	28	4.3	--	35	

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 4186

Date Sampled	EDC ($\mu\text{g/l}$)	EDB ($\mu\text{g/l}$)	Post Purge DO (mg/l)	TAME 8260B ($\mu\text{g/l}$)	TBA 8260B ($\mu\text{g/l}$)	DIPE 8260B ($\mu\text{g/l}$)	ETBE 8260B ($\mu\text{g/l}$)	Ethanol 8260B ($\mu\text{g/l}$)	Post Purge ORP (mV)
U-1									
10/02/00	--	--	--	--	ND	--	--	--	--
12/30/02	--	--	0.60	--	--	--	--	--	91
05/02/03	--	--	0.50	--	--	--	--	--	90
07/01/03	--	--	0.60	--	--	--	--	ND<500000	110
10/03/03	--	--	3.79	--	--	--	--	ND<500	329
01/08/04	--	--	12.36	--	--	--	--	ND<500	184
04/15/04	--	--	10.56	--	--	--	--	ND<50	213
07/15/04	--	--	6.62	--	--	--	--	ND<50	251
12/08/04	--	--	2.66	--	--	--	--	ND<50	68
03/23/05	--	--	3.12	--	--	--	--	ND<50	091
06/28/05	--	--	8.84	--	--	--	--	ND<1000	153
09/23/05	--	--	2.26	--	--	--	--	ND<1000	187
12/30/05	--	--	7.74	--	--	--	--	ND<250	159
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	--	--	1.20	--	--	--	--	ND<500000	110
10/03/03	--	--	5.61	--	--	--	--	ND<500	321
01/08/04	--	--	12.11	--	--	--	--	ND<500	- 6
04/15/04	--	--	11.39	--	--	--	--	ND<50	259
07/15/04	--	--	7.46	--	--	--	--	ND<50	238
12/08/04	--	--	3.57	--	--	--	--	ND<50	132
03/23/05	--	--	4.57	--	--	--	--	730	024
06/28/05	--	--	8.08	--	--	--	--	ND<1000	230

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 4186

Date Sampled	EDC ($\mu\text{g/l}$)	EDB ($\mu\text{g/l}$)	Post Purge DO (mg/l)	TAME 8260B ($\mu\text{g/l}$)	TBA 8260B ($\mu\text{g/l}$)	DIPE 8260B ($\mu\text{g/l}$)	ETBE 8260B ($\mu\text{g/l}$)	Ethanol 8260B ($\mu\text{g/l}$)	Post Purge ORP (mV)
U-2 continued									
09/23/05	--	--	5.47	--	--	--	--	ND<1000	188
12/30/05	--	--	8.33	--	--	--	--	ND<250	177
U-3									
10/02/00	--	--	--	--	63000	--	--	--	--
01/08/01	ND	ND	--	ND	49300	ND	ND	ND	--
04/03/01	ND	ND	--	ND	22200	ND	ND	ND	--
07/02/01	ND	ND	--	ND	27000	ND	ND	ND	--
10/08/01	ND<290	ND<290	--	ND<290	33000	ND<290	ND<290	ND<140000000	--
01/03/02	ND<100	ND<100	--	ND<100	17000	ND<100	ND<100	ND<50000000	--
04/05/02	ND<100	ND<100	--	ND<100	66000	ND<100	ND<100	ND<25000000	--
07/02/02	ND<250	ND<250	--	ND<250	47000	ND<500	ND<250	ND<13000000	--
10/01/02	ND<1000	ND<1000	0.50	ND<1000	ND<50000	ND<1000	ND<1000	ND<250000000	-47
12/30/02	ND<400	ND<400	0.20	ND<400	23000	ND<400	ND<400	ND<100000000	106
05/02/03	ND<200	ND<200	0.50	ND<200	25000	ND<200	ND<200	ND<50000000	85
07/01/03	ND<400	ND<400	0.50	ND<400	32000	ND<400	ND<400	ND<100000000	90
10/03/03	ND<200	ND<200	3.80	ND<200	39000	ND<2.0	ND<200	ND<50000	-27
01/08/04	ND<400	ND<400	12.82	ND<400	ND<20000	ND<400	ND<400	ND<100000	133
04/15/04	ND<0.5	ND<0.5	3.11	ND<0.5	18000	ND<1.0	ND<0.5	ND<2500	24
07/15/04	ND<25	ND<25	1.90	ND<25	15000	ND<50	ND<25	ND<2500	53
12/08/04	ND<50	ND<50	1.30	ND<50	34000	ND<100	ND<50	ND<5000	-81
03/23/05	--	--	0.52	--	--	--	--	ND<5000	-087
06/28/05	--	--	1.47	--	--	--	--	ND<1000	-151
09/23/05	--	--	1.40	--	--	--	--	ND<50000	-80
12/30/05	ND<0.50	ND<0.50	1.45	0.58	2000	ND<0.50	ND<0.50	ND<250	-068
U-4									
04/03/01	ND	ND	--	ND	ND	ND	ND	ND	--

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 4186

Date Sampled	EDC ($\mu\text{g/l}$)	EDB ($\mu\text{g/l}$)	Post Purge DO (mg/l)	TAME 8260B ($\mu\text{g/l}$)	TBA 8260B ($\mu\text{g/l}$)	DIPE 8260B ($\mu\text{g/l}$)	ETBE 8260B ($\mu\text{g/l}$)	Ethanol 8260B ($\mu\text{g/l}$)	Post Purge ORP (mV)
U-4 continued									
07/02/01	ND	ND	--	ND	ND	ND	ND	ND	--
01/03/02	ND<1.0	ND<1.0	--	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<500000	--
10/01/02	--	--	1.00	--	--	--	--	--	83
12/30/02	--	--	0.40	--	--	--	--	--	126
05/02/03	--	--	0.70	--	--	--	--	--	120
07/01/03	--	--	0.60	--	--	--	--	ND<500000	130
10/03/03	--	--	2.06	--	--	--	--	ND<500	3.05
01/08/04	--	--	11.90	--	--	--	--	ND<500	76
04/15/04	--	--	3.30	--	--	--	--	ND<50	116
07/15/04	--	--	2.50	--	--	--	--	ND<50	32
12/08/04	--	--	2.09	--	--	--	--	ND<50	47
03/23/05	--	--	0.04	--	--	--	--	ND<50	021
06/28/05	--	--	2.24	--	--	--	--	ND<1000	120
09/23/05	--	--	3.01	--	--	--	--	ND<1000	176
12/30/05	--	--	1.96	--	--	--	--	ND<250	175
U-5									
04/03/01	ND	ND	--	ND	ND	ND	ND	ND	--
07/02/01	ND	ND	--	ND	ND	ND	ND	ND	--
10/08/01	ND<2.0	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<1000000	--
01/03/02	ND<1.0	ND<1.0	--	ND<1.0	ND<20	ND<1.0	ND<1.0	ND<500000	--
05/02/03	--	--	0.60	--	--	--	--	--	120
07/01/03	--	--	0.90	--	--	--	--	ND<500	145
10/03/03	--	--	2.21	--	--	--	--	ND<500	3.13
01/08/04	--	--	11.27	--	--	--	--	ND<500	104
04/15/04	--	--	3.35	--	--	--	--	ND<50	65
07/15/04	--	--	2.87	--	--	--	--	ND<50	66

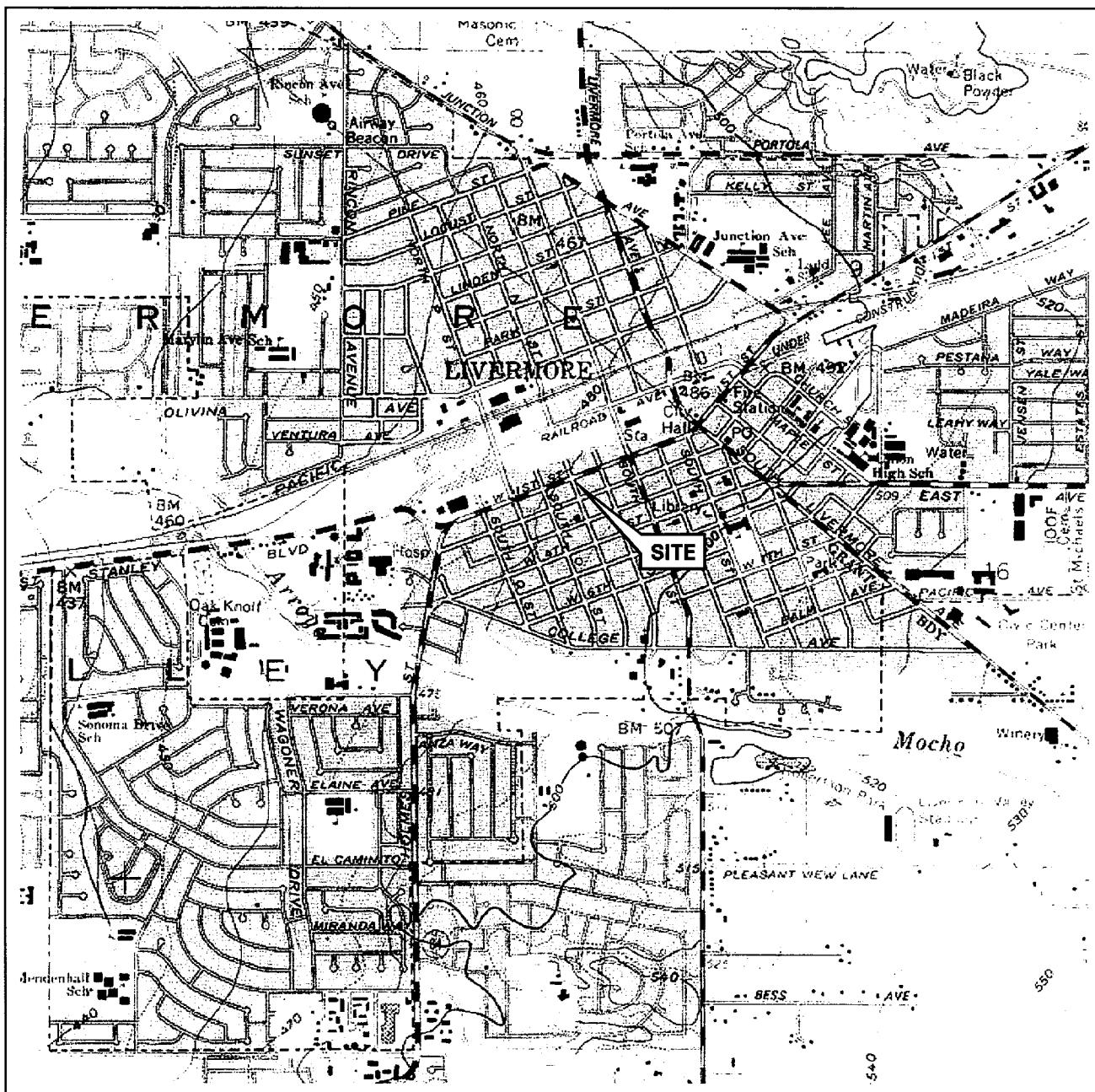
Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 4186

Date Sampled	EDC ($\mu\text{g/l}$)	EDB ($\mu\text{g/l}$)	Post Purge DO (mg/l)	TAME 8260B ($\mu\text{g/l}$)	TBA 8260B ($\mu\text{g/l}$)	DIPE 8260B ($\mu\text{g/l}$)	ETBE 8260B ($\mu\text{g/l}$)	Ethanol 8260B ($\mu\text{g/l}$)	Post Purge ORP (mV)
U-5 continued									
12/08/04	--	--	1.67	--	--	--	--	ND<50	102
03/23/05	--	--	0.75	--	--	--	--	ND<50	131
06/28/05	--	--	2.29	--	--	--	--	ND<1000	103
09/23/05	--	--	2.05	--	--	--	--	ND<1000	172
12/30/05	--	--	1.39	--	--	--	--	ND<250	171
U-6									
01/03/02	ND<10	ND<10	--	ND<10	ND<200	ND<10	ND<10	ND<5000000	--
10/01/02	--	--	0.90	--	--	--	--	--	--
12/30/02	--	--	0.20	--	--	--	--	--	88
05/02/03	--	--	0.90	--	--	--	--	--	145
07/01/03	--	--	0.70	--	--	--	--	ND<500000	120
10/03/03	--	--	2.26	--	--	--	--	ND<100000	12
01/08/04	--	--	11.95	--	--	--	--	ND<5000	-37
04/15/04	--	--	3.47	--	--	--	--	ND<250	-20
07/15/04	--	--	3.25	--	--	--	--	ND<250	-43
12/08/04	--	--	0.94	--	--	--	--	ND<250	-91
03/23/05	--	--	0.55	--	--	--	--	ND<50	-077
06/28/05	--	--	0.86	--	--	--	--	ND<1000	-129
09/23/05	--	--	1.97	--	--	--	--	ND<50000	-82
12/30/05	--	--	1.01	--	--	--	--	ND<250	-66
U-7									
01/03/02	ND<1.0	ND<1.0	--	ND<1.0	30	ND<1.0	ND<1.0	ND<500000	--
10/01/02	--	--	1.80	--	--	--	--	--	-60
12/30/02	--	--	0.10	--	--	--	--	--	121
05/02/03	--	--	0.40	--	--	--	--	--	105
07/01/03	--	--	0.50	--	--	--	--	ND<500000	95

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 4186

Date Sampled	EDC ($\mu\text{g/l}$)	EDB ($\mu\text{g/l}$)	Post Purge DO (mg/l)	TAME 8260B ($\mu\text{g/l}$)	TBA 8260B ($\mu\text{g/l}$)	DIPE 8260B ($\mu\text{g/l}$)	ETBE 8260B ($\mu\text{g/l}$)	Ethanol 8260B ($\mu\text{g/l}$)	Post Purge ORP (mV)
U-7 continued									
10/03/03	--	--	2.91	--	--	--	--	ND<5000	-21
01/08/04	--	--	11.85	--	--	--	--	ND<1000	-51
04/15/04	--	--	4.68	--	--	--	--	ND<100	-16
07/15/04	--	--	2.55	--	--	--	--	ND<100	-52
12/08/04	--	--	1.20	--	--	--	--	ND<100	-88
03/23/05	--	--	0.21	--	--	--	--	ND<100	-088
06/28/05	--	--	1.32	--	--	--	--	ND<1000	-160
09/23/05	--	--	2.25	--	--	--	--	ND<1000	108
12/30/05	--	--	1.12	--	--	--	--	ND<250	105

FIGURES



0 1/4 1/2 3/4 1 MILE

SCALE 1:24,000

N

SOURCE:

United States Geological Survey
7.5 Minute Topographic Map:
Livermore Quadrangle

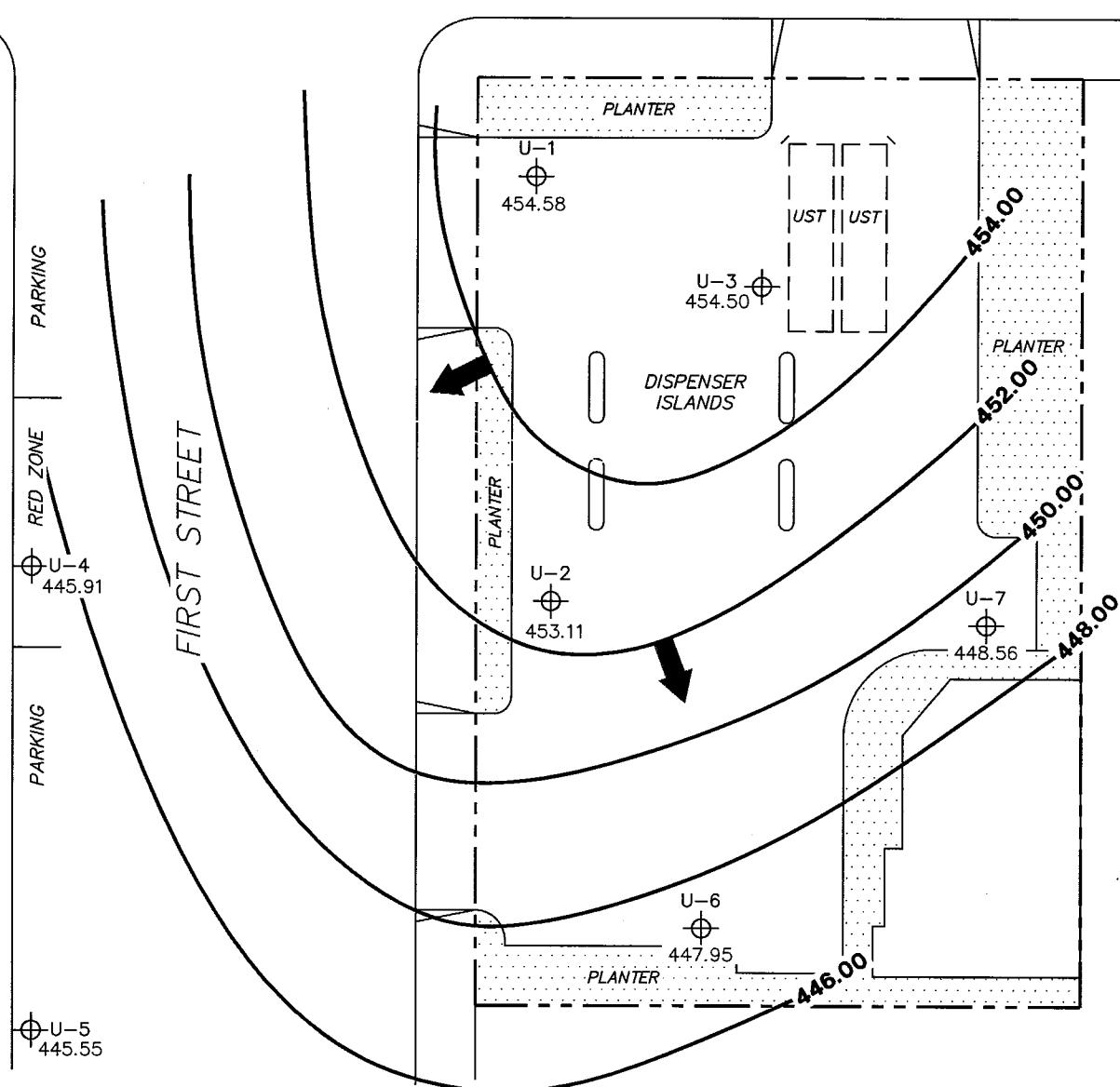


VICINITY MAP

76 Station 4186
1771 First Street
Livermore, California

TRC

N STREET



LEGEND

U-7 Monitoring Well with
Groundwater Elevation (feet)

454.00 — Groundwater Elevation Contour

→ General Direction of
Groundwater Flow

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**
December 30, 2005

76 Station 4186
1771 First Street
Livermore, California

SCALE (FEET)
0 30

N STREET



PARKING

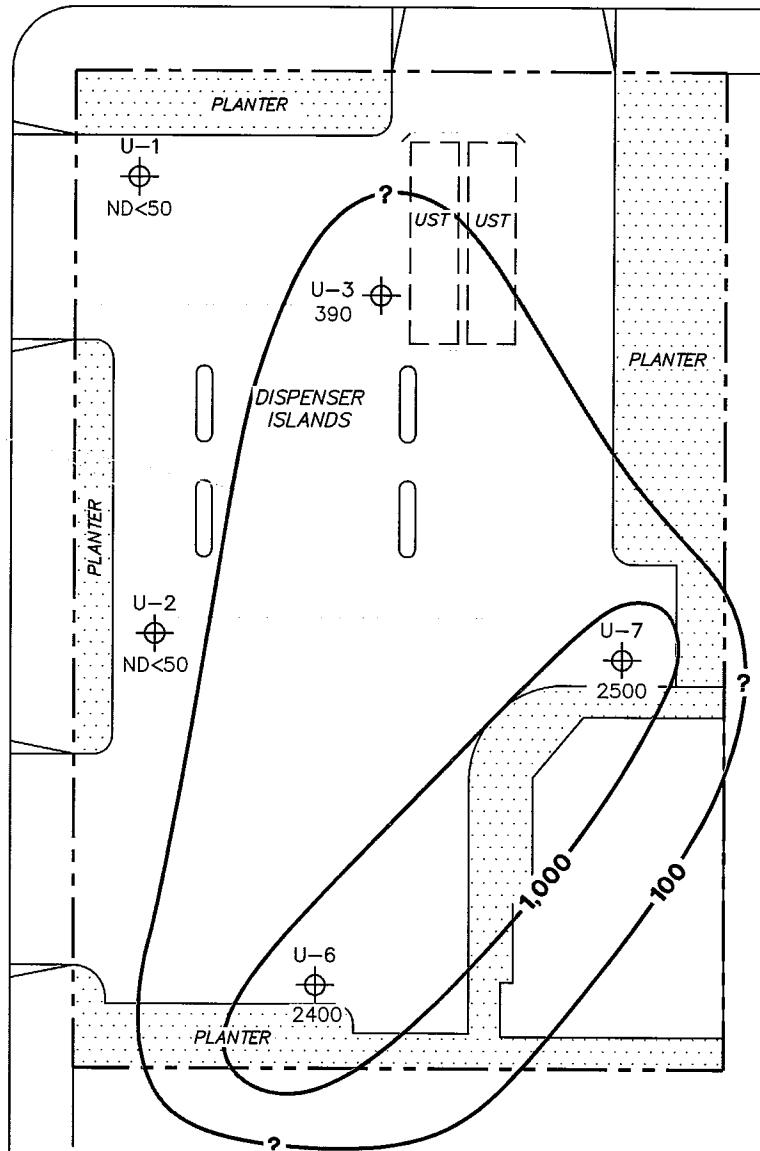
RED ZONE

PARKING

U-5
ND<50

U-4
ND<50

FIRST STREET



NOTES:

Contour lines are interpretive and based on laboratory analysis of groundwater samples.
TPPH = total purgeable petroleum hydrocarbons.
 $\mu\text{g/l}$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
UST = underground storage tank.
Results obtained using EPA Method 8260B.

LEGEND

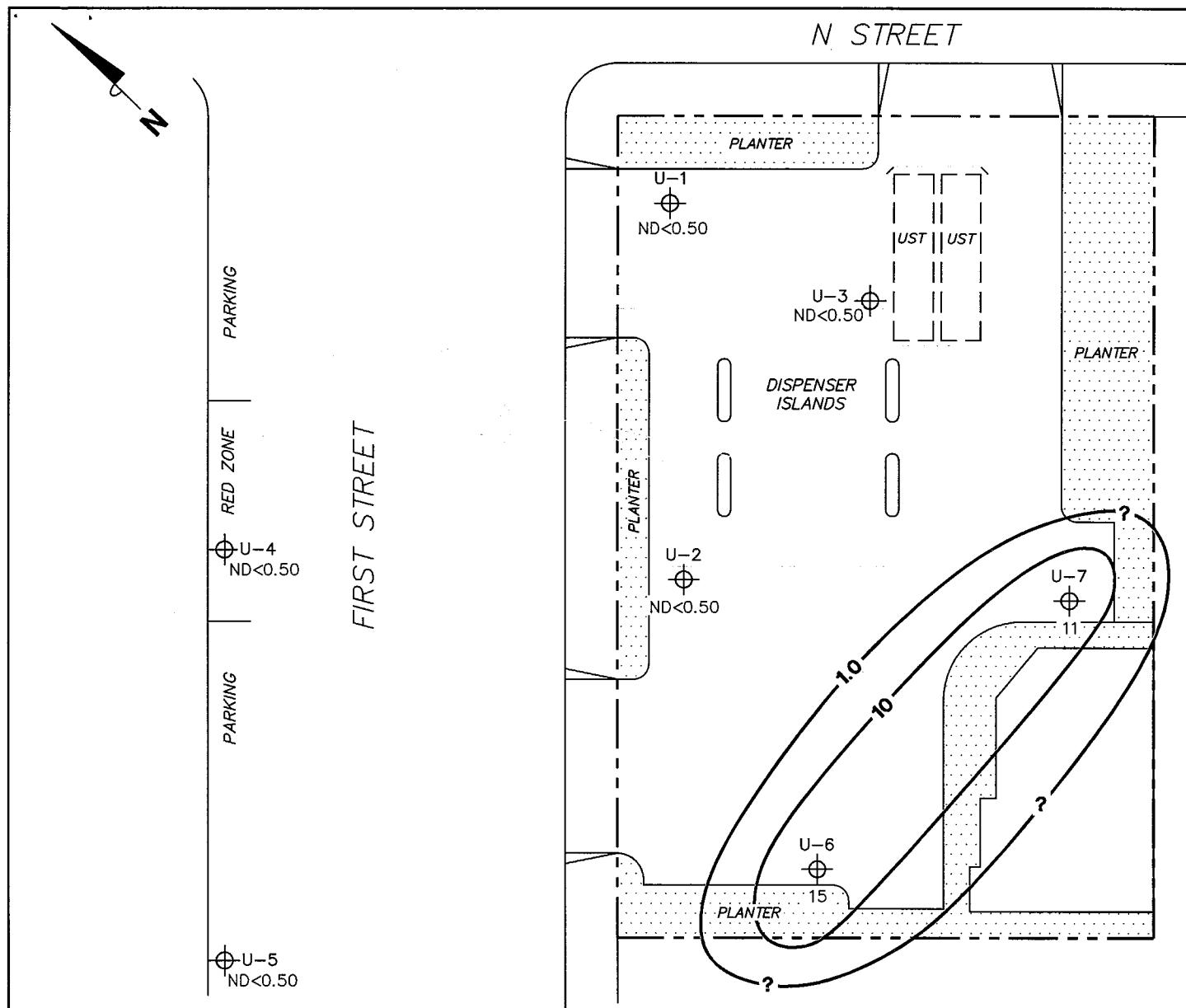
U-7 Monitoring Well with Dissolved-Phase TPPH Concentration ($\mu\text{g/l}$)

—1,000— Dissolved-Phase TPPH Contour ($\mu\text{g/l}$)

DISSOLVED PAHSE TPPH CONCENTRATION MAP
December 30, 2005

76 Station 4186
1771 First Street
Livermore, California

SCALE (FEET)
0 30



NOTES:

Contour lines are interpretive and based on laboratory analysis of groundwater samples.
 $\mu\text{g/l}$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
 UST = underground storage tank.

LEGEND

U-7 Monitoring Well with Dissolved-Phase Benzene Concentration ($\mu\text{g/l}$)

— 10 — Dissolved-Phase Benzene Contour ($\mu\text{g/l}$)

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
December 30, 2005

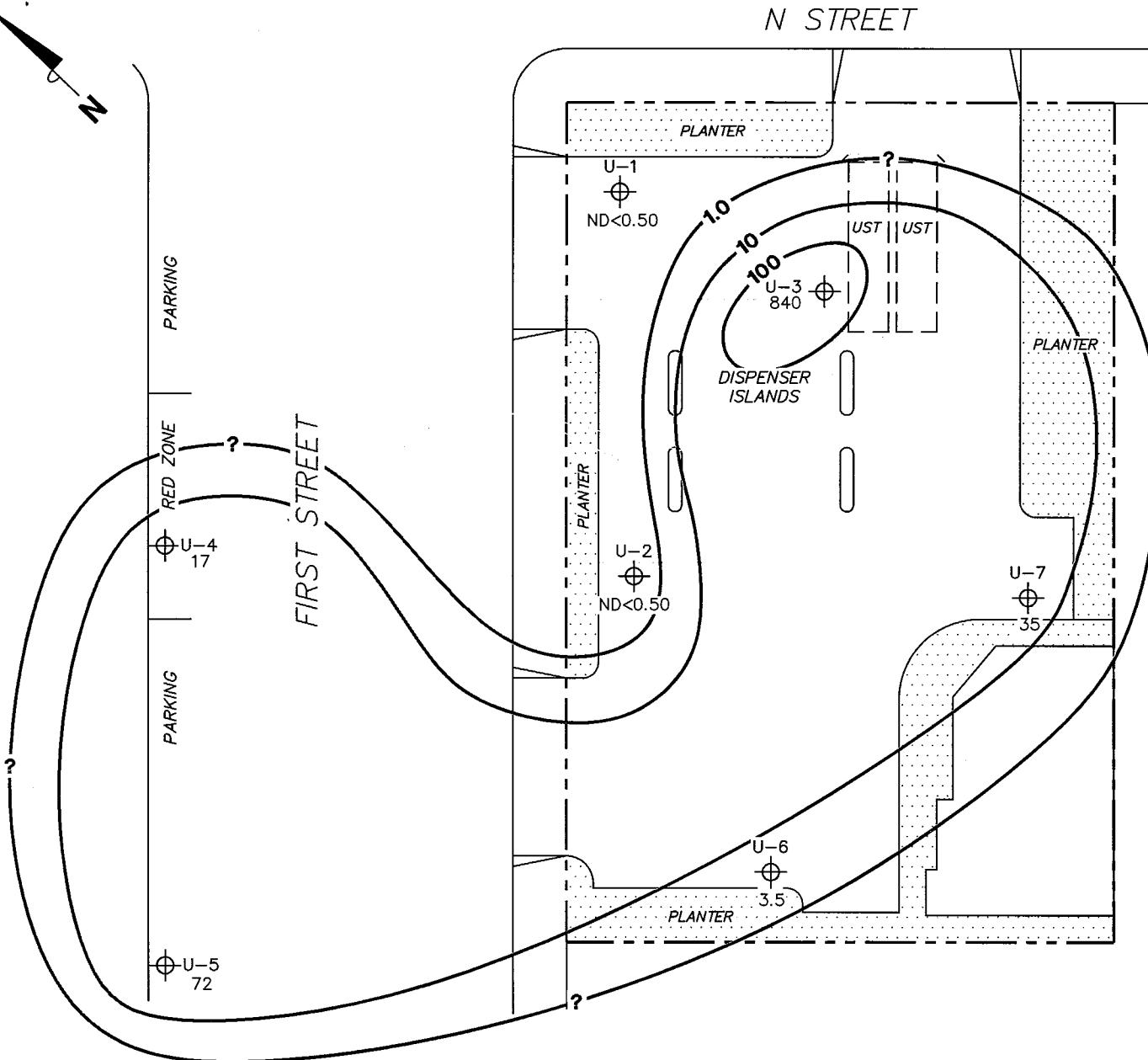
76 Station 4186
 1771 First Street
 Livermore, California

SCALE (FEET)
 0 30

TRC

FIGURE 4

N STREET



NOTES:

Contour lines are interpretive and based on laboratory analysis of groundwater samples.
MTBE = methyl tertiary butyl ether.
 $\mu\text{g/l}$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank.
Results obtained using EPA Method 8260B.

LEGEND

U-7 Monitoring Well with
Dissolved-Phase MTBE
Concentration ($\mu\text{g/l}$)

—100— Dissolved-Phase
MTBE Contour ($\mu\text{g/l}$)

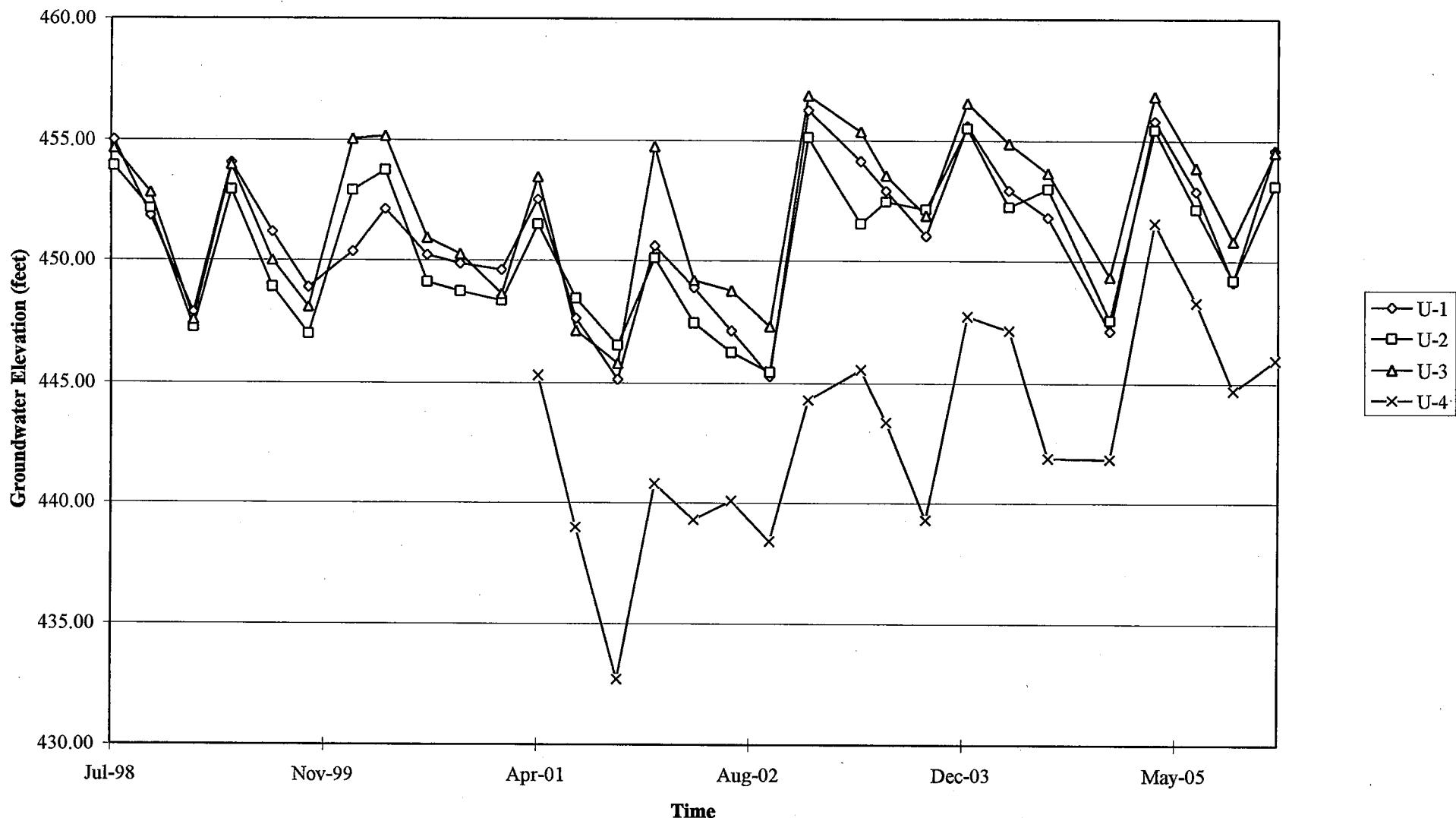
**DISSOLVED PHASE MTBE
CONCENTRATION MAP**
December 30, 2005

76 Station 4186
1771 First Street
Livermore, California

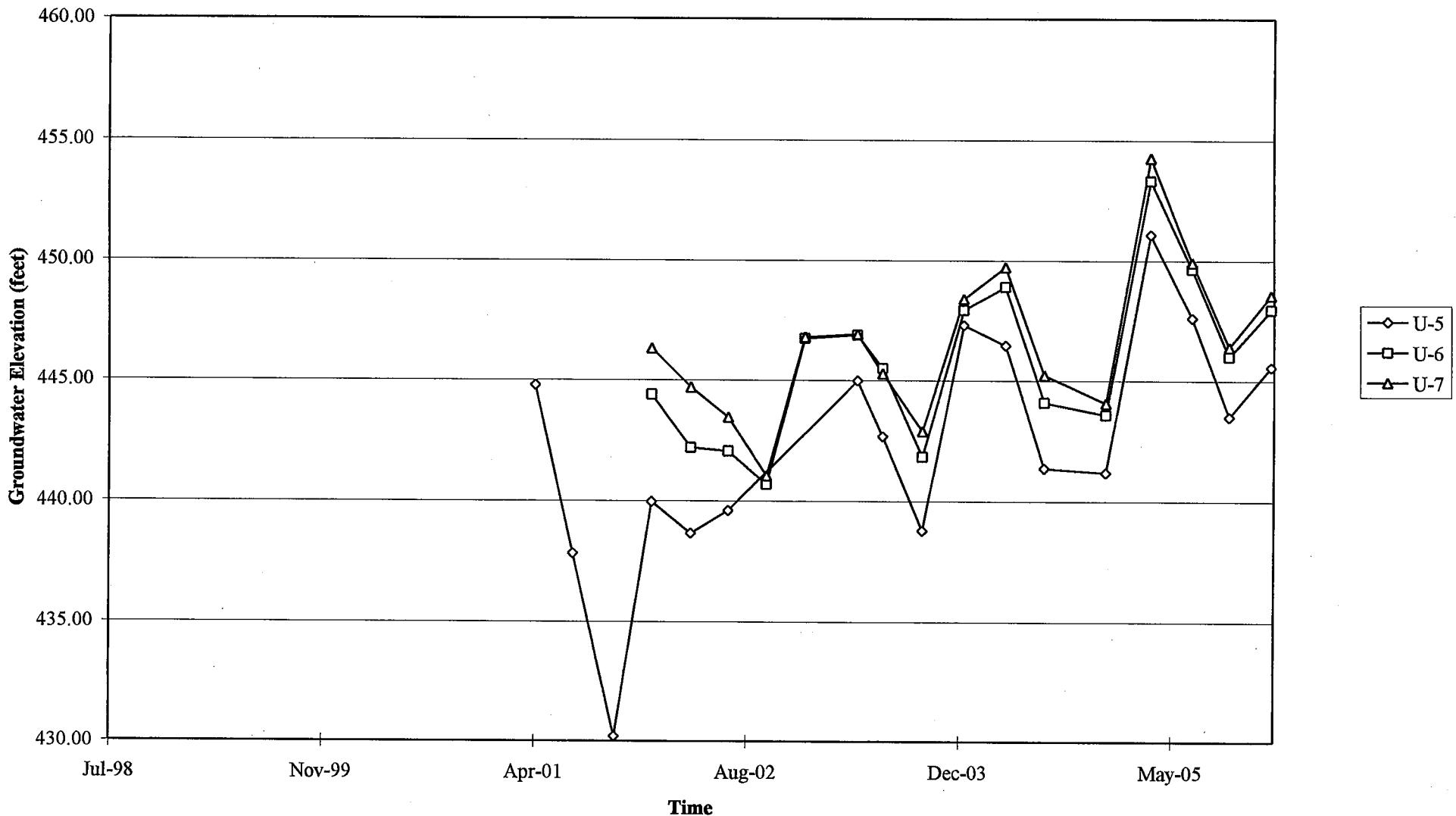
SCALE (FEET)
0 30

GRAPHS

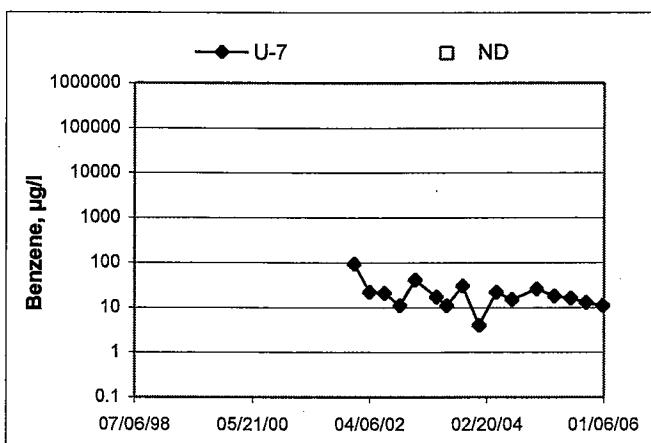
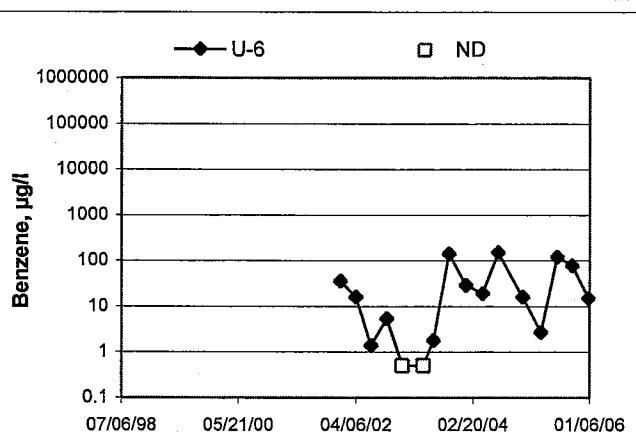
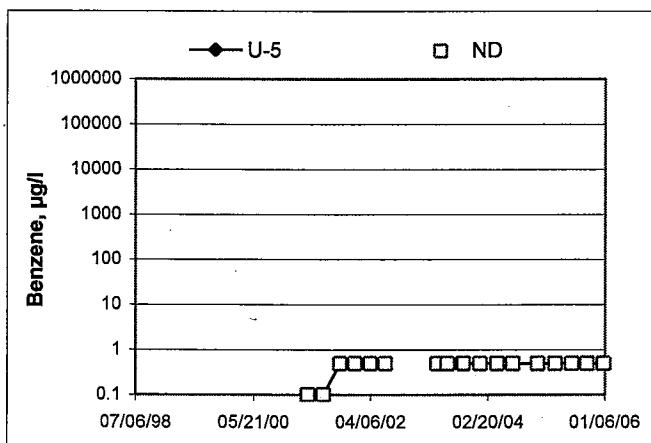
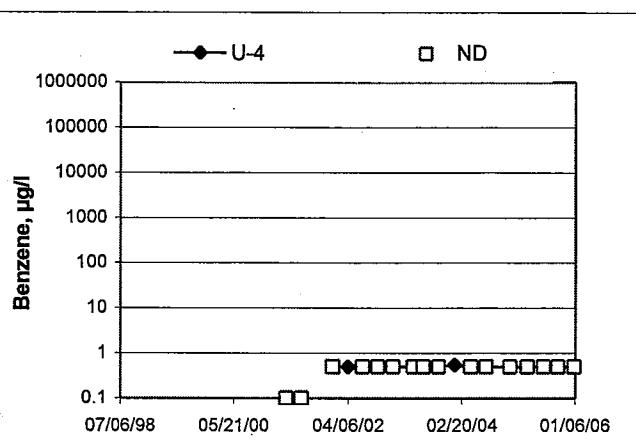
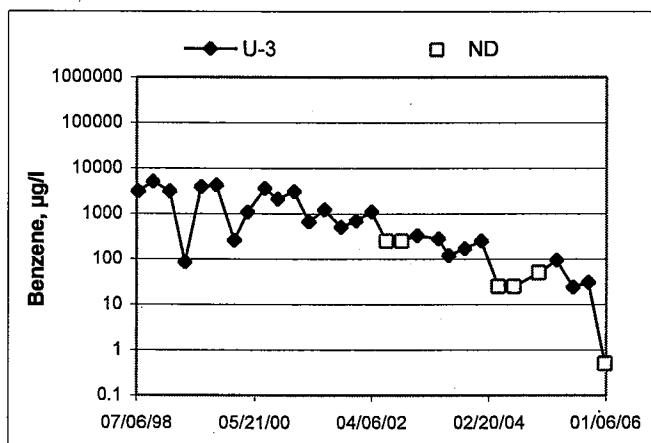
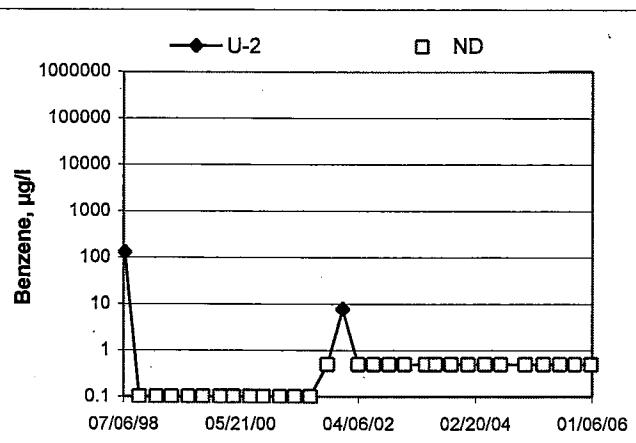
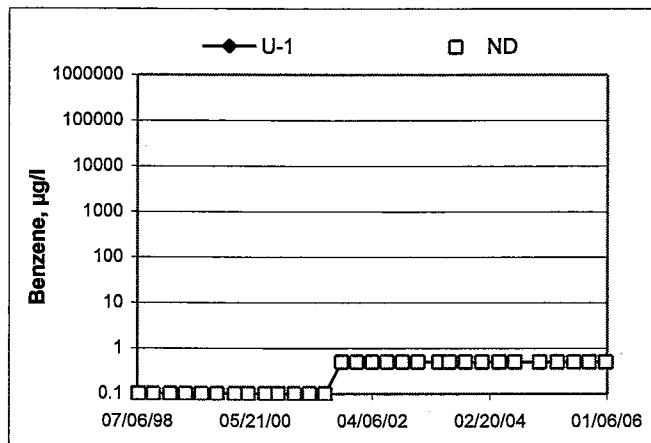
Groundwater Elevations vs. Time
76 Station 4186



Groundwater Elevations vs. Time
76 Station 4186



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 (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.

GROUNDWATER SAMPLING FIELD NOTES

Site: 4156

Technician: Melissa Jamie

Project No.: 41050001

Date: 12-30-05

Well No.: U-1

Purge Method: Sub

Depth to Water (feet): 23.65

Depth to Product (feet): _____

Total Depth (feet): 33.70

LPH & Water Recovered (gallons): _____

Water Column (feet): 10.0

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 25.69

1 Well Volume (gallons): 2

Well No.: V-2

Purge Method: Sub

Depth to Water (feet): 24.33

Depth to Product (feet): _____

Total Depth (feet): 33.09

LPH & Water Recovered (gallons): _____

Water Column (feet): 8.76

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 26.08

1 Well Volume (gallons): 1

GROUNDWATER SAMPLING FIELD NOTES

Technician: Wellsen Jamie

Site: 41-86

Project No.: 4105-0001

Date: 12-30-05

Well No.: U-4

Purge Method: S, 4

Depth to Water (feet): 31.02

Depth to Product (feet): _____

Total Depth (feet): 45' 09"

LPH & Water Recovered (gallons): _____

Water Column (feet): 14.0

Casing Diameter (Inches): 2 1/2

80% Recharge Depth (feet): 35.5

1 Well Volume (gallons):

Well No.: U-5

Purge Method: Sub

Depth to Water (feet): 30.96

Depth to Product (feet): _____

Total Depth (feet): 47.05

LPH & Water Recovered (gallons): _____

Water Column (feet): 16.09

Casing Diameter (Inches): 2

80% Recharge Depth (feet): 34.17

1 Well Volume (gallons): 3

GROUNDWATER SAMPLING FIELD NOTES

Site: 4.186

Technician: Melissa, SCW

Date: 12-30-05

Well No.: U-7

Purge Method: Sub

Depth to Water (feet): 30.19

Depth to Product (feet): _____

Total Depth (feet): 44.35

LPH & Water Recovered (gallons): _____

Water Column (feet): 14.17

Casing Diameter (Inches): 3"

80% Recharge Depth (feet): 33.01

1 Well Volume (gallons): _____

Well No.: U-3

Purge Method: Sub

Depth to Water (feet): 23.96

Depth to Product (feet): _____

Total Depth (feet): 33,41

LPH & Water Recovered (gallons): _____

Water Column (feet): 9.45

Casing Diameter (Inches): 2 1/2

80% Recharge Depth (feet): 25.85

1 Well Volume (gallons): 2

GROUNDWATER SAMPLING FIELD NOTES

Technician: Melissa, Jamie

Site: 4186

Project No.: 41050001

Date: 12-30-05

Well No.: U-6

Purge Method: Sub

Depth to Water (feet): 30.43

Depth to Product (feet): _____

Total Depth (feet): 44.56

LPH & Water Recovered (gallons): _____

Water Column (feet): 14.13

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 33.25

1 Well Volume (gallons): 2

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): _____



Laboratories, Inc

Date of Report: 01/11/2006

Anju Farfan

TRC Alton Geoscience

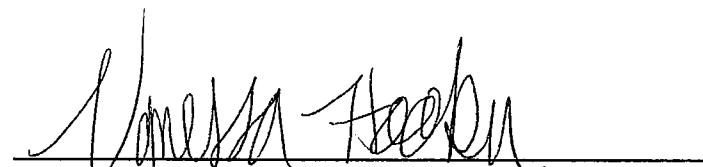
21 Technology Drive
Irvine, CA 92618-2302

RE: 4186

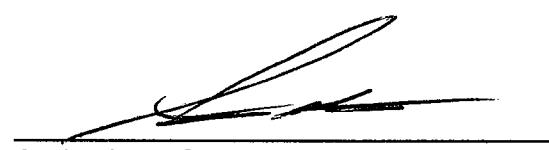
BC Lab Number: 0600053

Enclosed are the results of analyses for samples received by the laboratory on 01/03/06 23:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Vanessa Hooker
Client Service Rep



Authorized Signature

TRC Alton Geoscience
21 Technology Drive
Irvine CA, 92618-2302

Project: 4186
Project Number: [none]
Project Manager: Anju Farfan

Reported: 01/11/06 09:21

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
0600053-01	COC Number: --- Project Number: 4186 Sampling Location: U-1 Sampling Point: U-1 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 09:02 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0600053-02	COC Number: --- Project Number: 4186 Sampling Location: U-2 Sampling Point: U-2 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 09:28 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0600053-03	COC Number: --- Project Number: 4186 Sampling Location: U-4 Sampling Point: U-4 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 09:15 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0600053-04	COC Number: --- Project Number: 4186 Sampling Location: U-5 Sampling Point: U-5 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 09:20 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0600053-05	COC Number: --- Project Number: 4186 Sampling Location: U-7 Sampling Point: U-7 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 08:50 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:

0600053-01	COC Number: --- Project Number: 4186 Sampling Location: U-1 Sampling Point: U-1 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 09:02 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0600053-02	COC Number: --- Project Number: 4186 Sampling Location: U-2 Sampling Point: U-2 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 09:28 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0600053-03	COC Number: --- Project Number: 4186 Sampling Location: U-4 Sampling Point: U-4 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 09:15 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0600053-04	COC Number: --- Project Number: 4186 Sampling Location: U-5 Sampling Point: U-5 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 09:20 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0600053-05	COC Number: --- Project Number: 4186 Sampling Location: U-7 Sampling Point: U-7 Sampled By: Melissa/Jaime of TRCI	Receive Date: 01/03/06 23:30 Sampling Date: 12/30/05 08:50 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW: Global ID: T0600101777 Matrix: W Samle QC Type (SACode): CS Cooler ID:



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Project: 4186
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Project Manager: Anju Farfan

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Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information
0600053-06	<p>COC Number: --- Project Number: 4186 Sampling Location: U-3 Sampling Point: U-3 Sampled By: Melissa/Jaime of TRCI</p> <p>Receive Date: 01/03/06 23:30 Delivery Work Order (LabW: Sampling Date: 12/30/05 09:09 Global ID: T0600101777 Sample Depth: --- Matrix: W Sample Matrix: Water Samle QC Type (SACode): CS Cooler ID:</p>
0600053-07	<p>COC Number: --- Project Number: 4186 Sampling Location: U-6 Sampling Point: U-6 Sampled By: Melissa/Jaime of TRCI</p> <p>Receive Date: 01/03/06 23:30 Delivery Work Order (LabW: Sampling Date: 12/30/05 08:57 Global ID: T0600101777 Sample Depth: --- Matrix: W Sample Matrix: Water Samle QC Type (SACode): CS Cooler ID:</p>

COC Number: --- **Receive Date:** 01/03/06 23:30 **Delivery Work Order (LabW:**
Project Number: 4186 **Sampling Date:** 12/30/05 09:09 **Global ID:** T0600101777
Sampling Location: U-3 **Sample Depth:** --- **Matrix:** W
Sampling Point: U-3 **Sample Matrix:** Water **Samle QC Type (SACode):** CS
Sampled By: Melissa/Jaime of TRCI **Cooler ID:**

COC Number: --- **Receive Date:** 01/03/06 23:30 **Delivery Work Order (LabW:**
Project Number: 4186 **Sampling Date:** 12/30/05 08:57 **Global ID:** T0600101777
Sampling Location: U-6 **Sample Depth:** --- **Matrix:** W
Sampling Point: U-6 **Sample Matrix:** Water **Samle QC Type (SACode):** CS
Sampled By: Melissa/Jaime of TRCI **Cooler ID:**



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Project Manager: Anju Farfan

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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0600053-01 | Client Sample Name: 4186, U-1, U-1, 12/30/2005 9:02:00AM, Melissa/Jaime

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Instrument ID	QC Dilution	Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	ND
Ethylbenzene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	ND
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	ND
Toluene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	ND
Total Xylenes	ND	ug/L	1.0		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	ND
Ethanol	ND	ug/L	250		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	ND
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	ND
1,2-Dichloroethane-d4 (Surrogate)	94.6	%	76 - 114 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	
Toluene-d8 (Surrogate)	99.4	%	88 - 110 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	
4-Bromofluorobenzene (Surrogate)	94.7	%	86 - 115 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:01	sdu	MS-V12	1	BPA0211	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0600053-02		Client Sample Name: 4186, U-2, U-2, 12/30/2005 9:28:00AM, Melissa/Jaime										
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Instrument ID	QC Dilution	Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	ND
Ethylbenzene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	ND
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	ND
Toluene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	ND
Total Xylenes	ND	ug/L	1.0		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	ND
Ethanol	ND	ug/L	250		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	ND
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	ND
1,2-Dichloroethane-d4 (Surrogate)	95.8	%	76 - 114 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	
Toluene-d8 (Surrogate)	99.2	%	88 - 110 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	
4-Bromofluorobenzene (Surrogate)	93.3	%	86 - 115 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:22	sdu	MS-V12	1	BPA0211	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0600053-03 Client Sample Name: 4186, U-4, U-4, 12/30/2005 9:15:00AM, Melissa/Jaime

Constituent	Result	Units	PQL	MDL	Method	Prep	Run	Instru-	QC	MB	Lab	
						Date	Date/Time	ment ID				
Benzene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	ND
Ethylbenzene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	ND
Methyl t-butyl ether	17	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	ND
Toluene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	ND
Total Xylenes	ND	ug/L	1.0		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	ND
Ethanol	ND	ug/L	250		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	ND
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	ND
1,2-Dichloroethane-d4 (Surrogate)	94.6	%	76 - 114 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	
Toluene-d8 (Surrogate)	99.6	%	88 - 110 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	
4-Bromofluorobenzene (Surrogate)	94.8	%	86 - 115 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 18:44	sdu	MS-V12	1	BPA0211	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0600053-04 Client Sample Name: 4186, U-5, U-5, 12/30/2005 9:20:00AM, Melissa/Jaime

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211	ND
Ethylbenzene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211	ND
Methyl t-butyl ether	72	ug/L	0.50		EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211	ND
Toluene	ND	ug/L	0.50		EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211	ND
Total Xylenes	ND	ug/L	1.0		EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211	ND
Ethanol	ND	ug/L	250		EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211	ND
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211	ND A53
1,2-Dichloroethane-d4 (Surrogate)	94.5	%	76 - 114 (LCL - UCL)	EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211		
Toluene-d8 (Surrogate)	99.2	%	88 - 110 (LCL - UCL)	EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211		
4-Bromofluorobenzene (Surrogate)	96.1	%	86 - 115 (LCL - UCL)	EPA-8260	01/05/06	01/05/06 19:06	sdu	MS-V12	1	BPA0211		



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0600053-05		Client Sample Name: 4186, U-7, U-7, 12/30/2005 8:50:00AM, Melissa/Jaime										
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Instrument ID	QC Dilution	Batch ID	MB Bias	Lab Quals
Benzene	11	ug/L	0.50		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	ND
Ethylbenzene	28	ug/L	0.50		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	ND
Methyl t-butyl ether	35	ug/L	0.50		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	ND
Toluene	1.1	ug/L	0.50		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	ND
Total Xylenes	4.3	ug/L	1.0		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	ND
Ethanol	ND	ug/L	250		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	ND
Total Purgeable Petroleum Hydrocarbons	2500	ug/L	50		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	ND
1,2-Dichloroethane-d4 (Surrogate)	95.7	%	76 - 114 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	
Toluene-d8 (Surrogate)	103	%	88 - 110 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	
4-Bromofluorobenzene (Surrogate)	106	%	86 - 115 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 19:28	sdu	MS-V12	1	BPA0211	



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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0600053-06		Client Sample Name: 4186, U-3, U-3, 12/30/2005 9:09:00AM, Melissa/Jaime										
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Instrument ID	QC Dilution	Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
1,2-Dichloroethane	ND	ug/L	0.50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
Ethylbenzene	ND	ug/L	0.50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
Methyl t-butyl ether	840	ug/L	25	EPA-8260	01/05/06	01/06/06 14:22	sdu	MS-V12	50	BPA0211	ND	A01
Toluene	ND	ug/L	0.50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
Total Xylenes	ND	ug/L	1.0	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
t-Amyl Methyl ether	0.58	ug/L	0.50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
t-Butyl alcohol	2000	ug/L	10	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
Ethanol	ND	ug/L	250	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
Total Purgeable Petroleum Hydrocarbons	390	ug/L	50	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211	ND	
1,2-Dichloroethane-d4 (Surrogate)	96.8	%	76 - 114 (LCL - UCL)	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211		
1,2-Dichloroethane-d4 (Surrogate)	88.6	%	76 - 114 (LCL - UCL)	EPA-8260	01/05/06	01/06/06 14:22	sdu	MS-V12	50	BPA0211		
Toluene-d8 (Surrogate)	98.6	%	88 - 110 (LCL - UCL)	EPA-8260	01/05/06	01/06/06 14:22	sdu	MS-V12	50	BPA0211		
Toluene-d8 (Surrogate)	99.6	%	88 - 110 (LCL - UCL)	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211		
4-Bromofluorobenzene (Surrogate)	96.3	%	86 - 115 (LCL - UCL)	EPA-8260	01/05/06	01/05/06 19:50	sdu	MS-V12	1	BPA0211		
4-Bromofluorobenzene (Surrogate)	92.9	%	86 - 115 (LCL - UCL)	EPA-8260	01/05/06	01/06/06 14:22	sdu	MS-V12	50	BPA0211		



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Project: 4186
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Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0600053-07		Client Sample Name: 4186, U-6, U-6, 12/30/2005 8:57:00AM, Melissa/Jaime										
Constituent	Result	Units	PQL	MDL	Method	Prep	Run	Instrument ID	Dilution	QC	MB	Lab
						Date	Date/Time					
Benzene	15	ug/L	0.50		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	ND
Ethylbenzene	99	ug/L	0.50		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	ND
Methyl t-butyl ether	3.5	ug/L	0.50		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	ND
Toluene	0.67	ug/L	0.50		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	ND
Total Xylenes	12	ug/L	1.0		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	ND
Ethanol	ND	ug/L	250		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	ND
Total Purgeable Petroleum Hydrocarbons	2400	ug/L	50		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	ND
1,2-Dichloroethane-d4 (Surrogate)	92.6	%	76 - 114 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)		EPA-8260	01/05/06	01/05/06 20:12	sdu	MS-V12	1	BPA0211	



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Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample ID	QC Sample Type	Source Result	Result	Spike Added	Units	RPD	Control Limits		
									Percent Recovery	RPD	Percent Recovery Lab Quals
Benzene	BPA0211	BPA0211-MS1	Matrix Spike	ND	21.080	25.000	ug/L	84.3	70 - 130	20	70 - 130
		BPA0211-MSD1	Matrix Spike Duplicate	ND	22.430	25.000	ug/L	6.21	89.7		
Toluene	BPA0211	BPA0211-MS1	Matrix Spike	ND	21.290	25.000	ug/L	85.2	70 - 130	20	70 - 130
		BPA0211-MSD1	Matrix Spike Duplicate	ND	23.220	25.000	ug/L	8.65	92.9		
1,2-Dichloroethane-d4 (Surrogate)	BPA0211	BPA0211-MS1	Matrix Spike	ND	9.3800	10.000	ug/L	93.8	76 - 114	20	76 - 114
		BPA0211-MSD1	Matrix Spike Duplicate	ND	9.4900	10.000	ug/L	94.9	76 - 114		
Toluene-d8 (Surrogate)	BPA0211	BPA0211-MS1	Matrix Spike	ND	9.9200	10.000	ug/L	99.2	88 - 110	20	88 - 110
		BPA0211-MSD1	Matrix Spike Duplicate	ND	9.9400	10.000	ug/L	99.4	88 - 110		
4-Bromofluorobenzene (Surrogate)	BPA0211	BPA0211-MS1	Matrix Spike	ND	9.8300	10.000	ug/L	98.3	86 - 115	20	86 - 115
		BPA0211-MSD1	Matrix Spike Duplicate	ND	9.7800	10.000	ug/L	97.8	86 - 115		



TRC Alton Geoscience
21 Technology Drive
Irvine CA, 92618-2302

Project: 4186
Project Number: [none]
Project Manager: Anju Farfan

Reported: 01/11/06 09:21

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	Control Limits		
									Percent Recovery	RPD	Lab Quals
Benzene	BPA0211	BPA0211-BS1	LCS	21.150	25.000	0.50	ug/L	84.6	70 - 130		
Toluene	BPA0211	BPA0211-BS1	LCS	21.720	25.000	0.50	ug/L	86.9	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BPA0211	BPA0211-BS1	LCS	9.2700	10.000		ug/L	92.7	76 - 114		
Toluene-d8 (Surrogate)	BPA0211	BPA0211-BS1	LCS	9.9000	10.000		ug/L	99.0	88 - 110		
4-Bromofluorobenzene (Surrogate)	BPA0211	BPA0211-BS1	LCS	9.8300	10.000		ug/L	98.3	86 - 115		



TRC Alton Geoscience
21 Technology Drive
Irvine CA, 92618-2302

Project: 4186
Project Number: [none]
Project Manager: Anju Farfan

Reported: 01/11/06 09:21

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	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.12	
1,2-Dibromoethane	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichloroethane	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.25	
Ethylbenzene	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.12	
Methyl t-butyl ether	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.12	
Toluene	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.15	
Total Xylenes	BPA0211	BPA0211-BLK1	ND	ug/L	1.0	0.37	
t-Amyl Methyl ether	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.49	
t-Butyl alcohol	BPA0211	BPA0211-BLK1	ND	ug/L	10	10	
Diisopropyl ether	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.25	
Ethanol	BPA0211	BPA0211-BLK1	ND	ug/L	250	110	
Ethyl t-butyl ether	BPA0211	BPA0211-BLK1	ND	ug/L	0.50	0.25	
Total Purgeable Petroleum Hydrocarbons	BPA0211	BPA0211-BLK1	ND	ug/L	50	23	
1,2-Dichloroethane-d4 (Surrogate)	BPA0211	BPA0211-BLK1	92.9	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BPA0211	BPA0211-BLK1	99.0	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BPA0211	BPA0211-BLK1	95.3	%	86 - 115 (LCL - UCL)		



TRC Alton Geoscience
21 Technology Drive
Irvine CA, 92618-2302

Project: 4186
Project Number: [none]
Project Manager: Anju Farfan

Reported: 01/11/06 09:21

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

Submission #: 26-00053

Project Code:

TB Batch #

SHIPPING INFORMATION

Federal Express UPS Hand Delivery
 BC Lab Field Service Other (Specify) _____

SHIPPING CONTAINER

Ice Chest None
 Box Other (Specify) _____

Refrigerant: Ice Blue Ice None Other Comments: _____

Custody Seals: Ice Chest Containers None Comments:
 Intact? Yes No Intact? Yes No

All samples received? Yes No All samples containers intact? Yes No Description(s) match COC? Yes No

COC Received
 YES NO

Ice Chest ID: R1W
 Temperature: 3.8 °C
 Thermometer ID: 48

Emissivity 1.0
 Container A+P

Date/Time 11/16 2330
 Analyst Init APW

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
100ml TOTAL ORGANIC CARBON										
QT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A-3	A-3	A-3	A-3	A-3	A-3	A-3	A-3	A-3	A-3
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 801SM										
QT QA/QC										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments: _____

Sample Numbering Completed By: APW

Date/Time: 11/16 0110



Laboratories, Inc.

Chain of Custody Form

PLEASE COMPLETE
BCL QUOTE ID:

Report To: Client: TRC	Project #: 41050001
Attn: Anja Farfan	Project Name: Conoco Phillips
Street Address: 21 technology Dr	Project Code: 4186
City, State, Zip: Irvine Ca 92618	Sampler(s): Melissa, Jamie
Phone: 341-7440 Fax: 753-0111	Global ID: T0600101777
Email Address: afarfan@trcsolutions.com	Lab WO: 1237TRCS01
Submittal #: 06-000 53	

Sample #	Description	Date Sampled	Time Sampled
-1	U-1	12/30/05	0902
-2	U-2	1/1/06	0928
-3	U-4	1/1/06	0915
-4	U-5	1/1/06	0920
-5	U-7	1/1/06	0850
-6	U-3	1/1/06	0909
-7	U-6	1/1/06	0857

Analysis Requested

Please refer to the back of this page for completion instructions and method legend.

Legend:

- 8260 Pesticides
- 8260 MTBE
- 8260 Benzene
- T014 TTEX/MTBE
- It Ethanol

Sample Matrix	Turnaround * # of work days	Are there any tests with holding times less than or equal to 48 hours?
Soil Sludge Drinking Water Ground Water Waste Water Other	X	<input type="checkbox"/> Yes <input type="checkbox"/> No

36578

Page ____ of ____

Comments:

"Run 8 Oxys by 8260 on 8260 MTBE hit, U-3 only"

Notes	
* Standard Turnaround = 15 work days	Std 3 voas w/HCC

CHK BY	DISTRIBUTION
NFL	AKH
SUB-OUT E	

Billing Client: Conoco Phillips	<input type="checkbox"/> Same as above	Report Drinking Waters on State Form?	Sample Disposal	Special Reporting
Address:	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Return to Client <input type="checkbox"/> Disposal by lab <input type="checkbox"/> Archive: Months	<input type="checkbox"/> QC <input type="checkbox"/> WIP <input type="checkbox"/> Raw Data	
City: _____ State: _____ Zip: _____	Send Copy to State of CA?	1. Relinquished By: <i>Ross Dickey</i> Date: 12-30-05 Time: 1045	1. Received By: <i>Refrigerator</i> Date: 12-30-05 Time: 1045	
Attn: _____ PO#:	<input type="checkbox"/> Yes <input type="checkbox"/> No	2. Relinquished By: <i>Ross Dickey</i> Date: 1/3/06 Time: 1405	2. Received By: <i>Ross Dickey</i> Date: 1/3/06 Time: 1405	
		3. Relinquished By: <i>Ross Dickey</i> Date: 1/3/06 Time: 1830	3. Received By: <i>(initials) M. Mc Dickey</i> Date: 1-3-06 Time: 1830	

Northern CA
REL Dec 6-11-05

1/3/06 233-

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.



SECOR
INTERNATIONAL
INCORPORATED

www.sec.com
3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670
916-861-0400 TEL
916-861-0430 FAX

January 19, 2006

Daniel

Ms. Shelby Lathrop
ConocoPhillips
76 Broadway
Sacramento, CA 95818

JAN 31 2006

RE: **Quarterly Remedial Performance Summary-Fourth Quarter 2005**
76 Service Station No. 4186
1771 First Street
Livermore, CA
SECOR Project No.: 77CP.60004.04.4186

Dear Ms. Lathrop:

This letter, prepared by SECOR International Incorporated (SECOR) on behalf of ConocoPhillips, presents a remedial action performance summary for the ozone injection system operating at the site referenced above. Included in this report are tables and figures summarizing the system operation during the current quarter. Field data sheets and laboratory reports are included as Attachments A and B, respectively. A brief site background and the status of recent remedial activities are presented below.

SITE BACKGROUND

The site is an operating 76 service station located at Second Street between N and O Streets in Livermore, California (Figure 1). The current station configuration consists of a service station building, four product dispenser islands, and two underground storage tanks (USTs). There is an ozone injection remediation system on the site that injects a mixture of ozone and air to ten sparge points. The system was put into operation on December 19, 2001. SECOR took over operation of the system in September 2003.

REMEDIAL PERFORMANCE SUMMARY

Ozone Injection Operation

The ozone injection system consists of a panel mounted KVA C-Sparge™ System that produces up to 4 grams per hour (0.009 pounds per hour) of ozone. The system supplies ozone to ten sparge points in eight wells for eight minutes per well, 18 cycles per day. Operation of the ozone injection system was initiated on December 19, 2001. The system operated for 801 hours, resulting in 43% of the programmed runtime during the fourth quarter 2005. On November 7, 2005 the ozone sparge tubing was replaced due to leaks caused by mice chewing the lines. The system was found to be non-operational on December 2, 2005 due to a tripped ozone sensor. It was reset and restarted. The panel and enclosure was moved on December 14, 2005 to the street side of the trash enclosure. Operational data is provided in Table 1.

S E C O R

Quarterly Remedial Performance Summary
January 19, 2006
Page 2

Ozone Injection Performance

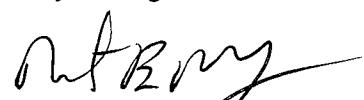
Monthly groundwater sampling was discontinued in the third quarter 2005 at the request of ConocoPhillips. Results of monthly groundwater sampling events are summarized in Table 2. Concentration versus time graphs for dissolved TPHg, benzene, and MtBE in monitoring wells U-3 and U-6 are provided in Figures 2 and 3. Field data sheets are presented in Attachment A.

If you have any questions, please contact us at (916) 861-0400.

Sincerely,
SECOR International Incorporated



Amy Draffan
Project Engineer



Rusty Benkosky, P.E.
Principal Engineer



Attachments: Figure 1 – Site Plan
Figure 2 – U-3 TPHg, Benzene, and MtBE Groundwater Concentrations
Figure 3 – U-6 TPHg, Benzene, and MtBE Groundwater Concentrations

Table 1 – System Operation Data
Table 2 – Groundwater Analytical Data

Attachment A – Field Data Sheets

cc: Mr. Eric Hetrick, Delta Environmental
Mr. Dan Truzzolino, ConocoPhillips

RB/ad

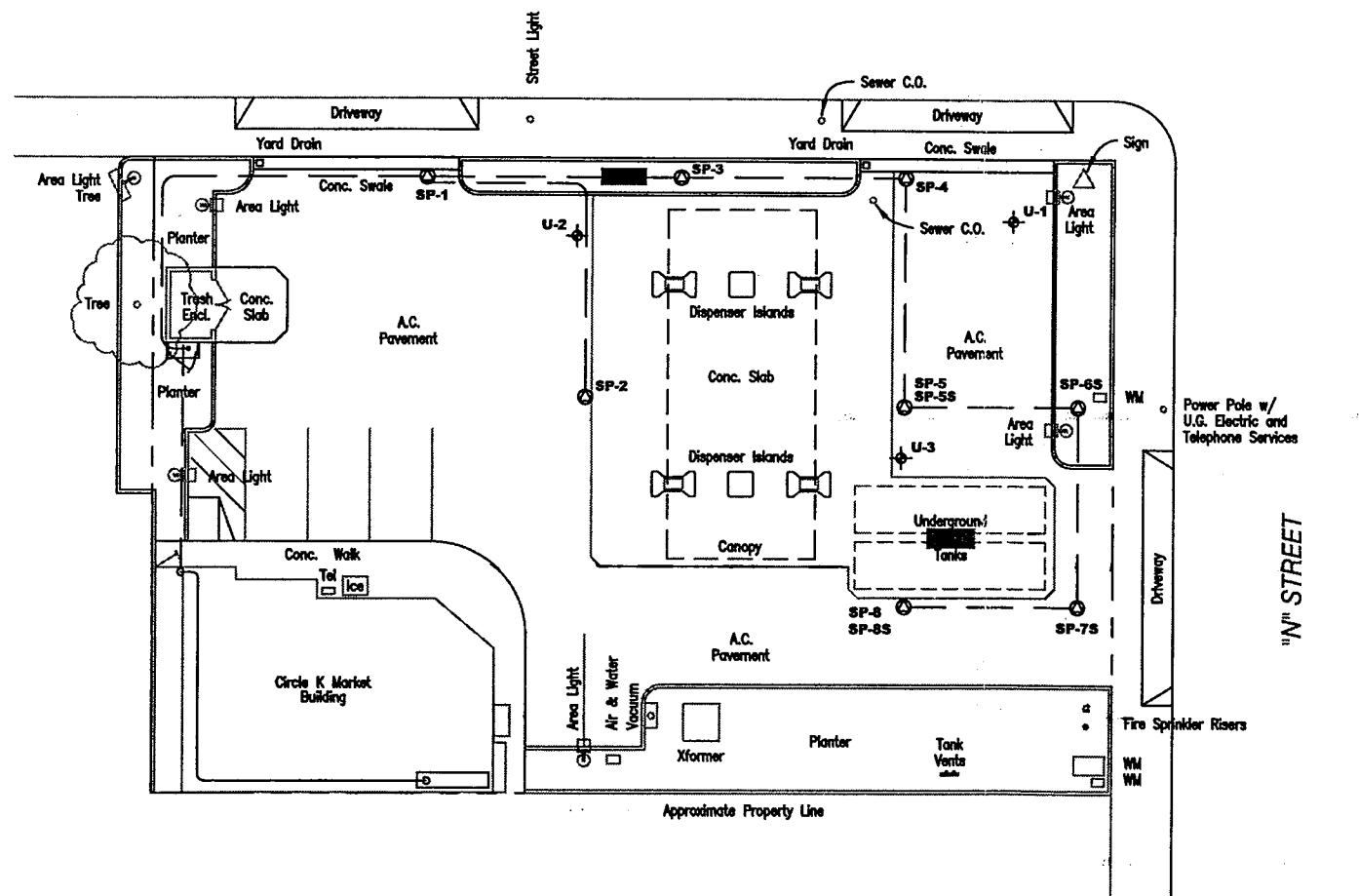
FIGURES

LEGEND

-  GROUNDWATER MONITORING WELL
-  OZONE SPARGE POINT
-  UNDERGROUND OZONE SPARGE LINE

U-5 Parking U-4 Red Zone U-1 Parking

FIRST STREET



0 30 60
APPROXIMATE SCALE FEET

REFERENCE: THIS FIGURE IS BASED ON A "SITE PLAN" PROVIDED BY GETTLER-RYAN INC., DATED JULY 2001, AND IS INTENDED FOR ILLUSTRATION ONLY.

DRAWN BY: DWR
CHECKED: AD
APPROVED: AD
DATE: 4/2/04
JOB NO.: 77CP.60004.01.4186
CAD FILE: CP-SITEPLAN

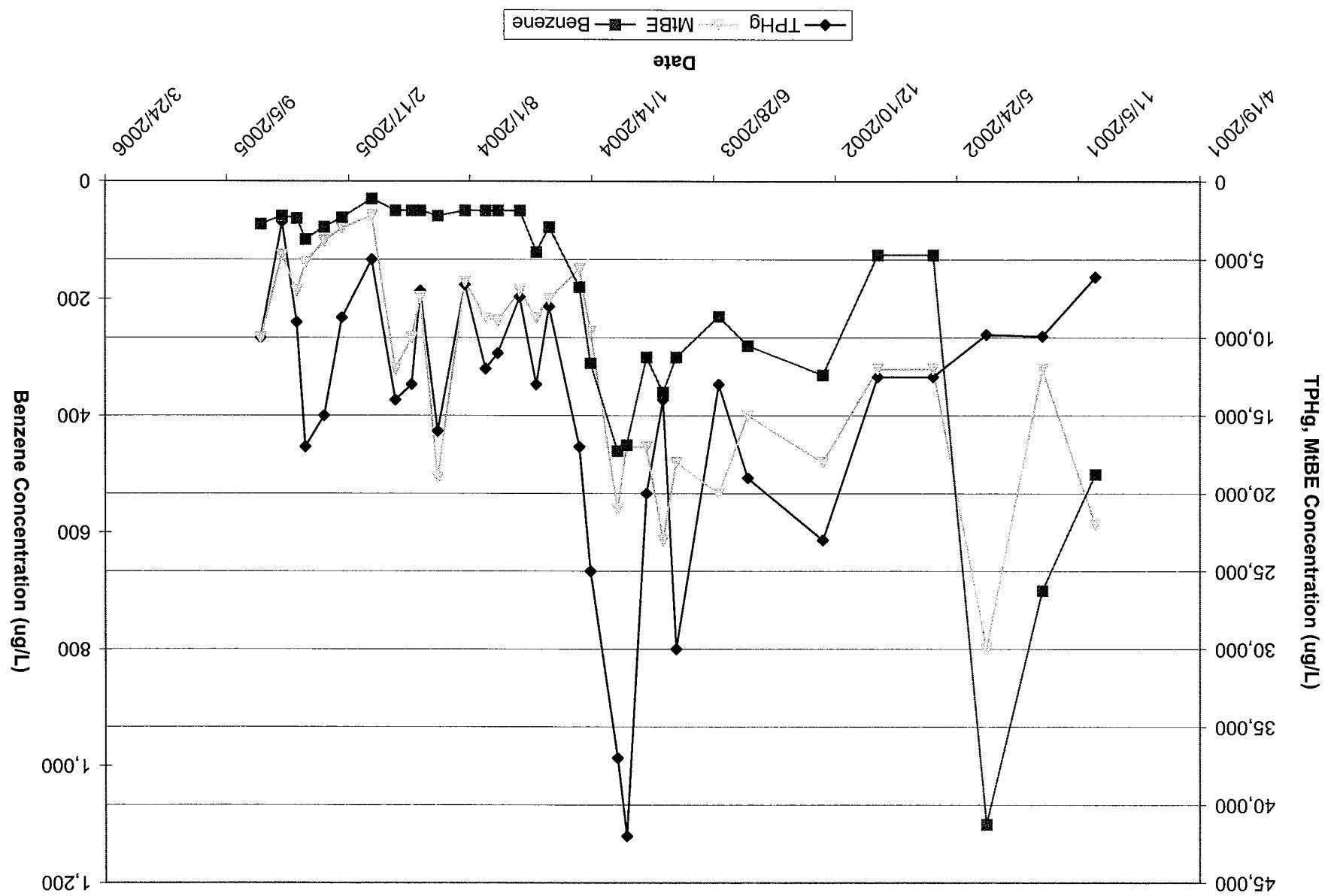
PREPARED BY:

SECOR
3017 KILGORE ROAD, SUITE 100
RANCHO CORDOVA, CA 95670

PREPARED FOR:
CONOCOPHILLIPS
STATION NO. 4186
1771 FIRST STREET
LIVERMORE, CALIFORNIA

FIGURE 1

SITE PLAN



U-3 TPHg, Benzene, and MTBE Groundwater Concentrations
76 Service Station No. 4186
1771 First Street, Livermore, California
Figure 2

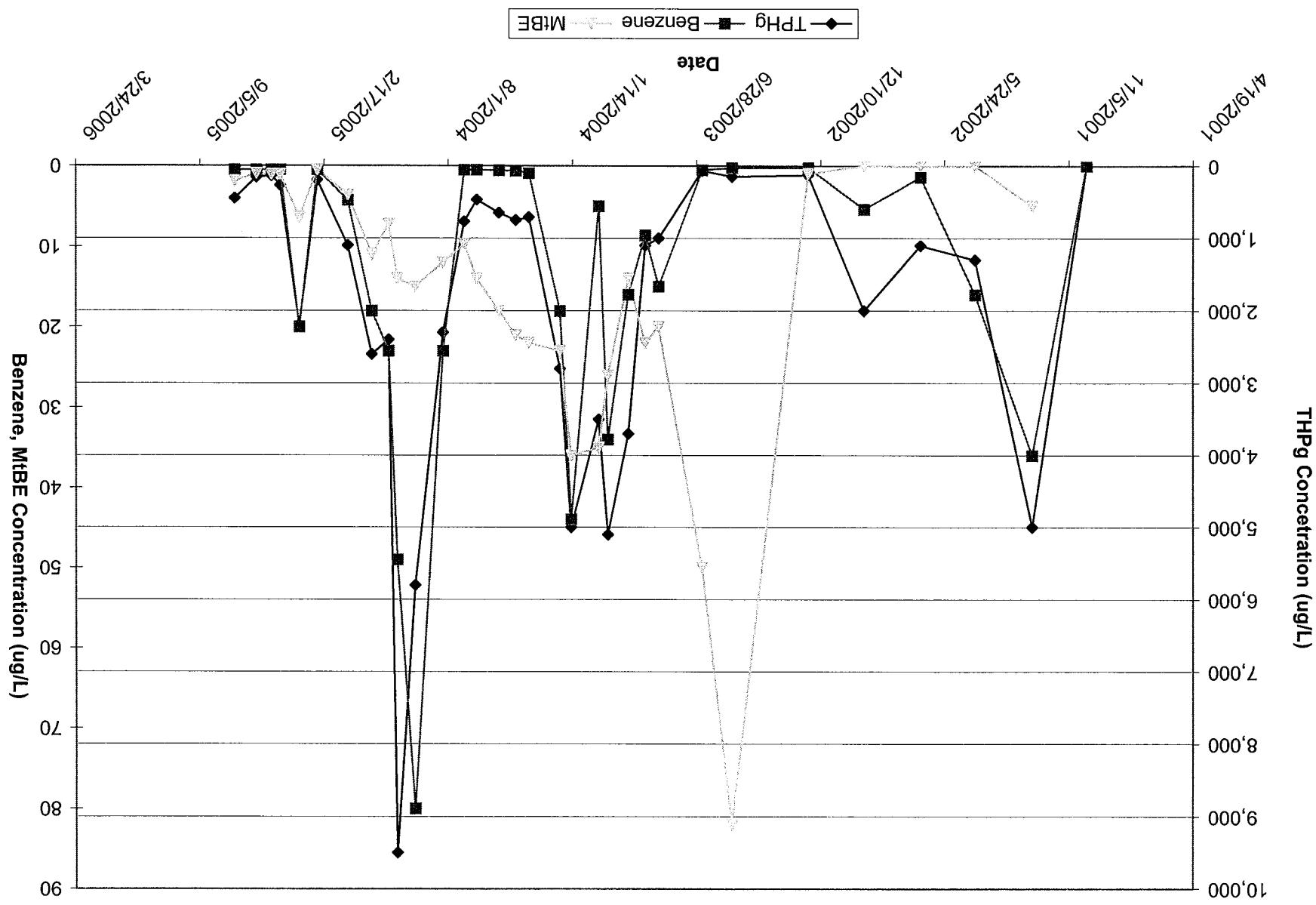


Figure 3
U-6 THg, Benzene, and MtBE Groundwater Concentrations
76 Service Station No. 4186
1771 First Street, Livermore, California

S E C O R

TABLES

Table 1
Ozone Injection - System Operation Data
76 Service Station No. 4186
1771 First Street, Livermore, California

Date	Notes	OZONE SPARGE SYSTEM					OZ-1	OZ-2	OZ-3	OZ-4	OZ-5	OZ-6	OZ-7	OZ-8	OZ-9	OZ-10
		System Status on Arrival (On/Off)	System Status on Departure (On/Off)	Hourmeter Reading	Periodic Online Factor	Cumulative Online Factor	Pressure (psi)									
06/19/03		On	On	6997.92	--	--	30	24	22	28	33	28	30	32	35	29
07/30/03		On	On	NM	--	--	40	35	42	38	36	39	22	20	28	45
08/28/03		Off	On	7127.87	0.09	0.09	36	48	22	42	37	33	35	40	50	35
09/19/03		On	On	7131.66	0.01	0.07	35.2	36.1	23.7	38.0	34.9	31.1	34.8	38.0	49.3	32.2
10/16/03		On	On	7146.57	0.03	0.06	35.0	40.0	24.2	38.2	16.5	31.4	35.1	36.6	45.8	34
11/18/03		On	Off	7152.34	0.01	0.05	37.0	36.5	26.0	35.0	16.0	33.0	38.0	19.0	52.0	35.0
12/03/03		Off	On	7153.15	0.00	0.04	38.0	38.2	26.5	39.2	40.9	33.8	39.1	40.0	48.2	36.8
01/16/04		Off	--	7499.58	0.37	0.11	44.0	48.0	27.5	48.0	39.0	37.0	--	43.0	54.0	40.0
02/06/04	a	Off	Off	7541.66	0.10	0.11	40.0	38.5	--	--	--	--	--	--	--	--
02/17/04		Off	On	7542.14	0.00	0.11	39.0	38.5	26.5	38.5	38.0	37.0	39.2	40.0	53.0	35.8
03/24/04	b	Off	On	7937.07	0.52	0.16	42.0	38.2	27.5	42.0	38.0	38.0	39.7	41.5	60.0	36.0
04/07/04		Off	On	8008.40	0.24	0.16	--	--	--	--	--	--	--	--	--	--
04/09/04		On	On	8047.53	0.93	0.17	--	--	--	--	--	--	--	--	--	--
04/14/04		Off	On	8053.53	0.06	0.17	40.8	38.3	27.2	41.2	37.8	37.0	37.1	40.4	60.0	36.1
04/16/04		On	On	8088.36	0.83	0.17	--	--	--	--	--	--	--	--	--	--
04/20/04	c	On	Off	8167.64	0.94	0.18	--	--	--	--	--	--	--	--	--	--
04/21/04		Off	On	8167.78	0.01	0.18	38.6	35.9	27.2	41.2	37.6	36.1	37.1	40.7	60.0	36.2
04/23/04		On	On	8204.68	0.88	0.19	37.9	34.0	29.1	34.8	35.2	35.2	36.3	25.8	60.0	34.5
05/11/04	b	Off	On	8253.45	0.13	0.18	40.8	45.3	27.0	40.2	24.8	36.2	25.0	23.0	56.3	35.8
05/13/04		On	On	8291.64	0.91	0.19	--	--	--	--	--	--	--	--	--	--
05/21/04		On	On	8441.19	0.89	0.20	37.7	35.2	27.5	35.0	25.2	34.9	24.8	23.6	60.0	35.8
06/16/04	b	Off	On	8505.37	0.12	0.20	41.2	41.5	27.8	43.0	24.8	37.2	25.8	24.5	60.0	37.6
07/06/04	b,d	Off	On	8554.82	0.13	0.19	40	44	27	40	24	36	24	24	Off	36
08/09/04	b,d,e	Off	On	9002.21	0.78	0.24	40	Off	28	44	23	36	26	24	Off	36
09/23/04	b,d,e	Off	On	9012.63	0.01	0.22	39	Off	29	43	24	35	25	24	Off	34
10/22/04	b,d,e	Off	On	9164.90	0.31	0.23	31	Off	21	34	18	28	19	18	Off	28
11/05/04	f	Off	Off	9165.08	0.00	0.22	30	Off	20	31	18	29	19	18	Off	26
12/02/04	g	Off	Off	9165.08	0.00	0.21	--	--	--	--	--	--	--	--	--	--
01/10/05	h	Off	Off	9165.15	0.00	0.19	--	--	--	--	--	--	--	--	--	--
02/28/05	i,d	Off	On	9165.26	0.00	0.18	41	44	27	45	23	38	24	22	Off	36
03/29/05	b	Off	On	9171.71	0.01	0.17	42	46	27	46	22	39	24	22	Off	35
04/29/05	b,j	Off	On	9191.99	0.04	0.16	41	44	26	44	22	39	23	21	Off	34
05/13/05	k	Off	On	9226.71	0.10	0.16	42	46	28	43	23	40	25	23	50	35.5
06/06/05	f	Off	On	9402.13	0.30	0.17	41	40	28	42	23	30	24	23	Off	36
07/11/05	l	Off	Off	9929.79	0.63	0.19	--	--	--	--	--	--	--	--	--	--

Table 1
Ozone Injection - System Operation Data
76 Service Station No. 4186
1771 First Street, Livermore, California

Date	Notes	OZONE SPARGE SYSTEM					OZ-1	OZ-2	OZ-3	OZ-4	OZ-5	OZ-6	OZ-7	OZ-8	OZ-9	OZ-10
		System Status on Arrival (On/Off)	System Status on Departure (On/Off)	Hourmeter Reading	Periodic Online Factor	Cumulative Online Factor	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)	Pressure (psi)
08/08/05	l,m	Off	Off	9929.79	0.00	0.18	--	--	--	--	--	--	--	--	--	--
08/26/05	n,o	Off	On	9930.17	0.00	0.18	30	30	25	43	Off	Off	19	22	50	30
09/13/05	p	Off	On	9932.50	0.01	0.18	31	27	28	Off	Off	Off	24	Off	32	
09/30/05		On	On	10340.21	1.00	0.19	27	24	26	Off	Off	Off	Off	Off	21	Off
10/04/05		On	On	10435.53	0.99	0.20	30	25	27	Off	Off	Off	Off	Off	23	Off
10/31/05	q	On	On	11085.70	1.00	0.22	38	25	28	Off	Off	Off	Off	Off	Off	31
12/02/05	f	Off	On	11089.15	0.00	0.21	39	35	45	38	35	35	37	36	38	47
12/16/05	r	On	On	11141.12	0.15	0.21	35	32	37	37	33	36	37	36	48	39
							Sparge time per cycle (min)		8	8	8	8	8	8	8	8

Reporting Period: Fourth Quarter 2005 (09/30/05 to 12/16/05)

Total Hours Operational: 11,089

Total Pounds Ozone Injected: 100

Period Hours Operational: 801

Period Percent Operational: 43%

Period Pounds Ozone Injected: 7.2

Definitions:

psi Pounds per square inch
-- Data not available
NA Not applicable

Notes:

- System cycles program 18 times per day, for 100% utilization
- a = GFI switch would not reset.
- b = System's 16amp breaker was tripped
- c = Installing Generator
- d = OZ-9 offline due to high pressure
- e = OZ-2 offline due to leaking check valve
- f = System shutdown due to ozone sensor switch.
- g = System off due to leaking compressor, no readings.
- h = Compressor not in panel, being repaired / replaced.
- i = Reinstalled compressor after installing new piston rebuild kit & new check valve on line # 2.
- j = System runtime increased to 100%
- k = Lead to sparge blower was burnt, repaired and restarted.
- l = Compressor broken, system left off.
- m = Removed old compressor, unable to install new one due to incompatible feet.
- n = New compressor and new feet installed.
- o = OZ-5 and OZ-6 turned off due to leaks. Programmed modified to remain at 100% runtime.
- p = System down for Ozone alarm. Found ozone coming form secondary containment for OZ-4, turned off. Found broken line for OZ-7, turned off.
- q = OZ-8 turned off due to leak
- r = Reprogrammed all lines to run for 8 minutes a cycle and 100% runtime.

**ATTACHMENT A
FIELD DATA SHEETS**

Quarterly Remedial Performance Summary
76 Service Station No. 4186
1771 First Street
Livermore, CA
SECOR Project No.: 77CP.60004.04.4186

SITE VISITATION REPORT

Project: Conoco PhillipsDate: 10/4/05

4186

Name of Technicians(s) Brian Schenck & TrevorProject No: 770P70004044183Arrival Time: 0830Departure Time: 0920

Rate Sch/Bill Code:

Weather Notations: SUN

CLOUDY

RAIN SNOW

 Yes NoWho did you call? Am-DraffanTemperature: 60

F

4186

System running upon arrival

PSI 1	O ₂	2	PSI 3	O ₂	off 4	5
30	.03	25	.03	27	.03	off

off	7	PSI 8	off 9	10
		O ₂		PSI O ₂
		.03		31 .03

Lubed air compressor with dry film silicone.
 Tested O₂ leak detection shutdown system.
 Compressor AMPS - 10.0

U-3	4-6	
ORP	D.O.	Time
-42	0.0	0910
1.87	+122	1.04 0900

ENTERED

Field L. Sheet
Ozone Sparge System

ConocoPhil., Site # 4186
1771 First Street
Livermore, California

Requested By: An. Jaffan
Lab: STL

Frequency	Item to Inspect or Maintain	Date Performed				
Monthly	Check integrity of all hoses, fittings, piping, and valves	10/31				
Monthly	Measure Blower Running Amperage	9/18				
Monthly	Inspect electrical fittings and tighten as needed	10/31				
Monthly	Check controller operation	10/31				
As-Needed	Adjust controller program	10/31				
Monthly	Gross particle filter-visually inspect	10/31				
As-Needed	Gross particle filter-replace as necessary	—				
Monthly	Check flow and pressure on assemblies (system and wells)	10/31				
Monthly	Take ozone readings at compound and well boxes	10/31				
Monthly	Check wellhead connections	10/31				
Monthly	Check/test all safety override systems	10/31				
As-Needed	Sparge blower-repair as necessary	—				
As-Needed	Sparge blower-replace as necessary	—				

NOTES AND DESCRIPTION OF ACTIVITIES ON SITE

WELL LINE Replacement scheduled for 11/7/05

Field Log Sheet
Ozone Sparge System

ConocoPhillips Site # 4186
1771 First Street
Livermore, California

Requested By: Anil Gaffan
Lab: STL

Initials	Date	Time In	System Status on Arrival On/Off	Electrical Meter Reading	Ozone Meter		Hourmeter	Ozone Readings			
								Outside Compound (ppm)	Inside Compound (ppm)	Inside Shed/Panel (ppm)	Secondary Containment (ppm)
					Brand	Range					
RJS	12/6/05	1040	OFF		ECO	01-10	11089.15	:03	:03	:03	:03

Initials	Date	Well Data																			
		OZ-1		OZ-2		OZ-3		OZ-4		OZ-5		OZ-6		OZ-7		OZ-8		OZ-9			
Press	O ₃	Press	O ₃	Press	O ₃	Press	O ₃	Press	O ₃	Press	O ₃	Press	O ₃	Press	O ₃	Press	O ₃	Press	O ₃		
RJS	12/6/05	39	103	35	103	45	103	38	103	35	103	35	103	37	103	36	103	38	103	47	103

Initials	Date	Weather Conditions (estimated)		Temp in Ozone Panel	Monthly Sampling				Time Out	System Status on Departure On/Off	Ozone Badge Color (White/Tan/ Brown)	
					U-3		U-6					
		Wind Dir.	Wind Speed		ORP (mV)	DO (ug/l)	ORP (mV)	DO (ug/l)				
RJS	12/6/05	N	15	60					1145	ON	W	

ENTERED
12/05

Frequency	Item to Inspect or Maintain	Date Performed				
Monthly	Check integrity of all hoses, fittings, piping, and valves	12/2/05				
Monthly	Measure Blower Running Amperage	9.8				
Monthly	Inspect electrical fittings and tighten as needed	12/2/05				
Monthly	Check controller operation	12/2/05				
As-Needed	Adjust controller program	—				
Monthly	Gross particle filter-visually inspect	12/2/05				
As-Needed	Gross particle filter-replace as necessary	—				
Monthly	Check flow and pressure on assemblies (system and wells)	12/2/05				
Monthly	Take ozone readings at compound and well boxes	12/2/05				
Monthly	Check wellhead connections	12/2/05				
Monthly	Check/test all safety override systems	12/2/05				
As-Needed	Sparge blower-repair as necessary	—				
As-Needed	Sparge blower-replace as necessary	—				

NOTES AND DESCRIPTION OF ACTIVITIES ON SITE

Circuit breaker tripped inside control panel. Reset breaker
Panel needs its breaker replaced by a fuse & holder.

marked for USA to facilitate Panel relocation