



21 Technology Drive
Irvine, CA 92618

949.727.9336 PHONE
949.727.7399 FAX

www.TRCSolutions.com

RECEIVED

1:46 pm, Mar 18, 2008

Alameda County
Environmental Health

DATE: January 8, 2008

TO: ConocoPhillips Company
76 Broadway
Sacramento, California 95818

ATTN: MR. BILL BORGH

SITE: 76 STATION 4186
1771 FIRST STREET
LIVERMORE, CALIFORNIA

RE: QUARTERLY MONITORING REPORT
OCTOBER THROUGH DECEMBER 2007

Dear Mr. Borgh:

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) 727-9336.

Sincerely,

TRC

Anju Farfan
Groundwater Program Operations Manager

CC: Mr. Dennis Dettloff, Delta Consultants (1 copy)

Enclosures
20-0400/4186R17.QMS.doc

**QUARTERLY MONITORING REPORT
OCTOBER THROUGH DECEMBER 2007**

76 STATION 4186
1771 First Street
Livermore, California

Prepared For:

Mr. Bill Borgh
CONOCOPHILLIPS COMPANY
76 Broadway
Sacramento, California 95818

By:

Dennis E. Jensen



Senior Project Geologist, Irvine Operations

Date: 1/7/08



LIST OF ATTACHMENTS

Summary Sheet	Summary of Gauging and Sampling Activities
Tables	<p>Table Key</p> <p>Contents of Tables</p> <p>Table 1: Current Fluid Levels and Selected Analytical Results</p> <p>Table 1a: Additional Current Analytical Results</p> <p>Table 2: Historic Fluid Levels and Selected Analytical Results</p> <p>Table 2a: Additional Historic Analytical Results</p>
Figures	<p>Figure 1: Vicinity Map</p> <p>Figure 2: Groundwater Elevation Contour Map</p> <p>Figure 3: Dissolved-Phase TPH-G (GC/MS) Concentration Map</p> <p>Figure 4: Dissolved-Phase Benzene Concentration Map</p> <p>Figure 5: Dissolved-Phase MTBE Concentration Map</p>
Graphs	<p>Groundwater Elevations vs. Time</p> <p>Benzene Concentrations vs. Time</p>
Field Activities	<p>General Field Procedures</p> <p>Field Monitoring Data Sheet - 12/20/07</p> <p>Groundwater Sampling Field Notes - 12/20/07</p> <p>Statement of Non-Completion - 12/20/07</p>
Laboratory Reports	<p>Official Laboratory Reports</p> <p>Quality Control Reports</p> <p>Chain of Custody Records</p>
Statements	<p>Purge Water Disposal</p> <p>Limitations</p>

Summary of Gauging and Sampling Activities
October 2007 through December 2007
76 Station 4186
1771 First Street
Livermore, CA

Project Coordinator: **Bill Borgh**
Telephone: **916-558-7612**

Water Sampling Contractor: **TRC**
Compiled by: **Daniel Lee**

Date(s) of Gauging/Sampling Event: **12/20/07**

Sample Points

Groundwater wells: **5** onsite, **2** offsite Wells gauged: **7** Wells sampled: **0**
Purging method: **No purge**
Purge water disposal: **n/a**
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: **n/a feet** Maximum: **n/a feet**
Average groundwater elevation (relative to available local datum): **n/a feet**
Average change in groundwater elevation since previous event: **n/a**
Interpreted groundwater gradient and flow direction:
 Current event: **n/a**
 Previous event: **0.15 ft/ft, north, west and south (9/23/07)**

Selected Laboratory Results

Wells with detected **Benzene**: **0** Wells above MCL (1.0 µg/l): **n/a**
 Maximum reported benzene concentration: **n/a**

Wells with **TPH-G by GC/MS** **0**
Wells with **MTBE 8260B** **0**

Notes:

U-1=Dry well, U-2=Dry well, U-3=Dry well, U-4=Dry well, U-5=Dry well, U-6=Dry well, U-7=Dry well,

TABLES

TABLE KEY

STANDARD ABBREVIATIONS

--	=	not analyzed, measured, or collected
LPH	=	liquid-phase hydrocarbons
Trace	=	less than 0.01 foot of LPH in well
µg/l	=	micrograms per liter (approx. equivalent to parts per billion, ppb)
mg/l	=	milligrams per liter (approx. equivalent to parts per million, ppm)
ND <	=	not detected at or above laboratory detection limit
TOC	=	top of casing (surveyed reference elevation)

ANALYTES

BTEX	=	benzene, toluene, ethylbenzene, and (total) xylenes
DIPE	=	di-isopropyl ether
ETBE	=	ethyl tertiary butyl ether
MTBE	=	methyl tertiary butyl ether
PCB	=	polychlorinated biphenyls
PCE	=	tetrachloroethene
TBA	=	tertiary butyl alcohol
TCA	=	trichloroethane
TCE	=	trichloroethene
TPH-G	=	total petroleum hydrocarbons with gasoline distinction
TPH-G (GC/MS)	=	total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B
TPH-D	=	total petroleum hydrocarbons with diesel distinction
TRPH	=	total recoverable petroleum hydrocarbons
TAME	=	tertiary amyl methyl ether
1,1-DCA	=	1,1-dichloroethane
1,2-DCA	=	1,2-dichloroethane (same as EDC, ethylene dichloride)
1,1-DCE	=	1,1-dichloroethene
1,2-DCE	=	1,2-dichloroethene (cis- and trans-)
DNA	=	data not available

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

REFERENCE

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

Contents of Tables 1 and 2

Site: 76 Station 4186

Current Event

Table 1	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
---------	---------------	-------------------	------------------	-------------------------------	------------------------	------------------	------------------	---------	---------	-------------------	------------------	-----------------	-----------------	----------

Historic Data

Table 2	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
---------	---------------	-------------------	------------------	-------------------------------	------------------------	------------------	------------------	---------	---------	-------------------	------------------	-----------------	-----------------	----------

Table 2a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP	
----------	---------------	-----	--------------------	---------------------------------	------------------	------	------	------	-----------------------------------	----------------------------------	------------------	-------------------	--

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
December 20, 2007
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
U-1		(Screen Interval in feet: 14.0-34.0)												
12/20/07	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-2		(Screen Interval in feet: 13.0-34.0)												
12/20/07	477.44	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-3		(Screen Interval in feet: 14.0-34.0)												
12/20/07	478.46	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-4		(Screen Interval in feet: 35.0-45.0)												
12/20/07	476.93	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-5		(Screen Interval in feet: 37.0-47.0)												
12/20/07	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-6		(Screen Interval in feet: DNA)												
12/20/07	478.38	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-7		(Screen Interval in feet: DNA)												
12/20/07	478.74	--	--	--	--	--	--	--	--	--	--	--	--	Dry well

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
U-1	(Screen Interval in feet: 14.0-34.0)													
7/13/98	478.27	23.28	0.00	454.99	--	ND	--	ND	ND	ND	ND	ND	--	
10/7/98	478.27	26.43	0.00	451.84	-3.15	ND	--	ND	ND	ND	ND	ND	--	
1/15/99	478.27	30.42	0.00	447.85	-3.99	ND	--	ND	ND	ND	1.1	7.3	--	
4/14/99	478.27	24.21	0.00	454.06	6.21	ND	--	ND	ND	ND	ND	160	--	
7/19/99	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	--	
1/24/00	478.27	27.90	0.00	450.37	1.50	ND	--	ND	ND	ND	ND	28	--	
4/10/00	478.27	26.16	0.00	452.11	1.74	ND	--	ND	0.930	ND	ND	ND	--	
7/17/00	478.27	28.04	0.00	450.23	-1.88	ND	--	ND	ND	ND	ND	160	--	
10/2/00	478.27	28.41	0.00	449.86	-0.37	ND	--	ND	ND	ND	ND	120	--	
1/8/01	478.27	28.68	0.00	449.59	-0.27	ND	--	ND	ND	ND	ND	103	--	
4/3/01	478.27	25.74	0.00	452.53	2.94	ND	--	ND	ND	ND	ND	55.1	--	
7/2/01	478.27	30.67	0.00	447.60	-4.93	ND	--	ND	ND	ND	ND	ND	--	
10/8/01	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	--	
1/3/02	478.27	27.67	0.00	450.60	5.46	160	--	ND<0.50	0.51	ND<0.50	0.69	31	--	
4/5/02	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	--	
7/2/02	478.27	31.17	0.00	447.10	-1.77	--	1100	ND<0.50	1.7	0.73	130	--	35	
10/1/02	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	
5/2/03	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	
7/1/03	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	
10/3/03	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	
1/8/04	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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
U-1 continued														
4/15/04	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	
7/15/04	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	
12/8/04	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	
3/23/05	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	
6/28/05	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	
9/23/05	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	
3/24/06	478.27	22.54	0.00	455.73	1.15	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.6	
6/26/06	478.27	24.99	0.00	453.28	-2.45	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
9/26/06	478.27	30.19	0.00	448.08	-5.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
11/21/06	478.27	28.27	0.00	450.00	1.92	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
3/26/07	478.27	26.92	0.00	451.35	1.35	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
6/27/07	478.27	30.78	0.00	447.49	-3.86	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/23/07	478.27	33.17	0.00	445.10	-2.39	--	--	--	--	--	--	--	--	Not enough water to sample
12/20/07	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-2 (Screen Interval in feet: 13.0-34.0)														
7/13/98	477.44	23.52	0.00	453.92	--	1200	--	130	12	62	180	1100	--	
10/7/98	477.44	25.31	0.00	452.13	-1.79	ND	--	ND	ND	ND	ND	160	--	
1/15/99	477.44	30.22	0.00	447.22	-4.91	ND	--	ND	ND	ND	ND	280	--	
4/14/99	477.44	24.50	0.00	452.94	5.72	ND	--	ND	ND	ND	ND	460	--	
7/19/99	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	--	
1/24/00	477.44	24.52	0.00	452.92	5.96	ND	--	ND	ND	ND	ND	150	--	
4/10/00	477.44	23.68	0.00	453.76	0.84	ND	--	ND	ND	ND	ND	177	--	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
U-2 continued														
7/17/00	477.44	28.35	0.00	449.09	-4.67	ND	--	ND	ND	ND	ND	62.7	--	
10/2/00	477.44	28.72	0.00	448.72	-0.37	ND	--	ND	ND	ND	ND	52	--	
1/8/01	477.44	29.11	0.00	448.33	-0.39	ND	--	ND	ND	ND	ND	57.3	--	
4/3/01	477.44	25.95	0.00	451.49	3.16	ND	--	ND	ND	ND	ND	30.2	--	
7/2/01	477.44	29.01	0.00	448.43	-3.06	ND	--	ND	ND	ND	ND	16	--	
10/8/01	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	--	
1/3/02	477.44	27.33	0.00	450.11	3.61	260	--	7.7	11	1.7	15	42	--	
4/5/02	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	--	
7/2/02	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	
10/1/02	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	
5/2/03	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	
7/1/03	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	
10/3/03	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	
1/8/04	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	
4/15/04	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	
7/15/04	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	
12/8/04	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	
3/23/05	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	
6/28/05	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	
9/23/05	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	
3/24/06	477.44	22.34	0.00	455.10	1.99	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
6/26/06	477.44	23.15	0.00	454.29	-0.81	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
U-2 continued														
9/26/06	477.44	28.52	0.00	448.92	-5.37	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
11/21/06	477.44	25.85	0.00	451.59	2.67	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
3/26/07	477.44	25.62	0.00	451.82	0.23	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
6/27/07	477.44	28.37	0.00	449.07	-2.75	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/23/07	477.44	31.40	0.00	446.04	-3.03	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
12/20/07	477.44	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-3 (Screen Interval in feet: 14.0-34.0)														
7/13/98	478.46	23.82	0.00	454.64	--	70000	--	3100	5500	2700	16000	7500	--	
10/7/98	478.46	25.64	0.00	452.82	-1.82	54000	--	5000	1100	3100	14000	6100	--	
1/15/99	478.46	30.92	0.00	447.54	-5.28	41000	--	3100	ND	1800	3800	15000	--	
4/14/99	478.46	24.48	0.00	453.98	6.44	33000	--	86	290	2200	7800	39000	--	
7/19/99	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	
1/24/00	478.46	23.43	0.00	455.03	6.96	13000	--	260	ND	770	3200	53000	42000	
4/10/00	478.46	23.31	0.00	455.15	0.12	35200	--	1070	241	2820	8850	35600	40900	
7/17/00	478.46	27.53	0.00	450.93	-4.22	29000	--	3570	525	3180	5660	22500	21000	
10/2/00	478.46	28.19	0.00	450.27	-0.66	11000	--	2100	31	2000	780	25000	28000	
1/8/01	478.46	29.85	0.00	448.61	-1.66	33600	--	3060	427	3040	4190	24700	30900	
4/3/01	478.46	24.98	0.00	453.48	4.87	5390	--	660	10.8	304	356	15200	19300	
7/2/01	478.46	31.35	0.00	447.11	-6.37	13000	--	1200	58	1300	930	25000	26000	
10/8/01	478.46	32.69	0.00	445.77	-1.34	6100	--	500	ND<10	570	130	23000	22000	
1/3/02	478.46	23.73	0.00	454.73	8.96	9900	--	700	130	24	1000	14000	12000	
4/5/02	477.44	28.27	0.00	449.17	-5.56	9800	--	1100	180	220	1400	16000	30000	
7/2/02	478.46	29.71	0.00	448.75	-0.42	--	ND<25000	ND<250	ND<250	ND<250	ND<500	12000	12000	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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-3 continued														
10/1/02	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	
5/2/03	478.46	23.11	0.00	455.35	-1.49	--	19000	280	ND<50	880	1500	15000	15000	
7/1/03	478.46	24.89	0.00	453.57	-1.78	--	19000	120	ND<100	180	880	22000	22000	
10/3/03	478.46	26.59	0.00	451.87	-1.70	--	20000	170	ND<50	250	730	--	16000	
1/8/04	478.46	21.92	0.00	456.54	4.67	--	17000	250	ND<100	770	1500	--	9700	
4/15/04	478.46	23.59	0.00	454.87	-1.67	--	4600	ND<25	ND<25	36	100	--	3700	
7/15/04	478.46	24.80	0.00	453.66	-1.21	--	2700	ND<25	ND<25	ND<25	ND<50	--	3400	
12/8/04	478.46	29.13	0.00	449.33	-4.33	--	12000	ND<50	ND<50	250	140	--	13000	
3/23/05	478.46	21.64	0.00	456.82	7.49	--	21000	94	ND<50	630	1200	--	6200	
6/28/05	478.46	24.57	0.00	453.89	-2.93	--	6600	24	0.64	150	70	--	4700	
9/23/05	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	
3/24/06	478.46	22.52	0.00	455.94	1.44	--	2700	28	ND<5.0	57	120	--	690	
6/26/06	478.46	23.89	0.00	454.57	-1.37	--	2000	51	0.77	84	45	--	560	
9/26/06	478.46	28.08	0.00	450.38	-4.19	--	1200	20	ND<2.5	5.2	2.8	--	170	
11/21/06	478.46	27.23	0.00	451.23	0.85	--	1500	22	ND<5.0	5.8	ND<5.0	--	180	
3/26/07	478.46	25.27	0.00	453.19	1.96	--	3900	65	0.61	50	160	--	95	
6/27/07	478.46	27.51	0.00	450.95	-2.24	--	1400	29	ND<0.50	5.6	2.3	--	170	
9/23/07	478.46	31.70	0.00	446.76	-4.19	--	1600	16	0.61	2.7	3.7	--	88	
12/20/07	478.46	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-4 (Screen Interval in feet: 35.0-45.0)														
4/3/01	476.93	31.63	0.00	445.30	--	ND	--	ND	ND	ND	ND	37.8	38.2	
7/2/01	476.93	37.96	0.00	438.97	-6.33	ND	--	ND	ND	ND	ND	ND	5.3	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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-4 continued														
10/8/01	476.93	44.24	0.00	432.69	-6.28	--	--	--	--	--	--	--	--	Not enough water to sample
1/3/02	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	
4/5/02	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	--	
7/2/02	476.93	36.85	0.00	440.08	0.79	--	67	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	12	
10/1/02	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	
5/2/03	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	
7/1/03	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	
10/3/03	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	
1/8/04	476.93	29.23	0.00	447.70	8.40	--	ND<50	0.55	ND<0.50	1.6	3.7	--	2.5	
4/15/04	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	
7/15/04	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	
12/8/04	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	
3/23/05	476.93	25.38	0.00	451.55	9.72	--	ND<50	ND<0.50	ND<0.50	1.3	1.2	--	0.65	
6/28/05	476.93	28.67	0.00	448.26	-3.29	--	34J	ND<0.50	0.15J	ND<0.50	ND<1.0	--	0.23J	
9/23/05	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	
3/24/06	476.93	26.51	0.00	450.42	4.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	4.4	--	21	
6/26/06	476.93	27.98	0.00	448.95	-1.47	--	63	ND<0.50	ND<0.50	0.56	ND<1.0	--	11	
9/26/06	476.93	33.72	0.00	443.21	-5.74	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	13	
11/21/06	476.93	33.43	0.00	443.50	0.29	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
3/26/07	476.93	30.52	0.00	446.41	2.91	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
6/27/07	476.93	38.20	0.00	438.73	-7.68	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	0.78	
9/23/07	476.93	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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-4 continued														
12/20/07	476.93	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-5 (Screen Interval in feet: 37.0-47.0)														
4/3/01	476.51	31.75	0.00	444.76	--	ND	--	ND	0.728	ND	0.993	54.8	55.4	
7/2/01	476.51	38.68	0.00	437.83	-6.93	ND	--	ND	ND	ND	ND	88	94	
10/8/01	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	
1/3/02	476.51	36.55	0.00	439.96	9.76	ND<50	--	ND<0.50	0.59	ND<0.50	0.91	51	53	
4/5/02	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	--	
7/2/02	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	
10/1/02	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible - truck parked over well
12/30/02	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible - car parked over well
5/2/03	476.51	31.55	0.00	444.96	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	18	
7/1/03	476.51	33.83	0.00	442.68	-2.28	--	73	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	46	
10/3/03	476.51	37.72	0.00	438.79	-3.89	--	58	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	44	
1/8/04	476.51	29.21	0.00	447.30	8.51	--	ND<50	ND<0.50	ND<0.50	1.1	2.7	--	17	
4/15/04	476.51	30.05	0.00	446.46	-0.84	--	57	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	37	
7/15/04	476.51	35.15	0.00	441.36	-5.10	--	60	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	27	
12/8/04	476.51	35.33	0.00	441.18	-0.18	--	62	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	39	
3/23/05	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	
6/28/05	476.51	28.90	0.00	447.61	-3.45	--	73	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	40	
9/23/05	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	
3/24/06	476.51	22.42	0.00	454.09	8.54	--	2400	13	ND<5.0	48	58	--	54	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
U-5 continued														
6/26/06	476.51	29.31	0.00	447.20	-6.89	--	72	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	82	
9/26/06	476.51	34.35	0.00	442.16	-5.04	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	51	
11/21/06	476.51	32.43	0.00	444.08	1.92	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	25	
3/26/07	476.51	31.20	0.00	445.31	1.23	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	29	
6/27/07	476.51	38.62	0.00	437.89	-7.42	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	30	
9/23/07	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
12/20/07	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-6 (Screen Interval in feet: DNA)														
1/3/02	478.38	33.99	0.00	444.39	--	5000	--	36	ND<25	260	450	ND<250	ND<10	
4/5/02	478.38	36.18	0.00	442.20	-2.19	1300	--	16	ND<5.0	54	ND<5.0	ND<25	--	
7/2/02	478.38	36.33	0.00	442.05	-0.15	--	1100	1.4	ND<0.50	16	ND<1.0	--	0.94	
10/1/02	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	
5/2/03	478.38	31.49	0.00	446.89	0.14	--	150	ND<0.50	ND<0.50	1.8	1.7	--	82	
7/1/03	478.38	32.88	0.00	445.50	-1.39	--	190	1.8	ND<0.50	9.4	8.7	--	36	
10/3/03	478.38	36.54	0.00	441.84	-3.66	--	ND<10000	140	ND<100	940	560	--	ND<400	
1/8/04	478.38	30.45	0.00	447.93	6.09	--	3500	29	32	90	89	--	27	
4/15/04	478.38	29.48	0.00	448.90	0.97	--	2400	19	ND<2.5	91	53	--	16	
7/15/04	478.38	34.30	0.00	444.08	-4.82	--	8500	150	5.7	970	560	--	24	
12/8/04	478.38	34.80	0.00	443.58	-0.50	--	2700	16	ND<2.5	28	ND<5.0	--	10	
3/23/05	478.38	25.08	0.00	453.30	9.72	--	960	2.7	ND<0.50	9.6	4.8	--	2.5	
6/28/05	478.38	28.75	0.00	449.63	-3.67	--	12000	120	4.9	930	780	--	21	
9/23/05	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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
U-6 continued														
3/24/06	478.38	25.94	0.00	452.44	4.49	--	4300	52	ND<5.0	440	160	--	11	
6/26/06	478.38	28.07	0.00	450.31	-2.13	--	5300	59	ND<5.0	520	300	--	ND<5.0	
9/26/06	478.38	33.31	0.00	445.07	-5.24	--	7400	78	ND<5.0	490	160	--	6.4	
11/21/06	478.38	31.65	0.00	446.73	1.66	--	1500	5.5	ND<0.50	37	2.4	--	1.4	
3/26/07	478.38	29.25	0.00	449.13	2.40	--	480	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	0.50	
6/27/07	478.38	35.09	0.00	443.29	-5.84	--	110	1.2	ND<0.50	1.3	ND<0.50	--	0.86	
9/23/07	478.38	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
12/20/07	478.38	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
U-7 (Screen Interval in feet: DNA)														
1/3/02	478.74	32.43	0.00	446.31	--	3100	--	93	ND<10	35	73	140	130	
4/5/02	478.74	34.06	0.00	444.68	-1.63	630	--	22	0.53	2.6	ND<0.50	45	--	
7/2/02	478.74	35.28	0.00	443.46	-1.22	--	1100	21	ND<0.50	6.9	ND<1.0	--	60	
10/1/02	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	
5/2/03	478.74	31.81	0.00	446.93	0.12	--	3000	17	2.7	14	5.1	--	42	
7/1/03	478.74	33.47	0.00	445.27	-1.66	--	2300	11	0.53	8.0	1.5	--	35	
10/3/03	478.74	35.84	0.00	442.90	-2.37	--	6500	30	ND<5.0	41	ND<10	--	53	
1/8/04	478.74	30.35	0.00	448.39	5.49	--	1600	4.0	ND<1.0	4.2	8.7	--	56	
4/15/04	478.74	29.03	0.00	449.71	1.32	--	3600	22	1.3	64	40	--	57	
7/15/04	478.74	33.52	0.00	445.22	-4.49	--	4700	15	1.2	59	57	--	50	
12/8/04	478.74	34.68	0.00	444.06	-1.16	--	5800	26	1.9	63	27	--	52	
3/23/05	478.74	24.49	0.00	454.25	10.19	--	5600	18	1.3	42	14	--	39	
6/28/05	478.74	28.83	0.00	449.91	-4.34	--	5400	16	1.1	35	10	--	45	
9/23/05	478.74	32.35	0.00	446.39	-3.52	--	2400	13	1.3	31	6.9	--	46	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through December 2007
76 Station 4186

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (8015M) (µg/l)	TPH-G (GC/MS) (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-7 continued														
12/30/05	478.74	30.18	0.00	448.56	2.17	--	2500	11	1.1	28	4.3	--	35	
3/24/06	478.74	25.06	0.00	453.68	5.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	32	
6/26/06	478.74	28.30	0.00	450.44	-3.24	--	2500	11	1.1	45	15	--	55	
9/26/06	478.74	33.47	0.00	445.27	-5.17	--	2300	7.8	0.84	17	2.1	--	61	
11/21/06	478.74	31.66	0.00	447.08	1.81	--	3000	15	1.1	26	2.2	--	69	
3/26/07	478.74	29.82	0.00	448.92	1.84	--	2200	1.2	ND<0.50	ND<0.50	ND<0.50	--	70	
6/27/07	478.74	36.59	0.00	442.15	-6.77	--	590	5.8	ND<0.50	3.3	0.94	--	100	
9/23/07	478.74	44.05	0.00	434.69	-7.46	--	--	--	--	--	--	--	--	Not enough water to sample
12/20/07	478.74	--	--	--	--	--	--	--	--	--	--	--	--	Dry well

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)	(µg/l)	(mV)
U-1											
10/2/00	ND	--	--	--	--	--	--	--	--	--	--
12/30/02	--	--	--	--	--	--	--	0.60	--	--	91
5/2/03	--	--	--	--	--	--	--	0.50	--	--	90
7/1/03	--	ND<500000	--	--	--	--	--	0.60	--	--	110
10/3/03	--	ND<500	--	--	--	--	--	3.79	--	--	329
1/8/04	--	ND<500	--	--	--	--	--	12.36	--	--	184
4/15/04	--	ND<50	--	--	--	--	--	10.56	--	--	213
7/15/04	--	ND<50	--	--	--	--	--	6.62	--	--	251
12/8/04	--	ND<50	--	--	--	--	--	2.66	--	--	68
3/23/05	--	ND<50	--	--	--	--	--	3.12	--	--	091
6/28/05	--	ND<1000	--	--	--	--	--	8.84	--	--	153
9/23/05	--	ND<1000	--	--	--	--	--	2.26	--	--	187
12/30/05	--	ND<250	--	--	--	--	--	7.74	--	--	159
3/24/06	--	ND<250	--	--	--	--	--	--	3.88	036	--
6/26/06	--	ND<250	--	--	--	--	--	--	5.50	008	--
9/26/06	--	ND<250	--	--	--	--	--	4.24	4.66	203	200
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.24	4.56	1.97	2.00
3/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.58	6.98	107	102
6/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.98	4.85	20	34
U-2											
10/2/00	ND	--	--	--	--	--	--	--	--	--	--
10/1/02	--	--	--	--	--	--	--	1.40	--	--	--
12/30/02	--	--	--	--	--	--	--	2.80	--	--	120
5/2/03	--	--	--	--	--	--	--	150.00	--	--	120
7/1/03	--	ND<500000	--	--	--	--	--	1.20	--	--	110
10/3/03	--	ND<500	--	--	--	--	--	5.61	--	--	321

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)	(µg/l)	(mV)
U-2 continued											
1/8/04	--	ND<500	--	--	--	--	--	12.11	--	--	- 6
4/15/04	--	ND<50	--	--	--	--	--	11.39	--	--	259
7/15/04	--	ND<50	--	--	--	--	--	7.46	--	--	238
12/8/04	--	ND<50	--	--	--	--	--	3.57	--	--	132
3/23/05	--	730	--	--	--	--	--	4.57	--	--	024
6/28/05	--	ND<1000	--	--	--	--	--	8.08	--	--	230
9/23/05	--	ND<1000	--	--	--	--	--	5.47	--	--	188
12/30/05	--	ND<250	--	--	--	--	--	8.33	--	--	177
3/24/06	--	ND<250	--	--	--	--	--	--	6.20	-004	--
6/26/06	--	ND<250	--	--	--	--	--	--	4.51	040	--
9/26/06	--	ND<250	--	--	--	--	--	3.70	3.49	-31	-17
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.70	3.45	-29	-20
3/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	10.05	10.31	90	95
6/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.87	4.21	-63	-41
9/23/07	69	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	-133	-48
U-3											
10/2/00	63000	--	--	--	--	--	--	--	--	--	--
1/8/01	49300	ND	ND	ND	ND	ND	ND	--	--	--	--
4/3/01	22200	ND	ND	ND	ND	ND	ND	--	--	--	--
7/2/01	27000	ND	ND	ND	ND	ND	ND	--	--	--	--
10/8/01	33000	ND<14000000	ND<290	ND<290	ND<290	ND<290	ND<290	--	--	--	--
1/3/02	17000	ND<50000000	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	--
4/5/02	66000	ND<25000000	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	--
7/2/02	47000	ND<13000000	ND<250	ND<250	ND<500	ND<250	ND<250	--	--	--	--
10/1/02	ND<50000	ND<25000000	ND<1000	ND<1000	ND<1000	ND<1000	ND<1000	0.50	--	--	- 47
12/30/02	23000	ND<10000000	ND<400	ND<400	ND<400	ND<400	ND<400	0.20	--	--	106

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)	(µg/l)	(mV)
U-3 continued											
5/2/03	25000	ND<50000000	ND<200	ND<200	ND<200	ND<200	ND<200	0.50	--	--	85
7/1/03	32000	ND<10000000	ND<400	ND<400	ND<400	ND<400	ND<400	0.50	--	--	90
10/3/03	39000	ND<50000	ND<200	ND<200	ND<2.0	ND<200	ND<200	3.80	--	--	- 27
1/8/04	ND<20000	ND<100000	ND<400	ND<400	ND<400	ND<400	ND<400	12.82	--	--	133
4/15/04	18000	ND<2500	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<0.5	3.11	--	--	24
7/15/04	15000	ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25	1.90	--	--	53
12/8/04	34000	ND<5000	ND<50	ND<50	ND<100	ND<50	ND<50	1.30	--	--	-81
3/23/05	--	ND<5000	--	--	--	--	--	0.52	--	--	-087
6/28/05	--	ND<1000	--	--	--	--	--	1.47	--	--	-151
9/23/05	--	ND<50000	--	--	--	--	--	1.40	--	--	-80
12/30/05	2000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.58	1.45	--	--	-068
3/24/06	--	ND<2500	--	--	--	--	--	--	.79	003	--
6/26/06	18000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	3.56	015	--
9/26/06	--	ND<1200	--	--	--	--	--	1.06	1.10	-72	-95
11/21/06	33000	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	1.04	1.10	-83	-96
3/26/07	13000	ND<250	ND<0.50	0.95	ND<0.50	ND<0.50	ND<0.50	7.08	6.99	78	68
6/27/07	20000	ND<250	ND<0.50	0.79	ND<0.50	ND<0.50	ND<0.50	4.89	4.79	-79	-82
9/23/07	19000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	-114	-88
U-4											
4/3/01	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
7/2/01	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
1/3/02	ND<20	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--
10/1/02	--	--	--	--	--	--	--	1.00	--	--	83
12/30/02	--	--	--	--	--	--	--	0.40	--	--	126
5/2/03	--	--	--	--	--	--	--	0.70	--	--	120
7/1/03	--	ND<500000	--	--	--	--	--	0.60	--	--	130

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)	(µg/l)	(mV)
U-4 continued											
10/3/03	--	ND<500	--	--	--	--	--	2.06	--	--	3.05
1/8/04	--	ND<500	--	--	--	--	--	11.90	--	--	76
4/15/04	--	ND<50	--	--	--	--	--	3.30	--	--	116
7/15/04	--	ND<50	--	--	--	--	--	2.50	--	--	32
12/8/04	--	ND<50	--	--	--	--	--	2.09	--	--	47
3/23/05	--	ND<50	--	--	--	--	--	0.04	--	--	021
6/28/05	--	ND<1000	--	--	--	--	--	2.24	--	--	120
9/23/05	--	ND<1000	--	--	--	--	--	3.01	--	--	176
12/30/05	--	ND<250	--	--	--	--	--	1.96	--	--	175
3/24/06	--	ND<250	--	--	--	--	--	--	1.48	015	--
6/26/06	--	ND<250	--	--	--	--	--	--	1.31	031	--
9/26/06	--	ND<250	--	--	--	--	--	1.38	1.23	-54	-7
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.38	1.13	-60	-10
3/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	7.09	7.28	14	25
6/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.82	2.62	82	73
U-5											
4/3/01	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
7/2/01	ND	ND	ND	ND	ND	ND	ND	--	--	--	--
10/8/01	ND<100	ND<1000000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	--	--	--
1/3/02	ND<20	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--
5/2/03	--	--	--	--	--	--	--	0.60	--	--	120
7/1/03	--	ND<500	--	--	--	--	--	0.90	--	--	145
10/3/03	--	ND<500	--	--	--	--	--	2.21	--	--	3.13
1/8/04	--	ND<500	--	--	--	--	--	11.27	--	--	104
4/15/04	--	ND<50	--	--	--	--	--	3.35	--	--	65
7/15/04	--	ND<50	--	--	--	--	--	2.87	--	--	66

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)	(µg/l)	(mV)
U-5 continued											
12/8/04	--	ND<50	--	--	--	--	--	1.67	--	--	102
3/23/05	--	ND<50	--	--	--	--	--	0.75	--	--	131
6/28/05	--	ND<1000	--	--	--	--	--	2.29	--	--	103
9/23/05	--	ND<1000	--	--	--	--	--	2.05	--	--	172
12/30/05	--	ND<250	--	--	--	--	--	1.39	--	--	171
3/24/06	--	ND<2500	--	--	--	--	--	--	.97	011	--
6/26/06	--	ND<250	--	--	--	--	--	--	7.23	091	--
9/26/06	--	ND<250	--	--	--	--	--	1.19	0.80	44	44
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.12	0.79	41	47
3/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.20	3.60	31	52
6/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.01	1.67	66	58
U-6											
1/3/02	ND<200	ND<5000000	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--
10/1/02	--	--	--	--	--	--	--	0.90	--	--	--
12/30/02	--	--	--	--	--	--	--	0.20	--	--	88
5/2/03	--	--	--	--	--	--	--	0.90	--	--	145
7/1/03	--	ND<500000	--	--	--	--	--	0.70	--	--	120
10/3/03	--	ND<100000	--	--	--	--	--	2.26	--	--	12
1/8/04	--	ND<5000	--	--	--	--	--	11.95	--	--	-37
4/15/04	--	ND<250	--	--	--	--	--	3.47	--	--	-20
7/15/04	--	ND<250	--	--	--	--	--	3.25	--	--	-43
12/8/04	--	ND<250	--	--	--	--	--	0.94	--	--	-91
3/23/05	--	ND<50	--	--	--	--	--	0.55	--	--	-077
6/28/05	--	ND<1000	--	--	--	--	--	0.86	--	--	-129
9/23/05	--	ND<50000	--	--	--	--	--	1.97	--	--	-82
12/30/05	--	ND<250	--	--	--	--	--	1.01	--	--	-66

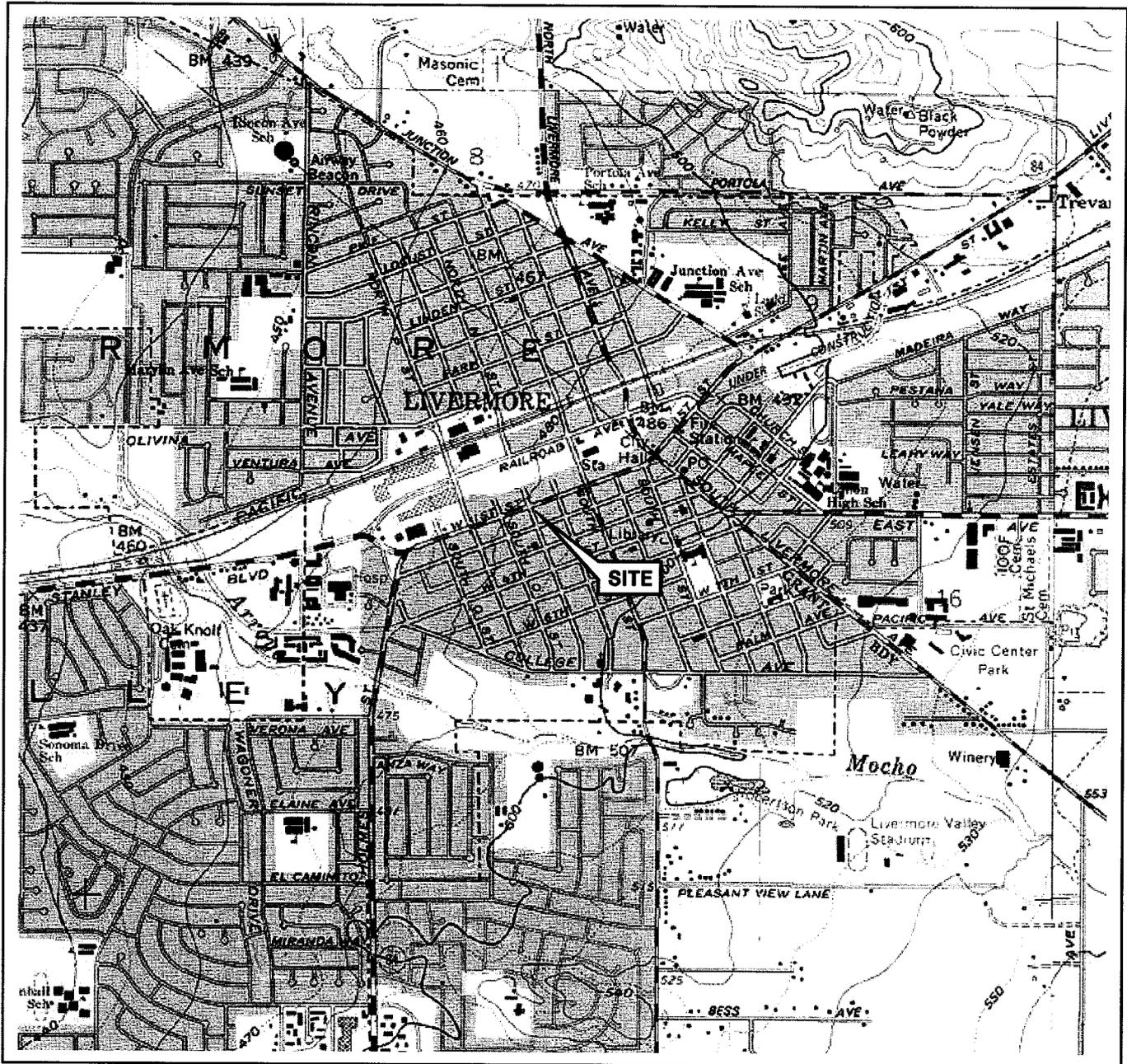
Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)	(µg/l)	(mV)
U-6 continued											
3/24/06	--	ND<2500	--	--	--	--	--	--	1.25	011	--
6/26/06	--	ND<2500	--	--	--	--	--	--	5.48	015	--
9/26/06	--	ND<2500	--	--	--	--	--	6.97	7.05	-67	-69
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.83	1.05	-65	-69
3/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	6.40	6.26	15	9
6/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.51	3.20	-64	-54
U-7											
1/3/02	30	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--
10/1/02	--	--	--	--	--	--	--	1.80	--	--	-60
12/30/02	--	--	--	--	--	--	--	0.10	--	--	121
5/2/03	--	--	--	--	--	--	--	0.40	--	--	105
7/1/03	--	ND<500000	--	--	--	--	--	0.50	--	--	95
10/3/03	--	ND<5000	--	--	--	--	--	2.91	--	--	-21
1/8/04	--	ND<1000	--	--	--	--	--	11.85	--	--	-51
4/15/04	--	ND<100	--	--	--	--	--	4.68	--	--	-16
7/15/04	--	ND<100	--	--	--	--	--	2.55	--	--	-52
12/8/04	--	ND<100	--	--	--	--	--	1.20	--	--	-88
3/23/05	--	ND<100	--	--	--	--	--	0.21	--	--	-088
6/28/05	--	ND<1000	--	--	--	--	--	1.32	--	--	-160
9/23/05	--	ND<1000	--	--	--	--	--	2.25	--	--	108
12/30/05	--	ND<250	--	--	--	--	--	1.12	--	--	105
3/24/06	--	ND<250	--	--	--	--	--	--	.99	008	--
6/26/06	--	ND<250	--	--	--	--	--	--	1.27	025	--
9/26/06	--	ND<250	--	--	--	--	--	0.78	1.02	-47	-63
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.88	0.98	-43	-59
3/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.85	6.00	14	8

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(mg/l)	(µg/l)	(mV)
U-7 continued 6/27/07	14	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.98	2.60	-90	-102

FIGURES



SOURCE:

United States Geological Survey
7.5 Minute Topographic Map:
Livermore Quadrangle

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



SCALE 1:24,000



QUADRANGLE
LOCATION



PROJECT: 154771

FACILITY:

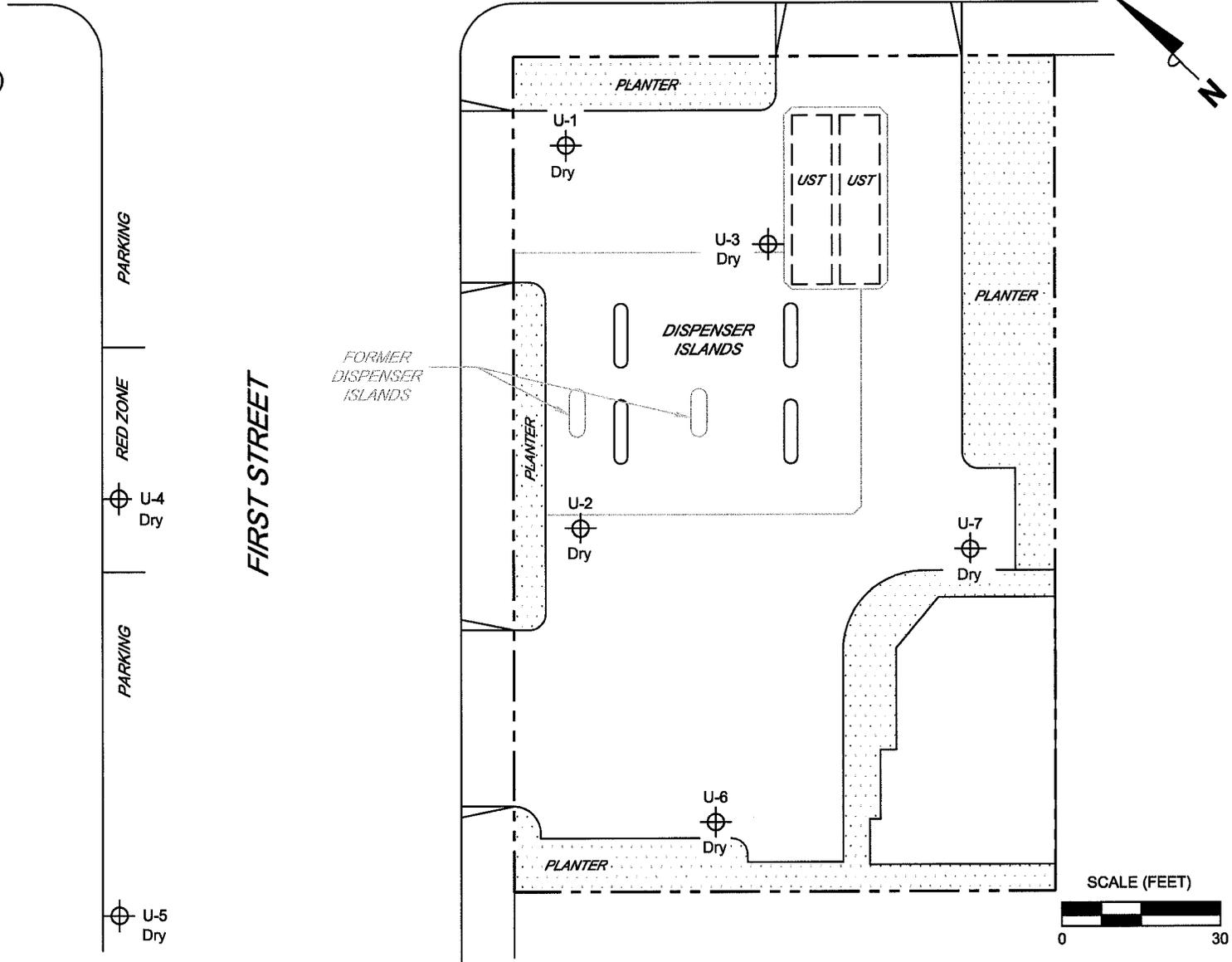
76 STATION 4186
1771 FIRST STREET
LIVERMORE, CALIFORNIA

VICINITY MAP

FIGURE 1

LEGEND

U-7  Monitoring Well with Groundwater Elevation (feet)



NOTES:

Elevations are in feet above mean sea level.
UST = underground storage tank.



PROJECT: **154771**

FACILITY:
76 STATION 4186
1771 FIRST STREET
LIVERMORE, CALIFORNIA

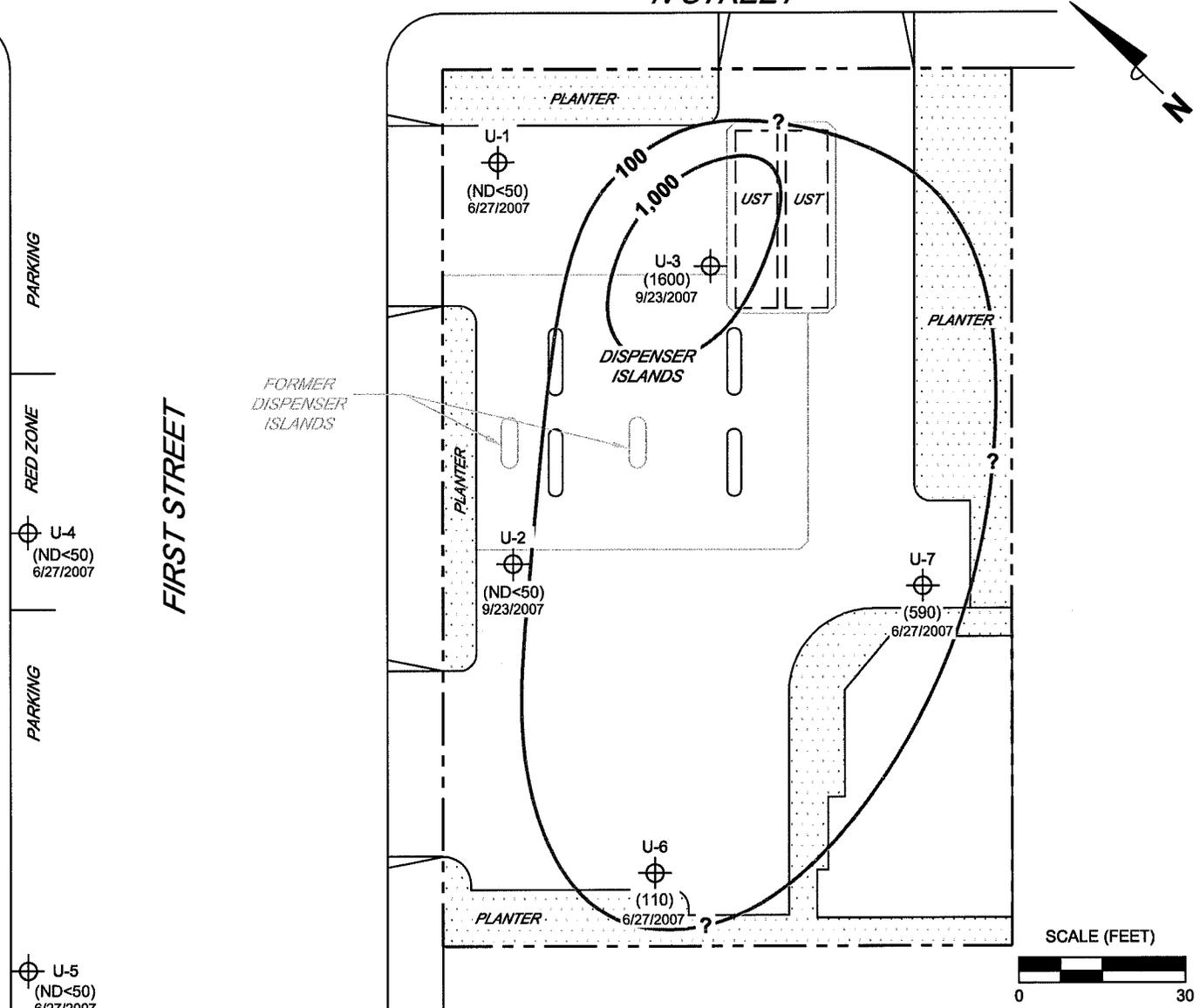
**GROUNDWATER ELEVATION
CONTOUR MAP
December 20, 2007**

FIGURE 2

LEGEND

U-7  Monitoring Well with Dissolved-Phase TPH-G (GC/MS) Concentration (µg/l)

 1,000 Dissolved-Phase TPH-G (GC/MS) Contour (µg/l)



NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.
 TPH-G (GC/MS) = total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B.
 µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
 () = representative historical value. UST = underground storage tank.



PROJECT: **154771**

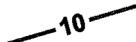
FACILITY:
 76 STATION 4186
 1771 FIRST STREET
 LIVERMORE, CALIFORNIA

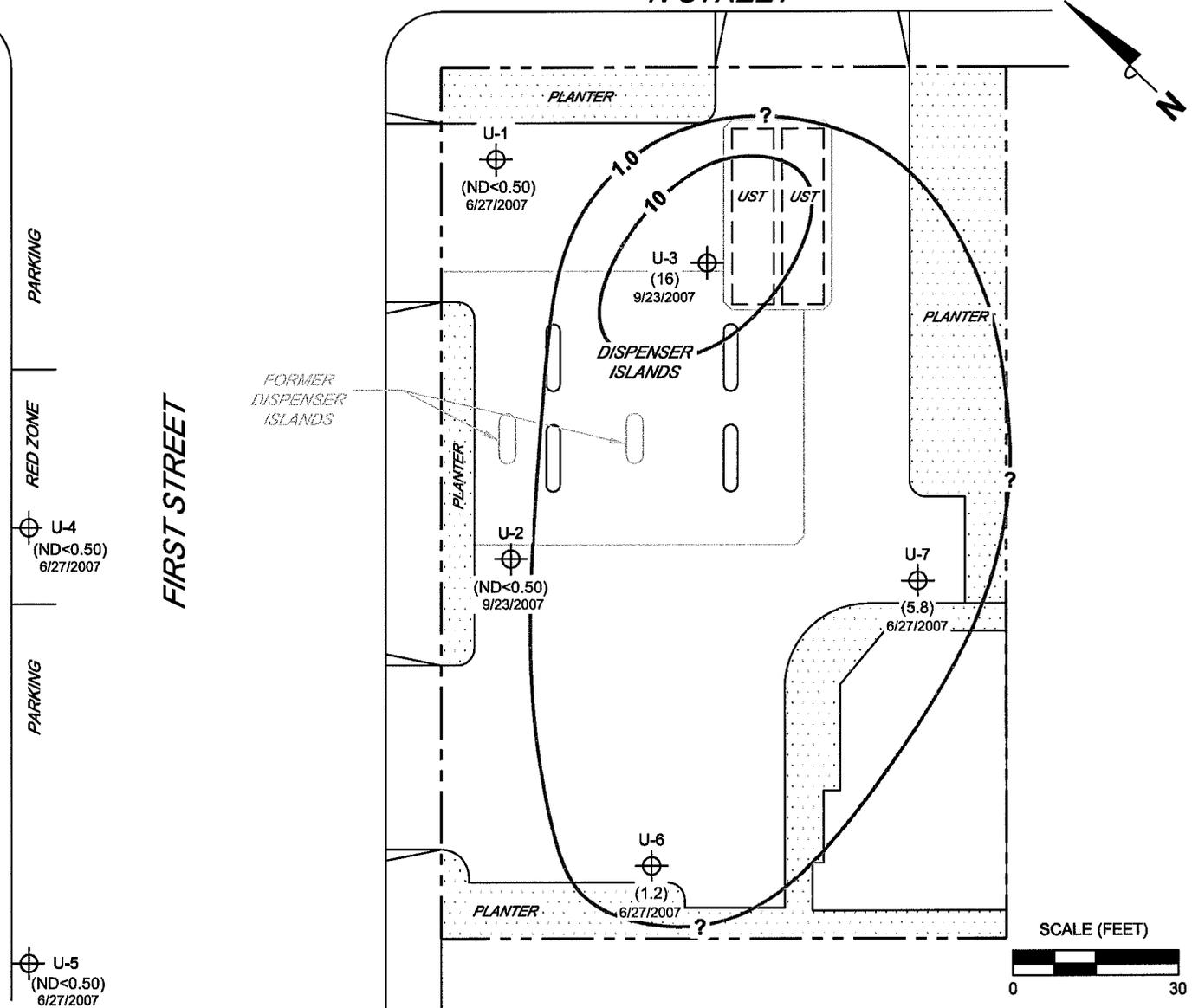
**DISSOLVED-PHASE TPH-G (GC/MS)
 CONCENTRATION MAP
 December 20, 2007**

FIGURE 3

LEGEND

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

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



NOTES:

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



PROJECT: **154771**
 FACILITY:
 76 STATION 4186
 1771 FIRST STREET
 LIVERMORE, CALIFORNIA

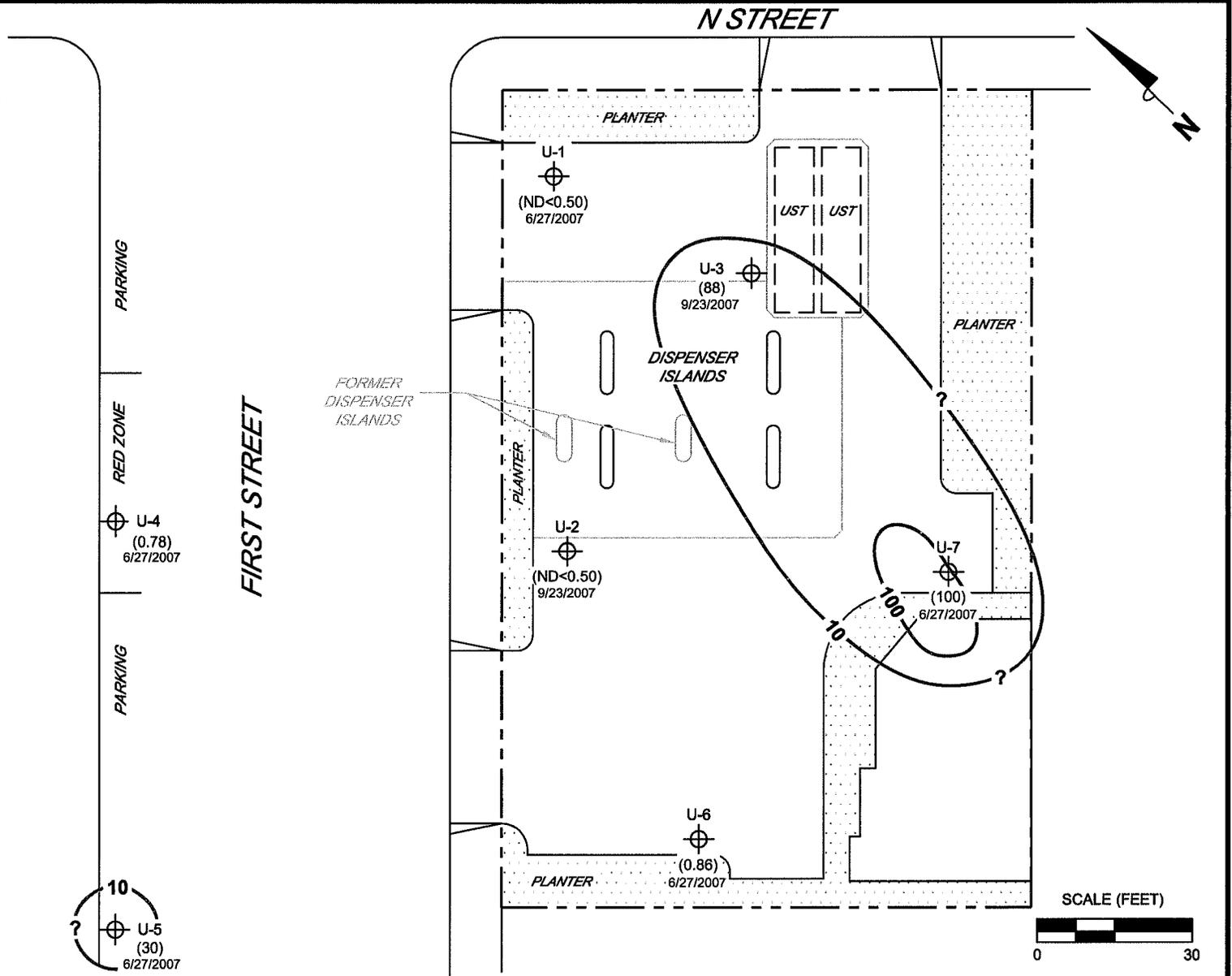
**DISSOLVED-PHASE BENZENE
 CONCENTRATION MAP
 December 20, 2007**

FIGURE 4

LEGEND

U-7  Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

 100 Dissolved-Phase MTBE Contour (µg/l)



NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.
 MTBE = methyl tertiary butyl ether.
 µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
 () = representative historical value. UST = underground storage tank. Results obtained using EPA Method 8260B.



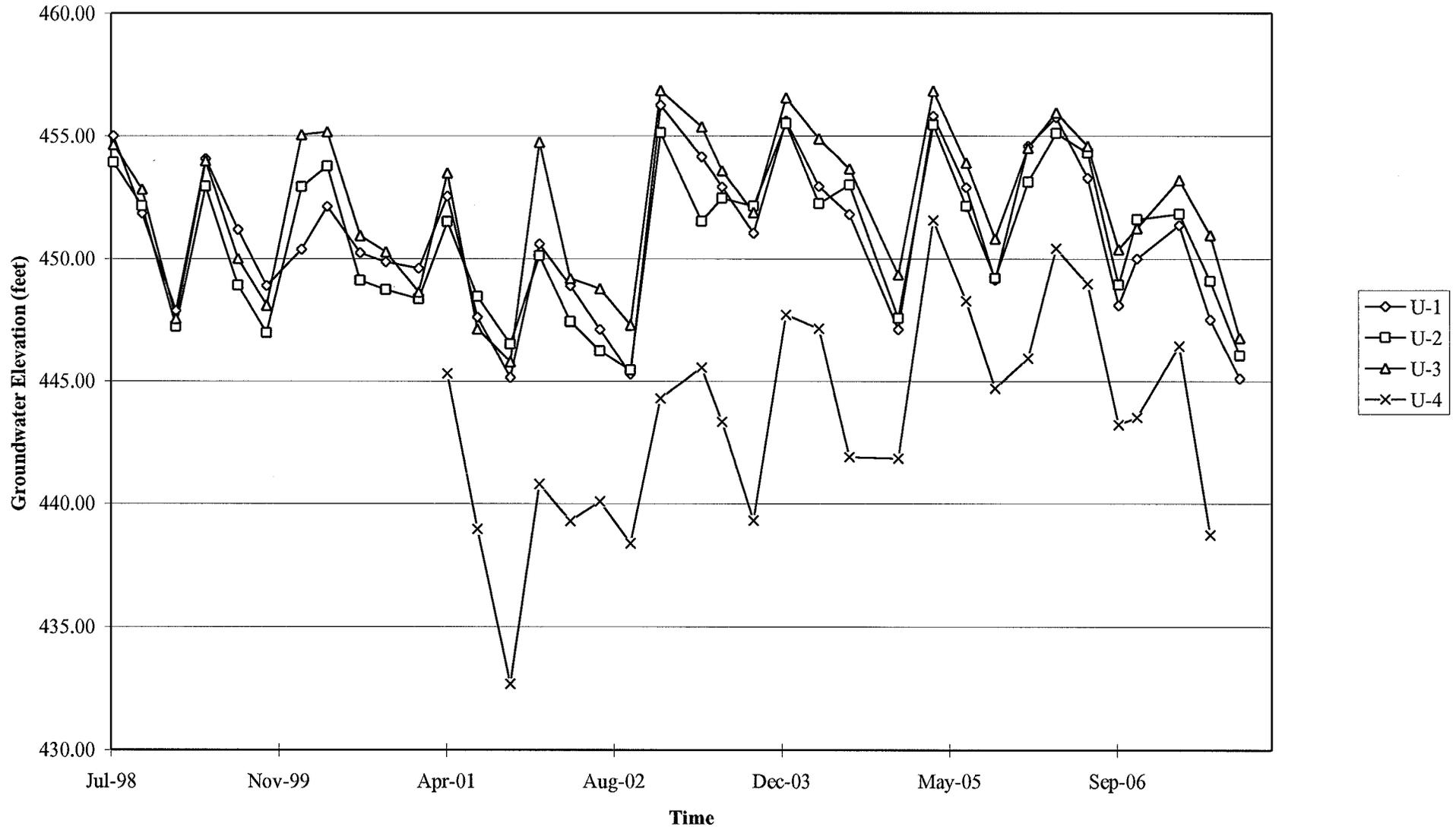
PROJECT: **154771**
 FACILITY:
 76 STATION 4186
 1771 FIRST STREET
 LIVERMORE, CALIFORNIA

**DISSOLVED-PHASE MTBE
 CONCENTRATION MAP
 December 20, 2007**

FIGURE 5

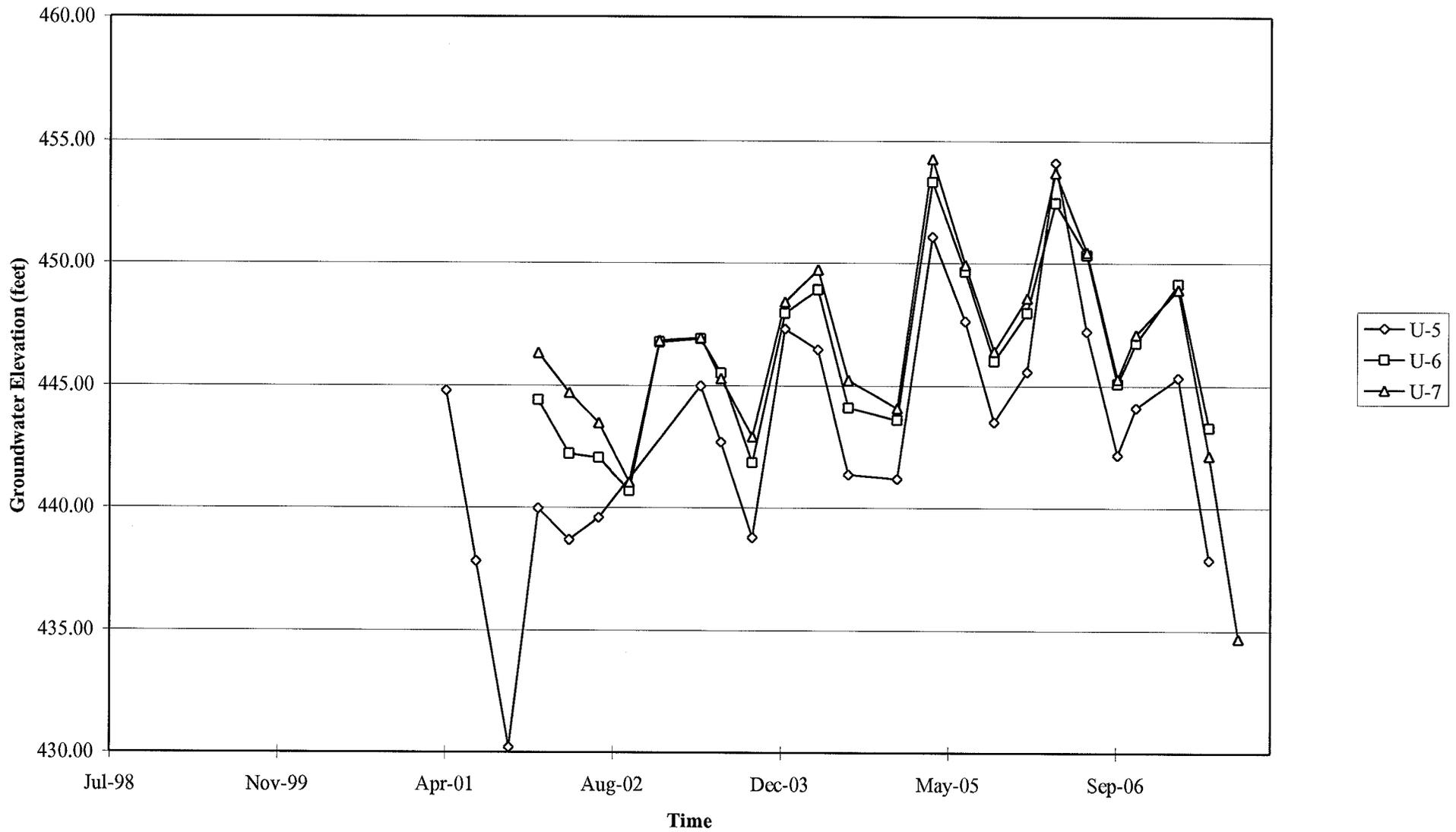
GRAPHS

Groundwater Elevations vs. Time
76 Station 4186



Elevations may have been corrected for apparent changes due to resurvey

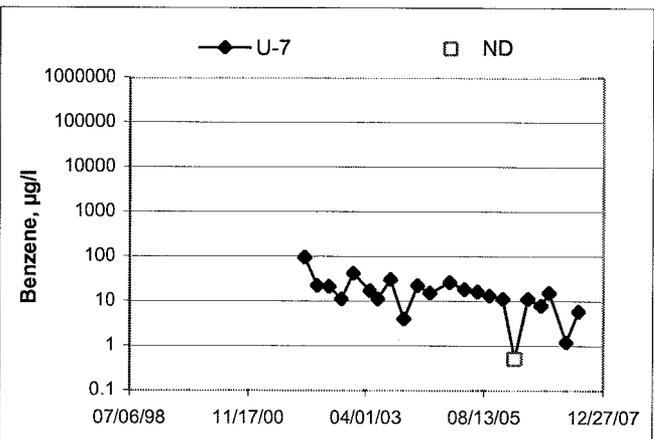
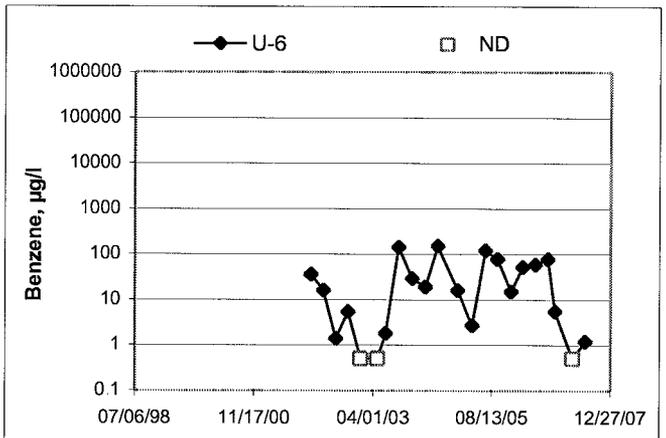
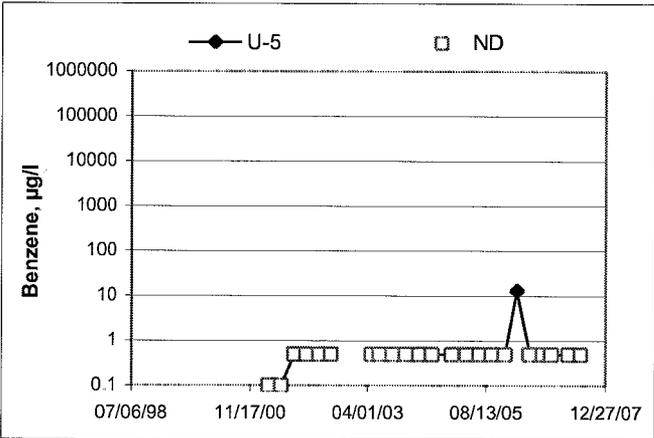
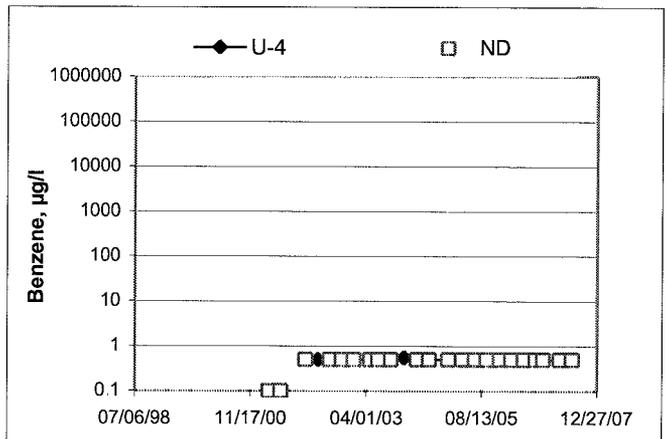
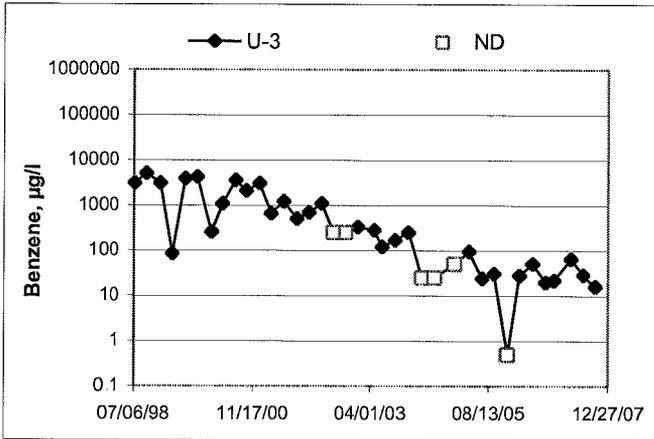
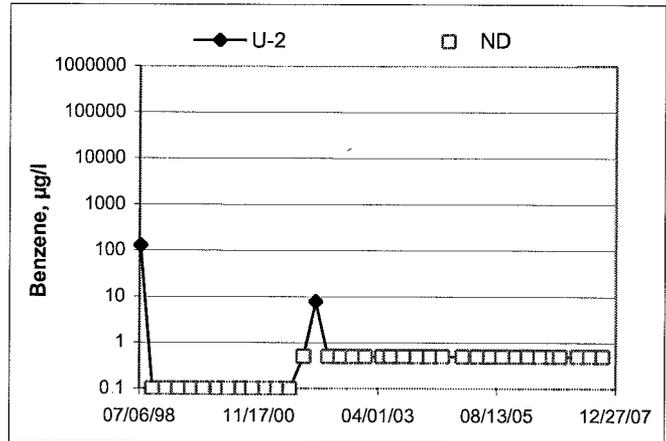
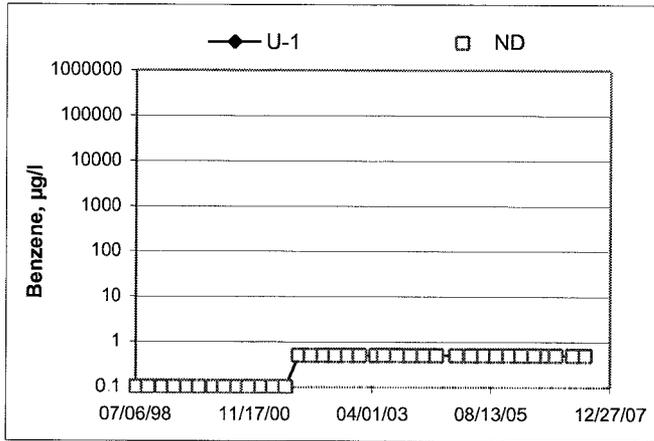
Groundwater Elevations vs. Time
76 Station 4186



Elevations may have been corrected for apparent changes due to resurvey

Benzene Concentrations vs Time

76 Station 4186



GENERAL FIELD PROCEDURES

Groundwater Monitoring and Sampling Assignments

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

Fluid Level Measurements

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

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depth to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (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

Technician: ALEX

Site: 4186

Project No.: 154771

Date: 12/20/07

Well No. U-2

Purge Method: DRY

Depth to Water (feet): 30.64

Depth to Product (feet): _____

Total Depth (feet): 33.10

LPH & Water Recovered (gallons): _____

Water Column (feet): 2.46

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): _____

1 Well Volume (gallons): 0.39

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	D.O.	ORP	Turbidity
Static at Time Sampled			Total Gallons Purged			Sample Time			
Comments:									

Well No. U-3

Purge Method: DRY

Depth to Water (feet): 30.75

Depth to Product (feet): _____

Total Depth (feet): 33.55

LPH & Water Recovered (gallons): _____

Water Column (feet): 2.8

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): _____

1 Well Volume (gallons): 0.448

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	D.O.	ORP	Turbidity
Static at Time Sampled			Total Gallons Purged			Sample Time			
Comments:									

STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 12/20/07 STATION NUMBER: 4186

NAME OF TECH: ALEX CALLED GORDON: _____

CALLED PM: NAME OF PM CALLED: A. COLLINS

WELL NUMBER: U-1 STATEMENT FROM PM _____ OR TECH

well dry

WELL NUMBER: U-3 STATEMENT FROM PM _____ OR TECH

Not enough water in well (0.44 gallons)

WELL NUMBER: U-7 STATEMENT FROM PM _____ OR TECH

Not enough water in well (0.048 gallons)

WELL NUMBER: _____ STATEMENT FROM PM _____ OR TECH _____

STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 12/20/07 STATION NUMBER: 4186

NAME OF TECH: ALIX CALLED GORDON: _____

CALLED PM: NAME OF PM CALLED: A. COLLINS

WELL NUMBER: U-4 STATEMENT FROM PM _____ OR TECH

well dry

WELL NUMBER: U-5 STATEMENT FROM PM _____ OR TECH

Well dry

WELL NUMBER: U-6 STATEMENT FROM PM _____ OR TECH _____

well dry

WELL NUMBER: U-2 STATEMENT FROM PM _____ OR TECH

Not enough water in well (0.39 gallons)

STATEMENTS

Purge Water Disposal

Non-hazardous groundwater produced during purging and sampling of monitoring wells was accumulated at TRC's groundwater monitoring facility at Concord, California, for transportation by a licensed carrier, 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 others.

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.