



76 Broadway
Sacramento, California 95818

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2:35 pm, Oct 23, 2008

Alameda County
Environmental Health

October 20, 2008

Mr. Jerry Wickham
Alameda County Health Agency
1131 Harbor Bay parkway, Suite250
Alameda, California 94502-577

Re: ***Quarterly Summary Report—Third Quarter 2008***
Former 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 call me at (916) 558-7666.

Sincerely,

Terry L. Grayson
Site Manager
Risk Management & Remediation

October 20, 2008

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

**Re: Quarterly Summary Report – Third Quarter 2008
And Sensitive Receptor Survey
Fuel Leak Case No. RO0000436**



Dear Mr. Wickham:

On behalf of ConocoPhillips (COP), Delta Consultants (Delta) is submitting the Quarterly Summary Report – Third Quarter 2008 and forwarding a copy of TRC Solutions, Inc. (TRC's) *Quarterly Monitoring Report, July through September 2008*, dated September 17, 2008, for the following location:

Service Station

Former 76 Service Station No. 4186

Location

1771 First Street
Livermore,
California

Sincerely,
DELTA CONSULTANTS

A handwritten signature in black ink that reads "Dennis S. Dettloff".

Dennis S. Dettloff, P.G.
Senior Project Manager
California Registered Professional Geologist No. 7480



cc: Mr. Terry Grayson, ConocoPhillips (electronic copy)

QUARTERLY SUMMARY REPORT
Sensitive Receptor Survey
Third Quarter 2008
Former 76 Station No. 4186
1771 First Street
Livermore, California

SITE DESCRIPTION

The site is located on the southwest corner of the intersection of First Street and N Street, and is currently an active Chevron service station. Two 10,000-gallon gasoline underground storage tanks (USTs), four dispenser islands, and a station building are present at the site. The site is located in a generally commercial area.

PREVIOUS ASSESSMENT

In June 1996, during dispenser and piping replacement activities, six soil samples were collected beneath the dispensers and product piping. Total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethyl-benzene and total xylenes (BTEX) were below the laboratory's indicated reporting limits in all of the samples collected and submitted for analysis.

In September 1997, a soil gas survey was conducted at the site. Six soil gas probes were advanced and samples were collected at 3 or 15 feet below ground surface (bgs) in the vicinity of the USTs, dispenser islands, and product lines. TPHg was reported in the samples at concentrations ranging from 41 to 4,500 parts per billion by volume (ppbv), benzene was reported at concentrations up to 110 ppbv, and methyl tertiary butyl ether (MTBE) was reported at concentrations up to 8,000 ppbv. The highest concentrations were reported in the area of the USTs.

In June 1998, three groundwater monitoring wells (U-1 through U-3) were installed at the site to depths of 34 feet bgs. TPHg, benzene, and MTBE were below the laboratory's indicated reporting limits in soil samples collected from the well borings.

A site conceptual model (SCM) was completed for the site in May 2000. The groundwater flow velocity was calculated to estimate plume travel time to the nearest down-gradient receptor. Groundwater velocity was calculated to be 46 feet per year. It was concluded that hydrocarbon impact to groundwater appears to fluctuate with the rise and fall of the groundwater surface beneath the site.

In February 2001, two additional monitoring wells (U-4 and U-5) were installed. The monitoring wells were installed to depths of 45 feet bgs (U-4) and 47 feet bgs (U-5). TPHg, BTEX, and MTBE were below the laboratory's indicated reporting limits in soil samples collected from the well borings. TPHg and benzene were below the laboratory's indicated reporting limits in the initial groundwater samples collected from monitoring wells U-4 and U-5; however, MTBE was reported at concentrations of 38.2 and 55.4 micrograms per liter ($\mu\text{g/L}$), respectively.

In December 2001, two additional monitoring wells (U-6 and U-7) and eight ozone injection sparge wells (SP-1 through SP-4, SP-5/5S, SP-6S, SP-7S, and SP-8/8S) were installed at the site. The monitoring wells were installed to 45 feet bgs. The sparge

points in wells SP-1 through SP-4 were installed to a depth of 45 feet bgs. The sparge points in wells SP-6S and SP-7S were installed to a shallower depth of 25 feet bgs. The remaining two sparge wells each contained dual-nested sparge points installed to 25 feet bgs (SP-5S and SP-8S) and 45 feet bgs (SP-5 and SP-8). An ozone microsparge system was then installed and began operation in December 2001. The system injected ozone into the 10 sparge points.

In April 2006, seven borings (B-1 through B-7) were advanced at the site. Three boreholes were advanced at each boring location. The initial borehole was advanced to record a cone penetrometer (CPT) log of subsurface lithology. The second borehole was advanced for the purpose of collecting soil samples for observation and laboratory analysis, and to collect discrete groundwater samples at depths of approximately 38 feet to 44 feet bgs. The third borehole was advanced to collect a discrete groundwater sample at approximately 57 feet to 65 feet bgs. Three general stratigraphic zones were identified: an upper zone from 36 to 43 feet bgs, a middle clay zone from 43 to 55 feet bgs, and a lower zone from 55 to the maximum depth of 65.5 feet bgs explored. Soil samples from various depths were submitted for laboratory analysis. TPHg was reported in five upper zone, six clay zone, and three lower zone soil samples at concentrations up to 700 milligrams per kilogram (mg/kg). MTBE was reported in three upper zone, three clay zone, and two lower zone soil samples at concentrations up to 0.29 milligrams per kilogram (mg/kg). Benzene was reported in three clay zone soil samples at concentrations up to 1.3 mg/kg. TPHg was reported in all of the 14 groundwater samples at concentrations up to 26,000 µg/L. Benzene was reported in five upper zone, and six lower zone groundwater samples at concentrations up to 510 µg/L. MTBE was reported in four upper zone, and six lower zone groundwater samples at concentrations up to 1,100 µg/L.

In March 2007, two additional on-site borings (B-8 and B-9) and one additional off-site boring (B-10) were advanced using a CPT rig. The borings were advanced to further evaluate the vertical extent of impacted groundwater to the base of the lowermost sand and gravel unit, to evaluate groundwater quality in the lowermost sand and gravel unit down-gradient of the site, and to evaluate the presence of a clay layer underlying the lowermost coarse-grained soils which may represent a regional aquitard. Four soil samples were collected for laboratory analysis from off-site boring B-10. MTBE was reported in two of the samples at concentrations up to 0.016 mg/kg; TPHg and benzene were below the laboratory's indicated reporting limits in all of the soil samples collected for analysis. TPHg (200 µg/L), benzene (0.94 µg/L), and MTBE (7.1 µg/L) were reported in the groundwater sample collected at 79 to 83 feet bgs from boring B-8. TPHg, BTEX, and fuel oxygenates were below the laboratory's indicated reporting limits in the groundwater sample collected at 78 to 88 feet bgs from boring B-9. A low concentration of MTBE (0.73 µg/L) was reported in the groundwater sample collected at 66 to 70 feet bgs from boring B-10, and a low concentration of toluene (1.4 µg/L) was reported in the groundwater sample collected at 83 to 87 feet bgs from boring B-10. Based on the results of the investigation, soil and groundwater in the area of off-site boring B-10 did not appear to be significantly impacted, groundwater within the lowermost sand and gravel unit in the area of boring B-8 was slightly impacted, and groundwater within the lowermost sand and gravel unit in the area of boring B-9 was not impacted.

Quarterly monitoring of the site wells has been performed since July 1998. Historically,

the groundwater flow direction has varied from the north to the southwest. The depth to groundwater has varied from 21.62 feet bgs to 46.31 feet bgs.

Although the ozone system experienced problems with consistent operation, it appeared to be effective as TPHg, BTEX, and MTBE concentrations in monitoring well U-3 significantly decreased since startup of the system. The system was shut down in October 2006 to evaluate for groundwater concentration rebound. In March 2007, oxygen injection testing was performed in sparge wells SP-5/5S and SP-6S to evaluate the radius of influence (ROI) of the existing sparge wells, and to evaluate the effectiveness of the existing system. As described in our *Additional Subsurface Assessment Report*, dated April 26, 2007, the testing suggested a ROI of between 10 to 15 feet around the wells on average, but perhaps greater in some areas.

Impacted groundwater remains beneath the site in the areas of monitoring wells U-6 and U-7. Impacted groundwater also remains in the northwest portion of the site based on the results of the borings advanced in April 2006.

SENSITIVE RECEPTORS

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

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

MONITORING AND SAMPLING

Groundwater is currently monitored and sampled on a quarterly basis. During the September 3, 2008 monitoring and sampling event, depth to groundwater and groundwater flow direction were unable to be determined due to insufficient water in the monitoring wells. During the previous quarter the groundwater elevation ranged from 31.23 feet (U-3) to 39.9 feet (U-5) below top of casing (TOC) and the groundwater flow direction was interpreted to be to the west with a gradient of 0.06 foot per foot (ft/ft). Historic groundwater flow directions are shown on a rose diagram presented as Attachment B.

Contaminants of Concern:

The following analytical results are from the second quarter 2008 monitoring event. No groundwater samples were collected during the third quarter 2008 monitoring event due to insufficient water in the monitoring well.

TPPH: Total purgeable petroleum hydrocarbons (TPPH) were above the laboratory's indicated reporting limits in the groundwater samples collected from monitoring wells U-3 (770 µg/L), U-4 (71 µg/L), U-5 (55 µg/L), U-6 (2,100 µg/L), and U-7 (1,200 µg/L) during the current sampling event.

Benzene: Benzene was above the laboratory's indicated reporting limits in the groundwater samples collected from monitoring wells U-3 (4.1 µg/L), U-6 (11 µg/L), and U-7 (1.9 µg/L) during the current sampling event.

MTBE: MTBE was above the laboratory's indicated reporting limits in the groundwater samples collected from monitoring wells U-3 (27 µg/L), U-4 (7.5 µg/L), U-5 (28 µg/L), U-6 (1.1 µg/L), and U-7 (40 µg/L) during the current sampling event.

Additionally, toluene, ethyl-benzene, and total xylenes were above the laboratory's indicated reporting limits in monitoring well U-6 (0.79 µg/L, 27 µg/L, and 2.3 µg/L, respectively). Ethyl-benzene was additionally reported in monitoring well U-7 (1.1 µg/L) during the current sampling event.

In addition, at the request of the Alameda County Health Care Services Agency (ACHCSA) each groundwater sample collected and submitted for analysis were analyzed for CAM 17 metals, total dissolved solids, hexavalent chromium, major anions and major cations. The additional analytical data is presented in tables 2a through 2d in TRC's *Quarterly Monitoring Report, July through September 2008*, dated September 17, 2008.

REMEDIATION STATUS

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

During the Second Quarter 2007, the ozone system was shut down, to evaluate whether dissolved gasoline concentrations would rebound or remain stable in the absence of ozone injection with the current well and system configuration.

Based on existing groundwater monitoring data it appears the ozone injection is effective in reducing the petroleum hydrocarbon impact to the groundwater in the vicinity of monitoring well U-3. It also appears based on the data collected during the oxygen injection test conducted by Delta in March 2007, ozone injection at the site would be effective in reducing the petroleum hydrocarbon impact to the groundwater at the site. However, the configuration of the current system is being evaluated and a work plan has been prepared and submitted to the ACHCSA recommending changes to the current system, including the placement of new wells and/or re-screening existing well locations, as appropriate based on soil types and areas requiring further remediation. The installation of the additional ozone injection wells as well as the upgrade of the ozone injection system is currently on hold pending the results of the upcoming site investigation.

CHARACTERIZATION STATUS

The furthest up-gradient monitor well, U-7, contained 40 µg/L MTBE and 1,200 µg/L TPHg during the second quarter 2008 sampling event. The furthest off-site down-gradient monitoring well, U-4, contained 7.5 µg/L MTBE and 71 µg/L TPHg during the second quarter 2008 monitoring and sampling event.

RECENT CORRESPONDENCE

On July 11, 2008 COP requested an extension, until November, 2008, in an e-mail for the submittal of the monitoring well installation report. ACHCSA agreed to the extension (November 12, 2008) in an email dated July 17, 2008.

THIS QUARTER ACTIVITIES (Third Quarter 2008)

1. TRC conducted the quarterly monitoring and sampling at the site.
2. In September and October 2008, Delta installed 8 monitoring wells on-site.

WASTE DISPOSAL SUMMARY

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

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

NEXT QUARTER ACTIVITIES (Fourth Quarter 2008)

1. TRC will conduct quarterly groundwater monitoring and sampling at the site.
2. Delta will complete the installation of 8 monitoring wells on-site. The results of this investigation will be presented under a separate cover by November 12, 2008.

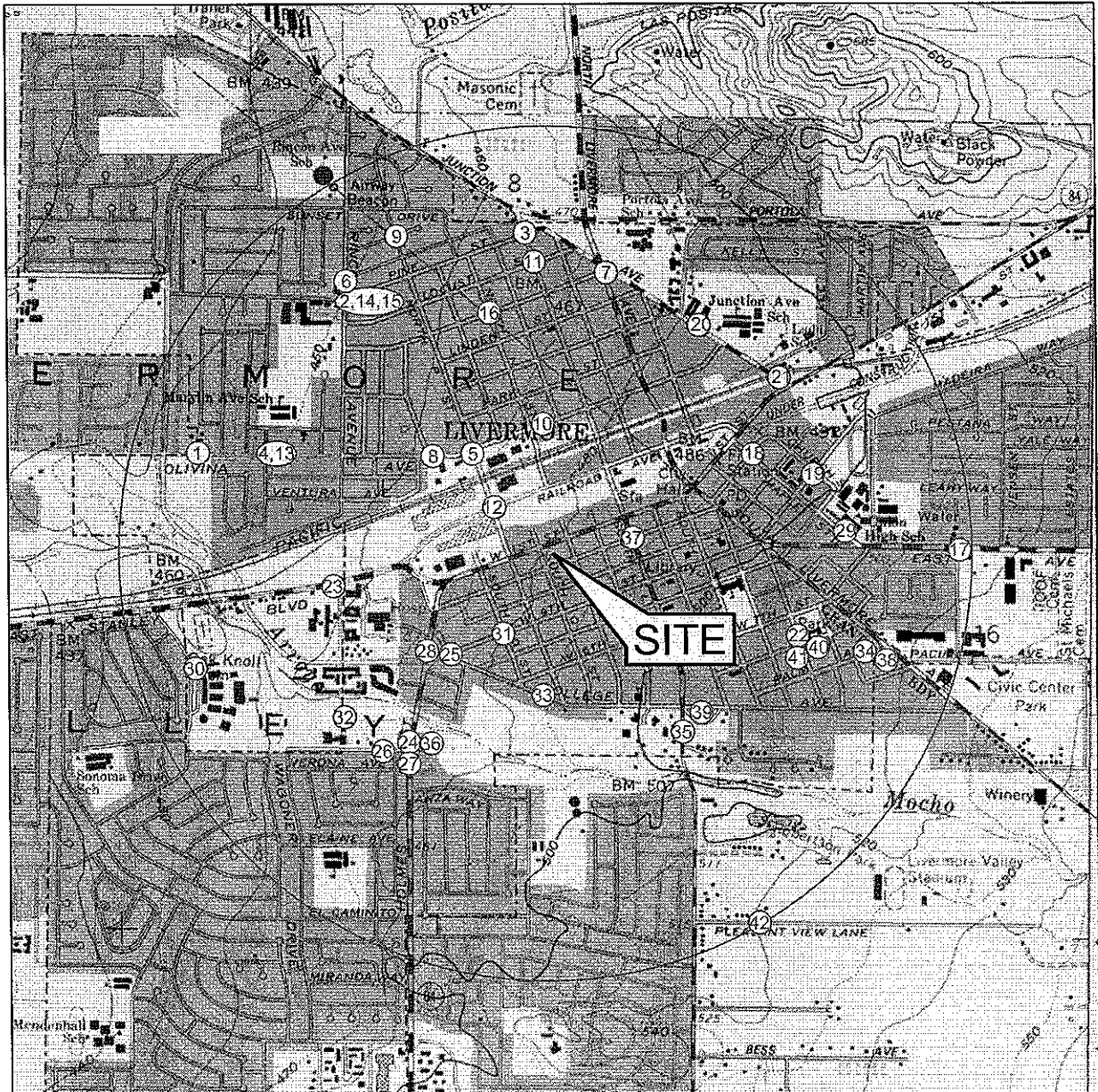
CONSULTANT: Delta Consultants

Attachment A – Sensitive Receptor Survey Data

Attachment B – Historic Groundwater Flow Directions

Attachment A

Sensitive Receptor Survey Data



0 1000 FT 2000 FT
SCALE: 1 : 24,000



SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, CALABASAS QUADRANGLE, 1987

FIGURE 1
SITE LOCATOR SENSITIVE RECEPTOR
MAP
 76 STATION NO. 4186
 1771 FIRST STREET
 LIVERMORE, CA

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

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

DWR ¹ Well No.	Address	City	State	Zip	Owner	Well Type	Distance from Site (miles)	Direction Relative to Site
1-3S/2E-7R3	732 Olivina Avenue	Livermore	CA		California Water Service Co.	Public/Production Well	0.9	NW
2-3S/2E-8E80?	Pine St. at Rincon Ave.	Livermore	CA		City of Livermore		0.8	NW
3-3S/2E-8F1?	Pine Street at Arroyo Road	Livermore	CA		California Water Service Co.	Municipal	0.7	NW
4-3S/2E-8N2?	40' south of Olivina St., 200' west of Albatross	Livermore	CA		California Water Service Co.		0.8	NW
5-3S/2E-2P1	sw of corner of Olivina and P st.	Livermore	CA		California Water Service Co.		0.3	NW
6-3S/2E-8E1	951 Rincon Ave	Livermore	CA		City of Livermore		0.8	NW
7-3S/2E-8H1	sw of North Livermore Avenue at Elm Street	Livermore	CA		California Water Service Co.	Municipal	0.7	NE
8-3S/2E-8P1	se of Olivina Avenue at Adelle Street	Livermore	CA		California Water Service Co.		0.3	NW
9-3S/2E-8F1?	sw of Juniper Street at N P Street	Livermore	CA		California Water Service Co.	Municipal	0.8	NW
10-3S/2E-8K1	1830 Chestnut St.	Livermore	CA		PG&E	Cathodic protection	0.3	N
11-3S/2E-8G2	L St. at Locust St.	Livermore	CA		PG&E	Cathodic protection	0.7	N
12-3S/2E-8P2	sw of N P St. at Railroad Avenue	Livermore	CA		California Water Service Co.	Municipal	0.3	NW
13-3S/2E-8N2	se of Olivina Avenue at Albatross Avenue	Livermore	CA		California Water Service Co.	Municipal	0.7	NW
14-3S/2E-8E9	899 Rincon Avenue	Livermore	CA		ARCO Products, Co.	Recovery Well	0.8	NW
15-3S/2E-8E10	899 Rincon Avenue	Livermore	CA		ARCO Products, Co.	Vapor Extraction	0.8	NW
16-3S/2E-8G1	sw of Elm Street at N N Street	Livermore	CA		California Water Service Co.	Municipal	0.6	NW
17-3S/2E-9Q1	north of East Avenue at Dolores Street	Livermore	CA		California Water Service Co.	Domestic/Municipal	1.0	E
18-3S/2E-9P	Maple Street at Second Street	Livermore	CA		PG&E	Cathodic protection	0.5	SW
19-3S/2E-9P1	2778 Fourth Street	Livermore	CA		California Water Service Co.	Municipal	0.7	NE
20-3S/2E-9M1	403 Junction	Livermore	CA		Victor Baldi	Irrigation	0.6	NE
21-3S/2E-9L1	south side of First St. at Junction Ave.	Livermore	CA		California Water Service Co.	Municipal	0.7	NE
22-3S/2E-18C81	811 South H.	Livermore	CA		Leslie Holm		0.6	SE
23-3S/2E-17C1	965 E. Stanley Blvd.	Livermore	CA		Fred Holdener		0.5	SW
24-3S/2E-17E1	south side Mocho Street, 0.3 mi west of Vallecitos Road	Livermore	CA		W. J. Wagoner		0.8	SW
25-3S/32E-17F1	0.2 mi west of Holmes St. at College Ave.	Livermore	CA		U.S. Veterans Hospital		0.6	SW
26-3S/2E-17L2	0.2 mi west of Vallecitos Rd. on Mocho St, 10' south of Mocho	Livermore	CA		W. J. Wagoner		0.7	SW
27-3S/2E-17P1?	0.45 mi south of Mocho St on east side of Vallecitos Rd.	Livermore	CA		Adele Coldewei (formerly C.A. Smith)		1.0	SW
28-3S/2E-17B1	Fourth St. at College Ave.	Livermore	CA		California Water Service Co.		0.4	SW
29-3S/2E-17E5	Livermore High School, 600 Maple St.	Livermore	CA		Livermore School District	Domestic/ Irrigation	0.7-0.8	NE
30-3S/2E-17E4	Granada High School, 400 Wall St.	Livermore	CA		Livermore Valley School District	Irrigation/Test Well	0.7-1.0	SW
31-3S/2E-17B3	4th St. at Q St.	Livermore	CA		PG&E	Cathodic protection	0.3	SW
32-3S/2E-17J?	1000' west of Arroyo Rd., 150' south of Arroyo Mocho Creek	Livermore	CA		R. A. Hansen	Irrigation	0.6	SE
33-3S/2E-17?	1531 College Ave.	Livermore	CA		Don Benton	Domestic	0.4	SW
34-3S/2E-16B1	Palm Ave. between Livermore and Almond	Livermore	CA		California Water Service Co.		0.6-0.8	SE
35-3S/2E-16E1	954 South L. St.	Livermore	CA		Livermore Sanitarium		0.5	SE
36-3S/2E-16E2	300' east of Arroyo Rd., 150' north of Mocho Creek	Livermore	CA		Livermore Sanitarium		0.6	SE
37-3S/2E-16?	Ferrario Winery, 2nd St. and L St.	Livermore	CA		Ferrario Winery		0.2	E
38-3S/2E-16B1	sw of Palm Avenue and South Livermore Avenue	Livermore	CA		California Water Service Co.		0.8	SE
39-3S/2E-16E6	300' se of College St. at L St.	Livermore	CA		First Baptist Church	Irrigation	0.6	SE
40-3S/2E-16C3	Eighth St. at S H St.	Livermore	CA		PG&E	Cathodic protection	0.6	SE
41-3S/2E-16C1	787 S H Street	Livermore	CA		Ben F. Mingola	Municipal	0.6	SE
42-3S/2E-1681?	2486 Pleasant View Lane	Livermore	CA		George Sharp	Domestic	1.0	SE

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

DWR ¹ Well No.	Address	City	State	Zip	Owner	Well Type	Distance from Site (miles)	Direction Relative to Site
43-3S/2E-17D81	near Ventura Ct.	Livermore	CA		Richard Woelffel	Irrigation	0.6	W
² 44-3S/2E-16A80	East Ave (former Rasmussen property)	Livermore	CA		L. Oddon	Domestic		
² 45-3S/2E-7?	Dow Airport, Highway 50 between Livermore and Dublin	Livermore	CA		Conrad Molt	Domestic		
² 46-3S/2E-7N1	0.5 mi south of Kittyhawk at Las Positas, west of Livermore		CA		Alameda County Flood Control	Test Well/Other		
² 47-3S/2E-7P2	west end of Olivina Road	Livermore	CA		Herb Hageman			
² 48-3S/2E-8B1	Joesrilli?	Livermore	CA		A.P. Caratti			
² 49-3S/2E-8M80	1936 Olovina Ave.	Livermore	CA		Jean Eyherabide			
² 50-3S/2E-8N1	Star Route 5	Pleasanton	CA		John Fenrich	Irrigation		
² 51-3S/2E-9Q80	East Avenue	Livermore	CA		Frydendel	Domestic		
² 52-3S/2E-18R	Vallecitos Road	Livermore	CA		W. J. Wagoner			
² 53-3S/2E-18A1	Elsie Johnson Ranch	Livermore	CA		Richard Woelffel			
² 54-3S/2E-17B2	West Fourth Street	Livermore	CA		R. A. Hansen	Domestic		
² 55-3S/2E-17?	Kaiser Site	Livermore	CA		Veterans Administration Hospital	Domestic		
² 56-3S/2E-17J1	Creek Bank Ranch	Livermore	CA		R. A. Hansen			
² 57-3S/2E-17R1	Creek Bank Ranch	Livermore	CA		R. A. Hansen			
² 58-3S/2E-17F2	Vallecitos Road	Livermore	CA		W. J. Wagoner			
² 59-3S/2E-16A5	East Avenue	Livermore	CA		St. Michael's Cemetary	Irrigation		
² 60-3S/2E-16?	Church St. and L Street	Livermore	CA		Livermore Sanitarium	Domestic/Irrigation		
² 61-3S/2E-16R2	Wente at Stadium Way	Livermore	CA		Gene A. Matyevich	Domestic		

DWR: Department of Water Resources

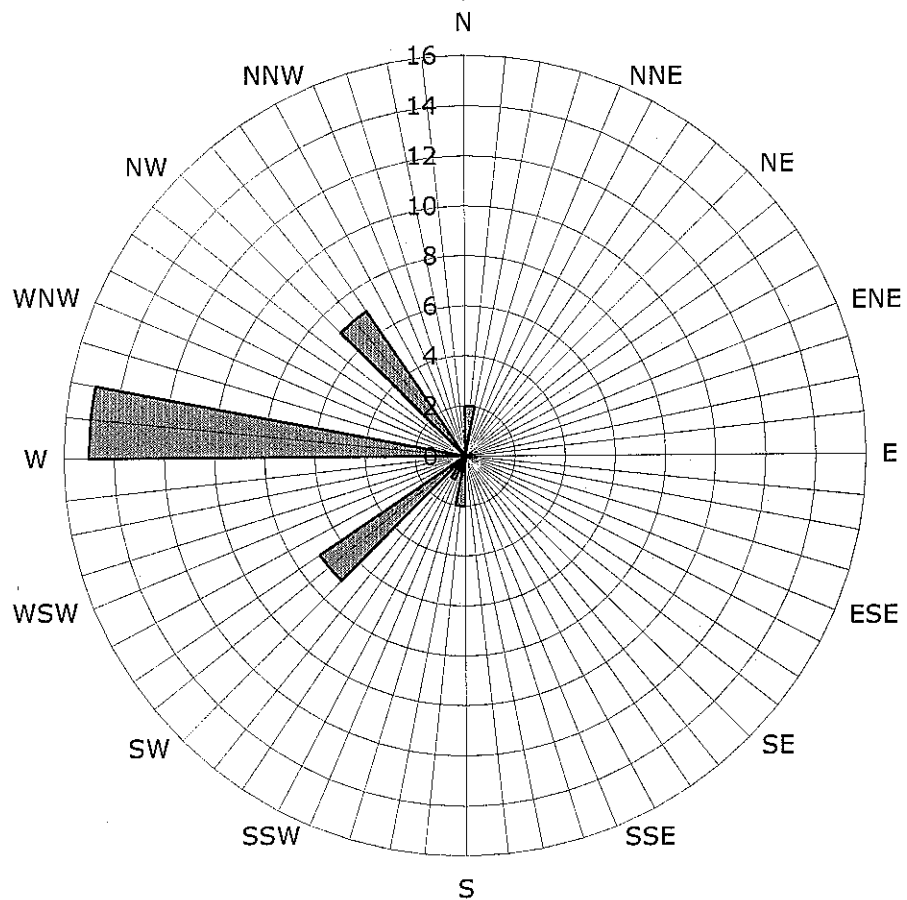
¹ Well Locations shown on Figure 1.

² Specific address cannot be located on map.

Attachment B

Historic Groundwater Flow Directions

Historic Groundwater Flow Directions
ConocoPhillips Site No. 4186
1771 First Street
Livermore, California



Legend
Concentric circles represent
quarterly monitoring events
Fourth Quarter 2000 through
Second Quarter 2008
34 data points shown

Groundwater Flow Direction



21 Technology Drive
Irvine, CA 92618

949.727.9336 PHONE
949.727.7399 FAX

www.TRCSolutions.com

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SEP 26 2008

DATE: September 17, 2008

TO: ConocoPhillips Company
76 Broadway
Sacramento, California 95818

ATTN: MR. TERRY GRAYSON

SITE: 76 STATION 4186
1771 FIRST STREET
LIVERMORE, CALIFORNIA

RE: QUARTERLY MONITORING REPORT
JULY THROUGH SEPTEMBER 2008

Dear Mr. Grayson:

Please find enclosed our Quarterly Monitoring Report for 76 Station 4186, located at 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
20-0400/4186R20.QMS.doc

**QUARTERLY MONITORING REPORT
JULY THROUGH SEPTEMBER 2008**

76 STATION 4186
1771 First Street
Livermore, California

Prepared For:

Mr. Terry Grayson
CONOCOPHILLIPS COMPANY
76 Broadway
Sacramento, California 95818

By:



Senior Project Geologist, Irvine Operations

Date: 9/16/08



LIST OF ATTACHMENTS

Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Contents of Tables Table 1: Current Fluid Levels and Selected Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 2a: Additional Historic Analytical Results Table 2b: Additional Historic Analytical Results Table 2c: Additional Historic Analytical Results Table 2d: Additional Historic Analytical Results Table 2e: Additional Historic Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Map Figure 3: Dissolved-Phase TPH-G (GC/MS) Concentration Map Figure 4: Dissolved-Phase Benzene Concentration Map Figure 5: Dissolved-Phase MTBE Concentration Map
Graphs	Groundwater Elevations vs. Time Benzene Concentrations vs. Time
Field Activities	General Field Procedures Field Monitoring Data Sheet – 09/03/08 Groundwater Sampling Field Notes – 09/03/08 Statement of Non-Completion – 09/03/08
Statements	Purge Water Disposal Limitations

Summary of Gauging and Sampling Activities
July 2008 through September 2008
76 Station 4186
1771 First Street
Livermore, CA

Project Coordinator: **Terry Grayson**
Telephone: **916-558-7666**

Water Sampling Contractor: **TRC**
Compiled by: **Christina Carrillo**

Date(s) of Gauging/Sampling Event: **09/03/08**

Sample Points

Groundwater wells: **5** onsite, **2** offsite Points gauged: **7** Points sampled: **0**
Purging method: **Bailer**
Purge water disposal: **Veolia/Rodeo Unit 100**
Other Sample Points: **0** Type: **--**

Liquid Phase Hydrocarbons (LPH)

Sample Points with LPH: **0** Maximum thickness (feet): **--**
LPH removal frequency: **--** Method: **--**
Treatment or disposal of water/LPH: **--**

Hydrogeologic Parameters

Depth to groundwater (below TOC): Minimum: **-- feet** Maximum: **-- feet**
Average groundwater elevation (relative to available local datum): **-- feet**
Average change in groundwater elevation since previous event: **--**
Interpreted groundwater gradient and flow direction:
 Current event: **n/a**
 Previous event: **0.06 ft/ft, west (06/12/08)**

Selected Laboratory Results

Sample Points with detected **Benzene**: **0** Sample Points above MCL (1.0 µg/l): **--**
 Maximum reported benzene concentration: **--**

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

Notes:

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

TABLES

TABLE KEY

STANDARD ABBREVIATIONS

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

ANALYTES

BTEX	=	benzene, toluene, ethylbenzene, and (total) xylenes
DIPE	=	di-isopropyl ether
ETBE	=	ethyl tertiary butyl ether
MTBE	=	methyl tertiary butyl ether
PCB	=	polychlorinated biphenyls
PCE	=	tetrachloroethene
TBA	=	tertiary butyl alcohol
TCA	=	trichloroethane
TCE	=	trichloroethene
TPH-G	=	total petroleum hydrocarbons with gasoline distinction
TPH-G (GC/MS)	=	total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B
TPH-D	=	total petroleum hydrocarbons with diesel distinction
TRPH	=	total recoverable petroleum hydrocarbons
TAME	=	tertiary amyl methyl ether
1,1-DCA	=	1,1-dichloroethane
1,2-DCA	=	1,2-dichloroethane (same as EDC, ethylene dichloride)
1,1-DCE	=	1,1-dichloroethene
1,2-DCE	=	1,2-dichloroethene (cis- and trans-)

NOTES

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

REFERENCE

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

Contents of Tables 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)
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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)
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Table 2a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Antimony (total)	Antimony (dissolved)	Arsenic (total)	Arsenic (dissolved)	Barium (total)
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Table 2b	Well/ Date	Barium (dissolved)	Beryllium (total)	Beryllium (dissolved)	Cadmium (total)	Cadmium (dissolved)	Calcium	Chromium VI	Chromium (total)	Chromium (dissolved)	Cobalt (total)	Cobalt (dissolved)	Copper (dissolved)
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Table 2c	Well/ Date	Copper (total)	Lead (dissolved)	Lead (total)	Magnesium (dissolved)	Manganese (dissolved)	Mercury (total)	Mercury (dissolved)	Molyb- denum (total)	Molyb- denum (dissolved)	Nickel (total)	Nickel (dissolved)	Potassium
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Table 2d	Well/ Date	Selenium (total)	Selenium (dissolved)	Silver (total)	Silver (dissolved)	Sodium	Thallium (total)	Thallium (dissolved)	Vanadium (total)	Vanadium (dissolved)	Zinc (dissolved)	Zinc (total)	Chloride
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Table 2e	Well/ Date	Fluoride	Nitrogen as Nitrate	Sulfate	TDS	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP
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Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
September 3, 2008
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-1				(Screen Interval in feet: 14.0-34.0)										
09/03/08	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry
U-2				(Screen Interval in feet: 13.0-34.0)										
09/03/08	477.44	--	--	--	--	--	--	--	--	--	--	--	--	Dry
U-3				(Screen Interval in feet: 14.0-34.0)										
09/03/08	478.46	--	--	--	--	--	--	--	--	--	--	--	--	Dry
U-4				(Screen Interval in feet: 35.0-45.0)										
09/03/08	476.93	--	--	--	--	--	--	--	--	--	--	--	--	Dry
U-5				(Screen Interval in feet: 37.0-47.0)										
09/03/08	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Dry
U-6				(Screen Interval in feet:--)										
09/03/08	478.38	--	--	--	--	--	--	--	--	--	--	--	--	Dry
U-7				(Screen Interval in feet:--)										
09/03/08	478.74	--	--	--	--	--	--	--	--	--	--	--	--	Dry

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through September 2008
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-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<0.50	--	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<0.50	--	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<0.50	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<0.50	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<0.50	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<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through September 2008
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-1 continued														
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	
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	
03/24/06	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	
06/26/06	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	
09/26/06	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	
03/26/07	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	
06/27/07	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	
09/23/07	478.27	33.17	0.00	445.10	-2.39	--	--	--	--	--	--	--	--	Not enough water to sample
12/20/07	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
03/17/08	478.27	31.20	0.00	447.07	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/12/08	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
09/03/08	478.27	--	--	--	--	--	--	--	--	--	--	--	--	Dry
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	--	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through September 2008
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-2 continued														
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	
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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through September 2008
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-2 continued														
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	
03/24/06	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	
06/26/06	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	
09/26/06	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	
03/26/07	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	
06/27/07	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	
09/23/07	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
03/17/08	477.44	30.45	0.00	446.99	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/12/08	477.44	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
09/03/08	477.44	--	--	--	--	--	--	--	--	--	--	--	--	Dry
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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 1998 Through September 2008
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														
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	
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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
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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														
03/24/06	478.46	22.52	0.00	455.94	1.44	--	2700	28	ND<5.0	57	120	--	690	
06/26/06	478.46	23.89	0.00	454.57	-1.37	--	2000	51	0.77	84	45	--	560	
09/26/06	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	
03/26/07	478.46	25.27	0.00	453.19	1.96	--	3900	65	0.61	50	160	--	95	
06/27/07	478.46	27.51	0.00	450.95	-2.24	--	1400	29	ND<0.50	5.6	2.3	--	170	
09/23/07	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
03/17/08	478.46	28.84	0.00	449.62	--	--	1400	17	ND<1.0	2.3	ND<2.0	--	150	
06/12/08	478.46	31.23	0.00	447.23	-2.39	--	770	4.1	ND<1.0	ND<1.0	ND<2.0	--	27	
09/03/08	478.46	--	--	--	--	--	--	--	--	--	--	--	--	Dry
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
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	

Table 2
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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														
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	
03/24/06	476.93	26.51	0.00	450.42	4.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	4.4	--	21	
06/26/06	476.93	27.98	0.00	448.95	-1.47	--	63	ND<0.50	ND<0.50	0.56	ND<1.0	--	11	
09/26/06	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	
03/26/07	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	
06/27/07	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	
09/23/07	476.93	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
12/20/07	476.93	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
03/17/08	476.93	34.18	0.00	442.75	--	--	71	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.9	
06/12/08	476.93	39.50	0.00	437.43	-5.32	--	71	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	7.5	
09/03/08	476.93	--	--	--	--	--	--	--	--	--	--	--	--	Dry
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	

Table 2
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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-5 continued														
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	
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	
03/24/06	476.51	22.42	0.00	454.09	8.54	--	2400	13	ND<5.0	48	58	--	54	
06/26/06	476.51	29.31	0.00	447.20	-6.89	--	72	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	82	
09/26/06	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	
03/26/07	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	

Table 2
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U-5 continued														
06/27/07	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	
09/23/07	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Car parked over well
12/20/07	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
03/17/08	476.51	34.28	0.00	442.23	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	25	
06/12/08	476.51	39.90	0.00	436.61	-5.62	--	55	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	28	
09/03/08	476.51	--	--	--	--	--	--	--	--	--	--	--	--	Dry
U-6 (Screen Interval in feet: --)														
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	
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	

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U-6 continued														
03/24/06	478.38	25.94	0.00	452.44	4.49	--	4300	52	ND<5.0	440	160	--	11	
06/26/06	478.38	28.07	0.00	450.31	-2.13	--	5300	59	ND<5.0	520	300	--	ND<5.0	
09/26/06	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	
03/26/07	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	
06/27/07	478.38	35.09	0.00	443.29	-5.84	--	110	1.2	ND<0.50	1.3	ND<0.50	--	0.86	
09/23/07	478.38	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
12/20/07	478.38	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
03/17/08	478.38	33.82	0.00	444.56	--	--	580	1.5	ND<0.50	3.2	ND<1.0	--	ND<0.50	
06/12/08	478.38	38.16	0.00	440.22	-4.34	--	2100	11	0.79	27	2.3	--	1.1	
09/03/08	478.38	--	--	--	--	--	--	--	--	--	--	--	--	Dry
U-7 (Screen Interval in feet: --)														
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	

Table 2
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July 1998 Through September 2008
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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														
12/08/04	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	
03/24/06	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	
06/26/06	478.74	28.30	0.00	450.44	-3.24	--	2500	11	1.1	45	15	--	55	
09/26/06	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	
03/26/07	478.74	29.82	0.00	448.92	1.84	--	2200	1.2	ND<0.50	ND<0.50	ND<0.50	--	70	
06/27/07	478.74	36.59	0.00	442.15	-6.77	--	590	5.8	ND<0.50	3.3	0.94	--	100	
09/23/07	478.74	44.05	0.00	434.69	-7.46	--	--	--	--	--	--	--	--	Not enough water to sample
12/20/07	478.74	--	--	--	--	--	--	--	--	--	--	--	--	Dry well
03/17/08	478.74	33.83	0.00	444.91	--	--	1200	1.9	ND<0.50	0.82	ND<1.0	--	27	
06/12/08	478.74	38.56	0.00	440.18	-4.73	--	1200	1.9	ND<0.50	1.1	ND<1.0	--	40	
09/03/08	478.74	--	--	--	--	--	--	--	--	--	--	--	--	Dry

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Ethylene-							Antimony (total) (µg/l)	Antimony (dissolved) (µg/l)	Arsenic (total) (µg/l)	Arsenic (dissolved) (µg/l)	Barium (total) (µg/l)
	TBA (µg/l)	Ethanol (8260B) (µg/l)	dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)					
U-1												
10/02/00	ND	--	--	--	--	--	--	--	--	--	--	--
07/01/03	--	ND<500000	--	--	--	--	--	--	--	--	--	--
10/03/03	--	ND<500	--	--	--	--	--	--	--	--	--	--
01/08/04	--	ND<500	--	--	--	--	--	--	--	--	--	--
04/15/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
07/15/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
12/08/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
03/23/05	--	ND<50	--	--	--	--	--	--	--	--	--	--
06/28/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
09/23/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
12/30/05	--	ND<250	--	--	--	--	--	--	--	--	--	--
03/24/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
06/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
09/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
06/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/17/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
U-2												
10/02/00	ND	--	--	--	--	--	--	--	--	--	--	--
07/01/03	--	ND<500000	--	--	--	--	--	--	--	--	--	--
10/03/03	--	ND<500	--	--	--	--	--	--	--	--	--	--
01/08/04	--	ND<500	--	--	--	--	--	--	--	--	--	--
04/15/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
07/15/04	--	ND<50	--	--	--	--	--	--	--	--	--	--

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Antimony (total) (µg/l)	Antimony (dissolved) (µg/l)	Arsenic (total) (µg/l)	Arsenic (dissolved) (µg/l)	Barium (total) (µg/l)
U-2 continued												
12/08/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
03/23/05	--	730	--	--	--	--	--	--	--	--	--	--
06/28/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
09/23/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
12/30/05	--	ND<250	--	--	--	--	--	--	--	--	--	--
03/24/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
06/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
09/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
06/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
09/23/07	69	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/17/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	--	58	--	2000
U-3												
10/02/00	63000	--	--	--	--	--	--	--	--	--	--	--
01/08/01	49300	ND	ND	ND	ND	ND	ND	--	--	--	--	--
04/03/01	22200	ND	ND	ND	ND	ND	ND	--	--	--	--	--
07/02/01	27000	ND	ND	ND	ND	ND	ND	--	--	--	--	--
10/08/01	33000	ND<140000000	ND<290	ND<290	ND<290	ND<290	ND<290	--	--	--	--	--
01/03/02	17000	ND<50000000	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	--	--
04/05/02	66000	ND<25000000	ND<100	ND<100	ND<100	ND<100	ND<100	--	--	--	--	--
07/02/02	47000	ND<13000000	ND<250	ND<250	ND<500	ND<250	ND<250	--	--	--	--	--
10/01/02	ND<50000	ND<250000000	ND<1000	ND<1000	ND<1000	ND<1000	ND<1000	--	--	--	--	--
12/30/02	23000	ND<100000000	ND<400	ND<400	ND<400	ND<400	ND<400	--	--	--	--	--
05/02/03	25000	ND<50000000	ND<200	ND<200	ND<200	ND<200	ND<200	--	--	--	--	--

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Antimony (total) (µg/l)	Antimony (dissolved) (µg/l)	Arsenic (total) (µg/l)	Arsenic (dissolved) (µg/l)	Barium (total) (µg/l)
U-3 continued												
07/01/03	32000	ND<10000000	ND<400	ND<400	ND<400	ND<400	ND<400	--	--	--	--	--
10/03/03	39000	ND<50000	ND<200	ND<200	ND<2.0	ND<200	ND<200	--	--	--	--	--
01/08/04	ND<20000	ND<100000	ND<400	ND<400	ND<400	ND<400	ND<400	--	--	--	--	--
04/15/04	18000	ND<2500	ND<0.5	ND<0.5	ND<1.0	ND<0.5	ND<0.5	--	--	--	--	--
07/15/04	15000	ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25	--	--	--	--	--
12/08/04	34000	ND<5000	ND<50	ND<50	ND<100	ND<50	ND<50	--	--	--	--	--
03/23/05	--	ND<5000	--	--	--	--	--	--	--	--	--	--
06/28/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
09/23/05	--	ND<50000	--	--	--	--	--	--	--	--	--	--
12/30/05	2000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.58	--	--	--	--	--
03/24/06	--	ND<2500	--	--	--	--	--	--	--	--	--	--
06/26/06	18000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
09/26/06	--	ND<1200	--	--	--	--	--	--	--	--	--	--
11/21/06	33000	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	--	--	--	--
03/26/07	13000	ND<250	ND<0.50	0.95	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
06/27/07	20000	ND<250	ND<0.50	0.79	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
09/23/07	19000	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/17/08	15000	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	ND<100	95	ND<50	1700
06/12/08	21000	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<100	--	210	--	2800
U-4												
04/03/01	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
07/02/01	ND	ND	ND	ND	ND	ND	ND	--	--	--	--	--
01/03/02	ND<20	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
07/01/03	--	ND<500000	--	--	--	--	--	--	--	--	--	--
10/03/03	--	ND<500	--	--	--	--	--	--	--	--	--	--

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Antimony (total) (µg/l)	Antimony (dissolved) (µg/l)	Arsenic (total) (µg/l)	Arsenic (dissolved) (µg/l)	Barium (total) (µg/l)
U-4 continued												
01/08/04	--	ND<500	--	--	--	--	--	--	--	--	--	--
04/15/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
07/15/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
12/08/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
03/23/05	--	ND<50	--	--	--	--	--	--	--	--	--	--
06/28/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
09/23/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
12/30/05	--	ND<250	--	--	--	--	--	--	--	--	--	--
03/24/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
06/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
09/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
06/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/17/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	2000
06/12/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	2500
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<100	ND<1000000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	--	--	--	--	--
01/03/02	ND<20	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
07/01/03	--	ND<500	--	--	--	--	--	--	--	--	--	--
10/03/03	--	ND<500	--	--	--	--	--	--	--	--	--	--
01/08/04	--	ND<500	--	--	--	--	--	--	--	--	--	--
04/15/04	--	ND<50	--	--	--	--	--	--	--	--	--	--

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Ethanol		Ethylene-dibromide	1,2-DCA				Antimony	Antimony	Arsenic	Arsenic	Barium
	TBA (µg/l)	(8260B) (µg/l)	(EDB) (µg/l)	(EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	(total) (µg/l)	(dissolved) (µg/l)	(total) (µg/l)	(dissolved) (µg/l)	(total) (µg/l)
U-5 continued												
07/15/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
12/08/04	--	ND<50	--	--	--	--	--	--	--	--	--	--
03/23/05	--	ND<50	--	--	--	--	--	--	--	--	--	--
06/28/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
09/23/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
12/30/05	--	ND<250	--	--	--	--	--	--	--	--	--	--
03/24/06	--	ND<2500	--	--	--	--	--	--	--	--	--	--
06/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
09/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
06/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/17/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	1300
06/12/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	830
U-6												
01/03/02	ND<200	ND<5000000	ND<10	ND<10	ND<10	ND<10	ND<10	--	--	--	--	--
07/01/03	--	ND<500000	--	--	--	--	--	--	--	--	--	--
10/03/03	--	ND<100000	--	--	--	--	--	--	--	--	--	--
01/08/04	--	ND<5000	--	--	--	--	--	--	--	--	--	--
04/15/04	--	ND<250	--	--	--	--	--	--	--	--	--	--
07/15/04	--	ND<250	--	--	--	--	--	--	--	--	--	--
12/08/04	--	ND<250	--	--	--	--	--	--	--	--	--	--
03/23/05	--	ND<50	--	--	--	--	--	--	--	--	--	--
06/28/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
09/23/05	--	ND<50000	--	--	--	--	--	--	--	--	--	--

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Ethylene-dibromide							Antimony (total) (µg/l)	Antimony (dissolved) (µg/l)	Arsenic (total) (µg/l)	Arsenic (dissolved) (µg/l)	Barium (total) (µg/l)
	TBA (µg/l)	Ethanol (8260B) (µg/l)	(EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)					
U-6 continued												
12/30/05	--	ND<250	--	--	--	--	--	--	--	--	--	--
03/24/06	--	ND<2500	--	--	--	--	--	--	--	--	--	--
06/26/06	--	ND<2500	--	--	--	--	--	--	--	--	--	--
09/26/06	--	ND<2500	--	--	--	--	--	--	--	--	--	--
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
06/27/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/17/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	520
06/12/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	910
U-7												
01/03/02	30	ND<500000	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
07/01/03	--	ND<500000	--	--	--	--	--	--	--	--	--	--
10/03/03	--	ND<5000	--	--	--	--	--	--	--	--	--	--
01/08/04	--	ND<1000	--	--	--	--	--	--	--	--	--	--
04/15/04	--	ND<100	--	--	--	--	--	--	--	--	--	--
07/15/04	--	ND<100	--	--	--	--	--	--	--	--	--	--
12/08/04	--	ND<100	--	--	--	--	--	--	--	--	--	--
03/23/05	--	ND<100	--	--	--	--	--	--	--	--	--	--
06/28/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
09/23/05	--	ND<1000	--	--	--	--	--	--	--	--	--	--
12/30/05	--	ND<250	--	--	--	--	--	--	--	--	--	--
03/24/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
06/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
09/26/06	--	ND<250	--	--	--	--	--	--	--	--	--	--
11/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	TBA (µg/l)	Ethanol (8260B) (µg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Antimony (total) (µg/l)	Antimony (dissolved) (µg/l)	Arsenic (total) (µg/l)	Arsenic (dissolved) (µg/l)	Barium (total) (µg/l)
U-7 continued												
03/26/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
06/27/07	14	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	--	--	--	--
03/17/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	670
06/12/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<100	ND<100	ND<50	ND<50	520

Table 2 b
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Barium (dissolved) (µg/l)	Beryllium (total) (µg/l)	Beryllium (dissolved) (µg/l)	Cadmium (total) (µg/l)	Cadmium (dissolved) (mg/l)	Calcium (mg/l)	Chromium VI (µg/l)	Chromium (total) (µg/l)	Chromium (dissolved) (µg/l)	Cobalt (total) (µg/l)	Cobalt (dissolved) (µg/l)	Copper (dissolved) (µg/l)
U-1												
03/17/08	--	--	--	--	--	--	ND<2.0	--	--	--	--	--
U-2												
03/17/08	--	ND<10	--	ND<10	--	--	ND<2.0	540	--	150	--	--
U-3												
03/17/08	410	ND<10	ND<10	ND<10	ND<0.01	59	ND<2.0	450	ND<10	140	ND<50	ND<10
06/12/08	--	ND<10	--	ND<10	--	--	--	980	--	350	--	--
U-4												
03/17/08	470	ND<10	ND<10	ND<10	ND<0.01	68	ND<2.0	410	ND<10	140	ND<50	ND<10
06/12/08	52	ND<10	ND<10	ND<10	ND<10	2.4	ND<2.0	610	ND<10	180	ND<50	ND<10
U-5												
03/17/08	390	ND<10	ND<10	ND<10	ND<0.01	67	ND<2.0	110	--	ND<50	ND<50	ND<10
06/12/08	370	ND<10	ND<10	ND<10	ND<10	66	ND<2.0	86	ND<10	ND<50	ND<50	ND<10
U-6												
03/17/08	330	ND<10	ND<10	ND<10	ND<0.01	73	ND<2.0	34	ND<10	ND<50	ND<50	ND<10
06/12/08	600	ND<10	ND<10	ND<10	ND<10	69	ND<2.0	ND<10	ND<10	ND<50	ND<50	ND<10
U-7												
03/17/08	510	ND<10	ND<10	ND<10	ND<0.01	68	ND<2.0	28	ND<10	ND<50	ND<50	ND<10
06/12/08	490	ND<10	ND<10	ND<10	ND<10	60	ND<2.0	10	ND<10	ND<50	ND<50	ND<10

Table 2 c
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Copper (total) (µg/l)	Lead (dissolved) (mg/l)	Lead (total) (µg/l)	Magnesium (dissolved) (mg/l)	Manganese (dissolved) (µg/l)	Mercury (total) (µg/l)	Mercury (dissolved) (µg/l)	Molybdenum (total) (µg/l)	Molybdenum (dissolved) (µg/l)	Nickel (total) (µg/l)	Nickel (dissolved) (µg/l)	Potassium (mg/l)
U-2												
03/17/08	330	--	71	--	--	1.7	--	ND<50	--	1500	--	--
U-3												
03/17/08	240	ND<50	65	94	2600	0.84	ND<0.20	ND<50	ND<50	1200	ND<10	1.6
06/12/08	590	--	160	--	--	2.4	--	81	--	2800	--	--
U-4												
03/17/08	250	ND<50	ND<50	88	2000	ND<0.20	ND<0.20	ND<50	ND<50	1300	ND<10	2.3
06/12/08	360	ND<50	53	7.7	720	2.5	ND<0.20	ND<50	ND<50	2100	ND<10	ND<1.0
U-5												
03/17/08	72	ND<50	ND<50	89	76	0.55	ND<0.20	ND<50	ND<50	360	ND<10	2.4
06/12/08	53	ND<50	ND<50	73	36	0.26	ND<0.20	ND<50	ND<50	290	ND<10	1.9
U-6												
03/17/08	17	ND<50	ND<50	120	4300	ND<0.20	ND<0.20	ND<50	ND<50	91	ND<10	1.0
06/12/08	ND<10	ND<50	ND<50	110	3800	0.60	ND<0.20	ND<50	ND<50	47	ND<10	1.3
U-7												
03/17/08	16	ND<50	ND<50	110	2300	ND<0.20	ND<0.20	ND<50	ND<50	79	ND<10	2.4
06/12/08	ND<10	ND<50	ND<50	92	2400	ND<0.20	ND<0.20	ND<50	ND<50	38	ND<10	2.4

Table 2 d
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Selenium (total) (µg/l)	Selenium (dissolved) (µg/l)	Silver (total) (µg/l)	Silver (dissolved) (µg/l)	Sodium (mg/l)	Thallium (total) (µg/l)	Thallium (dissolved) (µg/l)	Vanadium (total) (µg/l)	Vanadium (dissolved) (µg/l)	Zinc (dissolved) (µg/l)	Zinc (total) (µg/l)	Chloride (mg/l)
U-2												
03/17/08	ND<100	--	ND<10	--	--	ND<100	--	240	--	--	590	--
U-3												
03/17/08	ND<100	ND<100	ND<10	ND<10	41	ND<100	ND<100	190	ND<10	ND<10	360	14
06/12/08	ND<100	--	ND<10	--	--	ND<100	--	410	--	--	970	--
U-4												
03/17/08	ND<100	ND<100	ND<10	ND<10	35	ND<100	ND<100	190	ND<10	ND<10	340	37
06/12/08	ND<100	ND<100	ND<10	ND<10	9.0	ND<100	ND<100	260	ND<10	ND<10	420	38
U-5												
03/17/08	ND<100	ND<100	ND<10	ND<10	49	ND<100	ND<100	60	ND<100	ND<10	120	32
06/12/08	ND<100	ND<100	ND<10	ND<10	26	ND<100	ND<100	44	ND<10	ND<10	87	31
U-6												
03/17/08	ND<100	ND<100	ND<10	ND<10	90	ND<100	ND<100	15	ND<10	ND<10	79	160
06/12/08	ND<100	ND<100	ND<10	ND<10	76	ND<100	ND<100	ND<10	ND<10	11	ND<50	190
U-7												
03/17/08	ND<100	ND<100	ND<10	ND<10	68	ND<100	ND<100	12	ND<10	ND<10	51	91
06/12/08	ND<100	ND<100	ND<10	ND<10	59	ND<100	ND<100	ND<10	ND<10	11	ND<50	120

Table 2 e
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
U-1								
12/30/02	--	--	--	--	0.60	--	--	91
05/02/03	--	--	--	--	0.50	--	--	90
07/01/03	--	--	--	--	0.60	--	--	110
10/03/03	--	--	--	--	3.79	--	--	329
01/08/04	--	--	--	--	12.36	--	--	184
04/15/04	--	--	--	--	10.56	--	--	213
07/15/04	--	--	--	--	6.62	--	--	251
12/08/04	--	--	--	--	2.66	--	--	68
03/23/05	--	--	--	--	3.12	--	--	091
06/28/05	--	--	--	--	8.84	--	--	153
09/23/05	--	--	--	--	2.26	--	--	187
12/30/05	--	--	--	--	7.74	--	--	159
03/24/06	--	--	--	--	--	3.88	036	--
06/26/06	--	--	--	--	--	5.50	008	--
09/26/06	--	--	--	--	4.24	4.66	203	200
11/21/06	--	--	--	--	4.24	4.56	1.97	2.00
03/26/07	--	--	--	--	6.58	6.98	107	102
06/27/07	--	--	--	--	4.98	4.85	20	34
03/17/08	--	--	--	--	3.12	2.43	151	153
U-2								
10/01/02	--	--	--	--	1.40	--	--	--
12/30/02	--	--	--	--	2.80	--	--	120
05/02/03	--	--	--	--	150.00	--	--	120
07/01/03	--	--	--	--	1.20	--	--	110
10/03/03	--	--	--	--	5.61	--	--	321

Table 2 e
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
U-2 continued								
01/08/04	--	--	--	--	12.11	--	--	- 6
04/15/04	--	--	--	--	11.39	--	--	259
07/15/04	--	--	--	--	7.46	--	--	238
12/08/04	--	--	--	--	3.57	--	--	132
03/23/05	--	--	--	--	4.57	--	--	024
06/28/05	--	--	--	--	8.08	--	--	230
09/23/05	--	--	--	--	5.47	--	--	188
12/30/05	--	--	--	--	8.33	--	--	177
03/24/06	--	--	--	--	--	6.20	-004	--
06/26/06	--	--	--	--	--	4.51	040	--
09/26/06	--	--	--	--	3.70	3.49	-31	-17
11/21/06	--	--	--	--	3.70	3.45	-29	-20
03/26/07	--	--	--	--	10.05	10.31	90	95
06/27/07	--	--	--	--	3.87	4.21	-63	-41
09/23/07	--	--	--	--	--	--	-133	-48
03/17/08	--	--	--	600	3.31	3.13	154	153
06/12/08	--	--	--	--	--	8.32	177	--
U-3								
10/01/02	--	--	--	--	0.50	--	--	- 47
12/30/02	--	--	--	--	0.20	--	--	106
05/02/03	--	--	--	--	0.50	--	--	85
07/01/03	--	--	--	--	0.50	--	--	90
10/03/03	--	--	--	--	3.80	--	--	- 27
01/08/04	--	--	--	--	12.82	--	--	133
04/15/04	--	--	--	--	3.11	--	--	24

Table 2 e
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Nitrogen as			TDS (mg/l)	Post-purge	Pre-purge	Pre-purge ORP (mV)	Post-purge ORP (mV)
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)		Dissolved Oxygen (mg/l)	Dissolved Oxygen (mg/l)		
U-3 continued								
07/15/04	--	--	--	--	1.90	--	--	53
12/08/04	--	--	--	--	1.30	--	--	-81
03/23/05	--	--	--	--	0.52	--	--	-087
06/28/05	--	--	--	--	1.47	--	--	-151
09/23/05	--	--	--	--	1.40	--	--	-80
12/30/05	--	--	--	--	1.45	--	--	-068
03/24/06	--	--	--	--	--	.79	003	--
06/26/06	--	--	--	--	--	3.56	015	--
09/26/06	--	--	--	--	1.06	1.10	-72	-95
11/21/06	--	--	--	--	1.04	1.10	-83	-96
03/26/07	--	--	--	--	7.08	6.99	78	68
06/27/07	--	--	--	--	4.89	4.79	-79	-82
09/23/07	--	--	--	--	--	--	-114	-88
03/17/08	0.073	ND<0.44	ND<1.0	530	2.88	1.96	-5	-33
06/12/08	--	--	--	--	0.11	1.30	-17	-40
U-4								
10/01/02	--	--	--	--	1.00	--	--	83
12/30/02	--	--	--	--	0.40	--	--	126
05/02/03	--	--	--	--	0.70	--	--	120
07/01/03	--	--	--	--	0.60	--	--	130
10/03/03	--	--	--	--	2.06	--	--	3.05
01/08/04	--	--	--	--	11.90	--	--	76
04/15/04	--	--	--	--	3.30	--	--	116
07/15/04	--	--	--	--	2.50	--	--	32
12/08/04	--	--	--	--	2.09	--	--	47

Table 2 e
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Nitrogen as			TDS (mg/l)	Post-purge	Pre-purge	Pre-purge ORP (mV)	Post-purge ORP (mV)
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)		Dissolved Oxygen (mg/l)	Dissolved Oxygen (mg/l)		
U-4 continued								
03/23/05	--	--	--	--	0.04	--	--	021
06/28/05	--	--	--	--	2.24	--	--	120
09/23/05	--	--	--	--	3.01	--	--	176
12/30/05	--	--	--	--	1.96	--	--	175
03/24/06	--	--	--	--	--	1.48	015	--
06/26/06	--	--	--	--	--	1.31	031	--
09/26/06	--	--	--	--	1.38	1.23	-54	-7
11/21/06	--	--	--	--	1.38	1.13	-60	-10
03/26/07	--	--	--	--	7.09	7.28	14	25
06/27/07	--	--	--	--	2.82	2.62	82	73
03/17/08	0.12	0.61	29	540	2.47	2.71	153	150
06/12/08	0.14	ND<0.44	30	610	1.26	4.00	185	188
U-5								
05/02/03	--	--	--	--	0.60	--	--	120
07/01/03	--	--	--	--	0.90	--	--	145
10/03/03	--	--	--	--	2.21	--	--	3.13
01/08/04	--	--	--	--	11.27	--	--	104
04/15/04	--	--	--	--	3.35	--	--	65
07/15/04	--	--	--	--	2.87	--	--	66
12/08/04	--	--	--	--	1.67	--	--	102
03/23/05	--	--	--	--	0.75	--	--	131
06/28/05	--	--	--	--	2.29	--	--	103
09/23/05	--	--	--	--	2.05	--	--	172
12/30/05	--	--	--	--	1.39	--	--	171
03/24/06	--	--	--	--	--	.97	011	--

Table 2 e
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Nitrogen as			TDS (mg/l)	Post-purge	Pre-purge	Pre-purge ORP (mV)	Post-purge ORP (mV)
	Fluoride (mg/l)	Nitrate (mg/l)	Sulfate (mg/l)		Dissolved Oxygen (mg/l)	Dissolved Oxygen (mg/l)		
U-5 continued								
06/26/06	--	--	--	--	--	7.23	091	--
09/26/06	--	--	--	--	1.19	0.80	44	44
11/21/06	--	--	--	--	1.12	0.79	41	47
03/26/07	--	--	--	--	3.20	3.60	31	52
06/27/07	--	--	--	--	2.01	1.67	66	58
03/17/08	0.086	3.8	31	530	2.91	1.98	151	156
06/12/08	0.070	1.8	26	550	1.89	1.22	172	171
U-6								
10/01/02	--	--	--	--	0.90	--	--	--
12/30/02	--	--	--	--	0.20	--	--	88
05/02/03	--	--	--	--	0.90	--	--	145
07/01/03	--	--	--	--	0.70	--	--	120
10/03/03	--	--	--	--	2.26	--	--	12
01/08/04	--	--	--	--	11.95	--	--	-37
04/15/04	--	--	--	--	3.47	--	--	-20
07/15/04	--	--	--	--	3.25	--	--	-43
12/08/04	--	--	--	--	0.94	--	--	-91
03/23/05	--	--	--	--	0.55	--	--	-077
06/28/05	--	--	--	--	0.86	--	--	-129
09/23/05	--	--	--	--	1.97	--	--	-82
12/30/05	--	--	--	--	1.01	--	--	-66
03/24/06	--	--	--	--	--	1.25	011	--
06/26/06	--	--	--	--	--	5.48	015	--
09/26/06	--	--	--	--	6.97	7.05	-67	-69
11/21/06	--	--	--	--	0.83	1.05	-65	-69

Table 2 e
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

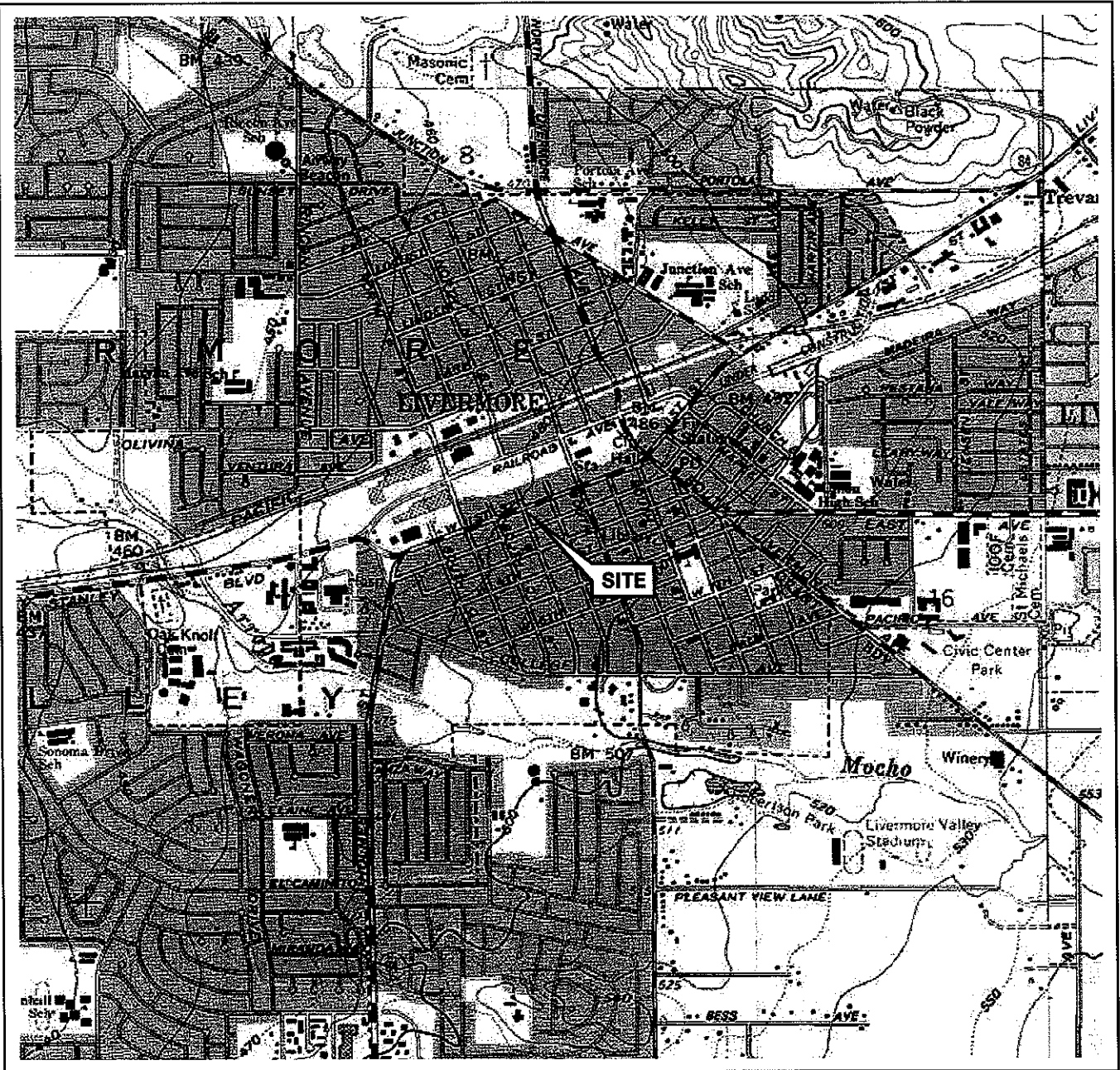
Date Sampled	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
U-6 continued								
03/26/07	--	--	--	--	6.40	6.26	15	9
06/27/07	--	--	--	--	3.51	3.20	-64	-54
03/17/08	0.066	ND<0.44	51	860	1.19	1.87	101	26
06/12/08	0.11	0.45	27	860	1.10	2.08	-20	-26
U-7								
10/01/02	--	--	--	--	1.80	--	--	-60
12/30/02	--	--	--	--	0.10	--	--	121
05/02/03	--	--	--	--	0.40	--	--	105
07/01/03	--	--	--	--	0.50	--	--	95
10/03/03	--	--	--	--	2.91	--	--	-21
01/08/04	--	--	--	--	11.85	--	--	-51
04/15/04	--	--	--	--	4.68	--	--	-16
07/15/04	--	--	--	--	2.55	--	--	-52
12/08/04	--	--	--	--	1.20	--	--	-88
03/23/05	--	--	--	--	0.21	--	--	-088
06/28/05	--	--	--	--	1.32	--	--	-160
09/23/05	--	--	--	--	2.25	--	--	108
12/30/05	--	--	--	--	1.12	--	--	105
03/24/06	--	--	--	--	--	.99	008	--
06/26/06	--	--	--	--	--	1.27	025	--
09/26/06	--	--	--	--	0.78	1.02	-47	-63
11/21/06	--	--	--	--	0.88	0.98	-43	-59
03/26/07	--	--	--	--	5.85	6.00	14	8
06/27/07	--	--	--	--	2.98	2.60	-90	-102
03/17/08	0.077	ND<0.44	7.0	640	3.06	2.86	137	120

Table 2 e
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 4186

Date Sampled	Fluoride (mg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	TDS (mg/l)	Post-purge Dissolved Oxygen (mg/l)	Pre-purge Dissolved Oxygen (mg/l)	Pre-purge ORP (mV)	Post-purge ORP (mV)
U-7 continued 06/12/08	0.15	19	13	700	0.98	2.27	9	-11

FIGURES

PS=1:1 L:\QMS VICINITY M A P S\4186vm.DWG Sep 11, 2008 - 1:44pm bschmidt



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

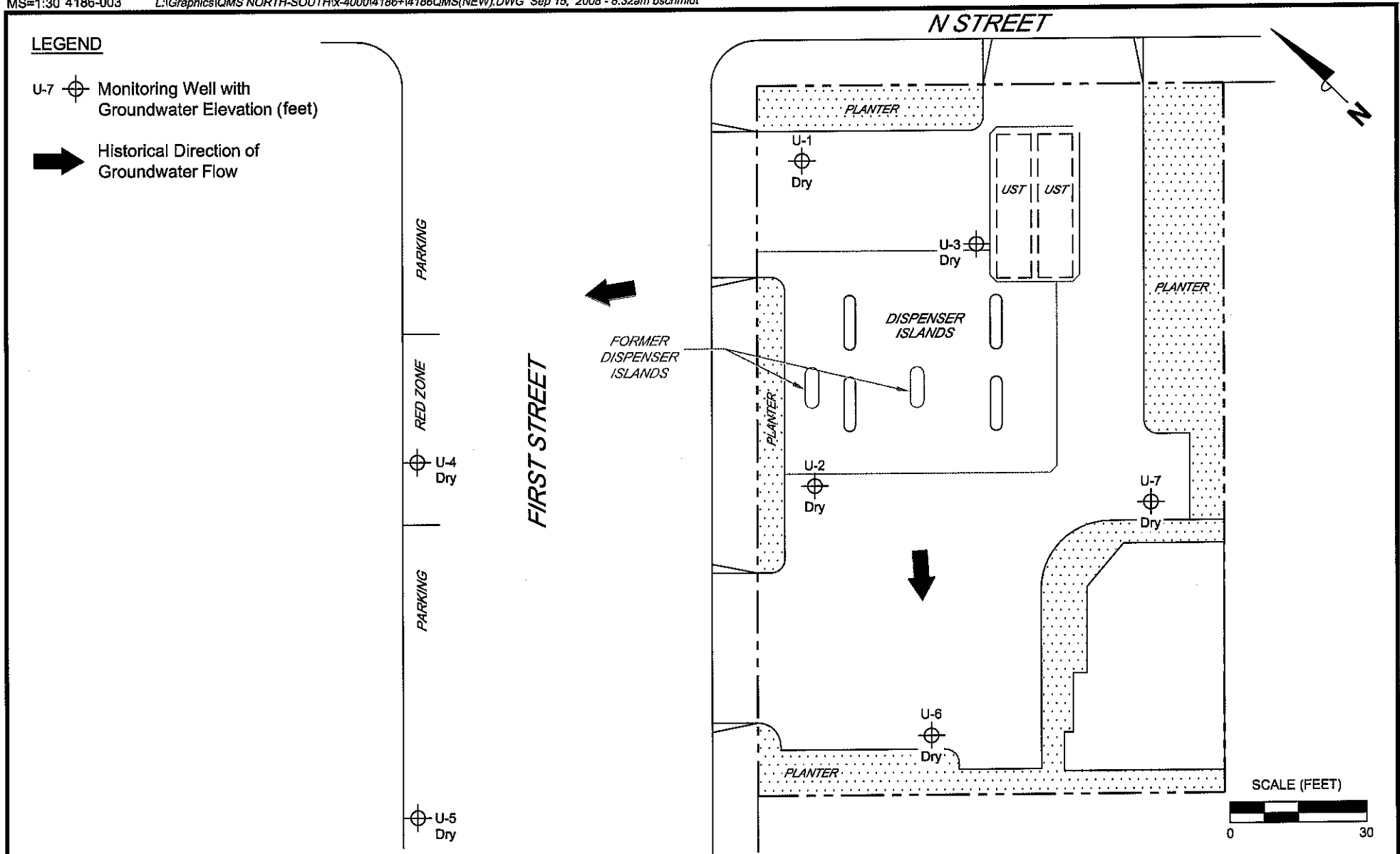
VICINITY MAP

FIGURE 1

LEGEND

U-7  Monitoring Well with Groundwater Elevation (feet)

 Historical Direction of Groundwater Flow



NOTES:

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




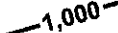
PROJECT: 154771

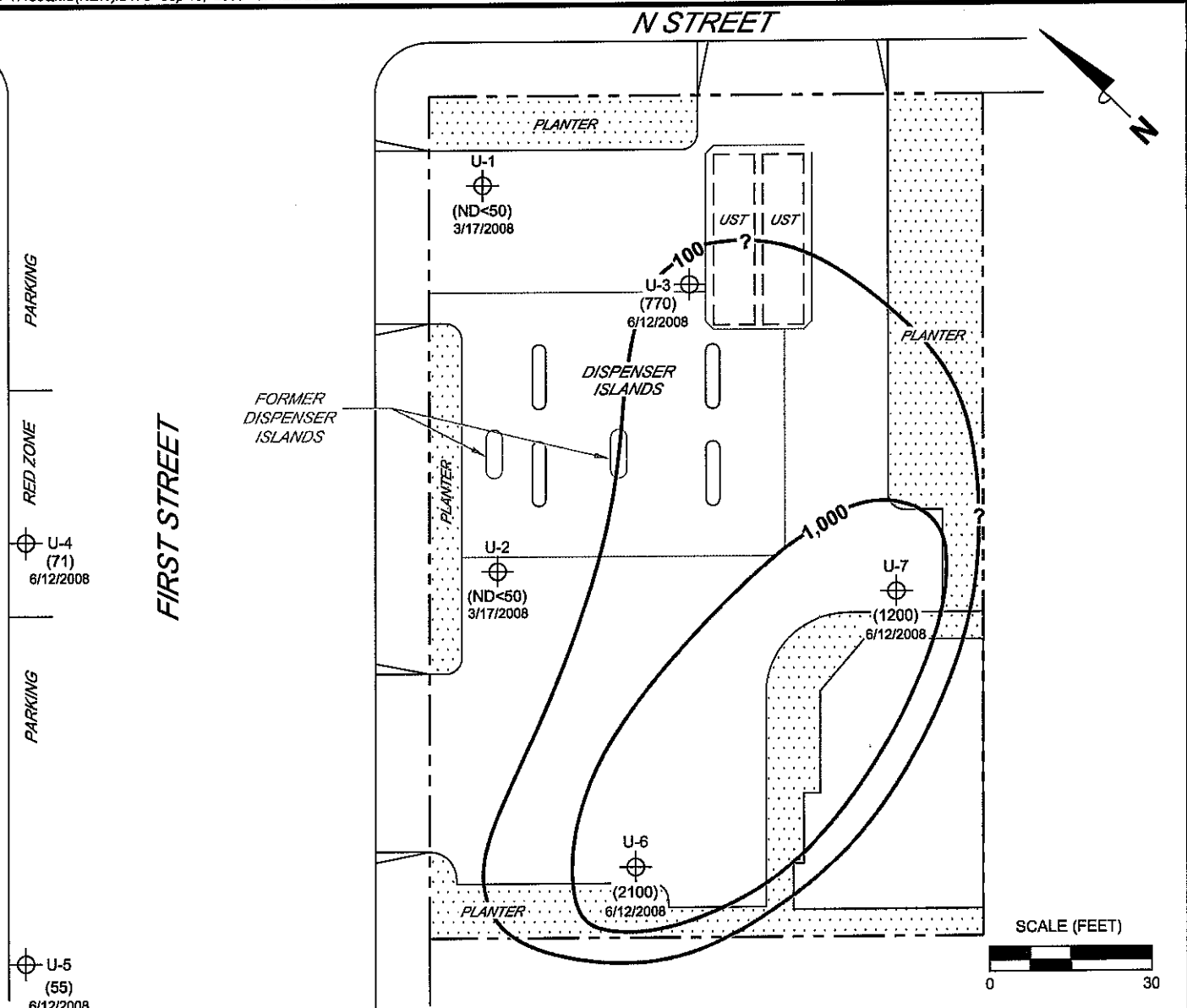
FACILITY:
76 STATION 4186
1771 FIRST STREET
LIVERMORE, CALIFORNIA

**GROUNDWATER
ELEVATION MAP
September 3, 2008**

FIGURE 2

LEGEND

- U-7  Monitoring Well with Dissolved-Phase TPH-G (GC/MS) Concentration ($\mu\text{g/l}$)
-  1,000 Dissolved-Phase TPH-G (GC/MS) Contour ($\mu\text{g/l}$)



NOTES:


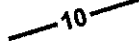
Contour lines are interpretive and based on laboratory analysis results of groundwater samples.
 TPH-G (GC/MS) = total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B.
 $\mu\text{g/l}$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report.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

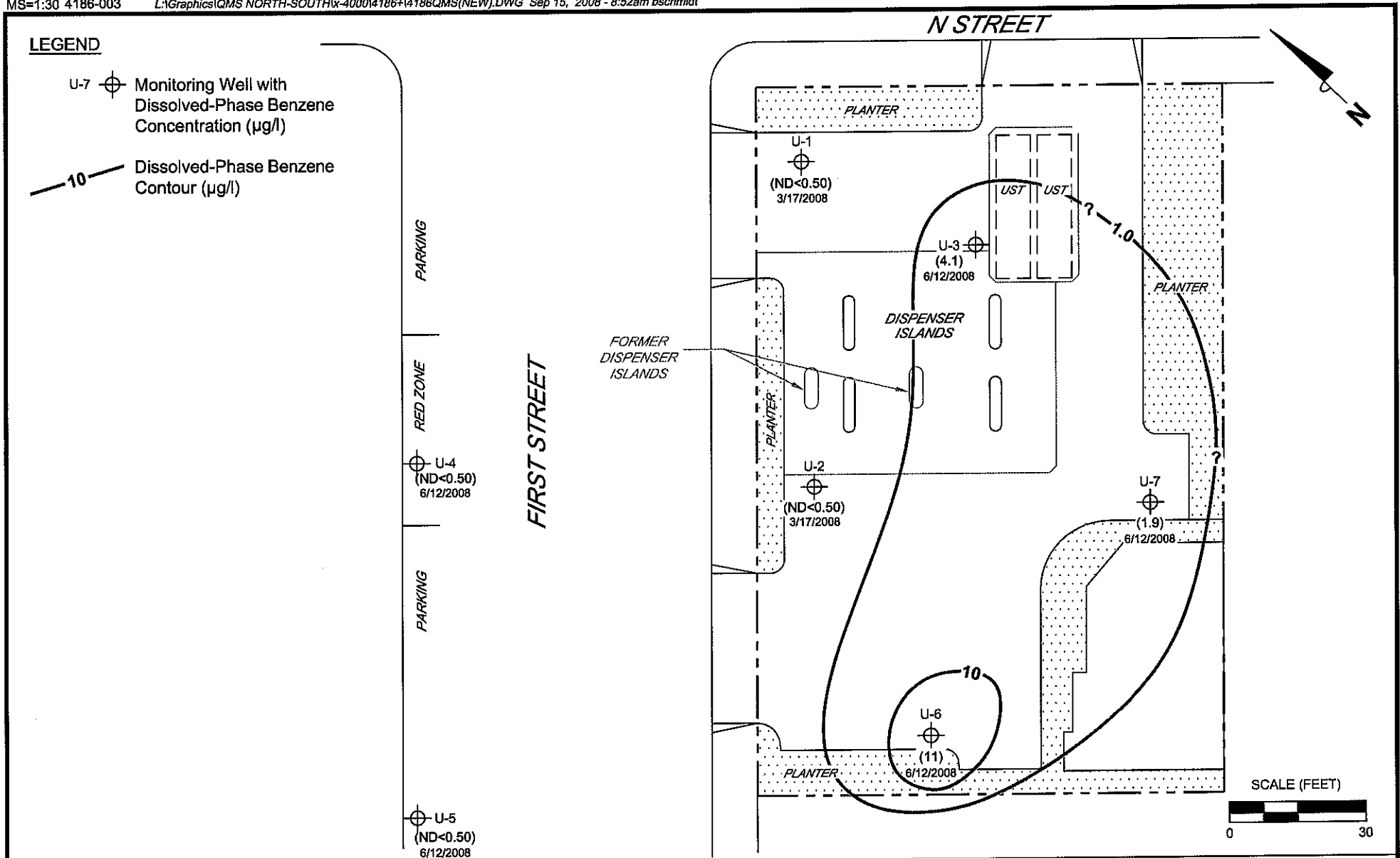


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**DISSOLVED-PHASE TPH-G (GC/MS)
 CONCENTRATION MAP**
 September 3, 2008
FIGURE 3

LEGEND

- U-7  Monitoring Well with Dissolved-Phase Benzene Concentration ($\mu\text{g/l}$)
-  10 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.





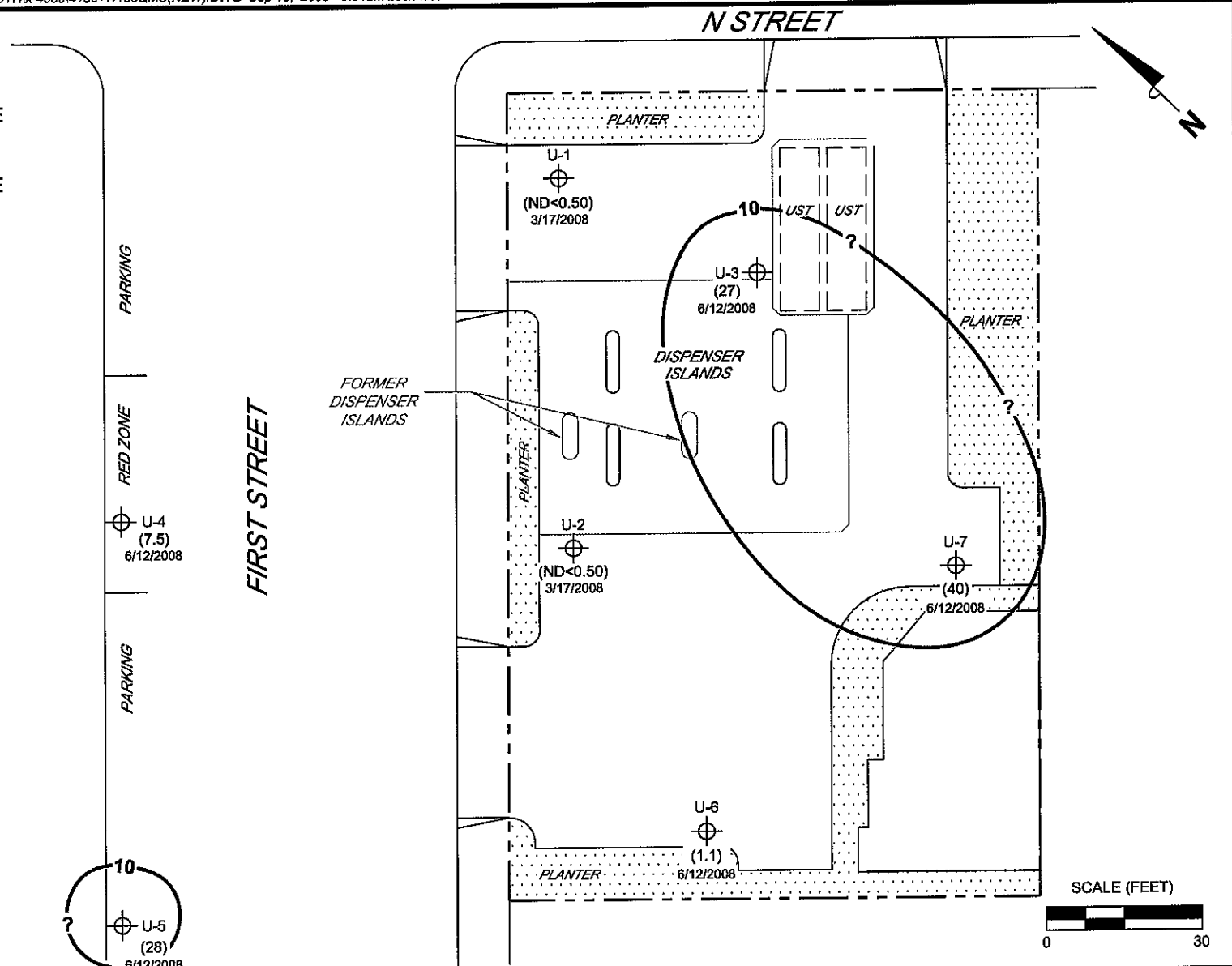
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**DISSOLVED-PHASE BENZENE
 CONCENTRATION MAP
 September 3, 2008**

FIGURE 4

LEGEND

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



NOTES:

Contour lines are interpretive and based on laboratory analysis results 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. () = representative historical value. UST = underground storage tank. Results obtained using EPA Method 8260B.



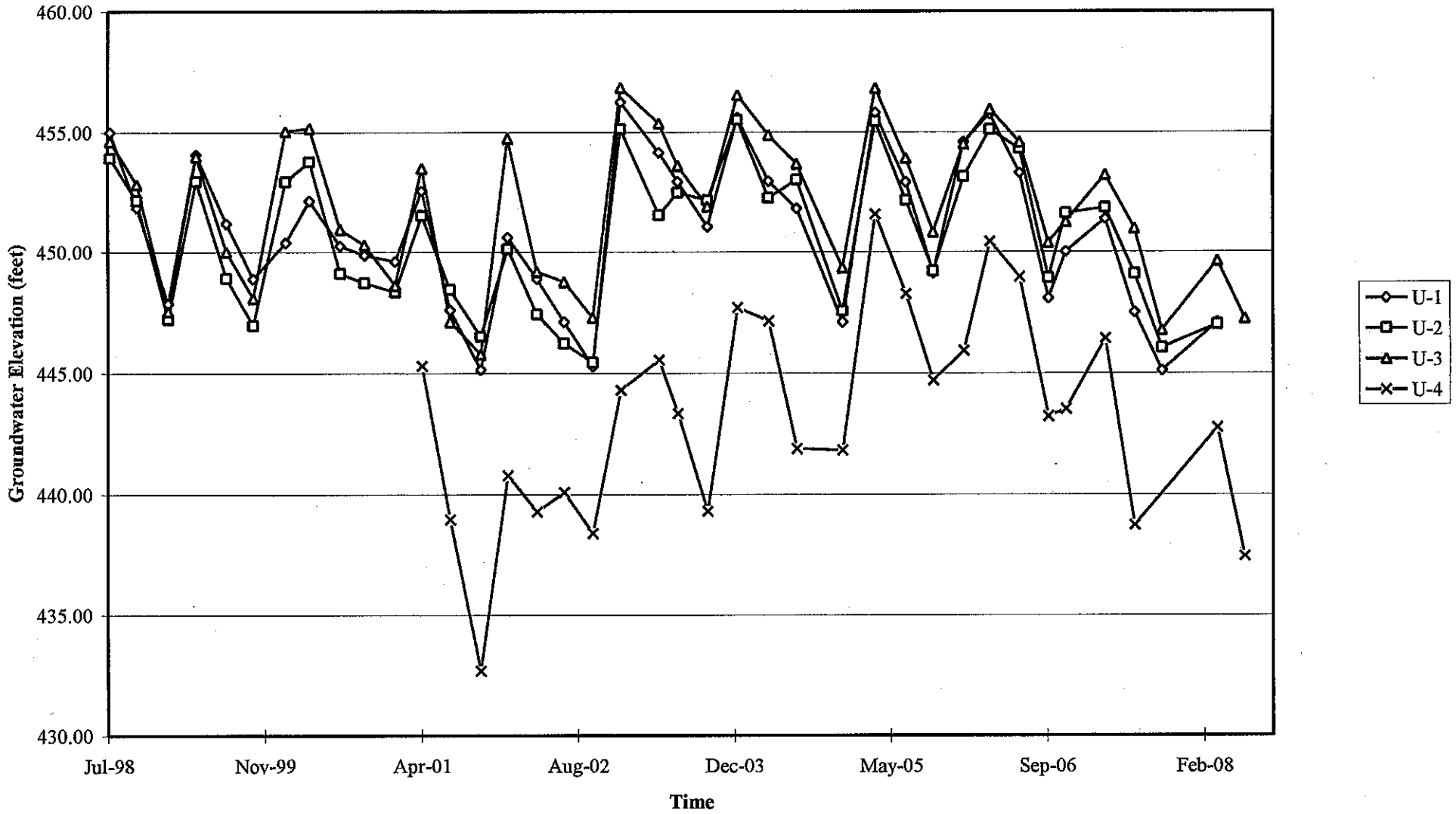
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**DISSOLVED-PHASE MTBE
 CONCENTRATION MAP
 September 3, 2008**

FIGURE 5

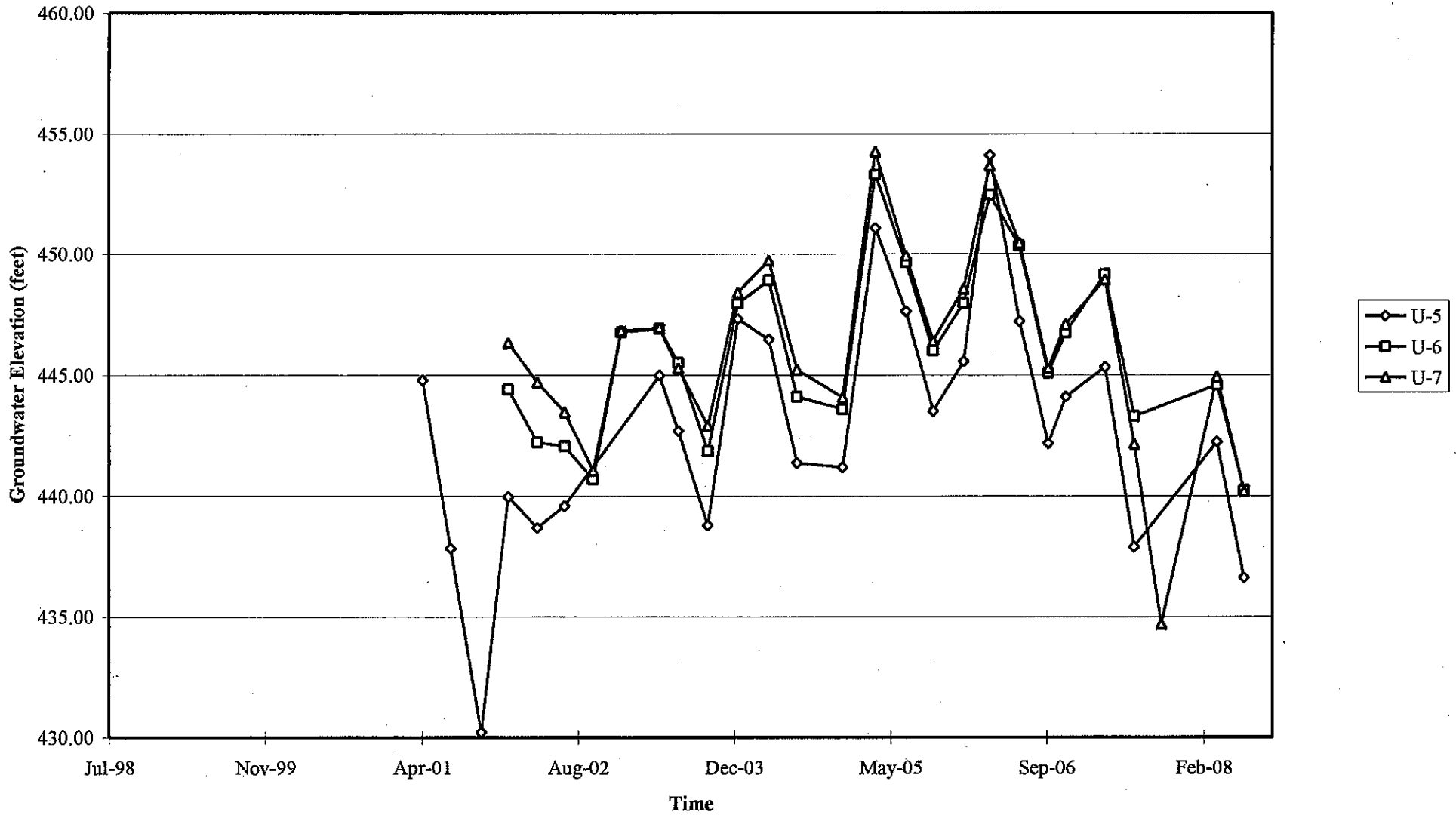
GRAPHS

Groundwater Elevations vs. Time
76 Station 4186



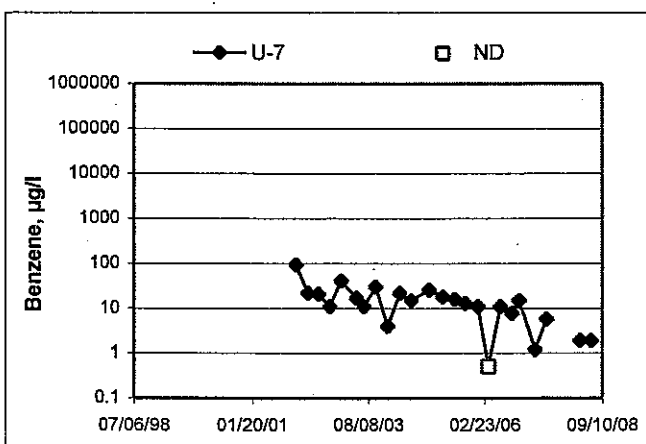
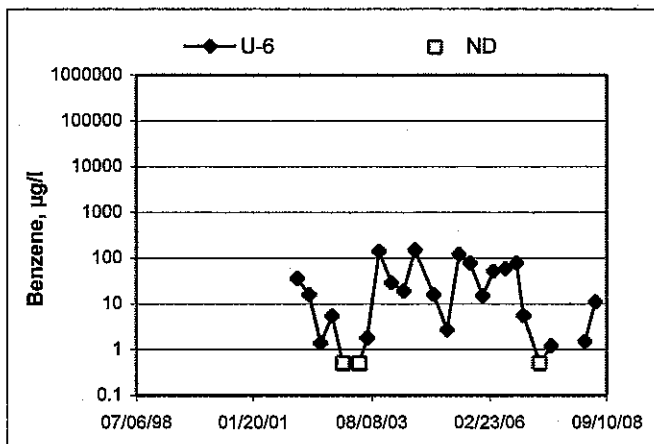
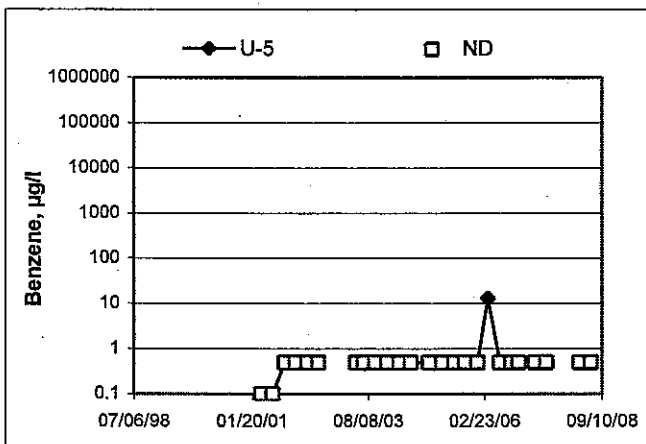
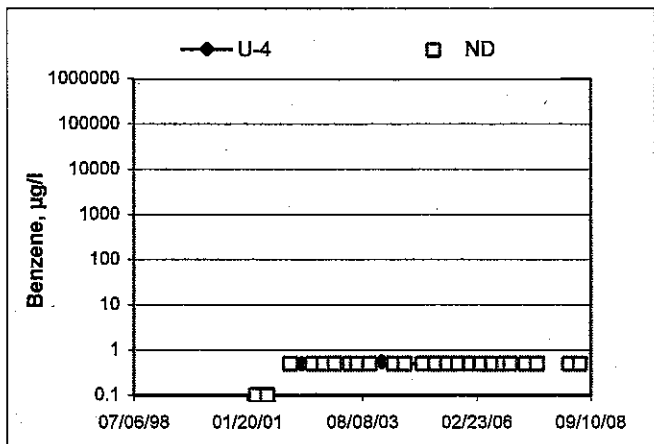
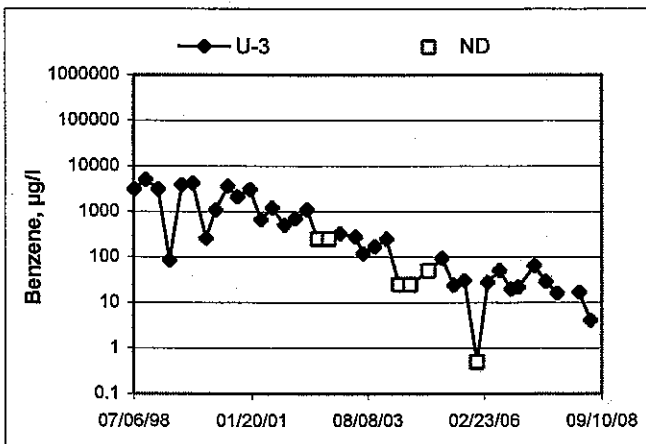
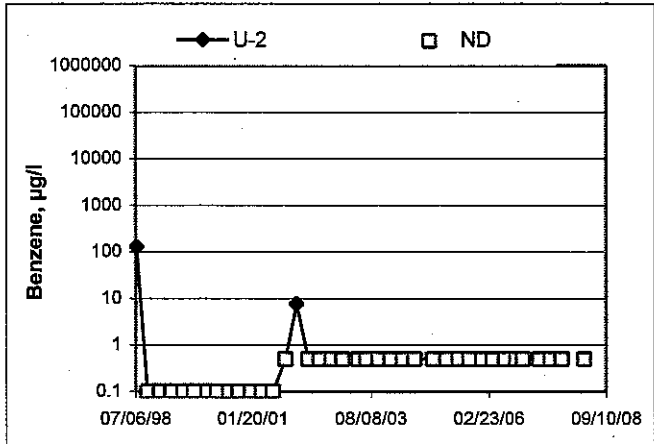
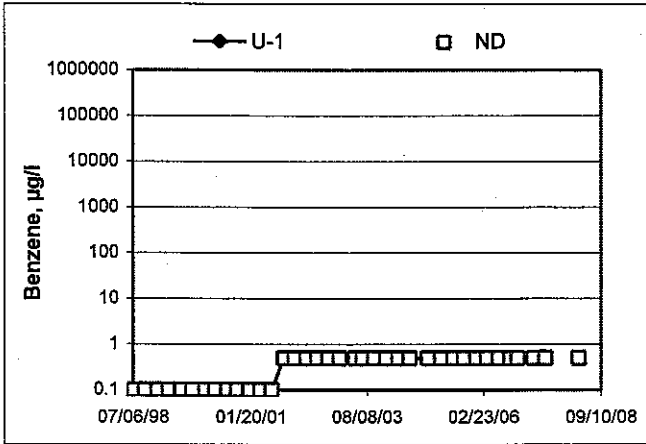
Elevations may have been corrected for apparent changes due to resurvey

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



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 is 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 a particular well, 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: Rick R.

Site: 4186

Project No.: 154771

Date: 8/9/03/08

Well No. U-3

Purge Method: HB

Depth to Water (feet): 32.58

Depth to Product (feet):

Total Depth (feet) 33.63

LPH & Water Recovered (gallons):

Water Column (feet): 1.05

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 32.79

1 Well Volume (gallons): 1

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	D.O. (mg/L)	ORP	Turbidity
<u>1022</u>	<u>1025</u>		<u>1</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
			<u>2</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
			<u>3</u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	
		Static at Time Sampled <u>2 HRS</u>		Total Gallons Purged		Sample Time <u>2 HR MARK</u>			
		<u>33.50</u>		<u>0.5</u>		<u>1225</u>			

Comments: DRY AT 1/2 GALLON. STATIC AT 45 MINS WAS 33.50. WELL DID NOT RECOVER AFTER 45 MINS. WELL DID NOT RECOVER AFTER 2 HRS. COULD NOT RETRIEVE ANY WATER WITH BAIRBE.

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):

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



STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 9/03/08 STATION NUMBER: 4186

NAME OF TECH: Rick R. CALLED GORDON: _____

CALLED PM: X NAME OF PM CALLED: A. Collins

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

DRY WELL.

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

DRY WELL.

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

DRY WELL.

WELL NUMBER: _____ STATEMENT FROM PM _____ OR TECH _____

STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 9/03/08 STATION NUMBER: 4186

NAME OF TECH: Rick P CALLED GORDON: _____

CALLED PM: X NAME OF PM CALLED: A. Collins

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

WELL PURGED, AND I WAS UNABLE TO SAMPLE
WELL DUE TO INSUFFICIENT AMOUNT OF WATER AT
THE 2 HR. MARK. (WELL DRY)

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

DRY WELL.

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

DRY WELL.

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

DRY WELL.

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.

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.