



76 Broadway  
Sacramento, CA 95818  
phone 916.558.7676  
fax 916.558.7639

R0229

February 2, 2005

Mr. Don Hwang  
Alameda County Health Agency  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Environmental Health  
FEB 15 2005  
Alameda County

Re: **Document Transmittal**  
Fuel Leak Case  
76 Station #5325  
3200 Lakeshore Avenue  
Oakland, CA

Dear Mr. Hwang:

Please find attached TRC's *Quarterly Status Report, dated 2/4/05*, and TRC's *Quarterly Monitoring Report, dated 1/25/05* for the above referenced site. I declare, under penalty of perjury, that to the best of my knowledge the information and/or recommendations contained in the attached proposal or report is true and correct.

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,

Thomas H. Kosel  
Site Manger, Risk Management and Remediation  
ConocoPhillips  
76 Broadway, Sacramento, CA 95818

Attachment

cc: Roger Batra, TRC



Customer-Focused Solutions

Ro 229

June 22, 2004

TRC Project No. 42013701

Don Hwang  
Alameda County Health Services  
1131 Harbor Bay Parkway  
Alameda, CA 94502-6577

**RE: Quarterly Status Report - First Quarter 2004**  
**76 Service Station #5325, 3220 Lakeshore Avenue, Oakland, California**  
**Alameda County**

Dear Mr. Hwang:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC is submitting the First Quarter 2004 Quarterly Status Report for the subject site, shown on the attached Figure 3.

#### **PREVIOUS ASSESSMENTS**

The subject site is an operating 76 Service Station situated on the southeast corner of the intersection of Lakeshore Avenue and Lake Park Avenue in Oakland, California. Current site facilities consist of the service station building with three service bays, three product dispenser islands, and two 12,000-gallon double-wall fiberglass gasoline underground storage tanks (USTs).

October 1994: The waste oil UST was replaced along with the fuel product piping and dispenser islands. Holes were noted in the waste oil UST upon removal. Hydrocarbon odors and staining were noted in the soil beneath the waste oil UST. Overexcavation to remove the contaminated soil was limited to the area immediately surrounding the waste oil UST due to the proximity of structures. Confirmation soil samples indicated that low to moderate levels of petroleum hydrocarbons remained after the overexcavation. Soil sampling results from the product line/dispenser islands did not contain detectable concentrations of total petroleum hydrocarbons as gasoline (TPH-g), total petroleum hydrocarbons as diesel (TPH-d) or benzene.

October 2003: Site environmental consulting responsibilities were transferred to TRC.

#### **SENSITIVE RECEPTORS**

Lake Merritt is located approximately 0.3 miles down gradient. No domestic wells are located within 1 mile of the site.

#### **MONITORING AND SAMPLING**

Currently, four onsite and two offsite wells are monitored quarterly. All wells were sampled this quarter. The groundwater gradient and flow direction were 0.02 foot/foot to the northwest. Last quarter's flow direction was to the north.

## **CHARACTERIZATION STATUS**

Total purgeable petroleum hydrocarbons (TPPH) were detected in four of the six wells, at a maximum concentration of 12,000 micrograms per liter ( $\mu\text{g/l}$ ) in onsite monitoring wells U-1 and U-2. These levels were consistent with recent historical data.

Benzene was not detected in any of the six wells. However, the lower limit of detection was above the maximum contaminant level (MCL) in three wells. These levels were consistent with recent historical data.

Methyl tertiary butyl ether (MTBE) was detected in four of the six wells, at a maximum concentration of 13,000  $\mu\text{g/l}$  in onsite monitoring well U-1. These levels were consistent with recent historical data.

## **REMEDIATION STATUS**

October 1994: A total of 388.7 tons of impacted soil associated with the waste oil UST has been removed from the site. In addition, approximately 6,500 gallons of hydrocarbon impacted groundwater was pumped from the waste oil UST excavation to remediate hydrocarbon impacted soil and groundwater in the immediate area.

Remediation is not currently being conducted at the site.

## **RECENT CORRESPONDENCE**

No correspondence this quarter.

## **CURRENT QUARTER ACTIVITIES**

March 30, 2004: TRC performed groundwater monitoring and sampling. Wastewater generated from well purging and equipment cleaning was stored at TRC's groundwater monitoring facility in Concord, California, and transported by Onyx to the ConocoPhillips Refinery in Rodeo, California, for treatment and disposal.

## **NEXT QUARTER ACTIVITIES**

Await agency directives for additional assessment work, if any.

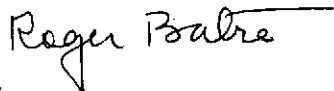
Continue quarterly monitoring and sampling to assess plume stability and concentration trends at key wells.

QSR – First Quarter 2004  
76 Service Station #5325, Oakland, California  
June 22, 2004  
Page 3

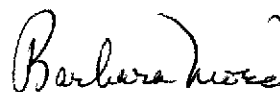
If you have any questions regarding this report, please call Roger Batra at (925) 688-2466.

Sincerely,

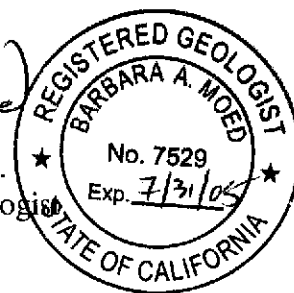
TRC



Roger Batra  
Senior Project Manager



Barbara Moed, R.G.  
Senior Project Geologist



Attachments:

Figure 3 – Dissolved-Phase Hydrocarbon Concentrations Map, March 30, 2004, from First Quarter 2004 Fluid Level Monitoring and Groundwater Sampling Report, dated April 28, 2004 by TRC.

cc: Thomas Kosel, ConocoPhillips (hard copy and electronic upload)

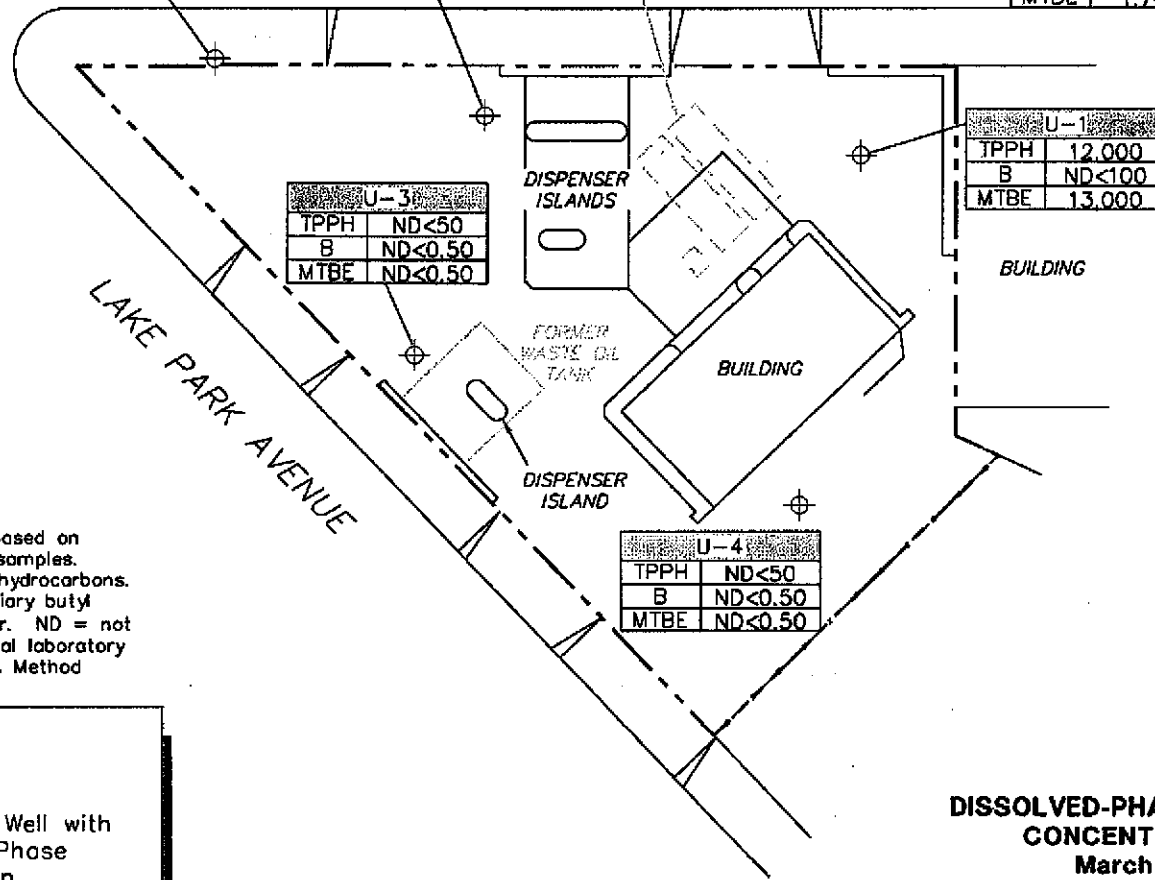
LAKESHORE AVENUE

U-5	
TPPH	100
B	ND<0.50
MTBE	130

U-2	
TPPH	12,000
B	ND<100
MTBE	11,000

FORMER UNDERGROUND STORAGE TANKS

U-6	
TPPH	1,200
B	ND<10
MTBE	1,700



NOTES:

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

LEGEND

Well No.	
TPPH	$\mu\text{g/l}$
B	$\mu\text{g/l}$
MTBE	$\mu\text{g/l}$

⊕ Monitoring Well with Dissolved-Phase Hydrocarbon Concentrations ( $\mu\text{g/l}$ )

DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS MAP  
March 30, 2004

76 Station 5325  
3220 Lakeshore Avenue  
Oakland, California

FIGURE 3

SCALE (FEET)



**TRC**

PS=1:1

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Customer-Focused Solutions

July 16, 2004

ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818

Alameda County  
JUL 20 2004  
Environmental Health Services

ATTN: MR. THOMAS H. KOSEL  
  
SITE: 76 STATION 5325  
3220 LAKESHORE AVENUE  
OAKLAND, CALIFORNIA  
  
RE: QUARTERLY MONITORING REPORT  
APRIL THROUGH JUNE 2004

Dear Mr. Kosel:

Please find enclosed our Quarterly Monitoring Report for 76 Station 5325, located at 3220 Lakeshore Avenue, Oakland, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan  
QMS Operations Manager

CC: Don Hwang, Alameda County Health Care Services Division  
Barbara Moed, TRC

Enclosures  
20-0400/5325R03.QMS





Customer-Focused Solutions

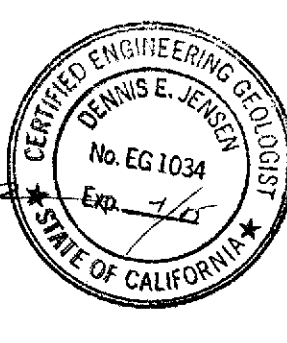
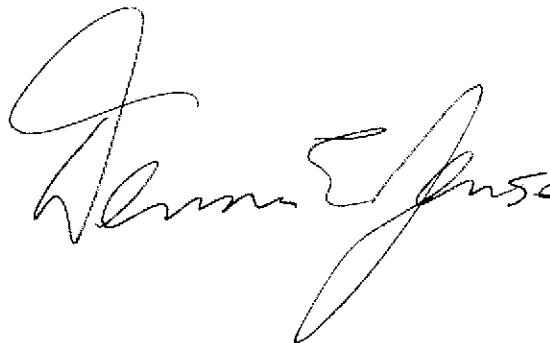
**QUARTERLY MONITORING REPORT  
APRIL THROUGH JUNE 2004**

76 Station 5325  
3200 Lakeshore Avenue  
Oakland, California

Prepared For:

Mr. Thomas H. Kosel  
CONOCOPHILLIPS COMPANY  
76 Broadway  
Sacramento, California 95818

By:



Senior Project Geologist, Irvine Operations  
July 16, 2004



## QUARTERLY MONITORING REPORT

LIST OF ATTACHMENTS	
Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Table 1: Summary of Groundwater Levels and Chemical Analysis Results Table 2: Historic Groundwater Levels and Chemical Analysis Results Table 3: Summary of Additional Chemical Analysis Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPPH Concentrations Map Figure 4: Dissolved-Phase Benzene Concentration Map Figure 5: Dissolved-Phase MTBE Concentration Map
Graphs	Benzene Concentrations vs. Time Hydrographs
Field Activities	General Field Procedures Groundwater Sampling Field Notes
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Transport and Disposal Limitations



**Summary of Gauging and Sampling Activities**  
**April 2004 through June 2004**  
**76 Station 5325**  
**3220 Lakeshore Avenue**  
**Oakland, CA**

**Site Information:**

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Site:	76 Station 3220 Lakeshore Avenue Oakland, CA
Project Coordinator/Phone Number:	Thomas H. Kosel/916-558-7666
Groundwater wells onsite:	5
Groundwater wells offsite:	1

**Field Activity:**

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Sampling consultant:	TRC
Date(s) sampled:	06/07/04
Groundwater wells gauged:	6
Groundwater wells sampled:	6
Purging method:	diaphragm pump
Treatment/disposal method during sampling event:	Onyx/Rodeo Unit 100
Free product pumpouts other than sampling event:	No
Treatment/Disposal method during free product pumpouts:	N/A

**Site Hydrogeology:**

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Minimum depth to groundwater (feet bgs):	7.75
Maximum depth to groundwater (feet bgs):	11
Average groundwater elevation (feet relative to mean sea level):	-0.60
Average change in groundwater elevations since previous event (feet):	-1.36
Groundwater gradient and flow direction:	0.04 ft/ft, north
Previous gradient and/or flow direction (and date):	0.02 ft/ft, northwest (03/30/04)

**Groundwater Condition (Benzene Maximum Contaminant Level [MCL] = 1.0 µg/l)**

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Wells with benzene concentrations below MCL:	6
Wells with benzene concentrations at or above MCL:	0
Minimum benzene concentration (µg/l):	ND
Maximum benzene concentration (µg/l):	ND
Minimum MTBE concentration (µg/l):	ND
Maximum MTBE concentration (µg/l):	13000
Minimum TPPH concentration (µg/l):	ND
Maximum TPPH concentration (µg/l):	14000 (U-2)
Groundwater wells with free product:	0
Minimum free product thickness (feet):	0
Maximum free product thickness (feet):	0

**Additional Information:**

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This report presents the results of groundwater monitoring and sampling activities performed by TRC. Please contact the primary consultant for other specific information on this site.

## TABLE KEY

### ABBREVIATIONS / SYMBOLS

LPH	=	liquid-phase hydrocarbons
µg/l	=	micrograms per liter
mg/l	=	milligrams per liter
ND	=	not detected at or above laboratory detection limit
DTSC	=	Department of Toxic Substances Control
N/A	=	not applicable
Trace	=	less than 0.01 foot of LPH in well
USTs	=	underground storage tanks
--	=	not analyzed, measured, or collected
TPH-G	=	total petroleum hydrocarbons with gasoline distinction
BTEX	=	benzene, toluene, ethylbenzene, and total xylenes
TPH-D	=	total petroleum hydrocarbons with diesel distinction
TRPH	=	total recoverable petroleum hydrocarbons
MTBE	=	methyl tertiary butyl ether
TAME	=	tertiary amyl methyl ether
ETBE	=	ethyl tertiary butyl ether
DIPE	=	di-isopropyl ether
TBA	=	tertiary butyl alcohol
1,1-DCA	=	1,1-Dichloroethane
1,2-DCA	=	1,2-Dichloroethane
1,1-DCE	=	1,1-Dichloroethene
1,2-DCE	=	cis- and trans-1,2-Dichloroethene
PCE	=	tetrachloroethene
TCA	=	trichloroethane
TCE	=	trichloroethene
PCB	=	polychlorinated biphenyls
TPPH	=	total purgeable petroleum hydrocarbons

### NOTES

Elevations are in feet above mean sea level.

Groundwater elevation for wells with LPH is calculated as follows:

$$\text{Surface elevation} - \text{depth to water} + (0.75 \times \text{LPH thickness}).$$

Concentration Graphs have been modified to plot non-detect results at the reporting limit stated in the official laboratory report. All non-detect results prior to the Second Quarter 2000 were plotted at 0.1 µg/l for graphical display.

J = estimated concentration, value is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL)

### REFERENCE

TRC began groundwater monitoring and sampling activities in October 2003. Historical data for 76 Station 5325 was provided by Gettler-Ryan Inc., Dublin, California, in an excel table received in September 2003.

**Table 1**  
**SUMMARY OF GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS**  
**June 7, 2004**  
**76 Station 5325**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>U-1</b>		<b>(Screen Interval in feet: 5.0-20.0)</b>												
06/07/04	8.46	10.35	0.00	-1.89	-1.97	--	13000	ND<100	ND<100	ND<100	ND<200	--	12000	
<b>U-2</b>		<b>(Screen Interval in feet: 5.0-20.0)</b>												
06/07/04	7.62	7.75	0.00	-0.13	-0.68	--	14000	ND<100	ND<100	ND<100	ND<200	--	13000	
<b>U-3</b>		<b>(Screen Interval in feet: 5.0-20.0)</b>												
06/07/04	10.98	11.00	0.00	-0.02	-0.36	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
<b>U-4</b>		<b>(Screen Interval in feet: 5.0-20.0)</b>												
06/07/04	11.15	8.93	0.00	2.22	-1.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
<b>U-5</b>		<b>(Screen Interval in feet: 5.0-20.0)</b>												
06/07/04	6.98	8.53	0.00	-1.55	-1.65	--	250	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	160	
<b>U-6</b>		<b>(Screen Interval in feet: 5.0-24.0)</b>												
06/07/04	7.14	9.35	0.00	-2.21	-2.03	--	1700	ND<10	ND<10	ND<10	ND<20	--	1800	

**Table 2**  
**HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS**  
**August 1990 Through June 2004**

**76 Station 5325**

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>U-1 (Screen Interval in feet: 5.0-20.0)</b>														
01/07/91	--	--	--	--	--	250	--	22	16	4.20	17	--	--	
04/01/91	--	--	--	--	--	160	--	13	8.60	1.0	15	--	--	
07/03/91	--	--	--	--	--	140	--	21	4.30	0.36	17	--	--	
10/09/91	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/12/92	--	--	--	--	--	250	--	--	--	--	--	--	--	
05/05/92	--	--	--	--	--	230	--	1.20	--	--	--	--	--	
06/11/92	--	--	--	--	--	1000	--	80	1.40	6.70	41	--	--	
08/20/92	--	--	--	--	--	400	--	1.0	--	--	0.60	--	--	
02/22/93	--	--	--	--	--	34000	--	1400	5500	910	7300	--	--	
05/07/93	--	--	--	--	--	8700	--	600	240	650	3300	--	--	
08/08/93	--	--	--	--	--	4900	--	79	--	832	270	--	--	
11/16/93	5.32	8.61	0.00	-3.29	--	690	--	--	--	--	--	--	--	
02/16/94	5.32	8.54	0.00	-3.22	0.07	6800	--	--	--	--	--	--	--	
06/22/94	8.46	8.39	0.00	0.07	3.29	200	--	--	--	5.90	21	--	--	
09/22/94	8.46	8.66	0.00	-0.20	-0.27	6100	--	--	--	--	--	--	--	
12/24/94	8.46	8.04	0.00	0.42	0.62	50000	--	2500	9700	2400	17000	--	--	
03/25/95	8.46	7.72	0.00	0.74	0.32	--	--	--	--	--	--	--	--	
06/21/95	8.46	9.30	0.00	-0.84	-1.58	--	--	--	--	--	--	--	--	
09/19/95	8.46	9.29	0.00	-0.83	0.01	--	--	--	--	--	--	--	--	
12/19/95	8.46	8.98	0.00	-0.52	0.31	--	--	--	--	--	--	--	--	
03/18/96	8.46	8.25	0.00	0.21	0.73	27000	--	--	2300	1400	11000	4900	--	
06/27/96	8.46	7.92	0.00	0.54	0.33	120000	--	540	4300	2600	26000	--	--	
09/26/96	8.46	9.10	0.02	-0.63	-1.17	--	--	--	--	--	--	--	--	
12/09/96	8.46	6.88	0.03	1.60	2.23	--	--	--	--	--	--	--	--	
03/14/97	8.46	9.02	0.55	-0.15	-1.75	--	--	--	--	--	--	--	--	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-1 continued														
06/30/97	8.46	8.41	0.02	0.07	0.21	--	--	--	--	--	--	--	--	
09/19/97	8.46	8.56	0.02	-0.09	-0.15	--	--	--	--	--	--	--	--	
12/12/97	8.46	8.58	0.01	-0.11	-0.03	--	--	--	--	--	--	--	--	
03/03/98	8.46	8.23	0.04	0.26	0.37	--	--	--	--	--	--	--	--	
06/15/98	8.46	8.37	0.00	0.09	-0.17	52000	--	--	900	1800	13000	--	--	
09/30/98	8.46	8.94	0.00	-0.48	-0.57	1000000	--	--	2600	13000	83000	4800	--	
12/28/98	8.46	8.57	0.00	-0.11	0.37	1100000	--	--	1600	8600	71000	5700	--	
03/22/99	8.46	8.18	0.00	0.28	0.39	130000	--	470	1100	2000	28000	5700	--	
06/09/99	8.46	9.37	0.00	-0.91	-1.19	40000	--	230	640	590	13000	3500	2100	
09/08/99	8.46	9.53	0.00	-1.07	-0.16	55000	--	217	202	745	14300	6890	6690	
12/07/99	8.46	9.67	0.00	-1.21	-0.14	41200	--	89.30	--	385	6930	15800	14700	
03/13/00	8.46	8.44	0.00	0.02	1.23	48000	--	490	610	2400	10000	22000	23000	
06/21/00	8.46	9.45	0.00	-0.99	-1.01	37000	--	200	--	1200	7200	15000	20000	
09/27/00	8.46	9.29	0.00	-0.83	0.16	15000	--	92	--	540	2800	74000	83000	
12/12/00	8.46	9.37	0.00	-0.91	-0.08	50000	--	--	--	250	1900	12000	15000	
03/07/01	8.46	8.45	0.00	0.01	0.92	6220	--	29.80	10.40	96.30	638	11200	11800	
06/06/01	8.46	9.29	0.00	-0.83	-0.84	5200	--	17	--	69	420	6500	8700	
09/24/01	8.46	9.39	0.00	-0.93	-0.10	4300	--	36	ND<25	65	590	4400	4400	
12/10/01	8.46	9.17	0.00	-0.71	0.22	11000	--	220	ND<100	380	1500	5100	5100	
03/11/02	8.46	9.44	0.00	-0.98	-0.27	5500	--	28	ND<20	360	690	6400	6300	
06/04/02	8.46	8.32	0.00	0.14	1.12	4600	--	31	ND<10	240	180	6500	--	
09/03/02	8.46	9.36	0.00	-0.90	-1.04	2300	--	ND<12	ND<12	ND<12	68	3500	4700	
12/03/02	8.46	8.18	0.00	0.28	1.18	--	ND<5000	ND<50	ND<50	ND<50	<100	--	4700	
03/04/03	8.46	8.29	0.00	0.17	-0.11	--	8900	26	ND<25	400	130	--	5500	
06/18/03	8.46	7.58	0.00	0.88	0.71	--	8300	ND<25	ND<25	ND<25	<50	--	10000	
09/24/03	8.46	8.18	0.00	--	--	--	ND<10000	ND<100	ND<100	ND<100	ND<200	--	11000	
12/02/03	8.46	8.90	0.00	-0.44	--	--	ND<10000	ND<100	ND<100	ND<100	ND<200	--	11000	
03/30/04	8.46	8.38	0.00	0.08	0.52	--	12000	ND<100	ND<100	190	ND<200	--	13000	
06/07/04	8.46	10.35	0.00	-1.89	-1.97	--	13000	ND<100	ND<100	ND<100	ND<200	--	12000	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>U-2 (Screen Interval in feet: 5.0-20.0)</b>														
08/10/90	--	--	--	--	--	780	--	27	46	15	130	--	--	
01/07/91	--	--	--	--	--	1900	--	67	5.8	58	69	--	--	
04/01/91	--	--	--	--	--	1700	--	250	89	34	190	--	--	
07/03/91	--	--	--	--	--	2100	--	150	25	3.10	290	--	--	
10/09/91	--	--	--	--	--	230	--	7.1	--	--	11	--	--	
02/12/92	--	--	--	--	--	410	--	1.9	--	0.36	0.40	--	--	
05/05/92	--	--	--	--	--	1600	--	120	52	6.20	290	--	--	
06/11/92	--	--	--	--	--	620	--	17	2.10	--	37	--	--	
08/20/92	--	--	--	--	--	700	--	28	6.50	1.30	4.60	--	--	
02/22/93	--	--	--	--	--	3400	--	2400	2100	1200	5800	--	--	
05/07/93	--	--	--	--	--	17000	--	1800	660	1700	4000	--	--	
08/08/93	--	--	--	--	--	5600	--	420	--	410	670	--	--	
11/16/93	4.53	8.17	0.00	-3.64	--	510	--	--	--	--	--	--	--	
02/16/94	4.53	7.73	0.00	-3.20	0.44	980	--	49	13	2.70	40	--	--	
06/22/94	7.62	7.60	0.00	0.02	3.22	31000	--	2200	62	1500	3500	--	--	
09/22/94	7.62	7.93	0.00	-0.31	-0.33	8500	--	29	--	--	--	--	--	
12/24/94	7.62	7.27	0.00	0.35	0.66	32000	--	1500	890	1300	5000	--	--	
03/25/95	7.62	7.01	0.00	0.61	0.26	170000	--	1900	21000	4800	33000	--	--	
06/21/95	7.62	6.98	0.00	0.64	0.03	16000	--	2100	--	1800	1700	--	--	
09/19/95	7.62	7.70	0.00	-0.08	-0.72	3000	--	610	--	78	240	--	--	
12/19/95	7.62	7.30	0.00	0.32	0.40	1600	--	140	55	52	270	--	--	
03/18/96	7.62	6.45	0.00	1.17	0.85	12000	--	2200	--	1200	2200	22000	--	
06/27/96	7.62	7.41	0.00	0.21	-0.96	28000	--	3400	--	2800	3100	3000	--	
09/26/96	7.62	7.90	0.00	-0.28	-0.49	5900	--	750	--	--	--	18000	--	
12/09/96	7.62	6.76	0.00	0.86	1.14	13000	--	5100	290	980	370	2700	--	
03/14/97	7.62	7.12	0.03	0.52	-0.34	--	--	--	--	--	--	--	--	
06/30/97	7.62	6.19	0.00	1.43	0.91	--	--	--	--	--	--	--	--	
09/19/97	7.62	7.31	0.00	0.31	-1.12	--	--	--	--	--	--	--	--	
12/12/97	7.62	6.75	0.00	0.87	0.56	--	--	--	--	--	--	--	--	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-2 continued														
03/03/98	7.62	6.36	0.00	1.26	0.39	80000	--	3000	1100	820	16000	16000	--	
06/15/98	7.62	6.51	0.00	1.11	-0.15	48000	--	1800	330	470	7900	20000	--	
09/30/98	7.62	7.17	0.00	0.45	-0.66	60000	--	1300	--	500	9700	19000	--	
12/28/98	7.62	7.06	0.00	0.56	0.11	63000	--	590	160	320	5600	16000	--	
03/22/99	7.62	6.82	0.00	0.80	0.24	28000	--	1100	--	360	2900	25000	--	
06/09/99	7.62	7.51	0.00	0.11	-0.69	21000	--	110	190	310	2600	7900	7800	
09/08/99	7.62	8.16	0.00	-0.54	-0.65	23300	--	477	138	286	4110	16400	15300	
12/07/99	7.62	8.31	0.00	-0.69	-0.15	4840	--	17.20	--	--	157	14900	15600	
03/13/00	7.62	6.69	0.00	0.93	1.62	11000	--	380	160	--	2100	22000	26000	
06/21/00	7.62	7.67	0.00	-0.05	-0.98	9100	--	22	--	--	800	16000	22000	
09/27/00	7.62	7.44	0.00	0.18	0.23	2900	--	43	--	--	39	20000	26000	
12/12/00	7.62	7.51	0.00	0.11	-0.07	3600	--	17	--	--	87	8000	7800	
03/07/01	7.62	7.15	0.00	0.47	0.36	1670	--	51	--	7.20	19.50	5930	7900	
06/06/01	7.62	7.57	0.00	0.05	-0.42	1100	--	14	--	9.30	35	9200	10000	
09/24/01	7.62	7.63	0.00	-0.01	-0.06	1000	--	25	ND<2.50	12	100	9800	11000	
12/10/01	7.62	6.78	0.00	0.84	0.85	83	--	14	0.55	3.4	6.8	2500	2500	
03/11/02	7.62	7.12	0.00	0.50	-0.34	ND<1000	--	28	ND<10	40	31	11000	11000	
06/04/02	7.62	7.18	0.00	0.44	-0.06	7700	--	32	ND<25	33	48	14000	14000	
09/03/02	7.62	7.58	0.00	0.04	-0.40	5200	--	ND<25	ND<25	ND<25	ND<25	11000	15000	
12/03/02	7.62	7.68	0.00	-0.06	-0.10	--	ND<5000	ND<50	ND<50	ND<50	ND<100	--	3200	
03/04/03	7.62	7.77	0.00	-0.15	-0.09	--	8100	ND<50	ND<50	ND<50	ND<100	--	7800	
06/18/03	7.62	6.87	0.00	0.75	0.90	--	11000	ND<50	ND<50	ND<50	ND<100	--	16000	
09/24/03	7.62	7.49	0.00	0.13	-0.62	--	ND<10000	ND<100	ND<100	ND<100	ND<200	--	10000	
12/02/03	7.62	7.95	0.00	-0.33	-0.46	--	ND<10000	ND<100	ND<100	ND<100	ND<200	--	10000	
03/30/04	7.62	7.07	0.00	0.55	0.88	--	12000	ND<100	ND<100	ND<100	ND<200	--	11000	
06/07/04	7.62	7.75	0.00	-0.13	-0.68	--	14000	ND<100	ND<100	ND<100	ND<200	--	13000	
U-3 (Screen Interval in feet: 5.0-20.0)														
08/10/90	--	--	--	--	--	--	--	--	--	--	--	--	--	
01/07/91	--	--	--	--	--	--	--	--	--	--	1.80	--	--	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-3 continued														
04/01/91	--	--	--	--	--	--	--	1.0	2.90	0.53	5.40	--	--	
07/03/91	--	--	--	--	--	--	--	--	--	--	--	--	--	
10/09/91	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/12/92	--	--	--	--	--	--	--	--	--	--	--	--	--	
05/05/92	--	--	--	--	--	--	--	--	--	--	--	--	--	
06/11/92	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	
02/22/93	--	--	--	--	--	--	--	--	--	--	--	--	--	
05/07/93	--	--	--	--	--	--	--	--	--	--	--	--	--	
08/08/93	--	--	--	--	--	210	--	5.0	9.70	0.70	4.10	--	--	
11/16/93	7.86	11.82	0.00	-3.96	--	--	--	--	--	--	--	--	--	
02/16/94	7.86	11.62	0.00	-3.76	0.20	--	--	--	--	--	--	--	--	
06/22/94	10.98	11.64	0.00	-0.66	3.10	--	--	--	--	--	--	--	--	
09/22/94	10.98	11.76	0.00	-0.78	-0.12	--	--	--	--	--	--	--	--	
12/24/94	10.98	11.28	0.00	-0.30	0.48	--	--	--	--	--	--	--	--	
03/25/95	10.98	10.96	0.00	0.02	0.32	--	--	--	--	--	--	--	--	
06/21/95	10.98	11.37	0.00	-0.39	-0.41	--	--	--	--	--	--	--	--	
09/19/95	10.98	11.55	0.00	-0.57	-0.18	--	--	--	--	--	--	--	--	
12/19/95	10.98	11.45	0.00	-0.47	0.10	--	--	--	--	--	--	--	--	
03/18/96	10.98	11.10	0.00	-0.12	0.35	--	--	--	--	--	--	--	--	
06/27/96	10.98	11.16	0.00	-0.18	-0.06	440	--	49	50	51	140	50	--	
09/26/96	10.98	11.55	0.00	-0.57	-0.39	--	--	--	--	--	--	--	--	
12/09/96	10.98	10.12	0.00	0.86	1.43	--	--	--	--	--	--	29	--	
03/14/97	10.98	10.87	0.00	0.11	-0.75	--	--	--	--	--	--	--	--	
06/30/97	10.98	11.08	0.00	-0.10	-0.21	--	--	--	--	--	--	--	--	
09/19/97	10.98	11.05	0.00	-0.07	0.03	--	--	--	--	--	--	--	--	
12/12/97	10.98	10.58	0.00	0.40	0.47	--	--	--	--	--	--	--	--	
03/03/98	10.98	9.84	0.00	1.14	0.74	--	--	--	--	--	--	--	--	
06/15/98	10.98	10.56	0.00	0.42	-0.72	--	--	--	--	--	--	--	--	



Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-3 continued														
09/30/98	10.98	11.12	0.00	-0.14	-0.56	--	--	--	--	--	--	--	--	--
12/28/98	10.98	10.96	0.00	0.02	0.16	--	--	--	--	--	--	--	--	--
03/22/99	10.98	9.46	0.00	1.52	1.50	--	--	--	--	--	--	--	--	--
06/09/99	10.98	11.01	0.00	-0.03	-1.55	--	--	--	--	--	--	--	--	--
09/08/99	10.98	11.31	0.00	-0.33	-0.30	--	--	--	--	--	--	--	--	--
12/07/99	10.98	11.26	0.00	-0.28	0.05	--	--	--	--	--	--	--	--	--
03/13/00	10.98	8.28	0.00	2.70	2.98	--	--	--	--	--	--	--	--	--
06/21/00	10.98	11.12	0.00	-0.14	-2.84	--	--	--	--	--	--	--	--	--
09/27/00	10.98	11.07	0.00	-0.09	0.05	--	--	--	--	--	--	--	--	--
12/12/00	10.98	10.94	0.00	0.04	0.13	--	--	--	--	--	--	--	--	--
03/07/01	10.98	8.32	0.00	2.66	2.62	--	--	--	--	--	--	--	--	--
06/06/01	10.98	10.94	0.00	0.04	-2.62	--	--	--	--	--	--	--	--	--
09/24/01	10.98	11.03	0.00	-0.05	-0.09	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.50	--	--
12/10/01	10.98	8.16	0.00	2.82	2.87	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.50	--	--
03/11/02	10.98	7.82	0.00	3.16	0.34	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	--
06/04/02	10.98	10.58	0.00	0.40	-2.76	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.50	--	--
09/03/02	10.98	10.94	0.00	0.04	-0.36	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.50	--	--
12/03/02	10.98	10.66	0.00	0.32	0.28	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
03/04/03	10.98	10.76	0.00	0.22	-0.10	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
06/18/03	10.98	10.26	0.00	0.72	0.50	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
09/24/03	10.98	10.88	0.00	0.10	-0.62	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
12/02/03	10.98	11.00	0.00	-0.02	-0.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	--
03/30/04	10.98	10.64	0.00	0.34	0.36	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
06/07/04	10.98	11.00	0.00	-0.02	-0.36	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	--
U-4 (Screen Interval in feet: 5.0-20.0)														
06/22/94	11.15	10.16	0.00	0.99	--	--	--	--	--	--	--	--	--	--
09/22/94	11.15	10.79	0.00	0.36	-0.63	--	--	0.78	1.3	--	1.4	--	--	--
12/24/94	11.15	9.81	0.00	1.34	0.98	--	--	--	--	--	--	--	--	--
03/25/95	11.15	9.51	0.00	1.64	0.30	--	--	--	--	--	--	--	--	--

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-4 continued														
06/21/95	11.15	9.54	0.00	1.61	-0.03	--	--	--	--	--	--	--	--	
09/19/95	11.15	10.17	0.00	0.98	-0.63	--	--	--	--	--	--	--	--	
12/19/95	11.15	9.98	0.00	1.17	0.19	--	--	--	--	--	--	--	--	
03/18/96	11.15	9.66	0.00	1.49	0.32	--	--	--	--	--	--	--	--	
06/27/96	11.15	9.74	0.00	1.41	-0.08	--	--	--	--	--	--	--	--	
09/26/96	11.15	10.14	0.00	1.01	-0.40	--	--	--	--	--	--	--	--	
12/09/96	11.15	8.67	0.00	2.48	1.47	--	--	--	--	--	--	33	--	
03/14/97	11.15	9.35	0.00	1.80	-0.68	--	--	--	--	--	--	--	--	
06/30/97	11.15	9.89	0.00	1.26	-0.54	--	--	--	--	--	--	--	--	
09/19/97	11.15	9.96	0.00	1.19	-0.07	--	--	--	--	--	--	--	--	
12/12/97	11.15	8.56	0.00	2.59	1.40	--	--	--	--	--	--	--	--	
03/03/98	11.15	7.85	0.00	3.30	0.71	--	--	--	--	--	--	--	--	
06/15/98	11.15	9.08	0.00	2.07	-1.23	--	--	--	--	--	--	--	--	
09/30/98	11.15	9.75	0.00	1.40	-0.67	--	--	--	--	--	--	--	--	
12/28/98	11.15	9.59	0.00	1.56	0.16	--	--	--	--	--	--	--	--	
03/22/99	11.15	8.34	0.00	2.81	1.25	--	--	--	--	--	--	--	--	
06/09/99	11.15	9.39	0.00	1.76	-1.05	--	--	--	--	--	--	--	--	
09/08/99	11.15	9.90	0.00	1.25	-0.51	--	--	--	--	--	--	--	--	
12/07/99	11.15	10.05	0.00	1.10	-0.15	--	--	--	--	--	--	--	--	
03/13/00	11.15	7.24	0.00	3.91	2.81	--	--	--	--	--	--	--	--	
06/21/00	11.15	9.48	0.00	1.67	-2.24	--	--	--	--	--	--	--	--	
09/27/00	11.15	9.42	0.00	1.73	0.06	--	--	--	--	--	--	--	--	
12/12/00	11.15	9.50	0.00	1.65	-0.08	--	--	--	--	--	--	--	--	
03/07/01	11.15	6.88	0.00	4.27	2.62	--	--	--	--	--	--	--	--	
06/06/01	11.15	9.18	0.00	1.97	-2.30	--	--	--	--	--	--	--	--	
09/24/01	11.15	9.21	0.00	1.94	-0.03	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.50	--	
12/10/01	11.15	7.32	0.00	3.83	1.89	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.50	--	
03/11/02	11.15	6.92	0.00	4.23	0.40	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
06/04/02	11.15	7.58	0.00	3.57	-0.66	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.50	--	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
<b>U-4 continued</b>														
09/03/02	11.15	9.17	0.00	1.98	-1.59	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.50	--	
12/03/02	11.15	9.20	0.00	1.95	-0.03	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
03/04/03	11.15	9.32	0.00	1.83	-0.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
06/18/03	11.15	7.65	0.00	3.50	1.67	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
09/24/03	11.15	8.26	0.00	2.89	-0.61	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
12/02/03	11.15	9.16	0.00	1.99	-0.90	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
03/30/04	11.15	7.47	0.00	3.68	1.69	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
06/07/04	11.15	8.93	0.00	2.22	-1.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
<b>U-5 (Screen Interval in feet: 5.0-20.0)</b>														
06/22/94	6.98	6.83	0.00	0.15	--	210	--	7.10	13	4.50	26	--	--	
09/22/94	6.98	6.90	0.00	0.08	-0.07	170	--	8.40	10	8.50	18	--	--	
12/24/94	6.98	6.43	0.00	0.55	0.47	8700	--	560	70	670	430	--	--	
03/25/95	6.98	6.35	0.00	0.63	0.08	44000	--	390	960	1500	7600	--	--	
06/21/95	6.98	7.11	0.00	-0.13	-0.76	400	--	2.3	--	9.10	3.50	--	--	
09/19/95	6.98	6.99	0.00	-0.01	0.12	850	--	14	7.10	13	66	--	--	
12/19/95	6.98	7.17	0.00	-0.19	-0.18	--	--	--	--	--	--	--	--	
03/18/96	6.98	6.65	0.00	0.33	0.52	100	--	0.67	0.50	0.51	5.40	--	--	
06/27/96	6.98	6.49	0.00	0.49	0.16	16000	--	280	150	1400	4600	530	--	
09/26/96	6.98	7.13	0.00	-0.15	-0.64	--	--	--	0.57	--	0.96	--	--	
12/09/96	6.98	5.90	0.00	1.08	1.23	1300	--	29	46	--	140	97	--	
03/14/97	6.98	6.99	0.00	-0.01	-1.09	--	--	--	--	--	--	14	--	
06/30/97	6.98	7.08	0.00	-0.10	-0.09	4200	--	74	51	180	980	270	--	
09/19/97	6.98	6.78	0.00	0.20	0.30	6300	--	160	13	370	1000	480	--	
12/12/97	6.98	6.94	0.00	0.04	-0.16	60	--	1.30	--	1.60	2.10	47	--	
03/03/98	6.98	6.50	0.00	0.48	0.44	1700	--	29	--	150	190	330	--	
06/15/98	6.98	6.85	0.00	0.13	-0.35	1500	--	32	--	91	83	330	--	
09/30/98	6.98	7.31	0.00	-0.33	-0.46	1700	--	44	--	39	150	60	--	
12/28/98	6.98	7.25	0.00	-0.27	0.06	1400	--	59	--	13	27	150	--	
03/22/99	6.98	6.86	0.00	0.12	0.39	780	--	8.90	--	0.76	4.5	350	--	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-5 continued														
06/09/99	6.98	7.28	0.00	-0.30	-0.42	1000	--	--	--	10	35	280	350	
09/08/99	6.98	7.52	0.00	-0.54	-0.24	2620	--	26.20	--	32.20	157	280	239	
12/07/99	6.98	7.67	0.00	-0.69	-0.15	949	--	9.26	--	11.20	22.70	235	301	
03/13/00	6.98	6.73	0.00	0.25	0.94	880	--	12	1.0	5.60	8.70	46	37	
06/21/00	6.98	7.39	0.00	-0.41	-0.66	700	--	4.0	--	0.99	4.0	120	140	
09/27/00	6.98	7.45	0.00	-0.47	-0.06	400	--	1.9	--	--	1.50	160	250	
12/12/00	6.98	7.68	0.00	-0.70	-0.23	770	--	3.20	--	--	--	27	13	
03/07/01	6.98	6.83	0.00	0.15	0.85	623	--	5.15	--	--	0.669	35.70	43.4	
06/06/01	6.98	7.42	0.00	-0.44	-0.59	110	--	--	--	--	--	--	--	
09/24/01	6.98	7.50	0.00	-0.52	-0.08	270	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	40	42	
12/10/01	6.98	6.65	0.00	0.33	0.85	420	--	13	0.60	0.66	ND<0.50	ND<2.50	--	
03/11/02	6.98	7.00	0.00	-0.02	-0.35	260	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	42	47	
06/04/02	6.98	6.71	0.00	0.27	0.29	170	--	ND<0.50	0.77	0.87	0.69	29	--	
09/03/02	6.98	7.47	0.00	-0.49	-0.76	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	37	53	
12/03/02	6.98	6.64	0.00	0.34	0.83	--	320	ND<0.50	ND<0.50	5.70	ND<1.0	--	11	
03/04/03	6.98	6.75	0.00	0.23	-0.11	--	100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	44	
06/18/03	6.98	6.25	0.00	0.73	0.50	--	51	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	36	
09/24/03	6.98	6.86	0.00	0.12	-0.61	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
12/02/03	6.98	7.12	0.00	-0.14	-0.26	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	24	
03/30/04	6.98	6.88	0.00	0.10	0.24	--	100	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	130	
06/07/04	6.98	8.53	0.00	-1.55	-1.65	--	250	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	160	
U-6 (Screen Interval in feet: 5.0-24.0)														
06/22/94	7.14	7.14	0.00	0.00	--	--	--	--	--	--	--	--	--	
09/22/94	7.14	7.34	0.00	-0.20	-0.20	130	--	1.30	0.80	--	0.73	--	--	
12/24/94	7.14	6.67	0.00	0.47	0.67	6900	--	500	59	600	380	--	--	
03/25/95	7.14	6.29	0.00	0.85	0.38	47000	--	450	1300	1700	8200	--	--	
06/21/95	7.14	7.60	0.00	-0.46	-1.31	--	--	--	--	--	--	--	--	
09/19/95	7.14	7.70	0.00	-0.56	-0.10	--	--	--	--	--	--	--	--	
12/19/95	7.14	7.75	0.00	-0.61	-0.05	210	--	2.50	1.0	2.90	17	--	--	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-6 continued														
03/18/96	7.14	6.86	0.00	0.28	0.89	--	--	--	--	--	--	--	--	
06/27/96	7.14	6.52	0.00	0.62	0.34	--	--	--	--	--	--	510	--	
09/26/96	7.14	7.62	0.00	-0.48	-1.10	--	--	--	--	--	--	1400	--	
12/09/96	7.14	5.88	0.00	1.26	1.74	1200	--	29	48	6.40	140	58	--	
03/14/97	7.14	7.30	0.00	-0.16	-1.42	--	--	--	--	--	--	1500	--	
06/30/97	7.14	7.35	0.00	-0.21	-0.05	--	--	--	--	--	--	990	--	
09/19/97	7.14	7.25	0.00	-0.11	0.10	--	--	--	--	--	--	1400	--	
12/12/97	7.14	7.29	0.00	-0.15	-0.04	--	--	--	--	--	--	680	--	
03/03/98	7.14	7.00	0.00	0.14	0.29	--	--	--	--	--	--	1600	--	
06/15/98	7.14	7.18	0.00	-0.04	-0.18	--	--	--	--	--	--	1000	--	
09/30/98	7.14	7.90	0.00	-0.76	-0.72	--	--	--	--	--	--	1200	--	
12/28/98	7.14	7.79	0.00	-0.65	0.11	--	--	--	--	--	--	730	--	
03/22/99	7.14	7.47	0.00	-0.33	0.32	--	--	--	--	--	--	1800	--	
06/09/99	7.14	7.73	0.00	-0.59	-0.26	--	--	--	--	--	--	1000	850	
09/08/99	7.14	7.95	0.00	-0.81	-0.22	--	--	--	--	--	--	851	1040	
12/07/99	7.14	8.10	0.00	-0.96	-0.15	--	--	--	--	--	--	1140	1150	
03/13/00	7.14	6.95	0.00	0.19	1.15	--	--	--	--	--	--	560	670	
06/21/00	7.14	7.84	0.00	-0.70	-0.89	--	--	--	--	--	--	400	590	
09/27/00	7.14	7.68	0.00	-0.54	0.16	--	--	--	--	--	--	2500	2800	
12/12/00	7.14	7.74	0.00	-0.60	-0.06	--	--	--	--	--	--	590	580	
06/06/01	7.14	7.80	0.00	-0.66	--	--	--	--	--	--	--	250	330	
09/24/01	7.14	7.82	0.00	-0.68	-0.02	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	530	660	
12/10/01	7.14	7.15	0.00	-0.01	0.67	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	220	220	
03/11/02	7.14	7.32	0.00	-0.18	-0.17	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	720	760	
06/04/02	7.14	7.18	0.00	-0.04	0.14	250	--	ND<1.0	ND<1.0	ND<1.0	ND<1.0	470	470	
09/03/02	7.14	7.72	0.00	-0.58	-0.54	420	--	ND<2.50	ND<2.50	ND<2.50	4.70	860	1200	
12/03/02	7.14	6.92	0.00	0.22	0.80	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	870	
03/04/03	7.14	7.01	0.00	0.13	-0.09	--	2300	ND<10	ND<10	ND<10	ND<20	--	2700	
06/18/03	7.14	6.60	0.00	0.54	0.41	--	1300	ND<10	ND<10	ND<10	ND<20	--	1700	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground- water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
U-6 continued														
09/24/03	7.14	7.24	0.00	-0.10	-0.64	--	ND<10000	ND<100	ND<100	ND<100	ND<200	--	1500	
12/02/03	7.14	7.80	0.00	-0.66	-0.56	--	1300	ND<10	ND<10	ND<10	ND<20	--	1800	
03/30/04	7.14	7.32	0.00	-0.18	0.48	--	1200	ND<10	ND<10	ND<10	ND<20	--	1700	
06/07/04	7.14	9.35	0.00	-2.21	-2.03	--	1700	ND<10	ND<10	ND<10	ND<20	--	1800	

**Table 3**  
**SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS**  
**76 Station 5325**

Date Sampled	EDC (µg/l)	EDB (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	NO3 (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Fe+2 (mg/l)	ORP (mV)	Acenaphthylene (µg/l)	Phosphate (mg/l)	Ethanol 8260B (µg/l)	1,2 DCE (µg/l)
<b>U-1</b>															
06/15/98	--	--	--	--	--	--	--	--	--	39	382	--	--	--	--
09/30/98	--	--	--	--	--	--	--	--	--	17	366	--	--	--	--
12/28/98	--	--	--	--	6.30	--	--	--	--	4.30	298	--	28	--	--
03/22/99	--	--	--	--	--	--	--	--	--	4.90	320	--	3.50	--	--
06/09/99	--	--	--	--	--	--	--	--	--	1.20	260	--	--	--	--
09/08/99	--	--	--	--	--	--	--	--	--	1.80	85	--	--	--	--
12/07/99	--	--	1.36	--	--	--	--	--	--	5.70	404	--	17	--	--
03/13/00	--	--	--	--	0.18	--	--	--	--	8.0	262	--	--	--	--
06/21/00	--	--	1.53	--	--	--	--	--	--	9.30	148	--	--	--	--
09/27/00	--	--	1.63	--	--	--	--	--	--	2.80	119	--	18.40	--	--
12/12/00	--	--	1.48	--	--	--	--	--	--	0.49	131	--	16	--	--
03/07/01	--	--	1.91	--	2.64	--	--	--	--	0.48	125	--	6.89	--	--
06/06/01	--	--	1.77	--	--	--	--	--	--	1.04	141	--	2.70	--	--
09/24/01	--	ND<1000	1.64	--	0.45	ND<1000	ND<20000	ND<1000	ND<1000	ND<0.10	125	--	--	ND<400000	ND<1000
12/10/01	--	ND<100	1.82	--	ND<0.50	ND<100	ND<4000	ND<100	ND<100	14	141	--	2.20	ND<8000	ND<100
03/11/02	--	ND<100	2.21	--	ND<0.50	ND<100	ND<5000	ND<100	ND<100	15	132	--	0.11	ND<25000	ND<100
06/04/02	--	--	1.88	--	ND<0.50	--	--	--	--	ND<0.50	117	--	ND<0.10	--	--
09/03/02	--	ND<200	1.62	--	ND<0.50	ND<200	ND<10000	ND<200	ND<200	ND<0.50	94	--	ND<0.10	ND<50000	ND<200
12/03/02	--	ND<200	1.71	--	ND<1.0	ND<200	ND<10000	ND<200	ND<200	9.60	72	--	ND<1.0	ND<50000	ND<200
03/04/03	--	ND<100	0.30	--	ND<1.0	ND<100	ND<5000	ND<100	ND<100	36	-125	--	ND<1.0	ND<25000	ND<100
06/18/03	--	ND<100	--	1.70	ND<1.0	ND<100	ND<5000	ND<100	ND<100	16	-48	--	ND<1.0	ND<25000	ND<100
09/24/03	--	ND<400	--	--	18	ND<400	ND<20000	ND<400	ND<400	15	-36	--	ND<1.0	ND<100000	ND<400
12/02/03	--	--	--	--	--	--	--	--	--	4.0	--	--	--	ND<100000	--
03/30/04	ND<100	ND<100	--	--	ND<1.0	ND<100	3100	ND<200	ND<100	12	--	--	ND<1.0	ND<10000	--
06/07/04	ND<100	ND<100	--	--	ND<0.50	ND<100	3300	ND<200	ND<100	0.66	--	--	6.8	ND<10000	--

U-2

Date Sampled	EDC (µg/l)	EDB (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	NO3 (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Fe+2 (mg/l)	ORP (mV)	Acenaphthylene (µg/l)	Phosphate (mg/l)	Ethanol 8260B (µg/l)	1,2 DCE (µg/l)
U-2 continued															
03/03/98	--	--	--	--	--	--	--	--	--	25	369	--	--	--	--
06/15/98	--	--	--	--	--	--	--	--	--	42	341	--	--	--	--
09/30/98	--	--	--	--	--	--	--	--	--	25	354	--	--	--	--
12/28/98	--	--	--	--	--	--	--	--	--	28	276	--	--	--	--
03/22/99	--	--	--	--	--	--	--	--	--	0.68	320	--	2.30	--	--
06/09/99	--	--	--	--	--	--	--	--	--	0.50	290	--	--	--	--
09/08/99	--	--	--	--	--	--	--	--	--	1.90	235	--	--	--	--
12/07/99	--	--	2.28	--	--	--	--	--	--	0.25	389	--	--	--	--
03/13/00	--	--	--	--	0.31	--	--	--	--	4.30	184	--	--	--	--
06/21/00	--	--	1.96	--	--	--	--	--	--	0.26	136	--	--	--	--
09/27/00	--	--	2.12	--	--	--	--	--	--	0.64	142	--	10.50	--	--
12/12/00	--	--	2.35	--	--	--	--	--	--	2.70	155	--	--	--	--
03/07/01	--	--	2.21	--	2.24	--	--	--	--	0.68	148	--	3.02	--	--
06/06/01	--	--	2.67	--	--	--	--	--	--	0.80	163	--	2.80	--	--
09/24/01	--	ND<1000	2.10	--	0.49	ND<1000	ND<20000	ND<1000	ND<1000	ND<0.10	151	--	--	ND<400000	ND<1000
12/10/01	--	ND<50	2.81	--	ND<0.50	ND<50	ND<2000	ND<50	ND<50	ND<0.10	171	--	0.20	ND<4000	ND<50
03/11/02	--	ND<200	2.77	--	ND<0.50	ND<200	ND<10000	ND<200	ND<200	ND<0.10	156	--	0.65	ND<50000	ND<200
06/04/02	--	--	3.14	--	ND<0.50	--	--	--	--	ND<0.10	144	--	ND<0.10	--	--
09/03/02	--	ND<1000	2.85	--	ND<0.50	ND<1000	ND<50000	ND<1000	ND<1000	ND<0.25	151	--	0.26	ND<250000	ND<1000
12/03/02	--	ND<200	1.97	--	ND<1.0	ND<200	ND<10000	ND<200	ND<200	9.90	94	--	ND<1.0	ND<50000	ND<200
03/04/03	--	ND<200	0.40	--	ND<1.0	ND<200	ND<10000	ND<200	ND<200	8.60	-147	--	ND<1.0	ND<50000	ND<200
06/18/03	--	ND<200	--	3.20	ND<1.0	ND<200	ND<10000	ND<200	ND<200	5.50	-8	--	3.1	ND<50000	ND<200
09/24/03	--	ND<400	--	--	ND<1.0	ND<400	ND<20000	ND<400	ND<400	14	-10	--	ND<1.0	ND<100000	ND<400
12/02/03	--	--	--	--	--	--	--	--	--	2.7	--	--	--	ND<100000	--
03/30/04	ND<100	ND<100	--	--	ND<1.0	ND<100	2400	ND<200	ND<100	ND<0.20	--	--	2.9	ND<10000	--
06/07/04	ND<100	ND<100	--	--	ND<0.50	ND<100	2600	ND<200	ND<100	0.21	--	--	2.4	ND<10000	--
U-3															
06/30/97	--	--	4.10	--	21	--	--	--	--	1.40	190	--	0.86	--	--
09/19/97	--	--	4.20	--	19	--	--	--	--	0.57	75	--	--	--	--



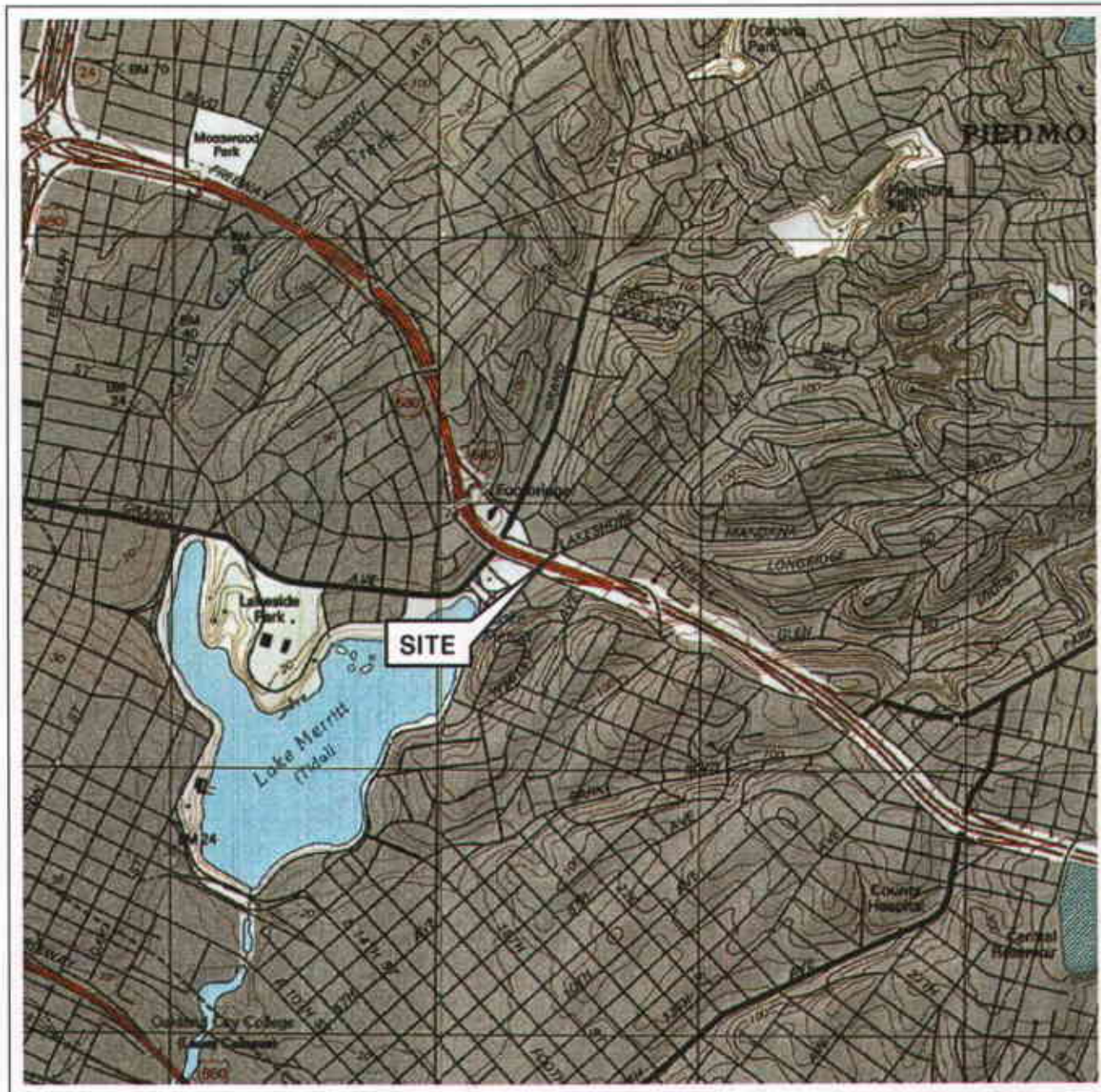
Date Sampled	EDC (µg/l)	EDB (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	NO3 (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Fe+2 (mg/l)	ORP (mV)	Acenaphthylene (µg/l)	Phosphate (mg/l)	Ethanol 8260B (µg/l)	1,2 DCE (µg/l)
U-3 continued															
12/12/97	--	--	2.97	--	23	--	--	--	--	1.90	390	--	0.85	--	--
03/03/98	--	--	2.63	--	36	--	--	--	--	0.013	358	--	--	--	--
06/15/98	--	--	2.93	--	33	--	--	--	--	0.16	318	--	--	--	--
09/30/98	--	--	3.11	--	31	--	--	--	--	0.040	295	--	--	--	--
12/28/98	--	--	3.59	--	29	--	--	--	--	--	281	--	--	--	--
03/22/99	--	--	4.02	--	30	--	--	--	--	0.015	310	--	0.14	--	--
06/09/99	--	--	3.70	--	26	--	--	--	--	--	350	--	1.20	--	--
09/08/99	--	--	3.96	--	32.90	--	--	--	--	--	417	--	--	--	--
12/07/99	--	--	4.21	--	27.90	--	--	--	--	0.0520	437	--	--	--	--
03/13/00	--	--	--	--	33	--	--	--	--	0.15	307	--	--	--	--
06/21/00	--	--	4.27	--	32	--	--	--	--	0.20	225	--	--	--	--
09/27/00	--	--	4.67	--	34	--	--	--	--	--	211	307	15.70	--	--
12/12/00	--	--	4.79	--	31	--	--	--	--	--	246	--	--	--	--
03/07/01	--	--	5.16	--	36.5	--	--	--	--	--	251	--	0.443	--	--
06/06/01	--	--	4.79	--	8.0	--	--	--	--	--	214	--	0.18	--	--
09/24/01	--	--	4.27	--	23.0	--	--	--	--	ND<0.10	198	--	--	--	--
12/10/01	--	--	4.66	--	21	--	--	--	--	ND<0.10	188	--	0.11	--	--
03/11/02	--	--	5.06	--	30	--	--	--	--	ND<0.10	166	--	0.14	--	--
06/04/02	--	--	5.79	--	18	--	--	--	--	ND<0.10	151	--	ND<0.10	--	--
09/03/02	--	--	6.04	--	28	--	--	--	--	ND<0.10	143	--	ND<0.10	--	--
12/03/02	--	--	5.58	--	20	--	--	--	--	ND<0.20	154	--	ND<1.0	--	--
03/04/03	--	--	0.20	--	18	--	--	--	--	ND<0.20	-136	--	ND<1.0	--	--
06/18/03	--	--	--	3.50	17	--	--	--	--	ND<0.20	333	--	ND<1.0	--	--
09/24/03	--	--	--	--	18	--	--	--	--	ND<0.20	-50	--	1.4	ND<500	--
12/02/03	--	--	--	--	--	--	--	--	--	ND<0.20	--	--	--	ND<500	--
03/30/04	--	--	--	--	16	--	--	--	--	ND<0.20	--	--	ND<1.0	ND<50	--
06/07/04	--	--	--	--	17	--	--	--	--	ND<0.20	--	--	ND<0.20	ND<50	--
U-4															
06/30/97	--	--	5.40	--	35	--	--	--	--	0.13	200	--	0.52	--	--

Date Sampled	EDC (µg/l)	EDB (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	NO3 (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Fe+2 (mg/l)	ORP (mV)	Acenaph- thylene (µg/l)	Phosphate (mg/l)	Ethanol 8260B (µg/l)	1,2 DCE (µg/l)
U-4 continued															
09/19/97	--	--	5.10	--	30	--	--	--	--	0.35	45	--	--	--	--
12/12/97	--	--	3.11	--	31	--	--	--	--	0.68	380	--	0.73	--	--
03/03/98	--	--	2.94	--	3.20	--	--	--	--	0.018	284	--	--	--	--
06/15/98	--	--	3.08	--	33	--	--	--	--	0.14	256	--	--	--	--
09/30/98	--	--	4.05	--	31	--	--	--	--	0.049	276	--	--	--	--
12/28/98	--	--	4.57	--	31	--	--	--	--	0.36	280	--	--	--	--
03/22/99	--	--	4.26	--	30	--	--	--	--	--	320	--	0.14	--	--
06/09/99	--	--	3.61	--	35	--	--	--	--	--	340	--	0.91	--	--
09/08/99	--	--	3.75	--	24	--	--	--	--	--	391	--	--	--	--
12/07/99	--	--	4.03	--	27.70	--	--	--	--	--	478	--	--	--	--
03/13/00	--	--	--	--	33	--	--	--	--	--	244	--	--	--	--
06/21/00	--	--	4.89	--	32	--	--	--	--	0.034	248	--	--	--	--
09/27/00	--	--	5.09	--	28	--	--	--	--	--	198	--	--	--	--
12/12/00	--	--	4.86	--	30	--	--	--	--	--	210	--	--	--	--
03/07/01	--	--	4.97	--	33.90	--	--	--	--	--	233	--	0.226	--	--
06/06/01	--	--	5.12	--	7.4	--	--	--	--	--	248	--	0.21	--	--
09/24/01	--	--	4.86	--	24	--	--	--	--	ND<0.10	262	--	--	--	--
12/10/01	--	--	5.05	--	19	--	--	--	--	ND<0.10	242	--	0.1	--	--
03/11/02	--	--	4.83	--	31	--	--	--	--	ND<0.10	195	--	0.14	--	--
06/04/02	--	--	5.58	--	27	--	--	--	--	ND<0.10	169	--	ND<0.10	--	--
09/03/02	--	--	5.94	--	28	--	--	--	--	ND<0.10	126	--	0.27	--	--
12/03/02	--	--	5.82	--	20	--	--	--	--	ND<0.20	133	--	ND<1.0	--	--
03/04/03	--	--	0.30	--	26	--	--	--	--	ND<0.20	-148	--	ND<1.0	--	--
06/18/03	--	--	--	3.60	31	--	--	--	--	ND<0.20	250	--	ND<1.0	--	--
09/24/03	--	--	--	--	17	--	--	--	--	ND<0.20	-24	--	1.5	--	--
12/02/03	--	--	--	--	--	--	--	--	--	ND<0.20	--	--	--	ND<500	--
03/30/04	--	--	--	--	25	--	--	--	--	ND<0.20	--	--	ND<1.0	ND<50	--
06/07/04	--	--	--	--	24	--	--	--	--	ND<0.20	--	--	ND<0.20	ND<50	--

U-5

Date Sampled	EDC (µg/l)	EDB (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	NO3 (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Fe+2 (mg/l)	ORP (mV)	Acenaphthylene (µg/l)	Phosphate (mg/l)	Ethanol 8260B (µg/l)	1,2 DCE (µg/l)
U-5 continued															
06/30/97	--	--	3.40	--	--	--	--	--	--	16	160	--	--	--	--
09/19/97	--	--	0.60	--	--	--	--	--	--	0.22	63	--	--	--	--
12/12/97	--	--	1.75	--	--	--	--	--	--	6.70	400	--	--	--	--
03/03/98	--	--	2.36	--	3.10	--	--	--	--	18	345	--	--	--	--
06/15/98	--	--	2.55	--	--	--	--	--	--	17	333	--	--	--	--
09/30/98	--	--	1.93	--	--	--	--	--	--	17	318	--	--	--	--
12/28/98	--	--	1.64	--	6.60	--	--	--	--	17	305	--	--	--	--
03/22/99	--	--	1.99	--	--	--	--	--	--	0.12	340	--	2.4	--	--
06/09/99	--	--	2.10	--	--	--	--	--	--	0.23	320	--	--	--	--
09/08/99	--	--	2.21	--	--	--	--	--	--	2.10	335	--	--	--	--
12/07/99	--	--	2.66	--	--	--	--	--	--	0.310	408	--	--	--	--
03/13/00	--	--	--	--	0.16	--	--	--	--	0.33	264	--	--	--	--
06/21/00	--	--	3.42	--	--	--	--	--	--	0.15	159	--	--	--	--
09/27/00	--	--	3.85	--	--	--	--	--	--	0.33	136	--	--	--	--
12/12/00	--	--	3.53	--	--	--	--	--	--	0.086	122	--	--	--	--
03/07/01	--	--	2.98	--	3.02	--	--	--	--	1.07	141	--	4.0	--	--
06/06/01	--	--	2.67	--	--	--	--	--	--	--	112	--	1.20	--	--
09/24/01	--	ND<10	3.15	--	0.77	ND<10	ND<200	ND<10	ND<10	ND<0.10	146	--	--	ND<4000	ND<10
12/10/01	--	--	2.85	--	ND<0.50	--	--	--	--	3.70	96	--	2.60	--	--
03/11/02	--	ND<2.0	3.15	--	ND<0.50	ND<2.0	ND<100	ND<2.0	ND<2.0	0.10	108	--	0.52	ND<500	ND<2.0
06/04/02	--	--	3.46	--	ND<0.50	--	--	--	--	ND<0.250	118	--	ND<0.10	--	--
09/03/02	--	ND<2.0	2.85	--	ND<0.50	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<0.250	87	--	ND<0.10	ND<500	ND<2.0
12/03/02	--	ND<2.0	2.71	--	ND<1.0	ND<2.0	ND<100	ND<2.0	ND<2.0	22	104	--	ND<1.0	ND<500	ND<2.0
03/04/03	--	ND<2.0	0.20	--	ND<1.0	ND<2.0	ND<100	ND<2.0	ND<2.0	19	166	--	ND<1.0	ND<500	ND<2.0
06/18/03	--	ND<2.0	--	2.40	ND<1.0	ND<2.0	ND<100	ND<2.0	ND<2.0	11	-10	--	ND<1.0	ND<500	ND<2.0
09/24/03	--	--	--	--	18	--	--	--	--	ND<0.20	-28	--	1.8	--	--
12/02/03	--	--	--	--	--	--	--	--	--	9.4	--	--	--	ND<500	--
03/30/04	ND<0.50	ND<0.50	--	--	ND<1.0	ND<0.50	52	ND<1.0	ND<0.50	5.9	--	--	ND<1.0	ND<50	--
06/07/04	ND<0.5	ND<0.5	--	--	ND<0.50	ND<0.5	69	ND<1.0	ND<0.5	3.8	--	--	ND<0.20	ND<50	--

Date Sampled	EDC (µg/l)	EDB (µg/l)	Pre-Purge DO (mg/l)	Post Purge DO (mg/l)	NO3 (mg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Fe+2 (mg/l)	ORP (mV)	Acenaphthylene (µg/l)	Phosphate (mg/l)	Ethanol 8260B (µg/l)	1,2 DCE (µg/l)
<b>U-6</b>															
06/30/97	--	--	0.30	--	0.80	--	--	--	--	88	190	--	--	--	--
09/19/97	--	--	0.60	--	1.80	--	--	--	--	2.90	--	--	--	--	--
12/12/97	--	--	2.70	--	--	--	--	--	--	51	380	--	--	--	--
03/03/98	--	--	2.18	--	3.50	--	--	--	--	60	327	--	--	--	--
06/15/98	--	--	2.48	--	4.80	--	--	--	--	590	315	--	--	--	--
09/30/98	--	--	3.06	--	--	--	--	--	--	33	345	--	--	--	--
12/28/98	--	--	3.42	--	7.20	--	--	--	--	83	297	--	--	--	--
03/22/99	--	--	3.88	--	--	--	--	--	--	2.10	330	--	0.98	--	--
06/09/99	--	--	3.29	--	0.20	--	--	--	--	0.47	320	--	--	--	--
09/08/99	--	--	3.12	--	5.59	--	--	--	--	0.140	305	--	--	--	--
12/07/99	--	--	3.44	--	--	--	--	--	--	0.260	443	--	--	--	--
03/13/00	--	--	--	--	0.26	--	--	--	--	0.79	222	--	--	--	--
06/21/00	--	--	3.27	--	--	--	--	--	--	1.90	159	--	--	--	--
09/27/00	--	--	3.49	--	--	--	--	--	--	2.60	170	--	--	--	--
12/12/00	--	--	3.06	--	2.70	--	--	--	--	--	128	--	--	--	--
06/06/01	--	--	2.46	--	0.15	--	--	--	--	0.474	97	--	0.70	--	--
09/24/01	--	ND<100	3.10	--	0.58	ND<100	ND<2000	ND<100	ND<100	ND<0.10	123	--	--	ND<40000	ND<100
12/10/01	--	ND<5.0	2.57	--	0.50	ND<5.0	ND<200	ND<5.0	ND<5.0	0.99	112	--	2.0	ND<400	ND<5.0
03/11/02	--	ND<8.0	3.03	--	ND<0.50	ND<8.0	ND<400	ND<8.0	ND<8.0	1.20	128	--	0.089	ND<2000	ND<8.0
06/04/02	--	--	2.84	--	ND<0.50	--	--	--	--	ND<0.10	97	--	ND<1.0	--	--
09/03/02	--	ND<40	3.12	--	0.58	ND<40	ND<2000	ND<40	ND<40	ND<0.10	110	--	1.10	ND<10000	ND<40
12/03/02	--	ND<20	2.96	--	ND<1.0	ND<20	ND<1000	ND<20	ND<20	1.20	95	--	2.60	ND<5000	ND<20
03/04/03	--	ND<40	0.30	--	ND<1.0	ND<40	ND<2000	ND<40	ND<40	20	-112	--	ND<1.0	ND<10000	ND<40
06/18/03	--	ND<40	--	3.20	ND<1.0	ND<40	ND<2000	ND<40	ND<40	3.20	-15	--	2.0	ND<10000	ND<40
09/24/03	--	ND<400	--	--	ND<1.0	ND<400	ND<20000	ND<400	ND<400	1.4	-12	--	4.6	ND<100000	ND<400
12/02/03	--	--	--	--	--	--	--	--	--	1.4	--	--	--	ND<10000	--
03/30/04	ND<10	ND<10	--	--	ND<1.0	ND<10	770	ND<20	ND<10	2.6	--	--	ND<1.0	ND<1000	--
06/07/04	ND<10	ND<10	--	--	0.8	ND<10	110	ND<20	ND<10	2.1	--	--	ND<0.20	ND<1000	--



SCALE 1:24,000



QUADRANGLE LOCATION

**VICINITY MAP**

76 Station 5325  
3220 Lakeshore Avenue  
Oakland, California

**SOURCE:**

United States Geological Survey  
7.5 Minute Topographic Map:  
Oakland West Quadrangle

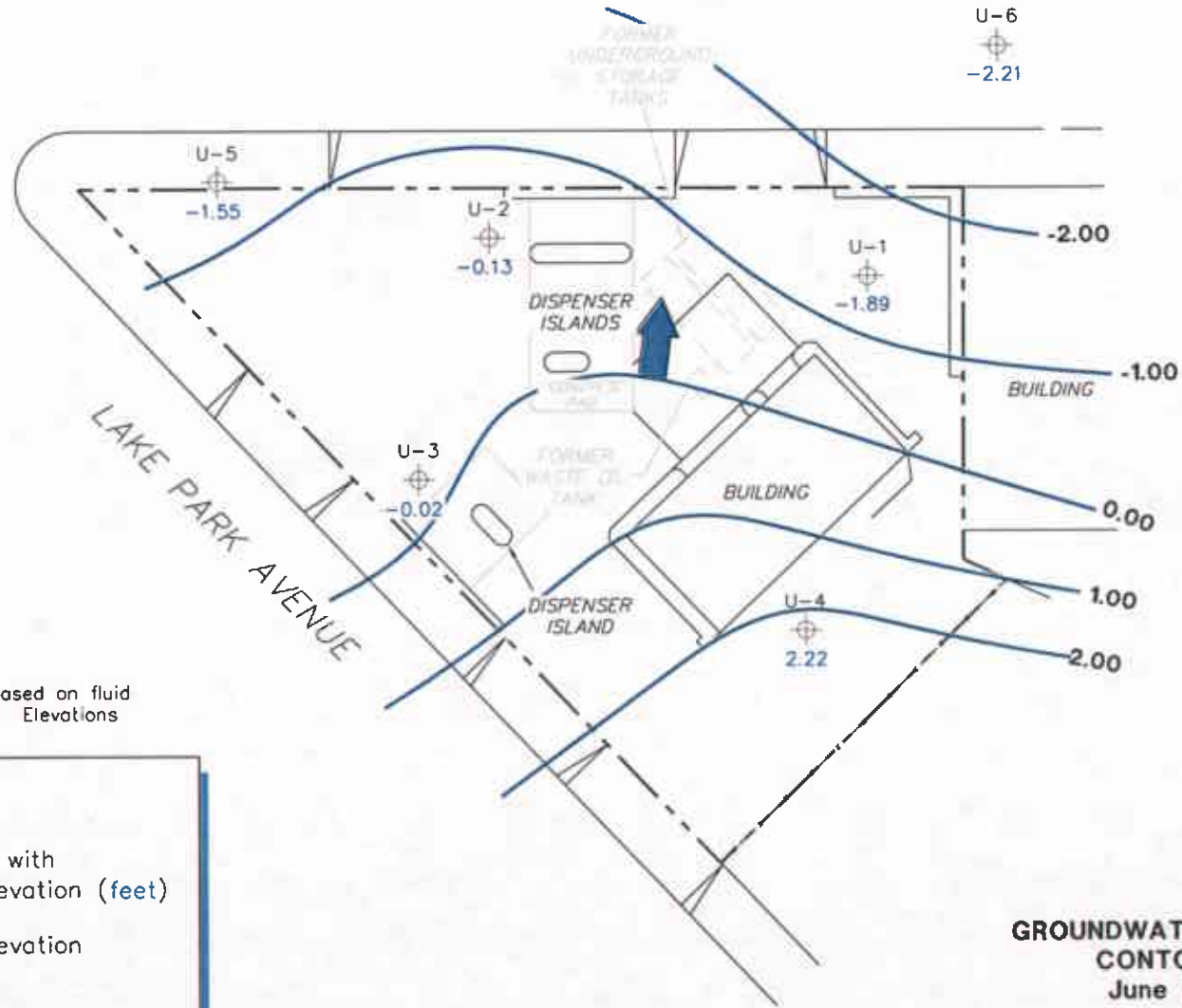
**FIGURE 1**

**TRC**

PS = 1:1

LAKESHORE AVENUE


U-6  
-2.21





**NOTES:**

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

**LEGEND**

U-6  Monitoring Well with Groundwater Elevation (feet)

2.00  Groundwater Elevation Contour

 General Direction of Groundwater Flow

**GROUNDWATER ELEVATION  
CONTOUR MAP  
June 7, 2004**

76 Station 5325  
3220 Lakeshore Avenue  
Oakland, California

SCALE (FEET)

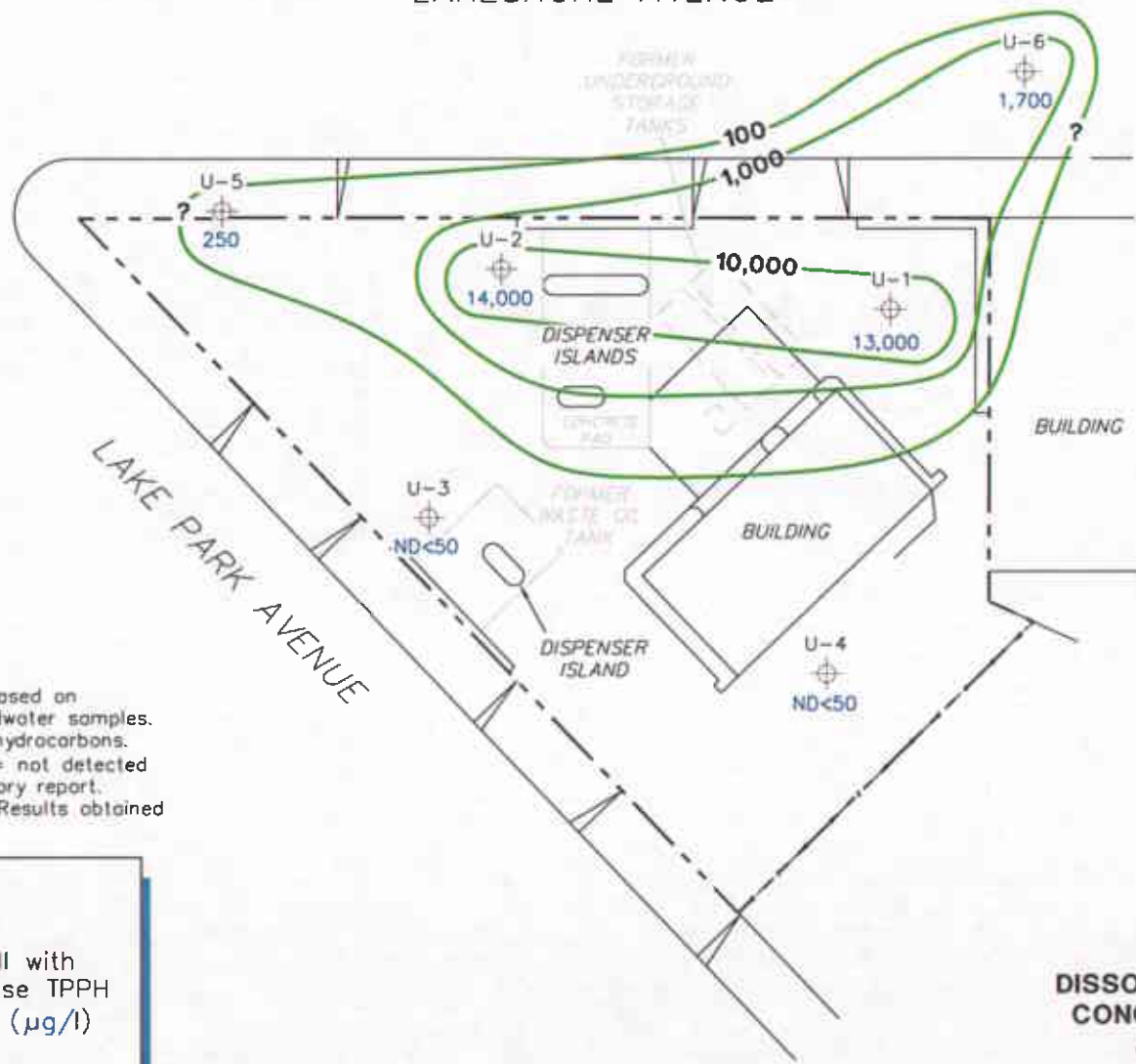


**FIGURE 2**

PS=1:1 5325-003



LAKESHORE AVENUE



**NOTES:**

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

**LEGEND**

- U-6 ⊕ Monitoring Well with Dissolved-Phase TPPH Concentration (µg/l)
- 10,000- Dissolved-Phase TPPH Contour (µg/l)

**DISSOLVED-PHASE TPPH  
CONCENTRATION MAP  
June 7, 2004**

76 Station 5325  
3220 Lakeshore Avenue  
Oakland, California

**FIGURE 3**

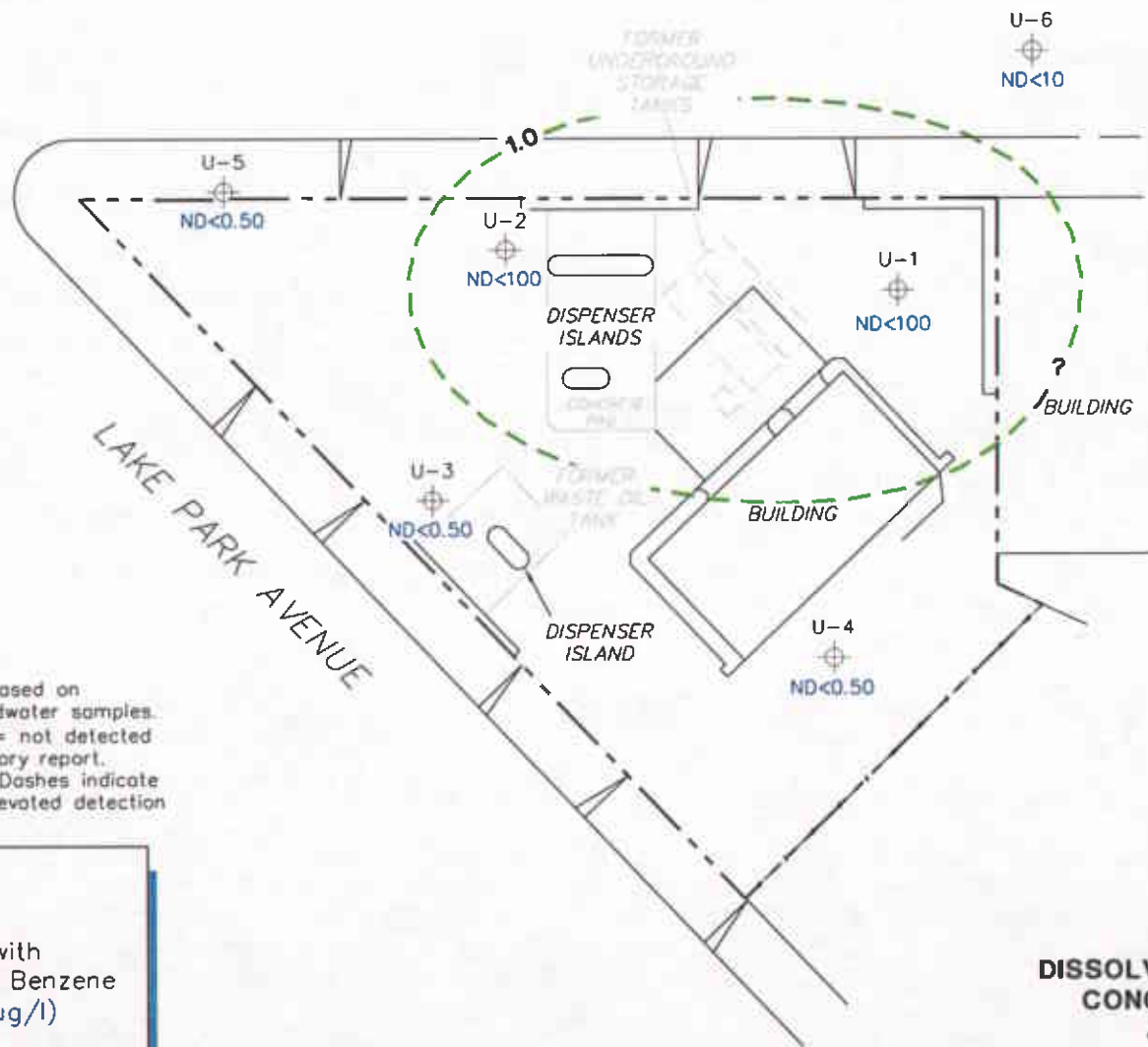
SCALE (FEET)



PS=1:1 5325-003





LAKESHORE AVENUE



**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Dashes indicate contour based on non-detect at elevated detection limit.

**LEGEND**

- U-6  Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)
-  1.0 Dissolved-Phase Benzene Contour (µg/l)

**DISSOLVED-PHASE BENZENE  
CONCENTRATION MAP**  
June 7, 2004

76 Station 5325  
3220 Lakeshore Avenue  
Oakland, California



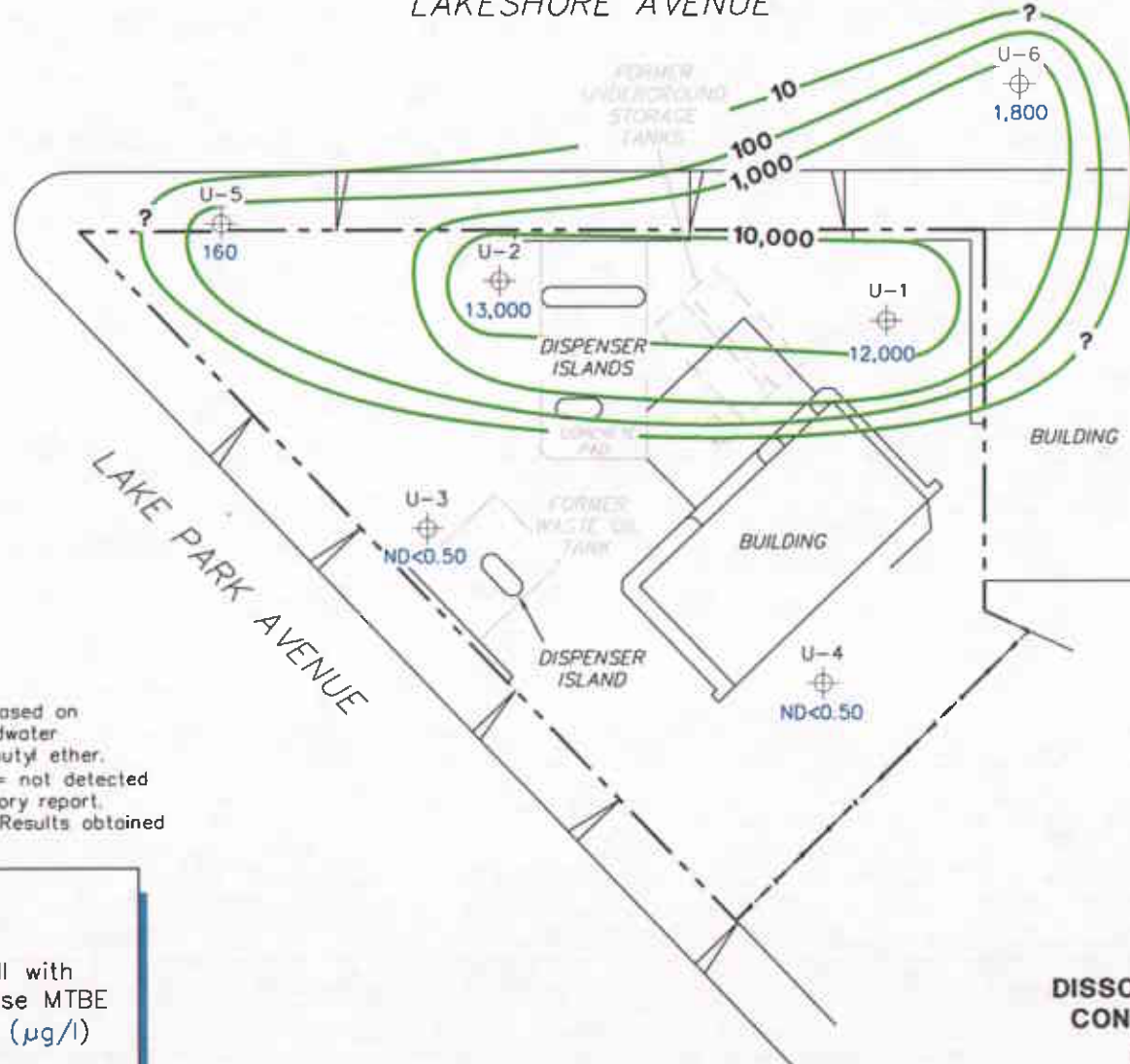
**FIGURE 4**



PS=1:1 5325-003





LAKESHORE AVENUE



**NOTES:**

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

**LEGEND**

- U-6  Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)
-  10,000 Dissolved-Phase MTBE Contour (µg/l)

**DISSOLVED-PHASE MTBE  
CONCENTRATION MAP  
June 7, 2004**

76 Station 5325  
3220 Lakeshore Avenue  
Oakland, California

**TRC**

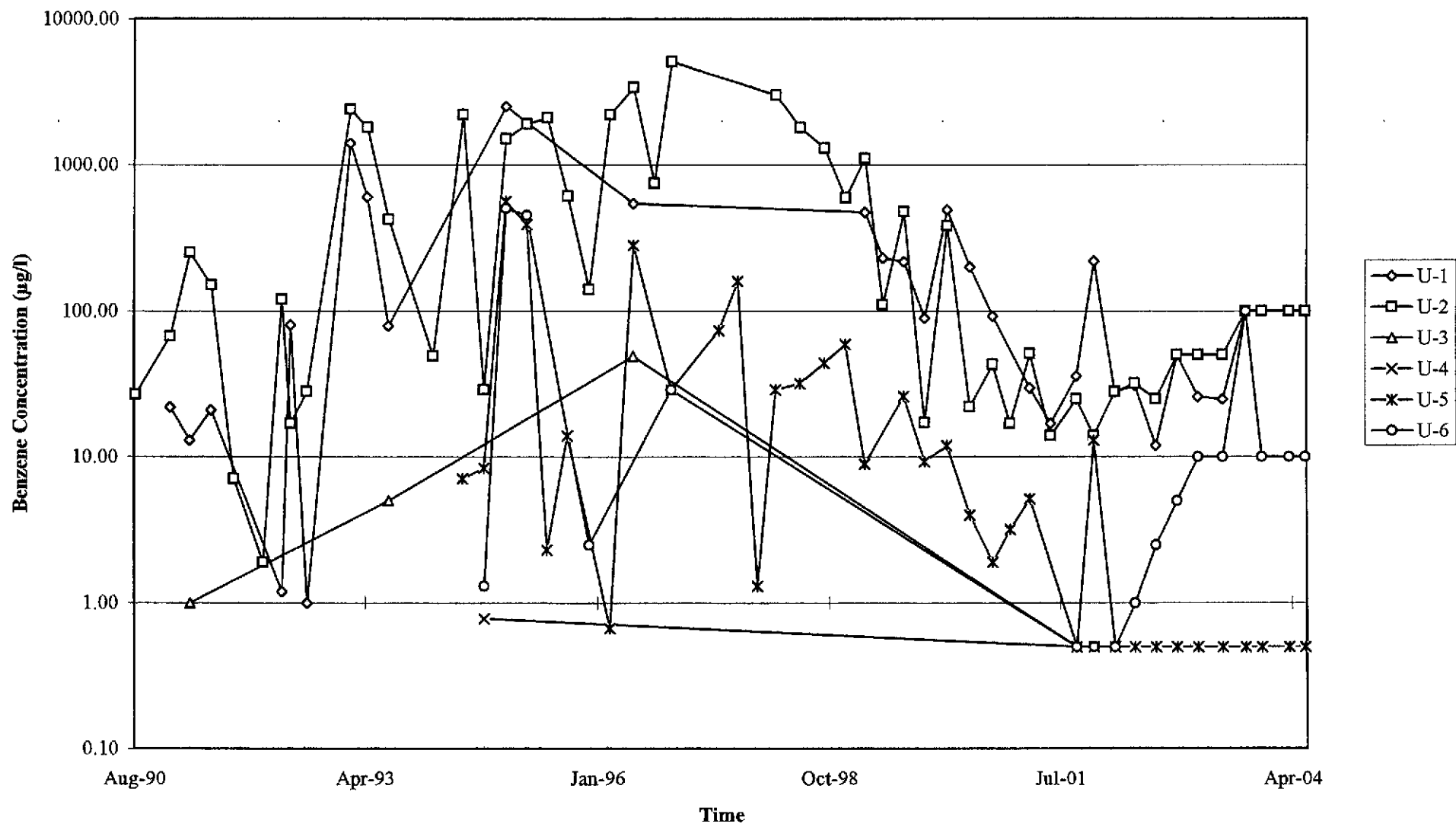
SCALE (FEET)



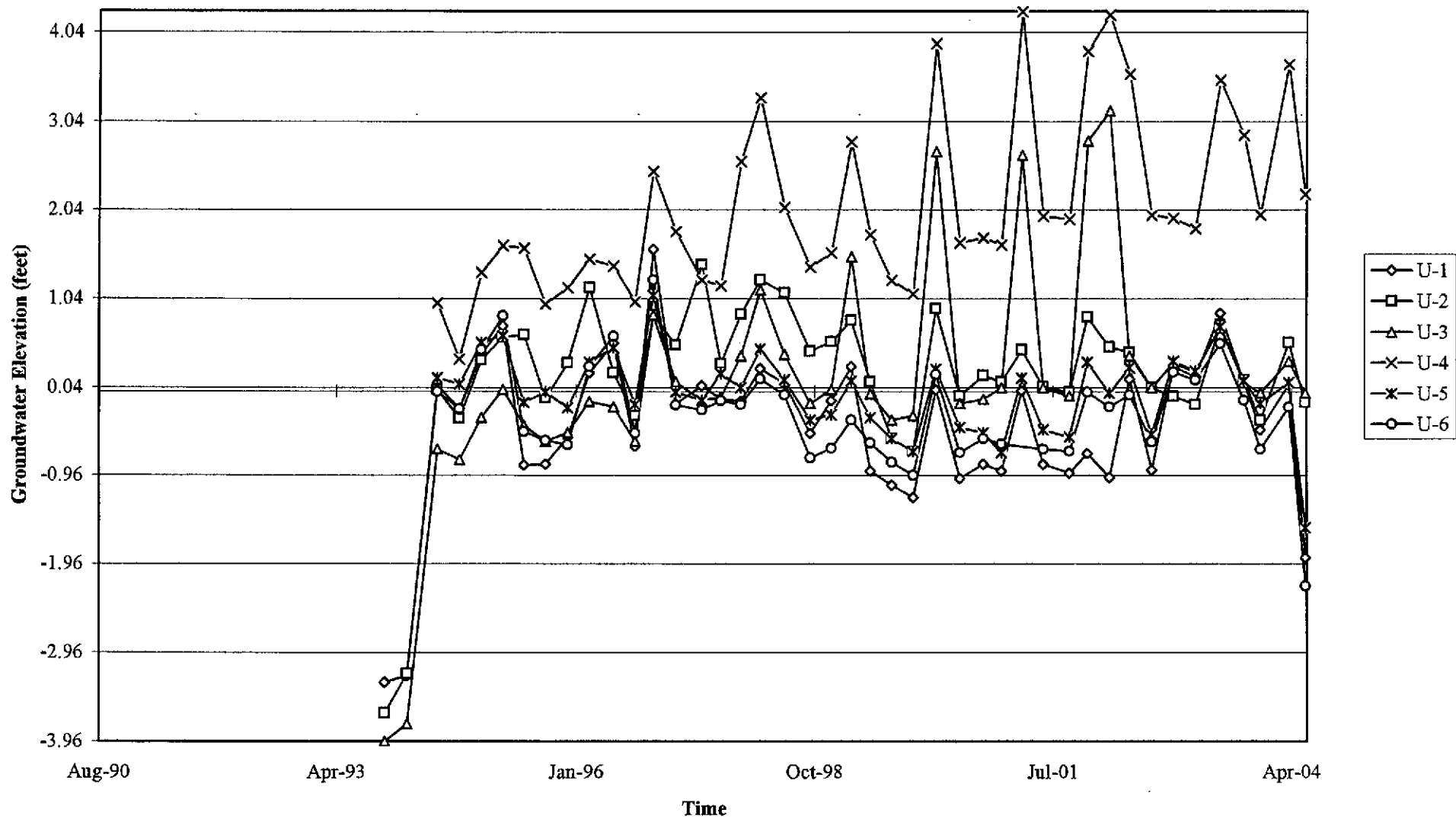
**FIGURE 5**

PS=1:1 5325-003

Graph 1  
Benzene Concentrations vs. Time  
76 Station 5325



Graph 2  
Hydrograph  
76 Station 5325



## 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 measurement are calibrated daily according to manufacturer's instructions.

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

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

### **Groundwater Sample Collection**

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

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

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

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

### **Sequence of Gauging, Purging, and Sampling**

The sequence in which monitoring activities are conducted are specified on the TSR. In general, wells are gauged beginning with the least-affected well and ending with the well that has 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 well to the most-affected well.

### **Decontamination**

In order to reduce the possibility of cross-contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated to a particular 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.

# FIELD MONITORING DATA SHEET

Technician: Max Fekstein

Job #/Task #: 41050001/FA20

Date: 6-7-04

Site # 5325

Project Manager Barbara Moed

Page 1 of 1

Well #	Grade	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes		
								DEF	DO	ORV
U-1		✓	13.22	10.35	0	0	0900	3"		
U-2		✓	14.25	7.75	0	0	1000	3"		
U-3		✓	14.35	11.00	0	0	1042	3"		
U-4		✓	20.11	8.93	0	0	0942	4"		
U-5		✓	20.08	8.53	0	0	1020	4"		
U-6		✓	23.65	9.35	0	0	0925	2"		
									HE	
FIELD DATA COMPLETE ✓    QA/QC ✓    COC ✓    WELL BOX CONDITION SHEETS ✓										
WTT CERTIFICATE    MANIFEST    DRUM INVENTORY ✓    TRAFFIC CONTROL ✓										

GROUNDWATER SAMPLING FIELD NOTES

Technician: Max Eckstein

Site: 5325

Project No.: 4050001

Date: 6-7-04

Well No.: U-4

Purge Method: D:5

Depth to Water (feet): 8.93

Depth to Product (feet): 0

Total Depth (feet): 20.11

LPH & Water Recovered (gallons): 0

Water Column (feet): 11.18

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 11.17

1 Well Volume (gallons): 7

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F.C)	pH	<del>Turbidity</del> ORP	D.O.
0709			7	821	19.0	10.17	-27	4.56
			14	793	19.9	10.07	-19	4.33
	0716		21	790	19.1	10.03	-15	4.02
Static at Time Sampled		Total Gallons Purged			Time Sampled			
14.93		21			0942			
Comments: <u>Well Dry @ 21 gallons - Didn't recover after 2 hrs.</u>								

Well No.: U-2

Purge Method: D:9

Depth to Water (feet): 7.75

Depth to Product (feet): 0

Total Depth (feet): 19.25

LPH & Water Recovered (gallons): 0

Water Column (feet): 11.50

Casing Diameter (Inches): 3"

80% Recharge Depth (feet): 10.05

1 Well Volume (gallons): 4

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F.C)	pH	<del>Turbidity</del> ORP	D.O.
0736			4	885	19.5	8.63	-6	3.10
			8	903	19.2	8.91	-2	3.15
	0739		12	903	19.5	8.75	7	3.29
Static at Time Sampled		Total Gallons Purged			Time Sampled			
13.94		12			1000			
Comments: <u>Well Didn't <sup>fully</sup> recover in 2 hrs.</u>								

GROUNDWATER SAMPLING FIELD NOTES

Technician: Max Eckstein

Site: 5325

Project No.: 41050001

Date: 6-7-09

Well No.: U-5

Purge Method: Dis

Depth to Water (feet): 8.53

Depth to Product (feet): 0

Total Depth (feet): 20.08

LPH & Water Recovered (gallons): 0

Water Column (feet): 11.55

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 10.84

1 Well Volume (gallons): 8

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C)	pH	Turbidity <del>Turbidity</del> ORP	D.O.
0755			8	3.41ms	20.5	9.16	-15	1.92
			16	3.48ms	19.5	9.07	-27	1.87
	0800		24	3.59ms	19.5	8.94	-31	1.88
Static at Time Sampled		Total Gallons Purged			Time Sampled			
9.76		24			1020			
Comments:								

Well No.: U-3

Purge Method: Dis

Depth to Water (feet): 11.00

Depth to Product (feet): 0

Total Depth (feet): 19.35

LPH & Water Recovered (gallons): 0

Water Column (feet): 8.35

Casing Diameter (Inches): 3"

80% Recharge Depth (feet): 12.67

1 Well Volume (gallons): 3

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F.C)	pH	Turbidity <del>Turbidity</del> ORP	D.O.
0812			3	832	17.7	10.11	23	4.70
			6	822	18.0	10.16	38	4.32
	0817		9	819	18.0	10.10	42	4.19
Static at Time Sampled		Total Gallons Purged			Time Sampled			
11.13		9			1042			
Comments:								



GROUNDWATER SAMPLING FIELD NOTES

Technician: Max Eckstein

Site: 5325

Project No.: 41050001

Date: 6-7-04

Well No.: U-1

Purge Method: Dis

Depth to Water (feet): 10.35

Depth to Product (feet): 0

Total Depth (feet): 13.22

LPH & Water Recovered (gallons): 0

Water Column (feet): 2.87

Casing Diameter (Inches): 3"

80% Recharge Depth (feet): 10.92

1 Well Volume (gallons): 1

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F.C)	pH	Turbidity <u>ORP</u>	D.O.
0833			1	975	18.1	9.60	-32	2.30
			2	999	17.5	9.26	-42	1.87
	0836		3	1012	17.7	9.15	-48	1.62
Static at Time Sampled		Total Gallons Purged			Time Sampled			
10.91		3			0900			
Comments:								

Well No.: U-6

Purge Method: Dis

Depth to Water (feet): 9.35

Depth to Product (feet): 0

Total Depth (feet): 23.65

LPH & Water Recovered (gallons): 0

Water Column (feet): 14.30

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 12.21

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F.C)	pH	Turbidity	D.O.
0916			2	1498	17.1	8.49	-32	2.90
			4	1541	17.3	8.62	-67	2.37
	0919		6	1602	17.4	8.62	-62	2.43
Static at Time Sampled		Total Gallons Purged			Time Sampled			
11.92		6			0925			
Comments:								

TRC Alton Geoscience- Irvine

June 14, 2004

21 Technology Drive  
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001FA20

Project: Conoco Phillips # 5325

Site: 3220 Lakeshore Ave, Oakland

Attached is our report for your samples received on 06/07/2004 11:50.

This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 07/22/2004 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: [dsharma@stl-inc.com](mailto:dsharma@stl-inc.com)

Sincerely,



Dimple Sharma  
Project Manager

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* [www.stl-inc.com](http://www.stl-inc.com) \* CA DHS ELAP# 2496

**Dissolved Metals**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
U-1	06/07/2004 09:00	Water	1
U-2	06/07/2004 10:00	Water	2
U-3	06/07/2004 10:42	Water	3
U-4	06/07/2004 09:42	Water	4
U-5	06/07/2004 10:20	Water	5
U-6	06/07/2004 09:25	Water	6

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

06/09/2004 09:03

**Dissolved Metals**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 3005A	Test(s): 6010B
Sample ID: U-1	Lab ID: 2004-06-0191 - 1
Sampled: 06/07/2004 09:00	Extracted: 6/7/2004 13:37
Matrix: Water	QC Batch#: 2004/06/07-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Iron	0.66	0.20	mg/L	1.00	06/09/2004 02:52	

**Dissolved Metals**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 3005A	Test(s): 6010B
Sample ID: U-2	Lab ID: 2004-06-0191 - 2
Sampled: 06/07/2004 10:00	Extracted: 6/7/2004 13:37
Matrix: Water	QC Batch#: 2004/06/07-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Iron	0.21	0.20	mg/L	1.00	06/09/2004 03:06	

**Dissolved Metals**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 3005A	Test(s): 6010B
Sample ID: U-3	Lab ID: 2004-06-0191 - 3
Sampled: 06/07/2004 10:42	Extracted: 6/7/2004 13:37
Matrix: Water	QC Batch#: 2004/06/07-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Iron	ND	0.20	mg/L	1.00	06/09/2004 03:10	

**Dissolved Metals**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 3005A	Test(s): 6010B
Sample ID: U-4	Lab ID: 2004-06-0191 - 4
Sampled: 06/07/2004 09:42	Extracted: 6/7/2004 13:37
Matrix: Water	QC Batch#: 2004/06/07-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Iron	ND	0.20	mg/L	1.00	06/09/2004 03:32	

**Dissolved Metals**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 3005A	Test(s): 6010B
Sample ID: U-5	Lab ID: 2004-06-0191 - 5
Sampled: 06/07/2004 10:20	Extracted: 6/7/2004 13:37
Matrix: Water	QC Batch#: 2004/06/07-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Iron	3.8	0.20	mg/L	1.00	06/09/2004 03:37	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

06/09/2004 09:03



**Dissolved Metals**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 3005A	Test(s): 6010B
Sample ID: U-6	Lab ID: 2004-06-0191 - 6
Sampled: 06/07/2004 09:25	Extracted: 6/7/2004 13:37
Matrix: Water	QC Batch#: 2004/06/07-04.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Iron	2.1	0.20	mg/L	1.00	06/09/2004 03:41	

**Dissolved Metals**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Batch QC Report**

Prep(s): 3005A

Method Blank

MB: 2004/06/07-04.15-145

Water

Test(s): 6010B

QC Batch # 2004/06/07-04.15

Date Extracted: 06/07/2004 13:37

Compound	Conc.	RL	Unit	Analyzed	Flag
Iron	ND	0.20	mg/L	06/09/2004 02:39	

**Dissolved Metals**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Batch QC Report**

Prep(s): 3005A

Test(s): 6010B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/06/07-04.15**

LCS 2004/06/07-04.15-146

Extracted: 06/07/2004

Analyzed: 06/09/2004 02:43

LCSD 2004/06/07-04.15-147

Extracted: 06/07/2004

Analyzed: 06/09/2004 02:48

Compound	Conc. mg/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Iron	5.06	4.90	5.00	101.2	98.0	3.2	80-120	20		

**Dissolved Metals**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Batch QC Report**

Prep(s): 3005A

Test(s): 6010B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2004/06/07-04.15**

U-1 >> MS

Lab ID: 2004-06-0191 - 001

MS: 2004/06/07-04.15-149

Extracted: 06/07/2004

Analyzed: 06/09/2004 02:57

Dilution: 1.00

MSD: 2004/06/07-04.15-150

Extracted: 06/07/2004

Analyzed: 06/09/2004 03:01

Dilution: 1.00

Compound	Conc. mg/L			Spk.Level mg/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Iron	5.64	5.45	0.656	5.00	99.7	95.9	3.9	75-125	20		

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
U-1	06/07/2004 09:00	Water	1
U-2	06/07/2004 10:00	Water	2
U-3	06/07/2004 10:42	Water	3
U-4	06/07/2004 09:42	Water	4
U-5	06/07/2004 10:20	Water	5
U-6	06/07/2004 09:25	Water	6

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

06/09/2004 12:50

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 5030B Test(s): 8260FAB  
 Sample ID: U-1 Lab ID: 2004-06-0191 - 1  
 Sampled: 06/07/2004 09:00 Extracted: 6/8/2004 15:15  
 Matrix: Water QC Batch#: 2004/06/08-1B.66  
 Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	13000	10000	ug/L	200.00	06/08/2004 15:15	g
Benzene	ND	100	ug/L	200.00	06/08/2004 15:15	
Toluene	ND	100	ug/L	200.00	06/08/2004 15:15	
Ethylbenzene	ND	100	ug/L	200.00	06/08/2004 15:15	
Total xylenes	ND	200	ug/L	200.00	06/08/2004 15:15	
tert-Butyl alcohol (TBA)	3300	1000	ug/L	200.00	06/08/2004 15:15	
Methyl tert-butyl ether (MTBE)	12000	100	ug/L	200.00	06/08/2004 15:15	
Di-isopropyl Ether (DIPE)	ND	200	ug/L	200.00	06/08/2004 15:15	
Ethyl tert-butyl ether (ETBE)	ND	100	ug/L	200.00	06/08/2004 15:15	
tert-Amyl methyl ether (TAME)	ND	100	ug/L	200.00	06/08/2004 15:15	
1,2-DCA	ND	100	ug/L	200.00	06/08/2004 15:15	
EDB	ND	100	ug/L	200.00	06/08/2004 15:15	
Ethanol	ND	10000	ug/L	200.00	06/08/2004 15:15	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	106.6	72-128	%	200.00	06/08/2004 15:15	
Toluene-d8	101.6	80-113	%	200.00	06/08/2004 15:15	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 5030B	Test(s): 8260FAB
Sample ID: U-2	Lab ID: 2004-06-0191 - 2
Sampled: 06/07/2004 10:00	Extracted: 6/8/2004 15:39
Matrix: Water	QC Batch#: 2004/06/08-1B.66
Analysis Flag: o ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	14000	10000	ug/L	200.00	06/08/2004 15:39	g
Benzene	ND	100	ug/L	200.00	06/08/2004 15:39	
Toluene	ND	100	ug/L	200.00	06/08/2004 15:39	
Ethylbenzene	ND	100	ug/L	200.00	06/08/2004 15:39	
Total xylenes	ND	200	ug/L	200.00	06/08/2004 15:39	
tert-Butyl alcohol (TBA)	2600	1000	ug/L	200.00	06/08/2004 15:39	
Methyl tert-butyl ether (MTBE)	13000	100	ug/L	200.00	06/08/2004 15:39	
Di-isopropyl Ether (DIPE)	ND	200	ug/L	200.00	06/08/2004 15:39	
Ethyl tert-butyl ether (ETBE)	ND	100	ug/L	200.00	06/08/2004 15:39	
tert-Amyl methyl ether (TAME)	ND	100	ug/L	200.00	06/08/2004 15:39	
1,2-DCA	ND	100	ug/L	200.00	06/08/2004 15:39	
EDB	ND	100	ug/L	200.00	06/08/2004 15:39	
Ethanol	ND	10000	ug/L	200.00	06/08/2004 15:39	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	113.5	72-128	%	200.00	06/08/2004 15:39	
Toluene-d8	103.6	80-113	%	200.00	06/08/2004 15:39	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

06/09/2004 12:50

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 5030B Test(s): 8260FAB  
 Sample ID: U-3 Lab ID: 2004-06-0191 - 3  
 Sampled: 06/07/2004 10:42 Extracted: 6/8/2004 16:03  
 Matrix: Water QC Batch#: 2004/06/08-1B.66  
 Analysis Flag: ,gs ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/08/2004 16:03	g
Benzene	ND	0.50	ug/L	1.00	06/08/2004 16:03	
Toluene	ND	0.50	ug/L	1.00	06/08/2004 16:03	
Ethylbenzene	ND	0.50	ug/L	1.00	06/08/2004 16:03	
Total xylenes	ND	1.0	ug/L	1.00	06/08/2004 16:03	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	06/08/2004 16:03	
Ethanol	ND	50	ug/L	1.00	06/08/2004 16:03	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	105.6	72-128	%	1.00	06/08/2004 16:03	
Toluene-d8	100.4	80-113	%	1.00	06/08/2004 16:03	



**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111  
Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 5030B Test(s): 8260FAB  
Sample ID: U-4 Lab ID: 2004-06-0191 - 4  
Sampled: 06/07/2004 09:42 Extracted: 6/8/2004 18:50  
Matrix: Water QC Batch#: 2004/06/08-2C.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/08/2004 18:50	
Benzene	ND	0.50	ug/L	1.00	06/08/2004 18:50	
Toluene	ND	0.50	ug/L	1.00	06/08/2004 18:50	
Ethylbenzene	ND	0.50	ug/L	1.00	06/08/2004 18:50	
Total xylenes	ND	1.0	ug/L	1.00	06/08/2004 18:50	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	06/08/2004 18:50	
Ethanol	ND	50	ug/L	1.00	06/08/2004 18:50	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	106.6	72-128	%	1.00	06/08/2004 18:50	
Toluene-d8	98.2	80-113	%	1.00	06/08/2004 18:50	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	U-5	Lab ID:	2004-06-0191 - 5
Sampled:	06/07/2004 10:20	Extracted:	6/8/2004 19:15
Matrix:	Water	QC Batch#:	2004/06/08-2C.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	250	50	ug/L	1.00	06/08/2004 19:15	
Benzene	ND	0.50	ug/L	1.00	06/08/2004 19:15	
Toluene	ND	0.50	ug/L	1.00	06/08/2004 19:15	
Ethylbenzene	ND	0.50	ug/L	1.00	06/08/2004 19:15	
Total xylenes	ND	1.0	ug/L	1.00	06/08/2004 19:15	
tert-Butyl alcohol (TBA)	69	5.0	ug/L	1.00	06/08/2004 19:15	
Methyl tert-butyl ether (MTBE)	160	0.50	ug/L	1.00	06/08/2004 19:15	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	1.00	06/08/2004 19:15	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	1.00	06/08/2004 19:15	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	1.00	06/08/2004 19:15	
1,2-DCA	ND	0.5	ug/L	1.00	06/08/2004 19:15	
EDB	ND	0.5	ug/L	1.00	06/08/2004 19:15	
Ethanol	ND	50	ug/L	1.00	06/08/2004 19:15	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	102.4	72-128	%	1.00	06/08/2004 19:15	
Toluene-d8	99.0	80-113	%	1.00	06/08/2004 19:15	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

06/09/2004 12:50

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

Prep(s): 5030B Test(s): 8260FAB  
 Sample ID: U-6 Lab ID: 2004-06-0191 - 6  
 Sampled: 06/07/2004 09:25 Extracted: 6/8/2004 19:39  
 Matrix: Water QC Batch#: 2004/06/08-2C.66  
 Analysis Flag: o ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1700	1000	ug/L	20.00	06/08/2004 19:39	g
Benzene	ND	10	ug/L	20.00	06/08/2004 19:39	
Toluene	ND	10	ug/L	20.00	06/08/2004 19:39	
Ethylbenzene	ND	10	ug/L	20.00	06/08/2004 19:39	
Total xylenes	ND	20	ug/L	20.00	06/08/2004 19:39	
tert-Butyl alcohol (TBA)	110	100	ug/L	20.00	06/08/2004 19:39	
Methyl tert-butyl ether (MTBE)	1800	10	ug/L	20.00	06/08/2004 19:39	
Di-isopropyl Ether (DIPE)	ND	20	ug/L	20.00	06/08/2004 19:39	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	20.00	06/08/2004 19:39	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	20.00	06/08/2004 19:39	
1,2-DCA	ND	10	ug/L	20.00	06/08/2004 19:39	
EDB	ND	10	ug/L	20.00	06/08/2004 19:39	
Ethanol	ND	1000	ug/L	20.00	06/08/2004 19:39	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	126.8	72-128	%	20.00	06/08/2004 19:39	
Toluene-d8	102.7	80-113	%	20.00	06/08/2004 19:39	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2004/06/08-1B.66-032

Water

Test(s): 8260FAB

QC Batch # 2004/06/08-1B.66

Date Extracted: 06/08/2004 07:32

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	06/08/2004 07:32	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	06/08/2004 07:32	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	06/08/2004 07:32	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	06/08/2004 07:32	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	06/08/2004 07:32	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	06/08/2004 07:32	
1,2-DCA	ND	0.5	ug/L	06/08/2004 07:32	
EDB	ND	0.5	ug/L	06/08/2004 07:32	
Benzene	ND	0.5	ug/L	06/08/2004 07:32	
Toluene	ND	0.5	ug/L	06/08/2004 07:32	
Ethylbenzene	ND	0.5	ug/L	06/08/2004 07:32	
Total xylenes	ND	1.0	ug/L	06/08/2004 07:32	
Ethanol	ND	50	ug/L	06/08/2004 07:32	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	95.4	72-128	%	06/08/2004 07:32	
Toluene-d8	101.8	80-113	%	06/08/2004 07:32	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2004/06/08-2C.66-021

Water

Test(s): 8260FAB

QC Batch # 2004/06/08-2C.66

Date Extracted: 06/08/2004 18:21

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	06/08/2004 18:21	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	06/08/2004 18:21	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	06/08/2004 18:21	
Di-isopropyl Ether (DIPE)	ND	1.0	ug/L	06/08/2004 18:21	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	06/08/2004 18:21	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	06/08/2004 18:21	
1,2-DCA	ND	0.5	ug/L	06/08/2004 18:21	
EDB	ND	0.5	ug/L	06/08/2004 18:21	
Benzene	ND	0.5	ug/L	06/08/2004 18:21	
Toluene	ND	0.5	ug/L	06/08/2004 18:21	
Ethylbenzene	ND	0.5	ug/L	06/08/2004 18:21	
Total xylenes	ND	1.0	ug/L	06/08/2004 18:21	
Ethanol	ND	50	ug/L	06/08/2004 18:21	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	99.0	72-128	%	06/08/2004 18:21	
Toluene-d8	103.0	80-113	%	06/08/2004 18:21	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260FAB

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/06/08-1B.66**

LCS 2004/06/08-1B.66-043

Extracted: 06/08/2004

Analyzed: 06/08/2004 06:43

LCSD 2004/06/08-1B.66-008

Extracted: 06/08/2004

Analyzed: 06/08/2004 07:08

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	22.2	23.1	25	88.8	92.4	4.0	65-165	20		
Benzene	24.8	25.3	25	99.2	101.2	2.0	69-129	20		
Toluene	25.2	25.1	25	100.8	100.4	0.4	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	449	447	500	89.8	89.4		72-128			
Toluene-d8	513	502	500	102.6	100.4		80-113			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

06/09/2004 12:50

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260FAB

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/06/08-2C.66**

LCS 2004/06/08-2C.66-033

Extracted: 06/08/2004

Analyzed: 06/08/2004 17:33

LCSD 2004/06/08-2C.66-057

Extracted: 06/08/2004

Analyzed: 06/08/2004 17:57

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	25.3	25.6	25	101.2	102.4	1.2	65-165	20		
Benzene	26.8	26.3	25	107.2	105.2	1.9	69-129	20		
Toluene	25.1	26.0	25	100.4	104.0	3.5	70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	479	481	500	95.8	96.2		72-128			
Toluene-d8	516	501	500	103.2	100.2		80-113			

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

06/09/2004 12:50

Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5325

Received: 06/07/2004 11:50

Site: 3220 Lakeshore Ave, Oakland

---

Legend and Notes

---

**Sample Comment**

Lab ID: 2004-06-0191 -3

gs-Siloxane peaks were found in the sample which are not believed to be gasoline related. If quantified as gasoline, concentration would be 74 ug/L.

**Analysis Flag**

o

Reporting limits were raised due to high level of analyte present in the sample.

**Result Flag**

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.





# STL

June 21, 2004

TRC ALTON GEOSCIENCE

Attn: Anju Farfan

21 Technology Drive

Irvine, Ca 92718

Dear Anju,

Enclosed are the hard copy subcontract report(s) for STL San Francisco submission number 2004-06-0191, Project name 41050001FA20 Conoco Phillips # 5325. You were mailed fax copies with our original data package because the subcontract copies were not yet available.

**These are for your records only.**

We apologize for any inconvenience.

If you have any questions or need more information, please do not hesitate to give me a call.

Sincerely,

Tina Totorica  
Administrative Assistant

Enclosures

**Severn Trent Laboratories, Inc.**

**STL San Francisco** • 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 • [www.stl-inc.com](http://www.stl-inc.com)

Ms. Tina Totorica  
 STL San Francisco  
 1220 Quarry Lane, #C  
 Pleasanton, CA 94566-4756

3942-A Valley Avenue  
 Pleasanton, CA 94566-4715  
 Tel: 925.462.2771  
 Fax: 925.462.2775

Sample Source:  
 Project No.: 2004-06-0191  
 Project Name: Conoco Phillips #5325  
 Date Sampled: 06/07/04  
 Date Received: 06/11/04  
 Matrix: Water

14 June, 2004  
 Job No.0406120  
 Sample No.001-006  
 Cust. No.10176

Analyte	Results	Detection Limit	Method	Date Analyzed
Lab No.001				
Sample I.D.: U-1				
Nitrate as NO <sub>3</sub>	N.D.	0.5 mg/L	EPA 300.0	06/11/04
Ortho-Phosphate as P	6.8	0.2 mg/L	EPA 300.0	06/11/04
Lab No.002				
Sample I.D.: U-2				
Nitrate as NO <sub>3</sub>	N.D.	0.5 mg/L	EPA 300.0	06/11/04
Ortho-Phosphate as P	2.4	0.2 mg/L	EPA 300.0	06/11/04
Lab No.003				
Sample I.D.: U-3				
Nitrate as NO <sub>3</sub>	17	0.5 mg/L	EPA 300.0	06/11/04
Ortho-Phosphate as P	N.D.	0.2 mg/L	EPA 300.0	06/11/04
Lab No.004				
Sample I.D.: U-4				
Nitrate as NO <sub>3</sub>	24	0.5 mg/L	EPA 300.0	06/11/04
Ortho-Phosphate as P	N.D.	0.2 mg/L	EPA 300.0	06/11/04
Lab No.005				
Sample I.D.: U-5				
Nitrate as NO <sub>3</sub>	N.D.	0.5 mg/L	EPA 300.0	06/11/04
Ortho-Phosphate as P	N.D.	0.2 mg/L	EPA 300.0	06/11/04
Lab No.006				
Sample I.D.: U-6				
Nitrate as NO <sub>3</sub>	0.8	0.5 mg/L	EPA 300.0	06/11/04
Ortho-Phosphate as P	N.D.	0.2 mg/L	EPA 300.0	06/11/04

  
 Cheryl McMillen  
 Laboratory Director

**QUALITY CONTROL DATA - Nitrate as NO<sub>3</sub>**  
EPA Method No.: 300.0  
Date Analyzed: June 11, 2004

Laboratory Control Sample Summary

	Blank Result	True Value	LCS Result	Percent Recovery
Nitrate as NO <sub>3</sub> (mg/L):	N.D.	11.08	11.37	102.6
Reporting Limit (mg/L):	0.5			
QC Limits (%):				85-115

**QUALITY CONTROL DATA - Ortho-Phosphate as P**  
EPA Method No.: 300.0  
Date Analyzed: June 11, 2004

Laboratory Control Sample Summary

	Blank Result	True Value	LCS Result	Percent Recovery
Ortho-Phosphate as P (mg/L):	N.D.	4.89	5.288	108.1
Reporting Limit (mg/L):	0.2			
QC Limits (%):				85-115

STL San Francisco

### Sample Receipt Checklist

Submission #: 2004- 016 - 0191

Checklist completed by: (initials) JM Date: 06 10 04

Courier name:  STL San Francisco  Client \_\_\_\_\_

Custody seals intact on shipping container/samples

Yes \_\_\_ No \_\_\_ Not Present

Chain of custody present?

Yes  No \_\_\_

Chain of custody signed when relinquished and received?

Yes  No \_\_\_

Chain of custody agrees with sample labels?

Yes  No \_\_\_

Samples in proper container/bottle?

Yes  No \_\_\_

Sample containers intact?

Yes  No \_\_\_

Sufficient sample volume for indicated test?

Yes  No \_\_\_

All samples received within holding time?

Yes  No \_\_\_

Container/Temp Blank temperature in compliance ( $4^{\circ}C \pm 2$ )?

Temp: 14 °C Yes  No \_\_\_

Ice Present Yes  No \_\_\_

Water - VOA vials have zero headspace?

No VOA vials submitted \_\_\_ Yes  No \_\_\_

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small ~O), M (medium ~ O) or L (large ~ O))

Water - pH acceptable upon receipt?  Yes  No

pH adjusted- Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc - Lot #(s) 419037

For any item check-listed "No", provided detail of discrepancy in comment section below:

Comments: 4 hrs from sampling  
metals filtered and presented in lab.

### Project Management [Routing for instruction of indicated discrepancy(ies)]

Project Manager: (initials) \_\_\_\_\_ Date: 1 / 1 /04

Client contacted:  Yes  No

Summary of discussion:  
\_\_\_\_\_  
\_\_\_\_\_

Corrective Action (per PM/Client):  
\_\_\_\_\_  
\_\_\_\_\_

STL-San Francisco

2004-06-0191

ConocoPhillips Chain Of Custody Record

86600

1220 Quarry Lane  
Pleasanton, CA 94566

(925) 484-1919 (925) 484-1096 fax

ConocoPhillips Site Manager:

INVOICE REMITTANCE ADDRESS:

CONOCOPHILLIPS  
Attn: Dee Hutchinson  
3611 South Harbor, Suite 200  
Santa Ana, CA. 92704

ConocoPhillips Work Order Number

1394 TRCS00

ConocoPhillips Cost Object

DATE: 6-7-04

PAGE: 1 of 1

SAMPLING COMPANY: TRC		Valid Value ID:	CONOCOPHILLIPS SITE NUMBER 5325		GLOBAL ID NO.: 70600101463
ADDRESS: 21 Technology Drive, Irvine CA 92618			SITE ADDRESS (Street and City): 3220 Lakeshore Ave, Oakland		CONOCOPHILLIPS SITE MANAGER: Barbara Moeck
PROJECT CONTACT (Hardcopy or PDF Report to): Anju Farfan					
TELEPHONE: 949-341-7440	FAX: 949-753-0111	E-MAIL: afarfan@trcsolutions.com			
EDF DELIVERABLE TO (RP or Designee): Peter Thomson, TRC pthomson@trcsolutions.com		PHONE NO.: 949-341-7408		E-MAIL:	

SAMPLER NAME(S) (Print): Moeck	CONSULTANT PROJECT NUMBER 41050001/FA20	REQUESTED ANALYSES			
-----------------------------------	--	--------------------	--	--	--

TURNAROUND TIME (CALENDAR DAYS): 8260  
 14 DAYS  7 DAYS  72 HOURS  48 HOURS  24 HOURS  LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED   
 Run BOXES by 8260 on all 8260  
 MTRF hits.

8015m - TPHd Extractable	8260B - TPHg/BTEX/MBE	8260B - TPHg / BTEX / 8 Oxygenates	8260B - TPHg / BTEX / 8 oxygenates + methanol (8015M)	8260B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015M / 8021B - TPHg/BTEX/MBE	Lead <input type="checkbox"/> Total <input type="checkbox"/> DTCLP	X TPHH by 8260S	X BTEX/MBE by 8260S	X Ethanol by 8260S	X Nitrate	X Phosphate	X Ferric Iron
--------------------------	-----------------------	------------------------------------	---	--	------------------------	-------------------------------	--	-----------------	---------------------	--------------------	-----------	-------------	---------------

FIELD NOTES:  
 Container/Preservative or PID Readings or Laboratory Notes

TEMPERATURE ON RECEIPT C°  
 14

LAB USE ONLY	Sample Identification/Field Point Name*	SAMPLING		MATRIX	NO. OF CONT.
		DATE	TIME		
	U-1	6-7	0900	GW	6
	U-2		1030		
	U-3		1042		
	U-4		0942		
	U-5		1020		
	U-6		0925		

**RUSH**

Relinquished by: (Signature) 	Received by: (Signature) Jean Muller	Date: 6-7-04	Time: 11:50
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:



STL

Date Shipped: 6/11/2004

Chain of Custody

2004-06-0191 - 1

From: STL San Francisco (CL)
1220 Quarry Lane
Pleasanton, CA 94566-4756

To: Cerco Analytical - SUB CONTRACT ONLY
3942 Valley Avenue, Suite A
Pleasanton, CA 94566

Project Manager: Dimple Sharma
Phone: (925) 484-1919
Fax: (925) 484-1096
Email: dsharma@stl-inc.com

Phone: (925) 462-2771
Fax: (925) 462-2775
Contact: Darlene Langford
Phone: (925) 462-2771

CL Submission #: 2004-06-0191
CL PO #:

Project #: 41050001FA20
Project Name: Conoco Phillips # 5325

Table with columns: Client Sample ID, Analysis, GB#, Sampled, Matrix, Method, TA. Rows 1-6 with handwritten numbers 1-6 on the left margin.

Handwritten notes: "out of field time", "CA0406120"

RUSH 24 hrs

RELINQUISHED BY: 1. Signature: D. Harrington, Printed Name: STL-SF, Date: 6/11/04

RELINQUISHED BY: 2. (Blank signature and name fields)

RELINQUISHED BY: 3. (Blank signature and name fields)

RECEIVED BY: 1. Signature: Darlene Langford, Printed Name: Darlene Langford, Date: 6/11/04

RECEIVED BY: 2. (Blank signature and name fields)

RECEIVED BY: 3. (Blank signature and name fields)

## **STATEMENTS**

### **Purge Water Transport and Disposal**

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

## **LIMITATIONS**

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