



R0253

76 Broadway  
Sacramento, CA 95818  
phone 916.558.7676  
fax 916.558.7639

March 28, 2005

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

Alameda County  
APR 0 2 2005  
ENVIRONMENTAL SERVICES

Re: **Document Transmittal**  
Fuel Leak Case  
76 Station #5781  
3535 Pierson Street  
Oakland, CA

Dear Mr. Hwang:

Please find attached TRC's *Quarterly Status Report, dated 3/30/05*, and TRC's *Quarterly Monitoring Report, dated 3/24/05* 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

March 30, 2005

TRC Project No. 42010201

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

**RE: Quarterly Status Report - First Quarter 2005  
76 Service Station #5781, 3535 Pierson Street, Oakland, California  
Alameda County**

Dear Mr. Hwang:

On behalf of ConocoPhillips Company (ConocoPhillips), TRC is submitting the First Quarter 2005 Quarterly Status Report for the subject site, shown on the attached Figures 3 through 5.

#### **PREVIOUS ASSESSMENTS**

The subject site is currently an operating service station located on the northwest corner of the intersection of Pierson Street and the Highway 580 off ramp in Oakland California. Station facilities include two 12,000-gallon double-wall fiberglass clad steel gasoline underground storage tanks (USTs), one 520-gallon fiberglass clad steel waste oil UST, two dispenser islands and associated double-walled fiberglass piping, and a station building.

December 1989: Two 10,000 gallon steel fuel USTs and one 280-gallon steel waste oil UST and associated product piping were removed. No holes or cracks were observed in the gasoline USTs, however a hole was observed in the waste oil UST. Confirmation soil sampling was conducted. Petroleum hydrocarbon levels were non-detect or low beneath the fuel USTs and piping. Total oil and grease (TOG) levels were elevated beneath the waste oil tank. The waste oil UST pit was over-excavated to the extent permitted by the station building and buried utilities. Four sidewall samples were collected at depths ranging from 9 to 10 feet below ground surface (bgs) following the over-excavation. Maximum residual TOG levels were elevated.

April 1990: Three exploratory soil borings were advanced to depths ranging from approximately 40 to 50 feet bgs, and soil samples were collected. Petroleum hydrocarbon levels were non-detect in the soil samples. Since groundwater was not encountered, monitoring wells were not installed.

July 1990: Two soil borings were advanced adjacent to the former waste oil tank cavity to determine if waste oil impacted soil was limited to the immediate area surrounding the former waste oil UST. Groundwater was encountered at depths from approximately 33.5 to 36.7 feet bgs and a grab groundwater sample was collected from each boring. Maximum levels of petroleum hydrocarbons and volatile organic compounds in soil and grab groundwater samples were non-detect to low.

December 1991: One monitoring well was installed to a depth of 45 feet bgs.

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

### **SENSITIVE RECEPTORS**

According to information in Geotracker, four active wells owned by East Bay Regional Park District are located 2,193 feet northeast of site.

### **MONITORING AND SAMPLING**

Groundwater samples have been collected on a quarterly or annual basis since the installation of well MW-A. Total petroleum hydrocarbons as gasoline (TPH-g), benzene, and methyl tertiary butyl ether (MTBE) have not been detected during the monitoring and sampling events. Total Petroleum hydrocarbons as diesel (TPH-d) have been sporadically detected. TOG has been detected on two occasions at concentrations of 7 parts per million and 5,900 parts per billion (GR, 2003).

One well is currently monitored annually. The well was gauged and sampled this quarter.

### **CHARACTERIZATION STATUS**

TPH-g, TPH-d, benzene, and MTBE were not detected above the reporting limit in well MW-A.

### **REMEDIATION STATUS**

December 1989: The waste oil UST pit was over-excavated to 16 feet bgs, approximately 35 feet to the east, 10 feet to the west, 15 feet to the south, and 2 feet to the north. The station building and buried utilities prevented further excavation except to the east.

Remediation is not currently being conducted at the site.

### **RECENT CORRESPONDENCE**

No correspondence this quarter.

### **CURRENT QUARTER ACTIVITIES**

February 18, 2005: 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.

QSR – First Quarter 2005  
76 Service Station #5781, Oakland, California  
March 30, 2005  
Page 3

### **NEXT QUARTER ACTIVITIES**

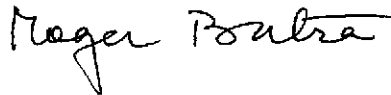
Site closure will be proposed based on a summary of site data through first quarter 2005.

Continue annual monitoring and sampling until case closure is granted.

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

Sincerely,

TRC



Roger Batra  
Senior Project Manager

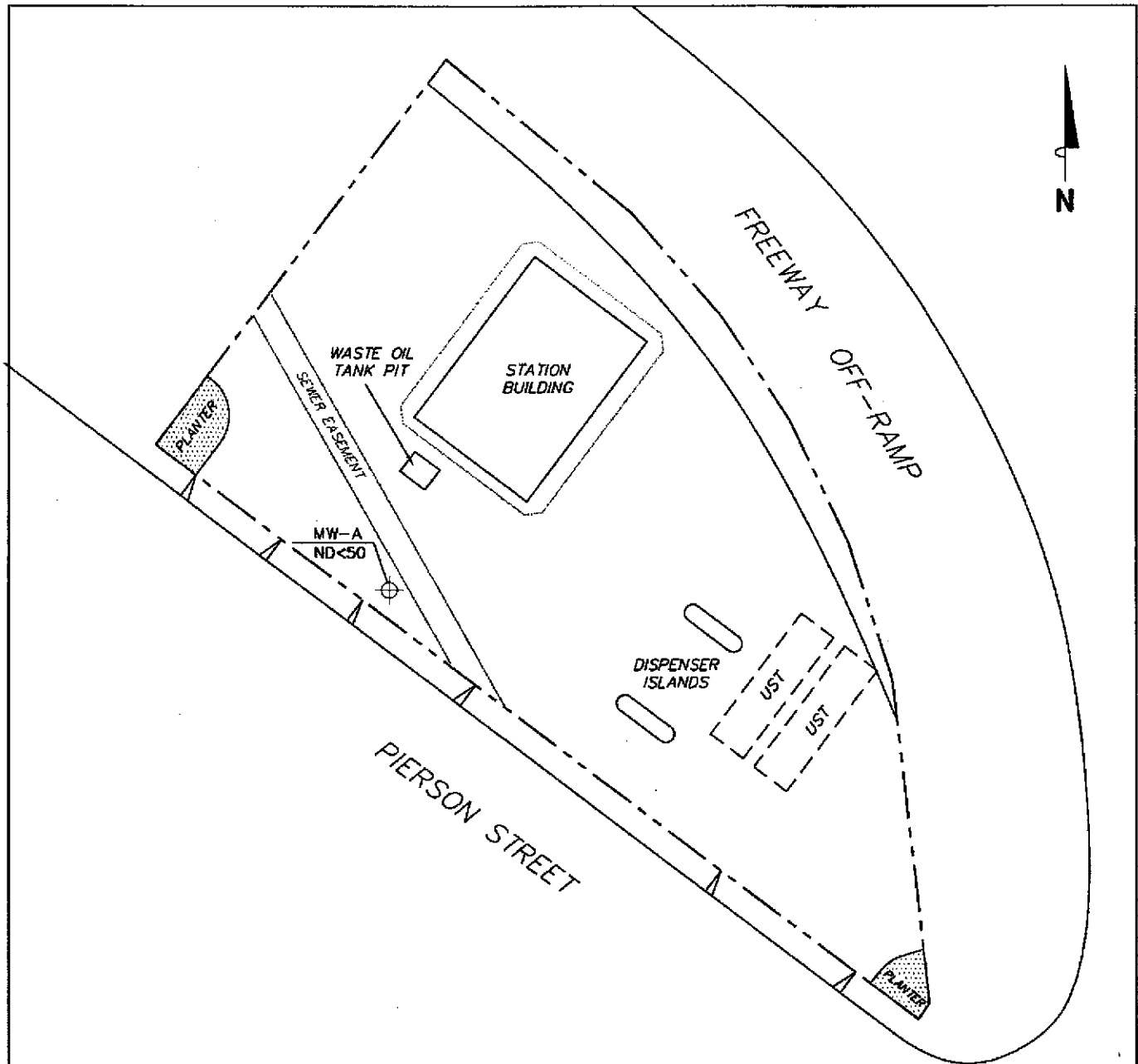
#### Attachments:

Figure 3 – Dissolved-Phase TPH-G Concentration Map, February 18, 2005, from Annual Monitoring Report, April 2004 through March 2005, dated March 24, 2005 by TRC.

Figure 4 – Dissolved-Phase Benzene Concentration Map, February 18, 2005, from Annual Monitoring Report, April 2004 through March 2005, dated March 24, 2005 by TRC.

Figure 5 – Dissolved-Phase MTBE Concentration Map, February 18, 2005, from Annual Monitoring Report, April 2004 through March 2005, dated March 24, 2005 by TRC.

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



**NOTES:**

TPH-G = total petroleum hydrocarbons as gasoline.  
 µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank. Results obtained using EPA Method 8015.

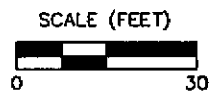
**LEGEND**

MW-A ⊕ Monitoring Well with Dissolved-Phase TPH-G Concentration (µg/l)

**DISSOLVED-PHASE TPH-G  
 CONCENTRATION MAP  
 February 18, 2005**

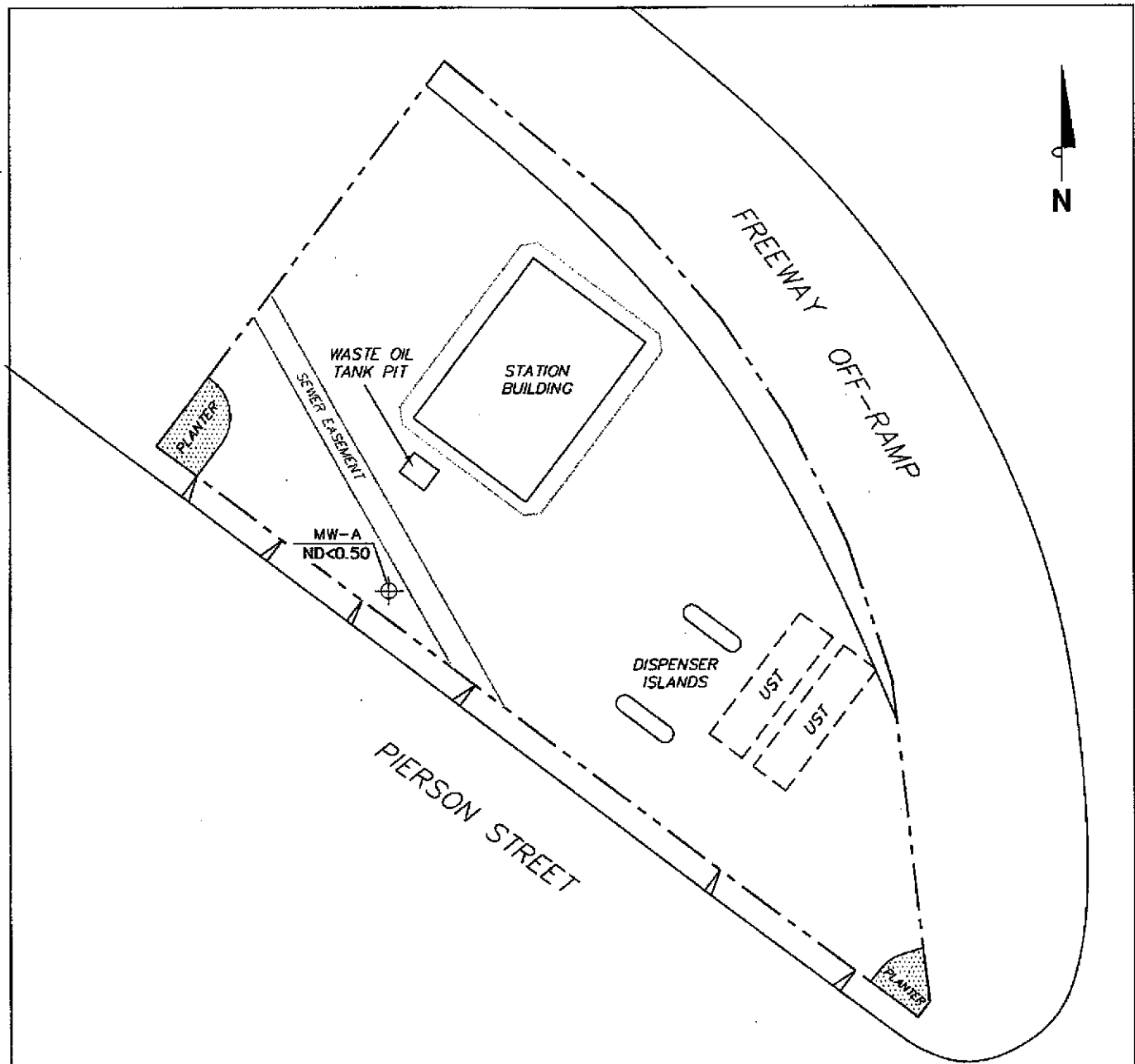
76 Station 5781  
 3535 Pierson Street  
 Oakland, California

**TRC**



**FIGURE 3**

PS=1:1 5781-003



**NOTES:**

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

**LEGEND**

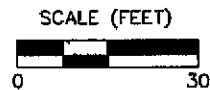
MW-A ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

**DISSOLVED-PHASE BENZENE  
 CONCENTRATION MAP  
 February 18, 2005**

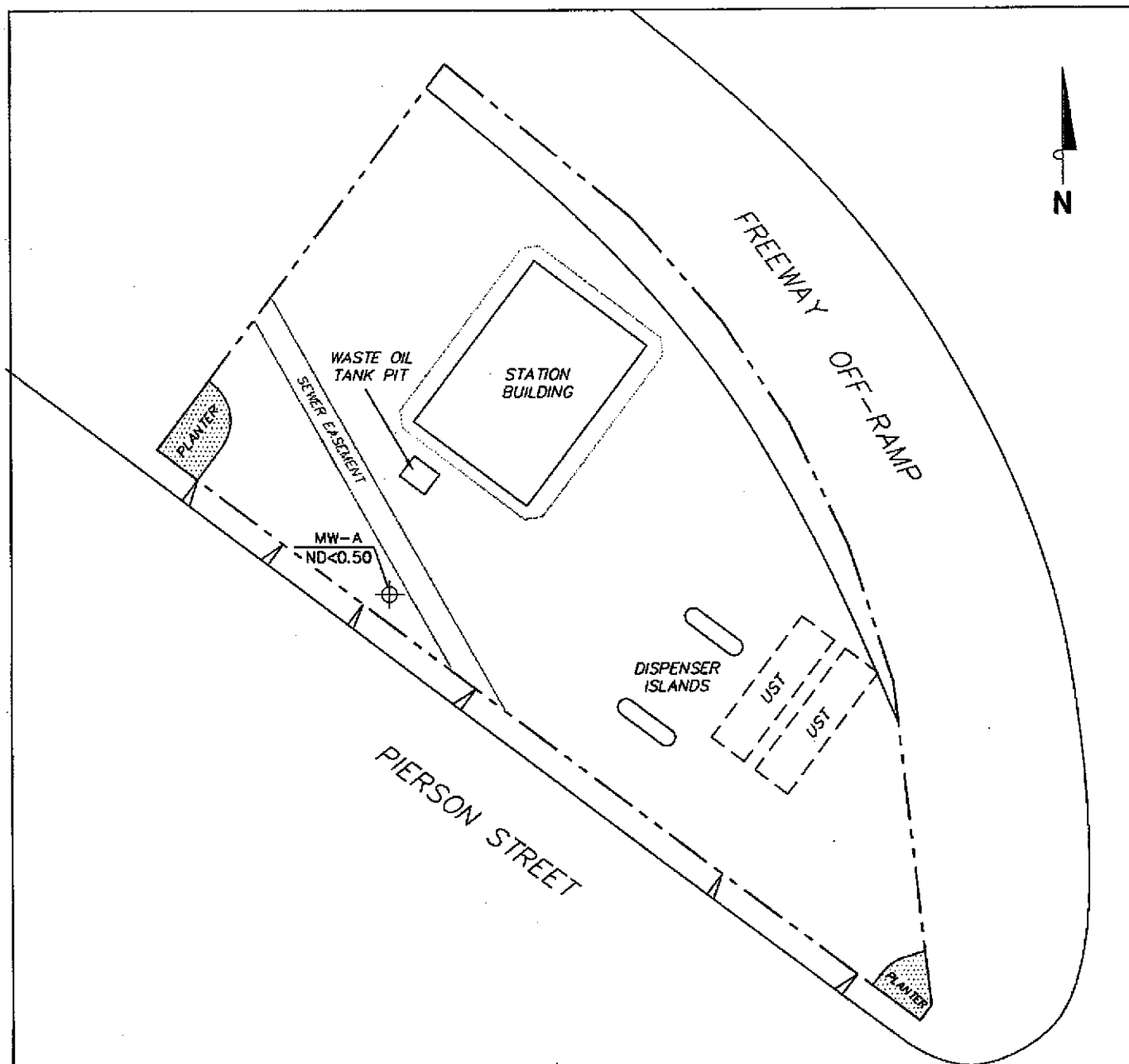
76 Station 5781  
 3535 Pierson Street  
 Oakland, California

**FIGURE 4**

**TRC**



PS=1:1 5781-003



**NOTES:**

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.

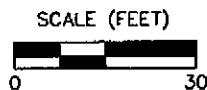
**LEGEND**

MW-A ⊕ Monitoring Well with  
 Dissolved-Phase MTBE  
 Concentration (µg/l)

**DISSOLVED-PHASE MTBE  
 CONCENTRATION MAP  
 February 18, 2005**

76 Station 5781  
 3535 Pierson Street  
 Oakland, California

**TRC**



**FIGURE 5**

PS=1:15781-003



Customer-Focused Solutions

March 24, 2005

ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818

ATTN: MR. THOMAS H. KOSEL

SITE: 76 STATION 5781  
3535 PIERSON STREET  
OAKLAND, CALIFORNIA

RE: ANNUAL MONITORING REPORT  
APRIL 2004 THROUGH MARCH 2005

Dear Mr. Kosel:

Please find enclosed our Annual Monitoring Report for 76 Station 5781, located at 3535 Pierson Street, Oakland, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan *for*  
QMS Operations Manager

CC: Mr. Roger Batra, TRC (2 copies)

Enclosures  
20-0400/5781R02.QMS





Customer-Focused Solutions

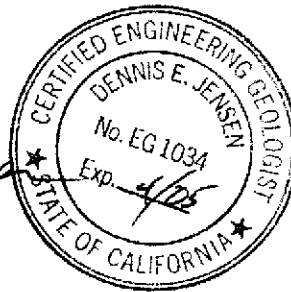
**ANNUAL MONITORING REPORT  
APRIL 2004 THROUGH MARCH 2005**

76 STATION 5781  
3535 Pierson Street  
Oakland, California

Prepared For:

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

By:



Senior Project Geologist, Irvine Operations  
March 22, 2005

## LIST OF ATTACHMENTS

Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Table 1: Current Fluid Levels and Selected Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 3: Additional Analytical Results Table 3b: Additional Analytical Results Table 3c: Additional Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPH-G Concentration Map Figure 4: Dissolved-Phase Benzene Concentration Map Figure 5: Dissolved-Phase MTBE Concentration Map
Graphs	Groundwater Elevation vs. Time Benzene Concentrations vs. Time
Field Activities	General Field Procedures Groundwater Sampling Field Notes
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

**Summary of Gauging and Sampling Activities**  
**April 2004 through March 2005**  
**76 Station 5781**  
**3535 Pierson Street**  
**Oakland, CA**

Project Coordinator: **Thomas Kosel**  
Telephone: **916-558-7666**

Water Sampling Contractor: **TRC**  
Compiled by: **Valentina Tobon**

Date(s) of Gauging/Sampling Event: **02/18/05**

**Sample Points**

Groundwater wells: **1** onsite, **0** offsite      Wells gauged: **1**      Wells sampled: **1**  
Purging method: **Submersible pump**  
Purge water disposal: **Onyx/Rodeo Unit 100**  
Other Sample Points: **0**      Type: **n/a**

**Liquid Phase Hydrocarbons (LPH)**

Wells with LPH: **0**      Maximum thickness (feet): **n/a**  
LPH removal frequency: **n/a**      Method: **n/a**  
Treatment or disposal of water/LPH: **n/a**

**Hydrogeologic Parameters**

Depth to groundwater (below TOC):      Minimum: **14.21 feet**      Maximum: **14.21 feet**  
Average groundwater elevation (relative to available local datum): **137.59 feet**  
Average change in groundwater elevation since previous event: **0.11 feet**  
Interpreted groundwater gradient and flow direction:  
    Current event: **n/a**  
    Previous event: **N/A (02/03/04)**

**Selected Laboratory Results**

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

**Notes:**

# TABLES

## TABLE KEY

### STANDARD ABBREVIATIONS

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

### ANALYTES

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

### NOTES

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

### REFERENCE

TRC began groundwater monitoring and sampling for 76 Station 5781 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

**Table 1**  
**CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**February 18, 2005**  
**76 Station 5781**

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>MW-A</b>														
02/18/05	151.80	14.21	0.00	137.59	0.11	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<0.50	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**December 1990 Through February 2005**  
**76 Station 5781**

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>MW-A</b>														
12/18/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
05/03/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
08/07/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/08/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
02/06/92	151.80	19.88	0.00	131.92	--	ND	--	ND	ND	ND	ND	--	--	
08/04/92	151.80	18.95	0.00	132.85	0.93	ND	--	ND	ND	ND	0.51	--	--	
02/10/93	151.80	17.71	0.00	134.09	1.24	ND	--	ND	ND	ND	ND	--	--	
02/10/94	151.80	15.25	0.00	136.55	2.46	ND	--	ND	0.52	ND	0.92	--	--	
02/09/95	151.80	15.68	0.00	136.12	-0.43	ND	--	ND	ND	ND	ND	--	--	
02/06/96	151.80	12.52	0.00	139.28	3.16	ND	--	ND	ND	ND	2.1	--	--	
02/05/97	151.80	13.01	0.00	138.79	-0.49	ND	--	ND	ND	ND	ND	--	ND	
02/02/98	151.80	11.91	0.00	139.89	1.10	ND	--	ND	ND	ND	ND	--	ND	
02/22/99	151.80	11.24	0.00	140.56	0.67	ND	--	ND	ND	ND	ND	--	ND	
02/26/00	151.80	12.16	0.00	139.64	-0.92	ND	--	ND	1.01	ND	ND	--	ND	
03/07/01	151.80	11.91	0.00	139.89	0.25	ND	--	ND	ND	ND	ND	ND	ND	
02/22/02	151.80	14.08	0.00	137.72	-2.17	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<5.0	
02/22/03	151.80	14.41	0.00	137.39	-0.33	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<2.0	
02/03/04	151.80	14.32	0.00	137.48	0.09	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	
02/18/05	151.80	14.21	0.00	137.59	0.11	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<0.50	

**Table 3**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5781**

Date Sampled	TPH-D (µg/l)	TRPH (mg/l)	cis-1,3-dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	Chloro-benzene (µg/l)	2-Chloroethy l vinyl (µg/l)	Dibromo-chloro-methane (µg/l)	PCE (µg/l)	cis-1,2-Dichloro-ethene (µg/l)	trans-1,2-Dichloro-ethene (µg/l)	1,3-Dichloro-benzene (µg/l)	Carbon tetra-chloride (µg/l)	Chloro-form (µg/l)
<b>MW-A</b>															
12/18/90	73	--	--	--	--	--	--	--	--	--	--	--	--	--	--
05/03/91	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/07/91	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
11/08/91	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/06/92	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
08/04/92	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/10/93	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/10/94	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/09/95	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/06/96	120	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/05/97	61	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/02/98	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/22/99	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/26/00	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/01	131	--	--	--	--	ND	--	--	--	--	--	--	--	--	--
02/22/02	ND<50	--	--	--	--	--	--	--	--	--	--	--	--	--	--
02/22/03	93	--	--	--	--	ND<2.0	--	--	--	--	--	--	--	--	--
02/03/04	60	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
02/18/05	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50



**Table 3 b**  
**ADDITIONAL ANALYTICAL RESULTS**  
**76 Station 5781**

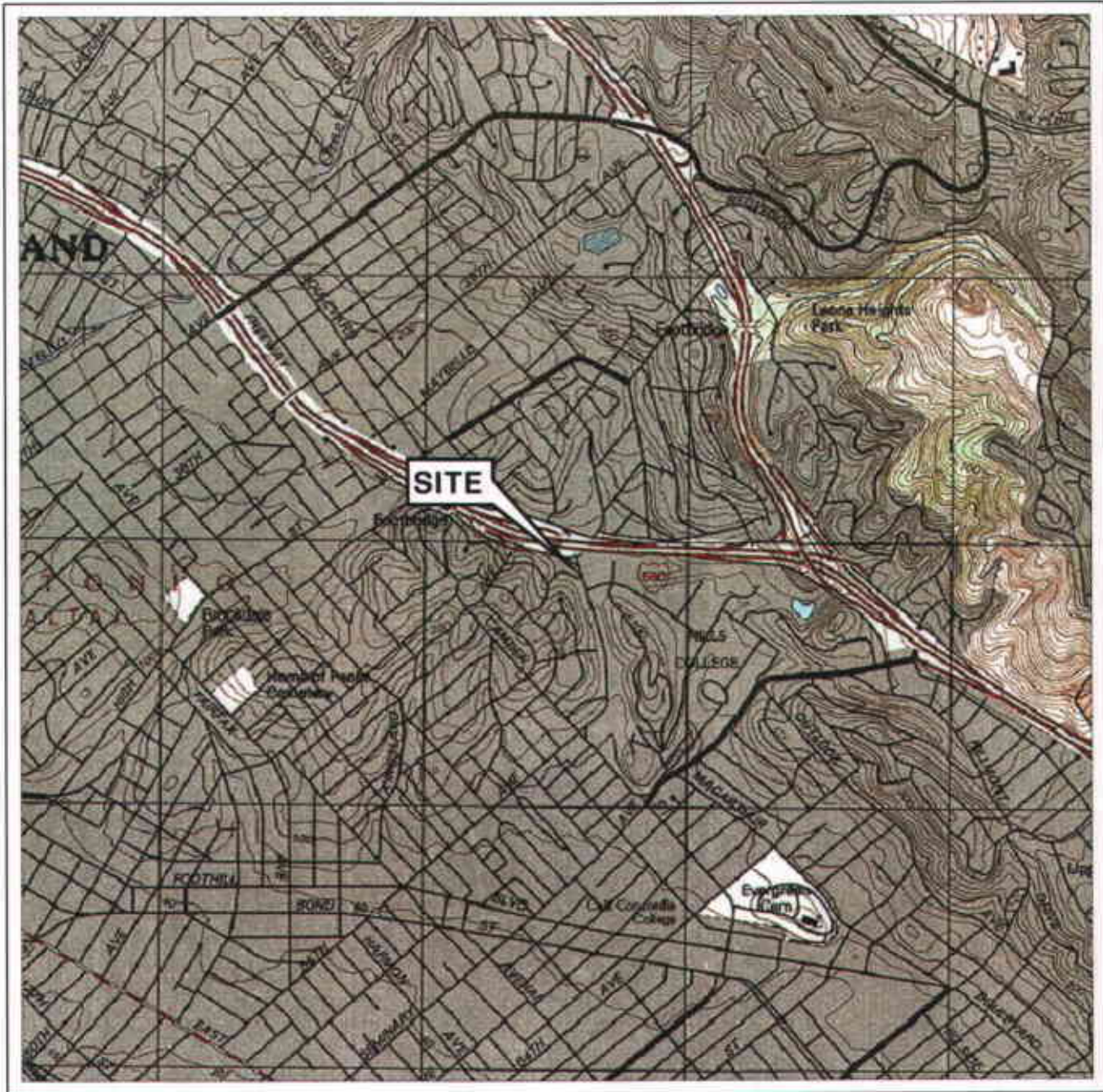
Date Sampled	1,1,1-Trichloroethane (µg/l)	Bromo-methane (µg/l)	Chloro-methane (µg/l)	Chloro-ethane (µg/l)	Vinyl chloride (µg/l)	Methylene chloride (µg/l)	Bromoform (µg/l)	Bromo-dichloro-methane (µg/l)	1,1-Dichloro-ethane (µg/l)	1,1-Dichloro-ethene (µg/l)	Trichloro-fluoro-methane (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2-Dichloro-propane (µg/l)	1,1,2-Trichloro-ethane (µg/l)	TCE (µg/l)
<b>MW-A</b>															
02/03/04	ND<0.50	ND<1.0	ND<2.0	ND<1.0	ND<0.50	ND<5.0	ND<2.0	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50
02/18/05	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<0.50	ND<5.0	ND<2.0	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50

**Table 3 c**  
**ADDITIONAL ANALYTICAL RESULTS**

76 Station 5781

Date Sampled	1,1,2,2- Tetrachloroethane (µg/l)	1,2- Dichlorobenzene (µg/l)	Dichloro- difluoro- methane (µg/l)	EDB (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8260B (µg/l)	TOG (mg/l)
<b>MW-A</b>										
03/07/01	--	--	--	ND	ND	ND	ND	ND	ND	--
02/22/03	--	--	--	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
02/03/04	ND<0.50	ND<0.50	ND<1.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
02/18/05	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<50	ND<2.0

# FIGURES



SCALE 1:24,000



**VICINITY MAP**

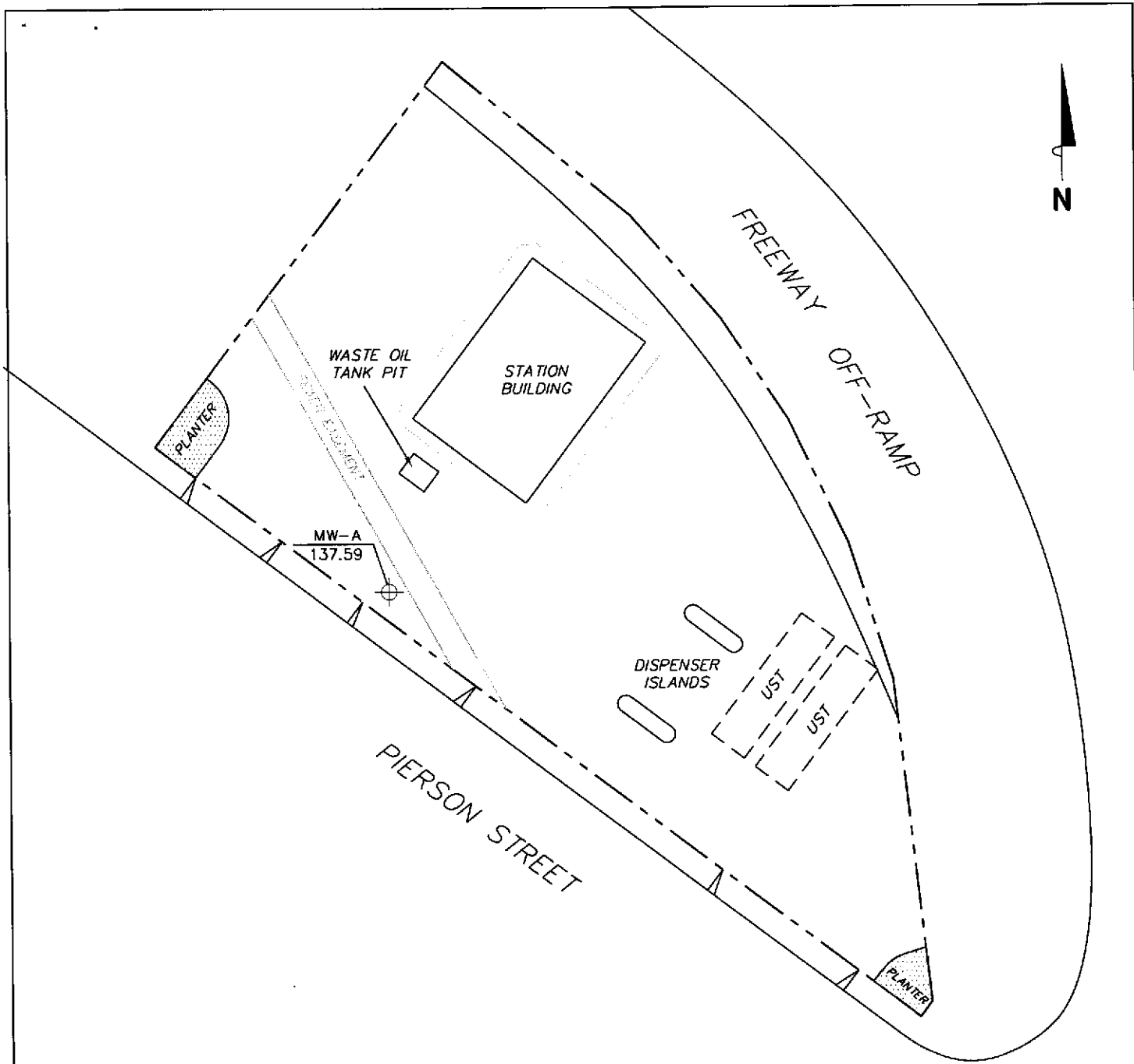
76 Station 5781  
3535 Pierson Street  
Oakland, California

SOURCE:  
United States Geological Survey  
7.5 Minute Topographic Map:  
Oakland East Quadrangle

**FIGURE 1**




0.5 = 1:1



**NOTES:**

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

**LEGEND**

MW-A  Monitoring Well with  
 Groundwater Elevation (feet)

**GROUNDWATER ELEVATION  
 MAP**

**February 18, 2005**

76 Station 5781  
 3535 Pierson Street  
 Oakland, California

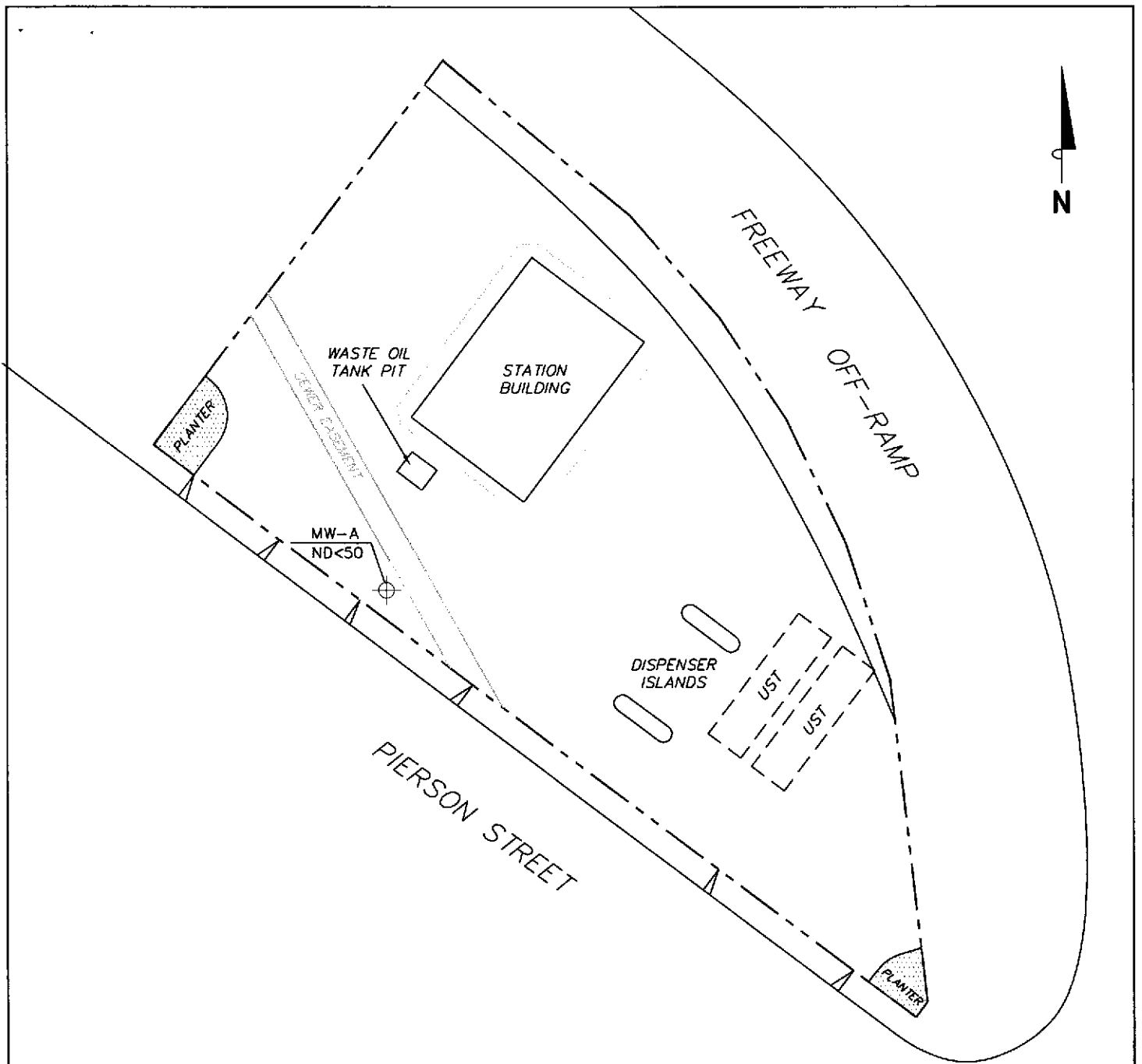
**FIGURE 2**

SCALE (FEET)



**TRC**

PS=1:1.5781-003



**NOTES:**

TPH-G = total petroleum hydrocarbons as gasoline.  
 µg/l = micrograms per liter. ND = not detected  
 at limit indicated on official laboratory report.  
 UST = underground storage tank. Results obtained  
 using EPA Method 8015.

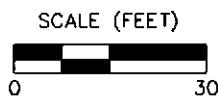
**LEGEND**

MW-A ⊕ Monitoring Well with  
 Dissolved-Phase TPH-G  
 Concentration (µg/l)

**DISSOLVED-PHASE TPH-G  
 CONCENTRATION MAP  
 February 18, 2005**

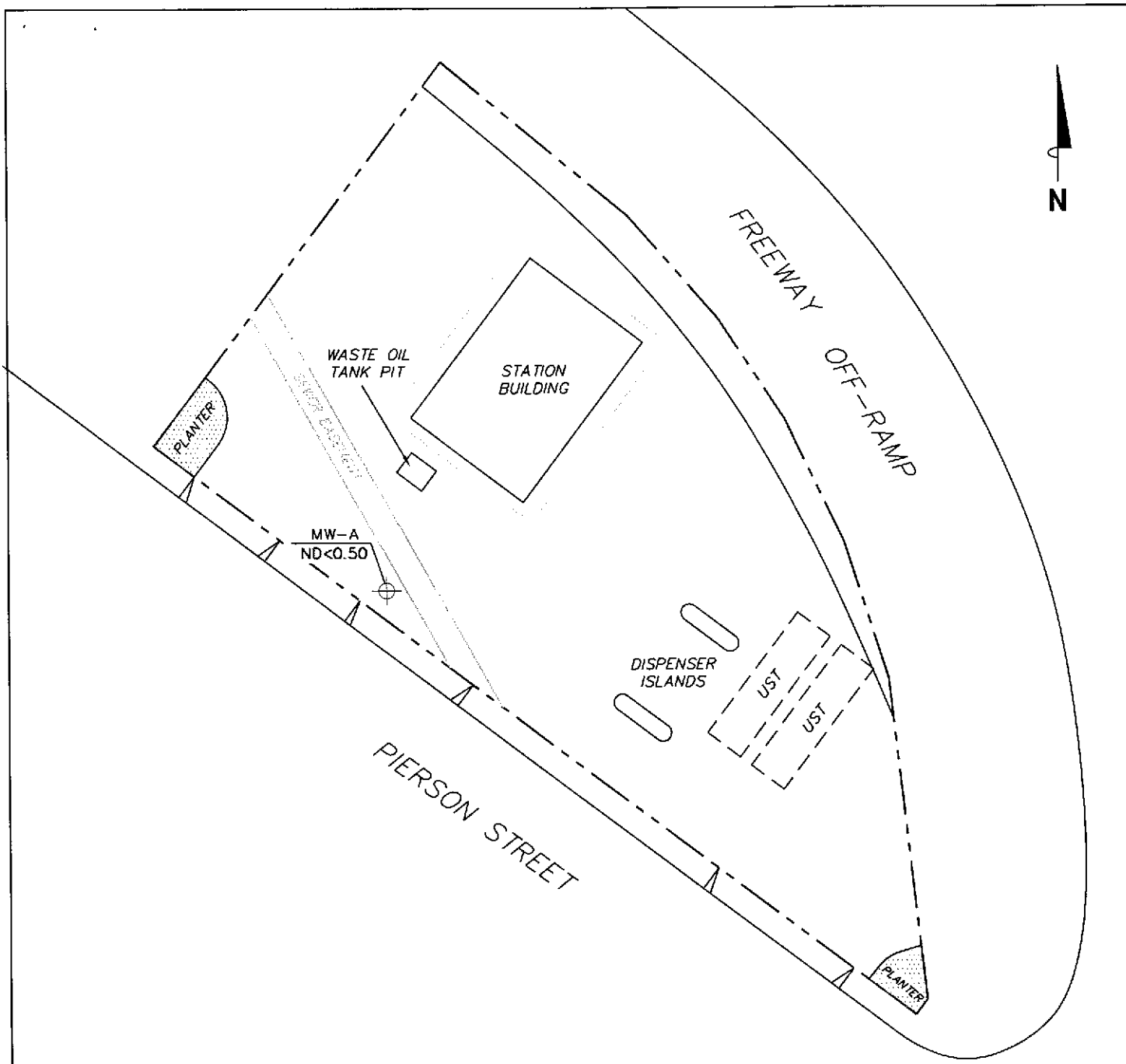
76 Station 5781  
 3535 Pierson Street  
 Oakland, California

**TRC**



**FIGURE 3**

PS=1:1.5781-003



**NOTES:**

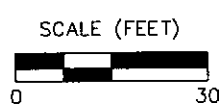
$\mu\text{g/l}$  = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank.

**LEGEND**

MW-A  $\oplus$  Monitoring Well with Dissolved-Phase Benzene Concentration ( $\mu\text{g/l}$ )

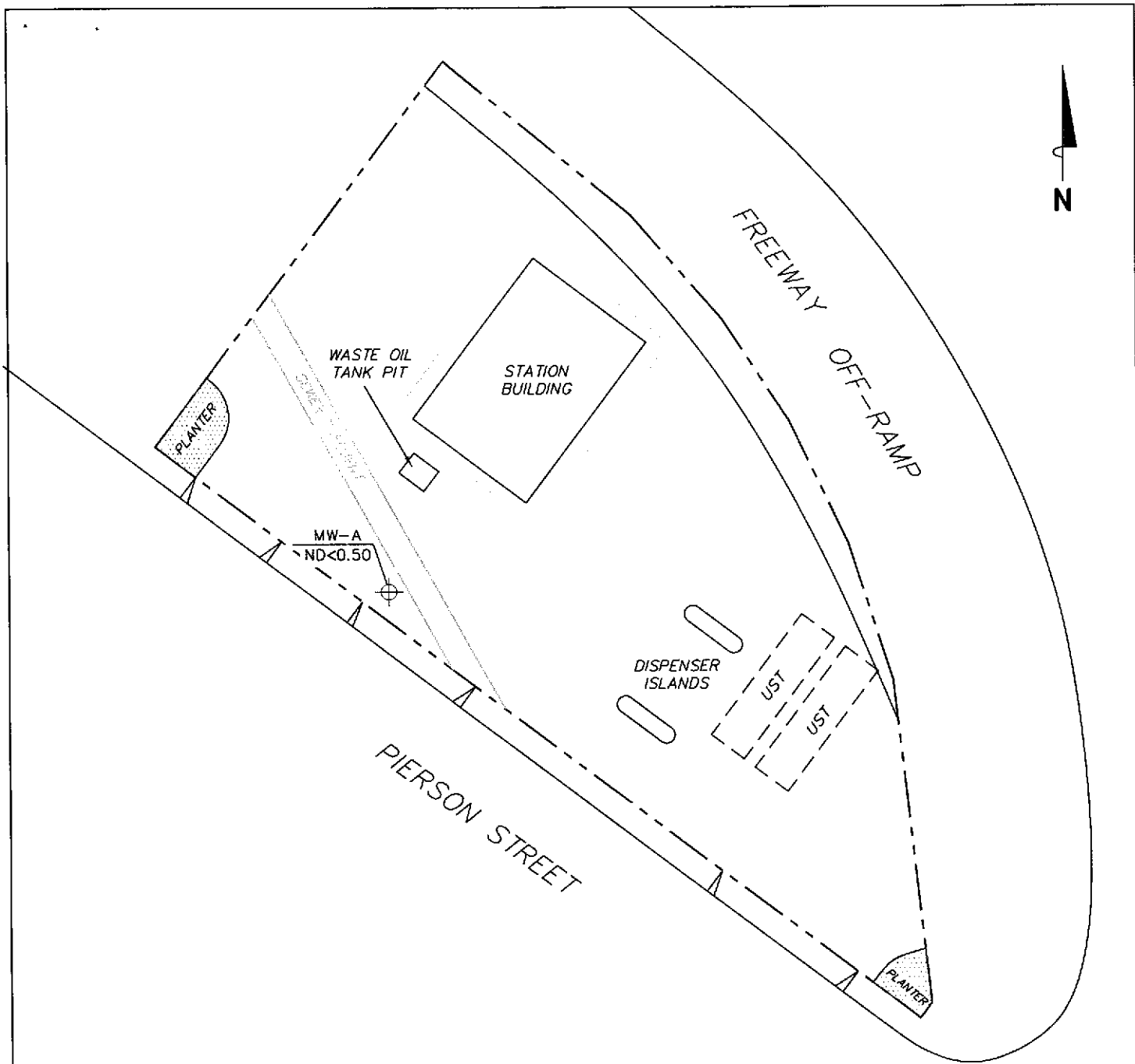
**DISSOLVED-PHASE BENZENE  
 CONCENTRATION MAP  
 February 18, 2005**

76 Station 5781  
 3535 Pierson Street  
 Oakland, California



**FIGURE 4**

PS=1:1 5781-003



**NOTES:**

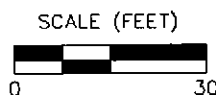
MTBE = methyl tertiary butyl ether.  
 µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.  
 UST = underground storage tank. Results obtained using EPA Method 8260B.

**LEGEND**

MW-A ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

**DISSOLVED-PHASE MTBE CONCENTRATION MAP**  
**February 18, 2005**

76 Station 5781  
 3535 Pierson Street  
 Oakland, California



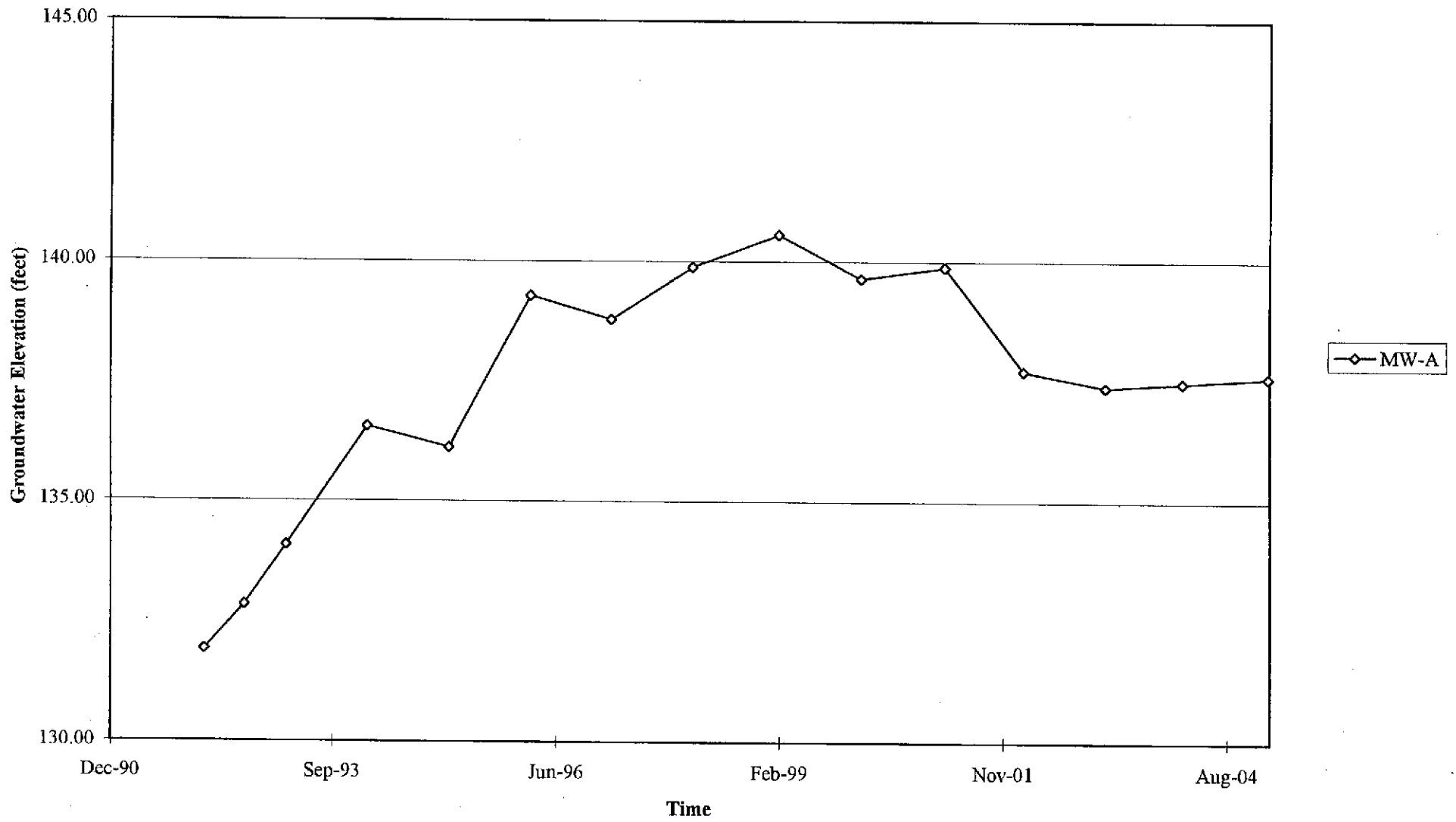
**FIGURE 5**

PS=1:1 5781-003

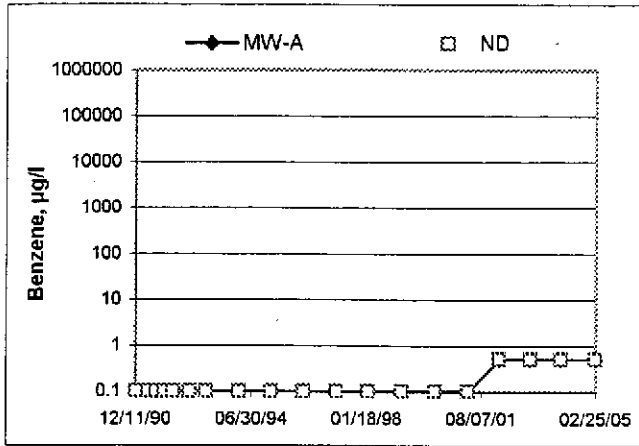


# GRAPHS

Groundwater Elevations vs. Time  
76 Station 5781



Benzene Concentrations vs Time  
76 Station 5781



## 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.



GROUNDWATER SAMPLING FIELD NOTES

Technician: Anthony

Site: 5781

Project No.: 41050001

Date: 2-18-05

Well No.: MW-A

Purge Method: sub

Depth to Water (feet): 14.21

Depth to Product (feet): 0

Total Depth (feet): 44.83

LPH & Water Recovered (gallons): 0

Water Column (feet): 30.62

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 20.33

1 Well Volume (gallons): 5

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
1245			5	1332	20.0	7.04		
			10	1411	20.2	7.00		
	1256		15	1375	20.0	6.83		
Static at Time Sampled			Total Gallons Purged		Time Sampled			
• 26.90			15		1458			
Comments: <u>well Did not Recover in 2 hours</u>								

Well No.: \_\_\_\_\_

Purge Method: \_\_\_\_\_

Depth to Water (feet): \_\_\_\_\_

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet): \_\_\_\_\_

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): \_\_\_\_\_

Casing Diameter (Inches): \_\_\_\_\_

80% Recharge Depth (feet): \_\_\_\_\_

1 Well Volume (gallons): \_\_\_\_\_

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

TRC Alton Geoscience- Irvine

March 09, 2005

21 Technology Drive  
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001/FA20

Project: Conoco Phillips #5781

Site: 3535 Pierson St., Oakland

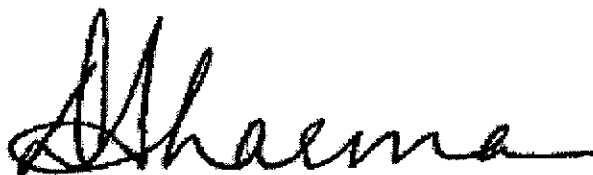
Attached is our report for your samples received on 02/22/2005 18:09  
This report has been reviewed and approved for release. Reproduction of this report  
is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after  
04/08/2005 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@sti-inc.com](mailto:dsharma@sti-inc.com)

Sincerely,



Dimple Sharma  
Project Manager



**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/18/2005 14:58	Water	1

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

02/25/2005 13:54

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

Prep(s): 5030  
5030  
Test(s): 8015M  
8021B  
Sample ID: MW-A  
Lab ID: 2005-02-0662 - 1  
Sampled: 02/18/2005 14:58  
Extracted: 2/25/2005 01:49  
Matrix: Water  
QC Batch#: 2005/02/24-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	02/25/2005 01:49	
Benzene	ND	0.50	ug/L	1.00	02/25/2005 01:49	
Toluene	ND	0.50	ug/L	1.00	02/25/2005 01:49	
Ethyl benzene	ND	0.50	ug/L	1.00	02/25/2005 01:49	
Xylene(s)	ND	0.50	ug/L	1.00	02/25/2005 01:49	
MTBE	ND	5.0	ug/L	1.00	02/25/2005 01:49	
<b>Surrogate(s)</b>						
Trifluorotoluene	98.7	58-124	%	1.00	02/25/2005 01:49	
4-Bromofluorobenzene-FID	83.6	50-150	%	1.00	02/25/2005 01:49	

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030

5030

Method Blank

MB: 2005/02/24-01.05-003

Test(s): 8015M

8021B

QC Batch # 2005/02/24-01.05

Date Extracted: 02/24/2005 09:41

Water

Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	02/24/2005 09:41	
Benzene	ND	0.5	ug/L	02/24/2005 09:41	
Toluene	ND	0.5	ug/L	02/24/2005 09:41	
Ethyl benzene	ND	0.5	ug/L	02/24/2005 09:41	
Xylene(s)	ND	0.5	ug/L	02/24/2005 09:41	
MTBE	ND	5.0	ug/L	02/24/2005 09:41	
<b>Surrogates(s)</b>					
Trifluorotoluene	100.4	58-124	%	02/24/2005 09:41	
4-Bromofluorobenzene-FID	88.6	50-150	%	02/24/2005 09:41	

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

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

Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/02/24-01.05**

LCS 2005/02/24-01.05-004  
LCSD

Extracted: 02/24/2005

Analyzed: 02/24/2005 10:14

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	54.8		50.0	109.6			77-123	20		
Toluene	55.0		50.0	110.0			78-122	20		
Ethyl benzene	55.0		50.0	110.0			70-130	20		
Xylene(s)	162		150	108.0			75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	529		500	105.8			58-124			

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

02/25/2005 13:54

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

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

Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike

Water

QC Batch # 2005/02/24-01.05

LCS 2005/02/24-01.05-005

Extracted: 02/24/2005

Analyzed: 02/24/2005 10:47

LCSD

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
GRO (C6-C12)	247		250	98.8			75-125	20		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene-FID	459		500	91.8			50-150			

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

02/25/2005 13:54

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/02/24-01.05**

MS/MSD

Lab ID: 2005-02-0613 - 010

MS: 2005/02/24-01.05-013

Extracted: 02/24/2005

Analyzed: 02/24/2005 15:28

Dilution: 1.00

MSD: 2005/02/24-01.05-014

Extracted: 02/24/2005

Analyzed: 02/24/2005 16:00

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Benzene	55.8	58.6	ND	50.0	111.6	117.2	4.9	65-135	20		
Toluene	55.3	57.5	ND	50.0	110.6	115.0	3.9	65-135	20		
Ethyl benzene	54.4	56.2	ND	50.0	108.8	112.4	3.3	65-135	20		
Xylene(s)	160	166	ND	150	106.7	110.7	3.7	65-135	20		
<b>Surrogate(s)</b>											
Trifluorotoluene	487	527		500	97.4	105.4		58-124			

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

02/25/2005 13:54

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

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

Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/02/24-01.05**

MS/MSD

Lab ID: 2005-02-0613 - 014

MS: 2005/02/24-01.05-015

Extracted: 02/24/2005

Analyzed: 02/24/2005 16:33

Dilution: 1.00

MSD: 2005/02/24-01.05-016

Extracted: 02/24/2005

Analyzed: 02/24/2005 17:06

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
GRO (C6-C12)	231	226	ND	250	92.4	90.4	2.2	65-135	20		
<i>Surrogate(s)</i>											
4-Bromofluorobenzene-FID	433	430		500	86.6	86.0		50-150			

**Oil & Grease (Total) by EPA 1664A**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/18/2005 14:58	Water	1

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

02/25/2005 16:32



**Oil & Grease (Total) by EPA 1664A**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

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

Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

---

Prep(s):	1664A	Test(s):	1664A
Sample ID:	MW-A	Lab ID:	2005-02-0662 - 1
Sampled:	02/18/2005 14:58	Extracted:	2/23/2005 00:00
Matrix:	Water	QC Batch#:	2005/02/23-02.23

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	2.0	mg/L	1.00	02/24/2005	

**Oil & Grease (Total) by EPA 1664A**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

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

Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 1664A

Test(s): 1664A

Method Blank

Water

QC Batch # 2005/02/23-02.23

MB: 2005/02/23-02.23-001

Date Extracted: 02/23/2005

Compound	Conc.	RL	Unit	Analyzed	Flag
Oil & Grease (total)	ND	2	mg/L	02/24/2005	

Sewern Trent Laboratories, Inc.

02/25/2005 16:32

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

**Oil & Grease (Total) by EPA 1664A**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 1664A

Test(s): 1664A

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/02/23-02.23**

LCS 2005/02/23-02.23-002

Extracted: 02/23/2005

Analyzed: 02/24/2005

LCSD 2005/02/23-02.23-003

Extracted: 02/23/2005

Analyzed: 02/24/2005

Compound	Conc. mg/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Oil & Grease (total)	33.5	36.8	40.0	83.8	92.0	9.3	79-114	18		

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

02/25/2005 16:32

Page 4 of 4

**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/18/2005 14:58	Water	1

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03/03/2005 15:44

**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-A	Lab ID:	2005-02-0662 - 1
Sampled:	02/18/2005 14:58	Extracted:	3/3/2005 09:01
Matrix:	Water	QC Batch#:	2005/03/03-1A.60

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	03/03/2005 09:01	
Vinyl chloride	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Chloroethane	ND	1.0	ug/L	1.00	03/03/2005 09:01	
Trichlorofluoromethane	ND	1.0	ug/L	1.00	03/03/2005 09:01	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Methylene chloride	ND	5.0	ug/L	1.00	03/03/2005 09:01	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Chloroform	ND	0.50	ug/L	1.00	03/03/2005 09:01	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Carbon tetrachloride	ND	0.50	ug/L	1.00	03/03/2005 09:01	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Trichloroethene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Bromodichloromethane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Tetrachloroethene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Dibromochloromethane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Chlorobenzene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Bromoform	ND	2.0	ug/L	1.00	03/03/2005 09:01	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	03/03/2005 09:01	
Chloromethane	ND	1.0	ug/L	1.00	03/03/2005 09:01	

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03/03/2005 15:44

**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-A	Lab ID: 2005-02-0662 - 1
Sampled: 02/18/2005 14:58	Extracted: 3/3/2005 09:01
Matrix: Water	QC Batch#: 2005/03/03-1A.60

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Bromomethane	ND	1.0	ug/L	1.00	03/03/2005 09:01	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	94.4	79-118	%	1.00	03/03/2005 09:01	
1,2-Dichloroethane-d4	99.0	78-117	%	1.00	03/03/2005 09:01	
Toluene-d8	102.9	77-121	%	1.00	03/03/2005 09:01	

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**Halogenated Volatile Organic Compounds by 8021B/8260B**

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Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2005/03/03-1A.60-027

Water

Test(s): 8260B

QC Batch # 2005/03/03-1A.60

Date Extracted: 03/03/2005 08:27

Compound	Conc.	RL	Unit	Analyzed	Flag
Bromodichloromethane	ND	0.5	ug/L	03/03/2005 08:27	
Bromoform	ND	2.0	ug/L	03/03/2005 08:27	
Bromomethane	ND	1.0	ug/L	03/03/2005 08:27	
Carbon tetrachloride	ND	0.5	ug/L	03/03/2005 08:27	
Chlorobenzene	ND	0.5	ug/L	03/03/2005 08:27	
Chloroethane	ND	1.0	ug/L	03/03/2005 08:27	
Chloroform	ND	0.5	ug/L	03/03/2005 08:27	
Chloromethane	ND	1.0	ug/L	03/03/2005 08:27	
Dibromochloromethane	ND	0.5	ug/L	03/03/2005 08:27	
1,2-Dichlorobenzene	ND	0.5	ug/L	03/03/2005 08:27	
1,3-Dichlorobenzene	ND	0.5	ug/L	03/03/2005 08:27	
1,4-Dichlorobenzene	ND	0.5	ug/L	03/03/2005 08:27	
Dichlorodifluoromethane	ND	1.0	ug/L	03/03/2005 08:27	
1,1-Dichloroethane	ND	0.5	ug/L	03/03/2005 08:27	
1,2-Dichloroethane	ND	0.5	ug/L	03/03/2005 08:27	
1,1-Dichloroethene	ND	0.5	ug/L	03/03/2005 08:27	
cis-1,2-Dichloroethene	ND	0.5	ug/L	03/03/2005 08:27	
trans-1,2-Dichloroethene	ND	0.5	ug/L	03/03/2005 08:27	
1,2-Dichloropropane	ND	0.5	ug/L	03/03/2005 08:27	
cis-1,3-Dichloropropene	ND	0.5	ug/L	03/03/2005 08:27	
trans-1,3-Dichloropropene	ND	0.5	ug/L	03/03/2005 08:27	
Methylene chloride	ND	5.0	ug/L	03/03/2005 08:27	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	03/03/2005 08:27	
Tetrachloroethene	ND	0.5	ug/L	03/03/2005 08:27	
1,1,1-Trichloroethane	ND	0.5	ug/L	03/03/2005 08:27	
1,1,2-Trichloroethane	ND	0.5	ug/L	03/03/2005 08:27	
Trichloroethene	ND	0.5	ug/L	03/03/2005 08:27	
Trichlorofluoromethane	ND	1.0	ug/L	03/03/2005 08:27	
Trichlorotrifluoroethane	ND	0.5	ug/L	03/03/2005 08:27	

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**Halogenated Volatile Organic Compounds by 8021B/8260B**

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Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2005/03/03-1A.60-027

Water

Test(s): 8260B

QC Batch # 2005/03/03-1A.60

Date Extracted: 03/03/2005 08:27

Compound	Conc.	RL	Unit	Analyzed	Flag
Vinyl chloride	ND	0.5	ug/L	03/03/2005 08:27	
4-Bromofluorobenzene	95.6	79-118	%	03/03/2005 08:27	
1,2-Dichloroethane-d4	102.5	78-117	%	03/03/2005 08:27	
Toluene-d8	103.8	77-121	%	03/03/2005 08:27	

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**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience- Irvine  
Attn.: Anju Farfan

21 Technology Drive  
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Phone: (949) 341-7440 Fax: (949) 753-0111  
Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/03/03-1A.60**

LCS 2005/03/03-1A.60-054  
LCSD

Extracted: 03/03/2005

Analyzed: 03/03/2005 07:54

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Chlorobenzene	20.0		20	100.0			61-121	20		
1,1-Dichloroethene	18.2		20	91.0			65-125	20		
Trichloroethene	19.1		20	95.5			74-134	20		
<b>Surrogates(s)</b>										
4-Bromofluorobenzene	470		500	94.0			79-118			
1,2-Dichloroethane-d4	520		500	104.0			78-117			
Toluene-d8	518		500	103.6			77-121			

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**Halogenated Volatile Organic Compounds by 8021B/8260B**

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Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/03/03-1A.60**

MS/MSD

Lab ID: 2005-02-0670 - 002

MS: 2005/03/03-1A.60-046

Extracted: 03/03/2005

Analyzed: 03/03/2005 12:46

Dilution: 1.00

MSD: 2005/03/03-1A.60-020

Extracted: 03/03/2005

Analyzed: 03/03/2005 13:20

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Chlorobenzene	19.8	19.9	ND	20	99.0	99.5	0.5	61-121	20		
1,1-Dichloroethene	17.8	18.6	ND	20	89.0	93.0	4.4	65-125	20		
Trichloroethene	18.7	18.7	ND	20	93.5	93.5	0.0	74-134	20		
<b>Surrogate(s)</b>											
4-Bromofluorobenzene	470	480		500	93.9	96.0		79-118			
1,2-Dichloroethane-d4	455	487		500	91.0	97.4		78-117			
Toluene-d8	508	506		500	101.6	101.2		77-121			

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**Diesel (C9-C24)**

TRC Alton Geoscience- Irvine  
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Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/18/2005 14:58	Water	1

**Diesel (C9-C24)**

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

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Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

Prep(s): 3511	Test(s): 8015M
Sample ID: MW-A	Lab ID: 2005-02-0662 - 1
Sampled: 02/18/2005 14:58	Extracted: 2/24/2005 07:41
Matrix: Water	QC Batch#: 2005/02/24-02.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	02/24/2005 10:23	
<i>Surrogate(s)</i>						
o-Terphenyl	89.8	64-127	%	1.00	02/24/2005 10:23	

**Diesel (C9-C24)**

TRC Alton Geoscience- Irvine  
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Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 3511

Method Blank

MB: 2005/02/24-02.10-001

Water

Test(s): 8015M

QC Batch # 2005/02/24-02.10

Date Extracted: 02/24/2005 07:41

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	02/24/2005 12:11	
<i>Surrogates(s)</i> o-Terphenyl	89.0	64-127	%	02/24/2005 12:11	

**Diesel (C9-C24)**

TRC Alton Geoscience- Irvine

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Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 3511

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/02/24-02.10**

LCS 2005/02/24-02.10-002

Extracted: 02/24/2005

Analyzed: 02/24/2005 11:44

LCSD 2005/02/24-02.10-003

Extracted: 02/24/2005

Analyzed: 02/24/2005 11:17

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	565	586	680	83.1	86.2	3.7	60-150	25		
<i>Surrogates(s)</i> o-Terphenyl	1.36	1.36	1.25	109.0	109.0		64-127	0		

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03/07/2005 16:25

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

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/18/2005 14:58	Water	1

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

TRC Alton Geoscience- Irvine

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-A	Lab ID: 2005-02-0662 - 1
Sampled: 02/18/2005 14:58	Extracted: 3/1/2005 10:09 3/1/2005 09:29
Matrix: Water	QC Batch#: 2005/03/01-1B.65 2005/03/01-1B.68

Analysis Flag: . ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	03/01/2005 09:29	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	03/01/2005 09:29	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	03/01/2005 09:29	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	03/01/2005 09:29	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	03/01/2005 09:29	
1,2-DCA	ND	0.50	ug/L	1.00	03/01/2005 09:29	
EDB	ND	0.50	ug/L	1.00	03/01/2005 09:29	
Ethanol	ND	50	ug/L	1.00	03/01/2005 10:09	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	107.4	73-130	%	1.00	03/01/2005 10:09	
1,2-Dichloroethane-d4	109.8	73-130	%	1.00	03/01/2005 09:29	
Toluene-d8	102.1	81-114	%	1.00	03/01/2005 10:09	
Toluene-d8	110.2	81-114	%	1.00	03/01/2005 09:29	

Severn Trent Laboratories, Inc.

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03/08/2005 18:15



**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: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2005/03/01-1B.65-013

Water

Test(s): 8260B

QC Batch # 2005/03/01-1B.65

Date Extracted: 03/01/2005 09:13

Compound	Conc.	RL	Unit	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	03/01/2005 09:13	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	03/01/2005 09:13	
Di-isopropyl Ether (DIPE)	ND	0.5	ug/L	03/01/2005 09:13	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	03/01/2005 09:13	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	03/01/2005 09:13	
1,2-DCA	ND	0.5	ug/L	03/01/2005 09:13	
EDB	ND	0.5	ug/L	03/01/2005 09:13	
Ethanol	ND	50	ug/L	03/01/2005 09:13	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	111.4	73-130	%	03/01/2005 09:13	
Toluene-d8	101.6	81-114	%	03/01/2005 09:13	

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

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Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

Method Blank

Water

QC Batch # 2005/03/01-1B.68

MB: 2005/03/01-1B.68-045

Date Extracted: 03/01/2005 07:45

Compound	Conc.	RL	Unit	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	03/01/2005 07:45	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	03/01/2005 07:45	
Di-isopropyl Ether (DIPE)	ND	0.5	ug/L	03/01/2005 07:45	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	03/01/2005 07:45	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	03/01/2005 07:45	
1,2-DCA	ND	0.5	ug/L	03/01/2005 07:45	
EDB	ND	0.5	ug/L	03/01/2005 07:45	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	113.0	73-130	%	03/01/2005 07:45	
Toluene-d8	104.6	81-114	%	03/01/2005 07:45	

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03/08/2005 18:15

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

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Project: 41050001/FA20  
Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike

Water

QC Batch # 2005/03/01-1B.65

LCS 2005/03/01-1B.65-048

Extracted: 03/01/2005

Analyzed: 03/01/2005 08:48

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	27.7		25	110.8			65-165	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	438		500	87.6			73-130			
Toluene-d8	509		500	101.8			81-114			

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03/08/2005 18:15

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**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: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/03/01-1B.68**

LCS 2005/03/01-1B.68-028

Extracted: 03/01/2005

Analyzed: 03/01/2005 07:28

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	22.0		25	88.0			65-165	20		
<i>Surrogates(s)</i>										
1,2-Dichloroethane-d4	453		500	90.6			73-130			
Toluene-d8	507		500	101.4			81-114			

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

03/08/2005 18:15

**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: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/03/01-1B.65**

MS/MSD

Lab ID: 2005-02-0835 - 002

MS: 2005/03/01-1B.65-043

Extracted: 03/01/2005

Analyzed: 03/01/2005 12:43

Dilution: 1.00

MSD: 2005/03/01-1B.65-007

Extracted: 03/01/2005

Analyzed: 03/01/2005 13:07

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	29.5	28.0	ND	25	118.0	112.0	5.2	65-165	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	441	451		500	88.2	90.2		73-130			
Toluene-d8	575	572		500	115.0	114.4		81-114		S5	S5

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

TRC Alton Geoscience- Irvine

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Irvine, CA 92718

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

Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/03/01-1B.68**

MS/MSD

Lab ID: 2005-02-0812 - 003

MS: 2005/03/01-1B.68-013

Extracted: 03/01/2005

Analyzed: 03/01/2005 11:13

Dilution: 1.00

MSD: 2005/03/01-1B.68-030

Extracted: 03/01/2005

Analyzed: 03/01/2005 11:30

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample		ug/L	MS	MSD	RPD	Rec.	RPD	MS
Methyl tert-butyl ether	24.9	23.6	ND	25	99.6	94.4	5.4	65-165	20		
<i>Surrogate(s)</i>											
1,2-Dichloroethane-d4	468	474		500	93.5	94.8		73-130			
Toluene-d8	558	559		500	111.6	111.8		81-114			

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03/08/2005 18:15

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

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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Project: 41050001/FA20

Conoco Phillips #5781

Received: 02/22/2005 18:09

Site: 3535 Pierson St., Oakland

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**Legend and Notes**

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**Analysis Flag**

**Result Flag**

S5

Surrogate recoveries higher than acceptance limits.  
Matrix interference suspected

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03/08/2005 18:15

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STL San Francisco

Sample Receipt Checklist

Submission #: 2005- 02 - 0662

Checklist completed by: (initials) MN Date: 02, 23 /05

Courier name: [X] STL San Francisco [ ] Client

Custody seals intact on shipping container/samples Yes \_\_\_ No \_\_\_ Not Present [X]

Chain of custody present? Yes [X] No \_\_\_

Chain of custody signed when relinquished and received? Yes [X] No \_\_\_

Chain of custody agrees with sample labels? Yes [X] No \_\_\_

Samples in proper container/bottle? Yes [X] No \_\_\_

Sample containers intact? Yes [X] No \_\_\_

Sufficient sample volume for indicated test? Yes [X] No \_\_\_

All samples received within holding time? Yes [X] No \_\_\_

Container/Temp Blank temperature in compliance (4° C ± 2)? Temp: 2 °C Yes [X] No \_\_\_

Potential reason for > 6°C - Ice melted [X] Ice in bags [ ] Not enough ice [ ] Not enough blue ice [ ] Samples in boxes [ ]

Sampled < 4hr. ago [ ] Ice not required (e.g. air or bulk sample) [ ] Ice Present Yes [X] No \_\_\_

Water - VOA vials have zero headspace? No VOA vials submitted \_\_\_ Yes [X] 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: [ ] HNO3 [ ] HCl [ ] H2SO4 [ ] NaOH [ ] ZnOAc -Lot #(s) \_\_\_\_\_

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

Comments: \_\_\_\_\_

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

Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_\_ / \_\_\_\_ /05

Client contacted: [ ] Yes [ ] No

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

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





## **STATEMENTS**

### **Purge Water Disposal**

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

### **Limitations**

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