R0253

TRC

Customer-Focused Solutions

July 2, 2004 TRC Project No. 42010201

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

RE: Quarterly Status Report - First Quarter 2004
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 2004 Quarterly Status Report for the subject site.

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.

1590 Solano Way, Suite A • Concord, California 94520
Telephone 925-688-1200 • Fax 925-688-0388

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, benzene, and MTBE were not detected above the reporting limit in well MW-A. TPH-d was detected at a concentration of 60 µg/l.

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 3, 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

Discontinue annual monitoring and sampling based on data trends through first quarter of 2004. Verify the status of the site closure request submitted to the Alameda County Health Care Services Agency in July 2003.

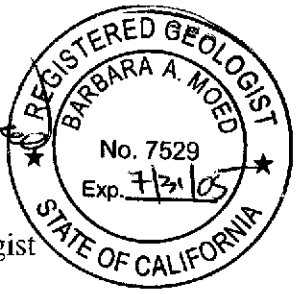
If you have any questions regarding this report, please call Roger Batra at (925) 688-2466.

Sincerely,

TRC

Roger Batra
Senior Project Manager

Barbara Moed, R.G.
Senior Project Geologist



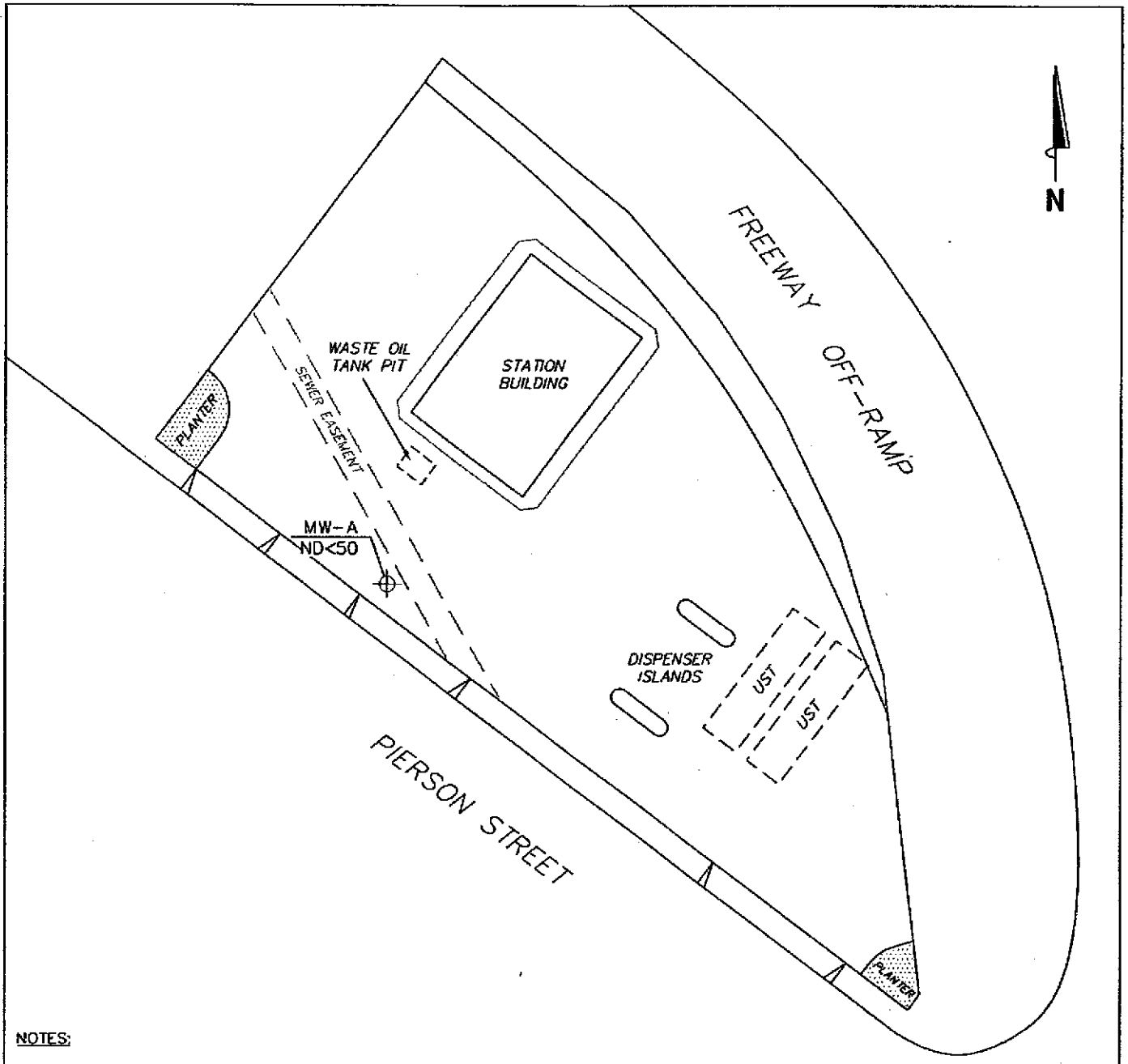
Attachments:

Figure 3 – Dissolved-Phase TPH-G Concentration Map, February 3, 2004, from First Quarter 2004 Fluid level Monitoring and Sampling Report, dated April 26, 2004 by TRC.

Figure 4 – Dissolved-Phase Benzene Concentration Map, February 3, 2004, from First Quarter 2004 Fluid level Monitoring and Sampling Report, dated April 26, 2004 by TRC.

Figure 5 – Dissolved-Phase MTBE Concentration Map, February 3, 2004, from First Quarter 2004 Fluid level Monitoring and Sampling Report, dated April 26, 2004 by TRC.

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



NOTES:

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 8015.

LEGEND

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

DISSOLVED-PHASE TPH-G CONCENTRATION MAP
February 3, 2004

76 Station 5781
3535 Pierson Street
Oakland, California

TRC

SCALE (FEET)
0 30

FIGURE 3

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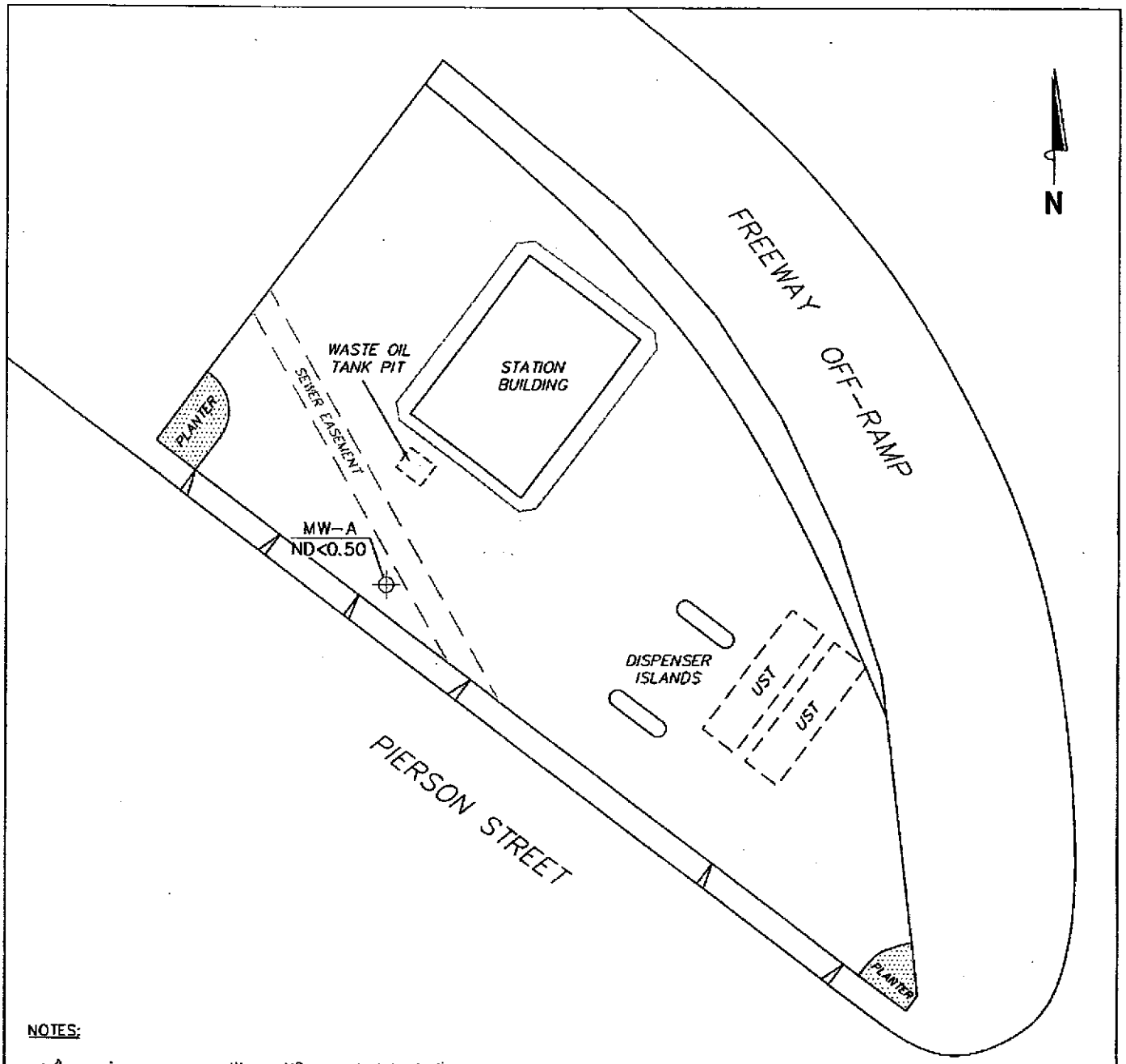

NOTES:

µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8021.

LEGEND

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

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
February 3, 2004

76 Station 5781
3535 Pierson Street
Oakland, California

TRC

SCALE (FEET)
0 30

PS=1:1

FIGURE 4

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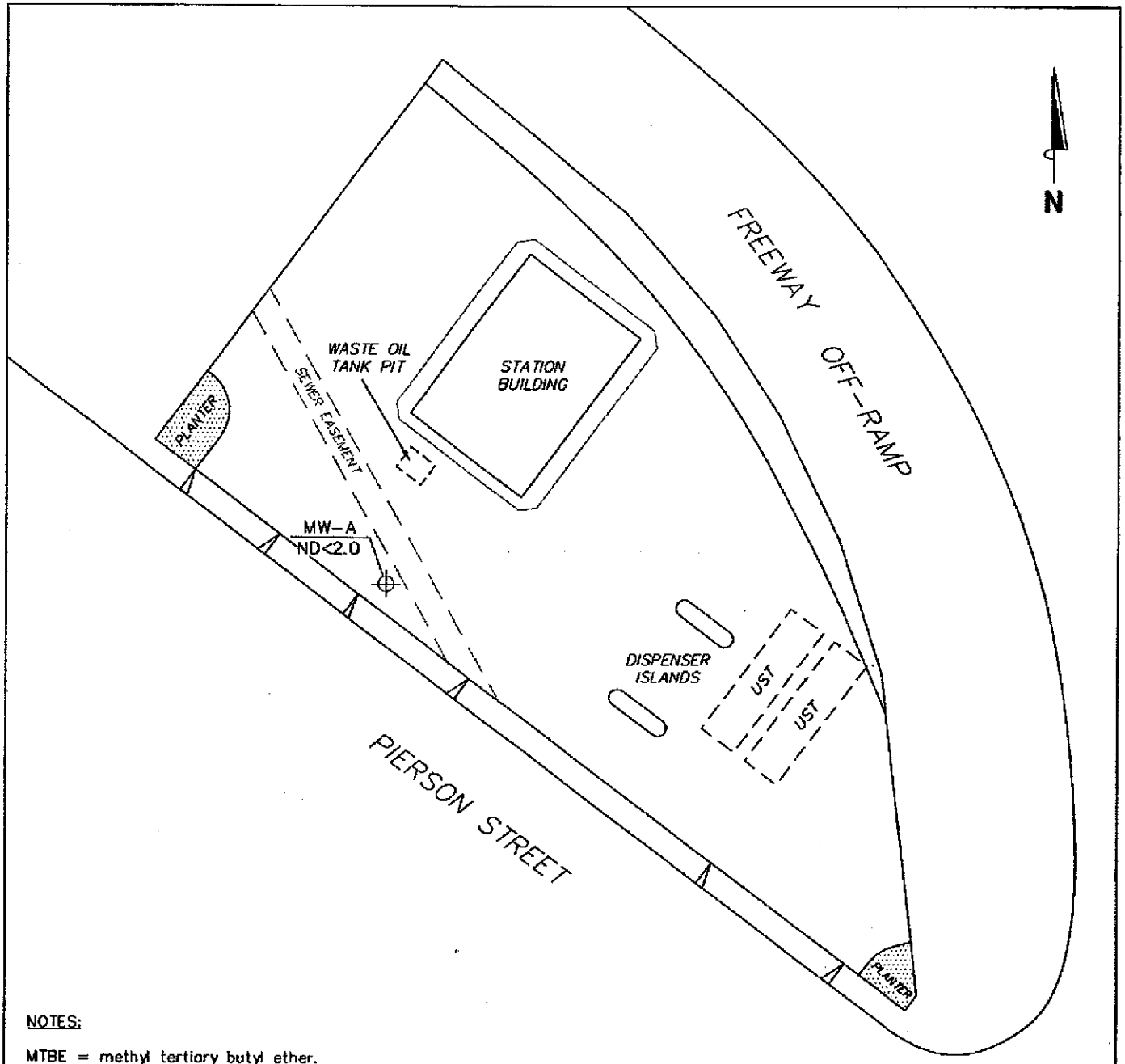

NOTES:

MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter. ND = not detectedot limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8021.

LEGEND

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

DISSOLVED-PHASE MTBE CONCENTRATION MAP
February 3, 2004

76 Station 5781
3535 Pierson Street
Oakland, California

TRC

SCALE (FEET)
0 30

FIGURE 5

PS=1:1

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RO 253

TRC

Customer-Focused Solutions

April 26, 2004

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
MARCH 2003 THROUGH MARCH 2004

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

Anju Farfan
QMS Operations Manager

CC: Ms. Eva Chu, Alameda County Health Care Services
Ms. Barbara Moed, TRC

Enclosures
20-0400/5781R01.QMS

21 Technology Drive • Irvine, California 92618
Telephone 949-727-9336 • Fax 949-727-7399

TRC

Customer-Focused Solutions

FLUID LEVEL MONITORING AND GROUNDWATER SAMPLING REPORT

MARCH 2003 THROUGH MARCH 2004

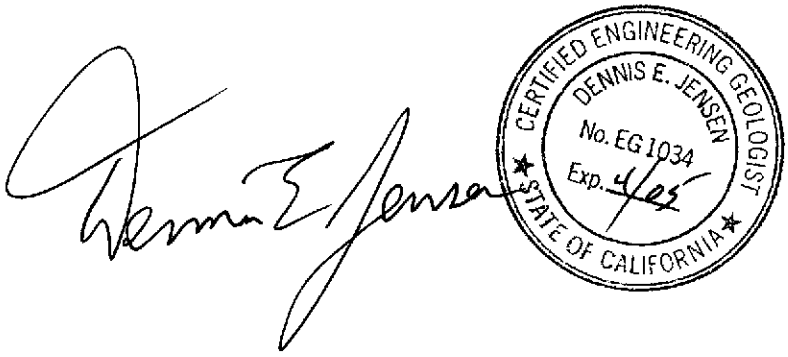
April 26, 2004

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

21 Technology Drive • Irvine, California 92618
Telephone 949-727-9336 • Fax 949-727-7399

GROUNDWATER 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 Table 3b: Summary of Additional Chemical Analysis Results Table 3c: Summary of Additional Chemical Analysis Results
Gettler-Ryan Historical Tables	Table 1: Groundwater Monitoring Data and Analytical Results Table 2: Groundwater Analytical Results – Oxygenate Compounds
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	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

76 Station 5781
3535 Pierson Street
Oakland, CA

Site Information:

Site:	76 Station 3535 Pierson Street Oakland, CA
Project Coordinator/Phone Number:	Thomas Kosel/916-558-7666
Groundwater wells onsite:	1
Groundwater wells offsite:	0

Field Activity:

Sampling consultant:	TRC
Date(s) sampled:	02/03/04
Groundwater wells gauged:	1
Groundwater wells sampled:	1
Purging method:	submersible 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:

Minimum depth to groundwater (feet bgs):	14.32
Maximum depth to groundwater (feet bgs):	14.32
Average groundwater elevation (feet relative to mean sea level):	137.48
Average change in groundwater elevations since previous event (feet):	N/A
Groundwater gradient and flow direction:	N/A

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

Wells with benzene concentrations below MCL:	1
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):	ND
Minimum TPH-G concentration (µg/l):	ND
Maximum TPH-G concentration (µg/l):	ND
Groundwater wells with free product:	0
Minimum free product thickness (feet):	0
Maximum free product thickness (feet):	0

Additional Information:

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.

TABLES

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:

Surface elevation - depth to water + (0.75 x 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 5781 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

February 3, 2004

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
MW-A														
02/03/04	151.80	14.32	0.00	137.48	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	

Table 2

HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS

February 3, 2004

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
MW-A														
02/03/04	151.80	14.32	0.00	137.48	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	

Table 3
SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS 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-Chloroethyl vinyl (µg/l)	DBCM (µg/l)	PCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,3-Dichloro-benzene (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-form (µg/l)
MW-A															
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

Table 3b
SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS
76 Station 5781

Date Sampled	1,1,1-TCE (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)	BDCM (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	Trichloro-fluoro-methane (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2-dichloro-propane (µg/l)	1,1,2-TCA (µg/l)	TCE (µg/l)
MW-A															
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

Table 3c

SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS

76 Station 5781

Date Sampled	1,1,2,2-Tetrachloroethane (µg/l)	1,2-DCB (µg/l)	Dichlorodifluoromethane (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)
MW-A									
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

GETTLER-RYAN INC.
HISTORICAL TABLES

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5781
3535 Pierson Street
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	GWE (msl)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-A	12/18/90[1]	--	--	73	ND	ND	ND	ND	ND	--
	05/03/91[1]	--	--	ND	ND	ND	ND	ND	ND	--
	08/07/91[1]	--	--	ND	ND	ND	ND	ND	ND	--
	11/08/91[1]	--	--	ND	ND	ND	ND	ND	ND	--
151.80	02/06/92[1]	19.88	131.92	ND	ND	ND	ND	ND	ND	--
	08/04/92[1]	18.95	132.85	ND	ND	ND	ND	ND	0.51	--
	02/10/93[1]	17.71	134.09	ND	ND	ND	ND	ND	ND	--
	02/10/94[1]	15.25	136.55	ND	ND	ND	0.52	ND	0.92	--
	02/09/95[1]	15.68	136.12	ND	ND	ND	ND	ND	ND	--
	02/06/96[2]	12.52	139.28	120[3]	ND	ND	ND	ND	2.1	--
	02/05/97[1]	13.01	138.79	61[4]	ND	ND	ND	ND	ND	ND
	02/02/98[1,5]	11.91	139.89	ND	ND	ND	ND	ND	ND	ND
	02/22/99[6]	11.24	140.56	ND	ND	ND	ND	ND	ND	ND
	02/26/00[7]	12.16	139.64	ND	ND	ND	1.01	ND	ND	ND
	03/07/01[8]	11.91	139.89	131[9]	ND	ND	ND	ND	ND	ND/ND[10]
	02/22/02[8]	14.08	137.72	<50	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	02/22/03[12,13]	**14.41**	**137.39**	**93[11]**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.0/<2.0[10]**
Trip Blank										
TB-LB	02/02/98	--	--	--	ND	ND	ND	ND	ND	ND
	02/22/99	--	--	--	ND	ND	ND	ND	ND	ND
	02/26/00	--	--	--	ND	ND	ND	ND	ND	ND
	03/07/01	--	--	--	ND	ND	ND	ND	ND	ND
	02/22/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
QA	**02/22/03**	**--**	**--**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<2.0**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5781
3535 Pierson Street
Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory results prior to February 2, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing elevation
(ft.) = Feet
DTW = Depth to Water
GWE = Groundwater Elevation
MSL = Mean Sea Level
TPH-D = Total Petroleum Hydrocarbons as Diesel
TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether
(ppb) = Parts per billion
(ppm) = Parts per million
ND = Not Detected
-- = Not Measured/Not Analyzed
TOG = Total Oil and Grease
QA = Quality Assurance/Trip Blank

* TOC elevation has been surveyed relative to Mean Sea Level (msl) (Elevation = 119.80 msl).

1 TOG and all EPA Method 8010 compounds were ND.

2 TOG and all EPA Method 8010 compounds were ND except for tetrachloroethene, which was detected at a concentration of 1.8 ppb.

3 Laboratory report indicates the hydrocarbons detected did not appear to be diesel.

4 Laboratory report indicates the hydrocarbons detected appeared to be diesel and non-diesel mixture.

5 All EPA Method 8010 constituents were ND. Total recoverable petroleum hydrocarbons TRPH/TOG by SM 5520 B&F, was detected at 7 ppm.

6 TOG and all EPA Method 8010 compounds were ND except for Methylene chloride, which was detected at a concentration of 10 ppb.

7 TOG and all EPA Method 8010 compounds analyzed by EPA Method 8260B were ND except for Bromodichloromethane, which was detected at a concentration of 7.33 ppb, and Chloroform at 44.8 ppb.

8 TOG and all EPA Method 8021B compounds were less than the reporting limit.

9 Laboratory report indicates unidentified hydrocarbons C9-C24.

10 MTBE by EPA Method 8260.

11 Laboratory report indicates hydrocarbon pattern is present in the fuel quantitation range but does not resemble the pattern of the requested fuel.

12 All VOCs by EPA Method 8260 were less than the reporting limit.

13 TOG was detected at 5,900 ppb.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #5781

3535 Pierson Street

Oakland, California

WELL ID	DATE	ETHANOL *(ppb)*	TBA *(ppb)*	MTBE *(ppb)*	DIPE *(ppb)*	ETBE *(ppb)*	TAME *(ppb)*	1,2-DCA *(ppb)*	EDB *(ppb)*
MW-A	03/07/01	ND	ND	ND	ND	ND	ND	ND	ND
	02/22/03	**<500**	**<100**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

EDB = 1,2-Dibromoethane

(ppb) = Parts per billion

ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

FIGURES

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

SCALE 1:24,000

N

SOURCE:

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

VICINITY MAP

76 Station 5781
3535 Pierson Street
Oakland, California

FIGURE 1

TRC

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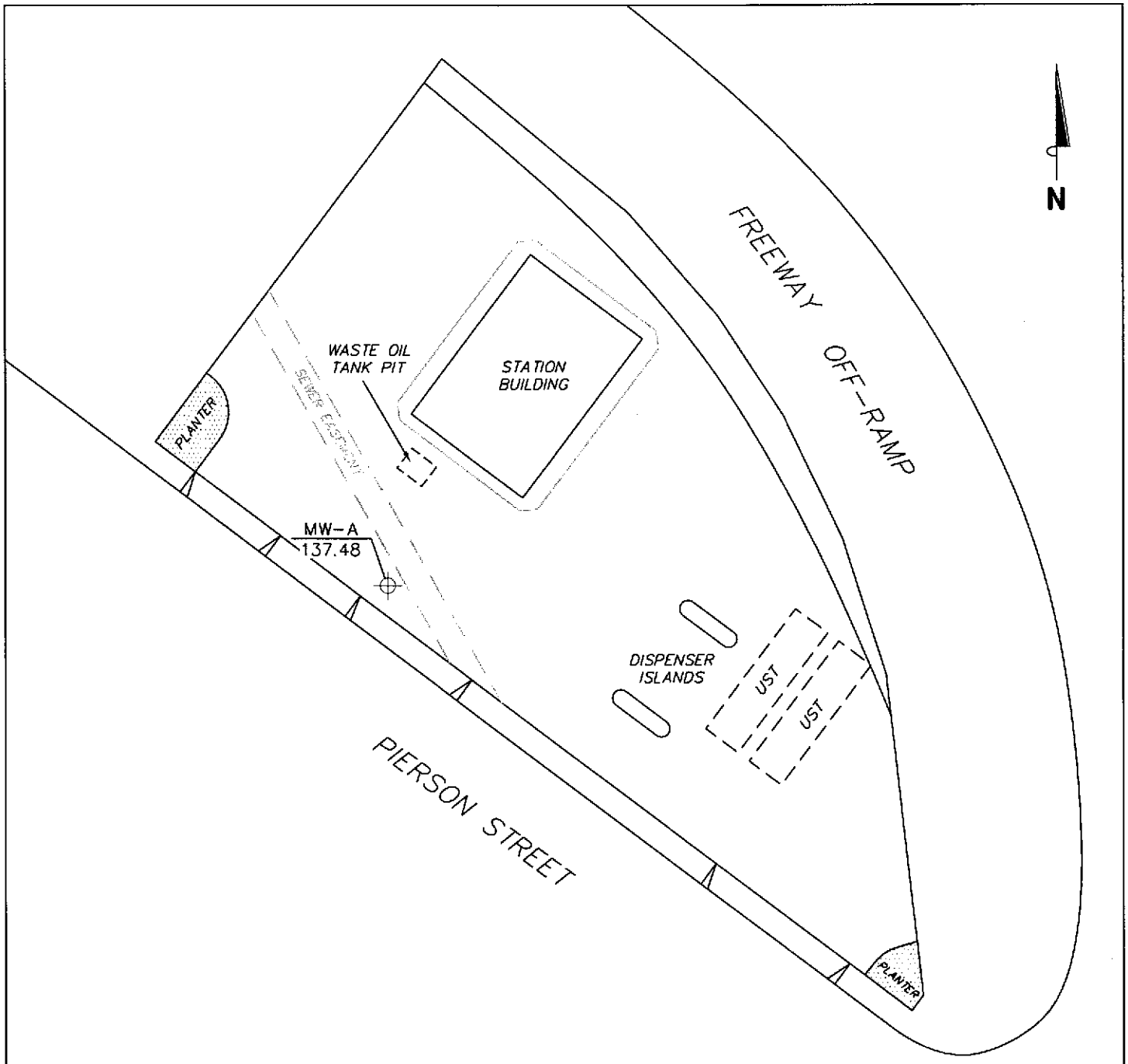

NOTES:

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 3, 2004

76 Station 5781
3535 Pierson Street
Oakland, California

TRC

SCALE (FEET)
0 30

PS=1:1

FIGURE 2

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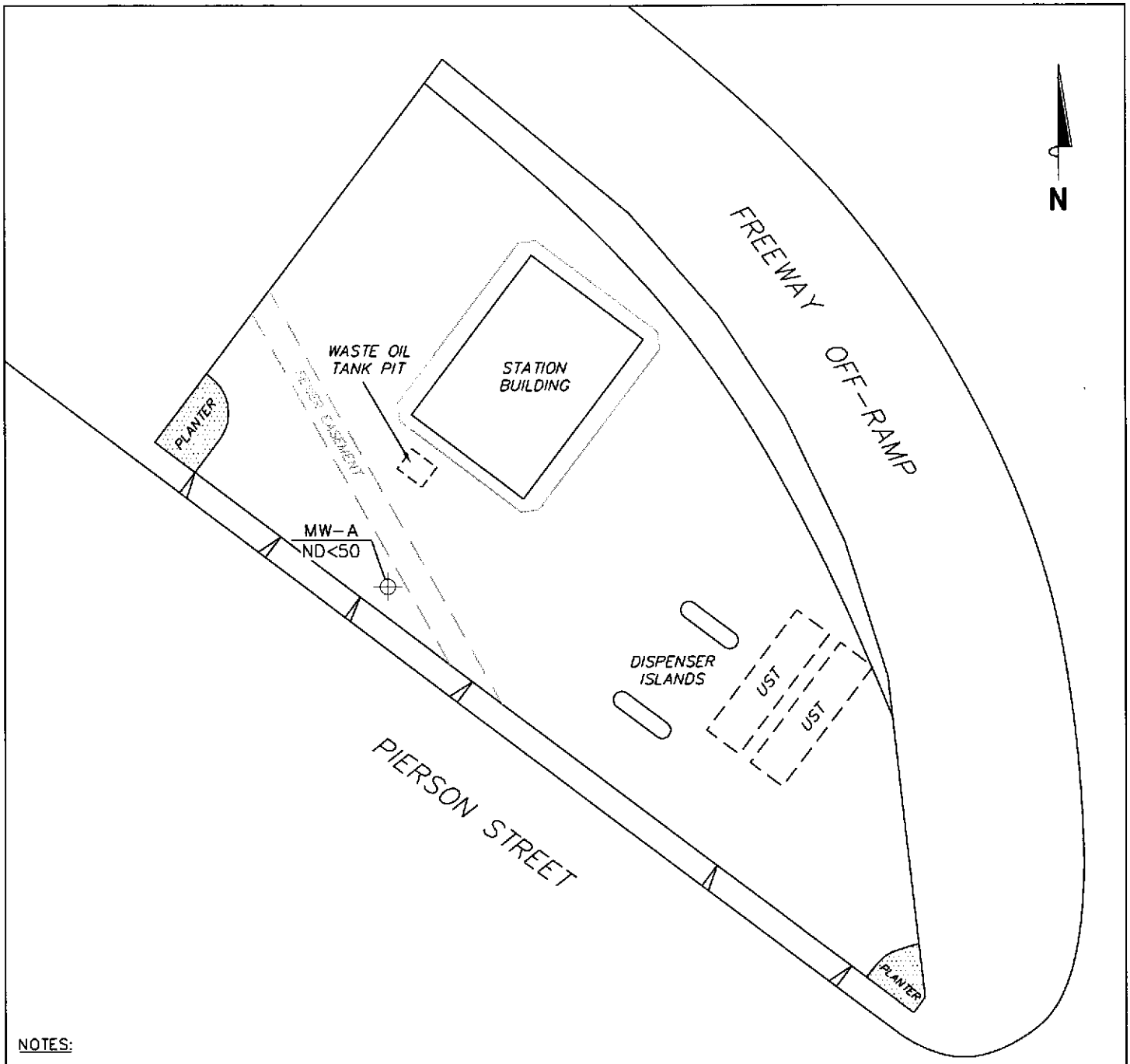


NOTES:

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 8015.

LEGEND

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

DISSOLVED-PHASE TPH-G CONCENTRATION MAP
February 3, 2004

76 Station 5781
3535 Pierson Street
Oakland, California

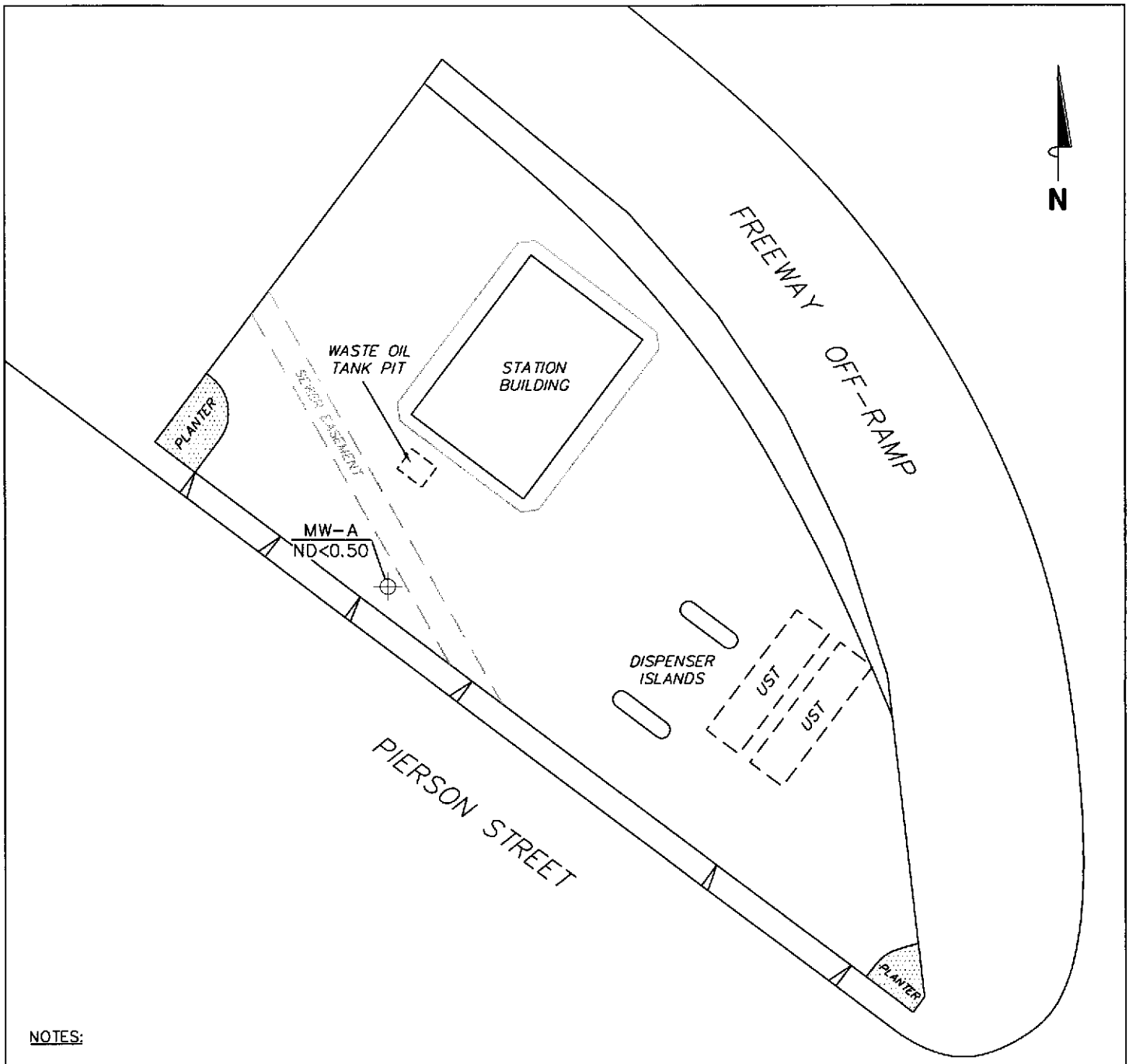
TRC

SCALE (FEET)
0 30

PS=1:1

FIGURE 3

Graphics on Irine-fs1(L:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-5000\5781+\5781-QMS.dwg 4/15/04 jrw



NOTES:

µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8021.

LEGEND

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

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
February 3, 2004

76 Station 5781
3535 Pierson Street
Oakland, California

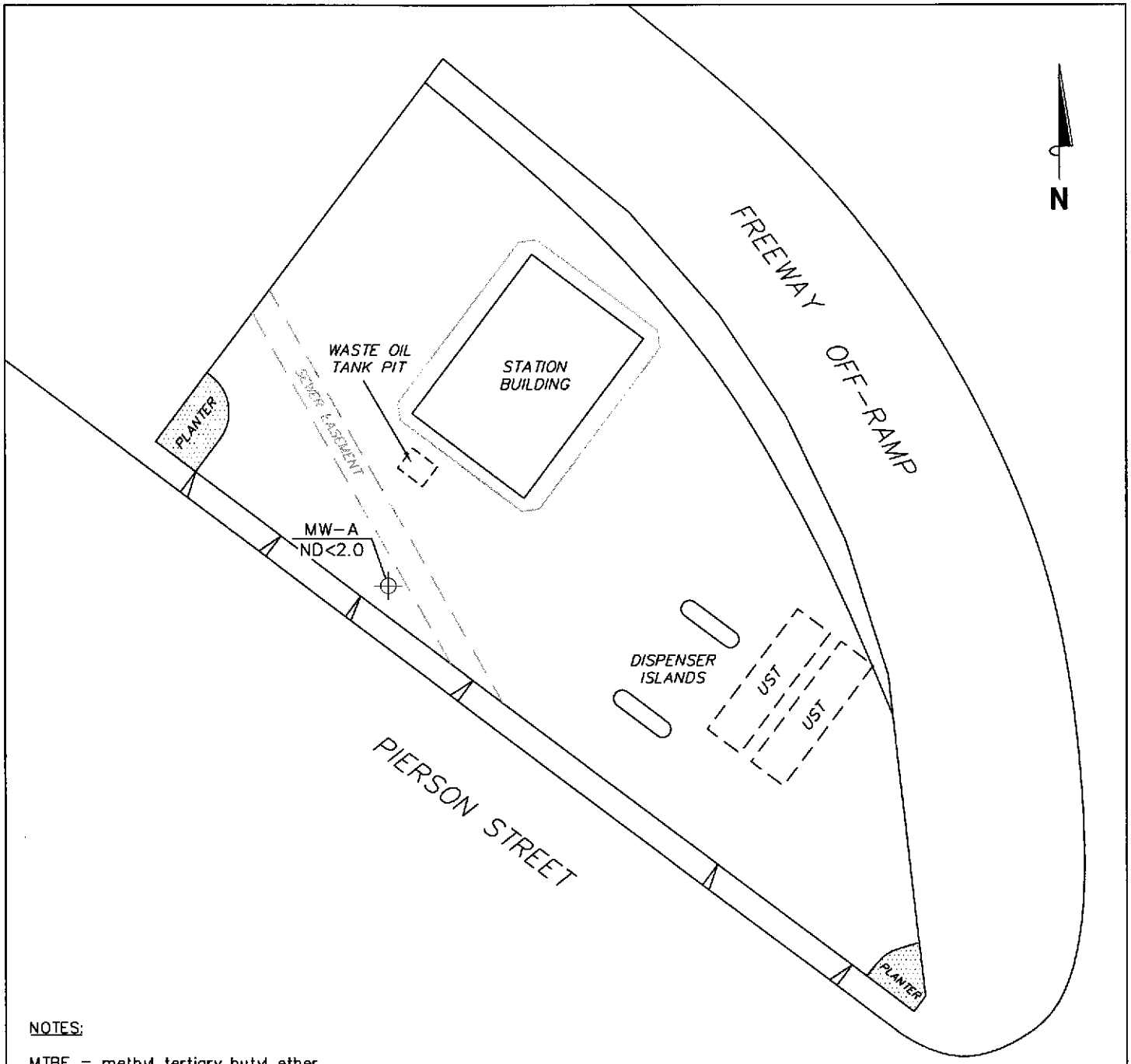
TRC

SCALE (FEET)
0 30

PS=1:1

FIGURE 4

Graphics on Irine-fs1(L:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-5000\5781+\5781-QMS.dwg 4/15/04 jrw



NOTES:

MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter. ND = not detectedat limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8021.

LEGEND

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

DISSOLVED-PHASE MTBE CONCENTRATION MAP
February 3, 2004

76 Station 5781
3535 Pierson Street
Oakland, California

TRC

SCALE (FEET)
0 30

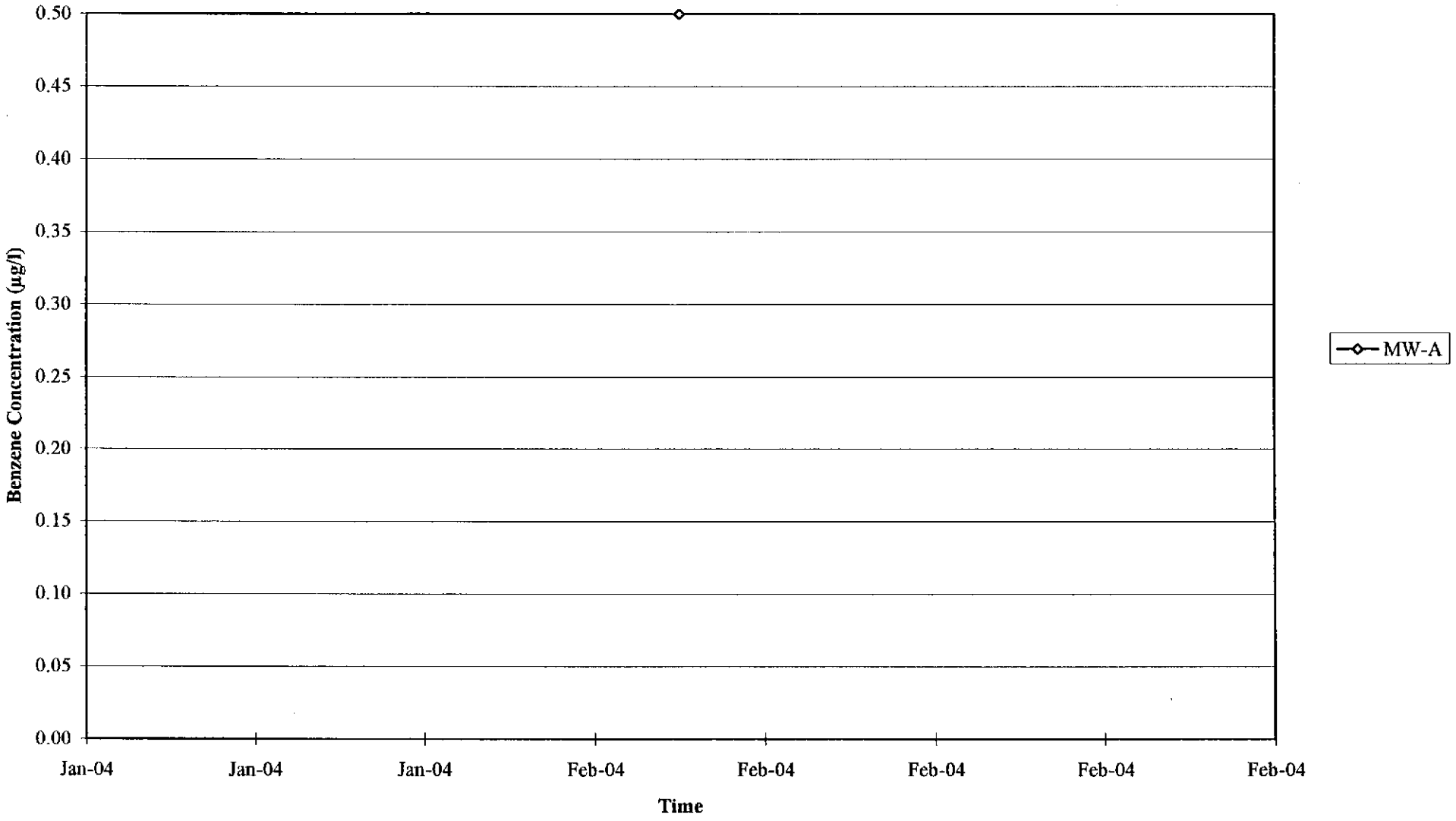
FIGURE 5

PS=1:1

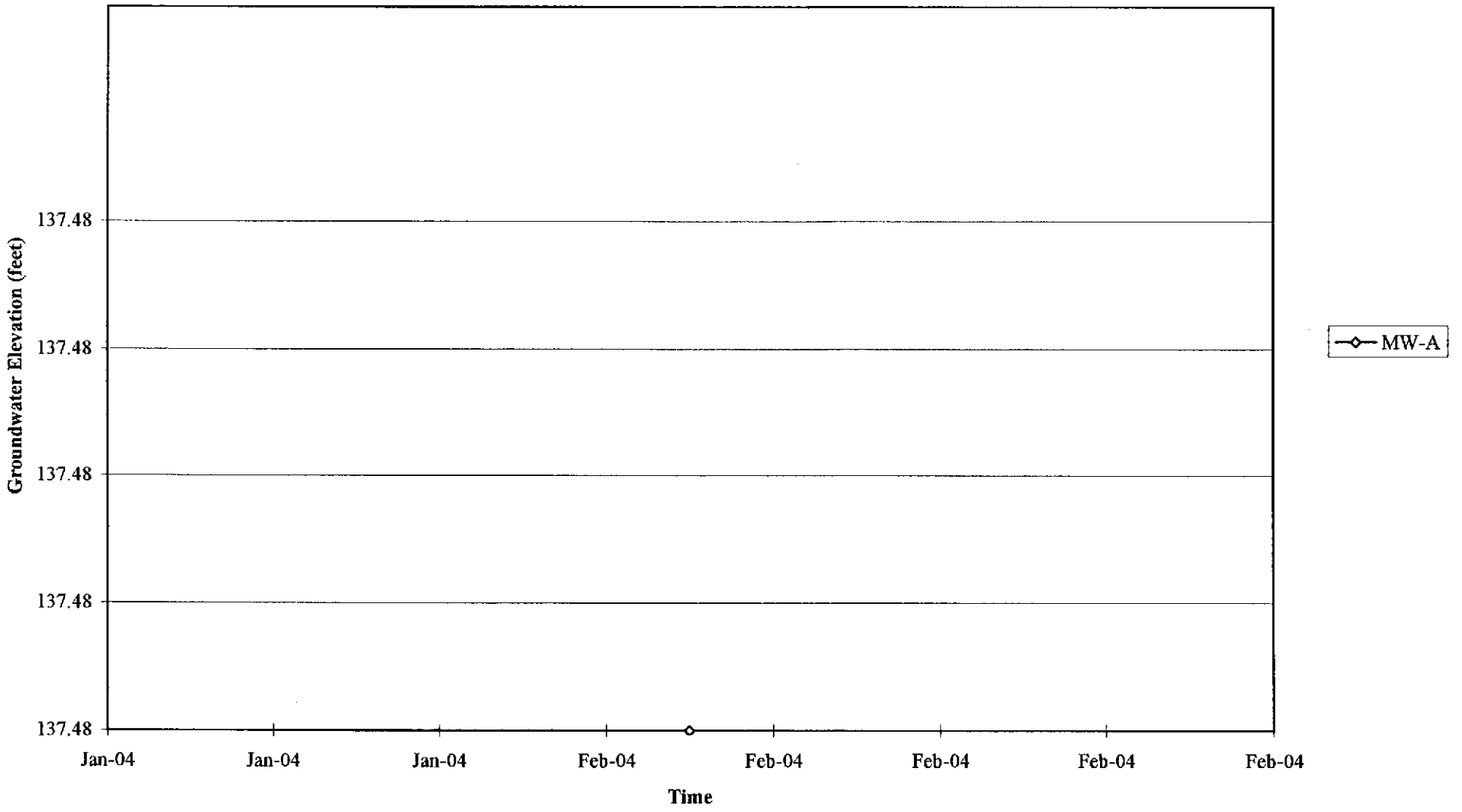
Graphics on Irine-fs1(L:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-5000\5781+\5781-QMS.dwg 4/15/04 jrw

GRAPHS

Graph 1
Benzene Concentrations vs. Time
76 Station 5781



Graph 2
Hydrograph
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.

FIELD MONITORING DATA SHEET

TRC

Technician: HERNANDEZ Job #/Task #: 410500011FA20 Date: 09/03/04

Site # 5781 Project Manager A. FARFAN Page 1 of 1

Well #	Grade	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-A		X	44.85	14.32	~~0~~	~~0~~	1929	211

FIELD DATA COMPLETE ✓ QA/QC COC ✓ WELL BOX CONDITION SHEETS

WTT CERTIFICATE MANIFEST DRUM INVENTORY ✓ TRAFFIC CONTROL

Fldmon.xls 8/23/01

GROUNDWATER SAMPLING FIELD NOTES

Site: 5781 Project No.: 410500021/FA20 Date: 02/10/04

Well No. MW-A
Depth to Water (feet): 14.32
Total Depth (feet) 44.85
Water Column (feet): 30.53
80% Recharge Depth (feet): 20.42

Purge Method: SUB
Depth to Product (feet): 0
LPH & Water Recovered (gallons): 0
Casing Diameter (Inches): 2"
1 Well Volume (gallons): 5

MW

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1739			5	1725	18.0	8.07
			10	1703	19.4	8.08
	1751		15	1067	19.2	7.91

Static at Time Sampled	Total Purged	Time Sampled
20.41	15 gal	1929

Comments:

15 gallons

Site: _____ Project No.: _____

Well No. _____
Depth to Water (feet): _____
Total Depth (feet) _____
Water Column (feet): _____
80% Recharge Depth (feet): _____

Purge Method: _____
Depth to Product (feet): _____
LPH & Water Recovered (gallons): _____
Casing Diameter (Inches): _____
1 Well Volume (gallons): _____

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH

Static at Time Sampled	Total Purged	Time Sampled

Comments:

SEVERN TRENT STL

Submission#: 2004-02-0246

TRC Alton Geoscience

February 25, 2004

21 Technology Drive
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001FA20
Project: Conoco Phillips #5781
Site: 3535 Pierson Street, Oakland, CA

Attached is our report for your samples received on 02/05/2004 17:53
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 03/21/2004 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

Sincerely,

Dimple Sharma
Project Manager

SEVERN TRENT STL

Submission #: 2004-02-0246

Halogenated Volatile Organic Compounds by 8021B/8260B

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/03/2004 19:29	Water	1

Halogenated Volatile Organic Compounds by 8021B/8260B

TRC Alton Geoscience

Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Prep(s):	5030B	Test(s):	8260B
Sample ID:	**MW-A**	Lab ID:	2004-02-0246 - 1
Sampled:	02/03/2004 19:29	Extracted:	2/11/2004 22:47
Matrix:	Water	QC Batch#:	2004/02/11-1B.07

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	02/11/2004 22:47	
Vinyl chloride	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Chloroethane	ND	1.0	ug/L	1.00	02/11/2004 22:47	
Trichlorofluoromethane	ND	1.0	ug/L	1.00	02/11/2004 22:47	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Methylene chloride	ND	5.0	ug/L	1.00	02/11/2004 22:47	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Chloroform	ND	0.50	ug/L	1.00	02/11/2004 22:47	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Carbon tetrachloride	ND	0.50	ug/L	1.00	02/11/2004 22:47	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Trichloroethene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Bromodichloromethane	ND	0.50	ug/L	1.00	02/11/2004 22:47	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	02/11/2004 22:47	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Tetrachloroethene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Dibromochloromethane	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Chlorobenzene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Bromoform	ND	2.0	ug/L	1.00	02/11/2004 22:47	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	02/11/2004 22:47	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	02/11/2004 22:47	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	02/11/2004 22:47	

Halogenated Volatile Organic Compounds by 8021B/8260B

TRC Alton Geoscience

Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Prep(s): 5030B
Sample ID: **MW-A**
Sampled: 02/03/2004 19:29
Matrix: Water

Test(s): 8260B
Lab ID: 2004-02-0246 - 1
Extracted: 2/11/2004 22:47
QC Batch#: 2004/02/11-1B.07

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Chloromethane	ND	2.0	ug/L	1.00	02/11/2004 22:47	
Bromomethane	ND	1.0	ug/L	1.00	02/11/2004 22:47	
Surrogate(s)						
4-Bromofluorobenzene	91.9	86-115	%	100.00	02/11/2004 22:47	
1,2-Dichloroethane-d4	94.7	76-114	%	100.00	02/11/2004 22:47	
Toluene-d8	98.3	88-110	%	100.00	02/11/2004 22:47	

Halogenated Volatile Organic Compounds by 8021B/8260B

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 5030B — Test(s): 8260B

Method Blank — **Water** — **QC Batch # 2004/02/11-1B.07**

MB: 2004/02/11-1B.07-005 — Date Extracted: 02/11/2004 14:16

Compound	Conc.	RL	Unit	Analyzed	Flag
Bromodichloromethane	ND	0.5	ug/L	02/11/2004 14:16	
Bromoform	ND	2.0	ug/L	02/11/2004 14:16	
Bromomethane	ND	1.0	ug/L	02/11/2004 14:16	
Carbon tetrachloride	ND	0.5	ug/L	02/11/2004 14:16	
Chlorobenzene	ND	0.5	ug/L	02/11/2004 14:16	
Chloroethane	ND	1.0	ug/L	02/11/2004 14:16	
2-Chloroethylvinyl ether	ND	0.5	ug/L	02/11/2004 14:16	
Chloroform	ND	0.5	ug/L	02/11/2004 14:16	
Chloromethane	ND	1.0	ug/L	02/11/2004 14:16	
Dibromochloromethane	ND	0.5	ug/L	02/11/2004 14:16	
1,2-Dichlorobenzene	ND	0.5	ug/L	02/11/2004 14:16	
1,3-Dichlorobenzene	ND	0.5	ug/L	02/11/2004 14:16	
1,4-Dichlorobenzene	ND	0.5	ug/L	02/11/2004 14:16	
Dichlorodifluoromethane	ND	1.0	ug/L	02/11/2004 14:16	
1,1-Dichloroethane	ND	0.5	ug/L	02/11/2004 14:16	
1,2-Dichloroethane	ND	0.5	ug/L	02/11/2004 14:16	
1,1-Dichloroethene	ND	0.5	ug/L	02/11/2004 14:16	
cis-1,2-Dichloroethene	ND	0.5	ug/L	02/11/2004 14:16	
trans-1,2-Dichloroethene	ND	0.5	ug/L	02/11/2004 14:16	
1,2-Dichloropropane	ND	0.5	ug/L	02/11/2004 14:16	
cis-1,3-Dichloropropene	ND	0.5	ug/L	02/11/2004 14:16	
trans-1,3-Dichloropropene	ND	0.5	ug/L	02/11/2004 14:16	
Methylene chloride	ND	5.0	ug/L	02/11/2004 14:16	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	02/11/2004 14:16	
Tetrachloroethene	ND	0.5	ug/L	02/11/2004 14:16	
1,1,1-Trichloroethane	ND	0.5	ug/L	02/11/2004 14:16	
1,1,2-Trichloroethane	ND	0.5	ug/L	02/11/2004 14:16	
Trichloroethene	ND	0.5	ug/L	02/11/2004 14:16	
Trichlorofluoromethane	ND	1.0	ug/L	02/11/2004 14:16	

Halogenated Volatile Organic Compounds by 8021B/8260B

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 5030B | Test(s): 8260B

Method Blank | **Water** | **QC Batch # 2004/02/11-1B.07**

MB: 2004/02/11-1B.07-005 | Date Extracted: 02/11/2004 14:16

Compound	Conc.	RL	Unit	Analyzed	Flag
Trichlorotrifluoroethane	ND	0.5	ug/L	02/11/2004 14:16	
Vinyl chloride	ND	0.5	ug/L	02/11/2004 14:16	
Surrogates(s)					
4-Bromofluorobenzene	94.5	86-115	%	02/11/2004 14:16	
1,2-Dichloroethane-d4	99.4	76-114	%	02/11/2004 14:16	
Toluene-d8	91.6	88-110	%	02/11/2004 14:16	

Halogenated Volatile Organic Compounds by 8021B/8260B

TRC Alton Geoscience

Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2004/02/11-1B.07**

LCS 2004/02/11-1B.07-012 Extracted: 02/11/2004 Analyzed: 02/11/2004 13:25

LCSD 2004/02/11-1B.07-013 Extracted: 02/11/2004 Analyzed: 02/11/2004 13:51

Analysis Flag: ,bfb (See Legend and Note Section)

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
1,1-Dichloroethene	20.7	19.7	20.0	103.5	98.5	5.0	65-125	20		
Trichloroethene	21.0	19.8	20.0	105.0	99.0	5.9	74-134	20		
Chlorobenzene	21.8	20.1	20.0	109.0	100.5	8.1	61-121	20		
Surrogates(s)										
4-Bromofluorobenzene	427	454	500	85.4	90.8		86-115	0	,bfb	
1,2-Dichloroethane-d4	474	486	500	94.8	97.2		76-114	0		
Toluene-d8	484	506	500	96.8	101.2		88-110	0		

SEVERN TRENT STL

Submission #: 2004-02-0246

Halogenated Volatile Organic Compounds by 8021B/8260B

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Legend and Notes

QC Sample Comment

Lab ID: LCS 2004/02/11/1B.07-12

bfb-Surrogate recovery for 4-Bromofluorobenzene was below acceptance criteria. Recovery for this compound was compliant for all other QC and field samples. Results reported as is.

Result Flag

SEVERN TRENT STL

Submission #: 2004-02-0246

Oil & Grease (Total) by EPA 1664A

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/03/2004 19:29	Water	1

Oil & Grease (Total) by EPA 1664A

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Prep(s): 1664A
Sample ID: **MW-A**
Sampled: 02/03/2004 19:29
Matrix: Water

Test(s): 1664A
Lab ID: 2004-02-0246 - 1
Extracted: 2/11/2004 00:00
QC Batch#: 2004/02/11-01.23

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	1.0	mg/L	1.00	02/11/2004	

Oil & Grease (Total) by EPA 1664A

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 1664A
Method Blank
MB: 2004/02/11-01.23-001

Water

Test(s): 1664A
QC Batch # 2004/02/11-01.23
Date Extracted: 02/11/2004

Compound	Conc.	RL	Unit	Analyzed	Flag
Oil & Grease (total)	ND	1	mg/L	02/12/2004	

SEVERN TRENT STL

Submission #: 2004-02-0246

Oil & Grease (Total) by EPA 1664A

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 1664A

Test(s): 1664A

Laboratory Control Spike **Water** **QC Batch # 2004/02/11-01.23**

LCS 2004/02/11-01.23-002 Extracted: 02/11/2004 Analyzed: 02/11/2004
LCSD 2004/02/11-01.23-003 Extracted: 02/11/2004 Analyzed: 02/11/2004

Compound	Conc. mg/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Oil & Grease (total)	38.7	39.8	40.0	96.8	99.5	2.8	79-114	18		

SEVERN TRENT STL

Submission #: 2004-02-0246

Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/03/2004 19:29	Water	1

SEVERN TRENT STL

Submission #: 2004-02-0246

Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Prep(s): 5030B
Sample ID: **MW-A**
Sampled: 02/03/2004 19:29
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-02-0246 - 1
Extracted: 2/13/2004 03:46
QC Batch#: 2004/02/12-2A.62

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	02/13/2004 03:46	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	02/13/2004 03:46	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	02/13/2004 03:46	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	02/13/2004 03:46	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	02/13/2004 03:46	
1,2-DCA	ND	2.0	ug/L	1.00	02/13/2004 03:46	
EDB	ND	2.0	ug/L	1.00	02/13/2004 03:46	
Ethanol	ND	500	ug/L	1.00	02/13/2004 03:46	
Surrogate(s)						
Toluene-d8	104.8	88-110	%	1.00	02/13/2004 03:46	
1,2-Dichloroethane-d4	110.7	76-114	%	1.00	02/13/2004 03:46	

Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 5030B
Method Blank

Water

Test(s): 8260FAB
QC Batch # 2004/02/12-2A.62

MB: 2004/02/12-2A.62-009

Date Extracted: 02/12/2004 19:09

Compound	Conc.	RL	Unit	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	100	ug/L	02/12/2004 19:09	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	02/12/2004 19:09	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	02/12/2004 19:09	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	02/12/2004 19:09	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	02/12/2004 19:09	
1,2-DCA	ND	2.0	ug/L	02/12/2004 19:09	
EDB	ND	2.0	ug/L	02/12/2004 19:09	
Ethanol	ND	500	ug/L	02/12/2004 19:09	
Surrogates(s)					
1,2-Dichloroethane-d4	99.2	76-114	%	02/12/2004 19:09	
Toluene-d8	99.2	88-110	%	02/12/2004 19:09	

Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience

Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2004/02/12-2A.62**

LCS 2004/02/12-2A.62-025 Extracted: 02/12/2004 Analyzed: 02/12/2004 18:25

LCSD 2004/02/12-2A.62-047 Extracted: 02/12/2004 Analyzed: 02/12/2004 18:47

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	32.6	31.3	25	130.4	125.2	4.1	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	491	516	500	98.2	103.2		76-114			
Toluene-d8	494	512	500	98.8	102.4		88-110			

SEVERN TRENT STL

Submission #: 2004-02-0246

Diesel (C9-C24)

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/03/2004 19:29	Water	1

Diesel (C9-C24)

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Prep(s): 3510/8015M
Sample ID: **MW-A**
Sampled: 02/03/2004 19:29
Matrix: Water

Test(s): 8015M
Lab ID: 2004-02-0246 - 1
Extracted: 2/11/2004 05:22
QC Batch#: 2004/02/11-2A.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	60	50	ug/L	1.00	02/12/2004 22:36	ndp
Surrogate(s)						
o-Terphenyl	75.7	50-120	%	1.00	02/12/2004 22:36	

Diesel (C9-C24)

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 3510/8015M
Method Blank
MB: 2004/02/11-2A.10-001

Water

Test(s): 8015M
QC Batch # 2004/02/11-2A.10
Date Extracted: 02/11/2004 05:22

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	02/11/2004 17:28	
Surrogates(s)					
o-Terphenyl	74.2	50-120	%	02/11/2004 17:28	

Diesel (C9-C24)

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 3510/8015M

Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2004/02/11-2A.10**

LCS 2004/02/11-2A.10-002 Extracted: 02/11/2004 Analyzed: 02/11/2004 13:53
LCSD 2004/02/11-2A.10-003 Extracted: 02/11/2004 Analyzed: 02/11/2004 14:24

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	777	706	1000	77.7	70.6	9.6	60-130	25		
Surrogates(s)										
o-Terphenyl	15.7	13.9	20.0	78.7	69.5		50-120			

Diesel (C9-C24)

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Legend and Notes

Result Flag

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

SEVERN TRENT STL

Submission #: 2004-02-0246

Gas/BTEX Compounds by 8015M/8021

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-A	02/03/2004 19:29	Water	1

Gas/BTEX Compounds by 8015M/8021

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Prep(s):	5030 5030	Test(s):	8015M 8021B
Sample ID:	**MW-A**	Lab ID:	2004-02-0246 - 1
Sampled:	02/03/2004 19:29	Extracted:	2/13/2004 17:45
Matrix:	Water	QC Batch#:	2004/02/13-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	02/13/2004 17:45	
Benzene	ND	0.50	ug/L	1.00	02/13/2004 17:45	
Toluene	ND	0.50	ug/L	1.00	02/13/2004 17:45	
Ethyl benzene	ND	0.50	ug/L	1.00	02/13/2004 17:45	
Xylene(s)	ND	0.50	ug/L	1.00	02/13/2004 17:45	
MTBE	ND	5.0	ug/L	1.00	02/13/2004 17:45	
Surrogate(s)						
Trifluorotoluene	90.9	58-124	%	1.00	02/13/2004 17:45	
4-Bromofluorobenzene-FID	87.5	50-150	%	1.00	02/13/2004 17:45	

Gas/BTEX Compounds by 8015M/8021

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 5030
Method Blank
MB: 2004/02/13-01.05-003

Water

Test(s): 8015M
QC Batch # 2004/02/13-01.05
Date Extracted: 02/13/2004 07:05

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/13/2004 07:05	
Benzene	ND	0.5	ug/L	02/13/2004 07:05	
Toluene	ND	0.5	ug/L	02/13/2004 07:05	
Ethyl benzene	ND	0.5	ug/L	02/13/2004 07:05	
Xylene(s)	ND	0.5	ug/L	02/13/2004 07:05	
MTBE	ND	5.0	ug/L	02/13/2004 07:05	
Surrogates(s)					
Trifluorotoluene	97.0	58-124	%	02/13/2004 07:05	
4-Bromofluorobenzene-FID	90.8	50-150	%	02/13/2004 07:05	

Gas/BTEX Compounds by 8015M/8021

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike **Water** **QC Batch # 2004/02/13-01.05**

LCS 2004/02/13-01.05-004 Extracted: 02/13/2004 Analyzed: 02/13/2004 07:38
LCSD 2004/02/13-01.05-005 Extracted: 02/13/2004 Analyzed: 02/13/2004 08:11

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	49.0	48.0	50.0	98.0	96.0	2.1	77-123	20		
Toluene	49.7	49.1	50.0	99.4	98.2	1.2	78-122	20		
Ethyl benzene	48.0	47.5	50.0	96.0	95.0	1.0	70-130	20		
Xylene(s)	150	151	150	100.0	100.7	0.7	75-125	20		
Surrogates(s)										
Trifluorotoluene	466	468	500	93.2	93.6		58-124			

SEVERN TRENT STL

Submission #: 2004-02-0246

Gas/BTEX Compounds by 8015M/8021

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5781

Received: 02/05/2004 17:53

Site: 3535 Pierson Street, Oakland, CA

Batch QC Report

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2004/02/13-01.05**

LCS 2004/02/13-01.05-006 Extracted: 02/13/2004 Analyzed: 02/13/2004 08:45
LCSD 2004/02/13-01.05-007 Extracted: 02/13/2004 Analyzed: 02/13/2004 09:18

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Gasoline	237	238	250	94.8	95.2	0.4	75-125	20		
Surrogates(s)										
4-Bromofluorobenzene-FID	435	434	500	87.0	86.8		50-150			

SEVERN TRENT STL

STL San Francisco

Sample Receipt Checklist

Submission #:2004- 02 - 0246

Checklist completed by: (initials) DSH Date: 02/08/04

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 (4^0 C ± 2)?	Temp: 4.0 °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_3 ☐ HCl ☐ H_2SO_4 ☐ 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: ____/____/04

Client contacted: ☐ Yes ☐ No

Summary of discussion: _____

Corrective Action (per PM/Client): _____

2004-02-0246

ConocoPhillips Chain Of Custody Record

82698

STL-San Francisco

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:

ConocoPhillips Cost Object:

DATE: 02/03/04

PAGE: 1 of 1

SAMPLING COMPANY: TRC	Valid Value ID:	CONOCOPHILLIPS SITE NUMBER: 5781	GLOBAL ID NO.:
ADDRESS: 21 Technology Drive, Irvine CA 92618		SITE ADDRESS (Street and City): 3535 PIERSON STREET OAKLAND, CA	CONOCOPHILLIPS SITE MANAGER:
PROJECT CONTACT (Hardcopy or PDF Report to): Anju Farfan		EDF DELIVERABLE TO (RP or Designee): Peter Thomson, TRC pthomson@trcsolutions.com	PHONE NO.: 949-341-7408
TELEPHONE: 949-341-7440 / FAX: 949-753-0111	E-MAIL: afarfan@trcsolutions.com		E-MAIL:
SAMPLER NAME(S) (Print): HERNANDEZ	CONSULTANT PROJECT NUMBER: 41050001/FA20		LAB USE ONLY

TURNAROUND TIME (CALENDAR DAYS): [X] 14 DAYS [ ] 7 DAYS [ ] 72 HOURS [ ] 48 HOURS [ ] 24 HOURS [ ] LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED [X]

REQUESTED ANALYSES

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

4.0 °C

TEMPERATURE ON RECEIPT C°

* Field Point name only required if different from Sample ID

LAB USE ONLY	Sample Identification/Field Point Name*	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	8015m - TPHd	8260B - TPHg/BTEX/MtBE	8260B - TPHg / BTEX / 8 Oxygenates	8260B - TPHg / BTEX / 8 oxygenates + methanol (8015M)	8260B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015M - TPHg	Lead ☐Total ☐STLC ☐TCLP	BTEX/MTBE by 8021	8 oxys by 8260B	HVOC's (8010 LIST by 8021	TOG
	MW-A	02/3/04	1929	GW	12	X						X		X	X	X	X

Relinquished by: (Signature)	Received by: (Signature)	Date: 2/5/04	Time: 1235
Relinquished by: (Signature) 2/5/04 1713	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) Neunals	Date: 2-5-04	Time: 1753

9/19/03 Revision

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.