RO 2444

AG

SECOR
INTERNATIONAL
INCORPORATED

www.secor.com

3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670
916-861-0400 TEL
916-861-0430 FAX

February 5, 2004

Ms. Eva Chu
Alameda County Environmental Health Services Department
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502

RE: **Quarterly Summary Report-Fourth Quarter 2003**
SECOR Project No.: 77CP.60008.00.7124

Dear Ms. Chu:

On behalf of ConocoPhillips, SECOR International Incorporated (SECOR) is forwarding the quarterly summary report for the following location:

Service Station	**Location**
76 Service Station No. 7124	10151 East 14th Street Oakland, California 94603

Sincerely,
SECOR International Incorporated

M. Gavan Heinrich
Associate Geologist

GH

cc: Mr. Thomas Kosel, ConocoPhillips (Bartlesville)

SECOR

3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670
916-861-0400 TEL
916-861-0430 FAX

QUARTERLY SUMMARY REPORT
Fourth Quarter 2003

76 Service Station No. 7124
10151 East 14th Street
Oakland, California

City/County ID #: Oakland

County: Alameda

PREVIOUS ASSESSMENT

The Site is currently an active 76 Service Station located on the northwestern corner of the intersection of 14th Street and 102nd Avenue in Oakland, California. Site facilities include three underground storage tanks (USTs), and associated piping and fuel dispensers.

On March 22, 2000, SECOR supervised the removal and replacement of product lines and dispensers by Balch Petroleum (Balch) of Milpitas, California. Soil samples collected from beneath the dispensers and product lines revealed the presence of total petroleum hydrocarbons as gasoline (TPHg) at a maximum concentration of 6,200 milligrams per kilogram (mg/kg), MtBE at a maximum concentration of 120 mg/kg, and benzene at a maximum concentration of 7.4 mg/kg. Excavation and sampling activities were observed and approved by Inspector Gomez of the City of Oakland Fire Services Agency (COFSA).

On March 27, 2000, SECOR observed the over-excavation of approximately 60 cubic yards of soil from the beneath those portions of the dispensers and product lines where soil samples with elevated concentrations of petroleum hydrocarbons were located. Areas measuring approximately 8-10 feet long by 8-10 feet wide were over-excavated to an approximate depth of 8 feet below ground surface (bgs) in each of these areas. Additional over-excavation in these areas was not possible due to their proximity to the footings of the service station canopy. TPHg was detected in 2 of the 3 samples at a maximum concentration of 108 mg/kg; benzene was detected in 1 of the 3 samples at a maximum concentration of 0.162 mg/kg; and MtBE was detected in all 3 samples at a maximum concentration of 43.8 mg/kg. Lead was not detected at or above laboratory reporting limits in any samples.

During February, 2002, SECOR supervised the installation of four on-Site groundwater monitor wells. Prior to well installation, all borings were advanced to 26.5 feet bgs, and subsurface soil samples were collected every five feet. Soil samples were analyzed for gasoline range organics (GRO), BTEX, and fuel oxygenates via Method 8260B. The maximum reported concentrations were 42 mg/kg GRO, 0.36 mg/kg ethylbenzene, 0.26 mg/kg xylenes, and 1.2 mg/kg MtBE.

SENSITIVE RECEPTORS

Not evaluated.

MONITORING AND SAMPLING

The Site has been monitored and sampled since 3rd quarter, 2002. Currently, 4 wells are monitored quarterly (MW-1 through MW-4). Samples are analyzed for TPHg, BTEX, and fuel oxygenates.

SECOR

3017 Kilgore Road, Suite 100
Rancho Cordova, CA 95670
916-861-0400 TEL
916-861-0430 FAX

REMEDIAL STATUS

No active remediation

CHARACTERIZATION STATUS

Contamination in soil is adequately delineated. The highest concentrations of residual TPHg and MtBE contamination are localized in the area of the northern dispenser island. The extent of dissolved contamination is undefined in the downgradient (northwest) direction. MW-2 and MW-3, and MW-4 all contained elevated concentrations of TPHg and MtBE.

RECENT SUBMITTALS/CORRESPONDENCE

None

THIS QUARTER ACTIVITIES (Fourth Quarter 2003)

1. TRC performed groundwater monitoring and sampling event.

NEXT QUARTER ACTIVITIES (First Quarter 2004)

1. Perform groundwater monitoring and sampling event.

CONSULTANT: SECOR International Incorporated

TRC

Customer-Focused Solutions

RO 2444

February 23, 2004

ConocoPhillips Company
76 Broadway
Sacramento, CA 95818

ATTN: MR. THOMAS KOSEL

SITE: 76 STATION 7124
10151 EAST 14TH STREET
OAKLAND, CALIFORNIA

RE: QUARTERLY MONITORING REPORT
JANUARY THROUGH MARCH 2004

Dear Mr. Kosel:

Please find enclosed our Quarterly Monitoring Report for 76 Station 7124, located at 10151 East 14th 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
Mr. Gavan Heinrich, SECOR International Inc.

Enclosures
200400/7124R02.QMS.doc

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

TRC

Customer-Focused Solutions

FIRST QUARTER 2004
FLUID LEVEL MONITORING AND
GROUNDWATER SAMPLING REPORT

February 23, 2004

76 STATION 7124
10151 East 14th 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
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase Hydrocarbon Concentration Map
Graphs	Benzene Concentrations vs. Time Hydrograph
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
January 2004 through March 2004
76 Station 7124
10151 East 14th Street
Oakland, CA

Site Information:

Site:	76 Station 10151 East 14th Street Oakland, CA
Project Coordinator/Phone Number:	Thomas H. Kosel/916-558-7666
Groundwater wells onsite:	4
Groundwater wells offsite:	0

Field Activity:

Sampling consultant:	TRC
Date(s) sampled:	01/09/04
Groundwater wells gauged:	4
Groundwater wells sampled:	4
Purging method:	diaphragm pump
Treatment/disposal method during sampling event:	Onyx/Rodeo Unit 100
Free product pumpouts other than sampling event:	No
Treatment/Disposal method during free product pumpouts:	N/A

Site Hydrogeology:

Minimum depth to groundwater (feet bgs):	13.79
Maximum depth to groundwater (feet bgs):	16.15
Average groundwater elevation (feet relative to mean sea level):	22.66
Average change in groundwater elevations since previous event (feet):	2.59
Groundwater gradient and flow direction:	0.01 ft/ft, northwest
Previous gradient and/or flow direction (and date):	0.005 ft/ft, northwest (10/02/03)

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

Wells with benzene concentrations below MCL:	4
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):	3800 (MW-3)
Minimum TPPH concentration (µg/l):	ND
Maximum TPPH concentration (µg/l):	18000 (MW-4)
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 76 Station 7124 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

January 9, 2004

76 Station 7124

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-1														
01/09/04	37.37	13.79	0.00	23.58	2.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
MW-2														
01/09/04	37.87	15.42	0.00	22.45	2.51	--	1000	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	300	
MW-3														
01/09/04	37.72	15.31	0.00	22.41	2.54	--	8700	ND<25	ND<25	98	ND<50	--	3800	
MW-4														
01/09/04	38.36	16.15	0.00	22.21	2.43	--	18000	ND<10	ND<10	ND<10	ND<20	--	530	

Table 2

HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS

April 2002 Through January 2004

76 Station 7124

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-1														
07/28/02	37.37	15.88	0.00	21.49	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
11/03/02	37.37	16.75	0.00	20.62	-0.87	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
01/24/03	37.37	13.94	0.00	23.43	2.81	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
04/02/03	37.37	14.99	0.00	22.38	-1.05	460	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
07/01/03	37.37	15.48	0.00	21.89	-0.49	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
10/02/03	37.37	16.68	0.00	20.69	-1.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
01/09/04	37.37	13.79	0.00	23.58	2.89	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
MW-2														
04/08/02	37.87	15.86	0.00	22.01	--	4,400	--	ND<2.5	ND<2.5	6.4	ND<2.5	380	490	
07/28/02	37.87	17.28	0.00	20.59	-1.42	3,200	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	170	
11/03/02	37.87	18.03	0.00	19.84	-0.75	3,800	--	ND<5.0	ND<5.0	ND<5.0	ND<10	--	72	
01/24/03	37.87	15.59	0.00	22.28	2.44	410	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	490	
04/02/03	37.87	16.50	0.00	21.37	-0.91	1,000	--	ND<5.0	ND<5.0	ND<5.0	ND<10	--	180	
07/01/03	37.87	16.94	0.00	20.93	-0.44	1,900	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	120	
10/02/03	37.87	17.93	0.00	19.94	-0.99	--	6900	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	32	
01/09/04	37.87	15.42	0.00	22.45	2.51	--	1000	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	300	
MW-3														
04/08/02	37.72	15.86	0.00	21.86	--	8,700	--	65	ND<25	400	ND<25	6,500	8,300	
07/28/02	37.72	17.22	0.00	20.50	-1.36	4,500	--	ND<25	ND<25	ND<25	ND<50	--	1,100	
11/03/02	37.72	17.90	0.00	19.82	-0.68	25,000	--	ND<5.0	ND<5.0	25	ND<10	--	470	
01/24/03	37.72	15.57	0.00	22.15	2.33	6,000	--	ND<25	ND<25	94	ND<50	--	10,000	
04/02/03	37.72	16.45	0.00	21.27	-0.88	130,000	--	ND<100	ND<100	ND<100	ND<200	--	4,400	
07/01/03	37.72	16.88	0.00	20.84	-0.43	9,400	--	ND<10	ND<10	ND<10	ND<20	--	2,200	
10/02/03	37.72	17.85	0.00	19.87	-0.97	--	73000	ND<50	ND<50	ND<50	ND<100	--	460	
01/09/04	37.72	15.31	0.00	22.41	2.54	--	8700	ND<25	ND<25	98	ND<50	--	3800	

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-4														
04/08/02	38.36	16.59	0.00	21.77	--	13,000	--	ND<5.0	ND<5.0	28	ND<5.0	790	980	
07/28/02	38.36	17.93	0.00	20.43	-1.34	18,000	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	170	
11/03/02	38.36	18.66	0.00	19.70	-0.73	220	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	5.7	
01/24/03	38.36	16.27	0.00	22.09	2.39	ND<1,000	--	ND<10	ND<10	ND<10	ND<20	--	1,000	
04/02/03	38.36	17.19	0.00	21.17	-0.92	130,000	--	ND<100	ND<100	ND<100	ND<200	--	ND<400	
07/01/03	38.36	17.61	0.00	20.75	-0.42	15,000	--	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	170	
10/02/03	38.36	18.58	0.00	19.78	-0.97	--	7100	ND<10	ND<10	ND<10	ND<20	--	70	
01/09/04	38.36	16.15	0.00	22.21	2.43	--	18000	ND<10	ND<10	ND<10	ND<20	--	530	
Trip Blank														
04/08/02	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	--	
07/28/02	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.0	
11/03/02	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.0	
01/24/03	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.0	
04/02/03	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.0	
07/01/03	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.0	

Table 3
SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS
76 Station 7124

Date Sampled	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8015B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(µg/l)	(µg/l)
MW-1									
07/28/02	--	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	ND<2.0
11/03/02	--	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	ND<2.0
01/24/03	--	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	ND<2.0
04/02/03	--	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	ND<2.0
07/01/03	--	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	ND<2.0
10/02/03	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	--	ND<500	--
01/09/04	--	ND<2	ND<2	ND<100	ND<2	ND<2	--	ND<500	ND<2
MW-2									
04/08/02	--	ND<40	ND<40	ND<2,000	ND<40	ND<40	ND<10,000	--	ND<40
07/28/02	--	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2,500	--	ND<10
11/03/02	--	ND<20	ND<20	ND<1,000	ND<20	ND<20	ND<5,000	--	ND<20
01/24/03	--	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2,500	--	ND<10
04/02/03	--	ND<20	ND<20	ND<1,000	ND<20	ND<20	ND<5,000	--	ND<20
07/01/03	--	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2,500	--	ND<10
10/02/03	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	--	ND<500	--
01/09/04	--	ND<10	ND<10	ND<500	ND<10	ND<10	--	ND<2500	ND<10
MW-3									
10/02/03	ND<200	ND<200	ND<200	ND<10000	ND<200	ND<200	--	ND<50000	--
01/09/04	--	ND<100	ND<100	ND<5000	ND<100	ND<100	--	ND<25000	ND<100
MW-4									
04/08/02	--	ND<100	ND<100	ND<5,000	ND<100	ND<100	ND<25,000	--	ND<100
07/28/02	--	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2,500	--	ND<10
11/03/02	--	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--	ND<2.0
01/24/03	--	ND<40	ND<40	ND<2,000	ND<40	ND<40	ND<10,000	--	ND<40
04/02/03	--	ND<400	ND<400	ND<20,000	ND<400	ND<400	ND<100,000	--	ND<400
07/01/03	--	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2,500	--	ND<10

Date Sampled	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8015B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(mg/l)	(µg/l)	(µg/l)
MW-4 continued									
10/02/03	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40	--	ND<10000	--
01/09/04	--	ND<40	ND<40	ND<2000	ND<40	ND<40	--	ND<10000	ND<40

FIGURES

SOURCE:

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

VICINITY MAP

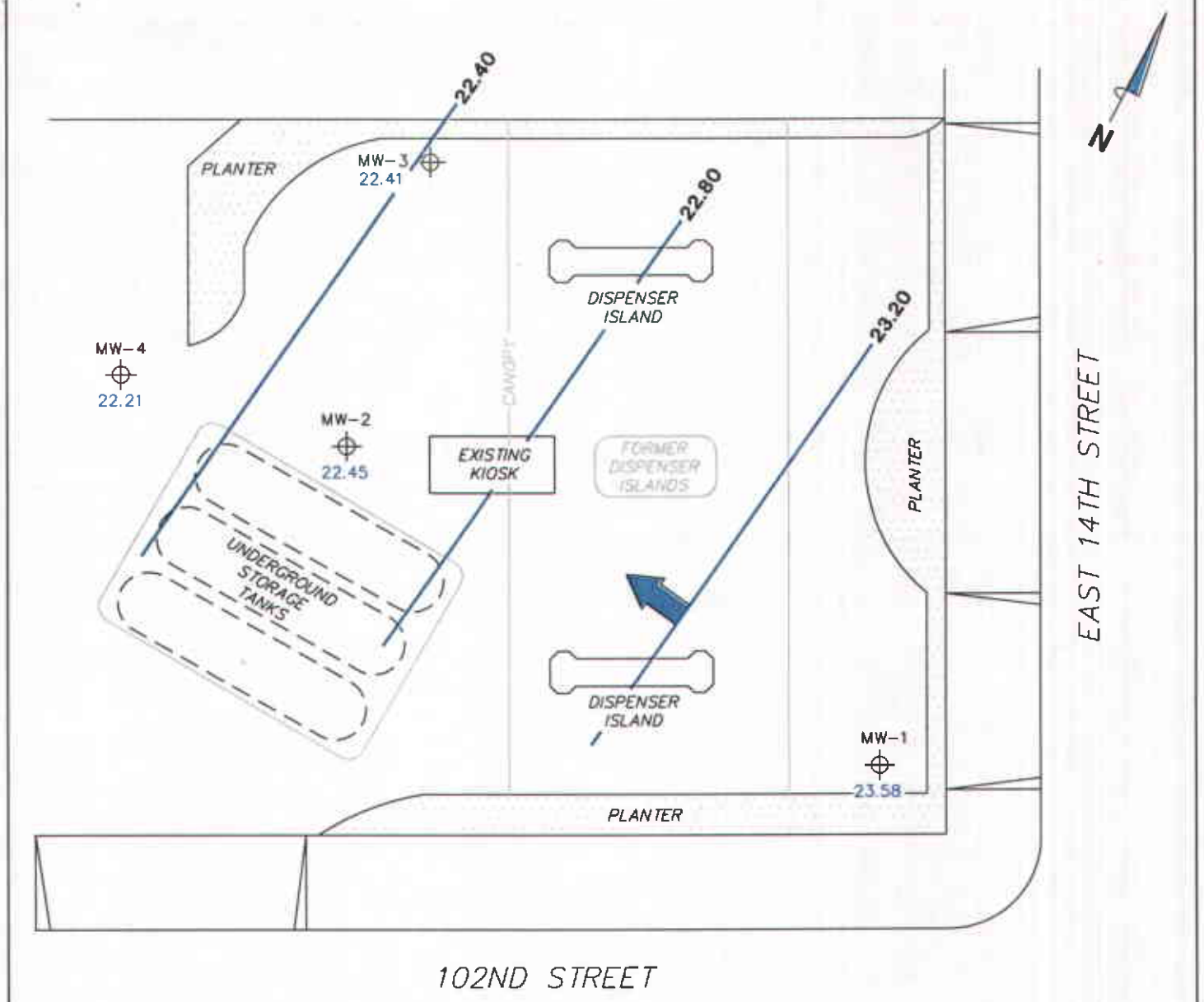
79 Station 7124
10151 East 14th Street
Oakland, California

TRC

FIGURE 1

PS = 1:1

Graphics on Ir1(E)\VICINITY MAPS\7124vm.dwg 11/17/03 cme



LEGEND

MW-4 ⊕ Monitoring Well with Groundwater Elevation (feet)

23.20 —— Groundwater Elevation Contour

General Direction of Groundwater Flow

NOTES:

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

GROUNDWATER ELEVATION CONTOUR MAP
January 9, 2004

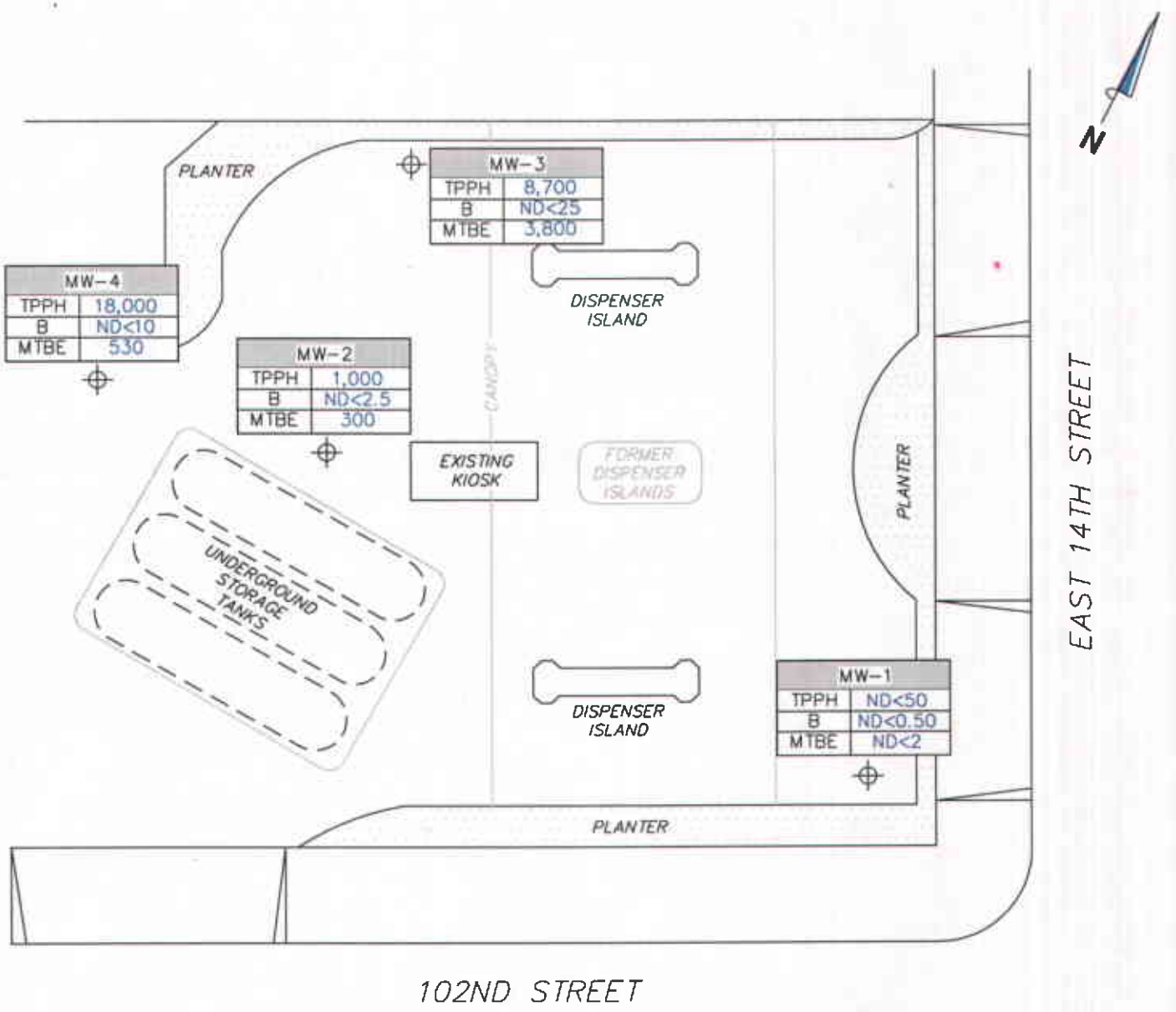
76 Station 7124
10151 East 14th Street
Oakland, California

TRC

SCALE (FEET)
0 20

FIGURE 2

Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-7000\7124+\7124QMS.dwg 2/17/04 bbs



NOTES:

TPPH = total purgeable petroleum hydrocarbons. B = benzene. MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. Results obtained using EPA Method 8260B.

LEGEND

Well No.
TPPH µg/l
B µg/l
MTBE µg/l

Monitoring Well with Dissolved-Phase Hydrocarbon Concentrations (µg/l)

DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS MAP
January 9, 2004

76 Station 7124
10151 East 14th Street
Oakland, California

TRC

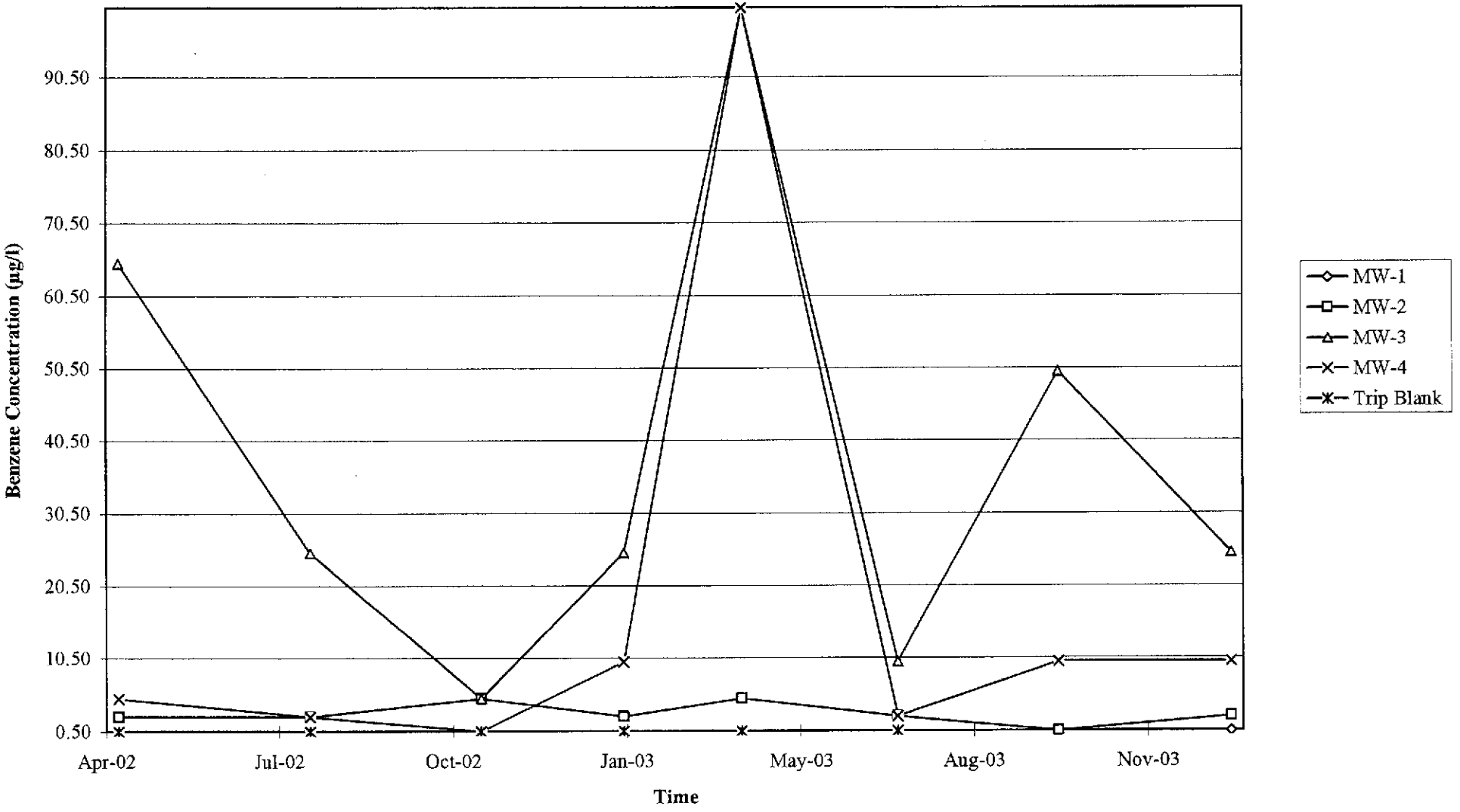
SCALE (FEET)
0 20

FIGURE 3

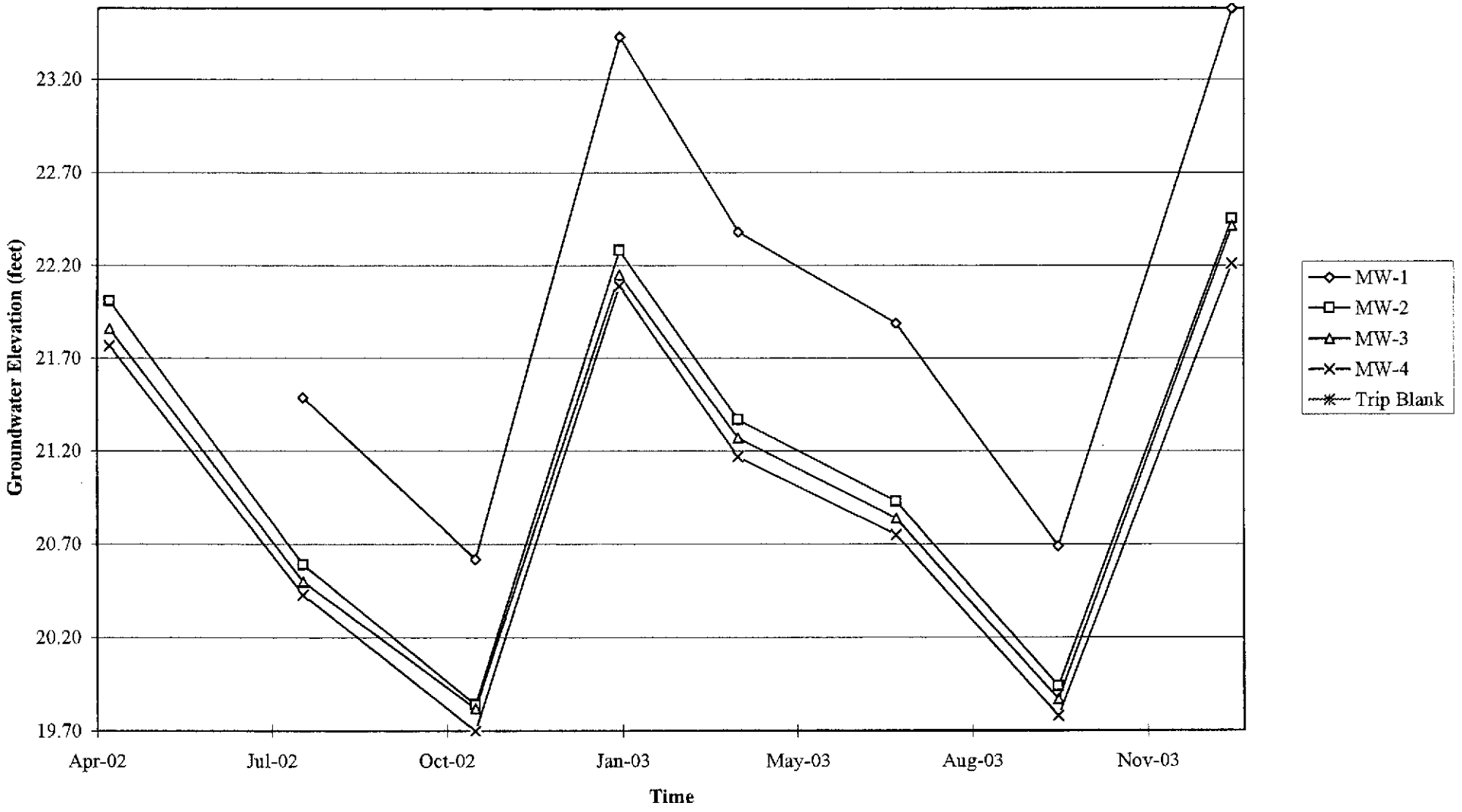
Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-7000\7124+\7124QMS.dwg 2/17/04 bbs

GRAPHS

Graph 1
Benzene Concentrations vs. Time
76 Station 7124



Graph 2
Hydrograph
76 Station 7124



GENERAL FIELD PROCEDURES

Groundwater Monitoring and Sampling Assignments

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

Fluid Level Measurements

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

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depth to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (surveyors mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

Wells that are found to contain LPH are not purged or sampled. Instead, one casing volume of fluid is bailed from the well and the well is re-sealed. Bailed fluids are placed in a container separate from normal purge water, and properly disposed.

Purging and Groundwater Parameter Measurement

TSR instructions may specify that a well not be purged (no-purge sampling), be purged using low-flow methods, or be purged using conventional pump and/or bail methods. Conventional purging generally consists of pumping or bailing until a minimum of three casing volumes of water have been removed or until the well has been pumped dry. Pumping is generally accomplished using submersible electric or pneumatic diaphragm pumps.

During conventional purging, three groundwater parameters (temperature, pH, and conductivity) are measured after removal of each casing volume. Stabilization of these parameters, to within 10 percent, confirm that sufficient purging has been completed. In some cases, the TSR indicates that other parameters are also to be measured during purging. TRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurement are calibrated daily according to manufacturer's instructions.

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

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

Groundwater Sample Collection

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

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

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

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

Sequence of Gauging, Purging, and Sampling

The sequence in which monitoring activities are conducted are specified on the TSR. In general, wells are gauged beginning with the least-affected well and ending with the well that has highest concentration based on previous analytic results. After all gauging for the site is completed, wells are purged and/or sampled from the least-affected well to the most-affected well.

Decontamination

In order to reduce the possibility of cross-contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated to a particular well, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liqui-nox and water and rinsing twice. The final rinse is in deionized water.

Exceptions

Additional tasks or non-standard procedures, if any, that may be requested or required for a particular site, and noted on the site TSR, are documented in field notes on the following pages.

FIELD MONITORING DATA SHEET

Technician: ALEX Job #/Task #: 41050001 / FA20 Date: 1-9-04

Site # 7124 Project Manager KATHLEEN DESKIN Page 1 of 1

Well #	Grade	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-4		✓	24.92	16.15	0	0	1150	4"
MW-2		✓	25.21	15.42	0	0	1215	4"
MW-3		✓	25.08	15.31	0	0	1240	4"
MW-1 (dup)		✓	24.72	13.79	0	0	1320	4"

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

WTT CERTIFICATE MANIFEST DRUM INVENTORY ✓ TRAFFIC CONTROL

GROUNDWATER SAMPLING FIELD NOTES

Technician: Alex

Site: 7124 Project No.: 410500 01 Date: 1-9-04

Well No.: MW-4 Purge Method: DIA

Depth to Water (feet): 16.15 Depth to Product (feet): 0

Total Depth (feet): 24.92 LPH & Water Recovered (gallons): 0

Water Column (feet): 8.77 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 17.90 1 Well Volume (gallons): 6

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
1130			6	478	19.1	5.76		
			12	476	19.0	5.77		
	1138		18	467	19.6	5.75		

Static at Time Sampled	Total Gallons Purged	Time Sampled
16.50	18	1150

Comments:

Well No.: MW-2 Purge Method: DIA

Depth to Water (feet): 15.42 Depth to Product (feet): 0

Total Depth (feet): 25.21 LPH & Water Recovered (gallons): 0

Water Column (feet): 9.79 Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 17.57 1 Well Volume (gallons): 6

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
1203			6	484	19.2	6.27		
			12	461	19.6	6.07		
	1210		18	453	19.5	5.93		

Static at Time Sampled	Total Gallons Purged	Time Sampled
15.73	18	1215

Comments:

GROUNDWATER SAMPLING FIELD NOTES

Technician: ALEX

Site: 7124 Project No.: 41050001 Date: 1-9-04

Well No.: MW-3 Purge Method: DIA

Depth to Water (feet): 25 Jan. 15.31 Depth to Product (feet): 0

Total Depth (feet): 25.08 LPH & Water Recovered (gallons): 0

Water Column (feet): 9.77 Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 17.26 1 Well Volume (gallons): 6

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F C)	pH	Turbidity	D.O.
1230			6	464	18.2	6.42		
			12	465	18.9	6.03		
	1245		18	470	19.0	6.05		

Static at Time Sampled	Total Gallons Purged	Time Sampled
10.15	18	1240

Comments:

Well No.: MW-1 Purge Method: DIA

Depth to Water (feet): 13.79 Depth to Product (feet): 0

Total Depth (feet): 24.72 LPH & Water Recovered (gallons): 0

Water Column (feet): 10.93 Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 15.97 1 Well Volume (gallons): 7

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F C)	pH	Turbidity	D.O.
1255			7	399	18.9	6.31		
			14	403	18.7	6.09		
	1305		21	405	18.8	6.20		

Static at Time Sampled	Total Gallons Purged	Time Sampled
14.02	21	1320 1M 1320

Comments:

SEVERN TRENT STL

Submission#: 2004-01-0285

TRC Alton Geoscience

January 23, 2004

21 Technology Drive
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001FA20
Project: Conoco Phillips # 7124
Site: 10151 East 14Th., St Oakland

Attached is our report for your samples received on 01/12/2004 11:17
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 02/26/2004 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 #: 2004-01-0285

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW- 4	01/19/2004 11:50	Water	1
MW- 2	01/19/2004 12:15	Water	2
MW- 3	01/19/2004 12:40	Water	3
MW- 1	01/19/2004 13:20	Water	4

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Prep(s): 5030B
Sample ID: **MW- 4**
Sampled: 01/19/2004 11:50
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-01-0285 - 1
Extracted: 1/22/2004 11:33
QC Batch#: 2004/01/22-1B.66

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	18000	1000	ug/L	20.00	01/22/2004 11:33	g
Benzene	ND	10	ug/L	20.00	01/22/2004 11:33	
Toluene	ND	10	ug/L	20.00	01/22/2004 11:33	
Ethylbenzene	ND	10	ug/L	20.00	01/22/2004 11:33	
Total xylenes	ND	20	ug/L	20.00	01/22/2004 11:33	
tert-Butyl alcohol (TBA)	ND	2000	ug/L	20.00	01/22/2004 11:33	
Methyl tert-butyl ether (MTBE)	530	40	ug/L	20.00	01/22/2004 11:33	
Di-isopropyl Ether (DIPE)	ND	40	ug/L	20.00	01/22/2004 11:33	
Ethyl tert-butyl ether (ETBE)	ND	40	ug/L	20.00	01/22/2004 11:33	
tert-Amyl methyl ether (TAME)	ND	40	ug/L	20.00	01/22/2004 11:33	
1,2-DCA	ND	40	ug/L	20.00	01/22/2004 11:33	
EDB	ND	40	ug/L	20.00	01/22/2004 11:33	
Ethanol	ND	10000	ug/L	20.00	01/22/2004 11:33	
Surrogate(s)						
1,2-Dichloroethane-d4	97.0	76-114	%	20.00	01/22/2004 11:33	
Toluene-d8	95.7	88-110	%	20.00	01/22/2004 11:33	

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Prep(s): 5030B
Sample ID: **MW- 2**
Sampled: 01/19/2004 12:15
Matrix: Water
Analysis Flag: o (See Legend and Note Section)

Test(s): 8260FAB
Lab ID: 2004-01-0285 - 2
Extracted: 1/22/2004 14:21
QC Batch#: 2004/01/22-1B.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1000	250	ug/L	5.00	01/22/2004 14:21	g
Benzene	ND	2.5	ug/L	5.00	01/22/2004 14:21	
Toluene	ND	2.5	ug/L	5.00	01/22/2004 14:21	
Ethylbenzene	ND	2.5	ug/L	5.00	01/22/2004 14:21	
Total xylenes	ND	5.0	ug/L	5.00	01/22/2004 14:21	
tert-Butyl alcohol (TBA)	ND	500	ug/L	5.00	01/22/2004 14:21	
Methyl tert-butyl ether (MTBE)	300	10	ug/L	5.00	01/22/2004 14:21	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	5.00	01/22/2004 14:21	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	5.00	01/22/2004 14:21	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	5.00	01/22/2004 14:21	
1,2-DCA	ND	10	ug/L	5.00	01/22/2004 14:21	
EDB	ND	10	ug/L	5.00	01/22/2004 14:21	
Ethanol	ND	2500	ug/L	5.00	01/22/2004 14:21	
Surrogate(s)						
1,2-Dichloroethane-d4	105.0	76-114	%	5.00	01/22/2004 14:21	
Toluene-d8	90.4	88-110	%	5.00	01/22/2004 14:21	

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Prep(s): 5030B
Sample ID: **MW- 3**
Sampled: 01/19/2004 12:40
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-01-0285 - 3
Extracted: 1/23/2004 12:36
QC Batch#: 2004/01/23-1B.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	8700	2500	ug/L	50.00	01/23/2004 12:36	
Benzene	ND	25	ug/L	50.00	01/23/2004 12:36	
Toluene	ND	25	ug/L	50.00	01/23/2004 12:36	
Ethylbenzene	98	25	ug/L	50.00	01/23/2004 12:36	
Total xylenes	ND	50	ug/L	50.00	01/23/2004 12:36	
tert-Butyl alcohol (TBA)	ND	5000	ug/L	50.00	01/23/2004 12:36	
Methyl tert-butyl ether (MTBE)	3800	100	ug/L	50.00	01/23/2004 12:36	
Di-isopropyl Ether (DIPE)	ND	100	ug/L	50.00	01/23/2004 12:36	
Ethyl tert-butyl ether (ETBE)	ND	100	ug/L	50.00	01/23/2004 12:36	
tert-Amyl methyl ether (TAME)	ND	100	ug/L	50.00	01/23/2004 12:36	
1,2-DCA	ND	100	ug/L	50.00	01/23/2004 12:36	
EDB	ND	100	ug/L	50.00	01/23/2004 12:36	
Ethanol	ND	25000	ug/L	50.00	01/23/2004 12:36	
Surrogate(s)						
1,2-Dichloroethane-d4	98.6	76-114	%	50.00	01/23/2004 12:36	
Toluene-d8	94.3	88-110	%	50.00	01/23/2004 12:36	

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Prep(s): 5030B
Sample ID: **MW- 1**
Sampled: 01/19/2004 13:20
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-01-0285 - 4
Extracted: 1/23/2004 13:00
QC Batch#: 2004/01/23-1B.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	01/23/2004 13:00	
Benzene	ND	0.50	ug/L	1.00	01/23/2004 13:00	
Toluene	ND	0.50	ug/L	1.00	01/23/2004 13:00	
Ethylbenzene	ND	0.50	ug/L	1.00	01/23/2004 13:00	
Total xylenes	ND	1.0	ug/L	1.00	01/23/2004 13:00	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	01/23/2004 13:00	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	01/23/2004 13:00	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	01/23/2004 13:00	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	01/23/2004 13:00	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	01/23/2004 13:00	
1,2-DCA	ND	2.0	ug/L	1.00	01/23/2004 13:00	
EDB	ND	2.0	ug/L	1.00	01/23/2004 13:00	
Ethanol	ND	500	ug/L	1.00	01/23/2004 13:00	
Surrogate(s)						
1,2-Dichloroethane-d4	94.8	76-114	%	1.00	01/23/2004 13:00	
Toluene-d8	99.9	88-110	%	1.00	01/23/2004 13:00	

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Batch QC Report

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

Method Blank **Water** **QC Batch # 2004/01/22-1B.66**

MB: 2004/01/22-1B.66-006
Date Extracted: 01/22/2004 10:06

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	01/22/2004 10:06	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	01/22/2004 10:06	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	01/22/2004 10:06	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	01/22/2004 10:06	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	01/22/2004 10:06	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	01/22/2004 10:06	
1,2-DCA	ND	0.5	ug/L	01/22/2004 10:06	
EDB	ND	0.5	ug/L	01/22/2004 10:06	
Benzene	ND	0.5	ug/L	01/22/2004 10:06	
Toluene	ND	0.5	ug/L	01/22/2004 10:06	
Ethylbenzene	ND	0.5	ug/L	01/22/2004 10:06	
Total xylenes	ND	1.0	ug/L	01/22/2004 10:06	
Ethanol	ND	500	ug/L	01/22/2004 10:06	
Surrogates(s)					
1,2-Dichloroethane-d4	91.2	76-114	%	01/22/2004 10:06	
Toluene-d8	94.0	88-110	%	01/22/2004 10:06	

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Batch QC Report

Prep(s): 5030B
Method Blank

Water

Test(s): 8260FAB
QC Batch # 2004/01/23-1B.65

MB: 2004/01/23-1B.65-007

Date Extracted: 01/23/2004 10:07

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	01/23/2004 10:07	
tert-Butyl alcohol (TBA)	ND	100	ug/L	01/23/2004 10:07	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	01/23/2004 10:07	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	01/23/2004 10:07	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	01/23/2004 10:07	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	01/23/2004 10:07	
1,2-DCA	ND	2.0	ug/L	01/23/2004 10:07	
EDB	ND	2.0	ug/L	01/23/2004 10:07	
Benzene	ND	0.5	ug/L	01/23/2004 10:07	
Toluene	ND	0.5	ug/L	01/23/2004 10:07	
Ethylbenzene	ND	0.5	ug/L	01/23/2004 10:07	
Total xylenes	ND	1.0	ug/L	01/23/2004 10:07	
Ethanol	ND	500	ug/L	01/23/2004 10:07	
Surrogates(s)					
1,2-Dichloroethane-d4	84.2	76-114	%	01/23/2004 10:07	
Toluene-d8	98.0	88-110	%	01/23/2004 10:07	

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260B

Laboratory Control Spike **Water** **QC Batch # 2004/01/22-1B.66**

LCS 2004/01/22-1B.66-018 Extracted: 01/22/2004 Analyzed: 01/22/2004 09:18
LCSD 2004/01/22-1B.66-042 Extracted: 01/22/2004 Analyzed: 01/22/2004 09:42

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	22.1	19.2	25	88.4	76.8	14.0	65-165	20		
Benzene	22.4	19.6	25	89.6	78.4	13.3	69-129	20		
Toluene	22.9	21.4	25	91.6	85.6	6.8	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	432	426	500	86.4	85.2		76-114			
Toluene-d8	457	463	500	91.4	92.6		88-110			

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2004/01/23-1B.65**

LCS 2004/01/23-1B.65-032 Extracted: 01/23/2004 Analyzed: 01/23/2004 10:32
LCSD 2004/01/23-1B.65-054 Extracted: 01/23/2004 Analyzed: 01/23/2004 10:54

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	27.4	29.0	25	109.6	116.0	5.7	65-165	20		
Benzene	24.9	24.0	25	99.6	96.0	3.7	69-129	20		
Toluene	25.2	24.8	25	100.8	99.2	1.6	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	463	471	500	92.6	94.2		76-114			
Toluene-d8	499	493	500	99.8	98.6		88-110			

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 # 7124

Received: 01/12/2004 11:17

Site: 10151 East 14Th., St Oakland

Legend and Notes

Analysis Flag

o

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

Result Flag

g

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

SEVERN TRENT STL

STL San Francisco

Sample Receipt Checklist

Submission #:2004- 01 - 0285

Checklist completed by: (initials) NR Date: 01 / 12 /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^{o} 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): _____

2004-01-0285

ConocoPhillips Chain Of Custody Record

81911

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: 1-9-04

PAGE: 1 of 1

SAMPLING COMPANY: TRC	Valid Value ID:	CONOCOPHILLIPS SITE NUMBER: 7124	GLOBAL ID NO.: NONE FOR THIS SITE
ADDRESS: 21 Technology Drive, Irvine CA 92618		SITE ADDRESS (Street and City): 10151 EAST 14TH ST. OAKLAND	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: / LAB USE ONLY
SAMPLER NAME(S) (Print): ALEX M.	CONSULTANT PROJECT NUMBER: 41050001/FA20		

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

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED ☒

* Field Point name only required if different from Sample ID

REQUESTED ANALYSES

LAB USE ONLY	Sample Identification/Field Point Name*	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	8015m - TPHd Extractable	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 / 8021B - TPHg/BTEX/MtBE	Lead ☐Total ☐STLC ☐TCLP	TPH BY 8260B	BTX /MTBE BY 8260B	5 OXYS BY 8260B
	MW-4	1-9-04	1150	G.W.	3									X	X	X
	MW-2		1215													
	MW-3		1240													
	MW-1		1320													

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

4.0°C

TEMPERATURE ON RECEIPT C°

REFRIGERATED

Relinquished by: (Signature)	Received by: (Signature)	Date: 1/12/04	Time: 1020
Relinquished by: (Signature) 1/12/04 1117	Received by: (Signature) Denise Harrington/STL-SF	Date: 1/12/04	Time: 1117
Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:

9/18/03 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.