R02444

ConocoPhillips

76 Broadway
Sacramento, CA 95818
phone 916.558.7676
fax 916.558.7639



April 20, 2005

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

Re: **Document Transmittal**
Fuel Leak Case
76 Station #7124
10151 International Blvd.
Oakland, CA

Dear Mr. Hwang:

Please find attached Secor's *Quarterly Summary Report, dated 4/25/05,* and TRC's *Quarterly Monitoring Report, dated 3/17/05* for the above referenced site. I declare, under penalty of perjury, that to the best of my knowledge the information and/or recommendations contained in the attached proposal or report is true and correct.

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

Sincerely,

Thomas H. Kosel

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

Attachment
cc: Tom Potter, Secor

SECOR

SECOR
INTERNATIONAL
INCORPORATED

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

April 25, 2005

Mr. Donald Hwang
Alameda County Environmental Health Services
1131 Harbor Bay Parkway Suite 250
Alameda, CA 94502

RE: **Quarterly Summary and Monitoring Report-First Quarter 2005**
SECOR Project No.: 77CP.60008.01.7124

Dear Mr. Hwang:

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 International Blvd<br>Oakland, California |

Sincerely,
**SECOR International Incorporated**

Thomas M. Potter
Staff Scientist

Attachments: SECOR's *Quarterly Summary Report* dated April 14, 2005
Attachment 1 – TRC *Quarterly Monitoring Report January through March, 2005* dated April 5, 2005

cc: Mr. Thomas Kosel, ConocoPhillips

# QUARTERLY SUMMARY REPORT
## First Quarter 2005

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

During third quarter, 2004 SECOR completed a ½-mile radius agency receptor survey and obtained an EDR radius map for the site from Environmental Data Resources, Incorporated. The agency survey identified 2 industrial supply well, 3 cathodic protection wells, and 2 wells of unknown type within the search radius. The survey also identified 12 wells of unknown type that could not be located precisely because the records on file with DWR did not include this information. These wells may or may not be located within the search radius. The EDR radius map did not identify any water supply wells within the search radius but did identify two water supply wells within one mile of the site.

## 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.

The first quarter monitoring report (Attachment 1) indicates that MW-2 is covered with asphalt and could not be accessed. The well will be restored or repaired, as necessary during second quarter 2005.

## 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-3 and MW-4 contained elevated concentrations of TPPH and MtBE.

## RECENT SUBMITTALS/CORRESPONDENCE

Submitted – October 14, 2004 Work Plan for Additional Off-Site Monitoring Well Installation.

## DISCUSSION

During the first quarter 2005, depth to groundwater ranged between 12.83 and 15.22 feet bgs, which was in range of historical levels. Historical groundwater depths have been reported between 12.83 feet and 18.66 feet bgs. The direction of groundwater flow was toward the west.

Evaluation of dissolved concentrations through the first quarter 2005 indicates that the highest concentrations of residual petroleum hydrocarbons and MtBE continue to be detected in on-site wells MW-3 and MW-4. TPPH was reported at its highest in well MW-3 this quarter at 6,100 µg/L. The dissolved plume remains undefined by the existing monitoring well network. Currently SECOR has submitted a work plan to install

two down gradient wells to define the dissolved plume. SECOR is currently waiting on the work plan approval from the Alameda County Department of Environmental Health.

**THIS QUARTER ACTIVITIES (First Quarter 2005)**

1. TRC performed coordinated groundwater monitoring and sampling event.
2. Received access agreement with adjacent property owners for installation of up to three monitoring wells.

**NEXT QUARTER ACTIVITIES (Second Quarter 2005)**

1. TRC to perform coordinated groundwater monitoring and sampling event.
2. Implement October 14, 2004 Work Plan pending agency approval.
3. TRC to locate and restore or repair MW-2.

# ATTACHMENT 1
# QUARTERLY MONITORING REPORT
# JANUARY THROUGH MARCH 2005 (TRC)

76 Service Station No. 7124
10151 East 14th Street
Oakland, California
April 25, 2005

TRC

Customer-Focused Solutions

March 17, 2005

ConocoPhillips Company
76 Broadway
Sacramento, CA 95818

ATTN: MR. THOMAS KOSEL

SITE: 76 STATION 7124
10151 INTERNATIONAL BLVD.
OAKLAND, CALIFORNIA

RE: QUARTERLY MONITORING REPORT
JANUARY THROUGH MARCH 2005

Dear Mr. Kosel:

Please find enclosed our Quarterly Monitoring Report for 76 Station 7124, located at 10151 International Blvd., Oakland, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan
QMS Operations Manager

CC: Mr. Thomas Potter, Secor International, Inc (2 copies)

Enclosures
200400/7124R06.QMS.doc

RECEIVED
MAR 17 2005
BY:

21 Technology Drive • Irvine, California 92618
Telephone 949-753-0101 • Fax 949-753-0111

TRC

Customer-Focused Solutions

# QUARTERLY MONITORING REPORT
# JANUARY THROUGH MARCH 2005

76 STATION 7124
10151 International Blvd.
Oakland, California

Prepared For:

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

By:


Senior Project Geologist, Irvine Operations
March 17, 2005

21 Technology Drive • Irvine, California 92618
Telephone 949-753-0101 • Fax 949-753-0111

| LIST OF ATTACHMENTS | |
|---|---|
| Summary Sheet | Summary of Gauging and Sampling Activities |
| Tables | Table Key<br>Table 1: Current Fluid Levels and Selected Analytical Results<br>Table 2: Historic Fluid Levels and Selected Analytical Results<br>Table 3: Additional Analytical Results |
| Figures | Figure 1: Vicinity Map<br>Figure 2: Groundwater Elevation Contour Map<br>Figure 3: Dissolved-Phase TPPH Concentration Map<br>Figure 4: Dissolved-Phase Benzene Concentration Map<br>Figure 5: Dissolved-Phase MTBE Concentration Map |
| Graphs | Groundwater Elevations vs. Time<br>MTBE 8260B Concentrations vs. Time |
| Field Activities | General Field Procedures<br>Groundwater Sampling Field Notes |
| Laboratory Reports | Official Laboratory Reports<br>Quality Control Reports<br>Chain of Custody Records |
| Statements | Purge Water Disposal<br>Limitations |

# Summary of Gauging and Sampling Activities
# January 2005 through March 2005
# 76 Station 7124
# 10151 International Blvd.
# Oakland, CA

Project Coordinator: **Thomas H. Kosel**
Telephone: **916-558-7666**
Water Sampling Contractor: ***TRC***
Compiled by: **Valentina Tobon**
Date(s) of Gauging/Sampling Event: **01/12/05**

## Sample Points

Groundwater wells: **4** onsite, **0** offsite Wells gauged: **3** Wells sampled: **3**
Purging method: **Diaphragm pump**
Purge water disposal: **Onyx/Rodeo Unit 100**
Other Sample Points: **0** Type: **n/a**

## Liquid Phase Hydrocarbons (LPH)

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

## Hydrogeologic Parameters

Depth to groundwater (below TOC): Minimum: **12.83 feet** Maximum: **15.22 feet**
Average groundwater elevation (relative to available local datum): **23.59 feet**
Average change in groundwater elevation since previous event: **2.96 feet**
Interpreted groundwater gradient and flow direction:
Current event: **0.015 ft/ft, west**
Previous event: **0.009 ft/ft, west (10/29/04)**

## Selected Laboratory Results

Wells with detected **Benzene:** **1** Wells above MCL (1.0 µg/l): **0**
Maximum reported benzene concentration: **0.88 µg/l (MW-3)**

Wells with **TPPH 8260B** **2** Maximum: **6,100 µg/l (MW-3)**
Wells with **MTBE** **2** Maximum: **6,900 µg/l (MW-3)**

## Notes:

MW-2=Well was paved over.,

# TABLES

# TABLE KEY

STANDARD ABREVIATIONS

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

ANALYTES

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

NOTES

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

REFERENCE

TRC began groundwater monitoring and sampling for 76 Station 7124 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

**Table 1**

**CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**January 12, 2005**

**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** | | | | | | | | | | | | | | |
| 01/12/05 | 37.37 | 12.83 | 0.00 | 24.54 | 3.31 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| **MW-2** | | | | | | | | | | | | | | |
| 01/12/05 | 37.87 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Well was paved over. |
| **MW-3** | | | | | | | | | | | | | | |
| 01/12/05 | 37.72 | 14.64 | 0.00 | 23.08 | 2.65 | -- | 6100 | 0.88 | 0.99 | 30 | 2.2 | -- | 6900 | |
| **MW-4** | | | | | | | | | | | | | | |
| 01/12/05 | 38.36 | 15.22 | 0.00 | 23.14 | 2.91 | -- | 1300 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 620 | |

**Table 2**

**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**April 2002 Through January 2005**

**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** | | | | | | | | | | | | | | |
| 04/08/02 | 37.37 | 14.27 | 0.00 | 23.10 | -- | ND<50 | -- | ND<0.50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<2.5 | ND<2.0 | |
| 07/28/02 | 37.37 | 15.88 | 0.00 | 21.49 | -1.61 | -- | 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 | |
| 04/26/04 | 37.37 | 15.21 | 0.00 | 22.16 | -1.42 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 07/22/04 | 37.37 | 16.43 | 0.00 | 20.94 | -1.22 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 10/29/04 | 37.37 | 16.14 | 0.00 | 21.23 | 0.29 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| 01/12/05 | 37.37 | 12.83 | 0.00 | 24.54 | 3.31 | -- | ND<50 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | ND<0.50 | |
| **MW-2** | | | | | | | | | | | | | | |
| 04/08/02 | 37.87 | 15.86 | 0.00 | 22.01 | -- | 4400 | -- | 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 | -- | 3200 | 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 | -- | 3800 | 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 | -- | 1000 | 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 | -- | 1900 | 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 | |
| 04/26/04 | 37.87 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Covered with asphalt |
| 07/22/04 | 37.87 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Covered with asphalt |
| 10/29/04 | 37.87 | -- | 0.00 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Well is paved over. |

**Table 2**

**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**April 2002 Through January 2005**

**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-2** | continued | | | | | | | | | | | | | |
| 01/12/05 | 37.87 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | Well was paved over. |
| **MW-3** | | | | | | | | | | | | | | |
| 04/08/02 | 37.72 | 15.86 | 0.00 | 21.86 | -- | 8700 | -- | 65 | ND<25 | 400 | ND<25 | 6500 | 8300 | |
| 07/28/02 | 37.72 | 17.22 | 0.00 | 20.50 | -1.36 | -- | 4500 | ND<25 | ND<25 | ND<25 | ND<50 | -- | 1100 | |
| 11/03/02 | 37.72 | 17.90 | 0.00 | 19.82 | -0.68 | -- | 25000 | ND<5.0 | ND<5.0 | 25 | ND<10 | -- | 470 | |
| 01/24/03 | 37.72 | 15.57 | 0.00 | 22.15 | 2.33 | -- | 6000 | ND<25 | ND<25 | 94 | ND<50 | -- | 10000 | |
| 04/02/03 | 37.72 | 16.45 | 0.00 | 21.27 | -0.88 | -- | 130000 | ND<100 | ND<100 | ND<100 | ND<200 | -- | 4400 | |
| 07/01/03 | 37.72 | 16.88 | 0.00 | 20.84 | -0.43 | -- | 9400 | ND<10 | ND<10 | ND<10 | ND<20 | -- | 2200 | |
| 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 | |
| 04/26/04 | 37.72 | 16.62 | 0.00 | 21.10 | -1.31 | -- | 6700 | ND<25 | ND<25 | ND<25 | ND<50 | -- | 3900 | |
| 07/22/04 | 37.72 | 17.62 | 0.00 | 20.10 | -1.00 | -- | 13000 | ND<25 | ND<25 | ND<25 | ND<50 | -- | 980 | |
| 10/29/04 | 37.72 | 17.29 | 0.00 | 20.43 | 0.33 | -- | 4600 | ND<5.0 | ND<5.0 | 13 | ND<10 | -- | 640 | |
| 01/12/05 | 37.72 | 14.64 | 0.00 | 23.08 | 2.65 | -- | 6100 | 0.88 | 0.99 | 30 | 2.2 | -- | 6900 | |
| **MW-4** | | | | | | | | | | | | | | |
| 04/08/02 | 38.36 | 16.59 | 0.00 | 21.77 | -- | 13000 | -- | 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 | -- | 18000 | 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<1000 | ND<10 | ND<10 | ND<10 | ND<20 | -- | 1000 | |
| 04/02/03 | 38.36 | 17.19 | 0.00 | 21.17 | -0.92 | -- | 130000 | ND<100 | ND<100 | ND<100 | ND<200 | -- | ND<400 | |
| 07/01/03 | 38.36 | 17.61 | 0.00 | 20.75 | -0.42 | -- | 15000 | 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 | |
| 04/26/04 | 38.36 | 17.20 | 0.00 | 21.16 | -1.05 | -- | 6500 | ND<10 | ND<10 | ND<10 | ND<20 | -- | 240 | |

**Table 2**

**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**

**April 2002 Through January 2005**

**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-4 continued | | | | | | | | | | | | | | |
| 07/22/04 | 38.36 | 18.34 | 0.00 | 20.02 | -1.14 | -- | 18000 | ND<10 | ND<10 | ND<10 | ND<20 | -- | 48 | |
| 10/29/04 | 38.36 | 18.13 | 0.00 | 20.23 | 0.21 | -- | 2700 | ND<2.5 | ND<2.5 | ND<2.5 | ND<5.0 | -- | 76 | |
| 01/12/05 | 38.36 | 15.22 | 0.00 | 23.14 | 2.91 | -- | 1300 | ND<0.50 | ND<0.50 | ND<0.50 | ND<1.0 | -- | 620 | |

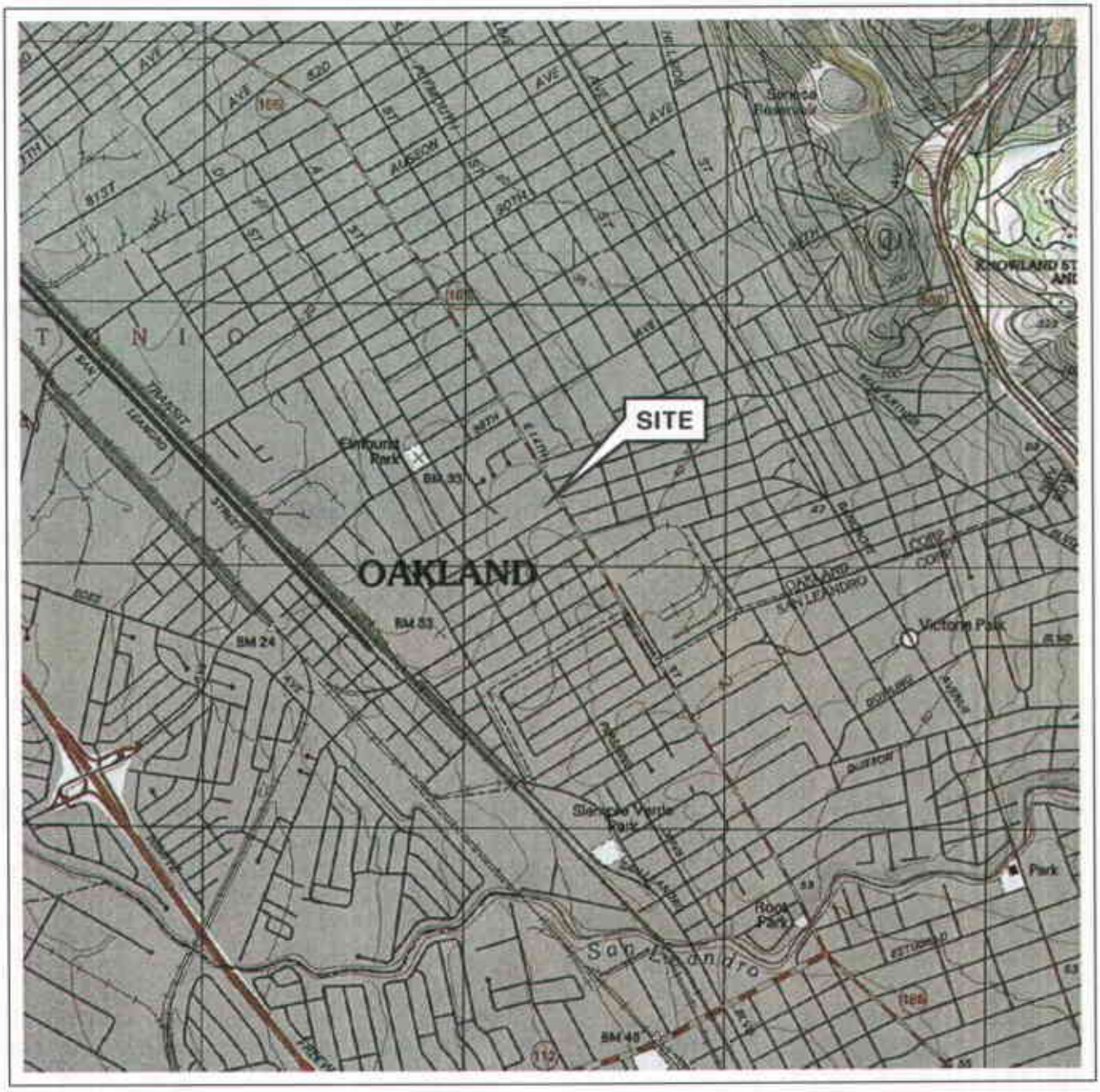
**Table 3**
**ADDITIONAL ANALYTICAL RESULTS**
**76 Station 7124**

| 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<2.0 | ND<100 | ND<2.0 | ND<2.0 | ND<500 | -- | -- |
| 11/03/02 | ND<2.0 | ND<2.0 | ND<2.0 | ND<100 | ND<2.0 | ND<2.0 | ND<500 | -- | -- |
| 01/24/03 | ND<2.0 | ND<2.0 | ND<2.0 | ND<100 | ND<2.0 | ND<2.0 | ND<500 | -- | -- |
| 04/02/03 | ND<2.0 | ND<2.0 | ND<2.0 | ND<100 | ND<2.0 | ND<2.0 | ND<500 | -- | -- |
| 07/01/03 | ND<2.0 | ND<2.0 | ND<2.0 | ND<100 | ND<2.0 | ND<2.0 | ND<500 | -- | -- |
| 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<2.0 | ND<2 | ND<2 | ND<100 | ND<2 | ND<2 | -- | ND<500 | ND<2 |
| 04/26/04 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | ND<1.0 | ND<0.50 | -- | ND<50 | -- |
| 07/22/04 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | ND<1.0 | ND<0.50 | -- | ND<50 | ND<0.50 |
| 10/29/04 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | ND<1.0 | ND<0.50 | -- | ND<50 | -- |
| 01/12/05 | ND<0.50 | ND<0.50 | ND<0.50 | ND<5.0 | ND<1.0 | ND<0.50 | -- | ND<50 | -- |
| **MW-2** | | | | | | | | | |
| 04/08/02 | ND<40 | ND<40 | ND<40 | ND<2000 | ND<40 | ND<40 | ND<10000 | -- | -- |
| 07/28/02 | ND<10 | ND<10 | ND<10 | ND<500 | ND<10 | ND<10 | ND<2500 | -- | -- |
| 11/03/02 | ND<20 | ND<20 | ND<20 | ND<1000 | ND<20 | ND<20 | ND<5000 | -- | -- |
| 01/24/03 | ND<10 | ND<10 | ND<10 | ND<500 | ND<10 | ND<10 | ND<2500 | -- | -- |
| 04/02/03 | ND<20 | ND<20 | ND<20 | ND<1000 | ND<20 | ND<20 | ND<5000 | -- | -- |
| 07/01/03 | ND<10 | ND<10 | ND<10 | ND<500 | ND<10 | ND<10 | ND<2500 | -- | -- |
| 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<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<100 | ND<5000 | ND<100 | ND<100 | -- | ND<25000 | ND<100 |
| 04/26/04 | ND<25 | ND<25 | ND<25 | ND<250 | ND<50 | ND<25 | -- | ND<2500 | -- |
| 07/22/04 | ND<25 | ND<25 | ND<25 | ND<250 | ND<50 | ND<25 | -- | ND<2500 | ND<25 |
| 10/29/04 | ND<5.0 | ND<5.0 | ND<5.0 | ND<50 | ND<10 | ND<5.0 | -- | ND<500 | -- |

**Table 3**
**ADDITIONAL ANALYTICAL 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-3 continued** | | | | | | | | | |
| 01/12/05 | ND<25 | ND<25 | ND<25 | 1300 | ND<50 | ND<25 | -- | ND<2500 | -- |
| **MW-4** | | | | | | | | | |
| 04/08/02 | ND<100 | ND<100 | ND<100 | ND<5000 | ND<100 | ND<100 | ND<25000 | -- | -- |
| 07/28/02 | ND<10 | ND<10 | ND<10 | ND<500 | ND<10 | ND<10 | ND<2500 | -- | -- |
| 11/03/02 | ND<2.0 | ND<2.0 | ND<2.0 | ND<100 | ND<2.0 | ND<2.0 | ND<500 | -- | -- |
| 01/24/03 | ND<40 | ND<40 | ND<40 | ND<2000 | ND<40 | ND<40 | ND<10000 | -- | -- |
| 04/02/03 | ND<400 | ND<400 | ND<400 | ND<20000 | ND<400 | ND<400 | ND<100000 | -- | -- |
| 07/01/03 | ND<10 | ND<10 | ND<10 | ND<500 | ND<10 | ND<10 | ND<2500 | -- | -- |
| 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<40 | ND<2000 | ND<40 | ND<40 | -- | ND<10000 | ND<40 |
| 04/26/04 | ND<10 | ND<10 | ND<10 | 430 | ND<20 | ND<10 | -- | ND<1000 | -- |
| 07/22/04 | ND<10 | ND<10 | ND<10 | ND<100 | ND<20 | ND<10 | -- | ND<1000 | ND<10 |
| 10/29/04 | ND<2.5 | ND<2.5 | ND<2.5 | 63 | ND<5.0 | ND<2.5 | -- | ND<250 | -- |
| 01/12/05 | ND<2.5 | ND<10 | ND<2.5 | 1300 | ND<5.0 | ND<2.5 | -- | ND<250 | -- |

# 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 West Quadrangle

**VICINITY MAP**

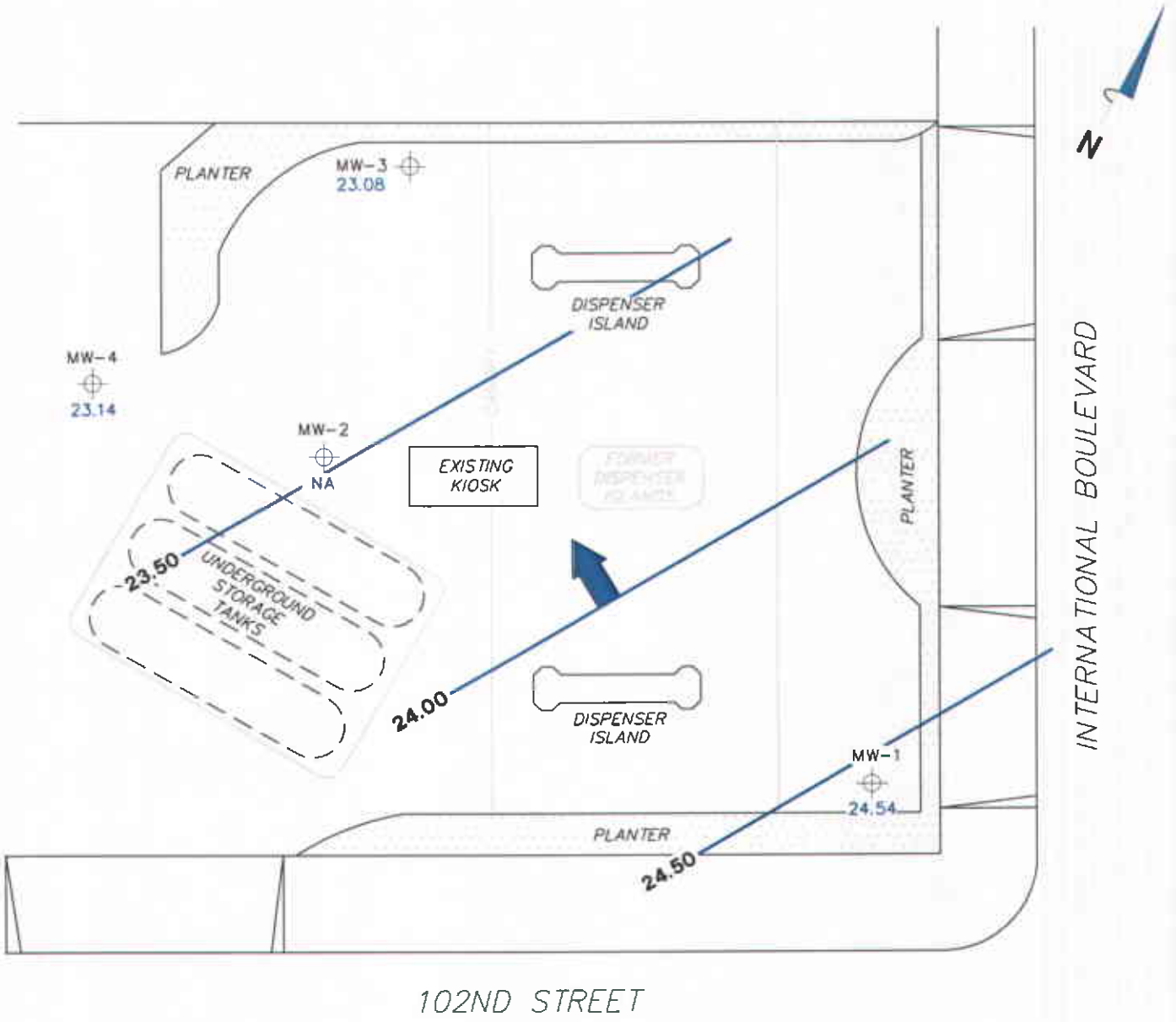
76 Station 7124
10151 International Boulevard
Oakland, California

TRC

# FIGURE 1

PS = 1:1

Graphics on Ir1(z:)\VICINITY MAPS\7124vm.dwg 11/17/03 blw




NOTES:

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. NA = not analyzed, measured, or collected.

LEGEND

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

24.50 — Groundwater Elevation Contour

➡ General Direction of Groundwater Flow

**GROUNDWATER ELEVATION CONTOUR MAP**
**January 12, 2005**

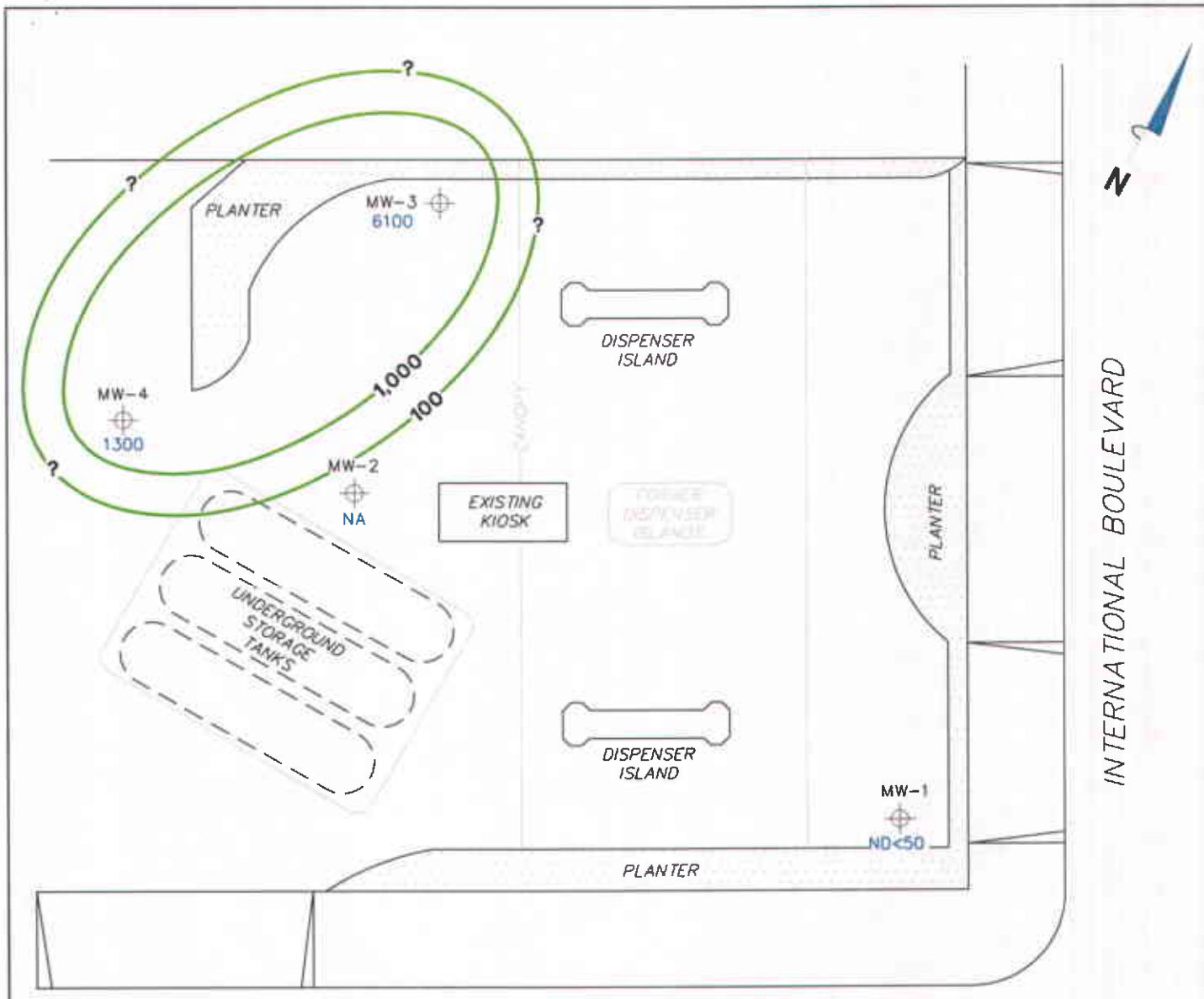
76 Station 7124
10151 International Boulevard
Oakland, California

TRC

SCALE (FEET)
0 20

**FIGURE 2**

Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-7000\7124+\7124QMS.dwg 2/7/05 rbs




NOTES:

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

LEGEND

MW-4 ⊕ Monitoring Well with Dissolved-Phase TPPH Concentration (µg/l)

1,000 Dissolved-Phase TPPH Contour (µg/l)

**DISSOLVED-PHASE TPPH CONCENTRATION MAP**
**January 12, 2005**

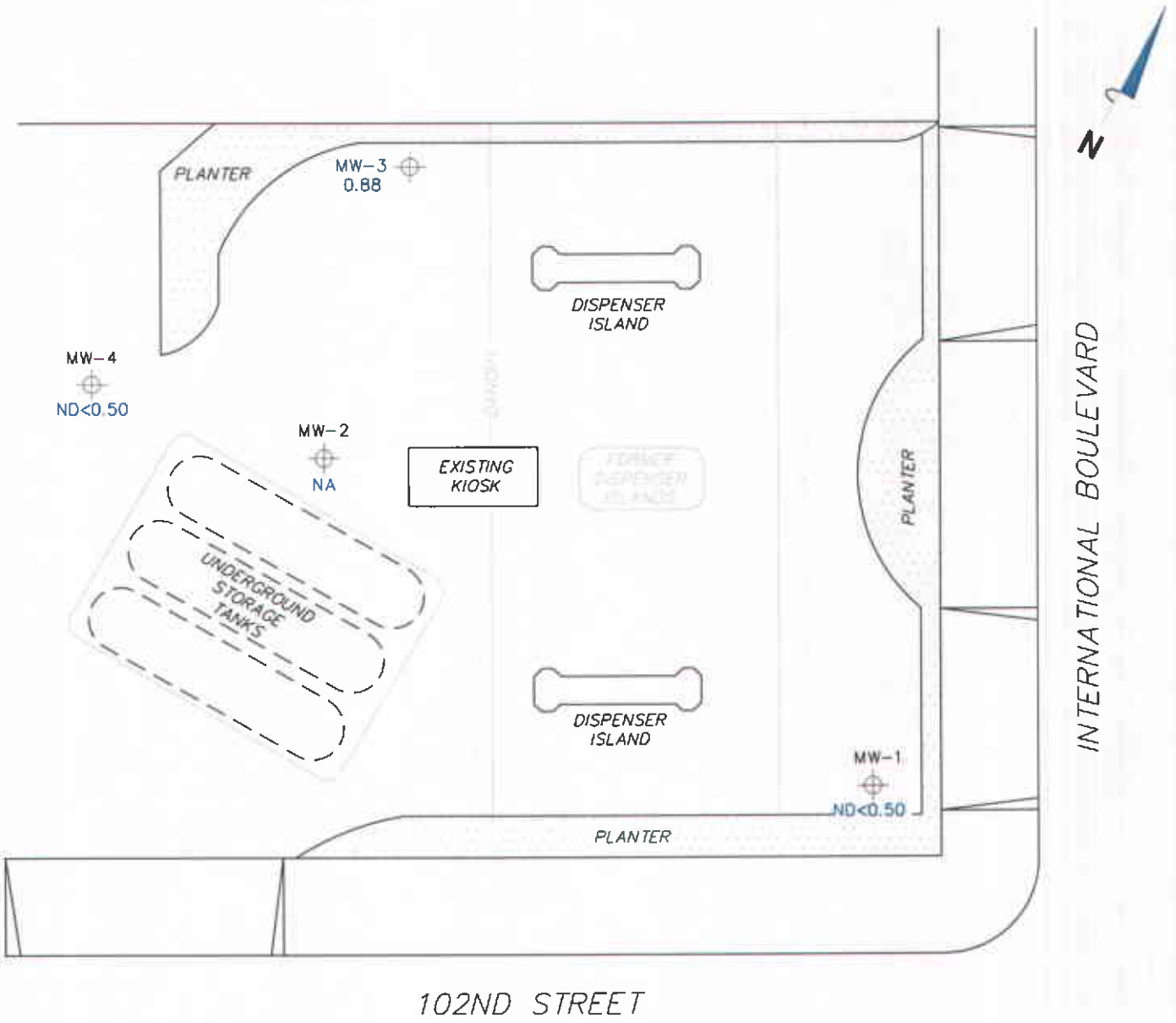
76 Station 7124
10151 International Boulevard
Oakland, California

TRC

SCALE (FEET)
0 20

**FIGURE 3**

Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-7000\7124+\7124QMS.dwg 2/7/05 rbs




NOTES:

µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
NA = not analyzed, measured, or collected.

LEGEND

MW-4 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

**DISSOLVED-PHASE BENZENE CONCENTRATION MAP**
**January 12, 2005**

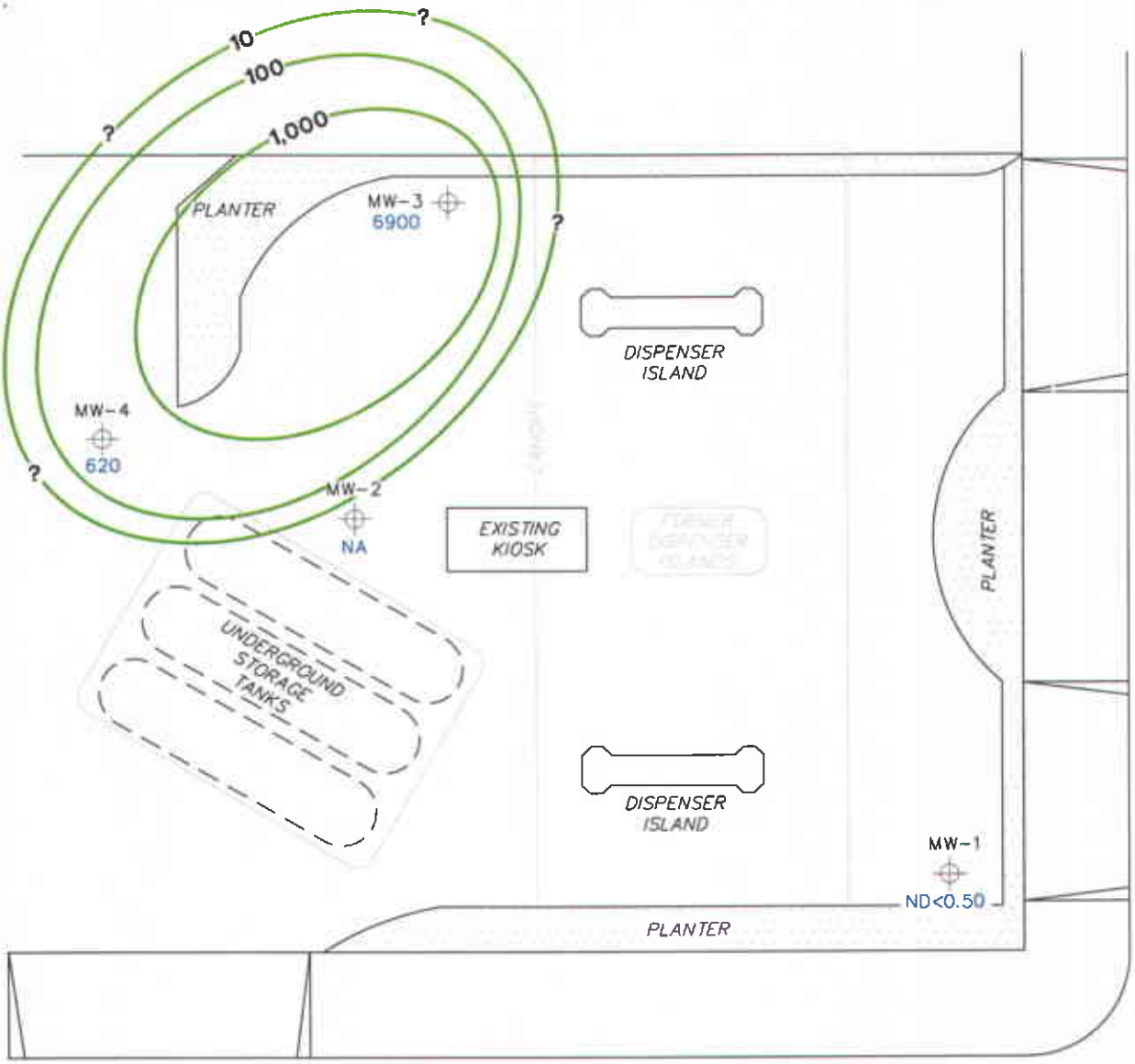
76 Station 7124
10151 International Boulevard
Oakland, California

TRC

SCALE (FEET)
0 20

# FIGURE 4

Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-7000\7124+\7124QMS.dwg 2/7/05 rbs




NOTES:

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

LEGEND

MW-4 ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

1,000 Dissolved-Phase MTBE Contour (µg/l)

**DISSOLVED-PHASE MTBE CONCENTRATION MAP**
**January 12, 2005**

76 Station 7124
10151 International Boulevard
Oakland, California

TRC

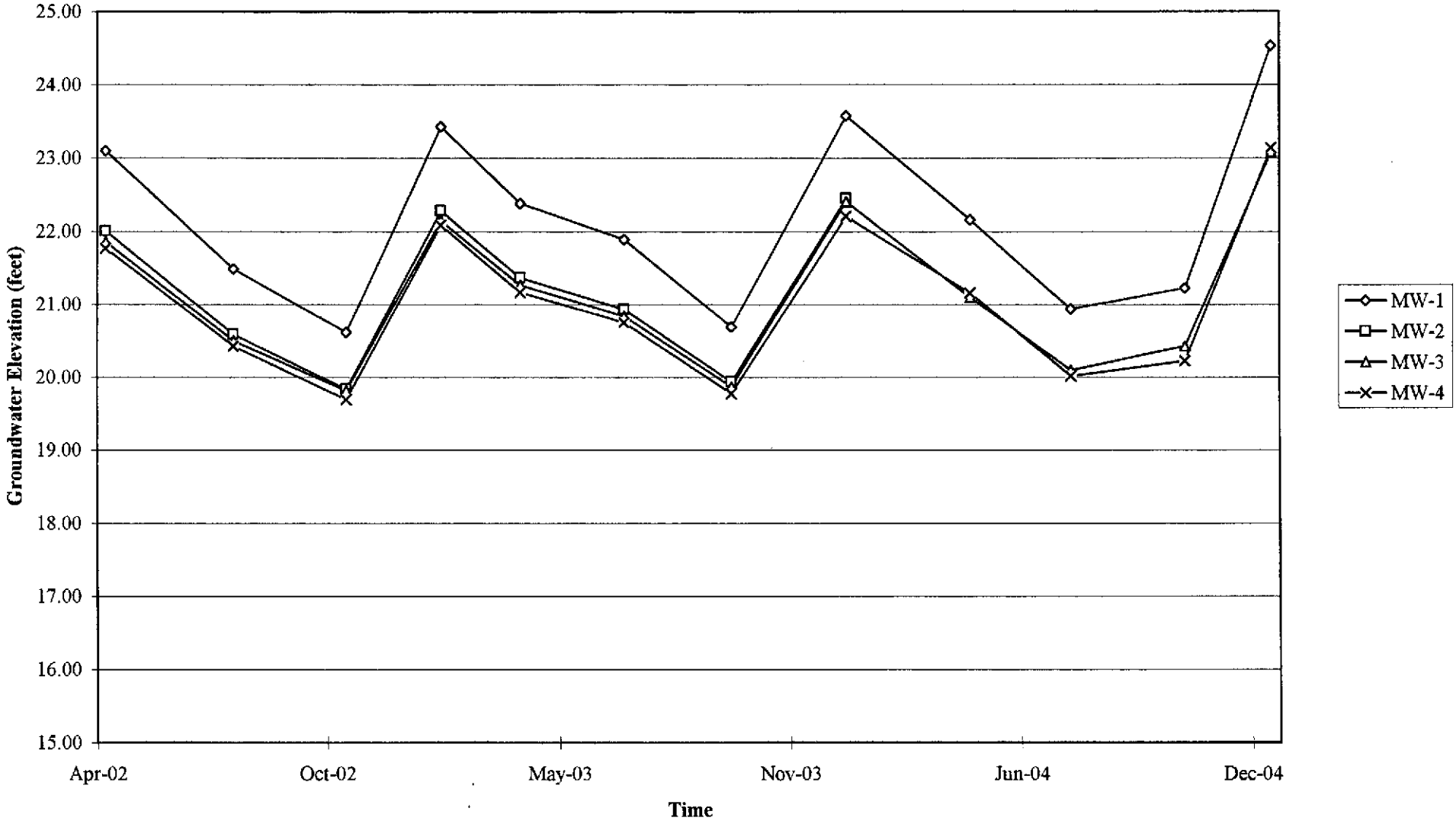
SCALE (FEET)
0 20

**FIGURE 5**

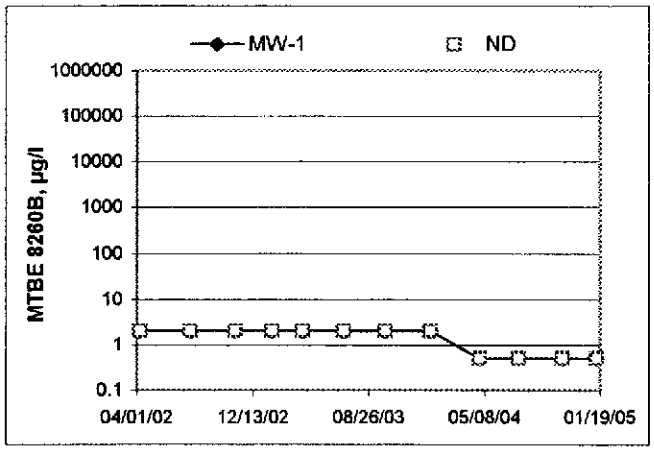
Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-7000\7124+\7124QMS.dwg 2/7/05 rbs

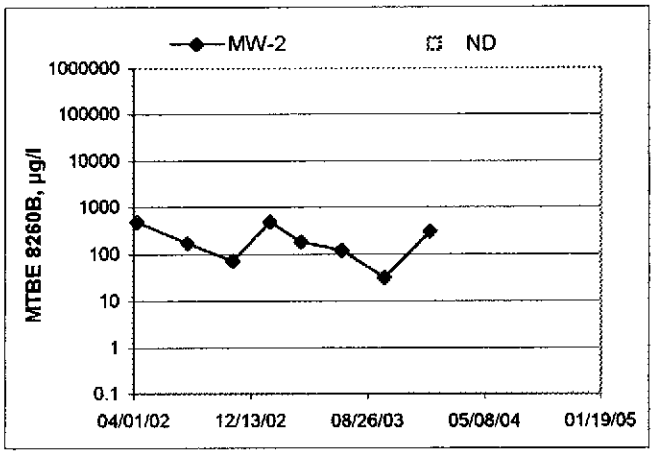
# GRAPHS

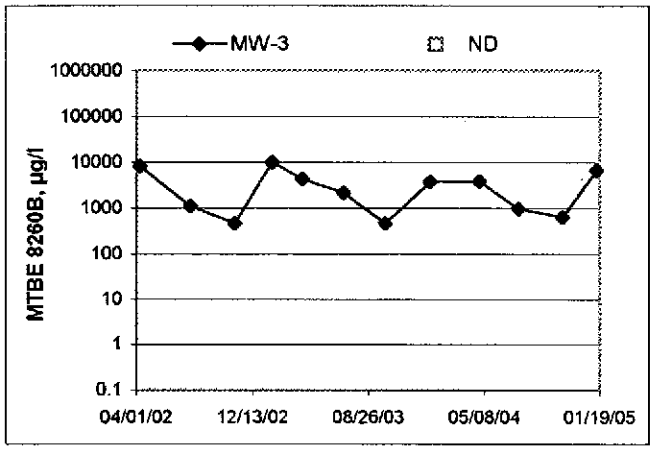
Groundwater Elevations vs. Time
76 Station 7124

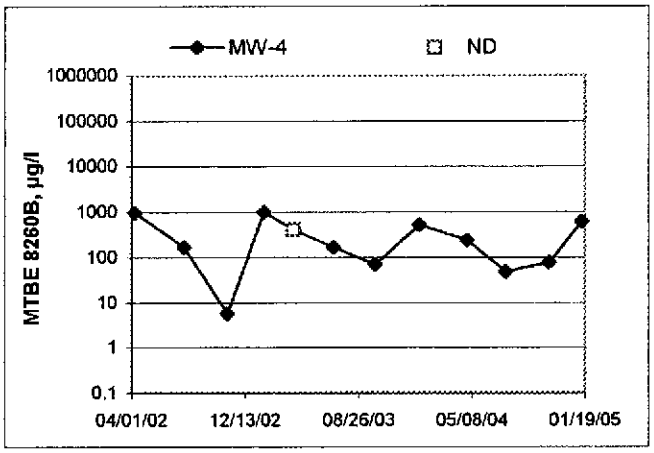


**MTBE 8260B Concentrations vs Time**
76 Station 7124



# 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 e xperience 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-inchto 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: Travis V. Job #/Task #: 41050001/FA20 Date: 1-12-05

Site # 7124 Project Manager M. Collins Page 1 of 1

| Well # | TOC | Time Gauged | Total Depth | Depth to Water | Depth to Product | Product Thickness (feet) | Time Sampled | Misc. Well Notes |
|---|---|---|---|---|---|---|---|---|
| MW-1 | X | 548 | 24.82 | 12.83 | — | — | 0631 | 4" |
| MW-4 | X | 550 | 24.93 | 15.22 | — | — | 0648 | 4" |
| MW-2 | — | — | — | — | — | — | — | — |
| MW-3 | X | 554 | 25.01 | 14.64 | — | — | 0706 | 4" |
| | | | | | | | | |
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FIELD DATA COMPLETE X | QA/QC X | COC X | WELL BOX CONDITION SHEETS X

WTT CERTIFICATE | MANIFEST | DRUM INVENTORY X | TRAFFIC CONTROL



TRC

# GROUNDWATER SAMPLING FIELD NOTES

Technician: Travis V

Site: 7124 Project No.: 4105000/FA20 Date: 1-12-05

Well No.: MW-3 Purge Method: Dia

Depth to Water (feet): 14.64 Depth to Product (feet): 0

Total Depth (feet): 25.01 LPH & Water Recovered (gallons): 0

Water Column (feet): 10.37 Casing Diameter (Inches): 4/11

80% Recharge Depth (feet): 16.11 1 Well Volume (gallons): 7

| Time Start | Time Stop | Depth To Water (feet) | Volume Purged (gallons) | Conduc-tivity (uS/cm) | Temperature (F, C) | pH | Turbidity | D.O. |
|---|---|---|---|---|---|---|---|---|
| 655 | | | 7 | 441 | 19.3 | 6.29 | | |
| | | | 14 | 381 | 19.6 | 6.34 | | |
| | 701 | | 21 | 414 | 20.3 | 6.31 | | |
| | | | | | | | | |
| | | | | | | | | |

| Static at Time Sampled | Total Gallons Purged | Time Sampled |
|---|---|---|
| 1484 | 21 | 706 |

Comments:

---

Well No.: _____ Purge Method: _____

Depth to Water (feet): _____ Depth to Product (feet): _____

Total Depth (feet): _____ LPH & Water Recovered (gallons): _____

Water Column (feet): _____ Casing Diameter (Inches): _____

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

| Time Start | Time Stop | Depth To Water (feet) | Volume Purged (gallons) | Conduc-tivity (uS/cm) | Temperature (F, C) | pH | Turbidity | D.O. |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

| Static at Time Sampled | Total Gallons Purged | Time Sampled |
|---|---|---|
| | | |

Comments:

## GROUNDWATER SAMPLING FIELD NOTES

Technician: Travis V.

Site: 7124 Project No.: 4105001/FA20 Date: 1-12-05

Well No.: MW-1
Depth to Water (feet): 12.83
Total Depth (feet): 24.82
Water Column (feet): 11.99
80% Recharge Depth (feet): 15.22

Purge Method: Dia
Depth to Product (feet): 0
LPH & Water Recovered (gallons): 0
Casing Diameter (Inches): 4"
1 Well Volume (gallons): 8

| Time Start | Time Stop | Depth To Water (feet) | Volume Purged (gallons) | Conductivity (uS/cm) | Temperature (F, C) | pH | Turbidity | D.O. |
|---|---|---|---|---|---|---|---|---|
| 619 | | | 8 | 443 | 18.6 | 6.19 | | |
| | | | 16 | 405 | 19.7 | 5~~9~~ | | |
| | 625 | | 24 | 386 | 20.3 | 6.08 | | |
| | | | | | | | | |
| | | | | | | | | |

| Static at Time Sampled | Total Gallons Purged | Time Sampled |
|---|---|---|
| 15.22 | 24 | 631 TU~~645~~ |

Comments:

Well No.: MW-4
Depth to Water (feet): 15.22
Total Depth (feet): 24.93
Water Column (feet): 9.71
80% Recharge Depth (feet): 17.16

Purge Method: Dia
Depth to Product (feet): 0
LPH & Water Recovered (gallons): ~~0~~
Casing Diameter (Inches): 4"
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. |
|---|---|---|---|---|---|---|---|---|
| 637 | | | 6 | 431 | 18.6 | 6.25 | | |
| | | | 12 | 331 | 20.5 | 6.29 | | |
| | 644 | | 18 | 387 | 20.8 | 6.27 | | |
| | | | | | | | | |
| | | | | | | | | |

| Static at Time Sampled | Total Gallons Purged | Time Sampled |
|---|---|---|
| 16.09 | ~~18~~ | TU~~643~~ 648 |

Comments:

# STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 1-12-05 STATION NUMBER: 7124

NAME OF TECH: Travis - V. CALLED GORDON: _____

CALLED PM: _____ NAME OF PM CALLED: _____

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

Well was Paved over.

WELL NUMBER: _____ STATEMENT FROM PM _____ OR TECH _____

WELL NUMBER: _____ STATEMENT FROM PM _____ OR TECH _____

WELL NUMBER: _____ STATEMENT FROM PM _____ OR TECH _____

PAGE _____

SEVERN TRENT STL

**Submission#: 2005-01-0328**

**TRC Alton Geoscience- Irvine**

January 26, 2005

21 Technology Drive
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001/FA20
Project: Conoco Phillips #7124
Site: 10151 International Blvd., Oakland

Attached is our report for your samples received on 01/12/2005 17:39
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 02/26/2005 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: dsharma@stl-inc.com

Sincerely,

Dimple Sharma
Project Manager

SEVERN TRENT STL

**Submission: 2005-01-0328**

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine
Attn.: Anju Farfan

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

Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

### Samples Reported

| Sample Name | Date Sampled | Matrix | Lab # |
|---|---|---|---|
| MW-1 | 01/12/2005 06:31 | Water | 1 |
| MW-4 | 01/12/2005 06:48 | Water | 2 |
| MW-3 | 01/12/2005 07:06 | Water | 3 |

SEVERN TRENT STL

**Submission: 2005-01-0328**

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine
Attn.: Anju Farfan

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

Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

| | | | |
|---|---|---|---|
| Prep(s): | 5030B | Test(s): | 8260B |
| Sample ID: | **MW-1** | Lab ID: | 2005-01-0328 - 1 |
| Sampled: | 01/12/2005 06:31 | Extracted: | 1/20/2005 22:42 |
| Matrix: | Water | QC Batch#: | 2005/01/20-2C.65 |

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| GRO (C6-C12) | ND | 50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| Benzene | ND | 0.50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 01/20/2005 22:42 | |
| tert-Butyl alcohol (TBA) | ND | 5.0 | ug/L | 1.00 | 01/20/2005 22:42 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| Di-isopropyl Ether (DIPE) | ND | 1.0 | ug/L | 1.00 | 01/20/2005 22:42 | |
| Ethyl tert-butyl ether (ETBE) | ND | 0.50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| tert-Amyl methyl ether (TAME) | ND | 0.50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| 1,2-DCA | ND | 0.50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| EDB | ND | 0.50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| Ethanol | ND | 50 | ug/L | 1.00 | 01/20/2005 22:42 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 99.1 | 73-130 | % | 1.00 | 01/20/2005 22:42 | |
| Toluene-d8 | 99.6 | 81-114 | % | 1.00 | 01/20/2005 22:42 | |

## Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

| | | | |
|---|---|---|---|
| Prep(s): | 5030B | Test(s): | 8260B |
| Sample ID: | **MW-4** | Lab ID: | 2005-01-0328 - 2 |
| Sampled: | 01/12/2005 06:48 | Extracted: | 1/20/2005 21:13<br>1/20/2005 23:09<br>1/22/2005 14:08 |
| Matrix: | Water | QC Batch#: | 2005/01/20-01.07<br>2005/01/20-2C.65<br>2005/01/22-1A.64 |

Analysis Flag: L2 ( See Legend and Note Section )

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| GRO (C6-C12) | 1300 | 250 | ug/L | 5.00 | 01/22/2005 14:08 | |
| Benzene | ND | 0.50 | ug/L | 1.00 | 01/20/2005 21:13 | |
| Toluene | ND | 0.50 | ug/L | 1.00 | 01/20/2005 21:13 | |
| Ethylbenzene | ND | 0.50 | ug/L | 1.00 | 01/20/2005 21:13 | |
| Total xylenes | ND | 1.0 | ug/L | 1.00 | 01/20/2005 21:13 | |
| tert-Butyl alcohol (TBA) | 1300 | 100 | ug/L | 20.00 | 01/20/2005 23:09 | |
| Methyl tert-butyl ether (MTBE) | 620 | 2.5 | ug/L | 5.00 | 01/22/2005 14:08 | |
| Di-isopropyl Ether (DIPE) | ND | 5.0 | ug/L | 5.00 | 01/22/2005 14:08 | |
| Ethyl tert-butyl ether (ETBE) | ND | 2.5 | ug/L | 5.00 | 01/22/2005 14:08 | |
| tert-Amyl methyl ether (TAME) | ND | 2.5 | ug/L | 5.00 | 01/22/2005 14:08 | |
| 1,2-DCA | ND | 2.5 | ug/L | 5.00 | 01/22/2005 14:08 | |
| EDB | ND | 10 | ug/L | 20.00 | 01/20/2005 23:09 | |
| Ethanol | ND | 250 | ug/L | 5.00 | 01/22/2005 14:08 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 112.6 | 73-130 | % | 1.00 | 01/22/2005 14:08 | |
| 1,2-Dichloroethane-d4 | 102.8 | 73-130 | % | 1.00 | 01/20/2005 23:09 | |
| 1,2-Dichloroethane-d4 | 103.3 | 73-130 | % | 1.00 | 01/20/2005 21:13 | |
| Toluene-d8 | 101.4 | 81-114 | % | 1.00 | 01/22/2005 14:08 | |
| Toluene-d8 | 97.0 | 81-114 | % | 1.00 | 01/20/2005 23:09 | |
| Toluene-d8 | 101.3 | 81-114 | % | 1.00 | 01/20/2005 21:13 | |

# Gas/BTEX Fuel Oxygenates by 8260B

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

Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

| | | | |
|---|---|---|---|
| Prep(s): | 5030B | Test(s): | 8260B |
| Sample ID: | **MW-3** | Lab ID: | 2005-01-0328 - 3 |
| Sampled: | 01/12/2005 07:06 | Extracted: | 1/20/2005 09:21<br>1/20/2005 21:44<br>1/20/2005 23:35 |
| Matrix: | Water | QC Batch#: | 2005/01/20-01.07<br>2005/01/20-01.07<br>2005/01/20-2C.65 |

Analysis Flag: L2 ( See Legend and Note Section )

| Compound | Conc. | RL | Unit | Dilution | Analyzed | Flag |
|---|---|---|---|---|---|---|
| GRO (C6-C12) | 6100 | 2500 | ug/L | 50.00 | 01/20/2005 23:35 | |
| Benzene | 0.88 | 0.50 | ug/L | 1.00 | 01/20/2005 21:44 | |
| Toluene | 0.99 | 0.50 | ug/L | 1.00 | 01/20/2005 21:44 | |
| Ethylbenzene | 30 | 0.50 | ug/L | 1.00 | 01/20/2005 21:44 | |
| Total xylenes | 2.2 | 1.0 | ug/L | 1.00 | 01/20/2005 21:44 | |
| tert-Butyl alcohol (TBA) | 1300 | 250 | ug/L | 50.00 | 01/20/2005 23:35 | |
| Methyl tert-butyl ether (MTBE) | 6900 | 25 | ug/L | 50.00 | 01/20/2005 23:35 | |
| Di-isopropyl Ether (DIPE) | ND | 50 | ug/L | 50.00 | 01/20/2005 23:35 | |
| Ethyl tert-butyl ether (ETBE) | ND | 25 | ug/L | 50.00 | 01/20/2005 23:35 | |
| tert-Amyl methyl ether (TAME) | ND | 25 | ug/L | 50.00 | 01/20/2005 23:35 | |
| 1,2-DCA | ND | 25 | ug/L | 50.00 | 01/20/2005 23:35 | |
| EDB | ND | 25 | ug/L | 50.00 | 01/20/2005 23:35 | |
| Ethanol | ND | 2500 | ug/L | 50.00 | 01/20/2005 23:35 | |
| ***Surrogate(s)*** | | | | | | |
| 1,2-Dichloroethane-d4 | 96.3 | 73-130 | % | 1.00 | 01/20/2005 23:35 | |
| 1,2-Dichloroethane-d4 | 105.6 | 73-130 | % | 1.00 | 01/20/2005 09:21 | |
| Toluene-d8 | 94.8 | 81-114 | % | 1.00 | 01/20/2005 23:35 | |
| Toluene-d8 | 103.1 | 81-114 | % | 1.00 | 01/20/2005 09:21 | |

# Gas/BTEX Fuel Oxygenates by 8260B

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

Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

## Batch QC Report

Prep(s): 5030B
**Method Blank**
MB: 2005/01/20-01.07-003

**Water**

Test(s): 8260B
**QC Batch # 2005/01/20-01.07**
Date Extracted: 01/20/2005 15:56

| Compound | Conc. | RL | Unit | Analyzed | Flag |
|---|---|---|---|---|---|
| Benzene | ND | 0.5 | ug/L | 01/20/2005 15:56 | |
| Toluene | ND | 0.5 | ug/L | 01/20/2005 15:56 | |
| Ethylbenzene | ND | 0.5 | ug/L | 01/20/2005 15:56 | |
| Total xylenes | ND | 1.0 | ug/L | 01/20/2005 15:56 | |
| ***Surrogates(s)*** | | | | | |
| 1,2-Dichloroethane-d4 | 98.2 | 73-130 | % | 01/20/2005 15:56 | |
| Toluene-d8 | 103.0 | 81-114 | % | 01/20/2005 15:56 | |

# Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

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

Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

## Batch QC Report

Prep(s): 5030B
**Method Blank**
MB: 2005/01/20-2C.65-020

**Water**

Test(s): 8260B
**QC Batch # 2005/01/20-2C.65**
Date Extracted: 01/20/2005 18:20

| Compound | Conc. | RL | Unit | Analyzed | Flag |
|---|---|---|---|---|---|
| GRO (C6-C12) | ND | 50 | ug/L | 01/20/2005 18:20 | |
| Benzene | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| Toluene | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| Ethylbenzene | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| Total xylenes | ND | 1.0 | ug/L | 01/20/2005 18:20 | |
| tert-Butyl alcohol (TBA) | ND | 5.0 | ug/L | 01/20/2005 18:20 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| Di-isopropyl Ether (DIPE) | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| Ethyl tert-butyl ether (ETBE) | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| tert-Amyl methyl ether (TAME) | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| 1,2-DCA | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| EDB | ND | 0.5 | ug/L | 01/20/2005 18:20 | |
| Ethanol | ND | 50 | ug/L | 01/20/2005 18:20 | |
| ***Surrogates(s)*** | | | | | |
| 1,2-Dichloroethane-d4 | 92.8 | 73-130 | % | 01/20/2005 18:20 | |
| Toluene-d8 | 96.2 | 81-114 | % | 01/20/2005 18:20 | |

## Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

### Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Water**

**QC Batch # 2005/01/22-1A.64**

MB: 2005/01/22-1A.64-047

Date Extracted: 01/22/2005 08:47

| Compound | Conc. | RL | Unit | Analyzed | Flag |
|---|---|---|---|---|---|
| GRO (C6-C12) | ND | 50 | ug/L | 01/22/2005 08:47 | |
| Benzene | ND | 0.5 | ug/L | 01/22/2005 08:47 | |
| Toluene | ND | 0.5 | ug/L | 01/22/2005 08:47 | |
| Ethylbenzene | ND | 0.5 | ug/L | 01/22/2005 08:47 | |
| Total xylenes | ND | 1.0 | ug/L | 01/22/2005 08:47 | |
| Methyl tert-butyl ether (MTBE) | ND | 0.5 | ug/L | 01/22/2005 08:47 | |
| Di-isopropyl Ether (DIPE) | ND | 0.5 | ug/L | 01/22/2005 08:47 | |
| Ethyl tert-butyl ether (ETBE) | ND | 0.5 | ug/L | 01/22/2005 08:47 | |
| tert-Amyl methyl ether (TAME) | ND | 0.5 | ug/L | 01/22/2005 08:47 | |
| 1,2-DCA | ND | 0.5 | ug/L | 01/22/2005 08:47 | |
| Ethanol | ND | 50 | ug/L | 01/22/2005 08:47 | |
| ***Surrogates(s)*** | | | | | |
| 1,2-Dichloroethane-d4 | 102.4 | 73-130 | % | 01/22/2005 08:47 | |
| Toluene-d8 | 104.0 | 81-114 | % | 01/22/2005 08:47 | |

# Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike** **Water** **QC Batch # 2005/01/20-01.07**

LCS 2005/01/20-01.07-002 Extracted: 01/20/2005 Analyzed: 01/20/2005 15:25
LCSD

| Compound | Conc. ug/L | | Exp.Conc. | Recovery % | | RPD | Ctrl.Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | % | Rec. | RPD | LCS | LCSD |
| Benzene | 19.9 | | 25.0 | 79.6 | | | 69-129 | 20 | | |
| Toluene | 21.7 | | 25.0 | 86.8 | | | 70-130 | 20 | | |
| ***Surrogates(s)*** | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 497 | | 500 | 99.4 | | | 73-130 | | | |
| Toluene-d8 | 520 | | 500 | 104.0 | | | 81-114 | | | |

# Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike** **Water** **QC Batch # 2005/01/20-2C.65**

LCS 2005/01/20-2C.65-055 Extracted: 01/20/2005 Analyzed: 01/20/2005 17:55
LCSD

| Compound | Conc. ug/L | | Exp.Conc. | Recovery % | | RPD | Ctrl.Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | % | Rec. | RPD | LCS | LCSD |
| Methyl tert-butyl ether (MTBE) | 25.1 | | 25 | 100.4 | | | 65-165 | 20 | | |
| Benzene | 23.6 | | 25 | 94.4 | | | 69-129 | 20 | | |
| Toluene | 24.1 | | 25 | 96.4 | | | 70-130 | 20 | | |
| ***Surrogates(s)*** | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 396 | | 500 | 79.2 | | | 73-130 | | | |
| Toluene-d8 | 488 | | 500 | 97.6 | | | 81-114 | | | |

# Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike** **Water** **QC Batch # 2005/01/22-1A.64**

LCS 2005/01/22-1A.64-025 Extracted: 01/22/2005 Analyzed: 01/22/2005 08:25
LCSD

| Compound | Conc. ug/L | | Exp.Conc. | Recovery % | | RPD | Ctrl.Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|
| | LCS | LCSD | | LCS | LCSD | % | Rec. | RPD | LCS | LCSD |
| Methyl tert-butyl ether (MTBE) | 25.6 | | 25 | 102.4 | | | 65-165 | 20 | | |
| Benzene | 26.0 | | 25 | 104.0 | | | 69-129 | 20 | | |
| Toluene | 25.6 | | 25 | 102.4 | | | 70-130 | 20 | | |
| ***Surrogates(s)*** | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 480 | | 500 | 96.0 | | | 73-130 | | | |
| Toluene-d8 | 509 | | 500 | 101.8 | | | 81-114 | | | |

# Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )** **Water** **QC Batch # 2005/01/20-01.07**

MS/MSD

Lab ID: 2005-01-0327 - 002

MS: 2005/01/20-01.07-005 Extracted: 01/20/2005 Analyzed: 01/20/2005 19:10

Dilution: 1.00

MSD: 2005/01/20-01.07-006 Extracted: 01/20/2005 Analyzed: 01/20/2005 19:41

Dilution: 1.00

| Compound | Conc. ug/L | | | Spk.Level | Recovery % | | | Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS | MSD | Sample | ug/L | MS | MSD | RPD | Rec. | RPD | MS | MSD |
| Benzene | 19.6 | 22.9 | 0.988 | 25.0 | 74.4 | 87.6 | 16.3 | 69-129 | 20 | | |
| Toluene | 22.4 | 25.4 | 2.54 | 25.0 | 79.4 | 91.4 | 14.1 | 70-130 | 20 | | |
| ***Surrogate(s)*** | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 527 | 549 | | 500 | 105.4 | 109.8 | | 73-130 | | | |
| Toluene-d8 | 519 | 522 | | 500 | 103.8 | 104.4 | | 81-114 | | | |

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Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

## Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )** **Water** **QC Batch # 2005/01/20-2C.65**

MS/MSD

Lab ID: 2005-01-0327 - 001

MS: 2005/01/20-2C.65-009 Extracted: 01/20/2005 Analyzed: 01/20/2005 20:09

Dilution: 1.00

MSD: 2005/01/20-2C.65-035 Extracted: 01/20/2005 Analyzed: 01/20/2005 20:35

Dilution: 1.00

| Compound | Conc. ug/L | | | Spk.Level | Recovery % | | | Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS | MSD | Sample | ug/L | MS | MSD | RPD | Rec. | RPD | MS | MSD |
| Methyl tert-butyl ether | 32.2 | 26.7 | 4.17 | 25 | 112.1 | 90.1 | 21.8 | 65-165 | 20 | | R1 |
| Benzene | 26.2 | 23.1 | 0.589 | 25 | 102.4 | 90.0 | 12.9 | 69-129 | 20 | | |
| Toluene | 27.3 | 23.6 | ND | 25 | 109.2 | 94.4 | 14.5 | 70-130 | 20 | | |
| ***Surrogate(s)*** | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 378 | 374 | | 500 | 75.6 | 74.8 | | 73-130 | | | |
| Toluene-d8 | 493 | 512 | | 500 | 98.6 | 102.4 | | 81-114 | | | |

SEVERN TRENT STL

**Submission: 2005-01-0328**

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine
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Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

### Batch QC Report

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )** **Water** **QC Batch # 2005/01/22-1A.64**

MS/MSD

Lab ID: 2005-01-0458 - 001

MS: 2005/01/22-1A.64-046 Extracted: 01/22/2005 Analyzed: 01/22/2005 09:46
Dilution: 1.00

MSD: 2005/01/22-1A.64-008 Extracted: 01/22/2005 Analyzed: 01/22/2005 10:08
Dilution: 1.00

| Compound | Conc. ug/L | | | Spk.Level | Recovery % | | | Limits % | | Flags | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | MS | MSD | Sample | ug/L | MS | MSD | RPD | Rec. | RPD | MS | MSD |
| Methyl tert-butyl ether | 30.2 | 24.9 | ND | 25 | 120.8 | 99.6 | 19.2 | 65-165 | 20 | | |
| Benzene | 26.2 | 23.8 | ND | 25 | 104.8 | 95.2 | 9.6 | 69-129 | 20 | | |
| Toluene | 25.6 | 24.3 | ND | 25 | 102.4 | 97.2 | 5.2 | 70-130 | 20 | | |
| ***Surrogate(s)*** | | | | | | | | | | | |
| 1,2-Dichloroethane-d4 | 534 | 518 | | 500 | 106.8 | 103.6 | | 73-130 | | | |
| Toluene-d8 | 515 | 497 | | 500 | 103.0 | 99.4 | | 81-114 | | | |

SEVERN TRENT STL

**Submission: 2005-01-0328**

## Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine
Attn.: Anju Farfan

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

Project: 41050001/FA20
Conoco Phillips #7124

Received: 01/12/2005 17:39

Site: 10151 International Blvd., Oakland

### Legend and Notes

**Analysis Flag**

L2

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

**Result Flag**

R1

Analyte RPD was out of QC limits.

# ConocoPhillips Chain Of Custody Record

99464


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

2005-01-0328

ConocoPhillips Work Order Number

ConocoPhillips Cost Object

DATE: 1-12-05

PAGE: 1 of 1

| | | | |
|---|---|---|---|
| SAMPLING COMPANY: TRC | Valid Value ID: | CONOCOPHILLIPS SITE NUMBER: 7124 | GLOBAL ID NO.: 1000 |
| ADDRESS: 21 Technology Drive, Irvine CA 92618 | | SITE ADDRESS (Street and City): 10151 International Blvd. Oakland | CONOCOPHILLIPS SITE MANAGER: Thomas Kosel |
| 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): Travis Vandevoir | CONSULTANT PROJECT NUMBER: 41050001/FA20 | | LAB USE ONLY |

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 ☑

REQUESTED ANALYSES

FIELD NOTES:

Container/Preservative or PID Readings or Laboratory Notes

* 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 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 | TPPH by 8260B | BTEX/MTBE by 8260B | 8oxys by 8260B | TEMPERATURE ON RECEIPT C° |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | MW-1 | 1-12 | 631 | GW | 3 | | | | | | | | | X | X | X | 3 voas w/ HCl |
| | MW-4 | ↓ | 648 | ↓ | ↓ | | | | | | | | | ↓ | ↓ | ↓ | |
| | MW-3 | ↓ | 706 | ↓ | ↓ | | | | | | | | | ↓ | ↓ | ↓ | |
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| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| Relinquished by: (Signature) | Received by: (Signature) | Date: | Time: |
| | Refridgerator | 1-12-05 | 8:15 |
| | | 1/12/05 | 0955 |
| 1/12/05 | | 1/12/05 | 17:39 |

9/19/03 Revision

# STATEMENTS

## Purge Water Disposal

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