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*By dehloptoxic at 10:59 am, Jul 28, 2006*



76 Broadway  
Sacramento, California 95818

July 20, 2006

Mr. Don Hwang  
Alameda County Health Agency  
1131 Harbor Bay Parkway  
Alameda, California 94502

Re: **Report Transmittal  
Quarterly Report  
Second Quarter – 2006  
76 Service Station #7124  
10151 International Blvd  
Oakland, CA**

Dear Mr. Hwang:

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact

Shelby S. Lathrop (Contractor)  
ConocoPhillips  
Risk Management & Remediation  
76 Broadway  
Sacramento, CA 95818  
Phone: 916-558-7609  
Fax: 916-558-7639

Sincerely,

A handwritten signature in black ink that reads "Thomas H. Kosel". The signature is written in a cursive, flowing style.

Thomas Kosel  
Risk Management & Remediation

Attachment



**SECOR  
INTERNATIONAL  
INCORPORATED**

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

July 26, 2006

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

**RE: Quarterly Monitoring and Summary Report – Second Quarter 2006**  
SECOR Project No.: 77CP.01634.00.0303

Dear Mr. Hwang:

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

**Service Station**

76 Service Station No. 7124

**Location**

10151 International Boulevard  
Oakland, California

If there are questions or comments regarding this quarterly summary report, please contact me at (916) 861-0400.

Sincerely,  
**SECOR International Incorporated**

  
Sean Coyle  
Project Manager

Attachments: *SECOR's Quarterly Monitoring and Summary Report – Second Quarter 2006.*

cc: Ms. Shelby Lathrop, ConocoPhillips

## QUARTERLY SUMMARY REPORT Second Quarter 2006

76 Service Station No. 7124  
10151 International Boulevard  
Oakland, California

City/County ID #: Oakland  
County: Alameda

### SITE DESCRIPTION

The site is currently an active 76 Service Station located on the northwestern corner of the intersection of International Boulevard and 102nd Avenue in Oakland, California. Site facilities include three underground storage tanks (USTs) and associated piping and fuel dispensers. A detailed site plan is included in TRC's *Quarterly Monitoring Report April through June 2006* dated June 19, 2006 (Attachment 1).

### PREVIOUS ASSESSMENT

On March 22, 2000, SECOR supervised the removal and replacement of product lines and dispensers by Balch Petroleum 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), methyl tertiary butyl ether (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.

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 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 monitoring 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), benzene, toluene, ethylbenzene, total xylenes (BTEX), and fuel oxygenates via EPA 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 the third quarter 2004, SECOR completed a ½-mile radius agency receptor survey and obtained an Environmental Data Resources (EDR) radius map for the site from Environmental Data Resources, Incorporated. The agency survey identified two industrial supply wells, three cathodic protection wells, and two wells of unknown type within the search radius. The survey also identified twelve 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 the third quarter 2002. Currently, four wells are monitored quarterly (MW-1 through MW-4). Samples are analyzed for TPHg, BTEX, and the fuel oxygenates tert-butyl alcohol (TBA), MtBE, di-isopropyl ether (DIPE), ethyl tert-butyl ether (EtBE), tert-amyl methyl ether (TAME), ethylene di-bromide (EDB), and ethanol by EPA Method 8260B.

### **DISCUSSION**

During the second quarter 2006, depth to groundwater ranged between 13.30 and 15.79 feet below top of casing (toc), which was in the range of historical levels. Historical groundwater depths have been reported between 12.83 and 18.66 feet below top of casing (toc). The direction of groundwater flow is toward the northwest at a gradient of 0.02 foot/foot (Attachment 1).

Evaluation of dissolved residual petroleum hydrocarbons and MtBE concentrations through the second quarter 2006 indicates that the highest concentrations of residual petroleum hydrocarbons and MtBE continue to be detected in on-site wells MW-3 and MW-4. This quarter, the maximum concentration of TPHg and MtBE were reported to be in well MW-3 at 1,500 µg/L and 760 µg/L respectively (Attachment 1). The downgradient/crossgradient extent of the dissolved plume remains undefined by the existing monitoring well network.

On October 14, 2004, SECOR submitted a workplan for the installation of monitoring wells offsite to delineate the dissolved phase hydrocarbons in groundwater. However, in a letter dated April 12, 2005, the Alameda County Environmental Health Services (ACEHS) disapproved the workplan stating that it was premature to install more monitoring wells without additional groundwater sampling to determine the location of the plume for optimal well locations. Therefore, an addendum to the October 14, 2004 workplan was submitted on July 22, 2005 and awaits approval.

## **CHARACTERIZATION STATUS**

None of the groundwater samples collected showed detections at or above MCL levels for benzene. The highest concentrations of residual TPHg and MtBE contamination are localized in the northeastern area of the site in the vicinity of MW-3 and MW-4. The extent of dissolved contamination is undefined in the downgradient (northwest) direction. MW-3 and MW-4 contain elevated concentrations of TPHg and MtBE.

## **REMEDIATION STATUS**

Currently, there is no active remediation at this site.

## **RECENT SUBMITTALS/CORRESPONDENCE**

Submitted: *Quarterly Summary and Monitoring Report – First Quarter 2006*, dated May 1, 2006

## **WASTE DISPOSAL SUMMARY**

The volume of purged groundwater generated and disposed of during the quarterly groundwater monitoring event is documented in TRC's *Quarterly Monitoring Report, April through June 2006*, dated June 19, 2006 (Attachment 1).

## **THIS QUARTER ACTIVITIES (Second Quarter 2006)**

1. TRC performed quarterly groundwater monitoring and sampling event.
2. SECOR prepared and submitted the first quarter 2006 summary report.


## **NEXT QUARTER ACTIVITIES (Third Quarter 2006)**

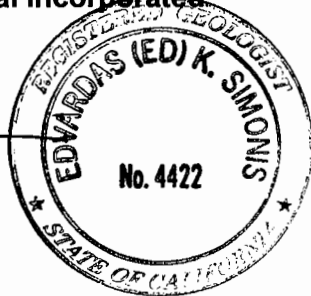
1. TRC to perform coordinated groundwater monitoring and sampling event.
2. SECOR to prepare and submit quarterly summary and monitoring report.
3. SECOR to discuss site path forward with the agency, including any required revisions to the workplan submitted approximately one year ago. After discussions, if no additional comments to the work plan are forthcoming, the proposed scope of work will be implemented within 60 days of discussion, as it has been well over 60 days since the workplan was first submitted. Drilling will likely take place during the fourth quarter of 2006, or as to be determined pending agency discussions.

## LIMITATIONS

This report presents our understanding of existing conditions at the subject site. The conclusions contained herein are based on the analytical results, and professional judgment in accordance with current standards of professional practice; no other warranty is expressed or implied. SECOR assumes no responsibility for exploratory borings or data reported by other consultants or contractors.

Sincerely,  
**SECOR International Incorporated**

  
Ed Simonis P.G.  
Senior Geologist





Ben McKenna  
Project Geologist

Attachment 1: TRC's *Quarterly Monitoring Report – April through June 2006*, dated June 19, 2006

**ATTACHMENT 1**  
**TRC'S QUARTERLY MONITORING REPORT**  
***APRIL THROUGH JUNE 2006***

Quarterly Monitoring and Summary Report  
76 Service Station No. 7124  
10151 International Boulevard  
Oakland, California



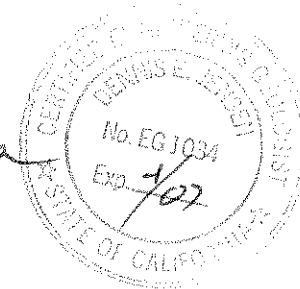
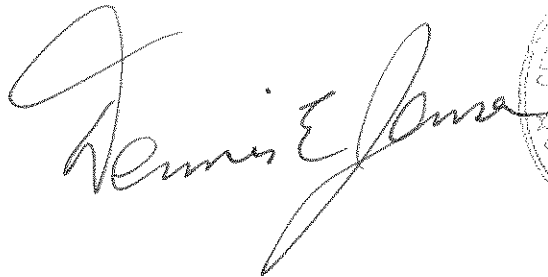
**QUARTERLY MONITORING REPORT  
APRIL THROUGH JUNE 2006**

76 STATION 7124  
10151 International Boulevard  
Oakland, California

Prepared For:

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

By:



Senior Project Geologist, Irvine Operations  
June 19, 2006



### LIST OF ATTACHMENTS

Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Contents of Tables Table 1: Current Fluid Levels and Selected Analytical Results Table 1a: Additional Current Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 2a: Additional Historic Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPH-G (GC/MS) Concentration Map Figure 4: Dissolved-Phase Benzene Concentration Map Figure 5: Dissolved-Phase MTBE Concentration Map
Graphs	Groundwater Elevations vs. Time MTBE 8260B Concentrations vs. Time
Field Activities	General Field Procedures Field Monitoring Data Sheet – 5/30/06 Groundwater Sampling Field Notes – 5/30/06
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

**Summary of Gauging and Sampling Activities**  
**April 2006 through June 2006**  
**76 Station 7124**  
**10151 International Boulevard**  
**Oakland, CA**

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

Water Sampling Contractor: **TRC**  
Compiled by: **Daniel Lee**

Date(s) of Gauging/Sampling Event: **05/30/06**

**Sample Points**

Groundwater wells: **4** onsite, **0** offsite      Wells gauged: **4**      Wells sampled: **4**  
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: **13.3 feet**      Maximum: **15.79 feet**  
Average groundwater elevation (relative to available local datum): **22.85 feet**  
Average change in groundwater elevation since previous event: **-1.49 feet**  
Interpreted groundwater gradient and flow direction:  
    Current event: **0.02 ft/ft, northwest**  
    Previous event: **0.02 ft/ft, northwest (03/24/06)**

**Selected Laboratory Results**

Wells with detected **Benzene**: **0**      Wells above MCL (1.0 µg/l): **n/a**  
    Maximum reported benzene concentration: **n/a**  
  
Wells with **TPH-G by GC/MS** **3**      Maximum: **1,500 µg/l (MW-3)**  
Wells with **MTBE** **3**      Maximum: **760 µg/l (MW-3)**

**Notes:**

# TABLES

## TABLE KEY

### STANDARD ABBREVIATIONS

--	=	not analyzed, measured, or collected
LPH	=	liquid-phase hydrocarbons
Trace	=	less than 0.01 foot of LPH in well
ug/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-G (GC/MS)	=	total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B
TPH-D	=	total petroleum hydrocarbons with diesel distinction
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:  $\text{Surface Elevation} - \text{Measured Depth to Water} + (D_p \times \text{LPH Thickness})$ , where  $D_p$  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.

**Contents of Tables**  
**Site: 76 Station 7124**

**Current Event**

<b>Table 1</b>	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
<b>Table 1a</b>	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME						

**Historic Data**

<b>Table 2</b>	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
<b>Table 2a</b>	Well/ Date	TBA	Ethanol (8015B)	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME					

**Table 1**  
**CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**May 30, 2006**  
**76 Station 7124**

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
(feet)	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
<b>MW-1</b>														
05/30/06	37.37	13.30	0.00	24.07	-1.45	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
<b>MW-2</b>														
05/30/06	37.87	15.16	0.00	22.71	-1.39	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	6.6	
<b>MW-3</b>														
05/30/06	37.72	15.69	0.00	22.03	-1.83	--	1500	ND<12	ND<12	ND<12	ND<25	--	760	
<b>MW-4</b>														
05/30/06	38.36	15.79	0.00	22.57	-1.31	--	1200	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	130	

**Table 1 a**  
**ADDITIONAL CURRENT ANALYTICAL RESULTS**  
**76 Station 7124**

Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
<b>MW-1</b>							
05/30/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>MW-2</b>							
05/30/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>MW-3</b>							
05/30/06	ND<250	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12
<b>MW-4</b>							
05/30/06	ND<50	ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**April 2002 Through May 2006**  
**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 (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-1</b>														
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	
06/20/05	37.37	14.38	0.00	22.99	-1.55	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
09/23/05	37.37	15.92	0.00	21.45	-1.54	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/13/05	37.37	16.09	0.00	21.28	-0.17	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
03/24/06	37.37	11.85	0.00	25.52	4.24	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
05/30/06	37.37	13.30	0.00	24.07	-1.45	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
<b>MW-2</b>														
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	



**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**April 2002 Through May 2006**  
**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 (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-2 continued</b>														
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.
01/12/05	37.87	--	--	--	--	--	--	--	--	--	--	--	--	Well was paved over.
06/20/05	37.87	15.94	0.00	21.93	--	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	46	
09/23/05	37.87	17.29	0.00	20.58	-1.35	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	10	
12/13/05	37.87	17.41	0.00	20.46	-0.12	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11	
03/24/06	37.87	13.77	0.00	24.10	3.64	--	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	15	
05/30/06	37.87	15.16	0.00	22.71	-1.39	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	6.6	
<b>MW-3</b>														
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	

**Table 2**  
**HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS**  
**April 2002 Through May 2006**  
**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 (8015M) (µg/l)	TPH-G (GC/MS) (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE (8021B) (µg/l)	MTBE (8260B) (µg/l)	Comments
<b>MW-3 continued</b>														
01/12/05	37.72	14.64	0.00	23.08	2.65	--	6100	0.88	0.99	30	2.2	--	6900	
06/20/05	37.72	15.91	0.00	21.81	-1.27	--	1900	ND<0.50	0.21J	0.52	0.46J	--	960	
09/23/05	37.72	17.20	0.00	20.52	-1.29	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	160	
12/13/05	37.72	17.32	0.00	20.40	-0.12	--	2100	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	340	
03/24/06	37.72	13.86	0.00	23.86	3.46	--	2200	ND<5.0	ND<5.0	ND<5.0	ND<10	--	970	
05/30/06	37.72	15.69	0.00	22.03	-1.83	--	1500	ND<12	ND<12	ND<12	ND<25	--	760	
<b>MW-4</b>														
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	
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	
06/20/05	38.36	16.63	0.00	21.73	-1.41	--	980	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	110	
09/23/05	38.36	17.93	0.00	20.43	-1.30	--	1500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	34	
12/13/05	38.36	18.04	0.00	20.32	-0.11	--	3900	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	36	
03/24/06	38.36	14.48	0.00	23.88	3.56	--	1500	ND<12	ND<12	ND<12	ND<25	--	200	
05/30/06	38.36	15.79	0.00	22.57	-1.31	--	1200	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	130	

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 7124**

Date Sampled	TBA	Ethanol (8015B)	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
	(µg/l)	(mg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
<b>MW-1</b>								
07/28/02	ND<100	ND<500	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
11/03/02	ND<100	ND<500	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/24/03	ND<100	ND<500	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
04/02/03	ND<100	ND<500	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
07/01/03	ND<100	ND<500	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
10/02/03	ND<100	--	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/09/04	ND<100	--	ND<500	ND<2	ND<2.0	ND<2	ND<2	ND<2
04/26/04	ND<5.0	--	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
07/22/04	ND<5.0	--	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
10/29/04	ND<5.0	--	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
01/12/05	ND<5.0	--	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
06/20/05	ND<10	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/23/05	ND<10	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/13/05	ND<10	--	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
03/24/06	ND<10	--	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
05/30/06	ND<10	--	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>MW-2</b>								
04/08/02	ND<2000	ND<10000	--	ND<40	ND<40	ND<40	ND<40	ND<40
07/28/02	ND<500	ND<2500	--	ND<10	ND<10	ND<10	ND<10	ND<10
11/03/02	ND<1000	ND<5000	--	ND<20	ND<20	ND<20	ND<20	ND<20
01/24/03	ND<500	ND<2500	--	ND<10	ND<10	ND<10	ND<10	ND<10
04/02/03	ND<1000	ND<5000	--	ND<20	ND<20	ND<20	ND<20	ND<20
07/01/03	ND<500	ND<2500	--	ND<10	ND<10	ND<10	ND<10	ND<10
10/02/03	ND<100	--	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/09/04	ND<500	--	ND<2500	ND<10	ND<10	ND<10	ND<10	ND<10
06/20/05	25	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 7124**

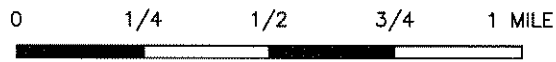
Date Sampled	TBA	Ethanol (8015B)	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
	(µg/l)	(mg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
<b>MW-2 continued</b>								
09/23/05	ND<10	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/13/05	ND<10	--	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
03/24/06	ND<10	--	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
05/30/06	ND<10	--	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
<b>MW-3</b>								
10/02/03	ND<10000	--	ND<50000	ND<200	ND<200	ND<200	ND<200	ND<200
01/09/04	ND<5000	--	ND<25000	ND<100	ND<100	ND<100	ND<100	ND<100
04/26/04	ND<250	--	ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25
07/22/04	ND<250	--	ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25
10/29/04	ND<50	--	ND<500	ND<5.0	ND<5.0	ND<10	ND<5.0	ND<5.0
01/12/05	1300	--	ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25
06/20/05	39	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.311
09/23/05	ND<10	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/13/05	ND<50	--	ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
03/24/06	ND<100	--	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
05/30/06	ND<250	--	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12
<b>MW-4</b>								
04/08/02	ND<5000	ND<25000	--	ND<100	ND<100	ND<100	ND<100	ND<100
07/28/02	ND<500	ND<2500	--	ND<10	ND<10	ND<10	ND<10	ND<10
11/03/02	ND<100	ND<500	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/24/03	ND<2000	ND<10000	--	ND<40	ND<40	ND<40	ND<40	ND<40
04/02/03	ND<20000	ND<100000	--	ND<400	ND<400	ND<400	ND<400	ND<400
07/01/03	ND<500	ND<2500	--	ND<10	ND<10	ND<10	ND<10	ND<10
10/02/03	ND<2000	--	ND<10000	ND<40	ND<40	ND<40	ND<40	ND<40
01/09/04	ND<2000	--	ND<10000	ND<40	ND<40	ND<40	ND<40	ND<40
04/26/04	430	--	ND<1000	ND<10	ND<10	ND<20	ND<10	ND<10

**Table 2 a**  
**ADDITIONAL HISTORIC ANALYTICAL RESULTS**  
**76 Station 7124**

Date Sampled	TBA	Ethanol (8015B)	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
	(µg/l)	(mg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
<b>MW-4 continued</b>								
07/22/04	ND<100	--	ND<1000	ND<10	ND<10	ND<20	ND<10	ND<10
10/29/04	63	--	ND<250	ND<2.5	ND<2.5	ND<5.0	ND<2.5	ND<2.5
01/12/05	1300	--	ND<250	ND<10	ND<2.5	ND<5.0	ND<2.5	ND<2.5
06/20/05	580	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/23/05	92	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/13/05	50	--	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
03/24/06	1900	--	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12
05/30/06	ND<50	--	ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5

# FIGURES

PS = 1:1 L:\VICINITY M A P S\7124\m.dwg Apr 17, 2006 - 10:00am lwinters



SCALE 1:24,000

SOURCE:

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



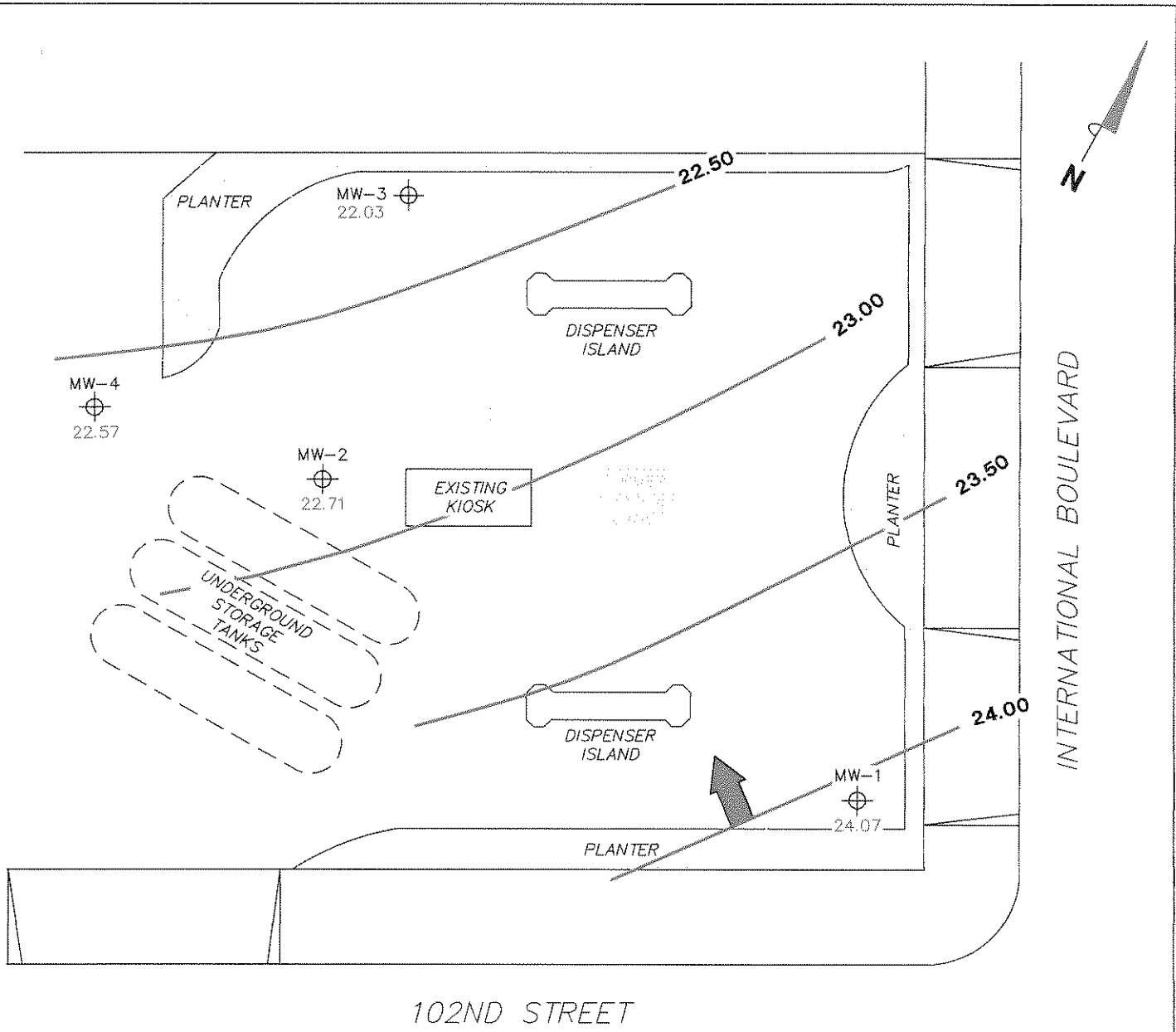
VICINITY MAP

76 Station 7124  
10151 International Boulevard  
Oakland, California

**TRC**

**FIGURE 1**

PS=1:1 7124-003 L:\Graphics\Projects\Number\20-xxxx\20-0400(UnocalRMS)\x-7000\7124+7124GMS.DWG Jun 30, 2006 - 10:02am L.winters



102ND STREET

**NOTES:**

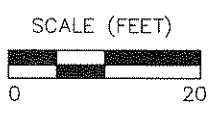
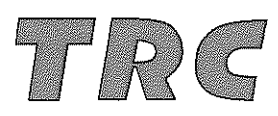
Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level.

**LEGEND**

- MW-4 Monitoring Well with Groundwater Elevation (feet)
- 24.00 Groundwater Elevation Contour
- General Direction of Groundwater Flow

**GROUNDWATER ELEVATION CONTOUR MAP  
May 30, 2006**

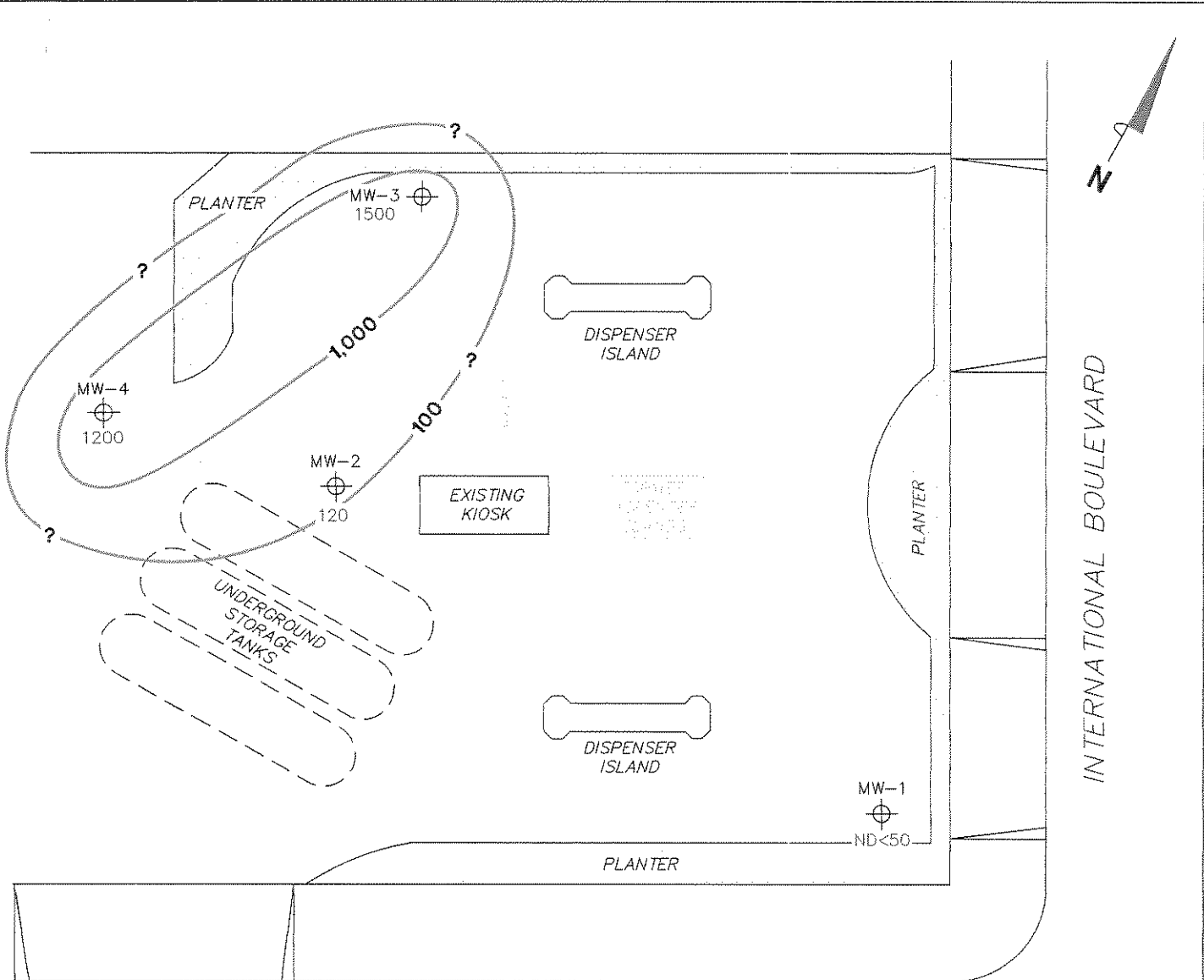
76 Station 7124  
10151 International Boulevard  
Oakland, California



**FIGURE 2**



PS=I:1 7124-003 L:\Graphics\Projects\B\Number\20-xxxx\20-0400(UnocalQMS)\x-7000\7124+7124QMS.DWG Jun 20, 2006 - 8:28am tgesualdo



102ND STREET

INTERNATIONAL BOULEVARD

**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  
 TPH-G (GC/MS) = total purgeable petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B. µg/l = micrograms per liter.  
 ND = not detected at limit indicated on official laboratory report.

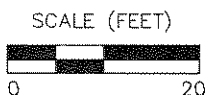
**LEGEND**

MW-4 ⊕ Monitoring Well with Dissolved-Phase TPH-G (GC/MS) Concentration (µg/l)

-1,000- Dissolved-Phase TPH-G (GC/MS) Contour (µg/l)

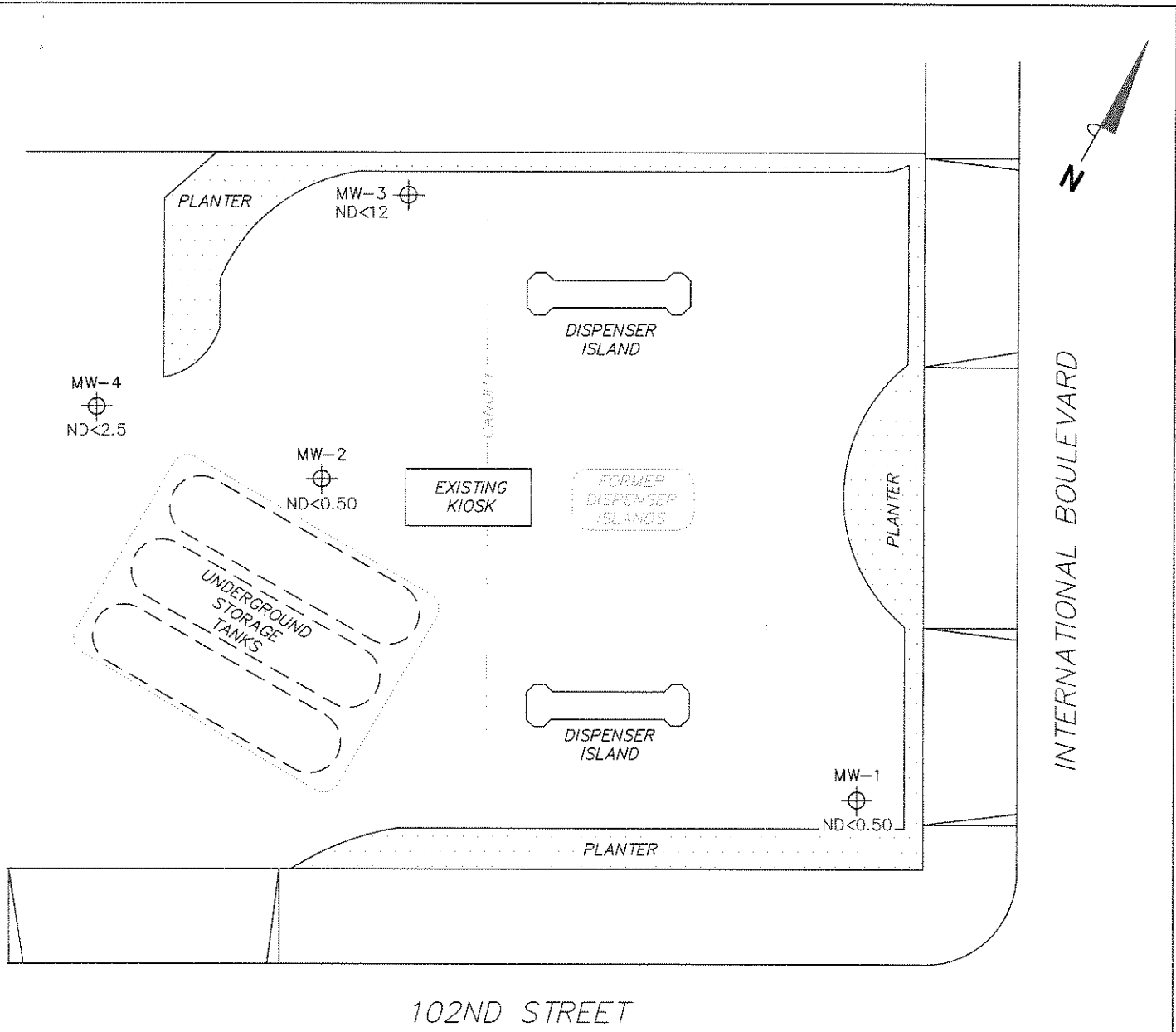
**DISSOLVED-PHASE  
 TPH-G (GC/MS)  
 CONCENTRATION MAP  
 May 30, 2006**

76 Station 7124  
 10151 International Boulevard  
 Oakland, California



**FIGURE 3**

PS=1:1 7124-003 L:\Graphics\Projects\B\Number\20-xxxx\20-0400(UnocalQMS)\x-7000\7124+ 7124.QMS.DWG Jun 19, 2006 - 12:58pm tgesualdo



**NOTES:**

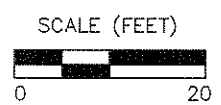
µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.

**LEGEND**

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

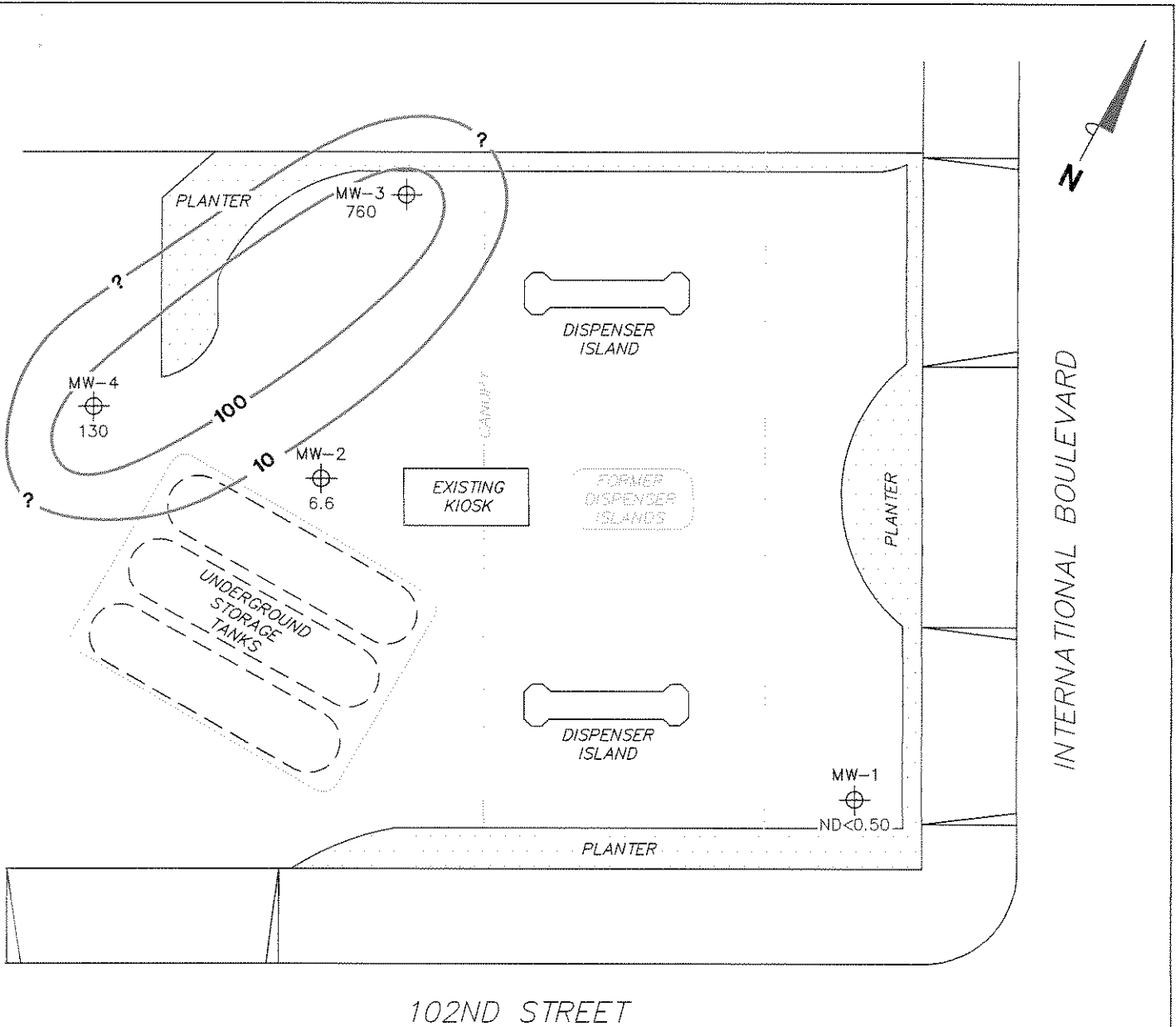
**DISSOLVED-PHASE BENZENE CONCENTRATION MAP**  
**May 30, 2006**

76 Station 7124  
 10151 International Boulevard  
 Oakland, California



**FIGURE 4**

PS=1:1 7124-003 L:\Graphics\Projects\Number\20-xxxx\20-0400(UnocalQMS)\x-7000\7124+71240MS.DWG Jun 19, 2006 -- 12:58pm tgesalido



**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. Results obtained using EPA Method 8260B.

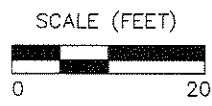
**LEGEND**

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

Dissolved-Phase MTBE Contour (µg/l)

**DISSOLVED-PHASE MTBE CONCENTRATION MAP  
May 30, 2006**

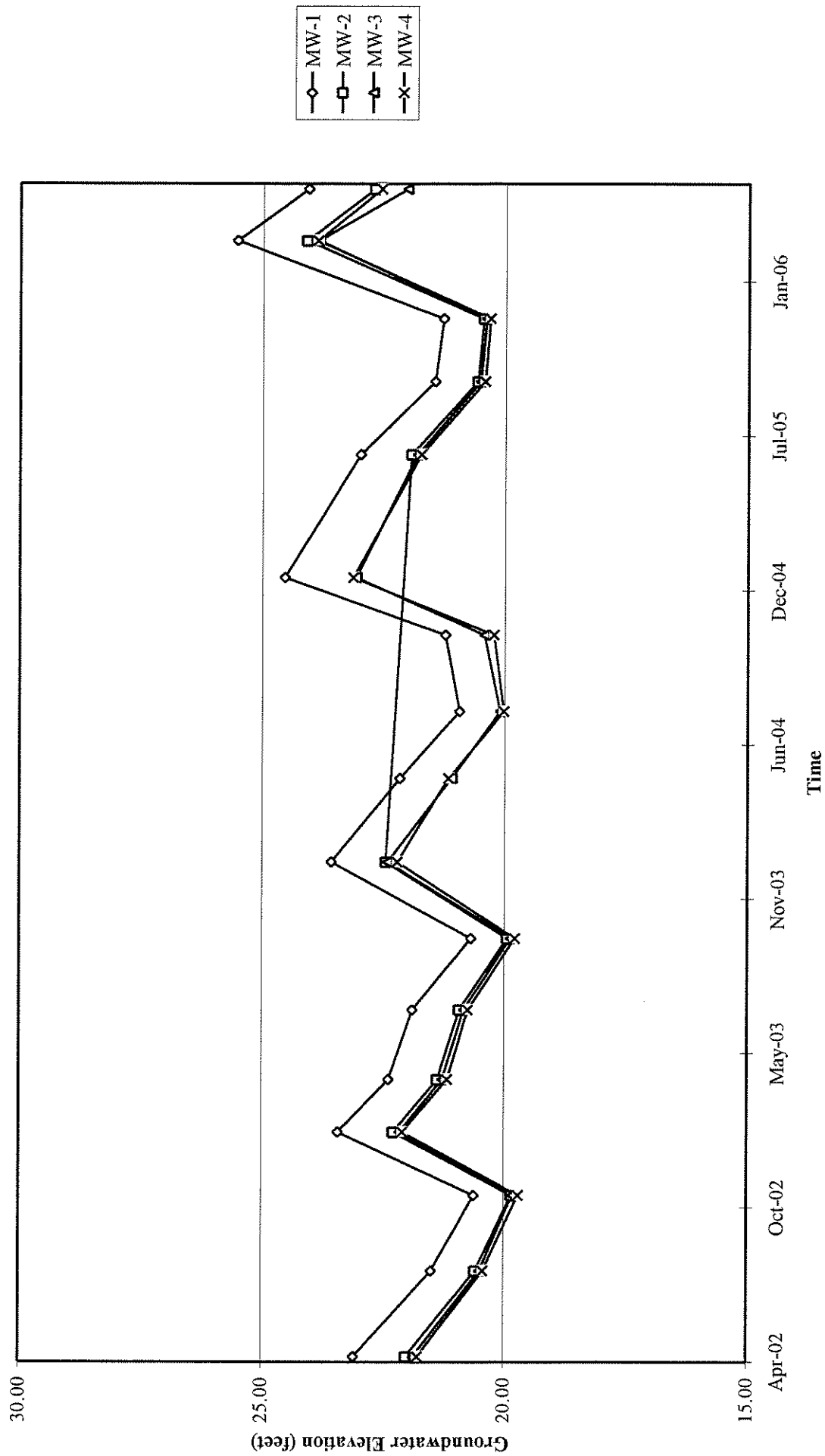
76 Station 7124  
10151 International Boulevard  
Oakland, California



**FIGURE 5**

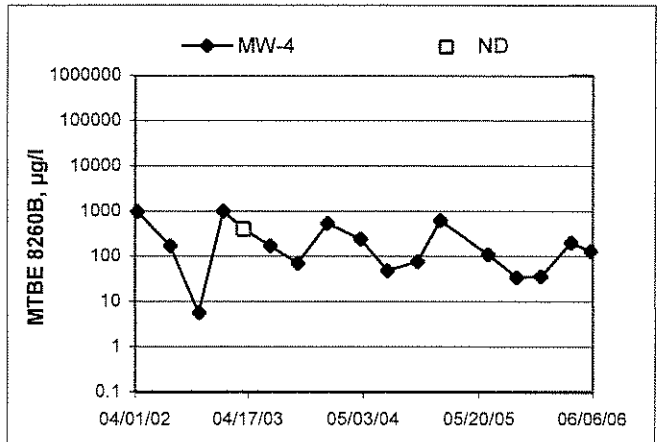
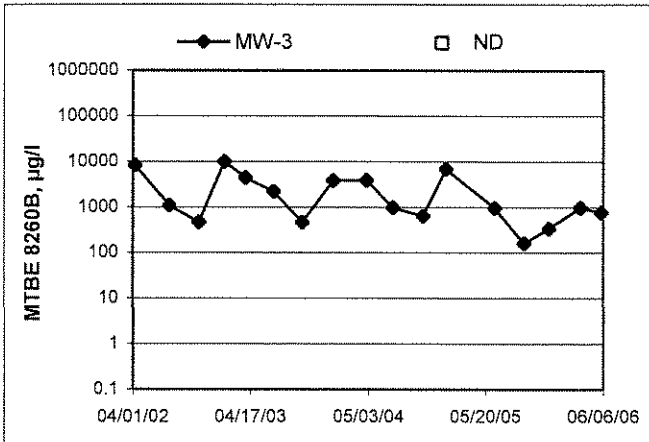
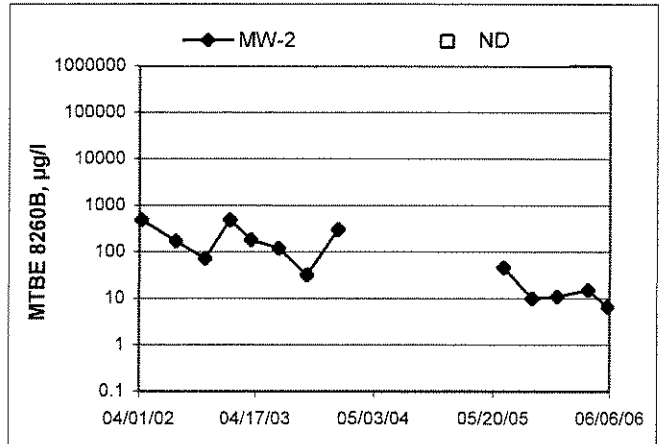
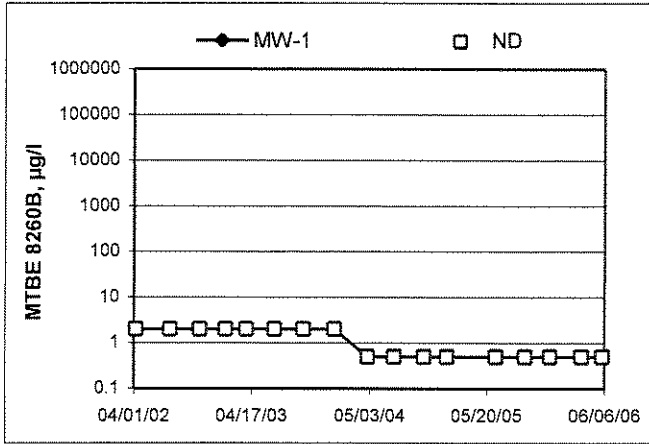
# GRAPHS

Groundwater Elevations vs. Time  
76 Station 7124



Elevations may have been corrected for apparent changes due to resurvey

**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 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 measurements 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, sample time, and the sampler's 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 the 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 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 wells, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liqui-nox and water and rinsing twice. The final rinse is in deionized water.

## **Exceptions**

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





## GROUNDWATER SAMPLING FIELD NOTES

Technician: Nick

Site: 7124

Project No.: 4165001

Date: 05/30/06

Well No.: MW-1

Purge Method: DA

Depth to Water (feet): 1330

Depth to Product (feet): Ø

Total Depth (feet): 2476

LPH & Water Recovered (gallons): Ø

Water Column (feet): 1146

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 1559

1 Well Volume (gallons): 7

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. °)	pH	Turbidity	D.O.
0947			7	337	19.1	6.36		
			14	331	19.1	5.96		
	0951		21	344	18.9	5.25		
Static at Time Sampled			Total Gallons Purged			Time Sampled		
1330			21			0951		
Comments:								

Well No.: MW-2

Purge Method: DA

Depth to Water (feet): 1516

Depth to Product (feet): Ø

Total Depth (feet): 2521

LPH & Water Recovered (gallons): Ø

Water Column (feet): 1005

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 1717

1 Well Volume (gallons): 7

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. °)	pH	Turbidity	D.O.
1008			7	295	20.0	5.70		
			14	346	18.3	5.06		
	1011		21	379	20.1	4.90		
Static at Time Sampled			Total Gallons Purged			Time Sampled		
1516			21			1017		
Comments:								

**GROUNDWATER SAMPLING FIELD NOTES**

Technician: NCK

Site: 7124

Project No.: 4105001

Date: 05/30/06

Well No.: MW-4

Purge Method: DIA

Depth to Water (feet): 15.79

Depth to Product (feet): 0

Total Depth (feet): 24.90

LPH & Water Recovered (gallons): 0

Water Column (feet): 9.11

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 17.61

1 Well Volume (gallons): 6

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. <del>W</del> )	pH	Turbidity	D.O.
1027			6	386	20.5	5.31		
			12	407	20.1	5.03		
	1030		18	409	19.7	4.92		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
1601		18			1036			
Comments:								

Well No.: MW-3

Purge Method: DIA

Depth to Water (feet): 15.69

Depth to Product (feet): 0

Total Depth (feet): 25.06

LPH & Water Recovered (gallons): 0

Water Column (feet): 9.37

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 17.56

1 Well Volume (gallons): 6

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. <del>W</del> )	pH	Turbidity	D.O.
1045			6	381	21.8	5.56		
			12	378	20.1	4.83		
	1048		18	414	20.2	4.79		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
15.90		18			1055			
Comments:								



*Laboratories, Inc*

Date of Report: 06/08/2006

Anju Farfan

TRC Alton Geoscience

21 Technology Drive  
Irvine, CA 92618-2302

RE: 7124

BC Lab Number: 0605366

Enclosed are the results of analyses for samples received by the laboratory on 05/30/06 23:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Vanessa Hooker", written over a horizontal line.

Contact Person: Vanessa Hooker

Client Service Rep

A handwritten signature in black ink, consisting of several sweeping strokes, written over a horizontal line.

Authorized Signature



TRC Alton Geoscience  
21 Technology Drive  
Irvine CA, 92618-2302

Project: 7124  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 06/08/06 10:31

### Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
0605366-01	<b>COC Number:</b> --- <b>Project Number:</b> 7124 <b>Sampling Location:</b> MW-1 <b>Sampling Point:</b> MW-1 <b>Sampled By:</b> Nick of TRCI	<b>Receive Date:</b> 05/30/06 23:00 <b>Sampling Date:</b> 05/30/06 09:57 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: 1000 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0605366-02	<b>COC Number:</b> --- <b>Project Number:</b> 7124 <b>Sampling Location:</b> MW-2 <b>Sampling Point:</b> MW-2 <b>Sampled By:</b> Nick of TRCI	<b>Receive Date:</b> 05/30/06 23:00 <b>Sampling Date:</b> 05/30/06 10:19 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: 1000 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0605366-03	<b>COC Number:</b> --- <b>Project Number:</b> 7124 <b>Sampling Location:</b> MW-4 <b>Sampling Point:</b> MW-4 <b>Sampled By:</b> Nick of TRCI	<b>Receive Date:</b> 05/30/06 23:00 <b>Sampling Date:</b> 05/30/06 10:36 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: 1000 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0605366-04	<b>COC Number:</b> --- <b>Project Number:</b> 7124 <b>Sampling Location:</b> MW-3 <b>Sampling Point:</b> MW-3 <b>Sampled By:</b> Nick of TRCI	<b>Receive Date:</b> 05/30/06 23:00 <b>Sampling Date:</b> 05/30/06 10:55 <b>Sample Depth:</b> --- <b>Sample Matrix:</b> Water	<b>Delivery Work Order:</b> Global ID: 1000 Matrix: W Sample QC Type (SACode): CS Cooler ID:

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine CA, 92618-2302

 Project: 7124  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 06/08/06 10:31

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0605366-01		Client Sample Name: 7124, MW-1, MW-1, 5/30/2006 9:57:00AM, Nick											
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quais
Benzene	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
Toluene	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
Ethanol	ND	ug/L	250		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152	ND	
1,2-Dichloroethane-d4 (Surrogate)	99.9	%	76 - 114 (LCL - UCL)		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152		
Toluene-d8 (Surrogate)	103	%	88 - 110 (LCL - UCL)		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152		
4-Bromofluorobenzene (Surrogate)	90.8	%	86 - 115 (LCL - UCL)		EPA-8260	06/01/06	06/02/06 05:56	DKC	MS-V6	1	BPF0152		



TRC Alton Geoscience  
21 Technology Drive  
Irvine CA, 92618-2302

Project: 7124  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 06/08/06 10:31

### Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0605366-02 Client Sample Name: 7124, MW-2, MW-2, 5/30/2006 10:19:00AM, Nick

Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru-ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
Methyl t-butyl ether	6.6	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
Toluene	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
Ethanol	ND	ug/L	250		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
Total Purgeable Petroleum Hydrocarbons	120	ug/L	50		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152	ND	
1,2-Dichloroethane-d4 (Surrogate)	99.3	%	76 - 114 (LCL - UCL)		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152		
Toluene-d8 (Surrogate)	105	%	88 - 110 (LCL - UCL)		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152		
4-Bromofluorobenzene (Surrogate)	106	%	86 - 115 (LCL - UCL)		EPA-8260	06/01/06	06/02/06 06:21	DKC	MS-V6	1	BPF0152		

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 21 Technology Drive  
 Irvine CA, 92618-2302

 Project: 7124  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 06/08/06 10:31

## Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0605366-03		Client Sample Name: 7124, MW-4, MW-4, 5/30/2006 10:36:00AM, Nick												
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instrument ID	Dilution	QC Batch ID	MB Bias	Lab Quals	
Benzene	ND	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
1,2-Dibromoethane	ND	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
1,2-Dichloroethane	ND	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
Ethylbenzene	ND	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
Methyl t-butyl ether	130	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
Toluene	ND	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
Total Xylenes	ND	ug/L	5.0		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
t-Amyl Methyl ether	ND	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
t-Butyl alcohol	ND	ug/L	50		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
Diisopropyl ether	ND	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
Ethanol	ND	ug/L	1200		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
Ethyl t-butyl ether	ND	ug/L	2.5		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01	
Total Purgeable Petroleum Hydrocarbons	1200	ug/L	250		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303	ND	A01, A53	
1,2-Dichloroethane-d4 (Surrogate)	108	%	76 - 114 (LCL - UCL)		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303			
Toluene-d8 (Surrogate)	99.9	%	88 - 110 (LCL - UCL)		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303			
4-Bromofluorobenzene (Surrogate)	105	%	86 - 115 (LCL - UCL)		EPA-8260	06/05/06	06/05/06 22:01	DKC	MS-V6	5	BPF0303			





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21 Technology Drive  
Irvine CA, 92618-2302

Project: 7124  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 06/08/06 10:31

### Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0605366-04 Client Sample Name: 7124, MW-3, MW-3, 5/30/2006 10:55:00AM, Nick

Constituent	Result	Units	PQL	MDL	Method	Prep	Run	Analyst	Instru- ment ID	Dilution	QC	MB	Lab
						Date	Date/Time				Batch ID	Bias	Quals
Benzene	ND	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
1,2-Dibromoethane	ND	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
1,2-Dichloroethane	ND	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
Ethylbenzene	ND	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
Methyl t-butyl ether	760	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
Toluene	ND	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
Total Xylenes	ND	ug/L	25		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
t-Amyl Methyl ether	ND	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
t-Butyl alcohol	ND	ug/L	250		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
Diisopropyl ether	ND	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
Ethanol	ND	ug/L	6200		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
Ethyl t-butyl ether	ND	ug/L	12		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
Total Purgeable Petroleum Hydrocarbons	1500	ug/L	1200		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303	ND	A01
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303		
Toluene-d8 (Surrogate)	99.2	%	88 - 110 (LCL - UCL)		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303		
4-Bromofluorobenzene (Surrogate)	99.8	%	86 - 115 (LCL - UCL)		EPA-8260	06/05/06	06/05/06 22:26	DKC	MS-V6	25	BPF0303		

TRC Alton Geoscience  
 21 Technology Drive  
 Irvine CA, 92618-2302

 Project: 7124  
 Project Number: [none]  
 Project Manager: Anju Farfan

Reported: 06/08/06 10:31

## Volatile Organic Analysis (EPA Method 8260)

### Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample ID	QC Sample Type	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
										RPD	Percent Recovery Lab Quals
Benzene	BPF0152	BPF0152-MS1	Matrix Spike	7.3822	39.418	25.000	ug/L		128		70 - 130
		BPF0152-MSD1	Matrix Spike Duplicate	7.3822	37.338	25.000	ug/L	6.45	120	20	70 - 130
Toluene	BPF0152	BPF0152-MS1	Matrix Spike	5.3510	34.053	25.000	ug/L		115		70 - 130
		BPF0152-MSD1	Matrix Spike Duplicate	5.3510	31.896	25.000	ug/L	8.14	106	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BPF0152	BPF0152-MS1	Matrix Spike	ND	10.217	10.000	ug/L		102		76 - 114
		BPF0152-MSD1	Matrix Spike Duplicate	ND	10.336	10.000	ug/L		103		76 - 114
Toluene-d8 (Surrogate)	BPF0152	BPF0152-MS1	Matrix Spike	ND	10.059	10.000	ug/L		101		88 - 110
		BPF0152-MSD1	Matrix Spike Duplicate	ND	10.151	10.000	ug/L		102		88 - 110
4-Bromofluorobenzene (Surrogate)	BPF0152	BPF0152-MS1	Matrix Spike	ND	10.351	10.000	ug/L		104		86 - 115
		BPF0152-MSD1	Matrix Spike Duplicate	ND	10.053	10.000	ug/L		101		86 - 115
Benzene	BPF0303	BPF0303-MS1	Matrix Spike	ND	26.726	25.000	ug/L		107		70 - 130
		BPF0303-MSD1	Matrix Spike Duplicate	ND	27.799	25.000	ug/L	3.67	111	20	70 - 130
Toluene	BPF0303	BPF0303-MS1	Matrix Spike	ND	25.048	25.000	ug/L		100		70 - 130
		BPF0303-MSD1	Matrix Spike Duplicate	ND	25.372	25.000	ug/L	0.995	101	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BPF0303	BPF0303-MS1	Matrix Spike	ND	10.537	10.000	ug/L		105		76 - 114
		BPF0303-MSD1	Matrix Spike Duplicate	ND	10.946	10.000	ug/L		109		76 - 114
Toluene-d8 (Surrogate)	BPF0303	BPF0303-MS1	Matrix Spike	ND	9.9939	10.000	ug/L		99.9		88 - 110
		BPF0303-MSD1	Matrix Spike Duplicate	ND	10.066	10.000	ug/L		101		88 - 110
4-Bromofluorobenzene (Surrogate)	BPF0303	BPF0303-MS1	Matrix Spike	ND	10.249	10.000	ug/L		102		86 - 115
		BPF0303-MSD1	Matrix Spike Duplicate	ND	10.176	10.000	ug/L		102		86 - 115



TRC Alton Geoscience  
21 Technology Drive  
Irvine CA, 92618-2302

Project: 7124  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 06/08/06 10:31

### Volatile Organic Analysis (EPA Method 8260) Quality Control Report - Laboratory Control Sample

Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	Control Limits		Lab Quals
									RPD	Percent Recovery	
Benzene	BPF0152	BPF0152-BS1	LCS	27.995	25.000	0.50	ug/L	112		70 - 130	
Toluene	BPF0152	BPF0152-BS1	LCS	24.997	25.000	0.50	ug/L	100		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BPF0152	BPF0152-BS1	LCS	9.2485	10.000		ug/L	92.5		76 - 114	
Toluene-d8 (Surrogate)	BPF0152	BPF0152-BS1	LCS	10.025	10.000		ug/L	100		88 - 110	
4-Bromofluorobenzene (Surrogate)	BPF0152	BPF0152-BS1	LCS	9.3396	10.000		ug/L	93.4		86 - 115	
Benzene	BPF0303	BPF0303-BS1	LCS	26.894	25.000	0.50	ug/L	108		70 - 130	
Toluene	BPF0303	BPF0303-BS1	LCS	24.920	25.000	0.50	ug/L	99.7		70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BPF0303	BPF0303-BS1	LCS	10.037	10.000		ug/L	100		76 - 114	
Toluene-d8 (Surrogate)	BPF0303	BPF0303-BS1	LCS	10.105	10.000		ug/L	101		88 - 110	
4-Bromofluorobenzene (Surrogate)	BPF0303	BPF0303-BS1	LCS	10.185	10.000		ug/L	102		86 - 115	



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Project: 7124  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 06/08/06 10:31

## Volatile Organic Analysis (EPA Method 8260) Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Benzene	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.12	
1,2-Dibromoethane	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichloroethane	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.25	
Ethylbenzene	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.12	
Methyl t-butyl ether	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.12	
Toluene	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.15	
Total Xylenes	BPF0152	BPF0152-BLK1	ND	ug/L	1.0	0.37	
t-Amyl Methyl ether	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.49	
t-Butyl alcohol	BPF0152	BPF0152-BLK1	ND	ug/L	10	10	
Diisopropyl ether	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.25	
Ethanol	BPF0152	BPF0152-BLK1	ND	ug/L	250	110	
Ethyl t-butyl ether	BPF0152	BPF0152-BLK1	ND	ug/L	0.50	0.25	
Total Purgeable Petroleum Hydrocarbons	BPF0152	BPF0152-BLK1	ND	ug/L	50	23	
1,2-Dichloroethane-d4 (Surrogate)	BPF0152	BPF0152-BLK1	94.5	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BPF0152	BPF0152-BLK1	102	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BPF0152	BPF0152-BLK1	87.3	%	86 - 115 (LCL - UCL)		
Benzene	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.12	
1,2-Dibromoethane	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.24	
1,2-Dichloroethane	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.25	
Ethylbenzene	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.12	
Methyl t-butyl ether	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.12	
Toluene	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.15	
Total Xylenes	BPF0303	BPF0303-BLK1	ND	ug/L	1.0	0.37	
t-Amyl Methyl ether	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.49	
t-Butyl alcohol	BPF0303	BPF0303-BLK1	ND	ug/L	10	10	



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Project: 7124  
Project Number: [none]  
Project Manager: Anju Farfan

Reported: 06/08/06 10:31

## Volatile Organic Analysis (EPA Method 8260) Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Diisopropyl ether	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.25	
Ethanol	BPF0303	BPF0303-BLK1	ND	ug/L	250	110	
Ethyl t-butyl ether	BPF0303	BPF0303-BLK1	ND	ug/L	0.50	0.25	
Total Purgeable Petroleum Hydrocarbons	BPF0303	BPF0303-BLK1	ND	ug/L	50	23	
1,2-Dichloroethane-d4 (Surrogate)	BPF0303	BPF0303-BLK1	103	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BPF0303	BPF0303-BLK1	98.0	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BPF0303	BPF0303-BLK1	97.3	%	86 - 115 (LCL - UCL)		



*Laboratories, Inc*

TRC Alton Geoscience  
21 Technology Drive  
Irvine CA, 92618-2302

Project: 7124  
Project Number: [none]  
Project Manager: Anju Farfan

**Reported:** 06/08/06 10:31

### Notes and Definitions

- J Estimated value
- A53 Chromatogram not typical of gasoline.
- A01 PQL's and MDL's are raised due to sample dilution.
- ND Analyte NOT DETECTED at or above the reporting limit
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference

Submission #: 06-05366

Project Code:

TB Batch #

SHIPPING INFORMATION

Federal Express  UPS  Hand Delivery   
BC Lab Field Service  Other  (Specify) \_\_\_\_\_

SHIPPING CONTAINER

Ice Chest  None   
Box  Other  (Specify) \_\_\_\_\_

Refrigerant: Ice  Blue Ice  None  Other  Comments:

Custody Seals: Ice Chest  Containers  None  Comments:  
Intact? Yes  No  Intact? Yes  No

All samples received? Yes  No  All samples containers intact? Yes  No  Description(s) match COC? Yes  No

COC Received  
 YES  NO

Ice Chest ID \_\_\_\_\_  
Temperature: 3.1 °C  
Thermometer ID: 49

Emissivity 1.0  
Container VOA

Date/Time 5/30/06  
Analyst Init JMK

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
GENERAL MINERAL/ GENERAL PHYSICAL										
PE UNPRESERVED										
INORGANIC CHEMICAL METALS										
INORGANIC CHEMICAL METALS										
CYANIDE										
NITROGEN FORMS										
TOTAL SULFIDE										
oz. NITRATE / NITRITE										
80ml TOTAL ORGANIC CARBON										
TOX										
CHEMICAL OXYGEN DEMAND										
A PHENOLICS										
0ml VOA VIAL TRAVEL BLANK										
0ml VOA VIAL	A.3.	A.3.	A.3.	A.3.						
EPA 413.1, 413.2, 418.1										
ODOR										
ADIOLOGICAL										
ACTERIOLOGICAL										
ml VOA VIAL- 504										
EPA 508/608/8080										
EPA 515.1/8150										
EPA 525										
EPA 525 TRAVEL BLANK										
0ml EPA 547										
0ml EPA 531.1										
EPA 548										
EPA 549										
EPA 632										
EPA 8015M										
QA/QC										
AMBER										
OZ. JAR										
OZ. JAR										
ML SLEEVE										
B VIAL										
ASTIC BAG										
RROUS IRON										
CORE										

Comments: \_\_\_\_\_  
Sample Numbering Completed By: JMK Date/Time: 5/31/06 0025

BC LABORATORIES, INC.

4100 Atlas Court, Bakersfield, CA 93308  
(661) 327-4911 FAX (661) 327-1913

CHAIN OF CUSTODY

Analysis Requested

#06-05366

Circle one: Phillips 66 / Unocal		Consultant Firm: TRC	MATRIX (GW) Ground-water (S) Soil (VW) Waste-water (SL) Sludge
Address: 10151 International Blvd		21 Technology Drive Irvine, CA 92618-2302 Attn: Anju Farfan	
City: OAKLAND		4-digit site#: 7124	
State: CA	Zip:	PO #:	
Phillips 66 / Unocal Mgr: Thomas KOSOL		Project #: 4105001	
Sampler Name: NICK			

Lab#	Sample Description	Field Point Name	Date & Time Sampled		BTEX/MTBE by 80218, Gas by 8015	TPH GAS by 8015M	TPH DIESEL by 8015	8260 full list w/ MTBE & oxygenates	BTEX/MTBE/BOXYs BY 8260B	ETHANOL by 8260B	TPPH by 8260B	3 vars w/ HCl Turnaround Time Requested
	/	MW-1-1	05/30/06 0957	GW					X			X Std
	/	MW-2-2	1011						↓			↓
	/	MW-4-3	1036						↓			↓
	/	MW-3-4	1055						↓			↓

CHK BY <i>JK</i>	DISTRIBUTION <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
	SUB-OUT <input type="checkbox"/>

Comments  GLOBAL ID 1000 No ml.	Relinquished by (Signature) <i>McK</i>	Received by <i>FRIDGE</i>	Date & Time 05/30/06
	Relinquished by (Signature) <i>Ross</i>	Received by <i>Ross</i>	Date & Time 5/30/06 1400
	Relinquished by (Signature) <i>Ross</i>	Received by <i>Ross</i>	Date & Time 5-30-06 1455
			Date & Time 5/30/06 2300



## **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.