

Ro 2444



76 Broadway
Sacramento, California 95818

November 1, 2005

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

Alameda County
NOV 04 2005
Environmental Health

**Re: Report Transmittal
Quarterly Report
Third Quarter – 2005
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,

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

November 1, 2005

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

RE: **Quarterly Summary and Monitoring Report – Third 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

76 Service Station No. 7124

Location

10151 International Blvd
Oakland, California

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

Sincerely,
SECOR International Incorporated

Thomas M. Potter
Project Scientist

Attachments: SECOR's *Quarterly Summary Report – Third Quarter 2005*

cc: Ms, Shelby Lathrop, ConocoPhillips

Alameda County
NOV 04 2005
Environmental Health

**QUARTERLY SUMMARY REPORT
Third Quarter 2005**

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

City/County ID #: Oakland

County: Alameda

Environmental Health
 NOV 04 2005
 Alameda County

SITE DESCRIPTION

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.

PREVIOUS ASSESSMENT

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 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 2 industrial supply wells, 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 the third quarter 2002. Currently, four wells are monitored quarterly (MW-1 through MW-4). Samples are analyzed for total purgeable petroleum hydrocarbons (TPPH), 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 third quarter 2005, depth to groundwater ranged between 15.92 and 17.93 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 at a gradient of 0.012 foot/foot.

Evaluation of dissolved concentrations through the third 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 and MtBE were reported at maximum concentrations in well MW-3 this quarter at 2,400 µg/L and 160 µg/L respectively. 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

Contamination in soil is adequately delineated for benzene. The highest concentrations of residual TPPH 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 contain elevated concentrations of TPPH and MtBE.

SECOR

Mr. Donald Hwang
November 1, 2005
Page 4

REMEDIATION STATUS

Currently, there is no active remediation at this site.

RECENT SUBMITTALS/CORRESPONDENCE

Submitted:

Quarterly Summary and Monitoring Report – Second Quarter 2005, dated August 10, 2005

Addendum to Workplan for Additional Off-Site Monitoring Well Installation, dated July 22, 2005.

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, July through September, 2005*, dated October 18, 2005 (Attachment 1).

THIS QUARTER ACTIVITIES (Third Quarter 2005)

1. TRC performed coordinated groundwater monitoring and sampling event.
2. SECOR prepared and submitted quarterly summary report.
3. SECOR prepared and submitted addendum to the *Workplan for Additional Off-Site Monitoring Well Installation*.

NEXT QUARTER ACTIVITIES (Fourth Quarter 2005)

1. TRC to perform coordinated groundwater monitoring and sampling event.
2. SECOR to prepare and submit quarterly summary and monitoring report.
3. SECOR to implement Work Plan dated July 22, 2005 pending agency approval.

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


Adrian Pérez, P.E.
Associate Engineer



Attachment 1: TRC's *Quarterly Monitoring Report – July through September 2005*, dated October 18, 2005

ATTACHMENT 1
TRC'S QUARTERLY MONITORING REPORT
JULY THROUGH SEPTEMBER 2005

76 Service Station No. 7124
10151 East 14th Street
Oakland, California
November 1, 2005



Customer-Focused Solutions

October 20, 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
JULY THROUGH SEPTEMBER 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
200400/7124R08.QMS.doc

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

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OCT 2 2005

BY:.....





Customer-Focused Solutions

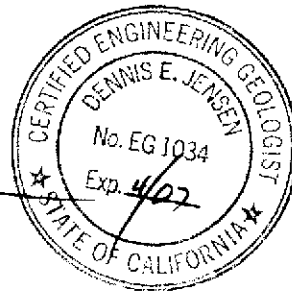
**QUARTERLY MONITORING REPORT
JULY THROUGH SEPTEMBER 2005**

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
October 18, 2005

LIST OF ATTACHMENTS

Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Table 1: Current Fluid Levels and Selected Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 3: Additional Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPPH 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 Groundwater Sampling Field Notes
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

Summary of Gauging and Sampling Activities
July 2005 through September 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: **09/23/05**

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: **15.92 feet** Maximum: **17.93 feet**
Average groundwater elevation (relative to available local datum): **20.74 feet**
Average change in groundwater elevation since previous event: **-1.37 feet**
Interpreted groundwater gradient and flow direction:
 Current event: **0.012 ft/ft, west**
 Previous event: **0.012 ft/ft, west (06/20/05)**

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 **TPPH 8260B** **3** Maximum: **2,400 µg/l (MW-3)**
Wells with **MTBE** **3** Maximum: **160 µg/l (MW-3)**

Notes:

This report presents the results of groundwater monitoring and sampling activities performed by TRC. Please contact the primary consultant for other specific information on this site.

TABLES

TABLE KEY

STANDARD ABBREVIATIONS

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

ANALYTES

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

NOTES

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

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
September 23, 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														
9/23/2005	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	
MW-2														
9/23/2005	37.87	17.29	0.00	20.58	-1.35	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	10	
MW-3														
9/23/2005	37.72	17.20	0.00	20.52	-1.29	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	160	
MW-4														
9/23/2005	38.36	17.93	0.00	20.43	-1.30	--	1500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	34	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through September 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														
4/8/2002	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	
7/28/2002	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	
11/3/2002	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	
1/24/2003	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	
4/2/2003	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	
7/1/2003	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	
10/2/2003	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	
1/9/2004	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	
4/26/2004	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	
7/22/2004	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	
10/29/2004	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	
1/12/2005	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	
6/20/2005	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	
9/23/2005	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	
MW-2														
4/8/2002	37.87	15.86	0.00	22.01	--	4400	--	ND<2.5	ND<2.5	6.4	ND<2.5	380	490	
7/28/2002	37.87	17.28	0.00	20.59	-1.42	--	3200	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	170	
11/3/2002	37.87	18.03	0.00	19.84	-0.75	--	3800	ND<5.0	ND<5.0	ND<5.0	ND<10	--	72	
1/24/2003	37.87	15.59	0.00	22.28	2.44	--	410	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	490	
4/2/2003	37.87	16.50	0.00	21.37	-0.91	--	1000	ND<5.0	ND<5.0	ND<5.0	ND<10	--	180	
7/1/2003	37.87	16.94	0.00	20.93	-0.44	--	1900	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	120	
10/2/2003	37.87	17.93	0.00	19.94	-0.99	--	6900	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	32	
1/9/2004	37.87	15.42	0.00	22.45	2.51	--	1000	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	300	
4/26/2004	37.87	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through September 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)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
MW-2 continued														
7/22/2004	37.87	--	--	--	--	--	--	--	--	--	--	--	--	Covered with asphalt
10/29/2004	37.87	--	0.00	--	--	--	--	--	--	--	--	--	--	Well is paved over.
1/12/2005	37.87	--	--	--	--	--	--	--	--	--	--	--	--	Well was paved over.
6/20/2005	37.87	15.94	0.00	21.93	--	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	46	
9/23/2005	37.87	17.29	0.00	20.58	-1.35	--	120	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	10	
MW-3														
4/8/2002	37.72	15.86	0.00	21.86	--	8700	--	65	ND<25	400	ND<25	6500	8300	
7/28/2002	37.72	17.22	0.00	20.50	-1.36	--	4500	ND<25	ND<25	ND<25	ND<50	--	1100	
11/3/2002	37.72	17.90	0.00	19.82	-0.68	--	25000	ND<5.0	ND<5.0	25	ND<10	--	470	
1/24/2003	37.72	15.57	0.00	22.15	2.33	--	6000	ND<25	ND<25	94	ND<50	--	10000	
4/2/2003	37.72	16.45	0.00	21.27	-0.88	--	130000	ND<100	ND<100	ND<100	ND<200	--	4400	
7/1/2003	37.72	16.88	0.00	20.84	-0.43	--	9400	ND<10	ND<10	ND<10	ND<20	--	2200	
10/2/2003	37.72	17.85	0.00	19.87	-0.97	--	73000	ND<50	ND<50	ND<50	ND<100	--	460	
1/9/2004	37.72	15.31	0.00	22.41	2.54	--	8700	ND<25	ND<25	98	ND<50	--	3800	
4/26/2004	37.72	16.62	0.00	21.10	-1.31	--	6700	ND<25	ND<25	ND<25	ND<50	--	3900	
7/22/2004	37.72	17.62	0.00	20.10	-1.00	--	13000	ND<25	ND<25	ND<25	ND<50	--	980	
10/29/2004	37.72	17.29	0.00	20.43	0.33	--	4600	ND<5.0	ND<5.0	13	ND<10	--	640	
1/12/2005	37.72	14.64	0.00	23.08	2.65	--	6100	0.88	0.99	30	2.2	--	6900	
6/20/2005	37.72	15.91	0.00	21.81	-1.27	--	1900	ND<0.50	0.21J	0.52	0.46J	--	960	
9/23/2005	37.72	17.20	0.00	20.52	-1.29	--	2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	160	
MW-4														
4/8/2002	38.36	16.59	0.00	21.77	--	13000	--	ND<5.0	ND<5.0	28	ND<5.0	790	980	
7/28/2002	38.36	17.93	0.00	20.43	-1.34	--	18000	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	170	
11/3/2002	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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through September 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														
1/24/2003	38.36	16.27	0.00	22.09	2.39	--	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1000	
4/2/2003	38.36	17.19	0.00	21.17	-0.92	--	130000	ND<100	ND<100	ND<100	ND<200	--	ND<400	
7/1/2003	38.36	17.61	0.00	20.75	-0.42	--	15000	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	170	
10/2/2003	38.36	18.58	0.00	19.78	-0.97	--	7100	ND<10	ND<10	ND<10	ND<20	--	70	
1/9/2004	38.36	16.15	0.00	22.21	2.43	--	18000	ND<10	ND<10	ND<10	ND<20	--	530	
4/26/2004	38.36	17.20	0.00	21.16	-1.05	--	6500	ND<10	ND<10	ND<10	ND<20	--	240	
7/22/2004	38.36	18.34	0.00	20.02	-1.14	--	18000	ND<10	ND<10	ND<10	ND<20	--	48	
10/29/2004	38.36	18.13	0.00	20.23	0.21	--	2700	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	76	
1/12/2005	38.36	15.22	0.00	23.14	2.91	--	1300	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	620	
6/20/2005	38.36	16.63	0.00	21.73	-1.41	--	980	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	110	
9/23/2005	38.36	17.93	0.00	20.43	-1.30	--	1500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	34	

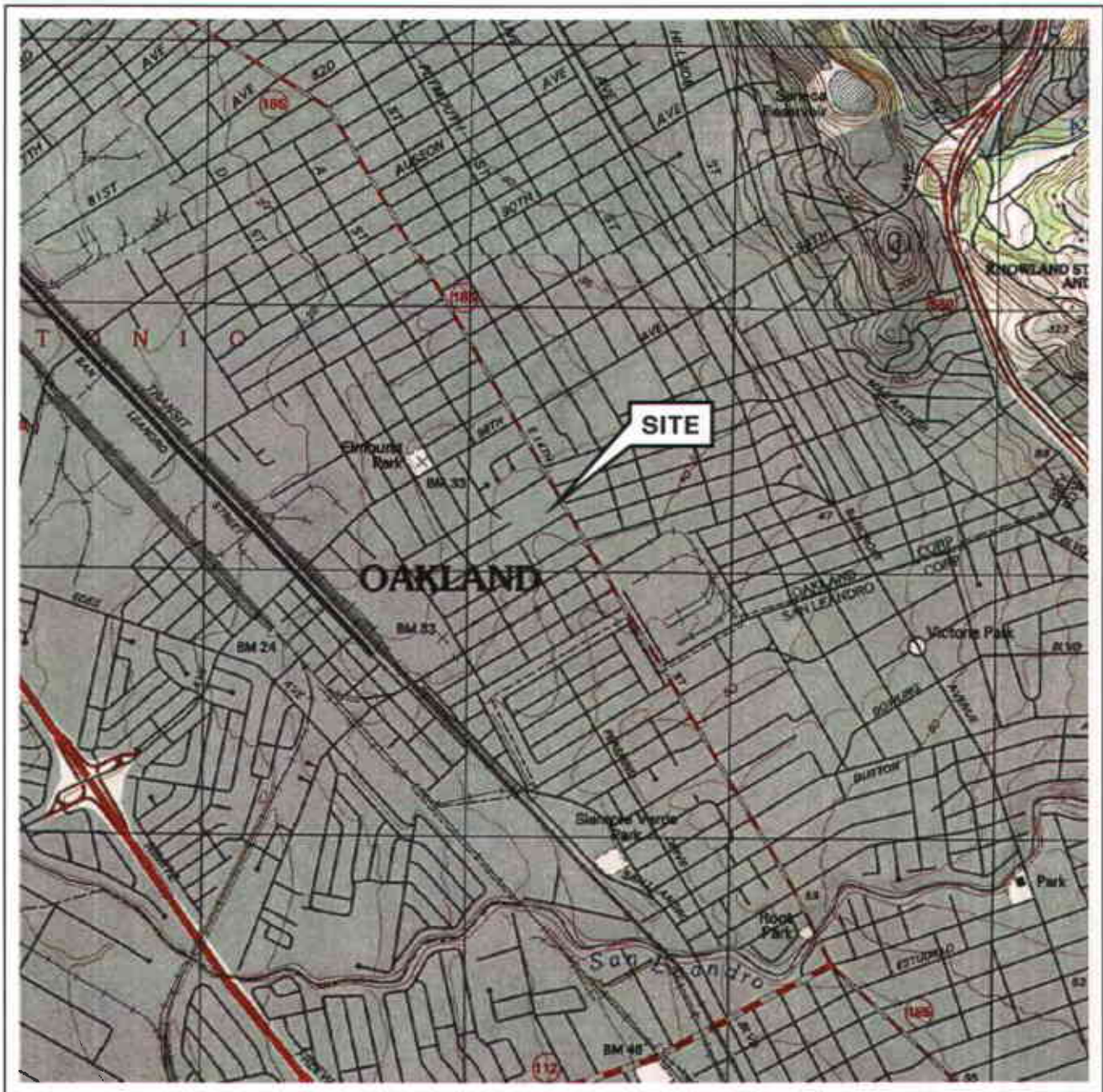
Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 7124

Date Sampled	EDC (µg/l)	EDB (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8015B (mg/l)	Ethanol 8260B (µg/l)
MW-1								
7/28/2002	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
11/3/2002	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
1/24/2003	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
4/2/2003	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
7/1/2003	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
10/2/2003	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	--	ND<500
1/9/2004	ND<2.0	ND<2	ND<2	ND<100	ND<2	ND<2	--	ND<500
4/26/2004	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	ND<50
7/22/2004	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	ND<50
10/29/2004	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	ND<50
1/12/2005	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	ND<50
6/20/2005	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<0.50	ND<0.50	--	ND<1000
9/23/2005	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<0.50	ND<0.50	--	ND<1000
MW-2								
4/8/2002	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40	ND<10000	--
7/28/2002	ND<10	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2500	--
11/3/2002	ND<20	ND<20	ND<20	ND<1000	ND<20	ND<20	ND<5000	--
1/24/2003	ND<10	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2500	--
4/2/2003	ND<20	ND<20	ND<20	ND<1000	ND<20	ND<20	ND<5000	--
7/1/2003	ND<10	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2500	--
10/2/2003	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	--	ND<500
1/9/2004	ND<10	ND<10	ND<10	ND<500	ND<10	ND<10	--	ND<2500
6/20/2005	ND<0.50	ND<0.50	ND<0.50	25	ND<0.50	ND<0.50	--	ND<1000
9/23/2005	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<0.50	ND<0.50	--	ND<1000
MW-3								
10/2/2003	ND<200	ND<200	ND<200	ND<10000	ND<200	ND<200	--	ND<50000

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 7124

Date Sampled	EDC (µg/l)	EDB (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Ethanol 8015B (mg/l)	Ethanol 8260B (µg/l)
MW-3 continued								
1/9/2004	ND<100	ND<100	ND<100	ND<5000	ND<100	ND<100	--	ND<25000
4/26/2004	ND<25	ND<25	ND<25	ND<250	ND<50	ND<25	--	ND<2500
7/22/2004	ND<25	ND<25	ND<25	ND<250	ND<50	ND<25	--	ND<2500
10/29/2004	ND<5.0	ND<5.0	ND<5.0	ND<50	ND<10	ND<5.0	--	ND<500
1/12/2005	ND<25	ND<25	ND<25	1300	ND<50	ND<25	--	ND<2500
6/20/2005	ND<0.50	ND<0.50	0.31J	39	ND<0.50	ND<0.50	--	ND<1000
9/23/2005	ND<0.50	ND<0.50	ND<0.50	ND<10	ND<0.50	ND<0.50	--	ND<1000
MW-4								
4/8/2002	ND<100	ND<100	ND<100	ND<5000	ND<100	ND<100	ND<25000	--
7/28/2002	ND<10	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2500	--
11/3/2002	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	--
1/24/2003	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40	ND<10000	--
4/2/2003	ND<400	ND<400	ND<400	ND<20000	ND<400	ND<400	ND<100000	--
7/1/2003	ND<10	ND<10	ND<10	ND<500	ND<10	ND<10	ND<2500	--
10/2/2003	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40	--	ND<10000
1/9/2004	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40	--	ND<10000
4/26/2004	ND<10	ND<10	ND<10	430	ND<20	ND<10	--	ND<1000
7/22/2004	ND<10	ND<10	ND<10	ND<100	ND<20	ND<10	--	ND<1000
10/29/2004	ND<2.5	ND<2.5	ND<2.5	63	ND<5.0	ND<2.5	--	ND<250
1/12/2005	ND<2.5	ND<10	ND<2.5	1300	ND<5.0	ND<2.5	--	ND<250
6/20/2005	ND<0.50	ND<0.50	ND<0.50	580	ND<0.50	ND<0.50	--	ND<1000
9/23/2005	ND<0.50	ND<0.50	ND<0.50	92	ND<0.50	ND<0.50	--	ND<1000

FIGURES



SCALE 1:24,000



VICINITY MAP

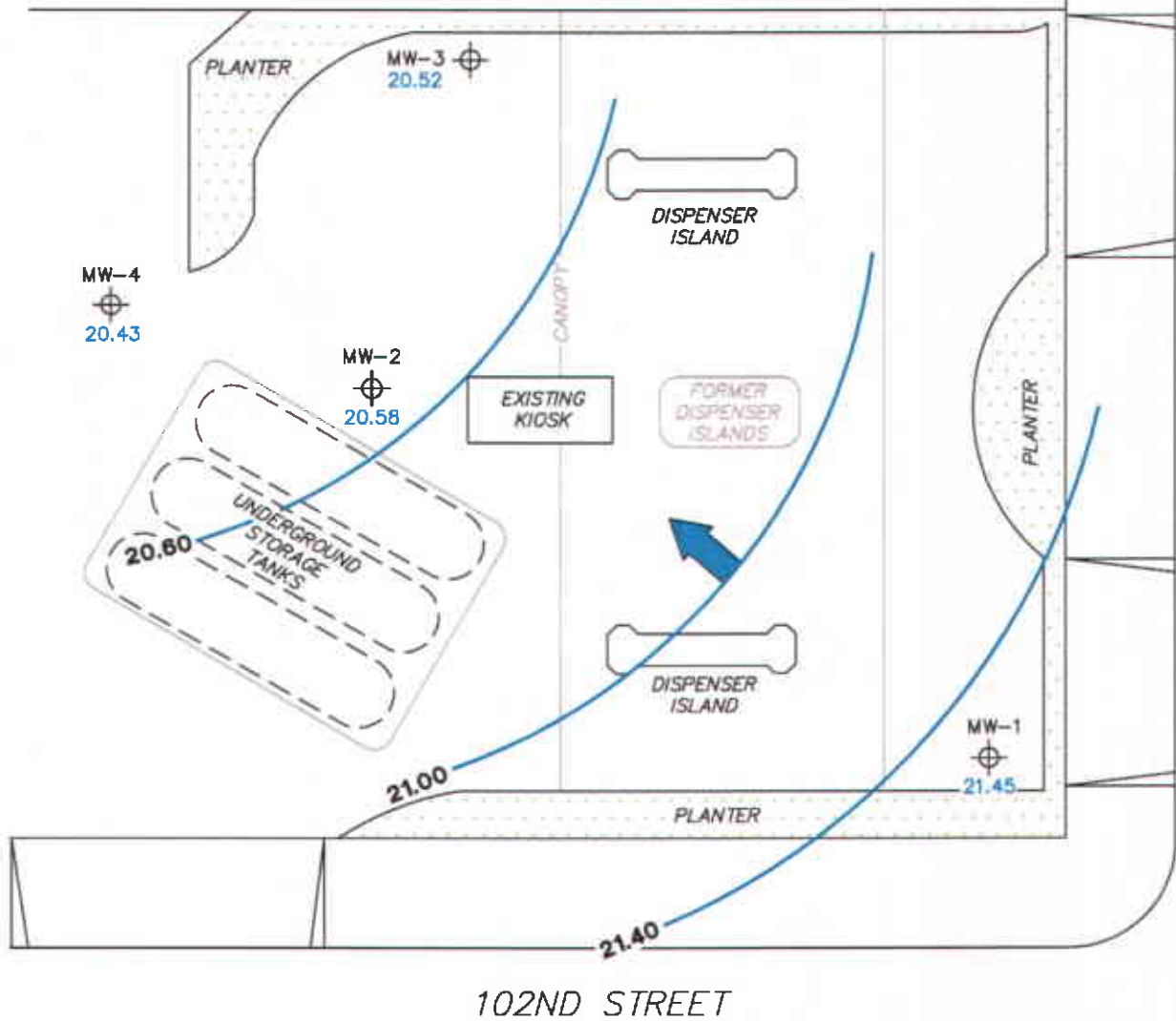
76 Station 7124
 10151 International Boulevard
 Oakland, California

FIGURE 1

SOURCE:

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




TRC



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)
- 21.40  Groundwater Elevation Contour
-  General Direction of Groundwater Flow

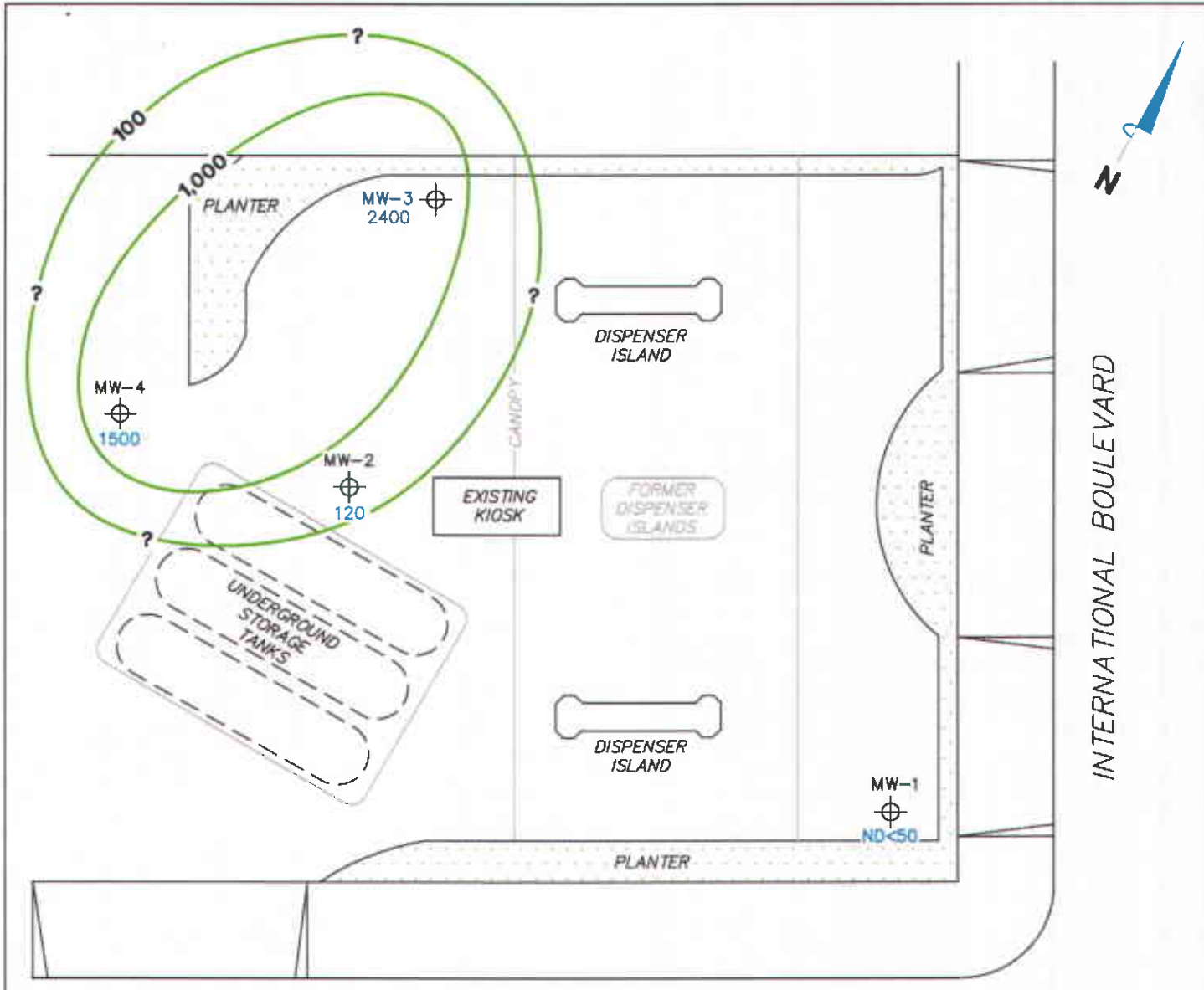
**GROUNDWATER ELEVATION
CONTOUR MAP
September 23, 2005**

76 Station 7124
10151 International Boulevard
Oakland, California



FIGURE 2

PS=1:1 7124-003



102ND STREET

INTERNATIONAL BOULEVARD

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. 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)

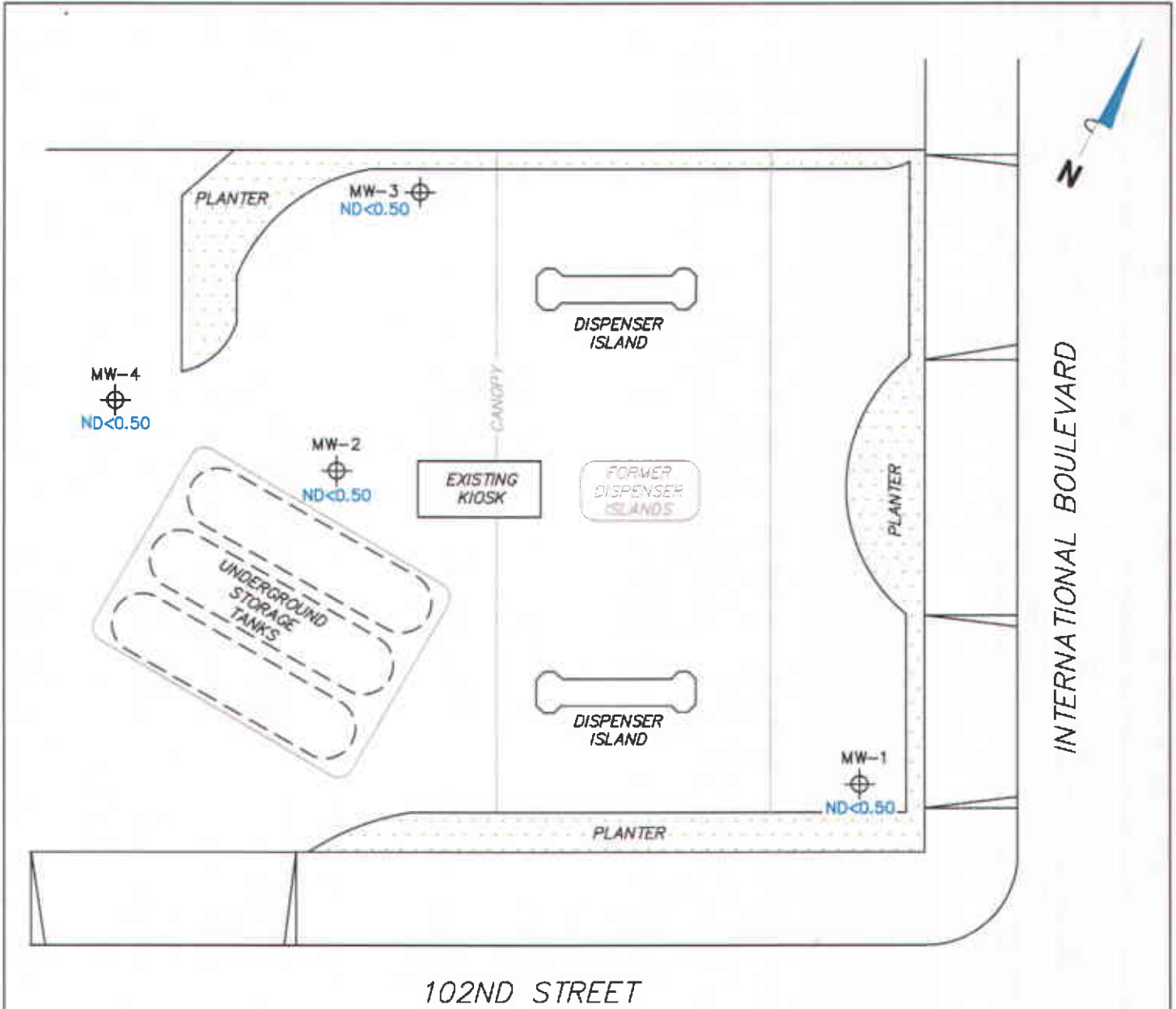
DISSOLVED-PHASE TPPH CONCENTRATION MAP
September 23, 2005

76 Station 7124
10151 International Boulevard
Oakland, California



FIGURE 3

PS=1:1 7124-003



102ND STREET

INTERNATIONAL BOULEVARD



NOTES:

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

LEGEND

MW-4  Monitoring Well with Dissolved-Phase Benzene Concentration ($\mu\text{g/l}$)

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
September 23, 2005

76 Station 7124
10151 International Boulevard
Oakland, California

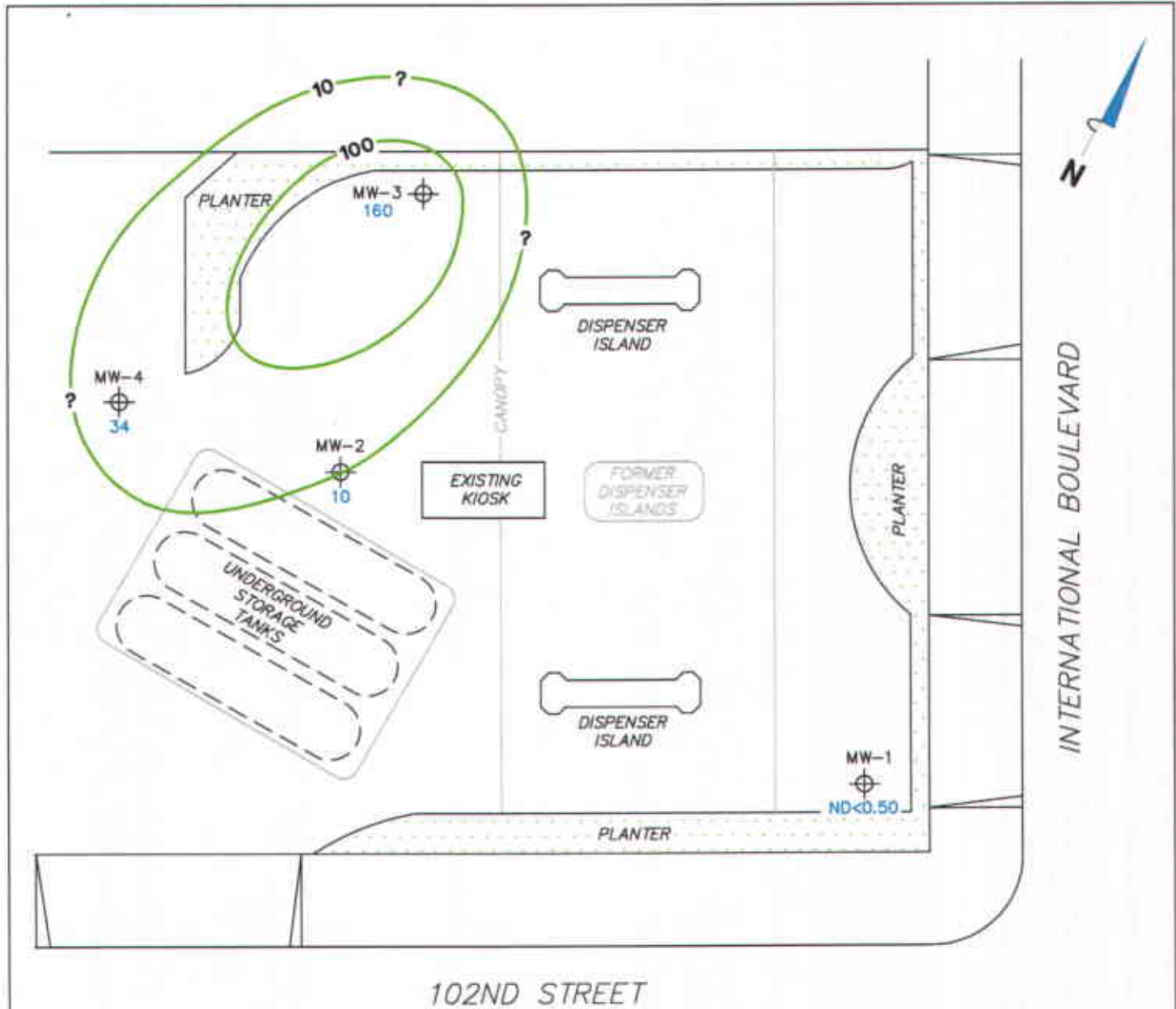


SCALE (FEET)



FIGURE 4


PS=1:1 7124-003




NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. $\mu\text{g/l}$ = 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 ($\mu\text{g/l}$)

 Dissolved-Phase MTBE Contour ($\mu\text{g/l}$)

**DISSOLVED-PHASE MTBE
CONCENTRATION MAP
September 23, 2005**

76 Station 7124
10151 International Boulevard
Oakland, California

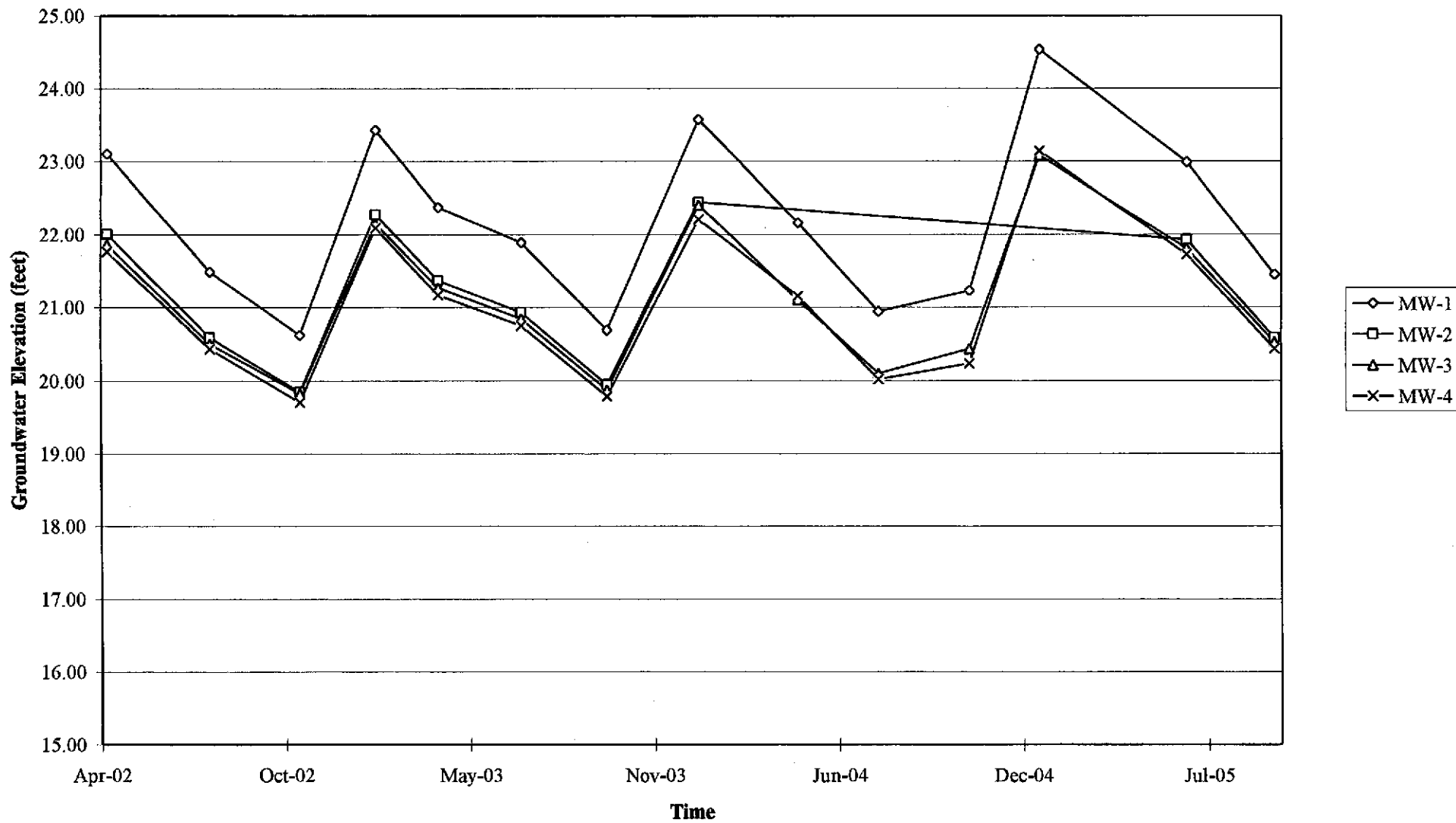


FIGURE 5

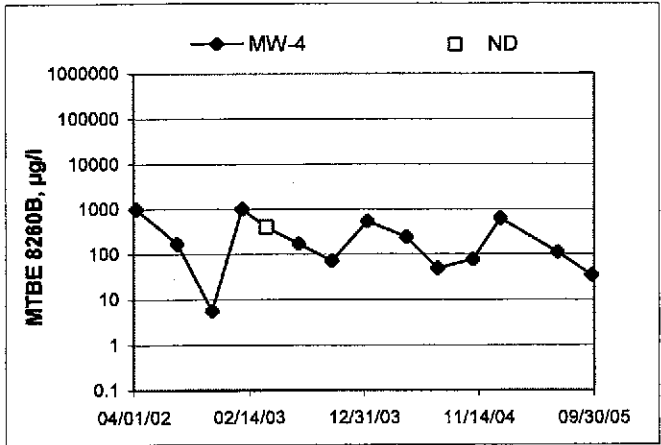
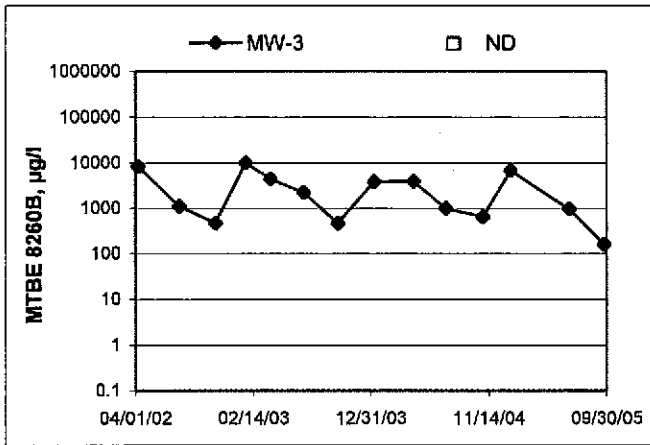
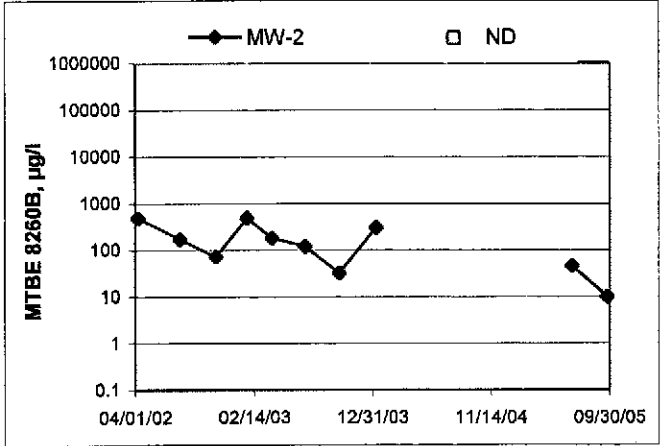
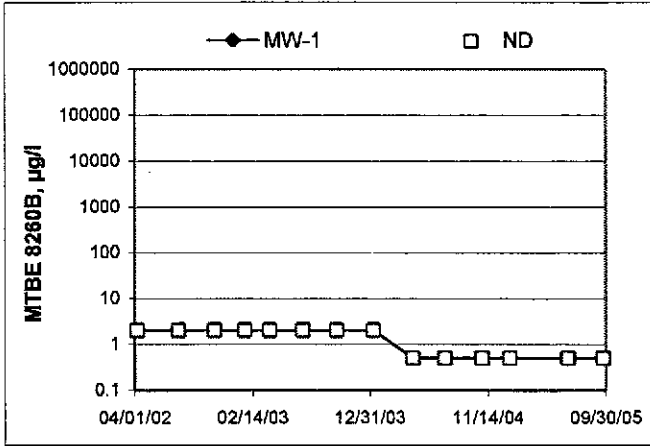
PS=1:1 7124-003

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 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: Pick R.

Site: 7124

Project No.: 41030001

Date: 09/23/05

Well No.: MW-1

Purge Method: DIA

Depth to Water (feet): 15.92

Depth to Product (feet): 0

Total Depth (feet): 24.75

LPH & Water Recovered (gallons): 0

Water Column (feet): 8.83

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 17.69

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.
0725			6	510	18.2	7.01		
			12	510	18.9	7.00		
	0731		18	511	19.0	7.02		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
17.48		18			0734			
Comments:								

Well No.: MW-2

Purge Method: DIA

Depth to Water (feet): 17.29

Depth to Product (feet): 0

Total Depth (feet): 25.19

LPH & Water Recovered (gallons): 0

Water Column (feet): 7.90

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 18.87

1 Well Volume (gallons): 5

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F. °C)	pH	Turbidity	D.O.
0744			5	561	19.1	7.10		
			10	564	19.5	7.12		
	0749		15	565	19.5	7.13		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
17.74		15			0751			
Comments:								

GROUNDWATER SAMPLING FIELD NOTES

Technician: Rick R.

Site: 7124

Project No.: 41050001

Date: 09/23/05

Well No.: MW-4
 Depth to Water (feet): 17.93
 Total Depth (feet): 24.90
 Water Column (feet): 6.97
 80% Recharge Depth (feet): 19.34

Purge Method: DIA
 Depth to Product (feet): 0
 LPH & Water Recovered (gallons): 0
 Casing Diameter (Inches): 4"
 1 Well Volume (gallons): 5

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F/C)	pH	Turbidity	D.O.
0800			5	582	19.1	7.16		
			10	590	19.1	7.16		
	0805		15	588	19.2	7.16		
Static at Time Sampled			Total Gallons Purged		Time Sampled			
18.57			15		0807			
Comments:								

Well No.: MW-3
 Depth to Water (feet): 17.20
 Total Depth (feet): 25.13
 Water Column (feet): 7.93
 80% Recharge Depth (feet): 18.79

Purge Method: DIA
 Depth to Product (feet): 0
 LPH & Water Recovered (gallons): 0
 Casing Diameter (Inches): 4"
 1 Well Volume (gallons): 5

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F/C)	pH	Turbidity	D.O.
0819			5	543	18.6	7.07		
			10	481	18.8	7.00		
	0823		15	552	18.9	7.10		
Static at Time Sampled			Total Gallons Purged		Time Sampled			
17.36			15		0828			
Comments:								



Laboratories, Inc.

Date of Report: 10/03/2005

Anju Farfan

TRC Alton Geoscience

21 Technology Drive
Irvine, CA 92618-2302

RE: 7124

BC Lab Number: 0509487

Enclosed are the results of analyses for samples received by the laboratory on 09/23/05 22:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Molly Meyers for

Contact Person: Vanessa Surratt

Client Service Rep

[Signature]

Authorized Signature



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

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

Reported: 10/03/05 16:28

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information		
0509487-01	COC Number: --- Project Number: 7124 Sampling Location: MW-1 Sampling Point: MW-1 Sampled By: Rick R. of TRCI	Receive Date: 09/23/05 22:45 Sampling Date: 09/23/05 07:34 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW): Global ID: 1000 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0509487-02	COC Number: --- Project Number: 7124 Sampling Location: MW-2 Sampling Point: MW-2 Sampled By: Rick R. of TRCI	Receive Date: 09/23/05 22:45 Sampling Date: 09/23/05 07:51 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW): Global ID: 1000 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0509487-03	COC Number: --- Project Number: 7124 Sampling Location: MW-4 Sampling Point: MW-4 Sampled By: Rick R. of TRCI	Receive Date: 09/23/05 22:45 Sampling Date: 09/23/05 08:07 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW): Global ID: 1000 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0509487-04	COC Number: --- Project Number: 7124 Sampling Location: MW-3 Sampling Point: MW-3 Sampled By: Rick R. of TRCI	Receive Date: 09/23/05 22:45 Sampling Date: 09/23/05 08:28 Sample Depth: --- Sample Matrix: Water	Delivery Work Order (LabW): 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: 10/03/05 16:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0509487-01 **Client Sample Name:** 7124, MW-1, MW-1, 9/23/2005 7:34:00AM, Rick R.

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	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
Methyl t-butyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	0.15	
Toluene	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
Ethanol	ND	ug/L	1000		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108	ND	
1,2-Dichloroethane-d4 (Surrogate)	108	%	76 - 114 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108		
Toluene-d8 (Surrogate)	99.1	%	88 - 110 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108		
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 01:42	MGC	MS-V5	1	BOI1108		



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

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

Reported: 10/03/05 16:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0509487-02 **Client Sample Name:** 7124, MW-2, MW-2, 9/23/2005 7:51:00AM, Rick R.

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	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
Methyl t-butyl ether	10	ug/L	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	0.15	
Toluene	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
Ethanol	ND	ug/L	1000		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
Total Purgeable Petroleum Hydrocarbons	120	ug/L	50		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108	ND	
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108		
Toluene-d8 (Surrogate)	95.2	%	88 - 110 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108		
4-Bromofluorobenzene (Surrogate)	106	%	86 - 115 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 12:52	MGC	MS-V5	1	BOI1108		



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

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

Reported: 10/03/05 16:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0509487-03 Client Sample Name: 7124, MW-4, MW-4, 9/23/2005 8:07:00AM, Rick R.

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	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
Methyl t-butyl ether	34	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	0.15	
Toluene	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
t-Butyl alcohol	92	ug/L	10		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
Ethanol	ND	ug/L	1000		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
Total Purgeable Petroleum Hydrocarbons	1500	ug/L	50		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108	ND	
1,2-Dichloroethane-d4 (Surrogate)	100	%	76 - 114 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108		
4-Bromofluorobenzene (Surrogate)	95.2	%	86 - 115 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 13:25	MGC	MS-V5	1	BOI1108		



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

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

Reported: 10/03/05 16:28

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0509487-04		Client Sample Name: 7124, MW-3, MW-3, 9/23/2005 8:28:00AM, Rick R.											
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	0.50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
Methyl t-butyl ether	160	ug/L	10		EPA-8260	09/28/05	09/29/05 20:41	MGC	MS-V5	20	BOI1108	3.0	A01
Toluene	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
Ethanol	ND	ug/L	1000		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
Total Purgeable Petroleum Hydrocarbons	2400	ug/L	50		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108	ND	
1,2-Dichloroethane-d4 (Surrogate)	104	%	76 - 114 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108		
1,2-Dichloroethane-d4 (Surrogate)	105	%	76 - 114 (LCL - UCL)		EPA-8260	09/28/05	09/29/05 20:41	MGC	MS-V5	20	BOI1108		
Toluene-d8 (Surrogate)	104	%	88 - 110 (LCL - UCL)		EPA-8260	09/28/05	09/29/05 20:41	MGC	MS-V5	20	BOI1108		
Toluene-d8 (Surrogate)	104	%	88 - 110 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108		
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)		EPA-8260	09/28/05	09/30/05 13:58	MGC	MS-V5	1	BOI1108		
4-Bromofluorobenzene (Surrogate)	106	%	86 - 115 (LCL - UCL)		EPA-8260	09/28/05	09/29/05 20:41	MGC	MS-V5	20	BOI1108		



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

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

Reported: 10/03/05 16:28

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	BOI1108	BOI1108-MS1	Matrix Spike	ND	26.320	25.000	ug/L		105		70 - 130
		BOI1108-MSD1	Matrix Spike Duplicate	ND	26.210	25.000	ug/L	0.00	105	20	70 - 130
Toluene	BOI1108	BOI1108-MS1	Matrix Spike	ND	26.680	25.000	ug/L		107		70 - 130
		BOI1108-MSD1	Matrix Spike Duplicate	ND	26.510	25.000	ug/L	0.939	106	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BOI1108	BOI1108-MS1	Matrix Spike	ND	10.080	10.000	ug/L		101		76 - 114
		BOI1108-MSD1	Matrix Spike Duplicate	ND	10.150	10.000	ug/L		102		76 - 114
Toluene-d8 (Surrogate)	BOI1108	BOI1108-MS1	Matrix Spike	ND	10.100	10.000	ug/L		101		88 - 110
		BOI1108-MSD1	Matrix Spike Duplicate	ND	10.230	10.000	ug/L		102		88 - 110
4-Bromofluorobenzene (Surrogate)	BOI1108	BOI1108-MS1	Matrix Spike	ND	10.270	10.000	ug/L		103		86 - 115
		BOI1108-MSD1	Matrix Spike Duplicate	ND	10.580	10.000	ug/L		106		86 - 115



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

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

Reported: 10/03/05 16:28

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	RPD	Control Limits		Lab Quals
										Percent Recovery	RPD	
Benzene	BOI1108	BOI1108-BS1	LCS	25.860	25.000	0.50	ug/L	103		70 - 130		
Toluene	BOI1108	BOI1108-BS1	LCS	25.630	25.000	0.50	ug/L	103		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BOI1108	BOI1108-BS1	LCS	10.400	10.000		ug/L	104		76 - 114		
Toluene-d8 (Surrogate)	BOI1108	BOI1108-BS1	LCS	10.190	10.000		ug/L	102		88 - 110		
4-Bromofluorobenzene (Surrogate)	BOI1108	BOI1108-BS1	LCS	10.740	10.000		ug/L	107		86 - 115		



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

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

Reported: 10/03/05 16:28

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	BOI1108	BOI1108-BLK1	ND	ug/L	0.50	0.12	
1,2-Dibromoethane	BOI1108	BOI1108-BLK1	ND	ug/L	0.50	0.11	
1,2-Dichloroethane	BOI1108	BOI1108-BLK1	ND	ug/L	0.50	0.25	
Ethylbenzene	BOI1108	BOI1108-BLK1	ND	ug/L	0.50	0.13	
Methyl t-butyl ether	BOI1108	BOI1108-BLK1	0.15000	ug/L	0.50	0.15	M03
Toluene	BOI1108	BOI1108-BLK1	ND	ug/L	0.50	0.15	
Total Xylenes	BOI1108	BOI1108-BLK1	ND	ug/L	1.0	0.40	
t-Amyl Methyl ether	BOI1108	BOI1108-BLK1	ND	ug/L	0.50	0.31	
t-Butyl alcohol	BOI1108	BOI1108-BLK1	ND	ug/L	10	10	
Diisopropyl ether	BOI1108	BOI1108-BLK1	ND	ug/L	0.50	0.25	
Ethanol	BOI1108	BOI1108-BLK1	ND	ug/L	1000	110	
Ethyl t-butyl ether	BOI1108	BOI1108-BLK1	ND	ug/L	0.50	0.27	
Total Purgeable Petroleum Hydrocarbons	BOI1108	BOI1108-BLK1	ND	ug/L	50	23	
1,2-Dichloroethane-d4 (Surrogate)	BOI1108	BOI1108-BLK1	111	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BOI1108	BOI1108-BLK1	101	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BOI1108	BOI1108-BLK1	99.0	%	86 - 115 (LCL - UCL)		



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

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

Reported: 10/03/05 16:28

Notes and Definitions

- M03 Analyte detected in the Method Blank at a level between the PQL and the MDL.
- J Estimated value
- 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 #: 05-9487

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 B/W
Temperature: 2.6 °C
Thermometer ID: 48

Emissivity 97
Container VOQS

Date/Time 9/23 2245
Analyst Init ARM

SAMPLE CONTAINERS	SAMPLE NUMBERS									
	1	2	3	4	5	6	7	8	9	10
QT GENERAL MINERAL/ GENERAL PHYSICAL										
PT PE UNPRESERVED										
QT INORGANIC CHEMICAL METALS										
PT INORGANIC CHEMICAL METALS										
PT CYANIDE										
PT NITROGEN FORMS										
PT TOTAL SULFIDE										
2oz. NITRATE / NITRITE										
100ml TOTAL ORGANIC CARBON										
QT TOX										
PT CHEMICAL OXYGEN DEMAND										
PTA PHENOLICS										
40ml VOA VIAL TRAVEL BLANK										
40ml VOA VIAL	A 3	A 3	A 3	A 3						
QT EPA 413.1, 413.2, 418.1										
PT ODOR										
RADIOLOGICAL										
BACTERIOLOGICAL										
40 ml VOA VIAL- 504										
QT EPA 508/608/8080										
QT EPA 515.1/8150										
QT EPA 525										
QT EPA 525 TRAVEL BLANK										
100ml EPA 547										
100ml EPA 531.1										
QT EPA 548										
QT EPA 549										
QT EPA 632										
QT EPA 8015M										
QT OAOQ										
QT AMBER										
8 OZ. JAR										
32 OZ. JAR										
SOIL SLEEVE										
PCB VIAL										
PLASTIC BAG										
FERROUS IRON										
ENCORE										

Comments: Two jars on dash had the wrong description

Sample Numbering Completed By: ppw

Date/Time: 9/24/00

BC LABORATORIES, INC.

4100 Atlas Court □ Bakersfield, CA 93303
(661) 327-4911 □ FAX (661) 327-1918

CHAIN OF CUSTODY

#05-9487

Analysis Requested

Circle one: Phillips 66 / Unocal	Consultant Firm: TRC	MATRIX (GV)	BTEX/MTEB by 8021B, Gas by 8015	Turnaround Time Requested
Address: 10151 International Blvd.	1 Technology Drive Irvine, CA 92618-2302 Attn: Anju Farfan	Ground-water (S)	TPH GAS by 8015M	
City: OAKLAND	4-digit site#: 7124	Soil (WW)	TPH DIESEL by 8015	
State: CA Zip:	Workorder #: 1634TRC501	Waste-water (SL)	8250 full list w/ MTEB & oxygenates	
Phillips 66 /Unocal Mgr:	Project #: 41050000/FA20	Sludge	BTEX/MTEB/ETHANOL BY 8260B	
	Sampler Name: Rick R.		TPPH by 8250B	

Lab #	Sample Description	Field Point Name	Date & Time Sampled		BTEX/MTEB by 8021B, Gas by 8015	TPH GAS by 8015M	TPH DIESEL by 8015	8250 full list w/ MTEB & oxygenates	BTEX/MTEB/ETHANOL BY 8260B	ETHANOL by 8260B	TPPH by 8250B	80928 for sludge & oxys by 8260B
-1	MW-1		09/23/05 0734	GW					X	X	X	
-2	MW-2		↓ 0751	↓					↓	↓	↓	
-3	MW-4		↓ 0807	↓					↓	↓	↓	
-4	MW-3		↓ 0828	↓					↓	↓	↓	

CHK BY DISTRIBUTION
 ANALYSIS
 SUB-OUT

Comments CLOSER ID 1000	Relinquished by (Signature) <i>[Signature]</i>	Received by REFRIGERATED	Date & Time 09/23/05 - 1330
	Relinquished by (Signature) <i>[Signature]</i>	Received by Rick Widley	Date & Time 09-23-05 1451
	Relinquished by (Signature) Rick Widley	Received by Cleo J. McDeffie	Date & Time 9-23-05 (910)

GC = ANALYSIS CB = CONTAINER (P) = PLEISTOCENE
 Northern CA 11/22/05 9246 KEN Cleo J. McDeffie 9-23-05 0915

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.