


76 Broadway
Sacramento, California 95818

RECEIVED

2:36 pm, Feb 21, 2008

Alameda County
Environmental Health

February 20, 2008

Ms. Donna Drogos
Alameda County Health Agency
1131 Harbor Bay Parkway
Alameda, California 94502

**Re: Quarterly Summary Report – Forth Quarter 2007
And Sensitive Receptor Survey**

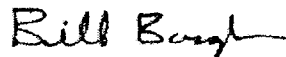
76 Service Station No. 6129
3420 35th Avenue
Oakland, California

Dear Ms. Drogos:

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 me at (916) 558-7612.

Sincerely,



Bill Borgh
Site Manager – Risk Management and Remediation

Attachment

February 20, 2008

Ms. Donna Drogos
Alameda County Health Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502

**Re: Quarterly Summary Report – Fourth Quarter 2007
And Sensitive Receptor Survey**
Delta Project Number: C1Q-6129-604

Dear Ms. Drogos:



On behalf of ConocoPhillips Company (COP), Delta Consultants (Delta) is submitting the Quarterly Summary Report – Fourth Quarter 2007 and forwarding a copy of TRC's *Quarterly Monitoring Report, October through December 2007*, dated January 10, 2008, for the following location:

Service Station

76 Service Station No. 6129

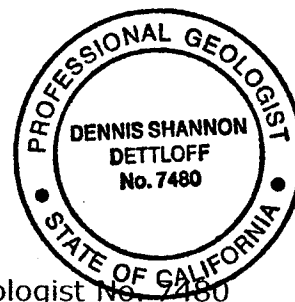
Location

3420 35th Avenue
Oakland, California

Sincerely,
DELTA CONSULTANTS

A handwritten signature in black ink that reads "Dennis S. Dettloff". The signature is written in a cursive style with a large, prominent 'D' at the beginning.

Dennis S. Dettloff, P.G.
Senior Project Manager
California Registered Professional Geologist No. 7480



cc: Mr. William Borgh, ConocoPhillips (electronic copy)

QUARTERLY SUMMARY REPORT
Sensitive Receptor Survey
Fourth Quarter 2007
76 Service Station No. 6129
3420 35th Avenue
Oakland, California

SITE DESCRIPTION

The site is currently an operating 76 Service Station that dispenses gasoline stored in two 12,000-gallon underground storage tanks (USTs) from two dispenser islands. An automotive repair facility is present at the site which contains three service bays. Additionally, there is one used-oil UST, three hydraulic lifts, and three groundwater monitoring wells (MW-1 through MW-3) present at the site. There was previously one used-oil UST, one clarifier beneath the central hydraulic lift, and two floor drains, all of which have been removed.

PREVIOUS ASSESSMENT

According to Kaprealian Engineering, Inc. (KEI), in 1989 two 10,000-gallon gasoline USTs and one 550-gallon waste oil UST were removed from the site. Analytical data from soil samples collected beneath the former gasoline USTs, used-oil UST, and product piping indicated that low concentrations of petroleum hydrocarbons were present in each of the sampling areas. Three groundwater monitoring wells (MW-1 through MW-3) were installed in 1989 to depths of approximately 44 feet below ground surface (bgs).

In 1990, four soil borings (EB1 through EB4) were advanced at the site in the vicinity of MW-3 in an attempt to define the petroleum hydrocarbon impact to soil. Based on the analytical data from the soil sampling, approximately 230 cubic yards of soil were excavated from an area between the dispenser islands and around monitoring well MW-3 in 1991. The excavation was completed as to not destroy monitoring well MW-3. Analytical data from confirmation soil samples indicated that the majority of the impacted soil had been removed.

On November 12 and 13, 2003, as part of a due diligence investigation, four soil borings (SB-1 and SB-3 through SB-5) were advanced to total depths of approximately 31.5 to 36.5 feet bgs. Proposed boring SB-2 was unable to be advanced due to the presence of subsurface utilities and/or structures. Groundwater was encountered in the borings at a depth of approximately 35 feet bgs. Methyl tertiary butyl ether (MTBE) was reported at concentrations ranging from 0.37 to 0.41 milligrams per kilogram (mg/kg) in the soil samples collected at depths ranging from 26 and 31 feet bgs. All other constituents were below the laboratory's indicated reporting limits for the soil samples analyzed. The three existing groundwater monitoring wells were sampled on November 13, 2003. Analytical data indicated that MTBE was present at concentrations ranging from 240 and 3,700 micrograms per liter ($\mu\text{g/L}$), with the most elevated concentrations found in monitoring wells MW-2 (2,100 $\mu\text{g/L}$) and MW-3 (3,700 $\mu\text{g/L}$).

On September 13, 2006, Delta observed the advancement of six boreholes by a licensed contractor using CPT technology. The CPT borings provided accurate continuous records of the subsurface lithology and stratigraphy and measured depth to

first groundwater. Groundwater and soil samples were not collected from the CPT borings.

On November 7 and 8, 2006, Delta observed the advancement of five soil borings (B-2, B-7, B-8, B-9, and B-14) by a licensed contractor using hollow stem auger technology. Four of these soil borings were advanced adjacent to the previously advanced CPT borings. On December 27, 2006, four soil borings (B-10, B-12, B-15, and B-16) were advanced using hollow stem auger technology. Soil samples were collected every five feet for lithologic descriptions, field hydrocarbon screening, and laboratory analysis. A description of this work is presented in the *Soil Boring Site Assessment Report* dated February 19, 2007.

SENSITIVE RECEPTORS

2004 - A 1,000-foot radius well search was completed by the request of the Alameda County Public Works Agency (ACPWA). The search indicated that a six-inch diameter irrigation well was located at 3397 Arkansas Street, approximately 800 feet west-northwest of the site. The well was installed in August 1977 to a total depth of 62 feet bgs with depth to water reported at 18 feet bgs. Alameda County Health Care Services update of July 30, 1984 reported the well owner as Arthur Smith.

2006 - A survey entailing a visit to the DWR office in Sacramento was conducted to examine well log records and to identify domestic wells within the survey area. The DWR survey indicated three potential receptors were located within one mile of the site; two irrigation wells located 0.5 mile and 0.8 mile north (up-gradient) of the site and one domestic/irrigation well located 0.8 mile northeast (up-gradient) of the site. Two additional potential receptors were identified although the specific addresses could not be located. Based on groundwater gradient information and distance to the receptors from the site, identified receptors do not appear to be at risk due to gasoline constituents in groundwater at the site.

The 2006 sensitive receptor survey data are presented in Attachment A.

MONITORING AND SAMPLING

Groundwater monitoring and sampling activities were conducted at the site from January 1990 through May 1991. Sampling activities were re-initiated during the third quarter 2004. The monitoring well network is currently sampled on a quarterly basis.

During the most recent groundwater monitoring event, conducted on December 12, 2007, the depth to groundwater ranged from 29.30 feet (MW-3) to 30.30 feet (MW-1) below top of casing (TOC). The groundwater flow direction was interpreted to be to the southwest at a gradient of 0.01 foot per foot (ft/ft) as compared to the previous quarterly sampling event when the groundwater flow direction was interpreted to be to the southwest at a gradient of 0.01 ft/ft. Historic groundwater flow directions presented as a rose diagram included as Attachment B.

Contaminants of Concern:

- **TPPH:** Total purgeable petroleum hydrocarbons (TPPH) was reported above the laboratory's indicated reporting limits in monitoring wells MW-2 and MW-3 at 400 µg/L and 270 µg/L, respectively during the fourth quarter 2007 sampling event. However, the notes in the analytical report indicate that the TPPH in monitoring wells MW-2 and MW-3 does not exhibit a "gasoline" pattern and that the TPPH is entirely due to MTBE.
- **Benzene:** Benzene was below the laboratory's indicated reporting limit in all three of the monitoring in wells purged and sampled during the fourth quarter 2007 sampling event.
- **MTBE:** MTBE was reported above the laboratory's indicated reporting limits in monitoring wells MW-1, MW-2, and MW-3 at 0.65 µg/L, 930 µg/L, and 570 µg/L, respectively during the fourth quarter 2007 sampling event.

Tertiary butyl alcohol (TBA) was above the laboratory's indicated reporting limits in monitoring wells MW-2 and MW-3 at 48 µg/L, and 26 µg/L, respectively during the fourth quarter 2007 sampling event. Di-isopropyl ether (DIPE) was above the laboratory's indicated reporting limit in monitoring well MW-2 at 24 µg/L during the fourth quarter 2007 sampling event. With the exception of the constituents listed above, all other constituents tested were below the laboratory's indicated reporting limits during the fourth quarter 2007 sampling event.

REMEDIATION STATUS

Remediation has not been required by the lead regulatory agency for this site.

CHARACTERIZATION STATUS

Recent site assessment data has been submitted to the agency for review. Groundwater monitoring is ongoing.

RECENT CORRESPONDENCE

No recent correspondence was documented during this reporting period.

WASTE DISPOSAL SUMMARY

In 1991, based on the analytical results of soil samples from borings EB1 through EB4, approximately 230 cubic yards of soil were excavated from the area between the dispensers and the pump islands in the area around MW-3.

Thirty three (33) drums of non-hazardous soil and water produced during recent field activities were transported off-site for disposal on 10/19/06 and 12/29/06.

THIS QUARTER ACTIVITIES (Fourth Quarter 2007)

1. TRC conducted the quarterly monitoring and sampling event at the site.

NEXT QUARTER ACTIVITIES (First Quarter 2008)

1. TRC will conduct the quarterly groundwater monitoring and sampling event at the site.

CONSULTANT: Delta Consultants

Attachment A – Sensitive Receptor Survey Data

Attachment B – Historic Groundwater Flow Directions

Attachment A

Sensitive Receptor Survey Data

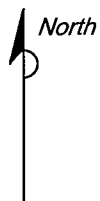
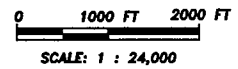


FIGURE 1
SITE LOCATOR SENSITIVE RECEPTOR
MAP

76 STATION NO. 6129
 3420 35th AVENUE
 OAKLAND, CA

PROJECT NO. C106-129	DRAWN BY JH 12/12/06	
FILE NO.	PREPARED BY JH	
REVISION NO.	REVIEWED BY	

SOURCE: USGS 7.5 MINUTE TOPOGRAPHIC MAP, OAKLAND EAST QUADRANGLE, 1983

Table 1
 One-Mile Agency Receptor Survey
 ConocoPhillips Station No.6129
 3420 35th Avenue, Oakland, California

	DWR¹ Well No.	Address	City	State	Zip	Owner	Well Type	Distance from Site (miles)	Direction Relative to Site
1-	1S/3W- 32H1	Scenic Ave. at Laguna Ave.	Oakland	CA		PG&E	Cathodic protection	0.7	NW
2-	1S/3W-33L1	3062 Arizona St.	Oakland	CA	94602	Steven C. Olsen	Irrigation	0.5	N
3-	1S/3W-33E2	4010 Coolidge Ave.	Oakland	CA		Herman Volz	Irrigation	0.8	N
4-	1S/3W-33D80	Alida St., 35' south of Lincoln Ave	Oakland	CA		PG&E	Cathodic protection	1.0	NW
5-	1S/3W-33R1	Monterey Blvd. west of Dunsmuir Ave	Oakland	CA		PG&E	Cathodic protection	0.8	NE
6-	1S/3W-33G1	4374 Norton Ave	Oakland	CA		Zeber Zel	Domestic/Irrigation	0.8	NE
7-	2S/3W-3E1	Steele St. 160' east of Enos Ave	Oakland	CA		PG&E	Cathodic protection	0.9	SE
² 8-	1S/3W-33F1	2051 W. . . ?	Oakland	CA					
² 9-	2S/3W-3N?	Mills College on 64th Ave	Oakland	CA					

DWR: Department of Water Resources

¹ Well Locations shown on Figure 1.

² Specific address cannot be located on map.

Attachment B

Historic Groundwater Flow Directions

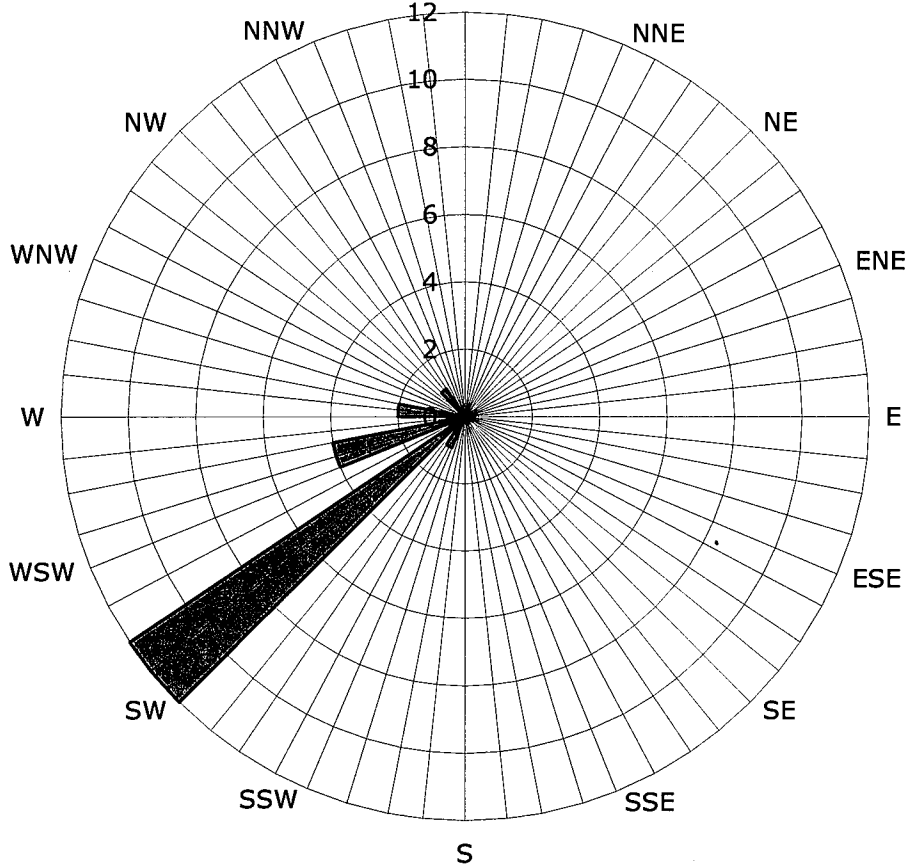
Historic Groundwater Flow Directions

ConocoPhillips Site No. 6129

3420 35th Avenue

Oakland, California

N



Legend
Concentric circles represent
quarterly monitoring events
First Quarter 1990 through
Fourth Quarter 2007
20 data points shown

■ Groundwater Flow Direction



21 Technology Drive
Irvine, CA 92618

949.727.9336 PHONE
949.727.7399 FAX

www.TRCSolutions.com

DATE: January 11, 2008

TO: ConocoPhillips Company
76 Broadway
Sacramento, CA 94563

ATTN: MR. BILL BORGH

SITE: 76 STATION 6129
3420 35TH AVENUE
OAKLAND, CALIFORNIA

RE: QUARTERLY MONITORING REPORT
OCTOBER THROUGH DECEMBER 2007

Dear Mr. Borgh:

Please find enclosed our Quarterly Monitoring Report for 76 Station 6129, located at 3420 35th Avenue, Oakland, California. If you have any questions regarding this report, please call us at (949) 727-9336.

Sincerely,

TRC

A handwritten signature in black ink, appearing to read "Anju Farfan".

Anju Farfan
Groundwater Program Operations Manager

CC: Mr. Dennis Dettloff, Delta Consultants (1 copy)

Enclosures:
20-0400/6129R017.QMS

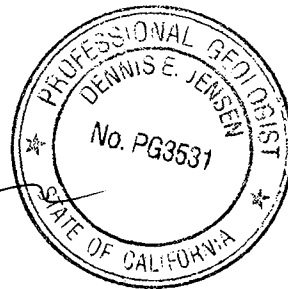
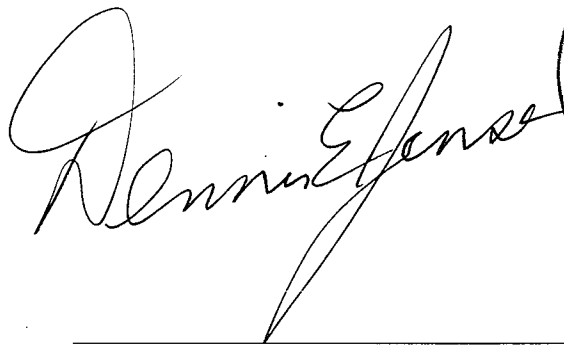
**QUARTERLY MONITORING REPORT
OCTOBER THROUGH DECEMBER 2007**

76 STATION 6129
3420 35th Avenue
Oakland, California

Prepared For:

Mr. Bill Borgh
CONOCOPHILLIPS COMPANY
76 Broadway
Sacramento, CA 94563

By:



Senior Project Geologist, Irvine Operations

Date: 1/10/08



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 Benzene Concentrations vs. Time MTBE 8260B Concentrations vs. Time
Field Activities	General Field Procedures Field Monitoring Data Sheet – 12/14/07 Groundwater Sampling Field Notes – 12/14/07
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

Summary of Gauging and Sampling Activities
October 2007 through December 2007
76 Station 6129
3420 35th Ave.
Oakland, CA

Project Coordinator: **Bill Borgh**
Telephone: **916-558-7612**

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

Date(s) of Gauging/Sampling Event: **12/14/07**

Sample Points

Groundwater wells: **3** onsite, **0** offsite Wells gauged: **3** Wells sampled: **3**
Purging method: **Diaphragm pump/bailer**
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: **29.3 feet** Maximum: **30.3 feet**
Average groundwater elevation (relative to available local datum): **71.61 feet**
Average change in groundwater elevation since previous event: **0.27 feet**
Interpreted groundwater gradient and flow direction:
 Current event: **0.01 ft/ft, southwest**
 Previous event: **0.01 ft/ft, southwest (9/22/07)**

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** **2** Maximum: **400 µg/l (MW-2)**
Wells with **MTBE 8260B** **3** Maximum: **930 µg/l (MW-2)**

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: $\text{Surface Elevation} - \text{Measured Depth to Water} + (\text{Dp} \times \text{LPH Thickness})$, 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 re-survey.

REFERENCE

TRC began groundwater monitoring and sampling 76 Station 6129 in August 2004.

Contents of Tables 1 and 2
Site: 76 Station 6129

Current Event

Table 1	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
----------------	---------------	-------------------	------------------	-------------------------------	------------------------	------------------	------------------	---------	---------	-------------------	------------------	-----------------	-----------------	----------

Table 1a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME						
-----------------	---------------	-----	--------------------	---------------------------------	------------------	------	------	------	--	--	--	--	--	--

Historic Data

Table 2	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
----------------	---------------	-------------------	------------------	-------------------------------	------------------------	------------------	------------------	---------	---------	-------------------	------------------	-----------------	-----------------	----------

Table 2a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME						
-----------------	---------------	-----	--------------------	---------------------------------	------------------	------	------	------	--	--	--	--	--	--

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
December 14, 2007
76 Station 6129

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
MW-1														
12/14/07	102.24	30.30	0.00	71.94	0.31	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.65	
MW-2														
12/14/07	102.16	29.96	0.00	72.20	0.22	--	400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	930	
MW-3														
12/14/07	100.00	29.30	0.00	70.70	0.27	--	270	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	570	

Table 1 a
ADDITIONAL CURRENT ANALYTICAL RESULTS
76 Station 6129

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)
MW-1							
12/14/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-2							
12/14/07	48	ND<250	ND<0.50	ND<0.50	24	ND<0.50	ND<0.50
MW-3							
12/14/07	26	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
January 1990 Through December 2007
76 Station 6129

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground-water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethylbenzene	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)	
MW-1														
1/5/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
5/11/90	--	--	--	--	--	ND	--	ND	7.1	ND	ND	--	--	
8/9/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/14/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
2/12/91	--	--	--	--	--	ND	--	0.32	ND	ND	ND	--	--	
5/9/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/13/03	--	--	--	--	--	--	180	ND<1.0	ND<1.0	ND<1.0	ND<2.0	--	240	
8/27/04	102.24	30.65	0.00	71.59	--	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
11/23/04	102.24	29.35	0.00	72.89	1.30	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
2/9/05	102.24	26.89	0.00	75.35	2.46	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	9.3	
5/17/05	102.24	26.56	0.00	75.68	0.33	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.9	
7/27/05	102.24	27.33	0.00	74.91	-0.77	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/6/05	102.24	29.59	0.00	72.65	-2.26	--	ND<50	ND<0.50	0.93	ND<0.50	1.8	--	ND<0.50	
2/21/06	102.24	28.27	0.00	73.97	1.32	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.6	
6/8/06	102.24	26.07	0.00	76.17	2.20	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	11	
9/15/06	102.24	28.86	0.00	73.38	-2.79	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.4	
12/14/06	102.24	29.49	0.00	72.75	-0.63	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	3.5	
3/28/07	102.24	27.24	0.00	75.00	2.25	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	0.64	
6/25/07	102.24	28.30	0.00	73.94	-1.06	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<0.50	
9/22/07	102.24	30.61	0.00	71.63	-2.31	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	4.1	
12/14/07	102.24	30.30	0.00	71.94	0.31	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	0.65	
MW-2														
1/5/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
January 1990 Through December 2007
76 Station 6129

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
MW-2 continued														
5/11/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
8/9/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/14/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
2/12/91	--	--	--	--	--	ND	--	ND	0.42	ND	0.51	--	--	
5/9/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/13/03	--	--	--	--	--	--	ND<2000	ND<20	ND<20	ND<20	ND<40	--	2100	
8/27/04	102.16	30.28	0.00	71.88	--	--	950	ND<5.0	ND<5.0	ND<5.0	ND<10	--	1400	
11/23/04	102.16	28.75	0.00	73.41	1.53	--	53	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.2	
2/9/05	102.16	26.08	0.00	76.08	2.67	--	ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	400	
5/17/05	102.16	24.53	0.00	77.63	1.55	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	330	
7/27/05	102.16	27.51	0.00	74.65	-2.98	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	580	
12/6/05	102.16	29.13	0.00	73.03	-1.62	--	340	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	780	
2/21/06	102.16	29.23	0.00	72.93	-0.10	--	190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	340	
6/8/06	102.16	25.76	0.00	76.40	3.47	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	440	
9/15/06	102.16	29.17	0.00	72.99	-3.41	--	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--	570	
12/14/06	102.16	29.11	0.00	73.05	0.06	--	520	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	770	
3/28/07	102.16	26.68	0.00	75.48	2.43	--	290	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	460	
6/25/07	102.16	25.91	0.00	76.25	0.77	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	1.2	
9/22/07	102.16	30.18	0.00	71.98	-4.27	--	400	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	530	
12/14/07	102.16	29.96	0.00	72.20	0.22	--	400	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	930	
MW-3														
1/5/90	--	--	0.00	--	--	ND	--	ND	ND	ND	ND	--	--	
5/11/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
8/9/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
January 1990 Through December 2007
76 Station 6129

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)	
MW-3 continued														
11/14/90	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
2/12/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
5/9/91	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/13/03	--	--	--	--	--	--	2600	ND<20	ND<20	ND<20	ND<40	--	3700	
8/27/04	100.00	29.61	0.00	70.39	--	--	1700	ND<10	ND<10	ND<10	ND<20	--	2600	
11/23/04	100.00	28.48	0.00	71.52	1.13	--	1500	ND<10	ND<10	ND<10	ND<20	--	1800	
2/9/05	100.00	26.45	0.00	73.55	2.03	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2100	
5/17/05	100.00	25.61	0.00	74.39	0.84	--	ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1200	
7/27/05	100.00	27.35	0.00	72.65	-1.74	--	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1400	
12/6/05	100.00	28.78	0.00	71.22	-1.43	--	430	ND<0.50	1.6	ND<0.50	3.6	--	1800	
2/21/06	100.00	28.91	0.00	71.09	-0.13	--	420	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1100	
6/8/06	100.00	25.97	0.00	74.03	2.94	--	ND<1200	ND<12	ND<12	ND<12	ND<25	--	1000	
9/15/06	100.00	28.73	0.00	71.27	-2.76	--	ND<1200	ND<12	ND<12	ND<12	ND<12	--	1200	
12/14/06	100.00	28.62	0.00	71.38	0.11	--	ND<1000	ND<10	ND<10	ND<10	ND<10	--	1300	
3/28/07	100.00	26.69	0.00	73.31	1.93	--	500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	860	
6/25/07	100.00	26.74	0.00	73.26	-0.05	--	270	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	570	
9/22/07	100.00	29.57	0.00	70.43	-2.83	--	500	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	980	
12/14/07	100.00	29.30	0.00	70.70	0.27	--	270	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	570	

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 6129

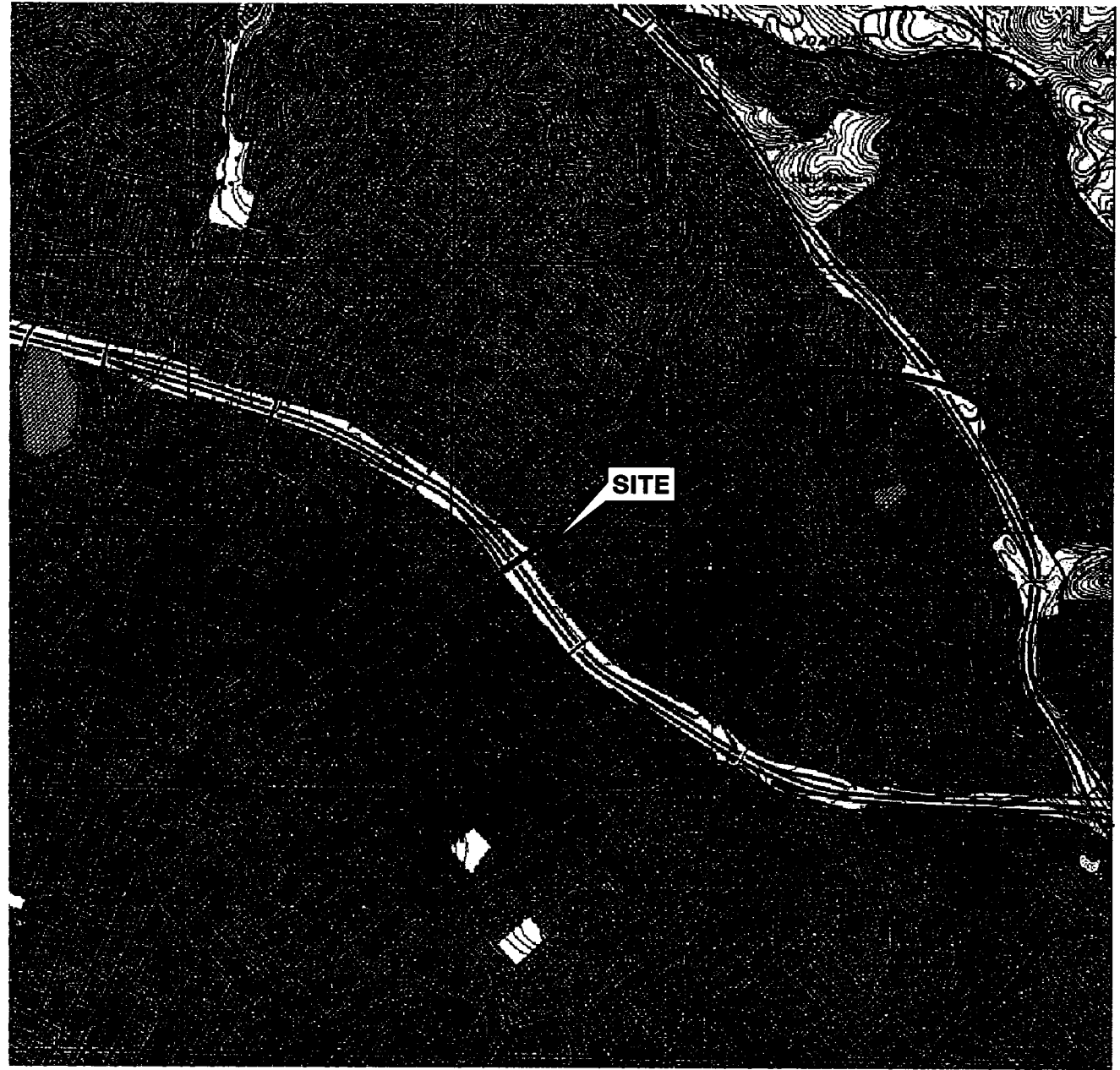
Date Sampled	TBA	Ethanol (8260B)	Ethylene-dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-1							
11/13/03	ND<200	ND<1000	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0
8/27/04	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
11/23/04	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
2/9/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
5/17/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
7/27/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/6/05	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
2/21/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
6/8/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
9/15/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/14/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/28/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
6/25/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
9/22/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/14/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-2							
11/13/03	ND<4000	ND<20000	ND<80	ND<80	ND<80	ND<80	ND<80
8/27/04	ND<50	ND<500	ND<5.0	ND<5.0	24	ND<5.0	ND<5.0
11/23/04	ND<5.0	ND<50	ND<0.50	ND<0.50	18	ND<0.50	ND<0.50
2/9/05	ND<50	ND<500	ND<5.0	ND<5.0	19	ND<5.0	ND<5.0
5/17/05	ND<5.0	ND<50	ND<0.50	ND<0.50	12	ND<0.50	ND<0.50
7/27/05	140	ND<500	ND<5.0	ND<5.0	16	ND<5.0	ND<5.0
12/6/05	61	ND<250	ND<0.50	ND<0.50	15	ND<0.50	ND<0.50
2/21/06	ND<10	ND<250	ND<0.50	ND<0.50	18	ND<0.50	ND<0.50
6/8/06	ND<100	ND<2500	ND<5.0	ND<5.0	14	ND<5.0	ND<5.0
9/15/06	ND<100	ND<2500	ND<5.0	ND<5.0	17	ND<5.0	ND<5.0

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 6129

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)
MW-2 continued							
12/14/06	27	ND<250	ND<0.50	ND<0.50	20	ND<0.50	ND<0.50
3/28/07	260	ND<250	ND<0.50	ND<0.50	23	ND<0.50	ND<0.50
6/25/07	ND<10	ND<250	ND<0.50	ND<0.50	23	ND<0.50	ND<0.50
9/22/07	ND<10	ND<250	ND<0.50	ND<0.50	35	ND<0.50	ND<0.50
12/14/07	48	ND<250	ND<0.50	ND<0.50	24	ND<0.50	ND<0.50
MW-3							
11/13/03	ND<4000	ND<20000	ND<80	ND<80	ND<80	ND<80	ND<80
8/27/04	ND<100	ND<1000	ND<10	ND<10	ND<20	ND<10	ND<10
11/23/04	ND<100	ND<1000	ND<10	ND<10	ND<20	ND<10	ND<10
2/9/05	130	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10
5/17/05	ND<100	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10
7/27/05	360	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10
12/6/05	160	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
2/21/06	88	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.58
6/8/06	ND<250	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12
9/15/06	ND<250	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12
12/14/06	ND<200	ND<5000	ND<10	ND<10	ND<10	ND<10	ND<10
3/28/07	500	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
6/25/07	11	ND<250	ND<0.50	0.65	ND<0.50	ND<0.50	ND<0.50
9/22/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/14/07	26	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

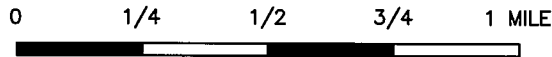
FIGURES

PS-1:1 L:\QMS\VICINITY M A P SD6129.m.dwg Jan 10, 2008 - 2:06pm cvuong



SOURCE:

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



SCALE 1:24,000



PROJECT: 154771




FACILITY:

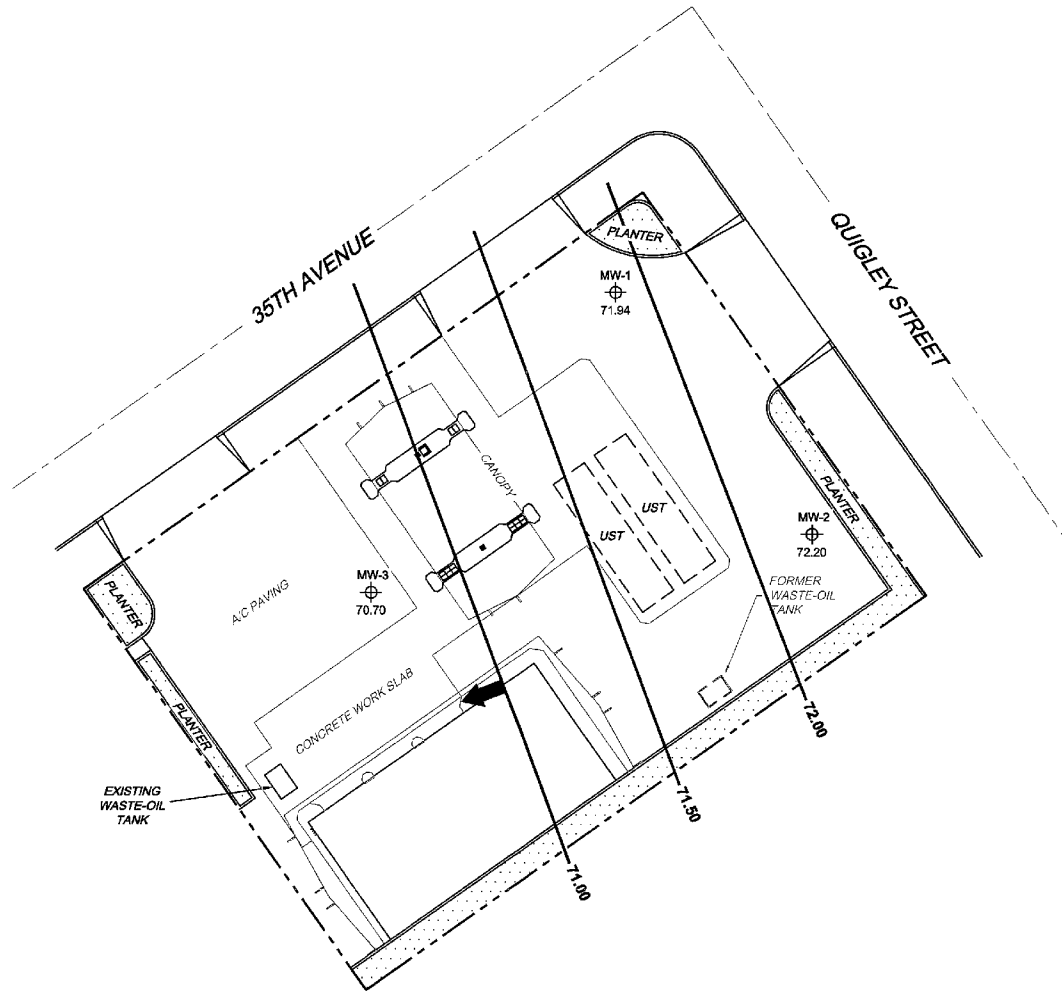
76 STATION 6129
3420 35TH AVENUE
OAKLAND, CALIFORNIA

VICINITY MAP

FIGURE 1

LEGEND

- MW-3  Monitoring Well with Groundwater Elevation (feet)
- 72.00  Groundwater Elevation Contour
-  General Direction of Groundwater Flow



MSF:11 6129-003 L:\09\h\m\c\ms NORTH+SOUTH\p\6129\c\6129_CMS(NEW).dwg Jan 09, 2008 - 4:27pm avang

NOTES:

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





PROJECT: 154771
 FACILITY: 76 STATION 6129
 3420 35TH AVENUE
 OAKLAND, CALIFORNIA

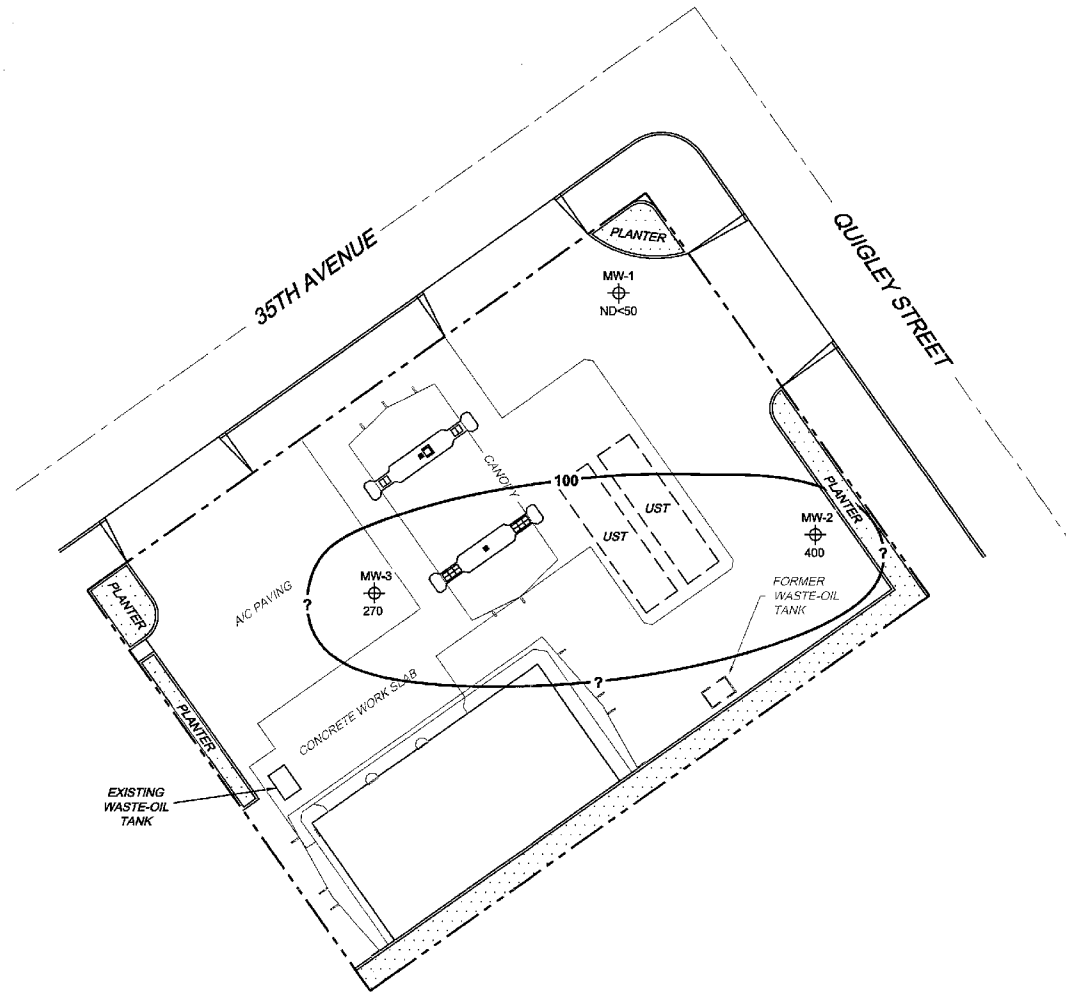
**GROUNDWATER ELEVATION
 CONTOUR MAP**
 December 14, 2007

FIGURE 2

MS-1-1 6159-003 I:\G:\phaser\GIS\NORTH-SOUTH\FHC\6000-0629-00128_GMS(NEW).dwg Jan 09, 2008 - 4:27pm cwanag

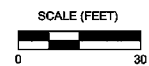
LEGEND

- MW-3  Monitoring Well with Dissolved-Phase TPH-G (GC/MS) Concentration (µg/l)
-  100 Dissolved-Phase TPH-G (GC/MS) Contour (µg/l)



NOTES:

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




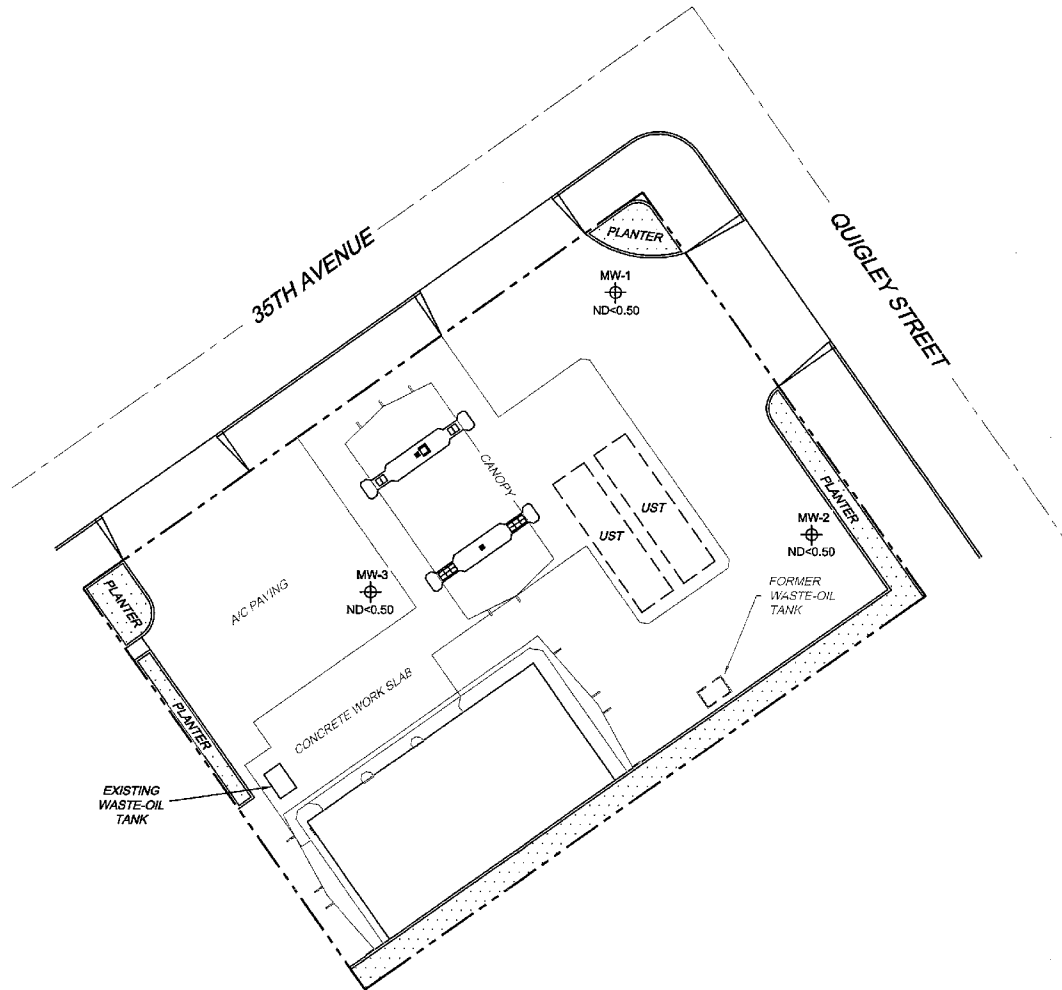
PROJECT: 154771
 FACILITY:
 76 STATION 6129
 3420 35TH AVENUE
 OAKLAND, CALIFORNIA

**DISSOLVED-PHASE TPH-G (GC/MS)
 CONCENTRATION MAP**
 December 14, 2007

FIGURE 3

LEGEND

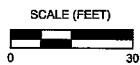
MW-3  Monitoring Well with Dissolved-Phase Benzene Concentration ($\mu\text{g/l}$)



MS-1-1 6129-003 L:\06\hsc\06\MS NORTH-SOUTH\6129-003\06\hsc\06\MS NORTH-SOUTH\6129-003.dwg Jan 09, 2008 4:27pm cswong

NOTES:

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




PROJECT: 154771
FACILITY:
76 STATION 6129
3420 35TH AVENUE
OAKLAND, CALIFORNIA

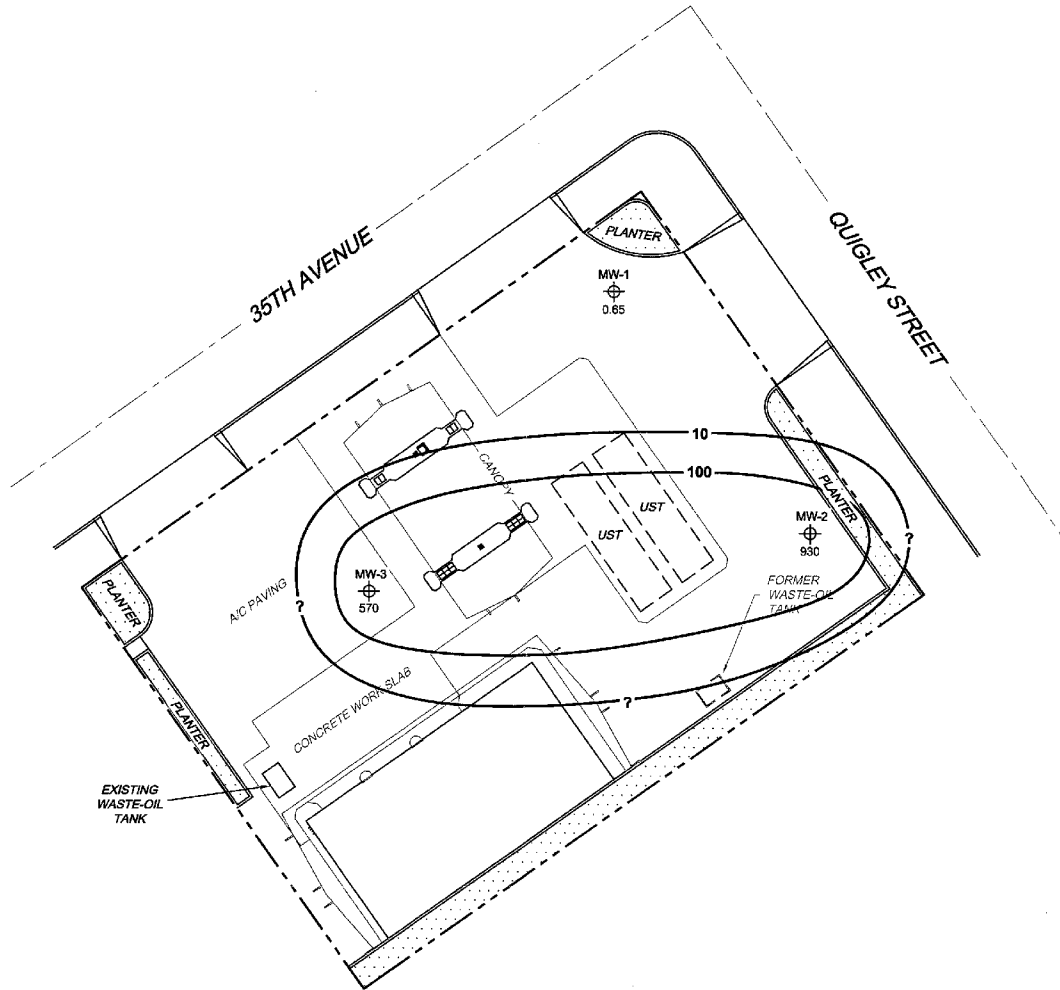
**DISSOLVED-PHASE BENZENE
CONCENTRATION MAP
December 14, 2007**

FIGURE 4

LEGEND

MW-3  Monitoring Well with Dissolved-Phase MTBE Concentration ($\mu\text{g/l}$)

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



MS-1.1 6129-003 L:\Graphics\COMS NORTH-SOUTH\FID\6000\6129\6129_0125_COMS(NW).dwg, Jan 09, 2008 - 4:27pm cswong

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. UST = underground storage tank. Results obtained using EPA Method 8260B.

SCALE (FEET)



PROJECT: 154771

FACILITY:

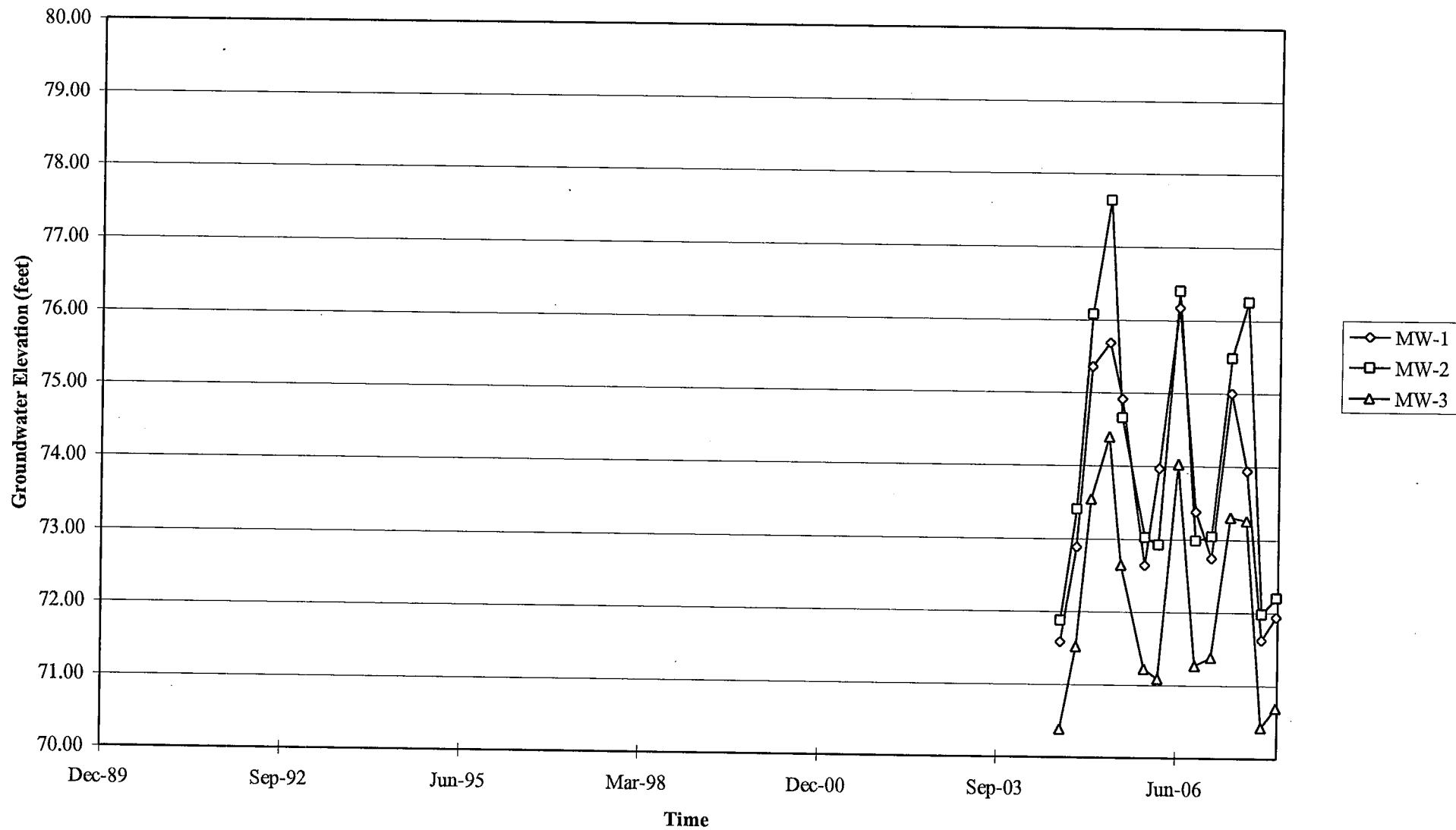
76 STATION 6129
3420 35TH AVENUE
OAKLAND, CALIFORNIA

**DISSOLVED-PHASE MTBE
CONCENTRATION MAP
December 14, 2007**

FIGURE 5

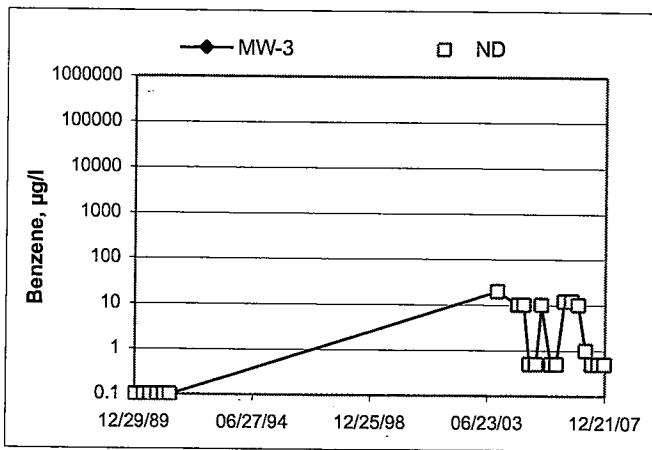
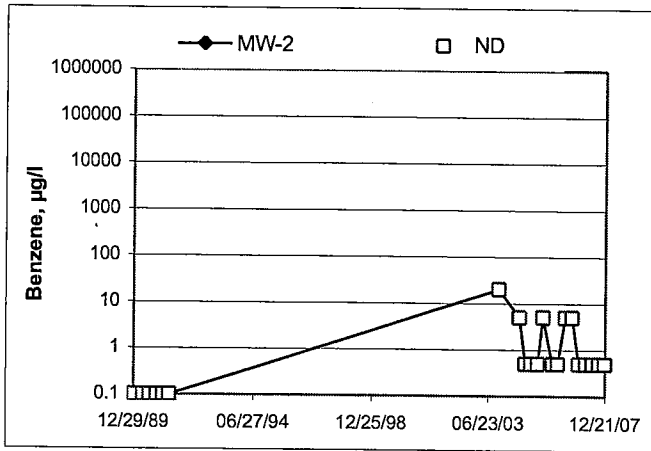
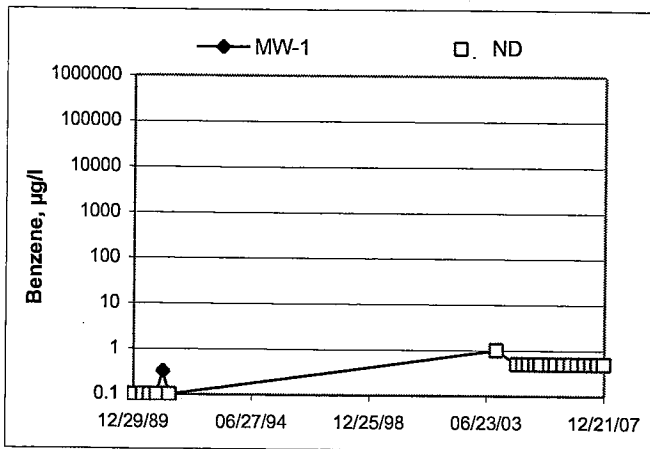
GRAPHS

Groundwater Elevations vs. Time
76 Station 6129

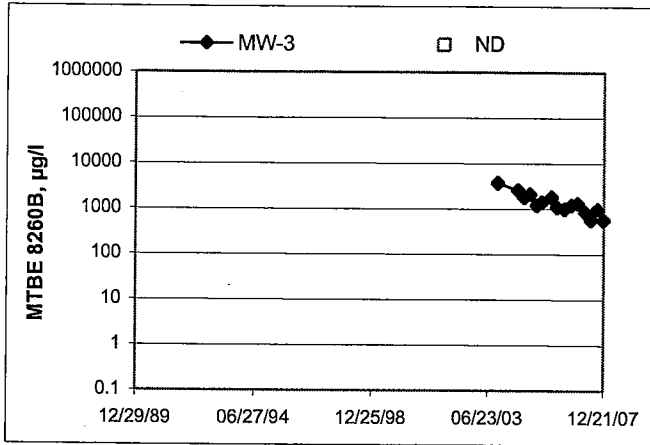
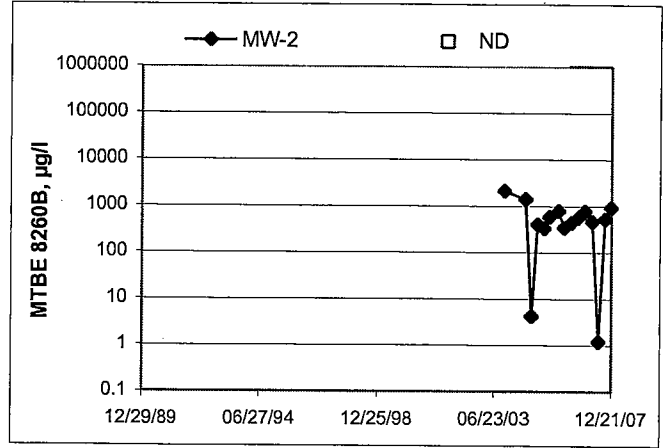
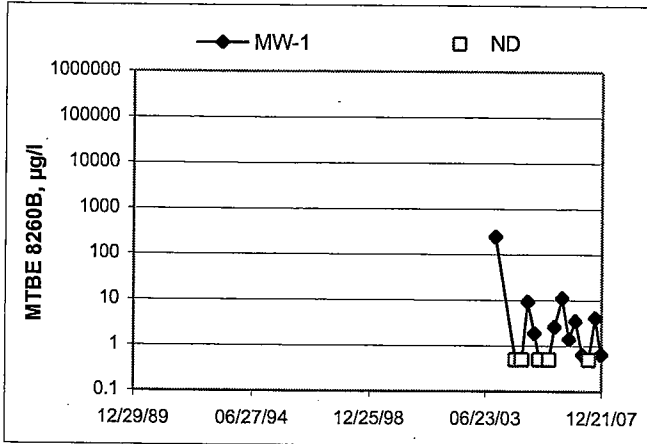


Elevations may have been corrected for apparent changes due to resurvey

Benzene Concentrations vs Time 76 Station 6129



MTBE 8260B Concentrations vs Time
76 Station 6129



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: ALEX

Site: 6129

Project No.: 154771

Date: 12/14/07

Well No. MW-1

Purge Method: 5" DIA

Depth to Water (feet): 30.30

Depth to Product (feet):

Total Depth (feet) 43.47

LPH & Water Recovered (gallons):

Water Column (feet): ~~13.17~~ 13.17

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 32.93

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	D.O.	ORP	Turbidity
0721			2	767.0	10.1	7.29			
			4	773.7	8.8	7.21			
	0724		6	773.8	8.7	7.26			
Static at Time Sampled			Total Gallons Purged			Sample Time			
31.25			6			0730			
Comments:									

Well No. MW-2

Purge Method: DIA

Depth to Water (feet): 29.96

Depth to Product (feet):

Total Depth (feet) 43.54

LPH & Water Recovered (gallons):

Water Column (feet): 13.58

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 32.67

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	D.O.	ORP	Turbidity
0743			2	750.8	11.1	7.03			
			4	749.2	10.8	7.14			
	0746		6	753.8	9.9	7.16			
Static at Time Sampled			Total Gallons Purged			Sample Time			
31.40			6			0750			
Comments:									

GROUNDWATER SAMPLING FIELD NOTES

Technician: ALEX

Site: 6129

Project No.: 154771

Date: 12/14/07

Well No. MW-3

Purge Method: HB

Depth to Water (feet): 29.30

Depth to Product (feet):

Total Depth (feet): 39.45

LPH & Water Recovered (gallons):

Water Column (feet): 10.15

Casing Diameter (Inches): 2"

80% Recharge Depth(feet): 31.33

1 Well Volume (gallons): 1.5

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	D.O.	ORP	Turbidity
<u>0804</u>			<u>1.5</u>	<u>539.1</u>	<u>15.5</u>	<u>7.56</u>			
			<u>3</u>	<u>533.7</u>	<u>16.4</u>	<u>7.49</u>			
	<u>0809</u>		<u>4.5</u>	<u>537.8</u>	<u>16.9</u>	<u>7.46</u>			
Static at Time Sampled			Total Gallons Purged			Sample Time			
<u>30.25</u>			<u>4.5</u>			<u>0815</u>			
Comments:									

Well No. _____

Purge Method: _____

Depth to Water (feet): _____

Depth to Product (feet): _____

Total Depth (feet): _____

LPH & Water Recovered (gallons): _____

Water Column (feet): _____

Casing Diameter (Inches): _____

80% Recharge Depth(feet): _____

1 Well Volume (gallons): _____

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	D.O.	ORP	Turbidity
Static at Time Sampled			Total Gallons Purged			Sample Time			
Comments:									



Date of Report: 01/02/2008

Anju Farfan

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


RE: 6129
BC Work Order: 0714926

Enclosed are the results of analyses for samples received by the laboratory on 12/14/2007 18:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Contact Person: Molly Meyers
Client Service Rep



Authorized Signature

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

Project: 6129
 Project Number: [none]
 Project Manager: Anju Farfan

Reported: 01/02/2008 13:17

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information					
0714926-01	COC Number:	---		Receive Date:	12/14/2007 18:05	Delivery Work Order:
	Project Number:	6129		Sampling Date:	12/14/2007 07:30	Global ID: T0600101465
	Sampling Location:	MW-1		Sample Depth:	---	Matrix: W
	Sampling Point:	MW-1		Sample Matrix:	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:	
0714926-02	COC Number:	---		Receive Date:	12/14/2007 18:05	Delivery Work Order:
	Project Number:	6129		Sampling Date:	12/14/2007 07:50	Global ID: T0600101465
	Sampling Location:	MW-2		Sample Depth:	---	Matrix: W
	Sampling Point:	MW-2		Sample Matrix:	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:	
0714926-03	COC Number:	---		Receive Date:	12/14/2007 18:05	Delivery Work Order:
	Project Number:	6129		Sampling Date:	12/14/2007 08:15	Global ID: T0600101465
	Sampling Location:	MW-3		Sample Depth:	---	Matrix: W
	Sampling Point:	MW-3		Sample Matrix:	Water	Sample QC Type (SACode): CS
	Sampled By:	TRCI			Cooler ID:	

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

 Project: 6129
 Project Number: [none]
 Project Manager: Anju Farfan

Reported: 01/02/2008 13:17

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	0714926-01		Client Sample Name:	6129, MW-1, MW-1, 12/14/2007 7:30:00AM									
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	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
Methyl t-butyl ether	0.65	ug/L	0.50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
Toluene	ND	ug/L	0.50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
t-Butyl alcohol	ND	ug/L	10		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
Ethanol	ND	ug/L	250		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
Total Purgeable Petroleum Hydrocarbons	ND	ug/L	50		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328	ND	
1,2-Dichloroethane-d4 (Surrogate)	97.0	%	76 - 114 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328		
Toluene-d8 (Surrogate)	101	%	88 - 110 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328		
4-Bromofluorobenzene (Surrogate)	99.3	%	86 - 115 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:08	KEN	MS-V12	1	BQL1328		

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

 Project: 6129
 Project Number: [none]
 Project Manager: Anju Farfan

Reported: 01/02/2008 13:17

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0714926-02		Client Sample Name: 6129, MW-2, MW-2, 12/14/2007 7:50:00AM											
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	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
Methyl t-butyl ether	930	ug/L	5.0		EPA-8260	12/26/07	12/27/07 23:56	KEN	MS-V12	10	BQL1328	ND	A01
Toluene	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
t-Butyl alcohol	48	ug/L	10		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
Diisopropyl ether	24	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
Ethanol	ND	ug/L	250		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	
Total Purgeable Petroleum Hydrocarbons	400	ug/L	50		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328	ND	A90
1,2-Dichloroethane-d4 (Surrogate)	95.0	%	76 - 114 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:56	KEN	MS-V12	10	BQL1328		
1,2-Dichloroethane-d4 (Surrogate)	88.8	%	76 - 114 (LCL - UCL)		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:56	KEN	MS-V12	10	BQL1328		
4-Bromofluorobenzene (Surrogate)	96.0	%	86 - 115 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:56	KEN	MS-V12	10	BQL1328		
4-Bromofluorobenzene (Surrogate)	102	%	86 - 115 (LCL - UCL)		EPA-8260	12/26/07	12/28/07 15:51	KEN	MS-V12	1	BQL1328		

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

 Project: 6129
 Project Number: [none]
 Project Manager: Anju Farfan

Reported: 01/02/2008 13:17

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	0714926-03		Client Sample Name:	6129, MW-3, MW-3, 12/14/2007 8:15:00AM									
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	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
1,2-Dibromoethane	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
1,2-Dichloroethane	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
Ethylbenzene	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
Methyl t-butyl ether	570	ug/L	6.2		EPA-8260	12/26/07	12/27/07 23:32	KEN	MS-V12	12.500	BQL1328	ND	A01
Toluene	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
Total Xylenes	ND	ug/L	1.0		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
t-Amyl Methyl ether	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
t-Butyl alcohol	26	ug/L	10		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
Diisopropyl ether	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
Ethanol	ND	ug/L	250		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
Ethyl t-butyl ether	ND	ug/L	0.50		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	
Total Purgeable Petroleum Hydrocarbons	270	ug/L	50		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328	ND	A90
1,2-Dichloroethane-d4 (Surrogate)	90.7	%	76 - 114 (LCL - UCL)		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328		
1,2-Dichloroethane-d4 (Surrogate)	97.1	%	76 - 114 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:32	KEN	MS-V12	12.500	BQL1328		
Toluene-d8 (Surrogate)	102	%	88 - 110 (LCL - UCL)		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328		
Toluene-d8 (Surrogate)	99.7	%	88 - 110 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:32	KEN	MS-V12	12.500	BQL1328		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)		EPA-8260	12/26/07	12/27/07 23:32	KEN	MS-V12	12.500	BQL1328		
4-Bromofluorobenzene (Surrogate)	99.4	%	86 - 115 (LCL - UCL)		EPA-8260	12/26/07	12/28/07 15:28	KEN	MS-V12	1	BQL1328		

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

 Project: 6129
 Project Number: [none]
 Project Manager: Anju Farfan

Reported: 01/02/2008 13:17

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	Control Limits	
										RPD	Percent Recovery Lab Quals
Benzene	BQL1328	Matrix Spike	0714775-38	0	25.390	25.000	ug/L		102		70 - 130
		Matrix Spike Duplicate	0714775-38	0	25.700	25.000	ug/L	1.0	103	20	70 - 130
Toluene	BQL1328	Matrix Spike	0714775-38	0	26.930	25.000	ug/L		108		70 - 130
		Matrix Spike Duplicate	0714775-38	0	27.240	25.000	ug/L	0.9	109	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BQL1328	Matrix Spike	0714775-38	ND	9.6300	10.000	ug/L		96.3		76 - 114
		Matrix Spike Duplicate	0714775-38	ND	9.7100	10.000	ug/L		97.1		76 - 114
Toluene-d8 (Surrogate)	BQL1328	Matrix Spike	0714775-38	ND	10.500	10.000	ug/L		105		88 - 110
		Matrix Spike Duplicate	0714775-38	ND	10.450	10.000	ug/L		104		88 - 110
4-Bromofluorobenzene (Surrogate)	BQL1328	Matrix Spike	0714775-38	ND	10.100	10.000	ug/L		101		86 - 115
		Matrix Spike Duplicate	0714775-38	ND	10.160	10.000	ug/L		102		86 - 115

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

 Project: 6129
 Project Number: [none]
 Project Manager: Anju Farfan

Reported: 01/02/2008 13:17

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	BQL1328	BQL1328-BS1	LCS	25.320	25.000	0.50	ug/L	101		70 - 130		
Toluene	BQL1328	BQL1328-BS1	LCS	26.950	25.000	0.50	ug/L	108		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BQL1328	BQL1328-BS1	LCS	9.3300	10.000		ug/L	93.3		76 - 114		
Toluene-d8 (Surrogate)	BQL1328	BQL1328-BS1	LCS	10.350	10.000		ug/L	104		88 - 110		
4-Bromofluorobenzene (Surrogate)	BQL1328	BQL1328-BS1	LCS	10.060	10.000		ug/L	101		86 - 115		

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

Project: 6129
 Project Number: [none]
 Project Manager: Anju Farfan

Reported: 01/02/2008 13:17

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	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
Ethylbenzene	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
Toluene	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
Total Xylenes	BQL1328	BQL1328-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BQL1328	BQL1328-BLK1	ND	ug/L	10		
Diisopropyl ether	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
Ethanol	BQL1328	BQL1328-BLK1	ND	ug/L	1000		
Ethyl t-butyl ether	BQL1328	BQL1328-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BQL1328	BQL1328-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BQL1328	BQL1328-BLK1	91.1	%	76 - 114 (LCL - UCL)		
Toluene-d8 (Surrogate)	BQL1328	BQL1328-BLK1	99.7	%	88 - 110 (LCL - UCL)		
4-Bromofluorobenzene (Surrogate)	BQL1328	BQL1328-BLK1	100	%	86 - 115 (LCL - UCL)		

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

Project: 6129
Project Number: [none]
Project Manager: Anju Farfan

Reported: 01/02/2008 13:17

Notes And Definitions

MDL Method Detection Limit
ND Analyte Not Detected at or above the reporting limit
PQL Practical Quantitation Limit
RPD Relative Percent Difference
A01 PQL's and MDL's are raised due to sample dilution.
A90 TPPH does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.

Submission #: 07-14926

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

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

COC Received YES NO

Ice Chest ID: RW Temperature: 5.0 °C Thermometer ID: 48

Emissivity: .95 Container: ALPE

Date/Time: 12/14/07 Analyst Init: 2220

Table with columns for Sample Containers and Sample Numbers (1-10). Rows include various sample types like QT GENERAL MINERAL, PT PE UNPRESERVED, etc.

Comments: Numbering Completed By: AEW Date/Time: 12/17/07 1830

BC LABORATORIES, INC.

4100 Atlas Court Bakersfield, CA 93308
 (661) 327-4911 FAX (661) 327-1918

CHAIN OF CUSTODY

07-14926

Analysis Requested

Bill to: Conoco Phillips/ TRC		Consultant Firm: TRC	
Address: <i>3420 35TH ST.</i>		21 Technology Drive Irvine, CA 92618-2302 Attn: Anju Farfan	
City: <i>OAKLAND</i>		4-digit site#: <i>6129</i>	Workorder #
State: CA	Zip:	Project #: <i>154771</i>	
Conoco Phillips Mgr:		Sampler Name: <i>ALEX</i>	

MATRIX (GW) Ground-water (S) Soil (WW) Waste-water (SL) Sludge	BTEX/MTBE by 8021B, Gas by 8015	TPH GAS by 8015M	TPH DIESEL by 8015	8260 full list w/ oxygenates	BTEX/MTBE/OXYS BY 8260B	ETHANOL by 8260B	TPH -G by GC/MS	<i>EDS/EDC by 8260B</i>	Turnaround Time Requested
GW					X	X	X	X	STD
↓					↓	↓	↓	↓	↓
↓					↓	↓	↓	↓	↓

CHK BY: [Signature] DISTRIBUTION [Signature] SUB OUT [Signature]

Comments: GLOBAL ID: <i>T0600101465</i>	Relinquished by: (Signature) <i>[Signature]</i>	Received by: <i>FRIDGE</i>	Date & Time <i>12/14/07 0904</i>
	Relinquished by: (Signature) <i>[Signature]</i>	Received by: <i>Ross Decker</i>	Date & Time <i>12/14/07 1230</i>
	Relinquished by: (Signature) <i>Ross Decker 12/14/07</i>	Received by: <i>RUR</i>	Date & Time <i>12.14.07 1440</i>

P 12.14.07 1805

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 a licensed carrier, 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 others.

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.