RECEIVED



10:13 am, Jul 17, 2008

Alameda County Environmental Health ConocoPhillips Company 76 Broadway Sacramento, CA 95818 phone 916-558-7600 fax 916-558-7639

July 20, 2007

Ms. Donna Drogos Supervising Hazardous Materials Specialist Alameda County Environmental Health Services 1131 Harbor Bay Parkway Alameda, California 94502

RE: Quarterly Summary Report – Second Quarter 2007 And Sensitive Receptor Survey Delta Project Number: C1Q-6129-603

76 Station no. 6129 3420 35th Avenue Oakland, California

Dear Ms. Drogos,

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

Please feel free to contact me if you have any questions or require additional information.

Respectfully,

Bill Bargh

Bill Borgh

Site Manager - Risk Management and Remediation

Attachment

July 24, 2007

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

Re: Quarterly Summary Report – Second Quarter 2007

And Sensitive Receptor SurveyDelta Project Number: C1Q-6129-603

Door Ma Drogos

Dear Ms. Drogos:

On behalf of ConocoPhillips Company (COP), Delta Environmental Consultants, Inc. (Delta) is submitting the Quarterly Summary Report – Second Quarter 2007 and forwarding a copy of TRC's *Quarterly Monitoring Report, April through June 2007*, dated July 11, 2007, for the following location:

Service Station

Location

76 Service Station No. 6129

3420 35th Avenue Oakland, California

> DENNIS SHANNON DETTLOFF No. 7480

Sincerely,

Delta Consultants

Dennis S. Dettloff, P.G

Senior Project Manager

California Registered Professional Geologist

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



QUARTERLY SUMMARY REPORT Sensitive Receptor Survey Second 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 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 between 26 and 31 feet bgs. All other constituents were reported below the laboratories 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 (μ g/L), with the most elevated concentrations found in monitoring wells MW-2 (2,100 μ g/L) and MW-3 (3,700 μ 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

Page 3

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, B15, 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 total depth 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 provided three potential receptors 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 June 25, 2007. The depth to groundwater ranged from 25.91 feet (MW-2) to 28.30 feet (MW-1) below top of casing (TOC). The groundwater flow direction was interpreted to be to the northwest at a gradient of 0.03 foot per foot (ft/ft), consistent with historic events. Historic groundwater flow directions presented as a rose diagram and included as Attachment B.

Contaminants of Concern:

• **TPHg:** TPHg was reported above the laboratories indicated reporting limit in monitoring well MW-3 at 270 μ g/L.

- **Benzene:** Benzene was below the laboratories indicated reporting limit in all three of the monitoring in wells.
- MTBE: MTBE was reported above the laboratories indicated reporting limits in monitoring wells MW-2 and MW-3 at 1.2 µg/L and 570 µg/L, respectively.

REMEDIATION STATUS

76 Service Station No. 6129

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.

THIS QUARTER ACTIVITIES (Second Quarter 2007)

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

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.

NEXT QUARTER ACTIVITIES (Third Quarter 2007)

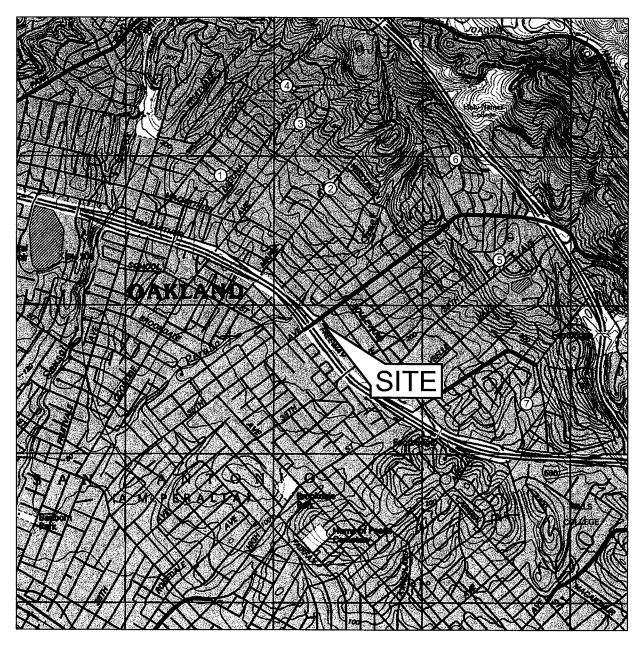
1. TRC will conduct the quarterly groundwater monitoring and sampling event at the site.

CONSULTANT: Delta Consultants

Attachment A – Sensitive Receptor Survey Data

Attachment B - Historic Groundwater Flow Directions

Attachment A Sensitive Receptor Survey Data



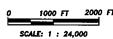






FIGURE 1

SITE LOCATOR SENSITIVE RECEPTOR MAP

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

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

	DWR ¹ 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					<u> </u>

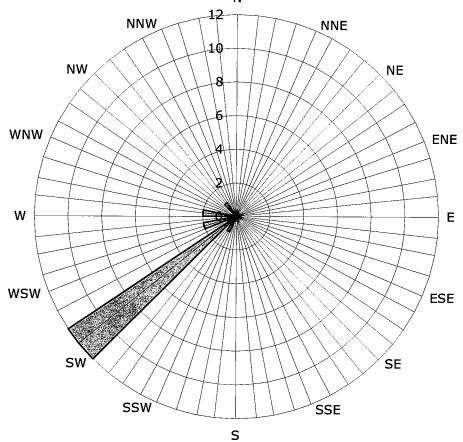
DWR: Department of Water Resources

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 montoring
events
First Quarter 1990 through
Second
Quarter 2007
18 data points shown

☐ Groundwater Flow Direction



21 Technology Drive Irvine, CA 92618

949.727.9336 PHONE 949.727.7399 FAX

www.TRCsolutions.com



July 12, 2007

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

APRIL THROUGH JUNE 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

Anju Farfan

Groundwater Program Operations Manager

CC:

Mr. Dennis Dettloff, Delta Environmental Consultants, Inc. (1 copy)

Enclosures:

20-0400/6129R015.QMS

QUARTERLY MONITORING REPORT APRIL THROUGH JUNE 2007

76 STATION 6129 3420 35th Avenue Oakland, California

Prepared For:

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

By:

Onn Str. OF CALIFORNIA

Senior Project Geologist, Irvine Operations July 11, 2007



	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 – 6/25/07
	Groundwater Sampling Field Notes – 6/25/07
Laboratory	Official Laboratory Reports
Reports	Quality Control Reports
	Chain of Custody Records
Statements	Purge Water Disposal
	Limitations

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

-		Bill Borgh 916-558-7	7612		r Sampling C	Contractor: TRC
Date(s) of	Gauging/S	ampling Eve	nt: 06/25/ 0			inici Ecc
Sample P	oints					
	ethod: Su er disposal	Onyx/Ro	te, 0 offsit pump/bailer deo Unit 100 ype: n/a	_	gauged: 3	Wells sampled: 3
Liquid Pha	ase Hydro	carbons (L	.PH)			
Wells with LPH remove Treatment	al frequen	Maximum cy: n/a l of water/LF	thickness (fee	-	thod: n/a	
Hydrogeo	logic Para	meters				
Average greater Average characteristics Interpreted Current	oundwater ange in gr groundwa event: (oundwater e iter gradient).03 ft/ft, n	elative to avai levation since and flow dire		m): 74.48 i	ximum: 28.3 feet feet et
Selected L	aborator	y Results				
Wells with o			0 oncentration:	Wells above	MCL (1.0 μς	g/l): n/a
Wells with Wells with			1 · · · · · · · · · · · · · · · · · · ·		270 µg/l (l 570 µg/l (l	
Notes:						

TABLES

TABLE KEY

STANDARD ABBREVIATIONS

-- not analyzed, measured, or collected

LPH = liquid-phase hydrocarbons

Trace = less than 0.01 foot of LPH in wel

Trace = less than 0.01 foot of LPH in well
ug/l = micrograms per liter (approx. e3quiyalen

ug/l = micrograms per liter (approx. e3quivalent 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

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: 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 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 E	vent													
Table 1	Weil/ 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 D	ata													
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
June 25, 2007
76 Station 6129

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation		TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	
MW-1 06/25/0°	7 102.24	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	
MW-2 06/25/0°	7 102.16	25.91	0.00	76.25	0.77		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	Pate	1.2	
MW-3 06/25/0°	7 100.00	26.74	0.00	73.26	-0.05		270	ND<0.50	ND<0.50	ND<0.50	ND<0.50		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 06/25/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
MW-2 06/25/07	ND<10	ND<250	ND<0.50	ND<0.50	23	ND<0.50	ND<0.50	
MW-3 06/25/07	11	ND<250	ND<0.50	0.65	ND<0.50	ND<0.50	ND<0.50	

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

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation		TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	
MW-1														
01/05/9	90					ND		ND	ND	ND	ND			
05/11/9	90					ND		ND	7.1	ND	ND		·	
08/09/9	90					ND		ND	ND	ND	ND			
11/14/9	90				***	ND		ND	ND	ND	ND			
02/12/9	91					ND		0.32	ND	ND.	ND			
05/09/9	91					ND		ND	ND	ND	ND			
11/13/0	03						180	ND<1.0	ND<1.0	ND<1.0	ND<2.0		240	
08/27/0	04 102.2	4 30.65	0.00	71.59			ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
11/23/0	04 102.2	4 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	•
02/09/0	05 102.2	4 26.89	0.00	75.35	2.46		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		9.3	
05/17/0	05 102.2	4 26.56	0.00	75.68	0.33		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.9	
07/27/0	05 102.2	4 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	
12/06/0	05 102.2	4 29.59	0.00	72.65	-2.26		ND<50	ND<0.50	0.93	ND<0.50	1.8		ND<0.50	
02/21/0	06 102.2	4 28.27	0.00	73.97	1.32		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.6	
06/08/0	06 102.2	4 26.07	0.00	76.17	2.20		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		11	
09/15/0	06 102.2	4 28.86	0.00	73.38	-2.79		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		1.4	
12/14/0	06 102.2	4 29.49	0.00	72.75	-0.63		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		3.5	
03/28/0	07 102.2	4 27.24	0.00	75.00	2,25		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		0.64	
06/25/0	07 102.2	4 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	
MW-2														
01/05/9	90					ND		ND	ND	ND	ND			
05/11/9	90					ND		ND	ND	ND	ND			
08/09/9	90					ND		ND	ND	ND	ND			41

Page 1 of 3

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

Date Sample	TOC l Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation		TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)		Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)		
MW-2	continue	I													
11/14	/90					ND		ND	ND	ND	ND				•
02/12	/91			·		ND		ND	0.42	ND	0.51				
05/09	/91					ND		ND	ND	ND	ND				
11/13	/03						ND<2000	ND<20	ND<20	ND<20	ND<40		2100		
08/27	/04 102.1	6 30.28	0.00	71.88			950	ND<5.0	ND<5.0	ND<5.0	ND<10		1400	•	
11/23	/04 102.1	6 28.75	0.00	73.41	1.53		53	ND<0.50	ND<0.50	ND<0.50	ND<1.0	·	4.2		
02/09	/05 102.1	6 26.08	0.00	76.08	2.67		ND<500	ND<0.50	ND<0.50	ND<0.50	ND<1.0		400		
05/17	//05 102.1	6 24.53	0.00	77.63	1.55		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		330		
07/27	7/05 102.1	6 27.51	0.00	74.65	-2.98		ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10		580		
12/06	6/05 102.1	6 29.13	0.00	73.03	-1.62		340	ND<0.50	ND<0.50	ND<0.50	ND<1.0		780		
02/23	/06 102.1	6 29.23	0.00	72.93	-0.10		190	ND<0.50	ND<0.50	ND<0.50	ND<1.0	~~	340		
06/08	3/06 102.1	6 25.76	0.00	76.40	3.47		ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10		440		
09/15	5/06 102.1	6 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	/06 102.1	6 29.11	0.00	73.05	0.06		520	ND<0.50	ND<0.50	ND<0.50	ND<0.50		770		
03/28	3/07 102.1	6 26.68	0.00	75.48	2.43		290	ND<0.50	ND<0.50	ND<0.50	ND<0.50		460		
06/2:	5/07 102.1	6 25.91	0.00	76.25	0.77		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		1.2		
MW-3												•			
01/05	5/90		0.00			ND		ND	ND	ND	ND	, 			
05/1	/90					ND		ND	ND	ND	ND				
08/09	9/90					ND		ND	ND	ND	ND				
11/14	l/90					ND		ND	ND	ND	ND				
02/12	2/91			**		ND		ND	ND	ND	ND				
05/09	9/91					ND		ND	ND	ND	ND				
11/13	3/03			,			2600	ND<20	ND<20	ND<20	ND<40		3700		44 f
								_							

Page 2 of 3

6129

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

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation		TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	· ·
MW-3	continued	1												
08/27/0	100.00	29.61	0.00	70.39			1700	ND<10	ND<10	ND<10	ND<20		2600	
11/23/0	100.00	28.48	0.00	71.52	1.13		1500	ND<10	ND<10	ND<10	ND<20		1800	
02/09/0	5 100.00	26.45	0.00	73.55	2.03		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0	•	2100	
05/17/0	5 100.00	25.61	0.00	74.39	0.84		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1200	
07/27/0	5 100.00	27.35	0.00	72.65	-1.74	<u>·</u>	ND<1000	ND<10	ND<10	ND<10	ND<20		1400	
12/06/0	5 100.00	28.78	0.00	71.22	-1.43		430	ND<0.50	1.6	ND<0.50	3.6		1800	
02/21/0	6 100.00	28.91	0.00	71.09	-0.13		420	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1100	
06/08/0	6 100.00	25.97	0.00	74.03	2.94		ND<1200	ND<12	ND<12	ND<12	ND<25		1000	
09/15/0	6 100.00	28.73	0.00	71.27	-2.76		ND<1200	ND<12	ND<12	ND<12	ND<12		1200	
12/14/0	6 100.00	28.62	0.00	71.38	0.11		ND<1000	ND<10	ND<10	ND<10	ND<10		1300	
03/28/0	7 100.00	26.69	0.00	73.31	1.93		500	ND<1.0	ND<1.0	ND<1.0	ND<1.0		860	
06/25/0	7 100.00	26.74	0.00	73.26	-0.05		270	ND<0.50	ND<0.50	ND<0.50	ND<0.50		570	

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 6129

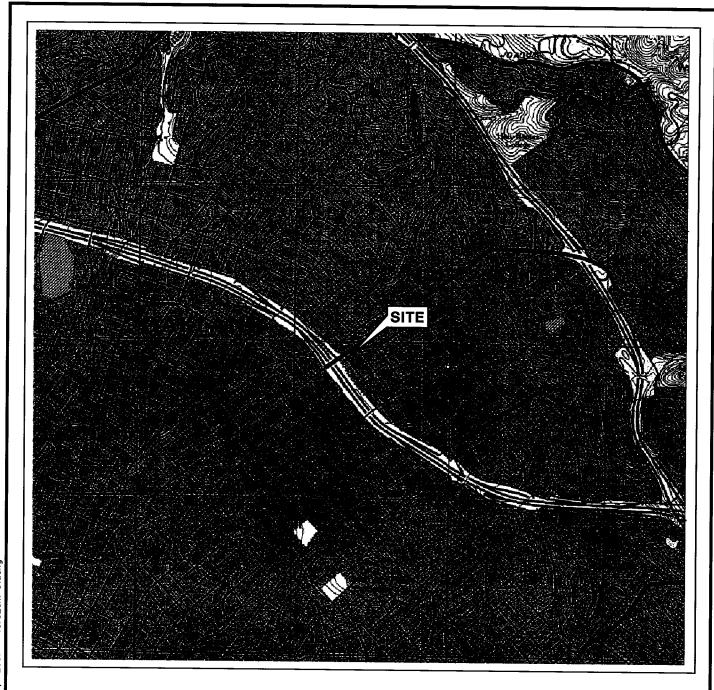
MW-1	Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	
11/13/03 ND=200 ND=40 N		(μg/l)	(μg/l)		(μg/l)	(μg/l)	(µg/l)	(μg/l)	
11/13/03 ND=200 ND=40 N	MW-1								
11/23/04 ND<5.0 ND<50 N		ND<200	ND<1000	ND<4.0	ND<4.0	ND<4.0	ND<4.0	ND<4.0	
02/09/05 ND<5.0 ND<5.0 ND<50	08/27/04	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	
05/17/05 ND<5.0 ND<5.0 ND<5.0 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	
07/27/05 ND<5.0	02/09/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	05/17/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
02/21/06 ND<10 ND<250 ND<0.50	07/27/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
06/08/06 ND<10 ND<250 ND<0.50	12/06/05	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
09/15/06 ND<10 ND<250 ND<0.50	02/21/06	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	06/08/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
03/28/07 ND<10 ND<250 ND<0.50	09/15/06	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<40.00 ND<50 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 08/27/04 ND<50 ND<500 ND<5.0	12/14/06	ND<10	ND<250	ND<0.50	ND<0.50		ND<0.50		
MW-2 11/13/03 ND<4000 ND<80 ND 80 ND<80 ND<80 ND<80 ND 80 ND<80 ND<80 ND 80 ND<80	03/28/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
11/13/03 ND<4000 ND<20000 ND<80 ND 80 ND<8	06/25/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
11/13/03 ND<4000 ND<20000 ND<80 ND 80 ND<8	MW-2								
11/23/04 ND<5.0		ND<4000	ND<20000	ND<80	ND<80	ND<80	ND<80	ND<80	
02/09/05 ND<50 ND<500 ND<5.0 ND<5.0 19 ND<5.0 ND<5.	08/27/04	ND<50	ND<500	ND<5.0	ND<5.0	24	ND<5.0	ND<5.0	
05/17/05 ND<5.0	11/23/04	ND<5.0	ND<50	ND<0.50	ND<0.50	18	ND<0.50	ND<0.50	
07/27/05 140 ND<500 ND<5.0 ND<5.0 16 ND<5.0 ND<5.0 ND<5.0 12/06/05 61 ND<250 ND<0.50 ND<0.50 15 ND<0.50 ND<0.5	02/09/05	ND<50	ND<500	ND<5.0	ND<5.0	19	ND<5.0	ND<5.0	
12/06/05 61 ND<250 ND<0.50 ND<0.50 15 ND<0.50	05/17/05	ND<5.0	ND<50	ND<0.50	ND<0.50	12	ND<0.50	ND<0.50	
02/21/06 ND<10 ND<250 ND<0.50 ND<0.50 18 ND<0.50 ND<0.50 ND<0.50 ND<0.50 O6/08/06 ND<100 ND<2500 ND<5.0 ND<5.0 14 ND<5.0 ND<5.0 ND<5.0 O9/15/06 ND<100 ND<2500 ND<5.0 ND<5.0 17 ND<5.0 ND<5.0 ND<5.0 ND<5.0 ND<0.50 ND	07/27/05	140	ND<500	ND<5.0	ND<5.0	16	ND<5.0	ND<5.0	
06/08/06 ND<100 ND<2500 ND<5.0	12/06/05	61	ND<250	ND<0.50	ND<0.50	15	ND<0.50	ND<0.50	
09/15/06 ND<100 ND<2500 ND<5.0 ND<5.0 ND<5.0 ND<5.0 ND<5.0 ND<5.0 12/14/06 27 ND<250 ND<0.50 ND<0.50 20 ND<0.50 ND<0.50	02/21/06	ND<10	ND<250	ND<0.50	ND<0.50	18	ND<0.50	ND<0.50	
12/14/06 27 ND<250 ND<0.50 ND<0.50 20 ND<0.50 ND<0.50	06/08/06	ND<100	ND<2500	ND<5.0	ND<5.0	14	ND<5.0	ND<5.0	
\mathcal{A}^{\dagger}	09/15/06	ND<100	ND<2500	ND<5.0	ND<5.0	17	ND<5.0	ND<5.0	
03/28/07 260 ND<250 ND<0.50 ND<0.50 23 ND<0.50 ND<0.50	12/14/06	27	ND<250	ND<0.50	ND<0.50	20	ND<0.50	ND<0.50	
	03/28/07	260	ND<250	ND<0.50	ND<0.50	23	ND<0.50	ND<0.50	Maria de la Ma

Page 1 of 2

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 06/25/07	continued ND<10	ND<250	ND<0.50	ND<0.50	23	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	
08/27/04	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	•
02/09/05	130	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10	
05/17/05	ND<100	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10	
07/27/05	360	ND<1000	ND<10	ND<10	ND<10	ND<10	ND<10	
12/06/05	160	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	
02/21/06	88	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.58	
06/08/06	ND<250	ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12	
09/15/06	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	
03/28/07	500	ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0	
06/25/07	11	ND<250	ND<0.50	0.65	ND<0.50	ND<0.50	ND<0.50	

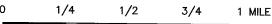
FIGURES





SOURCE:

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



SCALE 1:24,000





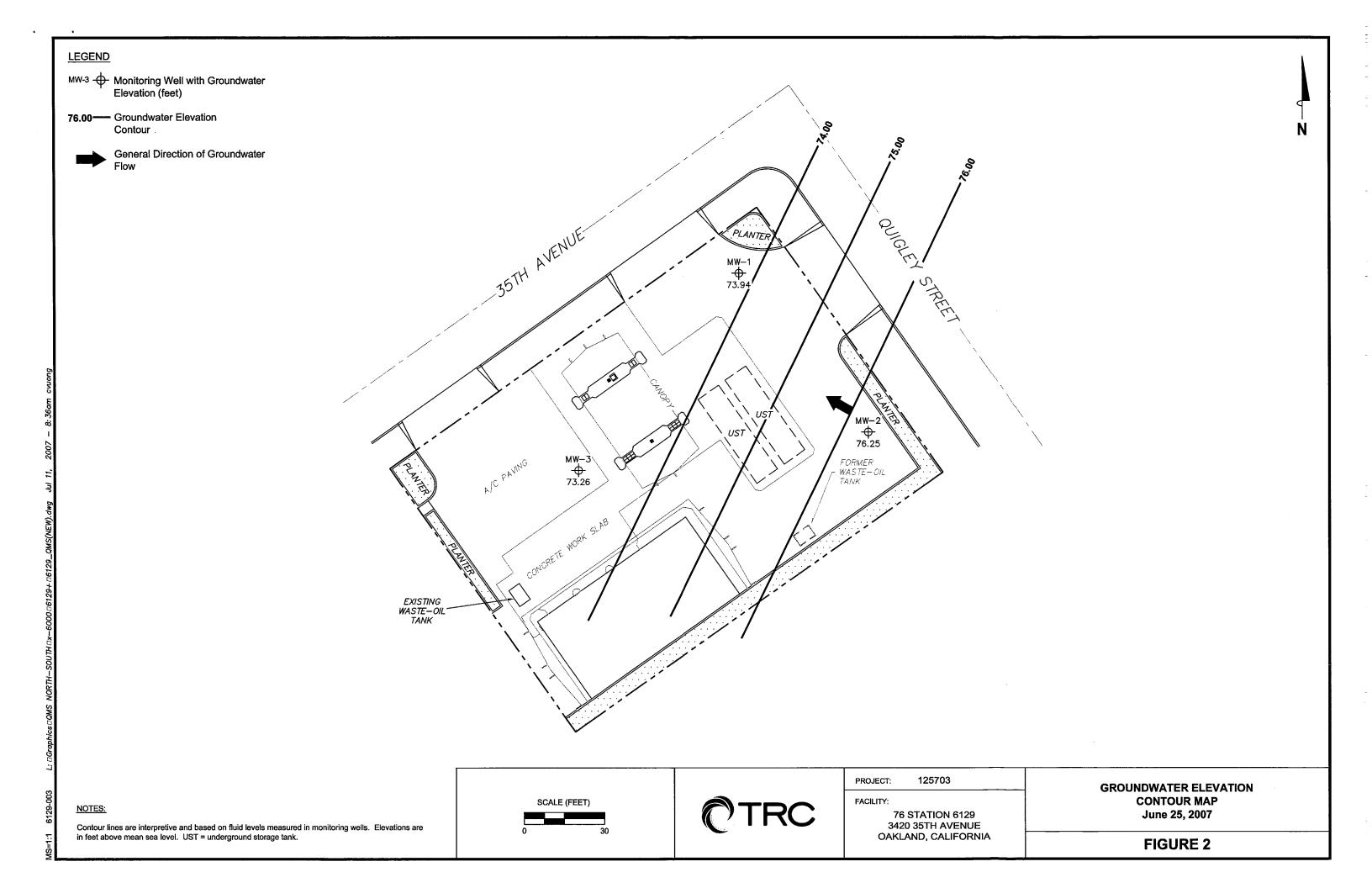
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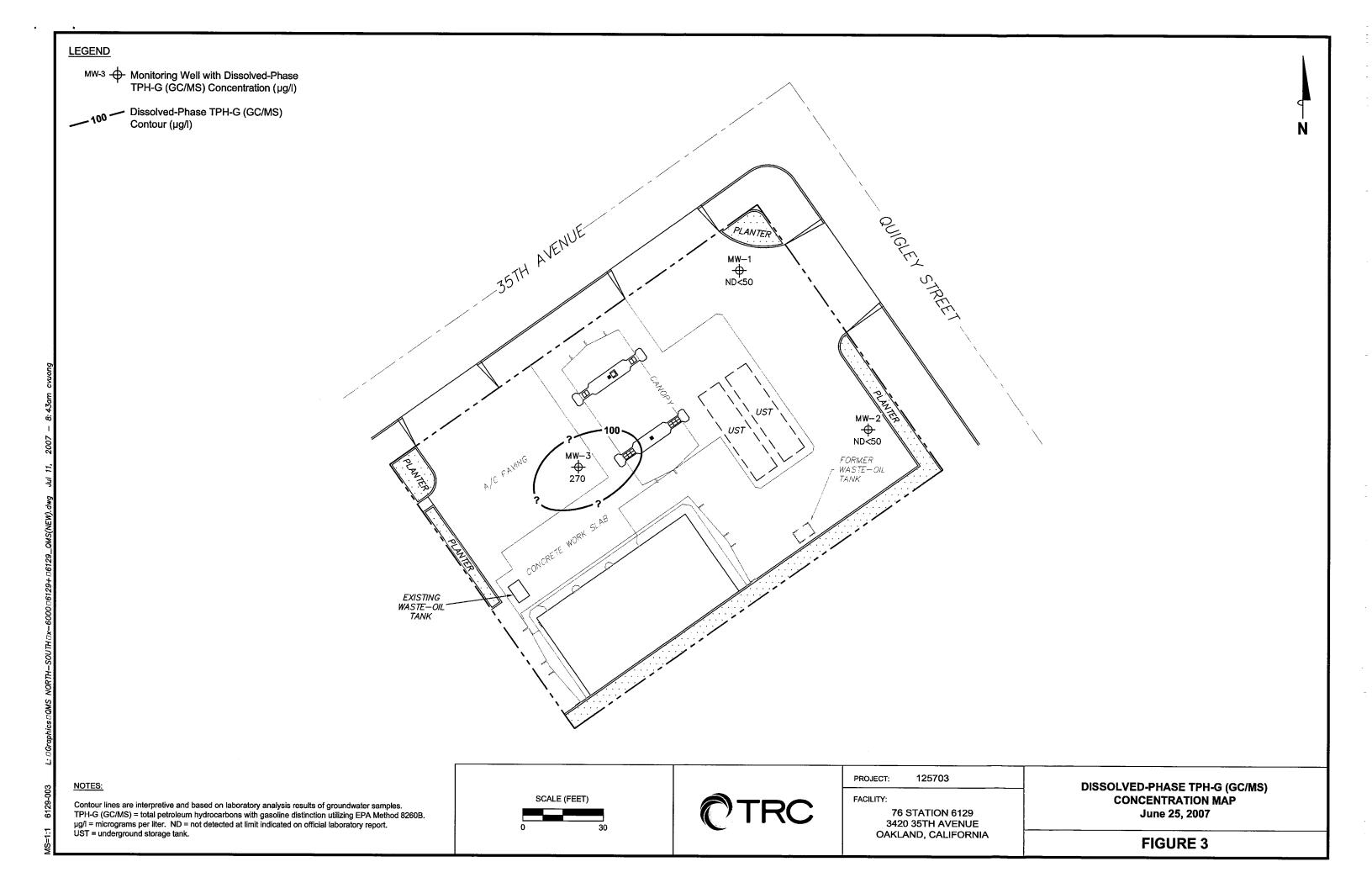
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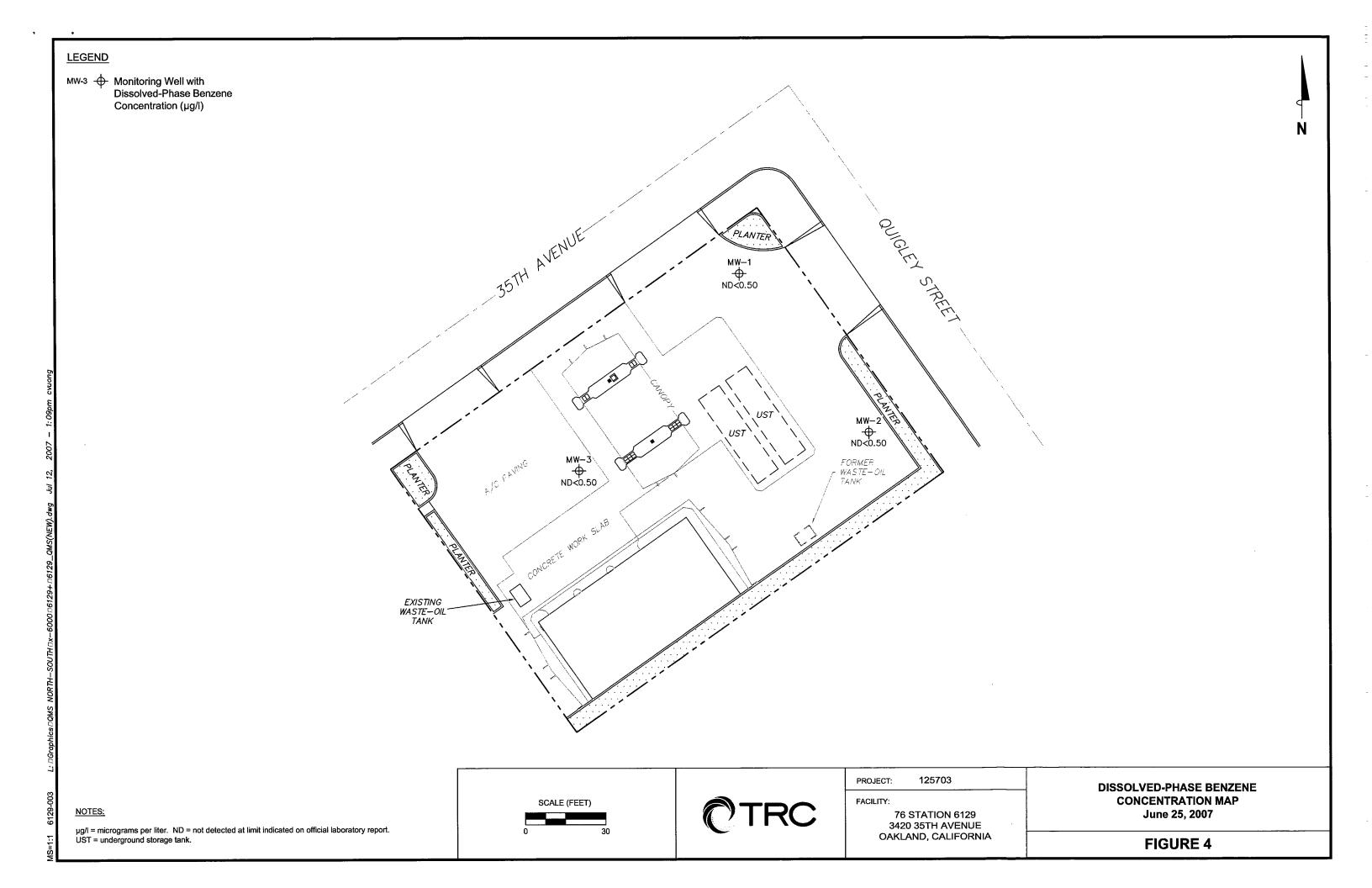
FACILITY:

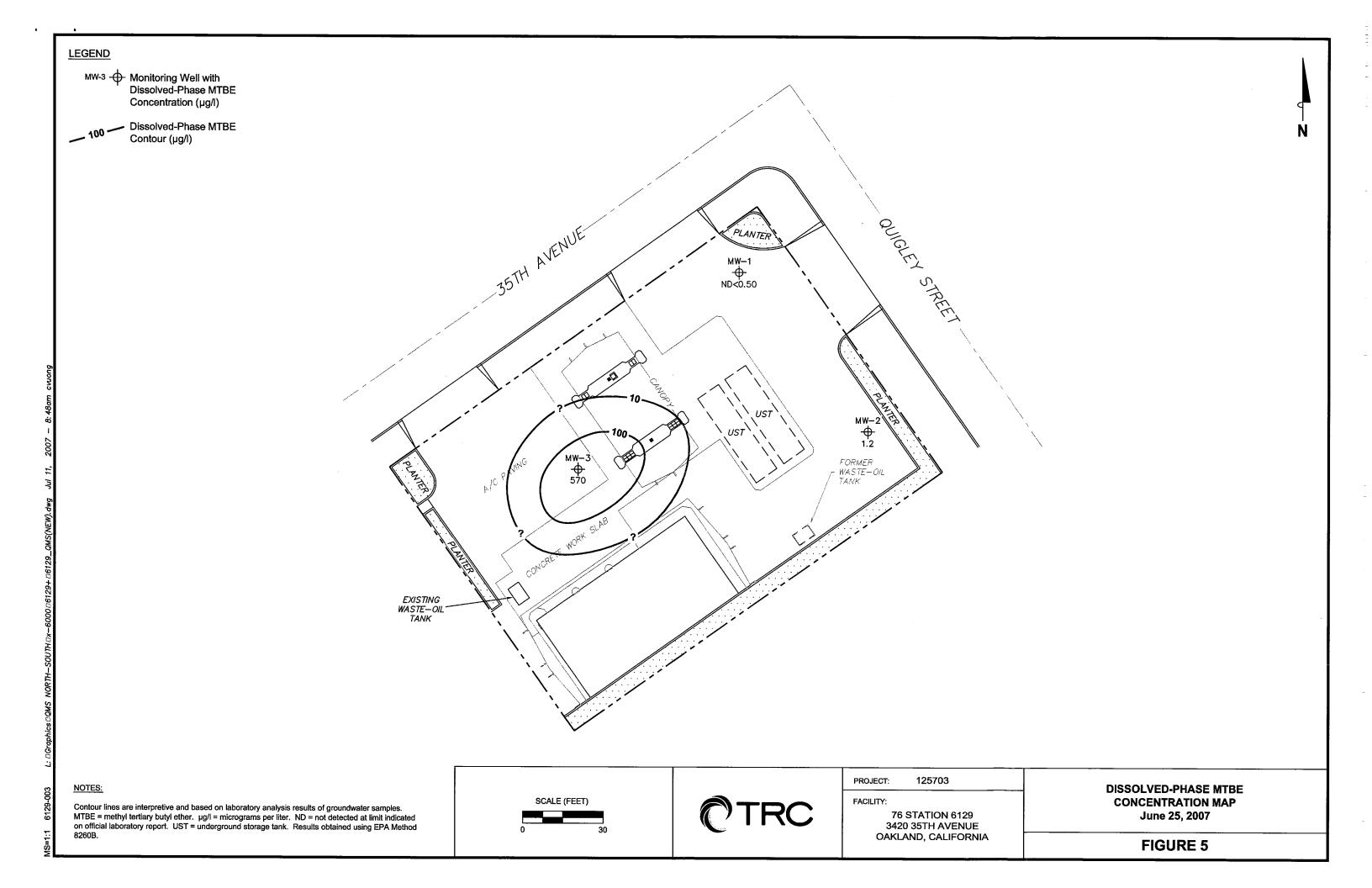
76 STATION 6129 3420 35TH AVENUE OAKLAND, CALIFORNIA **VICINITY MAP**

FIGURE 1



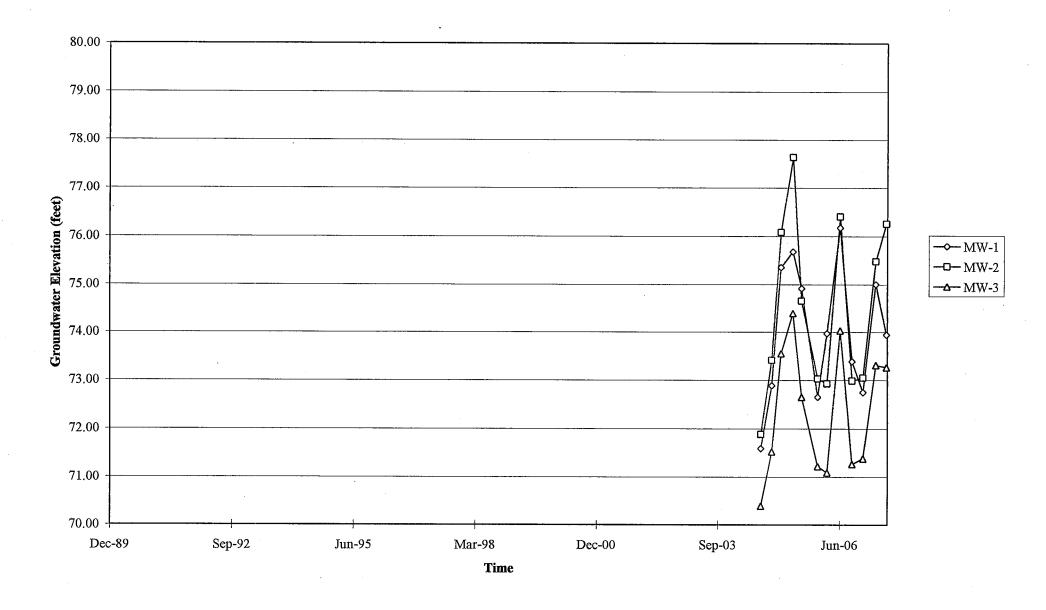






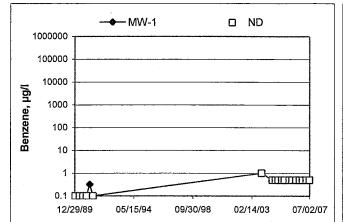
GRAPHS

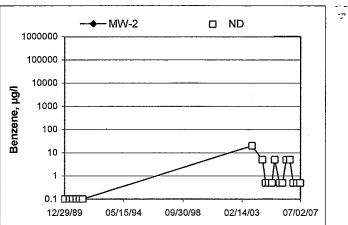
Groundwater Elevations vs. Time 76 Station 6129

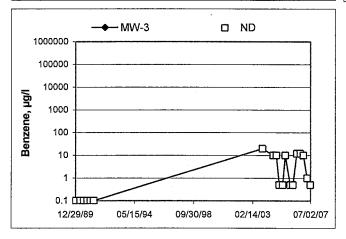


Benzene Concentrations vs Time

76 Station 6129

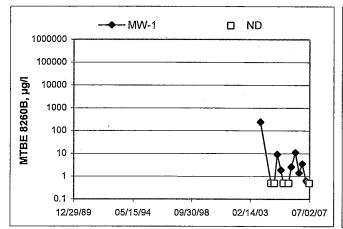


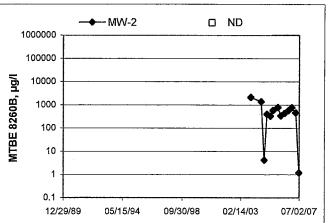




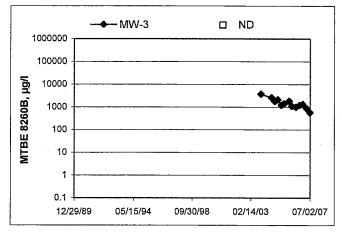
MTBE 8260B Concentrations vs Time

76 Station 6129





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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.

1/5/04 version

FIELD MONITORING DATA SHEET

Technician:	WILL	Job #/Task #: [25703	Date: 06 05 07
Site #	6129	Project Manager A. CaunS	Pageof

				Depth	Depth	Product		
	Time	:	Total	to	to	Thickness		34
Well #	Gauged	TOC	Depth	Water	Product	(feet)	Sampled	Misc. Well Notes
MW-1	1015	\rightarrow	4361	28.30			1045	9"
nw. 2	1021	X	4360	25.91			1110	J"
	1028	X	42,60	26.74	-		rgaa	ا ر ک
	.022							
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FIELD DAT.	A COMPL	ETE	QA/Q0	2	COC	V	VELL BOX C	QNDITION SHEETS
,			×	,	X			X
NTT CERT	IFICATE		MANIFE	ST	DRUM IN	VENTORY	TRA	FFIC CONTROL
		······································		·	<u> </u>			

GROUNDWATER SAMPLING FIELD NOTES

		Tec	hnician: _	wtu	····			•	
Site: 613	<u>c</u>	Proj	ect No.:	24703			Date:	6/25	5/07
Well No	WM-1		······································	Purge Metho	d: Sys	HB.			
Total Depth Water Colu	(feet)U3 mn (feet):	28.30 3.61 15.31 pet): 31-36		LPH & Wate	duct (feet):f rRecovered (g neter (Inches):_ ne (gallons):	allons):		_	
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F 🔘)	pН	D.O.	ORP	Turbidity
1010			3	610	19.5	7.08			
			6	641	19.0	6.95			
	1040		9	644	18.5	6.84			
								ļ	-
Stat	ic at Time Sa	ampled	Tot	al Gallons Pu	rged	<u> </u>	Sample	Time	1
	36,50			9		1	045		_
Comments	:	COULDNT	GET B.	AZIEZ O	UT.				_

Well No. MW - 2	Purge Method: 50B
Depth to Water (feet): 25.91	Depth to Product (feet):
Total Depth (feet) 43.60	LPH & Water Recovered (gallons):
Water Column (feet): 17.69	Casing Diameter (Inches): 3
80% Recharge Depth(feet): 2944	1 Well Volume (gallons): 3

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (u3/cm)	Temperature (F (C)	рН	D.O.	ORP	Turbidity
1056			3	671	18.9	6.82			
			6	714	18.7	6.84			
	1105		q	721	18.7	6.91			
	<u> </u>						<u>'</u>		.
	ic at Time Sa	ampled -	Tota	al Gallons Pu	rged		Sample	Time	
	15.90			a			10		
Comments	:						,,		

GROUNDWATER SAMPLING FIELD NOTES

		Tec	hnician: _	Will					
Site: 6(29	<u>1</u>	Proj	ect No.:i	25763			Date:	62	<u>s</u>
Well No	MW-3	3		Purge Metho	od:S	UB			
Depth to W	ater (feet):	26.74		Depth to Pro	oduct (feet):			-	
		12.60			r Recovered				
		15.86							
80% Recha	arge Depth(fe	eet): <u> 29.91</u>		1 Well Volun	neter (Inches) ne (gallons):_	_3_			
Time Start	Time Stop	Depth to Water	Volume Purged	Conduc- tivity	Temperatur	e pH	D.O.	ORP	Turbidity
1210		(feet)	(gallons)	(us)cm) 590	19.9	7.0 i		 	
1210			6	591	19.6	6.95			
	1220		9	583	18.5	6.87			
	<u> </u>				ļ				
Chal	in al Tima C		7.4	10-11	<u> </u>		<u> </u>	<u> </u>	<u> </u>
Stat	ic at Time S	ampied	100	al Gallons Pu			Sample	Time	
Comments	28.40		<u> </u>				222	···	
			•		··· ··································				<u> </u>
									
Well No	·			Purge Metho	od:				
Depth to W	ater (feet):		·	Depth to Pro	oduct (feet):				
					r Recovered	•			
					neter (Inches)			_	
		eet):			ne (gallons):		·····		
			·· ·····		(3/				-42
	Υ		· · · · · · · · · · · · · · · · · · ·				,··		
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperatur (F,C)	ерн	D.O.	ORP	Turbidity
			ļ						
			<u> </u>			-		 	
			 				,		
Sta	tic at Time S	ampled	Tot	I al Gallons Pu	med I		Sample	I	L
	 -				J		Janipic		
Comment	5:								

Date of Report: 07/06/2007

Anju Farfan

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

RE: 6129

BC Work Order: 0707228

Enclosed are the results of analyses for samples received by the laboratory on 06/25/2007 21:05. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Hooker

Client Service Rep

Authorized Signature

Project: 6129

Project Number: [none]
Project Manager: Anju Farfan

Reported: 07/06/2007 9:13

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Informa	tion			
0707228-01	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 6129 MW-1 MW-1 Will R. of TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	06/25/2007 21:05 06/25/2007 10:45 Water	Delivery Work Order: Global ID: T0600101465 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0707228-02	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 6129 MW-2 MW-2 Will R. of TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	06/25/2007 21:05 06/25/2007 11:10 Water	Delivery Work Order: Global ID: T0600101465 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0707228-03	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 6129 MW-3 MW-3 Will R. of TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	06/25/2007 21:05 06/25/2007 12:22 Water	Delivery Work Order: Global ID: T0600101465 Matrix: W Samle QC Type (SACode): CS Cooler ID:

Project: 6129

Project Number: [none] Project Manager: Anju Farfan Reported: 07/06/2007 9:13

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID:	0707228-01	Client Sam	ple Name	: 6129, MW-1, MW	/-1, 6/25/200	7 10:45:0	0AM, Will R.		· · · · · · · · · · · · · · · · · · ·	***************************************			
Constituent		Result	Units	PQL MDL	\$8 a 4 la a al	Prep	Run		Instru-		QC	MB ₅	Lab
Benzene		ND ND		0.50	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
			ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
1,2-Dibromoethane	**************************************	ND	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
Ethylbenzene		ND	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
Methyl t-butyl ether		ND	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
Toluene		ND	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
Total Xylenes		ND	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
t-Butyl alcohol		ND	ug/L	10	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
Diisopropyl ether		ND .	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
Ethanol		ND	ug/L	250	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
Total Purgeable Petrole Hydrocarbons	eum	ND	ug/L	50	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407	ND	
1,2-Dichloroethane-d4	(Surrogate)	91.0	%	76 - 114 (LCL - UCL)	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407		
Toluene-d8 (Surrogate))	94.1	%	88 - 110 (LCL - UCL)	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407		
4-Bromofluorobenzene	(Surrogate)	98.9	%	86 - 115 (LCL - UCL)	EPA-8260	06/28/07	06/30/07 10:52	DKC	MS-V12	1	BQF1407		

Project: 6129

Project Number: [none]
Project Manager: Anju Farfan

Reported: 07/06/2007 9:13

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 070722	3-02	Client Sam	Client Sample Name: 6129, MW-2, MW-2, 6/25/2007 11:10:00AM, Will R.											
							Prep	Run		Instru-		QC	MB	Lab
Constituent		Result	Units	PQL M	IDL N	<u>lethod</u>	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50	Ε	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
1,2-Dibromoethane		ND	ug/L	0.50	E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
1,2-Dichloroethane		ND	ug/L	0.50	Е	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
Ethylbenzene		ND	ug/L	0.50	Е	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
Methyl t-butyl ether		1.2	ug/L	0.50	E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
Toluene		ND	ug/L	0.50	Е	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	er og sterrendere i Frenche i i i ske mene er
Total Xylenes		ND	ug/L	0.50	E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
t-Amyl Methyl ether		ND	ug/L	0.50	E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
t-Butyl alcohol		ND	ug/L	10	Ε	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
Diisopropyl ether		23	ug/L	0.50	Ε	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
Ethanol		ND	ug/L	250	E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
Ethyl t-butyl ether		ND	ug/L	0.50	Ε	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50	E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407	ND	
1,2-Dichloroethane-d4 (Surrogate	∍)	94.9	%	76 - 114 (LCL - L	JCL) E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407		
Toluene-d8 (Surrogate)		95.2	%	88 - 110 (LCL - L	JCL) E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407		
4-Bromofluorobenzene (Surrogat	e)	104	%	86 - 115 (LCL - L	JCL) E	PA-8260	06/28/07	06/30/07 11:16	DKC	MS-V12	1	BQF1407		

Project: 6129

Project Number: [none] Project Manager: Anju Farfan Reported: 07/06/2007 9:13

Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0707228-03	Client Sam	ple Nam	e: 6129, MW-3, MV	V-3, 6/25/200	07 12:22:0	00PM, Will R.						· · · · · · · · · · · · · · · · · · ·
	_				Prep	Run		Instru-		QC	MB	Lab
Constituent	Result	Units	PQL MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene	ND	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
1,2-Dibromoethane	ND	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
1,2-Dichloroethane	0.65	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	. 1	BQF1407	ND	
Ethylbenzene	ND	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
Methyl t-butyl ether	570	ug/L	5.0	EPA-8260	06/28/07	06/30/07 11:40	DKC	MS-V12	10	BQF1407	ND	A01
Toluene	ND	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
Total Xylenes	ND	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
t-Amyl Methyl ether	ND	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
t-Butyl alcohol	11	ug/L	10	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
Diisopropyl ether	ND	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
Ethanol .	ND	ug/L	250	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
Ethyl t-butyl ether	ND	ug/L	0.50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	
Total Purgeable Petroleum Hydrocarbons	270	ug/L	50	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407	ND	A90
1,2-Dichloroethane-d4 (Surrogate)	91.2	%	76 - 114 (LCL - UCL)	EPA-8260	06/28/07	06/30/07 11:40	DKC	MS-V12	10	BQF1407		
1,2-Dichloroethane-d4 (Surrogate)	96.3	%	76 - 114 (LCL - UCL)	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407		
Toluene-d8 (Surrogate)	94.7	%	88 - 110 (LCL - UCL)	EPA-8260	06/28/07	06/30/07 11:40	DKC	MS-V12	10	BQF1407		
Toluene-d8 (Surrogate)	98.2	%	88 - 110 (LCL - UCL)	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407		***
4-Bromofluorobenzene (Surrogate)	100	%	86 - 115 (LCL - UCL)	EPA-8260	06/28/07	07/03/07 03:58	DKC	MS-V12	1	BQF1407		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - UCL)	EPA-8260	06/28/07	06/30/07 11:40	DKC	MS-V12	10	BQF1407		

Project: 6129

Project Number: [none]
Project Manager: Anju Farfan

Reported: 07/06/2007 9:13

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Precision & Accuracy

									Control Limits			
Constituent	Batch ID	QC Sample Type	Source Sample ID	Source Result	Result	Spike Added	Units	RPD	Percent Recovery	RPD	Percent Recovery Lab Quals	
Benzene	BQF1407	Matrix Spike	0707185-02	0	28.270	25.000	ug/L		113		70 - 130	
		Matrix Spike Duplicat	e 0707185-02	0	27.300	25.000	ug/L	3.6	109	20	70 - 130	
Toluene	BQF1407	Matrix Spike	0707185-02	0	26.990	25.000	ug/L		108		70 - 130	
		Matrix Spike Duplicat	90707185-02	0	26.770	25.000	ug/L	0.9	107	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BQF1407	Matrix Spike	0707185-02	ND	10.140	10.000	ug/L		101		76 - 114	
		Matrix Spike Duplicate	90707185-02	ND	10.120	10.000	ug/L		101		76 - 114	
Toluene-d8 (Surrogate)	BQF1407	Matrix Spike	0707185-02	ND	9.6600	10.000	ug/L		96.6	***********	88 - 110	
		Matrix Spike Duplicate	90707185-02	ND .	9.7300	10.000	ug/L	•	97.3		88 - 110	
4-Bromofluorobenzene (Surrogate)	BQF1407	Matrix Spike	0707185-02	ND	10.290	10.000	ug/L		103		86 - 115	
		Matrix Spike Duplicate	90707185-02	ND	10.420	10.000	ug/L		104		86 - 115	



Project: 6129

Project Number: [none] Project Manager: Anju Farfan Reported: 07/06/2007 9:13

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

·								Control Limits					
Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	Percent RPD Recovery	RPD	Lab Quals		
Benzene	BQF1407	BQF1407-BS1	LCS	24.040	25.000	0.50	ug/L	96.2	70 - 130				
Toluene	BQF1407	BQF1407-BS1	LCS	24.100	25.000	0.50	ug/L	96.4	70 - 130				
1,2-Dichloroethane-d4 (Surrogate)	BQF1407	BQF1407-BS1	LCS	9.1000	10.000		ug/L	91.0	76 - 114				
Toluene-d8 (Surrogate)	BQF1407	BQF1407-BS1	LCS	9.7000	10.000		ug/L	97.0	88 - 110		<u> </u>		
4-Bromofluorobenzene (Surrogate)	BQF1407	BQF1407-BS1	LCS	10.630	10.000		ug/L	106	86 - 115				

Project: 6129

Project Number: [none]
Project Manager: Anju Farfan

Reported: 07/06/2007 9:13

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	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		
Ethylbenzene	BQF1407	BQF1407-BLK1	ND	ug/L	0.50	-1	OPPORTUNE ON THE A MINISTER STATE OF THE PROPERTY OF THE STATE OF THE
Methyl t-butyl ether	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		
Toluene	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		
Total Xylenes	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		,
t-Amyl Methyl ether	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BQF1407	BQF1407-BLK1	ND	ug/L	10		
Diisopropyl ether	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		
Ethanol	BQF1407	BQF1407-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BQF1407	BQF1407-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BQF1407	BQF1407-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BQF1407	BQF1407-BLK1	95.2	%	76 - 114 (LCL	UCL)	
Toluene-d8 (Surrogate)	BQF1407	BQF1407-BLK1	95.0	%	88 - 110 (LCL		
4-Bromofluorobenzene (Surrogate)	BQF1407	BQF1407-BLK1	102	%	86 - 115 (LCL		



TRC Alton Geoscience

21 Technology Drive Irvine, CA 92618-2302 Project: 6129

Reported: 07/06/2007 9:13

Project Number: [none]

Project Manager: Anju Farfan

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.

BC LABORATORIES INC.		SAMPL	E RECEIF	T FORM	Л р	ev. No. 10	01/21/04	Page	Of			
Submission #: 07-0724		Project C		11010	n R		01/21/04	Page _	Of			
			oue.	r ======			Batch #					
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Federal Express UPS Other Other	(Specif	y)			Ice Ches		Non- Other □	e ⊔ ∄(Specify	٨			
									r)			
Refrigerant: Ice∕☐ Blue Ice ☐	None	e□ Ot	her 🗆 🕠	Commer	ıts:							
Custody Seals lice Chest □ Intact? Yes □ No □	Containe Intact? Ye	ers 🗵 🐇	None,	Comme	ents:							
All samples received? Yes ☑ No □	di sample	s container:	s intact? Y	es D No		Descrip	tion(s) mate	h COC2 \	(ast) No	п		
COC Received			nest ID	RIL								
✓YES □ NO	Temperature: 3. 6 °C Thermometer ID: 48			Contai	vity	9	1	Date/Time 6/25/7				
		Inermome	eter ID: 4	8				Analyst Init				
SAMPLE CONTAINERS		T	1		1	NUMBERS	_	 ?		·		
QT GENERAL MINERAL/ GENERAL PHYSICAL	1	2	3	4	5	6	7	8	9	10		
PT PE UNPRESERVED				-		1			 	 		
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100ml TOTAL ORGANIC CARBON												
QT TOX												
PT CHEMICAL OXYGEN DEMAND												
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40ml VOA VIAL TRAVEL BLANK	N 7					 						
40ml VOA VIAL	A 3	A (3)	A-3	(((()	(((
OT EPA 413.1, 413.2, 418.1							ļl			ļ		
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10 ml VOA VIAL- 504												
OT EPA 508/608/8080								·-				
OT EPA 515.1/8150												
)T EPA 525												
)T EPA 525 TRAVEL BLANK						· · · · · · · · · · · · · · · · · · ·				<u> </u>		
00ml EPA 547												
00ml EPA 531.1												
OT EPA 548								···				
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T EPA 632												
T EPA 8015M												
T QA/QC												
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#07-07228

BC LABORATORIES, INC.

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

CHAIN OF CUSTODY

(001) 327-1910							Analysis Requested								
Bill to: Conoco Phillips/ TRC Address: 3420 35th Ave City: OAKLAND		Consultant Firm: Ti 21 Techology Drive Irvine, CA 92618-23 Attn: Anju Farfan	MATRIX (GW) Ground- water (S) Soil (WW) Waste- water		33333333		Soves				3000000	Requested			
		4-digit site#: 612 Workorder #			y 8015	8260B	JOXYS BY	(6				ime Requ			
State: CA	Zip:	Project #: 1257	Project #: 125763			TPH DIESEL by 8015 ETHANOL by 8260B	o P	, co	1				F Pu		
Conoco Pi	hillips Mgr: D, DETTLOFF	Sampler Name: \	Sampler Name: WILL					WTBE_	ED				arou		
Lab# Sample Description		Field Point Name	Date & Time Sampled		ТРН (TPH	TP46	STEXIMIBE	508				Turnaround Time		
		MW-1 -/	6/25/7 1045	6~		`	XX		X				500		
		mw-2 -2	1 1110		·	>	< ;	Z X	\times						
		mv-3 -3	1222	\		>	< >						7		
	CHKB	DISTHIBUTION SUB-OUT													
Comments: Relinquished by: (Signature) Www.					REPRIGERATION 6					1 1 .	te & Time 25 7 1414				
GLOBAL ID:	T0600 10 1465	Relinquished by: (Si	1) Deckey ((25/07		Recei	ved by ved by)sell		Date & 6/25 Date & 6/25	Time 107 Time	14. 800			

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.