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2:37 pm, May 24, 2012

Alameda County
Environmental Health

April 13, 2009

Barbara Jakub Alameda County Health Agency 1131 Harbor Bay parkway, Suite250 Alameda, California 94502-577

Re:

Quarterly Summary Report (QSR)—First Quarter 2009

76 Service Station # 6129 RO # 058

3420 35<sup>th</sup> Ave Oakland, CA

Dear Ms. Jakub:

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 call me at (916) 558-7666.

Sincerely,

Terry L. Grayson Site Manager

Risk Management & Remediation

#### SUSTAINABLE STRATEGIES FOR GLOBAL LEADERS

April 13, 2009

Ms. Barbara Jakub Alameda County Health Care Services Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Re: Quarterly Summary Report – First Quarter 2009 Fuel Leak Case No. R00000058

Dear Ms. Jakub:

On behalf of ConocoPhillips Company (COP), Delta Consultants (Delta) is submitting the Quarterly Summary Report – First Quarter 2009 and forwarding a copy of TRC Solutions, Inc. (TRC's) Quarterly Monitoring Report, January through March 2009, dated April 3, 2009, for the following location:



#### **Service Station**

**Location** 

76 Service Station No. 6129

3420 35<sup>th</sup> Avenue Oakland, California

Sincerely, **DELTA CONSULTANTS** 

James B. Barnard, P.G. Senior Project Manager

allo B. Bargar

California Registered Professional Geologist No. 7478

cc: Mr. Terry Grayson, ConocoPhillips (electronic copy)



#### QUARTERLY SUMMARY REPORT First Quarter 2009 76 Service Station No. 6129 3420 35<sup>th</sup> 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 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 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 MTBE was present at concentrations ranging from 240 and 3,700 micrograms per liter ( $\mu$ g/L), with the most elevated concentrations found in monitoring wells MW-2 (2,100  $\mu$ g/L) and MW-3 (3,700  $\mu$ 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

#### **Quarterly Summary Report – First Quarter 2009** 76 Service Station No. 6129

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 State of California Department of Water Resources (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.

#### 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. Samples collected from the monitoring wells are analyzed for total purgeable petroleum hydrocarbons (TPPH), benzene, toluene, ethyl-benzene, and total xylenes (BTEX), and MTBE, di-isopropyl ether (DIPE), tertiary butyl alcohol (TBA), tertiary amyl methyl ether (TAME), ethyl tertiary butyl ether (ETBE), 1,2-dichloroethane (1,2-DCA), ethylene dibromide (EDB), and ethanol by Environmental Protection Agency (EPA) Method 8260. TRC has been retained to perform the monitoring and sampling. A copy of TRC's Quarterly Monitoring Report - January through March 2009, dated April 3, 2009 has been forwarded with this report.

During the most recent groundwater monitoring event, conducted on March 9, 2009, the depth to groundwater ranged from 25.56 feet (MW-3) to 27.50 feet (MW-1) below top of casing (TOC). The groundwater flow direction was interpreted to be to the northwest with a gradient of 0.022 foot per foot (ft/ft). This is inconsistent with the

previous quarterly sampling event when the groundwater flow direction was interpreted to be to the southwest with a gradient of  $0.013\ \text{ft/ft.}$  Historic groundwater flow directions presented as a rose diagram included as Attachment A.

#### **Contaminants of Concern:**

- **TPPH:** TPPH was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-2 and MW-3 at concentrations of 910 µg/L and 310 µg/L, respectively during the current sampling event. However, the laboratory notes indicate that the TPPH in monitoring wells MW-2 and MW-3 does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.
- Benzene: Benzene was below the laboratory's indicated reporting limit in each
  of the groundwater samples collected and submitted for analysis from the
  monitoring wells purged and sampled during the current sampling event.
- MTBE: MTBE was above the laboratory's indicated reporting limits in the groundwater samples collected and submitted for analysis from monitoring wells MW-1, MW-2, and MW-3 at concentrations of 25 µg/L, 1,400 µg/L, and 720 µg/L, respectively during the current sampling event.
- **DIPE:** DIPE was above the laboratory's indicated reporting limits in the groundwater sample collected and submitted for analysis from monitoring well MW-2 at a concentration of 15 μg/L during the current sampling event.
- **TBA:** TBA was above the laboratory's indicated reporting limits in the groundwater sample collected and submitted for analysis from monitoring well MW-3 at a concentration of 15 µg/L during the current sampling event.

With the exception of the constituents listed above, all other constituents tested were below the laboratory's indicated reporting limits the groundwater samples collected and submitted for analysis from the three monitoring wells during the first quarter 2009 sampling event.

#### **REMEDIATION STATUS**

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

#### **CHARACTERIZATION STATUS**

A site assessment work plan has been submitted to the agency for review. Delta is currently awaiting a response for Alameda County Health Care Services for the advancement of soil borings and installation of additional monitoring wells on-site. Groundwater monitoring is ongoing.

#### RECENT CORRESPONDENCE

Delta submitted a Site Assessment Work Plan, dated March 23, 2009, to Alameda County Health Care Services.

#### **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 (First Quarter 2009)**

1. TRC conducted the quarterly monitoring and sampling event at the site on March 9, 2009 and submitted *Quarterly Monitoring Report, January through March 2009*, dated April 3, 2009.

#### **NEXT QUARTER ACTIVITIES (Second Quarter 2009)**

- 1. TRC will conduct the quarterly groundwater monitoring and sampling event at the site
- 2. If a response is received from the Alameda County Health Care Services Agency (ACHCSA) to the work plan submitted on March 23, 2009, Delta will proceed with the proposed work as requested.

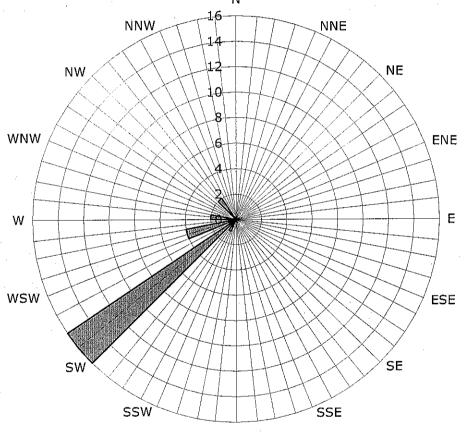
**CONSULTANT:** Delta Consultants

Attachment A - Historic Groundwater Flow Directions

# Attachment A 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 First Quarter 2009

24 data points shown





21 Technology Drive Irvine, CA 92618

949.727.9336 PHONE 949.727.7399 FAX

www.TRCsolutions.com

DATE:

April 3, 2009

TO:

ConocoPhillips Company

76 Broadway

Sacramento, CA 94563

ATTN:

MR TERRY GRAYSON

SITE:

76 STATION 6129

3420 35<sup>TH</sup> AVENUE

OAKLAND, CALIFORNIA

RE:

QUARTERLY MONITORING REPORT

**JANUARY THROUGH MARCH 2009** 

Dear Mr Grayson,

Please find enclosed our Quarterly Monitoring Report for 76 Station 6129, located at 3420 35<sup>th</sup> 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. James Barnard, Delta Consultants (1 copy)

Enclosures:

20-0400/6129R22 QMS

#### QUARTERLY MONITORING REPORT JANUARY THROUGH MARCH 2009

76 STATION 6129 3420 35<sup>th</sup> Avenue Oakland, California

Prepared For:

Mr. Terry Grayson CONOCOPHILLIPS COMPANY 76 Broadway Sacramento, CA 94563

By:

Senior Project Geologist, Irvine Operations

Pate: 4/2/6



DENNIS E JENSEN No 3531

	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 1b: Additional Current Analytical Results
	Table 2: Historic Fluid Levels and Selected Analytical Results
	Table 2a: Additional Historic Analytical Results
	Table 2b: 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 – 03/09/09
	Groundwater Sampling Field Notes – 03/09/09
Laboratory	Official Laboratory Reports
Reports	Quality Control Reports
	Chain of Custody Records
Statements	Purge Water Disposal
	Limitations

#### **Summary of Gauging and Sampling Activities** January 2009 through March 2009 76 Station 6129 3420 35th Ave. Oakland, CA

Project Coordinator: Terry Grayson

Water Sampling Contractor: TRC

Telephone: 916-558-7666

Compiled by: Christina Carrillo

Date(s) of Gauging/Sampling Event: 03/09/09

**Sample Points** 

3 onsite,

Points gauged: 3 0 offsite

Points sampled: 3

Purge water disposal: Veolia/Rodeo Unit 100

Groundwater wells:

Purging method: Bailer/submersible pump

Other Sample Points: 0

Type: --

Liquid Phase Hydrocarbons (LPH)

Sample Points with LPH: 0

Maximum thickness (feet): --

LPH removal frequency:

Method: --

Treatment or disposal of water/LPH: --

**Hydrogeologic Parameters** 

Depth to groundwater (below TOC):

Minimum: 25.56 feet

Maximum: 27.5 feet

Average groundwater elevation (relative to available local datum): 75.20 feet

Average change in groundwater elevation since previous event: 4.10 feet

Interpreted groundwater gradient and flow direction:

Current event: 0.022 ft/ft, northwest

Previous event: 0.013 ft/ft, southwest (11/25/08)

**Selected Laboratory Results** 

Sample Points with detected **Benzene**:

0

Sample Points above MCL (1.0 µg/l): --

Maximum reported benzene concentration: --

Sample Points with TPH-G by GC/MS

Maximum: 910 μg/l (MW-2)

Sample Points with MTBE 8260B

3

2

Maximum: 1,400 μg/l (MW-2)

**Notes:** 

Readings for D.O. and ORP were taken on 3/11/09.

### **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 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)

D = duplicate P = no-purge sample

#### **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: <u>Surface Elevation Measured Depth to Water + (Dp x LPH Thickness)</u>, 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.

#### REFERENCE

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

#### Contents of Tables 1 and 2 Site: 76 Station 6129

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Table 1	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015 (Luft)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
Table 1a	Well/ Date	ТВА	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Carbon (organic, total)	Iron Ferrous	Nitrogen as Nitrate	Sulfate	Alkalinity (total)
Table 1b	Well/ Date	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP								
Historic	Data												
Table 2	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015 (Luft)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
Table 2a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Carbon (organic, total)	Iron Ferrous	Nitrogen as Nitrate	Sulfate	Alkalinity (total)
Table 2b	Well/ Date	Post-purge Dissolved Oxygen	Pre-purge Dissolved Oxygen	Pre-purge ORP	Post-purge ORP								

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 9, 2009
76 Station 6129

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G 8015 (Luft)	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)	
<b>MW-1</b> 03/09/09	9 102.24	27.50	0.00	74.74	3.38		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		25	
<b>MW-2</b> 03/09/09	9 102.16	25.75	0.00	76.41	4.73	<del></del>	910	ND<5.0	ND<5.0	ND<5.0	ND<10		1400	
<b>MW-3</b> 03/09/09	9 100.00	25.56	0.00	74.44	4.18		310	ND<0.50	ND<0.50	ND<0.50	ND<1.0		720	



Table 1 a
ADDITIONAL CURRENT ANALYTICAL RESULTS
76 Station 6129

Date Sampled		Ethanol	Ethylene- dibromide	1,2-DCA				Carbon (organic,	Iron	Nitrogen as		Alkalinity
	TBA (μg/l)	(8260B) (μg/l)	(EDB) (μg/l)	(EDC) (μg/l)	DIPE (μg/l)	ETBE (µg/l)	TAME (µg/l)	total) (mg/l)	Ferrous (μg/l)	Nitrate (mg/l)	Sulfate (mg/l)	(total) (mg/l)
<b>MW-1</b> 03/09/09	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.83	ND<1000	2.0	46	310
<b>MW-2</b> 03/09/09	ND<100	ND<2500	ND<5.0	ND<5.0	15	ND<5.0	ND<5.0	1.4	940	2.0	41	410
<b>MW-3</b> 03/09/09	15	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.4	ND<500	ND<0.44	38	310



Table 1 b
ADDITIONAL CURRENT ANALYTICAL RESULTS
76 Station 6129

Date	Post-purge	Pre-purge		
Sampled	Dissolved	Dissolved	Pre-purge	Post-purge
	Oxygen	Oxygen	ORP	ORP
<u></u>	(mg/l)	(mg/l)	(mV)	(mV)
MW-1				
03/09/09	1.95	2.54	8	24
MW-2				
03/09/09	0.85	1.32	39	56
MW-3				
03/09/09	0.94	0.84	14	32



Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
January 1990 Through March 2009
76 Station 6129

Date	TOC	Depth to	LPH	Ground-	Change	TPH-G								Comments
Sampled	Elevation	Water	Thickness	water	in	8015	TPH-G			Ethyl-	Total	MTBE	MTBE	
				Elevation	Elevation	(Luft)	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$								
MW-1														
01/05/9	00					ND		ND	ND	ND	ND			
05/11/9	00					ND		ND	7.1	ND	ND	<b>-</b>		
08/09/9	90					ND		ND	ND	ND	ND			
11/14/9	90					ND		ND	ND	ND	ND			
02/12/9	)1					ND		0.32	ND	ND	ND			
05/09/9	)1				74	ND		ND	ND	ND	ND			
11/13/0	)3						180	ND<1.0	ND<1.0	ND<1.0	ND<2.0		240	
08/27/0	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	
11/23/0	)4 102.24	1 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	)5 102.24	26.89	0.00	75.35	2.46		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		9.3	
05/17/0	5 102.24	26.56	0.00	75.68	0.33		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.9	
07/27/0	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	
12/06/0	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	
02/21/0	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	
06/08/0	6 102.24	26.07	0.00	76.17	2.20		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		11	
09/15/0	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	
12/14/0	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	
03/28/0	7 102.24	27.24	0.00	75.00	2.25		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		0.64	
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	
09/22/0	7 102.24	30.61	0.00	71.63	-2.31		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		4.1	
12/14/0	7 102.24	30.30	0.00	71.94	0.31		ND<50			ND<0.50			0.65	
03/17/0	08 102.24	27.22	0.00	75.02	3.08		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		14	

**CTRC** 

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
January 1990 Through March 2009
76 Station 6129

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015 (Luft)	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)	$(\mu g/I)$	$(\mu g/l)$	$(\mu g/l)$	
	continued													
06/20/0		30.10		72.14	-2.88		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		11	
09/11/0	08 102.24	31.04		71.20	-0.94		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.3	
11/25/0				71.36	0.16		ND<50		ND<0.50		ND<1.0		5.8	
03/09/0	9 102.24	27.50	0.00	74.74	3.38		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		25	
MW-2														
01/05/9	90					ND		ND	ND	ND	ND			
05/11/9	00					ND		ND	ND	ND	·ND			
08/09/9	00					ND		ND	ND	ND	ND			
11/14/9	90					ND		ND	ND	ND	ND			
02/12/9	91					ND		ND	0.42	ND	0.51			
05/09/9	)1					ND		ND	ND	ND	ND			
11/13/0	)3						ND<2000	ND<20	ND<20	ND<20	ND<40		2100	
08/27/0	102.16	30.28	0.00	71.88			950	ND<5.0	ND<5.0	ND<5.0	ND<10		1400	
11/23/0	)4 102.1 <i>6</i>	28.75	0.00	73.41	1.53		53	ND<0.50	ND<0.50	ND<0.50	ND<1.0		4.2	
02/09/0	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	
05/17/0	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	
07/27/0	)5 102.16	27.51	0.00	74.65	-2.98	<b></b> ,	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10		580	
12/06/0	102.16	29.13	0.00	73.03	-1.62		340	ND<0.50	ND<0.50	ND<0.50	ND<1.0		780	
02/21/0	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	
06/08/0	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	
09/15/0	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	
12/14/0	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	
03/28/0	7 102.16	26.68	0.00	75.48	2.43		290	ND<0.50	ND<0.50	ND<0.50	ND<0.50		460	
6129								Page	2 of 4					ØTPC

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
January 1990 Through March 2009
76 Station 6129

Date	TOC	Depth to	LPH	Ground-	Change	TPH-G								Comments
Sampled	Elevation	Water	Thickness	water Elevation	ın Elevatıon	8015	TPH-G	ъ		Ethyl-	Total	MTBE	MTBE	
	(feet)	(feet)	(feet)	(feet)	(feet)	(Luft)	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
-	, ,		(Ieet)	(Icci)	(Ieel)	(µg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	
<b>MW-2</b> 06/25/0			0.00	76.25	0.77		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		1.2	
09/22/0			0.00	71.98	-4.27		400		ND<0.50	ND<0.50			530	
12/14/0			0.00	72.20	0.22	<u></u>	400		ND<0.50	ND<0.50			930	
03/17/0			0.00	75.42	3.22		570	ND<5.0	ND<5.0	ND<5.0	ND<10		630	
06/20/0			0.00	72.38	-3.04		580		ND<0.50	ND<0.50	ND<1.0		1200	
09/11/0			0.00	71.54	-0.84		220		ND<0.50	ND<0.50	ND<1.0		29	
11/25/0			0.00	71.68	0.14		500		ND<0.50	ND<0.50	ND<1.0		1500	
03/09/0	9 102.16	25.75	0.00	76.41	4.73		910	ND<5.0	ND<5.0	ND<5.0	ND<10		1400	
MW-3														
01/05/9	90		0.00			ND		ND	ND	ND	ND			
05/11/9	00					ND		ND	ND	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		ND	ND	ND	ND			
05/09/9	91					ND		ND	ND	ND	ND	~~		
11/13/0	)3						2600	ND<20	ND<20	ND<20	ND<40		3700	
08/27/0	04 100.00	29.61	0.00	70.39			1700	ND<10	ND<10	ND<10	ND<20		2600	
11/23/0	04 100.00	28.48	0.00	71.52	1.13		1500	ND<10	ND<10	ND<10	ND<20		1800	
02/09/0	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	
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	05 100.00	27.35	0.00	72.65	-1.74		ND<1000	ND<10	ND<10	ND<10	ND<20		1400	
12/06/0		28.78	0.00	71.22	-1.43		430	ND<0.50	1.6	ND<0.50	3.6		1800	
02/21/0	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	
6129								Page :	3 of 4					€ TPC

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
January 1990 Through March 2009
76 Station 6129

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)		Change in Elevation (feet)	TPH-G 8015 (Luft) (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-3	continued						., .,	(10)	40,	(, 0, )	(10)	(18)	(1.0.7	
06/08/0			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	
09/22/0	7 100.00	29.57	0.00	70.43	-2.83		500	ND<0.50	ND<0.50	ND<0.50	ND<0.50		980	
12/14/0	7 100.00	29.30	0.00	70.70	0.27		270	ND<0.50	ND<0.50	ND<0.50	ND<1.0		570	
03/17/0	8 100.00	26.82	0.00	73.18	2.48		220	ND<0.50	ND<0.50	ND<0.50	ND<1.0		520	
06/20/0	8 100.00	29.10	0.00	70.90	-2.28		490	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1300	
09/11/0	8 100.00	29.89	0.00	70.11	-0.79		630	ND<5.0	ND<5.0	ND<5.0	ND<10		1200	
11/25/0	8 100.00	29.74	0.00	70.26	0.15		380	ND<0.50	ND<0.50	ND<0.50	ND<1.0		870	
03/09/0	9 100.00	25.56	0.00	74.44	4.18		310	ND<0.50	ND<0.50	ND<0.50	ND<1.0		720	



Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 6129

Date Sampled		Ethanol	Ethylene- dibromide	1,2-DCA				Carbon (organic,	Iron	Nitrogen as		Alkalinıty
	TBA	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME	total)	Ferrous	Nitrate	Sulfate	(total)
	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(mg/l)	(μg/l)	(mg/l)	(mg/l)	(mg/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					
08/27/04	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					
02/09/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50					
05/17/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	70				
07/27/05	ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	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				***	
02/21/06	ND<10	ND<250	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	ND<0.50	ND<0.50	ND<0.50	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					
12/14/06	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	ND<0.50	ND<0.50	ND<0.50	ND<0.50					
06/25/07	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50					
09/22/07	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					
03/17/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50				w.m.	
06/20/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50					
09/11/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	<del></del>				
11/25/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50					
03/09/09	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0,50	ND<0.50	0.83	ND<1000	2.0	46	310
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	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					w <b>w</b>
02/09/05	ND<50	ND<500	ND<5.0	ND<5.0	19	ND<5.0	ND<5.0				****	
6129						Page 1 of 3						TRC

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 6129

Date Sampled	TBA (µg/l)	EthanoI (8260B) (μg/l)	Ethylene- dibromide (EDB) (µg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (μg/l)	Carbon (organic, total) (mg/l)	Iron Ferrous (μg/l)	Nitrogen as Nitrate (mg/l)	Sulfate (mg/l)	Alkalinity (total) (mg/l)
MW-2 co	ontinued											
05/17/05	ND<5.0	ND<50	ND<0.50	ND<0.50	12	ND<0.50	ND<0.50					<b></b>
07/27/05	140	ND<500	ND<5.0	ND<5.0	16	ND<5.0	ND<5.0					
12/06/05	61	ND<250	ND<0.50	ND<0.50	15	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					
06/08/06	ND<100	ND<2500	ND<5.0	ND<5.0	14	ND<5.0	ND<5.0				-	
09/15/06	ND<100	ND<2500	ND<5.0	ND<5.0	17	ND<5.0	ND<5.0	. <del></del>				
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					<del></del>
06/25/07	ND<10	ND<250	ND<0.50	ND<0.50	23	ND<0.50	ND<0.50					m=
09/22/07	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					
03/17/08	ND<100	ND<2500	ND<5.0	ND<5.0	18	ND<5.0	ND<5.0					
06/20/08	ND<10	ND<250	ND<0.50	ND<0.50	16	ND<0.50	ND<0.50					
09/11/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		777			
11/25/08	ND<10	ND<250	ND<0.50	ND<0.50	19	ND<0.50	ND<0.50					
03/09/09	ND<100	ND<2500	ND<5.0	ND<5.0	15	ND<5.0	ND<5.0	1.4	940	2.0	41	410
MW-3												
11/13/03	ND<4000	ND<20000	ND<80	ND<80	ND<80	ND<80	ND<80				77	
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					

**OTRO** 

Page 2 of 3

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 6129

Date			Ethylene-					Carbon		Nitrogen		
Sampled		Ethanol	dibromide	1,2-DCA				(organic,	Iron	as		Alkalinıty
	TBA	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME	total)	Ferrous	Nitrate	Sulfate	(total)
.,	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	$(\mu g/l)$	(mg/l)	(μg/l)	(mg/l)	(mg/l)	(mg/l)
MW-3 co	ntinued											
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				w	
06/25/07	11	ND<250	ND<0.50	0.65	ND<0.50	ND<0.50	ND<0.50					
09/22/07	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					
03/17/08	ND<10	ND<250	ND<0.50	0.65	ND<0.50	ND<0.50	ND<0.50			~~		
06/20/08	49	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50			"		
09/11/08	ND<100	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0					
11/25/08	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50					
03/09/09	15	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.4	ND<500	ND<0.44	38	310



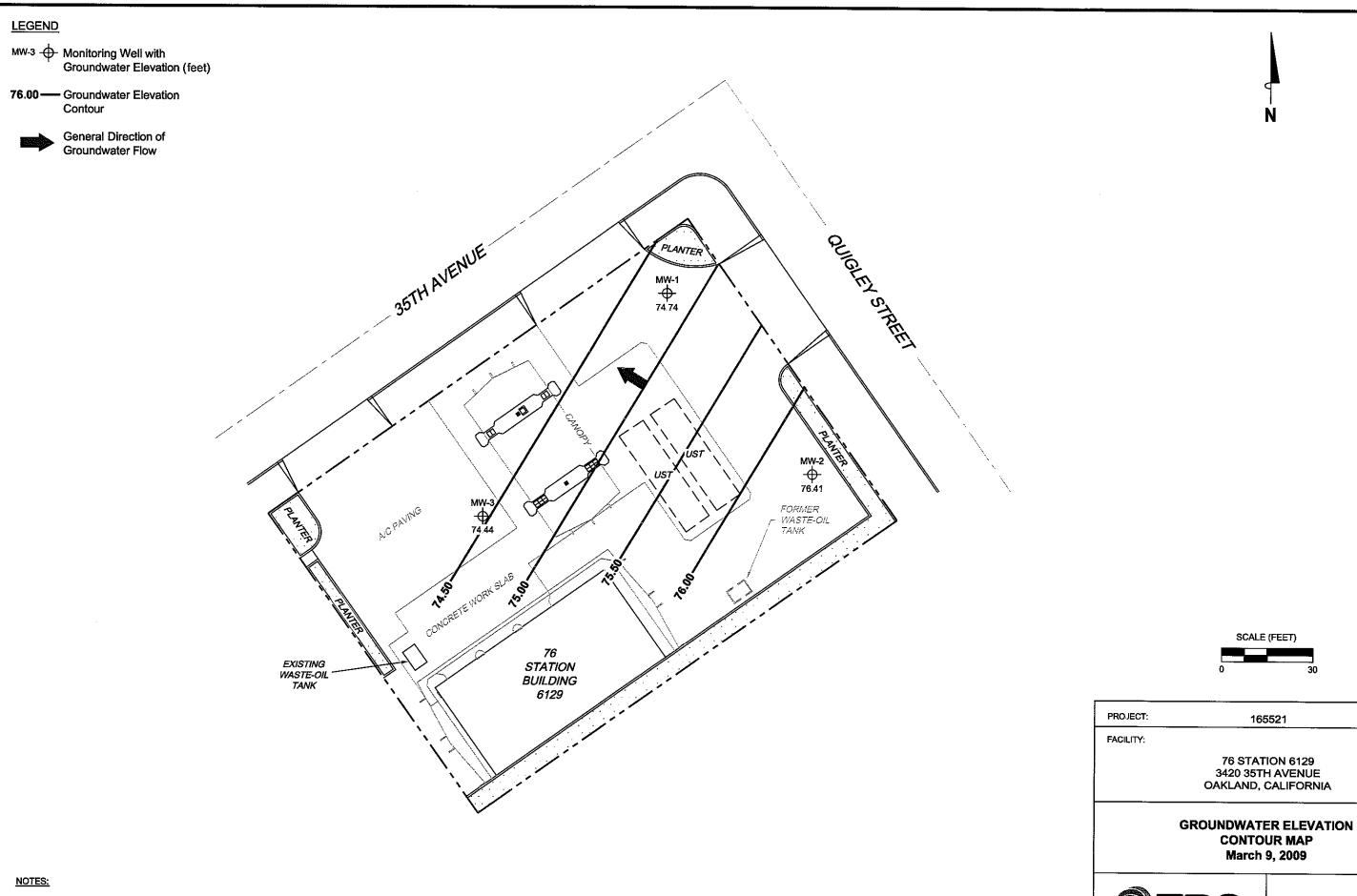
Table 2 b
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 6129

Date	Post-purge	Pre-purge		
Sampled	Dissolved	Dissolved	Pre-purge	Post-purge
	Oxygen	Oxygen	ORP	ORP
	(mg/l)	(mg/l)	(mV)	(mV)
MW-1				
03/09/09	1.95	2.54	8	24
MW-2				
03/09/09	0.85	1.32	39	56
MW-3				
03/09/09	0.94	0.84	14	32



## **FIGURES**

2009 - 1:53pm



7 00 70

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.

TRC

FIGURE 2

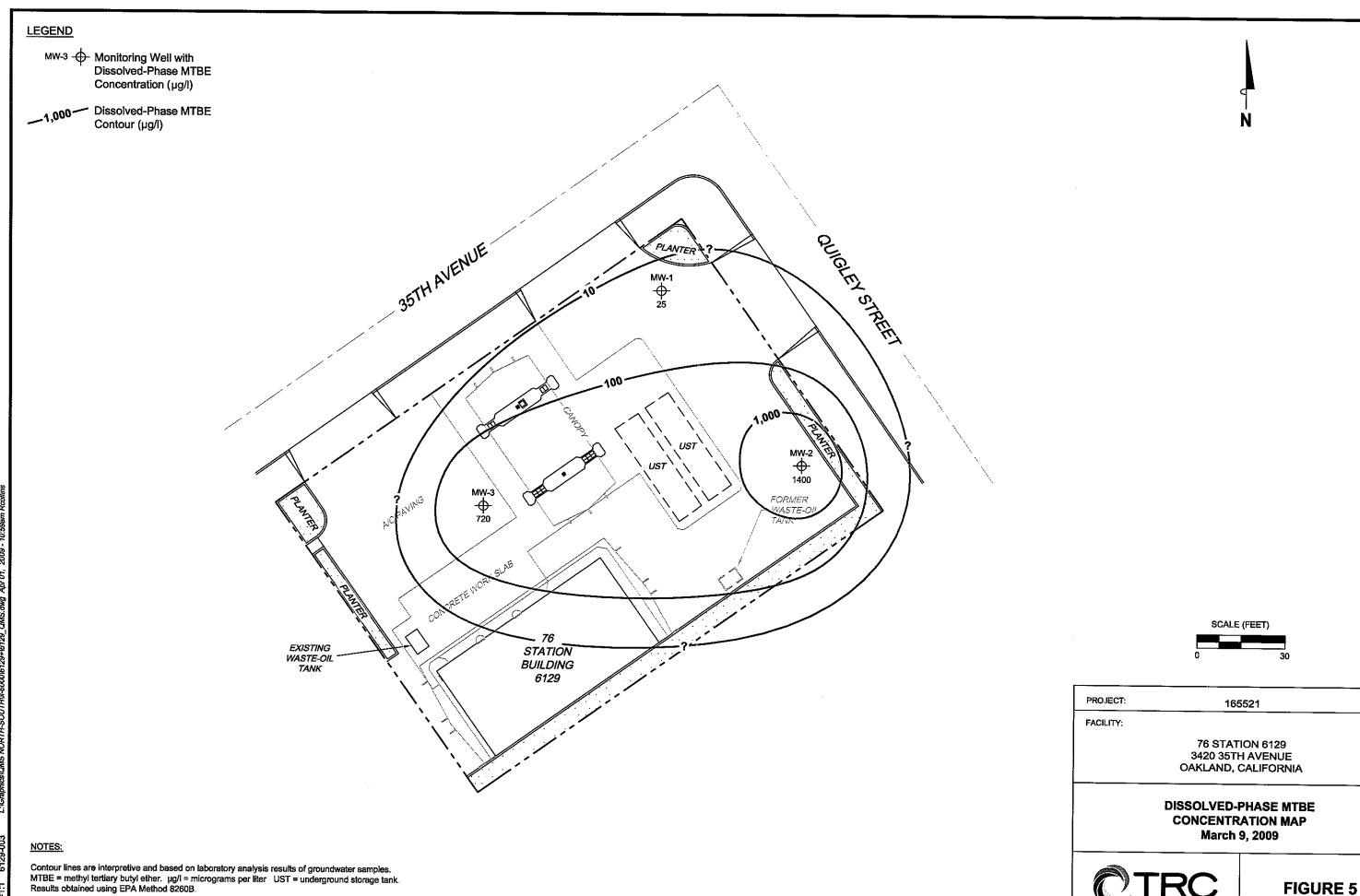
UST = underground storage tank.

FIGURE 3

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

OTRC

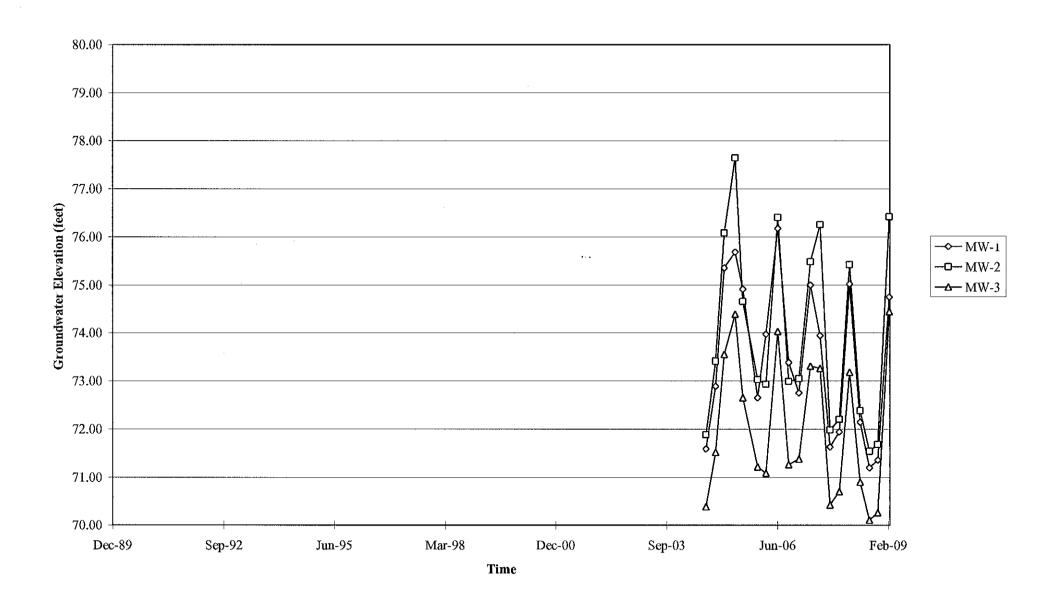
FIGURE 4



77.00

### **GRAPHS**

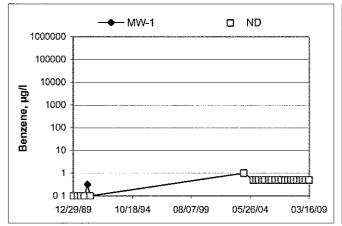
### Groundwater Elevations vs. Time 76 Station 6129

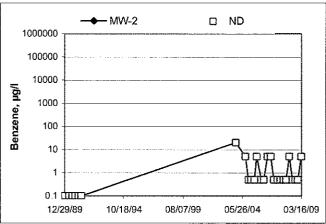


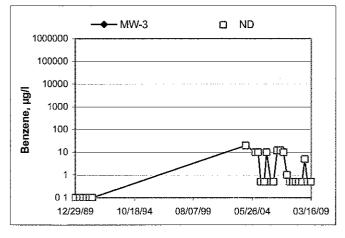
Elevations may have been corrected for apparent changes due to resurvey

#### **Benzene Concentrations vs Time**

76 Station 6129

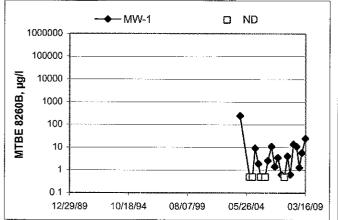


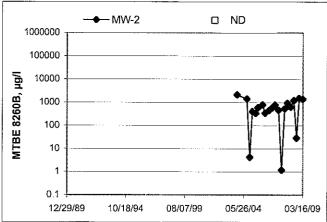


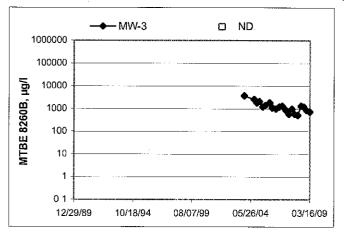


#### MTBE 8260B Concentrations vs Time

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 is 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 a particular well, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liqui-nox and water and rinsing twice. The final rinse is in deionized water.

#### **Exceptions**

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

3/7/08 version

### FIELD MONITORING DATA SHEET

 Technician: JoE
 Job #/Task #: 165521/FA20
 Date: 03-09-09

 Site # 6129
 Project Manager A: Collins
 Page 1 of 1

				Depth	Depth	Product		
Well#	TOC	Time Gauged	Total Depth	to Water	to Product	Thickness (feet)	Time Sampled	Misc. Well Notes
MW_1	X			27,50		(1001)		2" pressure
MW-3							0941	2" Pressur
mw-2				35,56				
MW-E	X	0855	43,55	25,75			1046	2"
					100	91/1		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
				25.56	1/4/	1/2/09	500	field naces
						1 1/		
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	-							
								·
							_	
FIELD DATA	COMPLE	TE	QA/QC		coć	WF	LL BOX CC	ONDITION SHEETS
	/		7		<del>-7-</del>		7	
MANIFEST		DRUM IN	ENTORY	,	TRAFFIC C	ONTROL		
		7						
<del></del>		<del></del>					<del> </del>	



		Tech	nician:	JOE					
Site: Col	29	Projec	ct No : <u>/6</u>	5521			Date:	13-1	1-09
Well No	MW-	- 1			:H				
Depth to Wa	iter (feet):				uct (feet):				
•		الاک خوالات سرمورد ای بهرمسر	· · · · · · · · · · · · · · · · · · ·		Recovered (ga				
				-	eter (Inches):			-	
		et):		1 Well Volume	e (gallons):		··········		
Time	Time	Depth to	Volume	Conduc-	Temperature	Hq	D.O.	ORP	Turbidity
Start	Stop	Water (feet)	Purged (gallons)	tivity (uS/cm)	(F(C)	٠٠٠٠.	(mg/L)		
1310					711	699	2.54	4	
pre	purgo			741.7	21.1 20.9	697	2.98		
P057	Purge			767.1	20.8	698	1,95	24	
1	1317							171	L
Stat	ic at Time Sa	ımpled		al Gallons Pur	ged		Sample	ime	
		-	3			<u> </u>			
Comments	S:								
107-1111-	mw-	3	ri <del>n and an Marakan and an an</del>	Purge Metho	od:	3			
AA6ii Mo'		تقاربان سيم وسنست م يككنا عسان وهرب	ماساند سماس جامع ام						
Depth to V	Vater (feet):			-	oduct (feet):				
Total Dept	h (feet)				r Recovered (g				
					neter (Inches):_			-	
80% Rech	arge Depth(fe	eet):	<del></del>	1 Well Volur	me (gallons):	<u> </u>			
Time	Time	Depth to	Volume	Conduc- tivity	Temperature	рН	D.O.	ORP	Turbidity
Start	Stop	Water (feet)	Purged (gallons)	(uS/cm)	(F(C)		(mg/L)		
1323				7.13	700	- 72	0.84	14	<del> </del>
pre	purge	·	<del></del> -	612:1	20,9 20.5	7.73	1.40	33	<del> </del>
POST	- Purge			618.0	20.2	7,30	0.94	32	
17/3/	1001-7	<u> </u>							
St	atic at Time S	Sampled	To	tal Gallons Pu	irged		Sample	e i ime	

Comments:



			mician.	JOE		•						
e: <u>612</u>	9	Proje	ct No.: 16	,552	<u> </u>		Date:	3-,	11-09			
	MW-				l:	HB_		<del></del>				
					luct (feet):			<b></b>				
•			<del></del>	•	Recovered (ga							
-					eter (Inches):							
		et):		1 Well Volume (gallons):								
176 Nechaty												
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F C)	рН	D.O. (mg/L)	ORP	Turbidity			
337					19.9	-7115	1.32	30	<u> </u>			
ore ,	purge !			790,5	13.9	7.45	1.90	62				
200	Purge	· · · · · · · · · · · · · · · · · · ·		761.3	19.0	17.19	0.85					
7057	rmec .			0.10.2								
Statio	at Time Sa	amoled	Tota	al Gallons Pu	rged		Sample	Time				
			3									
comments:								و منطقی برای در این این در این در این در این در این در این در				
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Vell No			کنگ — دران ک	Purge Metho	od:							
				_								
Depth to Wa	ater (feet):_			Depth to Pro	oduct (feet):			<del>-</del>				
Depth to Wa	ater (feet): (feet)		,	Depth to Pro	oduct (feet): er Recovered (	gallons):_		<del></del>				
Depth to Wa Total Depth Water Colu	ater (feet):_ ı (feet) mn (feet):			Depth to Pro	oduct (feet): er Recovered ( meter (inches):_	gallons):_		<del></del>				
Depth to Wa Total Depth Water Colu	ater (feet):_ ı (feet) mn (feet):			Depth to Pro	oduct (feet): er Recovered (	gallons):_		<del></del>				
Depth to Wa Total Depth Water Colu	ater (feet):_ ı (feet) mn (feet):	eet):	Volume Purged	Depth to Pro	oduct (feet): er Recovered ( meter (inches):_	gallons):		<del></del>	Turbidit			
Depth to Wa Total Depth Water Colui 80% Recha	ater (feet): (feet) mn (feet): arge Depth(fi	eet):	Volume	Depth to Pro LPH & Wate Casing Diar 1 Well Volum Conductivity	oduct (feet):er Recovered (geneter (inches):me (gallons):	gallons):_	D.O.		Turbidit			
Depth to Wa Total Depth Water Colui 80% Recha	ater (feet): (feet) mn (feet): arge Depth(fi	eet):	Volume Purged	Depth to Pro LPH & Wate Casing Diar 1 Well Volum Conductivity	oduct (feet):er Recovered (geneter (inches):me (gallons):	gallons):_	D.O.		Turbidit			
Depth to Wa Total Depth Water Colui 80% Recha	ater (feet): (feet) mn (feet): arge Depth(fi	eet):	Volume Purged	Depth to Pro LPH & Wate Casing Diar 1 Well Volum Conductivity	oduct (feet):er Recovered (geneter (inches):me (gallons):	gallons):_	D.O.		Turbidit			
Depth to Wa Total Depth Water Colui 80% Recha	ater (feet): (feet) mn (feet): arge Depth(fi	eet):	Volume Purged	Depth to Pro LPH & Wate Casing Diar 1 Well Volum Conductivity	oduct (feet):er Recovered (geneter (inches):me (gallons):	gallons):_	D.O.		Turbidit			
Depth to Wa Total Depth Water Colur 80% Recha Time Start	ater (feet): in (feet): mn (feet): arge Depth(fi	Depth to Water (feet)	Volume Purged (galions)	Depth to Pro LPH & Wate Casing Diar 1 Well Volu  Conductivity (uS/cm)	oduct (feet):er Recovered (content (inches):eme (gallons):	gallons):_	D.O.	ORP	Turbidit			
Depth to Wa Total Depth Water Colur 80% Recha Time Start	ater (feet): (feet) mn (feet): arge Depth(fi	Depth to Water (feet)	Volume Purged (galions)	Depth to Pro LPH & Wate Casing Diar 1 Well Volum Conductivity	oduct (feet):er Recovered (content (inches):eme (gallons):	gallons):_	D.O. (mg/L)	ORP	Turbidit			



		Tech	nician: _			-			
Site: Ce 1	29	Proje	ot No.: 16	5521			Date:_	93~€	9-09
					:SU				
Depth to Wa	ater (feet):	27,50	allerini. 19		luct (feet):				
Total Depth	(feet)	3.48 5.98		LPH & Water	Recovered (g	alions) 	.,''	•	
Water Colui	nn (reet): <u>/</u> rge Depth(fe	et): 30.69	dhian feri	1 Well Volum	eter (Inches): e (gallons):	3		-	
			Marin ann is M. M. Marin Making Marin (Anthol		and the second s	1			
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F C)	рН	D.O. (mg/L)	ORP	Turbidity
pre	purge	,					4.4.3	10	7
0925	<u>                                     </u>	<u></u>	<u>3</u>	862.0		6.67			
	0928		<del>- 8-</del> -	856.5	19,1	6.58			
	10, -0		dia 15 di State di Caratta di Car						
Sta	ic at Time Sa		Tot	al Gallons Pur	ged		Sample	Time	
	30.69						2941		
Comments	S:		with a well-state the state of				<del>,</del>		
Comments	<b>3</b> :			and the second s				ngal jaha gala jaya ayan ayan da k	
		-3		Purge Metho	.d:	TaB			
Well No	Mw			_					
Well No	Mw			Depth to Pro	duct (feet):	- diana):			
Well No	Mw Vater (feet):_ h (feet)	25,56 39.45 13,89	months and a second	Depth to Pro	duct (feet):	- diana):			
Well No	Mw Vater (feet):_ h (feet)	25,56 39.45 13,89	months and a second	Depth to Pro	duct (feet):	- diana):			
Well No	Mw Vater (feet):_ h (feet)	25,56 39.45	months and a second	Depth to Pro	duct (feet):	- diana):			
Well No	Vater (feet): h (feet): umn (feet):_ arge Depth(fe	25,56 39,45 13,89 eet): 28,3 Depth to Water	3 Volume	Depth to Pro LPH & Wate Casing Diam 1 Well Volur  Conductivity	duct (feet):	gallons):_ 2" 3	D.O. (mg/L)	ORP	Turbidity
Well No	Vater (feet): th (feet)_ umn (feet):_ arge Depth(fo	25.56 39.45 13.89 eet): 28.3	3	Depth to Pro LPH & Wate Casing Diam 1 Well Volur	duct (feet): r Recovered (geter (inches): ne (gallons): Temperature	gallons): 2" 3	D.O.		Turbidity
Well No	Vater (feet): h (feet): umn (feet):_ arge Depth(fe	25,56 39,45 13,89 eet): 28,3 Depth to Water	Volume Purged (gallons)	Depth to Pro LPH & Wate Casing Diam 1 Well Volum  Conductivity (uS/cm)	duct (feet):	gallons):2"3	D.O. (mg/L)	ORP	Turbidity
Well No	Vater (feet): th (feet)_ umn (feet):_ arge Depth(fo	25,56 39,45 13,89 eet): 28,3 Depth to Water	3 Volume	Depth to Pro LPH & Wate Casing Diam 1 Well Volur  Conductivity (uS/cm)	duct (feet): r Recovered (geter (inches): ne (gallons): Temperature (FC)	gallons):_ 2" 3	D.O. (mg/L)	ORP	Turbidity

Total Gailons Purged

1000

Comments:

Static at Time Sampled 28,30



Sample Time

		Tech	nnician:	Jo					
site: <u>612</u>	9	Proje	oct No.: 14	,5521	·		Date:	03-0	9-09
Vell No	MW-	2	with the same of t	Purge Metho	d: <i>Si</i> v	B			
				Depth to Pro	duct (feet):			_	
sebili io Ma	(foot)	13.55 13.55			Recovered (g				
Meter Colum	on (foot):	17.80	a .E. Volkeller, 448	Casing Diam	eter (Inches):_	Z"			
7vater Colum 30% Rechar	rge Depth(fee	et): 29,3/	isalita erradian su ua maidi dib	1 Well Volum	ne (gallons):	3			
	•								
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F C)	pН	D.O. (mg/L)	ORP	Turbidity
Pre.	Durge	(1661)	(ganons)	(uoroin)			0.67	49	
1028			3	769.0	18.1	7.09		ļ	<u> </u>
			4	811.8	18.9	7,10			ļ
	1034			829.9	19:1	7.02			<del> </del>
Otati	is at Time So	molad	Total	al Gallons Pu	raed I		Sample	Time	<u>.                                    </u>
Stati	ic at Time Sa 27. 65		4	a Gallons Fu	igeu	······	1046		
Comments				Andrew Control to the				( ) program ( ) pr	
Well No		ه صمر و با منت بهستور استان السائن است. بهدر ما		Purge Metho	od:	,-1			
Depth to W	/ater (feet):		Mangaritin (18	Depth to Pro	oduct (feet):				
Total Depth	n (feet)	· · · · · · · · · · · · · · · · · · ·		LPH & Wate	er Recovered (	(gallons):_		<u></u>	
-				Casing Diar	neter (Inches):				
80% Recha	arge Depth(fe	eet)	Filling Company	1 Well Volu	me (gallons):	· · · · · · · · · · · · · · · · · · ·	<u></u>		
Time	Time	Depth to	Volume	Conduc-	Temperature	∍ pH	D.O.	ORP	Turbidity
Start	Stop	Water (feet)	Purged (gallons)	tivity (uS/cm)	(F,C)	Pri	(mg/L)	ļ	1.3.3.4.7
		( = )		ļ			<del> </del> -	<u> </u>	<del> </del>
				<del> </del>			<del> </del>	<del> </del>	<del></del>
				<del> </del>	-				
	<del> </del>		<u> </u>						
Sta	tic at Time S	ampled	То	tal Gallons Pu	irged		Sample	Time	
					1				
Comment	ts:						N		



Date of Report: 03/19/2009

Anju Farfan

TRC 21 Technology Drive Irvine, CA 92618

RE:

6129

BC Work Order:

0903180

Invoice ID:

B059119

Enclosed are the results of analyses for samples received by the laboratory on 3/9/2009. 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 21 Technology Drive Irvine, CA 92618

Project: 6129

Project Number: 4510932381 Project Manager: Anju Farfan

Reported: 03/19/2009 16:26

### **Laboratory / Client Sample Cross Reference**

Laboratory	Client Sample Information	ON .			
0903180-01	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 6129  MVV-1 TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	03/09/2009 21:17 03/09/2009 09:41  Water	Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0903180-02	COC Number: Protect Number: Sampling Location: Sampling Point: Sampled By:	 6129  MW-3 TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	03/09/2009 21:17 03/09/2009 10:15  Water	Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0903180-03	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 6129  MW-2 TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	03/09/2009 21:17 03/09/2009 10:46  Water	Delivery Work Order: Global ID: T0600101465 Location ID (FieldPoint): MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:



21 Technology Drive Irvine, CA 92618

Project: 6129

Project Number: 4510932381 Project Manager: Anju Farfan

Reported: 03/19/2009 16:26

# Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 09	903180-01	Client Sampl	e Name:	6129, MW-1,	3/9/200	9 9:41:00Al	VI							
			•				Prep	Run		Instru-		QC	МВ	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	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
1,2-Dibromoethane		ND	ug/L	0.50		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
1,2-Dichloroethane		ND	ug/L	0,50		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
Ethylbenzene		ND	ug/L	0.50		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
Methyl t-butyl ether		25	ug/L	0.50		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
Toluene		ND	ug/L	0.50		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	í	BSC0842	ND	
Total Xylenes		ND	ug/L	1.0		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	j	BSC0842	ND	
t-Amyl Methvl ether		ND	ug/L	0.50		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
Ethanol		ND	ug/L	250		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50		Luft-GC/MS	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842	ND	
1,2-Dichloroethane-d4 (Surro	gate)	99.1	%	76 - 114 (LCL - U	ICL)	EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842		
Toluene-d8 (Surrogate)		97.7	%	88 - 110 (LCL - U	ICL)	EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842		
1-Bromofluorobenzene (Surr	ogate)	98.5	%	86 - 115 (LCL - U	ICL)	EPA-8260	03/12/09	03/13/09 12:07	SDU	MS-V10	1	BSC0842		



21 Technology Drive Irvine, CA 92618

Project: 6129

Project Number: 4510932381

Project Manager: Anju Farfan

Reported: 03/19/2009 16:26

# Water Analysis (General Chemistry)

BCL Sample ID: 0903180-01	Client Sampl	Client Sample Name:			09 9:41:00AN	Λ							
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Total Alkalinity as CaCO3	310	mg/L	4.1		EPA-310.1	03/11/09	03/11/09 10:26	FM2	MET-1	1	BSC0782	ND	
Nitrate as NO3	2.0	mg/L	0.44		EPA-300.0	03/09/09	03/10/09 03:16	CRR	IC1	1	BSC0599	ND	
Sulfate	46	mg/L	1.0		EPA-300.0	03/09/09	03/10/09 03:16	CRR	IC1	1	BSC0599	ND	
Iron (II) Species	ND	ug/L	1000		SM-3500-Fei	03/10/09	03/10/09 01:00	MRM	SPEC05	10	BSC0562	ND	A10
Non-Volatile Organic Carbon	0.83	mg/L	0.30		EPA-415.1	03/12/09	03/13/09 08:25	CDR	TOC2	1	BSC1038	ND	

21 Technology Drive Irvine, CA 92618 Project: 6129

Project Number: 4510932381

Project Manager: Aniu Farfan

Reported: 03/19/2009 16:26

# Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 090318	30-02	Client Sample	e Name:	6129, MW-3, 3/9	2009 10:15:00A	M							
						Prep	Run		instru-		QC	MB	Lab
Constituent		Result	Units	PQL MD	L Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
1,2-Dichloroethane		ND	ug/L	0,50	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
Ethylbenzene		ND	ug/L	0.50	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
Methyl t-butyl ether		720	ug/L	10	EPA-8260	03/12/09	03/13/09 00:35	SDU	MS-V10	20	BSC0841	ND	A01
Toluene		ND	ug/L	0.50	EPA-8260	03/12/09	03/13/09 23:37	SDŲ	MS-V10	1	BSC0841	ND	
Total Xvlenes		ND	ug/L	1.0	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
t-Butyl alcohol		15	ug/L	10	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
Ethanol		ND	ug/L	250	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	i	BSC0841	ND	
Ethyl t-butvl ether		ND	ug/L	0.50	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	
Total Purgeable Petroleum Hydrocarbons		310	ug/L	50	Luft-GC/MS	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	ND	A90
1,2-Dichloroethane-d4 (Surrogate)		98.0	%	76 - 114 (LCL - UCL)	EPA-8260	03/12/09	03/13/09 00:35	SDU	MS-V10	20	BSC0841		
1,2-Dichloroethane-d4 (Surrogate)		. 96.3	%	76 - 114 (LCL - UCL)	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841		
Toluene-d8 (Surrogate)		98.2	%	88 - 110 (LCL - UCL)	EPA-8260	03/12/09	03/13/09 00:35	SDU	MS-V10	20	B\$C0841		
Toluene-d8 (Surrogate)		98.4	%	88 - 110 (LCL - UCL)	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	í	BSC0841		
4-Bromofluorobenzene (Surrogate)		102	%	86 - 115 (LCL - UCL)	EPA-8260	03/12/09	03/13/09 23:37	SDU	MS-V10	1	BSC0841	***************************************	
4-Bromofluorobenzene (Surrogate)	1	102	%	86 - 115 (LCL - UCL)	EPA-8260	03/12/09	03/13/09 00:35	SDU	MS-V10	20	BSC0841		



21 Technology Drive Irvine, CA 92618

Project: 6129

Project Number: 4510932381 Project Manager: Anju Farfan

Reported: 03/19/2009 16:26

# Water Analysis (General Chemistry)

BCL Sample ID: 0903180-02	Client Sample Name:		6129, MVV-3, 3/9/2009 10:15:00AM				***						
						Prep	Run		Instru-		QC	MB	Lab
Constituent	Result	Units	PQL	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Total Alkalinity as CaCO3	310	mg/L	4.1	.,	EPA-310.1	03/11/09	03/11/09 10:32	FM2	MET-1	1	BSC0782	ND	
Nitrate as NO3	ND	mg/L	0.44	•	EPA-300.0	03/09/09	03/10/09 03:30	CRR	IC1	1	BSC0599	ND	
Sulfate	38	mg/L	1.0		EPA-300.0	03/09/09	03/10/09 03:30	CRR	IC1	1	BSC0599	ND	
Iron (II) Species	ND	ug/L	500		SM-3500-Fe[	03/10/09	03/10/09 01:00	MRM	SPEC05	5	BSC0562	ND	A10
Non-Volatile Organic Carbon	1.4	mg/L	0.30		EPA-415.1	03/12/09	03/13/09 09:16	CDR	TOC2	1	BSC1038	ND	<del></del>



21 Technology Drive Irvine, CA 92618

Project: 6129

Project Number: 4510932381 Project Manager: Anju Farfan

Reported: 03/19/2009 16:26

# Volatile Organic Analysis (EPA Method 8260)

BCL Sample ID: 0903180-03	Client Sample	Name:	6129, MW-2,	3/9/200	09 10:46:00A	M							
	•					Prep	Run		Instru-		QC	МВ	Lab
Constituent	Result	Units	PQL I	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene	ND	ug/L	5.0		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
1,2-Dibromoethane	ND	ug/L	5.0		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	B\$C0750		A01
1,2-Dichloroethane	ND	ug/L	5,0		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
Ethylbenzene	ND	ug/L	5.0		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
Methyl t-butyl ether	1400	ug/L	10		EPA-8260	03/11/09	03/14/09 00:48	SDU	MS-V10	20	BSC0750	ND	A01
Toluene	ND	ug/L	5.0		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
Total Xvlenes	ND	ug/L	10		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
t-Amyl Methyl ether	ND	ug/L	5.0		EPA-8260	03/11/09	03/13/09 00;53	SDU	MS-V10	10	BSC0750	ND	A01
t-Butyl alcohol	ND	ug/L	100		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
Diisopropyl ether	15	ug/L	5.0		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
Ethanol	ND	ug/L	2500		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
Ethyl t-butyl ether	ND	ug/L	5.0		EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01
Total Purgeable Petroleum Hydrocarbons	910	ug/L	500		Luft-GC/MS	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750	ND	A01,A90
1,2-Dichloroethane-d4 (Surrogate)	95.3	%	76 - 114 (LCL - U	ICL)	EPA-8260	03/11/09	03/13/09 00:53	SDU	M\$-V10	10	BSC0750		<u> </u>
1,2-Dichloroethane-d4 (Surrogate)	97.4	%	76 - 114 (LCL - U	ICL)	EPA-8260	03/11/09	03/14/09 00:48	SDU	MS-V10	20	BSC0750		
Toluene-d8 (Surrogate)	98.6	%	88 - 110 (LCL - U	CL)	EPA-8260	03/11/09	03/14/09 00:48	SDU	MS-V10	20	BSC0750		
Toluene-d8 (Surrogate)	99.5	%	88 - 110 (LCL - U	CL)	EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - U	ICL)	EPA-8260	03/11/09	03/13/09 00:53	SDU	MS-V10	10	BSC0750		
4-Bromofluorobenzene (Surrogate)	101	%	86 - 115 (LCL - U	CL)	EPA-8260	03/11/09	03/14/09 00:48	SDU	MS-V10	20	BSC0750		

Project: 6129

Reported: 03/19/2009 16:26

21 Technology Drive Irvine, CA 92618

Project Number: 4510932381 Project Manager: Anju Farfan

## Water Analysis (General Chemistry)

BCL Sample ID:	0903180-03	Client Sample	e Name:	6129, MV	/-2, 3/9/200	09 10:46:00AN	Л							
							Prep	Run		Instru-		QC	MB	Lab
Constituent		Result	Units	PQL	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Total Alkalinity as CaCO3		410	mg/L	4.1		EPA-310.1	03/11/09	03/11/09 10:38	FM2	MET-1	1	BSC0782	ND	
Nitrate as NO3		2.0	mg/L	0.44		EPA-300.0	03/09/09	03/10/09 03:43	CRR	IC1	1	BSC0599	ND	
Sulfate	·	41	mg/L	1.0		EPA-300.0	03/09/09	03/10/09 03:43	CRR	IC1	1	BSC0599	ND	
Iron (II) Species		940	ug/L	100		SM-3500-FeE	03/10/09	03/10/09 01:00	MRM	SPEC05	1	BSC0562	ND	
Non-Volatile Organic Carb	on	1.4	mg/L	0.30		EPA-415,1	03/12/09	03/13/09 09:34	CDR	TOC2	1	BSC1038	ND	

TRC 21 Technology Drive

Irvine, CA 92618

Project: 6129

Project Number: 4510932381 Project Manager: Anju Farfan

Reported: 03/19/2009 16:26

# Volatile Organic Analysis (EPA Method 8260)

### **Quality Control Report - Precision & Accuracy**

										Control Limits		
•			Source	Source		Spike			Percent		Percent	
Constituent	Batch ID	QC Sample Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery Lab Quals	
Benzene	BSC0750	Matrix Spike	0903079-05	0	26.520	25.000	ug/L		106		70 - 130	
		Matrix Spike Duplicate	0903079-05	0	28.740	25.000	ug/L	8.1	115	20	70 - 130	
Toluene	BSC0750	Matrix Spike	0903079-05	0	25,880	25.000	ug/L		104		70 - 130	
		Matrix Spike Duplicate	0903079-05	0	28.030	25.000	ug/L	7.4	112	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BSC0750	Matrix Spike	0903079-05	ND	9.9900	10.000	ug/L		99.9		76 - 114	
		Matrix Spike Duplicate	0903079-05	ND	10.070	10.000	ug/L		101		76 - 114	
Toluene-d8 (Surrogate)	BSC0750	Matrix Spike	0903079-05	ND	10.110	10,000	ug/L		101		88 - 110	
		Matrix Spike Duplicate	0903079-05	ND	10.130	10.000	ug/L		101		88 - 110	
4-Bromofluorobenzene (Surrogate)	BSC0750	Matrix Spike	0903079-05	ND	9.8800	10.000	ug/L		98.8		86 - 115	
		Matrix Spike Duplicate	0903079-05	ND	9.6400	10.000	ug/L		96.4		86 - 115	
Benzene	BSC0841	Matrix Spike	0903117-01	0	26.880	25.000	ug/L		108	×.w	70 - 130	
		Matrix Spike Duplicate	0903117-01	0	25,240	25.000	ug/L	6.7	101	20	70 - 130	
Toluene	BSC0841	Matrix Spike	0903117-01	0	26.250	25,000	ug/L		105		70 - 130	
·		Matrix Spike Duplicate	0903117-01	0	24.830	25.000	ug/L	5.6	99.3	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BSC0841	Matrix Spike	0903117-01	ND	9.6800	10.000	ug/L		96,8		76 - 114	
		Matrix Spike Dùplicate	0903117-01	ND	9.5400	10,000	ug/L		95.4		76 - 114	
Toluene-d8 (Surrogate)	BSC0841	Matrix Spike	0903117-01	ND	10.080	10.000	ug/L		101		88 - 110	
		Matrix Spike Duplicate	0903117-01	ND	10,040	10.000	цg/L		100		88 - 110	
4-Bromofluorobenzene (Surrogate)	BSC0841	Matrix Spike	0903117-01	ND	9.8200	10.000	ug/L		98.2		86 - 115	
		Matrix Spike Duplicate	0903117-01	ND	9.8600	10.000	ug/L		98.6		86 - 115	
Benzene	BSC0842	Matrix Spike	0903117-02	0.070000	24,320	25.000	ug/L	••	97.0		70 - 130	
		Matrix Spike Duplicate	0903117-02	0.070000	24,810	25.000	ug/L	2.0	99,0	20	70 - 130	
Toluene	BSC0842	Matrix Spike	0903117-02	0	23.680	25.000	ug/L	***************************************	94.7		70 - 130	
		Matrix Spike Duplicate	0903117-02	0	23.500	25.000	ug/L	0.7	94.0	20	70 - 130	
1,2-Dichloroethane-d4 (Surrogate)	BSC0842	Matrix Spike	0903117-02	ND	9.3300	10.000	ug/L		93.3		76 - 114	
		Matrix Spike Duplicate	0903117-02	ND	9.4300	10.000	ug/L		94.3		76 - 114	



21 Technology Drive Irvine, CA 92618

Project: 6129

Reported: 03/19/2009 16:26

Project Number: 4510932381 Project Manager: Anju Farfan

# Volatile Organic Analysis (EPA Method 8260)

### **Quality Control Report - Precision & Accuracy**

										Contr	ol Limits
			Source	Source		Spike			Percent		Percent
Constituent	Batch ID	QC Sample Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery Lab Quals
Toluene-d8 (Surrogate)	BSC0842	Matrix Spike	0903117-02	NĐ	9.9400	10.000	ug/L		99.4		88 - 110
		Matrix Spike Duplicate	0903117-02	ND	9.8400	10.000	ug/L		98.4		88 - 110
4-Bromofluorobenzene (Surrogate)	B\$C0842	Matrix Spike	0903117-02	ND	10.070	10.000	ug/L		101		86 - 115
		Matrix Spike Duplicate	0903117-02	ND	10.070	10.000	ug/L		101		86 - 115

21 Technology Drive

Irvine, CA 92618

Project: 6129

Project: 0129

Project Number: 4510932381 Project Manager: Anju Fartan Reported: 03/19/2009 16:26

### Water Analysis (General Chemistry)

### **Quality Control Report - Precision & Accuracy**

										Contr	ol Limits
			Source	Source		Spike			Percent		Percent
Constituent	Batch ID	QC Sample Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery Lab Quals
Iron (II) Species	BSC0562	Duplicate	0903180-01	750.00	ND		ug/L			10	
Nitrate as NO3	BSC0599	Duplicate	0903181-01	27.167	27.167		mg/L	0		10	
		Matrix Spike	0903181-01	27.167	50.546	22,358	mg/L		105		80 - 120
		Matrix Spike Duplicate	0903181-01	27.167	50,609	22,358	mg/L	0	105	10	80 - 120
Sulfate	BSC0599	Duplicate	0903181-01	8.9890	8.9270		mg/L	0.7		10	
		Matrix Spike	0903181-01	8.9890	118.47	101.01	mg/L		108		80 - 120
		Matrix Spike Duplicate	0903181-01	8.9890	118.80	101.01	mg/L	0,9	109	10	80 - 120
Total Alkalinity as CaCO3	BSC0782	Duplicate	0903242-01	707.11	708.33		mg/L	0.2		10	
Non-Volatile Organic Carbon	BSC1038	Duplicate	0903132-09	1.3470	1.3680		mg/L	1.5		10	
		Matrix Spike	0903132-09	1.3470	6.2864	5.0251	mg/L		98.3		80 - 120
		Matrix Spike Duplicate	0903132-09	1.3470	6.3156	5.0251	mg/L	0.6	98.9	10	80 - 120

21 Technology Drive Irvine, CA 92618 Project: 6129

Project Number: 4510932381
Project Manager: Anju Fartan

Reported: 03/19/2009 16:26

## **Volatile Organic Analysis (EPA Method 8260)**

### **Quality Control Report - Laboratory Control Sample**

										Control	<u>Limits</u>	
Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
Benzene	BSC0750	BSC0750-BS1	LCS	27.490	25.000	0.50	ug/L	110		70 - 130		
Toluene	BSC0750	BSC0750-BS1	LCS	26.960	25,000	0.50	ug/L	108		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BSC0750	BSC0750-BS1	LCS	10.020	10.000		ug/L	100		76 - 114		
Toluene-d8 (Surrogate)	BSC0750	BSC0750-BS1	LCS	10.260	10,000		ug/L	103		88 - 110		•
4-Bromofluorobenzene (Surrogate)	BSC0750	BSC0750-BS1	LCS	9.6700	10.000		ug/L	96.7		86 - 115		
Benzene	BSC0841	BSC0841-BS1	LCS	25,670	25.000	0,50	ug/L	103		70 - 130		
Toluene	BSC0841	BSC0841-BS1	LCS	25.820	25.000	0,50	ug/L	103	•••••	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BSC0841	BSC0841-BS1	LCS	9.5700	10.000		ug/L	95.7		76 - 114		
Toluene-d8 (Surrogate)	BSC0841	BSC0841-BS1	LCS	10.300	10,000	***	ug/L	103		88 - 110		
4-Bromofluorobenzene (Surrogate)	BSC0841	BSC0841-BS1	LCS	9.9100	10.000		ug/L	99.1		86 - 115		
Benzene	BSC0842	BSC0842-BS1	LCS	24,520	25.000	0,50	ug/L	98.1		70 - 130		
Toluene	BSC0842	BSC0842-BS1	LCS	24.130	25,000	0.50	ug/L	96.5		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BSC0842	BSC0842-BS1	LCS	9.3500	10.000		ug/Ĺ	93,5		76 - 114		
Toluene-d8 (Surrogate)	BSC0842	BSC0842-BS1	LCS	9.8700	10,000		ug/L	98.7	,	88 - 110		
4-Bromofluorobenzene (Surrogate)	BSC0842	BSC0842-BS1	LCS	9.9800	10.000		ug/L	99.8		86 - 115		

21 Technology Drive Irvine, CA 92618

Project: 6129

Reported: 03/19/2009 16:26

Project Number: 4510932381 Project Manager: Anju Fartan

## Water Analysis (General Chemistry)

#### **Quality Control Report - Laboratory Control Sample**

										Control	<u>Limits</u>	<u> </u>
Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
Iron (II) Species	BSC0562	BSC0562-BS1	LCS	1976.9	2000.0	100	ug/L	98.8		90 - 110		**
Nitrate as NO3	BSC0599	BSC0599-BS1	LCS	22.723	22,134	0.44	mg/L	103		90 - 110		
Sulfate	BSC0599	BSC0599-BS1	LCS	105.46	100.00	1.0	mg/L	105		90 - 110		
Total Alkalinity as CaCO3	BSC0782	BSC0782-BS3	LCS	101,78	100.00	4.1	mg/L	102		90 - 110		
Non-Volatile Organic Carbon	BSC1038	BSC1038-BS1	LCS	5.0380	5.0000	0.30	mg/L	101		85 - 115		

TRC 21 Technology Drive Irvine, CA 92618 Project: 6129

Project Number: 4510932381

Project Manager: Anju Farfan

Reported: 03/19/2009 16:26

## Volatile Organic Analysis (EPA Method 8260)

### **Quality Control Report - Method Blank Analysis**

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL.	MDŁ	Lab Quals
Benzene	BSC0750	BSC0750-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BSC0750	BSC0750-BLK1	ND	ug/L	0.50		
Ethylbenzene	BSC0750	BSC0750-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BSC0750	BSC0750-BLK1	ND	ug/L	0.50		
Toluene	BSC0750	BSC0750-BLK1	ND	ug/L	0.50		
Total Xylenes	BSC0750	BSC0750-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BSC0750	BSC0750-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BSC0750	BSC0750-BLK1	ND	ug/L	10		
Diisopropyl ether	BSC0750	BSC0750-BLK1	ND	ug/L	0.50		
Ethanol	BSC0750	BSC0750-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BSC0750	BSC0750-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BSC0750	8SC0750-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BSC0750	BSC0750-BLK1	98.0	%	76 - 114	(LCL - UCL)	
Toluene-d8 (Surrogate)	BSC0750	BSC0750-BLK1	98.3	%	88 - 110	(LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BSC0750	BSC0750-BLK1	99.2	%	86 - 115	(LCL - UCL)	
Benzene	BSC0841	BSC0841-BLK1	ND	ug/L	0.50		
1,2-Dibromoethane	BSC0841	BSC0841-BLK1	ND	ug/L	0,50		
1,2-Dichloroethane	BSC0841	BSC0841-BLK1	ND	ug/L	0.50	•	
Ethylbenzene	BSC0841	BSC0841-BLK1	ND	ug/L	0.50		
Methyl t-butyl ether	BSC0841	BSC0841-BLK1	ND	ug/L	0,50		
Toluene	BSC0841	BSC0841-BLK1	ND	ug/L	0.50		
Total Xylenes	BSC0841	BSC0841-BLK1	ND	ug/L	1.0		
t-Amyl Methyl ether	BSC0841	BSC0841-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BSC0841	BSC0841-BLK1	ND	ug/L	10		

TRC 21 Technology Drive Irvine, CA 92618

Project: 6129

Project Number: 4510932381 Project Manager: Anju Farfan

Reported: 03/19/2009 16:26

# Volatile Organic Analysis (EPA Method 8260)

### **Quality Control Report - Method Blank Analysis**

		***************************************					
Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Diisopropyl ether	BSC0841	BSC0841-BLK1	ND	ug/L	0,50		
Ethanol	BSC0841	B\$C0841-BLK1	ND	ug/L	250		
Ethyl t-butyl ether	BSC0841	BSC0841-BLK1	ND	ug/L	0.50		
Total Purgeable Petroleum Hydrocarbons	BSC0841	BSC0841-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BSC0841	BSC0841-BLK1	97.8	%	76 - 114	(LCL - UCL)	
Toluene-d8 (Surrogate)	BSC0841	BSC0841-BLK1	98.8	%	88 - 110	(LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BSC0841	BSC0841-BLK1	101	%	86 - 115	(LCL - UCL)	
Benzene	BSC0842	BSC0842-BLK1	ND	ug/L	0,50		
1,2-Dibromoethane	BSC0842	BSC0842-BLK1	ND	ug/L	0.50		
1,2-Dichloroethane	BSC0842	BSC0842-BLK1	ND	ug/L	0.50		
Ethylpenzene	BSC0842	BSC0842-BLK1	ND	ug/L	0.50		
Methvi t-butyl ether	BSC0842	BSC0842-BLK1	ND	ug/L	0.50	-	
Toluene	BSC0842	BSC0842-BLK1	ND	ug/L	0.50		
Total Xylenes	BSC0842	BSC0842-BLK1	ND	ug/L	1.0		•
t-Amvl Methvl ether	BSC0842	BSC0842-BLK1	ND	ug/L	0.50		
t-Butyl alcohol	BSC0842	BSC0842-BLK1	ND	ug/L	10		
Diisopropyl ether	BSC0842	BSC0842-BLK1	ND	ug/L	0.50		***
Ethanol	BSC0842	BSC0842-BLK1	ND	ug/L	250		
Ethvl t-butyl ether	BSC0842	BSC0842-BLK1	ND	ug/L	0,50		
Total Purgeable Petroleum Hydrocarbons	BSC0842	BSC0842-BLK1	ND	ug/L	50		
1,2-Dichloroethane-d4 (Surrogate)	BSC0842	BSC0842-BLK1	97.0	%	76 - 114	(LCL - UCL)	
Toluene-d8 (Surrogate)	BSC0842	BSC0842-BLK1	97.6	%	88 - 110	(LCL - UCL)	*****
4-Bromofluorobenzene (Surrogate)	BSC0842	BSC0842-BLK1	99.2	%	86 - 115	(LCL - UCL)	



21 Technology Drive Irvine, CA 92618

Project: 6129

Project Number: 4510932381 Project Manager: Anju Fartan

Reported: 03/19/2009 16:26

## Water Analysis (General Chemistry)

### **Quality Control Report - Method Blank Analysis**

QC Sample ID					
ac cample in	MB Result	Units	PQL	MDL	Lab Quals
BSC0562-BLK1	ND	ug/L	100	**********	
BSC0599-BLK1	ND	mg/L	0.44		
BSC0599-BLK1	ND	mg/L	1.0		
BSC0782-BLK1	ND	mg/L	4.1		
BSC1038-BLK1	ND	mg/L	0.30		, , , , , , , , , , , , , , , , , , , ,
	BSC0562-BLK1 BSC0599-BLK1 BSC0599-BLK1 BSC0782-BLK1	BSC0562-BLK1 ND  BSC0599-BLK1 ND  BSC0599-BLK1 ND  BSC0782-BLK1 ND	BSC0562-BLK1         ND         ug/L           BSC0599-BLK1         ND         mg/L           BSC0599-BLK1         ND         mg/L           BSC0782-BLK1         ND         mg/L	BSC0562-BLK1         ND         ug/L         100           BSC0599-BLK1         ND         mg/L         0.44           BSC0599-BLK1         ND         mg/L         1.0           BSC0782-BLK1         ND         mg/L         4.1	BSC0562-BLK1         ND         ug/L         100           BSC0599-BLK1         ND         mg/L         0.44           BSC0599-BLK1         ND         mg/L         1.0           BSC0782-BLK1         ND         mg/L         4.1



Project: 6129

Reported: 03/19/2009 16:26

21 Technology Drive Irvine, CA 92618 Project Number: 4510932381
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.

A10 PQL's and MDL's were raised due to matrix interference.

A90 TPPH does not exhibit a "gasoline" pattern. TPPH is entirely due to MTBE.

BC LABORATORIES INC.	<del>- ;</del>	SAMPLE	RECEIP	TFORM	Re	v. No. 12	06/24/0B	Page (	∠ Of ]	
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BC Lab Field Service 🛭 Other C	□ (Specify	)			∠Bóx		Othe	r 🗆 (Spe	cify)	
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ENCORE										

Comments:
Sample Numbering Completed By:
A = Actual / C = Corrected

# BC LABORATORIES, INC.

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

### **CHAIN OF CUSTODY**

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#### **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.