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Alameda County Environmental Health



Sacramento, California 95818

April 28, 2010

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

Re: Annual Summary Report (ASR)—2010 76 Service Station # 5781 RO # 253 3535 Pierson Street 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

April 28, 2010

Ms. Barbara Jakub Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, CA 94502-6577

Re: Annual Summary Report Second Quarter 2009 through First Quarter 2010 76 Service Station No. 5781 3535 Pierson Street Oakland, California Case No. RO253 Delta Project C1Q5781604



Dear Ms. Jakub:

On behalf of ConocoPhillips (COP), Delta Consultants (Delta) is forwarding the annual summary report for the following location:

Service Station

Location

ConocoPhillips Site No. 5781

3535 Pierson Street. Oakland, California

Sincerely, **Delta Consultants**

Jan Wagoner Sr. Project Manger

ames B. Barean

James B. Barnard, P.G. California Registered Professional Geologist No. 7478

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



11050 White Rock Road Suite 110 Rancho Cordova, California 95670 USA Phone +1 916.638.2085 / USA Toll Free 800.477.7411 Fax +1 916.638.8385 www.deltaenv.com

ANNUAL SUMMARY REPORT SECOND QUARTER 20009 THROUGH FIRST QUARTER 2010 76 Station No. 5781 3535 Pearson Street Oakland, California Alameda County County

GENERAL SITE DESCRIPTION

The Site is currently an active Union 76 service station located at the intersection of Pierson Street and MacArthur Boulevard in Oakland, California. Site features include two 12,000-gallon underground storage tanks (USTs), a station building and two gasoline dispenser islands under a single canopy. The station building consists of a vehicle service area with two hoists and a market and office area. A City of Oakland sewer easement crosses the west corner of the site. The site is at an elevation of approximately 150 feet above mean sea level (ft MSL).

SITE BACKGROUND

Historical documents indicate that the site has been a service station since 1947. Renovation of the site first occurred in 1967, when the size of the site expanded to its current configuration.

<u>1989</u>: Two 10,000-gallon gasoline USTs, one 280-gallon waste oil UST and product piping were removed from the site. Confirmation soil samples collected from the UST pit indicated low residual maximum concentrations of TPH-G, benzene, and TOG. After confirmation soil sampling, approximately 5,000 gallons of groundwater were removed from the UST pit and disposed offsite. A groundwater sample was collected and analyzed after recharge of the UST pit and contained TPH-G at 7,900 parts per billion (ppb) and benzene ate 850 ppb. Confirmation soil samples collected from the product piping trench indicated low maximum residual concentrations of TPH-G and benzene.

<u>February 1990:</u> The waste oil UST pit was over-excavated to 16 feet bgs and 35 feet to the east, 10 feet to the west, 15 feet to the south, and 2 feet to the north. Soil samples were collected from the base of the deepened excavation (W01-16) along with four sidewall samples (SWA through SWD). TOG was detected in samples SWA (adjacent to the site building) at 17,000 milligrams per kilogram (mg/kg), sample SWB at 4,100 mg/kg, and in sample SWD at 6,400 mg/kg. TOG was detected in sample WO-16 at 910 mg/kg. The highest concentrations of TPH-D, TPH-G, and benzene were detected in sample SWA at 1,400 mg/kg, 220 mg/kg, and 2.3 mg/kg, respectively. Further excavation was terminated due to the presence of underground sewer and gas lines to the south and west and the site building to the north side.

<u>April 1990</u> Three exploratory borings (MW-1, MW-2, MW-3) were advanced onsite with the intention that they would be converted into monitoring wells, however no

groundwater was encountered down to a depth of 40-50 feet below ground surface (bgs). The borings were backfilled.

<u>July 1990:</u> Two exploratory borings (EB-1, EB-2) were advanced onsite to 34.5 and 38ft bgs, near the location of the former waste oil UST pit. Groundwater was encountered at 33.5 and 36.7 feet bgs. Groundwater was sampled from both borings, and then the borings were backfilled with neat cement. TPH-D was detected only in the in groundwater sample from EB-1 at 6.7 ppb, benzene was detected only in the groundwater sample from EB-1 at 0.61 ppb, toluene (1.5 ppb) and xylenes (1.0 ppb) were detected at equal concentrations in groundwater from both borings.

<u>December 1990:</u> A 2" diameter monitoring well was installed onsite (MW-A) to a depth of 45 feet. Groundwater was encountered at 33 feet bgs during the well installation.

<u>December 1990 – March 2009</u>: Well MW-A was sampled on a semi-annual/annual schedule. Groundwater samples were analyzed for TPH-G, TPH-D, benzene, toluene, ethyl-benzene, total xylenes (BTEX), methyl-tert butyl ether (MTBE) (MTBE since 1997). TPH-G, benzene, and ethyl-benzene have not been detected in MW-A since its construction. TPH-D, toluene, total xylenes and MTBE have been primarily non-detect since the well's construction, except for detections up to 120 μ g/L, 1.01 μ g/L, 2.1 μ g/L and 0.54 μ g/L respectively.

<u>October 2003:</u> Site environmental consulting responsibilities were transferred to TRC. TRC performed a baseline site assessment, advancing five soil borings onsite (SB-1 through SB-5). Four of the soil borings were clustered around the location of the dispenser islands and USTs, and one near the waste oil tank. Maximum boring depth ranged from 24 feet to 54 feet bgs. Groundwater was encountered at depths ranging from 19.5 feet to 39 feet bgs in three wells, and was not encountered in two wells to a total depth of 54 feet bgs. Soil samples collected from the borings were reported to contain up to 1,100 mg/kg of total purgeable petroleum hydrocarbons (TPPH). The only detection from groundwater samples (three borings and MW-A) was lead at 0.18 mg/l in SB-5.

<u>April 2008:</u> The second generation waste oil tank (WOT) was removed and a total of four soil samples were collected from the WOT cavity (WO1 – WO4). One base sample was collected from beneath the WOT at a depth of 9.0 feet bgs, and three sidewall samples were collected at a depth of either 6.5 or 7.0 feet bgs. A fourth sidewall sample, from the southeast wall of the pit, was unable to be collected due to proximity of the station building. A composite soil sample (Composite) was also collected from materials stockpiled during removal and sampling activities.

No petroleum hydrocarbons (including TPH-D) or fuel oxygenates, TOG, volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), or polychlorinated biphenyls (PCBs) were detected in any of the four soil samples, or the composite sample. Samples were also analyzed for CAM 17 metals, and each of

the five samples contained arsenic at concentrations ranging from 3.2 mg/kg to 6.2 mg/kg. Although these detected concentrations exceed the California Regional Quality Control Board, San Francisco Bay Region (RWQCB) Environmental Screening Level (ESL) of 1.5 mg/kg (commercial), the detections appear to represent background conditions at the site and are consistent with regional arsenic concentrations. Analytical data from soil samples collected in the San Francisco Bay area by geologists of the United States Geological Survey (USGS) show that regional arsenic concentrations range from 4.1 to 10.0 parts per million (ppm) regionally. (USGS, 1984) All other CAM 17 metal detections were below the commercial ESLs set by the RWQCB. (Delta, 2008)

No over-excavation activities were conducted, the WOT was not replaced, and the stockpiled materials were backfilled into the remaining cavity following receipt of laboratory results. (Delta, 2008)

March 2010: Three soil borings were advanced onsite. Details of the investigation are forthcoming in Delta's *Additional Site Assessment Report.*

SENSITIVE RECEPTORS

The California Department of Water Resources database indicates the presence of four active water wells nearby the site. The four active wells are reported to be located in East Bay Regional Park District land, located approximately 2,193 feet northeast of the site.

MONITORING AND SAMPLING

Currently, one onsite well (MW-A) is monitored annually during the first quarter.

During the most recent groundwater monitoring and sampling event conducted on March 23, 2010, depth to groundwater was 19.55 feet below top of casing (TOC) in (MW-A). At least three data points are necessary to calculate groundwater flow direction and gradient, therefore, the groundwater flow direction was not reported for the current sampling event or for the previous sampling event (3/23/10).

Analytical results from the First Quarter 2010 event are discussed below. As approved in an email from ACEHD dated May 1, 2010, the analysis performed on the groundwater sample for MW-A was for TPHd only by EPA method 8015M. During previous sampling events groundwater samples were analyzed for TPHg and TPHd by EPA Method 8015M, benzene, toluene, ethylbenzene and total xylenes (BTEX) by EPA Method 8021B, total oil and grease (TOG) and volatile organic compounds by EPA Method 8260, and MTBE was by EPA Method 8021B and 8260B.

TPHd:. TPHd was not reported above the laboratory's indicated limit during the current April 2009 through March 2010 annual sampling event. During the previous event (03/27/09) TPHd was reported at a concentration of 56 µg/L.

TPHg: TPHg was not analyzed during the current sampling event, but has been below laboratory indicated reporting limits in MW-A since first quarter 2002.

Benzene: Benzene was not analyzed during the current sampling event, but has been below laboratory indicated reporting limits in MW-A since first quarter 2002.

MTBE: MTBE was not analyzed during the current sampling event, but has been below laboratory indicated reporting limits in MW-A since first quarter 2002, with the exception of first quarter 2006 (0.54 μ g/L).

REMEDIATION STATUS

Remediation is not currently being conducted at the site.

RECENT CORRESPONDENCE

Email dated May 1, 2009 from Ms. Barbara Jakub of Alameda County Environmental Health (ACEH) approving reducing analysis performed during monitoring and sampling activities to TPHd only.

Email dated December 21, 2009 from Mr. Barbara Jakub of ACEH approving the assessment activities as proposed in Delta's *Work Plan for Additional Assessment* dated September 24, 2009.

CONCLUSIONS AND RECOMMENDATIONS

One monitoring well (MW-A) is present at the site. For eight consecutive sampling events, with the exception of MTBE detected at 0.54 μ g/L (March 2006) and a maximum TPHd detection of 131 μ g/L (March 2001), petroleum hydrocarbons have not been detected in groundwater samples collected from this well.

Previously, groundwater samples were analyzed for TPHg and TPHd by EPA Method 8015M, BTEX by EPA Method 8021B, VOCs by EPA Method 8260, TOG by EPA method 1664, and MTBE by EPA Method 8021B and 8260B. Currently, groundwater samples are being analyzed for TPHd my EPA method 8015M, only.

With the exception of periodic reporting of concentrations of toluene (0.25 μ g/L, February 1994), total xylenes (maximum concentration of 2.1 μ g/L detected in February of 1996) and TPHd, analytes have been not been reported above the laboratory's indicated reporting limits in the site's monitoring history.

Historically, petroleum hydrocarbon concentrations in MW-A have been either at or near the laboratory's indicated reporting limits. With the exception of two sampling events (February of 1996 and March of 2001), where TPHd was reported at respective concentrations of 120 μ g/L and 131 μ g/L, all constituent concentrations reported in MW-A have been below the California Regional Water Quality Control Board (RWQCB) environmental screening levels (ESLs). (RWQCB, May 2008).

While preparing for the March, 2010 assessment activities Delta observed petroleum hydrocarbon odors in the storm drain man-way adjacent to the southwest boundary of the station. Delta is currently preparing to perform repairs on this man-way. Delta will also propose additional assessment activities south and southeast of the current USTs. A work plan providing details of the proposed additional assessment will be presented under separate cover along with the results of the March 2010 assessment activities.

APRIL 2009 THROUGH MARCH 2010 ACTIVITIES

- TRC performed monitoring and sampling of the groundwater monitoring well network on March 23, 2010, and prepared and submitted their results in *Annual Monitoring Report April 2009 through March 2010*, dated April 7, 2010.
- Delta performed assessment activities as detailed in a Work Plan for Additional Assessment dated September 24, 2009.

APRIL 2010 THROUGH MARCH 2011 ACTIVITIES

- Delta prepared and submitted the Annual Summary Report Second Quarter 2009 through First Quarter 2010.
- Delta to prepare and submit the *Additional Assessment Report*, documenting the work originally recommended by Delta in a *Site conceptual* Model (SCM) dated November 21, 2008 and detailed in a subsequent *Work Plan for Additional Assessment* dated September 24, 2009. This work was performed in accord with an email from ACEH dated December 21, 2009).
- Delta will perform repairs on the storm drain man-way to minimize the potential for groundwater to enter the storm drain line.
- Pending Agency concurrence, Delta will proceed with assessment activities to be proposed in the Additional Assessment Report summarizing the March 2010 assessment activities. This assessment report in work plan is currently scheduled for submittal in early May, 2010.

ATTACHMENTS

Attachment A: Annual Monitoring report – April 2009 through March 2010

<u>REMARKS</u>

The descriptions, conclusions, and recommendations contained in this report represent Delta's professional opinions based upon the currently available information and are arrived at in accordance with currently acceptable professional standards. For any reports cited that were not generated by Delta, the data from those reports is used "as is" and is assumed to be accurate. Delta does not guarantee the accuracy of this data for the referenced work performed nor the inferences or conclusions stated in these reports. This report is based upon a specific scope of work requested by the client. The Contract between Delta and its client outlines the scope of work, and only those tasks specifically authorized by that contract or outlined in this report were conducted. This report is intended only for the use of Delta's Client and anyone else specifically listed on this report. Delta will not and cannot be liable for unauthorized reliance by any other third party. Other than as contained in this paragraph, Delta makes no express or implied warranty as to the contents of this report.

CONSULTANT: Delta Consultants

ATTACHMENT A Annual Monitoring report – April 2009 through March 2010



123 Technology Drive West Irvine, CA 92618

949.727.9336 phone 949.727.7399 fax

www.TRCsolutions.com

- DATE: April 7, 2010
- TO: ConocoPhillips Company 76 Broadway Sacramento, CA 95818

ATTN: MR. TERRY GRAYSON

SITE: 76 STATION 5781 3535 PIERSON STREET OAKLAND, CALIFORNIA

RE: ANNUAL MONITORING REPORT APRIL 2009 THROUGH MARCH 2010

Dear Mr. Grayson:

Please find enclosed our Annual Monitoring Report for 76 Station 5781, located at 3535 Pierson Street, Oakland, California. If you have any questions regarding this report, please call us at (949) 727-9336.

Sincerely,

ťR Anju Farfan

Groundwater Program Operations Manager

CC: Mr. Jan Wagoner, Delta Consultants (2 copies)

Enclosures 20-0400/5781R08.QMS

ANNUAL MONITORING REPORT APRIL 2009 THROUGH MARCH 2010

76 STATION 5781 3535 Pierson Street Oakland, California

Prepared For:

Mr. Terry Grayson CONOCOPHILLIPS COMPANY 76 Broadway Sacramento, California 95818

By:

AL GE PROF DENNISE. JENSEN ø No. 3531 ŵ Senior Project Geologist, Irvine Operations

Date: $\frac{4/7}{10}$



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	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 2: Historic Fluid Levels and Selected Analytical Results
	Table 2a: Additional Historic Analytical Results
	Table 2b: Additional Historic Analytical Results
	Table 2c: Additional Historic Analytical Results
	Table 2d: Additional Historic Analytical Results
Figures	Figure 1: Vicinity Map
	Figure 2: Groundwater Elevation Map
	Figure 3: Dissolved-Phase TPH-D Concentration Map
Graphs	Groundwater Elevation vs. Time
	TPH-D Concentrations vs. Time
Field Activities	General Field Procedures
	Field Monitoring Data Sheet $-3/23/10$
	Groundwater Sampling Field Notes – 3/23/10
Laboratory	Official Laboratory Reports
Reports	Quality Control Reports
	Chain of Custody Records
Statements	Purge Water Disposal
	Limitations

Summary of Gauging and Sampling Activities April 2009 through March 2010 76 Station 5781 3535 Pierson Street Oakland, CA

Project Coordinator: Terry Grayson Telephone: 916-558-7666	Water Sampling Contractor: TRC Compiled by: Daniel Lee
Date(s) of Gauging/Sampling Event: 3/23/10	
Sample Points	
Groundwater wells: 1 onsite, 0 offsite	Points gauged: 1 Points sampled: 1
Purging method: Submersible pump	
Purge water disposal: Crosby and Overton treatme	ent facility
Other Sample Points: 0 Type:	
Liquid Phase Hydrocarbons (LPH)	
Sample Points with LPH: 0 Maximum thickness (f	eet):
LPH removal frequency:	Method:
Treatment or disposal of water/LPH:	
Hydrogeologic Parameters	
Depth to groundwater (below TOC): Minimum: 1	9.55 feet Maximum: 19.55 feet
Average groundwater elevation (relative to available le	
Average change in groundwater elevation since previo	
Interpreted groundwater gradient and flow direction:	
Current event: n/a	
Previous event: n/a (3/27/09)	
Selected Laboratory Results	
Sample Points with detected Benzene: 0 San	nple Points above MCL (1.0 µg/l):
Maximum reported benzene concentration:	
Sample Points with TPH-D 0	

Notes:

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

TABLES

TABLE KEY

STANDARD ABBREVIATIONS

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

P = no-purge sample

ANALYTES

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
1,2-DCA	=	1,2-dichloroethane (same as EDC, ethylene dichloride)

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.
- 8. Prior to the 1st quarter 2010, the word "monitor" was used in table comments interchangeably with the word "gauge". Starting in the 1st quarter 2010, the word "monitor" is used to include both "gauge" and "sample".

REFERENCE

TRC began groundwater monitoring and sampling for 76 Station 5781 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

Contents of Tables 1 and 2 Site: 76 Station 5781

Current Event

Table 1	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-D	TPH-G 8015	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
Historic	Data												
Table 2	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-D	TPH-G 8015	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
Table 2a	Well/ Date	TPH-G (GC/MS)	ТВА	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME	Total Oil and Grease	TRPH	Bromo- dichloro- methane	Bromo- form
Table 2b	Well/ Date	Bromo- methane	Carbon Tetra- chloride	Chloro- benzene	Chloro- ethane	2- Chloroethyl vinyl ether	Chloroform	Chloro- methane	Dibromo- chloro- methane	1,2- Dichloro- benzene	1,3- Dichloro- benzene	1,4- Dichloro- benzene	Dichloro- difluoro- methane
Table 2c	Well/ Date	1,1-DCA	1,1-DCE	cis- 1,2-DCE	trans- 1,2-DCE	1,2- Dichloro- propane	cis-1,3- Dichloro- propene	trans-1,3- Dichloro- propene	Methylene chloride	1,1,2,2- Tetrachloro- ethane	Tetrachloro- ethene (PCE)	Trichloro- trifluoro- ethane	1,1,1- Trichloro- ethane
Table 2d	Well/ Date	1,1,2- Trichloro- ethane	Trichloro- ethene (TCE)	Trichloro- fluoro- methane	Vinyl chloride								

Table 1 CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS March 23, 2010 76 Station 5781

Date	TOC	Depth to	LPH	Ground-	Change in									Comments
Sampled	Elevation	Water	Thickness		Elevation		TPH-G			Ethyl-	Total	MTBE	MTBE	
				Elevation		TPH-D	8015	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-A														
3/23/1	0 151.80	19.55	0.00	132.25	-5.20	ND<58								



Table 2 HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS December 1990 Through March 2010 76 Station 5781

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water	Change in Elevation									Comments
Sampled	Lievation	w ater	THICKNESS	Elevation			TPH-G	D	T-1	Ethyl-	Total	MTBE (8021D)	MTBE	
	(feet)	(feet)	(feet)	(feet)	(feet)	TPH-D	8015	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
	(leet)	(leet)	(leet)	(leet)	(leet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-A	0					72	ND	ND	ND	ND	ND			
12/18/9						73	ND	ND	ND	ND	ND			
5/3/91						ND	ND	ND	ND	ND	ND			
8/7/91						ND	ND	ND	ND	ND	ND			
11/8/91						ND	ND	ND	ND	ND	ND			
2/6/92	151.80	19.88	0.00	131.92		ND	ND	ND	ND	ND	ND			
8/4/92	151.80	18.95	0.00	132.85	0.93	ND	ND	ND	ND	ND	0.51			
2/10/93	3 151.80	17.71	0.00	134.09	1.24	ND	ND	ND	ND	ND	ND			
2/10/94	4 151.80	15.25	0.00	136.55	2.46	ND	ND	ND	0.52	ND	0.92			
2/9/95	151.80	15.68	0.00	136.12	-0.43	ND	ND	ND	ND	ND	ND			
2/6/96	151.80	12.52	0.00	139.28	3.16	120	ND	ND	ND	ND	2.1			
2/5/97	151.80	13.01	0.00	138.79	-0.49	61	ND	ND	ND	ND	ND		ND	
2/2/98	151.80	11.91	0.00	139.89	1.10	ND	ND	ND	ND	ND	ND		ND	
2/22/99	9 151.80	11.24	0.00	140.56	0.67	ND	ND	ND	ND	ND	ND		ND	
2/26/00	0 151.80	12.16	0.00	139.64	-0.92	ND	ND	ND	1.01	ND	ND		ND	
3/7/01	151.80	11.91	0.00	139.89	0.25	131	ND	ND	ND	ND	ND	ND	ND	
2/22/02	2 151.80	14.08	0.00	137.72	-2.17	ND<50	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<5.0	
2/22/03	3 151.80	14.41	0.00	137.39	-0.33	93	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<2.0	
2/3/04	151.80	14.32	0.00	137.48	0.09	60	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<2.0	
2/18/05			0.00	137.59		ND<50	ND<50				ND<0.50		ND<0.50	
3/29/06				139.08	1.49	ND<200	ND<50				ND<0.60		0.54	
3/28/07				137.82		92	ND<50				ND<0.60	ND<1.0	ND<0.50	
3/22/08				139.12		>2 ND<50	ND<50				ND<0.60			

Table 2 HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS December 1990 Through March 2010 76 Station 5781

Date	TOC	Depth to	LPH	Ground-	Change in									Comments
Sampled	Elevation	Water	Thickness	water	Elevation		TPH-G			Ethyl-	Total	MTBE	MTBE	
				Elevation		TPH-D	8015	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	
MW-A	continued	1												
3/27/0	9 151.8	0 14.35	0.00	137.45	-1.67	53	ND<50	ND<0.30	ND<0.30	ND<0.30	ND<0.60	ND<1.0	ND<0.50	
3/23/1	0 151.8	0 19.55	0.00	132.25	-5.20	ND<58								



Date Sampled	TPH-G (GC/MS) (µg/l)	TBA (µg/l)	Ethanol (8260B) (μg/l)	Ethylene- dibromide (EDB) (μg/l)	1,2-DCA (EDC) (µg/l)	DIPE (µg/l)	ETBE (µg/l)	TAME (µg/l)	Total Oil and Grease (mg/l)	TRPH (mg/l)	Bromo- dichloro- methane (µg/l)	Bromo- form (μg/l)
MW-A												
2/6/96												
2/5/97												
3/7/01		ND	ND	ND	ND	ND	ND	ND				
2/22/03		ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0				
2/3/04		ND<100	ND<500	ND<2.0	ND<0.50	ND<2.0	ND<2.0	ND<2.0		ND<1.0	ND<0.50	ND<2.0
2/18/05		ND<5.0	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0		ND<0.50	ND<2.0
3/29/06		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50			ND<0.50	ND<0.50
3/28/07		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		ND<0.50	ND<0.50
3/22/08		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		ND<0.50	ND<0.50
3/27/09		ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		ND<0.50	ND<0.50

Table 2 aADDITIONAL HISTORIC ANALYTICAL RESULTS76 Station 5781



					70	6 Station 5781						
Date		Carbon			2-			Dibromo-	1,2-	1,3-	1,4-	Dichloro-
Sampled	Bromo-	Tetra-	Chloro-	Chloro-	Chloroethyl		Chloro-	chloro-	Dichloro-	Dichloro-	Dichloro-	difluoro-
	methane	chloride	benzene	ethane	vinyl ether	Chloroform	methane	methane	benzene	benzene	benzene	methane
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-A												
2/3/04	ND<1.0	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<2.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
2/18/05	ND<1.0	ND<0.50	ND<0.50	ND<1.0		ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0
3/29/06	ND<1.0	ND<0.50	ND<0.50	ND<0.50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/28/07	ND<1.0	ND<0.50	ND<0.50	ND<0.50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/22/08	ND<1.0	ND<0.50	ND<0.50	ND<0.50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/27/09	ND<1.0	ND<0.50	ND<0.50	ND<0.50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 2 bADDITIONAL HISTORIC ANALYTICAL RESULTS76 Station 5781



					~	o Station 5701	L					
Date Sampled	1,1-DCA	1,1-DCE	cis- 1,2-DCE	trans- 1,2-DCE	1,2- Dichloro- propane	cis-1,3- Dichloro- propene	trans-1,3- Dichloro- propene	Methylene chloride	1,1,2,2- Tetrachloro- ethane	Tetrachloro- ethene (PCE)	Trichloro- trifluoro- ethane	1,1,1- Trichloro- ethane
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-A 2/3/04	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50
2/18/05	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/29/06	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/28/07	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/22/08	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/27/09	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Table 2 cADDITIONAL HISTORIC ANALYTICAL RESULTS76 Station 5781

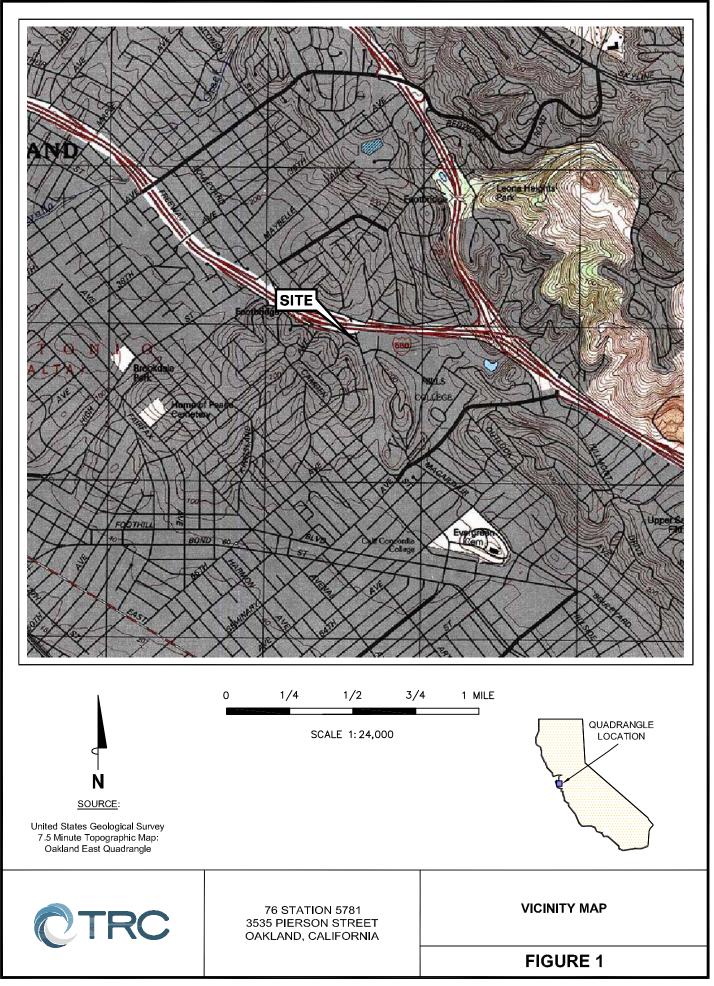


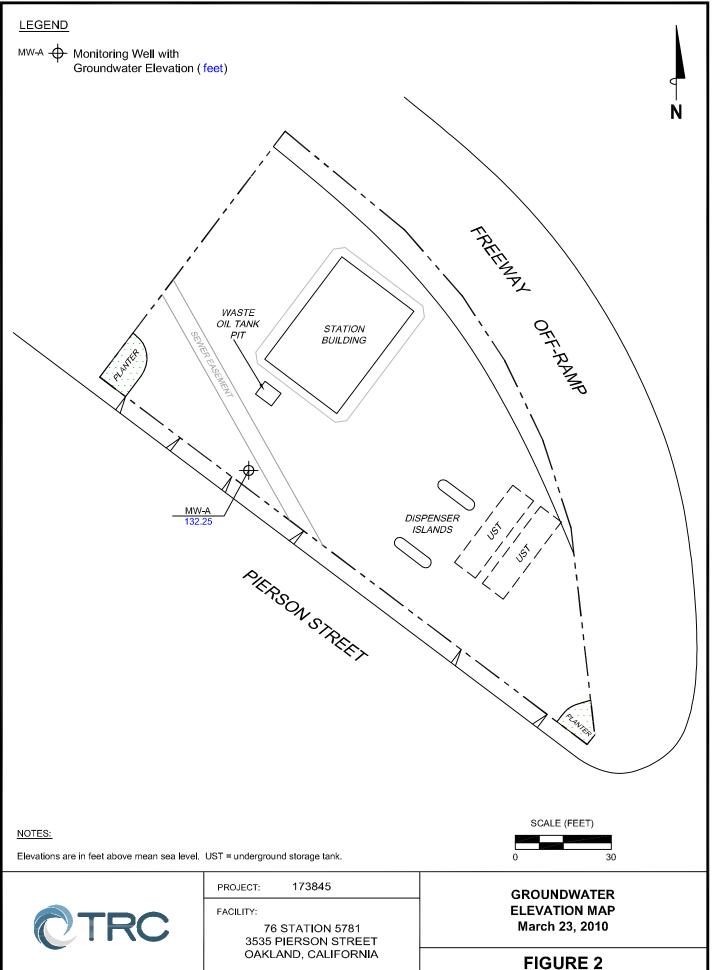
Table 2 dADDITIONAL HISTORIC ANALYTICAL RESULTS76 Station 5781

Date	1,1,2-	Trichloro-	Trichloro-	
Sampled	Trichloro-	ethene	fluoro-	Vinyl
	ethane	(TCE)	methane	chloride
	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-A				
2/3/04	ND<0.50	ND<0.50	ND<1.0	ND<0.50
2/18/05	ND<0.50	ND<0.50	ND<1.0	ND<0.50
3/29/06	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/28/07	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/22/08	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/27/09	ND<0.50	ND<0.50	ND<0.50	ND<0.50
3/27/09	ND<0.50	ND<0.50	ND<0.50	ND<0.5



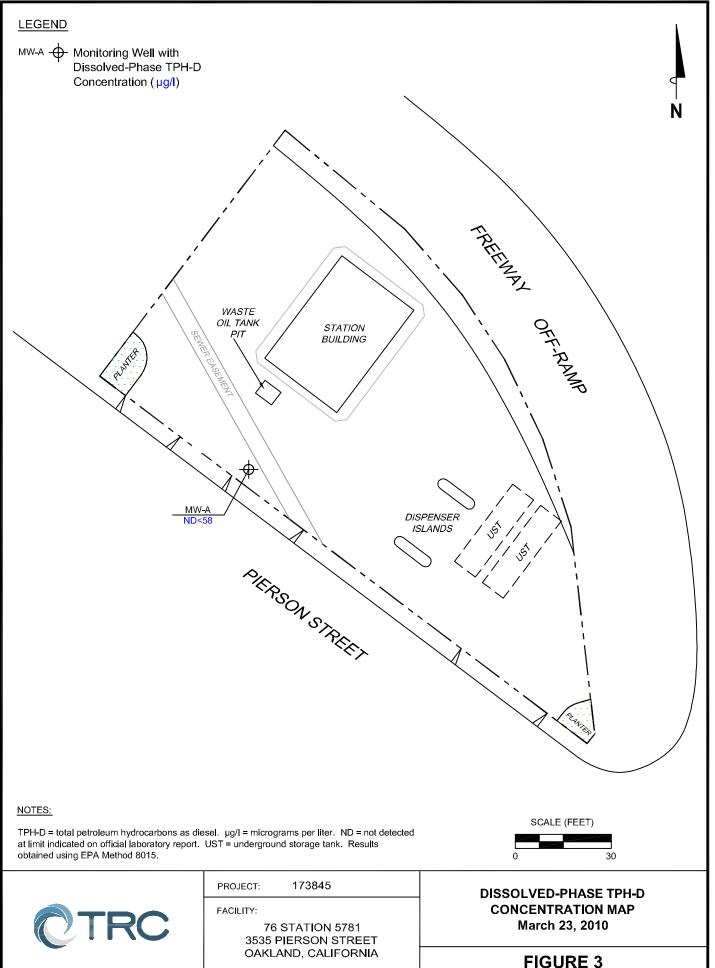
FIGURES





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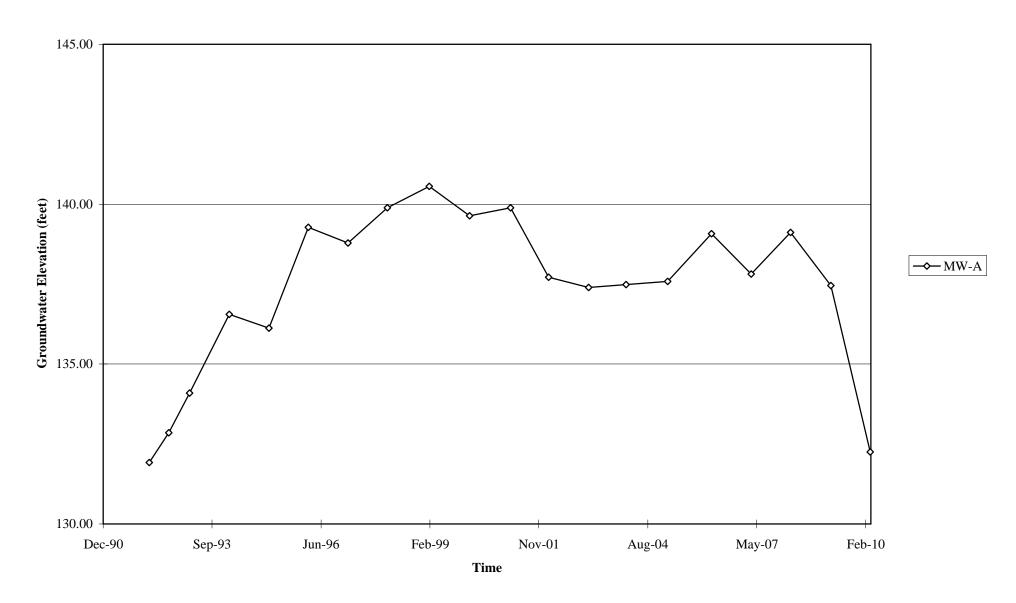
MS=1:1 5781-003



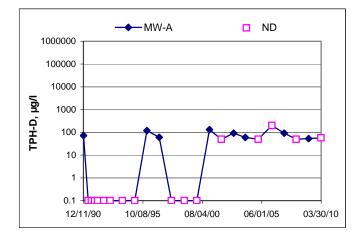
MS=1:1 5781-003

GRAPHS

Groundwater Elevations vs. Time 76 Station 5781



TPH-D Concentrations vs Time 76 Station 5781



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, ¹/₂-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:	Couli) Job #/Task #: _	173845 FAZO	Date:	3-23-10
Site #_	5781	Project Manager_	A. Collin's	Page _	of

				Depth	Depth	Product		
Well #	тос	Time Gauged	Total Depth	to Water	to Product	Thickness (feet)	Time Sampled	Misc. Well Notes
					Tioudot	(1000)	0912	
MW-A	~	0630	44.85	19.55	· · · · · · · · · · · · · · · · · · ·		OTE	
								· · · · · · · · · · · · · · · · · · ·
		-						
FIELD DATA		ETE	QA/QC		COC		ELL BOX C	ONDITION SHEETS
								· · · ·
MANIFEST		DRUM IN	VENTOR	 Y	TRAFFIC	CONTROL		
						· · · · · ·		



GROUNDWATER SAMPLING FIELD NOTES

Technician:	Banilis	
Site: 5781 Project No.:	173845	Date: 3-23-70
Well No. <u>Mw-A</u>	Purge Method: 545	
Depth to Water (feet): <u>19.55</u>	Depth to Product (feet):	
Total Depth (feet) <u>74.85</u>	LPH & Water Recovered (gallons):	
Water Column (feet): 25,30	Casing Diameter (Inches):	
80% Recharge Depth(feet): <u>2イ. C</u>	1 Well Volume (gallons):	

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F,C)	рН	D.O. (mg/L)	ORP	Turbidity
Pre-F	Purge				·				
0700			5	1527	18.2	6.95			
			10,	1496	19.0	6.82			
	0712		<u>'</u> 5	1480	18.8	6.76			
Stati	c at Time Sa	ampled	Tota	al Gallons Pur	ged	l	Sample	Time	j
	28.	47	15			09	212		
Comments	: Did	not ,	ecov	er in	~ zhrs				

Well No.____

Purge Method:_____

Depth to Water (feet):_____

Total Depth (feet)_____

Water Column (feet):_____

80% Recharge Depth(feet):_____

Depth to Product (feet):_____

ՎPH & Water Recovered (gallons)։_____

.

Casing Diameter (Inches):_____

1 Well,Volume (gallons):_____

Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F,C)	pН	D.O. (mg/L)	ORP	Turbidity
Pre-F	Purge								
Stati	c at Time S	ampled	Tota	al Gallons Pu	ged		Sample	Time	1
							\ \		
omments	:			·		·····	$\overline{)}$		
		,							

©TRC



Date of Report: 04/02/2010

Anju Farfan

TRC

123 Technology Drive Irvine, CA 92618

 RE:
 5781

 BC Work Order:
 1004070

 Invoice ID:
 B078065

Enclosed are the results of analyses for samples received by the laboratory on 3/24/2010. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

olly mayers

Contact Person: Molly Meyers Client Service Rep

Authorized Signature

			Project: 5781			Reported:	04/02/2010 13:27
123 Technology			Project Number: 4512981281				
Irvine, CA 92618	5		Project Manager: Anju Farfan				
		Lal	ooratory / Client Sample Cross	s Refe	rence		
Laboratory	Client Sample Informatio	Dn					
1004070-01	COC Number:		Receive I	Date:	03/24/2010 21:00	Delivery Work Order:	
	Project Number:	5781	Sampling	g Date:	03/23/2010 09:12	Global ID: T060101467	
	Sampling Location:		Sample D	Depth:		Location ID (FieldPoint):	MW-A
	Sampling Point:	MW-A	Sample N	Matrix:	Water	Matrix: W	
	oumphing i onici						
	Sampled By:	TRCI				Sample QC Type (SACoc	le): CS

thus

.



TRC	Project: 5781	Reported: 04/02/2010 13:27
123 Technology Drive	Project Number: 4512981281	
Irvine, CA 92618	Project Manager: Anju Farfan	

Total Petroleum Hydrocarbons

BCL Sample ID: 1004070)-01	Client Sample	e Name:	5781, MW-A, 3/23/2	010 9:12:00	AM							
						Prep	Run		Instru-		QC	MB	Lab
Constituent		Result	Units	PQL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Diesel Range Organics (C12 - C24)		ND	ug/L	58	Luft/TPHd	03/30/10	03/31/10 11:12	CKD	GC-2	1.163	BTD0025	ND	
Tetracosane (Surrogate)		89.8	%	28 - 139 (LCL - UCL)	Luft/TPHd	03/30/10	03/31/10 11:12	CKD	GC-2	1.163	BTD0025		



TRC 123 Technology Drive Irvine, CA 92618 Project: 5781

Reported: 04/02/2010 13:27

Project Number: 4512981281

Project Manager: Anju Farfan

Total Petroleum Hydrocarbons

Quality Control Report - Precision & Accuracy

										<u>Contr</u>	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
Diesel Range Organics (C12 - C24)	BTD0025	Matrix Spike	1002046-84	20.228	439.87	500.00	ug/L		83.9		36 - 130
		Matrix Spike Duplicate	1002046-84	20.228	429.92	500.00	ug/L	2.4	81.9	30	36 - 130
Tetracosane (Surrogate)	BTD0025	Matrix Spike	1002046-84	ND	17.784	20.000	ug/L		88.9		28 - 139
		Matrix Spike Duplicate	1002046-84	ND	17.976	20.000	ug/L		89.9		28 - 139



TRC 123 Technology Drive Irvine, CA 92618 Project: 5781

Reported: 04/02/2010 13:27

Project Number: 4512981281

Project Manager: Anju Farfan

Total Petroleum Hydrocarbons

Quality Control Report - Laboratory Control Sample

										Control	<u>Limits</u>		
					Spike			Percent		Percent			
Constituent	Batch ID	QC Sample ID	QC Type	Result	Level	PQL	Units	Recovery	RPD	Recovery	RPD	Lab Quals	
Diesel Range Organics (C12 - C24)	BTD0025	BTD0025-BS1	LCS	370.13	500.00	50	ug/L	74.0		48 - 125			
Tetracosane (Surrogate)	BTD0025	BTD0025-BS1	LCS	16.193	20.000		ug/L	81.0		28 - 139			



TRC	
123 Technology Drive	
rvine, CA 92618	

Project: 5781

Reported: 04/02/2010 13:27

Project Number: 4512981281 Project Manager: Anju Farfan

Total Petroleum Hydrocarbons

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL	MDL	Lab Quals
Diesel Range Organics (C12 - C24)	BTD0025	BTD0025-BLK1	ND	ug/L	50		
Tetracosane (Surrogate)	BTD0025	BTD0025-BLK1	79.6	%	28 - 139 (L	_CL - UCL)	

E	Laboratories, Inc. Environmental Testing Laboratory Since 1949		
TRC		Project: 5781	Reported: 04/02/2010 13:27
	chnology Drive	Project Number: 4512981281	
Irvine, CA 92618		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

OT EPA 413.1, 413.1 413	BC LABORATORIES INC.		5	SAMPLE	RECEIP	TFORM	i Re	v. No. 12	06/24/08	Page _	_Of	
Federal Express UPSC Man Delivery Ice Chest27 None D BC Lab Field Structed F Other D (Specify) Box U Other D (Specify) Reinigerand: Ice Chest27 None D Other D (Specify) Reinigerand: Ice Chest27 None D Other D (Specify) Reinigerand: Ice Chest27 None D Other D (Specify) All samples received Y Ice Chest27 None D (Specify) Description(n) match COC? Y (Specify) COC Received ImageAutor AL (Specify) ImageAutor AL (Specify) Description(n) match COC? Y (Specify) SAMP F CONTAINERS 1 2 4 4 1 4 4 Or Generations ImageAutor AL (Specify) ImageAutor AL (Specify) Description(n) match COC? Y (Specify) Anayat Int (Liv) SAMP F CONTAINERS 1 2 4 4 1 4 4 4 Or Generations 1 2 4 4 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 <	Submission #: 10-04	570									0-7	
Federal Express UPSC Man Delivery Ice Chest27 None D BC Lab Field Structed F Other D (Specify) Box U Other D (Specify) Reinigerand: Ice Chest27 None D Other D (Specify) Reinigerand: Ice Chest27 None D Other D (Specify) Reinigerand: Ice Chest27 None D Other D (Specify) All samples received Y Ice Chest27 None D (Specify) Description(n) match COC? Y (Specify) COC Received ImageAutor AL (Specify) ImageAutor AL (Specify) Description(n) match COC? Y (Specify) SAMP F CONTAINERS 1 2 4 4 1 4 4 Or Generations ImageAutor AL (Specify) ImageAutor AL (Specify) Description(n) match COC? Y (Specify) Anayat Int (Liv) SAMP F CONTAINERS 1 2 4 4 1 4 4 4 Or Generations 1 2 4 4 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 <	SHIPPING IN	FORMAT	ION			1		SHIPPI	NG CON	TAINER		
BC Las Pield Service p Other D (Seecify) Box D Other C (Specify) Refrigerant: Lee D Studies Subject Net Case Custory Sails Lee Chest Custory Sails Lee	Federal Express 🗆 UPS 🗆 Hand Delivery 🗆											
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Crustedy Social Ico Chest Containers Nons 2 Comments: Index Yes Non Adjacent continues intact? Yes Description(a) match COC? Non Adjacent continues intact? Yes Description(a) match COC? Nons Adjacent containers intact? Yes Description(a) match COC?						1						
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All Samples received Yes No All samples containers intart? Yes Ho Description(s) match COC? Yes No D COC Received Emission Street Intart? Yes Ho Description(s) match COC? Yes No D COC Received Emission Street Intart? Yes Ho Description(s) match COC? Yes No D The present of the second street Intart? Yes Ho Description(s) match COC? Yes No D The present of the second street Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D The present of the second street Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Samples containers Intart? Yes Ho Description(s) match COC? Yes No D Fr Containers Intart? Intart Intart? Intart Intart? Yes Ho Description(s) match COC? Internation Inter	Custody Seals Ice Chest	Cont	ainer	·s □]	None M	Comme	nic.					
All samples received? Yes Ord All samples containers inter? Description(s) match COC? Yes Ord COC Received Emissivity: Ord Coc Coc Analyst Init 2018 SAMPLE CONTANERS I <td></td> <td>1 1</td> <td></td> <td>1</td> <td></td> <td>oommo</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		1 1		1		oommo						
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BC LABORATORIES, INC. 10 0 40 70 4100 Atlas Court (661) 327-4911 Bakersfield, CA 93308 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 wells is accumulated at TRC's groundwater monitoring field office at Concord, California, for transportation by a licensed carrier to an authorized disposal facility. Currently, non-hazardous purge water is transported under a bulk non-hazardous waste manifest to Crosby and Overton, Inc. in Long Beach, California.

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.