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2:58 pm, Aug 31, 2009

Alameda County Environmental Health



76 Broadway Sacramento, California 95818

August 26, 2009

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

Re: Quarterly Summary Report—Third Quarter 2009

Former 76 Service Station # 7124 RO # 2444

10151 International Blvd.

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



Stantec Consulting Corporation 3017 Kilgore Road Suite 100 Rancho Cordova CA 95670 Tel: (916) 861-0400

Tel: (916) 861-0400 Fax: (916) 861-0430

Quarterly Summary Report - Third Quarter 2009 Former 76 Service Station No. 7124 10151 International Boulevard Oakland, California

Stantec Project No.: 211402273

Submitted to:
Ms. Barbara Jakub
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Oakland, California 94502

(Sent Via Electronic Upload to Alameda ftp)

Submitted by:
Stantec Consulting Corporation
3017 Kilgore Road, Suite 100
Rancho Cordova, California 95670
916-861-0400

Prepared on behalf of: ConocoPhillips Company Mr. Terry Grayson Site Manager 76 Broadway Sacramento, California 95818

August 26, 2009

Quarterly Summary Report – Third Quarter 2009 August 26, 2009

INTRODUCTION

On behalf of ConocoPhillips, Stantec Consulting Corporation (Stantec), is forwarding the quarterly summary report for the former 76 Service Station No. 7124, located at 10151 International Boulevard, in Oakland, California.

SITE DESCRIPTION

The site is located on the northwest corner of the intersection of International Boulevard and 102nd Avenue in Oakland, California (Figure 1). During the semi-annual monitoring and sampling event performed on July 16, 2009, TRC staff observed the site (currently a Royal Gasoline-branded station) to be fenced off. Site facilities include three underground storage tanks (USTs) and associated piping and fuel dispensers. A detailed site plan is included as Figure 2.

SITE GEOLOGY AND HYDROGEOLOGY

As shown in the United States Geological Survey Geologic Map and Map Database of the Oakland Metropolitan Area, Alameda, Contra Costa, and San Francisco Counties, California, prepared in 2000, the site is underlain by Holocene-aged alluvial fan and fluvial deposits. Based on assessment activities performed by Stantec in September 2008, the subsurface generally consists of silty sands to depths of 5 to 7 feet below ground surface (bgs), underlain by a clay layer generally to depths of 12 to 15 feet bgs. Below this clay layer, interbedded silt and clay with occasional sand lenses with thicknesses of up to three feet have been logged.

As outlined in the California Department of Water Resources 2003 *California Groundwater: Bulletin 118*, the site lies within the East Bay Plain Subbasin of the Santa Clara Valley Groundwater Basin. The East Bay Plain Subbasin is a northwest trending alluvial plain of Quaternary Age, bounded on the north by San Pablo Bay, on the east by the contact with Franciscan Complex rocks, on the south by the Niles Cone Groundwater Basin. The East Bay Plain Subbasin extends beneath San Francisco Bay to the west.

PREVIOUS ASSESSMENT

On March 22, 2000, SECOR International Incorporated (SECOR [now Stantec]) supervised the removal and replacement of product lines and dispensers by Balch Petroleum of Milpitas, California. Soil samples collected from beneath the dispensers and product lines revealed the presence of total petroleum hydrocarbons as gasoline (TPHg) at a maximum concentration of 6,200 milligrams per kilogram (mg/kg), methyl tertiary butyl ether (MTBE) up to120 mg/kg, and benzene up to 7.4 mg/kg. Excavation and sampling activities were observed and approved by Inspector Gomez of the City of Oakland Fire Services Agency.

On March 27, 2000, SECOR observed the over-excavation of approximately 60 cubic yards of soil from the beneath those portions of the dispensers and product lines where soil samples with elevated concentrations of petroleum hydrocarbons were located. Areas measuring approximately 8-10 feet long by 8-10 feet wide were over-excavated to an approximate depth of 8 feet bgs in each of these areas. Additional over-excavation in these areas was not possible

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August 26, 2009

due to their proximity to the footings of the service station canopy. TPHg was detected in two of the three samples at a concentration of 108 mg/kg; benzene was detected in one of the three samples at 0.162 mg/kg; and MTBE was detected in all three samples at maximum concentrations of up to 43.8 mg/kg. Lead was not detected at or above laboratory reporting limits in any samples.

During February 2002, SECOR supervised the installation of four on-site groundwater monitoring wells. Prior to well installation, all borings were advanced to 26.5 feet bgs, and subsurface soil samples were collected every five feet. Soil samples were analyzed for gasoline range organics (GRO), benzene, toluene, ethylbenzene, total xylenes (BTEX), and fuel oxygenates via EPA Method 8260B. The maximum reported concentrations were 42 mg/kg GRO, 0.36 mg/kg ethylbenzene, 0.26 mg/kg xylenes, and 1.2 mg/kg MTBE.

In September 2008, Stantec oversaw the advancement of two on-site and five off-site direct push soil borings. Soil and grab groundwater samples were collected and analyzed for total purgeable petroleum hydrocarbons (TPPH [aka gasoline]), BTEX, and fuel oxygenates tert-butyl alcohol (TBA), MTBE, di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), tert-amyl methyl ether (TAME), and ethanol, as well as, ethylene di-bromide (EDB) and 1,2-dichloroethane (1,2-DCA) via EPA Method 8260B. Maximum concentrations of TPPH and MTBE in groundwater were observed in off-site boring SB-4 (north of monitoring well MW-3), at concentrations of 45,000 micrograms per liter (μ g/L), and 62 μ g/L, respectively.

SENSITIVE RECEPTORS

During the third quarter of 2004, SECOR completed a ½-mile radius agency receptor survey and obtained an Environmental Data Resources Incorportated (EDR) radius map for the site. The agency survey identified two industrial supply wells, three cathodic protection wells, and two wells of unknown type within the search radius. The survey also identified twelve wells of unknown type that could not be located precisely because the records on file with DWR did not include this information. These wells may or may not be located within the search radius. The EDR radius map did not identify any water supply wells within the search radius, but did identify two water supply wells within one mile of the site.

During the third quarter of 2008, Stantec contacted the DWR to obtain copies of all well completion reports for wells located within 0.25-mile of the site. Stantec reviewed these well completion reports and determined that monitoring and vapor extraction wells associated with two sites are located within 0.25-mile of the site. One monitoring well is located approximately 650 feet south-southeast of the site (cross-gradient), while six monitoring wells and two vapor extraction wells are located approximately 1,150 feet north-northwest of the site (cross-gradient). No domestic or industrial supply wells or irrigation wells were located within 0.25-mile of the site.

Stantec also performed a utility survey at the site. The survey was conducted by having Underground Services Alert (USA) mark the site for utilities. Stantec staff subsequently hired a private utility locator to confirm utility locations and attempt to locate any potential utilities not marked by USA. Based on depth to groundwater (generally 15 to 20 feet bgs) and observed

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dissolved-phase hydrocarbon distribution, Stantec felt the utility trenches do not represent likely preferential pathways, and accordingly, did not determine the depths of the utility trenches.

MONITORING AND SAMPLING

The site has been monitored and sampled since the third quarter 2002. Currently, four wells are monitored semi-annually (MW-1 through MW-4) during the first and third quarter of each year. Samples are analyzed for TPPH, BTEX, fuel oxygenates TBA, MTBE, DIPE, ETBE, TAME, and ethanol, and lead scavengers EDB and 1,2-DCA by EPA Method 8260B.

During the third quarter 2009, depth to groundwater ranged between 16.90 and 18.70 feet below top of casing (toc). Historical groundwater depths have previously been reported between 15.11 and 19.25 feet below toc. The direction of groundwater flow was toward the west at a gradient of 0.008 foot/foot, consistent with the historically dominant direction (Attachment 1).

This quarter, the maximum concentrations of TPPH and MTBE were reported in well MW-3 at 1,900 μ g/L, and 100 μ g/L, respectively (Attachment 1). TPPH and MTBE concentrations across the site were generally consistent with those observed over the past several quarters, and over time, have shown a declining trend.

CHARACTERIZATION STATUS

None of the groundwater samples collected during the third quarter 2009 quarterly sampling event showed detectable levels of any BTEX components. The highest concentrations of residual TPHg and/or MTBE contamination are localized in the northeastern area of the site in the vicinity of MW-3. The down-gradient/cross-gradient extent of the dissolved plume remains undefined by the existing monitoring well network. The variable TBA levels in MW-4 may indicate active biodegradation of MTBE is occurring beneath the site.

REMEDIATION STATUS

Currently, there is no active remediation at this site.

CURRENT ASSESSMENT ACTIVITIES

No assessment activities were performed during the third quarter 2009.

RECENT SUBMITTALS/CORRESPONDENCE

- Submitted Quarterly Summary and Monitoring Report Second Quarter 2009, dated July 1, 2009.
- Submitted Work Plan for Additional Site Assessment and Remediation Feasibility Testing, dated July 20, 2009

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Received – Letter from Alameda County Environmental Health Services, dated July 24, 2009, requesting a decrease in monitoring and sampling frequency to a semi-annual basis.

WASTE DISPOSAL SUMMARY

The volume of purged groundwater generated and disposed of during the quarterly groundwater monitoring event is documented in TRC's *Semi-Annual Monitoring Report, April through September 2009*, dated August 14, 2009 (Attachment 1).

CONCLUSIONS

The third quarter 2009 hydrocarbon concentrations were generally similar to those observed during recent quarterly sampling events. Since initiation of groundwater monitoring and sampling, observed hydrocarbon concentrations have decreased significantly. During the third quarter 2009, Stantec prepared and submitted a work plan to perform additional site assessment and remediation feasibility testing. Stantec is currently awaiting a response from the Alameda County Environmental Health Services, regarding the proposed scope of work.

THIS QUARTER ACTIVITIES (Third Quarter 2009)

- 1. TRC performed quarterly groundwater monitoring and sampling event.
- 2. Stantec prepared and submitted a quarterly summary report.
- 3. Stantec prepared and submitted a work plan for additional site assessment and remediation feasibility testing.

NEXT QUARTER ACTIVITIES (Fourth Quarter 2009)

- 1. Stantec to prepare and submit a quarterly summary report.
- 2. Stantec to initiate additional site assessment and remediation feasibility testing, pending regulatory approval.

LIMITATIONS

This report presents our understanding of existing conditions at the subject site located at 10151 International Boulevard, Oakland, California. Evaluations of the geologic conditions at the site for the purposes of this investigation are inherently limited due to the number of observation points. There are no representations, warranties, or guarantees that the points selected for sampling are representative of the entire site. Data from this report reflects the conditions at specific locations at a specific point in time. Stantec assumes no responsibility for work reported or performed by other consultants or contractors. Stantec makes no warranties or guarantees for the groundwater monitoring report (Attachment 1) prepared by TRC. No other interpretation, representations, warranties, guarantees, express or implied, are included or intended in the report findings.

LESSIONAL GEOLOGICA

BENJAMIN CHEVLEN No. \$471

Exp. 06/30/1

Sincerely,

Stantec Consulting Corporation

Benjamin Chevlen, P.G.

Senior Geologist

Ed Simonis, P.G. Senior Geologist

Attachments:

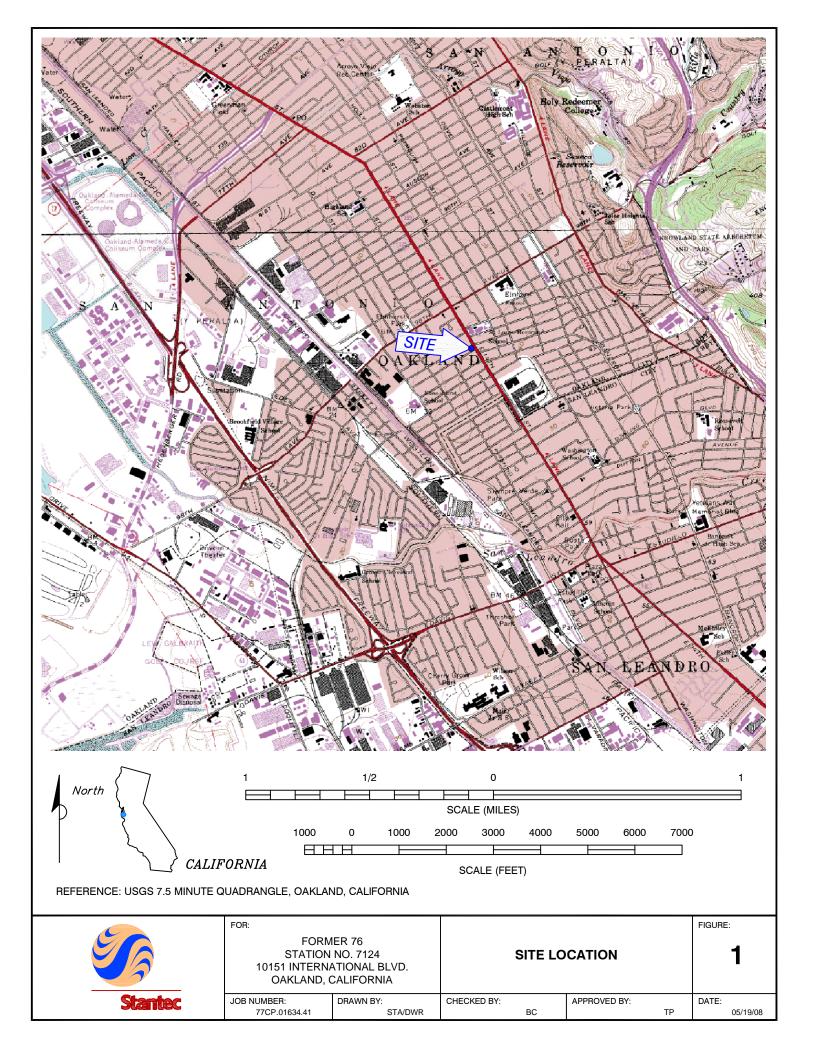
Figure 1 – Site Location Map

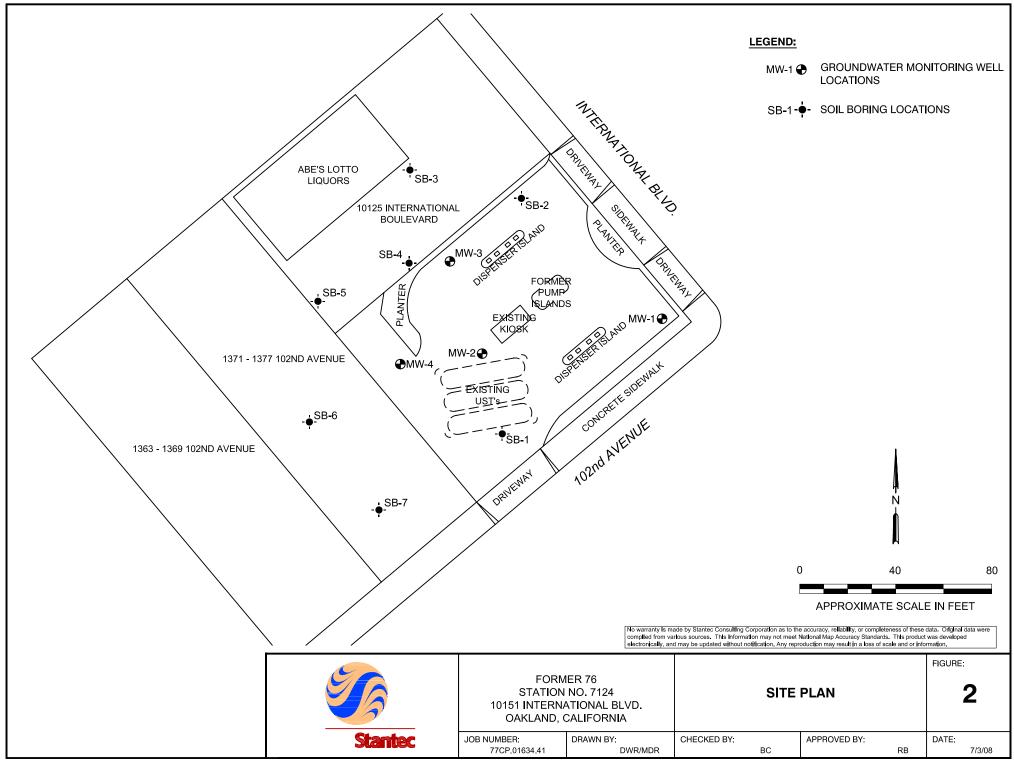
Figure 2 – Site Plan

Attachment 1 - TRC's Semi-Annual Monitoring Report – April through September 2009, dated August 14, 2009.

cc: Mr. Terry Grayson, ConocoPhillips (via electronic upload to Livelink only)

FIGURES





ATTACHMENT 1 TRC'S SEMI-ANNUAL MONITORING REPORT APRIL THROUGH SEPTEMBER 2009

Quarterly Summary Report – Third Quarter 2009 Former 76 Station 7124 10151 International Boulevard Oakland, California





21 Technology Drive Irvine, CA 92618

949.727.9336 PHONE 949.727.7399 FAX

www.TRCsolutions.com

DATE:

August 17, 2009

TO:

ConocoPhillips Company

76 Broadway

Sacramento, CA 95818

ATTN:

MR. TERRY GRAYSON

SITE:

76 STATION 7124

10151 INTERNATIONAL BOULEVARD

OAKLAND, CALIFORNIA

RE:

SEMI-ANNUAL MONITORING REPORT

APRIL THROUGH SEPTEMBER 2009

Dear Mr Grayson:

Please find enclosed our Semi-Annual Monitoring Report for 76 Station 7124, located at 10151 International Boulevard, Oakland, California. If you have any questions regarding this report, please call us at (949) 727-9336.

Sincerely,

Anju Farfan

Groundwater Program Operations Manager

CC: Mr. Ben Chevlen, Stantec, Inc (2 copies)

Enclosures 200400/7124R24.QMS.doc

SEMI-ANNUAL MONITORING REPORT APRIL THROUGH SEPTEMBER 2009

76 STATION 7124 10151 International Boulevard Oakland, California

Prepared For:

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

By:

Senior Project Geologist, Irvine Operations

Date: 6/4/09



	LIST OF ATTACHMENTS
Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key
	Contents of Tables
	Table 1: Current Fluid Levels and Selected Analytical Results
	Table 1a: Additional Current Analytical Results
	Table 2: Historic Fluid Levels and Selected Analytical Results
	Table 2a: Additional Historic Analytical Results
Figures	Figure 1: Vicinity Map
	Figure 2: Groundwater Elevation Contour Map
	Figure 2A: Historical Groundwater Flow Direction
	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
	MTBE 8260B Concentrations vs. Time
Field Activities	General Field Procedures
	Field Monitoring Data Sheet – 07/16/09
	Groundwater Sampling Field Notes – 0716/09
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 September 2009 76 Station 7124 10151 International Boulevard

Compiled by: Christina Carrillo

Project Coordinator: Terry Grayson Water Sampling Contractor: TRC

Date(s) of Gauging/Sampling Event: 07/16/09

Telephone: 916-558-7666

Sample Points

Groundwater wells: 4 onsite, 0 offsite Points gauged: 4 Points sampled: 4

Purging method: Submersible pump

Purge water disposal: Veolia/Rodeo Unit 100

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: 16.9 feet Maximum: 18.7 feet

Average groundwater elevation (relative to available local datum): 19.88 feet Average change in groundwater elevation since previous event: -1.18 feet

Interpreted groundwater gradient and flow direction:

Current event: 0.008 ft/ft, west

Previous event: 0.009 ft/ft, west (04/16/09)

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 3 Maximum: 1,900 μg/l (MW-3) Sample Points with MTBE 8260B 3 Maximum: 100 μg/l (MW-3)

Notes:

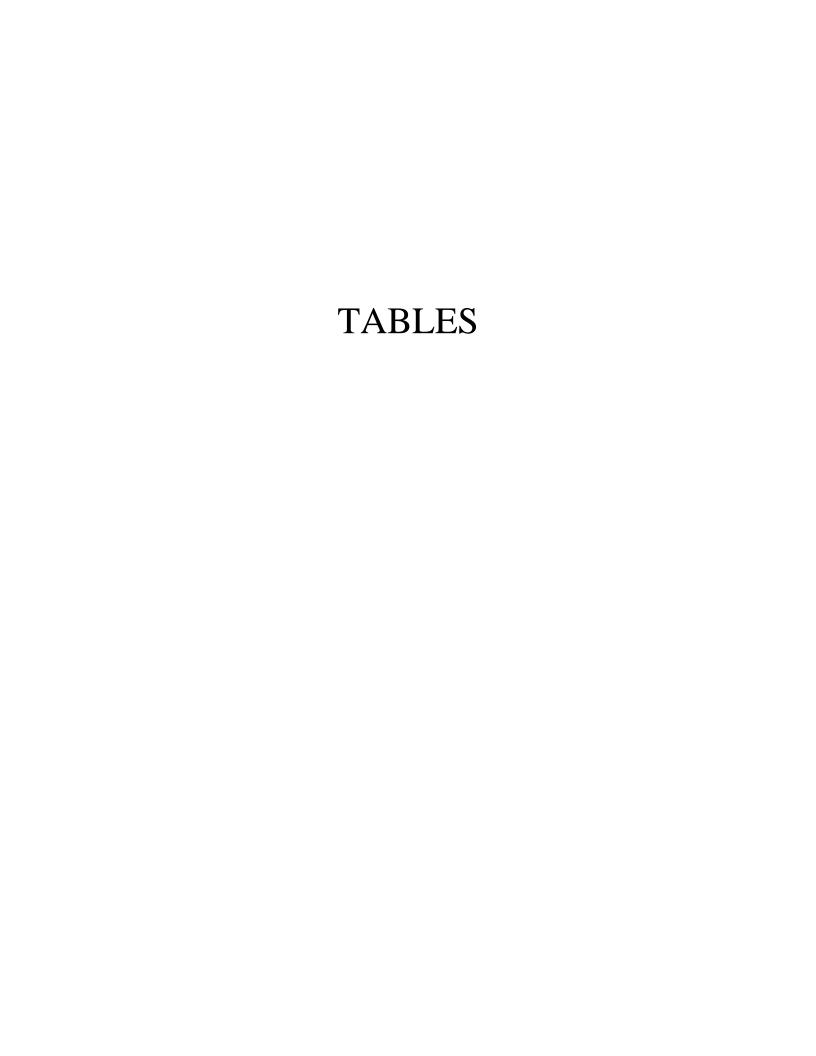


TABLE KEY

STANDARD ABBREVIATIONS

-- not analyzed, measured, or collected

LPH = liquid-phase hydrocarbons Trace = less than 0.01 foot of LPH in well

μg/l = micrograms per liter (approx. equivalent to parts per billion, ppb)
mg/l = milligrams per liter (approx. equivalent to parts per million, ppm)

ND< = not detected at or above laboratory detection limit TOC = top of casing (surveyed reference elevation)

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

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 for 76 Station 7124 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 7124

Current	Event										
Table 1	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes
Table 1a	Well/ Date	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME			
	D - 1 -										

Historic	Data												
Table 2	Well/ Date	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G 8015	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)
Table 2a	Well/ Date	TBA	Ethanol (8015B)	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME				

MTBE

(8021B)

MTBE

(8260B)

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
July 16, 2009
76 Station 7124

Date	TOC	Depth to	LPH	Ground-	Change in									Comments
Sampled	Elevation	Water	Thickness		Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE	
				Elevation	1	8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$	$(\mu g/l)$	$(\mu g/l)$	(µg/l)	$(\mu g/l)$	$(\mu g/l)$	$(\mu g/l)$	$(\mu g/l)$	
MW-1														
07/16/0	9 37.37	16.90	0.00	20.47	-1.30		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
MW-2														
07/16/0	9 37.87	18.15	0.00	19.72	-1.21		92	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.6	
MW-3														
07/16/0	9 37.72	18.05	0.00	19.67	-1.13		1900	ND<5.0	ND<5.0	ND<5.0	ND<10		100	
MW-4														
07/16/0	9 38.36	18.70	0.00	19.66	-1.09		310	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.2	



Table 1 a
ADDITIONAL CURRENT ANALYTICAL RESULTS
76 Station 7124

Date			Ethylene-				
Sampled		Ethanol	dibromide	1,2-DCA			
	TBA	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME
	$(\mu g/l)$						
MW-1							
07/16/09	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-2							
07/16/09	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-3							
07/16/09	ND<100	ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
NASS/ 4							
MW-4 07/16/09	20	ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50



Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through July 2009
76 Station 7124

Date	TOC	Depth to	LPH		Change in									Comments
Sampled	Elevation	Water	Thickness	water Elevation	Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE	
						8015	(GC/MS)	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-1														
04/08/0	02 37.37	14.27	0.00	23.10		ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	ND<2.0	
07/28/0	02 37.37	15.88	0.00	21.49	-1.61		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
11/03/0	37.37	16.75	0.00	20.62	-0.87		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
01/24/0	37.37	13.94	0.00	23.43	2.81		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
04/02/0	37.37	14.99	0.00	22.38	-1.05		460	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
07/01/0	37.37	15.48	0.00	21.89	-0.49		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
10/02/0	37.37	16.68	0.00	20.69	-1.20		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
01/09/0	04 37.37	13.79	0.00	23.58	2.89		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1		ND<2	
04/26/0	04 37.37	15.21	0.00	22.16	-1.42		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
07/22/0	04 37.37	16.43	0.00	20.94	-1.22		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
10/29/0	04 37.37	16.14	0.00	21.23	0.29		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
01/12/0	05 37.37	12.83	0.00	24.54	3.31		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
06/20/0	05 37.37	14.38	0.00	22.99	-1.55		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
09/23/0	05 37.37	15.92	0.00	21.45	-1.54		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
12/13/0	05 37.37	16.09	0.00	21.28	-0.17		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
03/24/0	06 37.37	11.85	0.00	25.52	4.24		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
05/30/0	06 37.37	13.30	0.00	24.07	-1.45		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
08/22/0	06 37.37	15.11	0.00	22.26	-1.81		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
10/31/0	06 37.37	16.11	0.00	21.26	-1.00		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
01/12/0	07 37.37	15.55	0.00	21.82	0.56		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
04/04/0	07 37.37	15.31	0.00	22.06	0.24		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
07/05/0	07 37.37	16.21	0.00	21.16	-0.90		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through July 2009
76 Station 7124

Date		Depth to	LPH		Change in									Comments
Sampled	Elevation	Water	Thickness	water Elevation	Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE	
	(C)	(6)	(6)			8015	(GC/MS)	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)	
	continued		0.00											
10/01/0		17.13		20.24	-0.92		ND<50			ND<0.50			ND<0.50	
01/11/0		14.48		22.89	2.65		ND<50		ND<0.50		ND<1.0		ND<0.50	G 1 500.00
04/04/0		16.17		21.20	-1.69		ND<50		ND<0.50		ND<1.0		ND<0.50	Gauged on 5-22-08
07/02/0		16.70		20.67	-0.53		ND<50		ND<0.50		ND<1.0		ND<0.50	
10/02/0		17.50		19.87	-0.80		ND<50		ND<0.50		ND<1.0		ND<0.50	
01/14/0	9 37.37	17.30		20.07	0.20		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
04/16/0	9 37.37	15.60		21.77	1.70		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
07/16/0	9 37.37	16.90	0.00	20.47	-1.30		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
MW-2														
04/08/0	37.87	15.86	0.00	22.01		4400		ND<2.5	ND<2.5	6.4	ND<2.5	380	490	
07/28/0	37.87	17.28	0.00	20.59	-1.42		3200	ND<2.5	ND<2.5	ND<2.5	ND<5.0		170	
11/03/0	37.87	18.03	0.00	19.84	-0.75		3800	ND<5.0	ND<5.0	ND<5.0	ND<10		72	
01/24/0	37.87	15.59	0.00	22.28	2.44		410	ND<2.5	ND<2.5	ND<2.5	ND<5.0		490	
04/02/0	37.87	16.50	0.00	21.37	-0.91		1000	ND<5.0	ND<5.0	ND<5.0	ND<10		180	
07/01/0	37.87	16.94	0.00	20.93	-0.44		1900	ND<2.5	ND<2.5	ND<2.5	ND<5.0		120	
10/02/0	37.87	17.93	0.00	19.94	-0.99		6900	ND<0.50	ND<0.50	ND<0.50	ND<1.0		32	
01/09/0	37.87	15.42	0.00	22.45	2.51		1000	ND<2.5	ND<2.5	ND<2.5	ND<5.0		300	
04/26/0	37.87													Covered with asphalt
07/22/0	37.87													Covered with asphalt
10/29/0	37.87		0.00											Well is paved over.
01/12/0	37.87													Well was paved over.
06/20/0	37.87	15.94	0.00	21.93			120	ND<0.50	ND<0.50	ND<0.50	ND<1.0		46	
09/23/0	37.87	17.29	0.00	20.58	-1.35		120	ND<0.50	ND<0.50	ND<0.50	ND<1.0		10	
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through July 2009
76 Station 7124

Date	TOC	Depth to	LPH		Change in									Comments
Sampled	Elevation	Water	Thickness	water Elevation	Elevation	TPH-G	TPH-G	_		Ethyl-	Total	MTBE	MTBE	
						8015	(GC/MS)	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)	
	continued													
12/13/0	37.87	17.41	0.00	20.46	-0.12		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		11	
03/24/0	06 37.87	13.77	0.00	24.10	3.64		190	ND<0.50	ND<0.50	ND<0.50	ND<1.0		15	
05/30/0	06 37.87	15.16	0.00	22.71	-1.39		120	ND<0.50	ND<0.50	ND<0.50	ND<1.0		6.6	
08/22/0	06 37.87	16.49	0.00	21.38	-1.33		81	ND<0.50	ND<0.50	ND<0.50	ND<0.50		3.0	
10/31/0	06 37.87	17.15	0.00	20.72	-0.66		93	ND<0.50	ND<0.50	ND<0.50	ND<0.50		2.0	
01/12/0	37.87	17.07	0.00	20.80	0.08		230	ND<0.50	ND<0.50	ND<0.50	ND<0.50		4.3	
04/04/0	37.87	17.84	0.00	20.03	-0.77		110	ND<0.50	ND<0.50	ND<0.50	ND<0.50		2.5	
07/05/0	37.87	17.51	0.00	20.36	0.33		150	ND<0.50	ND<0.50	ND<0.50	ND<0.50		2.6	
10/01/0	37.87	18.25	0.00	19.62	-0.74		160	ND<0.50	ND<0.50	ND<0.50	ND<0.50		2.0	
01/11/0	37.87	16.80	0.00	21.07	1.45		130	ND<0.50	ND<0.50	ND<0.50	ND<1.0		7.7	
05/22/0	08 37.87	17.46	0.00	20.41	-0.66		140	ND<0.50	ND<0.50	ND<0.50	ND<1.0		4.2	Gauged and sampled on 5-22- 08
07/02/0	37.87	17.94	0.00	19.93	-0.48		75	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.4	
10/02/0	37.87	18.65	0.00	19.22	-0.71		130	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.1	
01/14/0	9 37.87	18.40	0.00	19.47	0.25		66	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.5	
04/16/0	9 37.87	16.94	0.00	20.93	1.46		93	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.2	
07/16/0	9 37.87	18.15	0.00	19.72	-1.21		92	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.6	
MW-3														
04/08/0	37.72	15.86	0.00	21.86		8700		65	ND<25	400	ND<25	6500	8300	
07/28/0	37.72	17.22	0.00	20.50	-1.36		4500	ND<25	ND<25	ND<25	ND<50		1100	
11/03/0	2 37.72	17.90	0.00	19.82	-0.68		25000	ND<5.0	ND<5.0	25	ND<10		470	
01/24/0	37.72	15.57	0.00	22.15	2.33		6000	ND<25	ND<25	94	ND<50		10000	
04/02/0	37.72	16.45	0.00	21.27	-0.88		130000	ND<100	ND<100	ND<100	ND<200		4400	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through July 2009
76 Station 7124

Date	TOC	Depth to	LPH		Change in									Comments
Sampled	Elevation	Water	Thickness	water Elevation	Elevation	TPH-G	TPH-G	-		Ethyl-	Total	MTBE	MTBE	
	(6)	(6)	(C)			8015	(GC/MS)	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)	
	continued		. 0.00											
07/01/0				20.84			9400	ND<10	ND<10	ND<10	ND<20		2200	
10/02/0				19.87	-0.97		73000	ND<50	ND<50	ND<50	ND<100		460	
01/09/0				22.41	2.54		8700	ND<25	ND<25	98	ND<50		3800	
04/26/0				21.10			6700	ND<25	ND<25	ND<25	ND<50		3900	
07/22/0				20.10	-1.00		13000	ND<25	ND<25	ND<25	ND<50		980	
10/29/0		2 17.29		20.43	0.33		4600	ND<5.0	ND<5.0	13	ND<10		640	
01/12/0	05 37.72	2 14.64	0.00	23.08	2.65		6100	0.88	0.99	30	2.2		6900	
06/20/0	05 37.72	2 15.91	0.00	21.81	-1.27		1900	ND<0.50	0.21J	0.52	0.46J		960	
09/23/0	05 37.72	2 17.20	0.00	20.52	-1.29		2400	ND<0.50	ND<0.50	ND<0.50	ND<1.0		160	
12/13/0	05 37.72	2 17.32	0.00	20.40	-0.12		2100	ND<2.5	ND<2.5	ND<2.5	ND<5.0		340	
03/24/0	06 37.72	2 13.86	0.00	23.86	3.46		2200	ND<5.0	ND<5.0	ND<5.0	ND<10		970	
05/30/0	06 37.72	2 15.69	0.00	22.03	-1.83		1500	ND<12	ND<12	ND<12	ND<25		760	
08/22/0	06 37.72	2 16.51	0.00	21.21	-0.82		1900	ND<0.50	ND<0.50	ND<0.50	ND<0.50		160	
10/31/0	06 37.72	2 17.36	0.00	20.36	-0.85		2200	ND<0.50	ND<0.50	ND<0.50	ND<0.50		58	
01/12/0	07 37.72	2 16.85	0.00	20.87	0.51		2600	ND<0.50	ND<0.50	ND<0.50	ND<0.50		680	
04/04/0	07 37.72	2 16.62	0.00	21.10	0.23		1700	ND<0.50	ND<0.50	ND<0.50	ND<0.50		650	
07/05/0	07 37.72	2 17.42	0.00	20.30	-0.80		2400	ND<0.50	ND<0.50	ND<0.50	ND<0.50		160	
10/01/0	07 37.72	2 18.16	0.00	19.56	-0.74		1700	ND<1.0	ND<1.0	ND<1.0	ND<1.0		87	
01/11/0	08 37.72	2 15.84	0.00	21.88	2.32		2200	ND<0.50	ND<0.50	1.6	ND<1.0		1300	
04/04/0	08 37.72	2 17.30	0.00	20.42	-1.46		1600	ND<1.0	ND<1.0	ND<1.0	ND<2.0		470	Gauged on 5-22-08
07/02/0	08 37.72	2 17.84	0.00	19.88	-0.54		1200	ND<0.50	ND<0.50	ND<0.50	ND<1.0		91	
10/02/0	08 37.72	2 18.50	0.00	19.22	-0.66		2100	ND<0.50	ND<0.50	ND<0.50	ND<1.0		84	
01/14/0	09 37.72	2 18.33	0.00	19.39	0.17		2000	ND<0.50	ND<0.50	ND<0.50	ND<1.0		320	
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through July 2009
76 Station 7124

Date	TOC	Depth to	LPH		Change in									Comments
Sampled	Elevation	Water	Thickness	water Elevation	Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE	
	(C)	(6)	(6)			8015	(GC/MS)	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)	
	continued		0.00											
04/16/0				20.80			1800	ND<2.5	ND<2.5	ND<2.5	ND<5.0		560	
07/16/0	09 37.72	18.05	0.00	19.67	-1.13		1900	ND<5.0	ND<5.0	ND<5.0	ND<10		100	
MW-4														
04/08/0	38.36	16.59	0.00	21.77		13000		ND<5.0	ND<5.0	28	ND<5.0	790	980	
07/28/0	38.36	17.93	0.00	20.43	-1.34		18000	ND<2.5	ND<2.5	ND<2.5	ND<5.0		170	
11/03/0	38.36	18.66	0.00	19.70	-0.73		220	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.7	
01/24/0	38.36	16.27	0.00	22.09	2.39		ND<1000	ND<10	ND<10	ND<10	ND<20		1000	
04/02/0	38.36	17.19	0.00	21.17	-0.92		130000	ND<100	ND<100	ND<100	ND<200		ND<400	
07/01/0	38.36	17.61	0.00	20.75	-0.42		15000	ND<2.5	ND<2.5	ND<2.5	ND<5.0		170	
10/02/0	38.36	18.58	0.00	19.78	-0.97		7100	ND<10	ND<10	ND<10	ND<20		70	
01/09/0	38.36	16.15	0.00	22.21	2.43		18000	ND<10	ND<10	ND<10	ND<20		530	
04/26/0	38.36	17.20	0.00	21.16	-1.05		6500	ND<10	ND<10	ND<10	ND<20		240	
07/22/0	38.36	18.34	0.00	20.02	-1.14		18000	ND<10	ND<10	ND<10	ND<20		48	
10/29/0	38.36	18.13	0.00	20.23	0.21		2700	ND<2.5	ND<2.5	ND<2.5	ND<5.0		76	
01/12/0	05 38.36	15.22	0.00	23.14	2.91		1300	ND<0.50	ND<0.50	ND<0.50	ND<1.0		620	
06/20/0	05 38.36	16.63	0.00	21.73	-1.41		980	ND<0.50	ND<0.50	ND<0.50	ND<1.0		110	
09/23/0	38.36	17.93	0.00	20.43	-1.30		1500	ND<0.50	ND<0.50	ND<0.50	ND<1.0		34	
12/13/0	38.36	18.04	0.00	20.32	-0.11		3900	ND<0.50	ND<0.50	ND<0.50	ND<1.0		36	
03/24/0	06 38.36	14.48	0.00	23.88	3.56		1500	ND<12	ND<12	ND<12	ND<25		200	
05/30/0	06 38.36	15.79	0.00	22.57	-1.31		1200	ND<2.5	ND<2.5	ND<2.5	ND<5.0		130	
08/22/0	06 38.36	17.26	0.00	21.10	-1.47		980	ND<0.50	ND<0.50	ND<0.50	ND<0.50		33	
10/31/0	06 38.36	18.08	0.00	20.28	-0.82		1300	ND<0.50	ND<0.50	ND<0.50	ND<0.50		10	
01/12/0			0.00	20.79			820	ND<0.50	ND<0.50	ND<0.50	ND<0.50		28	
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
April 2002 Through July 2009
76 Station 7124

Date	TOC	Depth to	LPH	Ground-	Change in									Comments
Sampled	Elevation	Water	Thickness	water	Elevation	TPH-G	TPH-G			Ethyl-	Total	MTBE	MTBE	
				Elevation	l	8015	(GC/MS)	Benzene	Toluene	benzene	Xylenes	(8021B)	(8260B)	
	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$								
MW-4	continued													
04/04/0	38.36	17.40	0.00	20.96	0.17		460	ND<0.50	ND<0.50	ND<0.50	ND<0.50		41	
07/05/0	38.36	18.02	0.00	20.34	-0.62		920	ND<0.50	ND<0.50	ND<0.50	ND<0.50		7.0	
10/01/0	38.36	18.89	0.00	19.47	-0.87		560	ND<0.50	ND<0.50	ND<0.50	ND<0.50		3.0	
01/11/0	38.36	16.56	0.00	21.80	2.33		340	ND<0.50	ND<0.50	ND<0.50	ND<1.0		21	
05/22/0	38.36	18.10	0.00	20.26	-1.54		520	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5.6	Gauged and sampled on 5-22-08
07/02/0	38.36	18.55	0.00	19.81	-0.45		340	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.3	
10/02/0	38.36	19.25	0.00	19.11	-0.70		790	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.4	
01/14/0	9 38.36	19.10	0.00	19.26	0.15		430	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.4	
04/16/0	9 38.36	17.61	0.00	20.75	1.49		390	ND<0.50	ND<0.50	ND<0.50	ND<1.0		16	
07/16/0	9 38.36	18.70	0.00	19.66	-1.09		310	ND<0.50	ND<0.50	ND<0.50	ND<1.0		3.2	



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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7124

Date				Ethylene-				
Sampled		Ethanol	Ethanol	dibromide	1,2-DCA			
	TBA	(8015B)	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME
	$(\mu g/l)$	(mg/l)	$(\mu g/l)$	(µg/l)	(µg/l)	(µg/l)	$(\mu g/l)$	(µg/l)
MW-1								
07/28/02	ND<100	ND<500		ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
11/03/02	ND<100	ND<500		ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/24/03	ND<100	ND<500		ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
04/02/03	ND<100	ND<500		ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
07/01/03	ND<100	ND<500		ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
10/02/03	ND<100		ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/09/04	ND<100		ND<500	ND<2	ND<2.0	ND<2	ND<2	ND<2
04/26/04	ND<5.0		ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
07/22/04	ND<5.0		ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
10/29/04	ND<5.0		ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
01/12/05	ND<5.0		ND<50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50
06/20/05	ND<10		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/23/05	ND<10		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/13/05	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
03/24/06	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
05/30/06	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
08/22/06	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/31/06	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/12/07	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/04/07	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/05/07	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/01/07	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/11/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/04/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/02/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

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Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7124

Date				Ethylene-				
Sampled		Ethanol	Ethanol	dibromide	1,2-DCA			
	TBA	(8015B)	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME
	(µg/l)	(mg/l)	$(\mu g/l)$	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
	continued							
10/02/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/14/09	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/16/09	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/16/09	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-2								
04/08/02	ND<2000	ND<10000		ND<40	ND<40	ND<40	ND<40	ND<40
07/28/02	2 ND<500	ND<2500		ND<10	ND<10	ND<10	ND<10	ND<10
11/03/02	ND<1000	ND<5000		ND<20	ND<20	ND<20	ND<20	ND<20
01/24/03	3 ND<500	ND<2500		ND<10	ND<10	ND<10	ND<10	ND<10
04/02/03	ND<1000	ND<5000		ND<20	ND<20	ND<20	ND<20	ND<20
07/01/03	3 ND<500	ND<2500		ND<10	ND<10	ND<10	ND<10	ND<10
10/02/03	B ND<100		ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/09/04	ND<500		ND<2500	ND<10	ND<10	ND<10	ND<10	ND<10
06/20/05	5 25		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/23/05	5 ND<10		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/13/05	5 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
03/24/06	5 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
05/30/06	5 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
08/22/06	5 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/31/06	5 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/12/07	7 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/04/07	7 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/05/07	7 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/01/07	7 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/11/08	3 ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Page 2 of 5

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7124

Date Sampled	TBA (μg/l)	Ethanol (8015B) (mg/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)
MW-2 co								
05/22/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/02/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/02/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/14/09	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/16/09	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/16/09	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-3								
10/02/03	ND<10000		ND<50000	ND<200	ND<200	ND<200	ND<200	ND<200
01/09/04	ND<5000		ND<25000	ND<100	ND<100	ND<100	ND<100	ND<100
04/26/04	ND<250		ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25
07/22/04	ND<250		ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25
10/29/04	ND<50		ND<500	ND<5.0	ND<5.0	ND<10	ND<5.0	ND<5.0
01/12/05	1300		ND<2500	ND<25	ND<25	ND<50	ND<25	ND<25
06/20/05	39		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	0.31J
09/23/05	ND<10		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/13/05	ND<50		ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
03/24/06	ND<100		ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
05/30/06	ND<250		ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12
08/22/06	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/31/06	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/12/07	43		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/04/07	130		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/05/07	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/01/07	ND<20		ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
01/11/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

Page 3 of 5

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7124

Date				Ethylene-				
Sampled		Ethanol	Ethanol	dibromide	1,2-DCA			
	TBA	(8015B)	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME
	$(\mu g/l)$	(mg/l)	$(\mu g/l)$	(µg/l)	$(\mu g/l)$	(µg/l)	(µg/l)	(µg/l)
MW-3 c	ontinued							
04/04/08	ND<20		ND<500	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<1.0
07/02/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/02/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/14/09	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/16/09	ND<50		ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
07/16/09	ND<100		ND<2500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	ND<5.0
MW-4								
04/08/02	ND<5000	ND<25000		ND<100	ND<100	ND<100	ND<100	ND<100
07/28/02	ND<500	ND<2500		ND<10	ND<10	ND<10	ND<10	ND<10
11/03/02	ND<100	ND<500		ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
01/24/03	ND<2000	ND<10000		ND<40	ND<40	ND<40	ND<40	ND<40
04/02/03	ND<20000	ND<100000		ND<400	ND<400	ND<400	ND<400	ND<400
07/01/03	ND<500	ND<2500		ND<10	ND<10	ND<10	ND<10	ND<10
10/02/03	ND<2000		ND<10000	ND<40	ND<40	ND<40	ND<40	ND<40
01/09/04	ND<2000		ND<10000	ND<40	ND<40	ND<40	ND<40	ND<40
04/26/04	430		ND<1000	ND<10	ND<10	ND<20	ND<10	ND<10
07/22/04	ND<100		ND<1000	ND<10	ND<10	ND<20	ND<10	ND<10
10/29/04	63		ND<250	ND<2.5	ND<2.5	ND<5.0	ND<2.5	ND<2.5
01/12/05	1300		ND<250	ND<10	ND<2.5	ND<5.0	ND<2.5	ND<2.5
06/20/05	580		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
09/23/05	92		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
12/13/05	50		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
03/24/06	1900		ND<6200	ND<12	ND<12	ND<12	ND<12	ND<12
05/30/06	ND<50		ND<1200	ND<2.5	ND<2.5	ND<2.5	ND<2.5	ND<2.5
08/22/06	150		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50

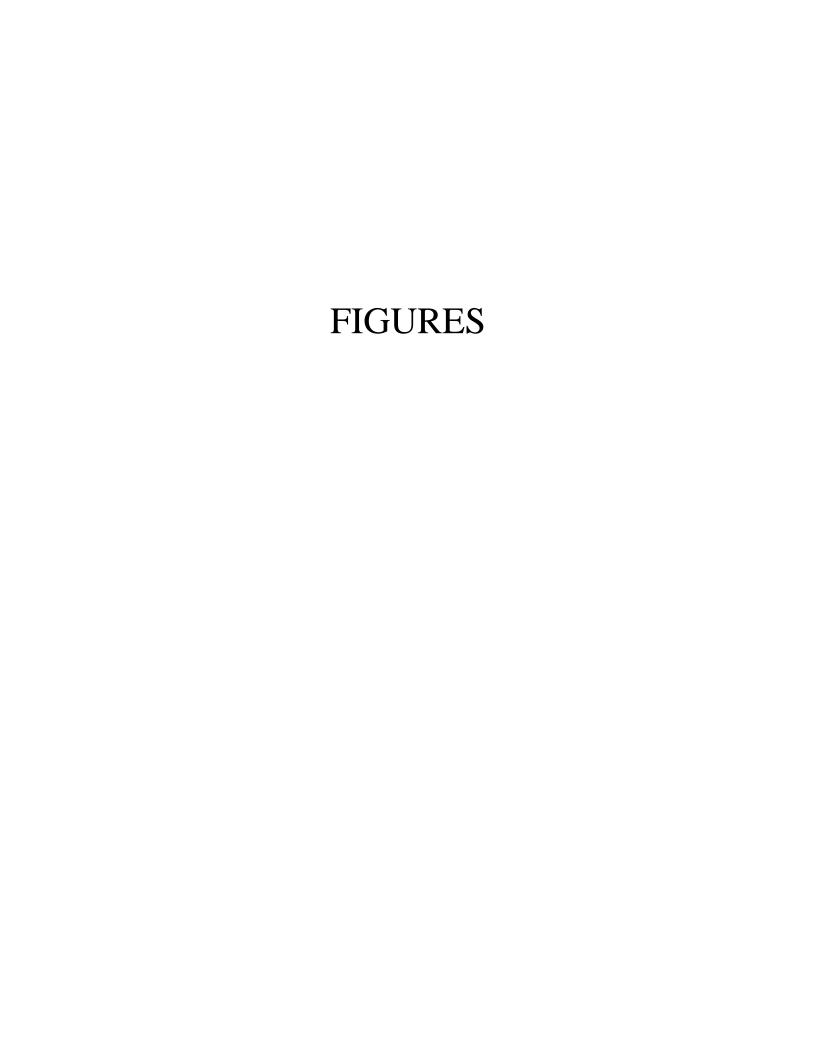
Page 4 of 5

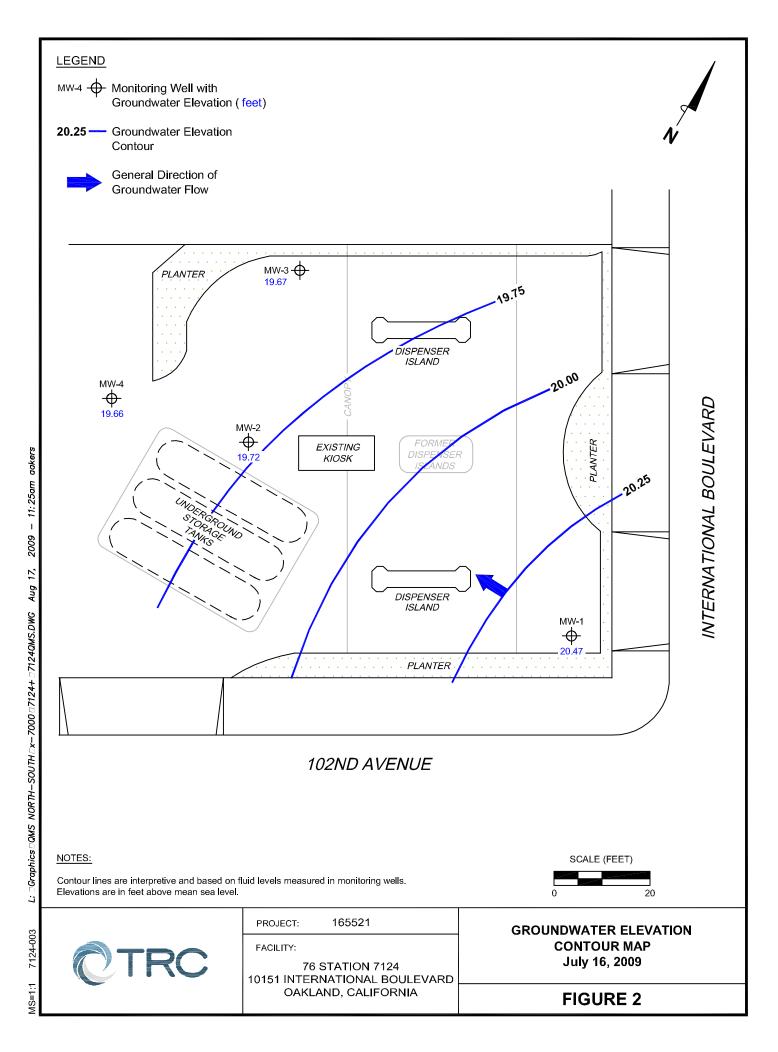
Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
76 Station 7124

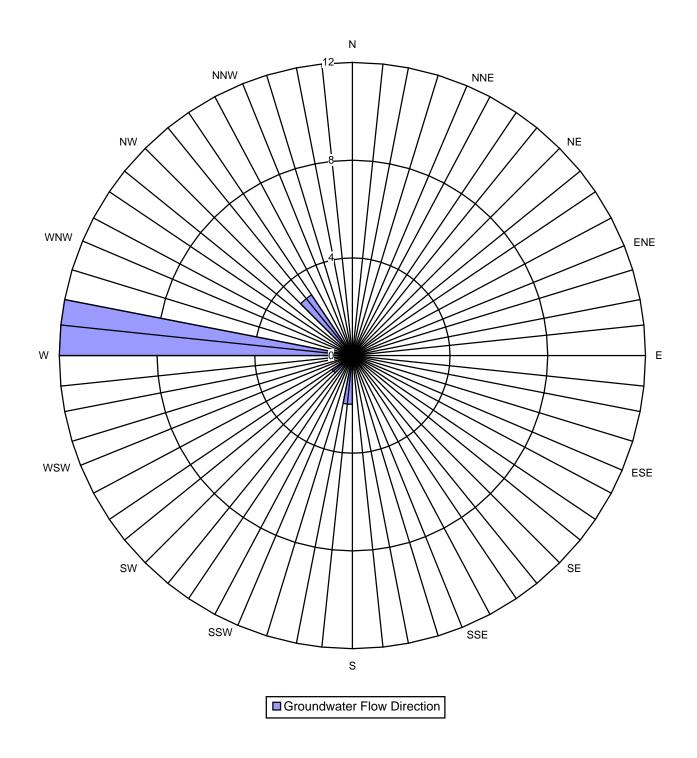
Date				Ethylene-				
Sampled		Ethanol	Ethanol	dibromide	1,2-DCA			
	TBA	(8015B)	(8260B)	(EDB)	(EDC)	DIPE	ETBE	TAME
	(µg/l)	(mg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	$(\mu g/l)$	$(\mu g/l)$
MW-4 co	ntinued							
10/31/06	43		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/12/07	72		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/04/07	260		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/05/07	18		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/01/07	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/11/08	140		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
05/22/08	52		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/02/08	15		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
10/02/08	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
01/14/09	ND<10		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
04/16/09	170		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
07/16/09	20		ND<250	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50



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LEGEND

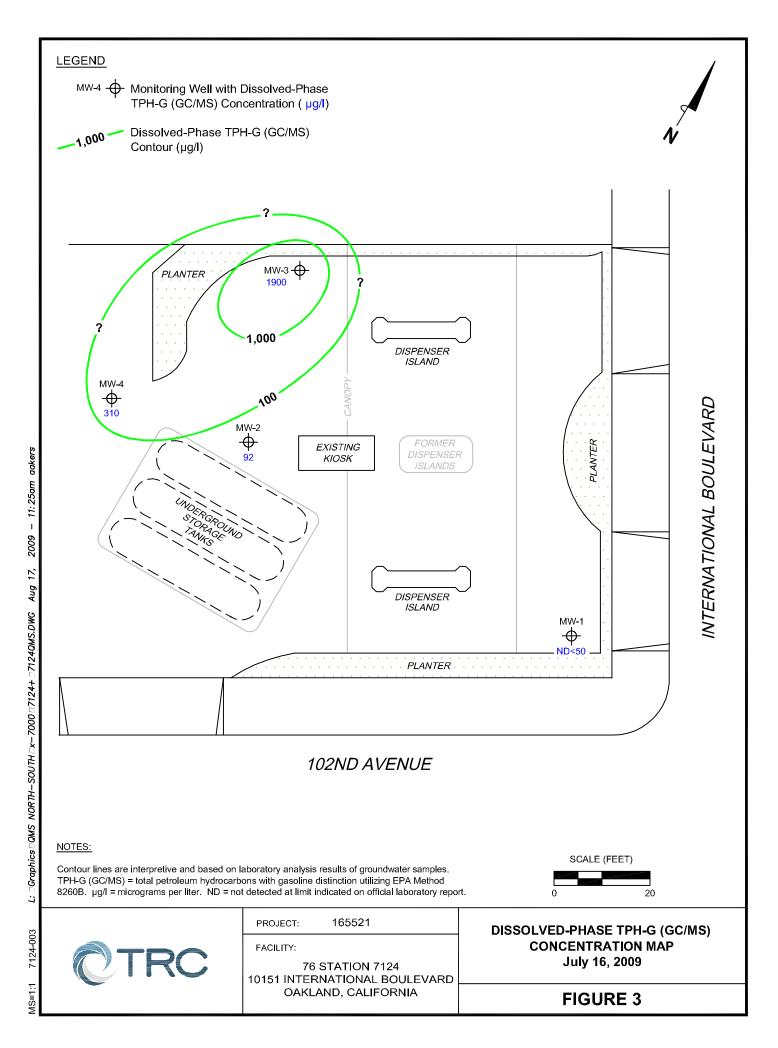
Concentric Circles Represent Quarterly Monitoring Events Conducted Since Fourth Quarter 2003. PROJECT: 165521

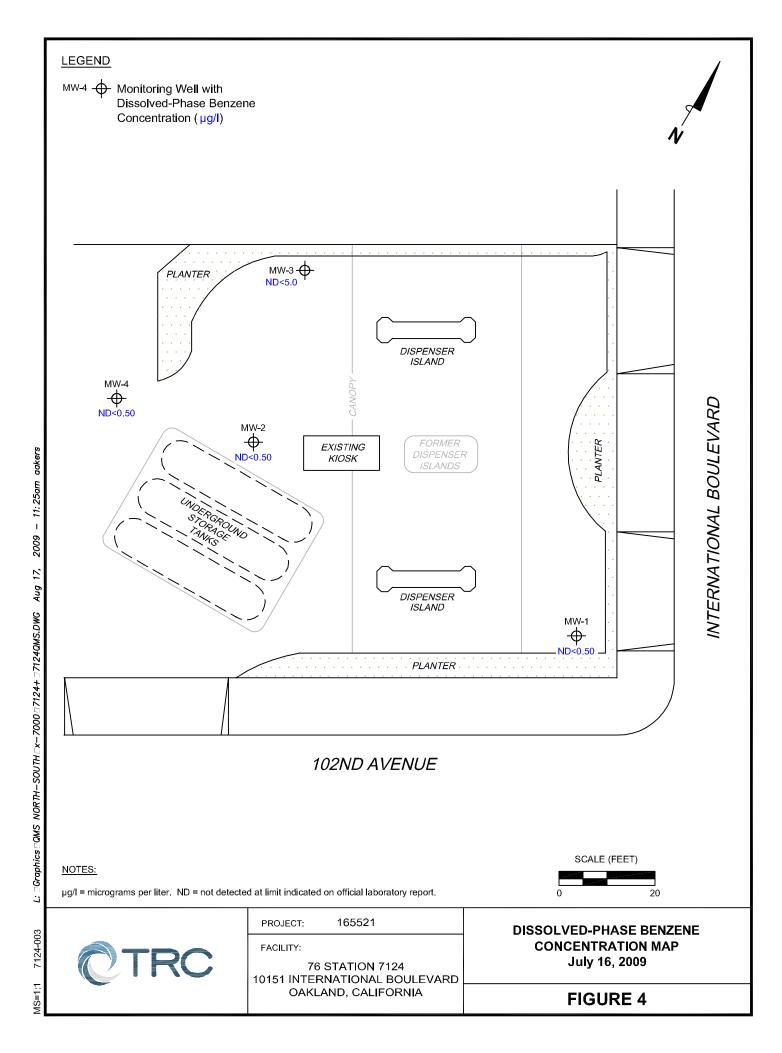
HISTORICAL GROUNDWATER FLOW DIRECTION

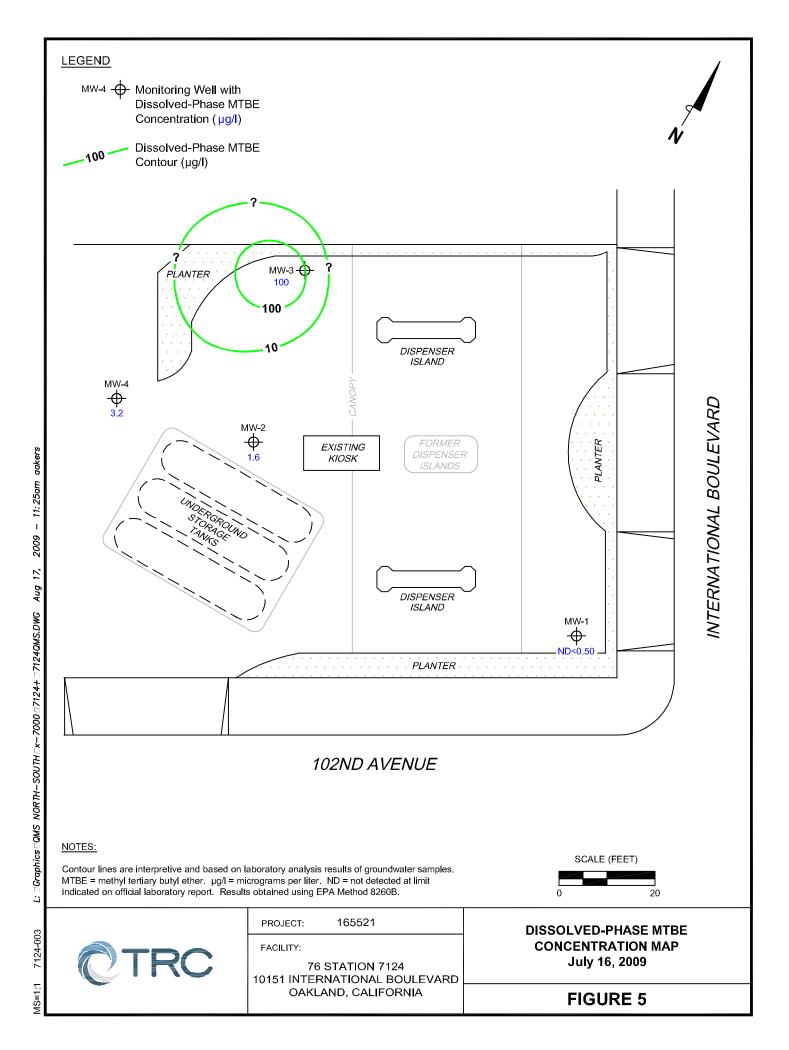


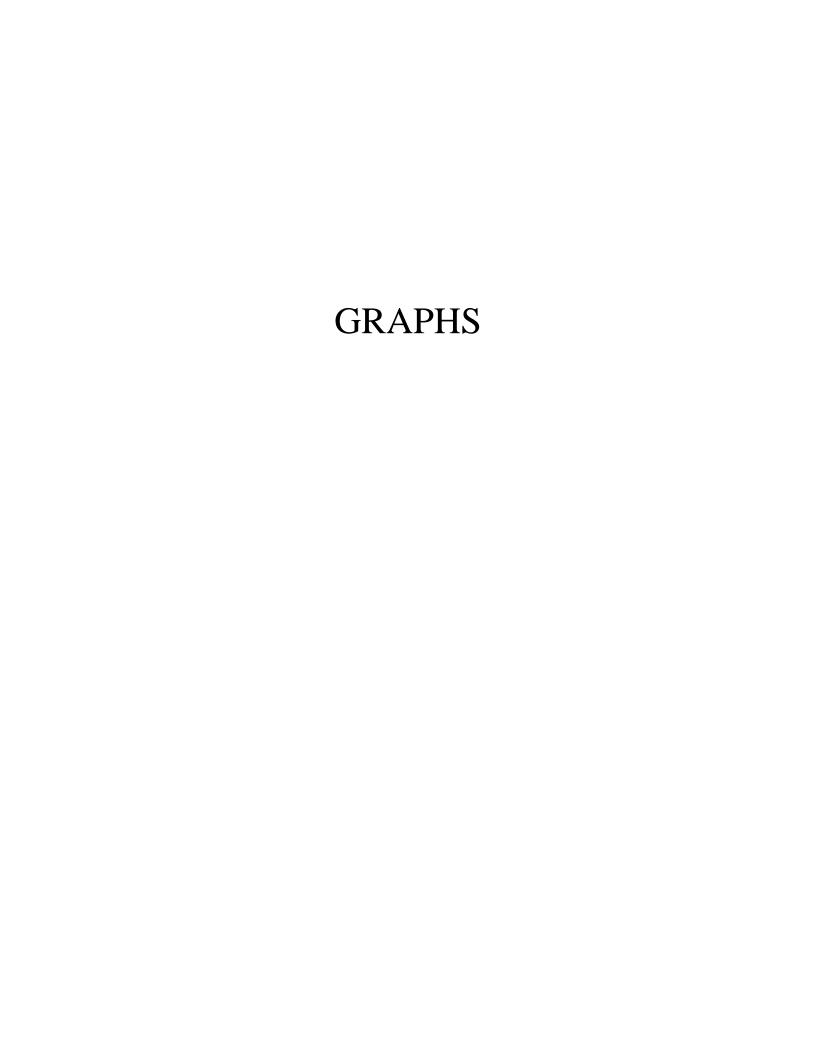
76 STATION 7124 10151 INTERNATIONAL BOULEVARD OAKLAND, CALIFORNIA

FIGURE 2A

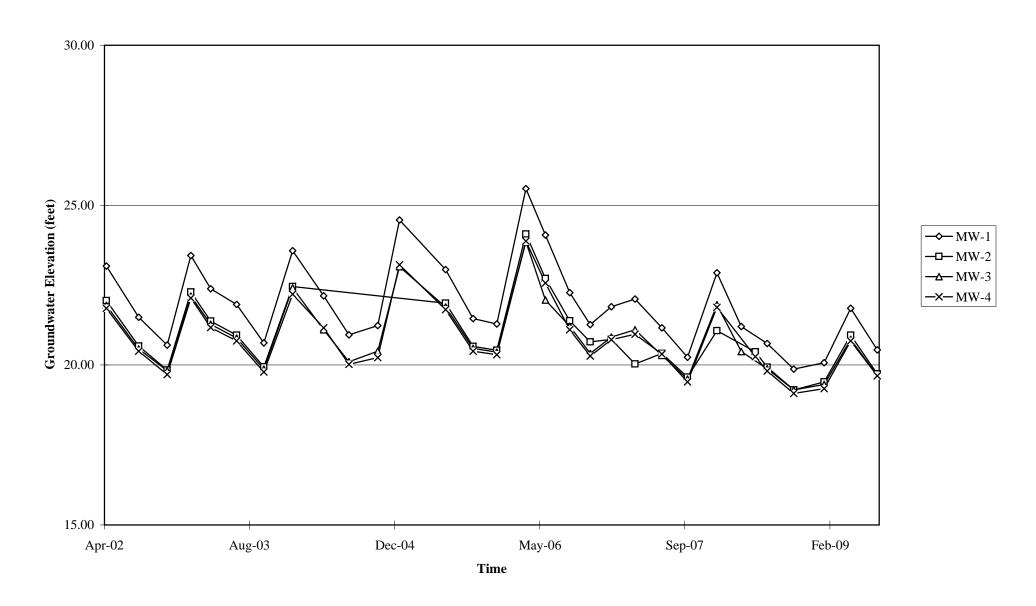






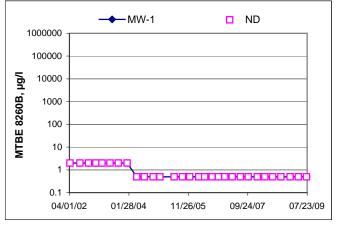


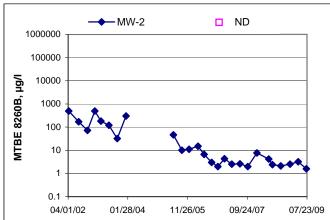
Groundwater Elevations vs. Time 76 Station 7124

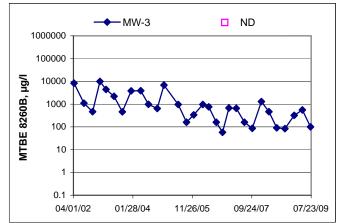


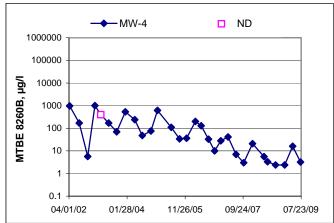
MTBE 8260B Concentrations vs Time

76 Station 7124









GENERAL FIELD PROCEDURES

Groundwater Monitoring and Sampling Assignments

For each site, TRC technicians are provided with a Technical Service Request (TSR) that specifies activities required to complete the groundwater monitoring and sampling assignment for the site. TSRs are based on client directives, instructions from the primary environmental consultant for the site, regulatory requirements, and TRC's previous experience with the site.

Fluid Level Measurements

Initial site activities include determination of well locations based on a site map provided with the TSR. Well boxes are opened and caps are removed. Indications of well or well box damage or of pressure buildup in the well are noted.

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depth to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (surveyors mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

Wells that are found to contain LPH are not purged or sampled. Instead, one casing volume of fluid is bailed from the well and the well is re-sealed. Bailed fluids are placed in a container separate from normal purge water, and properly disposed.

Purging and Groundwater Parameter Measurement

TSR instructions may specify that a well not be purged (no-purge sampling), be purged using low-flow methods, or be purged using conventional pump and/or bail methods. Conventional purging generally consists of pumping or bailing until a minimum of three casing volumes of water have been removed or until the well has been pumped dry. Pumping is generally accomplished using submersible electric or pneumatic diaphragm pumps.

During conventional purging, three groundwater parameters (temperature, pH, and conductivity) are measured after removal of each casing volume. Stabilization of these parameters, to within 10 percent, confirm that sufficient purging has been completed. In some cases, the TSR indicates that other parameters are also to be measured during purging. TRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurements are calibrated daily according to manufacturer's instructions.

Low-flow purging utilizes a bladder or peristaltic pump to remove water from the well at a low rate. Groundwater parameters specified by the TSR are measured continuously until they become stable in general accordance with EPA guidelines.

Purge water is generally collected in labeled drums for disposal. Drums may be left on site for disposal by others, or transported to a collection location for eventual transfer to a licensed treatment or recycling facility. In some cases, purge water may be collected directly from the site by a licensed vacuum truck company, or may be treated on site by an active remediation system, if so directed.

Groundwater Sample Collection

After wells are purged, or not purged, according to TSR instructions, samples are collected for laboratory analysis. For wells that have been purged using conventional pump or bail methods, sampling is conducted after the well has recovered to 80 percent of its original volume or after two hours if the well does not recover to at least 80 percent. If there is insufficient recharge of water in the well after two hours, the well is not sampled.

Samples are collected by lowering a new, disposable, ½-inch to 4-inch polyethylene bottom-fill bailer to just below the water level in the well. The bailer is retrieved and the water sample is carefully transferred to containers specified for the laboratory analytical methods indicated by the TSR. Particular care is given to containers for volatile organic analysis (VOAs) which require filling to zero headspace and fitting with Teflon-sealed caps.

After filling, all containers are labeled with project number (or site number), well designation, sample date, sample time, and the sampler's initials, and placed in an insulated chest with ice. Samples remain chilled prior to and during transport to a state-certified laboratory for analysis. Sample container descriptions and requested analyses are entered onto a chain-of-custody form in order to provide instructions to the laboratory. The chain-of-custody form accompanies the samples during transportation to provide a continuous record of possession from the field to the laboratory. If a freight or overnight carrier transports the samples, the carrier is noted on the form.

For wells that have been purged using low-flow methods, sample containers are filled from the effluent stream of the bladder or peristaltic pump. In some cases, if so specified by the TSR, samples are taken from the sample ports of actively pumping remediation wells.

Sequence of Gauging, Purging and Sampling

The sequence in which monitoring activities are conducted 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:	Bu	asili	် Jot	o #/Task #:	1655	21 8.	A20	Date: 7-16-0 Page of
Site#		124	Projec	t Manager	<u>A.</u>	Colli	ns.	Page of
				Depth	Depth	Product		
Well#	TOC	Time Gauged,	Total Depth	to Water	to Product	Thickness (feet)	Time Sampled	Misc. Well Notes
11W-1	0	1025	2480	1/ 4			1104	4"
11111-2		1029		18.15			1118	411
NW 4			25.20				1139	Y"
1/1W-3		1035	25,18	18.05	-	·	1205	4)11
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FIELD DATA	COMPL	ETE	QA/QC		COC	W	ELL BOX CO	ONDITION SHEETS
AANIIFECT		DOUM IN	n /ENTOD		TDAECIC			
MANIFEST		DRUM IN	IVENTOR'	<u>Y</u>	IRAFFIC	CONTROL		

GROUNDWATER SAMPLING FIELD NOTES

Technician: Haulis Project No.: 165521 Site: 7/24 Date: フー/6 - 09 Well No. 100-1 Purge Method: Depth to Water (feet): 16.90 Depth to Product (feet): Total Depth (feet) LPH & Water Recovered (gallons): Water Column (feet):_ Casing Diameter (Inches): 80% Recharge Depth(feet): 1 Well Volume (gallons): Depth to Volume Time Time Conductivity Temperature DO. Water Purged Hq ORP Turbidity Start Stop (µS/cm) (F, 2) (mg/L) (gallons) (feet) Pre-Purge 1050 21.7 6.72 6-63 21.7 1101 504-1 21-5 6-60 Static at Time Sampled Total Gallons Purged Sample Time 17-20 Comments: 1 11112

Well No. ////	Purge Method:
Depth to Water (feet): 18-15	Depth to Product (feet):
Total Depth (feet) <u>24.90</u>	LPH & Water Recovered (gallons):
Water Column (feet): 6-75	Casing Diameter (Inches):
80% Recharge Depth(feet): <i>J9.</i> _50_	1 Well Volume (gallons):

<u></u>	Stop	Water (feet)	(gallons)	Conductivity (µS/cm)	Temperature (F, C)	рН	DO (mg/L)	ORP	Turbidity
Pre-Pu	rge			111					
1109			5	555.5	22.8	10.74			<u> </u>
			10	558.6	226	6.62			
	1115		_15	361.7	22.6	1,60			
	,								
Static	at Time Sa	ımpled		l al Gallons Pur	ged		Sample	Time	
*****	18.5	7	15				1118		
omments:	7		1-2				7170		



GROUNDWATER SAMPLING FIELD NOTES

		Ted	hnician: _	8	azela	<u>7</u>			
Site: 7/	24	Proj	ect No.:	1655	51		Date:_	7-1	6-09
Well No	MW	-4		Purge Metho	od:	611.			
Depth to W	ater (feet):_	18.7 25.2 6.50	0	Depth to Pro					
Total Depth	ı (feet)	25.2	0		r Recovered (g	allons):	,	hillinger	
Water Colu	mn (feet):	6.50	<u> </u>		eter (Inches):_				
		eet): <u>20.</u>			ne (gallons):				
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F, ⓒ)	pН	D O (mg/L)	ORP	Turbidity
	Purge			1011					
1130			_5	394.5 596.4	22-3 22-2	6.88			
	1136		10	594.2		6.71	_		
	612					W.62			
Otat	in at Time O			0.50					
Stat	ic at Time Sa			al Gallons Pur	ged	17	Sample	Time	
Comments			/				2/		
		3						····	
Well No	Mn	1-3		Purge Metho	d:	Sul	2		
Depth to W	ater (feet):	18.05		Depth to Prod	duct (feet):	-			
Total Depth	(feet)	25.18		LPH & Water	Recovered (ga	allons):			
Water Colu	mn (feet):	7,13			eter (Inches):_	4		•	
80% Recha	rge Depth(fe	eet): 19,45	7		e (gallons):	3		_	
		•							
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (µS/cm)	Temperature (F,C)	рH	D O (mg/L)	ORP	Turbidity
Pre-F	urge								
1145				667.6	21.8	6.72			
· · · · · · · · · · · · · · · · · · ·	1150		/0	1812	21.4	6.36			
	1174		_/>	6113	21.4	6.53			
	·								
Stati	ic at Time Sa	<u> </u>	Tota	al Gallons Pur	ged		Sample	Time	l
Comer	18.6	7)		Ź			1205		
Comments	·•	<u> </u>	<u> </u>			·			





Date of Report: 07/21/2009

Anju Farfan

TRC

21 Technology Drive Irvine, CA 92618

RE: 7124

BC Work Order: 0909325
Invoice ID: B065220

Enclosed are the results of analyses for samples received by the laboratory on 7/16/2009. 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
 Project:
 7124
 Reported:
 07/21/2009
 16:27

 21 Technology Drive
 Project Number:
 4511010886

21 Technology Drive Project Number: 4511010886 Irvine, CA 92618 Project Manager: Anju Farfan

Laboratory / Client Sample Cross Reference

Laboratory	Client Sample Information	on			
0909325-01	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 7124 MW-1 TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	07/16/2009 21:15 07/16/2009 11:04 Water	Delivery Work Order: Global ID: T0600173591 Location ID (FieldPoint): MW-1 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0909325-02	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 7124 MW-2 TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	07/16/2009 21:15 07/16/2009 11:18 Water	Delivery Work Order: Global ID: T0600173591 Location ID (FieldPoint): MW-2 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0909325-03	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 7124 MW-4 TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	07/16/2009 21:15 07/16/2009 11:39 Water	Delivery Work Order: Global ID: T0600173591 Location ID (FieldPoint): MW-4 Matrix: W Sample QC Type (SACode): CS Cooler ID:
0909325-04	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 7124 MW-3 TRCI	Receive Date: Sampling Date: Sample Depth: Sample Matrix:	07/16/2009 21:15 07/16/2009 12:05 Water	Delivery Work Order: Global ID: T0600173591 Location ID (FieldPoint): MW-3 Matrix: W Sample QC Type (SACode): CS Cooler ID:

21 Technology Drive Project Number: 4511010886
Irvine, CA 92618 Project Manager: Anju Farfan

BCL Sample ID:	0909325-01	Client Sample	e Name:	7124, MW-1, 7/	16/2009 11:04:00	MAC							
		•				Prep	Run		Instru-		QC	МВ	Lab
Constituent		Result	Units	PQL MI	DL Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
Ethylbenzene		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
Methyl t-butyl ether		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
Toluene		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
Total Xylenes		ND	ug/L	1.0	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
t-Butyl alcohol		ND	ug/L	10	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
Ethanol		ND	ug/L	250	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
Total Purgeable Petroleur Hydrocarbons	n	ND	ug/L	50	Luft-GC/MS	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983	ND	
1,2-Dichloroethane-d4 (Su	urrogate)	108	%	76 - 114 (LCL - UCI	_) EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983		
Toluene-d8 (Surrogate)		102	%	88 - 110 (LCL - UCI	_) EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983		
4-Bromofluorobenzene (S	urrogate)	95.1	%	86 - 115 (LCL - UCI	_) EPA-8260	07/20/09	07/21/09 03:37	KEA	MS-V12	1	BSG0983		

21 Technology Drive Project Number: 4511010886
Irvine, CA 92618 Project Manager: Anju Farfan

BCL Sample ID:	0909325-02	Client Sample	e Name:	7124, MW-2, 7/	16/2009 11:	18:00AM							
		•				Prep	Run		Instru-		QC	МВ	Lab
Constituent		Result	Units	PQL M	DL Meth	od Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
Ethylbenzene		ND	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
Methyl t-butyl ether		1.6	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
Toluene		ND	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
Total Xylenes		ND	ug/L	1.0	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
t-Butyl alcohol		ND	ug/L	10	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
Diisopropyl ether		ND	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
Ethanol		ND	ug/L	250	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
Total Purgeable Petroleur Hydrocarbons	n	92	ug/L	50	Luft-G	C/MS 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983	ND	
1,2-Dichloroethane-d4 (Su	rrogate)	106	%	76 - 114 (LCL - UC	L) EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983		
Toluene-d8 (Surrogate)		99.9	%	88 - 110 (LCL - UC	CL) EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983		
4-Bromofluorobenzene (Su	ırrogate)	102	%	86 - 115 (LCL - UC	L) EPA-8	260 07/20/09	07/21/09 03:18	KEA	MS-V12	1	BSG0983		

21 Technology Drive Project Number: 4511010886
Irvine, CA 92618 Project Manager: Anju Farfan

BCL Sample ID:	0909325-03	Client Sample	Name:	7124, MW-4, 7/1	6/2009 11:39:00)AM							
		=				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	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
1,2-Dibromoethane		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
1,2-Dichloroethane		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
Ethylbenzene		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
Methyl t-butyl ether		3.2	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
Toluene		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
Total Xylenes		ND	ug/L	1.0	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
t-Butyl alcohol		20	ug/L	10	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
Ethanol		ND	ug/L	250	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
Ethyl t-butyl ether		ND	ug/L	0.50	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
Total Purgeable Petrole Hydrocarbons	um	310	ug/L	50	Luft-GC/MS	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983	ND	
1,2-Dichloroethane-d4 (S	Surrogate)	110	%	76 - 114 (LCL - UCL	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983		
Toluene-d8 (Surrogate)		102	%	88 - 110 (LCL - UCL	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983		
4-Bromofluorobenzene (Surrogate)	114	%	86 - 115 (LCL - UCL	EPA-8260	07/20/09	07/21/09 03:00	KEA	MS-V12	1	BSG0983		

21 Technology Drive Project Number: 4511010886
Irvine, CA 92618 Project Manager: Anju Farfan

BCL Sample ID:	0909325-04	Client Sample	e Name:	7124, MW-3, 7/	/16/2009 12	2:05:00P	PM							
		•					Prep	Run		Instru-		QC	MB	Lab
Constituent		Result	Units	PQL M	IDL Met	hod	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
1,2-Dibromoethane		ND	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
1,2-Dichloroethane		ND	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
Ethylbenzene		ND	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
Methyl t-butyl ether		100	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
Toluene		ND	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
Total Xylenes		ND	ug/L	10	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
t-Amyl Methyl ether		ND	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
t-Butyl alcohol		ND	ug/L	100	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
Diisopropyl ether		ND	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
Ethanol		ND	ug/L	2500	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
Ethyl t-butyl ether		ND	ug/L	5.0	EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
Total Purgeable Petroleu Hydrocarbons	um	1900	ug/L	500	Luft-	GC/MS	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983	ND	A01,Z1
1,2-Dichloroethane-d4 (S	urrogate)	108	%	76 - 114 (LCL - UC	CL) EPA-	8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983		
Toluene-d8 (Surrogate)		100	%	88 - 110 (LCL - UC	CL) EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983		
4-Bromofluorobenzene (S	Surrogate)	99.7	%	86 - 115 (LCL - UC	CL) EPA-	-8260	07/20/09	07/21/09 03:55	KEA	MS-V12	10	BSG0983		

21 Technology Drive Project Number: 4511010886
Irvine, CA 92618 Project Manager: Anju Farfan

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	BSG0983	Matrix Spike	0909238-02	0	23.330	25.000	ug/L		93.3		70 - 130
		Matrix Spike Duplicate	0909238-02	0	23.320	25.000	ug/L	0	93.3	20	70 - 130
Toluene	BSG0983	Matrix Spike	0909238-02	0	23.880	25.000	ug/L		95.5		70 - 130
		Matrix Spike Duplicate	0909238-02	0	23.150	25.000	ug/L	3.1	92.6	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BSG0983	Matrix Spike	0909238-02	ND	10.040	10.000	ug/L		100		76 - 114
		Matrix Spike Duplicate	0909238-02	ND	10.370	10.000	ug/L		104		76 - 114
Toluene-d8 (Surrogate)	BSG0983	Matrix Spike	0909238-02	ND	10.520	10.000	ug/L		105		88 - 110
		Matrix Spike Duplicate	0909238-02	ND	10.190	10.000	ug/L		102		88 - 110
4-Bromofluorobenzene (Surrogate)	BSG0983	Matrix Spike	0909238-02	ND	9.8600	10.000	ug/L		98.6		86 - 115
		Matrix Spike Duplicate	0909238-02	ND	9.9000	10.000	ug/L		99.0		86 - 115

21 Technology Drive Project Number: 4511010886
Irvine, CA 92618 Project Manager: Anju Farfan

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Laboratory Control Sample

									Control Limits			
Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	RPD	Percent Recovery	RPD	Lab Quals
Benzene	BSG0983	BSG0983-BS1	LCS	22.090	25.000	0.50	ug/L	88.4		70 - 130		
Toluene	BSG0983	BSG0983-BS1	LCS	23.030	25.000	0.50	ug/L	92.1		70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BSG0983	BSG0983-BS1	LCS	10.240	10.000		ug/L	102		76 - 114		
Toluene-d8 (Surrogate)	BSG0983	BSG0983-BS1	LCS	10.560	10.000		ug/L	106		88 - 110		
4-Bromofluorobenzene (Surrogate)	BSG0983	BSG0983-BS1	LCS	9.8200	10.000		ug/L	98.2		86 - 115		

21 Technology Drive Project Number: 4511010886 Irvine, CA 92618 Project Manager: Anju Farfan

Volatile Organic Analysis (EPA Method 8260)

Quality Control Report - Method Blank Analysis

Constituent	Batch ID	QC Sample ID	MB Result	Units	PQL MDL	Lab Quals
Benzene	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
1,2-Dibromoethane	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
1,2-Dichloroethane	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
Ethylbenzene	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
Methyl t-butyl ether	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
Toluene	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
Total Xylenes	BSG0983	BSG0983-BLK1	ND	ug/L	1.0	
t-Amyl Methyl ether	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
t-Butyl alcohol	BSG0983	BSG0983-BLK1	ND	ug/L	10	
Diisopropyl ether	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
Ethanol	BSG0983	BSG0983-BLK1	ND	ug/L	250	
Ethyl t-butyl ether	BSG0983	BSG0983-BLK1	ND	ug/L	0.50	
Total Purgeable Petroleum Hydrocarbons	BSG0983	BSG0983-BLK1	ND	ug/L	50	
1,2-Dichloroethane-d4 (Surrogate)	BSG0983	BSG0983-BLK1	104	%	76 - 114 (LCL - UCL)	
Toluene-d8 (Surrogate)	BSG0983	BSG0983-BLK1	102	%	88 - 110 (LCL - UCL)	
4-Bromofluorobenzene (Surrogate)	BSG0983	BSG0983-BLK1	97.2	%	86 - 115 (LCL - UCL)	



21 Technology Drive Project Number: 4511010886 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

A01 PQL's and MDL's are raised due to sample dilution.

Z1 Run at dilution to avoid sample foaming

								Dogo 1	Of I			
BC LABORATORIES INC.		SAMPLE	RECEIPT	I FORM	Rev.	No. 12	06/24/08	Page <u>l</u>	Of <u>I</u>	-		
Submission #: 09-09325												
SHIPPING INFORMATION Federal Express UPS Hand Delivery I Ice Chest None I Box Other (Specify) BC Lab Field Service Other (Specify) SHIPPING CONTAINER None I Box Other (Specify)												
Refrigerant: Ice 🛛 Blue Ice 🗆	None [□ Oth	er 🗆 C	comments	s:							
Custody Seals Ice Chest □	Container		None 🗹	Commer	its:							
All samples received? Yes No Description(s) match COC? Yes No Description(s) match COC? Yes No Description(s)												
5/1/50	nissivity: <u>(</u> mperature:						<u>(63</u>	Date/Time <u>Flivi</u> DA Al27				
2 ANALIS CONTAINED		<u> </u>		. 1	SAMPLE N		-	8	9	10		
SAMPLE CONTAINERS	1	2	3	4	5	6	7	6	3 1	10		
QT GENERAL MINERAL/ GENERAL PHYSICAL										····		
PT PE UNPRESERVED	New York											
OT INORGANIC CHEMICAL METALS		_										
PT INORGANIC CHEMICAL METALS			 _									
PT CYANIDE												
PT NITROGEN FORMS		~ ~				<u> </u>						
PT TOTAL SULFIDE	ESTATE OF THE PARTY OF THE PART	4										
202 NITRATE / NITRITE		<u> </u>	 					 				
PT TOTAL ORGANIC CARBON				<u> </u>								
PT TOX							 					
PT CHEMICAL OXYGEN DEMAND												
PLA PHENOLICS							*					
40ml VOA VIAL TRAVEL BLANK	A 13	A 13	AB	AB		, ,	1 () ((
40mi VOA VIAL	111-			100								
OT EPA 413.1, 413.2, 418.1												
PA DIOLOGICAL												
BACTERIOLOGICAL BACTERIOLOGICAL	7											
40 ml VOA VIAL- 504			İ									
OT EPA 508/608/8080						-						
OT EPA 515.1/8150												
QT EPA 525												
OT EPA 525 TRAVEL BLANK												
100ml EPA 547												
100ml EPA 531.1												
OT EPA 548												
OT EPA 549												
QT EPA 632												
OT AMBED												
OT AMBER	3000											
8 OZ. JAR		1	1									
32 OZ. JAR			1									
SOIL SLEEVE		1	 									
PCB VIAL			+									
PLASTIC BAG	T. Company	 	 	1								
FERROUS IRON												
ENCORE												

Comments:

Sample Numbering Completed By:

A = Actual / C = Corrected

Date/Time: 7/10/09 2333

BC LABORATORIES, INC.

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

CHAIN OF CUSTODY

09-09325							Ar	ıaly	rsis	Re	que	este	ed .			
Bill to: C	Conoco Phillips/ TRC	Cor	Consultant Firm: TRC			ro							NB			
Address: 10151 International BIIII Attn: Anju Farfan			(GW) Ground- water (S) Soil	, Gas by 8015			nates	8260B			by 80/1	2		Requested		
City:	Oakland		igit site#:	(WW) Waste- water	by 8021B,	8015W	8015M by 8015	8260 full list w/ oxygenates	XYS BY	by 8260B	GC/MS) BC			Time Red	
State: C	A Zip:		ject #: 1655	(SL)		ò		Š) ME	ğ		Q,				
Conoco Phillips Mgr: Percy Wayon Sampler Name: BASilis Del Rent				Sludge		GAS	DIESEL		JWL	NO	-G by	B			2	
Lab#	Sample Description	Field	Point Name	Date & Time Sampled		BTEX/MTBE	Ī	Ē	8260	BTEX/MTBE/OXYS	ETHANOL	표	(3)			Tunaround
-1		MW	-/ 7-	16-09 1104	6W					X	X	X	\times			571)
-2		NW	-2	1 1118												
-3		Mu	7-4	/ 1139												
-4		MW-3		1205						19	W	U	\bigvee			d
											V			-		
CH/	a see	art Mari y Addings							,							
A	and the control of the second															
Consultation of the community	SUB-OUT L															
Comments: Relinquished by: (Signature)						Received by:						Datey& Time + 1/6/09 1438				
GLOBAL	ID·		Relinquished by: (Si	t G	Received by:						Date & Time 7-16-00 18(0					
1	00173591	nn-eilleaforn bank birliforn i nit-ulli Weeks birli	Relinquished by: (Si	09 2115		Received by					Date & Time 7/10/09 2115					

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.