## RECEIVED

By dehloptoxic at 1:30 pm, Nov 06, 2006



76 Broadway Sacramento, California 95818

October 26, 2006

Mr. Don Hwang Alameda County Health Agency 1131 Harbor Bay Parkway Alameda, California 94502

Re:

Report Transmittal Quarterly Report Third Quarter – 2006 76 Service Station #0843 1629 Webster Street Alameda, CA

Dear Mr. Hwang:

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

If you have any questions or need additional information, please contact

Shelby S. Lathrop (Contractor) ConocoPhillips Risk Management & Remediation 76 Broadway Sacramento, CA 95818 Phone: 916-558-7609

Fax: 916-558-760

Sincerely,

Thomas Kosel

**Risk Management & Remediation** 

Home H. Koal

Attachment

October 26, 2006

Mr. Donald Hwang Alameda County Health Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502

Re: Quarterly Summary Report - Third Quarter 2006

Delta Project No. C102349041



Dear Mr. Hwang:

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

#### **Service Station**

### **Location**

DANIEL J. DAVIS

No. 6435

76 Service Station No. 0843

1629 Webster Street Alameda, California

Sincerely,

**Delta Consultants** 

Ben Wright Staff Geologist

Forward:

cc:

Daniel J. Davis, R.G. Senior Project Manager

TRC - Quarterly Monitoring Report

Ms. Shelby Lathrop, ConocoPhillips (electronic copy)

a member of:

Inogen\*
Environmental Alliance

# QUARTERLY SUMMARY REPORT Third Quarter 2006 76 Service Station No. 0843 1629 Webster Street Alameda, California

#### **PREVIOUS ASSESSMENT**

June 1998 - Tosco Marketing Company (Tosco, now ConocoPhillips) removed two 10,000-gallon gasoline underground storage tanks (USTs), one 550-gallon used oil UST, product lines, and dispensers. Two holes approximately ¾-inch in diameter were observed in the used oil tank during removal. Approximately 338 tons of hydrocarbon impacted soil and backfill were removed from beneath the former USTs, dispensers, and product lines during the UST removal activities.

<u>March 1999</u> – Four soil borings (B1 through B4) were advanced at the site and converted to monitor wells MW-1 through MW-4. Groundwater was encountered from 8 to 15 feet below ground surface (bgs). Static water was observed between 4 and 6 feet bgs subsequent to well installation.

<u>December 1999</u> – Two offsite soil borings (B5 and B6) were advanced and subsequently converted to monitor wells MW-5 and MW-6. Groundwater was initially present at approximately 10 feet below bgs. Static water was observed at 7 feet bgs subsequent to well installation.

<u>March 2001</u> - An underground utility survey was conducted to identify and locate underground utilities beneath and in the vicinity of the site that could provide potential preferential pathways for groundwater flow.

<u>May 2001</u> - Five direct-push soil borings (GP-1 through GP-5) were installed to evaluate whether underground utilities in the vicinity of the site are providing preferential pathways for groundwater flow and the migration of dissolved hydrocarbons. The results of the investigation indicated insufficient evidence that underground utility lines were providing preferential pathways for the off-site migration of dissolved petroleum hydrocarbons.

<u>December 2001</u> - Twelve direct-push soil borings (GP-6 through GP-17) were completed to further assess the extent of residual hydrocarbons in the vadose zone beneath the site. The results of the investigation indicated that the extent of the residual hydrocarbon impact detected in the previous investigations was limited.

<u>December 2002</u> - One on-site monitoring well (MW-2) was destroyed during remedial excavation of hydrocarbon-impacted soil. This well was completed in the vicinity of the former eastern dispenser island and was replaced with on-site backfill monitoring well MW-2A. Approximately 292 tons of hydrocarbon-impacted soil was removed from beneath the former eastern dispenser island.

<u>September 2003</u> - A *Request and Work Plan for Closure* prepared by ERI was submitted to the Alameda County Health Care Services Agency, dated September 10, 2003. The report summarized why no further action is needed for the site; the report also included

plans to destroy the existing wells upon regulatory acceptance for no further action. Closure was not granted.

June 2004 - A work plan was submitted for two monitor wells down-gradient of MW-5.

May 2005 – A work plan titled *Work Plan Addendum – Site Assessment Activity* dated May 17, 2005 was prepared by ATC Associates Inc. for the installation of two offsite monitor wells.

<u>September 2005</u> – A work plan was prepared by ATC Associates Inc., titled *Work Plan Subsurface Investigation*, for the installation of one onsite monitor well.

<u>September 2005</u> – Site environmental consulting responsibilities were transferred to Delta.

#### **SENSITIVE RECEPTORS**

<u>June/July 2002</u> - A groundwater receptor survey was conducted. Three irrigation wells are located within a one-half mile radius of the site. The wells are located approximately 1,980 feet west and 2,245 feet southwest of the site, cross-gradient and up-gradient of the site.

#### **GROUNDWATER MONITORING AND SAMPLING**

Quarterly groundwater monitoring and sampling was initiated in March 1999. During the most recent groundwater sampling event conducted on August 30, 2006, depth to groundwater ranged from 5.52 feet (MW-3) to 9.51 feet (MW-1) below top of casing (TOC). The groundwater flow direction was north at a gradient of 0.02 foot per foot (ft/ft). Historic groundwater flow directions are shown in Attachment A.

Maximum dissolved groundwater concentrations were present as follows: total petroleum hydrocarbons with gasoline distinction (TPH-G) (930 micrograms per liter ( $\mu$ g/l) in MW-6), and MTBE (820  $\mu$ g/l in MW-6). Benzene was reported below laboratory detection limits for all the samples that were collected during the August groundwater sampling event.

#### **REMEDIATION STATUS**

Approximately 338 tons of hydrocarbon impacted soil and backfill were removed from beneath the former USTs, dispensers, and product lines during UST removal activities. Approximately 292 tons of hydrocarbon-impacted soil was removed from beneath the former eastern island during the December 2002 excavation.

#### **CHARACTERIZATION STATUS**

Based on the most current (August 30, 2006) and historic groundwater analytical data, MTBE is not defined offsite cross-gradient (east-west) of MW-6 and down-gradient (north) of onsite well MW-4. Additional assessment may be required to define the dissolved MTBE offsite and downgradient of the site.

Monitor well MW-1 is sampled annually. The most recent TPH-G concentration in the groundwater sample from MW-1 was 910  $\mu$ g/l. Previously, this well contained <50  $\mu$ g/l. The MTBE concentration in the same sample was 5,100  $\mu$ g/l, whereas previously the well contained 27  $\mu$ g/l.

Groundwater samples from a Shell service station located approximately 75 feet south (up-gradient) of the site show very high concentrations of TPH-G and MTBE and it appears that MW-1 is showing impacts from offsite migration of these constituents onto the site.

Samples from downgradient monitor well MW-5 remain below laboratory detection limits for TPH-G, benzene, and MTBE.

#### RECENT CORRESPONDENCE

No recent correspondence was documented during this reporting period.

#### THIS QUARTER ACTIVITIES (Third Quarter 2006)

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

#### **WASTE DISPOSAL SUMMARY**

No waste was disposed of from the site during this reporting period.

#### **NEXT QUARTER ACTIVITIES (Fourth Quarter 2006)**

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

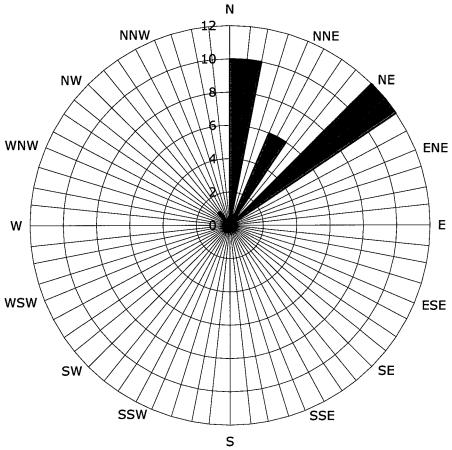
**CONSULTANT:** Delta Consultants

Attachment A – Historic Groundwater Flow Directions

Attachment A
Historic Groundwater Flow Directions

### Historic Groundwater Flow Directions ConocoPhillips Site No. 0843

1629 Webster Street Alameda, California



**■** Groundwater Flow Direction

Legend
Concentric circles represent
quarterly monitoring events
First Quarter 1999 through Third
Quarter 2006
29 data points shown



October 13, 2006

ConocoPhillips Company 76 Broadway Sacramento, CA 95818

ATTN:

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MR. THOMAS H. KOSEL

SITE:

FORMER 76 STATION 0843 1629 WEBSTER STREET

ALAMEDA, CALIFORNIA

RE:

QUARTERLY MONITORING REPORT

**JULY THROUGH SEPTEMBER 2006** 

Dear Mr. Kosel:

Please find enclosed our Quarterly Monitoring Report for Former 76 Station 0843, located at 1629 Webster Street, Alameda, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

**TRC** 

Anju Farfan

QMS Operations Manager

CC: Mr. Daniel Davis, Delta Environmental Consultants, Inc. (3 copies)



## QUARTERLY MONITORING REPORT JULY THROUGH SEPTEMBER 2006

Former 76 Station 0843 1629 Webster Street Alameda, California

Prepared For:

Mr. Thomas H. Kosel ConocoPhillips Company 76 Broadway Sacramento, California 95818

By:

No. EG 1034

Senior Project Geologist, Irvine Operations October 13, 2006

	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
Coordinated Event Data	Shell Service Station Well Concentrations
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPH-G (GC/MS) Concentration Map Figure 4: Dissolved-Phase Benzene Concentration Map Figure 5: Dissolved-Phase MTBE Concentration Map
Graphs	Groundwater Elevations vs. Time Benzene Concentrations vs. Time
Field Activities	General Field Procedures Field Monitoring Data Sheet – 08/30/06 Groundwater Sampling Field Notes – 08/30/06
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

# **Summary of Gauging and Sampling Activities** July 2006 through September 2006 Former 76 Station 0843 1629 Webster Street Alameda, CA

Project Coordinator: Thomas Kosel

Water Sampling Contractor: TRC

Telephone: **916-558-7666** 

Compiled by: Christina Carrillo

Date(s) of Gauging/Sampling Event: 08/30/06

**Sample Points** 

Groundwater wells:

4 onsite,

**2** offsite

Wells gauged: 6

Wells sampled: 5

Purging method: Bailer/diaphragm pump

Purge water disposal: Onyx/Rodeo Unit 100

Other Sample Points: 0

Type: n/a

**Liquid Phase Hydrocarbons (LPH)** 

Wells with LPH: 0

Maximum thickness (feet): n/a

LPH removal frequency: n/a

Method: n/a

Treatment or disposal of water/LPH: n/a

**Hydrogeologic Parameters** 

Depth to groundwater (below TOC):

Minimum: 5.52 feet

Maximum: 9.51 feet

Average groundwater elevation (relative to available local datum): 8.22 feet Average change in groundwater elevation since previous event: -1.30 feet

Interpreted groundwater gradient and flow direction:

Current event: 0.02 ft/ft, north

Previous event: 0.02 ft/ft, northeast (05/30/06)

**Selected Laboratory Results** 

Wells with detected **Benzene**:

0

Wells above MCL (1.0 µg/l): n/a

Maximum reported benzene concentration: n/a

Wells with TPH-G by GC/MS

2

Maximum: 930 μg/l (MW-6)

Wells with MTBE

3

Maximum: **820 μg/l (MW-6)** 

Notes:

MW-1=Sampled Q1 only,

# **TABLES**

#### 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)

#### **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.
- 8. Groundwater vs. Time graphs may be corrected for apparent level changes due to resurvey.

#### REFERENCE

TRC began groundwater monitoring and sampling for Former 76 Station 0843 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

# Contents of Tables Site: Former 76 Station 0843

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

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
August 30, 2006
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation		TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	
MW-1		(Screen I	nterval in fe	eet: 4.5-20.	.5)					· ·				
08/30/0	6 16.18	9.51	0.00	6.67	-3.03									Sampled Q1 only
MW-2A		(Screen I	nterval in fe	eet: 5-11.5)	)									
08/30/06	5 15.56	6.38	0.00	9.18	-0.76	·	77	ND<0.50	0.50	1.0	3.3		2.5	
MW-3		(Screen I	nterval in fe	et: 5.0-20.	.0)									
08/30/06	5 15.11	5.52	0.00	9.59	-0.44		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		0.51	
MW-4		(Screen I	nterval in fe	et: 5.0-20.	.5)									
08/30/06	5 15.17	6.02	0.00	9.15	-0.95		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
MW-5		(Screen I	iterval in fe	et: 5-20)										
08/30/06	13.34	5.65	0.00	7.69	-0.64	<b></b>	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
MW-6		(Screen I	iterval in fe	et: 5-20)										
08/30/06	14.08	7.01	0.00	7.07	-1.97		930	ND<5.0	ND<5.0	ND<5.0	ND<5.0		820	

Table 1 a
ADDITIONAL CURRENT ANALYTICAL RESULTS
Former 76 Station 0843

Date Sampled	TBA	Ethanol (8260B)	DIPE	ETBE	TAME	
	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	
<b>MW-2A</b> 08/30/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	
<b>MW-3</b> 08/30/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	
<b>MW-4</b> 08/30/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	
<b>MW-5</b> 08/30/06	ND<10	ND<250	ND<0.50	ND<0.50	ND<0.50	
<b>MW-6</b> 08/30/06	ND<100	ND<2500	ND<5.0	ND<5.0	ND<5.0	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through August 2006
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	
MW-1	(	Screen Int	erval in fee	t: 4.5-20.5)	)									
03/05/9				<b></b>		86.6		ND	2.04	ND	4.06		23.9	
06/03/9	9 16.18	6.24	0.00	9.94		ND		ND	ND	ND	ND	ND	ND	
09/02/9	9 16.18	7.19	0.00	8.99	-0.95	ND		ND	ND	ND	ND	ND	ND	
12/14/9	9 16.18	8.07	0.00	8.11	-0.88	ND		ND	ND	ND	ND	ND		
03/14/0	0 16.18	5.47	0.00	10.71	2.60	ND		ND	ND	ND	ND	ND		
05/31/0	0 16.18	6.22	0.00	9.96	-0.75	ND		ND	ND	ND	ND	ND		
08/29/0	0 16.18	6.82	0.00	9.36	-0.60	ND		ND	ND	ND	ND	ND		
12/01/0	0 16.18	7.54	0.00	8.64	-0.72	ND		ND	ND	ND	ND	ND		
03/17/0	16.18	5.73	0.00	10.45	1.81	ND		ND	ND	ND	ND	ND		
05/23/0	1 16.18	6.43	0.00	9.75	-0.70	ND		ND	ND	ND	ND	ND		
09/24/0	1 16.18	7.12	0.00	9.06	-0.69	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
12/10/0		6.89	0.00	9.29	0.23	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
03/11/0		5.61	0.00	10.57	1.28	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	·	
06/07/0		5.71	0.00	10.47	-0.10	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5		
09/03/0														Not monitored/sampled
12/12/0		7.80	0.00	8.38										No longer sampled
03/13/0		5.94	0.00	10.24	1.86									
06/12/0		6.10	0.00	10.08	-0.16									
09/12/0		6.65	0.00	9.53	-0.55									
12/31/0		5.74	0.00	10.44	0.91									Monitored Only
02/12/0		6.02	0.00	10.16	-0.28									Monitored Only
06/07/0		6.61	0.00	9.57	-0.59									Monitored Only
09/17/0	4 16.18	7.58	0.00	8.60	-0.97									Sampled Annually

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through August 2006
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	
MW-1	continued									······································			,	
12/11/0	16.18	6.49	0.00	9.69	1.09									Sampled Annually
03/15/0	5 16.18	5.28	0.00	10.90	1.21		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		27	-
05/17/0		5.83	0.00	10.35	-0.55									Sampled annually
07/27/0		6.52	0.00	9.66	-0.69									Sampled Annually
11/23/0		7.28	0.00	8.90	-0.76									Sampled annually
02/24/0		6.60	0.00	9.58	0.68		910	ND<0.50	ND<0.50	ND<0.50	ND<1.0		5100	
05/30/0		6.48	0.00	9.70	0.12									Sampled Q1 only
08/30/0	6 16.18	9.51	0.00	6.67	-3.03									Sampled Q1 only
MW-2		Screen Inte	erval in feet	: 4.5-20.5)										
03/05/9			0.00			34400		2070	7710	2340	8240		8460	
06/03/9		5.96	0.00	9.61		51200		1820	7570	2510	7320	6460	8800	
09/02/99		6.85	0.00	8.72	-0.89	17000		1000	3100	1400	3700	4000	3720	
12/14/9		7.65	0.00	7.92	-0.80	83000		3000	22000	4500	17000	9100	11000	
03/14/0		5.26	0.00	10.31	2.39	31000		1600	4600	2300	7300	5700	8700	
05/31/00		5.60	0.00	9.97	-0.34	9970		598	1030	487	2060	2500	1670	
08/29/00		6.35	0.00	9.22	-0.75	7900		390	1500	280	1900	1800	1300	
12/01/00		7.06	0.00	8.51	-0.71	87500		1860	17400	5590	19400	6220	3790	
03/17/03		5.98	0.00	9.59	1.08	4310		371	59.0	280	682	321	433	
05/23/0		6.97	0.00	8.60	-0.99	45400		374	4490	2790	10900	ND	406	
09/24/01		7.56	0.00	8.01	-0.59	76000		430	13000	4700	18000	ND<2000	480	
12/10/0		6.52	0.00	9.05	1.04	82000		320	9100	4400	16000	ND<2500	270	
03/11/02		5.51	0.00	10.06	1.01	14000		75	1400	1100	3600	ND<250	150	
06/07/02		5.73	0.00	9.84	-0.22	14000		120	1200	1400	4700	540	200	
09/03/02	2 15.57	6.81	0.00	8.76	-1.08	10000		150	1200	610	2800	510	460	
0843								Page 2	of 8					

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through August 2006
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(μg/l)	
	continued						-						-	
12/12/0	02 15.57													Destroyed, replaced with MW-2A
MW-2a			erval in fee											
12/12/0		7.45	0.00	8.11		3400		80	260	210	1000	380	400	
03/13/0		5.85	0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	1.8	2.4	2.4	
06/12/0		6.08	0.00			ND<50		0.59	0.69	ND<0.50	1.2	6.0	4.7	
09/12/0		6.54	0.00	9.02	`		120	1.8	4.2	6.1	20		6.6	
12/31/0	3 15.56	5.63	0.00	9.93	0.91	88		0.79	1.8	3.6	14	ND<5.0	2.9	
02/12/0	)4 15.56	5.68	0.00	9.88	-0.05	160		2.6	4.8	13	48	7.2	7.9	
06/07/0	15.56	6.21	0.00	9.35	-0.53	94		0.80	1.2	2.1	9.1	4.5	3.7	
09/17/0	15.56	7.16	0.00	8.40	-0.95		230	3.5	6.1	13	41		83	
12/11/0	15.56	5.84	0.00	9.72	1.32		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1.2	
03/15/0	)5 15.56	5.52	0.00	10.04	0.32		92	0.84	1.7	2.4	9.8		ND<10	
05/17/0	5 15.56	5.55	0.00	10.01	-0.03		54	2.1	1.7	1.9	7.0		2.9	
07/27/0	15.56	6.16	0.00	9.40	-0.61		ND<50	0.66	1.1	1.3	4.2		3.7	
11/23/0	15.56	6.88	0.00	8.68	-0.72		120	1.3	2.8	7.8	30		10	
02/24/0	6 15.56	5.79	0.00	9.77	1.09		84	0.51	1.2	4.2	16		7.2	
05/30/0	6 15.56	5.62	0.00	9.94	0.17		69	0.90	2.2	3.7	14		4.1	
08/30/0	6 15.56	6.38	0.00	9.18	-0.76		77	ND<0.50	0.50	1.0	3.3		2.5	
MW-3	(5	Screen Int	erval in feet	:: 5.0-20.0)										
03/05/9	9 15.11		0.00			135		ND	ND	ND	4.84		2.46	
06/03/9		5.57	0.00	9.54		ND		ND	ND	ND	ND	5.23	12.7	
09/02/9		6.50	0.00	8.61	-0.93	ND		ND	ND	ND	ND	13	11	
12/14/9	9 15.11	7.28	0.00	7.83	-0.78	ND		ND	ND	ND	ND	ND	~=	
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# Table 2 HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS March 1999 Through August 2006 Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	$(\mu g/l)$	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	
MW-3	continued	l			-								•	
03/14/0	00 15.11	4.87	0.00	10.24	2.41	ND		ND	ND	ND	ND	7.2	6,3	
05/31/0	00 15.11	5.58	0.00	9.53	-0.71	ND		ND	ND	ND	ND	ND		
08/29/0	00 15.11	6.06	0.00	9.05	-0.48	ND		ND	ND	ND	ND	ND	ND	
12/01/0	00 15.11	6.76	0.00	8.35	-0.70	ND		ND	ND	ND	ND	ND		
03/17/0	15.11	5.09	0.00	10.02	1.67	ND		ND	ND.	ND	ND	ND		
05/23/0	15.11	5.72	0.00	9.39	-0.63	ND		ND	ND	ND	ND	ND		
09/24/0	15.11	6.34	0.00	8.77	-0.62	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
12/10/0	15.11	6.31	0.00	8.80	0.03	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
03/11/0	15.11	5.15	0.00	9.96	1.16	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
06/07/0	2 15.11	5.45	0.00	9.66	-0.30	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5		
12/12/0	15.11	7.15	0.00	7.96	-1.70									No longer sampled
03/13/0	3 15.11	5.37	0.00	9.74	1.78									
06/12/0	15.11	5.51	0.00	9.60	-0.14									
09/12/0	3 15.11	6.03	0.00	9.08	-0.52									
12/31/0	15.11	5.62	0.00	9.49	0.41									Monitored Only
02/12/0	15.11	5.51	0.00	9.60	0.11									Monitored Only
06/07/0	15.11	5.92	0.00	9.19	-0.41									Monitored Only
09/17/0	15.11													Unable to locate
12/11/0	15.11	5.94	0.00	9.17										Sampled Annually
03/11/0	5 15.11	4.76	0.00	10.35	1.18	·	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	•
05/17/0	5 15.11	5.23	0.00	9.88	-0.47		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
07/27/0	5 15.11	5.81	0.00	9.30	-0.58		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
11/23/0	5 15.11	6.60	0.00	8.51	-0.79		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
02/24/0	6 15.11	5.37	0.00	9.74	1.23		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2.2	
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through August 2006
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
· · · · · · · · · · · · · · · · · · ·	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	
MW-3	continued											,,,,		
05/30/0	6 15.11	5.08	0.00	10.03	0.29		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		0.92	
08/30/0	6 15.11	5.52	0.00	9.59	-0.44		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		0.51	
MW-4	(5	Screen Inte	erval in feet	:: 5.0-20.5)										
03/05/9	9 15.17		0.00			ND		ND	ND	ND	2.44		25.2	
06/03/9		5.45	0.00	9.72	· <u></u>	ND		ND	ND	ND	ND	ND	3.96	
09/02/9	9 15.17	6.48	0.00	8.69	-1.03	ND <sub>.</sub>		ND	ND	ND	ND	23	27	
12/14/9	9 15.17	7.27	0.00	7.90	-0.79	ND		ND	ND	ND	ND	200	270	
03/14/0		4.67	0.00	10.50	2.60	ND		ND	ND	ND	ND	46	49	
05/31/0		5.48	0.00	9.69	-0.81	ND		ND	ND	ND	ND	ND		
08/29/0	0 15.17	6.10	0.00	9.07	-0.62	ND		ND	ND	ND	ND	6.1	3.2	
12/01/0	0 15.17	6.79	0.00	8.38	-0.69	ND	<del></del> ,	ND	ND	ND	ND	152	101	
03/17/0	1 15.17	5.01	0.00	10.16	1.78	ND		ND	ND	ND	ND	ND		
05/23/0		5.78	0.00	9.39	-0.77	ND		ND	ND	ND	ND	ND		
09/24/0		6.42	0.00	8.75	-0.64	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
12/10/0		6.41	0.00	8.76	0.01	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	1700	1300	
03/11/02		5.05	0.00	10.12	1.36	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
06/07/02		5.42	0.00	9.75	-0.37	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5		
09/03/02		6.50	0.00	8.67	-1.08	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5		
12/12/02		7.18	0.00	7.99	-0.68	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	2.9	3.3	
03/13/03		5.42	0.00	9.75	1.76	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0		
06/12/03		5.60	0.00	9.57	-0.18	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0		
09/12/03		6.07	0.00	9.10	-0.47		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
12/31/03		5.63	0.00	9.54	0.44	750		ND<5.0	ND<5.0	ND<5.0	ND<5.0	790		
02/12/04	4 15.17	5.26	0.00	9.91	0.37	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through August 2006
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	
MW-4	continued			.,										
06/07/0	15.17	5.82	0.00	9.35	-0.56	ND<50		ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<1		
09/17/0	4 15.17	6.86	0.00	8.31	-1.04		56	ND<0.50	ND<0.50	ND<0.50	ND<1.0		10	
12/11/0	4 15.17	6.01	0.00	9.16	0.85		350	ND<2.5	ND<2.5	ND<2.5	ND<5.0		380	
03/11/0	5 15.17	4.61	0.00	10.56	1.40		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
05/17/0	5 15.17	4.93	0.00	10.24	-0.32		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
07/27/0		5.74	0.00	9.43	-0.81		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
11/23/0		6.59	0.00	8.58	-0.85		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		23	
02/24/0		5.19	0.00	9.98	1.40		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		4.7	
05/30/0		5.07	0.00	10.10	0.12		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
08/30/0	6 15.17	6.02	0.00	9.15	-0.95		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
MW-5	(8	creen Inte	erval in feet	: 5-20)										
12/14/9		6.45	0.00	6.89		ND		ND	ND	ND	ND	3.5	3.8	
03/14/0		4.46	0.00	8.88	1.99	ND		ND	ND	ND	ND	ND		
05/31/0		5.18	0.00	8.16	-0.72	ND		ND	ND	ND	ND	ND		
08/29/0		5.46	0.00	7.88	-0.28	ND		ND	ND	ND	ND	ND		
12/01/0		5.95	0.00	7.39	-0.49	ND		ND	ND	ND	ND	ND		
03/17/0		5.36	0.00	7.98	0.59	ND		ND	ND	ND	ND	ND		
05/23/0		5.09	0.00	8.25	0.27	ND		ND	ND	ND	ND	ND		
09/24/0		5.58	0.00	7.76	-0.49	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
12/10/0		5.51	0.00	7.83	0.07	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
03/11/02		4.70	0.00	8.64	0.81	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
06/07/02										'				Inaccessible - paved over
09/03/02														Inaccessible - paved over
12/12/02	2 13.34	6.42	0.00	6.92		ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0		
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Table 2 HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS March 1999 Through August 2006 Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	(μg/l)	
MW-5														
03/13/0		5.12	0.00	8.22	1.30	ND<50	·	ND<0.50	0.54	ND<0.50	ND<0.50	ND<2.0		
06/12/0		5.24	0.00	8.10	-0.12	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0		
09/12/0		5.53	0.00	7.81	-0.29		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<2.0	
12/31/0		5.11	0.00	8.23	0.42	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
02/12/0		5.02	0.00	8.32	0.09	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
06/07/0		5.35	0.00	7.99	-0.33	ND<50		ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<1		
09/17/0		6.10	0.00	7.24	-0.75									Sampled Annually
12/11/0		5.53	0.00	7.81	0.57									Sampled Annually
03/11/0	5 13.34	4.96	0.00	8.38	0.57		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
05/17/0:		5.04	0.00	8.30	-0.08		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
07/27/0		5.31	0.00	8.03	-0.27		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
11/23/0		5.86	0.00	7.48	-0.55		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
02/24/0		5.08	0.00	8.26	0.78		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
05/30/06		5.01	0.00	8.33	0.07		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
08/30/06	5 13.34	5.65	0.00	7.69	-0.64		ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50		ND<0.50	
MW-6	(S	creen Inte	rval in feet:	5-20)										
12/14/99	9 14.08	6.64	0.00	7.44		ND		ND	ND	ND	ND	11000	18000	
03/14/00	14.08	4.72	0.00	9.36	1.92	ND		ND	ND	ND	ND	19000	21000	
05/31/00	14.08	5.28	0.00	8.80	-0.56	ND		ND	ND	ND	ND	13200		
08/29/00	14.08	5.39	0.00	8.69	-0.11	ND		ND	ND	ND	ND	270	400	
12/01/00		6.11	0.00	7.97	-0.72	ND		ND	ND	ND	ND	6330	3640	
03/17/01		6.02	0.00	8.06	0.09	18700		2950	989	1040	3000	10200	11500	
05/23/01	14.08	5.82	0.00	8.26	0.20	ND		ND	ND	ND	ND	4660		
09/24/01	14.08	6.59	0.00	7.49	-0.77	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	160	190	
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Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through August 2006
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G (8015M)	TPH-G (GC/MS)	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE (8021B)	MTBE (8260B)	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	$(\mu g/l)$	$(\mu g/l)$	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	
MW-6	continued													
12/10/0	14.08	6.50	0.00	7.58	0.09	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	3200	2400	
03/11/0		4.81	0.00	9.27	1.69	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	92	120	
06/07/0	2 14.08													Inaccessible - paved over
09/03/0	2 14.08													Inaccessible - paved over
12/12/0	2 14.08	6.51	0.00	7.57		590		ND<0.50	ND<0.50	ND<0.50	ND<0.50	1500	6200	
03/13/0	3 14.08	5.20	0.00	8.88	1.31	1600		ND<5.0	ND<5.0	ND<5.0	ND<5.0	4900	4100	
D 03/13/0	3 14.08	5.20	0.00	8.88	1.31					·			5100	
06/12/0	3 14.08	5.38	0.00	8.70	-0.18	1600		ND<10	ND<10	ND<10	ND<10	5200	3700	
09/12/0	3 14.08	6.29	0.00	7.79	-0.91		ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0		310	
12/31/0	3 14.08	5.38	0.00	8.70	0.91	3300		ND<25	ND<25	ND<25	ND<25	3800		
02/12/0	4 14.08	5.06	0.00	9.02	0.32	1100		ND<10	ND<10	ND<10	ND<10	1900	2800	
06/07/0	4 14.08	5.45	0.00	8.63	-0.39	2500		ND<3	ND<3	ND<3	ND<6	3200	2900	
09/17/0	4 14.08	6.20	0.00	7.88	-0.75		1300	ND<10	ND<10	ND<10	ND<20		2000	
12/11/0	4 14.08	5.60	0.00	8.48	0.60		1800	ND<10	ND<10	ND<10	ND<20		2700	
03/11/0	5 14.08	4.71	0.00	9.37	0.89		ND<1000	ND<10	ND<10	ND<10	ND<20		2500	
05/17/0	5 14.08	4.98	0.00	9.10	-0.27		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0		2200	
07/27/0	5 14.08	5.48	0.00	8.60	-0.50		ND<1000	ND<0.50	ND<0.50	ND<0.50	ND<1.0		1100	
11/23/0	5 14.08	6.01	0.00	8.07	-0.53		590	ND<0.50	ND<0.50	ND<0.50	ND<1.0	, <del></del>	1700	
02/24/0		5.12	0.00	8.96	0.89		400	ND<0.50	ND<0.50	ND<0.50	ND<1.0		990	
05/30/0		5.04	0.00	9.04	0.08		ND<1200	ND<12	ND<12	ND<12	ND<25		560	
08/30/0	6 14.08	7.01	0.00	7.07	-1.97		930	ND<5.0	ND<5.0	ND<5.0	ND<5.0		820	

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
Former 76 Station 0843

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME		
	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)		
MW-1 .									
09/02/99	ND	ND			ND	ND	ND		
03/15/05	ND<5.0	ND<50			ND<0.50	ND<0.50	ND<0.50	•	
02/24/06	62	ND<250			ND<0.50	ND<0.50	5.5		
MW-2									
09/02/99	ND	ND			ND	ND	ND		
12/14/99	ND	ND	ND	ND	ND	ND	ND		
03/14/00	1300	ND	ND	ND	ND	ND	ND		
05/31/00	ND	ND	ND	ND	ND	ND	ND		
08/29/00	250	ND	ND	ND	ND	ND	ND		
12/01/00	ND	ND	ND	ND	ND	ND	ND		
03/17/01	ND	ND	ND	ND	14.8	ND	ND		
05/23/01	ND	ND	ND	ND	ND	ND	ND		
09/24/01	ND<5000	ND<50000000	ND<100	ND<100	ND<100	ND<100	ND<100		
12/10/01	ND<500	ND<12000000	ND<25	ND<25	ND<25	ND<25	ND<25		
03/11/02	ND<1000	ND<5000000	ND<20	ND<20	ND<20	ND<20	ND<20		
06/07/02	ND<1000	ND<2000000	ND<25	ND<25	ND<25	ND<25	ND<25		
09/03/02	ND<1000	ND<5000000	ND<20	ND<20	ND<20	ND<20	ND<20		
MW-2a									
12/12/02	ND<100	ND<500000	ND<2.0	2.3	ND<2.0	ND<2.0	ND<2.0		
03/13/03	ND<100	ND<500000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0		
06/12/03	ND<100	ND<500000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0		
09/12/03	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0		
12/31/03	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0		
02/12/04	ND<100	ND<500	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0		
06/07/04	ND<12	ND<800	ND<0.5	ND<0.5	ND<1	ND<1	ND<1		

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
Former 76 Station 0843

Date Sampled	ТВА	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME
	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)
MW-2A	continued						
09/17/04	6.7	ND<50			ND<1.0	ND<0.50	ND<0.50
12/11/04		ND<50			ND<1.0	ND<0.50	ND<0.50
03/15/05		ND<50			ND<0.50	ND<0.50	ND<0.50
05/17/05		ND<50			ND<0.50	ND<0.50	ND<0.50
07/27/05	ND<5.0	ND<50			ND<0.50	ND<0.50	ND<0.50
11/23/05	ND<10	ND<250			ND<0.50	ND<0.50	ND<0.50
02/24/06	ND<10	ND<250			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
08/30/06	ND<10	ND<250			ND<0.50	ND<0.50	ND<0.50
MW-3							
09/02/99	ND	ND			ND	ND	ND
03/11/05	ND<5.0	ND<50			ND<0.50	ND<0.50	ND<0.50
05/17/05	ND<5.0	ND<50			ND<0.50	ND<0.50	ND<0.50
07/27/05	ND<5.0	ND<50			ND<0.50	ND<0.50	ND<0.50
11/23/05	ND<10	ND<250			ND<0.50	ND<0.50	ND<0.50
02/24/06	ND<10	ND<250		· 	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
08/30/06	ND<10	ND<250			ND<0.50	ND<0.50	ND<0.50
MXX A							
<b>MW-4</b> 09/02/99	ND	ND			ND	ND	ND
		ND<7100000		ND<14	ND<14	ND<14	ND<14
		ND<500000		ND<2.0	ND<14 ND<2.0	ND<14 ND<2.0	ND<14 ND<2.0
09/12/03		ND<500			TVD \2.0		
09/17/04		ND<50			ND<1.0	ND<0.50	 ND<0.50
12/11/04	ND<25	ND<250			ND<1.0 ND<5.0	ND<2.5	
03/11/05		ND<50			ND<0.50	ND<0.50	ND<2.5 ND<0.50
03/11/03	.10 0.0	110 700		- <b>-</b>	X110 -0.50	7477~0.70	14D~0.50

0843

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
Former 76 Station 0843

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)		DIPE	ETBE	TAME	
	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(µg/l)	
MW-4								
05/17/05		ND<50			ND<0.50	ND<0.50	ND<0.50	
07/27/05		ND<50			ND<0.50	ND<0.50	ND<0.50	
11/23/05	ND<10	ND<250			ND<0.50	ND<0.50	ND<0.50	
02/24/06	ND<10	ND<250			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	
08/30/06	ND<10	ND<250			ND<0.50	ND<0.50	ND<0.50	
MW-5					•			
09/12/03		ND<500						
03/11/05	ND<5.0	ND<50			ND<0.50	ND<0.50	ND<0.50	
05/17/05	ND<5.0	ND<50			ND<0.50	ND<0.50	ND<0.50	
07/27/05	ND<5.0	ND<50			ND<0.50	ND<0.50	ND<0.50	
11/23/05	ND<10	ND<250			ND<0.50	ND<0.50	ND<0.50	
02/24/06	59	ND<250			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	
08/30/06	ND<10	ND<250			ND<0.50	ND<0.50	ND<0.50	
MW-6								
03/17/01	ND	ND	ND	219	ND	ND	ND	
09/24/01	ND<100	ND<1000000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	
12/10/01	ND<500	ND<12000000	ND<25	ND<25	ND<25	ND<25	ND<25	
03/11/02	ND<100	ND<500000	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	
12/12/02	ND<10000	ND<50000000	ND<200	ND<200	ND<200	ND<200	ND<200	
03/13/03	ND<5000	ND<25000000	ND<100	ND<100	ND<100	ND<100	ND<100	
06/12/03	ND<2000	ND<10000000	ND<40	ND<40	ND<40	ND<40	ND<40	
09/12/03		ND<2500			. <b></b>			
02/12/04	ND<2000	ND<10000	ND<40	ND<40	ND<40	ND<40	ND<40	
06/07/04	ND<200	ND<8000	ND<5	ND<5	ND<10	ND<10	ND<10	
0843							Page 3	of 4

Table 2 a
ADDITIONAL HISTORIC ANALYTICAL RESULTS
Former 76 Station 0843

Date Sampled	TBA	Ethanol (8260B)	Ethylene- dibromide (EDB)	1,2-DCA (EDC)	DIPE	ETBE	TAME				
	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)				
MW-6	continued									 	
09/17/04	ND<100	ND<1000			ND<20	ND<10	ND<10				
12/11/04	ND<100	ND<1000			ND<20	ND<10	ND<10				
03/11/05	ND<100	ND<1000			ND<10	ND<10	ND<10				
05/17/05	ND<100	ND<1000			ND<10	ND<10	ND<10				
07/27/05	ND<100	ND<1000			ND<10	ND<10	ND<10				
11/23/05	ND<10	ND<250			ND<0.50	ND<0.50	1.0	ž.			
02/24/06	ND<10	ND<250			ND<0.50	ND<0.50	0.68				
05/30/06	ND<250	ND<6200			ND<12	ND<12	ND<12				
08/30/06	ND<100	ND<2500			ND<5.0	ND<5.0	ND<5.0				

# COORDINATED EVENT DATA

# WELL CONCENTRATIONS Shell Service Station

## 1601 Webster Street Alameda, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
											<u> </u>	<u> </u>	<u> </u>		(	()	(11102)
S-2	11/14/2005	NA	NA	NA	NA	NA .	NA	NA	NA	NA	NA	NA	NA	NA	19.73	7.60	12.13
S-2	11/22/2005	996	0.630	0.500	0.500	3.10	406	<0.500	<0.500	0.570	18.0	NA	NA	NA	19.73	7.70	12.03
S-2	02/24/2006	<50 b	<0.50	<0.50	<0.50	<0.50	2.0	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	19.73	6.29	13.44
S-2	05/30/2006	<50.0	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<0.500	<10.0	NA	NA	NA	19.73	6.14	13.59
S-2	08/30/2006	420	<0.500	<0.500	<0.500	<0.500	4.42	<0.500	<0.500	<0.500	<10.0	NA	NA	NA	19.73	7.18	12.55
										· ·							
S-3	11/14/2005	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.14	7.01	12.13
S-3	11/22/2005	3,900	<0.500	<0.500	<0.500	0.900	3,730	<0.500	<0.500	3.44	26.0	NA	NA	NA	19.14	7.15	11.99
S-3	02/24/2006	580 b	<0.50	<0.50	<0.50	<0.50	360	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	19.14	5.95	13.19
S-3	05/30/2006	<50.0	<0.500	<0.500	<0.500	0.510	52.2	<0.500	<0.500	<0.500	<10.0	NA	NA	NA	19.14	5.85	13.29
S-3	08/30/2006	2,910	<0.500	<0.500	<0.500	<0.500	882	<0.500	<0.500	<0.500	<10.0	NA	NA	NA	19.14	6.71	12.43
····	· · · · · · · · · · · · · · · · · · ·										<u> </u>						
S-4	11/14/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.16	6.00	12.16
S-4	11/22/2005	4,570	<0.500	<0.500	<0.500	0.660	3,450	<0.500	<0.500	3.57	26.0	NA	NA	NA	18.16	6.10	12.06
S-4	02/24/2006	2,200 b	<0.50	<0.50	<0.50	<0.50	1,400	<0.50	<0.50	1.4	13 c	NA	NA	NA	18.16	5.09	13.07
S-4	05/30/2006	1,100	<0.500	<0.500	<0.500	<0.500	1,060	<0.500	<0.500	1.04	87.5	NA	NA	NA	18.16	5.00	13.16
S-4	08/30/2006	3,170	<0.500	<0.500	<0.500	<0.500	1,000	<0.500	<0.500	0.850	120	NA	NA	NA	18.16	5.81	12,35
S-4B	08/21/2006	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.78	6.14	12,64
S-4B	08/30/2006	3,630	<0.500	<0.500	5.32	<0.500	1,130	<0.500	<0.500	1.47	643	NA	NA	NA	18.78	6.32	12.46
	·																****
S-5	11/14/2005	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	18.68	6.33	12.35
S-5	11/22/2005	1,010	0.900	<0.500	1.79	4.91	302	<0.500	<0.500	<0.500	397	NA	NA	NA	18.68	6.44	12.24
S-5	02/24/2006	<50 b	<0.50	<0.50	<0.50	<0.50	19	<0.50	<0.50	<0.50	<5.0	NA	NA	NA	18.68	5.44	13.24
S-5	05/30/2006	2,000	4.13	0.670	<0.500	3.28	143	<0.500	<0.500	<0.500	<10.0	NA	NA	NA	18.68	5.33	13.35
S-5	08/30/2006	1,380	<0.500	<0.500	1.43	<0.500	211	<0.500	<0.500	<0.500	106	NA	NA	NA	18.68	6.16	12.52
												<u> </u>					
S-6	11/14/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.32	6.36	12.96
S-6	11/22/2005	15,800	5.14	0.690	32.1	934	<0.500	<0.500	<0.500	<0.500	14.2	NA	NA	NA	19.32	6.53	12.79

# WELL CONCENTRATIONS Shell Service Station 1601 Webster Street Alameda, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE	ETBE	TAME	TBA	1,2-DCA	EDB	Ethanol	тос	Depth to Water	GW Elevation
		(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(MSL)	(ft.)	(MSL)
S-6	01/19/2006	NA	NA	NA	NA	NA	NA	NA	NA	l NA	NA	NA	NA	NA	19.32	5.50	13.82
S-6	02/24/2006	7,900 b	4.4	<1.5	260	380	<1.5	<1.5	<1.5	<1.5	<7.0	NA NA	NA	NA NA	19.32	5.76	13.56
S-6	05/30/2006	4,170	4.98	<0.500	76.6	44.2	<0.500	<0.500	<0.500	<0.500	<10.0	NA	NA	NA NA	19.32	5.68	13.64
S-6	08/30/2006	16,400	10.7	<0.500	353	292	<0.500	<0.500	<0.500	<0.500	<10.0	NA	NA	NA.	19.32	6.38	12.94
	T													·			
S-7	11/14/2005	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19.44	6.76	12.68
S-7	11/22/2005	51,100	2,680	2,980	969	6,360	1.49	<0.500	<0.500	<0.500	53.3	NA	NA	NA	19.44	6.88	12.56
S-7	02/24/2006	22,000 b/25,000 d	1,700	1,200	1,200	2,800	<2.5	<2.5	<2.5	<2.5	58	NA	NA	NA	19.44	5.73	13.71
S-7	05/30/2006	35,600	1,720	641	1,600	3,630	2.83	<0.500	<0.500	<0.500	<10.0	NA	NA	NA	19.44	5.61	13.83
S-7	08/30/2006	83,900	5,060	62.5	1,640	4,010	2.38	<0.500	<0.500	<0.500	43.4	NA	NA	NA	19.44	6.43	13.01
S-8	08/21/2006	NA	NA NA	NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA	20.11	7.02	13.09
S-8	08/30/2006	90,600	5,150	28.2	3,230	4,450	4.30	<0.500	<0.500	<0.500	<10.0	NA	NA	NA	20.11	7.19	12.92
60	00/04/0000										, , , , , ,						
S-9 S-9	08/21/2006 08/30/2006	NA 162,000	NA 1 620	NA 5 040	NA 2.040	NA 00 500	NA TOO	NA	NA	NA	NA	NA	_NA	NA	19.60	6.93	12.67
3-9	08/30/2000	102,000	3,620	5,040	3,810	22,500	<0.500	<0.500	<0.500	<0.500	<10.0	NA	NA	NA	19.60	6.52	13.08
TBW-E	11/23/2004	NA I	NA	NA	NA	NA	210	210	110		1						
TBW-E	12/01/2004	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	6.31	NA
TBW-E	12/07/2004	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA	NA	NA	7.01	NA NA
TBW-E	12/15/2004	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA	NA	6.32	NA NA
TBW-E	12/23/2004	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA	6.55	NA NA
TBW-E	12/27/2004	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	5.95	NA NA
						14/ (	101	IIA	IVA	1975	INA	IVA	INA	NA	NA	8.47	NA
TBW-N	11/23/2004	83,000	640	27.000	1,700	20,000	2,300	<400	<400	<400	1,300	<100	<100	<10,000	NA	5.64	NIA
TBW-N	12/01/2004	160,000	700	31,000	2,300	24,000	2,900	<400	<400	<400	1,200	<100	<100	<10,000	NA NA	6.35	NA NA
TBW-N	12/07/2004	130,000	590	29,000	2,300	24,000	2,700	<400	<400	<400	1,200	<100	<100	<10,000	NA NA	5.65	NA NA
TBW-N	12/15/2004	120,000	420	26,000	2,000	22,000	3,300	<400	<400	<400	<1.000	<100	<100	<10,000	NA NA	5.85	NA NA
TBW-N	12/23/2004	100.000	220	23,000	1,900	20,000	1,900	<400	<400	<400	<1,000	<100	<100	<10,000	NA NA	5.30	NA NA

# WELL CONCENTRATIONS Shell Service Station 1601 Webster Street Alameda, CA

Well ID	Date	ТРРН	В	Т	E	х	MTBE 8260	DIPE	ETBE	TAME	ТВА	1,2-DCA	EDB ·	Ethanol	тос	Depth to Water	GW Elevation
<u></u>	<u></u>	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(ug/L)	(MSL)	(ft.)	(MSL)
7734431	1000000			<u></u>				·	<del></del>		·		·				
TBW-N	12/27/2004	110,000	470	26,000	2,300	22,000	1,800	<400	<400	<400	<1,000	<100	<100	<10,000	NA ·	7.80	NA
TBW-N	01/17/2005	86,000	330	22,000	2,200	21,000	1,600	<400	<400	<400	1,600	<100	<100	<10,000	NA	6.59	NA
TBW-N	02/04/2005	97,000	290	23,000	1,800	20,000	1,900	<400	<400	<400	<1,000	<100	<100	<10,000	NA	4.50	NA
TBW-N	03/02/2005	94,000	360	24,000	2,000	19,000	1,200	<400	<400	<400	<1,000	<100	<100	<10,000	NA	4.11	NA
TBW-N	04/12/2005	27,000	130	9,300	1,100	8,700	1,400	<100	<100	<20	390	<25	<25	<2,500	NA	4.08	NA
TBW-N	05/13/2005	42,000	130	8,700	1,500	12,000	1,400	<100	<100	<100	440	<25	<25	<2,500	NA	4.45	NA
TBW-N	06/10/2005	46,000	63	5,500	1,300	11,000	500	<100	<100	<100	<250	<25	<25	<2,500	NA	4.97	NA
TBW-N	07/15/2005	48,000	88	8,400	1,300	9,500	660	<100	<100	<100	310	<25	<25	<2,500	NA	5.18	NA
TBW-N	08/17/2005 a	36,000	85	8,500	1,200	11,000	510	<200	<200	<200	<500	<50	<50	<5,000	18.08	5.28	12.80
TBW-N	09/15/2005	20,000	59	2,400	730	9,300	600	<40	<40	<40	500	NA	NA	<1,000	18.08	5.92	12.16
TBW-N	10/17/2005	59,000	58	4,900	1,200	16,000	490	<100	<100	<100	<250	<25	<25	<2,500	18.08	5.96	12.12
TBW-N	11/22/2005	105,000	41.3	8,750	1,550	18,300	443	<0.500	<0.500	<0.500	248	<0.500	<0.500	<50.0	18.08	5.82	12.26
TBW-N	12/09/2005	65,900	43.4	5,110	1,110	13,500	493	<0.500	<0.500	<0.500	259	<0.500	<0.500	<50.0	18.08	5.60	12.48
TBW-N	01/05/2006	80,100	33.8	4,910	1,620	19,400	410	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	<50.0	18.08	4.44	13.64
TBW-N	02/24/2006	56,000 b/60,000 d	15	2,700	1,000	12,000	270	<15	<15	<15	180	<15	<15	<150	18.08	4.67	13.41
TBW-N	03/08/2006	60,200	23.4	3,820	1,370	16,500	293	<0.500	<0.500	<0.500	93.8	<0.500	<0.500	<50.0	18.08	4.18	13.90
TBW-N	04/13/2006	73,000	21.8	2,900	1,220	14,600	277	<0.500	<0.500	<0.500	68.5	<0.500	<0.500	<500	18.08	3,49	14.59
TBW-N	05/30/2006	59,300	18.7	1,170	1,800	10,200	119 e	<0.500	<0.500	<0.500	<10.0	0.860	<0.500	<50.0	18.08	4.52	13.56
TBW-N	06/05/2006	83,700	16.0	1,510	2,090	11,400	146 e	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	<50.0	18.08	4.55	13.53
TBW-N	07/19/2006	80,100	16.4	632	1,550	13,900	85.7	<0.500	<0.500	<0.500	<10.0	<0.500	<0.500	<50.0	18.08	4.99	13.09
TBW-N	08/30/2006	52,700	18.2	747	1,900	13,400	82.9	<5.00	<5.00	<5.00	<100	<5.00	<5.00	<500	18.08	5.47	12.61
													<u></u>				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
TBW-S	11/23/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.18	NA
TBW-S	12/01/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA	6.87	NA NA
TBW-S	12/07/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.	NA NA	NA NA	NA NA	6.15	NA NA
TBW-S	12/15/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA NA	NA NA	NA NA	NA NA	6.38	NA NA
TBW-S	12/23/2004	NA	NA	NΑ	NA	NA	NA	NA	NA	NA	NA NA	NA.	NA NA	NA NA	NA NA	5.81	NA NA
TBW-S	12/27/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA NA	NA NA	NA NA	NA NA	8.35	NA NA

#### **WELL CONCENTRATIONS**

### Shell Service Station 1601 Webster Street Alameda, CA

Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	<b>1,2-DCA</b> (ug/L)	EDB (ug/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
TBW-W	11/23/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.14	NA
TBW-W	12/01/2004	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.	NA	NA.	NA	6.86	NA NA
TBW-W	12/07/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.	NA	NA NA	NA.	6.13	NA NA
TBW-W	12/15/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.	NA .	NA.	6.37	NA NA
TBW-W	12/23/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA.	NA.	5.79	NA NA
TBW-W	12/27/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	8.32	NA NA

#### Abbreviations:

TPPH = Total petroleum hydrocarbons as gasoline by modified EPA Method 8260B.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B.

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether, analyzed by EPA Method 8260B

ETBE = Ethyl tertiary butyl ether, analyzed by EPA Method 8260B

TAME = Tertiary amyl methyl ether, analyzed by EPA Method 8260B

TBA = Tertiary butyl alcohol or tertiary butanol, analyzed by EPA Method 8260B

1,2-DCA = 1,2-Dichloroethane, analyzed by EPA Method 8260B

EDB = Ethylene Dibromide, analyzed by EPA Method 8260B

TOC = Top of Casing Elevation

GW = Groundwater

ug/L = Parts per billion

MSL = Mean sea level

ft. = Feet

<n = Below detection limit

NA = Not applicable

## **WELL CONCENTRATIONS**

### Shell Service Station 1601 Webster Street Alameda, CA

	Well ID	Date	TPPH (ug/L)	B (ug/L)	T (ug/L)	E (ug/L)	X (ug/L)	MTBE 8260 (ug/L)	DIPE (ug/L)	ETBE (ug/L)	TAME (ug/L)	TBA (ug/L)	1,2-DCA (ug/L)	EDB (ua/L)	Ethanol (ug/L)	TOC (MSL)	Depth to Water (ft.)	GW Elevation (MSL)
--	---------	------	----------------	-------------	-------------	-------------	-------------	------------------------	----------------	----------------	----------------	---------------	-------------------	---------------	-------------------	--------------	----------------------------	--------------------------

#### Notes:

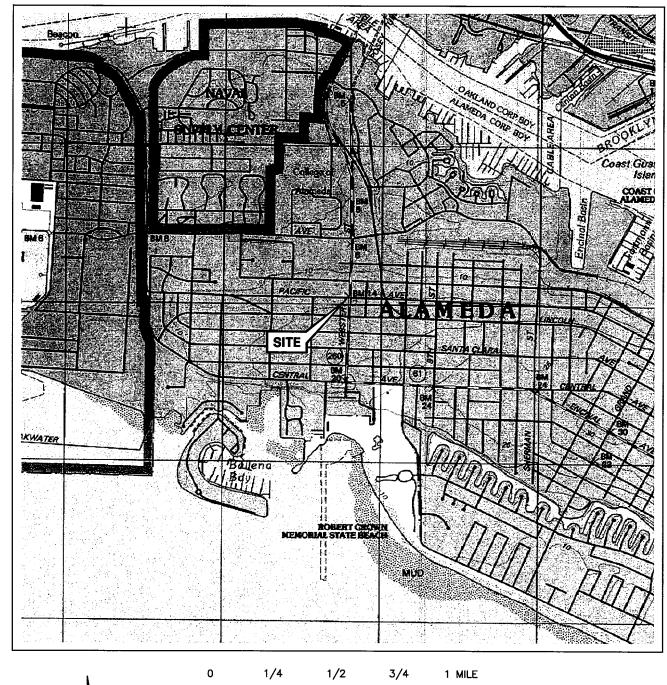
- a = Extracted out of holding time.
- b = Result with a carbon range of C4-C12.
- c = Result may be biased slightly high. See lab report case narrative.
- d = Result with a carbon range of C6-C12.
- e = Secondary ion abundances were outside method requirements. Identification based on analytical judgement. Ethanol analyzed by EPA Method 8260B.

Well TBW-N surveyed September 1, 2005 by Virgil Chavez Land Surveying of Vallejo, CA.

Wells S-2 through S-7 surveyed on November 30, 2005 by Virgil Chavez Land Surveying of Vallejo, CA.

Wells S-4B and S-7 through S-9 surveyed on August 17, 2006 by Virgil Chavez Land Surveying of Vallejo, CA.

# **FIGURES**





1/2 5/+ 1

SCALE 1:24,000

## SOURCE:

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





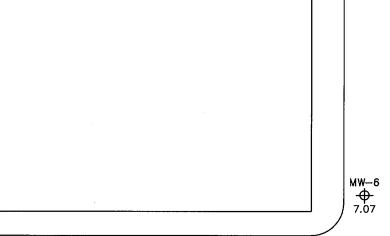
#### VICINITY MAP

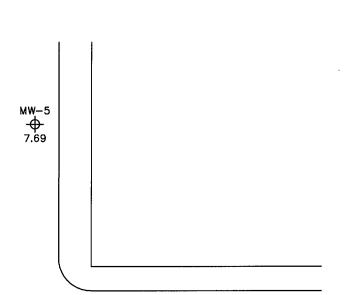
Former 76 Station 0843 1629 Webster Street Alameda, California

# FIGURE 1

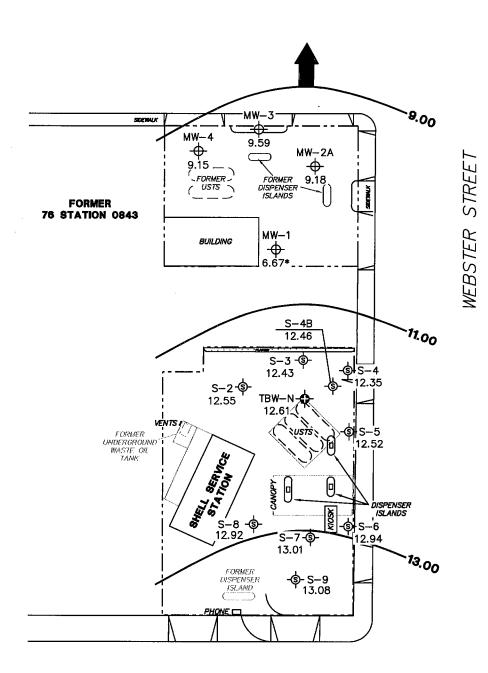
1:1

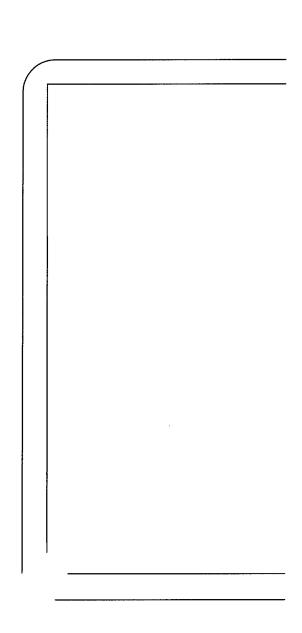






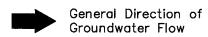
## PACIFIC AVENUE





### **LEGEND**

- MW-6 + Former 76 Monitoring Well with Groundwater Elevation (feet)
- S-9 \$\square\$ Shell Service Station Monitoring Well with Groundwater Elevation (feet)
- TBW-N Shell Tank Backfill
  Monitoring Well with
  Groundwater Elevation
  (feet)
- **13.00** Groundwater Elevation Contour



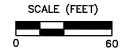
### NOTES:

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. UST = underground storage tank. \* = not included in groundwater contour interpretation. Shell Service Station data provided by Blaine Tech.

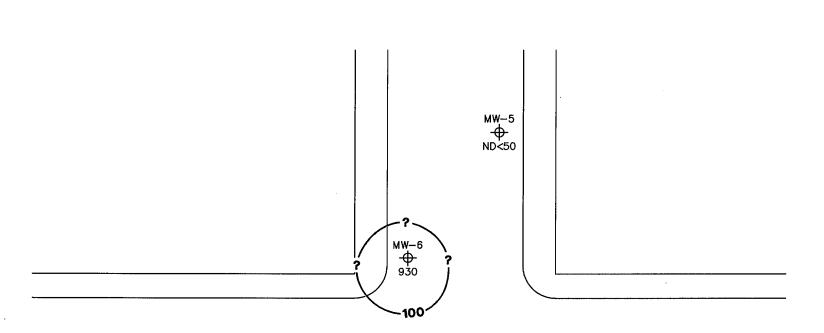
# GROUNDWATER ELEVATION CONTOUR MAP August 30, 2006

Former 76 Station 0843 1629 Webster Street Alameda, California

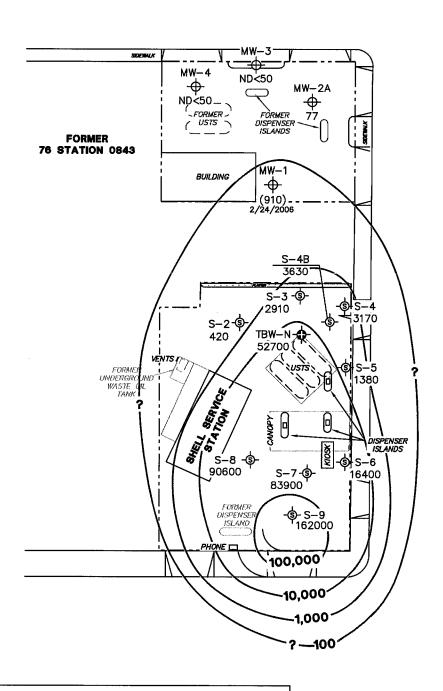








### PACIFIC AVENUE



### <u>LEGEND</u>

- MW-6 + Former 76 Monitoring Well with Dissolved-Phase TPH-G (GC/MS) Concentration (μg/l)
- S-9 Shell Service Station
  Monitoring Well with
  Dissolved-Phase TPPH
  Concentration (µg/l)
- TBW-N Shell Tank Backfill Monitoring Well
- \_100,000 Dissolved-Phase TPH-G (GC/MS) Contour (µg/l)

### NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPH-G (GC/MS) = total petroleum hydrocarbons with gasoline distinction utilizing EPA Method 8260B. TPPH = total purgeable petroleum hydrocarbons. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. ( ) = representative of historical value. UST = underground storage tank. Shell Service Station data provided by Blaine Tech; TPPH results obtained using EPA Method 8260B.

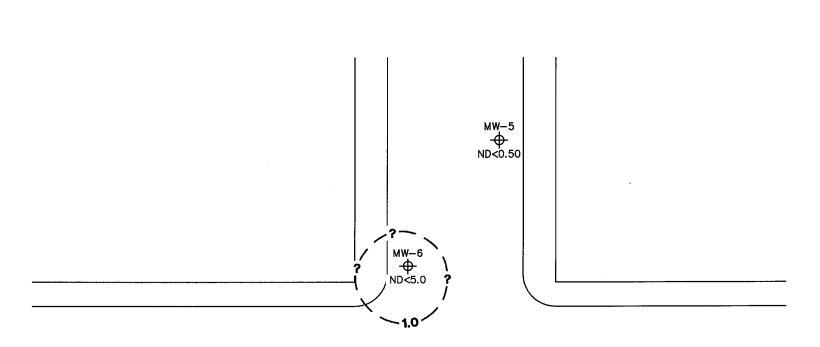
DISSOLVED-PHASE TPH-G (GC/MS) CONCENTRATIONS MAP August 30, 2006

Former 76 Station 0843 1629 Webster Street Alameda, California

TRC

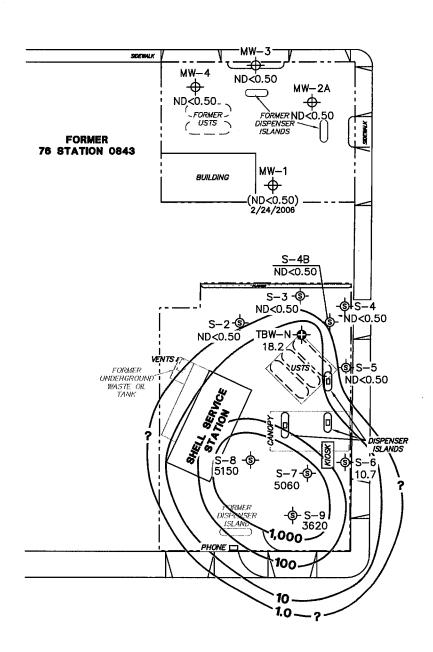






WEBSTER STREET

### PACIFIC AVENUE



### **LEGEND**

- ww-6 → Former 76 Monitoring Well with Dissolved—Phase Benzene Concentration (µg/l)
- S-9 Shell Service Station Monitoring Well
- TBW-N Shell Tank Backfill Monitoring Well
- \_1,000 Dissolved—Phase Benzene Contour (µg/I)

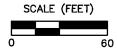
### NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples.  $\mu g/l = \text{micrograms}$  per liter. ND = not detected at limit indicated on official laboratory report. ( ) = representative of historical value. Dashes indicate contour based on non—detect at elevated detection limit. UST = underground storage tank. Shell Service Station data provided by Blaine Tech.

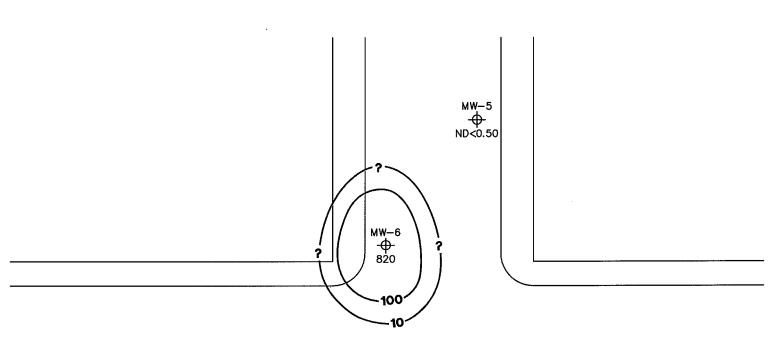
DISSOLVED-PHASE BENZENE CONCENTRATIONS MAP August 30, 2006

Former 76 Station 0843 1629 Webster Street Alameda, California



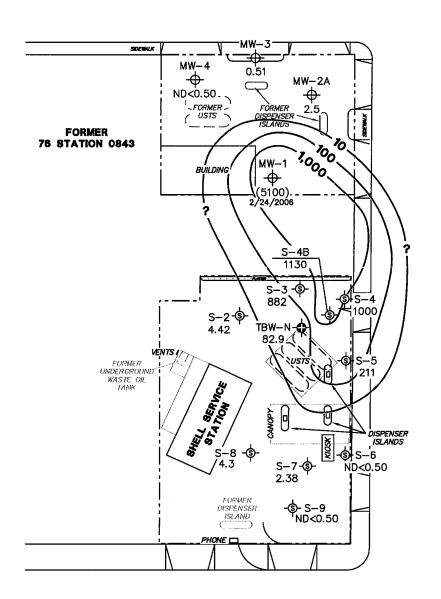






WEBSTER STREET

PACIFIC AVENUE



### **LEGEND**

MW-6 + Former 76 Monitoring Well with Dissolved-Phase MTBE Concentration (μg/l)

S-9 - Shell Service Station Monitoring Well

TBW-N - Shell Tank Backfill Monitoring Well

\_1,000 — Dissolved—Phase MTBE Contour (µg/I)

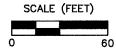
### NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether.  $\mu g/l = micrograms$  per liter. ND = not detected at limit indicated on official laboratory report. ( ) = representative of historical value. UST = underground storage tank. Shell Service Station data provided by Blaine Tech. Results obtained using EPA Method 8260B.

DISSOLVED-PHASE MTBE CONCENTRATIONS MAP August 30, 2006

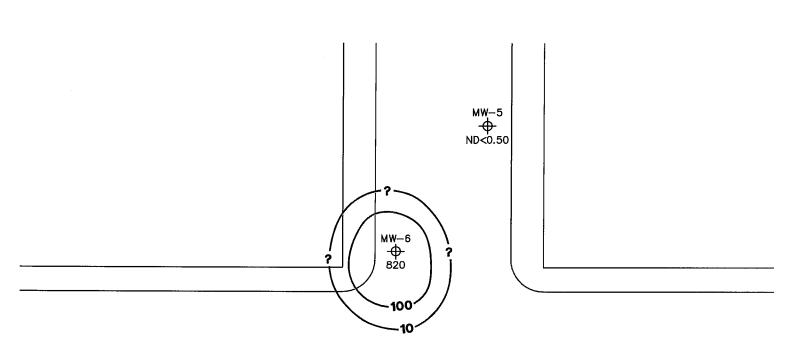
Former 76 Station 0843 1629 Webster Street Alameda, California



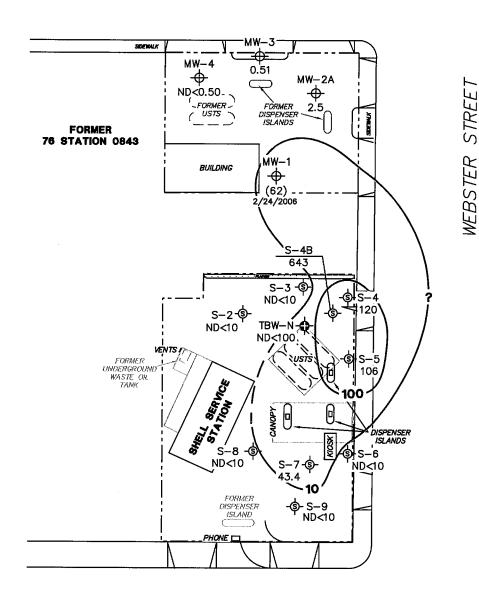


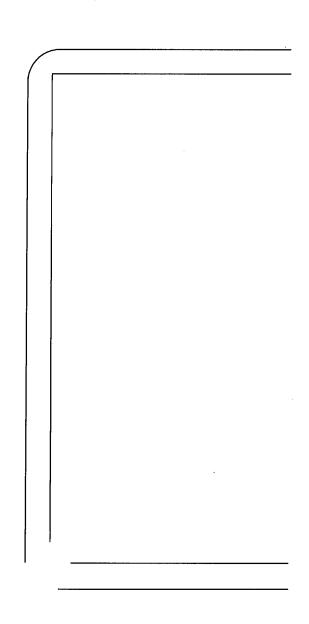






PACIFIC AVENUE





### **LEGEND**

- MW-6 + Former 76 Monitoring Well with Dissolved-Phase TBA Concentration (μg/l)
- S-9 Shell Service Station Monitoring Well
- TBW-N Shell Tank Backfill Monitoring Well

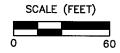
### NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TBA = tertiary butyl alcohol.  $\mu g/l =$  micrograms per liter. ND = not detected at limit indicated on official laboratory report. ( ) = representative of historical value. UST = underground storage tank. Dashes indicate contour based on non-detect at elevated detection limit. Shell Service Station data provided by Blaine Tech. Results obtained using EPA Method 8260B.

DISSOLVED-PHASE TBA CONCENTRATIONS MAP August 30, 2006

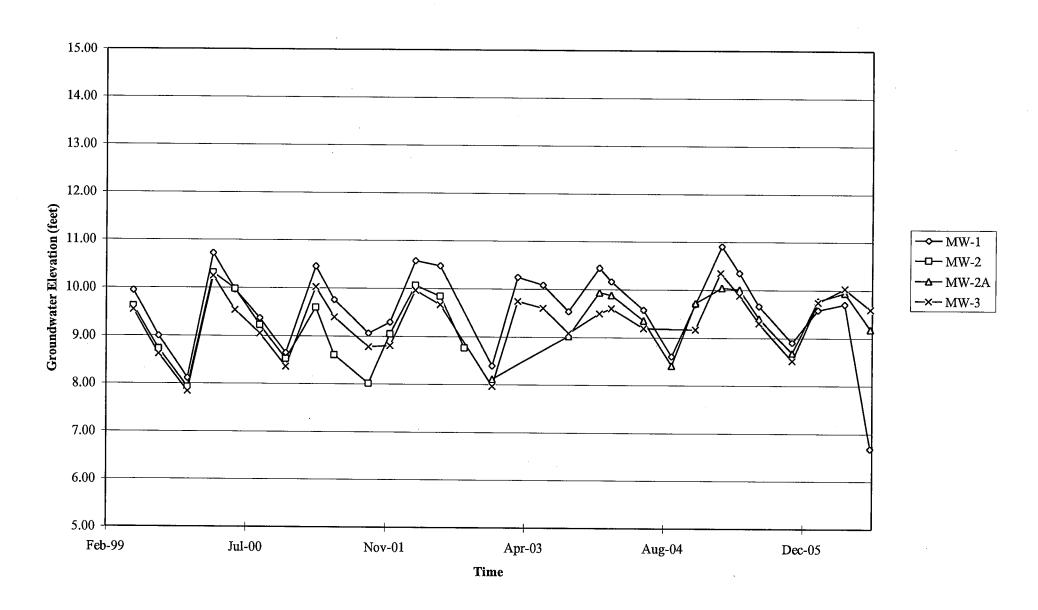
Former 76 Station 0843 1629 Webster Street Alameda, California



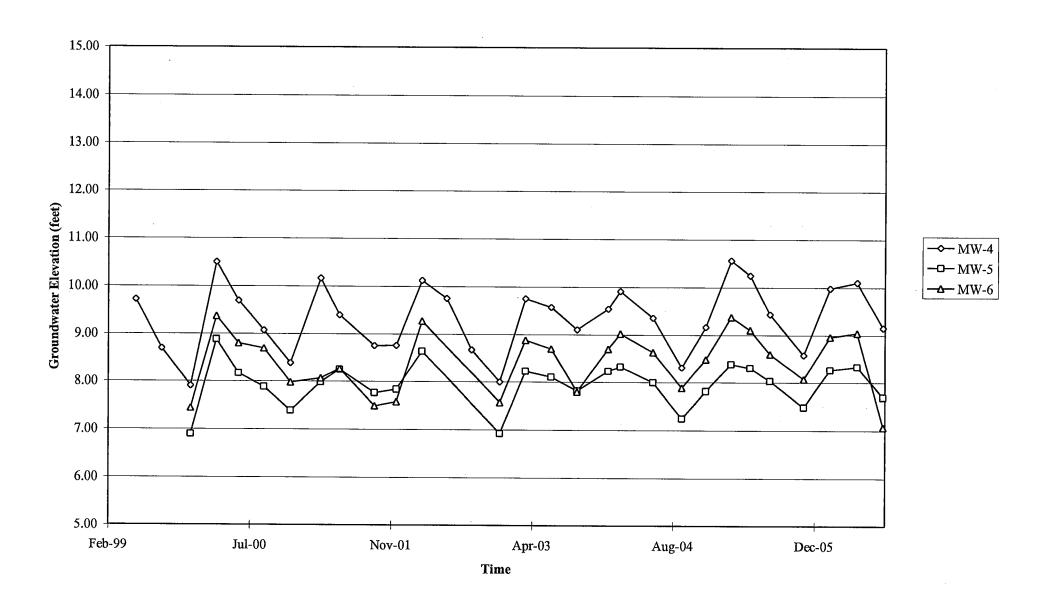


# **GRAPHS**

#### Groundwater Elevations vs. Time Former 76 Station 0843

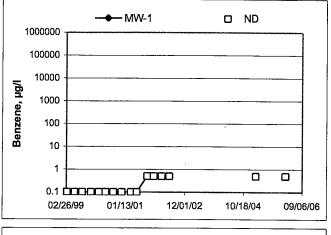


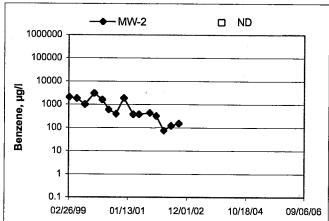
## Groundwater Elevations vs. Time Former 76 Station 0843

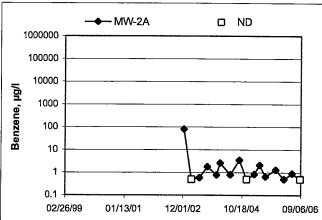


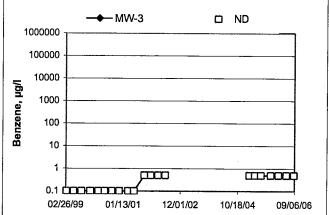
### Benzene Concentrations vs Time

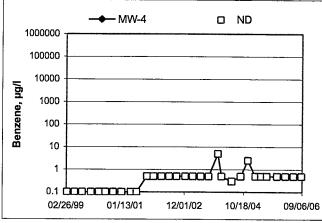
Former 76 Station 0843

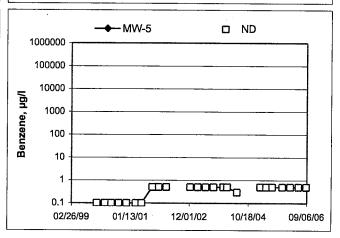


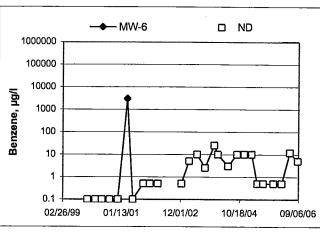












#### GENERAL FIELD PROCEDURES

#### 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 (surveyo rs mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

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

#### Purging and Groundwater Parameter Measurement

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

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

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

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

#### **Groundwater Sample Collection**

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

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

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

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

#### Sequence of Gauging, Purging and Sampling

The sequence in which monitoring activities are conducted are specified on the TSR. In general, wells are gauged beginning with the least affected well and ending with the well that has the highest concentration based on previous analytic results. After all gauging for the site is completed, wells are purged and/or sampled from the least-affected to the most-affected well.

#### Decontamination

In order to reduce the possibility of cross contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated to a particular wells, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liqui-nox and water and rinsing twice. The final rinse is in deionized water.

#### **Exceptions**

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

1/5/04 version

## FIELD MONITORING DATA SHEET

chnician:_	Chri	3_	Job	#/Task #: _	4/0GO	Date: 8-30-06					
	084		Project	Manager_	A.C	ollins		Pageof			
	Time		Total	Depth to	Depth to	Product Thickness	Time				
Well#	Gauged	TOC	Depth	Water	Product	(feet)	Sampled	Misc. Well Notes			
4W-5	0617	X	20.07	5.65			0635	7"			
nn-4	0650		19.34	6.02			0801				
mw-3	0658		19.88	5.52			0813				
m. c~24	0707		10.33	6-38			0832				
Mnc-G	0715	4 1	20.04	7.01			0858				
nw-1	0722	TMC	19.79				N/5	moniter only			
	700	1									
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FIELD DA	ATA COM	PLETE	QA/C	OC	$\frac{1}{cc}$	OC /	WELL BOX	CONDITION SHEETS			
	<u></u>							<u> </u>			
WTT CE	RTIFICAT	Έ	MANIF	EST	DRUM	INVENTORY	Y TF	RAFFIC CONTROL			

## **GROUNDWATER SAMPLING FIELD NOTES**

		Ted	chnician: _	Chris	Ž			٠	
Site: DK	+3_	Proj	ject No.: 4	1060001	<del></del>		Date:	8-30	r-06
Well No	MW-5	>		Purge Meth	od:	A			
		5.65		Depth to Pro	oduct (feet):	8			
		20.07 14.43			er Recovered (			<del></del>	
		eet): 8.5		1 Well Volur	meter (Inches):_ me (gallons):	2		<del></del>	
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS)cm)	Temperature ( F C	рН	D.O.	ORP	Turbidity
0628	-		3	638	17.7	5:84			
	0630		6	521	19,2	6:70			
Sta	tic at Time Sa	ımpled		al Gallons Pu	rged		Sample		
Comments	<u>フ・                                    </u>		6				063!	5	
Depth to W	/ater (feet):	602			od:				
	n (feet)			LPH & Wate	r Recovered (g	allons):		_	
	imn (feet): arge Depth(fe		)		neter (Inches):_	2"		<del></del>	
00 /0 1100116	nge Depullie	et). <b>5 · 6</b> 0	<del></del>	1 Well Volum	ne (gallons):		<u> </u>	·	
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS)cm)	Temperature (F,C)	рН	D.O.	ORP	Turbidity
0753			3	1438	17.4	7.24			
,	0756		6	1475	20.0	2.26			
Stat	ic at Time Sa	mpled	Tota	il Gallons Pur	ged		Sample	Time	
Comments	7. (2		6				1080		
			<del></del>						

## **GROUNDWATER SAMPLING FIELD NOTES**

			_	chris		<del></del>			
Site: 081	<u> 13</u>	. Pro	ject No.: 4	1060001	· 		Date:	8-30	7-06
Well No	MW	<u>/-3</u>		Purge Metho	od: <i>D[</i> _	A			
Total Dept Water Colu	h (feet)	5.57 19.88 14.36 eet): 8.39		LPH & Wate Casing Diam	oduct (feet): er Recovered neter (Inches): ne (gallons):_	(gallons): ): <b>2</b> //			·
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conductivity (US)cm) 1446 863	Temperature (F C) 17.9 9.1	7.96 7.44 7.15	D.O.	ORP	Turbidity
Sta	tic at Time Sa	ampled	Tota	al Gallons Pur	rged			Time	
Comments			b				0813	3	
	MW-2		· · · · · · · · · · · · · · · · · · ·	Purge Metho	od:				
		6.38	<del></del>	Depth to Pro	duct (feet):	<u>Ø</u>			
		[0.33   3.95    eet): フルフ	<b>.</b>	Casing Diame	r Recovered( neter (Inches): ne (gallons):	2"	<i>B</i>		
Time Start	Time Stop	Depth to Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature	е рН	D.O.	ORP	Turbidity
<i>વ</i> 822				602	22.9	11.04			
	082>		3	665 607	23.8	11.27			
							A -		
Stati	ic at Time Sa	ımpled	Tota	al Gallons Purg	ned		Sample	Time	
Comments	6-95		3				083		
Comments	•							•	

### **GROUNDWATER SAMPLING FIELD NOTES**

Technician: Chr. 5 Project No.: 4060001 Site: <u>0843</u> Well No. MW-6 DIA Purge Method: Depth to Water (feet): 49.51 Depth to Product (feet): LPH & Water Recovered (gallons): Water Column (feet): LO.28 Casing Diameter (Inches): 2" 80% Recharge Depth(feet):\_ 11.56 1 Well Volume (gallons): Depth to Volume Conduc-Time Time Temperature Water Purged tivitv рН Start D.O. ORP Stop **Turbidity** (feet) (gallons) 0844 0851 Static at Time Sampled **Total Gallons Purged** Sample Time 0858 Comments: Well No.\_\_\_\_ Purge Method: Depth to Water (feet):\_\_\_\_ Depth to Product (feet):\_\_\_\_\_ Total Depth (feet)\_\_\_\_\_ LPH & Water Recovered (gallons):\_\_\_\_\_ Water Column (feet):\_\_\_\_\_ Casing Diameter (Inches):\_\_\_\_\_ 80% Recharge Depth(feet):\_\_\_\_\_ 1 Well Volume (gallons):\_\_\_\_\_ Depth to Volume Conduc-Time Time Stop Temperature Water Purged tivity Start Hq D.O. ORP **Turbidity** (F,C)(feet) (gallons) (uS/cm) Static at Time Sampled Total Gallons Purged Sample Time Comments:



Date of Report: 09/14/2006

Anju Farfan

TRC Alton Geoscience 21 Technology Drive

Irvine, CA 92618-2302

RE: 0843

BC Lab Number: 0609021

Enclosed are the results of analyses for samples received by the laboratory on 08/30/06 21:20. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Contact Person: Vanessa Hooker

Client Service Rep

**Authorized Signature** 

Project: 0843

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/14/06 11:21

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

Laboratory	Client Sample Informa	tion		
0609021-01	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 0843 MW-2A MW-2A TRCI	Receive Date: 08/30/06 21:20 Sampling Date: 08/30/06 08:32 Sample Depth: Sample Matrix: Water	Delivery Work Order: Global ID: T0600102263 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0609021-02	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	0843 MW-3 MW-3 TRCI	Receive Date: 08/30/06 21:20 Sampling Date: 08/30/06 08:13 Sample Depth: Sample Matrix: Water	Delivery Work Order: Global ID: T0600102263 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0609021-03	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 0843 MW-4 MW-4 TRCI	Receive Date: 08/30/06 21:20 Sampling Date: 08/30/06 08:01 Sample Depth: Sample Matrix: Water	Delivery Work Order: Global ID: T0600102263 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0609021-04	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 0843 MW-5 MW-5 TRCI	Receive Date: 08/30/06 21:20 Sampling Date: 08/30/06 06:35 Sample Depth: Sample Matrix: Water	Delivery Work Order: Global ID: T0600102263 Matrix: W Samle QC Type (SACode): CS Cooler ID:
0609021-05	COC Number: Project Number: Sampling Location: Sampling Point: Sampled By:	 0843 MW-6 MW-6 TRCI	Receive Date: 08/30/06 21:20 Sampling Date: 08/30/06 08:58 Sample Depth: Sample Matrix: Water	Delivery Work Order: Global ID: T0600102263 Matrix: W Samle QC Type (SACode): CS Cooler ID:



Project: 0843

Project Number: [none]
Project Manager: Anju Farfan

Reported: 09/14/06 11:21

BCL Sample ID: 0609021	-01	Client Sam	ole Name	e: 0843, M	W-2A,	MW-2A, 8/	/30/2006	8:32:00AM						
		<del> </del>					Prep	Run		Instru-		QC	MB	Lab
Constituent		Result	Units	PQL	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	0.50		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	
Ethylbenzene		1.0	ug/L	0.50		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	
Methyl t-butyl ether		2.5	ug/L	0.50		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	
Toluene		0.50	ug/L	0.50		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BP10502	ND	
Total Xylenes		3.3	ug/L	0.50	*	EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	
Ethanol		ND	ug/L	250		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/11/06 23:57	SDU.	MS-V6	1	BPI0502	ND	
Total Purgeable Petroleum Hydrocarbons		77	ug/L	50		EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502	ND	,,
1,2-Dichloroethane-d4 (Surrogate)		105	%	76 - 114 (LCL	UCL)	EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BP10502		
Toluene-d8 (Surrogate)		103	%	88 - 110 (LCL	- UCL)	EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1	BPI0502		
4-Bromofluorobenzene (Surrogate)	)	92.5	%	86 - 115 (LCL	- UCL)	EPA-8260	09/11/06	09/11/06 23:57	SDU	MS-V6	1 .	BPI0502		



Project: 0843
Project Number: [none]

Project Manager: Anju Farfan Reported: 09/14/06 11:21

BCL Sample ID:	0609021-02	Client Sam	ole Nam	e: 0843, MV	V-3, N	IW-3, 8/30	/2006 8:	13:00AM						
							Prep	Run		Instru-		QC	MB	Lab
Constituent		Result	Units	PQL	MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene	,	ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
Ethylbenzene		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
Methyl t-butyl ether		0.51	ug/L	0.50		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
Toluene		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BP10502	ND	
Ethanol		ND	ug/L	250		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
Ethyl t-butyl ether		ND	ug/L	0.50	***************************************	EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	**************************************
Total Purgeable Petrole Hydrocarbons	eum	ND	ug/L	50		EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502	ND	
1,2-Dichloroethane-d4	(Surrogate)	102	%	76 - 114 (LCL	- UCL)	EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502		
Toluene-d8 (Surrogate)		104	%	88 - 110 (LCL	- UCL)	EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502		· · · · · · · · · · · · · · · · · · ·
4-Bromofluorobenzene	(Surrogate)	93.7	%	86 - 115 (LCL	- UCL)	EPA-8260	09/11/06	09/12/06 00:22	SDU	MS-V6	1	BPI0502		



Project: 0843

Project Number: [none]
Project Manager: Anju Farfan

**Reported:** 09/14/06 11:21

BCL Sample ID: 060	9021-03	Client Sam	ole Name	e: 0843, MW-4,	MW-4, 8/30	/2006 8	:01:00AM		· · · · · · · · · · · · · · · · · · ·				,
Constituent		Result	Units	PQL MDI	_ Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene		ND	ug/L	0.50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	
Ethylbenzene		ND	ug/L	0.50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	
Methyl t-butyl ether		ND	ug/L	0.50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	
Toluene		ND	ug/L	0.50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	
Total Xylenes		ND	ug/L	0.50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	. ND	
t-Amyl Methyl ether		ND	ug/L	0.50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	
t-Butyl alcohol		ND	ug/L	10	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	
Diisopropyl ether		ND	ug/L	0.50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BP10502	ND	
Ethanol		ND	ug/L	250	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	
Ethyl t-butyl ether	Milesto release and company	, ND	ug/L	0.50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50	EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502	ND	IN CANAL PRINTER PARTY AND AND A
1,2-Dichloroethane-d4 (Surro	ogate)	111	%	76 - 114 (LCL - UC	L) EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502		
Toluene-d8 (Surrogate)		103	%	88 - 110 (LCL - UC	L) EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502		
4-Bromofluorobenzene (Surr	rogate)	90.5	%	86 - 115 (LCL - UC	L) EPA-8260	09/11/06	09/12/06 00:47	SDU	MS-V6	1	BPI0502		



Project: 0843

Project Number: [none]

Project Manager: Anju Farfan

**Reported:** 09/14/06 11:21

BCL Sample ID: 06	09021-04	Client Sam	ple Name	e: 0843	3, MW-5, M	W-5, 8/30	/2006 6:	35:00AM					<del></del>	
Constituent		Result	Units	PQL	MDL	Method	Prep Date	Run Date/Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Benzene		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BP10502	ND	
Ethylbenzene		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	ND	
Methyl t-butyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	ND	
Toluene		ND	ug/L	0.50	1	EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	ND	
Total Xylenes		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BP10502	ND	
t-Amyl Methyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	ND	
t-Butyl alcohol		ND	ug/L	10		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BP10502	ND	
Diisopropyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	ND	
Ethanol		ND	ug/L	250		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	ND	
Ethyl t-butyl ether		ND	ug/L	0.50		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	ND	
Total Purgeable Petroleum Hydrocarbons		ND	ug/L	50		EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	ND	menten i la di se dissertiti dell'estat, stende estato cer
1,2-Dichloroethane-d4 (Sur	rogate)	106	%	76 - 114	(LCL - UCL)	EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502	***************************************	### # 14###############################
Toluene-d8 (Surrogate)	•	104	%	88 - 110	(LCL - UCL)	EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502		
4-Bromofluorobenzene (Su	rrogate)	92.1	%	86 - 115	(LCL - UCL)	EPA-8260	09/11/06	09/12/06 01:12	SDU	MS-V6	1	BPI0502		



Project: 0843

Project Number: [none]
Project Manager: Anju Farfan

**Reported:** 09/14/06 11:21

BCL Sample ID: 06	09021-05	Client Sam	ole Name	e: 0843, MW-6,	MW-6, 8/30	/2006 8	:58:00AM					***************************************	
						Prep	Run		Instru-		QC	МВ	Lab
Constituent		Result	Units	PQL MDL	Method	Date	Date/Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
Benzene		ND	ug/L	5.0	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
Ethylbenzene		ND	ug/L	5.0	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BP10502	ND	A01
Methyl t-butyl ether		820	ug/L	5.0	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
Toluene		ND	ug/L	5.0	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
Total Xylenes		ND	ug/L	5.0	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
t-Amyl Methyl ether		ND	ug/L	5.0	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
t-Butyl alcohol		ND	ug/L	100	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
Diisopropyl ether		ND	ug/L	5.0	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
Ethanol		ND	ug/L	2500	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
Ethyl t-butyl ether		ND	ug/L	5.0	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01
Total Purgeable Petroleum Hydrocarbons	า	930	ug/L	500	EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502	ND	A01, A53
1,2-Dichloroethane-d4 (Su	rrogate)	99.9	%	76 - 114 (LCL - UCL	) EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502		
Toluene-d8 (Surrogate)		102	%	88 - 110 (LCL - UCL	) EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502		
4-Bromofluorobenzene (Su	urrogate)	87.0	%	86 - 115 (LCL - UCL	) EPA-8260	09/11/06	09/12/06 01:37	SDU	MS-V6	10	BPI0502		



Project: 0843

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/14/06 11:21

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

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

										Contr	ol Limits
			Source	Source		Spike			Percent		Percent
Constituent	Batch ID	QC Sample Type	Sample ID	Result	Result	Added	Units	RPD	Recovery	RPD	Recovery Lab Quals
Benzene	BP10502	Matrix Spike	0608879-40	ND	27.144	25.000	ug/L		109		70 - 130
		Matrix Spike Duplicate	0608879-40	ND	26.375	25.000	ug/L	2.79	106	20	70 - 130
Toluene	BPI0502	Matrix Spike	0608879-40	ND	26.231	25.000	ug/L		105		70 - 130
		Matrix Spike Duplicate	0608879-40	ND	25.486	25.000	ug/L	2.90	102	20	70 - 130
1,2-Dichloroethane-d4 (Surrogate)	BPI0502	Matrix Spike	0608879-40	ND	10.380	10.000	ug/L		104		76 - 114
		Matrix Spike Duplicate	0608879-40	ND	10.263	10.000	ug/L		103		76 - 114
Toluene-d8 (Surrogate)	BPI0502	Matrix Spike	0608879-40	ND	10.104	10.000	ug/L		101		88 - 110
		Matrix Spike Duplicate	0608879-40	ND	10.154	10.000	ug/L		102		88 - 110
4-Bromofluorobenzene (Surrogate)	BPI0502	Matrix Spike	0608879-40	ND	10.406	10.000	ug/L		104		86 - 115
		Matrix Spike Duplicate	0608879-40	ND	10.384	10.000	ug/L		104		86 - 115



Project: 0843

Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/14/06 11:21

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

**Quality Control Report - Laboratory Control Sample** 

					•			, ,	<u>Control</u>	Limits	
Constituent	Batch ID	QC Sample ID	QC Type	Result	Spike Level	PQL	Units	Percent Recovery	Percent RPD Recovery	RPD	Lab Quals
Benzene	BPI0502	BPI0502-BS1	LCS	26.139	25.000	0.50	ug/L	105	70 - 130		<u> </u>
Toluene	BPI0502	BPI0502-BS1	LCS	25.032	25.000	0.50	ug/L	100	70 - 130		
1,2-Dichloroethane-d4 (Surrogate)	BPI0502	BPI0502-BS1	LCS	10.166	10.000		ug/L	102	76 - 114		
Toluene-d8 (Surrogate)	BP10502	BPI0502-BS1	LCS	9.8365	10.000		ug/L	98.4	88 - 110		
4-Bromofluorobenzene (Surrogate)	BPI0502	BPI0502-BS1	LÇS	10.166	10.000		ug/L	102	86 - 115		

Project: 0843

Project Number: [none]

Project Namager: Anju Farfan

Reported: 09/14/06 11:21

## **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	BPI0502	BPI0502-BLK1	ND	ug/L .	0.50	0.14	
Ethylbenzene	BPI0502	BPI0502-BLK1	ND	ug/L	0.50	0.094	
Methyl t-butyl ether	BP10502	BPI0502-BLK1	ND	ug/L	0.50	0.13	
Toluene	BPI0502	BPI0502-BLK1	ND	ug/L	0.50	0.12	
Total Xylenes	BPI0502	BPI0502-BLK1	ND	ug/L	0.50	0.31	
t-Amyl Methyl ether	BPI0502	BPI0502-BLK1	ND	ug/L	0.50	0.34	
t-Butyl alcohol	BPI0502	BPI0502-BLK1	ND	ug/L	10	9.3	
Diisopropyl ether	BPI0502	BPI0502-BLK1	ND	ug/L	0.50	0.34	
Ethanol	BPI0502	BPI0502-BLK1	ND	ug/L	. 250	85	
Ethyl t-butyl ether	BPI0502	BPI0502-BLK1	ND	ug/L	0.50	0.32	
Total Purgeable Petroleum Hydrocarbons	BPI0502	BPI0502-BLK1	ND	ug/L	50	16	
1,2-Dichloroethane-d4 (Surrogate)	BPI0502	BPI0502-BLK1	110	%	76 - 114 (L	.CL - UCL)	
Toluene-d8 (Surrogate)	BPI0502	BPI0502-BLK1	106	%	88 - 110 (L	.CL - UCL)	The state of the s
4-Bromofluorobenzene (Surrogate)	BP10502	BPI0502-BLK1	93.9	%	86 - 115 (L	.CL - UCL)	



Project: 0843 Project Number: [none]

Project Manager: Anju Farfan

Reported: 09/14/06 11:21

#### **Notes and Definitions**

J	Estimated value
A53	Chromatogram not typical of gasoline.
A01	PQL's and MDL's are raised due to sample dilution.
ND	Analyte NOT DETECTED at or above the reporting limit
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

BC LABORATORIES INC.		SAMI	PLE RECE	IPT FOR	M	Rev. No. 10	01/21/	04 Pa	ge <u> </u> 0	<u> </u>					
01 0000	) p	roject Co	de:			ТВ В	atch #	· · · · · · · · · · · · · · · · · · ·							
Submission #: () () - () - () - () - () - () - () -		0,000	<del></del>			SHIPPIN	G CONT	AINER							
				Ice Chest 🕾 None 🗆											
				Box □ Other □ (Specify)											
Bo Eds Fills Galler															
Refrigerant: Ice D Blue Ice D	None	O	her 🗆	Commer	its:										
	Containe	rs []	None	Commer	nts:										
303(00) 052101100 000200	TB Batch #   IIIPPING INFORMATION														
			Inches V	AL OF MAIN	n	Descripti	on(s) match	COC? Ye	s No (	כ					
all samples received: (1992)															
COC Received	1	ice Ch	est ID	·c											
VES ONO		Thermome	er Di				1.000	Analyst Init							
SAMPLE CONTAINERS	,	2	3	4			7	8	9	10					
IT GENERAL MINERAL MENERAL PHYSICAL	-	Ž.													
T PE UNPRESERVED			,												
)T INORGANIC CHEMICAL METALS									•						
T INORGANIC CHEMICAL HETALS	ļ	4													
TCYANIDE															
T NITROGEN FORMS															
T TOTAL SULFIDE			Salaria Madelillania	garana ayan da	,		encertain en en tra								
OL NITRATE/NITRITE	-				į.		1								
00ml TOTAL ORGANIC CARBON					•										
YT TOX YT CHEMICAL OXYGEN DEMAND															
TA PHENOLICS															
10ml YOA VIAL TRAVEL BLANK			A -=		N 3										
IOMI YOA VIAL	H 13	H 131	H 151	H 3	H '5	1 3		1							
OT EPA 413.1, 413.2, 418.1	<u> </u>	<b>]</b>								<u> </u>					
PT ODOR .	<b></b>														
RADIOLOGICAL	<b></b>	<del> </del>													
BACTERIOLOGICAL	<b></b>	<u> </u>		,	·										
40 mi VOA VIAL- 504				1,											
OT EPA 508/608/8080				/											
OT EPA 515.1/8150 OT EPA 525										ļ <u></u>					
OT EPA 525 TRAVEL BLANK										· · ·					
100ml EPA 547															
100ml EPA 531.1			ļ	ļ	<u> </u>	<u> </u>									
OT EPA 548		ļ		<del> </del>		·									
OT EPA 549				<del> </del>		<del> </del>			7						
OT EPA 632	<b></b>	-	<del> </del>	<del> </del>											
QT EPA 8015M	<del> </del>	<del> </del>	<del> </del>												
OT QA/QC	<del> </del>	<del> </del>		<del> </del>											
OT AMBER	<b> </b>	<del> </del>													
8 OZ JAR				1						<u> </u>					
32 OZ. JAR		1													
SOIL SLEEVE	1									<del> </del>					
PCB VIAL PLASTIC BAG									<u> </u>	<del> </del>					
FERROUS IRON				<u> </u>	<u> </u>		<b> </b>		<del> </del>						
ENCORE				<u> </u>	<u> </u>					<b></b>					
		1	<u></u>	<u> </u>	<u></u>	<u> </u>			<u> </u>						
				1 1				. •							

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

## BC LABORATORIES, INC.

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Circle one: Phillips 66 / Unocal C		Consultant Firm: The	onsultant Firm: TRC		8015			S						
1			21 Technology Drive Irvine, CA 92618-2302 Attn: Anju Farfan					8260 full list w/ MTBE & oxygenates	XYS BY 8260B		MS	8260B		Turnaround Time Requested
<u> </u>		4-digit site#: 0843	4-digit site#: 0843 Work Order# 2807TRC502			Σ	315			8260B				Red
		Work Order# 2807T				3015	) 3 8 8							in e
State: CA	Zip:	Project #: 41060001	— water (SL)	BE by 8021B,	by 8	EL t	ist v	BE/C	by	GC/	by 8		Pc	
COP Manager: Thomas Kosel S		Sampler Name:	ampler Name:			AS	DIESEL by 8015		MT		l by	EDC		Loni
Lab#	Sample Description	Field Point Name	Date & Time Sampled		BTEX/MTBE	TPH GAS by 8015M	трн с	8260 1	BTEX/MTBE/OXYS	ETHANOL	TPH-g by GC/MS	EDB/EDC		Turna
	-	MW-2A	08-30-06 0832	GW					Х	X	Х	<del> </del>		STD
	-2	MW-3	08/3	GW					X	X	Х			STD
	-3	MW-4	0801	GW					Х	Х	Х			STD
	-4	MW-5	0635	GW					Х	Х	Х			STD
	-5	MW-6	V 0828	GW					Х	Х	Х			STD
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A) = ANALY	(C) = CC	ONTAINER (P)	PRESEŘVÁŤIVE	Stalle 3	131;	, s	d	tell		2	<del></del>	PF		2/2

#### **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 Onyx Transportation, Inc., 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 containing a significant amount of liquid -phase hydrocarbons was accumulated separately in drums for transportation and disposal by Filter Recycling, Inc.

#### Limitations

The fluid level monitoring and groundwater sampling activities summarized in this report have been performed under the responsible charge of a California Registered Geologi st or Registered Civil Engineer and have been conducted in accordance with curr ent 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.