RO450



6602 Owens Dr. Suite 100 Pleasanton, California 94588 www.atc-enviro.com 925.460.5300 Fax 925.463.2559

April 29, 2005

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

Re: Quarterly Summary Report – First Quarter 2005

76 Service Station No. 0843 / WNO 2807

1629 Webster Street Alameda, CA

- -----

Dear Mr. Hwang:

On behalf of ConocoPhillips Company, ATC Associates Inc. is forwarding the quarterly summary report for the above referenced facility.

Sincerely,

ATC ASSOCIATES INC.

David A. Evans

Senior Project Manager

Janine Weber-Band, Pl

CERTIFIED ENGINEERING

Principal Geologist

Attachment:

Site Plan

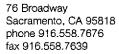
Quarterly Monitoring report, prepared by TRC

Cc:

Mr. Thomas Kosel - ConocoPhillips

Mr. George Levya, RWQCB - SF Bay Region, 1515 Clay Street, Suite 1400, Oakland,

CA 94612





April 27, 2005

Mr. Don Hwang Alameda County Health Agency 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Re: Document Transmittal

Fuel Leak Case 76 Station #0843 1629 Webster Street Alameda, CA

Dear Mr. Hwang:

Please find attached ATC's Quarterly Summary Report, dated 4/29/05, and TRC's Quarterly Monitoring Report, dated 4/8/05 for the above referenced site. I declare, under penalty of perjury, that to the best of my knowledge the information and/or recommendations contained in the attached proposal or report are true and correct.

If you have any questions or need additional information, please call me at (916) 558-7666.

Sincerely,

Thomas H. Kosel

Site Manger, Risk Management and Remediation

ConocoPhillips

76 Broadway, Sacramento, CA 95818

Attachment

cc: Dave Evans, ATC

QUARTERLY SUMMARY REPORT First Quarter 2005

76 Service Station No. 0843 / WNO 2807 1629 Webster Street Alameda, CA

City/County ID#:

Alameda

County:

Alameda

PREVIOUS SITE ACTIVITY

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.

<u>March 2001</u> - An underground utility survey was conducted to identify and located underground utilities beneath and in the vicinity of the site that may 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 may provide preferential pathways for groundwater flow and the migration of dissolved hydrocarbons. The results of the investigation indicated that there was insufficient evidence to suggest 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 vadous zone beneath the site.

<u>December 2002</u> - One on-site monitoring well (MW-2) was installed, a remedial excavation of hydrocarbon-impacted soil was completed in the vicinity of the former eastern dispenser island, and MW-2 was replaced with on-site backfill monitoring well MW-2A.

<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, which also included plans to destroy the existing wells upon regulatory acceptance for no further action.

June 2004 – A Work Plan was submitted to install one monitor well down gradient of MW-5.

January 2005 – ATC became the new lead consultant.

SENSITIVE RECEPTORS

<u>June/July 2002</u> - A groundwater receptor survey was conducted. Three irrigation wells were located within a ½ - mile radius of the site. The wells were reportedly located approximately 1,980 feet west and 2,245 feet southwest of the site, cross or upgradient of the site.

GROUNDWATER MONITORING AND SAMPLING

Quarterly groundwater monitoring and sampling were initiated in March 1999. During the most recent groundwater sampling event conducted on March 11, 2005, depth to groundwater ranged from 4.61 feet (MW-4) to 5.52 feet (MW-2A) below top of casing (TOC). The groundwater flow direction was reported towards the northeast at a gradient of 0.007 ft/ft. Maximum dissolved groundwater concentrations were present as follows: TPPH (92 ug/l in MW-2A), benzene (<10 ug/ in MW-6), and MtBE (2,500 ug/l in MW-6).

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 were removed from beneath the former eastern island during the December 2002 excavation.

CHARACTERIZATION STATUS

Based on the most current (March 11, 2005) and historic dissolved analytical data, MtBE is not defined offsite cross gradient (east-west) of MW-6 and down gradient (north) of onsite well MW-4. Upgradient monitor well, MW-1, contained 27 ug/l of MtBE on March 11, 2005. An expanded monitor well network is needed to define the dissolved MtBE offsite and downgradient of the site.

RECENT CORRESPONDENCE

There was no correspondence during the reporting period.

THIS QUARTER ACTIVITIES (First Quarter 2005)

- 1. ATC Associates Inc. (ATC became the new lead consultant for the site.
- 2. The monitoring well network was sampled by TRC Companies Inc.

WASTE DISPOSAL SUMMARY

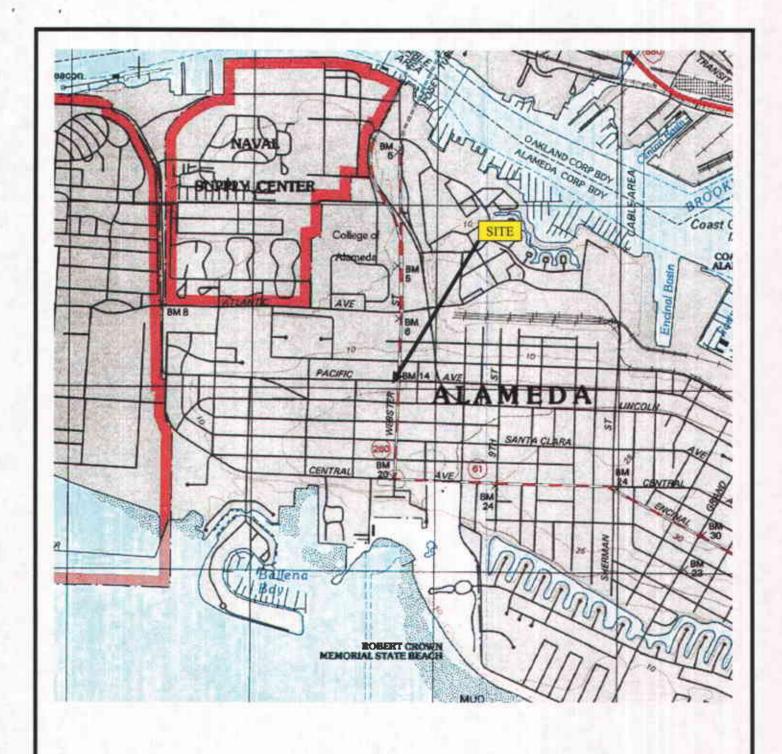
No waste disposition occurred this quarter.

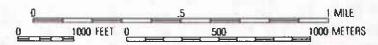
NEXT QUARTER ACTIVITIES (Second Quarter 2005)

1. The well network will be sampled by TRC.

2. Pending regulatory approval of Miller Brooks' Work Plan for Additional Subsurface Site Assessment Activities dated June 23, 2004, ConocoPhillips plans to install one groundwater monitor well northwest of MW-5 in an attempt to delineate the northern extent of the hydrocarbon plume and determine if subsurface utilities are acting as a preferential pathway for hydrocarbon migration. Additionally, ATC will contact the Alameda County Department of Public Health to request that two additional wells (east and west, respectively, of MW-6) are included in this approval.

CONSULTANT: ATC Associates Inc.





SOURCE: USGS OAKLAND EAST QUADRANGLE, CALIFORNIA (7.5 MINUTE SERIES) TOPOGRAPHIC MAP. OBTAINED FROM THE 2000 NATIONAL GEOGRAPHIC TOPO! SOFTWARE



6602 Owens Drive, Suite 100 Pleasanton, CA 94588 (925) 460-5300

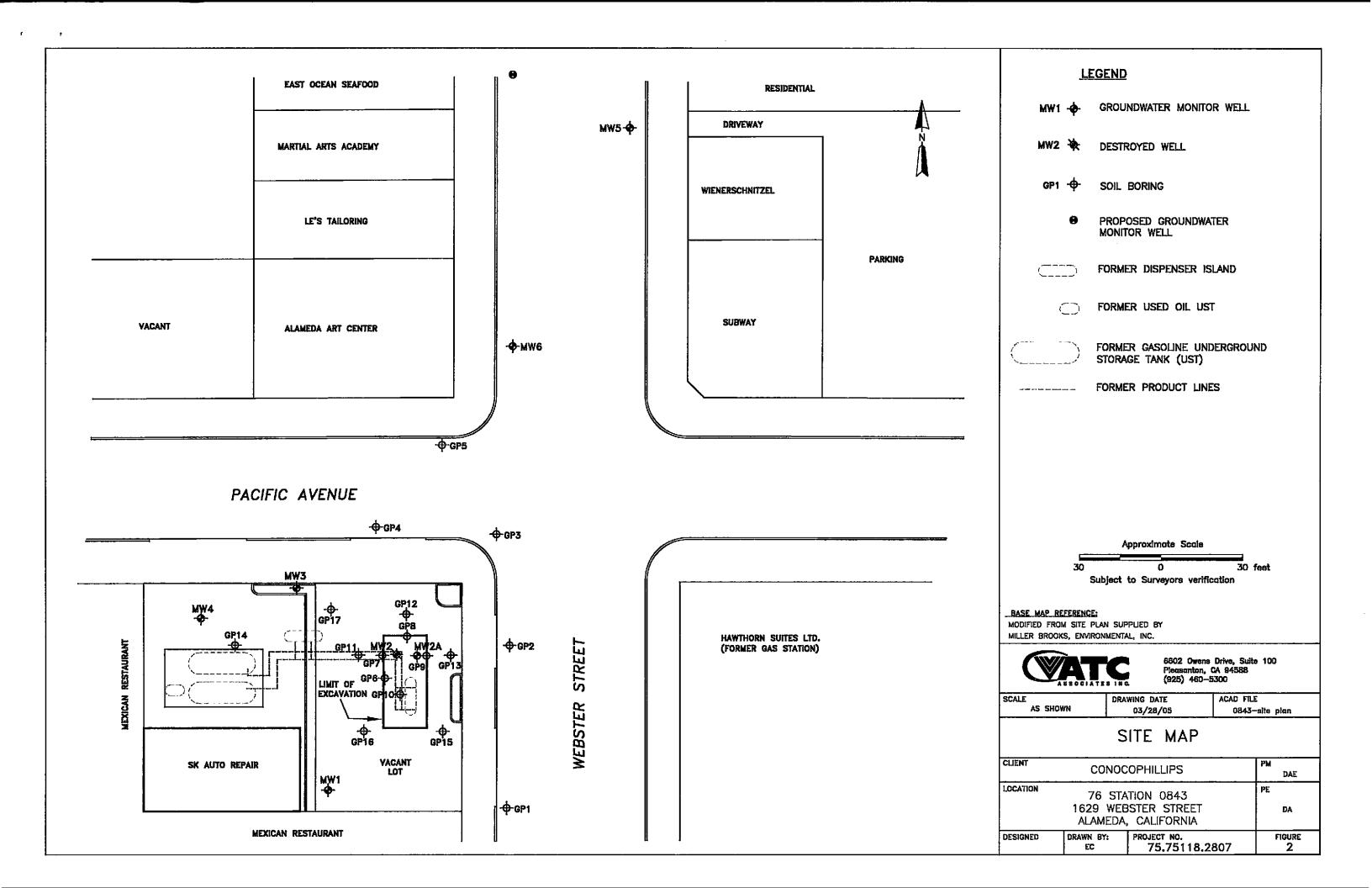
PROJECT NO: 75,75118.2807

DESIGNED BY: DE SCALE:N/A REVIEWED BY: DE
DRAWN BY: EC DATE: 03/05 FILE: 0843 SITE VIC

FIGURE 1

SITE VICINITY MAP

76 STATION 82349 (0843) 1629 WEBSTER STREET ALAMEDA, CALIFORNIA





April 8, 2005

ConocoPhillips Company 76 Broadway Sacramento, CA 95818

ATTN:

MR, THOMAS H. KOSEL

SITE:

FORMER 76 STATION 0843

1629 WEBSTER STREET ALAMEDA, CALIFORNIA

RE:

QUARTERLY MONITORING REPORT

JANUARY THROUGH MARCH 2005

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. Dave Evans, ATC Associates Inc. (3 copies)



QUARTERLY MONITORING REPORT JANUARY THROUGH MARCH 2005

Former 76 Station 0843 1629 Webster Street Alameda, California

Prepared For:

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

By:

Senior Project Geologist, Irvine Operations April 8, 2005

	LIST OF ATTACHMENTS
Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Table 1: Current Fluid Levels and Selected Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 3: Additional Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPPH 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 Groundwater Sampling Field Notes
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

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Summary of Gauging and Sampling Activities January 2005 through March 2005 Former 76 Station 0843 1629 Webster Street Alameda, CA

Project Coordinator: Thor Telephone: 916 -		Water Sampling C Compiled by: V a	
Date(s) of Gauging/Sampli		•	
Sample Points			·
Groundwater wells: Purging method: Diaphra Purge water disposal: Ony Other Sample Points: 0	- -	Wells gauged: 6	Wells sampled: 6
Liquid Phase Hydrocarb			
	ximum thickness (feet) n/a vater/LPH: n/a	m: n/a Method: n/a	
Hydrogeologic Paramet	ers		
Depth to groundwater (bel Average groundwater eleva Average change in ground Interpreted groundwater g Current event: 0.007 Previous event: 0.007	ation (relative to availa water elevation since p radient and flow direct rft/ft, northeast	ble local datum): 9.93 feer revious event: 0.93 feer ion:	
Selected Laboratory Res	sults		
Wells with detected Benze Maximum reported ben		Wells above MCL (1.0 μ).84 μg/l (MW-2A)	ıg/l): 0
Wells with TPPH 8260B Wells with MTBE	1 2	Maximum: 92 μg/l (N Maximum: 2,500 μg/	
Notes:			

TABLES

TABLE KEY

STANDARD ABREVIATIONS

-- = not analyzed, measured, or collected

LPH = liquid-phase hydrocarbons

Trace = less than 0.01 foot of LPH in well

mg/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

TBA = tertiary butyl alcohol
TCA = trichloroethane
TCE = trichloroethane

TPH-G = total petroleum hydrocarbons with gasoline distinction TPH-D = total petroleum hydrocarbons with diesel distinction

TPPH = total purgeable petroleum hydrocarbons
TRPH = total recoverable petroleum hydrocarbons

TAME = tertiary amyl methyl ether

1,1-DCA = 1,1-dichloroethane

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

1,1-DCE = 1,1-dichloroethene

1,2-DCE = 1,2-dichloroethene (cis- and trans-)

NOTES

- 1. Elevations are in feet above mean sea level. Depths are in feet below surveyed top-of-casing.
- 2. Groundwater elevations for wells with LPH are calculated as: Surface Elevation Measured Depth to Water + (Dp x LPH Thickness), where Dp is the density of the LPH, if known. A value of 0.75 is used for gasoline and when the density is not known. A value of 0.83 is used for diesel.
- 3. Wells with LPH are generally not sampled for laboratory analysis (see General Field Procedures).
- 4. Comments shown on tables are general. Additional explanations may be included in field notes and laboratory reports, both of which are included as part of this report.
- 5. A "J" flag indicates that a reported analytical result is an estimated concentration value between the method detection limit (MDL) and the practical quantification limit (PQL) specified by the laboratory.
- 6. Other laboratory flags (qualifiers) may have been reported. See the official laboratory report (attached) for a complete list of laboratory flags.
- 7. Concentration graphs based on tables (presented following Figures) show non-detect results prior to the Second Quarter 2000 plotted at fixed values for graphical display. Non-detect results reported since that time are plotted at reporting limits stated in the official laboratory report.
- 8. Groundwater vs. Time graphs may be corrected for apparent level changes due to 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.

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 11, 2005

Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G	TPPH 8260B	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μ g /l)	$(\mu g/l)$	$(\mu g/l)$	(μg/l)	
MW-1		(Screen I	nterval in f	eet: 4.5-20	0.5)									
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	
MW-2A		(Screen I	nterval in f	eet: 5-11.:	5)									
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	
MW-3		(Screen I	nterval in f	eet: 5.0-20	0.0)									
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	
MW-4		(Screen I	nterval in f	eet: 5.0-20	0.5)									
03/11/0	5 15.17	4.61	0.00	10.56	1.40		Ni><50	ND<0.50	ND<0.50	ND<0.50	ND<1.0		ND<0.50	
MW-5		(Screen I	nterval in f	eet: 5-20)										
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	
MW-6		(Screen Interval in feet: 5-20)												
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	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through March 2005
Former 76 Station 0843

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)		Change in Elevation (feet)	TPΗ-G (μg/l)	TPPH 8260Β (μg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl- benzene (µg/l)	Total Xylenes (μg/l)	MTBE 8021B (μg/l)	MTBE 8260Β (μg/l)	Comments
1077.4						(μg1)	(με/1/	(μβ/1)	(46/1)	(μg/1)	(µg/)	(μg/1)	(μg/1)	
MW-1 03/05/9			erval in fee 	et: 4.5-20.5 		86.6		ND	2.04	ND	4.06		23.9	
06/03/9			0.00	9.94		ND		ND	ND	ND	ND	ND	ND	
09/02/9				8.99	-0.95	ND		ND	ND	ND	ND	ND	ND	
12/14/9			0.00	8.11	-0.88	ND		ND	ND	ND	ND	ND		
03/14/0			0.00	10.71	2.60	ND		ND	ND	ND	ND	ND		
05/31/0			0.00	9.96	-0.75	ND		ND	ND	ND	ND	ND		
08/29/0	00 16.18			9.36	-0.60	ND		ND	ND	ND	ND	ND		
12/01/0	00 16.18	7.54	0.00	8.64	-0.72	ND		ND	ND	ND	ND	ND		
03/17/0	01 16.18	5.73	0.00	10.45	1.81	ND		ND	ND	ND	ND	ND		
05/23/0	01 16.18	6.43	0.00	9.75	-0.70	ND		ND	ND	ND	ND	ND		
09/24/6	01 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	01 16.18	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/	02 16.18	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/	02 16.18	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/	02 16.18	3		••										Not monitored/sampled
12/12/	02 16.18	7.80	0.00	8.38										No longer sampled
03/13/	03 16.18	5.94	0.00	10.24	1.86									
06/12/	03 16.18	6.10	0.00	10.08	-0.16									
09/12/	03 16.18	6.65	0.00	9.53	-0.55									
12/31/	03 16.18	5.74	0.00	10.44	0.91									Monitored Only
02/12/	04 16.18	6.02	0.00	10.16	-0.28									Monitored Only
06/07/	04 16.18	6.61	0.00	9.57	-0.59									Monitored Only
09/17/	04 16.18	7.58	0.00	8.60	-0.97									Sampled Annually
12/11/	04 16.18	6.49	0.00	9.69	1.09									Sampled Annually

Page 1 of 7

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through March 2005
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G	TPPH 8260B	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 03/15/6	continue 05 16.18		0.00	10.90	1.21		ND< 5 0	ND<0.50	ND<0.50	ND<0.50	ND<1.0		27	···
MW-2	(Screen Int	terval in fee	t: 4.5-20 5	a									
03/05/9			0.00			34400		2070	7710	2340	8240		8 460	
06/03/9	99 15.57	5.96	0.00	9.61		51200		1820	7570	2510	7320	6460	8800	
09/02/9	99 15.57	6.85	0.00	8.72	-0.89	17000		1000	3100	1400	3700	4000	3720	
12/14/9	99 15.57	7.65	0.00	7.92	-0.80	83000		3000	22000	4500	17000	9100	11000	
03/14/0	00 15.57	5.26	0.00	10.31	2.39	31000		1600	4600	2300	7300	5700	87 00	
05/31/0	00 15.57	5.60	0.00	9.97	-0.34	9970		598	1030	487	2060	2500	1670	
08/29/0	00 15.57	6.35	0.00	9.22	-0.75	7900		390	1500	280	1900	1800	1300	
12/01/0	00 15.57	7.06	0.00	8.51	-0.71	87500		1 8 60	17400	5590	19400	6220	3790	
03/17/0	01 15.57	5.98	0.00	9.59	1.08	4310		371	59.0	280	682	321	433	
05/23/	01 15.57	6.97	0.00	8.60	-0.99	45400		374	4490	2790	10900	ND	406	
09/24/	01 15.57	7.56	0.00	8.01	-0.59	76000		430	13000	4700	18000	ND<2000	480	
12/10/	01 15.57	6.52	0.00	9.05	1.04	82 000		320	9100	4400	16000	ND<2500	270	
03/11/	02 15.57	5.51	0.00	10.06	1.01	14000		75	1400	1100	3600	ND<250	150	
06/07/	02 15.57	5.73	0.00	9.84	-0.22	14000		120	1200	1400	4700	540	200	
09/03/	02 15.57	6.81	0.00	8.76	-1.08	10000		150	1200	610	2800	510	460	
12/12/	02 15.57											**	-+	Destroyed, replaced with MW-2A
MW-2a	(Screen In	terval in fee	et: 5-11.5)										
12/12/	02 15.56	7.45	0.00	8.11		3400		80	260	210	1000	380	400	
03/13/	03	5.85	0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	1.8	2.4	2.4	
06/12/	03	6.08	0.00			ND<50		0.59	0.69	ND<0.50	1.2	6.0	4.7	
09/12/	03 15.56	6.54	0.00	9.02			120	1.8	4.2	6.1	20		6.6	

Page 2 of 7

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through March 2005
Former 76 Station 0843

Date Sampled		Depth to Water	LPH Thickness	water	Change in Elevation	TPH-G	TPPH 8260B	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)	$(\mu g/l)$	(μg/l)	(μg/l)	(µg/l)	
MW-2A		ed							•					
12/31/0		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		6.21	0.00	9.35	-0.53	94		0.80	1.2	2.1	9.1	4.5	3.7	
09/17/0	4 15.56	7.16	0.00	8.40	-0.95		230	3.5	6.1	13	41		83	
12/11/0	4 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	
MW-3	(Screen Int	erval in fee	t: 5.0-20.0	1)						•			
03/05/9	9 15.11		0.00			135		ND	ND	ND	4.84		2.46	
06/03/9	9 15.11	5.57	0.00	9.54		ND	**	ND	ND	ND	ND	5.23	12.7	
09/02/9	9 15.11	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		
03/14/0	0 15.11	4.87	0.00	10.24	2.41	ND		ND	ND	ND	ND	7.2	6.3	
05/31/0	0 15.11	5.58	0.00	9.53	-0.71	ND		ND	ND	ND	ND	ND		
08/29/0	0 15.11	6.06	0.00	9.05	-0.48	ND		ND	ND	ND	ND	ND	ND	
12/01/0	0 15.11	6.76	0.00	8.35	-0.70	ND		ND	ND	ND	ND	ND		
03/17/0	1 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	2 15.11	7.15	0.00	7.96										No longer sampled
03/13/0	3 15.11	5.37	0.00	9.74	1.78									
06/12/0	3 15.11	5.51	0.00	9.60	-0.14									

Page 3 of 7

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through March 2005
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	TPH-G	TPPH 8260B	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	continue													-
09/12/0		6.03	0.00	9.08	-0.52									
12/31/0		5.62	0.00	9.49	0.41									Monitored Only
02/12/0		5.51	0.00	9.60	0.11									Monitored Only
06/07/0	4 15.11	5.92	0.00	9.19	-0.41									Monitored Only
09/17/0									-					Unable to locate
12/11/0	4 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	
MW-4		Screen Int	erval in fee	t: 5.0-20.5)						•			
03/05/9	9 15.17		0.00			ND		ND	ND	ND	2.44		25.2	
06/03/9	9 15.17	5.45	0.00	9.72		ND		ND	ND	ND	ND	ND	3.96	
09/02/9	9 15.17	6.48	0.00	8.69	-1.03	ND		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	00 15.17	4.67	0.00	10.50	2.60	ND		ND	ND	ND	ND	46	49	
05/31/0	00 15.17	5.48	0.00	9.69	-0.81	ND		ND	ND	ND	ND	ND		•
08/29/0	00 15.17	6.10	0.00	9.07	-0.62	ND		ND	ND	ND	ND	6.1	3.2	
12/01/0	00 15.17	6.79	0.00	8.38	-0.69	ND		ND	ND	ND	ND	152	101	
03/17/0	15.17	5.01	0.00	10.16	1.78	ND		ND	ND	ND	ND	ND		
05/23/0	15.17	5.78	0.00	9.39	-0.77	ND		ND	ND	ND	ND	ND		
09/24/0	15.17	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	15.17	6.41	0.00	8.76	0.01	ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	1700	1300	
03/11/0	2 15.17	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		
06/07/0	2 15.17	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		
09/03/0	15.17	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		
12/12/0	15.17	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	

Page 4 of 7

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through March 2005
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G	TPPH 8260B	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	l												
03/13/0	3 15.17	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		
06/12/0	3 15.17	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		
09/12/0	3 15.17	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	
12/31/0	3 15.17	5.63	0.00	9.54	0.44	750		ND<5.0	ND<5.0	ND<5.0	ND<5.0	790		
02/12/0	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		
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	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	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	
MW-5	(Screen Int	terval in fee	et: 5-20)										
12/14/9	9 13.34	6.45	0.00	6.89		ND		ND	ND	ND	ND	3.5	3.8	
03/14/0	00 13.34	4.46	0.00	8.88	1.99	ND		ND	ND	ND	ND	ND	-+	
05/31/0	00 13.34	5.18	0.00	8.16	-0.72	ND		ND	ND	ND	ND	ND		
08/29/0	00 13.34	5.46	0.00	7.88	-0.28	ND		ND	ND	ND	ND	ND		
12/01/0	00 13.34	5.95	0.00	7.39	-0.49	ND		ND	ND	ND	ND	ND		
03/17/0	01 13.34	5.36	0.00	7.98	0.59	ND		ND	ND	ND	ND	ND		
05/23/0	13.34	5.09	0.00	8.25	0.27	ND		ND	ND	ИD	ND	ND		
09/24/0	13.34	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	01 13.34	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		
03/11/0	02 13.34	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		
06/07/0	02 13.34													Inaccessible - paved over
09/03/0	02 13.34									brah.	+=			Inaccessible - paved over
12/12/0	02 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		
03/13/0	03 13.34	5.12	0.00	8.22	1.30	ND<50		ND<0.50	0.54	ND<0.50	ND<0.50	ND<2.0		

Page 5 of 7

0843

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through March 2005
Former 76 Station 0843

	Date Sampled	Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G	TPPH 8260B	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 06/12/0	continued 3 13.34		0.00	8.10	0.13	ND<50		NID <0.50	NTD <0.50	NTD -0 -80	NII) -0 60	NIIN Zi N			
	09/12/0		5.24 5.53	0.00	7.81	-0.12		 NTD <60	ND<0.50	ND<0.50	ND<0.50 ND<0.50	ND<0.50 ND<1.0	ND<2.0	 ND-210		
	12/31/0		5.11	0.00	8.23	-0.29 0.42	 ND<50	ND<50		ND<0.50	ND<0.50	ND<0.50	 ND<5.0	ND<2.0		
	02/12/0		5.02	0.00	8.32	0.42	ND<50			ND<0.50		ND<0.50	ND<5.0			
	06/07/0		5.35	0.00	7.99	-0.33	ND<50		ND<0.30	ND<0.30	ND<0.30	ND<0.30	ND<1			
	09/17/0		6.10	0.00	7.24	-0.75	 06><141		ND~0.3	N13~0.3	ND~0.5	NLX-0.0	1/17~1			Sampled Annually
	12/11/0		5.53	0.00	7.24	0.73				••						Sampled Annually
	03/11/0		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		Sampled Amidany
_						0.57		ND-30	ND<0.50	ND<0.50	ND~0.50	14D<1.0		ND~0.50		
ľ	MW-6 12/14/9	•	Screen Int 6.64	erval in fee 0.00	et: 5-20) 7.44		ND		ND	ND	ND	ND	11000	18000		
	03/14/0		4.72	0.00	9.36	1.92	ND		ND	ND	ND.	ND ND	19000	21000		
	05/31/0		5.28	0.00	8.80	-0.56	ND		ND	ND	ND	ND	13200			
	08/29/0		5.39	0.00	8.69	-0.11	ND		ND	ND	ND	ND	270	400	•	
	12/01/0		6.11	0.00	7.97	-0.11	ND		ND	ND	ND	ND	6330	3640		
	03/17/0			0.00	8.06	0.09	18700		2950	989	1040	3000	10200	11500		
	05/23/0			0.00	8.26	0.20	ND		2930 ND	ND	ND	ND	4660			
	09/24/0			0.00	7.49	-0.77	ND<50			ND<0.50	ND<0.50		160	 190		
	12/10/0			0.00	7.58	0.09	ND<50			ND<0.50		ND<0.50	3200	2400		
	03/11/0			0.00	9.27	1.69	ND<50			ND<0.50		ND<0.50	92	120		
	06/07/0				9.21	1.09			ND~0.50	ND<0.50	OC.O~UM	ND~0.50				Inaccessible - paved over
	09/03/0															Inaccessible - paved over
	12/12/0			0.00	7.57		590		ND<0.50	ND<0.50	ND<0.50	ND<0.50	1500	6200		maccessione - paved over
	03/13/0			0.00	8.88	1.31	1600		ND<5.0	ND<5.0	ND<5.0	ND<5.0	4900	4100		
1	03/13/0 D 03/13/0			0.00	8.88	0.00			MD~2.0	ND~5.0	ט.כ~עמ	1417~2.0		5100		
,	× 03/13/0	5 14.08	3.20	0.00	0.00	0.00	••	••						2100		

Page 6 of 7

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
March 1999 Through March 2005
Former 76 Station 0843

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	TPH-G	TPPH 82 60B	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-6	continue	1								:				
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	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	3 300		ND<25	ND<25	ND<25	ND<25	3800 -		
02/12/0	14.08	5.06	0.00	9.02	0.32	1100		ND<10	ND<10	ND<10	ND<10	1900	2800	
06/07/0	14.08	5.45	0.00	8.63	-0.39	2500		ND<3	ND<3	ND<3	ND<6	3200	2900	
09/17/0	14.08	6.20	0.00	7.88	-0.75		1300	ND<10	ND<10	ND<10	ND<20		2000	
12/11/0	04 14.08	5.60	0.00	8.48	0.60		1800	ND<10	NI)<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	

Table 3
ADDITIONAL ANALYTICAL RESULTS
Former 76 Station 0843

Date Sampled	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	
	(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<0.50	ND<5.0	ND<0.50	ND<0.50	ND<50	
MW-2	•							
09/02/99			ND	ND	ND	ND	ND	
12/14/99	ND	ND	ND	CIN	ND	ND	ND	
03/14/00	ND	ND	ND	1300	ND	ND	ND	
05/31/00	ND	ND	ND	ND	ND	ND	ND	
08/29/00	ND	ND	ND	250	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<100	ND<100	ND<100	ND<5000	ND<100	ND<100	ND<50000000	
12/10/01	ND<25	ND<25	ND<25	ND<500	ND<25	ND<25	ND<12000000	
03/11/02	ND<20	ND<20	ND<20	ND<1000	ND<20	ND<20	ND<5000000	
06/07/02	ND<25	ND<25	ND<25	ND<1000	ND<25	ND<25	ND<2000000	
09/03/02	ND<20	ND<20	ND<20	N1><1000	ND<20	ND<20	NI><5000000	
MW-2a								
12/12/02	2.3	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500000	
03/13/03	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500000	
06/12/03	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500000	
09/12/03	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	
12/31/03	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	
02/12/04	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500	
06/07/04	ND<0.5	ND<0.5	ND<1	ND<12	ND<1	ND<1	ND<800	
09/17/04			ND<0.50	6.7	ND<1.0	ND<0.50	ND<50	
12/11/04			NID<0.50	ND<5.0	ND<1.0	ND<0.50	ND<50	

0843

Page 1 of 3

Table 3
ADDITIONAL ANALYTICAL RESULTS
Former 76 Station 0843

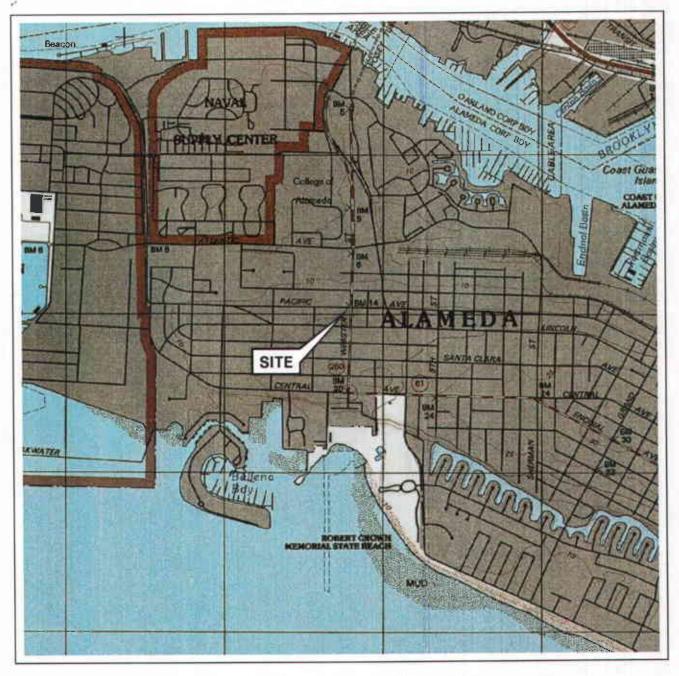
Date Sampled	EDC	EDB	TAME 82 60B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	
	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	
MW-2A 03/15/05	continued		ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<50	
MW-3								
09/02/99			ND	ND	ND	ИŊ	ND	
03/11/05			ND<0.50	ND<5.0	NID<0.50	ND<0.50	ND<50	
MW-4								
09/02/99			ND	ND	ND	ND	ND	
12/10/01	ND<14	ND<14	ND<14	ND<290	ND<14	ND<14	ND<7100000	
12/12/02	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500000	
09/12/03							ND<500	
09/17/04			ND<0.50	ND<5.0	ND<1.0	ND<0.50	ND<50	
12/11/04			ND<2.5	ND<25	ND<5.0	ND<2.5	ND<250	
03/11/05			ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<50	
MW-5								
09/12/03							ND<500	
03/11/05			ND<0.50	ND<5.0	ND<0.50	ND<0.50	ND<50	
MW-6								
03/17/01	219	ND	ND	ND	ND	ND	ND	
09/24/01	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<1000000	
12/10/01	ND<25	ND<25	ND<25	ND<500	ND<25	ND<25	ND<12000000	
03/11/02	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500000	
12/12/02	ND<200	ND<200	ND<200	ND<10000	ND<200	ND<200	ND<50000000	
03/13/03	ND<100	ND<100	ND<100	ND<5000	ND<100	ND<100	ND<25000000	
06/12/03	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40	ND<10000000	
09/12/03							ND<2500	
. 02/12/04	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40	ND<10000	

Page 2 of 3

Table 3
ADDITIONAL ANALYTICAL RESULTS
Former 76 Station 0843

Date Sampled	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B
,	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)
	continued	· (PB/+)	\r*8**/	(1.0.1)	(48.4)	(FB+)_	VFB**7
06/07/0	4 ND<5	ND<5	ND<10	ND<200	ND<10	ND<10	ND<8000
09/17/0	4		ND<10	ND<100	ND<20	ND<10	MD<1000
12/11/0	4		ND<10	ND<100	ND<20	ND<10	ND<1000
03/11/0	5		ND<10	ND<100	ND<10	ND<10	ND<1000

FIGURES







SCALE 1:24,000

SOURCE:

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

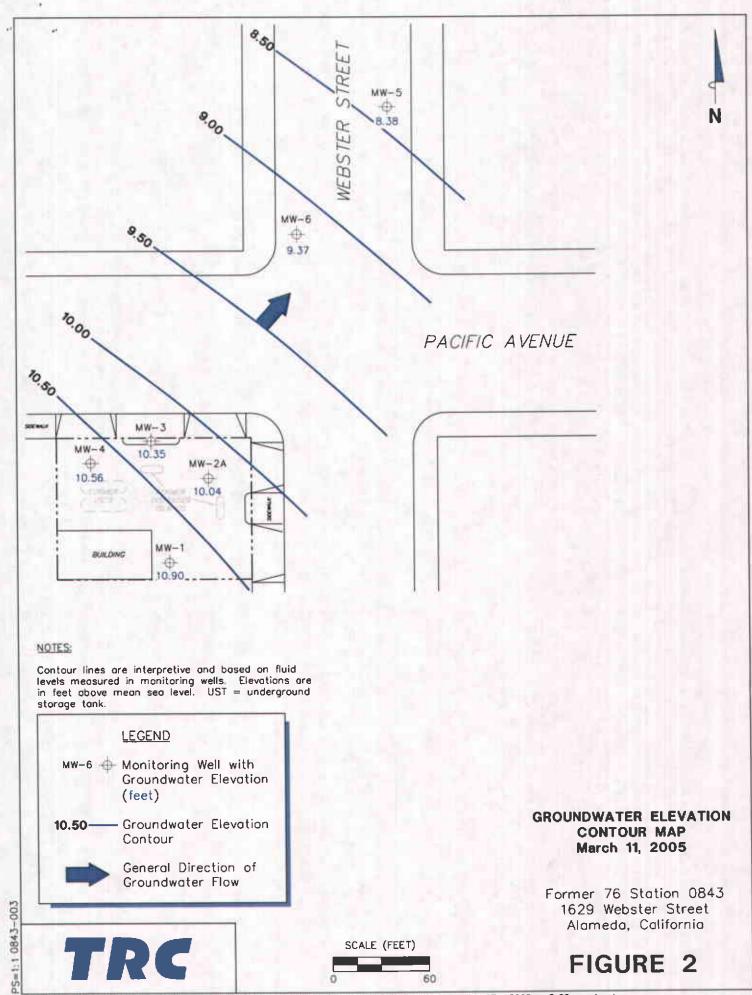


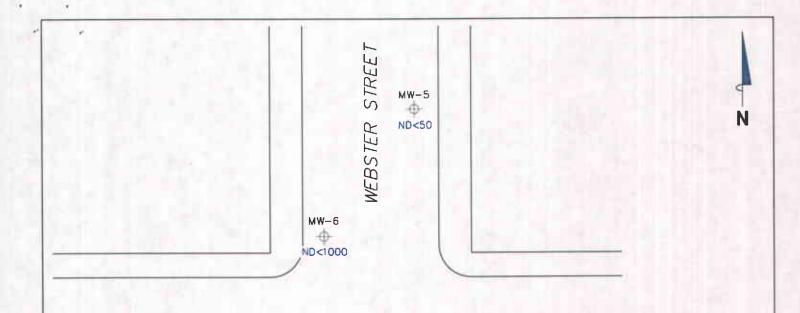


VICINITY MAP

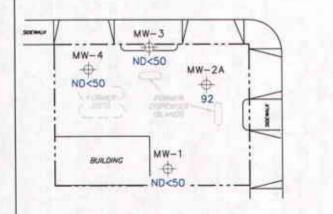
Former 76 Station 0843 1629 Webster Street Alameda, California

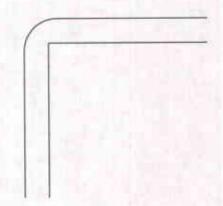
FIGURE 1





PACIFIC AVENUE





NOTES:

TPPH = total purgeable petroleum hydrocarbons. µg/l = micrograms per liter. ND = not detected at limit indicated on afficial laboratory report. UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

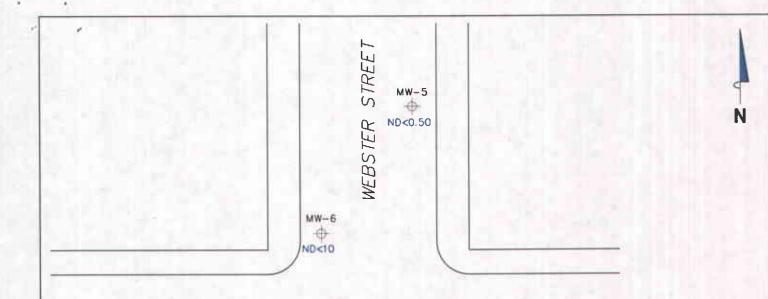
MW-6 Monitoring Well with Dissolved-Phase TPPH Concentration (µg/1)

DISSOLVED-PHASE TPPH **CONCENTRATIONS MAP** March 11, 2005

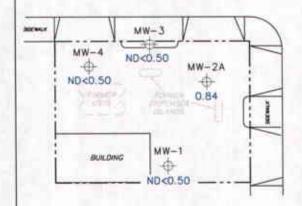
Former 76 Station 0843 1629 Webster Street Alameda, California

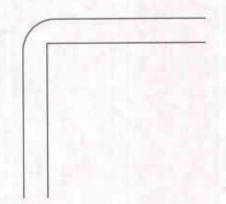


FIGURE 3



PACIFIC AVENUE





NOTES:

PS=1:1 0843-003

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

LEGEND

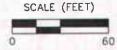
MW−6 → Monitoring Well with
Dissolved—Phase Benzene
Concentrations (µg/l)

DISSOLVED-PHASE BENZENE CONCENTRATIONS MAP March 11, 2005

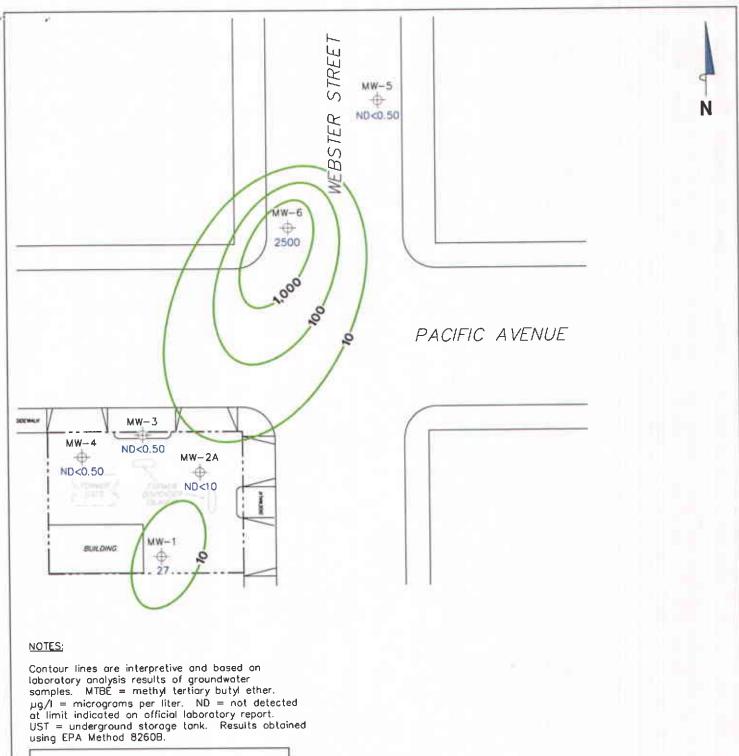
Former 76 Station 0843 1629 Webster Street Alameda, California

FIGURE 4

TRC



L \Graphics\ProjectsByNumber\20-xxxx\20-0400(UnocolOMS)\x-0000\0843+\0843_QMS.DWG Apr 07, 2005 - 5:01pm rdsantos



LEGEND

MW-6 Monitoring Well with
Dissolved-Phase MTBE
Concentration (µg/1)

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

DISSOLVED-PHASE MTBE CONCENTRATIONS MAP March 11, 2005

Former 76 Station 0843 1629 Webster Street Alameda, California

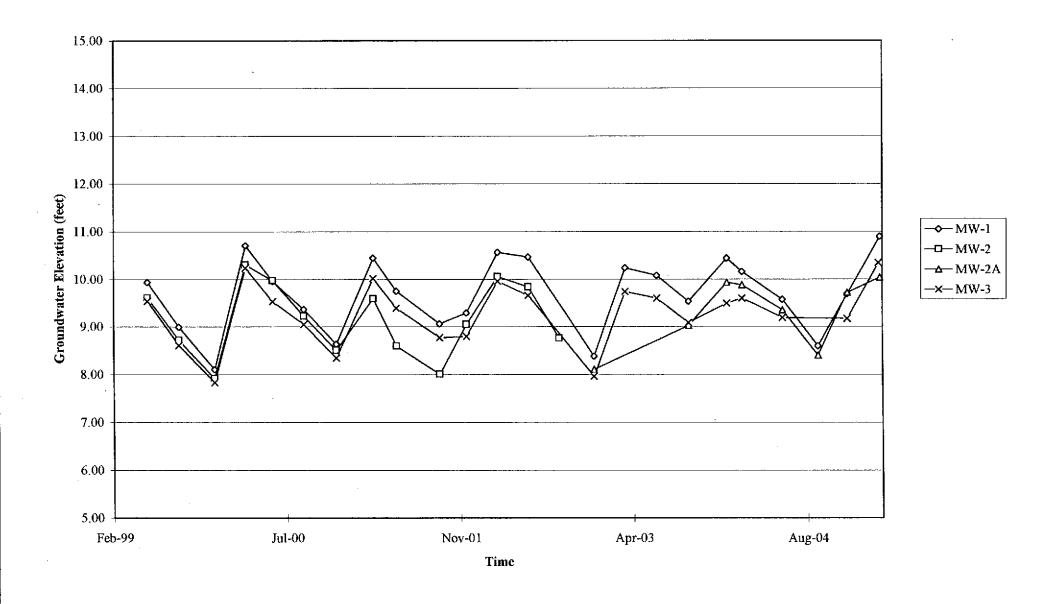
FIGURE 5



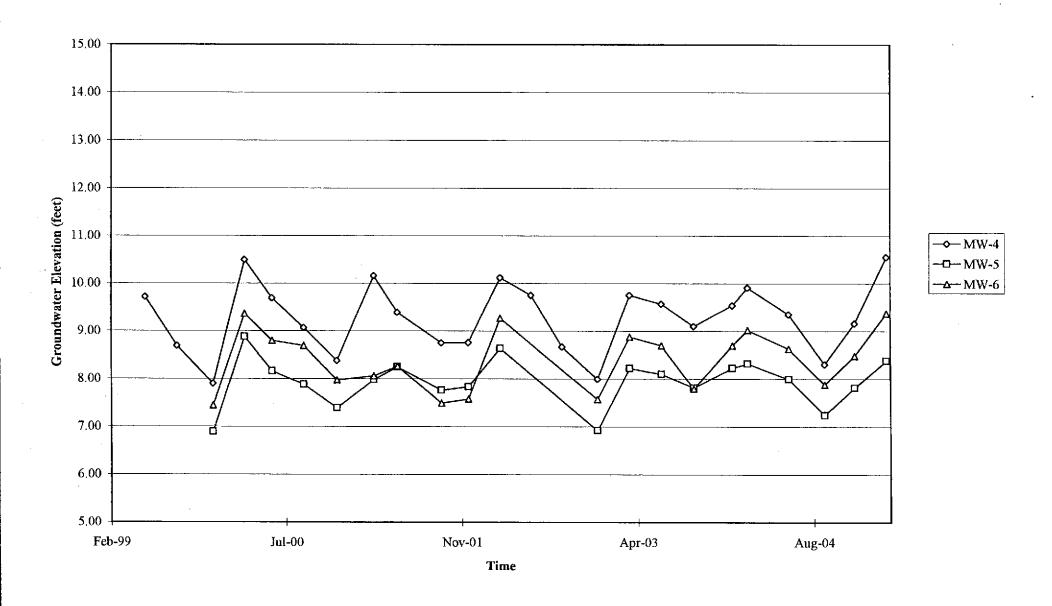
PS=1:1 0843-003

GRAPHS

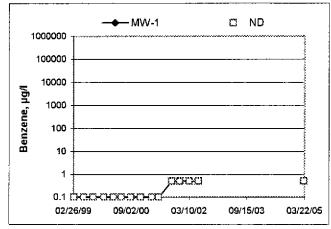
Groundwater Elevations vs. Time Former 76 Station 0843

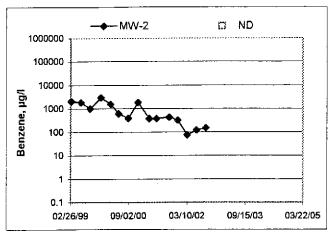


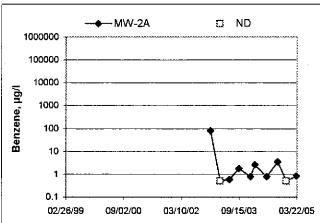
Groundwater Elevations vs. Time Former 76 Station 0843

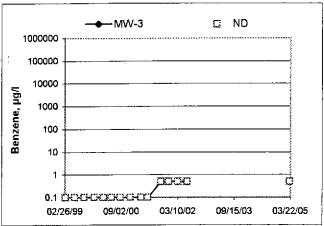


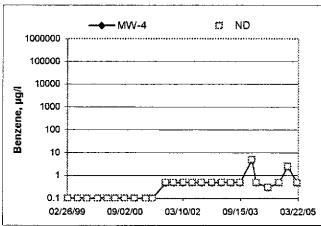
Benzene Concentrations vs Time Former 76 Station 0843

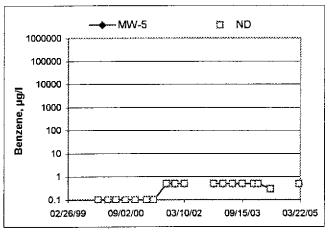


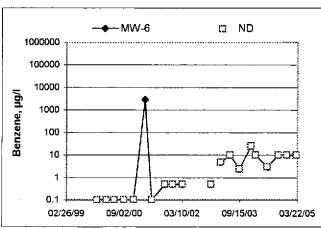












GENERAL FIELD PROCEDURES

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 pre vious 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 measurement 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-inchto 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, and the samplers 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 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 well 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 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.

1/5/04 version

FIELD MONITORING DATA SHEET

Technician:	Zi	10 D	. Job) #/Task #:	<u> 4105</u>	0001/	FAZU	Date:	111/05
Site #	081	13	Projec	t Manager	A -C	ollius	-	Page <u>1</u>	of
Well#	тос	Time Gauged	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Wel	I Notes
MW-9		0609	19.90	4.96			0644	4"(3)	
MW-6		0616	19.88				0659	2"(3)	
Mw-3		0623		4.76			0730	21/3) NO	Rolfs
MW-4		0628	18.97	4.6	•		0753	シャ/ツ	
MW-1		0000			-			UNADE +	CONSTRUCTION DACCESS
MW-2A									V
1 1 1 2 2 1									
	 -								
	_						•		
	-								
					-				
		·							
					_				
•									
FIELD DATA	COMPLE	TE	QA/QC		coc	WE	LL BOX CO	NDITION SHEE	TS
			MANIEES		DRUM INV	-NTORY	TRAF	FIC CONTROL	/

GROUNDWATER SAMPLING FIELD NOTES

٠			Technician:	Rick F	<u> 2</u>			
Site:	8-43		Project No.:			(Date: 3/1	1/05
	MW-5				DIA	-		
Well No.:N	er (feet):	91			uct (feet):_ O			
Depth to Wate	er (reer): 19.90	<u> </u>	-	I BU & Water i	Recovered (nall-	ons):	-	
Water Column	1 / 1	921		Casing Diame	ter (inches): 2	ζ.		
Water Column	e Depth (feet):_	7.95		1 Weil Volume	(gallons):	2		
80% Necharge	s pehin (iesi)-							
Time	Time	Depth	Volume	Conduc-	Temperature	рĦ	Turbidity	D.O.
Start	Stop	To Water (feet)	Purged (gallons)	tivity (uS/cm)	(F,(Ĉ))			
0,30		(1001)	2	420	110 5	194		
0638			11	3100	17.2	172		
			1	470	17.0	6.11		
	0640		6	429	14.1	6.73		 -
÷								
Stat	ic at Time Sam	pled	To	otal Gallons Pu	rged		Time Sample	ed
•	7-80				0	644		
Comments:	!							
Well No.:	MW-P			Purge Method	:DIP	\ -	<u> </u>	
Depth to Wate	er (feet): <u> </u>	71	_	Depth to Prod	uct (feet):			
Total Depth (fo	eet): <u>19.8</u>	8	_		Recovered (gal			ı
Water Column				Casing Diame	eter (Inches): $\frac{2}{2}$		·····	
80% Recharge	e Depth (feet):_	7.74		1 Well Volume	e (gallons):	<u> </u>		
T	Time	Donth	Volume	Conduc-	Temperature	<u> </u>		
Time Start	Time Stop	Depth To Water	Purged	tivity	, o.i.poidtoro	рН	Turbidity	D.O.
		(feet)	(gallons)	(uS/cm)	(F,C)_			
11654			2	450	16.9	6.51		
			4	451	16.6	6.51		
	0657		6	461	17.2	632		,3
Sta	tic at Time San	i npled	· T	otal Gallons Pu	ırged		Time Sample	ed
7	,51		(6.		0669			
Comments:				•	•			
ovamiento.				<u></u> -				
						_		

	GROUNDWATE	ER SAMPLING	G FIELD NOTE	ES		
1	Technician:	Dide	R			, .
Site: 0843	Project No.:	4109	10001		Date: <u>3/</u>	11/05
Well No.: MW-3		Purge Method	DIA			
Depth to Water (feet): 4.76		Depth to Produ	uct (feet):	 -		
Total Depth (feet): 19-83		LPH & Water	Recovered (gall	ons):_ <i>[0</i>	<u> </u>	
Water Column (feet): 15.07		Casing Diame	ter (Inches):	<u> </u>		
80% Recharge Depth (feet): 7.7	7	1 Well Volume	e (gallons):			
Time Time Depti Start Stop To Wai	ter Purged	Conduc- tivity (uS/cm)	Temperature	ρΗ	Turbidity	D.O.
1724	. 7	470	17.3	6.72		
0.100		469	17.0	677		
02 2 7	1	473		6.80	<u> </u>	
0727	6	1412	17.8	0.0		
		 		ļ		
					Time Samel	nd
Static at Time Sampled		otal Gallons Pu	rged NA	20	Time Sampl	eu
* 1.1	(0	1		<u> </u>		
Comments:						
	·					
Well No.: MWH			·011	}		
Depth to Water (feet):			uct (feet): 0			
Total Depth (feet): 18.97		LPH & Water	Recovered (gall	lons): <u>0</u>		
Water Column (feet): 14.36	<u> </u>		ter (Inches): 2			
80% Recharge Depth (leet): 1 1	<u>, 8</u>	1 Well Volume	e (gallons):			
Time Time Depti		Conduc-	Temperature			5.0
Start Stop To Wa	1	tivity (uS/cm)	(E/Q)	pΗ	Turbidity	D.O.
(feet	(gailoris)	<u> </u>	10.0	7.121		
0796	I <u>-1</u>	959	1 142.17	17471		1
1 1		 	17 0	7 22		
02112	4	970	17.7	7.28	4	
0749	4	 	17.7	7.28 7.53		
0749	4	970	17.7	7.28 7.53		
0749	4	970	17.7	7.28 7.53		
0749 Static at Time Sampled		970	17.7 17.7	7.28	Time Sampl	
O749 Static at Time Sampled 4.78		961	17.7 17.7	7.28 7.53	Time Samp	

STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 3	1105 STATION NUMBE	r: 0843
	CALLED GO	· ·
•	NAME OF PM CALLED:	
		.
WELL NUMBER:	<u>Іфиш-2</u> втатемент from pm	OR TECH _
	covered by cove	
debois wil	DE CLONE & RE	MOUED by
our Next	Uisit, FOREMAN S	Aid
		1
WELL NUMBER:	STATEMENT FROM PM	OR TECH
		•
<u> </u>		
WELL NUMBER:	STATEMENT FROM PM	OR TECH
·		
		OBJECH
WELL NUMBER:	STATEMENT FROM PM	OK IECH
	· ·	
		5405

FIELD MONITORING DATA SHEET

Technician: Zick R	Job #/Task #: <u>41050001 /FA2</u> U	Date: 3/15/05
Site # ()84/3	Project Manager A Collins	Page \ of \

		Time	Total	Depth to	Depth to	Product Thickness	Time	
Well#	тос	Gauged	Depth	Water	Product	(feet)	Sampled	Misc. Well Notes
AC-WM	~	0902	10.47	5.28			0909	2"(3)
MW-1	<u> </u>	0931	19.81	5.52			0943	2"(3)
							-	
							· · ·	
	·- ·							
					<u>-</u> .			
				·				
							·	
		-						
			:					
			:					

				-				
FIELD DATA	COMPLI	ETE	QA/QC		COC	WE	LL BOX CO	ONDITION SHEETS
WTT CERTIF	ICATE		MANIFES	T	DRUM INV	ENTORY	TRAF	FIC CONTROL
			·			<u>/</u>		

GROUNDWATER SAMPLING FIELD NOTES

,			Technician:	PZiCK	<u> 2.</u>		,	
Site:	843		Project No.:	410500	201	.	Date: 3/	15/05
Well No.:	Mur2A			Purge Method	-DHP	K HB		
Donth to Wate	er (feet): 5	28		Depth to Prod	uct (feet):			
Total Depth (fo	eet): 10.	47	-	-	Recovered (gall	ons):		
Mater Column	n (feet): 5.	19	-	Casing Diame	ter (Inches): 2	N :		
90% Pacham	e Depth (feet):_	6.32			e (gallons):			
00 % Healaig	e Depar (reery					,		
Time	Time	Depth	Volume	Conduc-	Temperature	рH	Turbidity	D.O.
Start	Stop	To Water (feet)	Purged (gallons)	tivity (uS/cm)	(F,(C))	Pit	Totolaky	2.0.
00.00		(ieci)	(90.01.0)	923	17.3	11.35		
0909			+	anil	110	11.39		
			1 2	107	17.2			
	0908		3_	1895	17.2	11.37		·
		· .	<u> </u>					
		-						i
	ic at Time Sam	pled	1	otal Gallons Pu		<u> </u>	Time Sample	ed
•	5.33		3		090) <u> </u>		
Comments:								
		· · · · ·						
L					00			
Well No.:	MW-1			Purge Method	DIK.	HB	 -	
Depth to Wate	er (feet): 5 .	52		Depth to Prod	uct (feet):	<u> </u>		
Total Depth (f	eet): 19.	81	_		Recovered (gall	ons): <u>(</u>	. <u></u>	
Water Column	n (feet): \\\	.29	_		eter (Inches):			
80% Rechard	e Depth (feet):	8,38			e (gallons):	<u>)</u>	<u>.</u> .	
		<u> </u>						
Time	Time	Depth	Volume	Conduc-	Temperature		Turbidity	D.O.
Start	Stop	To Water (feet)	Purged (gallons)	tivity (uS/cm)	(F,C)	pН	1 Citationty	0 .0.
0000	***, 2 **	(1001)	2	22	15.9	7 70		
0932			11	277		7 . 6	,	
ļ			1	428	16.2	7.68		
	1942		6	1235	165	7.34		
Sta	tic at Time San	i ipled	. т	otal Gallons Pu	ırged		Time Sampl	ed
6	58		6			943		
Comments:	· · · · · · · · · · · · · · · · · · ·	·						
Pouniems:								



TRC Alton Geoscience-Irvine

March 28, 2005

21 Technology Drive Irvine, CA 92718

Attn.:

Anju Farfan

Project#: 41050001FA20

Project:

Conoco Phillips #0843

Site:

1629 Webster St., Alameda

Attached is our report for your samples received on 03/14/2005 15:55 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 04/28/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com Sincerely,

Dimple Sharma Project Manager



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

Site: 1629 Webster St., Alameda

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
MW-5	03/11/2005 06:44	Water	1
MW-6	03/11/2005 06:59	Water	2
MW-3	03/11/2005 07:30	Water	3
MW-4	03/11/2005 07:53	Water	4



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

Prep(s): 5030B Test(s): 8260B
Prep(s): 5030B Test(s): 8260B
Sample ID: MW-5 Lab ID: 2005-03-0478 - 1
Sample ID: MW-5 Lab ID: 2005-03-0478 - 1
= 1000000000000000000000000000000000000
Caran salumbon da di Jona Caran da di Salumban da d
Sampled: 03/11/2005 06:44 Extracted: 3/24/2005 23:37
The state of the s
Matrix: Water QC Batch#: 2005/03/24-2A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	03/24/2005 23:37	
Benzene	ND	0.50	ug/L	1.00	03/24/2005 23:37	
Toluene	ND	0.50	ug/L	1.00	03/24/2005 23:37	
Ethylbenzene	ND	0.50	ug/L	1.00	03/24/2005 23:37	
Total xylenes	ND	1.0	ug/L	1.00	03/24/2005 23:37	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	03/24/2005 23:37	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	03/24/2005 23:37	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	03/24/2005 23:37	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	03/24/2005 23:37	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	03/24/2005 23:37	
Ethanol	ND	50	ug/L	1.00	03/24/2005 23:37	
Surrogate(s)]					
1,2-Dichloroethane-d4	95.2	73-130	%	1.00	03/24/2005 23:37	
Toluene-d8	91.4	81-114	%	1.00	03/24/2005 23:37	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

Site: 1629 Webster St., Alameda

Prep(s): 5030B Test(s): 8260B Sample ID: MW-6 Lab ID: 2005-03-0478 - 2 Sampled: 03/11/2005 06:59 Extracted: 3/24/2005 23:59 Matrix: Water QC Batch#: 2005/03/24-2A 64

Analysis Flag: L2 (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	1000	ug/L	20.00	03/24/2005 23:59	
Benzene	ND	10	ug/L	20.00	03/24/2005 23:59	
Toluene	ND	10	ug/L	20.00	03/24/2005 23:59	
Ethylbenzene	ND	10	ug/L	20.00	03/24/2005 23:59	
Total xylenes	ND	20	ug/L	20.00	03/24/2005 23:59	
tert-Butyl alcohol (TBA)	ND	100	ug/L	20.00	03/24/2005 23:59	
Methyl tert-butyl ether (MTBE)	2500	10	ug/L	20.00	03/24/2005 23:59	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	20.00	03/24/2005 23:59	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	20.00	03/24/2005 23:59	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	20.00	03/24/2005 23:59	
Ethanol	ND	1000	ug/L	20.00	03/24/2005 23:59	
Surrogate(s)						
1,2-Dichloroethane-d4	98.8	73-130	%	20.00	03/24/2005 23:59	
Toluene-d8	96.2	81-114	%	20.00	03/24/2005 23:59	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

Prep(s): 5030B Test(s): 8260B
Prep(s): 5030B Test(s): 8260B
The Control of the Co
Sample ID: MW-3 Lab ID: 2005-03-0478 - 3
Sampled: 03/11/2005 07:30 Extracted: 3/25/2005 00:22
Sampled: 03/11/2005 07:30 Fxtracted: 3/25/2005 00:22
Matrix: Water OC Batch# 2005/03/24-2A 64
Matrix: Water QC Batch#: 2005/03/24-2A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	03/25/2005 00:22	
Benzene	ND	0.50	ug/L	1.00	03/25/2005 00:22	
Toluene	ND	0.50	ug/L	1.00	03/25/2005 00:22	
Ethylbenzene	ND	0.50	ug/L	1.00	03/25/2005 00:22	
Total xylenes	ND	1.0	ug/L	1.00	03/25/2005 00:22	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	03/25/2005 00:22	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	03/25/2005 00:22	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	03/25/2005 00:22	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	03/25/2005 00:22	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	03/25/2005 00:22	
Ethanol	ND	50	ug/L	1.00	03/25/2005 00:22	
Surrogate(s)						
1,2-Dichloroethane-d4	96.8	73-130	%	1.00	03/25/2005 00:22	
Toluene-d8	91.5	81-114	%	1.00	03/25/2005 00:22	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

Prep(s): 5030B Test(s) 8260B
Prep(s): 5030B Test(s): 8260B
Sample ID: MW-4 Lab ID: 2005-03-0478 - 4
Sampled: 03/11/2005 07:53 Extracted: 3/25/2005 00:44
Sampled: 03/11/2005 07:53 Extracted: 3/25/2005 00:44
Matrix: Water OC Batch# 2005/03/24-2A 64
Matrix: Water QC Batch#: 2005/03/24-2A.64

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	03/25/2005 00:44	
Benzene	ND	0.50	ug/L	1.00	03/25/2005 00:44	
Toluene	ND	0.50	ug/L	1.00	03/25/2005 00:44	
Ethylbenzene	ND	0.50	ug/L	1.00	03/25/2005 00:44	
Total xylenes	ND	1.0	ug/L	1.00	03/25/2005 00:44	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	03/25/2005 00:44	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	03/25/2005 00:44	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	03/25/2005 00:44	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	03/25/2005 00:44	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	03/25/2005 00:44	
Ethanol	ND	50	ug/L	1.00	03/25/2005 00:44	
Surrogate(s)	1					
1,2-Dichloroethane-d4	101.2	73-130	%	1.00	03/25/2005 00:44	
Toluene-d8	94.5	81-114	%	1.00	03/25/2005 00:44	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

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Batch QC Report	ďΚ
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	68
	23
Prep(s): 5030B Test(s): 8260B	98
1 teld 2): Ondon	93
Method Blank Water QC Batch # 2005/03/24-2A.64	95
MEGITOR DIGITY ASSOCIATE TAXABLE TAXAB	23
	88
	90
MB: 2005/03/24-2A.64-015 Date Extracted: 03/24/2005 18:15	866
MD. 2000/00/24-2A.04-0 ID Date Lixedica. 00/24/2005 Id. Id.	26
	200
	6.00

Compound	Conc.	RL	Unit_	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	03/24/2005 18:15	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	03/24/2005 18:15	1
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	03/24/2005 18:15	
Di-isopropyl Ether (DIPE)	ND	0.5	ug/L	03/24/2005 18:15	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	03/24/2005 18:15	ļ
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	03/24/2005 18:15	1
Benzene	ND	0.5	ug/L	03/24/2005 18:15]
Toluene	ND	0.5	ug/L	03/24/2005 18:15	
Ethylbenzene	ND	0.5	ug/L	03/24/2005 18:15	
Total xylenes	ND	1.0	ug/L	03/24/2005 18:15	1
Ethanol	ND	50	ug/L	03/24/2005 18:15	
Surrogates(s)					
1,2-Dichloroethane-d4	100.8	73-130	%	03/24/2005 18:15	
Toluene-d8	104.8	81-114	%	03/24/2005 18:15	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

	000000000000000000000000000000000000000
Batch QC Report	
- Daving Royal	000000000000000000000000000000000000000
Prep(s): 5030B Test(s):	90000
Prep(s): 5030B Test(s):	02000
	2000 00 00 00 00 00 00 00 00 00 00 00 00
Laboratory Control Spike Water QC Batch # 2005/03/24	I-2A.64
	000000000000000000000000000000000000000
LCS 2005/03/24-2A.64-053 Extracted: 03/24/2005 Analyzed: 03/24/2005	5 17:53
LCSD	32 x 30 x 30 x 50 x
	(e)r000000000000000000000000000000000000

Compound	Conc.	ug/L	Exp.Conc.		very %	RPD	Ctrl.Lin	nits %	Flags		
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD	
Methyl tert-butyl ether (MTBE) Benzene Toluene	26.2 26.2 27.6		25 25 25	104.8 104.8 110.4			65-165 69-129 70-130	20 20 20			
Surrogates(s) 1,2-Dichloroethane-d4 Toluene-d8	485 520		500 500	97.0 104.0			73-130 81-114				



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

Prep(s): 5030B			Test(s): 82608
Matrix Spike (MS / MSD)	Water	QC Bate	:h # 2005/03/24-2A.64
MS/MSD		Lab ID:	2005-03-0521 - 001
MS: 2005/03/24-2A.64-023	Extracted: 03/24/2005	Analyzed:	03/24/2005 21:23
		Dilution:	1.00
MSD: 2005/03/24-2A.64-045	Extracted: 03/24/2005	Analyzed:	03/24/2005 21:45
		Dilution:	1.00

Compound	Conc.	u	g/L	Spk.Leve	R	ecovery	%	Limit	s %	Fl	ags
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether Benzene Toluene	32.8 29.4 31.7	32.1 28.7 30.4	ND ND ND	25 25 25	131.2 117.6 126.8	128.4 114.8 121.6	2.2 2.4 4.2	65-165 69-129 70-130	20 20 20		
Surrogate(s) 1,2-Dichloroethane-d4 Toluene-d8	514 451	496 466		500 500	102.8 90.1	99.2 93.2		73-130 81-114			



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/14/2005 15:55

Site: 1629 Webster St., Alameda

Legend and Notes

Analysis Flag

L2

Reporting limits were raised due to high level of analyte present in the sample.

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- C. W. C. 2011			(Noon-ed Co	20.200.500				ا اگراگ		 •::::::::::::::::::::::::::::::::		*********	ì	برگردورور در در د	n		<u> </u>			بينين
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TRC Alton Geoscience-Irvine

March 29, 2005

21 Technology Drive Irvine, CA 92718

Attn.:

Anju Farfan

Project#: 41050001FA20

Project:

Conoco Phillips #0843

Site:

1629 Webster St., Alameda

Attached is our report for your samples received on 03/15/2005 16:15 This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 04/29/2005 unless you have requested otherwise.

We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.

You can also contact me via email. My email address is: dsharma@stl-inc.com Sincerely,

Dimple Sharma Project Manager



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

Site: 1629 Webster St., Alameda

Samples Reported

Sample Name	Date Sampled	Matrix	Lab#
MW-2A	03/15/2005 09:09	Water	1
MW-1	03/15/2005 09:43	Water	2



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

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	5000000 500 5000 5 PA PO PO POPE SEE SEE SEE SEE SEE SEE SEE SEE SEE S
Prep(s): 5030B Test(s):	8260B
Prep(s): 5030B Test(s):	
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######################################	MB MB 1 (1) (1) (1) (1) (2) (4) (4) (4) (4) (4) (4) (4) (4) (4) (4
Sample ID: MW-2A Lab ID:	
Sample ID: MW-2A Lab ID:	2005-03-0496 - 1

	8 a.e. 5 a.e. 5 a.e. 5 a.e. 5 a.e. 5 a.e. 5 a.e. 6 a.e
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Sampled: 03/15/2005 09:09 Extracte	ed: 3/26/2005 12:57
	M10:
- Contract C	
	NG 1999 NG
Matrix: Water QC Bate	46# 90006002096 112 62
Walik. Wale	ch#: 2005/03/26-1B.64
	TARTON CONTENTA DE LA CONTENTA DE CONT

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	92	50	ug/L	1.00	03/26/2005 12:57	
Benzene	0.84	0.5	ug/L	1.00	03/26/2005 12:57	
Toluene	1.7	0.5	ug/L	1.00	03/26/2005 12:57	
Ethylbenzene	2.4	0.5	ug/L	1.00	03/26/2005 12:57	
Total xylenes	9.8	1.0	ug/L	1.00	03/26/2005 12:57	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	03/26/2005 12:57	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L	1.00	03/26/2005 12:57	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	03/26/2005 12:57	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	03/26/2005 12:57	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	03/26/2005 12:57	
Ethanol	ND	50	ug/L	1 .00	03/26/2005 12:57	
Surrogate(s)						
1,2-Dichloroethane-d4	98.2	73-130	%	1.00	03/26/2005 12:57	
Toluene-d8	102.5	81-114	%	1.00	03/26/2005 12:57	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

Pren(s): 5030B Test(s): 8260B
Prep(s): 5030B Test(s): 8260B
Sample ID: MW-1 Lab ID: 2005-03-0496 - 2

$egin{array}{cccccccccccccccccccccccccccccccccccc$
Sampled: 03/15/2005 09:43 Extracted: 3/28/2005 14:55
Sampled: 03/15/2005 09:43 Extracted: 3/28/2005 14:55
Matrix: Water QC Batch# 2005/03/28-1A.62
AND THE PROPERTY OF THE PROPER

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	03/28/2005 14:55	
Benzene	ND	0.5	ug/L	1.00	03/28/2005 14:55	
Toluene	ND	0.5	ug/L	1.00	03/28/2005 14:55	
Ethylbenzene	ND	0.5	lug/L	1.00	03/28/2005 14:55	
Total xylenes	ND	1.0	ug/L	1.00	03/28/2005 14:55	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	03/28/2005 14:55	
Methyl tert-butyl ether (MTBE)	27	0.5	ug/L	1.00	03/28/2005 14:55	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	03/28/2005 14:55	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	03/28/2005 14:55	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	03/28/2005 14:55	
Ethanol	ND	50	ug/L	1.00	03/28/2005 14:55	
Surrogate(s)		- 1			,	
1,2-Dichloroethane-d4	114.2	73-130	%	1.00	03/28/2005 14:55	
Toluene-d8	105.7	81-114	%	1.00	03/28/2005 14:55	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

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Batch QC Report	
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Prep(s): 5030B Test(s): 826	11.55
Prep(s): 5030B Test(s): 826	
Method Blank Water QC Batch # 2005/03/26-1B	
Method Blank Water QC Batch # 2005/03/26-1B	
	(4)44444444
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MB: 2005/03/26-1B.64-001 Date Extracted: 03/26/2005 08	1.73.4
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Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	03/26/2005 08:01	
Benzene	ND	0.5	ug/L	03/26/2005 08:01	
Toluene	ND	0.5	ug/L	03/26/2005 08:01	
Ethylbenzene	ND	0.5	ug/L	03/26/2005 08:01	
Total xylenes	ND	1.0	ug/L	03/26/2005 08:01	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	03/26/2005 08:01	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	03/26/2005 08:01	
Di-isopropyl Ether (DIPE)	ND	0.5	ug/L	03/26/2005 08:01	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	03/26/2005 08:01	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	03/26/2005 08:01	
Ethanol	ND	50	ug/L	03/26/2005 08:01	
Surrogates(s)					
1,2-Dichloroethane-d4	97.8	73-130	%	03/26/2005 08:01	
Toluene-d8	102.0	81-114	%	03/26/2005 08:01	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

WID. 2003/03/26-1A:02-030		1	Date Extracted	03/28/2005 09:56
Method Blank MB: 2005/03/28-1A 62-056	, i i i i i i i i i i i i i i i i i i i	Vater		2005/03/28-1A.62
Prep(s): 5030B				Test(s): 8260B
	Batch	QC Report		

Compound	Conc.	RL.	Unit	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	03/28/2005 09:56	
Benzene	ND	0.5	ug/L	03/28/2005 09:56	
Toluene	ND	0.5	ug/L	03/28/2005 09:56	
Ethylbenzene	ND	0.5	ug/L	03/28/2005 09:56	
Total xylenes	ND	1.0	ug/L	03/28/2005 09:56	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	03/28/2005 09:56	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	03/28/2005 09:56	
Di-isopropyl Ether (DIPE)	ND	0.5	ug/L	03/28/2005 09:56	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	03/28/2005 09:56	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	03/28/2005 09:56	
Ethanol	ND	50	ug/L	03/28/2005 09:56	
Surrogates(s)					
1,2-Dichloroethane-d4	101.6	73-130	%	03/28/2005 09:56	
Toluene-d8	102.6	81-114	%	03/28/2005 09:56	



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

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Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

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Batch QC Report	pgppppppcocococococococococococo
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Prep(s): 5030B Tes	st(s): 8260B
Laboratory Control Spike Water QC Batch # 2005/0	3/26-1B.64
	X6X0X6X6X6X6X3
LCS 2005/03/26-1B.64-039 Extracted: 03/26/2005 Analyzed: 03/26/	2005.07.39
LCSU	1901-100 C.

Compound	Conc.	ug/L	Exp.Conc.	Recov	very %	RPD	Ctrl.Lim	nits %	Fla	igs
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	25.8		25	103.2			65-165	20		
Benzene	25.2		25	100.8			69-129	20		
Toluene	28.7		25	114.8			70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	483		500	96.6			73-130			
Toluene-d8	541		500	108.2			81-114			



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

Batch QC Report	

Prep(s): 5030B	Test(s): 8260B
() CPIC!! *****	
	0005/00/00 44 60
Laboratory Control Spike Water QC Batch #	2005/03/28-1A.62
	60 100 MOGE 64 60
LCS: 2005/03/28-1A.62-029 Extracted: 03/28/2005 Analyzed	03/28/2005 09:29
LCSD	

Compound	Conc.	ug/L	Exp.Conc.	Recov	very %	RPD	Ctrl.Lin	nits %	Fla	igs
Compound	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE) Benzene Toluene	27.5 25.9 29.5		25 25 25	110.0 103.6 118.0			65-165 69-129 70-130	20 20 20		
Surrogates(s) 1,2-Dichloroethane-d4 Toluene-d8	4 87 537		500 500	97.4 107.4			73-130 81-114			



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

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Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

	Batch QC Report	***************************************	
Prep(s): 5030B			Test(s): 8260B
Matrix Spike (MS / MSD)	Water	QC Bate	:h # 2005/03/26-1B.64
MW-1 >> MS		Lab ID:	2005-03-0496 - 002
MS: 2005/03/26-1B.64-004	Extracted: 03/26/2005	Analyzed:	03/26/2005 14:04
		Dilution:	1.00
MSD: 2005/03/26-18.64-026	Extracted: 03/26/2005	Analyzed:	03/26/2005 14:26
		Dilution:	1,00

Compound	Conc. ug/L		Spk.Level	Recovery %		Limits %		Flags			
	мѕ	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	мѕ	MSD
Methyl tert-butyl ether	52.6	56.3	27.2	25	101.6	225.2	75.6	65-165	20		M4,R1
Benzene	24.4	27.1	ND	25	97.6	108.4	10.5	69-129	20		
Toluene	26.4	29.0	ND	25	105. 6	116.0	9.4	70-130	20		
Surrogate(s)											:
1,2-Dichloroethane-d4	480	470		500	96.0	94.0		73-130	1		
Toluene-d8	499	523		500	99.8	104.6		81-114			



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience- Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

		Batch QC Report		
Prep(s)				Test(s): 8260B
Matrix	: Spike (MS / MSD)	Water	QC Bate	ch # 2005/03/28-1A.62
MS/M:	SD		Lab ID:	2005-03-0756 - 001
MS:	2005/03/28-1A.62-036	Extracted; 03/28/2005	Analyzed:	03/28/2005 13:36
			Dilution:	1.00
MSD:	2005/03/28-1A.62-002	Extracted: 03/28/2005	Analyzed:	03/28/2005 14:02
			Dilution:	1.00

Compound	Conc. ug/L		Spk.Level	Recovery %		Limits %		Flags			
	мѕ	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	28.2	29.0	1.45	25	107.0	110.2	2.9	65-165	20		
Benzene	24.2	24.4	ND	25	96.8	97.6	8.0	69-129	20		
Toluene	27.4	27.9	ND	25	109.6	111.6	1.8	70-130	20		
Surrogate(s)			1		1						
1,2-Dichloroethane-d4	491	500		500	98.2	100.0	1	73-130	1		
Toluene-d8	523	518		500	104.6	103.6		81-114]		



Gas/BTEX Fuel Oxygenates by 8260B

TRC Alton Geoscience-Irvine

Attn.: Anju Farfan

21 Technology Drive Irvine, CA 92718

Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20

Conoco Phillips #0843

Received: 03/15/2005 16:15

Site: 1629 Webster St., Alameda

Legend and Notes

Result Flag

M4

MS/MSD spike recoveries were above acceptance limits. See blank spike (LCS).

R1

Analyte RPD was out of QC limits.



STL San Francisco

Sample Receipt Checklist

Submission #:2005- () () ()	
Character congressed by dealers) 45 page 3, 15 page	
Country name: 30 DTL State Francisco D Citeria	800 M
Custosy seeds some on shapping contained amples.	Var. 160 Billion C.
Cinina of cuspress pressing?	Year San
Chain of history algorit when relinquished and exclude?	
Chant of custody signers with sample tangle?	
Striptes in proper containentions;	
Complex Containers inter;	948ZW
Sufficient comple volume for indicated tent?	Yes
As samples received which healing kine?	
Contained Temp Blank is discretized in compliance (45 $C \pm 2)2$	7emp. 22 %: Yes. W/ Re
Folerally motion to > 8°C - for melloci C) for in bags. D. Millerweigh ice.	C 1801 annual Marker C Surviver in horse 17
Sampled = Atr. ago?() identifying (a.g. ar or bulk sample) ()	
Water VOA dels have zens beadenesse?	los Present Yes
	90 VOA Wols Submitted Yes No
(if the other is present, refer to opproximate bubble size and having in compa-	
Visia pHacceptable upon recept? Dives Dive	\$500 cg.
Coff adjusted Preservative used Copped, Colod OneSo, Copped	0 25 25 c 4.61 \$(s)
For any team check-listed. "No", provided detail of discrepancy in com-	ment section below:
Comments:	
Project Management [Routing for instruction of Indica	ated discrepancy(les)}
Project Manager, (crists)Date:	Client contactant ID Yes ID No
Summary of discussion:	
Corrective Action (per PMACtions)	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

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 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.