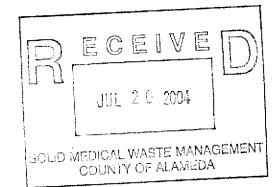


RO 450



July 14, 2004

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

APRIL THROUGH JUNE 2004

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:

Ms. Eva Chu, Alameda County Dept., of Environmental Health

Mr. Jed Douglas, Miller Brooks Environmental, Inc.

Enclosures

20-0400/0843R03.QMS



QUARTERLY MONITORING REPORT APRIL THROUGH JUNE 2004

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 July 14, 2004

QUARTERLY MONITORING REPORT

	LIST OF ATTACHMENTS
Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Table 1: Summary of Groundwater Levels and Chemical Analysis Results Table 2: Historic Groundwater Levels and Chemical Analysis Results Table 3: Summary of Additional Chemical Analysis 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	Benzene Concentrations vs. Time Hydrographs
Field Activities	General Field Procedures Groundwater Sampling Field Notes
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Transportation and Disposal Limitations

Summary of Gauging and Sampling Activities April 2004 through June 2004

Former 76 Station 0843 1629 Webster Street Alameda, CA

formation: Site:	Former 76 Station
oile.	1629 Webster Street
	Alameda, CA
	·
Project Coordinator/Phone Number:	Thomas Kosel/916-558-7666
Groundwater wells onsite:	4
Groundwater wells offsite:	2
Activity:	
Sampling consultant:	TRC
Date(s) sampled:	06/07/04
Groundwater wells gauged:	6
Groundwater wells sampled:	4
Purging method:	diaphragm pump/bailer
Treatment/disposal method during sampling event:	Onyx/Rodeo Unit 100
Free product pumpouts other than sampling event:	No
Treatment/Disposal method during free product pumpouts:	N/A
ydrogeology:	
Minimum depth to groundwater (feet bgs):	5.35
Maximum depth to groundwater (feet bgs):	6.61
Average groundwater elevation (feet relative to mean sea level):	9.01
Average change in groundwater elevations since previous event (feet):	-0.47
Groundwater gradient and flow direction:	0.005 ft/ft, northeast
Previous gradient and/or flow direction (and date):	0.005 ft/ft, North (02/12/04)
dwater Condition (Benzene Maximum Contaminant Level [MCL] = 1.0 µ	g/l)
Wells with benzene concentrations below MCL:	4
Wells with benzene concentrations at or above MCL:	0
Minimum benzene concentration (µg/l):	ND
Maximum benzene concentration (µg/l):	0.8
,, ,	ND
Minimum MTBE concentration (µg/I): Maximum MTBE concentration (µg/I):	2900 (MW-6)
waxiinan wii oc concentration (pg/i).	·
··· - ·	ND
Minimum TPH-G concentration (μg/l):	2500 (MW-6)
Minimum TPH-G concentration (μg/l): Maximum TPH-G concentration (μg/l):	
" • ,	0
Maximum TPH-G concentration (μg/I):	, ,

MW-1=Monitored Only, MW-3=Monitored Only,

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

TABLES

TABLE KEY

ABBREVIATIONS / SYMBOLS

LPH = liquid-phase hydrocarbons

μg/l = micrograms per liter mg/l = milligrams per liter

ND = not detected at or above laboratory detection limit

DTSC = Department of Toxic Substances Control

N/A = not applicable

Trace = less than 0.01 foot of LPH in well

USTs = underground storage tanks

-- = not analyzed, measured, or collected

TPH-G = total petroleum hydrocarbons with gasoline distinction

BTEX = benzene, toluene, ethylbenzene, and total xylenes TPH-D = total petroleum hydrocarbons with diesel distinction

TRPH = total recoverable petroleum hydrocarbons

MTBE = methyl tertiary butyl ether
TAME = tertiary amyl methyl ether
ETBE = ethyl tertiary butyl ether

DIPE = di-isopropyl ether
TBA = tertiary butyl alcohol
1,1-DCA = 1,1-Dichloroethane
1,2-DCA = 1,2-Dichloroethane
1,1-DCE = 1,1-Dichloroethene

1,2-DCE = cis- and trans-1,2-Dichloroethene

PCE = tetrachloroethene
TCA = trichloroethane
TCE = trichloroethene

PCB = polychlorinated biphenyls

TPPH = total purgeable petroleum hydrocarbons

NOTES

Elevations are in feet above mean sea level.

Groundwater elevation for wells with LPH is calculated as follows:

Surface elevation – depth to water + (0.75 x LPH thickness).

Concentration Graphs have been modified to plot non-detect results at the reporting limit stated in the official laboratory report. All non-detect results prior to the Second Quarter 2000 were plotted at $0.1 \,\mu g/l$ for graphical display.

J = estimated concentration, value is between the Method Detection Limit (MDL) and the Practical Quantitation Limit (PQL)

REFERENCE

TRC began groundwater monitoring and sampling activities in October 2003. Historical data for Former 76 Station 0843 was provided by Gettler-Ryan Inc., Dublin, California, in an excel table received in September 2003.

Table 1
SUMMARY OF GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS
June 7, 2004

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)	$(\mu g/l)$	(µg/l)	
MW-1		(Screen I	nterval in fe	et: 4.5-20	.5)									
06/07/04	4 16.18	6.61	0.00	9.57	-0.59									Monitored Only
MW-2A		(Screen I	nterval in fe	et: 5-11.5)									
06/07/04	15.56	6.21	0.00	9.35	-0.53	94		0.80	1.2	2.1	9.1	4.5	3.7	
MW-3		(Screen I	nterval in fe	et: 5.0-20	.0)									
06/07/04	4 15.11	5.92	0.00	9.19	-0.41									Monitored Only
MW-4		(Screen I	nterval in fe	et: 5.0-20	.5)									
06/07/04	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		
MW-5		(Screen I	nterval in fe	et: 5-20)										
06/07/04	13.34	5.35	0.00	7.99	-0.33	ND<50		ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<1		
MW-6		(Screen I	nterval in fe	et: 5-20)										
06/07/04	14.08	5.45	0.00	8.63	-0.39	2500		ND<3	ND<3	ND<3	ND<6	3200	2900	

Table 2
HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS
March 1999 Through June 2004

Former 76 Station 0843

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)		Change in Elevation	TPH-G	TPPH 8260B	Benzene		Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B	Comments
-		····		(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	
MW-1			erval in feet	•										
06/03/9				9.94		ND		ND	ND	ND	ND	ND	ND	
. 09/02/9			0.00	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		5.47	0.00	10.71	2.60	ND		ND	ND	ND	ND	ND		
05/31/0		6.22	0.00	9.96	-0.75	ND		ND	ND	ND	ND	ND		
08/29/0			0.00	9.36	-0.60	ND		ND	ND	ND	ND	ND		
12/01/0		7.54	0.00	8.64	-0.72	ND		ND	ND	ND	ND	ND		
03/17/0			0.00			ND		ND	ND	ND	ND	ND		
05/23/0	16.18		0.00			ND		ND	ND	ND	ND	ND		
09/24/0	1 16.18		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
12/10/0	1 16.18		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
03/11/0	2 16.18		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
06/07/0	2 16.18		0.00	-		ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	••	
09/03/0	2 16.18													
12/12/0	2 16.18	7.80	0.00	8.38										
03/13/0	3 16.18	5.94	0.00	10.24	1.86								•*	
06/12/0	3 16.18	6.10	0.00	10.08	-0.16									
09/12/0	3 16.18	6.65	0.00	9.53	-0.55									
12/31/0	3 16.18	5.74	0.00	10.44	0.91									Monitored Only
02/12/0	4 16.18	6.02	0.00	10.16	-0.28				~~					Monitored Only
06/07/04	4 16.18	6.61	0.00	9.57	-0.59									Monitored Only
MW-2	· ·	Screen Int	erval in feet	· DNA)										·
03/05/9			0.00	DIXA)		34400		ND	7710	2340	8240		8460	
06/03/99	9 15.57	5.96	0.00	9.61		51200		ND	7570	2510	7320	6460	8800	
09/02/99	9 15.57	6.85	0.00	8.72	-0.89	17000		ND	3100	1400	3700	4000	720	

Page 1 of 6

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-2 12/14/9	continued 9 15.57		0.00	7.03	0.00	01000		NID	22000	4500	17000	0100	11000	
03/14/9		7.65 5.26	0.00	7.92	-0.80	83000		ND	22000	4500	17000	9100	11000	
05/31/0		5.60	0.00	10.31 9.97	2.39	31000		ND	4600	2300	7300	5700	8700	
08/29/0		6.35	0.00	9.97	-0.34 -0.75	9970		ND ND	1030 1500	487 280	2060 1900	2500 1800	1670 1300	× .
12/01/0	-	7.06	0.00	8.51	-0.73	7900 87500		ND	17400	5590		6220	3790	
03/17/0		7.00	0.00	0.31	-0.71	4310		ND	59.0	280	19400 682	321	433	
05/23/0			0.00			45400		ND ND	4490	2790	10900	ND	406	
09/24/0		*-	0.00			76000		ND<0.50	13000	4700	18000	ND<2000	480	
12/10/0			0.00			82000		ND<0.50	9100	4400	16000	ND<2500	2 70	
03/11/0			0.00			14000		ND<0.50	1400	1100	3600	ND<250	150	
06/07/0		-	0.00			14000		ND<0.50	1200	1400	4700	540	200	
09/03/0			0.00			10000			1200	610	2800	510	460	
MW-2a	(5	Screen Int	erval in feet	h 5-11 5)										
12/12/0			0.00			3400		80	260	210	1000	380	400	MW-2 abndnd on 11/28/02, replaced by MW-2a
03/13/0	3		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	1.8	2.4	2.4	
06/12/0	3		0.00			ND<50		0.59	0.69	ND<0.50	1.2	6.0	4.7	
09/12/0	3 15.56	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	4 15.56	6.21	0.00	9.35	-0.53	94		0.80	1.2	2.1	9.1	4.5	3.7	
MW-3	(\$	Screen Int	erval in feet	t: 5.0-20.0)										
03/05/ 9			0.00					ND	ND	ND	4.84		2.46	
06/03/9		5.57	0.00	9.54		135		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		7.28	0.00	7.83	-0.78	ND		ND	ND	ND	ND	ND	ND	
03/14/0		4.87	0.00	10.24	2.41	ND	мн	ND	ND	ND	ND	7.2	6.3	
05/31/0		5.58	0.00	9.53	-0.71	ND		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	

Page 2 of 6

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness	Ground- water Elevation	Change in Elevation	ТРН-G	ТРРН 8260В	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													
12/01/0		6.76	0.00	8.35	-0.70	ND		ND	ND	ND	ND	ND	ND	
03/17/0			0.00			ND		ND	ND	ND	ND	ND	ND	
05/23/0		••	0.00			ND		ND	ND	ND	ND	ND	ND	
09/24/0			0.00			ND		_\ ND<0.50	ND<0.50	ND<0.50		ND<5.0	ND<5.0	
12/10/0			0.00			ND<50			ND<0.50	ND<0.50		ND<5.0	ND<5.0	
03/11/0			0.00			ND<50			ND<0.50			ND<5.0	ND<5.0	
06/07/0			0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5	ND<2.5	
12/12/0		7.15	0.00	7.96										
03/13/0		5.37	0.00	9.74	1.78							***		
06/12/0		5.51	0.00	9.60	-0.14									
09/12/0		6.03	0.00	9.08	-0.52								6.3	
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
MW-4	(5	Screen Into	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	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	0 15.17	4.67	0.00	10.50	2.60	ND		ND	ND	ND	ND	46	49	
05/31/0	0 15.17	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		ND	ND	ND	ND	152	101	
03/17/0	1 15.17		0.00			ND		ND	ND	ND	ND	ND		
05/23/0	1 15.17		0.00			ND		ND	ND	ND	ND	ND		
09/24/0	1 15.17		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	**	
12/10/0	1 15.17		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	1,700	1,300	
03/11/0	2 15.17		0.00	-		ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	***	
06/07/0	2 15.17		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5		

Page 3 of 6

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground- water Elevation (feet)	Change in Elevation (feet)	TPH-G (μg/l)	TPPH 8260B (μg/l)	Benzene (µg/l)	Toluene (μg/l)	Ethyl- benzene (μg/l)	Total Xylenes (µg/l)	MTBE 8021B (μg/l)	MTBE 8260B (μg/l)	Comments
3.6557.4		()	(2007)	(100.)	(2440)	(PB-7	\PB'-7	(F&-)	(86.7	(#6-7	(86.7)	(48,7	(1677)	
MW-4 09/03/0	continued 2 15.17		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5		
12/12/0			0.00			ND<50			ND<0.50		ND<0.50	2.9	3.3	
03/13/0			0.00			ND<50			ND<0.50		ND<0.50	ND<2.0		
06/12/0			0.00		*	ND<50			ND<0.50	ND<0.50		ND<2.0		
09/12/0		6.07	0.00	9.10			ND<50		ND<0.50	ND<0.50	ND<1.0		ND<2.0	
12/31/0		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	4 15.17	5.26	0.00	9.91	0.37	ND<50		ND<0.50		ND<0.50		ND<5.0		
06/07/0	4 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		
MW-5	0	Screen Int	erval in feet	· 520)										
12/14/9	•	6.45	0.00	6.89		ND		ND	ND	ND	ND	3.5	3.8	
03/14/0	0 13.34	4.46	0.00	8.88	1.99	ND		ND	ND	ND	ND	ND		
05/31/0	0 13.34	5.18	0.00	8.16	-0.72	ND		ND	ND	ND	ND	ND		
08/29/0	0 13.34	5.46	0.00	7.88	-0.28	ND		ND	ND	ND	ND	ND		
12/01/0	0 13.34	5.95	0.00	7.39	-0.49	ND		ND	ND	ND	ND	ND		
03/17/0	1 13.34		0.00			ND		ND	ND	ND	ND	ND		
05/23/0	1 13.34		0.00			ND		ND	ND	ND	ND	ND	**	
09/24/0	1 13.34		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
12/10/0	1 13.34		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
03/11/0	2 13.34		0.00			ND<50	••	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
06/07/0	2 13.34						••			**		**		
09/03/0	2 13.34													
12/12/0	2 13.34		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0		
03/13/0			0.00	***		ND<50		ND<0.50	0.54	ND<0.50	ND<0.50	ND<2.0		
06/12/0			0.00			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			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	4 13.34	5.35	0.00	7.99	-0.33	ND<50		ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<1		
MW-6	(5	Screen Int	erval in feet	: 5-20)										

Page 4 of 6

Date Sampled	TOC Elevation	Depth to Water	LPH Thickness		Change in Elevation	ТРН-G	ТРРН 8260В	Benzene	Toluene	Ethyl- benzene	Total Xylenes	MTBE 8021B	MTBE 8260B
	(feet)	(feet)	(feet)	(feet)	(feet)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μg/l)	(μ g/l)	(µg/l)	(μg/l)
	continued												
12/14/9			0.00	7.44		ND		ND	ND	ND	ND	11,000	18,000
03/14/0			0.00	9.36	1.92	ND		ND	ND	ND	ND	19,000	21,000
05/31/0			0.00	8.80	-0.56	ND		ND	ND	ND	ND	13200	
08/29/0		•	0.00	8.69	-0.11	ND		ND	ND	ND	ND	270	400
12/01/0		6.11	0.00	7.97	-0.72	ND		ND	ND	ND	ND	6330	3640
03/17/0			0.00			18700		2950	989	1040	3000	10200	11500
05/23/0	14.08		0.00			ND		ND	ND	ND	ND	4660	
09/24/0	14.08		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	160	190
12/10/0	14.08		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	3200	2400
03/11/0	14.08		0.00			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	92	120
06/07/0	14.08												
09/03/0	14.08							••			**		••
12/12/0	14.08		0.00			590		ND<0.50	ND<0.50	ND<0.50	ND<0.50	1500	6200
03/13/0	3 14.08		0.00			. 1600		ND<5.0	ND<5.0	ND<5.0	ND<5.0	4900	4100
06/12/0	3 14.08		0.00			1600		ND<10	ND<10	ND<10	ND<10	5200	3700
09/12/0	3 14.08	6.29	0.00	7.79			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
Trip Blank	: 6	Screen Inte	erval in feet	· DNA)									
03/05/9	•					ND		ND	ND	ND	ND		ND
06/03/9	9					ND	**	ND	ND	ND	ND	ND	**
09/02/9	9					ND		ND	ND	ND	ND	ND	
12/14/9	9					ND	••	ND	ND	ND	ND	ND	
03/14/0	0					ND		ND	ND	ND	ND	ND	***
05/31/0	0					ND		ND	ND	ND	ND	ND	98
08/29/0		**			~=	ND		ND	ND	ND	ND	ND	
12/01/0						ND		ND	ND	ND	ND	ND	
03/17/0						ND		ND	ND	ND	ND	ND	
									1,2				

Page 5 of 6

Comments

Date Sampled	TOC Elevation	-	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)	
Trip Bla		ntinued												
05/23/0)1 -					ND		ND	ND	ND	ND	ND		
09/24/0	1 -					ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
12/10/0	1 -					ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
03/11/0	2 -					ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0		
06/07/0	2 -					ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5		
09/03/0	2 -		**			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.5		
12/12/0	2 -		**			ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0		
03/13/0	-3					ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0	ND<0.50	
06/12/0	3 -					ND<50		ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<2.0		

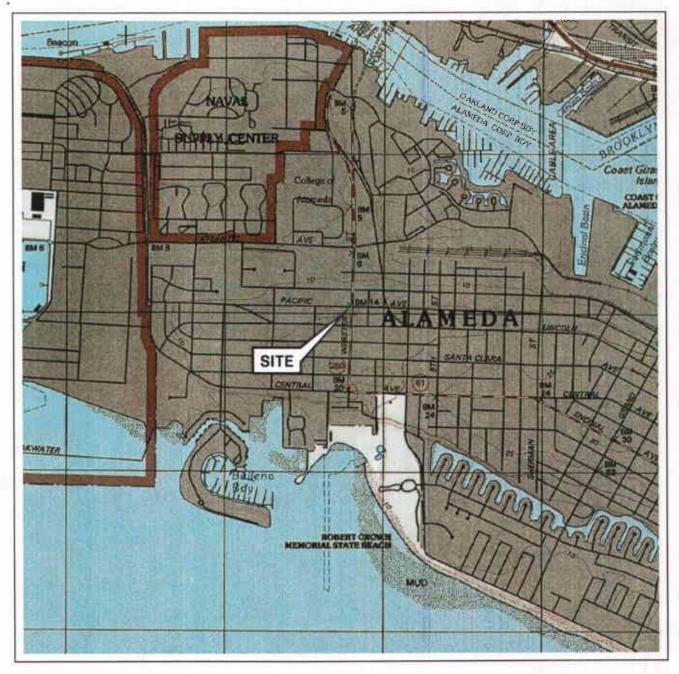
Table 3
SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS
Former 76 Station 0843

Date Sampled	EDC	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8015B	Ethanol 8260B	
	(μg/l)	(μg/l)	(µg/l)	(µg/l)	(μg/l).	(μg/l)	(mg/l)	(µg/l)	
MW-1 09/02/99			ND	ND	ND .	ND	, ND		
MW-2 09/02/99			ND	ND	ND	ND	ND	<u></u>	
12/14/99	ND	ND	ND	ND	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	ar c.	
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<50000		
12/10/01	ND<25	ND<25	ND<25	ND<500	ND<25	ND<25	ND<12000		
03/11/02	ND<20	ND<20	ND<20	ND<1000	ND<20	ND<20	ND<5000		
06/07/02	ND<25	ND<25	ND<25	ND<1000	ND<25	ND<25	ND<2000		
09/03/02	ND<20	ND<20	ND<20	ND<1000	ND<20	ND<20	ND<5000		
MW-2a									
12/12/02	2.3	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500		
03/13/03	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500		
06/12/03	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500		
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	
MW-3 09/02/99			ND	ND	ND	ND	ND		

Page 1 of 2

Date Sampled	EDC	EDB	TAME 8260B	TBA 8260B	DIPE . 8260B	ETBE 8260B	Ethanol 8015B	Ethanol 8260B	
	(μg/l)	(µg/l)	(μg/l)	(μg/l)	(μg/l)	(µg/l)	(mg/l)	(µg/l)	
MW-4 09/02/99			ND	ND	ND	ND			
12/10/01	ND<14	ND<14	ND<14	ND<290	ND<14	ND<14	ND<7,100	=-	·
12/12/02	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500		
09/12/03								ND<500	
MW-5 09/12/03								ND<500	
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<1000		
12/10/01	ND<25	ND<25	ND<25	ND<500	ND<25	ND<25	ND<12000		
03/11/02	ND<2.0	ND<2.0	ND<2.0	ND<100	ND<2.0	ND<2.0	ND<500		
12/12/02	ND<200	ND<200	ND<200	ND<10000	ND<200	ND<200	ND<50000		
03/13/03	ND<100	ND<100	ND<100	ND<5000	ND<100	ND<100	ND<25000		
06/12/03	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40	ND<10000		
09/12/03								ND<2500	
02/12/04	ND<40	ND<40	ND<40	ND<2000	ND<40	ND<40		ND<10000	
06/07/04	ND<5	ND<5	ND<10	ND<200	ND<10	ND<10		ND<8000	

FIGURES







SCALE 1: 24,000

SOURCE:

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

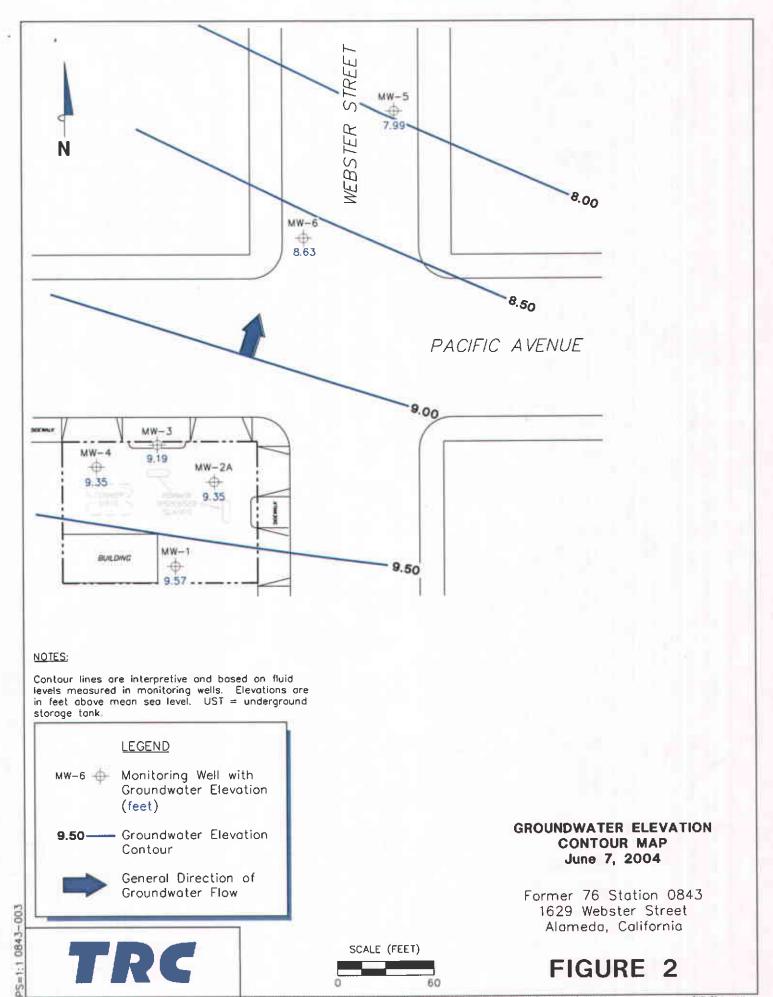




VICINITY MAP

Former 76 Station 0843 1629 Webster Street Alameda, California

FIGURE 1



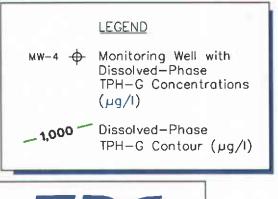
7/13/04 bbs



NOTES:

PS=1:1 0843-003

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPH-G = total petroleum hydrocarbons as gasoline.
µg/l = micrograms per liter. ND = not detected at limit indicated on afficial laboratory report.
NA = not analyzed, measured, or collected.
UST = underground storage tank. Results obtained using EPA Method 8015M.

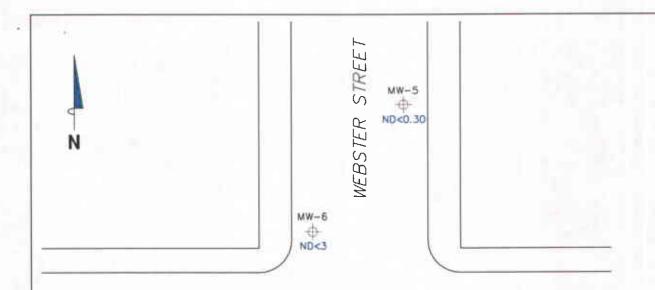


DISSOLVED-PHASE TPH-G CONCENTRATIONS MAP June 7, 2004

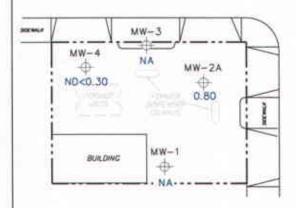
Former 76 Station 0843 1629 Webster Street Alameda, California

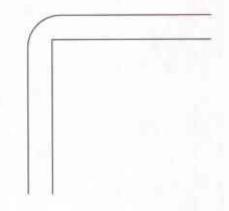
FIGURE 3

SCALE (FEET)



PACIFIC AVENUE





NOTES:

 μ g/I = micrograms per liter. ND = not detected at limit indicated on official laboratory report. NA = not analyzed, measured, or collected.
UST = underground storage tank. Benzene results obtained using EPA Method 8060B.

LEGEND

Monitoring Well with Dissolved-Phase Benzene Concentrations (µg/I)

DISSOLVED-PHASE BENZENE CONCENTRATIONS MAP June 7, 2004

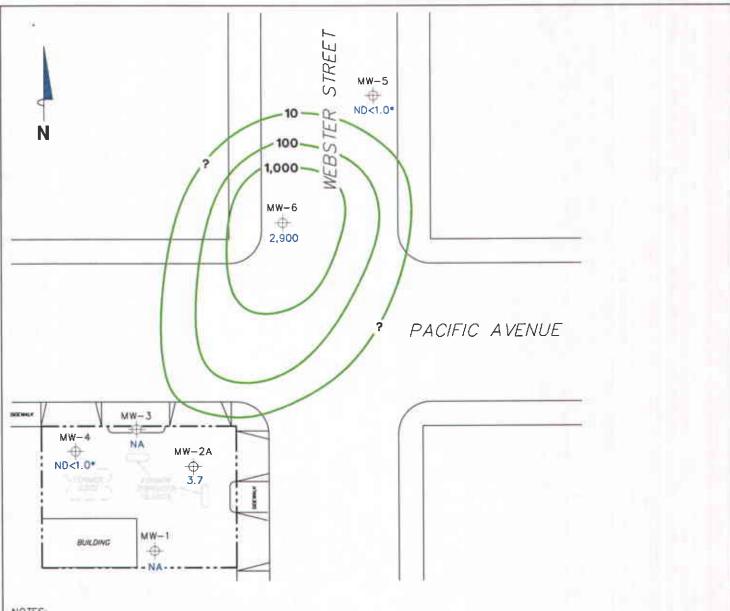
Former 76 Station 0843 1629 Webster Street Alameda, California

SCALE (FEET)

FIGURE 4

PS=1:1 0843-003

Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-0000\0843+\0843_qms.dwg 7/13/04 bbs



NOTES:

PS=1:1 0843-003

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. NA = not analyzed, measured, or collected. UST = underground storage tank. MTBE results obtained using EPA Method 8260B. • = result obtained using EPA Method 8021B.

LEGEND

MW-4

→ Monitoring Well with Dissolved-Phase MTBE Concentrations (I/gu)

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



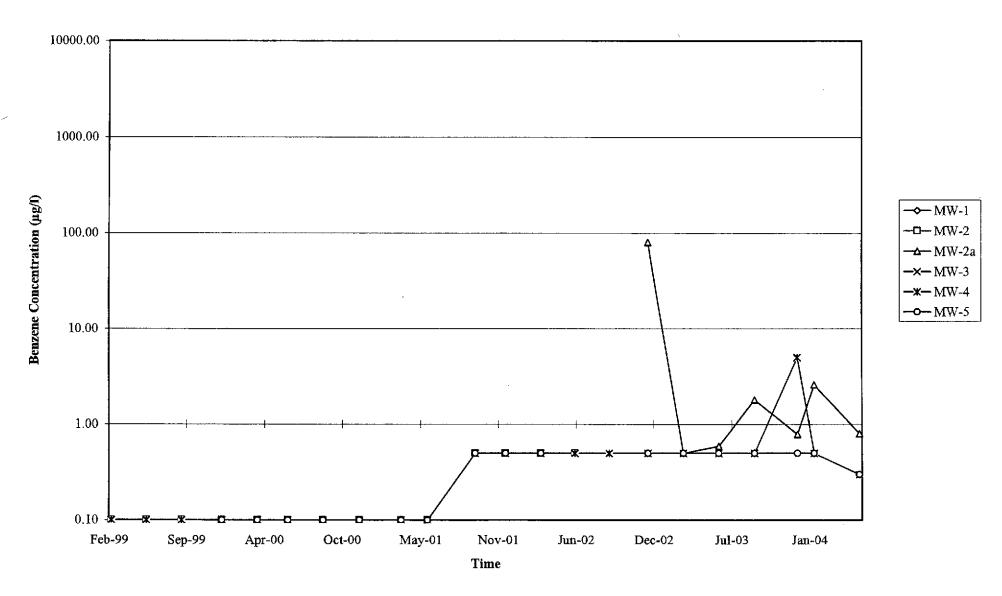
DISSOLVED-PHASE MTBE CONCENTRATIONS MAP June 7, 2004

Former 76 Station 0843 1629 Webster Street Alameda, California

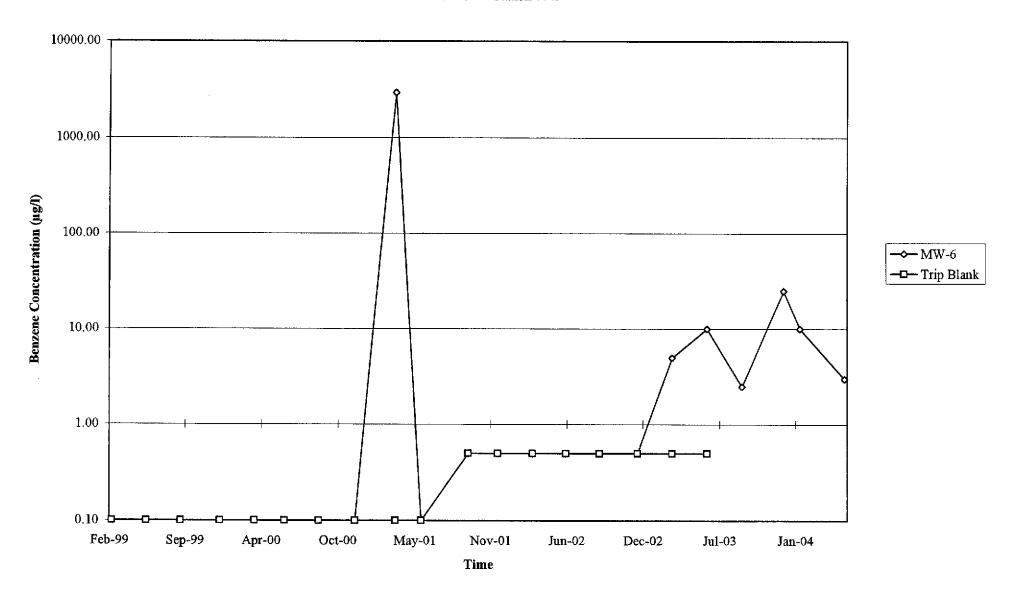
FIGURE 5

GRAPHS

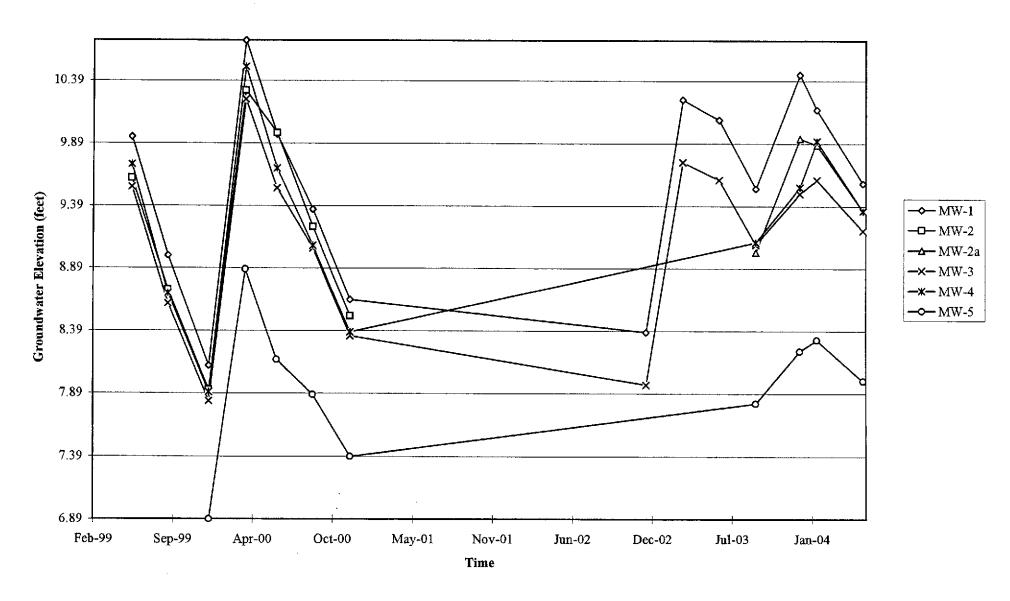
Graph 1
Benzene Concentrations vs. Time
Former 76 Station 0843



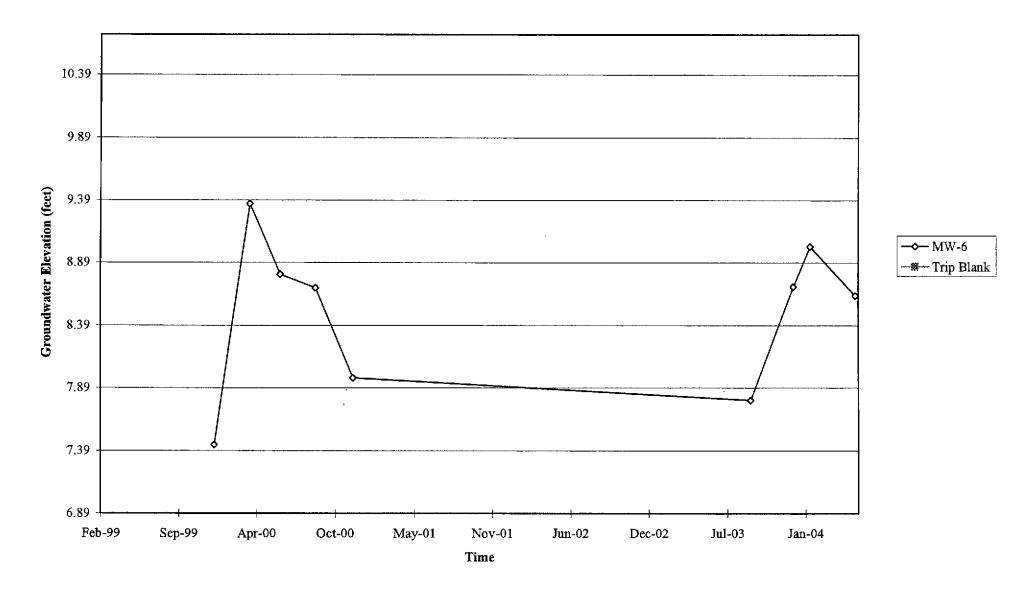
Graph 2
Benzene Concentrations vs. Time
Former 76 Station 0843



Graph 3 Hydrograph Former 76 Station 0843



Graph 4 Hydrograph 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 (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-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, 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.

FIELD MONITORING DATA SHEET

 Job #/Task #:
 4/063001 | Fm10
 Date:
 6/2/4

 roject Manager
 4. Colliss
 Page
 1 of
 Technician: Xttl Site # 08 #3 Project Manager M. Colliss Depth Depth **Product** Total to Thickness to Time TOC Well# Grade Depth Water **Product** Sampled Misc. Well Notes (feet) 21 10.48 1130 6.21 mw-21 ф 2" movitel ONLY 19.76 6.61 mw-/ NA 19.80 5.92 21 monitor NIT MW3 18.49 5.82 1108 mw-4 2" Ø 19.55 5.35 1000 MW·5 5.45 1031 MW-6 WELL BOX CONDITION SHEETS > FIELD DATA COMPLETE **QA/QC** COC TRAFFIC CONTROL WTT CERTIFICATE MANIFEST DRUM INVENTORY

GROUNDWATER SAMPLING FIELD NOTES

٠		1	echnician:	ack				,
e: oty	13		Project No.:	410536	01/1125	D	ate: <u>6/1</u> /	14
II No.: M	W-6		P	urge Method:_	DIA			
	(feet): ざ っ	45		epth to Produ		8		
: :al Depth (fe	et):	65	t.	.PH & Water R	ecovered (gallo	ons):	<u>, </u>	
ater Column	(feet)	420		Casing Diamete	ecovered (gallo	2"		
	Depth (feet):_	/2			(gallons): 2			
Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature	рН	Turbidity	D.O.
1017		(1904)	2	334	19.5	6.79	,	<u> </u>
			4	336	19.0	6.82		
	1021		6	3/8	18.7	6.86		·
Statio ファフ	at Time Sam	pled	Tot	tal Gallons Pur	ged j		Time Sampled	1
epth to Wate	Mw-3 er (feet): 5. eet): 19.3	35 85	<u>. </u>	Depth to Prod LPH & Water	l: DIM luct (feet): Recovered (ga	llons); <u> 9</u>	<u>, , , , , , , , , , , , , , , , , , , </u>	
Vater Column		14.20	· -	Casing Diame	eter (Inches):	2"	 	
0% Recharg	e Depth (feet):	8.19	-	1 Well Volum	e (gallons):	2		
Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature (F,C)	рН	Turbidity	• D.O
0945	1		2	419	19.7	7.32		
		-	4	386	19.3	7.00		
	0950		6	373	19.3	6.93		
	 							
		 		A				1
. Chai	tic at Time So	molad	Т	Total Callogs 12	urged	-	Time Samo	led
	tic at Time Sar	npled	1	Total Gallons P			Time Samp	
Star 8. 7 Comments:	12		1	6				

GROUNDWATER SAMPLING FIELD NOTES

_		16	echnician: <u> </u>	ruse				/ /
ite: 084	13	P	roject No.:	410500	01/11/10	τ	Date: 6/	4/4
ite: 084 ell No.:	DW-4		f	Purge Method:	/ DIA			/
epth to Water	r (feet): 5.	82		Depth to Produc		ø 		
· otal Depth (fe	et): 18.	49	t	LPH & Water R	ecovered (gallo	ons): <i>9</i>	<i>)</i> 	
ater Column	(feet) _ /2.	61	(Casing Diamete	er (Inches):	211		
)% Recharge	Depth (feet):_	8.35		1 Well Volume	ecovered (gailder (Inches):	<u> </u>		
Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc- tivity (uS/cm)	Temperature	рН	Turbidity	D.O.
1000		(reet)		534	21.7	6.95	<u> </u>	<u>sangan</u> abad
1050			2		212	7.19		
			/	574				
	1056		0	591	21.2	7.60		
Chair			Т-	fol Calling Dua			Time Campl	ođ
8.3	c at Time Sam	piea	10	tal Gallons Pur	gea		Time Sampl	108
Well No :	mw-2A	, .		Purge Method	118			
	MN - 2 A er (feet): 6 feet): 70	.2/	-	LPH & Water	i: //B uct (feet): Recovered (ga	llons):	<i>b</i>	
Water Colum		4.27		LPH & Water	Recovered (ga eter (Inches):	llons):	<i>b</i>	
Water Colum	n (feet):	4.27	Volume Purged (gallons)	LPH & Water Casing Diame	Recovered (ga eter (Inches):	pH	Turbidity	0.0
Water Colum 80% Rechard Time	n (feet): ge Depth (feet): Time	7.06 Depth To Water	Volume Purged	LPH & Water Casing Diame 1 Well Volume Conductivity (uS/cm)	Recovered (galeter (Inches):e (gallons): Temperature (F,C)	pH	Turbidity	0.0
Water Colum 80% Recharg Time Start	n (feet): ge Depth (feet): Time	7.06 Depth To Water	Volume Purged	LPH & Water Casing Diame 1 Well Volume Conductivity	Recovered (galeter (Inches):e (gallons):	(lons):	Turbidity	0.0
Water Colum 80% Recharg Time Start	n (feet): ge Depth (feet): Time	7.06 Depth To Water	Volume Purged (gallons)	LPH & Water Casing Diame 1 Well Volume Conductivity (uS/cm) 785	Recovered (galeter (Inches):e (gallons): Temperature (F,C) 22.8	pH	Turbidity	D.O
Water Colum 80% Recharg Time Start	n (feet): ge Depth (feet) Time Stop	7.06 Depth To Water	Volume Purged (gallons)	LPH & Water Casing Diame 1 Well Volume Conductivity (uS/cm) 785	Recovered (galeter (Inches):e (gallons): Temperature (F,C) 22.8	pH	Turbidity	0.0
Nater Colum 30% Rechard Time Start	n (feet): ge Depth (feet) Time Stop	Depth To Water (feet)	Volume Purged (gallons) / 2 3	LPH & Water Casing Diame 1 Well Volume Conductivity (uS/cm) 785 738	Recovered (galeter (Inches):e (gallons): Temperature (F,C) 22.8 22.8	pH	Turbidity	
Water Colum 80% Rechard Time Start	ri (feet):ge Depth (feet):	Depth To Water (feet)	Volume Purged (gallons) / 2 3	LPH & Water Casing Diame 1 Well Volume Conductivity (uS/cm) 785 738	Recovered (galeter (Inches):e (gallons): Temperature (F,C) 22.8 22.8	pH	Turbidity Time Sam	
Vater Colum 80% Rechard Time Start ///8	ri (feet): ge Depth (feet): Time Stop 1/23 atic at Time Sai	Depth To Water (feet)	Volume Purged (gallons) / 2 3	LPH & Water Casing Diame 1 Well Volume Conductivity (uS/cm) 785 738	Recovered (galeter (Inches):e (gallons): Temperature (F,C) 22.8 22.8	pH	Turbidity Time Sam	pled
Water Colum 80% Rechard Time Start	ri (feet): ge Depth (feet): Time Stop 1/23 atic at Time Sai	Depth To Water (feet)	Volume Purged (gallons) / 2 3	LPH & Water Casing Diame 1 Well Volume Conductivity (uS/cm) 785 738 Fotal Gallons P	Recovered (galeter (Inches):e (gallons): Temperature (F,C) 22.8 22.8	pH	Turbidity Time Sam	pled

Cover Report

TRC ALTON GEOSCIENCE 21 TECHNOLOGY DRIVE

IRVINE, CA 92618-2302

Attn: ANJU FARFAN

Project Number:

0843 COC Number:

BCL Number: 04-05824

Dear Ms. Farfan:

This report contains the analytical results for the samples received under chain of custody by BC Laboratories, Inc. The samples were logged into the Laboratory Information Management System (LIMS) and BC Lab numbers were assigned to each sample. The result of the temperature check, condition of the samples and any other discrepancies were recorded on the cooler receipt form.

All applicable quality control procedures met method-specific acceptance criteria, except as noted on the following analytical and quality control reports.

This report shall not be reproduced except in full, without written approval of the laboratory.

California DOHS Certification #1186

Authorized Signature



Attn: ANJU FARFAN

Purgeable Aromatic Analysis (EPA Method 8020)

						<u></u>	<u> </u>					<u></u>		
COC Number									Receive	Date/Tin	ne l	06/07/2004 @	21:20	
Project Number	0843								Samplin	g Date/T	ime	06/07/2004 @	2 11:30	
Sampling Location							;	Sample	Depth					
Sampling Point	MW-2A							Sample	Matrix		Water			
Sampled By	JACK				·				BCL Sar	nple ID		04-05824-1		
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date	Run Time		Instru- ment ID	Dilution	QC Batch ID	MB Blas	Lab Quals
Methyl t-butyl ether	4.5	ug/L	1	0.14	8021B	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523	ND	



Attn: ANJU FARFAN

Volatile Organic Analysis (EPA Method 8260)

	<u> </u>										 _			
COC Number									Receive	Date/Tin	ne	06/07/2004 @	0 21:20	
Project Number	0843								Samplin	g Date/T	ime	06/07/2004 <i>@</i>	<u>)</u> 11:30	
Sampling Location									Sample	Depth				
Sampling Point	MW-2A							;	Sample	Matrix		Water		
Sampled By	JACK							I	BCL Sar	nple ID		04-05824-1		
						Prep		Run		Instru=		QC .	MB	Lab
Constituent	Result	Units	PQL	MDL	Method	Date	Run Date	Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
1,2-Dibromoethane	< PQL	ug/L	0.5	0.17	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	317-100779	ND	
1,2-Dichloroethane	< PQL	ug/L	0.5	0.086	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	317-100779	ND	
t-Amyl Methyl ether	< PQL	ug/L	1	0.12	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	318-100779	ND	
t-Butyl alcohol	< PQL	ug/L	12	3.7	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	318-100779	NĐ	
Diisopropyl ether	< PQL	ug/L	1	0.13	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	318-100779	ND	
Ethanol	< PQL	ug/L	800	29	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	318-100779	ND	
Ethyl t-butyl ether	< PQL	ug/L	1	0.15	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	318-100779	ND	
Methyl t-butyl ether	3.7	ug/L	0.5	0.076	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	317-100779	ND	
						Prep		Run		Instru-	3.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7.7	QC .	МВ	Lab
Surrogate Compounds	Result	Units	Control	Limits	Method	Date	Run Date	Time	Analyst	ment ID	Dilution	Batch ID	Bias	Quals
1,2-Dichloroethane-d4	102	%	76-	114	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	317-100779		
Toluene-d8	100	%	88-	110	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	317-100779		
4-Bromofluorobenzene	100	%	86-	115	8260	06/10/04	06/10/04	01:42	MGC	MS-V5	1	317-100779		



Attn: ANJU FARFAN

Purgeable Aromatics and Total Petroleum Hydrocarbons

COC Number									Receive	Date/Tin	ne	06/07/2004 @	0 21:20	
Project Number	0843								Samplin	g Date/T		06/07/2004 @		
Sampling Location					,		•••		Sample I	=				
Sampling Point	MW-2A	· · · · · · · · · · · · · · · · · · ·							Sample I			Water		
Sampled By	JACK							+	BCL San	77. 2.2.2.		04-05824-1		.
Constituent	Result	Units	POL	MDL	Method	Prep Date	Run Date	Run	Analyst	Instru-	Dilution	QC Batch ID	MB Blas	Lab Quals
Benzene	0.80	ug/L	0.3	0.074	8021B	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523	ND	
Toluene	1.2	ug/L	0.3	0.15	8021B	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523	ND	
Ethylbenzene	2.1	ug/L	0.3	0.13	8021B	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523	ND	
Methyl t-butyl ether	4.5	ug/L	1	0.14	8021B	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523	ND	
Total Xylenes	9.1	ug/L	0.6	0.51	8021B	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523	ND	
Gasoline Range Organics (C4 - C12)	94	ug/L	50	14	8015M	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523	ND	
Surrogate Compounds	Result	Units	Control	Limits	Method	Prep Date	Run Date	Run Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
a,a,a-Trifluorotoluene	85	%	70-	130	8021B	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523		
a,a,a-Trifluorotoluene (8015 Surrogate)	106	%	70-	130	8015M	06/14/04	06/14/04	23:10	TLF	GC-V1	1	294-100523		

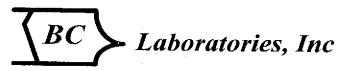
ABC Laboratories, Inc

TRC ALTON GEOSCIENCE 21 TECHNOLOGY DRIVE IRVINE, CA 92618-2302

Attn: ANJU FARFAN

Purgeable Aromatic Analysis (EPA Method 8020)

COC Number								٠	Receive	Date/Tir	ne	06/07/2004 @	2) 21:20	
Project Number	0843								Samplin	g Date/T	ime	06/07/2004 @	10:00	
Sampling Location									Sample	Depth				*
Sampling Point	MW-5								Sample	Matrix		Water		
Sampled By	JACK								BCL Sar	nple ID		04-05824-2		
Constituent	Result	Units	MDL	Method	Prep Date	Run Date	Run Time	Analyst	instru- ment ID	Dilution	QC Batch ID	MB Blas	Lab Quals	
Methyl t-butyl ether	< PQL	ug/L	1	0.14	8021B	06/19/04	06/19/04	00:48	TŁF	GC-V1	1	294-100523	ND	



Attn: ANJU FARFAN

Purgeable Aromatics and Total Petroleum Hydrocarbons

COC Number									Receive	Date/Tin	ne	06/07/2004 @	21:20	
Project Number	0843								Sampling	g Date/T	ime	06/07/2004 @	0 10:00	
Sampling Location									Sample I	= Depth				
Sampling Point	MW-5								Sample I	Matrix		Water		
Sampled By	JACK								BCL San			04-05824-2		
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date	Run	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Blas	Lab Quals
Benzene	< PQL	ug/L	0.3	0.074	8021B	06/19/04	06/19/04	00:48	1	GC-V1	1	294-100523	ND	
Toluene	< PQL	ug/L	0.3	0.15	8021B	06/19/04	06/19/04	00:48	TLF	GC-V1	1	294-100523	ND	
Ethylbenzene	< PQL	ug/L	0.3	0.13	8021B	06/19/04	06/19/04	00:48	TLF	GC-V1	1	294-100523	ND	
Methyl t-butyl ether	< PQL	ug/L	1	0.14	8021B	06/19/04	06/19/04	00:48	TLF	GC-V1	1	294-100523	ND	
Total Xylenes	< PQL	ug/L	0.6	0.51	8021B	06/19/04	06/19/04	00:48	TLF	GC-V1	1	294-100523	ND	
Gasoline Range Organics (C4 - C12)	< PQL	ug/L	50	14	8015M	06/19/04	06/19/04	00:48	TLF	GC-V1	1	294-100523	ND	
Surrogate Compounds	Result	Units	Contro	Limits	Method	Prep Date	Run Date	Run Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
a,a,a-Trifluorotoluene	87	%	70-	130	8021B	06/19/04	06/19/04	00:48	TLF	GC-V1	1	294-100523		
a,a,a-Trifluorotoluene (8015 Surrogate)	113	%	70-	130	8015M	06/19/04	06/19/04	00:48	TLF	GC-V1	1	294-100523		



Attn: ANJU FARFAN

Purgeable Aromatic Analysis (EPA Method 8020)

COC Number									Receive	Date/Tin	ne	06/07/2004 (ກ 21:20	
Project Number	0843							-		g Date/T		06/07/2004 (
Sampling Location														
Sampling Point	MW-4				Water									
Sampled By	JACK				<u>.</u>		•		BCL San	nple ID		04-05824-3		
Constituent	Result	Units	PQL.	MDL	Method	Prep Date	Run Date	Run Time		Instru- ment ID	Dilution	QC Batch ID	MB Blas	Lab Quais
Methyl t-butyl ether	< PQL	ug/L	1	0.14	8021B	06/18/04	06/18/04	19:32	TLF	GC-V1	1	294-100523	ND	



21 TECHNOLOGY DRIVE IRVINE, CA 92618-2302

Attn: ANJU FARFAN

Purgeable Aromatics and Total Petroleum Hydrocarbons

COC Number								••	Receive	Date/Tin	ne .	06/07/2004 (② 21:20	
Project Number	0843								Samplin	g Date/T		06/07/2004 (
Sampling Location				.,,					Sample	=	***************************************			
Sampling Point	MW-4	***.				•			Sample			Water		
Sampled By	JACK								BCL Sar		-	04-05824-3		_
Constituent	Result	Units	PQL	MĐL	Method	Prep Date	Run Date	Run Time		Instru- ment (D	Dilution	QC Batch ID	MB Blas	Lab Quals
Benzene	< PQL	ug/L	0.3	0.074	8021B	06/18/04	06/18/04	19:32		GC-V1	1	294-100523	ND	
Toluene	< PQL	ug/L	0.3	0.15	8021B	06/18/04	06/18/04	19:32	TLF	GC-V1	1	294-100523	ND	
Ethylbenzene	< PQL	ug/L	0.3	0.13	8021B	06/18/04	06/18/04	19:32	TLF	GC-V1	1	294-100523	ND	
Methyl t-butyl ether	< PQL	ug/L	1	0.14	8021B	06/18/04	06/18/04	19:32	TLF	GC-V1	1	294-100523	ND	
Total Xylenes	< PQL	ug/L	0.6	0.51	8021B	06/18/04	06/18/04	19:32	TLF	GC-V1	1	294-100523	ND	
Gasoline Range Organics (C4 - C12)	< PQL	ug/L	50	14	8015M	06/18/04	06/18/04	19:32		GC-V1	1	294-100523	ND	~~
Surrogate Compounds	Result	Units	Contro	l Limits	Method	Prep Date	Run Date	Run Time	Analyst	Instru- ment ID	Dilution	ĐC Batch ID	MB Blas	Lab Quals
a,a,a-Trifluorotoluene	71	%	70-	130	8021B	06/18/04	06/18/04	19:32		GC-V1	1	294-100523		
a,a,a-Trifluorotoluene (8015 Surrogate)	90	%	70-	130	8015M	06/18/04	06/18/04	19:32		GC-V1	1	294-100523		



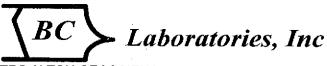
Attn: ANJU FARFAN

Purgeable Aromatic Analysis (EPA Method 8020)

COC Number				•				1	Receive	Date/Tin	ne	06/07/2004 @	21:20	
Project Number	0843							:	Samplin	g Date/T	ime	06/07/2004 @	<u>0</u> 10:31	
Sampling Location				·					Sample	Depth				
Sampling Point	MW-6							;	Sample	Matrix		Water		
Sampled By	JACK							ı	BCL Sar	nple ID		04-05824-4		
Constituent	Result	Units	PQL	MDL	Method	Prep Date	Run Date	Run Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Bias	Lab Quals
Methyl t-butyl ether	3200	ug/L	10	1.4	8021B	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523	ND	S01

Flag	Explanations	
S01	Sample result is not within the quantitation range of the method.	
Comment	s	
PQL's and	MDL's are raised due to sample dilution.	

California DOHS Certification #1186



Attn: ANJU FARFAN

Volatile Organic Analysis (EPA Method 8260)

COC Number									Receive	Date/Tir	ne	06/07/2004 @	21:20	
Project Number	0843								Samplin		-	06/07/2004 @	-	
Sampling Location									Sample					
Sampling Point	MW-6		*****		~				Sample	`		Water		·
Sampled By	JACK						· "		BCL San			04-05824-4		
Constituent	Result	Units	POL	MDL	Method	Prep Date	Run Date	Run Time	Analyst	Instru- ment ID	Dilution	QC Batch ID	MB Blas	Lab Quals
1,2-Dibromoethane	< PQL	ug/L	5	1.6	8260	06/16/04	06/16/04	06:30		MS-V4	10	319-100606	ND	Guais
1,2-Dichloroethane	< PQL	ug/L	5	1.3	8260	06/16/04	06/16/04	06:30		MS-V4	10	319-100606	ND	
t-Amyl Methyl ether	< PQL	ug/L	10	1.1	8260	06/16/04	06/16/04	06:30		MS-V4	10	320-100573	ND	
t-Butyl alcohol	< PQL	ug/L	200	87	8260	06/16/04	06/16/04	06:30		MS-V4	10	320-100573	ND	
Diisopropyl ether	< PQL	ug/L	10	1.5	8260	06/16/04	06/16/04	06:30	LAM	MS-V4	10	320-100573	ND	
Ethanol	< PQL	ug/L	8000	· 330	8260	06/16/04	06/16/04	06:30	LAM	MS-V4	10	320-100573	ND	
Ethyl t-butyl ether	< PQL	ug/L	10	0.92	8260	06/16/04	06/16/04	06:30	LAM	MS-V4	10	320-100573	ND	
Methyl t-butyl ether	2900	ug/L	30	7.5	8260	06/16/04	06/16/04	06:02	LAM	MS-V4	50	319-100606	ND	· ·
Surrogate Compounds	Result	Units	Contro	Limits	Method	Prep Date	Run Date	Run Time		Instru- ment ID	Dilution	QC Batch ID	MB Blas	Lab Quals
1,2-Dichloroethane-d4	108	%	76	-114	8260	06/16/04	06/16/04	06:30		MS-V4	10	319-100606		
Toluene-d8	94	%	88	-110	8260	06/16/04	06/16/04	06:30		MS-V4	10	319-100606		
4-Bromofluorobenzene	94	%	86	-115	8260	06/16/04	06/16/04			MS-V4	10	319-100606		

Comments

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

California DOHS Certification #1186



Attn: ANJU FARFAN

Purgeable Aromatics and Total Petroleum Hydrocarbons

<u>h</u>														
COC Number									Receive	Date/Tin	ne (06/07/2004 (@ 21:20	
Project Number	0843								Samplin	g Date/T	ime (06/07/2004 (@ 10:31	
Sampling Location			•					;	Sample	Depth				
Sampling Point	MW-6								Sample	Matrix	•	Water		
Sampled By	JACK							ļ	BCL San	nple ID		04-05824-4		
						Prep	Run		Instru-		QC	МВ	Lab	
Constituent	Result	Units	PQL	MDL	Method	Date	Run Date	Time	Analyst	ment ID	Dilution	Batch ID	Blas	Quals
Benzene	< PQL	ug/L	3	0.74	8021B	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523	ND	
Toluene	< PQL	ug/L	3	1.5	8021B	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523	ND	
Ethylbenzene	< PQL	ug/L	3	1.3	8021B	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523	ND	
Methyl t-butyl ether	3200	ug/L	10	1.4	8021B	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523	ND	S01
Total Xylenes	< PQL	ug/L	6	5.1	8021B	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523	ND	
Gasoline Range Organics (C4 - C12)	2500	ug/L	500	140	8015M	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523	ND	
Surrogate Compounds	Result	Units	Contro	Limits	Method	Prep Date	Run Date	Run Time	Analyst	Instru- ment ID	Dilution	QE Batch ID	MB Bias	Lab Quals
a,a,a-Triftuorotoluene	83	%	70-	130	8021B	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523		
a,a,a-Trifluorotoluene (8015 Surrogate)	101	%	70-	130	8015M	06/19/04	06/19/04	01:16	TLF	GC-V1	10	294-100523		

		\neg
Flag	Explanations	
	Sample result is not within the quantitation range of the method.	

California DOHS Certification #1186

BC LABORATORIES INC. Submission #: 04-0582	/1. (CEIPT FO	RM	Rev. No.		21/04	Page	Of	
		Project C	ode:	71.		TB	Batch #		*		
SHIPPING INFOR Federal Express □ UPS □							ING CON		•		
Federal Express □ UPS □ BC Lab Field Service CONTROL CONTROL	Hand De	livery 🗆			Ice Ches			ne 🗅	¥		
Other L	_ topecii	Y /			Вох	([]	Oth	er 🗀 (Sp	ecify)		
Refrigerant: Ice 🗷 Blue Ice □	Non	e □ (Other 🗆	Comm	ents:						
I	Containe	ers 🗌		— Comm	ents:				·	· -	
All samples received? Ye≰ No □	All sample	s containe	rs intact?	Yes N	o 🗆	Descrip	tion(s) mate	h COC?	Yea 28 No		
COC Received		ice C	hest ID	w	Emi	7	Date/Time 6-7-04 CIS				
Y YES INO		Tempe Thermom	erature: eter ID;	ი.გ_აი გე	Cont	tainer	10A_	Analyst Init ZA			
SAMPLE CONTAINERS			47								
	1	2	3	44	5	6	7	8	9	10	
QT GENERAL MINERAL/ GENERAL PHYSICAL PT PE UNPRESERVED		 	 		+		-	1	 		
OT INORGANIC CHEMICAL METALS		-	 	ļ	_		ļ		 	 	
		-	 	 	-		 		 	 	
PT INORGANIC CHEMICAL METALS PT CYANIDE		-	 	 	+		ļ		 	 	
PT NITROGEN FORMS		 		 	1.	 			 -	 	
PT TOTAL SULFIDE	·	 	 	 	-	 				 	
20z, NITRATE / NITRITE			 	-	 				 	 	
100ml TOTAL ORGANIC CARBON	-		 	 	 					 	
от тох	-			†	 	<u>†</u>			 	 	
PT CHEMICAL OXYGEN DEMAND			_		-				 	 	
PIA PHENOLICS		-	 	1	 				 	 	
40ml VOA VIAL TRAVEL BLANK				<u> </u>					 		
40ml VOA VIAL	1 (9)	1,9,	1.9	1 0	, ,	, ,	()	4	1 (
OT EPA 413.1, 413.2, 418.1			<u> </u>	† ¹ '						 	
PT ODOR					<u> </u>					 	
RADIOLOGICAL										1	
BACTERIOLOGICAL	· · · · · · · · · · · · · · · · · · ·									1	
10 ml VOA VIAL- 504											
QT EPA 508/608/8080											
OT EPA 515.1/8150			ļ								
OT EPA 525											
OT EPA 525 TRAVEL BLANK	·									İ	
00mf EPA 547		<u>-</u>			<u> </u>						
00ml EPA 531.1				ļ	<u></u>				ļ		
OT EPA 548											
)T EPA 549			·								
OT EPA 632											
OT EPA 8015M											
OT QA/QC				<u></u>							
OT AMBER				·							
OZ. JAR		- CHK	BY	DISTRI	BUTION						
2 OZ, JAR		+ -		8 1							
OIL SLEEVE		1124		SUB	QUT E						
CB VIAL		52-17-17-18	Canada San Carlo		***************************************		_		 		
LASTIC BAG					ļ				ļ		
ERROUS IRON					<u> </u>						
NCORE											
	1			i			E .				

	+- 050 Isul t art Firm: TF	82	<u>4</u>					Talan da Sind						
	esultant Firm: Tr	-	كالمالية الدريدة والمطلبة والأرائية الطيامية وكالوجية ويوشونها	anticia di cita di Cara di Cara			PALEE	lysis	128	(1), 10:	::516	:U		
2.1 1		Consultant Firm: TRC				្តេ		() ()	82608			608		N. C. S. C.
2:1 Techology Drive Irvine, CA 92618-2302 Attn: Anju Farfan				Ground- water (S)		i, Gas by BUI		S oxygen					1728	heiseups
4-di	4-digit site#: 0843					2	2 3	2 20	à S	20	:	1	8	
Woi	Workerder # 2807 TRE 500					કેં જે	30.15 20.15		BE/OXY	- by 826	8260B	13.89		(1) (m) (m) (m)
Project#: <i>4/050001</i>				(SL)			à							
San	Sampler Name: JALK			Sludge	e		SAS		TIMS	Ş	ž	3	14	ningionic Sundicina
Field	Point Name					ŭ	T Z	8260	STEX		1 0 1	00	1872	
iik adalahada ilka adaada aba	990, gazilga, kilipilga, iliadaki, iliilikki, iliilikki, iliiliilga, iliiliilga, papiga, yangan, va	4	7 1130	Z.	W	of stores we amount of	X					×	Х	
ma list-sour County resultate serv	hallen alleman, val Wash-ervanne, Arbeit- lögligte, eitster i singen		1000	<u>.</u>								: •		
are, itoolome, Windhale, menadar umu	alang persahan sepanjah ampirasa sepanjan sepanjan sepanjan sebagai sebagai sebagai sebagai sebagai sebagai se		1108		-		1							
nile du marie valikativa 3 mairatu pateri	dan dadar Addiso, alaksi, alaksi	\V_	1031	<u> </u>			<u> </u>			sa recorder conflict o			₩.	Pro competition beginning to contract one of months.
	and a state of the								<u> </u>					
-	mana, samanan said said ka dislahan said dibin dibindikan sagarapan Madilipko sanagila, sa	enter (natural) enteres estados	а Арфары, на 1986, dellata, наск от наского, начале почен						-		· ·			
11 Row 8 0x45 By 8260 on ALL			Retinquished by Gignature					Received by **RETANGO			Date & Tama 1240			The contract of the contract o
11/1	Elmany own						Received by		rspe.		6-	7-04		1445
T0600102263			~				PM	111	pais					2120
	Attri 4-di VVoi Pro San Field	Attn: Anju Farfain 4-digit site#: 08- VVorkorder# 280 Project#: 4/050 Sampler Name: 5 Field Point Name Retinquished by (1) ALL Ranguished by (2) Retinquished by (3) Attn: Anju Farfain 4-digit site#: 0843 VVorkorder# 2807 TR Project#: 4/050001 Sampler Name: TRUE Field Point Name Relinquished by (Signature Attn: Anju Farfain 4-digit site#: 0843 Workcrder# 2807 TRC 500 Project#: 4/050001 Sampler Name. TRUK Field Point Name. Date & Time. Sampled 4/7 1/30 1000 1000 1000 1000 1000 Relinquished by Gieneture Relinquished by (Signature) Attn: Anju Farfain 4-cligit site#: 084/3 (V/VV) Workcrder# 2807 TRC 500 Waster water Project#: 4/050001 (SL) Sampler Name. TRLK Field Point Name. Date & Time. Sampled 4/7 1/30 G. 1003 1008 1008 1008 1008 Relinquished by (Signature) Attn: Anju Farfan 4-digit site#: 0843 (V/V) Workcrder # 2807 TXC 500 Wastewater Project #: 4/050001 (SL) Sampler Name: TXLK Sindige Field Point Name Date & Time Sampled 67 1/30 G.W 1000 1008 1008 1008 1008 Retriquished by Cignature ALL Rangular by (Signature Retriquished by (Signature 2 Shurbor	Attn: Anju Farfan 4-digit site#: 0843 Workcrder# 2807 TRC 500 Waste-water Project#: 4/050001 Sampler Name. JRCK Sindge Field Point Name Date & Time Sampled 1000 1008 1008 1003 Refinquished by Gigneture	Attn: Anju Farfam 4-digit site#: 084/3 Workcrder# 2807 TRC 500 Waste- Water Project#: 4/050001 Sampler Name. TRUK Sindge Field Point Name Date & Time Sampled 108 108 108 108 108 108 108 10	4-cligit site#: 0843 Workcrder# 2807 TRL 500 Project#: 4/050001 Sampler Name. Jack Field Point Name Date & Time Sampled 1008 1008 1008 1008 1008 Refinquished by Clienature 4-digit site#: 08443 (V/VV) Waste-watel gas Age SXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	4-cligit site#: 084/3 (V/VV) 1070 88 88 88 Wester 1084 108 108 108 108 108 108 108 108 108 108	Soil 19 18 18 18 18 18 18 18	## Relinguished by Chemeture Relinguished by Ch	## Project #: # 10843 (V/VV) Work order # 2807 TRL 500 Wastewater for a 108 A 28 A					

STATEMENTS

Purge Water Transport and Disposal

Non-hazardous groundwater produced during purging and sampling 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 suspected of containing potentially hazardous material, such as liquid-phase hydrocarbons, was accumulated separately in a drum 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.