



Customer-Focused Solutions

20352

April 28, 2004

ConocoPhillips Company  
76 Broadway  
Sacramento, CA 95818

Alameda County  
MAY 13 2004  
Environmental Health

ATTN: MR. THOMAS KOSEL

SITE: 76 STATION 5484  
18950 LAKE CHABOT ROAD  
CASTRO VALLEY, CALIFORNIA

RE: ANNUAL MONITORING REPORT  
MARCH 2003 THROUGH MARCH 2004

Dear Mr. Kosel:

Please find enclosed our Annual Monitoring Report for 76 Station 5484, located at 18950 Lake Chabot Road, Castro Valley, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan  
QMS Operations Manager

CC: Alameda County Health Care Services Division  
Mr. Steve Meeks, Delta Environment

Enclosures  
20-0400/5484R01.QMS



Customer-Focused Solutions

**FLUID LEVEL MONITORING AND  
GROUNDWATER SAMPLING REPORT**

**MARCH 2003 THROUGH MARCH 2004**

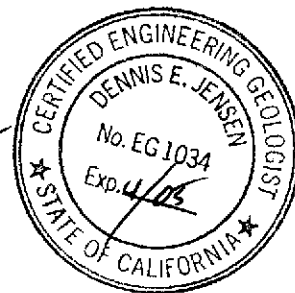
April 28, 2004

76 Station 5484  
18950 Lake Chabot  
Castro Valley, California

Prepared For:

Mr. Thomas Kosel  
CONOCOPHILLIPS COMPANY  
76 Broadway  
Sacramento, California 95818

By:



Senior Project Geologist, Irvine Operations

## GROUNDWATER MONITORING REPORT

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## Summary of Gauging and Sampling Activities

76 Station 5484  
18950 Lake Chabot Road  
Castro Valley, CA

### Site Information:

Site:	76 Station 18950 Lake Chabot Road Castro Valley, CA
Project Coordinator/Phone Number:	Thomas Kosel/916-558-7666
Groundwater wells onsite:	3
Groundwater wells offsite:	2

### Field Activity:

Sampling consultant:	TRC
Date(s) sampled:	03/26/04
Groundwater wells gauged:	4
Groundwater wells sampled:	2
Purging method:	diaphragm pump
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

### Site Hydrogeology:

Minimum depth to groundwater (feet bgs):	4.66
Maximum depth to groundwater (feet bgs):	7.25
Average groundwater elevation (feet relative to mean sea level):	225.12
Average change in groundwater elevations since previous event (feet):	-0.56
Groundwater gradient and flow direction:	0.1 ft/ft, south

### Groundwater Condition (Benzene Maximum Contaminant Level [MCL] = 1.0 µg/l)

Wells with benzene concentrations below MCL:	1
Wells with benzene concentrations at or above MCL:	1
Minimum benzene concentration (µg/l):	ND
Maximum benzene concentration (µg/l):	34 (MW-7)
Minimum MTBE concentration (µg/l):	ND
Maximum MTBE concentration (µg/l):	1200 (MW-7)
Minimum TPH-G concentration (µg/l):	ND
Maximum TPH-G concentration (µg/l):	2800 (MW-7)
Groundwater wells with free product:	0
Minimum free product thickness (feet):	0
Maximum free product thickness (feet):	0

### Additional Information:

MW-2=Monitored Only, MW-4=Unable to locate, MW-6=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 µg/l for graphical display.

Samples from wells MW-5 and MW-7 were each analyzed for 65 SVOCs compounds by EPA Method 8270C. Di-n-octyl phthalate was reported at 6.0 µg/l in MW-5. Napthalene and 2-methylnapthalene were detected at 17 µg/l and 23 µg/l respectively in MW-7. All other SVOCs were nondetect.

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 76 Station 5484 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**  
**March 26, 2004**  
**76 Station 5484**

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
<b>MW-2</b>														
03/26/04	228.88	4.66	0.00	224.22	-0.42	--	--	--	--	--	--	--	--	Monitored Only
<b>MW-4</b>														
03/26/04	227.77	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
<b>MW-5</b>														
03/26/04	225.11	6.93	0.00	218.18	-1.03	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
<b>MW-6</b>														
03/26/04	239.04	5.10	0.00	233.94	0.03	--	--	--	--	--	--	--	--	Monitored Only
<b>MW-7</b>														
03/26/04	231.39	7.25	0.00	224.14	-0.83	2800	--	34	ND<25	120	33	1200	--	

**Table 2**  
**HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS**  
**May 1991 Through March 2004**

**76 Station 5484**

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
<b>MW-2</b>														
05/23/91	229.47	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
09/20/91	229.47	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
12/19/91	229.47	--	--	--	--	140	--	0.66	ND	0.64	1.2	--	--	
03/20/92	229.47	--	--	--	--	120	--	ND	ND	ND	ND	--	--	
06/18/92	229.47	--	--	--	--	140	--	ND	ND	ND	ND	--	--	
09/10/92	229.47	--	--	--	--	61	--	ND	ND	ND	ND	110	--	
12/10/92	229.47	--	--	--	--	100	--	ND	ND	ND	ND	170	--	
03/10/93	229.47	4.69	0.00	224.78	--	110	--	ND	ND	ND	ND	350	--	
06/09/93	229.47	5.85	0.00	223.62	-1.16	120	--	ND	ND	ND	ND	300	--	
09/09/93	228.88	6.59	0.00	222.29	-1.33	210	--	ND	ND	ND	ND	--	--	
12/09/93	228.88	6.94	0.00	221.94	-0.35	96	--	ND	ND	ND	ND	--	--	
03/03/94	228.88	4.91	0.00	223.97	2.03	240	--	ND	ND	ND	ND	--	--	
06/03/94	228.88	5.71	0.00	223.17	-0.80	190	--	ND	ND	ND	ND	--	--	
09/02/94	228.88	7.05	0.00	221.83	-1.34	720	--	ND	ND	ND	4.6	--	--	
12/01/94	228.88	6.98	0.00	221.90	0.07	200	--	0.7	ND	0.58	ND	--	--	
03/01/95	228.88	4.60	0.00	224.28	2.38	ND	--	ND	ND	ND	ND	--	--	
06/01/95	228.88	4.65	0.00	224.23	-0.05	420	--	ND	ND	ND	ND	--	--	
09/05/95	228.88	5.66	0.00	223.22	-1.01	ND	--	ND	0.8	ND	0.74	5	--	
12/05/95	228.88	6.32	0.00	222.56	-0.66	ND	--	ND	ND	ND	ND	390	--	
04/11/96	228.88	4.22	0.00	224.66	--	--	--	--	--	--	--	--	--	Not Sampled
03/13/97	228.88	6.58	0.00	222.30	-2.36	--	--	--	--	--	--	--	--	
03/02/98	228.88	5.18	0.00	223.70	1.40	--	--	--	--	--	--	--	--	
03/25/99	228.88	4.84	0.00	224.04	0.34	--	--	--	--	--	--	--	--	
03/07/00	228.88	4.92	0.00	223.96	-0.08	--	--	--	--	--	--	--	--	
03/28/01	228.88	4.37	0.00	224.51	0.55	--	--	--	--	--	--	--	--	



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)	Ethylbenzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
MW-4 continued														
03/09/02	227.77	6.64	0.00	221.13	0.98	270	--	3.1	ND<1.0	5	ND<1.0	1200	--	
03/24/03	227.77	--	--	--	--	--	--	--	--	--	--	--	--	Inaccessible
03/26/04	227.77	--	--	--	--	--	--	--	--	--	--	--	--	Unable to locate
MW-5														
05/23/91	225.42	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
09/20/91	225.42	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
10/10/91	225.42	--	--	--	--	--	--	--	--	--	--	--	--	
12/19/91	225.42	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
03/20/92	225.42	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
06/18/92	225.42	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
09/10/92	225.42	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
12/10/92	225.42	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
03/10/93	225.42	7.67	0.00	217.75	--	ND	--	ND	ND	ND	ND	--	--	
06/09/93	225.42	8.57	0.00	216.85	-0.90	ND	--	ND	ND	ND	ND	--	--	
09/09/93	225.11	9.12	0.00	215.99	-0.86	ND	--	ND	ND	ND	ND	--	--	
12/09/93	225.11	9.97	0.00	215.14	-0.85	ND	--	ND	ND	ND	ND	--	--	
03/03/94	225.11	7.87	0.00	217.24	2.10	ND	--	ND	ND	0.71	1.7	ND	--	
06/03/94	225.11	9.01	0.00	216.10	-1.14	ND	--	ND	ND	ND	ND	--	--	
09/02/94	225.11	9.23	0.00	215.88	-0.22	ND	--	ND	ND	ND	ND	--	--	
12/01/94	225.11	9.18	0.00	215.93	0.05	ND	--	ND	ND	ND	ND	--	--	
03/01/95	225.11	7.98	0.00	217.13	1.20	ND	--	ND	ND	ND	ND	--	--	
06/01/95	225.11	8.21	0.00	216.90	-0.23	ND	--	ND	ND	ND	ND	--	--	
09/05/95	225.11	9.57	0.00	215.54	-1.36	ND	--	ND	0.95	ND	0.87	5	--	
12/05/95	225.11	9.60	0.00	215.51	-0.03	ND	--	ND	ND	ND	ND	27	--	
04/11/96	225.11	7.48	0.00	217.63	--	ND	--	ND	ND	ND	ND	56	--	
03/13/97	225.11	9.56	0.00	215.55	-2.08	ND	--	ND	ND	ND	ND	ND	--	
03/02/98	225.11	8.96	0.00	216.15	0.60	ND	--	ND	ND	ND	ND	ND	--	
03/25/99	225.11	7.53	0.00	217.58	1.43	ND	--	ND	ND	ND	ND	3.9	--	
03/07/00	225.11	7.49	0.00	217.62	0.04	ND	--	ND	1.13	ND	ND	ND	--	

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
MW-5 continued														
03/28/01	225.11	6.83	0.00	218.28	0.66	ND	--	ND	ND	ND	ND	ND	--	
03/09/02	225.11	5.85	0.00	219.26	0.98	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
03/24/03	225.11	5.90	0.00	219.21	-0.05	56	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
03/26/04	225.11	6.93	0.00	218.18	-1.03	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
MW-6														
05/23/91	239.38	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
09/20/91	239.38	--	--	--	--	--	--	--	--	--	--	--	--	Sampled semi-annually
12/19/91	239.38	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
12/10/92	239.38	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
03/10/93	239.38	5.32	0.00	234.06	--	--	--	--	--	--	--	--	--	
06/09/93	239.38	5.94	0.00	233.44	-0.62	ND	--	ND	ND	ND	ND	--	--	
09/09/93	239.04	6.82	0.00	232.22	-1.22	--	--	--	--	--	--	--	--	
12/09/93	239.04	7.43	0.00	231.61	-0.61	150	--	ND	ND	ND	1.7	--	--	
03/03/94	239.04	6.45	0.00	232.59	0.98	--	--	--	--	--	--	--	--	
06/03/94	239.04	5.81	0.00	233.23	0.64	ND	--	ND	ND	ND	ND	--	--	
09/02/94	239.04	6.98	0.00	232.06	-1.17	--	--	--	--	--	--	--	--	
12/01/94	239.04	6.92	0.00	232.12	0.06	ND	--	ND	ND	ND	ND	--	--	
03/01/95	239.04	5.17	0.00	233.87	1.75	--	--	--	--	--	--	--	--	
06/01/95	239.04	4.76	0.00	234.28	0.41	ND	--	ND	0.7	ND	1.7	--	--	
09/05/95	239.04	5.69	0.00	233.35	-0.93	--	--	--	--	--	--	--	--	
12/05/95	239.04	6.75	0.00	232.29	-1.06	ND	--	ND	ND	ND	ND	1.4	--	
04/11/96	239.04	4.28	0.00	234.76	--	--	--	--	--	--	--	--	--	Not Sampled
03/13/97	239.04	7.05	0.00	231.99	-2.77	--	--	--	--	--	--	--	--	
03/02/98	239.04	5.14	0.00	233.90	1.91	--	--	--	--	--	--	--	--	
03/25/99	239.04	5.05	0.00	233.99	0.09	--	--	--	--	--	--	--	--	
03/07/00	239.04	5.15	0.00	233.89	-0.10	--	--	--	--	--	--	--	--	
03/28/01	239.04	5.17	0.00	233.87	-0.02	--	--	--	--	--	--	--	--	
03/09/02	239.04	5.13	0.00	233.91	0.04	--	--	--	--	--	--	--	--	
03/24/03	239.04	5.13	0.00	233.91	0.00	--	--	--	--	--	--	--	--	

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
MW-6 continued														
03/26/04	239.04	5.10	0.00	233.94	0.03	--	--	--	--	--	--	--	--	Monitored Only
<b>MW-7</b>														
05/23/91	231.66	--	--	--	--	3000	--	160	1.2	25	120	--	--	
09/20/91	231.66	--	--	--	--	1400	--	160	0.75	89	130	--	--	
12/19/91	231.66	--	--	--	--	3900	--	240	2.4	280	270	--	--	
03/20/92	231.66	--	--	--	--	11000	--	980	ND	990	1600	--	--	
06/18/92	231.66	--	--	--	--	5500	--	340	4.2	380	410	--	--	
09/10/92	231.66	--	--	--	--	2100	--	160	1.9	140	150	--	--	
12/10/92	231.66	--	--	--	--	1200	--	28	ND	37	13	--	--	
03/10/93	231.66	7.69	0.00	223.97	--	4400	--	310	ND	300	330	--	--	
06/09/93	231.66	8.59	0.00	223.07	-0.90	4600	--	430	ND	510	430	--	--	
09/09/93	231.39	10.11	0.00	221.28	-1.79	2,600	--	160	19	250	120	--	--	
12/09/93	231.39	10.65	0.00	220.74	-0.54	980	--	54	4.6	71	5.6	--	--	
03/03/94	231.39	8.17	0.00	223.22	2.48	9300	--	290	ND	590	400	1.7	--	
06/03/94	231.39	8.73	0.00	222.66	-0.56	9400	--	380	5	820	240	--	--	
09/02/94	231.39	11.00	0.00	220.39	-2.27	3800	--	77	ND	180	42	--	--	
12/01/94	231.39	10.95	0.00	220.44	0.05	3100	--	80	ND	250	190	--	--	
03/01/95	231.39	8.03	0.00	223.36	2.92	3300	--	200	3.9	300	350	--	--	
06/01/95	231.39	7.92	0.00	223.47	0.11	3900	--	170	ND	400	430	--	--	
09/05/95	231.39	8.61	0.00	222.78	-0.69	710	--	32	ND	85	33	5	--	
12/05/95	231.39	9.69	0.00	221.70	-1.08	400	--	23	ND	34	16	1600	--	
12/08/95	231.39	9.59	0.00	221.80	0.10	--	--	--	--	--	--	--	--	
04/11/96	231.39	7.31	0.00	224.08	2.28	1500	--	52	ND	160	130	1500	--	
03/13/97	231.39	9.48	0.00	221.91	-2.17	460	--	13	ND	31	4	430	--	
03/02/98	231.39	7.93	0.00	223.46	1.55	1800	--	63	ND	240	60	790	--	
03/25/99	231.39	7.25	0.00	224.14	0.68	380	--	6.4	ND	10	4.9	1200	--	
03/07/00	231.39	7.12	0.00	224.27	0.13	199	--	3.51	ND	3.30	0.697	1,250	--	
03/28/01	231.39	6.92	0.00	224.47	0.20	734	--	19.6	0.514	23.3	6.13	1,070	1260	
03/09/02	231.39	6.48	0.00	224.91	0.44	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	

**Table 3**  
**SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS**  
**76 Station 5484**

Date Sampled	TPH-D (µg/l)	cis-1,3-dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	Chloro-benzene (µg/l)	2-Chloroethy l vinyl (µg/l)	DBCM (µg/l)	PCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,3-Dichloro-benzene (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-form (µg/l)	1,1,1-TCE (µg/l)
<b>MW-4</b>															
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>MW-5</b>															
09/20/91	450	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/10/91	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/92	170	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/18/92	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/10/92	110	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/92	83	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/93	69	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/93	64	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/09/93	58	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/09/93	87	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/03/94	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/03/94	80	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/02/94	130	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/01/94	79	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/01/95	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/01/95	57	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/95	210	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95	170	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date Sampled	TPH-D (µg/l)	cis-1,3-dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	Chloro-benzene (µg/l)	2-Chloroethy l vinyl (µg/l)	DBCM (µg/l)	PCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,3-Dichloro-benzene (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-form (µg/l)	1,1,1-TCE (µg/l)
MW-5 continued															
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	69.7	--
03/28/01	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	ND<0.50	--
03/24/03	--	--	--	--	--	--	--	--	--	--	--	--	--	ND<0.50	--
03/26/04	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-7															
05/23/91	540	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/20/91	580	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/19/91	770	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/92	3200	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/18/92	990	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/10/92	290	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/92	200	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/93	1,100	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/93	830	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/09/93	550	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/09/93	250	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/03/94	1,400	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/03/94	2,000	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/02/94	490	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/01/94	260	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/01/95	1,900	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/01/95	1,600	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/95	ND	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95	110	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/08/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date Sampled	TPH-D (µg/l)	cis-1,3-dichloro-propene (µg/l)	trans-1,3-Dichloro-propene (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	Chloro-benzene (µg/l)	2-Chloroethy l vinyl (µg/l)	DBCM (µg/l)	PCE (µg/l)	cis-1,2-DCE (µg/l)	trans-1,2-DCE (µg/l)	1,3-Dichloro-benzene (µg/l)	Carbon Tetra-chloride (µg/l)	Chloro-form (µg/l)	1,1,1-TCE (µg/l)
MW-7 continued															
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--
03/28/01	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	ND<0.50	--
03/24/03	--	--	--	--	--	--	--	--	--	--	--	--	--	ND<0.50	--
03/26/04	--	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10	ND<10

**Table 3b**  
**SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS**  
**76 Station 5484**

Date Sampled	Bromo- methane (µg/l)	Chloro- methane (µg/l)	Chloro- ethane (µg/l)	Vinyl chloride (µg/l)	Methylene chloride (µg/l)	Bromoform (µg/l)	BDCM (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	Trichloro- fluoro- methane (µg/l)	Trichloro- trifluoro- ethane (µg/l)	1,2- dichloro- propane (µg/l)	1,1,2-TCA (µg/l)	TCE (µg/l)	1,1,2,2- Tetrachloro ethane (µg/l)
<b>MW-4</b>															
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>MW-5</b>															
09/20/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/10/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/18/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/02/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/01/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date Sampled	Bromo-methane (µg/l)	Chloro-methane (µg/l)	Chloro-ethane (µg/l)	Vinyl chloride (µg/l)	Methylene chloride (µg/l)	Bromoform (µg/l)	BDCM (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	Trichloro-fluoro-methane (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2-dichloro-propane (µg/l)	1,1,2-TCA (µg/l)	TCE (µg/l)	1,1,2,2-Tetrachloro-ethane (µg/l)
MW-5 continued															
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/24/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/26/04	ND<1.0	ND<1.0	ND<1.0	ND<0.50	ND<5.0	ND<2.0	ND<0.50	ND<0.50	ND<0.50	ND<1.0	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-7															
05/23/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/20/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/19/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/18/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/02/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/01/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/08/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--



Date Sampled	Bromo-methane (µg/l)	Chloro-methane (µg/l)	Chloro-ethane (µg/l)	Vinyl chloride (µg/l)	Methylene chloride (µg/l)	Bromoform (µg/l)	BDCM (µg/l)	1,1-DCA (µg/l)	1,1-DCE (µg/l)	Trichloro-fluoro-methane (µg/l)	Trichloro-trifluoro-ethane (µg/l)	1,2-dichloro-propane (µg/l)	1,1,2-TCA (µg/l)	TCE (µg/l)	1,1,2,2-Tetrachloro ethane (µg/l)
MW-7 continued															
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/24/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/26/04	ND<20	ND<20	ND<20	ND<10	ND<100	ND<40	ND<10	ND<10	ND<10	ND<20	ND<10	ND<10	ND<10	ND<10	ND<10

**Table 3c**  
**SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS**  
**76 Station 5484**

Date Sampled	1,2-DCB (µg/l)	Dichloro- difluoro- methane (µg/l)	EDB (µg/l)	1,2,4- Trichloro- benzene (µg/l)	HCBD (µg/l)	Naphth- alene (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Acenaph- thylene (µg/l)	Acenaph- thene (µg/l)	Fluorene (µg/l)	Phenan- threne (µg/l)	Anthra- cene (µg/l)
<b>MW-4</b>															
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
<b>MW-5</b>															
09/20/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/10/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/18/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/02/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/01/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date Sampled	1,2-DCB (µg/l)	Dichloro- difluoro- methane (µg/l)	EDB (µg/l)	1,2,4- Trichloro- benzene (µg/l)	HCBD (µg/l)	Naphth- alene (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Acenaph- thylene (µg/l)	Acenaph- thene (µg/l)	Fluorene (µg/l)	Phenan- threne (µg/l)	Anthra- cene (µg/l)
MW-5 continued															
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/24/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/26/04	ND<0.50	ND<1.0	--	ND<2.0	ND<2.0	ND<2.0	--	--	--	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0
MW-7															
05/23/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/20/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/19/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/18/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/02/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/01/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/08/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/96	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Date Sampled	1,2-DCB (µg/l)	Dichloro- difluoro- methane (µg/l)	EDB (µg/l)	1,2,4- Trichloro- benzene (µg/l)	HCBD (µg/l)	Naphth- alene (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Acenaph- thylene (µg/l)	Acenaph- thene (µg/l)	Fluorene (µg/l)	Phenan- threne (µg/l)	Anthra- cene (µg/l)
MW-7 continued															
03/13/97	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/28/01	--	--	ND	--	--	--	ND	ND	ND	ND	--	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/24/03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/26/04	ND<10	ND<20	--	ND<2.0	ND<2.0	17	--	--	--	--	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0

**Table 3d**  
**SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS**  
**76 Station 5484**

Date Sampled	Fluoranthene (µg/l)	Pyrene (µg/l)	Benzo (a)Anthracene (µg/l)	Chrysene (µg/l)	B(b)Fl (µg/l)	B(k)F (µg/l)	Benzo(a) Pyrene (µg/l)	DB(a,h)A (µg/l)	Benzo (g,h,i)-Perylene (µg/l)	Indeno (1,2,3c,d)-Pyrene (µg/l)	Bis(2-ethylhexyl)-phthalate (µg/l)	2-Methylphenol (µg/l)	4-Methylphenol (µg/l)	TOG (mg/l)	1,2 DCE (µg/l)
<b>MW-4</b>															
04/11/96	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/13/97	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	ND<10	--	--	--	--
<b>MW-5</b>															
09/20/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
10/10/91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/18/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/93	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
06/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/03/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/02/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/01/94	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
06/01/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
09/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
04/11/96	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--

Date Sampled	Fluoranthene (µg/l)	Pyrene (µg/l)	Benzo(a)Anthracene (µg/l)	Chrysene (µg/l)	B(b)Fl (µg/l)	B(k)F (µg/l)	Benzo(a)Pyrene (µg/l)	DB(a,h)A (µg/l)	Benzo(g,h,i)Perylene (µg/l)	Indeno(1,2,3c,d)Pyrene (µg/l)	Bis(2-ethylhexyl)-phthalate (µg/l)	2-Methylphenol (µg/l)	4-Methylphenol (µg/l)	TOG (mg/l)	1,2 DCE (µg/l)
MW-5 continued															
03/13/97	--	--	--	--	--	--	--	--	--	--	740	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/09/02	--	--	--	--	--	--	--	--	--	--	ND<10	--	--	--	--
03/24/03	--	--	--	--	--	--	--	--	--	--	ND<10	--	--	--	ND<0.50
03/26/04	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10	ND<2.0	ND<2.0	--	--
MW-7															
05/23/91	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--
09/20/91	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--
12/19/91	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--
03/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--
06/18/92	--	--	--	--	--	--	--	--	--	--	--	--	--	ND	--
09/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/10/92	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
03/10/93	--	--	--	--	--	--	--	--	--	--	13	--	--	--	--
06/09/93	--	--	--	--	--	--	--	--	--	--	13	--	--	--	--
09/09/93	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
12/09/93	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/03/94	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
06/03/94	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
09/02/94	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
12/01/94	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/01/95	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
06/01/95	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
09/05/95	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
12/05/95	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
12/08/95	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
04/11/96	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--

Date Sampled	Fluoranthene (µg/l)	Pyrene (µg/l)	Benzo (a)Anthracene (µg/l)	Chrysene (µg/l)	B(b)Fl (µg/l)	B(k)F (µg/l)	Benzo(a) Pyrene (µg/l)	DB(a,h)A (µg/l)	Benzo (g,h,i)-Perylene (µg/l)	Indeno (1,2,3c,d)-Pyrene (µg/l)	Bis(2-ethylhexyl)-phthalate (µg/l)	2-Methylphenol (µg/l)	4-Methylphenol (µg/l)	TOG (mg/l)	1,2 DCE (µg/l)
MW-7 continued															
03/13/97	--	--	--	--	--	--	--	--	--	--	120	--	--	--	--
03/25/99	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/07/00	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	--
03/28/01	--	--	--	--	--	--	--	--	--	--	ND	--	--	--	ND
03/09/02	--	--	--	--	--	--	--	--	--	--	ND<10	--	--	--	--
03/24/03	--	--	--	--	--	--	--	--	--	--	ND<10	--	--	--	0.98
03/26/04	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<2.0	ND<10	ND<2.0	ND<2.0	--	--

**Table 3e**  
**SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS**  
**76 Station 5484**

Date Sampled	2- Methylnap h-thalene (µg/l)
<b>MW-4</b>	
04/11/96	--
03/13/97	--
03/25/99	--
03/07/00	--
03/28/01	--
03/09/02	--
<b>MW-5</b>	
09/20/91	--
10/10/91	--
03/20/92	--
06/18/92	--
09/10/92	--
12/10/92	--
03/10/93	--
06/09/93	--
09/09/93	--
12/09/93	--
03/03/94	--
06/03/94	--
09/02/94	--
12/01/94	--
03/01/95	--
06/01/95	--
09/05/95	--
12/05/95	--
04/11/96	--



Date Sampled	2- Methylnap h-thalene ( $\mu\text{g/l}$ )
-----------------	---

---

MW-5	continued
03/13/97	--
03/25/99	--
03/07/00	--
03/28/01	--
03/09/02	--
03/24/03	--
03/26/04	ND<2.0

**MW-7**

05/23/91	--
09/20/91	--
12/19/91	--
03/20/92	--
06/18/92	--
09/10/92	--
12/10/92	--
03/10/93	--
06/09/93	--
09/09/93	--
12/09/93	--
03/03/94	--
06/03/94	--
09/02/94	--
12/01/94	--
03/01/95	--
06/01/95	--
09/05/95	--
12/05/95	--
12/08/95	--
04/11/96	--

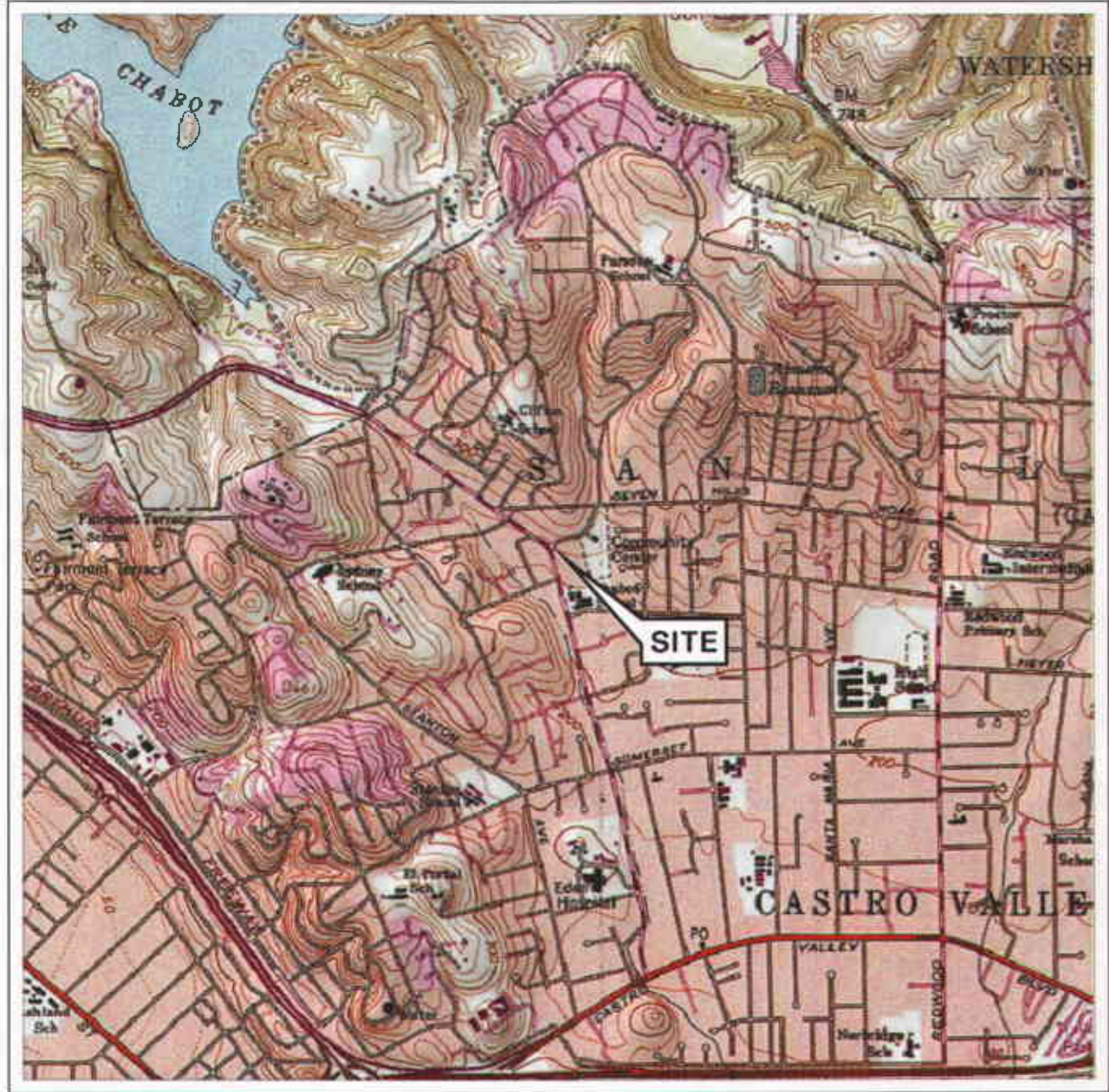
Date Sampled	2- Methylnap h-thalene (µg/l)
-----------------	--

---

MW-7 continued

03/13/97	--
03/25/99	--
03/07/00	--
03/28/01	--
03/09/02	--
03/24/03	--
03/26/04	23

# FIGURES



0 1/4 1/2 3/4 1 MILE

SCALE 1:24,000



SOURCE:

United States Geological Survey  
7.5 Minute Topographic Map:  
Hayward Quadrangle



VICINITY MAP

76 Station 5484  
18950 Lake Chobot Road  
Castro Valley, California

FIGURE 1

**TRC**

QUAIL AVENUE



MW-6  
233.94

DISPENSER ISLANDS

230.00

CANOPY

UST

UST

STATION BUILDING

225.00

MW-2  
224.22

MW-7  
224.14

WASTE OIL TANK

220.00

MW-5  
218.18

LAKE CHABOT ROAD

MW-4  
NA

**NOTES:**

Contour lines are interpretive and based on fluid levels measured in monitoring wells. NA = not analyzed, measured, or collected. Elevations are in feet above mean sea level. UST = underground storage tank.

**LEGEND**

MW-7 Monitoring Well with Groundwater Elevation (feet)

230.00 Groundwater Elevation Contour

General Direction of Groundwater Flow

**GROUNDWATER ELEVATION CONTOUR MAP  
March 26, 2004**

76 Station 5484  
18950 Lake Chabot Road  
Castro Valley, California



**FIGURE 2**

PS=1:1

QUAIL AVENUE



MW-6  
NA

DISPENSER ISLANDS

CANOPY

UST

UST

STATION BUILDING

WASTE OIL TANK

MW-2  
NA

MW-7

2,800

1,000

LAKE CHABOT ROAD

MW-4  
NA

MW-5  
ND<50

**NOTES:**

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

**LEGEND**

MW-7 Monitoring Well with Dissolved-Phase TPH-G Concentration ( $\mu\text{g/l}$ )

1,000 Dissolved-Phase TPH-G Contour ( $\mu\text{g/l}$ )

**DISSOLVED-PHASE TPH-G CONCENTRATION MAP  
March 26, 2004**

76 Station 5484  
18950 Lake Chabot Road  
Castro Valley, California



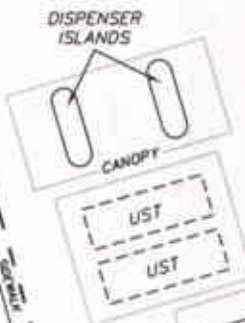
**FIGURE 3**

PS=1:1

QUAIL AVENUE



MW-6  
NA



WASTE OIL TANK

MW-2  
NA

MW-7  
34

MW-5  
ND<0.50

LAKE CHABOT ROAD

MW-4  
NA



**NOTES:**

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. NA = not analyzed, measured, or collected.

**LEGEND**

MW-7 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

10 — Dissolved-Phase Benzene Contour (µg/l)

**DISSOLVED-PHASE BENZENE CONCENTRATION MAP  
March 26, 2004**

76 Station 5484  
18950 Lake Chabot Road  
Castro Valley, California



SCALE (FEET)



**FIGURE 4**

PS=1:1

QUAIL AVENUE



MW-6  
⊕  
NA

DISPENSER ISLANDS

CANOPY

UST

UST

STATION BUILDING

WASTE OIL TANK

MW-2  
⊕  
NA

MW-7  
⊕  
1,200

1,000

LAKE CHABOT ROAD

MW-4  
⊕  
NA

MW-5  
⊕  
ND<5.0

**NOTES:**

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

**LEGEND**

MW-7 ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration ( $\mu\text{g/l}$ )

1,000 - - - Dissolved-Phase MTBE Contour ( $\mu\text{g/l}$ )

**DISSOLVED-PHASE MTBE CONCENTRATION MAP  
March 26, 2004**

76 Station 5484  
18950 Lake Chabot Road  
Castro Valley, California



SCALE (FEET)



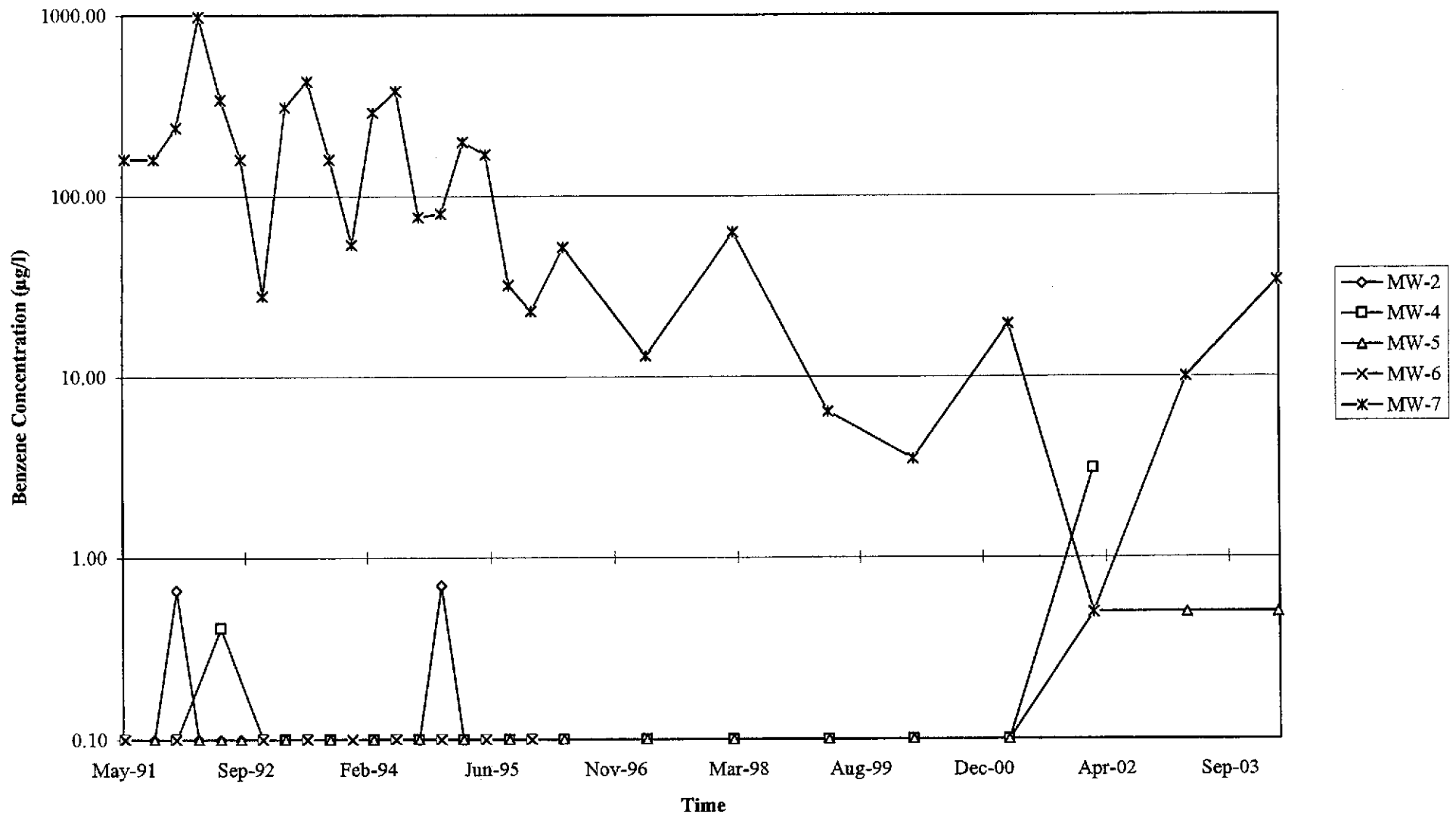
**FIGURE 5**

PS=1:1

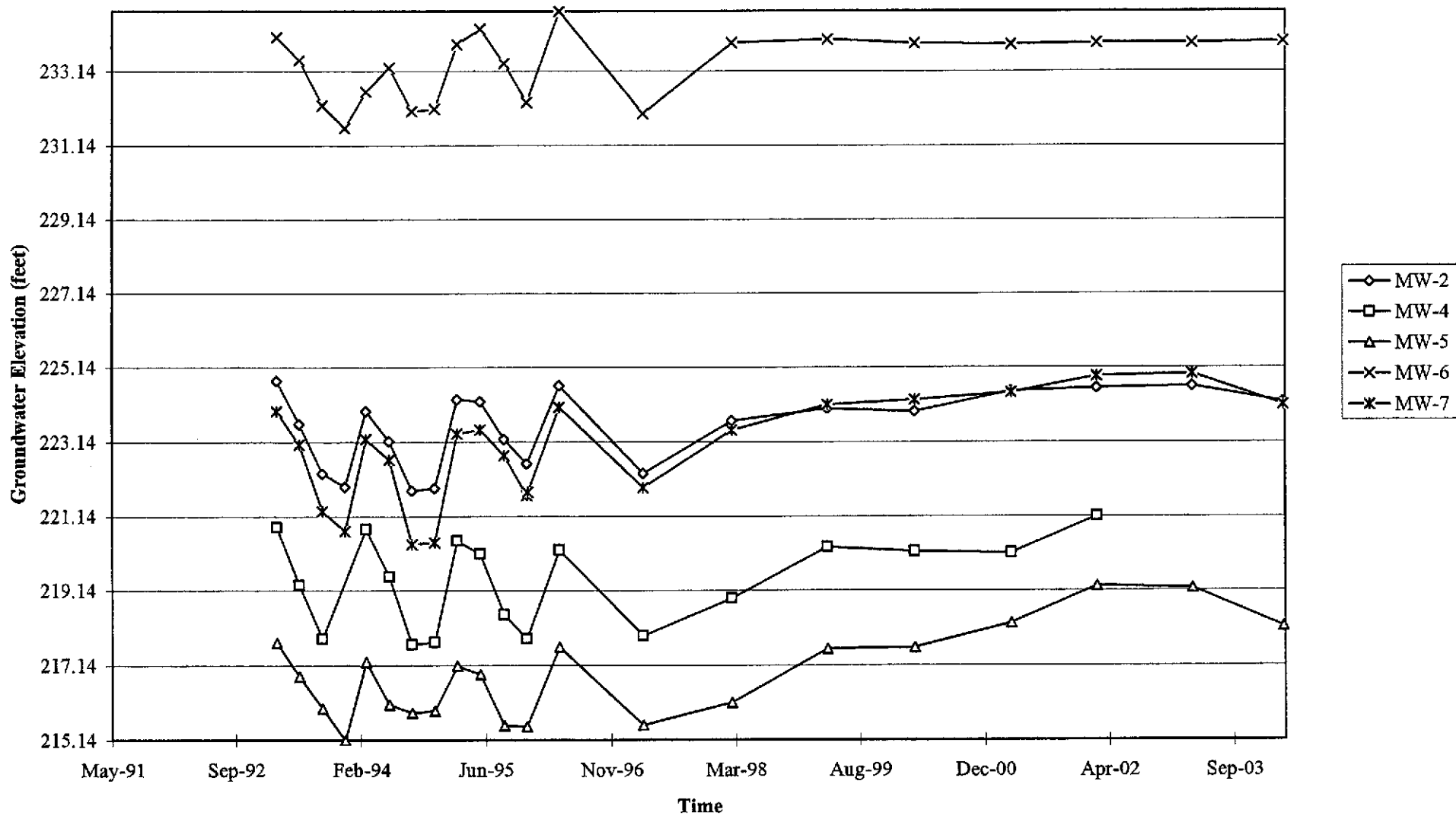


# GRAPHS

Graph 1  
Benzene Concentrations vs. Time  
76 Station 5484



Graph 2  
Hydrograph  
76 Station 5484



## 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.



**GROUNDWATER SAMPLING FIELD NOTES**

Site: 5484

Technician: David Tenney

Project No.: 410900-01/PA20

Date: 3-26-04

Well No.: MW-7

Purge Method: Dis

Depth to Water (feet): 7.25

Depth to Product (feet): 0

Total Depth (feet): 19.50

LPH & Water Recovered (gallons): 0

Water Column (feet): 12.25

Casing Diameter (Inches): 2

80% Recharge Depth (feet): 9.70

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
1055			2	1207u	17.4	6.27		
			4	1231	17.0	6.70		
	1107		6	1220	17.2	6.63		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
9:09		6			1220			
Comments:								

Well No.: \_\_\_\_\_

Purge Method: \_\_\_\_\_

Depth to Water (feet): \_\_\_\_\_

Depth to Product (feet): \_\_\_\_\_

Total Depth (feet): \_\_\_\_\_

LPH & Water Recovered (gallons): \_\_\_\_\_

Water Column (feet): \_\_\_\_\_

Casing Diameter (Inches): \_\_\_\_\_

80% Recharge Depth (feet): \_\_\_\_\_

1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
Static at Time Sampled		Total Gallons Purged			Time Sampled			
Comments:								

**GROUNDWATER SAMPLING FIELD NOTES**

Technician: JACK  
 Project No.: 41030301/FA20

Site: 5484

Date: 5/24/04

Well No.: MW-5  
 Depth to Water (feet): 6.93  
 Total Depth (feet): 23.85  
 Water Column (feet): 16.92  
 80% Recharge Depth (feet): 10.31

Purge Method: DIA  
 Depth to Product (feet): ∅  
 LPH & Water Recovered (gallons): ∅  
 Casing Diameter (Inches): 4.1  
 1 Well Volume (gallons): ~~16.2~~ 10.11

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
1053			10.11	787	17.4	7.10		
			20.22	807	18.2	7.16		
	1103		26.33	813	18.6	7.78		
Static at Time Sampled		Total Gallons Purged			Time Sampled			
15.72		33			10:12:53			
Comments: <u>DIDN'T RECOVER IN 2 HRS</u>								

Well No.: \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Total Depth (feet): \_\_\_\_\_ LPH & Water Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
Static at Time Sampled		Total Gallons Purged			Time Sampled			
Comments: _____								



STATEMENT OF NON-COMPLETION OF JOB

DATE OF EVENT: 3/26/04 STATION NUMBER: 5444

NAME OF TECH: Talk CALLED GORDON: \_\_\_\_\_

CALLED PM: \_\_\_\_\_ NAME OF PM CALLED: \_\_\_\_\_

WELL NUMBER: mw-4 STATEMENT FROM PM \_\_\_\_\_ OR TECH \_\_\_\_\_

UNABLE TO LOCATE WELL. NEW CONDOS ON SITE  
WHERE WELL WAS SUPPOSED TO BE. TALK TO CONTRACTOR OF  
CONDOS, HE SAID HE NEVER SAW ANY WELL. CALLED A. COLLINS,  
(TOOK PICTURES)

WELL NUMBER: \_\_\_\_\_ STATEMENT FROM PM \_\_\_\_\_ OR TECH \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WELL NUMBER: \_\_\_\_\_ STATEMENT FROM PM \_\_\_\_\_ OR TECH \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

WELL NUMBER: \_\_\_\_\_ STATEMENT FROM PM \_\_\_\_\_ OR TECH \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TRC Alton Geoscience

April 12, 2004

21 Technology Drive  
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001FA20

Project: Conoco Phillips # 5484

Site: 18950 Lake Chabot Rd., Castro Valley

Attached is our report for your samples received on 03/29/2004 17:26

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 05/13/2004 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](mailto:dsharma@stl-inc.com)

Sincerely,



Dimple Sharma  
Project Manager

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-5	03/26/2004 12:53	Water	1
MW-7	03/26/2004 12:20	Water	2

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 3510C/8270C                      Test(s): 8270C  
Sample ID: MW-5                              Lab ID: 2004-03-0913 - 1  
Sampled: 03/26/2004 12:53                Extracted: 3/30/2004 07:47  
Matrix: Water                                QC Batch#: 2004/03/30-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Phenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Bis(2-chloroethyl)ether	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2-Chlorophenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
1,3-Dichlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
1,4-Dichlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Benzyl alcohol	ND	5.0	ug/L	1.00	04/01/2004 19:47	
1,2-Dichlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2-Methylphenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Bis(2-chloroisopropyl) ether	ND	2.0	ug/L	1.00	04/01/2004 19:47	
4-Methylphenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
N-Nitroso-di-n-propylamine	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Hexachloroethane	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Nitrobenzene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Isophorone	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2-Nitrophenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2,4-Dimethylphenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Bis(2-chloroethoxy) methane	ND	5.0	ug/L	1.00	04/01/2004 19:47	
2,4-Dichlorophenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
1,2,4-Trichlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Naphthalene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
4-Chloroaniline	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Hexachlorobutadiene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
4-Chloro-3-methylphenol	ND	5.0	ug/L	1.00	04/01/2004 19:47	
2-Methylnaphthalene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Hexachlorocyclopentadiene	ND	5.0	ug/L	1.00	04/01/2004 19:47	
2,4,6-Trichlorophenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2,4,5-Trichlorophenol	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2-Chloronaphthalene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2-Nitroaniline	ND	10	ug/L	1.00	04/01/2004 19:47	

Severn Trent Laboratories, Inc.

04/09/2004 13:17

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 3510C/8270C

Test(s): 8270C

Sample ID: MW-5

Lab ID: 2004-03-0913 - 1

Sampled: 03/26/2004 12:53

Extracted: 3/30/2004 07:47

Matrix: Water

QC Batch#: 2004/03/30-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dimethyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 19:47	
Acenaphthylene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
3-Nitroaniline	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Acenaphthene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2,4-Dinitrophenol	ND	10	ug/L	1.00	04/01/2004 19:47	
4-Nitrophenol	ND	10	ug/L	1.00	04/01/2004 19:47	
Dibenzofuran	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2,4-Dinitrotoluene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
2,6-Dinitrotoluene	ND	5.0	ug/L	1.00	04/01/2004 19:47	
Diethyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 19:47	
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	1.00	04/01/2004 19:47	
Fluorene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
4-Nitroaniline	ND	10	ug/L	1.00	04/01/2004 19:47	
2-Methyl-4,6-dinitrophenol	ND	10	ug/L	1.00	04/01/2004 19:47	
N-Nitrosodiphenylamine	ND	2.0	ug/L	1.00	04/01/2004 19:47	
4-Bromophenyl phenyl ether	ND	5.0	ug/L	1.00	04/01/2004 19:47	
Hexachlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Pentachlorophenol	ND	10	ug/L	1.00	04/01/2004 19:47	
Phenanthrene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Anthracene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Di-n-butyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 19:47	
Fluoranthene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Pyrene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Butyl benzyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 19:47	
3,3-Dichlorobenzidine	ND	5.0	ug/L	1.00	04/01/2004 19:47	
Benzo(a)anthracene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	1.00	04/01/2004 19:47	
Chrysene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Di-n-octyl phthalate	6.0	5.0	ug/L	1.00	04/01/2004 19:47	

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04/09/2004 13:17

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 3510C/8270C	Test(s): 8270C
Sample ID: MW-5	Lab ID: 2004-03-0913 - 1
Sampled: 03/26/2004 12:53	Extracted: 3/30/2004 07:47
Matrix: Water	QC Batch#: 2004/03/30-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Benzo(b)fluoranthene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Benzo(k)fluoranthene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Benzo(a)pyrene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Dibenzo(a,h)anthracene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Benzo(g,h,i)perylene	ND	2.0	ug/L	1.00	04/01/2004 19:47	
Benzoic acid	ND	10	ug/L	1.00	04/01/2004 19:47	
<b>Surrogate(s)</b>						
Nitrobenzene-d5	37.6	35-114	%	1.00	04/01/2004 19:47	
2-Fluorobiphenyl	38.2	43-116	%	1.00	04/01/2004 19:47	sl
p-Terphenyl-d14	75.8	33-141	%	1.00	04/01/2004 19:47	
2-Fluorophenol	18.9	25-100	%	1.00	04/01/2004 19:47	sl
Phenol-d6	12.4	10-110	%	1.00	04/01/2004 19:47	
2,4,6-Tribromophenol	28.2	10-123	%	1.00	04/01/2004 19:47	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/09/2004 13:17

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 3510C/8270C

Test(s): 8270C

Sample ID: MW-7

Lab ID: 2004-03-0913 - 2

Sampled: 03/26/2004 12:20

Extracted: 3/30/2004 07:47

Matrix: Water

QC Batch#: 2004/03/30-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Phenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Bis(2-chloroethyl)ether	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2-Chlorophenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
1,3-Dichlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
1,4-Dichlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Benzyl alcohol	ND	5.0	ug/L	1.00	04/01/2004 20:16	
1,2-Dichlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2-Methylphenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Bis(2-chloroisopropyl) ether	ND	2.0	ug/L	1.00	04/01/2004 20:16	
4-Methylphenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
N-Nitroso-di-n-propylamine	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Hexachloroethane	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Nitrobenzene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Isophorone	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2-Nitrophenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2,4-Dimethylphenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Bis(2-chloroethoxy) methane	ND	5.0	ug/L	1.00	04/01/2004 20:16	
2,4-Dichlorophenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
1,2,4-Trichlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Naphthalene	17	2.0	ug/L	1.00	04/01/2004 20:16	
4-Chloroaniline	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Hexachlorobutadiene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
4-Chloro-3-methylphenol	ND	5.0	ug/L	1.00	04/01/2004 20:16	
2-Methylnaphthalene	23	2.0	ug/L	1.00	04/01/2004 20:16	
Hexachlorocyclopentadiene	ND	5.0	ug/L	1.00	04/01/2004 20:16	
2,4,6-Trichlorophenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2,4,5-Trichlorophenol	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2-Chloronaphthalene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2-Nitroaniline	ND	10	ug/L	1.00	04/01/2004 20:16	

Severn Trent Laboratories, Inc.

04/09/2004 13:17

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s):	3510C/8270C	Test(s):	8270C
Sample ID:	MW-7	Lab ID:	2004-03-0913 - 2
Sampled:	03/26/2004 12:20	Extracted:	3/30/2004 07:47
Matrix:	Water	QC Batch#:	2004/03/30-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dimethyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 20:16	
Acenaphthylene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
3-Nitroaniline	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Acenaphthene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2,4-Dinitrophenol	ND	10	ug/L	1.00	04/01/2004 20:16	
4-Nitrophenol	ND	10	ug/L	1.00	04/01/2004 20:16	
Dibenzofuran	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2,4-Dinitrotoluene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
2,6-Dinitrotoluene	ND	5.0	ug/L	1.00	04/01/2004 20:16	
Diethyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 20:16	
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	1.00	04/01/2004 20:16	
Fluorene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
4-Nitroaniline	ND	10	ug/L	1.00	04/01/2004 20:16	
2-Methyl-4,6-dinitrophenol	ND	10	ug/L	1.00	04/01/2004 20:16	
N-Nitrosodiphenylamine	ND	2.0	ug/L	1.00	04/01/2004 20:16	
4-Bromophenyl phenyl ether	ND	5.0	ug/L	1.00	04/01/2004 20:16	
Hexachlorobenzene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Pentachlorophenol	ND	10	ug/L	1.00	04/01/2004 20:16	
Phenanthrene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Anthracene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Di-n-butyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 20:16	
Fluoranthene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Pyrene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Butyl benzyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 20:16	
3,3-Dichlorobenzidine	ND	5.0	ug/L	1.00	04/01/2004 20:16	
Benzo(a)anthracene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	1.00	04/01/2004 20:16	
Chrysene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Di-n-octyl phthalate	ND	5.0	ug/L	1.00	04/01/2004 20:16	

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/09/2004 13:17



**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111  
Project: 41050001FA20  
Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 3510C/8270C	Test(s): 8270C
Sample ID: MW-7	Lab ID: 2004-03-0913 - 2
Sampled: 03/26/2004 12:20	Extracted: 3/30/2004 07:47
Matrix: Water	QC Batch#: 2004/03/30-01.11

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Benzo(b)fluoranthene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Benzo(k)fluoranthene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Benzo(a)pyrene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Dibenzo(a,h)anthracene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Benzo(g,h,i)perylene	ND	2.0	ug/L	1.00	04/01/2004 20:16	
Benzoic acid	ND	10	ug/L	1.00	04/01/2004 20:16	
<b>Surrogate(s)</b>						
Nitrobenzene-d5	25.3	35-114	%	1.00	04/01/2004 20:16	sl
2-Fluorobiphenyl	26.6	43-116	%	1.00	04/01/2004 20:16	sl
p-Terphenyl-d14	54.6	33-141	%	1.00	04/01/2004 20:16	
2-Fluorophenol	21.5	25-100	%	1.00	04/01/2004 20:16	sl
Phenol-d6	15.2	10-110	%	1.00	04/01/2004 20:16	
2,4,6-Tribromophenol	42.0	10-123	%	1.00	04/01/2004 20:16	

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 3510C/8270C

Test(s): 8270C

**Method Blank**
**Water**
**QC Batch # 2004/03/30-01.11**

MB: 2004/03/30-01.11-001

Date Extracted: 03/30/2004 07:47

Compound	Conc.	RL	Unit	Analyzed	Flag
Phenol	ND	2.0	ug/L	03/30/2004 20:06	
Bis(2-chloroethyl)ether	ND	2.0	ug/L	03/30/2004 20:06	
2-Chlorophenol	ND	2.0	ug/L	03/30/2004 20:06	
1,3-Dichlorobenzene	ND	2.0	ug/L	03/30/2004 20:06	
1,4-Dichlorobenzene	ND	2.0	ug/L	03/30/2004 20:06	
Benzyl alcohol	ND	5.0	ug/L	03/30/2004 20:06	
1,2-Dichlorobenzene	ND	2.0	ug/L	03/30/2004 20:06	
2-Methylphenol	ND	2.0	ug/L	03/30/2004 20:06	
Bis(2-chloroisopropyl) ether	ND	2.0	ug/L	03/30/2004 20:06	
4-Methylphenol	ND	2.0	ug/L	03/30/2004 20:06	
N-Nitroso-di-n-propylamine	ND	2.0	ug/L	03/30/2004 20:06	
Hexachloroethane	ND	2.0	ug/L	03/30/2004 20:06	
Nitrobenzene	ND	2.0	ug/L	03/30/2004 20:06	
Isophorone	ND	2.0	ug/L	03/30/2004 20:06	
2-Nitrophenol	ND	2.0	ug/L	03/30/2004 20:06	
2,4-Dimethylphenol	ND	2.0	ug/L	03/30/2004 20:06	
Bis(2-chloroethoxy) methane	ND	5.0	ug/L	03/30/2004 20:06	
2,4-Dichlorophenol	ND	2.0	ug/L	03/30/2004 20:06	
1,2,4-Trichlorobenzene	ND	2.0	ug/L	03/30/2004 20:06	
Naphthalene	ND	2.0	ug/L	03/30/2004 20:06	
4-Chloroaniline	ND	2.0	ug/L	03/30/2004 20:06	
Hexachlorobutadiene	ND	2.0	ug/L	03/30/2004 20:06	
4-Chloro-3-methylphenol	ND	5.0	ug/L	03/30/2004 20:06	
2-Methylnaphthalene	ND	2.0	ug/L	03/30/2004 20:06	
Hexachlorocyclopentadiene	ND	5.0	ug/L	03/30/2004 20:06	
2,4,6-Trichlorophenol	ND	2.0	ug/L	03/30/2004 20:06	
2,4,5-Trichlorophenol	ND	2.0	ug/L	03/30/2004 20:06	
2-Chloronaphthalene	ND	2.0	ug/L	03/30/2004 20:06	
2-Nitroaniline	ND	10	ug/L	03/30/2004 20:06	

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04/09/2004 13:17

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**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 3510C/8270C

Test(s): 8270C

Method Blank

Water

QC Batch # 2004/03/30-01.11

MB: 2004/03/30-01.11-001

Date Extracted: 03/30/2004 07:47

Compound	Conc.	RL	Unit	Analyzed	Flag
Dimethyl phthalate	ND	5.0	ug/L	03/30/2004 20:06	
Acenaphthylene	ND	2.0	ug/L	03/30/2004 20:06	
3-Nitroaniline	ND	2.0	ug/L	03/30/2004 20:06	
Acenaphthene	ND	2.0	ug/L	03/30/2004 20:06	
2,4-Dinitrophenol	ND	10	ug/L	03/30/2004 20:06	
4-Nitrophenol	ND	10	ug/L	03/30/2004 20:06	
Dibenzofuran	ND	2.0	ug/L	03/30/2004 20:06	
2,4-Dinitrotoluene	ND	2.0	ug/L	03/30/2004 20:06	
2,6-Dinitrotoluene	ND	5.0	ug/L	03/30/2004 20:06	
Diethyl phthalate	ND	5.0	ug/L	03/30/2004 20:06	
4-Chlorophenyl phenyl ether	ND	5.0	ug/L	03/30/2004 20:06	
Fluorene	ND	2.0	ug/L	03/30/2004 20:06	
4-Nitroaniline	ND	10	ug/L	03/30/2004 20:06	
2-Methyl-4,6-dinitrophenol	ND	10	ug/L	03/30/2004 20:06	
N-Nitrosodiphenylamine	ND	2.0	ug/L	03/30/2004 20:06	
4-Bromophenyl phenyl ether	ND	5.0	ug/L	03/30/2004 20:06	
Hexachlorobenzene	ND	2.0	ug/L	03/30/2004 20:06	
Pentachlorophenol	ND	10	ug/L	03/30/2004 20:06	
Phenanthrene	ND	2.0	ug/L	03/30/2004 20:06	
Anthracene	ND	2.0	ug/L	03/30/2004 20:06	
Di-n-butyl phthalate	ND	5.0	ug/L	03/30/2004 20:06	
Fluoranthene	ND	2.0	ug/L	03/30/2004 20:06	
Pyrene	ND	2.0	ug/L	03/30/2004 20:06	
Butyl benzyl phthalate	ND	5.0	ug/L	03/30/2004 20:06	
3,3-Dichlorobenzidine	ND	5.0	ug/L	03/30/2004 20:06	
Benzo(a)anthracene	ND	2.0	ug/L	03/30/2004 20:06	
bis(2-Ethylhexyl) phthalate	ND	10	ug/L	03/30/2004 20:06	
Chrysene	ND	2.0	ug/L	03/30/2004 20:06	
Di-n-octyl phthalate	ND	5.0	ug/L	03/30/2004 20:06	

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Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 3510C/8270C

Method Blank

MB: 2004/03/30-01.11-001

Water

Test(s): 8270C

QC Batch # 2004/03/30-01.11

Date Extracted: 03/30/2004 07:47

Compound	Conc.	RL	Unit	Analyzed	Flag
Benzo(b)fluoranthene	ND	2.0	ug/L	03/30/2004 20:06	
Benzo(k)fluoranthene	ND	2.0	ug/L	03/30/2004 20:06	
Benzo(a)pyrene	ND	2.0	ug/L	03/30/2004 20:06	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	03/30/2004 20:06	
Dibenzo(a,h)anthracene	ND	2.0	ug/L	03/30/2004 20:06	
Benzo(g,h,i)perylene	ND	2.0	ug/L	03/30/2004 20:06	
Benzoic acid	ND	10	ug/L	03/30/2004 20:06	
<b>Surrogates(s)</b>					
Nitrobenzene-d5	71.2	35-114	%	03/30/2004 20:06	
2-Fluorobiphenyl	64.8	43-116	%	03/30/2004 20:06	
p-Terphenyl-d14	72.3	33-141	%	03/30/2004 20:06	
2-Fluorophenol	40.8	25-100	%	03/30/2004 20:06	
Phenol-d6	26.8	10-110	%	03/30/2004 20:06	
2,4,6-Tribromophenol	55.9	10-123	%	03/30/2004 20:06	

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111  
Project: 41050001FA20  
Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 3510C/8270C

Test(s): 8270C

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/03/30-01.11**

LCS 2004/03/30-01.11-002

Extracted: 03/30/2004

Analyzed: 03/30/2004 20:35

LCSD 2004/03/30-01.11-003

Extracted: 03/30/2004

Analyzed: 03/30/2004 21:04

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Phenol	16.0	15.4	60.0	26.7	25.7	3.8	12-89	35		
2-Chlorophenol	37.4	36.1	60.0	62.3	60.2	3.4	23-134	25		
1,4-Dichlorobenzene	15.8	18.0	30.0	52.7	60.0	13.0	36-97	30		
N-Nitroso-di-n-propylamine	18.3	18.8	30.0	61.0	62.7	2.7	10-130	34		
1,2,4-Trichlorobenzene	16.4	16.7	30.0	54.7	55.7	1.8	44-142	35		
4-Chloro-3-methylphenol	45.5	43.1	60.0	75.8	71.8	5.4	22-147	31		
Acenaphthene	20.9	20.1	30.0	69.7	67.0	4.0	56-118	30		
4-Nitrophenol	9.54	9.87	60.0	15.9	16.5	3.7	1-132	35		
2,4-Dinitrotoluene	21.2	20.5	30.0	70.7	68.3	3.5	39-139	35		
Pentachlorophenol	25.1	24.9	60.0	41.8	41.5	0.7	45-125	35	,or	,or
Pyrene	23.2	25.9	30.0	77.3	86.3	11.0	52-115	35		
<b>Surrogates(s)</b>										
Nitrobenzene-d5	17.3	15.3	25	69.2	61.1		35-114			
2-Fluorobiphenyl	19.5	17.7	25	78.0	70.7		43-116			
p-Terphenyl-d14	19.2	21.4	25	76.8	85.7		33-141			
2-Fluorophenol	18.8	18.7	50	37.6	37.3		25-100			
Phenol-d6	14.5	14.0	50	29.0	27.9		10-110			
2,4,6-Tribromophenol	28.9	27.0	50	57.8	54.0		10-123			

**Semi-volatile analysis by GC/MS - EPA8270C**

TRC Alton Geoscience

Attn.: Anju Farfan

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

---

**Legend and Notes**

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**QC Sample Comment**

Lab ID: LCS 2004/03/30/01.11-2

or - Percent recovery is outside of control limit.

Lab ID: LCSD 2004/03/30/01.11-3

or - Percent recovery is outside of control limit.

**Result Flag**

sl

Surrogate recoveries were lower than QC limit due to matrix interference, confirmed by reanalysis.

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-5	03/26/2004 12:53	Water	1
MW-7	03/26/2004 12:20	Water	2

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566  
Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/09/2004 15:16

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: <b>MW-5</b>	Lab ID: 2004-03-0913 - 1
Sampled: 03/26/2004 12:53	Extracted: 4/7/2004 17:30
Matrix: Water	QC Batch#: 2004/04/07-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	04/07/2004 17:30	
Benzene	ND	0.50	ug/L	1.00	04/07/2004 17:30	
Toluene	ND	0.50	ug/L	1.00	04/07/2004 17:30	
Ethyl benzene	ND	0.50	ug/L	1.00	04/07/2004 17:30	
Xylene(s)	ND	0.50	ug/L	1.00	04/07/2004 17:30	
MTBE	ND	5.0	ug/L	1.00	04/07/2004 17:30	
<b>Surrogate(s)</b>						
Trifluorotoluene	107.4	58-124	%	1.00	04/07/2004 17:30	
4-Bromofluorobenzene-FID	88.0	50-150	%	1.00	04/07/2004 17:30	



**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience

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Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: MW-7	Lab ID: 2004-03-0913 - 2
Sampled: 03/26/2004 12:20	Extracted: 4/8/2004 12:21
Matrix: Water	QC Batch#: 2004/04/08-01.01

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2800	2500	ug/L	50.00	04/08/2004 12:21	
Benzene	34	25	ug/L	50.00	04/08/2004 12:21	
Toluene	ND	25	ug/L	50.00	04/08/2004 12:21	
Ethyl benzene	120	25	ug/L	50.00	04/08/2004 12:21	
Xylene(s)	33	25	ug/L	50.00	04/08/2004 12:21	
MTBE	1200	250	ug/L	50.00	04/08/2004 12:21	
<b>Surrogate(s)</b>						
Trifluorotoluene	83.4	58-124	%	50.00	04/08/2004 12:21	
4-Bromofluorobenzene-FID	98.6	50-150	%	50.00	04/08/2004 12:21	

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience

Attn.: Anju Farfan

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Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030

5030

Method Blank

MB: 2004/04/07-01.05-002

Test(s): 8015M

8021B

QC Batch # 2004/04/07-01.05

Date Extracted: 04/07/2004 14:15

Water

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/07/2004 14:15	
Benzene	ND	0.5	ug/L	04/07/2004 14:15	
Toluene	ND	0.5	ug/L	04/07/2004 14:15	
Ethyl benzene	ND	0.5	ug/L	04/07/2004 14:15	
Xylene(s)	ND	0.5	ug/L	04/07/2004 14:15	
MTBE	ND	5.0	ug/L	04/07/2004 14:15	
<b>Surrogates(s)</b>					
Trifluorotoluene	99.8	58-124	%	04/07/2004 14:15	
4-Bromofluorobenzene-FID	82.9	50-150	%	04/07/2004 14:15	

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience  
Attn.: Anju Farfan

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Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030  
5030

Test(s): 8015M  
8021B

Method Blank

Water

QC Batch # 2004/04/08-01.01

MB: 2004/04/08-01.01-003

Date Extracted: 04/08/2004 07:59

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	04/08/2004 07:59	
Benzene	ND	0.5	ug/L	04/08/2004 07:59	
Toluene	ND	0.5	ug/L	04/08/2004 07:59	
Ethyl benzene	ND	0.5	ug/L	04/08/2004 07:59	
Xylene(s)	ND	0.5	ug/L	04/08/2004 07:59	
MTBE	ND	5.0	ug/L	04/08/2004 07:59	
<b>Surrogates(s)</b>					
Trifluorotoluene	99.4	58-124	%	04/08/2004 07:59	
4-Bromofluorobenzene-FID	110.6	50-150	%	04/08/2004 07:59	

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience

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Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/04/07-01.05**

LCS 2004/04/07-01.05-003

Extracted: 04/07/2004

Analyzed: 04/07/2004 14:54

LCSD 2004/04/07-01.05-004

Extracted: 04/07/2004

Analyzed: 04/07/2004 15:33

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	48.4	47.2	50.0	96.8	94.4	2.5	77-123	20		
Toluene	50.4	51.0	50.0	100.8	102.0	1.2	78-122	20		
Ethyl benzene	47.2	46.9	50.0	94.4	93.8	0.6	70-130	20		
Xylene(s)	146	146	150	97.3	97.3	0.0	75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	518	491	500	103.6	98.2		58-124			

Sewern Trent Laboratories, Inc.

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Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/09/2004 15:16

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/04/07-01.05**

LCS 2004/04/07-01.05-005

Extracted: 04/07/2004

Analyzed: 04/07/2004 16:12

LCSD 2004/04/07-01.05-006

Extracted: 04/07/2004

Analyzed: 04/07/2004 16:51

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	208	203	250	83.2	81.2	2.4	75-125	20		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene-FID	429	412	500	85.8	82.4		50-150			

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience

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Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030

Test(s): 8021B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/04/08-01.01**

LCS 2004/04/08-01.01-004

Extracted: 04/08/2004

Analyzed: 04/08/2004 08:49

LCSD 2004/04/08-01.01-005

Extracted: 04/08/2004

Analyzed: 04/08/2004 09:25

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	47.0	45.2	50.0	94.0	90.4	3.9	77-123	20		
Toluene	48.0	45.9	50.0	96.0	91.8	4.5	78-122	20		
Ethyl benzene	52.2	49.2	50.0	104.4	98.4	5.9	70-130	20		
Xylene(s)	155	146	150	103.3	97.3	6.0	75-125	20		
<b>Surrogates(s)</b>										
Trifluorotoluene	490	469	500	98.0	93.8		58-124			

Sewern Trent Laboratories, Inc.

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04/09/2004 15:16

**Gas/BTEX Compounds by 8015M/8021**

TRC Alton Geoscience  
Attn.: Anju Farfan

21 Technology Drive  
Irvine, CA 92718  
Phone: (949) 341-7440 Fax: (949) 753-0111

Project: 41050001FA20  
Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030

Test(s): 8015M

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/04/08-01.01**

LCS 2004/04/08-01.01-006

Extracted: 04/08/2004

Analyzed: 04/08/2004 10:00

LCSD 2004/04/08-01.01-007

Extracted: 04/08/2004

Analyzed: 04/08/2004 10:35

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	241	238	250	96.4	95.2	1.3	75-125	20		
<i>Surrogates(s)</i>										
4-Bromofluorobenzene-FID	518	539	500	103.6	107.8		50-150			

**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
MW-5	03/26/2004 12:53	Water	1
MW-7	03/26/2004 12:20	Water	2

Severn Trent Laboratories, Inc.

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

04/10/2004 14:51



**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-5	Lab ID: 2004-03-0913 - 1
Sampled: 03/26/2004 12:53	Extracted: 4/8/2004 22:12
Matrix: Water	QC Batch#: 2004/04/08-1A.06

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	04/08/2004 22:12	
Vinyl chloride	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Chloroethane	ND	1.0	ug/L	1.00	04/08/2004 22:12	
Trichlorofluoromethane	ND	1.0	ug/L	1.00	04/08/2004 22:12	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Methylene chloride	ND	5.0	ug/L	1.00	04/08/2004 22:12	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Chloroform	ND	0.50	ug/L	1.00	04/08/2004 22:12	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Carbon tetrachloride	ND	0.50	ug/L	1.00	04/08/2004 22:12	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Trichloroethene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Bromodichloromethane	ND	0.50	ug/L	1.00	04/08/2004 22:12	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	04/08/2004 22:12	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Tetrachloroethene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Dibromochloromethane	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Chlorobenzene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Bromoform	ND	2.0	ug/L	1.00	04/08/2004 22:12	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	04/08/2004 22:12	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	04/08/2004 22:12	
Trichlorotrifluoroethane	ND	0.50	ug/L	1.00	04/08/2004 22:12	

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04/10/2004 14:51

STL San Francisco \* 1220 Quarry Lane, Pleasanton, CA 94566

Tel 925 484 1919 Fax 925 484 1096 \* www.stl-inc.com \* CA DHS ELAP# 2496

**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: MW-5	Lab ID: 2004-03-0913 - 1
Sampled: 03/26/2004 12:53	Extracted: 4/8/2004 22:12
Matrix: Water	QC Batch#: 2004/04/08-1A.06

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Chloromethane	ND	1.0	ug/L	1.00	04/08/2004 22:12	
Bromomethane	ND	1.0	ug/L	1.00	04/08/2004 22:12	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	101.3	86-115	%	1.00	04/08/2004 22:12	
1,2-Dichloroethane-d4	93.5	76-114	%	1.00	04/08/2004 22:12	
Toluene-d8	97.5	88-110	%	1.00	04/08/2004 22:12	

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**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s):	5030B	Test(s):	8260B
Sample ID:	MW-7	Lab ID:	2004-03-0913 - 2
Sampled:	03/26/2004 12:20	Extracted:	4/8/2004 22:48
Matrix:	Water	QC Batch#:	2004/04/08-1A.06

Analysis Flag: Irr ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	20	ug/L	20.00	04/08/2004 22:48	
Vinyl chloride	ND	10	ug/L	20.00	04/08/2004 22:48	
Chloroethane	ND	20	ug/L	20.00	04/08/2004 22:48	
Trichlorofluoromethane	ND	20	ug/L	20.00	04/08/2004 22:48	
1,1-Dichloroethene	ND	10	ug/L	20.00	04/08/2004 22:48	
Methylene chloride	ND	100	ug/L	20.00	04/08/2004 22:48	
trans-1,2-Dichloroethene	ND	10	ug/L	20.00	04/08/2004 22:48	
cis-1,2-Dichloroethene	ND	10	ug/L	20.00	04/08/2004 22:48	
1,1-Dichloroethane	ND	10	ug/L	20.00	04/08/2004 22:48	
Chloroform	ND	10	ug/L	20.00	04/08/2004 22:48	
1,1,1-Trichloroethane	ND	10	ug/L	20.00	04/08/2004 22:48	
Carbon tetrachloride	ND	10	ug/L	20.00	04/08/2004 22:48	
1,2-Dichloroethane	ND	10	ug/L	20.00	04/08/2004 22:48	
Trichloroethene	ND	10	ug/L	20.00	04/08/2004 22:48	
1,2-Dichloropropane	ND	10	ug/L	20.00	04/08/2004 22:48	
Bromodichloromethane	ND	10	ug/L	20.00	04/08/2004 22:48	
2-Chloroethylvinyl ether	ND	10	ug/L	20.00	04/08/2004 22:48	
trans-1,3-Dichloropropene	ND	10	ug/L	20.00	04/08/2004 22:48	
cis-1,3-Dichloropropene	ND	10	ug/L	20.00	04/08/2004 22:48	
1,1,2-Trichloroethane	ND	10	ug/L	20.00	04/08/2004 22:48	
Tetrachloroethene	ND	10	ug/L	20.00	04/08/2004 22:48	
Dibromochloromethane	ND	10	ug/L	20.00	04/08/2004 22:48	
Chlorobenzene	ND	10	ug/L	20.00	04/08/2004 22:48	
Bromoform	ND	40	ug/L	20.00	04/08/2004 22:48	
1,1,2,2-Tetrachloroethane	ND	10	ug/L	20.00	04/08/2004 22:48	
1,3-Dichlorobenzene	ND	10	ug/L	20.00	04/08/2004 22:48	
1,4-Dichlorobenzene	ND	10	ug/L	20.00	04/08/2004 22:48	

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**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

Prep(s): 5030B Test(s): 8260B  
 Sample ID: **MW-7** Lab ID: 2004-03-0913 - 2  
 Sampled: 03/26/2004 12:20 Extracted: 4/8/2004 22:48  
 Matrix: Water QC Batch#: 2004/04/08-1A.06  
 Analysis Flag: lrn ( See Legend and Note Section )

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
1,2-Dichlorobenzene	ND	10	ug/L	20.00	04/08/2004 22:48	
Trichlorotrifluoroethane	ND	10	ug/L	20.00	04/08/2004 22:48	
Chloromethane	ND	20	ug/L	20.00	04/08/2004 22:48	
Bromomethane	ND	20	ug/L	20.00	04/08/2004 22:48	
<b>Surrogate(s)</b>						
4-Bromofluorobenzene	100.5	86-115	%	20.00	04/08/2004 22:48	
1,2-Dichloroethane-d4	95.7	76-114	%	20.00	04/08/2004 22:48	
Toluene-d8	96.2	88-110	%	20.00	04/08/2004 22:48	

**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2004/04/08-1A.06-004

Water

Test(s): 8260B

QC Batch # 2004/04/08-1A.06

Date Extracted: 04/08/2004 13:48

Compound	Conc.	RL	Unit	Analyzed	Flag
Bromodichloromethane	ND	0.5	ug/L	04/08/2004 13:48	
Bromoform	ND	2.0	ug/L	04/08/2004 13:48	
Bromomethane	ND	1.0	ug/L	04/08/2004 13:48	
Carbon tetrachloride	ND	0.5	ug/L	04/08/2004 13:48	
Chlorobenzene	ND	0.5	ug/L	04/08/2004 13:48	
Chloroethane	ND	1.0	ug/L	04/08/2004 13:48	
2-Chloroethylvinyl ether	ND	0.5	ug/L	04/08/2004 13:48	
Chloroform	ND	0.5	ug/L	04/08/2004 13:48	
Chloromethane	ND	1.0	ug/L	04/08/2004 13:48	
Dibromochloromethane	ND	0.5	ug/L	04/08/2004 13:48	
1,2-Dichlorobenzene	ND	0.5	ug/L	04/08/2004 13:48	
1,3-Dichlorobenzene	ND	0.5	ug/L	04/08/2004 13:48	
1,4-Dichlorobenzene	ND	0.5	ug/L	04/08/2004 13:48	
Dichlorodifluoromethane	ND	1.0	ug/L	04/08/2004 13:48	
1,1-Dichloroethane	ND	0.5	ug/L	04/08/2004 13:48	
1,2-Dichloroethane	ND	0.5	ug/L	04/08/2004 13:48	
1,1-Dichloroethene	ND	0.5	ug/L	04/08/2004 13:48	
cis-1,2-Dichloroethene	ND	0.5	ug/L	04/08/2004 13:48	
trans-1,2-Dichloroethene	ND	0.5	ug/L	04/08/2004 13:48	
1,2-Dichloropropane	ND	0.5	ug/L	04/08/2004 13:48	
cis-1,3-Dichloropropene	ND	0.5	ug/L	04/08/2004 13:48	
trans-1,3-Dichloropropene	ND	0.5	ug/L	04/08/2004 13:48	
Methylene chloride	ND	5.0	ug/L	04/08/2004 13:48	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	04/08/2004 13:48	
Tetrachloroethene	ND	0.5	ug/L	04/08/2004 13:48	
1,1,1-Trichloroethane	ND	0.5	ug/L	04/08/2004 13:48	
1,1,2-Trichloroethane	ND	0.5	ug/L	04/08/2004 13:48	
Trichloroethene	ND	0.5	ug/L	04/08/2004 13:48	
Trichlorofluoromethane	ND	1.0	ug/L	04/08/2004 13:48	

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**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Method Blank

MB: 2004/04/08-1A.06-004

Water

Test(s): 8260B

QC Batch # 2004/04/08-1A.06

Date Extracted: 04/08/2004 13:48

Compound	Conc.	RL	Unit	Analyzed	Flag
Trichlorotrifluoroethane	ND	0.5	ug/L	04/08/2004 13:48	
Vinyl chloride	ND	0.5	ug/L	04/08/2004 13:48	
<b>Surrogates(s)</b>					
4-Bromofluorobenzene	97.6	86-115	%	04/08/2004 13:48	
1,2-Dichloroethane-d4	95.0	76-114	%	04/08/2004 13:48	
Toluene-d8	96.0	88-110	%	04/08/2004 13:48	

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**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2004/04/08-1A.06**

LCS 2004/04/08-1A.06-002

Extracted: 04/08/2004

Analyzed: 04/08/2004 12:37

LCSD 2004/04/08-1A.06-003

Extracted: 04/08/2004

Analyzed: 04/08/2004 13:13

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Chlorobenzene	19.2	19.0	20	96.0	95.0	1.0	61-121	20		
1,1-Dichloroethene	22.3	22.5	20	111.5	112.5	0.9	65-125	20		
Trichloroethene	21.7	21.9	20	108.5	109.5	0.9	74-134	20		
<b>Surrogates(s)</b>										
4-Bromofluorobenzene	497	497	500	99.4	99.4		86-115			
1,2-Dichloroethane-d4	463	486	500	92.6	97.2		76-114			
Toluene-d8	486	486	500	97.2	97.2		88-110			

**Halogenated Volatile Organic Compounds by 8021B/8260B**

TRC Alton Geoscience

Attn.: Anju Farfan

21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips # 5484

Received: 03/29/2004 17:26

Site: 18950 Lake Chabot Rd., Castro Valley

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**Legend and Notes**

---

**Analysis Flag**

Irn

Reporting limits raised due to high level of non-target analyte materials.

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04/10/2004 14:51



**STL San Francisco**

**Sample Receipt Checklist**

Submission #: 2004- 03 - 0913

Checklist completed by: (initials) NK Date: 03/30/04

Courier name:  STL San Francisco  Client \_\_\_\_\_

Custody seals intact on shipping container/samples

Yes \_\_\_ No \_\_\_ Not Present

Chain of custody present?

Yes  No \_\_\_

Chain of custody signed when relinquished and received?

Yes  No \_\_\_

Chain of custody agrees with sample labels?

Yes  No \_\_\_

Samples in proper container/bottle?

Yes  No \_\_\_

Sample containers intact?

Yes  No \_\_\_

Sufficient sample volume for indicated test?

Yes  No \_\_\_

All samples received within holding time?

Yes  No \_\_\_

Container/Temp Blank temperature in compliance ( $4^{\circ}\text{C} \pm 2$ )?

Temp 2.4°C Yes  No \_\_\_

Ice Present Yes  No \_\_\_

Water - VOA vials have zero headspace?

No VOA vials submitted \_\_\_ Yes  No \_\_\_

(if bubble is present, refer to approximate bubble size and itemize in comments as S (small ~O), M (medium ~ O) or L (large ~ O))

Water - pH acceptable upon receipt?  Yes  No

pH adjusted- Preservative used:  HNO<sub>3</sub>  HCl  H<sub>2</sub>SO<sub>4</sub>  NaOH  ZnOAc -Lot #(s) \_\_\_\_\_

For any item check-listed "No", provided detail of discrepancy in comment section below:

**Comments:**

**Project Management [Routing for instruction of indicated discrepancy(ies)]**

Project Manager: (initials) \_\_\_\_\_ Date: \_\_\_\_\_/\_\_\_\_\_/04

Client contacted:  Yes  No

Summary of discussion:

Corrective Action (per PM/Client):

STL-San Francisco

# ConocoPhillips Chain Of Custody Record

84302

1220 Quarry Lane  
Pleasanton, CA 94566

(925) 484-1919 (925) 484-1096 fax

ConocoPhillips Site Manager:

INVOICE REMITTANCE ADDRESS:

**2004-03-0913**

CONOCOPHILLIPS  
Attn: Dee Hutchinson  
3611 South Harbor, Suite 200  
Santa Ana, CA. 92704

ConocoPhillips Work Order Number

ConocoPhillips Cust Object

DATE: 3/26/04  
PAGE: 1 of 1

SAMPLING COMPANY: <b>TRC</b>		Valid Value ID:	CONOCOPHILLIPS SITE NUMBER <b>5848 5484</b>		GLOBAL ID NO.: <b>N/A</b>
ADDRESS: <b>21 Technology Drive, Irvine CA 92618</b>			SITE ADDRESS (Street and City): <b>19950 LAKE CHARLOT RD</b>		CONOCOPHILLIPS SITE MANAGER:
PROJECT CONTACT (Hardcopy or PDF Report to): <b>Anju Farfan</b>			EDF DELIVERABLE TO (RP or Designee): <b>Peter Thomson, TRC</b>		PHONE NO.: <b>949-341-7408</b>
TELEPHONE: <b>949-341-7440</b>	FAX: <b>949-753-0111</b>	E-MAIL: <b>afarfan@trcsolutions.com</b>	E-MAIL: <b>pthomson@trcsolutions.com</b>		LAB USE ONLY
SAMPLER NAME(S) (PIN): <b>JACKY CAVE</b>		CONSULTANT PROJECT NUMBER <b>41050001/FA20</b>		REQUESTED ANALYSES	

TURNAROUND TIME (CALENDAR DAYS):  
 14 DAYS  
 7 DAYS  
 72 HOURS  
 48 HOURS  
 24 HOURS  
 LESS THAN 24 HOURS

SPECIAL INSTRUCTIONS OR NOTES: CHECK BOX IF EDD IS NEEDED

\* Field Point name only required if different from Sample ID

LAB USE ONLY	Sample Identification/Field Point Name*	SAMPLING		MATRIX	NO. OF CONT.	8015m - TPHd Extractable	8260B - TPHg/BTEX/MBE	8260B - TPHg / BTEX / 8 Oxygenates	8260B - TPHg / BTEX / 8 oxygenates + methanol (8015M)	8260B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015M / 8021B - TPHg/BTEX/MBE	Lead <input type="checkbox"/> Total <input type="checkbox"/> TLCL <input type="checkbox"/> CLP	TPH.G BY 8015M	BTEX/MBE BY 8021	MUGS (BY 8015M)	BY 8021B	SUBS BY 8270	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes	TEMPERATURE ON RECEIPT C°
		DATE	TIME																	

LAB USE ONLY	Sample Identification/Field Point Name*	SAMPLING		MATRIX	NO. OF CONT.	8015m - TPHd Extractable	8260B - TPHg/BTEX/MBE	8260B - TPHg / BTEX / 8 Oxygenates	8260B - TPHg / BTEX / 8 oxygenates + methanol (8015M)	8260B - Full Scan VOCs (does not include oxygenates)	8270C - Semi-Volatiles	8015M / 8021B - TPHg/BTEX/MBE	Lead <input type="checkbox"/> Total <input type="checkbox"/> TLCL <input type="checkbox"/> CLP	TPH.G BY 8015M	BTEX/MBE BY 8021	MUGS (BY 8015M)	BY 8021B	SUBS BY 8270	FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes	TEMPERATURE ON RECEIPT C°
		DATE	TIME																	
	MLW-5	3/26	1253	GW	7									X	X	X	X	X		
	M-7	3/26	1220	GW	7									X	X	X	X	X		
																				RETRIDG
																				2.4°C

Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>3/26/04</u>	Time:
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>3/29/04</u>	Time: <u>1017</u>
Relinquished by: (Signature) <i>[Signature]</i>	Received by: (Signature) <i>[Signature]</i>	Date: <u>3/29/04</u>	Time: <u>1726</u>

## **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.