TRC

Customer-Focused Solutions

February 24, 2004

RO 219

ConocoPhillips Company
76 Broadway
Sacramento, CA 95818

ATTN: MR. THOMAS KOSEL

SITE: 76 STATION 5043
449 HEGENBERGER ROAD
OAKLAND, CALIFORNIA

RE: QUARTERLY MONITORING REPORT
JANUARY THROUGH MARCH 2004

Dear Mr. Kosel:

Please find enclosed our Quarterly Monitoring Report for 76 Station 5043, located at 449 Hegenberger Road, Oakland, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan

Anju Farfan
QMS Operations Manager

CC: Mr. Barney Chan, Alameda County Health Care Services
Beretta Investment Group
Ms. Barbara Moed, TRC

Enclosures
20-0400/5043R02.QMS

21 Technology Drive • Irvine, California 92618
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TRC

Customer-Focused Solutions

FIRST QUARTER 2004
FLUID LEVEL MONITORING AND
GROUNDWATER SAMPLING REPORT
February 24, 2004

76 STATION 5043
449 Hegenberger Road
Oakland, California

Prepared For:

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

By:

Senior Project Geologist, Irvine Operations

21 Technology Drive • Irvine, California 92618
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GROUNDWATER MONITORING REPORT

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Statements	Purge Water Transport and Disposal Limitations

Summary of Gauging and Sampling Activities
January 2004 through March 2004
76 Station 5043
449 Hegenberger Road
Oakland, CA

Site Information:

Site:	76 Station 449 Hegenberger Road Oakland, CA
Project Coordinator/Phone Number:	Thomas Kosel/916-558-7666
Groundwater wells onsite:	3
Groundwater wells offsite:	3

Field Activity:

Sampling consultant:	TRC
Date(s) sampled:	01/09/04
Groundwater wells gauged:	6
Groundwater wells sampled:	6
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):	1.9
Maximum depth to groundwater (feet bgs):	3.55
Average groundwater elevation (feet relative to mean sea level):	5.79
Average change in groundwater elevations since previous event (feet):	1.10
Groundwater gradient and flow direction:	0.01 ft/ft, southwest
Previous gradient and/or flow direction (and date):	0.01 ft/ft, southwest (10/02/03)

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

Wells with benzene concentrations below MCL:	4
Wells with benzene concentrations at or above MCL:	2
Minimum benzene concentration (µg/l):	ND
Maximum benzene concentration (µg/l):	2800 (MW-6)
Minimum MTBE concentration (µg/l):	ND
Maximum MTBE concentration (µg/l):	66
Minimum TPPH concentration (µg/l):	ND
Maximum TPPH concentration (µg/l):	170000 (MW-6)
Groundwater wells with free product:	0
Minimum free product thickness (feet):	0
Maximum free product thickness (feet):	0

Additional Information:

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
DNA	=	data not available

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.

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 5043 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
January 9, 2004
76 Station 5043

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-3		**(Screen Interval in feet: 2.5-14.0)**												
1/9/04	8.04	2.39	0.00	5.65	0.73	--	300	ND<0.50	0.53	0.53	1.5	--	66	
MW-6		**(Screen Interval in feet: 2.5-13.5)**												
1/9/04	8.87	2.80	0.00	6.07	1.02	--	170000	2800	3300	4700	16000	--	ND<200	
MW-7		**(Screen Interval in feet: 3.0-13.0)**												
1/9/04	8.83	3.55	0.00	5.28	1.91	--	54	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.4	
MW-8		**(Screen Interval in feet: 3.0-15.0)**												
1/9/04	8.52	2.38	0.00	6.14	1.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
MW-9		**(Screen Interval in feet: 3.0-13.0)**												
1/9/04	8.29	1.90	0.00	6.39	0.80	--	74	ND<0.50	0.98	2.3	6.2	--	ND<2.0	
MW-10		**(Screen Interval in feet: 3.0-13.0)**												
1/9/04	8.62	3.40	0.00	5.22	0.65	--	53	1.2	ND<0.50	0.70	1.6	--	ND<2.0	

Table 2

HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS

February 1992 Through January 2004

76 Station 5043

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-1	**(Screen Interval in feet: DNA)**													
02/18/92	8.96	--	--	--	--	150000	--	17000	26000	5200	26000	--	--	
05/20/92	8.96	--	--	--	--	--	--	--	--	--	--	--	--	
08/31/92	8.96	--	--	--	--	64000	--	13000	12000	2500	22000	--	--	
11/30/92	8.96	--	--	--	--	--	--	--	--	--	--	--	--	
02/04/93	8.96	--	--	--	--	--	--	--	--	--	--	--	--	
05/04/93	8.96	2.13	0.10	6.90	--	--	--	--	--	--	--	--	--	
08/04/93	7.38	2.92	0.03	4.48	-2.42	--	--	--	--	--	--	--	--	
11/03/93	7.38	3.04	0.00	4.34	-0.14	--	--	--	--	--	--	--	--	
02/07/94	7.38	2.55	0.03	4.85	0.51	--	--	--	--	--	--	--	--	
05/19/94	7.38	2.23	0.01	5.16	0.31	--	--	--	--	--	--	--	--	
06/25/94	7.38	2.49	0.01	4.90	-0.26	--	--	--	--	--	--	--	--	
07/27/94	7.38	3.10	0.00	4.28	-0.62	--	--	--	--	--	--	--	--	
08/15/94	7.38	2.85	0.11	4.61	0.33	--	--	--	--	--	--	--	--	
11/14/94	7.38	2.97	0.12	4.50	-0.11	--	--	--	--	--	--	--	--	
02/21/95	7.38	1.53	0.02	5.87	1.37	--	--	--	--	--	--	--	--	
MW-2	**(Screen Interval in feet: DNA)**													
02/18/92	8.96	--	--	--	--	29000	--	1000	5300	260	7900	--	--	
05/20/92	8.96	--	--	--	--	24000	--	2200	7600	630	11000	--	--	
08/31/92	8.96	--	--	--	--	9000	--	1800	640	140	2000	--	--	
11/30/92	8.96	--	--	--	--	29000	--	2000	3400	1200	6900	--	--	
02/04/93	8.96	--	--	--	--	18000	--	1600	3000	ND	6900	--	--	
05/04/93	8.96	2.48	0.00	6.48	--	63000	--	3200	17000	470	17000	--	--	
08/04/93	8.58	3.20	0.00	5.38	-1.10	45000	--	2100	6600	1400	12000	--	--	
11/03/93	8.58	3.37	0.00	5.21	-0.17	72000	--	3700	16000	3700	20000	--	--	
02/07/94	8.58	2.40	0.00	6.18	0.97	--	--	--	--	--	--	--	--	

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-2 continued														
05/19/94	8.58	2.13	0.00	6.45	0.27	42000	--	2500	1300	2300	13000	--	--	
06/25/94	8.58	2.65	0.00	5.93	-0.52	--	--	--	--	--	--	--	--	
07/27/94	8.58	3.44	0.00	5.14	-0.79	--	--	--	--	--	--	--	--	
08/15/94	8.58	3.25	0.00	5.33	0.19	35000	--	2400	850	1700	15000	--	--	
11/14/94	8.58	2.13	0.00	6.45	1.12	43000	--	2200	6500	1800	14000	--	--	
02/21/95	8.58	1.65	0.00	6.93	0.48	44000	--	2200	3200	1300	1500	--	--	
MW-3	**(Screen Interval in feet: 2.5-14.0)**													
02/18/92	7.84	--	--	--	--	230	--	4.8	22	1.8	33	--	--	
05/20/92	7.84	--	--	--	--	--	--	--	--	--	--	--	--	
08/31/92	7.84	--	--	--	--	210	--	1	ND	ND	ND	--	--	
11/30/92	7.84	--	--	--	--	790	--	ND	ND	ND	ND	--	--	
02/04/93	7.84	--	--	--	--	3300	--	320	ND	96	6.1	--	--	
05/04/93	7.84	4.32	0.00	3.52	--	1800	--	95	ND	ND	ND	--	--	
08/04/93	7.84	4.94	0.00	2.90	-0.62	210	--	ND	ND	ND	ND	--	--	
11/03/93	7.42	4.53	0.00	2.89	-0.01	640	--	ND	ND	ND	ND	--	--	
02/07/94	7.42	2.40	0.00	5.02	2.13	2700	--	110	ND	17	ND	--	--	
05/19/94	7.42	3.60	0.00	3.82	-1.20	1800	--	83	ND	6.2	9.1	--	--	
06/25/94	7.42	4.58	0.00	2.84	-0.98	--	--	--	--	--	--	--	--	
07/27/94	7.42	4.58	0.00	2.84	0.00	--	--	--	--	--	--	--	--	
08/15/94	7.42	4.65	0.00	2.77	-0.07	130	--	1.1	0.54	ND	0.97	--	--	
11/14/94	7.42	3.18	0.00	4.24	1.47	1600	--	ND	ND	ND	ND	--	--	
02/21/95	7.42	1.81	0.00	5.61	1.37	3800	--	350	ND	130	22	--	--	
05/18/95	7.42	4.56	0.00	2.86	-2.75	1300	--	42	ND	ND	ND	--	--	
08/17/95	7.42	--	--	--	--	--	--	--	--	--	--	--	--	
07/26/96	7.42	--	--	--	--	--	--	--	--	--	--	--	--	
10/28/96	7.42	--	--	--	--	--	--	--	--	--	--	--	--	
01/29/97	7.42	--	--	--	--	--	--	--	--	--	--	--	--	
04/15/97	7.42	--	--	--	--	--	--	--	--	--	--	--	--	
05/27/97	7.42	3.45	0.00	3.97	--	670	--	6.5	ND	ND	ND	--	250	

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-3 continued														
06/01/97	7.42	3.50	0.00	3.92	-0.05	--	--	--	--	--	--	--	--	
07/15/97	8.04	3.71	0.00	4.33	--	240	--	ND	ND	ND	ND	--	490	
10/09/97	8.04	3.70	0.00	4.34	--	270	--	1.1	ND	2.4	1.4	--	910	
01/14/98	8.04	2.16	0.00	5.88	1.54	310	--	ND	ND	0.62	0.65	--	140	
04/01/98	8.04	2.20	0.00	5.84	--	370	--	5.7	ND	ND	ND	--	93	
07/15/98	8.04	3.38	0.00	4.66	--	460	--	ND	ND	ND	ND	--	230	
10/16/98	8.04	2.30	0.00	5.74	--	330	--	4.7	ND	ND	ND	--	60	
01/25/99	8.04	2.42	0.00	5.62	--	420	--	1.5	ND	ND	ND	--	180	
04/15/99	8.04	2.16	0.00	5.88	--	290	--	0.54	ND	ND	ND	--	160	
07/14/99	8.04	2.35	0.00	5.69	--	290	--	3.2	ND	ND	ND	--	160	
10/21/99	8.04	2.49	0.00	5.55	--	360	--	0.77	ND	ND	ND	--	82	
01/20/00	8.04	2.38	0.00	5.66	--	ND	--	0.81	ND	ND	ND	--	54	
04/13/00	8.04	2.76	0.00	5.28	--	250	--	0.69	ND	ND	ND	--	150	
07/14/00	8.04	3.26	0.00	4.78	--	345	--	ND	ND	ND	ND	--	94.7	
01/03/01	8.04	3.65	0.00	4.39	--	364	--	1.59	ND	ND	ND	--	118	
04/04/01	8.04	--	--	--	--	417	--	1.24	ND	ND	0.802	--	237	
07/17/01	8.04	--	--	--	--	480	--	ND	ND	ND	ND	--	150	
10/01/01	8.04	--	--	--	--	310	--	1.0	ND<0.50	ND<0.50	ND<0.50	--	53	
01/31/02	8.04	--	--	--	--	250	--	3.5	ND<1	ND<1	ND<1	--	110	
04/18/02	8.04	3.55	0.00	4.49	--	300	--	ND<2	ND<2	ND<2	ND<2	--	59	
07/28/02	8.04	2.55	0.00	5.49	1.00	500	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	130	
10/09/02	8.04	2.47	0.00	5.57	0.08	690	--	ND<5	ND<5	ND<5	ND<10	--	120	
01/02/03	8.04	1.70	0.00	6.34	0.77	310	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	110	
04/01/03	8.04	3.48	0.00	4.56	--	250	--	ND<1	ND<1	ND<1	ND<2	--	210	
07/01/03	8.04	2.65	0.00	5.39	0.83	450	--	ND<2.5	ND<2.5	ND<2.5	ND<5	--	70	
10/02/03	8.04	3.12	0.00	4.92	-0.47	--	ND<250	ND<2.5	ND<2.5	ND<2.5	ND<5.0	--	210	
01/09/04	8.04	2.39	0.00	5.65	0.73	--	300	ND<0.50	0.53	0.53	1.5	--	66	
MW-4	**(Screen Interval in feet: DNA)**													
08/31/92	9.00	--	--	--	--	240	--	ND	ND	ND	0.54	--	--	

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-4 continued														
11/30/92	9.00	--	--	--	--	420	--	ND	ND	ND	ND	--	--	
02/04/93	9.00	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
05/04/93	9.00	4.09	0.00	4.91	--	110	--	0.95	ND	ND	ND	--	--	
08/04/93	9.00	5.01	0.00	3.99	-0.92	250	--	ND	3.5	ND	4.1	--	--	
11/03/93	8.41	4.23	0.00	4.18	0.19	130	--	ND	ND	ND	ND	--	--	
02/07/94	8.41	3.35	0.00	5.06	0.88	56	--	ND	ND	ND	ND	--	--	
05/19/94	8.41	3.92	0.00	4.49	-0.57	140	--	ND	ND	ND	ND	--	--	
06/25/94	8.41	4.35	0.00	4.06	-0.43	--	--	--	--	--	--	--	--	
07/27/94	8.41	4.28	0.00	4.13	0.07	--	--	--	--	--	--	--	--	
08/15/94	8.41	4.27	0.00	4.14	0.01	59	--	ND	0.6	ND	ND	--	--	
11/14/94	8.41	4.05	0.00	4.36	0.22	130	--	ND	ND	ND	ND	--	--	
MW-5	**(Screen Interval in feet: DNA)**													
08/31/92	8.95	--	--	--	--	78	--	0.89	ND	ND	13	--	--	
11/30/92	8.95	--	--	--	--	930	--	70	290	0.79	14	--	--	
02/04/93	8.95	--	--	--	--	5700	--	38	ND	620	170	--	--	
05/04/93	8.95	4.37	0.00	4.58	--	7400	--	41	ND	1000	35	--	--	
08/04/93	8.95	5.81	0.00	3.14	-1.44	1500	--	130	1	460	11	--	--	
11/03/93	8.95	5.68	0.00	3.27	0.13	13000	--	350	ND	3500	530	--	--	
02/07/94	8.95	5.11	0.00	3.84	0.57	2000	--	87	ND	370	110	--	--	
05/19/94	8.95	5.09	0.00	3.86	0.02	260	--	44	ND	32	4.1	--	--	
06/25/94	8.95	4.55	0.00	4.40	0.54	--	--	--	--	--	--	--	--	
07/27/94	8.95	5.72	0.00	3.23	-1.17	--	--	--	--	--	--	--	--	
08/15/94	8.95	5.68	0.00	3.27	0.04	1600	--	110	ND	340	72	--	--	
11/14/94	8.95	5.63	0.00	3.32	0.05	250	--	40	ND	ND	5	--	--	
MW-6	**(Screen Interval in feet: 2.5-13.5)**													
08/31/92	9.12	--	--	--	--	ND	--	ND	ND	ND	ND	--	--	
11/30/92	9.12	--	--	--	--	9200	--	550	ND	740	1600	--	--	
02/04/93	9.12	--	--	--	--	3600	--	340	ND	290	550	--	--	
05/04/93	9.12	3.72	0.00	5.40	--	4900	--	360	18	450	430	--	--	

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														
08/04/93	9.12	5.15	0.00	3.97	-1.43	3400	--	390	ND	440	190	--	--	
11/03/93	8.87	5.25	0.00	3.62	-0.35	1400	--	320	ND	200	7.7	--	--	
02/07/94	8.87	4.55	0.00	4.32	0.70	4900	--	650	ND	250	35	--	--	
05/19/94	8.87	4.62	0.00	4.25	-0.07	3600	--	300	1.7	210	41	--	--	
08/15/94	8.87	5.08	0.00	3.79	--	1300	--	130	6.7	54	57	--	--	
11/14/94	8.87	5.30	0.00	3.57	-0.22	730	--	50	ND	ND	39	--	--	
02/21/95	8.87	5.37	0.00	3.50	-0.07	2000	--	250	4.6	25	30	--	--	
05/18/95	8.87	--	--	--	--	--	--	--	--	--	--	--	--	
08/17/95	8.87	--	--	--	--	--	--	--	--	--	--	--	--	
07/26/96	8.87	6.40	3.33	4.97	--	--	--	--	--	--	--	--	--	
10/28/96	8.87	4.10	0.21	4.93	-0.04	--	--	--	--	--	--	--	--	
11/13/96	8.87	4.02	0.25	5.04	0.11	--	--	--	--	--	--	--	--	
11/25/96	8.87	4.01	0.75	5.42	0.38	--	--	--	--	--	--	--	--	
12/04/96	8.87	3.65	0.50	5.59	0.17	--	--	--	--	--	--	--	--	
12/19/96	8.87	4.80	2.20	5.72	0.13	--	--	--	--	--	--	--	--	
01/08/97	8.87	4.84	1.75	5.34	-0.38	--	--	--	--	--	--	--	--	
01/14/97	8.87	4.51	1.15	5.22	-0.12	--	--	--	--	--	--	--	--	
01/27/97	8.87	4.00	1.75	6.18	0.96	--	--	--	--	--	--	--	--	
01/29/97	8.87	3.24	0.31	5.86	-0.32	--	--	--	--	--	--	--	--	
02/11/97	8.87	4.65	1.20	5.12	-0.74	--	--	--	--	--	--	--	--	
02/24/97	8.87	4.81	1.10	4.89	-0.23	--	--	--	--	--	--	--	--	
03/10/97	8.87	4.60	0.95	4.98	0.10	--	--	--	--	--	--	--	--	
03/17/97	8.87	4.50	0.89	5.04	0.05	--	--	--	--	--	--	--	--	
03/31/97	8.87	4.65	1.00	4.97	-0.07	--	--	--	--	--	--	--	--	
04/15/97	8.87	4.90	1.03	4.74	-0.23	--	--	--	--	--	--	--	--	
04/28/97	8.87	4.78	0.03	4.11	-0.63	--	--	--	--	--	--	--	--	
05/15/97	8.87	4.60	0.25	4.46	0.35	--	--	--	--	--	--	--	--	
05/27/97	8.87	4.50	0.25	4.56	0.10	--	--	--	--	--	--	--	--	
06/09/97	8.87	4.60	0.20	4.42	--	--	--	--	--	--	--	--	--	

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														
06/24/97	8.87	4.50	0.25	4.56	0.14	--	--	--	--	--	--	--	--	
07/09/97	8.87	4.80	0.60	4.52	-0.04	--	--	--	--	--	--	--	--	
07/15/97	8.87	4.63	0.42	4.55	0.04	--	--	--	--	--	--	--	--	
07/21/97	8.87	4.75	0.25	4.31	-0.25	--	--	--	--	--	--	--	--	
08/06/97	8.87	4.50	0.10	4.44	0.14	--	--	--	--	--	--	--	--	
08/20/97	8.87	4.55	0.10	4.39	-0.05	--	--	--	--	--	--	--	--	
09/02/97	8.87	4.75	0.05	4.16	-0.24	--	--	--	--	--	--	--	--	
10/09/97	8.87	4.84	0.04	4.06	-0.10	--	--	--	--	--	--	--	--	
01/14/98	8.87	3.90	0.94	5.67	1.61	--	--	--	--	--	--	--	--	
02/12/98	8.87	3.35	0.64	6.00	0.33	--	--	--	--	--	--	--	--	
03/03/98	8.87	4.51	0.02	4.37	-1.63	--	--	--	--	--	--	--	--	
04/01/98	8.87	3.67	1.60	6.40	2.03	--	--	--	--	--	--	--	--	
05/26/98	8.87	4.11	0.50	5.13	-1.26	--	--	--	--	--	--	--	--	
06/15/98	8.87	5.03	0.30	4.06	-1.07	--	--	--	--	--	--	--	--	
07/15/98	8.87	4.56	0.05	4.35	0.28	--	--	--	--	--	--	--	--	
08/21/98	8.87	4.77	0.02	4.11	-0.23	--	--	--	--	--	--	--	--	
09/30/98	8.87	5.08	0.03	3.81	-0.30	--	--	--	--	--	--	--	--	
10/16/98	8.87	4.31	2.40	6.36	2.55	--	--	--	--	--	--	--	--	
11/06/98	8.87	3.98	0.17	5.02	-1.34	--	--	--	--	--	--	--	--	
11/25/98	8.87	3.92	0.10	5.02	0.01	--	--	--	--	--	--	--	--	
12/28/98	8.87	3.90	0.20	5.12	0.10	--	--	--	--	--	--	--	--	
01/25/99	8.87	4.18	0.60	5.14	0.02	--	--	--	--	--	--	--	--	
02/22/99	8.87	4.07	0.22	4.96	-0.18	--	--	--	--	--	--	--	--	
03/22/99	8.87	4.32	0.15	4.66	-0.30	--	--	--	--	--	--	--	--	
04/15/99	8.87	4.23	0.95	5.35	0.69	--	--	--	--	--	--	--	--	
05/28/99	8.87	4.38	0.39	4.78	-0.57	--	--	--	--	--	--	--	--	
06/29/99	8.87	4.12	0.02	4.76	-0.02	--	--	--	--	--	--	--	--	
07/14/99	8.87	4.20	0.03	4.69	-0.07	--	--	--	--	--	--	--	--	
08/23/99	8.87	4.51	0.24	4.54	-0.15	--	--	--	--	--	--	--	--	

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														
09/30/99	8.87	4.17	0.17	4.83	0.29	--	--	--	--	--	--	--	--	
10/21/99	8.87	4.27	0.12	4.69	-0.14	--	--	--	--	--	--	--	--	
11/29/99	8.87	4.18	0.00	4.69	0.00	--	--	--	--	--	--	--	--	
12/20/99	8.87	4.26	0.01	4.62	-0.07	--	--	--	--	--	--	--	--	
01/20/00	8.87	4.31	0.00	4.56	-0.06	130000	--	2900	8600	2000	16000	--	ND	
02/26/00	8.87	3.98	0.00	4.89	0.33	--	--	--	--	--	--	--	--	
03/31/00	8.87	4.14	0.00	4.73	-0.16	--	--	--	--	--	--	--	--	
04/13/00	8.87	4.04	0.00	4.83	0.10	140000	--	5000	14000	3600	27000	--	7700	
05/26/00	8.87	4.41	0.00	4.46	-0.37	--	--	--	--	--	--	--	--	
06/17/00	8.87	4.35	0.00	4.52	0.06	--	--	--	--	--	--	--	--	
07/14/00	8.87	4.47	0.00	4.40	-0.12	259000	--	7670	13700	6860	40700	--	ND	
08/24/00	8.87	3.71	0.00	5.16	0.76	--	--	--	--	--	--	--	--	
09/27/00	8.87	4.33	0.00	4.54	-0.62	--	--	--	--	--	--	--	--	
10/26/00	8.87	4.32	0.00	4.55	0.01	110000	--	7000	6200	3700	12000	--	43	
01/03/01	8.87	4.52	0.00	4.35	-0.20	84700	--	3950	4130	3650	11800	--	ND	
04/04/01	8.87	--	--	--	--	69800	--	2060	2840	3650	10900	--	47.8	
07/17/01	8.87	--	--	--	--	100000	--	3200	3300	3400	12000	--	ND	
10/01/01	8.87	--	--	--	--	110000	--	3200	2400	4500	13000	--	ND<1000	
01/31/02	8.87	--	--	--	--	230000	--	2400	1800	5400	16000	--	ND<2500	
04/18/02	8.87	3.45	0.00	5.42	--	94000	--	6800	13000	3000	19000	--	ND<500	
07/28/02	8.87	2.24	0.00	6.63	1.21	110000	--	530	170	3200	7300	--	ND<100	
10/09/02	8.87	3.53	0.00	5.34	-1.29	970000	--	10000	39000	13000	94000	--	ND<2000	
01/02/03	8.87	2.34	0.00	6.53	1.19	270000	--	6100	15000	5400	37000	--	ND<200	
04/01/03	8.87	3.17	0.00	5.70	--	3000000	--	8000	39000	37000	260000	--	ND<2000	
07/01/03	8.87	3.55	0.00	5.32	-0.38	38000	--	2100	990	2700	6500	--	ND<100	
10/02/03	8.87	3.82	0.00	5.05	-0.27	--	100000	5600	6900	4700	18000	--	ND<800	
01/09/04	8.87	2.80	0.00	6.07	1.02	--	170000	2800	3300	4700	16000	--	ND<200	
MW-7	**(Screen Interval in feet: 3.0-13.0)**													
05/27/97	8.83	4.50	0.00	4.33	--	68	--	ND	ND	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-7 continued														
06/01/97	8.83	4.54	0.00	4.29	-0.04	--	--	--	--	--	--	--	--	
07/15/97	8.83	4.70	0.00	4.13	--	ND	--	ND	ND	ND	ND	--	ND	
10/09/97	8.83	4.30	0.00	4.53	--	ND	--	ND	ND	ND	ND	--	ND	
01/14/98	8.83	2.88	0.00	5.95	1.42	ND	--	ND	ND	ND	ND	--	36	
04/01/98	8.83	3.13	0.00	5.70	--	ND	--	ND	ND	ND	ND	--	ND	
07/15/98	8.83	4.45	0.00	4.38	--	ND	--	ND	ND	ND	ND	--	ND	
10/16/98	8.83	3.45	0.00	5.38	--	ND	--	ND	ND	ND	ND	--	ND	
01/25/99	8.83	3.22	0.00	5.61	--	ND	--	ND	ND	ND	ND	--	ND	
04/15/99	8.83	3.11	0.00	5.72	--	ND	--	ND	ND	ND	ND	--	ND	
07/14/99	8.83	3.34	0.00	5.49	--	ND	--	ND	ND	ND	ND	--	ND	
10/21/99	8.83	3.43	0.00	5.40	--	ND	--	ND	ND	ND	ND	--	ND	
01/20/00	8.83	3.29	0.00	5.54	--	ND	--	ND	ND	ND	ND	--	4.2	
04/13/00	8.83	3.39	0.00	5.44	--	ND	--	ND	ND	ND	ND	--	ND	
07/14/00	8.83	4.42	0.00	4.41	--	ND	--	ND	ND	ND	ND	--	7.83	
07/17/01	8.83	5.06	0.00	3.77	--	ND	--	ND	ND	ND	ND	--	ND	
10/01/01	8.83	4.98	0.00	3.85	0.08	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<5	
01/31/02	8.83	3.88	0.00	4.95	1.10	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.5	
04/18/02	8.83	4.03	0.00	4.80	-0.15	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	5.7	
07/28/02	8.83	3.59	0.00	5.24	0.44	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	3.9	
10/09/02	8.83	4.53	0.00	4.30	-0.94	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	3.9	
01/03/03	8.83	3.36	0.00	5.47	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
04/01/03	8.83	3.94	0.00	4.89	-0.58	71	--	ND<0.50	ND<0.50	0.71	ND<1	--	3.4	
07/01/03	8.83	4.60	0.00	4.23	-0.66	64	--	ND<0.50	ND<0.50	0.77	2.0	--	35	
10/02/03	8.83	5.46	0.00	3.37	-0.86	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.9	
01/09/04	8.83	3.55	0.00	5.28	1.91	--	54	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	2.4	
MW-8	**(Screen Interval in feet: 3.0-15.0)**													
05/27/97	8.52	3.42	0.00	5.10	--	310	--	0.88	0.67	15	70	--	ND	
06/01/97	8.52	3.46	0.00	5.06	-0.04	--	--	--	--	--	--	--	--	
07/15/97	8.52	3.49	0.00	5.03	--	ND	--	ND	ND	2.7	3.8	--	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-8 continued														
10/09/97	8.52	3.73	0.00	4.79	--	590	--	1.4	ND	32	4.1	--	ND	
01/14/98	8.52	1.92	0.00	6.60	1.81	ND	--	ND	ND	ND	ND	--	ND	
04/01/98	8.52	2.38	0.00	6.14	--	ND	--	ND	ND	ND	ND	--	4.7	
07/15/98	8.52	3.53	0.00	4.99	--	ND	--	ND	ND	0.56	1.1	--	ND	
10/16/98	8.52	3.04	0.00	5.48	--	ND	--	ND	ND	ND	ND	--	ND	
01/25/99	8.52	2.92	0.00	5.60	--	ND	--	ND	ND	ND	ND	--	ND	
04/15/99	8.52	2.40	0.00	6.12	--	ND	--	ND	ND	ND	ND	--	ND	
07/14/99	8.52	3.03	0.00	5.49	--	ND	--	ND	ND	ND	ND	--	ND	
10/21/99	8.52	3.11	0.00	5.41	--	ND	--	ND	ND	ND	ND	--	ND	
01/20/00	8.52	3.06	0.00	5.46	--	ND	--	ND	ND	ND	ND	--	ND	
04/13/00	8.52	2.84	0.00	5.68	--	ND	--	ND	ND	ND	ND	--	ND	
07/14/00	8.52	3.39	0.00	5.13	--	ND	--	ND	ND	ND	ND	--	ND	
07/17/01	8.52	3.46	0.00	5.06	--	ND	--	ND	ND	ND	ND	--	ND	
10/01/01	8.52	3.51	0.00	5.01	-0.05	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<5	
01/31/02	8.52	2.75	0.00	5.77	0.76	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.5	
04/18/02	8.52	2.98	0.00	5.54	-0.23	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.5	
07/28/02	8.52	2.41	0.00	6.11	0.57	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
10/09/02	8.52	2.09	0.00	6.43	0.32	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
01/02/03	8.52	1.98	0.00	6.54	0.11	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
04/01/03	8.52	2.66	0.00	5.86	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
07/01/03	8.52	3.08	0.00	5.44	-0.42	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
10/02/03	8.52	3.89	0.00	4.63	-0.81	--	540	3.9	15	29	80	--	ND<2.0	
01/09/04	8.52	2.38	0.00	6.14	1.51	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	
MW-9	**(Screen Interval in feet: 3.0-13.0)**													
02/21/95	8.29	1.98	0.00	6.31	--	70	--	ND	ND	ND	ND	--	--	
05/18/95	8.29	3.47	0.00	4.82	-1.49	52	--	ND	1.1	ND	1.9	--	--	
08/17/95	8.29	1.49	0.00	6.80	1.98	ND	--	ND	ND	ND	ND	--	--	
07/26/96	8.29	0.28	0.00	8.01	1.21	ND	--	ND	ND	ND	ND	--	ND	
10/28/96	8.29	1.15	0.00	7.14	-0.87	ND	--	ND	ND	ND	ND	--	7.6	

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (µg/l)	TPPH 8260B (µg/l)	Benzene (µg/l)	Toluene (µg/l)	Ethyl-benzene (µg/l)	Total Xylenes (µg/l)	MTBE 8021B (µg/l)	MTBE 8260B (µg/l)	Comments
MW-9 continued														
01/29/97	8.29	1.05	0.00	7.24	--	ND	--	ND	ND	ND	ND	--	5.4	
04/15/97	8.29	1.88	0.00	6.41	--	ND	--	ND	ND	ND	ND	--	5.4	
05/27/97	8.29	1.05	0.00	7.24	--	--	--	--	--	--	--	--	--	
07/15/97	8.29	1.90	0.00	6.39	--	ND	--	ND	ND	ND	ND	--	ND	
10/09/97	8.29	1.76	0.00	6.53	--	ND	--	ND	ND	ND	ND	--	ND	
01/14/98	8.29	1.26	0.00	7.03	0.50	ND	--	ND	ND	ND	ND	--	3	
04/01/98	8.29	0.85	0.00	7.44	--	ND	--	ND	ND	ND	ND	--	ND	
07/15/98	8.29	1.52	0.00	6.77	--	ND	--	ND	ND	ND	ND	--	ND	
10/16/98	8.29	0.81	0.00	7.48	--	ND	--	ND	ND	ND	ND	--	ND	
01/25/99	8.29	0.92	0.00	7.37	--	ND	--	ND	ND	ND	ND	--	ND	
04/15/99	8.29	0.90	0.00	7.39	--	75	--	21	ND	ND	1.1	--	680	
07/14/99	8.29	1.04	0.00	7.25	--	ND	--	1.9	ND	ND	ND	--	260	
10/21/99	8.29	1.23	0.00	7.06	--	ND	--	ND	ND	ND	ND	--	170	
01/20/00	8.29	1.18	0.00	7.11	--	ND	--	1.1	ND	ND	ND	--	35	
04/13/00	8.29	1.08	0.00	7.21	--	160	--	0.64	ND	ND	ND	--	53	
07/14/00	8.29	1.43	0.00	6.86	--	ND	--	ND	ND	ND	ND	--	20.2	
10/26/00	8.29	1.38	0.00	6.91	--	240	--	2.9	ND	ND	ND	--	56	
01/03/01	8.29	1.66	0.00	6.63	-0.28	166	--	0.763	0.776	ND	1.28	--	50.2	
04/04/01	8.29	--	--	--	--	296	--	0.738	ND	ND	0.907	--	135	
07/17/01	8.29	--	--	--	--	ND	--	ND	ND	ND	ND	--	13	
10/01/01	8.29	--	--	--	--	51	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	5.0	
01/31/02	8.29	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	5.8	
04/18/02	8.29	1.76	0.00	6.53	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	5.1	
07/28/02	8.29	1.57	0.00	6.72	0.19	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	3.5	
10/09/02	8.29	1.45	0.00	6.84	0.12	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	17	
01/02/03	8.29	1.18	0.00	7.11	0.27	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	8.6	
04/01/03	8.29	2.04	0.00	6.25	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	9.4	
07/01/03	8.29	2.80	0.00	5.49	-0.76	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	3.2	
10/02/03	8.29	2.70	0.00	5.59	0.10	--	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<2.0	

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-9 continued														
01/09/04	8.29	1.90	0.00	6.39	0.80	--	74	ND<0.50	0.98	2.3	6.2	--	ND<2.0	
MW-10	**(Screen Interval in feet: 3.0-13.0)**													
02/21/95	8.62	4.69	0.00	3.93	--	1500	--	250	26	9.1	160	--	--	
05/18/95	8.62	4.92	0.00	3.70	-0.23	810	--	520	ND	18	23	--	--	
08/17/95	8.62	4.05	0.00	4.57	0.87	67	--	25	ND	2.4	ND	--	--	
07/26/96	8.62	4.08	0.00	4.54	-0.03	ND	--	3.7	ND	ND	ND	--	ND	
10/28/96	8.62	4.09	0.00	4.53	-0.01	ND	--	1.1	ND	ND	ND	--	ND	
01/29/97	8.62	2.94	0.00	5.68	--	210	--	41	0.67	7.2	4.8	--	11	
04/15/97	8.62	4.07	0.00	4.55	--	110	--	12	ND	0.77	ND	--	9.7	
05/27/97	8.62	4.40	0.00	4.22	--	--	--	--	--	--	--	--	--	
07/15/97	8.62	4.19	0.00	4.43	--	ND	--	2.1	ND	0.67	0.73	--	ND	
10/09/97	8.62	4.75	0.00	3.87	--	190	--	38	0.92	6.6	7.6	--	ND	
01/14/98	8.62	2.66	0.00	5.96	2.09	59	--	9.5	0.85	1.2	1.7	--	4.5	
04/01/98	8.62	3.45	0.00	5.17	--	230	--	66	1.7	12	17	--	6.4	
07/15/98	8.62	4.21	0.00	4.41	--	290	--	98	45	21	38	--	21	
10/16/98	8.62	4.11	0.00	4.51	--	160	--	44	0.96	2.5	10	--	17	
01/25/99	8.62	3.26	0.00	5.36	--	140	--	27	ND	2.8	6.8	--	23	
04/15/99	8.62	3.63	0.00	4.99	--	120	--	18	ND	1.8	5.1	--	14	
07/14/99	8.62	3.89	0.00	4.73	--	280	--	55	3.2	11	31	--	6.1	
10/21/99	8.62	4.09	0.00	4.53	--	140	--	22	0.59	1.7	7.7	--	5.3	
01/20/00	8.62	3.92	0.00	4.70	--	ND	--	0.73	0.86	ND	ND	--	5.2	
04/13/00	8.62	3.85	0.00	4.77	--	67	--	54	ND	2.6	ND	--	3.8	
07/14/00	8.62	4.18	0.00	4.44	--	ND	--	0.547	ND	ND	ND	--	ND	
10/26/00	8.62	3.96	0.00	4.66	--	ND	--	3.3	ND	0.83	1.5	--	ND	
01/03/01	8.62	4.14	0.00	4.48	-0.18	52.7	--	5.15	ND	0.823	1.57	--	ND	
04/04/01	8.62	--	--	--	--	129	--	28.1	1.67	4.97	10.1	--	ND	
07/17/01	8.62	--	--	--	--	ND	--	4.1	ND	1.0	1.8	--	ND	
10/01/01	8.62	--	--	--	--	140	--	30	0.51	4.0	12	--	ND<5	
01/31/02	8.62	--	--	--	--	110	--	16	ND<0.50	2.3	5.6	--	ND<2.5	

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-10	continued													
04/18/02	8.62	4.01	0.00	4.61	--	ND<50	--	11	ND<0.50	1.4	4.5	--	ND<2.5	
07/28/02	8.62	4.11	0.00	4.51	-0.10	67	--	15	ND<0.50	0.94	7.3	--	ND<2	
10/09/02	8.62	3.97	0.00	4.65	0.14	ND<50	--	0.67	ND<0.50	ND<0.50	ND<1	--	ND<2	
01/02/03	8.62	3.03	0.00	5.59	0.94	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
04/01/03	8.62	3.83	0.00	4.79	--	ND<50	--	11	ND<0.50	ND<0.50	ND<1	--	ND<2	
07/01/03	8.62	4.13	0.00	4.49	-0.30	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
10/02/03	8.62	4.05	0.00	4.57	0.08	--	77	9.9	0.78	2.3	4.9	--	ND<2.0	
01/09/04	8.62	3.40	0.00	5.22	0.65	--	53	1.2	ND<0.50	0.70	1.6	--	ND<2.0	
Trip Blank	**(Screen Interval in feet: DNA)**													
01/14/98	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
04/01/98	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
07/15/98	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
10/16/98	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
01/25/99	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
04/15/99	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
07/14/99	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
10/21/99	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
01/20/00	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
04/13/00	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
07/14/00	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
10/26/00	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
01/03/01	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
04/04/01	--	--	--	--	--	ND	--	ND	ND	ND	ND	--	ND	
10/01/01	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<5	
01/31/02	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.5	
04/18/02	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	--	ND<2.5	
07/28/02	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
10/09/02	--	--	--	--	--	--	--	ND<0.50	ND<0.50	ND<0.50	--	--	--	
01/02/03	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	

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
Trip Blank	continued													
04/01/03	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	
07/01/03	--	--	--	--	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<1	--	ND<2	

Table 3
SUMMARY OF ADDITIONAL CHEMICAL ANALYSIS RESULTS
76 Station 5043

Date Sampled	TPH-D	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-1								
2/18/92	13000	--	--	--	--	--	--	--
8/31/92	8900	--	--	--	--	--	--	--
MW-2								
2/18/92	4300	--	--	--	--	--	--	--
5/20/92	4300	--	--	--	--	--	--	--
8/31/92	1600	--	--	--	--	--	--	--
11/30/92	5700	--	--	--	--	--	--	--
2/4/93	6100	--	--	--	--	--	--	--
5/4/93	7100	--	--	--	--	--	--	--
8/4/93	1800	--	--	--	--	--	--	--
11/3/93	2600	--	--	--	--	--	--	--
5/19/94	3000	--	--	--	--	--	--	--
8/15/94	2800	--	--	--	--	--	--	--
11/14/94	10000	--	--	--	--	--	--	--
2/21/95	2000	--	--	--	--	--	--	--
MW-3								
2/18/92	ND	--	--	--	--	--	--	--
8/31/92	92	--	--	--	--	--	--	--
11/30/92	94	--	--	--	--	--	--	--
2/4/93	550	--	--	--	--	--	--	--
5/4/93	250	--	--	--	--	--	--	--
8/4/93	100	--	--	--	--	--	--	--
11/3/93	160	--	--	--	--	--	--	--
2/7/94	620	--	--	--	--	--	--	--
5/19/94	480	--	--	--	--	--	--	--
8/15/94	110	--	--	--	--	--	--	--

Date Sampled	TPH-D	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-3 continued								
11/14/94	150	--	--	--	--	--	--	--
2/21/95	850	--	--	--	--	--	--	--
5/18/95	150	--	--	--	--	--	--	--
6/1/97	610	--	--	--	--	--	--	--
7/15/97	240	--	--	--	--	--	--	--
10/9/97	500	--	--	--	--	--	--	--
1/14/98	340	--	--	--	--	--	--	--
4/1/98	320	--	--	--	--	--	--	--
7/15/98	510	--	--	--	--	--	--	--
10/16/98	67	--	--	--	--	--	--	--
1/25/99	120	--	--	--	--	--	--	--
4/15/99	170	--	--	--	--	--	--	--
7/14/99	420	--	--	--	--	--	--	--
10/21/99	350	--	--	--	--	--	--	--
1/20/00	2060	--	--	--	--	--	--	--
4/13/00	200	ND	ND	ND	ND	ND	ND	ND
7/14/00	423	--	--	--	--	--	--	--
1/3/01	287	--	--	--	--	--	--	--
4/4/01	360	--	--	--	--	--	--	--
7/17/01	270	--	--	--	--	--	--	--
10/1/01	270	--	--	--	--	--	--	--
1/31/02	250	--	--	--	--	--	--	--
4/18/02	320	--	--	--	--	--	--	--
7/28/02	310	--	--	--	--	--	--	--
10/9/02	700	--	--	--	--	--	--	--
1/2/03	210	ND<2	ND<2	ND<100	ND<2	ND<2	ND<500	ND<2
4/1/03	200	--	--	--	--	--	--	--
7/1/03	380	--	--	--	--	--	ND<2500	--
10/2/03	300	--	--	--	--	--	ND<2500	--
1/9/04	200	--	--	--	--	--	ND<500	--

Date Sampled	TPH-D	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-4								
8/31/92	90	--	--	--	--	--	--	--
11/30/92	61	--	--	--	--	--	--	--
2/4/93	ND	--	--	--	--	--	--	--
5/4/93	ND	--	--	--	--	--	--	--
8/4/93	81	--	--	--	--	--	--	--
11/3/93	68	--	--	--	--	--	--	--
2/7/94	ND	--	--	--	--	--	--	--
5/19/94	90	--	--	--	--	--	--	--
8/15/94	72	--	--	--	--	--	--	--
11/14/94	ND	--	--	--	--	--	--	--
MW-5								
8/31/92	690	--	--	--	--	--	--	--
11/30/92	470	--	--	--	--	--	--	--
2/4/93	5500	--	--	--	--	--	--	--
5/4/93	4600	--	--	--	--	--	--	--
8/4/93	970	--	--	--	--	--	--	--
11/3/93	2100	--	--	--	--	--	--	--
2/7/94	830	--	--	--	--	--	--	--
5/19/94	600	--	--	--	--	--	--	--
8/15/94	860	--	--	--	--	--	--	--
11/14/94	290	--	--	--	--	--	--	--
MW-6								
8/31/92	750	--	--	--	--	--	--	--
11/30/92	1400	--	--	--	--	--	--	--
2/4/93	890	--	--	--	--	--	--	--
5/4/93	1800	--	--	--	--	--	--	--
8/4/93	1100	--	--	--	--	--	--	--
11/3/93	390	--	--	--	--	--	--	--
2/7/94	970	--	--	--	--	--	--	--

Date Sampled	TPH-D	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-6 continued								
5/19/94	1400	--	--	--	--	--	--	--
8/15/94	790	--	--	--	--	--	--	--
11/14/94	800	--	--	--	--	--	--	--
2/21/95	730	--	--	--	--	--	--	--
1/20/00	67600	--	--	--	--	--	--	--
4/13/00	8700	--	--	--	--	--	--	--
7/14/00	133000	--	--	--	--	--	--	--
10/26/00	61000	--	--	--	--	--	--	--
1/3/01	929	--	--	--	--	--	--	--
4/4/01	18000	ND	ND	ND	ND	ND	ND	ND
7/17/01	20000	--	--	--	--	--	--	--
10/1/01	24000	--	--	--	--	--	--	--
1/31/02	11000	--	--	--	--	--	--	--
4/18/02	3500	--	--	--	--	--	--	--
7/28/02	27000	--	--	--	--	--	--	--
10/9/02	170000	--	--	--	--	--	--	--
1/2/03	66000	--	--	--	--	--	--	--
4/1/03	35000	--	--	--	--	--	--	--
7/1/03	11000	--	--	--	--	--	ND<25000	--
10/2/03	ND<50	--	--	--	--	--	ND<200000	--
1/9/04	20000	--	--	--	--	--	ND<50000	--
MW-7								
6/1/97	69	--	--	--	--	--	--	--
7/15/97	ND	--	--	--	--	--	--	--
10/9/97	190	--	--	--	--	--	--	--
1/14/98	65	--	--	--	--	--	--	--
4/1/98	ND	--	--	--	--	--	--	--
7/15/98	74	--	--	--	--	--	--	--
10/16/98	ND	--	--	--	--	--	--	--

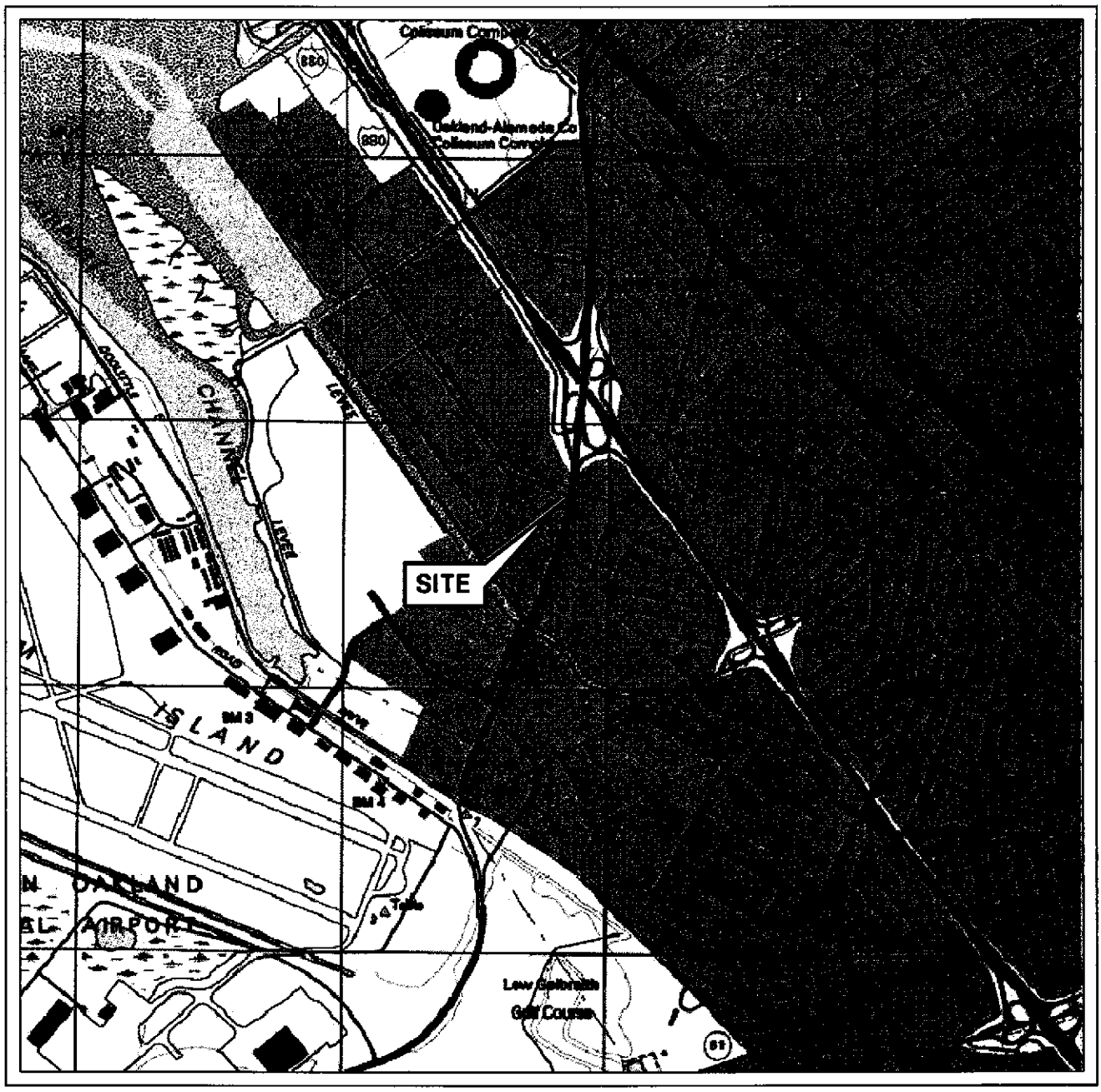
Date Sampled	TPH-D	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-7 continued								
1/25/99	ND	--	--	--	--	--	--	--
4/15/99	ND	--	--	--	--	--	--	--
7/14/99	69	--	--	--	--	--	--	--
10/21/99	ND	--	--	--	--	--	--	--
1/20/00	ND	--	--	--	--	--	--	--
4/13/00	ND	--	--	--	--	--	--	--
7/14/00	68	--	--	--	--	--	--	--
7/17/01	ND	--	--	--	--	--	--	--
10/1/01	ND<51	--	--	--	--	--	--	--
1/31/02	90	--	--	--	--	--	--	--
4/18/02	78	--	--	--	--	--	--	--
7/28/02	ND<50	--	--	--	--	--	--	--
10/9/02	ND<96	--	--	--	--	--	--	--
1/3/03	78	--	--	--	--	--	--	--
4/1/03	67	--	--	--	--	--	--	--
7/1/03	68	--	--	--	--	--	ND<500	--
10/2/03	82	--	--	--	--	--	ND<500	--
1/9/04	75	--	--	--	--	--	ND<500	--
MW-8								
5/27/97	320	--	--	--	--	--	--	--
6/1/97	320	--	--	--	--	--	--	--
7/15/97	ND	--	--	--	--	--	--	--
10/9/97	390	--	--	--	--	--	--	--
1/14/98	230	--	--	--	--	--	--	--
4/1/98	510	--	--	--	--	--	--	--
7/15/98	140	--	--	--	--	--	--	--
10/16/98	170	--	--	--	--	--	--	--
1/25/99	ND	--	--	--	--	--	--	--
4/15/99	91	--	--	--	--	--	--	--

Date Sampled	TPH-D	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-8 continued								
7/14/99	120	--	--	--	--	--	--	--
10/21/99	110	--	--	--	--	--	--	--
1/20/00	583	--	--	--	--	--	--	--
4/13/00	80	--	--	--	--	--	--	--
7/14/00	113	--	--	--	--	--	--	--
7/17/01	ND	--	--	--	--	--	--	--
10/1/01	ND<50	--	--	--	--	--	--	--
1/31/02	260	--	--	--	--	--	--	--
4/18/02	160	--	--	--	--	--	--	--
7/28/02	140	--	--	--	--	--	--	--
10/9/02	120	--	--	--	--	--	--	--
1/2/03	210	--	--	--	--	--	--	--
4/1/03	220	--	--	--	--	--	--	--
7/1/03	170	--	--	--	--	--	ND<500	--
10/2/03	350	--	--	--	--	--	ND<500	--
1/9/04	180	--	--	--	--	--	ND<500	--
MW-9								
2/21/95	71	--	--	--	--	--	--	--
5/18/95	ND	--	--	--	--	--	--	--
8/17/95	ND	--	--	--	--	--	--	--
7/26/96	98	--	--	--	--	--	--	--
10/28/96	99	--	--	--	--	--	--	--
1/29/97	54	--	--	--	--	--	--	--
4/15/97	94	--	--	--	--	--	--	--
7/15/97	ND	--	--	--	--	--	--	--
10/9/97	160	--	--	--	--	--	--	--
1/14/98	110	--	--	--	--	--	--	--
4/1/98	110	--	--	--	--	--	--	--
7/15/98	200	--	--	--	--	--	--	--

Date Sampled	TPH-D	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-9 continued								
10/16/98	ND	--	--	--	--	--	--	--
1/25/99	ND	--	--	--	--	--	--	--
4/15/99	ND	--	--	--	--	--	--	--
7/14/99	140	--	--	--	--	--	--	--
10/21/99	210	--	--	--	--	--	--	--
1/20/00	519	--	--	--	--	--	--	--
4/13/00	81	--	--	--	--	--	--	--
7/14/00	107	--	--	--	--	--	--	--
10/26/00	240	--	--	--	--	--	--	--
1/3/01	164	--	--	--	--	--	--	--
4/4/01	240	--	--	--	--	--	--	--
7/17/01	ND	--	--	--	--	--	--	--
10/1/01	ND<52	--	--	--	--	--	--	--
1/31/02	200	--	--	--	--	--	--	--
4/18/02	ND<50	--	--	--	--	--	--	--
7/28/02	ND<50	--	--	--	--	--	--	--
10/9/02	100	--	--	--	--	--	--	--
1/2/03	ND<50	--	--	--	--	--	--	--
4/1/03	56	--	--	--	--	--	--	--
7/1/03	ND<50	--	--	--	--	--	ND<500	--
10/2/03	ND<50	--	--	--	--	--	ND<500	--
1/9/04	91	--	--	--	--	--	ND<500	--
MW-10								
2/21/95	270	--	--	--	--	--	--	--
5/18/95	75	--	--	--	--	--	--	--
8/17/95	ND	--	--	--	--	--	--	--
7/26/96	ND	--	--	--	--	--	--	--
10/28/96	ND	--	--	--	--	--	--	--
1/29/97	ND	--	--	--	--	--	--	--

Date Sampled	TPH-D	EDB	TAME 8260B	TBA 8260B	DIPE 8260B	ETBE 8260B	Ethanol 8260B	1,2 DCE
	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)	(µg/l)
MW-10	continued							
4/15/97	ND	--	--	--	--	--	--	--
7/15/97	ND	--	--	--	--	--	--	--
10/9/97	ND	--	--	--	--	--	--	--
4/1/98	62	--	--	--	--	--	--	--
7/15/98	78	--	--	--	--	--	--	--
10/16/98	ND	--	--	--	--	--	--	--
1/25/99	ND	--	--	--	--	--	--	--
4/15/99	ND	--	--	--	--	--	--	--
7/14/99	180	--	--	--	--	--	--	--
10/21/99	96	--	--	--	--	--	--	--
1/20/00	252	--	--	--	--	--	--	--
4/13/00	69	--	--	--	--	--	--	--
7/14/00	149	--	--	--	--	--	--	--
10/26/00	83	--	--	--	--	--	--	--
1/3/01	126	--	--	--	--	--	--	--
4/4/01	75	--	--	--	--	--	--	--
7/17/01	ND	--	--	--	--	--	--	--
10/1/01	100	--	--	--	--	--	--	--
1/31/02	170	--	--	--	--	--	--	--
4/18/02	130	--	--	--	--	--	--	--
7/28/02	58	--	--	--	--	--	--	--
10/9/02	ND<94	--	--	--	--	--	--	--
1/2/03	64	--	--	--	--	--	--	--
4/1/03	76	--	--	--	--	--	--	--
7/1/03	87	--	--	--	--	--	ND<500	--
10/2/03	160	--	--	--	--	--	ND<500	--
1/9/04	74	--	--	--	--	--	ND<500	--

FIGURES



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

SCALE 1: 24,000

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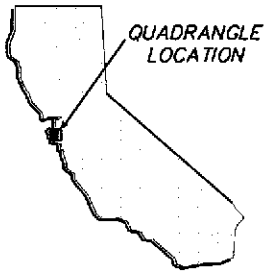


SOURCE:

United States Geological Survey
7.5 Minute Topographic Maps:
San Leandro Quadrangle

VICINITY MAP

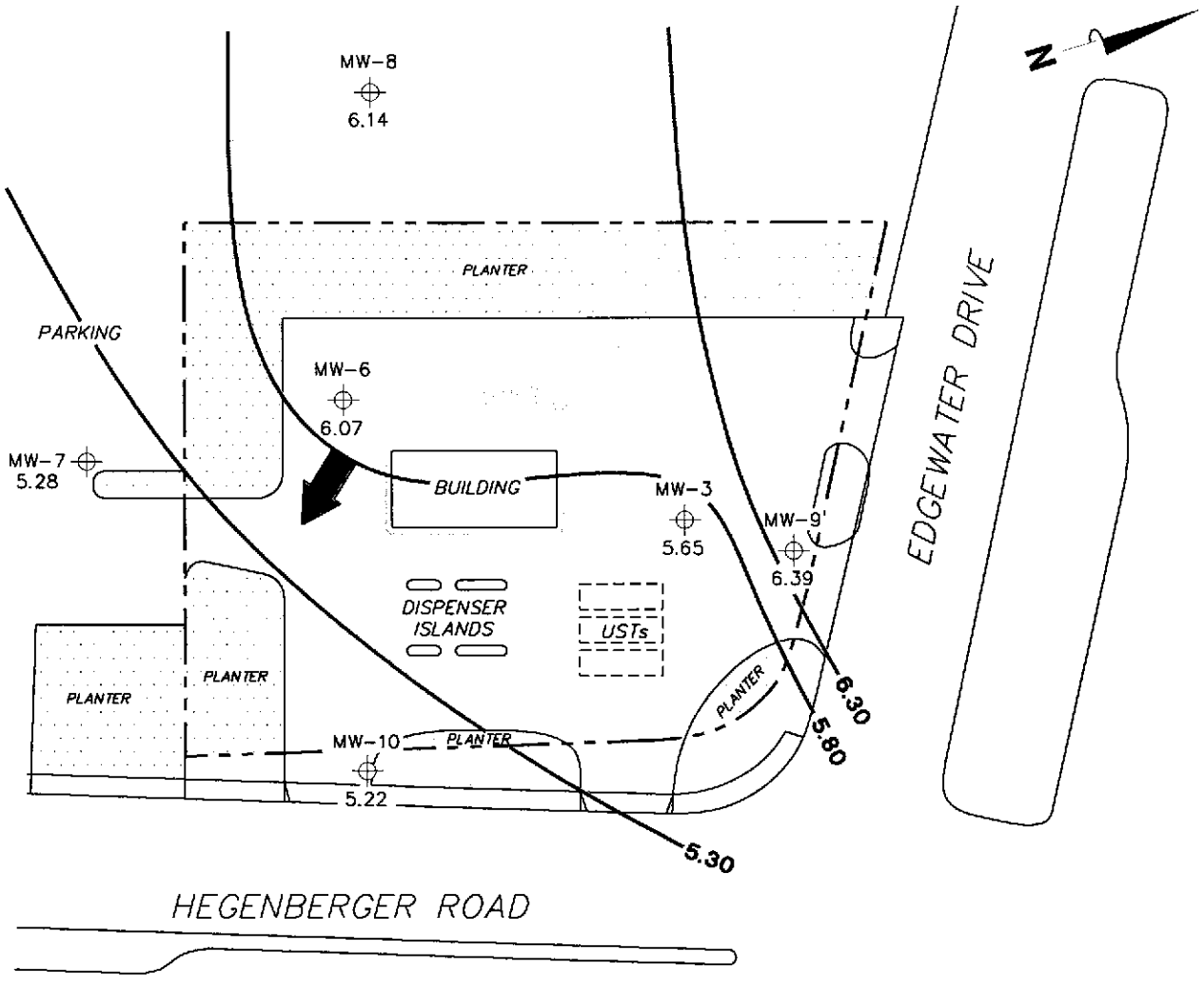
76 Station 5043
449 Hegenberger Road
Oakland, California

FIGURE 1

TRC

PS = 1:1

Graphics on lr1(i:)\VICINITY MAPS\5043vm.dwg 11/17/03 cme



NOTES:

Contour lines are interpretive and based on fluid levels measured in monitoring wells. Elevations are in feet above mean sea level. UST = underground storage tank.

LEGEND

MW-10 ⊕ Monitoring Well with Groundwater Elevation (feet)

6.30 —— Groundwater Elevation Contour

➡ General Direction of Groundwater Flow

GROUNDWATER ELEVATION CONTOUR MAP
January 9, 2004

76 Station 5043
449 Hegenberger Road
Oakland, California

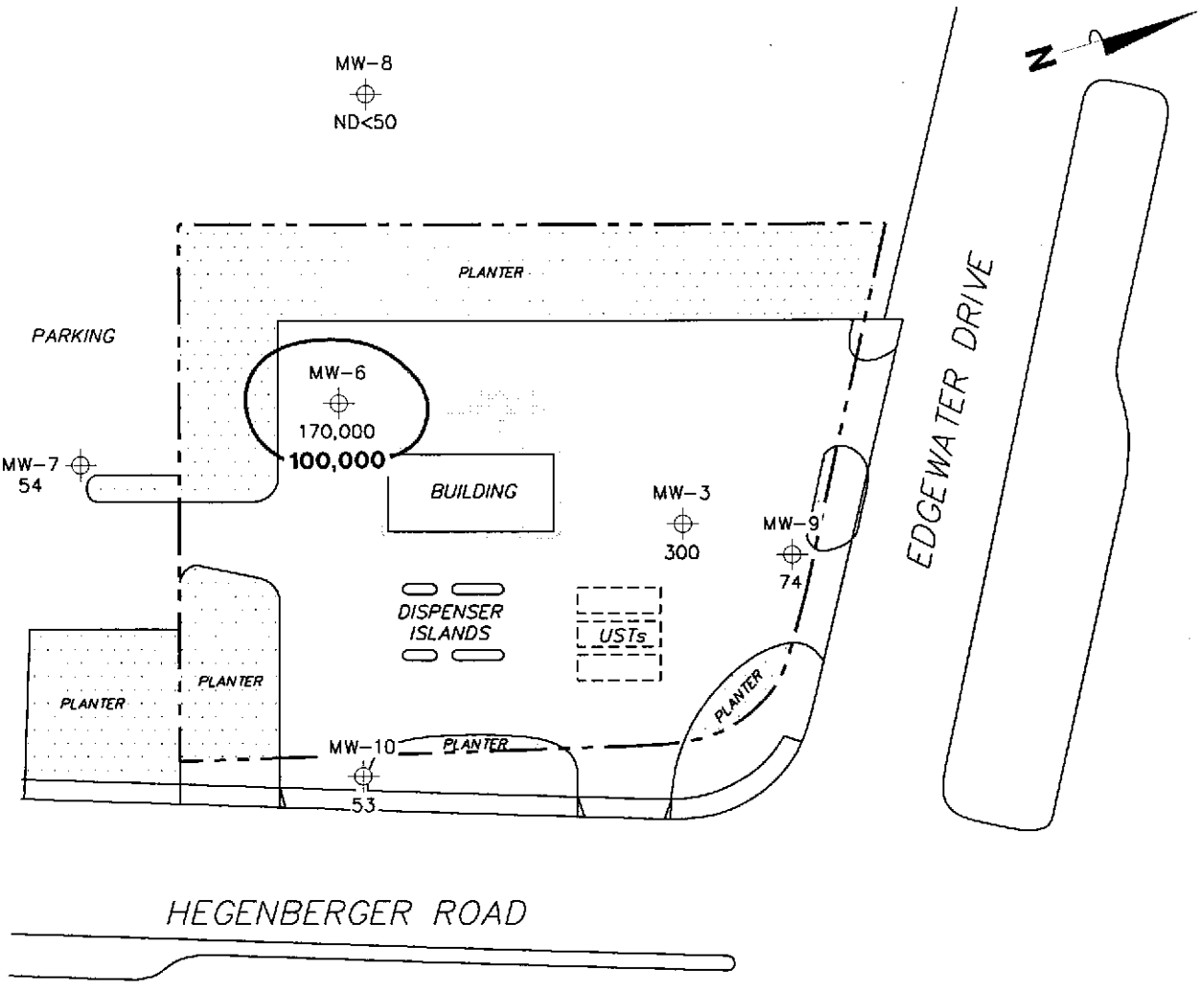
TRC

SCALE (FEET)
0 60

PS=1:1

FIGURE 2

Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-5000\5043+\5043qms.dwg 2/9/04 bbs



NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. TPPH = total purgeable petroleum hydrocarbons. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

MW-10 ⊕ Monitoring Well with Dissolved-Phase TPPH Concentration (µg/l)

—100,000— Dissolved-Phase TPPH Contour (µg/l)

DISSOLVED-PHASE TPPH CONCENTRATION MAP
January 9, 2004

76 Station 5043
449 Hegenberger Road
Oakland, California

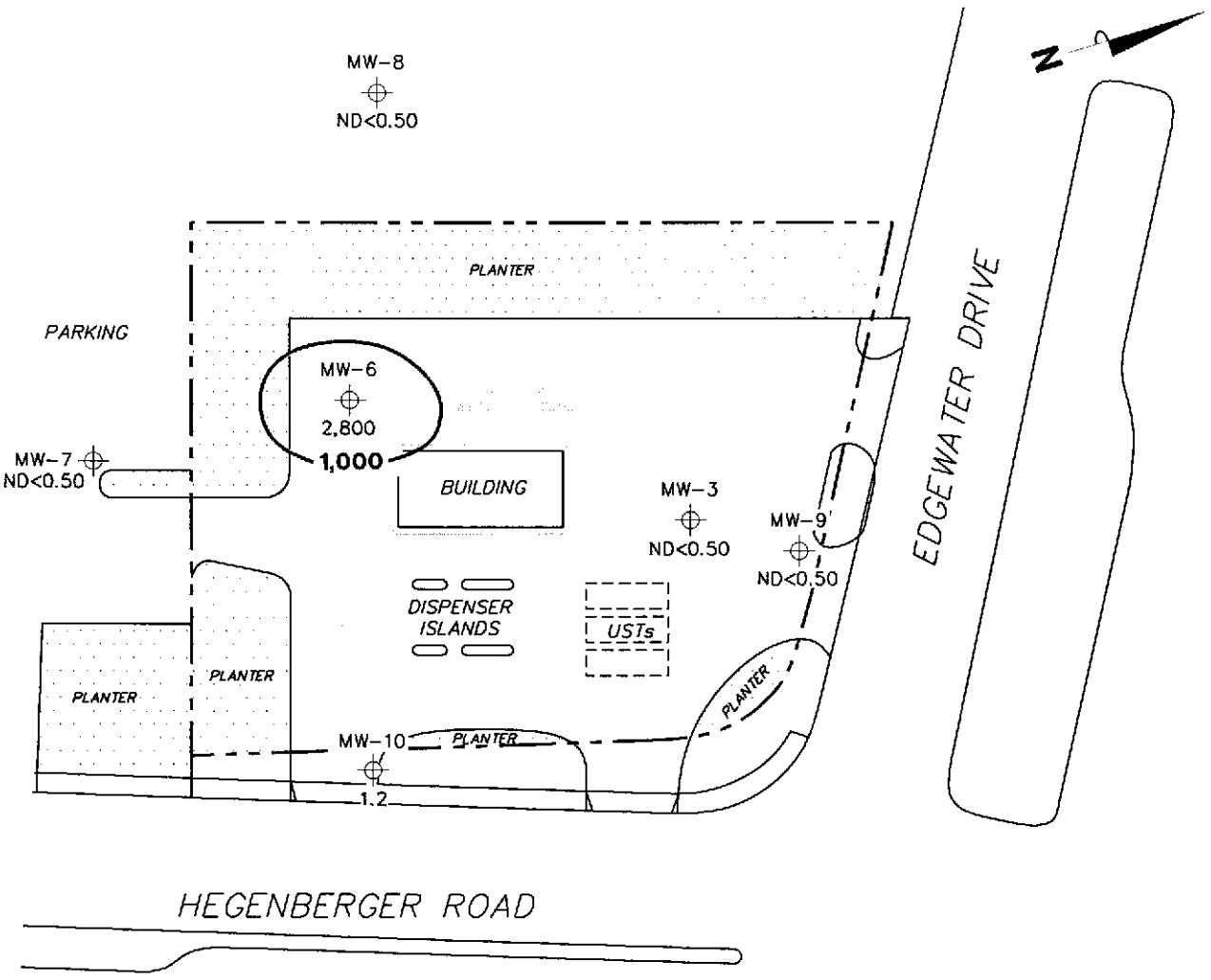
TRC

SCALE (FEET)
0 60

PS=1:1

FIGURE 3

Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-5000\5043+\5043qms.dwg 2/9/04 bbs



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.

LEGEND

MW-10 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

1,000 Dissolved-Phase Benzene Contour (µg/l)

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
January 9, 2004

76 Station 5043
449 Hegenberger Road
Oakland, California

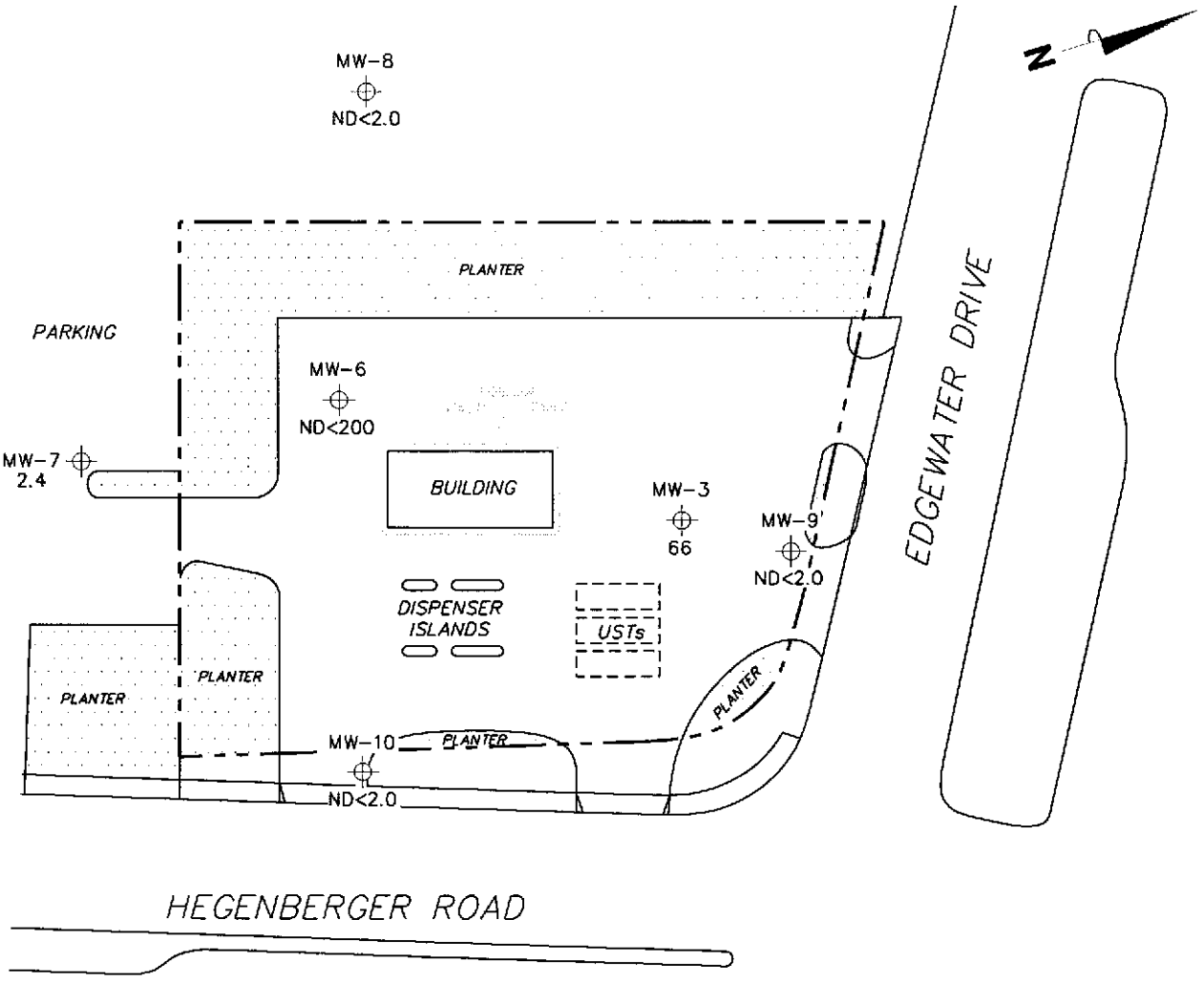
TRC

SCALE (FEET)
0 60

PS=1:1

FIGURE 4

Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-5000\5043+\5043qms.dwg 2/9/04 bbs



NOTES:

MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report. UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

MW-10 ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

DISSOLVED-PHASE MTBE CONCENTRATION MAP
January 9, 2004

76 Station 5043
449 Hegenberger Road
Oakland, California

TRC

SCALE (FEET)
0 60

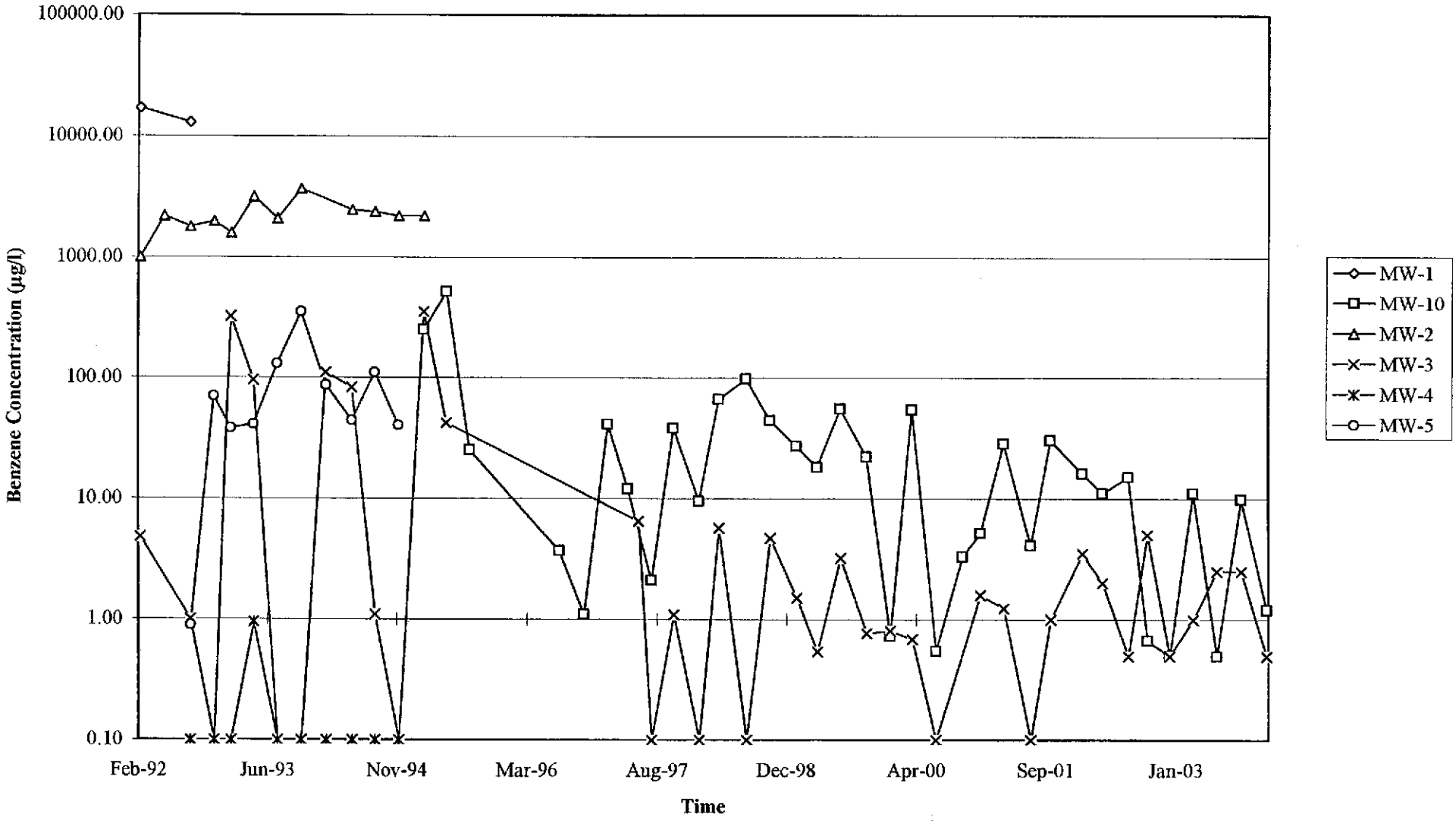
FIGURE 5

PS=1:1

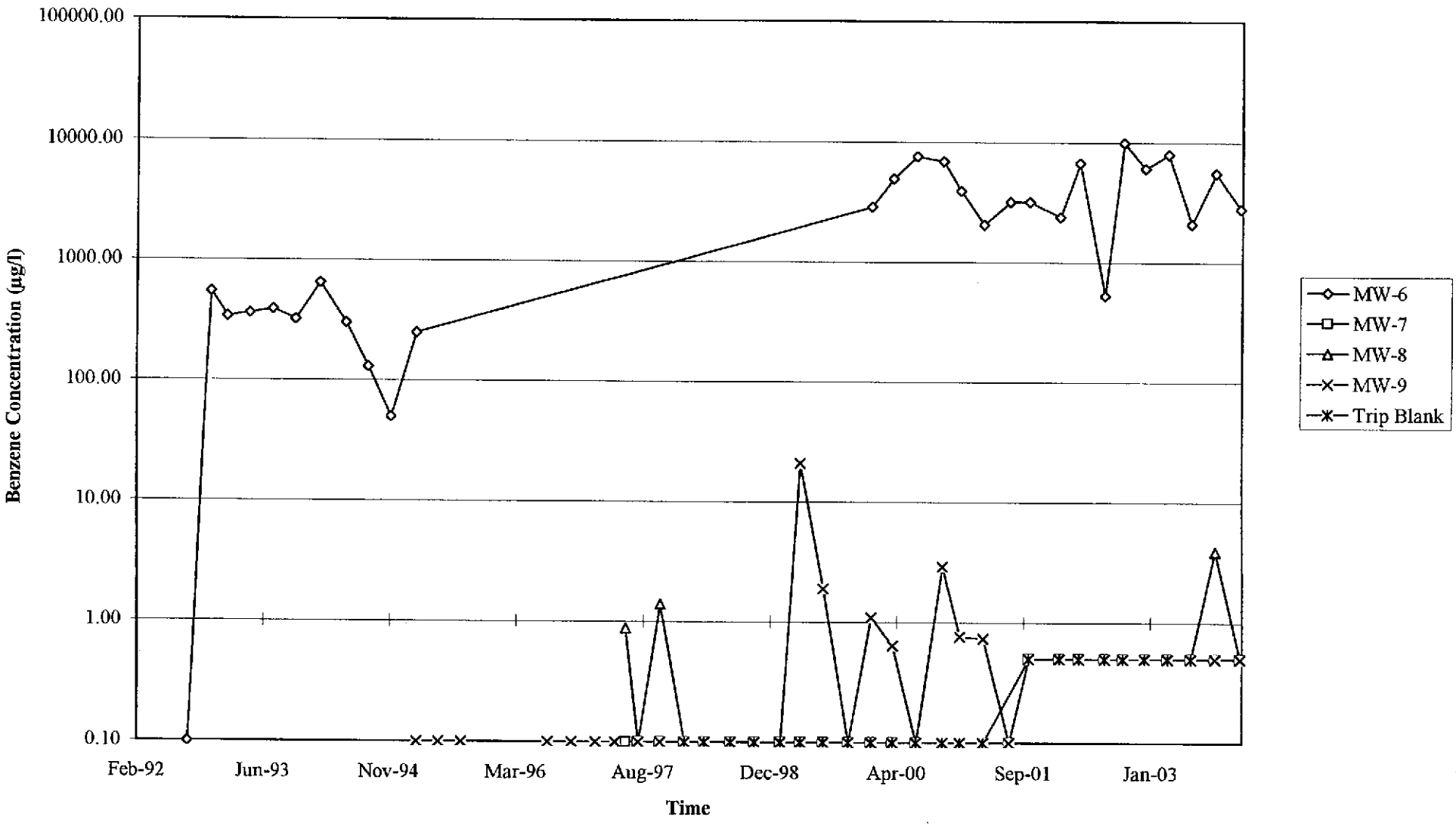
Graphics on Ir1(I:)\GRAPHICS\Projects By...\20-xxxx\20-0400\x-5000\5043+\5043qms.dwg 2/9/04 bbs

GRAPHS

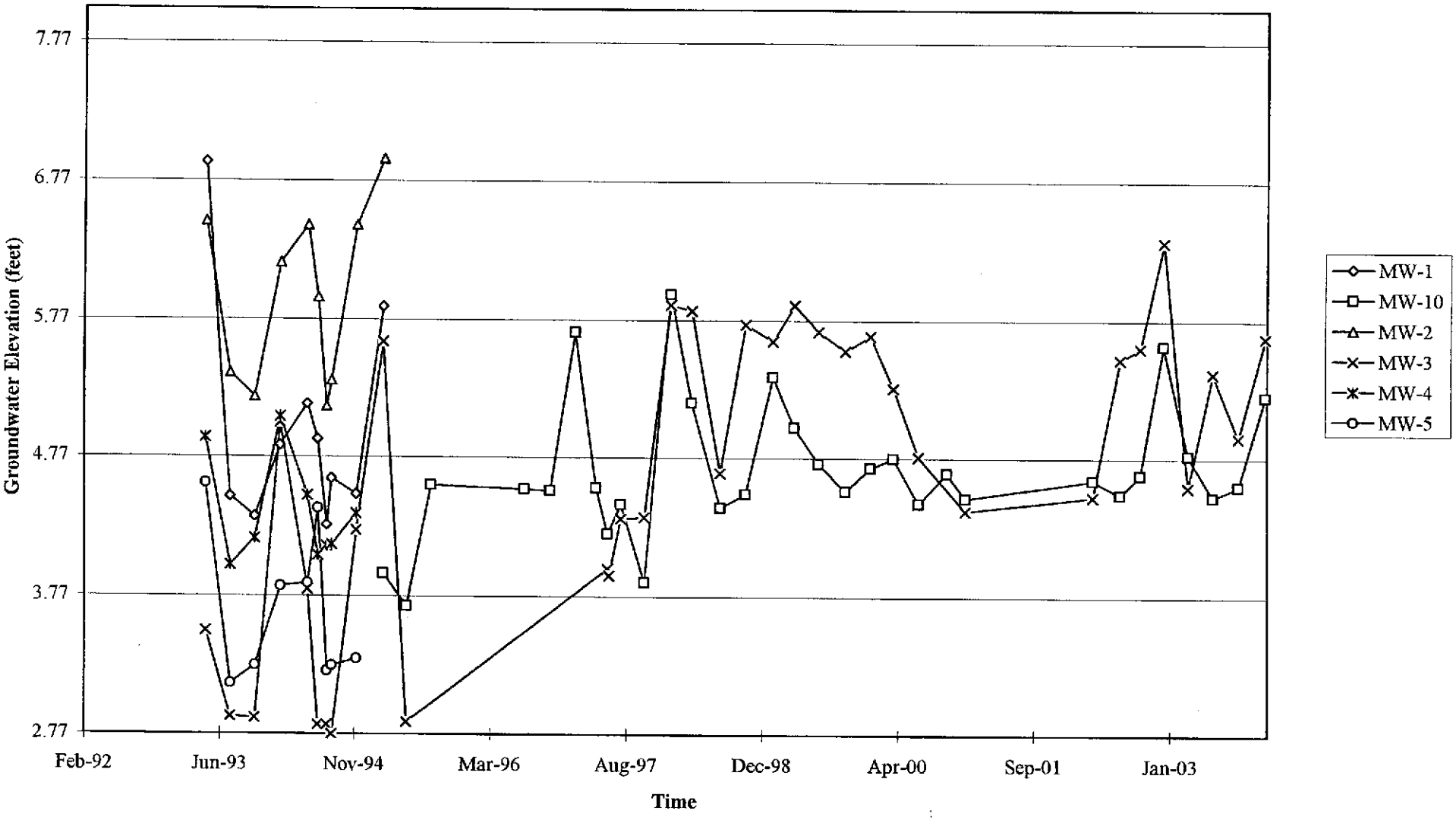
Graph 1
Benzene Concentrations vs. Time
76 Station 5043



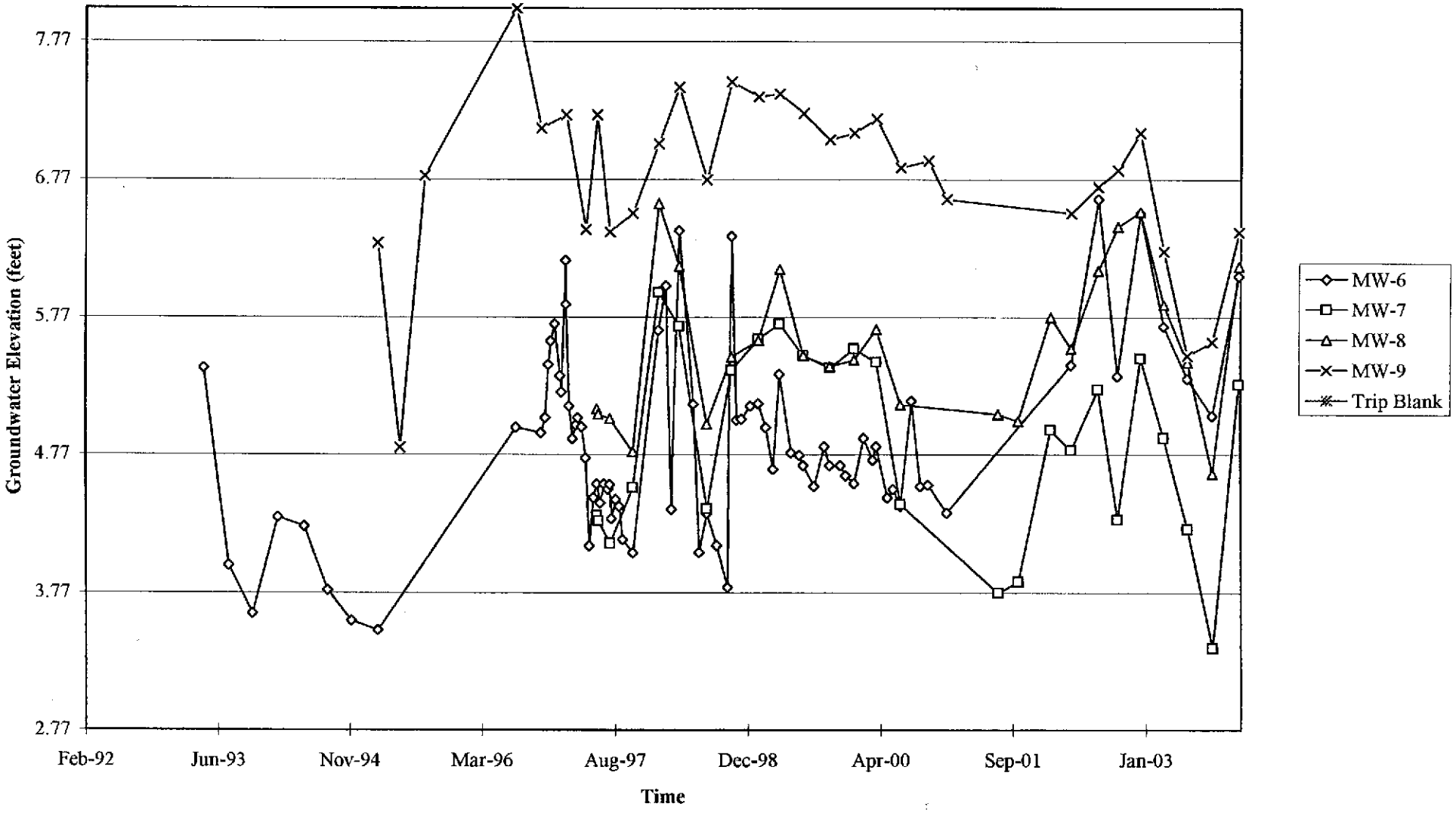
Graph 2
Benzene Concentrations vs. Time
76 Station 5043



Graph 3
Hydrograph
76 Station 5043



Graph 4
Hydrograph
76 Station 5043



GENERAL FIELD PROCEDURES

Groundwater Monitoring and Sampling Assignments

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

Fluid Level Measurements

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

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

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

Purging and Groundwater Parameter Measurement

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

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

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

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

Groundwater Sample Collection

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

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

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

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

Sequence of Gauging, Purging, and Sampling

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

Decontamination

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

Exceptions

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

FIELD MONITORING DATA SHEET

Technician: ALEX Job #/Task #: 41050001 / TA20 Date: 1-9-04

Site # 5043 Project Manager KATHIE HESKA Page 1 of 1

Well #	Grade	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-3		✓	14.02	2.39	0	0	0930	2"
MW-9		✓	12.54	1.90	0	0	1030	2"
MW-10		✓	12.74	3.40	0	0	0810	2"
MW-6		✓	12.75	2.80	0	0	0945	2"
MW-7		✓	12.30	3.55	0	0	0710	2"
MW-5		✓	14.76	2.38	0	0	0900	2"

FIELD DATA COMPLETE ✓	QA/QC ✓	COC ✓	WELL BOX CONDITION SHEETS ✓
WTT CERTIFICATE	MANIFEST	DRUM INVENTORY ✓	TRAFFIC CONTROL

GROUNDWATER SAMPLING FIELD NOTES

Technician: ALEX

Site: 5043 Project No.: 4105000.1 Date: 1-9-04

Well No.: MW-7
Depth to Water (feet): 3.55
Total Depth (feet): 12.60
Water Column (feet): 9.25
80% Recharge Depth (feet): 5.40

Purge Method: DIA
Depth to Product (feet): 0
LPH & Water Recovered (gallons): 0
Casing Diameter (Inches): 2"
1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F (C))	pH	Turbidity	D.O.
0655			2	1184	16.5	5.92		
			4	186.4	16.4	5.88		
	700		6	1167	16.3	5.86		

Static at Time Sampled	Total Gallons Purged	Time Sampled
3.70	6	0710

Comments:

Well No.: MW-8
Depth to Water (feet): 2.38
Total Depth (feet): 14.70
Water Column (feet): 12.38
80% Recharge Depth (feet): 4.85

Purge Method: DIA
Depth to Product (feet): 0
LPH & Water Recovered (gallons): 0
Casing Diameter (Inches): 2"
1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F (C))	pH	Turbidity	D.O.
0635			2	4.70 mS	16.6	5.49		
			4	4.35 mS	16.2	5.96		
	0640		6	3.97 mS	17.0	5.97		

Static at Time Sampled	Total Gallons Purged	Time Sampled
2.52	6	0900

Comments:

GROUNDWATER SAMPLING FIELD NOTES

Technician: ALEX

Site: 9043 | Project No.: 4105001 | Date: 1-9-04

Well No.: MW-10

Depth to Water (feet): 3.40

Total Depth (feet): 12.74

Water Column (feet): 9.34

80% Recharge Depth (feet): 5.26

Purge Method: PVA

Depth to Product (feet): 0

LPH & Water Recovered (gallons): 0

Casing Diameter (Inches): 2"

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
0751			2	1948	15.9	5.90		
			4	2.50 mS	16.9	5.97		
	0756		6	1483	17.6	6.00		

Static at Time Sampled	Total Gallons Purged	Time Sampled
3.70	6	0810

Comments:

Well No.: MW-9

Depth to Water (feet): 1.90

Total Depth (feet): 12.54

Water Column (feet): 10.64

80% Recharge Depth (feet): 4.02

Purge Method: PVA

Depth to Product (feet): 0

LPH & Water Recovered (gallons): 0

Casing Diameter (Inches): 2"

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.
0820			2	1540	17.1	5.89		
			4	1555	18.6	5.86		
	0825		6	3.11 mS	18.4	6.07		

Static at Time Sampled	Total Gallons Purged	Time Sampled
6.18	6	1030

Comments: NOT RECOVER IN 2HRS

GROUNDWATER SAMPLING FIELD NOTES

Technician: ALEX

Site: 5043 Project No.: 403601 Date: 1-9-04

Well No.: MW-7 Purge Method: DIA

Depth to Water (feet): 2.39 Depth to Product (feet): 0

Total Depth (feet): 14.02 LPH & Water Recovered (gallons): 0

Water Column (feet): 11.63 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 4.71 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F.C)	pH	Turbidity	D.O.
0720			2	1187	16.0	5.81		
			4	1274	16.4	5.85		
	0725		6	1337	17.0	5.91		

Static at Time Sampled	Total Gallons Purged	Time Sampled
5.02	6	0930

Comments: NOT RECOVER IN 2 HRS.

Well No.: MW-6 Purge Method: DIA

Depth to Water (feet): 2.80 Depth to Product (feet): 0

Total Depth (feet): 12.75 LPH & Water Recovered (gallons): 0

Water Column (feet): 9.95 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 4.79 1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F.C)	pH	Turbidity	D.O.
0736			2	893	16.0	596		
			4	1180	15.9	5.78		
	0741		6	1081	16.0	5.87		

Static at Time Sampled	Total Gallons Purged	Time Sampled
4.88	6	0945

Comments: NOT RECOVER IN 2 HRS.

SEVERN TRENT STL

Submission#: 2004-01-0293

TRC Alton Geoscience

January 26, 2004

21 Technology Drive
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001FA20
Project: Conoco Phillips #5043
Site: 449 Hegenberger Rd., Oakland

Attached is our report for your samples received on 01/12/2004 11:17
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 02/26/2004 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

Sincerely,

Dimple Sharma
Project Manager

SEVERN TRENT STL

Submission #: 2004-01-0293

Diesel

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-3	01/09/2004 09:30	Water	1
MW-9	01/09/2004 10:30	Water	2
MW-10	01/09/2004 08:10	Water	3
MW-6	01/09/2004 09:45	Water	4
MW-7	01/09/2004 07:10	Water	5
MW-8	01/09/2004 09:00	Water	6

Diesel

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 3510/8015M
Sample ID: **MW-3**
Sampled: 01/09/2004 09:30
Matrix: Water

Test(s): 8015M
Lab ID: 2004-01-0293 - 1
Extracted: 1/13/2004 13:29
QC Batch#: 2004/01/13-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	200	50	ug/L	1.00	01/15/2004 04:17	ndp
Surrogate(s)						
o-Terphenyl	66.4	60-130	%	1.00	01/15/2004 04:17	

Diesel

TRC Alton Geoscience
Attn.: Anju Farfan

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

Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 3510/8015M
Sample ID: **MW-9**
Sampled: 01/09/2004 10:30
Matrix: Water

Test(s): 8015M
Lab ID: 2004-01-0293 - 2
Extracted: 1/13/2004 13:29
QC Batch#: 2004/01/13-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	91	50	ug/L	1.00	01/15/2004 01:14	ndp
Surrogate(s)						
o-Terphenyl	83.4	60-130	%	1.00	01/15/2004 01:14	

Diesel

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Attn.: Anju Farfan

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 3510/8015M
Sample ID: **MW-10**
Sampled: 01/09/2004 08:10
Matrix: Water

Test(s): 8015M
Lab ID: 2004-01-0293 - 3
Extracted: 1/13/2004 13:29
QC Batch#: 2004/01/13-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	74	50	ug/L	1.00	01/15/2004 01:45	ndp
Surrogate(s)						
o-Terphenyl	79.5	60-130	%	1.00	01/15/2004 01:45	

Diesel

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 3510/8015M
Sample ID: **MW-6**
Sampled: 01/09/2004 09:45
Matrix: Water

Test(s): 8015M
Lab ID: 2004-01-0293 - 4
Extracted: 1/13/2004 13:29
QC Batch#: 2004/01/13-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	20000	1300	ug/L	25.00	01/19/2004 16:18	ndp
Surrogate(s)						
o-Terphenyl	NA	60-130	%	25.00	01/19/2004 16:18	sd

Diesel

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Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 3510/8015M
Sample ID: **MW-7**
Sampled: 01/09/2004 07:10
Matrix: Water

Test(s): 8015M
Lab ID: 2004-01-0293 - 5
Extracted: 1/13/2004 13:29
QC Batch#: 2004/01/13-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	75	50	ug/L	1.00	01/15/2004 02:45	ndp
Surrogate(s)						
o-Terphenyl	83.7	60-130	%	1.00	01/15/2004 02:45	

Diesel

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 3510/8015M
Sample ID: **MW-8**
Sampled: 01/09/2004 09:00
Matrix: Water

Test(s): 8015M
Lab ID: 2004-01-0293 - 6
Extracted: 1/13/2004 13:29
QC Batch#: 2004/01/13-06.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	180	50	ug/L	1.00	01/15/2004 03:15	ndp
Surrogate(s)						
o-Terphenyl	82.9	60-130	%	1.00	01/15/2004 03:15	

Diesel

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Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 3510/8015M
Method Blank
MB: 2004/01/13-06.10-001

Water

Test(s): 8015M
QC Batch # 2004/01/13-06.10
Date Extracted: 01/13/2004 13:29

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	01/14/2004 10:56	
Surrogates(s)					
o-Terphenyl	80.6	60-130	%	01/14/2004 10:56	

Diesel

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 3510/8015M

Test(s): 8015M

Laboratory Control Spike **Water** **QC Batch # 2004/01/13-06.10**

LCS 2004/01/13-06.10-002 Extracted: 01/13/2004 Analyzed: 01/14/2004 11:27
LCSD 2004/01/13-06.10-003 Extracted: 01/13/2004 Analyzed: 01/14/2004 11:57

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Diesel	872	866	1000	87.2	86.6	0.7	60-130	25		
Surrogates(s)										
o-Terphenyl	16.4	16.0	20.0	81.9	79.9		60-130	0		

Diesel

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Legend and Notes

Result Flag

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

sd

Surrogate recovery not reportable due to required dilution.

SEVERN TRENT STL

Submission #: 2004-01-0293

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-3	01/09/2004 09:30	Water	1
MW-9	01/09/2004 10:30	Water	2
MW-10	01/09/2004 08:10	Water	3
MW-6	01/09/2004 09:45	Water	4
MW-7	01/09/2004 07:10	Water	5
MW-8	01/09/2004 09:00	Water	6

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 5030B
Sample ID: **MW-3**
Sampled: 01/09/2004 09:30
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-01-0293 - 1
Extracted: 1/21/2004 20:23
QC Batch#: 2004/01/21-1B.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	300	50	ug/L	1.00	01/21/2004 20:23	
Benzene	ND	0.50	ug/L	1.00	01/21/2004 20:23	
Toluene	0.53	0.50	ug/L	1.00	01/21/2004 20:23	
Ethylbenzene	0.53	0.50	ug/L	1.00	01/21/2004 20:23	
Total xylenes	1.5	1.0	ug/L	1.00	01/21/2004 20:23	
Methyl tert-butyl ether (MTBE)	66	2.0	ug/L	1.00	01/21/2004 20:23	
Ethanol	ND	500	ug/L	1.00	01/21/2004 20:23	
Surrogate(s)						
1,2-Dichloroethane-d4	116.2	76-114	%	1.00	01/21/2004 20:23	sh
Toluene-d8	97.3	88-110	%	1.00	01/21/2004 20:23	

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 5030B
Sample ID: **MW-9**
Sampled: 01/09/2004 10:30
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-01-0293 - 2
Extracted: 1/22/2004 15:56
QC Batch#: 2004/01/22-1B.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	74	50	ug/L	1.00	01/22/2004 15:56	
Benzene	ND	0.50	ug/L	1.00	01/22/2004 15:56	
Toluene	0.98	0.50	ug/L	1.00	01/22/2004 15:56	
Ethylbenzene	2.3	0.50	ug/L	1.00	01/22/2004 15:56	
Total xylenes	6.2	1.0	ug/L	1.00	01/22/2004 15:56	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	01/22/2004 15:56	
Ethanol	ND	500	ug/L	1.00	01/22/2004 15:56	
Surrogate(s)						
1,2-Dichloroethane-d4	96.1	76-114	%	1.00	01/22/2004 15:56	
Toluene-d8	95.4	88-110	%	1.00	01/22/2004 15:56	

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 5030B
Sample ID: **MW-10**
Sampled: 01/09/2004 08:10
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-01-0293 - 3
Extracted: 1/21/2004 21:01
QC Batch#: 2004/01/21-1B.68

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	53	50	ug/L	1.00	01/21/2004 21:01	
Benzene	1.2	0.50	ug/L	1.00	01/21/2004 21:01	
Toluene	ND	0.50	ug/L	1.00	01/21/2004 21:01	
Ethylbenzene	0.70	0.50	ug/L	1.00	01/21/2004 21:01	
Total xylenes	1.6	1.0	ug/L	1.00	01/21/2004 21:01	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	01/21/2004 21:01	
Ethanol	ND	500	ug/L	1.00	01/21/2004 21:01	
Surrogate(s)						
1,2-Dichloroethane-d4	109.2	76-114	%	1.00	01/21/2004 21:01	
Toluene-d8	95.0	88-110	%	1.00	01/21/2004 21:01	

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 5030B
Test(s): 8260FAB

Sample ID: **MW-6**
Lab ID: 2004-01-0293 - 4

Sampled: 01/09/2004 09:45
Extracted: 1/22/2004 20:28

Matrix: Water
QC Batch#: 2004/01/22-2A.65

Analysis Flag: o (See Legend and Note Section)

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	170000	5000	ug/L	100.00	01/22/2004 20:28	
Benzene	2800	50	ug/L	100.00	01/22/2004 20:28	
Toluene	3300	50	ug/L	100.00	01/22/2004 20:28	
Ethylbenzene	4700	50	ug/L	100.00	01/22/2004 20:28	
Total xylenes	16000	100	ug/L	100.00	01/22/2004 20:28	
Methyl tert-butyl ether (MTBE)	ND	200	ug/L	100.00	01/22/2004 20:28	
Ethanol	ND	50000	ug/L	100.00	01/22/2004 20:28	
Surrogate(s)						
1,2-Dichloroethane-d4	98.3	76-114	%	100.00	01/22/2004 20:28	
Toluene-d8	105.2	88-110	%	100.00	01/22/2004 20:28	

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 5030B
Sample ID: **MW-7**
Sampled: 01/09/2004 07:10
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-01-0293 - 5
Extracted: 1/22/2004 20:50
QC Batch#: 2004/01/22-2A.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	54	50	ug/L	1.00	01/22/2004 20:50	
Benzene	ND	0.50	ug/L	1.00	01/22/2004 20:50	
Toluene	ND	0.50	ug/L	1.00	01/22/2004 20:50	
Ethylbenzene	ND	0.50	ug/L	1.00	01/22/2004 20:50	
Total xylenes	ND	1.0	ug/L	1.00	01/22/2004 20:50	
Methyl tert-butyl ether (MTBE)	2.4	2.0	ug/L	1.00	01/22/2004 20:50	
Ethanol	ND	500	ug/L	1.00	01/22/2004 20:50	
Surrogate(s)						
1,2-Dichloroethane-d4	82.8	76-114	%	1.00	01/22/2004 20:50	
Toluene-d8	93.7	88-110	%	1.00	01/22/2004 20:50	

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Prep(s): 5030B
Sample ID: **MW-8**
Sampled: 01/09/2004 09:00
Matrix: Water

Test(s): 8260FAB
Lab ID: 2004-01-0293 - 6
Extracted: 1/22/2004 21:14
QC Batch#: 2004/01/22-2A.65

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	01/22/2004 21:14	
Benzene	ND	0.50	ug/L	1.00	01/22/2004 21:14	
Toluene	ND	0.50	ug/L	1.00	01/22/2004 21:14	
Ethylbenzene	ND	0.50	ug/L	1.00	01/22/2004 21:14	
Total xylenes	ND	1.0	ug/L	1.00	01/22/2004 21:14	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	01/22/2004 21:14	
Ethanol	ND	500	ug/L	1.00	01/22/2004 21:14	
Surrogate(s)						
1,2-Dichloroethane-d4	83.7	76-114	%	1.00	01/22/2004 21:14	
Toluene-d8	92.5	88-110	%	1.00	01/22/2004 21:14	

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 5030B
Method Blank
MB: 2004/01/21-1B.68-035

Water

Test(s): 8260FAB
QC Batch # 2004/01/21-1B.68
Date Extracted: 01/21/2004 15:35

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	01/21/2004 15:35	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	01/21/2004 15:35	
Benzene	ND	0.5	ug/L	01/21/2004 15:35	
Toluene	ND	0.5	ug/L	01/21/2004 15:35	
Ethylbenzene	ND	0.5	ug/L	01/21/2004 15:35	
Total xylenes	ND	1.0	ug/L	01/21/2004 15:35	
Ethanol	ND	500	ug/L	01/21/2004 15:35	
Surrogates(s)					
1,2-Dichloroethane-d4	108.4	76-114	%	01/21/2004 15:35	
Toluene-d8	98.8	88-110	%	01/21/2004 15:35	

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 5030B
Method Blank

Water

Test(s): 8260FAB
QC Batch # 2004/01/22-1B.65

MB: 2004/01/22-1B.65-005

Date Extracted: 01/22/2004 11:05

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	01/22/2004 11:05	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	01/22/2004 11:05	
Benzene	ND	0.5	ug/L	01/22/2004 11:05	
Toluene	ND	0.5	ug/L	01/22/2004 11:05	
Ethylbenzene	ND	0.5	ug/L	01/22/2004 11:05	
Total xylenes	ND	1.0	ug/L	01/22/2004 11:05	
Ethanol	ND	500	ug/L	01/22/2004 11:05	
Surrogates(s)					
1,2-Dichloroethane-d4	99.8	76-114	%	01/22/2004 11:05	
Toluene-d8	96.6	88-110	%	01/22/2004 11:05	

Gas/BTEX Fuel Oxygenates by 8260B

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Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 5030B
Method Blank

Water

Test(s): 8260FAB
QC Batch # 2004/01/22-2A.65

MB: 2004/01/22-2A.65-000

Date Extracted: 01/22/2004 20:00

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	01/22/2004 20:00	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	01/22/2004 20:00	
Benzene	ND	0.5	ug/L	01/22/2004 20:00	
Toluene	ND	0.5	ug/L	01/22/2004 20:00	
Ethylbenzene	ND	0.5	ug/L	01/22/2004 20:00	
Total xylenes	ND	1.0	ug/L	01/22/2004 20:00	
Ethanol	ND	500	ug/L	01/22/2004 20:00	
Surrogates(s)					
1,2-Dichloroethane-d4	88.2	76-114	%	01/22/2004 20:00	
Toluene-d8	97.4	88-110	%	01/22/2004 20:00	

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2004/01/21-1B.68**

LCS 2004/01/21-1B.68-020 Extracted: 01/21/2004 Analyzed: 01/21/2004 16:20
LCSD 2004/01/21-1B.68-039 Extracted: 01/21/2004 Analyzed: 01/21/2004 16:39

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	23.8	24.3	25	95.2	97.2	2.1	65-165	20		
Benzene	25.1	22.8	25	100.4	91.2	9.6	69-129	20		
Toluene	24.8	23.7	25	99.2	94.8	4.5	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	488	520	500	97.6	104.0		76-114			
Toluene-d8	501	502	500	100.2	100.4		88-110			

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2004/01/22-1B.65**

LCS 2004/01/22-1B.65-018 Extracted: 01/22/2004 Analyzed: 01/22/2004 10:18
LCSD 2004/01/22-1B.65-051 Extracted: 01/22/2004 Analyzed: 01/22/2004 11:51

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	25.4	24.5	25	101.6	98.0	3.6	65-165	20		
Benzene	22.8	22.6	25	91.2	90.4	0.9	69-129	20		
Toluene	23.6	22.7	25	94.4	90.8	3.9	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	450	457	500	90.0	91.4		76-114			
Toluene-d8	509	494	500	101.8	98.8		88-110			

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2004/01/22-2A.65**

LCS 2004/01/22-2A.65-011 Extracted: 01/22/2004 Analyzed: 01/22/2004 19:11
LCSD 2004/01/22-2A.65-036 Extracted: 01/22/2004 Analyzed: 01/22/2004 19:36

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Methyl tert-butyl ether (MTBE)	24.1	24.9	25	96.4	99.6	3.3	65-165	20		
Benzene	26.0	23.7	25	104.0	94.8	9.3	69-129	20		
Toluene	24.2	24.7	25	96.8	98.8	2.0	70-130	20		
Surrogates(s)										
1,2-Dichloroethane-d4	420	467	500	84.0	93.4		76-114			
Toluene-d8	476	506	500	95.2	101.2		88-110			

Gas/BTEX Fuel Oxygenates by 8260B

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

Project: 41050001FA20
Conoco Phillips #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Matrix Spike (MS / MSD) **Water** **QC Batch # 2004/01/21-1B.68**

MW-7 >> MS

Lab ID: 2004-01-0293 - 005

MS: 2004/01/21-1B.68-058 Extracted: 01/21/2004 Analyzed: 01/21/2004 21:58

Dilution: 1.00

MSD: 2004/01/21-1B.68-017 Extracted: 01/21/2004 Analyzed: 01/21/2004 22:17

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level	Recovery %			Limits %		Flags	
	MS	MSD	Sample	ug/L	MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	28.2	30.5	2.34	25	103.4	112.6	8.5	65-165	20		
Benzene	26.9	24.1	ND	25	107.6	96.4	11.0	69-129	20		
Toluene	26.3	25.2	ND	25	105.2	100.8	4.3	70-130	20		
Surrogate(s)											
1,2-Dichloroethane-d4	496	568		500	99.2	113.6		76-114			
Toluene-d8	509	498		500	101.8	99.6		88-110			

Gas/BTEX Fuel Oxygenates by 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 #5043

Received: 01/12/2004 11:17

Site: 449 Hegenberger Rd., Oakland

Legend and Notes

Analysis Flag

o

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

Result Flag

sh

Surrogate recovery was higher than QC limit due to matrix interference.

SEVERN TRENT STL

STL San Francisco

Sample Receipt Checklist

Submission #:2004- 01 - 0293

Checklist completed by: (initials) DSH Date: 01/13/04

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^{o} C ± 2)?	Temp: 4.0 °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_3 ☐ HCl ☐ H_2SO_4 ☐ 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):

2004-01-0293

ConocoPhillips Chain Of Custody Record

81915

STL-San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

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

ConocoPhillips Site Manager:

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

ConocoPhillips Work Order Number:

ConocoPhillips Cost Object:

DATE: 1-9-04

PAGE: 1 of 1

SAMPLING COMPANY: TRC	Valid Value ID:	CONOCOPHILLIPS SITE NUMBER: 5043	GLOBAL ID NO.: T0600101476
ADDRESS: 21 Technology Drive, Irvine CA 92618		SITE ADDRESS (Street and City): 449 HEGENBERGER RD. OAKLAND	CONOCOPHILLIPS SITE MANAGER:
PROJECT CONTACT (Hardcopy or PDF Report to): Anju Farfan		EDF DELIVERABLE TO (RP or Designee): Peter Thomson, TRC pthomson@trcsolutions.com	PHONE NO.: 949-341-7408
TELEPHONE: 949-341-7440 / FAX: 949-753-0111 / E-MAIL: afarfan@trcsolutions.com			E-MAIL: / LAB USE ONLY
SAMPLER NAME(S) (Print): ALEX M.	CONSULTANT PROJECT NUMBER: 41050001/FA20		

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

REQUESTED ANALYSES

LAB USE ONLY	Sample Identification/Field Point Name*	SAMPLING DATE	SAMPLING TIME	MATRIX	NO. OF CONT.	8015m - TPHd Extractable	8260B - TPHg/BTEX/MtBE	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/MtBE	Lead ☐Total ☐STLC ☐TCLP	TPH-D BY 8015M	TPPH BY 8260B	BEX/MTBE BY 8260B	ETHANOL BY 8260B
	MW-3	1-9-04	0930	G.W.	4									X	X	X	X
	MW-9		1030														
	MW-10		0810														
	MW-6		0945														
	MW-7		0710														
	MW-8		0900														

FIELD NOTES: Container/Preservative or PID Readings or Laboratory Notes

4.0°C

TEMPERATURE ON RECEIPT C°

REFRIGERATED

Relinquished by: (Signature) Alex Cranall. 1117	Received by: (Signature)	Date: 1/12/04	Time: 1026
Relinquished by: (Signature) 1/12/04	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature) Denise Harrington/STL-SF	Date: 1/12/04	Time: 1117

9/19/03 Revision

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.