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Customer-Focused Solutions

April 26, 2004

ConocoPhillips Company
76 Broadway
Sacramento, CA 95818

ALAMEDA COUNTY
LDM GY 2004
Environmental Services

ATTN: MR. THOMAS H. KOSEL

SITE: 76 STATION 3538
411 WEST MACARTHUR BLVD.
OAKLAND, CALIFORNIA

RE: SEMI-ANNUAL MONITORING REPORT
OCTOBER 2003 THROUGH MARCH 2004

Dear Mr. Kosel:

Please find enclosed our Semi-Annual Monitoring Report for 76 Station 3538, located at 411 West MacArthur Blvd, Oakland, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan
For *Montaño*

Anju Farfan
QMS Operations Manager

CC: Mr. Don Hwang, Alameda County DHS
Ms. Barbara Moed, TRC

Enclosures
20-0400/3538R01.QMS





Customer-Focused Solutions

**FLUID LEVEL MONITORING AND
GROUNDWATER SAMPLING REPORT
OCTOBER 2003 THROUGH MARCH 2004**

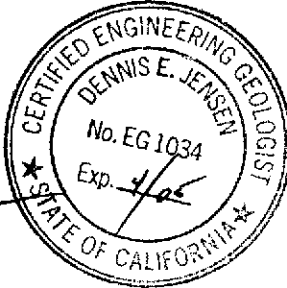

April 26, 2004

76 Station 3538
411 West MacArthur Blvd.
Oakland, California

Prepared For:

Mr. Thomas H. 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
January 2004 through March 2004
76 Station 3538
411 West MacArthur Blvd.
Oakland, CA

Site Information:

Site:	76 Station 411 West MacArthur Blvd. Oakland, CA
Project Coordinator/Phone Number:	Thomas H. Kosel/916-588-7666
Groundwater wells onsite:	6
Groundwater wells offsite:	0

Field Activity:

Sampling consultant:	TRC
Date(s) sampled:	2/04/04
Groundwater wells gauged:	6
Groundwater wells sampled:	2
Purging method:	bailer
Treatment/disposal method during sampling event:	Onyx/Rodeo Unit 100
Free product pumpouts other than sampling event:	No
Treatment/Disposal method during free product pumpouts:	N/A

Site Hydrogeology:

Minimum depth to groundwater (feet bgs):	16.2
Maximum depth to groundwater (feet bgs):	17.43
Average groundwater elevation (feet relative to mean sea level):	54.62
Average change in groundwater elevations since previous event (feet):	-0.11
Groundwater gradient and flow direction:	0.0025 ft/ft, South
Previous gradient and/or flow direction (and date):	(7/10/03)

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

Wells with benzene concentrations below MCL:	2
Wells with benzene concentrations at or above MCL:	0
Minimum benzene concentration (µg/l):	ND
Maximum benzene concentration (µg/l):	ND
Minimum MTBE concentration (µg/l):	ND
Maximum MTBE concentration (µg/l):	26 (MW-3)
Minimum TPH-G concentration (µg/l):	ND
Maximum TPH-G concentration (µg/l):	ND
Groundwater wells with free product:	0
Minimum free product thickness (feet):	0
Maximum free product thickness (feet):	0

Additional Information:

MW-1=Monitored Only, MW-4=Monitored Only, MW-5=Monitored Only, 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.

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:

$$\text{Surface elevation} - \text{depth to water} + (0.75 \times \text{LPH thickness}).$$

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 3538 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
February 4, 2004
76 Station 3538

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														
02/04/04	72.12	17.43	0.00	54.69	--	--	--	--	--	--	--	--	--	Monitored Only
MW-2														
02/04/04	71.34	17.22	0.00	54.12	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
MW-3														
02/04/04	71.40	17.05	0.00	54.35	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	26	--	
MW-4														
02/04/04	71.54	17.07	0.00	54.47	--	--	--	--	--	--	--	--	--	Monitored Only
MW-5														
02/04/04	71.16	16.23	0.00	54.93	--	--	--	--	--	--	--	--	--	Monitored Only
MW-6														
02/04/04	71.37	16.20	0.00	55.17	--	--	--	--	--	--	--	--	--	Monitored Only

Table 2
HISTORIC GROUNDWATER LEVELS AND CHEMICAL ANALYSIS RESULTS
February 4, 2004
76 Station 3538

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														
02/04/04	72.12	17.43	0.00	54.69	--	--	--	--	--	--	--	--	--	Monitored Only
MW-2														
02/04/04	71.34	17.22	0.00	54.12	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	--	
MW-3														
02/04/04	71.40	17.05	0.00	54.35	--	ND<50	--	ND<0.50	ND<0.50	ND<0.50	ND<0.50	26	--	
MW-4														
02/04/04	71.54	17.07	0.00	54.47	--	--	--	--	--	--	--	--	--	Monitored Only
MW-5														
02/04/04	71.16	16.23	0.00	54.93	--	--	--	--	--	--	--	--	--	Monitored Only
MW-6														
02/04/04	71.37	16.20	0.00	55.17	--	--	--	--	--	--	--	--	--	Monitored Only

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #3538
411 West MacArthur Boulevard
Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (mst)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1	09/15/89	--	5.0-29.0	--	ND	ND	0.61	ND	ND	--
	01/23/90	--		--	ND	1.5	2.3	ND	4.3	--
	04/19/90	--		--	ND	ND	ND	ND	ND	--
	07/17/90	--		--	ND	ND	ND	ND	ND	--
	10/16/90	--		--	ND	ND	ND	ND	ND	--
	01/15/91	--		--	ND	ND	ND	ND	ND	--
	04/12/91	--		--	ND	ND	ND	ND	ND	--
	07/15/91	--		--	ND	ND	ND	ND	ND	--
	07/14/92	--		--	ND	ND	ND	ND	ND	--
72.43	04/13/93	17.70		54.73	SAMPLED ANNUALLY		--	--	--	--
	07/14/93	18.49		53.94	ND	2.2	2.1	1.1	6.2	--
72.10	10/14/93	18.32		53.78	--	--	--	--	--	--
	01/12/94	18.18		53.92	--	--	--	--	--	--
	04/11/94	17.80		54.30	--	--	--	--	--	--
	07/07/94	18.28		53.82	ND	ND	ND	ND	ND	--
	10/05/94	18.55		53.55	--	--	--	--	--	--
	01/09/95	17.90		54.20	--	--	--	--	--	--
	04/17/95	17.22		54.88	--	--	--	--	--	--
	07/19/95	18.03		54.07	ND	ND	ND	ND	ND	--
	10/26/95	18.67		53.43	--	--	--	--	--	--
	01/16/95	17.20		54.90	--	--	--	--	--	--
	04/15/96	17.40		54.70	--	--	--	--	--	--
	07/11/96	18.03		54.07	ND	ND	ND	ND	ND	ND
	01/17/97	16.54		55.56	--	--	--	--	--	--
	07/21/97	18.16		53.94	ND	ND	ND	ND	ND	ND
	01/14/98	16.05		56.05	--	--	--	--	--	--
	07/06/98 ⁵	16.46		55.64	ND	ND	ND	ND	ND	ND
	01/13/99	17.37		54.73	--	--	--	--	--	--
72.12	08/31/99	17.00		55.12	ND	ND	ND	ND	ND	ND
	01/21/00	17.04		55.08	--	--	--	--	--	--
	07/10/00 ⁵	18.10		54.02	ND	ND	ND	ND	ND	ND
	01/04/01	17.95		54.17	--	--	--	--	--	--
	07/16/01	18.03		54.09	ND	ND	ND	ND	ND	ND
	01/28/02	17.31		54.81	SAMPLED ANNUALLY		--	--	--	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1	07/12/02	18.15	5.0-29.0	53.97	<50	<0.50	<0.50	<0.50	<0.50	<2.5
(cont)	01/14/03	17.66		54.46	SAMPLED ANNUALLY	--	--	--	--	--
	07/10/03	17.86		54.26	<50	<0.50	<0.50	<0.50	<0.50	<2.0
MW-2	09/15/89	--	3.5-28.5	--	290	ND	12	ND	ND	--
	01/23/90	--		--	400	73	36	10	40	--
	04/19/90	--		--	3,900	550	5.1	91	390	--
	07/17/90	--		--	490	76	0.59	11	46	--
	10/16/90	--		--	1,400	430	2.0	48	240	--
	01/15/91	--		--	680	170	0.7	19	81	--
	04/12/91	--		--	2,200	160	4.3	23	62	--
	07/15/91	--		--	2,200	770	12	72	370	--
	10/15/91	--		--	140	44	0.56	1.5	12	--
	01/15/92	--		--	220	37	0.52	1.1	7	--
	04/14/92	--		--	150	6.2	ND	ND	1.4	--
	07/14/92	--		--	130	3.7	ND	ND	ND	--
	10/12/92	--		--	370	3.4	0.56	ND	11	--
	01/08/93	--		--	510 ¹	ND	ND	ND	ND	--
71.63	04/13/93	17.86		53.77	410 ²	42	7.7	6.4	28	200
	07/14/93	18.38		53.25	110 ¹	6.5	ND	ND	1.1	250
71.38	10/14/93	18.20		53.18	230 ¹	5.3	ND	ND	2.1	--
	01/12/94	18.08		53.30	300	7.8	3.8	1.8	10	--
	04/09/94	17.97		53.41	120	10	0.88	1.1	4.9	--
	04/11/94	17.88		53.50	--	--	--	--	--	--
	07/07/94	17.81		53.57	110 ¹	4.4	ND	ND	ND	--
	10/05/94	18.33		53.05	720 ¹	20	ND	ND	3.1	--
	01/09/95	17.40		53.98	ND	ND	ND	ND	ND	--
	04/17/95	17.50		53.88	93	5.6	0.62	1.7	5.5	--
	07/19/95	18.01		53.37	77	32	0.58	1.7	4.1	--
	10/26/95	18.21		53.17	54 ²	13	ND	ND	0.72	220
	01/16/96 ³	16.58		54.80	120	23	ND	ND	0.99	--
	04/15/96	17.61		53.77	340	21	ND	2.2	3.7	45
	07/11/96	17.98		53.40	540	34	ND	4.3	12	150

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (mst)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-2	01/17/97	17.08	3.5-28.5	54.30	320	63	2.4	9.4	26	260
(cont)	07/21/97	18.06		53.32	160	13	ND	1.3	1.6	180
	01/14/98	16.52		54.86	66	6.3	ND	ND	0.98	100
	07/06/98	16.87		54.51	ND	2.3	ND	ND	ND	11
	01/13/99	17.88		53.50	53	24	ND	0.52	0.98	120
71.34	08/31/99	18.45		52.89	86 ¹⁰	14	ND	0.63	ND	21
	01/21/00	17.73		53.61	ND	1.94	ND	ND	ND	10.1
	07/10/00	18.14		53.20	ND	ND	ND	ND	ND	46.6
	01/04/01	18.02		53.32	ND	0.925	ND	ND	ND	ND
	07/16/01	18.02		53.32	ND	ND	ND	ND	ND	ND
	01/28/02	17.57		53.77	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/12/02	18.05		53.29	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/14/03	17.44		53.90	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	07/10/03	INACCESSIBLE - VEHICLE PARKED OVER WELL				--	--	--	--	--
MW-3	09/15/89	--	5.0-29.0	--	32	ND	ND	ND	ND	--
	01/23/90	--		--	450	110	1.2	4.4	11	--
	04/19/90	--		--	3,100	600	27	54	220	--
	07/17/90	--		--	4,000	270	48	130	250	--
	10/16/90	--		--	740	210	1.4	2.5	82	--
	01/15/91	--		--	3,200	460	1.5	120	270	--
	04/12/91	--		--	880	170	1.1	34	110	--
	07/15/91	--		--	9,200	1,300	230	490	1,900	--
	10/15/91	--		--	3,100	390	34	150	390	--
	01/15/92	--		--	3,000	590	14	310	750	--
	04/14/92	--		--	14,000	660	48	560	2,000	--
	07/14/92	--		--	21,000	890	200	1,200	4,300	--
	10/12/92	--		--	3,200	160	10	230	540	--
	01/08/93	--		--	1,100 ²	48	0.99	0.9	93	--
72.06	04/13/93	17.96		54.10	12,000 ²	290	38	760	2,300	1,400
	07/14/93	18.54		53.52	6,300	190	ND	430	1,000	860
71.86	10/14/93	18.45		53.41	2,500	52	ND	110	250	--
	01/12/94	18.34		53.52	3,800	78	ND	180	390	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (mst)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3	04/09/94	18.19	5.0-29.0	53.67	1,800	22	ND	140	280	--
(cont)	04/11/94	18.12		53.74	--	--	--	--	--	--
	07/07/94	18.21		53.65	110 ¹	4.5	ND	ND	ND	--
	10/05/94	18.58		53.28	ND	ND	ND	ND	ND	--
	01/09/95	17.69		54.17	ND	0.68	ND	ND	ND	--
	04/17/95	17.68		54.18	3,700	80	10	270	510	--
	07/19/95	18.20		53.66	15,000	330	27	990	2,400	--
	10/26/95	18.32		53.54	14,000	420	180	750	1,600	4,800
	01/16/96 ³	17.95		53.91	920	38	ND	30	57	--
	04/15/96	17.78		54.08	9,700	240	ND	570	860	3,200
	07/11/96	18.19		53.67	13,000	69	5.5	430	900	740
	01/17/97	17.23		54.63	4,400	25	ND	270	580	1,600
	07/21/97	18.29		53.57	9,000	36	ND	450	800	950
	01/14/98	16.71		55.15	7,100	40	ND ⁴	380	360	930
	07/06/98	17.03		54.83	6,800 ⁶	39	ND ⁴	320	360	370
	01/13/99 ⁷	18.00		53.86	1,800	9.4	ND ⁴	58	36	180
71.40	08/31/99	-- ⁸		--	--	--	--	--	--	--
	01/21/00	17.58		53.82	ND	ND	ND	ND	ND	21.4
	07/10/00	18.05		53.35	ND	ND	ND	ND	ND	162
	08/25/00	17.82		53.58	--	--	--	--	--	180 ¹¹
	01/04/01	18.16		53.24	ND	ND	ND	ND	ND	193
	07/16/01	17.98		53.42	ND	ND	ND	ND	ND	660
	01/28/02	17.84		53.56	<50	<0.50	<0.50	<0.50	<0.50	34
	07/12/02	17.87		53.53	<50	<0.50	<0.50	<0.50	<0.50	11/19 ¹¹
	01/14/03	17.28		54.12	<50	<0.50	<0.50	<0.50	<0.50	12
	07/10/03	17.64		53.76	<50	<0.50	<0.50	<0.50	<0.50	23
MW-4	09/15/89	--	5.0-29.0	--	ND	ND	ND	ND	ND	--
	01/23/90	--		--	ND	ND	0.4	ND	ND	--
	04/19/90	--		--	ND	ND	0.48	ND	ND	--
	07/17/90	--		--	ND	ND	ND	ND	ND	--
	10/16/90	--		--	ND	ND	ND	ND	ND	--
	01/15/91	--		--	ND	ND	ND	--	ND	--

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-4	04/12/91	--	5.0-29.0	--	ND	ND	ND	ND	ND	--
(cont)	07/15/91	--		--	ND	ND	ND	ND	ND	--
	07/14/92	--		--	ND	1.3	2.5	ND	1.0	--
71.98	04/13/93	17.67		54.31	SAMPLED ANNUALLY		--	--	--	--
	07/14/93	18.31		53.67	ND	ND	ND	ND	ND	--
71.64	10/14/93	18.08		53.56	--	--	--	--	--	--
	01/12/94	17.97		53.67	--	--	--	--	--	--
	04/11/94	17.70		53.94	--	--	--	--	--	--
	07/07/94	17.80		53.84	ND	ND	ND	ND	ND	--
	10/05/94	18.28		53.36	--	--	--	--	--	--
	01/09/95	17.38		54.26	--	--	--	--	--	--
	04/17/95	17.21		54.43	SAMPLED ANNUALLY		--	--	--	--
	07/19/95	17.82		53.82	ND	ND	ND	ND	ND	--
	10/26/95	18.17		53.47	--	--	--	--	--	--
	01/16/96	16.45		55.19	--	--	--	--	--	--
	04/15/96	17.35		54.29	--	--	--	--	--	--
	07/11/96	17.81		53.83	ND	ND	ND	ND	ND	ND
	01/17/97	16.73		54.91	--	--	--	--	--	--
	07/21/97	17.91		53.73	ND	ND	ND	ND	ND	ND
	01/14/98	16.18		55.46	--	--	--	--	--	--
	07/06/98	16.49		55.15	ND	ND	ND	ND	ND	ND
	01/13/99	17.29		54.35	--	--	--	--	--	--
71.54	08/31/99	-- ⁹		--	--	--	--	--	--	--
	01/21/00	17.51		54.03	--	--	--	--	--	--
	07/10/00	17.93		53.61	ND	ND	ND	ND	ND	ND
	01/04/01	18.10		53.44	--	--	--	--	--	--
	07/16/01	17.76		53.78	ND	ND	ND	ND	ND	ND
	01/28/02	17.20		54.34	SAMPLED ANNUALLY		--	--	--	--
	07/12/02	17.81		53.73	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/14/03	17.30		54.24	SAMPLED ANNUALLY		--	--	--	--
	07/10/03	17.58		53.96	<50	<0.50	<0.50	<0.50	<0.50	<2.0

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-5	11/30/92	--	13.0-30.0	--	ND	ND	ND	ND	ND	--
	01/08/93	--		--	ND	ND	ND	ND	ND	--
71.51	04/13/93	17.49		54.02	ND	ND	ND	ND	ND	--
	07/14/93	18.02		53.49	ND	ND	0.57	ND	ND	--
71.23	10/14/93	17.82		53.41	ND	ND	ND	ND	ND	--
	01/12/94	17.74		53.49	ND	ND	0.84	ND	1.6	--
	04/11/94	17.56		53.67	SAMPLED ANNUALLY		--	--	--	--
	07/07/94	17.50		53.73	ND	ND	ND	ND	ND	--
	10/05/94	17.98		53.25	--	--	--	--	--	--
	01/09/95	17.13		54.10	--	--	--	--	--	--
	04/17/95	17.05		54.18	--	--	--	--	--	--
	07/19/95	17.59		53.64	ND	ND	ND	ND	ND	--
	10/26/95	18.10		53.13	--	--	--	--	--	--
	01/16/96	17.11		54.12	--	--	--	--	--	--
	04/15/96	17.22		54.01	--	--	--	--	--	--
	07/11/96	17.59		53.64	ND	ND	ND	ND	ND	ND
	01/17/97	16.75		54.48	SAMPLED ANNUALLY		--	--	--	--
	07/21/97	17.59		53.64	ND	ND	ND	ND	ND	ND
	01/14/98	16.16		55.07	--	--	--	--	--	--
	07/06/98	16.52		54.71	ND	ND	ND	ND	ND	ND
	01/13/99	17.62		53.61	--	--	--	--	--	--
71.16	08/31/99	17.76		53.40	ND	ND	ND	ND	ND	ND
	01/21/00	16.83		54.33	--	--	--	--	--	--
	07/10/00	17.46		53.70	ND	ND	ND	ND	ND	ND
	01/04/01	17.51		53.65	--	--	--	--	--	--
	07/16/01	17.32		53.84	ND	ND	ND	ND	ND	ND
	01/28/02	17.12		54.04	SAMPLED ANNUALLY		--	--	--	--
	07/12/02	17.12		54.04	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/14/03	16.67		54.49	SAMPLED ANNUALLY		--	--	--	--
	07/10/03	17.39		53.77	<50	<0.50	<0.50	<0.50	<0.50	<2.0

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.L. (ft. bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-6	11/30/92	--	13.0-30.0	--	ND	ND	ND	ND	ND	--
	01/08/93	--		--	ND	ND	ND	ND	ND	--
71.79	04/13/93	11.94		59.85	ND	ND	ND	ND	ND	--
	07/14/93	17.20		54.59	ND	0.99	2.4	ND	1.9	--
71.44	10/14/93	17.21		54.23	ND	ND	0.64	ND	ND	--
	01/12/94	17.44		54.00	ND	ND	1.2	ND	2.9	--
	04/11/94	13.66		57.78	SAMPLED ANNUALLY		--	--	--	--
	07/07/94	14.05		57.39	ND	ND	ND	ND	ND	--
	10/05/94	14.16		57.28	--	--	--	--	--	--
	01/09/95	13.73		57.71	--	--	--	--	--	--
	04/17/95	11.30		60.14	--	--	--	--	--	--
	07/19/95	12.32		59.12	ND	ND	ND	ND	ND	--
	10/26/95	17.88		53.56	--	--	--	--	--	--
	01/16/96	16.38		55.06	--	--	--	--	--	--
	04/15/96	14.00		57.44	--	--	--	--	--	--
	07/11/96	13.58		57.86	ND	ND	ND	ND	ND	ND
	01/17/97	15.42		56.02	--	--	--	--	--	--
	07/21/97	13.78		57.66	ND	ND	ND	ND	ND	ND
	01/14/98	13.65		57.79	--	--	--	--	--	--
	07/06/98	13.90		57.54	ND	ND	ND	ND	ND	ND
	01/13/99	14.93		56.51	--	--	--	--	--	--
71.37	08/31/99	15.81		55.56	ND	ND	ND	ND	ND	ND
	01/21/00	16.13		55.24	SAMPLED ANNUALLY		--	--	--	--
	07/10/00	16.95		54.42	ND	ND	ND	ND	ND	ND
	01/04/01	17.09		54.28	--	--	--	--	--	--
	07/16/01	16.83		54.54	ND	ND	ND	ND	ND	ND
	01/28/02	14.58		56.79	SAMPLED ANNUALLY		--	--	--	--
	07/12/02	16.76		54.61	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/14/03	16.25		55.12	SAMPLED ANNUALLY		--	--	--	--
	07/10/03	12.97		58.40	<50	<0.50	<0.50	<0.50	<0.50	<2.0

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
Trip Blank										
TB-LB	01/14/98	--	--	--	ND	ND	ND	ND	ND	ND
	07/06/98	--	--	--	ND	ND	ND	ND	ND	ND
	01/13/99	--	--	--	ND	ND	ND	ND	ND	ND
	08/31/99	--	--	--	ND	ND	1.5	ND	2.3	39
	01/21/00	--	--	--	ND	ND	ND	ND	ND	ND
	07/10/00	--	--	--	ND	ND	ND	ND	ND	ND
	01/04/01	--	--	--	ND	ND	ND	ND	ND	ND
	07/16/01	--	--	--	ND	ND	ND	ND	ND	ND
	01/28/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA	07/12/02	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/14/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.0
	07/10/03	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.0

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to January 14, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing
 (ft.) = Feet

DTW = Depth to Water

S.I. = Screen Interval

(ft. bgs) = Feet Below Ground Surface

GWE = Groundwater Elevation

(msl) = Mean sea level

TPH-G = Total Petroleum Hydrocarbons as Gasoline

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether

(ppb) = Parts per billion

ND = Not Detected

-- = Not Measured/Not Analyzed

QA = Quality Assurance/Trip Blank

* TOC elevations are relative to msl, per the City of Oakland Benchmark #9NW10. (Elevation = 75.50 feet msl). Prior to October 14, 1994, the DTW measurements were taken from the top of well covers. On September 15, 1999, TOC elevations were resurveyed City of Oakland Benchmark being a square brass pin in the concrete gutter at the southwest corner of Webster & MacArthur. The stationing data is with reference to the back of sidewalk on MacArthur in front of the site. Benchmark (Elevation = 71.055 feet, msl)

- 1 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 2 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and a non-gasoline mixture.
- 3 Laboratory report indicates the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb.
- 4 Detection limit raised. Refer to analytical reports.
- 5 All EPA Method 8010 constituents were ND.
- 6 Laboratory report indicates gasoline and unidentified hydrocarbons <C7.
- 7 TOC measurement may have been altered due to damaged casing.
- 8 Well was obstructed by a solid at 0.5 feet.
- 9 Well was obstructed by a solid (concrete or soil) at 10.4 feet.
- 10 Laboratory report indicates gasoline C6-C12.
- 11 MTBE by EPA Method 8260.

Table 2
Groundwater Analytical Results
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID	DATE	TPH-D (ppb)	TOG (ppb)	Tetrachloroethene ¹ (ppb)
MW-1	09/15/89	ND	ND	2.7
	01/23/90	ND	1.5	2.1
	04/19/90	ND	ND	2.2
	07/17/90	ND	ND	1.7
	10/16/90	ND	ND	2.0
	01/15/91	ND	ND	2.1
	04/12/91	ND	ND	2.0
	07/15/91	ND	ND	1.8
	07/14/92	--	--	1.4
	07/14/93	--	--	0.95
	07/07/94	--	--	0.83
	07/19/95	--	--	0.52
	07/11/96 ²	--	--	0.73
	07/21/97 ³	--	--	0.70
	08/31/99	--	--	ND
	07/16/01 ⁴	--	--	ND
	07/12/02 ⁵	--	--	<0.60
	07/10/03 ⁶	--	--	<0.50

EXPLANATIONS:

Groundwater laboratory analytical results prior to August 31, 2001, were compiled from reports prepared by MPDS Services, Inc.

TPH-D = Total Petroleum Hydrocarbons as Diesel

TOG = Total Oil and Grease

(ppb) = Parts per billion

ND = Not Detected

-- = Not Analyzed

¹ All other EPA Method 8010 constituents were ND.

² Chloroform was detected at a concentration of 0.96 ppb.

³ Chloroform was detected at a concentration of 1.0 ppb.

⁴ All EPA Method 8021B constituents were ND with a raised detection limit, except Chloroform was detected at a concentration of 45 ppb and Bromodichloromethane at 1.7 ppb.

⁵ All EPA Method 8021B constituents were ND, except for Freon 113 was detected at 11 ppb and 1,1-Dichloroethene (1,1-DCA) was detected at 1.8 ppb.

⁶ All EPA Method 8021B constituents were ND, except for Freon 113 was detected at 7.7 ppb and 1,1-DCA was detected at 0.89 ppb.

Table 3
Groundwater Analytical Results - Oxygenate Compounds
 Tosco (Unocal) Service Station #3538
 411 West MacArthur Boulevard
 Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-3	08/25/00	--	ND ¹	180	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹
	07/12/02	<500	<20	19	<2.0	<2.0	<2.0	<2.0	<2.0

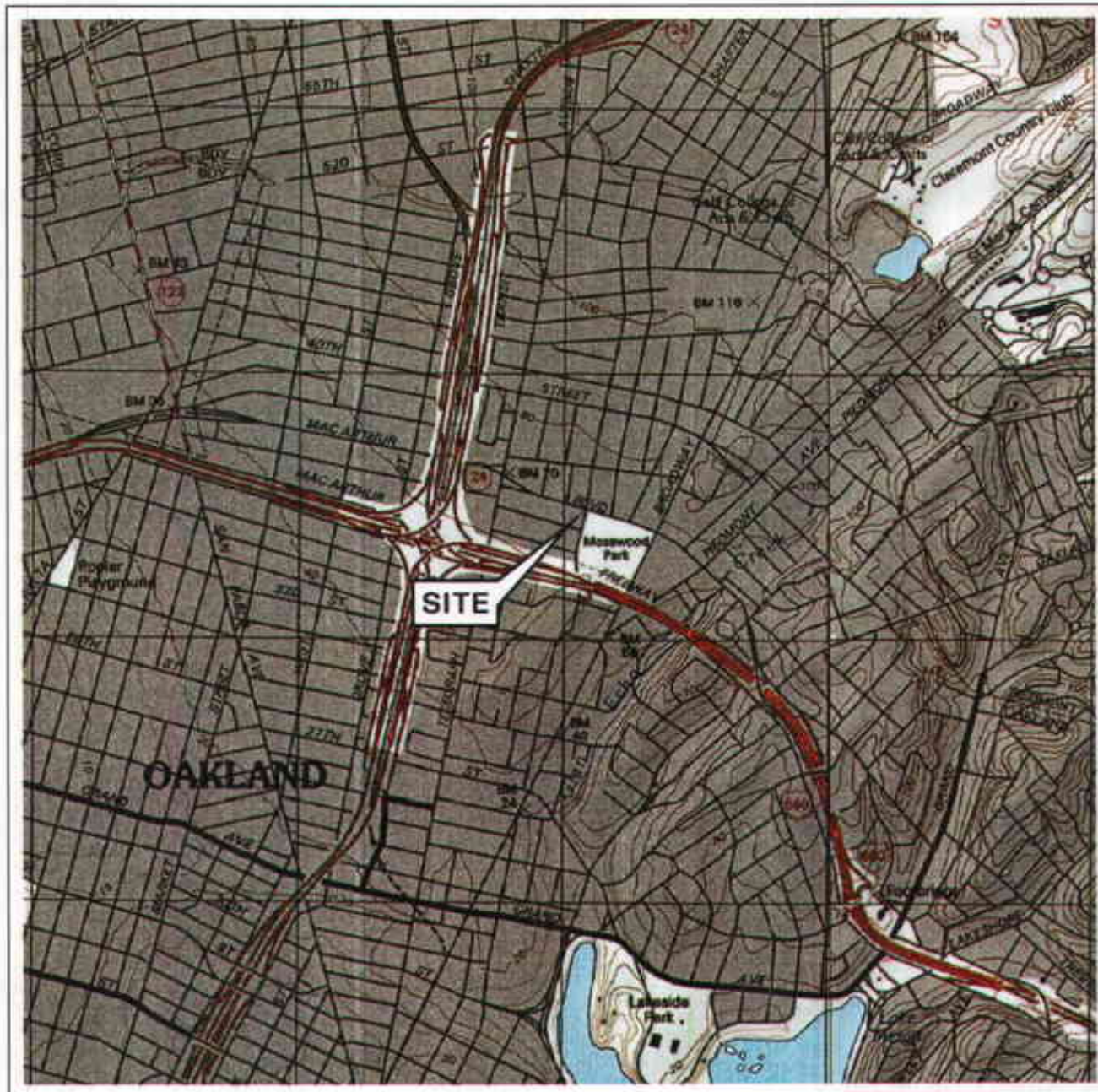
EXPLANATIONS:

TBA = Tertiary butyl alcohol
 MTBE = Methyl tertiary butyl ether
 DIPE = Di-isopropyl ether
 ETBE = Ethyl tertiary butyl ether
 TAME = Tertiary amyl methyl ether
 1,2-DCA = 1,2-Dichloroethane
 EDB = 1,2-Dibromoethane
 (ppb) = Parts per billion
 ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

¹ Detection limit raised. Refer to analytical reports.



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



SCALE 1:24,000



QUADRANGLE
LOCATION

VICINITY MAP

Former 76 Station 3538
411 West MacArthur Boulevard
Oakland, California

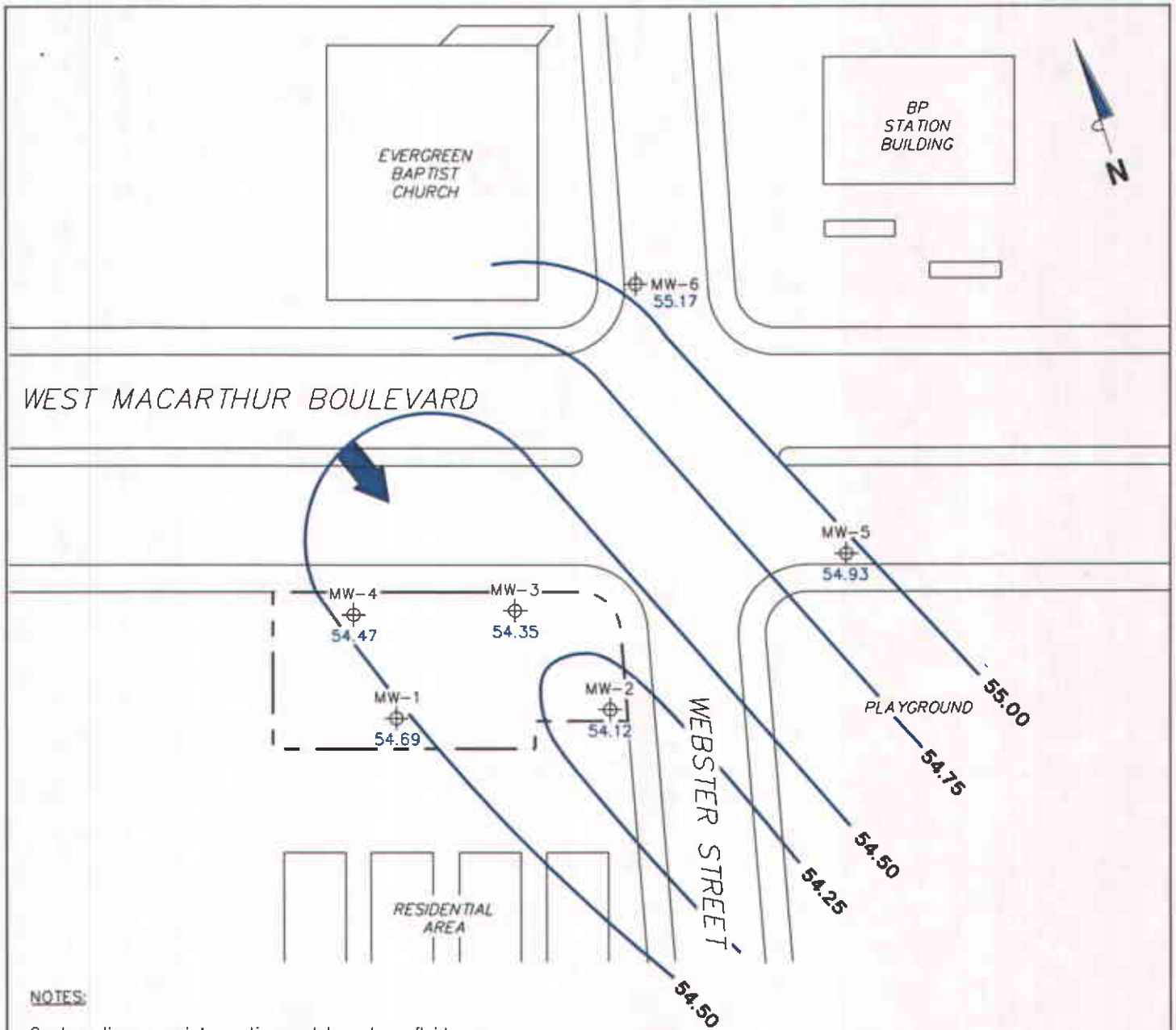
SOURCE:

United States Geological Survey
7.5 Minute Topographic Map:
Oakland East & Oakland West
Quadrangles

TRC

FIGURE 1

PS = 1:1



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-6 ⊕ Monitoring Well with Groundwater Elevation (feet)

55.00 — Groundwater Elevation Contour

➔ General Direction of Groundwater Flow

**GROUNDWATER ELEVATION
CONTOUR MAP
February 4, 2004**

76 Station 3538
411 West MacArthur Boulevard
Oakland, California

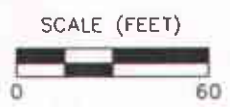
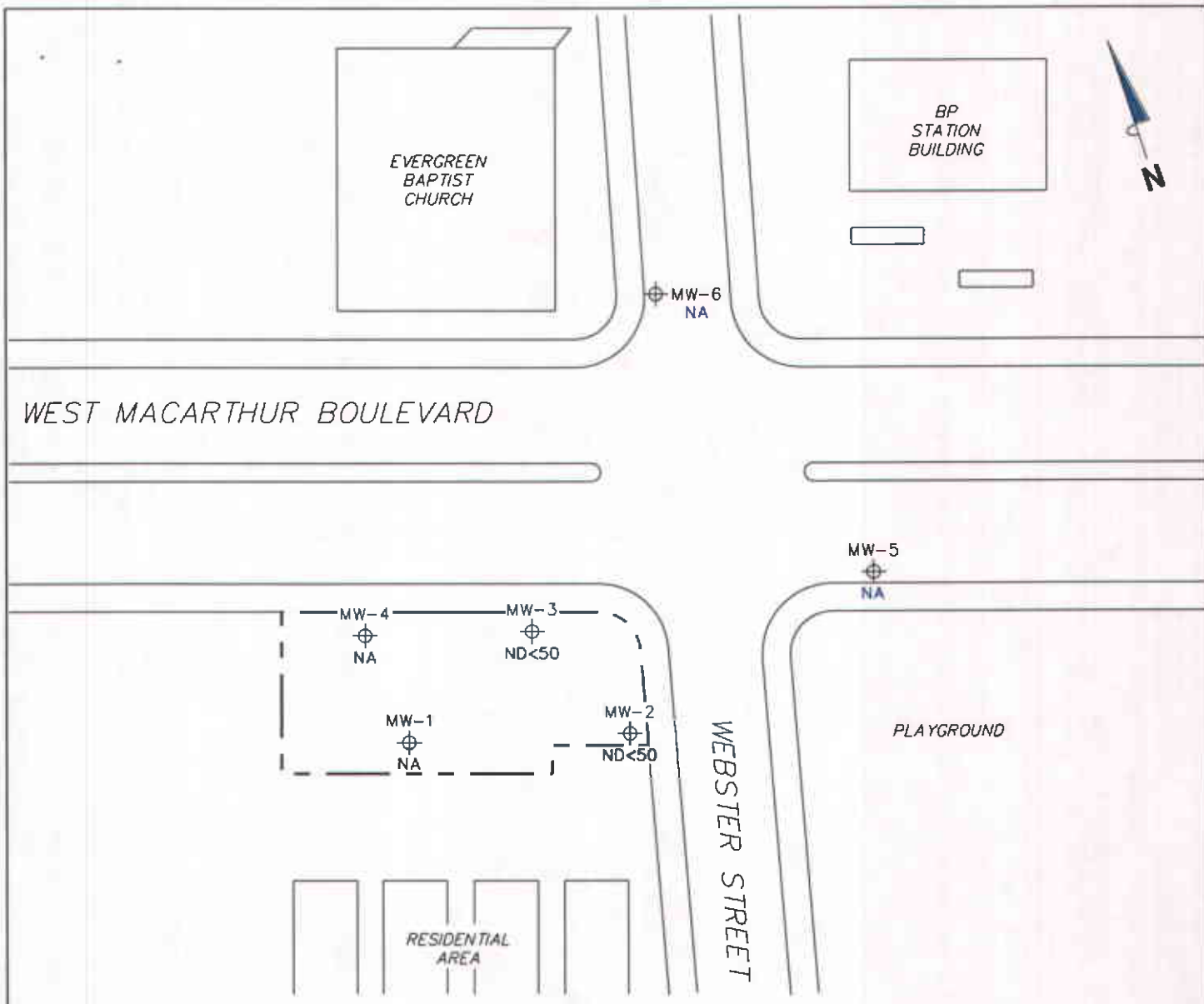


FIGURE 2

PS=1:1



NOTES:

TPH-G = total petroleum hydrocarbons as gasoline.
 µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
 NA = not analyzed, measured, or collected.
 UST = underground storage tank. Results obtained using EPA Method 8015.

LEGEND

MW-6 ⊕ Monitoring Well with Dissolved-Phase TPH-G Concentration (µg/l)

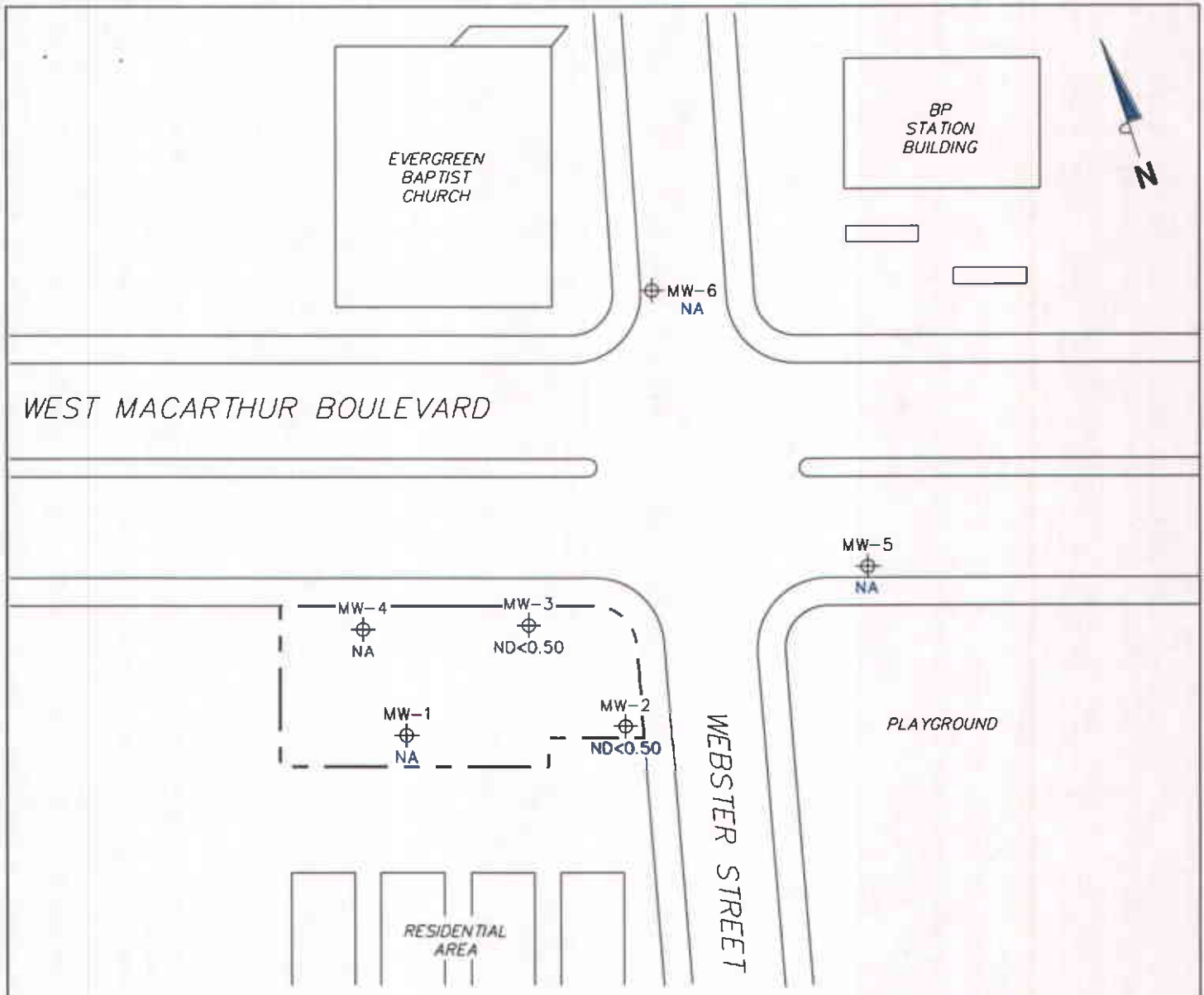
DISSOLVED-PHASE TPH-G CONCENTRATION MAP
February 4, 2004

76 Station 3538
 411 West MacArthur Boulevard
 Oakland, California

FIGURE 3



PS-1:1



NOTES:

µg/l = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
 NA = not analyzed, measured, or collected.
 UST = underground storage tank.

LEGEND

MW-6 ⊕ Monitoring Well with Dissolved-Phase Benzene Concentration (µg/l)

DISSOLVED-PHASE BENZENE CONCENTRATION MAP
February 4, 2004

76 Station 3538
 411 West MacArthur Boulevard
 Oakland, California

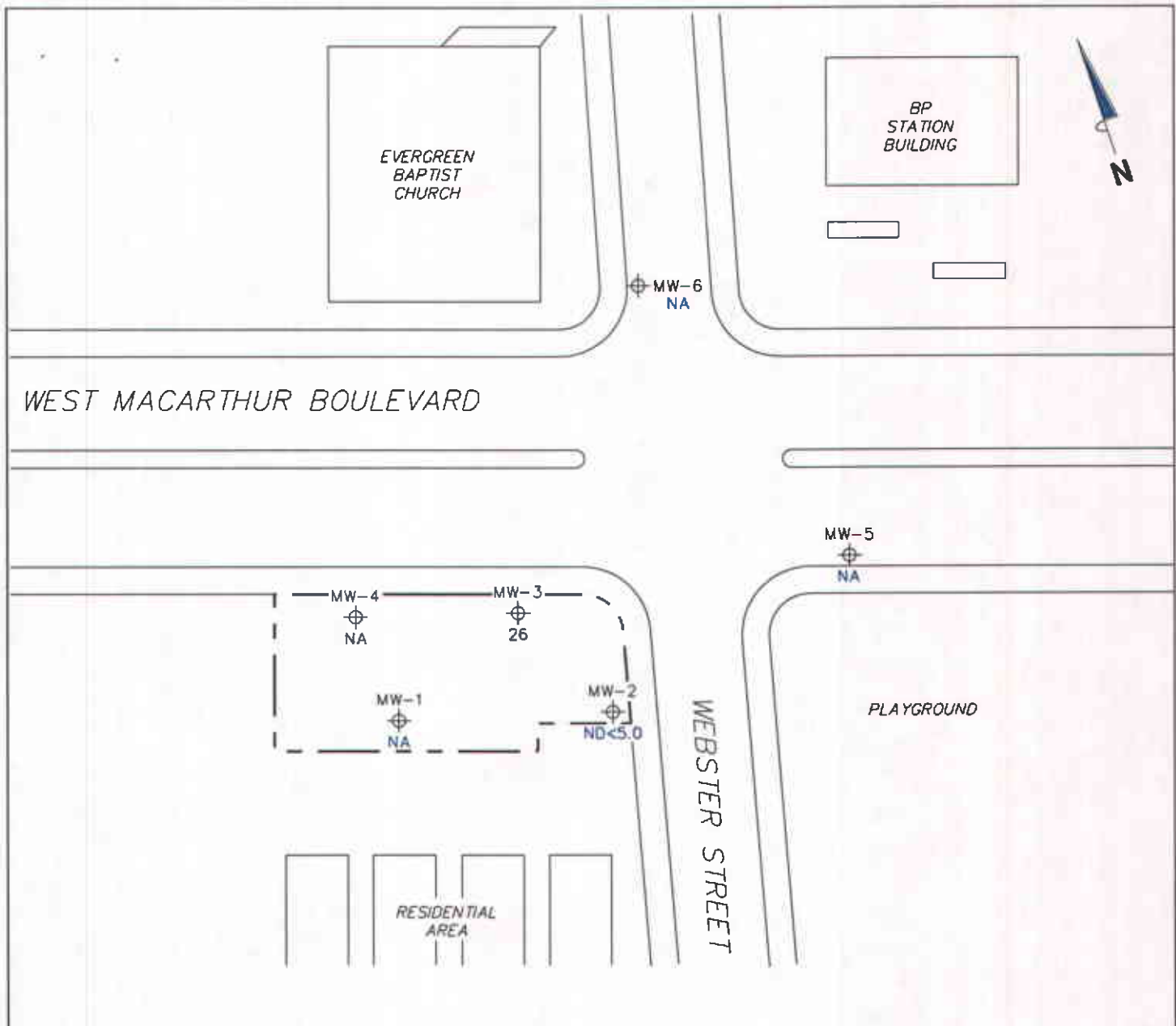
FIGURE 4

SCALE (FEET)



TRC


PS=1:1



NOTES:

MTBE = methyl tertiary butyl ether.
 $\mu\text{g/l}$ = micrograms per liter. ND = not detected at limit indicated on official laboratory report.
 NA = not analyzed, measured, or collected.
 UST = underground storage tank. Results obtained using EPA Method 8260B.

LEGEND

MW-6  Monitoring Well with Dissolved-Phase MTBE Concentration ($\mu\text{g/l}$)

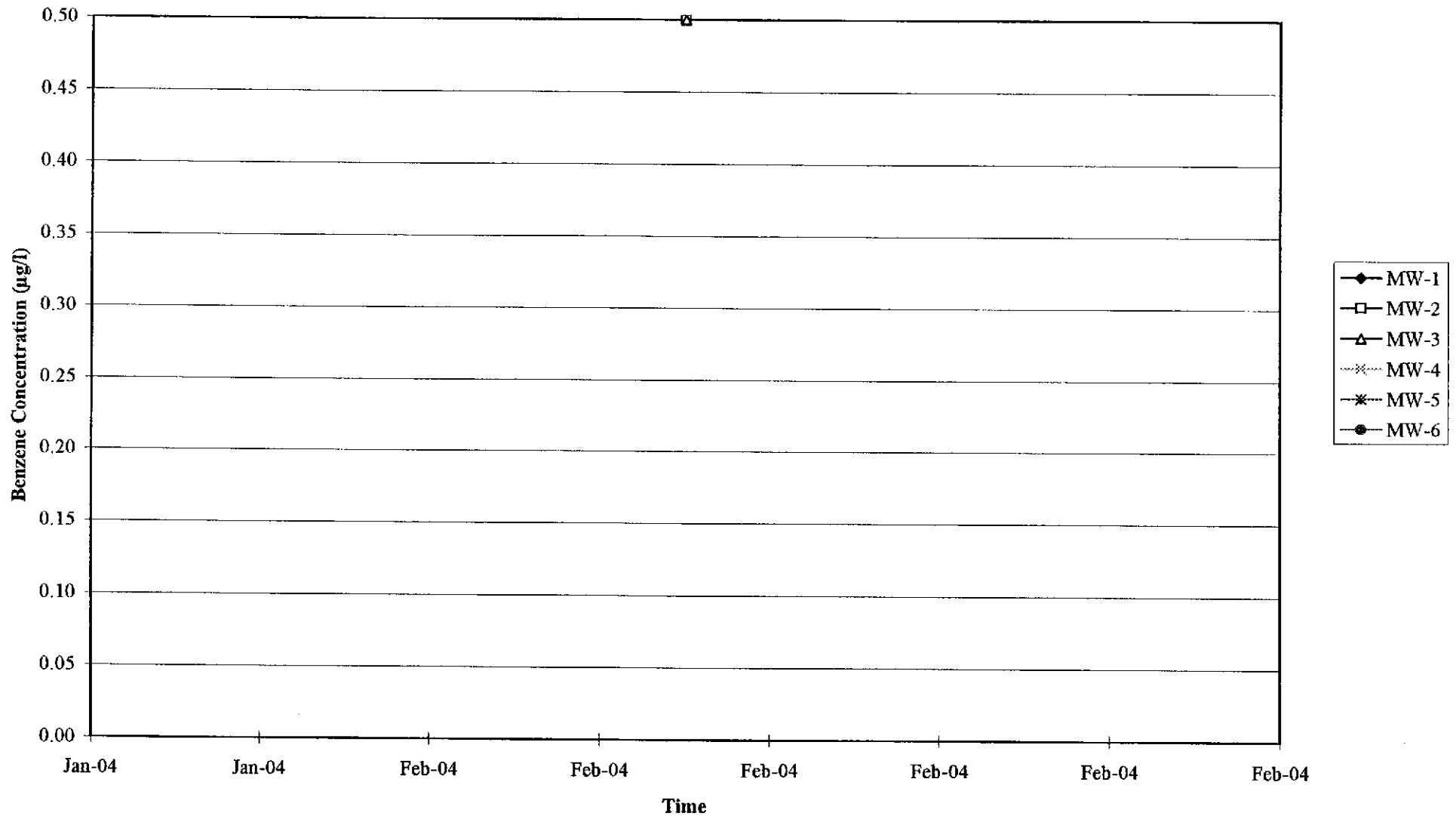
DISSOLVED-PHASE MTBE CONCENTRATION MAP
February 4, 2004

76 Station 3538
 411 West MacArthur Boulevard
 Oakland, California

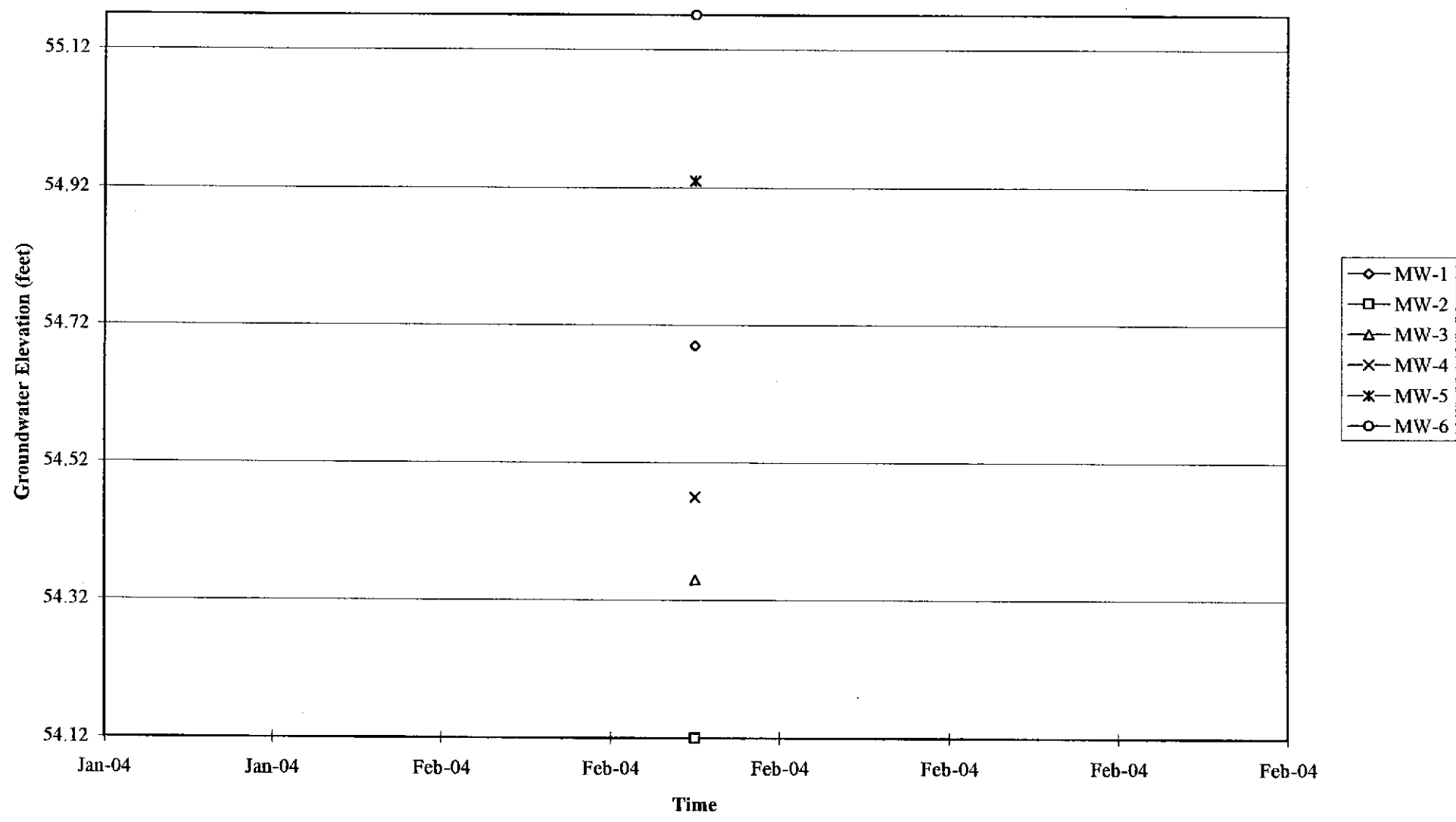
FIGURE 5



Graph 1
Benzene Concentrations vs. Time
76 Station 3538



Graph 2
Hydrograph
76 Station 3538



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.

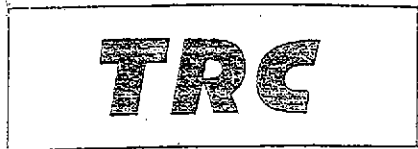
Decontamination

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: HERNANDEZ Job #/Task #: 4105000/FAR20

Date: 02/04/04

Site # 3538 Project Manager A. FARFAN

Page 1 of 1

Well #	Grade	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-2		X	24.25	17.22	0	0	1002	4'
MW-3		↓	27.15	17.05	↓	↓	1120	2''
MW-4		↓	23.32	17.43	↓	↓	N/S	29 monitor only
MW-5		↓	24.80	17.07	↓	↓	↓	↓
MW-6		↓	30.05	16.23	↓	↓	↓	↓

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

GROUNDWATER SAMPLING FIELD NOTES

Site: 3538

Project No.: 4105000/FA20

Date: 02/04/04

Well No. MW-2

Purge Method: HB

MW

Depth to Water (feet): 17.22

Depth to Product (feet): 0

Total Depth (feet): 24.25

LPH & Water Recovered (gallons): 0

Water Column (feet): 703

Casing Diameter (Inches): 4"

80% Recharge Depth (feet): 18.62

1 Well Volume (gallons): 5

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temper-ature (F, C)	pH
1145			5	1030	18.4	7.04
			10	1021	18.0	7.05
	1213		15	1018	18.9	6.92
Static at Time Sampled		Total Purged		Time Sampled		
17.90		15 gal		1222		
Comments:						

Site: _____

Project No.: _____

Well No. MW-3

Purge Method: HB

Depth to Water (feet): 17.05

Depth to Product (feet): 0

Total Depth (feet): 27.15

LPH & Water Recovered (gallons): 0

Water Column (feet): 10-10

Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 19.07

1 Well Volume (gallons): 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conduc-tivity (uS/cm)	Temper-ature (F, C)	pH
1058			2	901	18.8	7.85
			4	912	18.9	7.42
	1109		6	924	19.0	7.18
Static at Time Sampled		Total Purged		Time Sampled		
17.21		6 gal		1120		
Comments:						

TRC Alton Geoscience

February 20, 2004

21 Technology Drive
Irvine, CA 92718

Attn.: Anju Farfan

Project#: 41050001FA20

Project: Conoco Phillips #3538

Site: 411 W.Macarthur Blvd., Oakland,CA

Attached is our report for your samples received on 02/08/2004 17:53

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 03/24/2004 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 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

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 #3538

Received: 02/08/2004 17:53

Site: 411 W.Macarthur Blvd., Oakland,CA

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
MW-2	02/04/2004 12:22	Water	1
MW-3	02/04/2004 11:20	Water	2

Severn Trent Laboratories, Inc.

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

02/19/2004 15:22

Page 1 of 6

Gas/BTEX Compounds by 8015M/8021

TRC Alton Geoscience

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21 Technology Drive

Irvine, CA 92718

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

Project: 41050001FA20

Conoco Phillips #3538

Received: 02/08/2004 17:53

Site: 411 W.Macarthur Blvd., Oakland,CA

Prep(s):	5030	Test(s):	8015M
	5030		8021B
Sample ID:	MW-2	Lab ID:	2004-02-0238 - 1
Sampled:	02/04/2004 12:22	Extracted:	2/13/2004 16:38
Matrix:	Water	QC Batch#:	2004/02/13-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	02/13/2004 16:38	
Benzene	ND	0.50	ug/L	1.00	02/13/2004 16:38	
Toluene	ND	0.50	ug/L	1.00	02/13/2004 16:38	
Ethyl benzene	ND	0.50	ug/L	1.00	02/13/2004 16:38	
Xylene(s)	ND	0.50	ug/L	1.00	02/13/2004 16:38	
MTBE	ND	5.0	ug/L	1.00	02/13/2004 16:38	
Surrogate(s)						
Trifluorotoluene	95.5	58-124	%	1.00	02/13/2004 16:38	
4-Bromofluorobenzene-FID	91.3	50-150	%	1.00	02/13/2004 16:38	

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 #3538

Received: 02/08/2004 17:53

Site: 411 W. Macarthur Blvd., Oakland, CA

Prep(s): 5030	Test(s): 8015M
5030	8021B
Sample ID: MW-3	Lab ID: 2004-02-0238 - 2
Sampled: 02/04/2004 11:20	Extracted: 2/13/2004 17:12
Matrix: Water	QC Batch#: 2004/02/13-01.05

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	02/13/2004 17:12	
Benzene	ND	0.50	ug/L	1.00	02/13/2004 17:12	
Toluene	ND	0.50	ug/L	1.00	02/13/2004 17:12	
Ethyl benzene	ND	0.50	ug/L	1.00	02/13/2004 17:12	
Xylene(s)	ND	0.50	ug/L	1.00	02/13/2004 17:12	
MTBE	26	5.0	ug/L	1.00	02/13/2004 17:12	
Surrogate(s)						
Trifluorotoluene	92.7	58-124	%	1.00	02/13/2004 17:12	
4-Bromofluorobenzene-FID	87.7	50-150	%	1.00	02/13/2004 17:12	

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 #3538

Received: 02/08/2004 17:53

Site: 411 W. Macarthur Blvd., Oakland, CA

Batch QC Report

Prep(s): 5030

Method Blank

MB: 2004/02/13-01.05-003

Water

Test(s): 8015M

QC Batch # 2004/02/13-01.05

Date Extracted: 02/13/2004 07:05

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	02/13/2004 07:05	
Benzene	ND	0.5	ug/L	02/13/2004 07:05	
Toluene	ND	0.5	ug/L	02/13/2004 07:05	
Ethyl benzene	ND	0.5	ug/L	02/13/2004 07:05	
Xylene(s)	ND	0.5	ug/L	02/13/2004 07:05	
MTBE	ND	5.0	ug/L	02/13/2004 07:05	
Surrogates(s)					
Trifluorotoluene	97.0	58-124	%	02/13/2004 07:05	
4-Bromofluorobenzene-FID	90.8	50-150	%	02/13/2004 07:05	

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02/19/2004 15:22

Gas/BTEX Compounds by 8015M/8021

TRC Alton Geoscience

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Irvine, CA 92718

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Project: 41050001FA20

Conoco Phillips #3538

Received: 02/08/2004 17:53

Site: 411 W. Macarthur Blvd., Oakland, CA

Batch QC Report

Prep(s): 5030

Test(s): 8021B

Laboratory Control Spike

Water

QC Batch # 2004/02/13-01.05

LCS 2004/02/13-01.05-004

Extracted: 02/13/2004

Analyzed: 02/13/2004 07:38

LCSD 2004/02/13-01.05-005

Extracted: 02/13/2004

Analyzed: 02/13/2004 08:11

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	49.0	48.0	50.0	98.0	96.0	2.1	77-123	20		
Toluene	49.7	49.1	50.0	99.4	98.2	1.2	78-122	20		
Ethyl benzene	48.0	47.5	50.0	96.0	95.0	1.0	70-130	20		
Xylene(s)	150	151	150	100.0	100.7	0.7	75-125	20		
Surrogates(s)										
Trifluorotoluene	466	468	500	93.2	93.6		58-124			

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02/19/2004 15:22

Gas/BTEX Compounds by 8015M/8021

TRC Alton Geoscience

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

Project: 41050001FA20

Conoco Phillips #3538

Received: 02/08/2004 17:53

Site: 411 W. Macarthur Blvd., Oakland, CA

Batch QC Report

Prep(s): 5030

Test(s): 8015M

Laboratory Control Spike

Water

QC Batch # 2004/02/13-01.05

LCS 2004/02/13-01.05-006

Extracted: 02/13/2004

Analyzed: 02/13/2004 08:45

LCSD 2004/02/13-01.05-007

Extracted: 02/13/2004

Analyzed: 02/13/2004 09:18

Compound	Conc. ug/L		Exp. Conc.	Recovery %		RPD	Ctrl. Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Gasoline	237	238	250	94.8	95.2	0.4	75-125	20		
Surrogates(s) 4-Bromofluorobenzene-FID	435	434	500	87.0	86.8		50-150			

Severn Trent Laboratories, Inc.

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

02/19/2004 15:22

STL San Francisco

Sample Receipt Checklist

Submission #: 2004- 02 - 0238

Checklist completed by: (initials) TL Date: 02 / 06 /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° C ± 2)? Temp: 40°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: HNO₃ HCl H₂SO₄ 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):

2004-02-04
0238

STL-San Francisco

ConocoPhillips Chain Of Custody Record

82699

1220 Quarry Lane
Pleasanton, CA 94566
(925) 484-1919 (925) 484-1096 fax

ConocoPhillips Site Manager:	ConocoPhillips Work Order Number:
INVOICE REMITTANCE ADDRESS: CONOCOPHILLIPS Attn: Dee Hutchinson 3611 South Harbor, Suite 200 Santa Ana, CA. 92704	DATE: 02/04/04
	PAGE: 1 of 1
	ConocoPhillips Cost Object:

SAMPLING COMPANY: TRC	Valid Value ID:	CONOCOPHILLIPS SITE NUMBER: 3538	GLOBAL ID NO.:
ADDRESS: 21 Technology Drive, Irvine CA 92618	SITE ADDRESS (Street and City): 411 W. MACARTHUR Blvd. OAKLAND CA	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	LAB USE ONLY
SAMPLER NAME(S) (Print): HERNANDEZ	CONSULTANT PROJECT NUMBER: 41050001/FA20	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

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"/> DTCLP	FIELD NOTES:		
		DATE	TIME											Container/Preservative or PID Readings or Laboratory Notes	TEMPERATURE ON RECEIPT C°	
	MW-2	02/04/04	1222	GW	6											4.0°C
	MW-3	↓	1120	↓	↓									X	X	

Relinquished by: (Signature)	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Received by: (Signature)	Date: 2/5/04	Time: 1235
Relinquished by: (Signature)	Received by: (Signature)	Date: 2-5-04	Time: 1753

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.