TRC

January 16, 2006

ConocoPhillips Company
76 Broadway
Sacramento, CA 95818

ATTN: MR. THOMAS KOSEL

SITE: 76 STATION 5105
1950 GUERNEVILLE ROAD
SANTA ROSA, CALIFORNIA

RE: QUARTERLY MONITORING REPORT
OCTOBER THROUGH DECEMBER 2005

Dear Mr. Kosel:

Please find enclosed our Quarterly Monitoring Report for 76 Station 5105, located at 1950 Guerneville Road, Santa Rosa, California. If you have any questions regarding this report, please call us at (949) 753-0101.

Sincerely,

TRC

Anju Farfan
QMS Operations Manager

CC: Mr. Jan Wagoner, Delta Environmental, Inc. (2 copies)

Enclosures:
20-0400/5105R04.QMS

21 Technology Drive • Irvine, California 92618
Main: 949-727-9336 • Fax: 949-727-7399
www.trcsolutions.com

TRC

QUARTERLY MONITORING REPORT
OCTOBER THROUGH DECEMBER 2005

76 Station 5105
1950 Guerneville Road
Santa Rosa, California

Prepared For:

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

By:

REGISTERED GEOLOGIST
THOMAS
KELTY
NO. 4936
STATE OF CALIFORNIA

Senior Project Geologist, Irvine Operations
January 11, 2006

21 Technology Drive • Irvine, California 92618
Main: 949-727-9336 • Fax: 949-727-7399
www.trcsolutions.com

LIST OF ATTACHMENTS	
Summary Sheet	Summary of Gauging and Sampling Activities
Tables	Table Key Table 1: Current Fluid Levels and Selected Analytical Results Table 2: Historic Fluid Levels and Selected Analytical Results Table 3: Additional Analytical Results Table 3b:Additional Analytical Results Table 4: Additional Analytical Results
Figures	Figure 1: Vicinity Map Figure 2: Groundwater Elevation Contour Map Figure 3: Dissolved-Phase TPPH Concentration Map Figure 4: Dissolved-Phase Benzene Concentration Map Figure 5: Dissolved-Phase MTBE Concentration Map
Graphs	Groundwater Elevations vs. Time Benzene Concentrations vs. Time
Field Activities	General Field Procedures Groundwater Sampling Field Notes
Laboratory Reports	Official Laboratory Reports Quality Control Reports Chain of Custody Records
Statements	Purge Water Disposal Limitations

Summary of Gauging and Sampling Activities
October 2005 through December 2005
76 Station 5105
1950 Guerneville Road
Santa Rosa, CA

Project Coordinator: **Thomas Kosel**
Telephone: **916-558-7666**
Water Sampling Contractor: ***TRC***
Compiled by: **Christina Carrillo**
Date(s) of Gauging/Sampling Event: **12/01/05**

Sample Points

Groundwater wells: **9** onsite, **0** offsite
Wells gauged: **9** Wells sampled: **9**
Purging method: **Diaphragm pump**
Purge water disposal: **Onyx/Rodeo Unit 100**
Other Sample Points: **0** Type: **n/a**

Liquid Phase Hydrocarbons (LPH)

Wells with LPH: **0** Maximum thickness (feet): **n/a**
LPH removal frequency: **n/a** Method: **n/a**
Treatment or disposal of water/LPH: **n/a**

Hydrogeologic Parameters

Depth to groundwater (below TOC): Minimum: **10.78 feet** Maximum: **15.02 feet**
Average groundwater elevation (relative to available local datum): **109.73 feet**
Average change in groundwater elevation since previous event: **1.66 feet**
Interpreted groundwater gradient and flow direction:
Current event: **0.02 ft/ft, southwest**
Previous event: **0.01 ft/ft, southwest (09/26/05)**

Selected Laboratory Results

Wells with detected **Benzene:** **0** Wells above MCL (1.0 µg/l): **n/a**
Maximum reported benzene concentration: **n/a**

Wells with **TPH-G** **0**
Wells with **MTBE** **6** Maximum: **1,200 µg/l (MW-7)**

Notes:

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

STANDARD ABBREVIATIONS

--	=	not analyzed, measured, or collected
LPH	=	liquid-phase hydrocarbons
Trace	=	less than 0.01 foot of LPH in well
µg/l	=	micrograms per liter (approx. equivalent to parts per billion, ppb)
mg/l	=	milligrams per liter (approx. equivalent to parts per million, ppm)
ND<	=	not detected at or above laboratory detection limit
TOC	=	top of casing (surveyed reference elevation)

ANALYTES

BTEX	=	benzene, toluene, ethylbenzene, and (total) xylenes
DIPE	=	di-isopropyl ether
ETBE	=	ethyl tertiary butyl ether
MTBE	=	methyl tertiary butyl ether
PCB	=	polychlorinated biphenyls
PCE	=	tetrachloroethene
TBA	=	tertiary butyl alcohol
TCA	=	trichloroethane
TCE	=	trichloroethene
TPH-G	=	total petroleum hydrocarbons with gasoline distinction
TPH-D	=	total petroleum hydrocarbons with diesel distinction
TPPH	=	total purgeable petroleum hydrocarbons
TRPH	=	total recoverable petroleum hydrocarbons
TAME	=	tertiary amyl methyl ether
1,1-DCA	=	1,1-dichloroethane
1,2-DCA	=	1,2-dichloroethane (same as EDC, ethylene dichloride)
1,1-DCE	=	1,1-dichloroethene
1,2-DCE	=	1,2-dichloroethene (cis- and trans-)

NOTES

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

REFERENCE

TRC began groundwater monitoring and sampling 76 Station 5105 in October 2003. Historical data compiled prior to that time were provided by Gettler-Ryan Inc.

Table 1
CURRENT FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
December 1, 2005
76 Station 5105

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (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: 12.0-30.0)**											
12/01/05	122.73	13.65	0.00	109.08	1.67	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1000	
MW-3		**(Screen Interval in feet: 9.0-25.0)**											
12/01/05	121.75	11.29	0.00	110.46	1.83	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.1	
MW-6		**(Screen Interval in feet: 11.04-25.24)**											
12/01/05	124.02	15.02	0.00	109.00	1.01	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-7		**(Screen Interval in feet: 12.04-25.33)**											
12/01/05	121.46	13.80	0.00	107.66	-1.05	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1200	
MW-8		**(Screen Interval in feet: 12.36-25.20)**											
12/01/05	122.16	13.64	0.00	108.52	1.85	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-9		**(Screen Interval in feet: 12.72-25.27)**											
12/01/05	123.59	14.14	0.00	109.45	1.75	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-10		**(Screen Interval in feet: 11.98-24.10)**											
12/01/05	123.55	12.65	0.00	110.90	2.68	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	760	
MW-11		**(Screen Interval in feet: 8.12-25.14)**											
12/01/05	123.14	12.19	0.00	110.95	2.72	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	81	
MW-12		**(Screen Interval in feet: 8.08-24.90)**											
12/01/05	122.34	10.78	0.00	111.56	2.46	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	6.2	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
May 1991 Through December 2005
76 Station 5105

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (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: 12.0-30.0)**												
05/25/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
10/07/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/10/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
04/08/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/02/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
10/06/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/06/93	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
04/01/93	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/02/93	123.02	15.70	0.00	107.32	--	ND	ND	ND	ND	ND	--	--	
10/04/93	122.71	16.71	0.00	106.00	-1.32	ND	ND	ND	ND	ND	--	--	
01/27/94	122.73	13.39	0.00	109.34	3.34	--	--	--	--	--	--	--	
04/28/94	122.73	13.87	0.00	108.86	-0.48	130	ND	ND	ND	ND	--	--	
10/19/94	122.73	16.65	0.00	106.08	-2.78	560	ND	ND	ND	ND	--	--	
04/17/95	122.73	12.50	0.00	110.23	4.15	ND	ND	ND	ND	ND	--	--	
10/12/95	122.73	16.84	0.00	105.89	-4.34	ND	ND	ND	ND	ND	--	--	
04/08/96	122.73	11.97	0.00	110.76	4.87	ND	ND	ND	ND	ND	--	--	
10/29/96	122.73	15.16	0.00	107.57	-3.19	--	--	--	--	--	590	--	
04/25/97	122.73	12.82	0.00	109.91	2.34	--	--	--	--	--	270	--	
04/13/98	122.73	11.65	0.00	111.08	1.17	--	--	--	--	--	5.8	--	
08/31/98	122.73	14.68	0.00	108.05	-3.03	ND	ND	ND	ND	ND	448	451	
04/05/99	122.73	11.59	0.00	111.14	3.09	ND	ND	ND	ND	ND	390	360	
03/31/00	122.73	12.30	0.00	110.43	-0.71	ND	ND	ND	ND	ND	480	540	
04/06/01	122.73	12.44	0.00	110.29	-0.14	ND	ND	ND	ND	ND	635	880	
04/22/02	122.73	11.98	0.00	110.75	0.46	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	19	26	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

May 1991 Through December 2005

76 Station 5105

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (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 continued													
04/11/03	122.73	12.91	0.00	109.82	-0.93	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.7	7.2	
05/12/04	122.73	13.35	0.00	109.38	-0.44	750	ND<5.0	ND<5.0	ND<5.0	ND<5.0	790	1000	
06/07/05	122.73	12.91	0.00	109.82	0.44	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<5.0	660	570	
09/26/05	122.73	15.32	0.00	107.41	-2.41	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	500	
12/01/05	122.73	13.65	0.00	109.08	1.67	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1000	
MW-2	**(Screen Interval in feet: DNA)**												
05/25/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
10/07/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/10/92	--	--	--	--	--	100	ND	ND	ND	ND	--	--	
04/08/92	--	--	--	--	--	140	ND	ND	ND	ND	460	--	
07/02/92	--	--	--	--	--	120	ND	ND	ND	ND	240	--	
10/06/92	--	--	--	--	--	59	ND	ND	ND	ND	100	--	
01/06/93	--	--	--	--	--	120	ND	ND	ND	ND	240	--	
04/01/93	--	--	--	--	--	150	ND	ND	ND	ND	270	--	
07/02/93	121.89	13.76	0.00	108.13	--	82	ND	ND	ND	ND	200	--	
10/04/93	121.47	14.75	0.00	106.72	-1.41	ND	ND	ND	ND	ND	81	--	
01/27/94	121.49	12.53	0.00	108.96	2.24	--	--	--	--	--	--	--	
04/28/94	121.49	12.54	0.00	108.95	-0.01	120	ND	ND	ND	0.62	290	--	
10/19/94	121.49	15.10	0.00	106.39	-2.56	170	0.79	ND	0.53	ND	98	--	
04/17/95	121.49	10.92	0.00	110.57	4.18	ND	ND	ND	ND	ND	56	--	
MW-3	**(Screen Interval in feet: 9.0-25.0)**												
05/25/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
10/07/91	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
01/10/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	

Table 2

HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS

May 1991 Through December 2005

76 Station 5105

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (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													
04/08/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/02/92	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
10/06/92	--	--	--	--	--	ND	1.4	ND	ND	ND	--	--	
01/06/93	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
04/01/93	--	--	--	--	--	ND	ND	ND	ND	ND	--	--	
07/02/93	121.98	11.98	0.00	110.00	--	ND	ND	ND	ND	ND	--	--	
10/04/93	121.73	13.01	0.00	108.72	-1.28	ND	ND	ND	ND	ND	--	--	
01/27/94	121.75	10.86	0.00	110.89	2.17	--	--	--	--	--	--	--	
04/28/94	121.75	10.56	0.00	111.19	0.30	ND	ND	ND	ND	ND	--	--	
10/19/94	121.75	14.73	0.00	107.02	-4.17	--	--	--	--	--	--	--	Sampled Annually
04/17/95	121.75	8.40	0.00	113.35	6.33	ND	ND	ND	ND	ND	--	--	
10/12/95	121.75	14.61	0.00	107.14	-6.21	--	--	--	--	--	--	--	
04/08/96	121.75	8.38	0.00	113.37	6.23	ND	ND	ND	ND	ND	--	--	
10/29/96	121.75	12.92	0.00	108.83	-4.54	--	--	--	--	--	--	--	
04/25/97	121.75	9.64	0.00	112.11	3.28	--	--	--	--	--	ND	--	
04/13/98	121.75	8.38	0.00	113.37	1.26	--	--	--	--	--	14	--	
08/31/98	121.75	11.96	0.00	109.79	-3.58	ND	ND	ND	ND	ND	2.73	2.66	
04/05/99	121.75	8.38	0.00	113.37	3.58	ND	ND	ND	ND	ND	7.6	5.2	
03/31/00	121.75	9.00	0.00	112.75	-0.62	ND	ND	ND	ND	ND	8.9	8.5	
04/06/01	121.75	9.23	0.00	112.52	-0.23	ND	ND	ND	ND	ND	7.75	7.8	
04/22/02	121.75	8.74	0.00	113.01	0.49	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	5.1	7.6	
04/11/03	121.75	9.61	0.00	112.14	-0.87	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	4.0	5.1	
05/12/04	121.75	10.09	0.00	111.66	-0.48	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	3.9	
06/07/05	121.75	9.39	0.00	112.36	0.70	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<5.0	2.8	

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
May 1991 Through December 2005
76 Station 5105

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (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													
09/26/05	121.75	13.12	0.00	108.63	-3.73	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.5	
12/01/05	121.75	11.29	0.00	110.46	1.83	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	1.1	
MW-4	**(Screen Interval in feet: DNA)**												
04/08/92	--	--	--	--	--	110	ND	ND	ND	ND	--	--	
07/02/92	--	--	--	--	--	240	ND	ND	ND	ND	930	--	
10/06/92	--	--	--	--	--	130	ND	ND	ND	ND	320	--	
01/06/93	--	--	--	--	--	120	ND	ND	ND	ND	400	--	
04/01/93	--	--	--	--	--	210	ND	ND	ND	2.8	360	--	
07/02/93	121.77	13.52	0.00	108.25	--	210	ND	ND	ND	ND	350	--	
10/04/93	121.49	14.51	0.00	106.98	-1.27	ND	ND	ND	ND	ND	25	--	
01/27/94	121.51	12.03	0.00	109.48	2.50	--	--	--	--	--	--	--	
04/28/94	121.51	10.92	0.00	110.59	1.11	78	ND	ND	ND	ND	180	--	
10/19/94	121.51	13.78	0.00	107.73	-2.86	ND	ND	ND	ND	ND	260	--	
04/17/95	121.51	12.15	0.00	109.36	1.63	ND	ND	ND	ND	ND	90	--	
10/12/95	121.51	14.00	0.00	107.51	-1.85	ND	ND	ND	ND	ND	29	--	
04/08/96	121.51	10.57	0.00	110.94	3.43	ND	ND	ND	ND	ND	ND	--	
MW-5	**(Screen Interval in feet: DNA)**												
01/27/94	122.07	13.73	0.00	108.34	--	ND	ND	ND	ND	ND	--	--	
04/28/94	122.07	14.25	0.00	107.82	-0.52	ND	ND	ND	ND	ND	--	--	
10/19/94	122.07	16.15	0.00	105.92	-1.90	ND	ND	ND	ND	ND	--	--	
04/17/95	122.07	13.21	0.00	108.86	2.94	ND	ND	ND	ND	ND	--	--	
10/12/95	122.07	16.38	0.00	105.69	-3.17	ND	ND	ND	ND	ND	--	--	
04/08/96	122.07	--	--	--	--	--	--	--	--	--	--	--	Destroyed
MW-6	**(Screen Interval in feet: 11.04-25.24)**												

Table 2
HISTORIC FLUID LEVELS AND SELECTED ANALYTICAL RESULTS
May 1991 Through December 2005
76 Station 5105

Date Sampled	TOC Elevation (feet)	Depth to Water (feet)	LPH Thickness (feet)	Ground-water Elevation (feet)	Change in Elevation (feet)	TPH-G (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													
09/26/05	124.02	16.03	0.00	107.99	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/01/05	124.02	15.02	0.00	109.00	1.01	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-7	**(Screen Interval in feet: 12.04-25.33)**												
09/26/05	121.46	12.75	0.00	108.71	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	4.1	
12/01/05	121.46	13.80	0.00	107.66	-1.05	ND<1000	ND<10	ND<10	ND<10	ND<20	--	1200	
MW-8	**(Screen Interval in feet: 12.36-25.20)**												
09/26/05	122.16	15.49	0.00	106.67	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/01/05	122.16	13.64	0.00	108.52	1.85	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-9	**(Screen Interval in feet: 12.72-25.27)**												
09/26/05	123.59	15.89	0.00	107.70	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
12/01/05	123.59	14.14	0.00	109.45	1.75	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	ND<0.50	
MW-10	**(Screen Interval in feet: 11.98-24.10)**												
09/26/05	123.55	15.33	0.00	108.22	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	960	
12/01/05	123.55	12.65	0.00	110.90	2.68	ND<500	ND<5.0	ND<5.0	ND<5.0	ND<10	--	760	
MW-11	**(Screen Interval in feet: 8.12-25.14)**												
09/26/05	123.14	14.91	0.00	108.23	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	85	
12/01/05	123.14	12.19	0.00	110.95	2.72	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	81	
MW-12	**(Screen Interval in feet: 8.08-24.90)**												
09/26/05	122.34	13.24	0.00	109.10	--	--	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	3100	
12/01/05	122.34	10.78	0.00	111.56	2.46	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<1.0	--	6.2	

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 5105

Date Sampled	TPH-D (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	1,1-Dichloro-ethane (µg/l)	1,2-Dichloro-benzene (µg/l)	EDB (µg/l)	Lead (Total) (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Nitrite (mg/l)	Zinc (mg/l)	Ethanol 8260B (µg/l)	TPPH 8260B (µg/l)
MW-1															
05/25/91	ND	ND	ND	ND	ND	--	--	--	--	--	--	0.012	--	--	--
10/07/91	ND	ND	ND	1.9	1.2	--	0.027	--	--	--	--	1.8	0.12	--	--
01/10/92	ND	ND	ND	ND	ND	--	0.0089	--	--	--	--	--	0.11	--	--
04/08/92	ND	ND	ND	ND	ND	--	0.013	--	--	--	--	20	0.02	--	--
07/02/92	ND	0.95	0.56	ND	1.8	--	0.017	--	--	--	--	--	0.15	--	--
10/06/92	--	--	--	--	--	--	--	--	--	--	--	1.2	--	--	--
04/01/93	--	0.77	ND	ND	2	--	--	--	--	--	--	19	--	--	--
10/04/93	--	2.1	ND	ND	4.6	--	--	--	--	--	--	0.39	--	--	--
04/28/94	--	0.64	0.66	0.5	3.6	--	--	--	--	--	--	8.6	--	--	--
10/19/94	--	0.57	1.3	0.72	2.3	--	--	--	--	--	--	3.3	--	--	--
04/17/95	--	ND	ND	0.58	1.1	--	--	--	--	--	--	12	--	--	--
10/12/95	--	ND	ND	ND	ND	--	--	--	--	--	--	11	--	--	--
04/08/96	--	ND	ND	0.98	ND	--	--	--	--	--	--	12	--	--	--
10/29/96	--	ND	ND	ND	4.4	--	--	--	--	--	--	2.1	--	--	--
08/31/98	--	--	--	--	--	--	--	ND	ND	ND	ND	--	--	ND	--
04/05/99	--	--	--	--	--	--	--	ND	ND	ND	ND	--	--	ND	--
03/31/00	--	--	--	--	--	--	--	ND	ND	ND	ND	--	--	ND	--
04/06/01	--	--	ND	--	--	ND	--	ND	83	ND	ND	--	--	ND	--
04/22/02	--	--	ND<2.0	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	--	--	ND<500	--
04/11/03	--	--	ND<2.0	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	--	--	ND<500	--
05/12/04	--	--	ND<5.0	--	--	ND<5.0	--	ND<5.0	ND<50	ND<10	ND<5.0	--	--	ND<500	--
06/07/05	--	--	ND<2.5	--	--	ND<2.5	--	ND<2.5	94	ND<2.5	ND<2.5	--	--	ND<250	--
09/26/05	ND<200	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	54	ND<0.50	ND<0.50	--	--	ND<250	260
12/01/05	ND<50	--	ND<10	--	--	ND<10	--	ND<10	ND<100	ND<20	ND<10	--	--	ND<2000	--
MW-2															
05/25/91	--	ND	ND	ND	ND	--	--	--	--	--	--	3.5	--	--	--

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 5105

Date Sampled	TPH-D (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	1,1-Dichloro-ethane (µg/l)	1,2-Dichloro-benzene (µg/l)	EDB (µg/l)	Lead (Total) (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Nitrite (mg/l)	Zinc (mg/l)	Ethanol 8260B (µg/l)	TPPH 8260B (µg/l)
MW-2 continued															
10/07/91	ND	ND	ND	ND	ND	--	--	--	--	--	--	0.51	--	--	--
01/10/92	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--
04/08/92	ND	ND	ND	ND	ND	--	--	--	--	--	--	ND	--	--	--
07/02/92	--	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--
10/06/92	--	--	--	--	--	--	--	--	--	--	--	35	--	--	--
04/01/93	--	--	--	--	--	--	--	--	--	--	--	2.9	--	--	--
10/04/93	--	--	--	--	--	--	--	--	--	--	--	5.5	--	--	--
04/28/94	--	--	--	--	--	--	--	--	--	--	--	2.5	--	--	--
10/19/94	--	--	--	--	--	--	--	--	--	--	--	3.6	--	--	--
04/17/95	--	--	--	--	--	--	--	--	--	--	--	4.9	--	--	--
MW-3															
05/25/91	--	ND	ND	ND	ND	--	--	--	--	--	--	ND	--	--	--
10/07/91	ND	ND	ND	ND	ND	--	--	--	--	--	--	18	--	--	--
01/10/92	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--
04/08/92	ND	ND	ND	ND	ND	--	--	--	--	--	--	24	--	--	--
07/02/92	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--
10/06/92	--	--	--	--	--	--	--	--	--	--	--	26	--	--	--
04/01/93	--	--	--	--	--	--	--	--	--	--	--	22	--	--	--
10/04/93	--	--	--	--	--	--	--	--	--	--	--	63	--	--	--
04/28/94	--	--	--	--	--	--	--	--	--	--	--	20	--	--	--
04/17/95	--	--	--	--	--	--	--	--	--	--	--	23	--	--	--
04/08/96	--	--	--	--	--	--	--	--	--	--	--	21	--	--	--
08/31/98	--	--	--	--	--	--	--	ND	ND	ND	ND	--	--	ND	--
04/05/99	--	--	--	--	--	--	--	ND	ND	ND	ND	--	--	ND	--
03/31/00	--	--	--	--	--	--	--	ND	ND	ND	ND	--	--	ND	--
04/06/01	--	--	ND	--	--	ND	--	ND	ND	ND	ND	--	--	ND	--

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 5105

Date Sampled	TPH-D (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	1,1-Dichloro-ethane (µg/l)	1,2-Dichloro-benzene (µg/l)	EDB (µg/l)	Lead (Total) (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Nitrite (mg/l)	Zinc (mg/l)	Ethanol 8260B (µg/l)	TPPH 8260B (µg/l)
MW-3 continued															
04/22/02	--	--	ND<2.0	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	--	--	ND<500	--
04/11/03	--	--	ND<2.0	--	--	ND<2.0	--	ND<2.0	ND<100	ND<2.0	ND<2.0	--	--	--	--
05/12/04	--	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	--	ND<50	--
06/07/05	--	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<5.0	ND<0.50	ND<0.50	--	--	ND<50	--
09/26/05	ND<200	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<10	ND<0.50	ND<0.50	--	--	ND<250	ND<50
12/01/05	ND<50	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	--	ND<100	--
MW-4															
04/08/92	ND	ND	ND	ND	ND	--	--	--	--	--	--	5.7	--	--	--
07/02/92	ND	ND	ND	ND	ND	--	--	--	--	--	--	--	--	--	--
10/06/92	--	--	--	--	--	--	--	--	--	--	--	4.3	--	--	--
04/01/93	--	--	--	--	--	--	--	--	--	--	--	6.8	--	--	--
10/04/93	--	--	--	--	--	--	--	--	--	--	--	2.3	--	--	--
04/28/94	--	--	--	--	--	--	--	--	--	--	--	3.6	--	--	--
10/19/94	--	--	--	--	--	--	--	--	--	--	--	ND	--	--	--
04/17/95	--	--	--	--	--	--	--	--	--	--	--	ND	--	--	--
10/12/95	--	--	--	--	--	--	--	--	--	--	--	0.66	--	--	--
04/08/96	--	--	--	--	--	--	--	--	--	--	--	0.77	--	--	--
MW-5															
01/27/94	ND	1.2	ND	1.5	1.4	--	--	--	--	--	--	23	--	--	--
04/28/94	ND	ND	ND	1.6	ND	--	--	--	--	--	--	29	--	--	--
10/19/94	ND	ND	ND	1.6	ND	--	--	--	--	--	--	26	--	--	--
04/17/95	ND	0.92	ND	1.1	1.1	--	--	--	--	--	--	24	--	--	--
10/12/95	ND	ND	ND	0.53	ND	--	--	--	--	--	--	26	--	--	--
MW-6															
09/26/05	ND<200	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<10	ND<0.50	ND<0.50	--	--	ND<250	ND<50
12/01/05	ND<50	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	--	ND<100	--

Table 3
ADDITIONAL ANALYTICAL RESULTS
76 Station 5105

Date Sampled	TPH-D (µg/l)	1,4-Dichloro-benzene (µg/l)	EDC (µg/l)	1,1-Dichloro-ethane (µg/l)	1,2-Dichloro-benzene (µg/l)	EDB (µg/l)	Lead (Total) (µg/l)	TAME 8260B (µg/l)	TBA 8260B (µg/l)	DIPE 8260B (µg/l)	ETBE 8260B (µg/l)	Nitrite (mg/l)	Zinc (mg/l)	Ethanol 8260B (µg/l)	TPPH 8260B (µg/l)
MW-7															
09/26/05	ND<200	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<10	ND<0.50	ND<0.50	--	--	ND<250	ND<50
12/01/05	ND<50	--	ND<10	--	--	ND<10	--	ND<10	2400	ND<20	ND<10	--	--	ND<2000	--
MW-8															
09/26/05	ND<200	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<10	ND<0.50	ND<0.50	--	--	ND<250	ND<50
12/01/05	ND<50	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	--	ND<100	--
MW-9															
09/26/05	ND<200	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<10	ND<0.50	ND<0.50	--	--	ND<250	ND<50
12/01/05	ND<50	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	--	ND<100	--
MW-10															
09/26/05	ND<200	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	66	ND<0.50	ND<0.50	--	--	ND<250	420
12/01/05	ND<50	--	ND<5.0	--	--	ND<5.0	--	ND<5.0	93	ND<10	ND<5.0	--	--	ND<1000	--
MW-11															
09/26/05	ND<200	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<10	ND<0.50	ND<0.50	--	--	ND<250	52
12/01/05	ND<50	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	--	ND<100	--
MW-12															
09/26/05	ND<200	--	2.6	--	--	ND<0.50	--	ND<0.50	1200	ND<0.50	ND<0.50	--	--	ND<250	1000
12/01/05	ND<50	--	ND<0.50	--	--	ND<0.50	--	ND<0.50	ND<5.0	ND<1.0	ND<0.50	--	--	ND<100	--

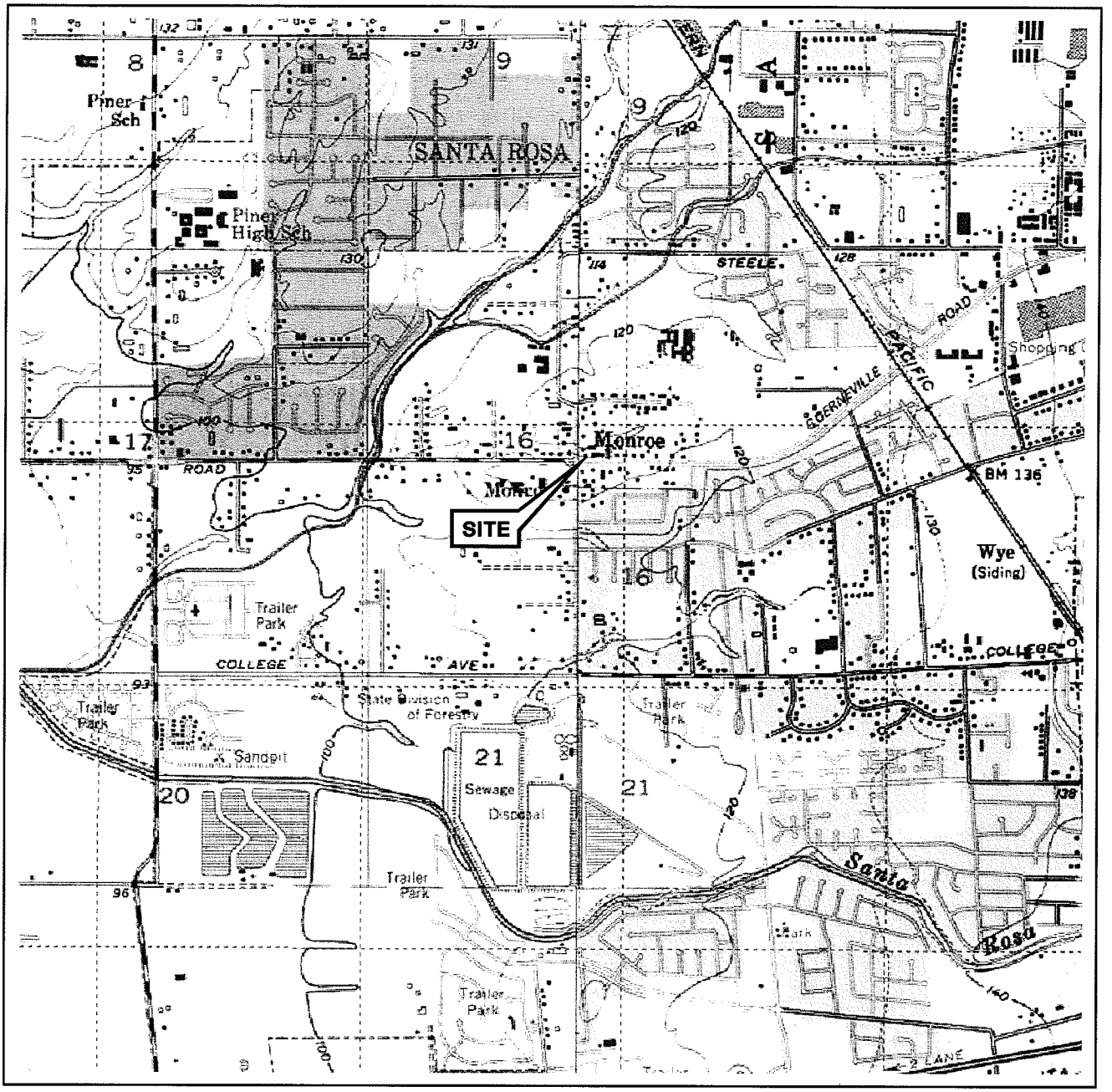
Table 3 b
ADDITIONAL ANALYTICAL RESULTS
76 Station 5105

Date Sampled	Nickel (mg/l)	Cadmium (mg/l)	Chromium (mg/l)	TOG (mg/l)
MW-1				
05/25/91	--	--	--	ND
10/07/91	0.31	ND	0.19	ND
01/10/92	ND	ND	0.0053	ND
04/08/92	ND	ND	ND	ND
07/02/92	0.38	ND	0.13	--
10/06/92	ND	--	ND	--
01/06/93	ND	--	ND	--
04/01/93	0.13	--	0.045	--
07/02/93	ND	--	0.011	--
10/04/93	ND	--	ND	--
04/28/94	0.12	--	0.067	--
10/19/94	0.043	--	0.016	--
04/17/95	0.027	--	0.011	--
10/12/95	0.051	--	0.029	--
04/08/96	ND	--	ND	--
MW-5				
01/27/94	--	--	--	ND
04/28/94	--	--	--	ND
10/19/94	--	--	--	ND
04/17/95	--	--	--	ND
10/12/95	--	--	--	ND

Table 4
ADDITIONAL ANALYTICAL RESULTS
76 Station 5105

Date Sampled	Barium (mg/l)	Mercury (mg/l)
MW-5		
01/27/94	0.0035	ND
04/28/94	0.46	ND
10/19/94	0.094	0.00044
04/17/95	0.24	ND
10/12/95	0.17	ND

FIGURES



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

SCALE 1:24,000

N

QUADRANGLE LOCATION

SOURCE:

United States Geological Survey
7.5 Minute Topographic Map:
Santa Rosa Quadrangle

VICINITY MAP

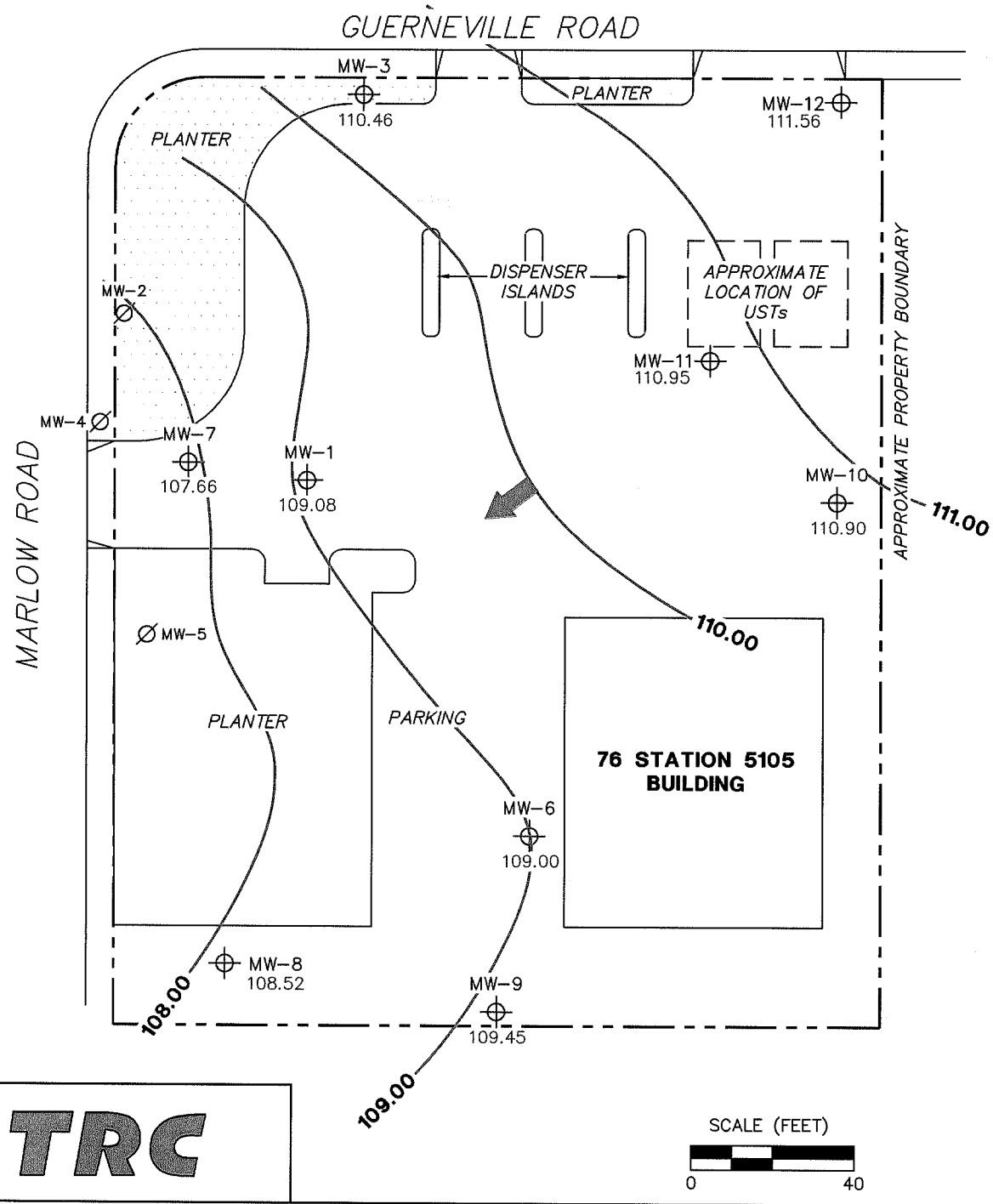
76 Station 5105
1950 Guerneville Road
Santa Rosa, California

TRC

FIGURE 1

PS = 1:1

L:\VICINITY MAPS\5105vm.dwg Dec 01, 2005 – 10:28am lwinters



N

LEGEND

MW-12 ⊕ Monitoring Well with Groundwater Elevation (feet)

MW-5 ∅ Destroyed Monitoring Well

111.00 — Groundwater Elevation Contour

General Direction of Groundwater Flow

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.

GROUNDWATER ELEVATION CONTOUR MAP
December 1, 2005

76 Station 5105
1950 Guerneville Road
Guerneville, California

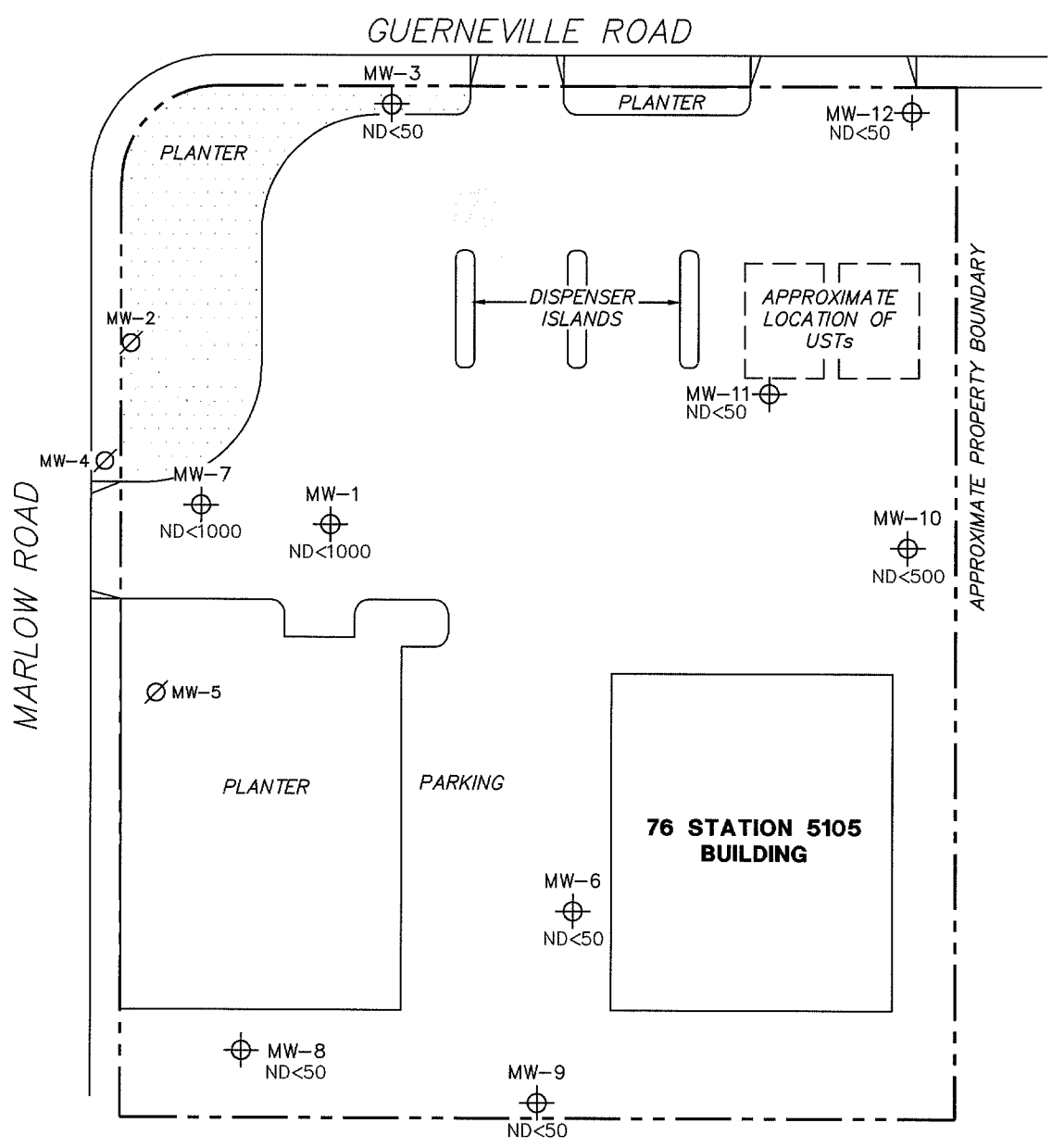
FIGURE 2

TRC

SCALE (FEET)
0 40

PS=1:1 5105-003

L:\Graphics\ProjectsByNumber\20-xxxx\20-0400(UnocalQMS)\x-5000\5105+\5105-QMS.dwg Jan 06, 2006 - 2:58pm rhughes



N

LEGEND

MW-12 ⊕ Monitoring Well with Dissolved-Phase TPH-G Concentration (µg/l)

MW-5 Ø Destroyed Monitoring Well

NOTES:

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

DISSOLVED-PHASE TPH-G CONCENTRATION MAP
December 1, 2005

76 Station 5105
1950 Guerneville Road
Guerneville, California

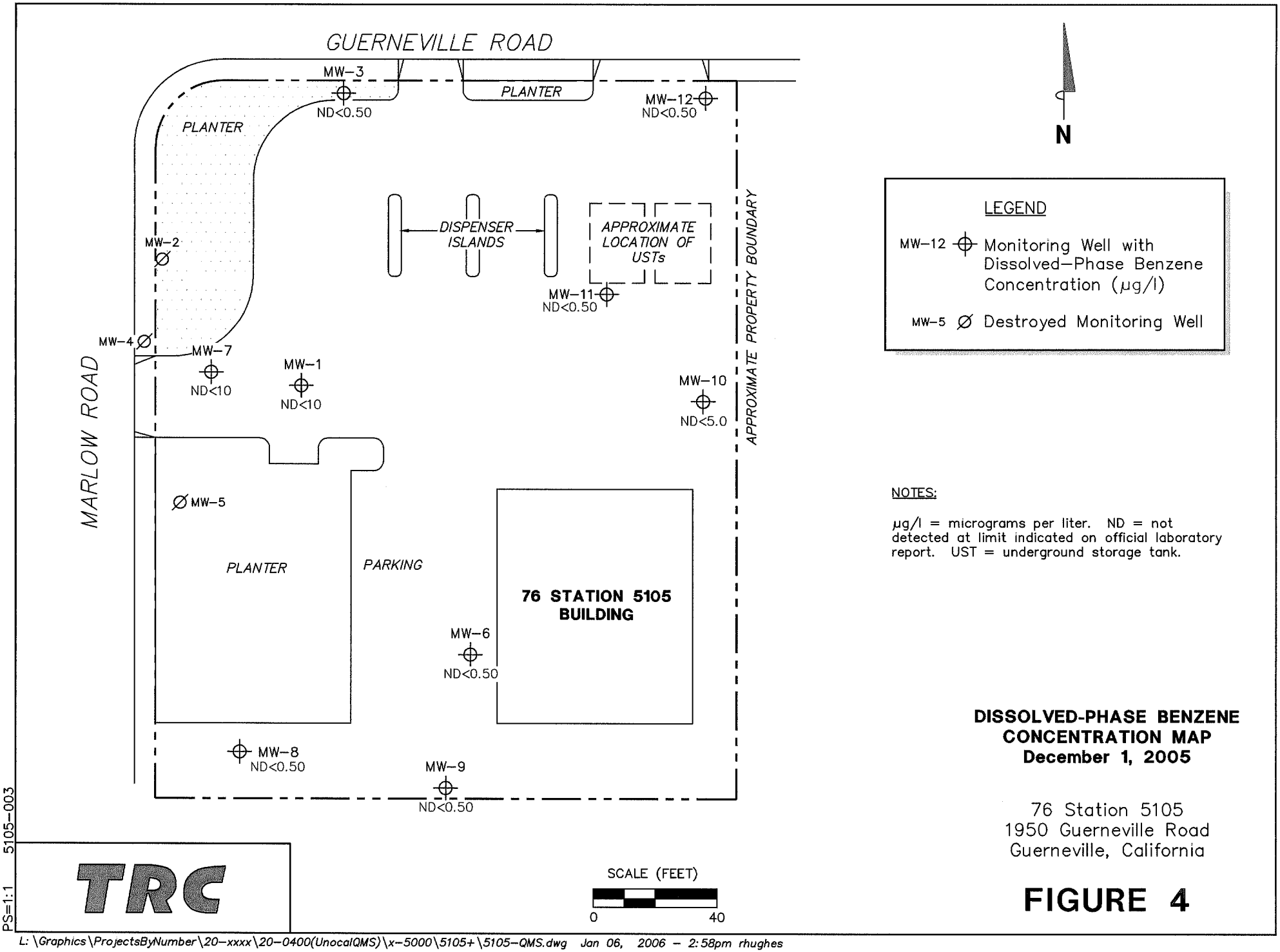
FIGURE 3

TRC

SCALE (FEET)
0 40

PS=1:1 5105-003

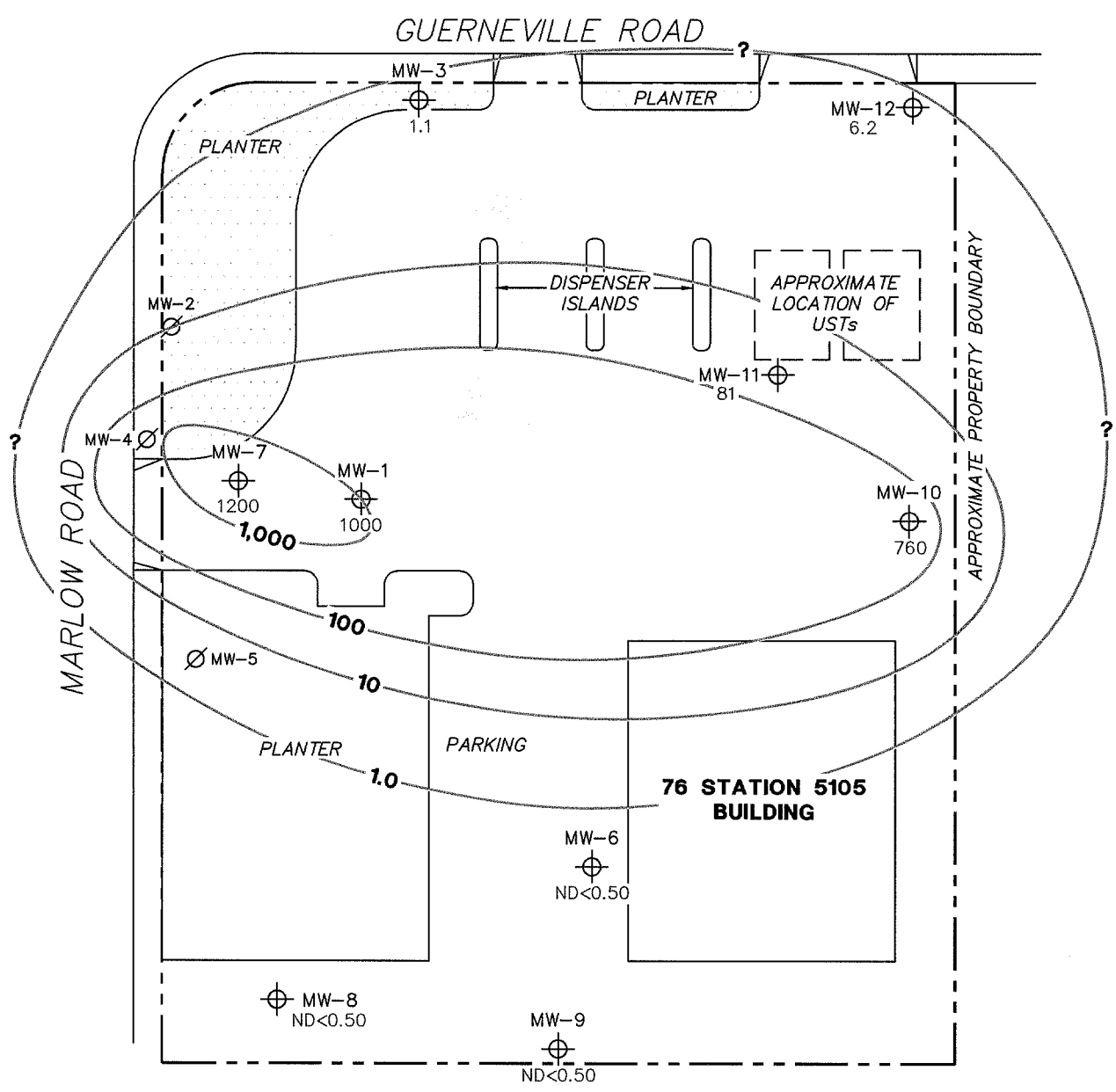
L:\Graphics\ProjectsByNumber\20-xxxx\20-0400(UnocalQMS)\x-5000\5105+\5105-QMS.dwg Jan 06, 2006 - 2:58pm rhughes



DISSOLVED-PHASE BENZENE CONCENTRATION MAP
December 1, 2005

76 Station 5105
1950 Guerneville Road
Guerneville, California

FIGURE 4



N

LEGEND

MW-12 ⊕ Monitoring Well with Dissolved-Phase MTBE Concentration (µg/l)

MW-5 ∅ Destroyed Monitoring Well

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

NOTES:

Contour lines are interpretive and based on laboratory analysis results of groundwater samples. MTBE = methyl tertiary butyl ether. µg/l = micrograms per liter.
UST = underground storage tank. Results obtained using EPA Method 8260B.

DISSOLVED-PHASE MTBE CONCENTRATION MAP
December 1, 2005

76 Station 5105
1950 Guerneville Road
Guerneville, California

FIGURE 5

TRC

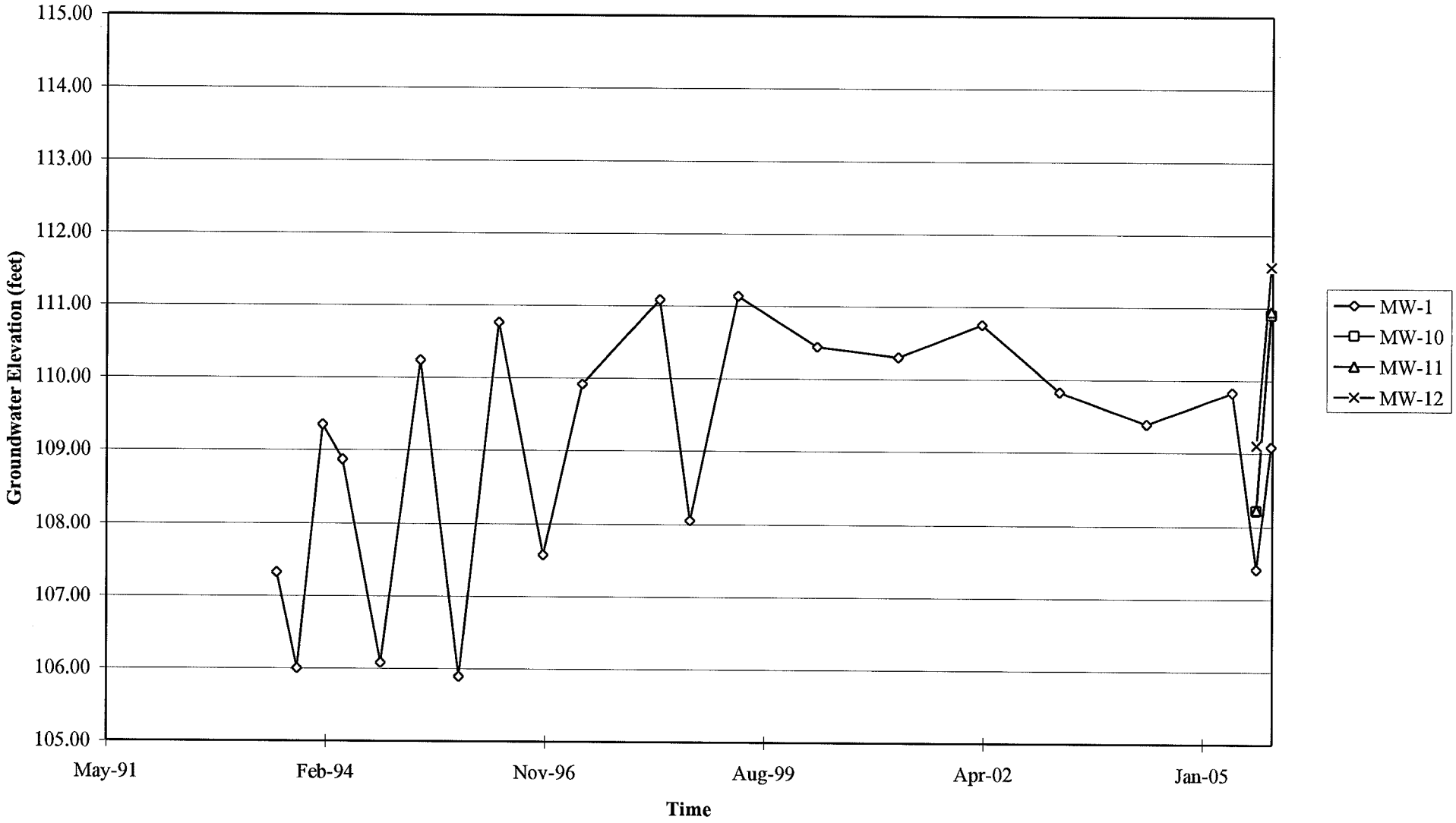
SCALE (FEET)
0 40

PS=1:1 5105-003

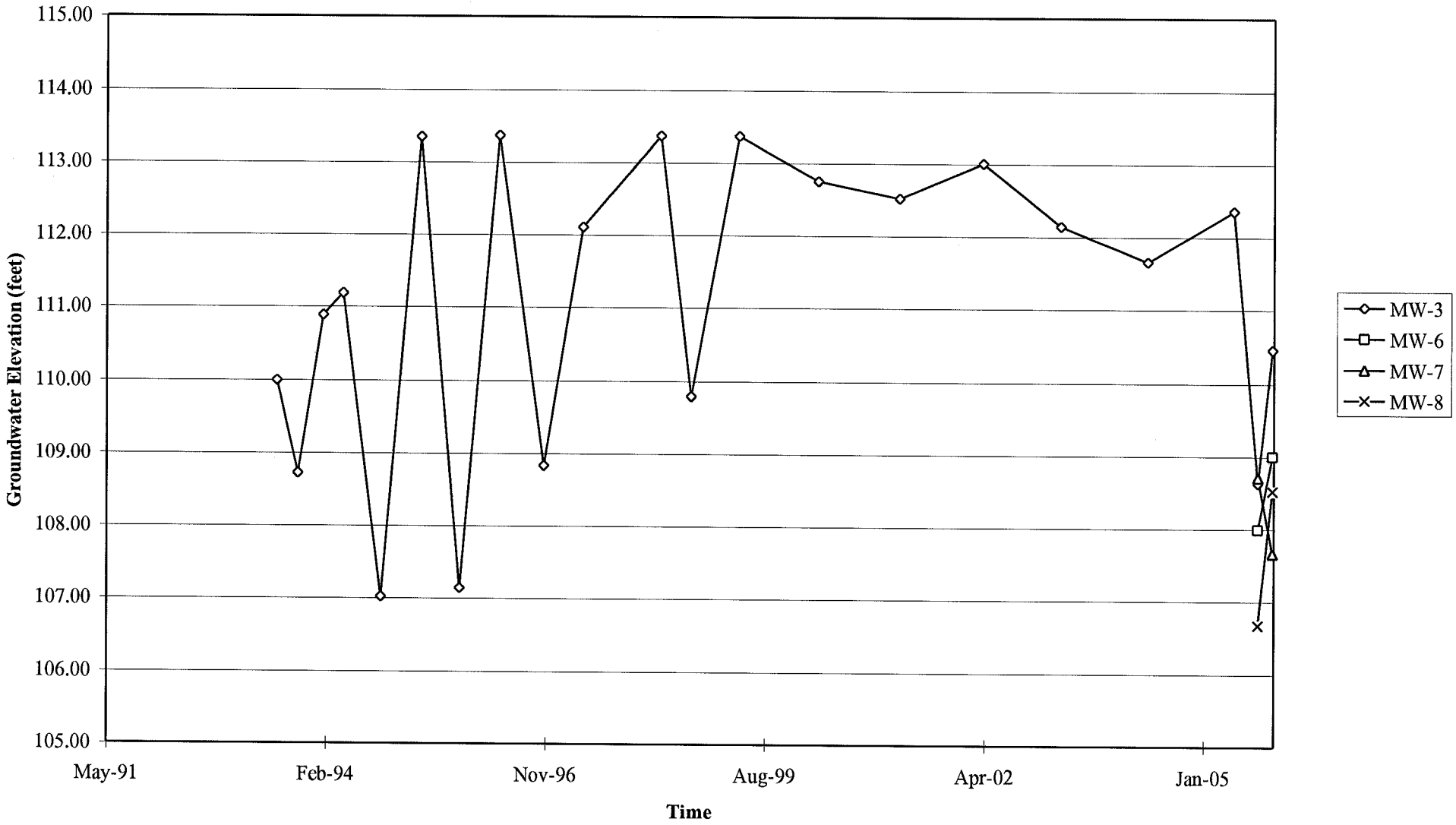
L:\Graphics\ProjectsByNumber\20-xxxx\20-0400(UnocalQMS)\x-5000\5105+\5105-QMS.dwg Jan 06, 2006 - 2:58pm rhughes

GRAPHS

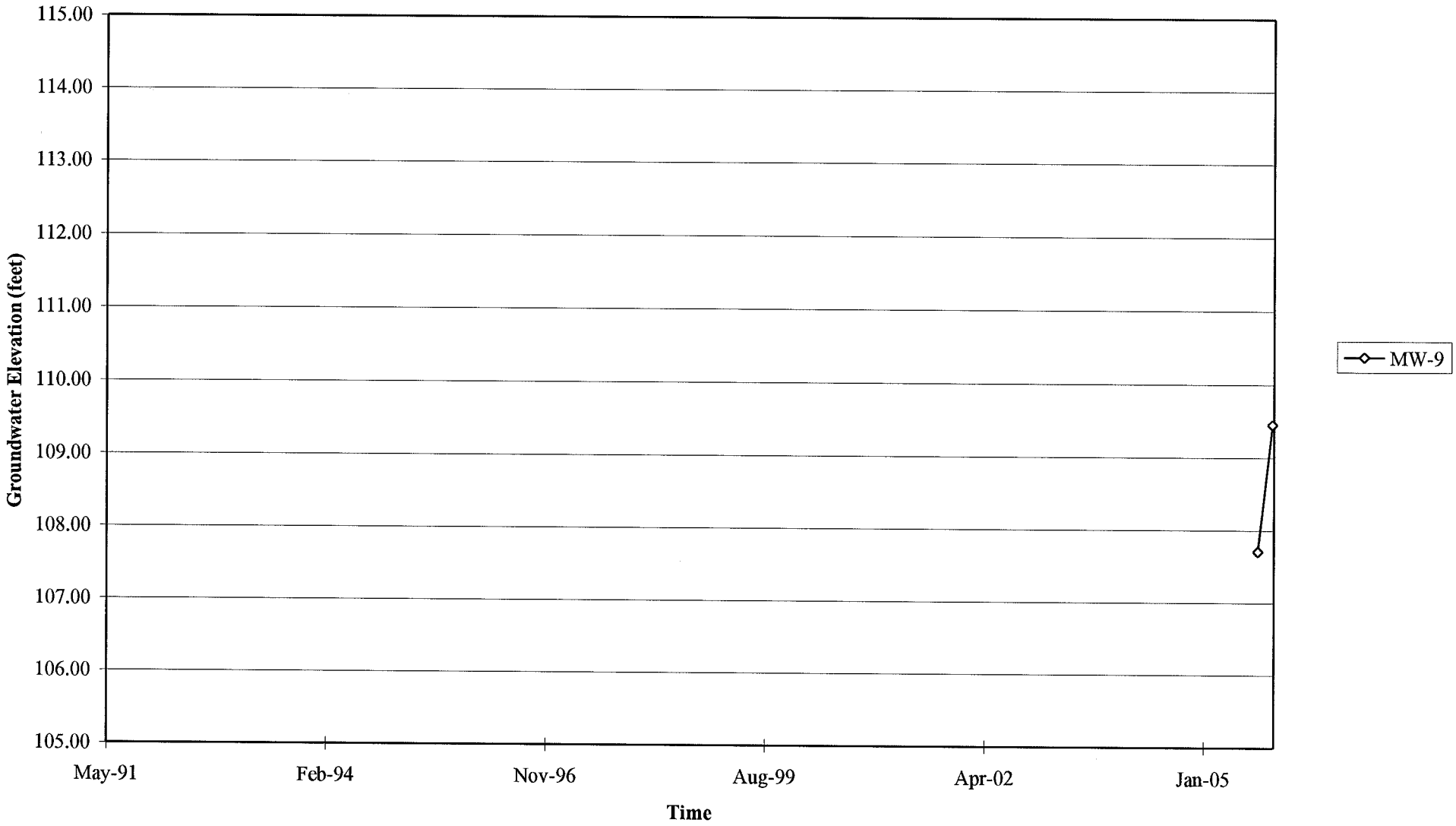
Groundwater Elevations vs. Time
76 Station 5105



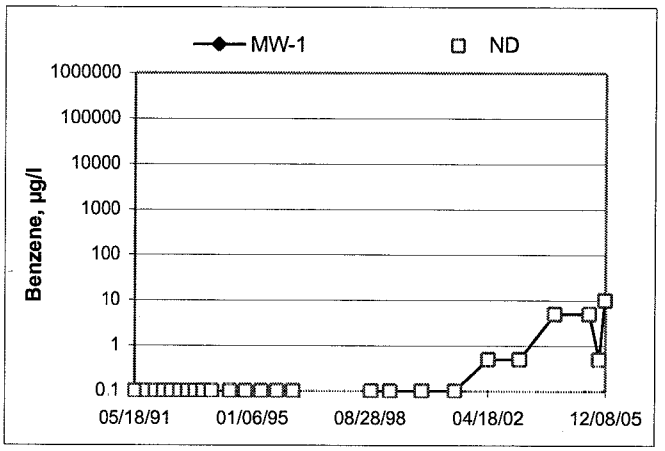
Groundwater Elevations vs. Time
76 Station 5105

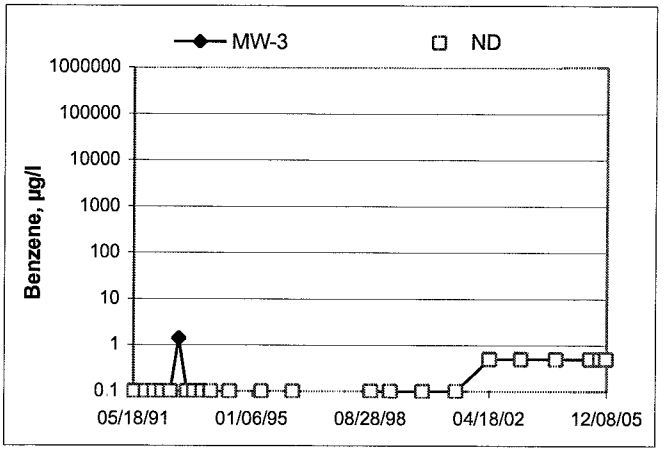


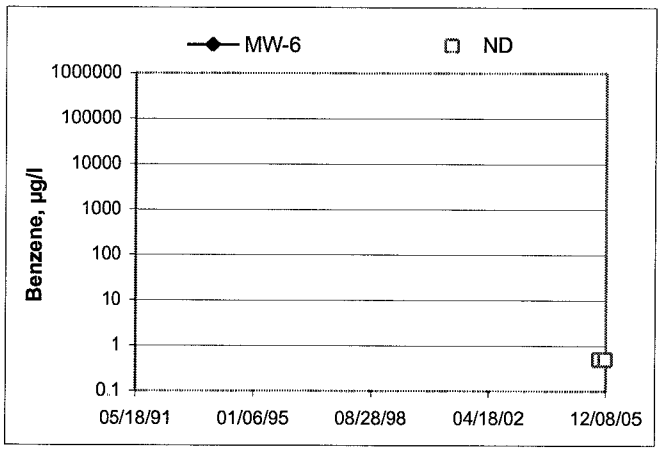
Groundwater Elevations vs. Time
76 Station 5105

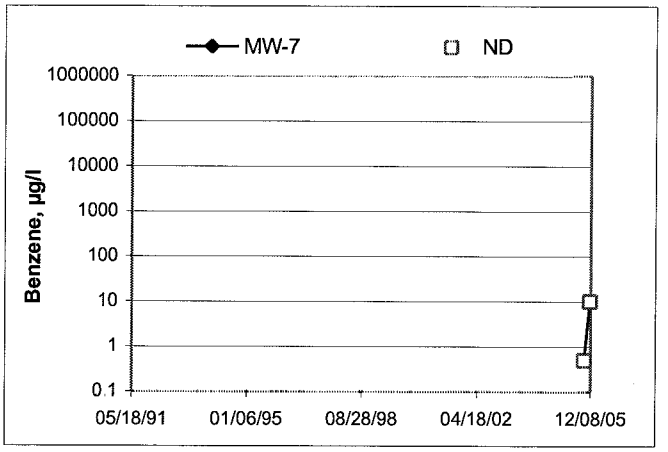


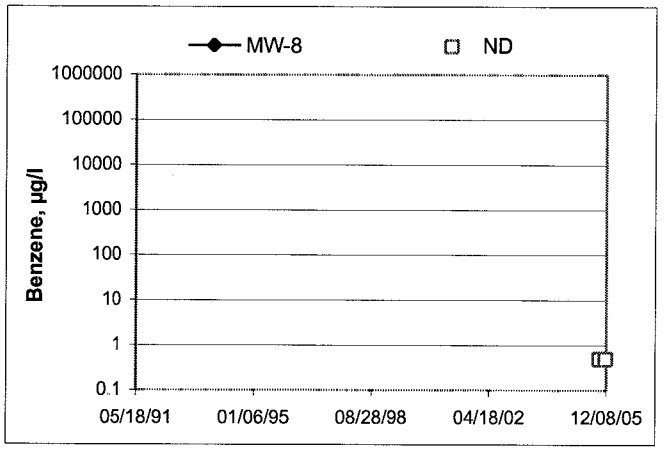
Benzene Concentrations vs Time
76 Station 5105

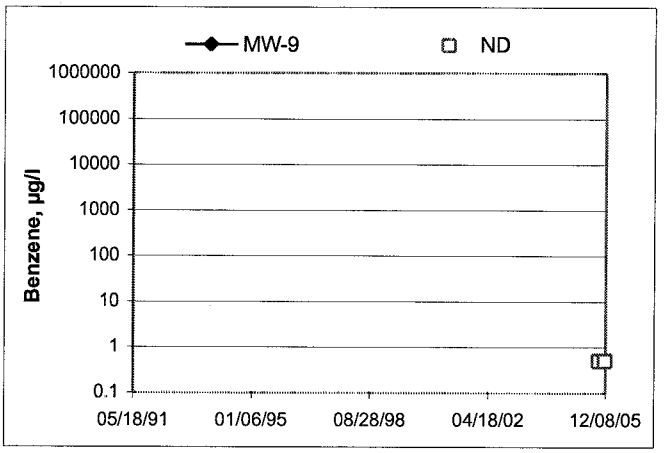


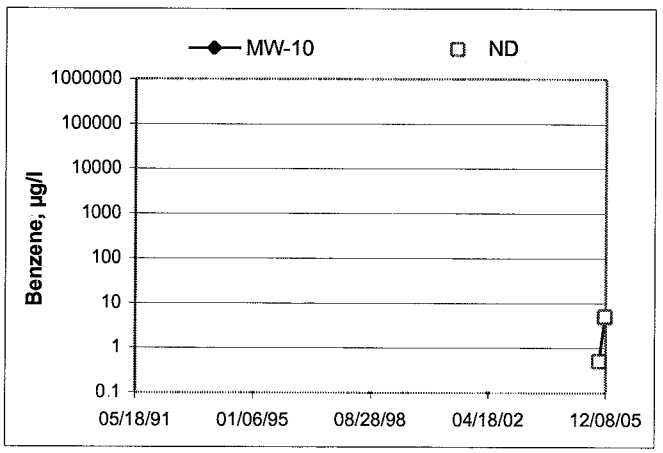


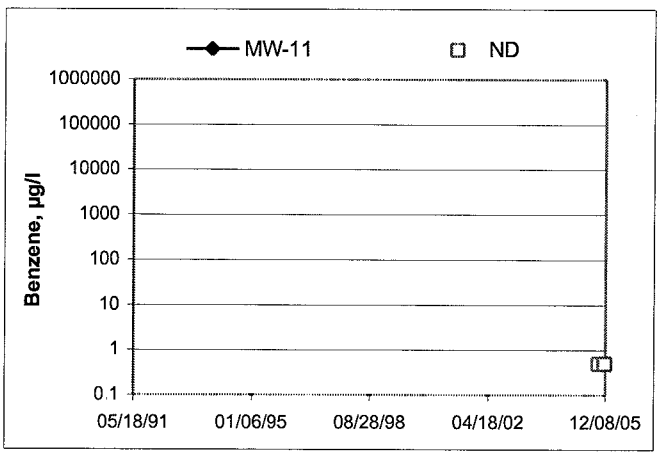




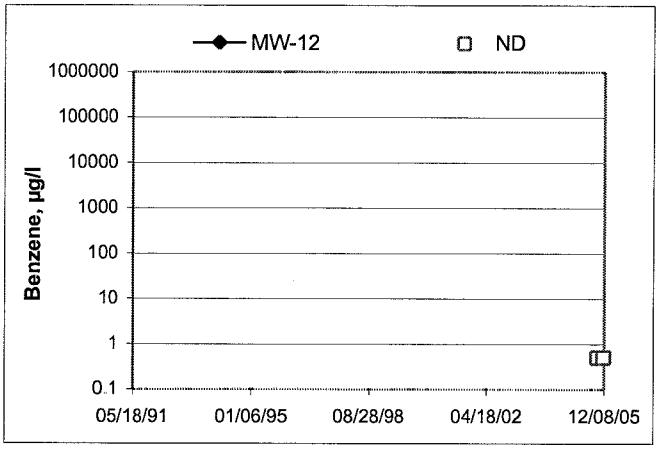








Benzene Concentrations vs Time
76 Station 5105



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 measurements 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, sample time, and the sampler's 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 the 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 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 wells, 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: Anthony Job #/Task #: 4105 0001/FA20 Date: 12-01-05

Site # 5105 Project Manager A. Collins Page 1 of 1

Well #	Time Gauged	TOC	Total Depth	Depth to Water	Depth to Product	Product Thickness (feet)	Time Sampled	Misc. Well Notes
MW-8	0905	—	25.19	13.64	—	—	1206	2"
MW-9	0910	—	25.23	14.14	—	—	1216	2"
MW-6	0914	—	25.13	15.02	—	—	1225	2"
MW-3	0919	—	24.36	11.29	—	—	1237	2"
MW-7	0923	—	25.27	13.80	—	—	1244	2"
MW-11	0929	—	25.06	12.19	—	—	1255	2"
MW-1	0933	—	28.78	13.65	—	—	1304	2"
MW-10	0937	—	24.77	12.65	—	—	1314	2"
MW-12	0942	—	24.73	10.78	—	—	1323	2"

FIELD DATA COMPLETE ✓ QA/QC ✓ COC ✓ WELL BOX CONDITION SHEETS ✓

WTT CERTIFICATE MANIFEST DRUM INVENTORY ✓ TRAFFIC CONTROL

GROUNDWATER SAMPLING FIELD NOTES

Technician: Anthony

Site: 5109 Project No.: 41050001 Date: 12-1-05

Well No.: MW-8 Purge Method: D-2

Depth to Water (feet): 13.64 Depth to Product (feet): —

Total Depth (feet): 25.19 LPH & Water Recovered (gallons): —

Water Column (feet): 11.55 Casing Diameter (Inches): 2"

80% Recharge Depth (feet) 15.95 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.
1037			2	560	17.7	7.11		
			4	544	18.0	7.10		
	1041		6	552	18.5	7.13		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1370	6	1206

Comments:

Well No.: MW-9 Purge Method: D-2

Depth to Water (feet): 14.14 Depth to Product (feet): —

Total Depth (feet): 25.23 LPH & Water Recovered (gallons): —

Water Column (feet): 11.09 Casing Diameter (Inches): 2"

80% Recharge Depth (feet) 16.36 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.
1047			2	612	17.4	7.29		
			4	597	~~17.7~~ 17.8	7.26		
	1050		6	576	17.9	7.16		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1438	6	1216

Comments:

GROUNDWATER SAMPLING FIELD NOTES

Technician: Anthony

Site: 5105 Project No.: 41050001 Date: 12-01-05

Well No.: MW-6 Purge Method: D.2

Depth to Water (feet): 15.02 Depth to Product (feet): —

Total Depth (feet): 25.13 LPH & Water Recovered (gallons): —

Water Column (feet): 10.11 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 17.04 1 Well Volume (gallons): AH ~~1.61~~ 2

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F (C))	pH	Turbidity	D.O
1055			2	579	17.9	6.54		
			4	570	18.7	6.47		
	1058		6	553	18.6	6.44		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1505	6	1229

Comments:

Well No.: MW-3 Purge Method: D.2

Depth to Water (feet): 11.29 Depth to Product (feet): —

Total Depth (feet): 24.36 LPH & Water Recovered (gallons): —

Water Column (feet): 13.07 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 13.90 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
1102			2	477	18.4	6.53		
			4	450	19.1	6.51		
	1105		6	448	19.3	6.46		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1136	6	1237

Comments:

GROUNDWATER SAMPLING FIELD NOTES

Technician: Anthony

Site: 5105 Project No.: 41050001 Date: 12-01-05

Well No.: MW-7 Purge Method: Dra

Depth to Water (feet): 13.80 Depth to Product (feet): —

Total Depth (feet): 25.27 LPH & Water Recovered (gallons): —

Water Column (feet): 11.47 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 16.09 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.
1100			2	939	19.2	6.79		
			4	977	19.6	6.78		
	1113		6	916	19.8	6.77		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1505	6	1244

Comments:

Well No.: MW-11 Purge Method: Dra

Depth to Water (feet): 12.19 Depth to Product (feet): —

Total Depth (feet): 25.06 LPH & Water Recovered (gallons): —

Water Column (feet): 12.87 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 14.76 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.
			2	170.1	18.6	8.15		
			4	105.2	18.5	9.00		
	1122		6	79.2	18.4	9.53		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1219	6	1255

Comments:

GROUNDWATER SAMPLING FIELD NOTES

Technician: Anthony

Site: 5105 Project No.: 41050001 Date: 12-01-05

Well No.: MW-1 Purge Method: Pump

Depth to Water (feet): 13.65 Depth to Product (feet): —

Total Depth (feet): 28.38 LPH & Water Recovered (gallons): —

Water Column (feet): 14.73 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 13.65 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
1125			2	911	19.0	6.92		
			4	927	19.3	6.96		
	1129		6	931	19.5	6.93		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1368	6	1304

Comments:

Well No.: MW-10 Purge Method: Pump

Depth to Water (feet): 12.65 Depth to Product (feet): —

Total Depth (feet): 24.77 LPH & Water Recovered (gallons): —

Water Column (feet): 12.12 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 15.07 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
1134			2	483	19.4	6.91		
			4	477	18.9	6.92		
	1137		6	471	19.0	6.90		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1265	6	1314

Comments:

GROUNDWATER SAMPLING FIELD NOTES

Technician: Anthony

Site: 5105 Project No.: 41050001 Date: 12-01-05

Well No.: MW-12 Purge Method: D-2

Depth to Water (feet): 10.78 Depth to Product (feet): —

Total Depth (feet): 24.73 LPH & Water Recovered (gallons): —

Water Column (feet): 13.95 Casing Diameter (Inches): 2"

80% Recharge Depth (feet): 13.57 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.
1143			2	516	19.0	6.33		
			4	511	19.7	6.54		
	1146		6	503	20.2	6.76		

Static at Time Sampled	Total Gallons Purged	Time Sampled
1086	6	1723

Comments:

Well No.: Purge Method:

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

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

Water Column (feet): Casing Diameter (Inches):

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

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH	Turbidity	D.O.

Static at Time Sampled	Total Gallons Purged	Time Sampled

Comments:

ANALYTICAL REPORT

Job Number: 720-841-1

Job Description: Conoco Phillips #5105, Santa Rosa

For:

TRC Solutions
21 Technology Drive
Irvine, CA 92718

Attention: Ms. Anju Farfan

Dimple Sharma
Project Manager I
dsharma@stl-inc.com
12/22/2005

METHOD SUMMARY

Client: TRC Solutions

Job Number: 720-841-1

Description	Lab Location	Method	Preparation Method		
Matrix: Water					
Volatile Organic Compounds by GC/MS	STL-SF	SW846	8260B		
Purge-and-Trap	STL-SF			SW846	5030B
Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)	STL-SF	SW846	8015B		
Organic Compounds in Water by Microextraction	STL-SF			SW846	3511

LAB REFERENCES:

STL-SF = STL-San Francisco

METHOD REFERENCES:

SW846 - "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

SAMPLE SUMMARY

Client: TRC Solutions

Job Number: 720-841-1

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled		Date/Time Received	
720-841-1	MW-8	Water	12/01/2005	1206	12/05/2005	1700
720-841-2	MW-9	Water	12/01/2005	1216	12/05/2005	1700
720-841-3	MW-6	Water	12/01/2005	1225	12/05/2005	1700
720-841-4	MW-3	Water	12/01/2005	1237	12/05/2005	1700
720-841-5	MW-7	Water	12/01/2005	1244	12/05/2005	1700
720-841-6	MW-11	Water	12/01/2005	1255	12/05/2005	1700
720-841-7	MW-1	Water	12/01/2005	1304	12/05/2005	1700
720-841-8	MW-10	Water	12/01/2005	1314	12/05/2005	1700
720-841-9	MW-12	Water	12/01/2005	1323	12/05/2005	1700

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-8

Lab Sample ID: 720-841-1
Client Matrix: Water

Date Sampled: 12/01/2005 1206
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/14/2005 0915
Date Prepared: 12/14/2005 0915

Analysis Batch: 720-3036

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8	99	77 - 121
1,2-Dichloroethane-d4	87	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-9

Lab Sample ID: 720-841-2
Client Matrix: Water

Date Sampled: 12/01/2005 1216
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/14/2005 1020
Date Prepared: 12/14/2005 1020

Analysis Batch: 720-3036

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	1.0		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8	100	77 - 121
1,2-Dichloroethane-d4	87	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-6

Lab Sample ID: 720-841-3
Client Matrix: Water

Date Sampled: 12/01/2005 1225
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/14/2005 1041
Date Prepared: 12/14/2005 1041

Analysis Batch: 720-3036

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8	101	77 - 121
1,2-Dichloroethane-d4	86	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-3

Lab Sample ID: 720-841-4
Client Matrix: Water

Date Sampled: 12/01/2005 1237
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/14/2005 1103
Date Prepared: 12/14/2005 1103

Analysis Batch: 720-3036

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	1.1		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8	98	77 - 121
1,2-Dichloroethane-d4	85	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-7

Lab Sample ID: 720-841-5
Client Matrix: Water

Date Sampled: 12/01/2005 1244
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 20
Date Analyzed: 12/15/2005 1218
Date Prepared: 12/15/2005 1218

Analysis Batch: 720-3082

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		10
Benzene	ND		10
Ethanol	ND		2000
Ethylbenzene	ND		10
MTBE	1200		10
TAME	ND		10
Toluene	ND		10
Xylenes, Total	ND		20
TBA	2400		100
DIPE	ND		20
EDB	ND		10
Gasoline Range Organics (GRO)-C6-C12	ND		1000
Ethyl tert-butyl ether	ND		10

Surrogate	%Rec	Acceptance Limits
Toluene-d8	101	77 - 121
1,2-Dichloroethane-d4	93	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-11

Lab Sample ID: 720-841-6
Client Matrix: Water

Date Sampled: 12/01/2005 1255
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/15/2005 1240
Date Prepared: 12/15/2005 1240

Analysis Batch: 720-3082

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	81		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8	98	77 - 121
1,2-Dichloroethane-d4	83	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-1

Lab Sample ID: 720-841-7
Client Matrix: Water

Date Sampled: 12/01/2005 1304
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 20
Date Analyzed: 12/15/2005 1345
Date Prepared: 12/15/2005 1345

Analysis Batch: 720-3082

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		10
Benzene	ND		10
Ethanol	ND		2000
Ethylbenzene	ND		10
MTBE	1000		10
TAME	ND		10
Toluene	ND		10
Xylenes, Total	ND		20
TBA	ND		100
DIPE	ND		20
EDB	ND		10
Gasoline Range Organics (GRO)-C6-C12	ND		1000
Ethyl tert-butyl ether	ND		10

Surrogate	%Rec	Acceptance Limits
Toluene-d8	102	77 - 121
1,2-Dichloroethane-d4	87	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-10

Lab Sample ID: 720-841-8
Client Matrix: Water

Date Sampled: 12/01/2005 1314
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 10
Date Analyzed: 12/15/2005 1302
Date Prepared: 12/15/2005 1302

Analysis Batch: 720-3082

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		5.0
Benzene	ND		5.0
Ethanol	ND		1000
Ethylbenzene	ND		5.0
MTBE	760		5.0
TAME	ND		5.0
Toluene	ND		5.0
Xylenes, Total	ND		10
TBA	93		50
DIPE	ND		10
EDB	ND		5.0
Gasoline Range Organics (GRO)-C6-C12	ND		500
Ethyl tert-butyl ether	ND		5.0

Surrogate	%Rec	Acceptance Limits
Toluene-d8	103	77 - 121
1,2-Dichloroethane-d4	101	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-12

Lab Sample ID: 720-841-9
Client Matrix: Water

Date Sampled: 12/01/2005 1323
Date Received: 12/05/2005 1700

8260B Volatile Organic Compounds by GC/MS

Method: 8260B
Preparation: 5030B
Dilution: 1.0
Date Analyzed: 12/15/2005 1323
Date Prepared: 12/15/2005 1323

Analysis Batch: 720-3082

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\12
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result (ug/L)	Qualifier	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	6.2		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	%Rec	Acceptance Limits
Toluene-d8	100	77 - 121
1,2-Dichloroethane-d4	84	73 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-8

Lab Sample ID: 720-841-1
Client Matrix: Water

Date Sampled: 12/01/2005 1206
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/11/2005 0911
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	87	60 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-9

Lab Sample ID: 720-841-2
Client Matrix: Water

Date Sampled: 12/01/2005 1216
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/11/2005 0943
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	86	60 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-6

Lab Sample ID: 720-841-3
Client Matrix: Water

Date Sampled: 12/01/2005 1225
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/11/2005 1015
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	84	60 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-3

Lab Sample ID: 720-841-4
Client Matrix: Water

Date Sampled: 12/01/2005 1237
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/11/2005 1047
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	86	60 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-7

Lab Sample ID: 720-841-5
Client Matrix: Water

Date Sampled: 12/01/2005 1244
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/11/2005 1120
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	80	60 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-11

Lab Sample ID: 720-841-6
Client Matrix: Water

Date Sampled: 12/01/2005 1255
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/11/2005 1153
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	91	60 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-1

Lab Sample ID: 720-841-7
Client Matrix: Water

Date Sampled: 12/01/2005 1304
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/11/2005 1226
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	89	60 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-10

Lab Sample ID: 720-841-8
Client Matrix: Water

Date Sampled: 12/01/2005 1314
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/11/2005 1259
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	88	60 - 130

Client: TRC Solutions

Job Number: 720-841-1

Client Sample ID: MW-12

Lab Sample ID: 720-841-9
Client Matrix: Water

Date Sampled: 12/01/2005 1323
Date Received: 12/05/2005 1700

8015B Nonhalogenated Organics using GC/FID -Modified (Diesel Range Organics)

Method: 8015B
Preparation: 3511
Dilution: 1.0
Date Analyzed: 12/12/2005 1123
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result (ug/L)	Qualifier	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	%Rec	Acceptance Limits
o-Terphenyl	85	60 - 130

DATA REPORTING QUALIFIERS

Lab Section	Qualifier	Description

Client: TRC Solutions

Job Number: 720-841-1

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
GC/MS VOA				
Analysis Batch:720-3036				
LCS 720-3036/4	Lab Control Spike	Water	8260B	
LCSD 720-3036/3	Lab Control Spike Duplicate	Water	8260B	
MB 720-3036/5	Method Blank	Water	8260B	
720-841-1	MW-8	Water	8260B	
720-841-1MS	Matrix Spike	Water	8260B	
720-841-1MSD	Matrix Spike Duplicate	Water	8260B	
720-841-2	MW-9	Water	8260B	
720-841-3	MW-6	Water	8260B	
720-841-4	MW-3	Water	8260B	
Analysis Batch:720-3082				
LCS 720-3082/5	Lab Control Spike	Water	8260B	
LCSD 720-3082/4	Lab Control Spike Duplicate	Water	8260B	
MB 720-3082/6	Method Blank	Water	8260B	
720-841-5	MW-7	Water	8260B	
720-841-6	MW-11	Water	8260B	
720-841-7	MW-1	Water	8260B	
720-841-8	MW-10	Water	8260B	
720-841-9	MW-12	Water	8260B	
720-995-A-1 MS	Matrix Spike	Water	8260B	
720-995-A-1 MSD	Matrix Spike Duplicate	Water	8260B	

Client: TRC Solutions

Job Number: 720-841-1

QC Association Summary

Lab Sample ID	Client Sample ID	Client Matrix	Method	Prep Batch
GC Semi VOA				
Prep Batch: 720-2748				
LCS 720-2748/2-A	Lab Control Spike	Water	3511	
LCSD 720-2748/3-A	Lab Control Spike Duplicate	Water	3511	
MB 720-2748/1-A	Method Blank	Water	3511	
720-841-1	MW-8	Water	3511	
720-841-2	MW-9	Water	3511	
720-841-3	MW-6	Water	3511	
720-841-4	MW-3	Water	3511	
720-841-5	MW-7	Water	3511	
720-841-6	MW-11	Water	3511	
720-841-7	MW-1	Water	3511	
720-841-8	MW-10	Water	3511	
720-841-9	MW-12	Water	3511	
Analysis Batch:720-2953				
LCS 720-2748/2-A	Lab Control Spike	Water	8015B	720-2748
LCSD 720-2748/3-A	Lab Control Spike Duplicate	Water	8015B	720-2748
MB 720-2748/1-A	Method Blank	Water	8015B	720-2748
720-841-1	MW-8	Water	8015B	720-2748
720-841-2	MW-9	Water	8015B	720-2748
720-841-3	MW-6	Water	8015B	720-2748
720-841-4	MW-3	Water	8015B	720-2748
720-841-5	MW-7	Water	8015B	720-2748
720-841-6	MW-11	Water	8015B	720-2748
720-841-7	MW-1	Water	8015B	720-2748
720-841-8	MW-10	Water	8015B	720-2748
720-841-9	MW-12	Water	8015B	720-2748

Client: TRC Solutions

Job Number: 720-841-1

Method Blank - Batch: 720-3036

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-3036/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2005 0833
Date Prepared: 12/14/2005 0833

Analysis Batch: 720-3036
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\1:
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	% Rec	Acceptance Limits
Toluene-d8	98	77 - 121
1,2-Dichloroethane-d4	83	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: TRC Solutions

Job Number: 720-841-1

Laboratory Control/
Laboratory Control Duplicate Recovery Report - Batch: 720-3036

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-3036/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2005 0750
Date Prepared: 12/14/2005 0750

Analysis Batch: 720-3036
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\1
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-3036/3
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2005 0811
Date Prepared: 12/14/2005 0811

Analysis Batch: 720-3036
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\121
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec LCS	% Rec LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	96	99	69 - 129	3	25		
MTBE	98	100	65 - 165	2	25		
Toluene	100	102	70 - 130	1	25		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8	101	101	77 - 121
1,2-Dichloroethane-d4	77	78	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: TRC Solutions

Job Number: 720-841-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-3036

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 720-841-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2005 0936
Date Prepared: 12/14/2005 0936

Analysis Batch: 720-3036
Prep Batch: N/A

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-841-1
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/14/2005 0958
Date Prepared: 12/14/2005 0958

Analysis Batch: 720-3036
Prep Batch: N/A

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\1
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. MS	% Rec. MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	105	99	69 - 129	7	20		
MTBE	112	108	65 - 165	3	20		
Toluene	107	106	70 - 130	0	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8	104	102	77 - 121
1,2-Dichloroethane-d4	85	83	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: TRC Solutions

Job Number: 720-841-1

Method Blank - Batch: 720-3082

Method: 8260B
Preparation: 5030B

Lab Sample ID: MB 720-3082/6
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2005 0844
Date Prepared: 12/15/2005 0844

Analysis Batch: 720-3082
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\1:
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	Result	Qual	RL
1,2-Dichloroethane	ND		0.50
Benzene	ND		0.50
Ethanol	ND		100
Ethylbenzene	ND		0.50
MTBE	ND		0.50
TAME	ND		0.50
Toluene	ND		0.50
Xylenes, Total	ND		1.0
TBA	ND		5.0
DIPE	ND		1.0
EDB	ND		0.50
Gasoline Range Organics (GRO)-C6-C12	ND		50
Ethyl tert-butyl ether	ND		0.50

Surrogate	% Rec	Acceptance Limits
Toluene-d8	102	77 - 121
1,2-Dichloroethane-d4	84	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: TRC Solutions

Job Number: 720-841-1

Laboratory Control/
Laboratory Control Duplicate Recovery Report - Batch: 720-3082

Method: 8260B
Preparation: 5030B

LCS Lab Sample ID: LCS 720-3082/5
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2005 0801
Date Prepared: 12/15/2005 0801

Analysis Batch: 720-3082
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\1:
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

LCSD Lab Sample ID: LCSD 720-3082/4
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2005 0822
Date Prepared: 12/15/2005 0822

Analysis Batch: 720-3082
Prep Batch: N/A
Units: ug/L

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\121
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Benzene	94	97	69 - 129	3	25		
MTBE	102	96	65 - 165	6	25		
Toluene	100	101	70 - 130	1	25		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
Toluene-d8	100	104	77 - 121
1,2-Dichloroethane-d4	83	79	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: TRC Solutions

Job Number: 720-841-1

Matrix Spike/
Matrix Spike Duplicate Recovery Report - Batch: 720-3082

Method: 8260B
Preparation: 5030B

MS Lab Sample ID: 720-995-A-1 MS
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2005 0947
Date Prepared: 12/15/2005 0947

Analysis Batch: 720-3082
Prep Batch: N/A

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

MSD Lab Sample ID: 720-995-A-1 MSD
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/15/2005 1009
Date Prepared: 12/15/2005 1009

Analysis Batch: 720-3082
Prep Batch: N/A

Instrument ID: Varian 3900A
Lab File ID: c:\saturnws\data\200512\1
Initial Weight/Volume: 10 mL
Final Weight/Volume: 10 mL

Analyte	% Rec MS	% Rec MSD	Limit	RPD	RPD Limit	MS Qual	MSD Qual
Benzene	106	108	69 - 129	2	20		
MTBE	117	110	65 - 165	6	20		
Toluene	111	113	70 - 130	2	20		

Surrogate	MS % Rec	MSD % Rec	Acceptance Limits
Toluene-d8	103	106	77 - 121
1,2-Dichloroethane-d4	84	83	73 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

Client: TRC Solutions

Job Number: 720-841-1

Method Blank - Batch: 720-2748

Method: 8015B
Preparation: 3511

Lab Sample ID: MB 720-2748/1-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/11/2005 0839
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748
Units: ug/L

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	Result	Qual	RL
Diesel Range Organics [C9-C24]	ND		50

Surrogate	% Rec	Acceptance Limits
o-Terphenyl	85	60 - 130

Laboratory Control/
Laboratory Control Duplicate Recovery Report - Batch: 720-2748

Method: 8015B
Preparation: 3511

LCS Lab Sample ID: LCS 720-2748/2-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/11/2005 0633
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748
Units: ug/L

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

LCSD Lab Sample ID: LCSD 720-2748/3-A
Client Matrix: Water
Dilution: 1.0
Date Analyzed: 12/11/2005 0704
Date Prepared: 12/08/2005 1220

Analysis Batch: 720-2953
Prep Batch: 720-2748
Units: ug/L

Instrument ID: Varian DRO4
Lab File ID: N/A
Initial Weight/Volume: 35.00 mL
Final Weight/Volume: 2 mL
Injection Volume:
Column ID: PRIMARY

Analyte	% Rec. LCS	% Rec. LCSD	Limit	RPD	RPD Limit	LCS Qual	LCSD Qual
Diesel Range Organics [C9-C24]	67	74	60 - 150	10	25		

Surrogate	LCS % Rec	LCSD % Rec	Acceptance Limits
o-Terphenyl	96	101	60 - 130

Calculations are performed before rounding to avoid round-off errors in calculated results.

90062

STL-San Francisco

1220 Quarry Lane

Pleasanton, CA 94566

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

ConocoPhillips Chain Of Custody Record

ConocoPhillips Site Manager:

INVOICE REMITTANCE ADDRESS: 720-841

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

ConocoPhillips Work Order Number: 2479TRLS01

ConocoPhillips Cost Object:

DATE: 12-01-05

PAGE: 1 of 1

SAMPLING COMPANY: TRC	Valid Value ID:
CONOCOPHILLIPS SITE NUMBER: 5105	GLOBAL ID NO.: T0609700585
ADDRESS: 21 Technology Drive, Irvine CA 92618	SITE ADDRESS (Street and City): 1950 Guerneville rd Santa Rosa
CONOCOPHILLIPS SITE MANAGER: Thomas Kosel	
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	EMAIL:
LAB USE ONLY	
TELEPHONE: 949-341-7440	FAX: 949-753-0111
EMAIL: afarfan@trcsolutions.com	
SAMPLER NAME(S) (Print): Bethany	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

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

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	TPH by 8260B	BTEX by 8260B	8OXYS by 8260B									TEMPERATURE ON RECEIPT: 4°
	MW-8	12-1	1206	GW	6									X	X	X	X									
	MW-9		1216																							
	MW-6		1225																							
	MW-3		1237																							
	MW-7		1244																							
	MW-11		1255																							
	MW-1		1309																							
	MW-10		1314																							
	MW-12		1325																							

Relinquished by: (Signature)	Received by: (Signature)	Date	Time
[signature]	[signature]	12-06-01	1400
[signature]	[signature]	12-05-05	1700

LOGIN SAMPLE RECEIPT CHECK LIST

Client: TRC Solutions

Job Number: 720-841-1

Login Number: 841

Question	T/F/NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	NA	
The cooler's custody seal, if present.	NA	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present	True	
Samples do not require splitting or compositing	True	

STATEMENTS

Purge Water Disposal

Non-hazardous groundwater produced during purging a nd sampling of monitoring was accumulated at TRC's groundwater monitoring facility at Concord, California, for transportation by Onyx Transportation, Inc., to the ConocoPhillips Refinery at Rodeo, California. Disposal at the Rodeo facility was authorized by ConocoPhillips in accordance with "ESD Standard Operating Procedures – Water Quality and Compliance", as revised on February 7, 2003. Documentation of compliance with ConocoPhillips requirements is provided by an ESD Form R -149, which is on file at TRC's Concord Office. Purge water containing a significant amount of liquid -phase hydrocarbons was accumulated separately in drums for transportation and disposal by Filter Recycling, Inc.

Limitations

The fluid level monitoring and groundwater sampling activ ities 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.