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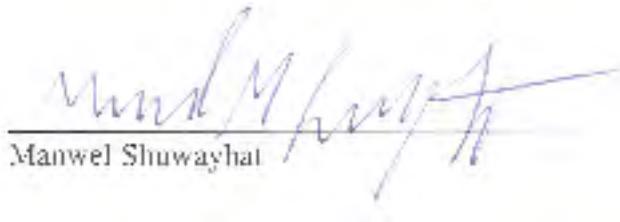
Allterra Environmental, Inc.
849 Almar Avenue, Suite C
No. 281
Santa Cruz, California 95060

Client: Manwel Shuwayhat
Project Location: 160 Holmes Street, Livermore, California
Subject: Fourth Quarter 2011 Groundwater Monitoring Report
Report Date: December 8, 2011

To Whom It May Concern:

I have reviewed the report referenced above and approve its distribution to the necessary regulatory agencies. Should any of the regulatory agencies require it, "I declare, under penalty of perjury, that the information and/or recommendations contained in the attached proposal or report is true and correct to the best of my knowledge."

Sincerely,



A handwritten signature in blue ink, appearing to read "Manwel Shuwayhat". Below the signature is a horizontal line.

Manwel Shuwayhat



**Fourth Quarter 2011 Groundwater Monitoring Report
Fuel Leak Case No. RO0000324, Livermore Gas and Mini Mart
160 Holmes Street, Livermore, California**

Date:
December 8, 2011

Project No.:
160

Prepared For:
Livermore Gas and Mini mart
Attention: Manwel and Samira Shuwayhat
54 Wolfe Canyon Road
Kentfield, California 94904

Allterra Environmental, Inc.
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<http://www.allterraenv.com>



December 8, 2011

Project No.: 160

Manwel and Samira Shuwayhat
Livermore Gas and Mini Mart
54 Wolfe Canyon Road
Kentfield, California 94904

**SUBJECT: Fourth Quarter 2011 Groundwater Monitoring Report for Fuel Leak Case
No. RO0000324, Livermore Gas and Mini Mart, 160 Holmes Street,
Livermore, California**

Dear Mr. and Mrs. Shuwayhat:

On your behalf, Allterra Environmental, Inc. (Allterra) has prepared this Fourth Quarter 2011 Groundwater Monitoring Report for the property located at 160 Holmes Street in Livermore, California (Site). This report describes the field and analytical methods, provides a summary of groundwater monitoring results, and presents conclusions and recommendations regarding groundwater conditions at the Site. Monitoring activities were completed in accordance with Alameda County Environmental Health Services (ACEHS) and Regional Water Quality Control Board (RWQCB) guidelines, and Allterra's protocols presented in Appendix A.

Site Location and Description

The Site is located on the southwest corner of Holmes Street and Second Street at 160 Holmes Street in Livermore, California (Figure 1). The Site currently operates as a service station and convenience store. The Site is paved with concrete and asphalt, and a canopy covers the fuel dispensers. Pertinent site features, such as monitoring well locations, are presented on Figure 2.

Groundwater Monitoring for Fourth Quarter 2011

Field Activities

On November 4, 7 and 8, 2011, Allterra conducted groundwater monitoring at fifteen on-site and off-site monitoring wells (MW-1A through MW-9B) and three on-site extraction wells (EW-1 through EW-3). Groundwater monitoring activities included the measurement of static groundwater levels, an evaluation of groundwater in the wells for the presence of petroleum hydrocarbons, field parameter testing, and groundwater quality sampling. Prior to sampling, all groundwater wells were purged using disposable bailers until temperature, color, specific conductance, and turbidity readings had stabilized or until at least three casing volumes had been removed. Groundwater sampling field logs are included in Appendix B.

Laboratory Analysis

Groundwater samples collected from the monitoring wells and the extraction wells were submitted under chain-of-custody documentation to McCampbell Analytical, Inc., of Pittsburg, California, a State of California certified laboratory (ELAP #1644). All samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by EPA method 8015B, and for benzene,

toluene, ethylbenzene, xylenes (BTEX), and methyl tert-butyl ether (MTBE) by EPA Method 8021B. Additionally, select wells were tested for total petroleum hydrocarbons as diesel (TPHd) by EPA method 8015B, fuel oxygenates tert-amyl methyl ether (TAME), tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), and MTBE, and lead scavengers 1,2-dibromoethane (EDB) and 1,2-dichloroethane (1,2-DCA) by EPA Method 8260B. Copies of the chain-of-custody documentation and the certified analytical report, including quality assurance and quality control (QA/QC) data, are included in Appendix C.

Groundwater Gradient and Flow Direction

On November 4, 2011, Allterra personnel measured and recorded depths to groundwater from the tops of well casings (TOC) for each well. Recorded depths to groundwater ranged from 22.77 to 24.50 feet below TOC. The surveyed elevations of each well casing (measured in feet relative to mean sea level), depths to groundwater, and calculated groundwater elevations are presented in Table 1 and depicted on Figure 3 as groundwater elevation contours. For the November 2011 monitoring event, the general groundwater flow direction was to the northwest at a gradient of approximately 0.0071 feet per foot (ft/ft).

Analytical Results

Petroleum constituents were detected in nine of the eighteen wells sampled during this event. A summary of current and historical groundwater analytical results is presented in Table 2. Additionally, concentrations of dissolved TPHg, TPHd, benzene, and MTBE in groundwater are shown on Figures 4 through 6. A discussion of current groundwater analytical results is presented below:

- TPHg was detected in three wells at concentrations ranging from 78 micrograms per liter ($\mu\text{g/L}$) in EW-1 to 100 $\mu\text{g/L}$ in MW-1A. However, TPHg was reported as ND<6,000 $\mu\text{g/L}$ in EW-3.
- TPHd was detected in two wells at concentrations of 150 $\mu\text{g/L}$ in MW-1A and 860 $\mu\text{g/L}$ in EW-3.
- Benzene was detected in one well (MW-1A) at 1.3 $\mu\text{g/L}$. However, benzene was reported as ND<50 $\mu\text{g/L}$ in EW-3.
- Toluene was detected in four wells at concentrations ranging from 0.64 $\mu\text{g/L}$ in MW-7A to 2.6 $\mu\text{g/L}$ in MW-7B. However, toluene was reported as ND<50 $\mu\text{g/L}$ in EW-3.
- Ethylbenzene was detected in one well (EW-3) at a concentration of 60 $\mu\text{g/L}$.
- Xylenes were detected in two wells at concentrations of 1.1 $\mu\text{g/L}$ in MW-1A and 130 $\mu\text{g/L}$ in EW-3.
- MTBE was detected in seven wells at concentrations ranging from 0.67 $\mu\text{g/L}$ in MW-7A to 82,000 $\mu\text{g/L}$ in EW-3.

In-Situ Remediation

To address elevated concentrations of petroleum constituents in the source area, Allterra performed in-situ remedial activities at the Site in April and May 2011. Remedial activities were completed in accordance with the ACCDEH-approved Revised Work Plan for In-Situ Soil and Groundwater Remediation, dated March 10, 2011. The scope of work included the pressure injection of two innovative treatment products (RegenOx™ and ORC-Advanced™) in an offset grid pattern throughout the source area. Allterra closely monitored the affects of in-situ remedial efforts by sampling key wells (MW-1A, MW-2A, MW-1B, MW-7A, MW-7B, and EW-1 through EW-3) a week after each injection event, twice biweekly after the final injection event, and quarterly thereafter. A summary of groundwater analytical results is presented in Table 2 and time-trend plots for petroleum constituents in select wells are presented as Figures 7 through 14. A full description of RegenOx™ and ORC-Advanced™ and details of remedial implementation is presented in Allterra's In-Situ Soil and Groundwater Remedial Implementation Report, dated August 19, 2011.

Discussion

Since April 2011, petroleum constituents in groundwater have generally exhibited decreasing trends throughout the in-situ treatment zone with the exception of the limited area near EW-3. Over the post-injection monitoring period, substantial contaminant reduction has occurred in key wells MW-1A, EW-1, and MW-7A located within and downgradient of the source area (Figures 7 through 14). Based on fourth quarter 2011 results, MW-1A demonstrates a 50%, 17%, and 92% reduction in TPHg, TPHd, and MTBE concentrations, respectively. EW-1 shows an 81%, 89%, and 97% reduction in TPHg, TPHd, and MTBE concentrations, respectively. MW-7A demonstrates an 82% and 88% reduction in TPHg and MTBE concentrations, respectively. EW-3 shows a 29% reduction in TPHg concentration, however TPHd and MTBE concentrations have fluctuated since the baseline sampling event. Generally, after an initial increase in contaminant levels in EW-3, concentrations are now displaying decreasing trends.

The initial increase in petroleum constituent concentrations in MW-3 may be attributed to the release of isolated areas of immobilized contaminates previously trapped within heterogeneous soils. Contaminates can often become relatively immobilized in argillaceous soils and/or finer grained zones within a heterogeneous soil, even if this soil is below the phreatic zone. The aggressive, fast acting RegenOx™ is known to forcefully remove contaminates (desorb) from soils in difficult settings. These higher concentrations are inferred to represent liberated contaminates that were released from soil into the groundwater, therefore increasing contaminant concentrations around these wells. The slower acting ORC Advanced™ can now further augment natural processes that break down the contaminates over time and facilitate further attenuation of contaminant concentrations.

Conclusions

Based on the current groundwater monitoring data, Allterra concludes the following:

- The overall groundwater flow direction was to the northwest with an estimated gradient of 0.0071 ft/ft, which is consistent with previous monitoring events.

- For the November 2011 monitoring event, petroleum constituents were detected at or above laboratory detection limits in nine of the eighteen wells sampled.
- The highest concentrations of petroleum constituents remaining in shallow groundwater appear to be limited to the area around well EW-3.
- The highest level of MTBE was detected in extraction well EW-3 (82,000 µg/L), which has a screen interval from 25 to 30 feet bgs. Based on previous quarterly data, the highest TPHg concentration is also likely found in EW-3 (reported as ND<6,000 µg/L).
- Decreasing trends in petroleum constituents in shallow groundwater indicate that in-situ remedial efforts have been effective in treating soil and groundwater in the source area at the Site, and continues to actively address residual contaminates.

Recommendations

Based on the conclusions presented above, Allterra recommends the following:

- Remaining elevated concentrations of MTBE in groundwater around EW-3 should be immediately addressed by using EW-3 to inject a minor volume of additional RegenOx™ into the subsurface. Allterra proposes completing this supplemental treatment at the Site in December 2011. All activities will be documented in the upcoming implementation report.
- All wells will continue to be sampled and analyzed for TPHg, BTEX, and MTBE on a quarterly basis. Only select wells will continue to be analyzed for TPHe, 5-fuel oxygenates, and lead scavengers on a quarterly basis
- Continue with the current quarterly groundwater monitoring at the Site for the purpose of closely monitoring potential contaminant rebound under varying seasonal conditions.

Limitations

Allterra prepared this report for the use of Livermore Gas and Mini Mart, ACEHS and RWQCB in evaluating groundwater quality at selected locations at the time of this study. Statements, conclusions, and recommendations in this report are based solely on the field observations and analytical results related to work performed by Allterra and there is no warranty, expressed or implied. Site conditions and data can change over time; therefore, data presented in this report is only applicable to the timeframe of this study. Allterra's services have been performed in accordance with environmental principles generally accepted at this time and location.

Should you have any questions, please contact Allterra at (831) 425-2608.

Sincerely,
Allterra Environmental, Inc.



Aaron Powers
Staff Geologist



Joe Mangine, P.G. 8423
Senior Geologist

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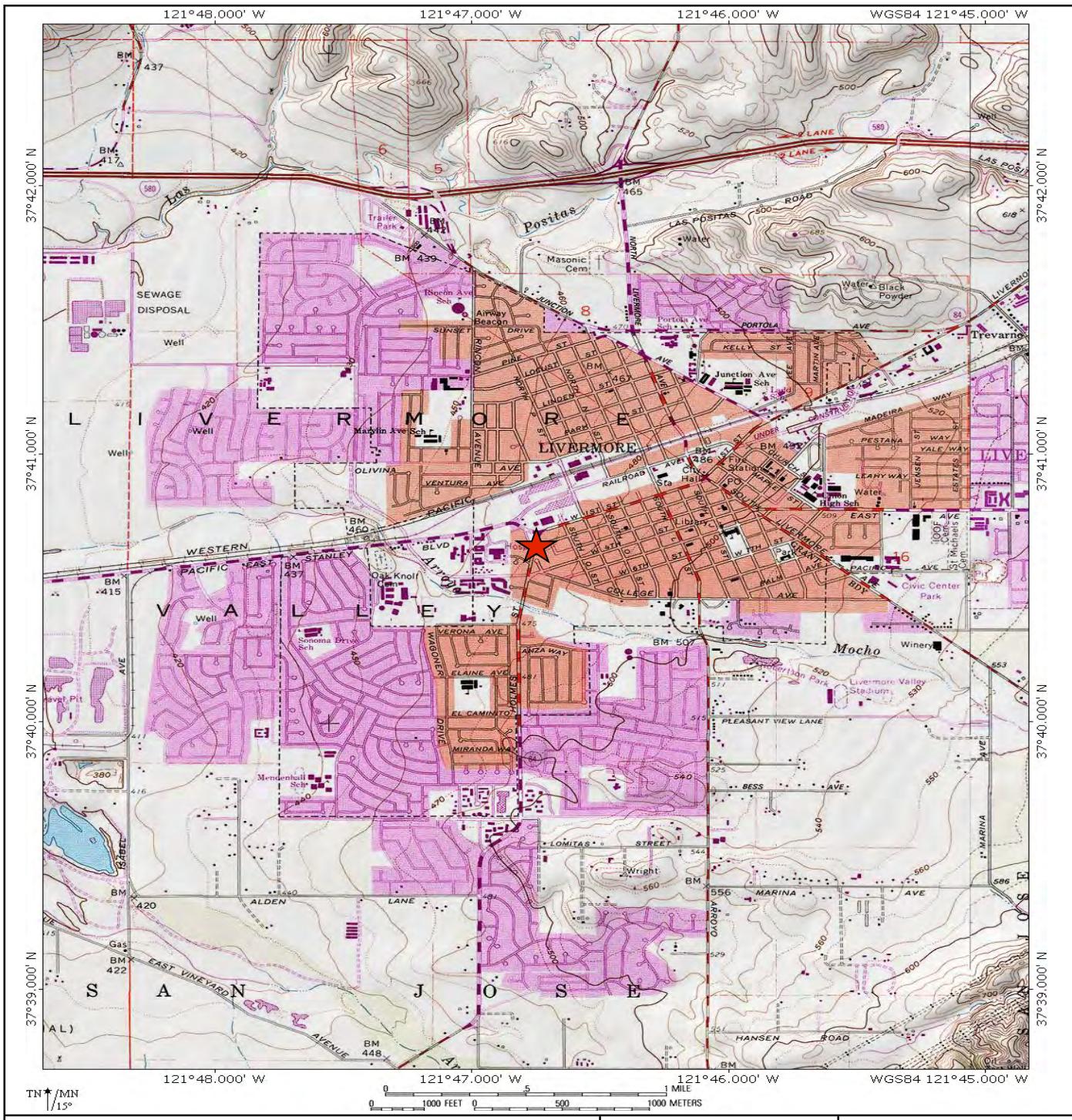
- Table 1, Groundwater Elevation Data
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- Appendix B, Groundwater Sampling Field Logs
- Appendix C, Certified Analytical Report and Chain-of-Custody

cc: Jerry Wickam, ACEHS

FIGURES 1 - 14

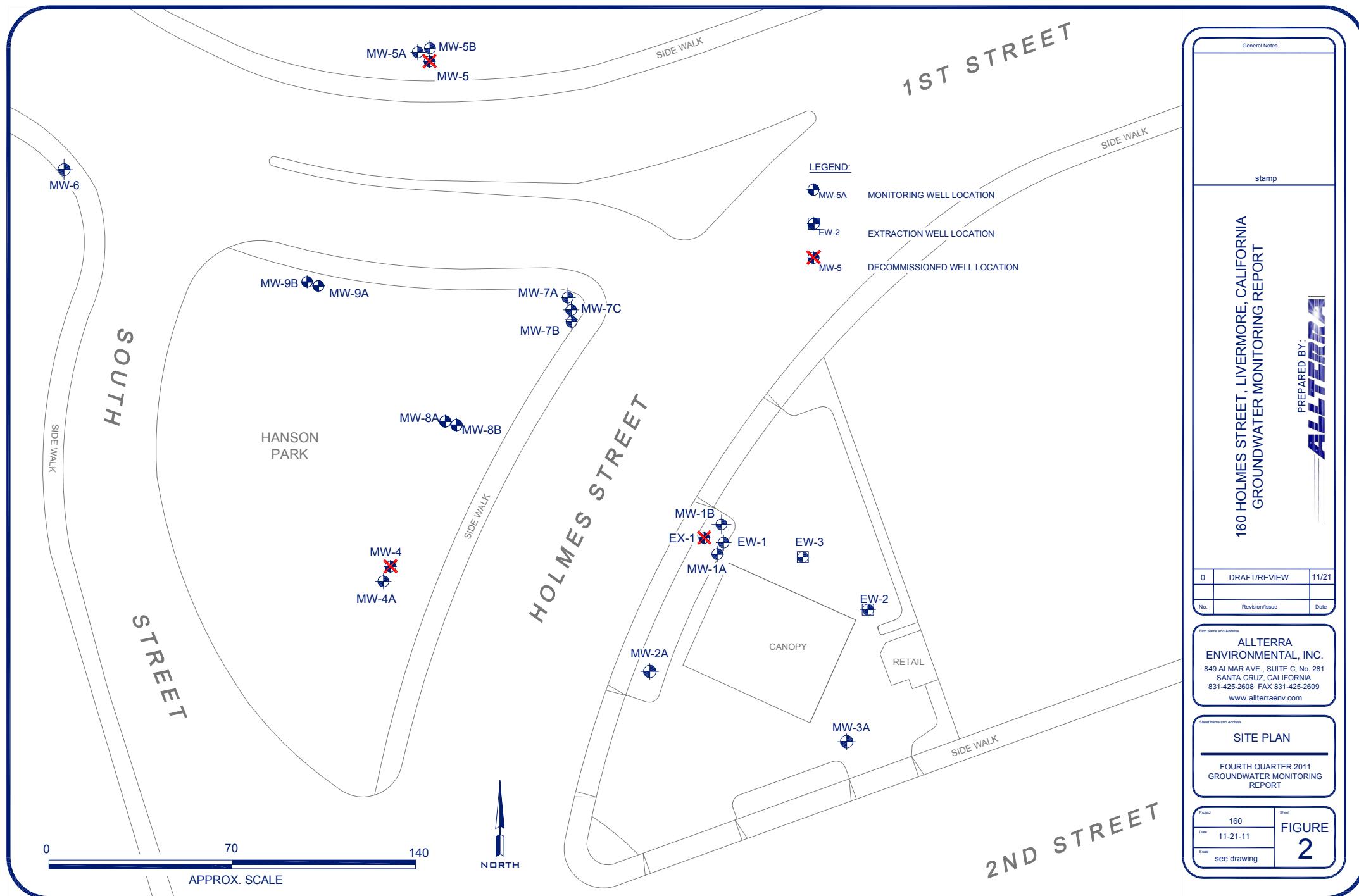


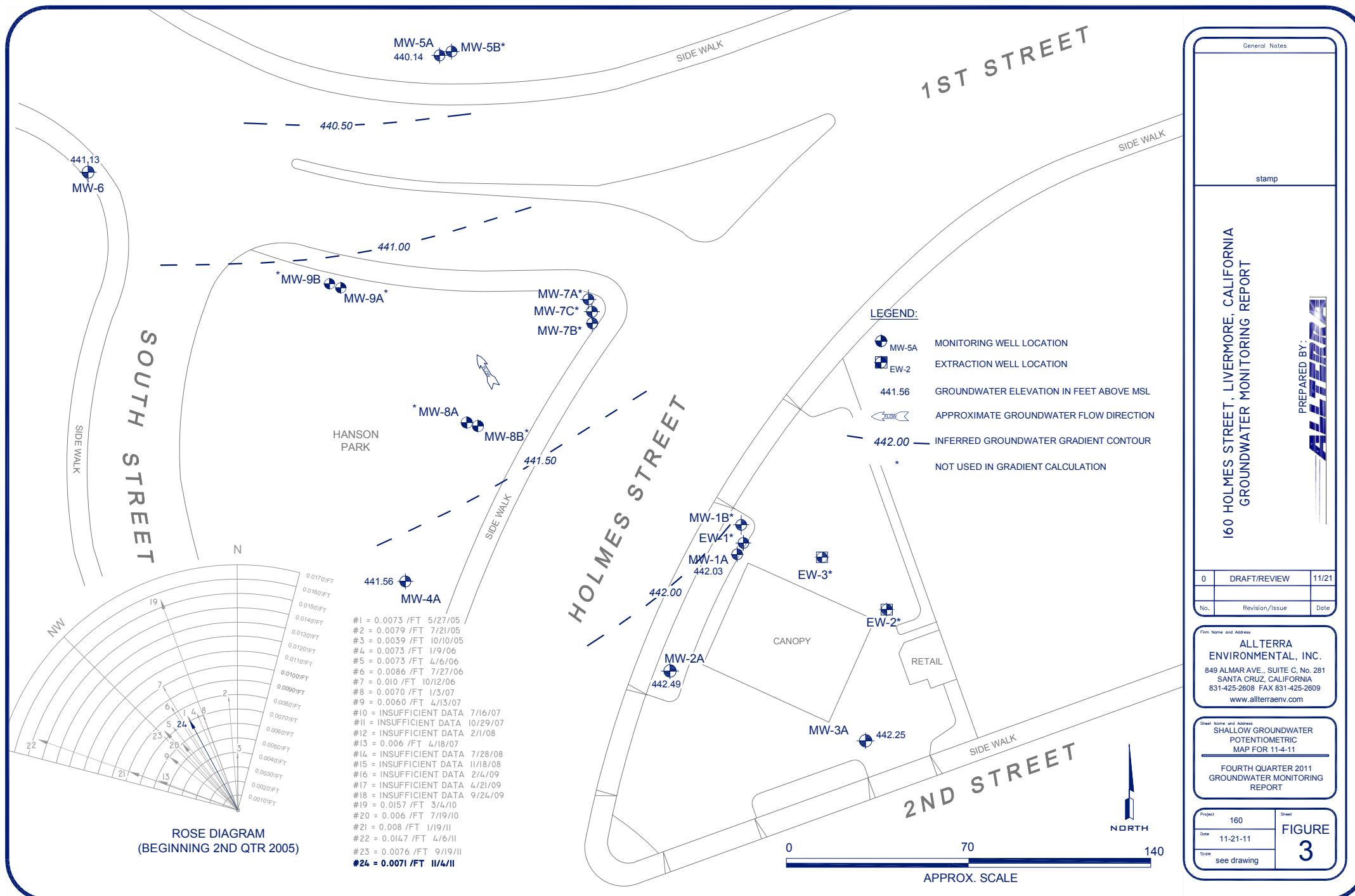
Vicinity Map
Livermore Gas and Minimart
160 Holmes Street
Livermore, California

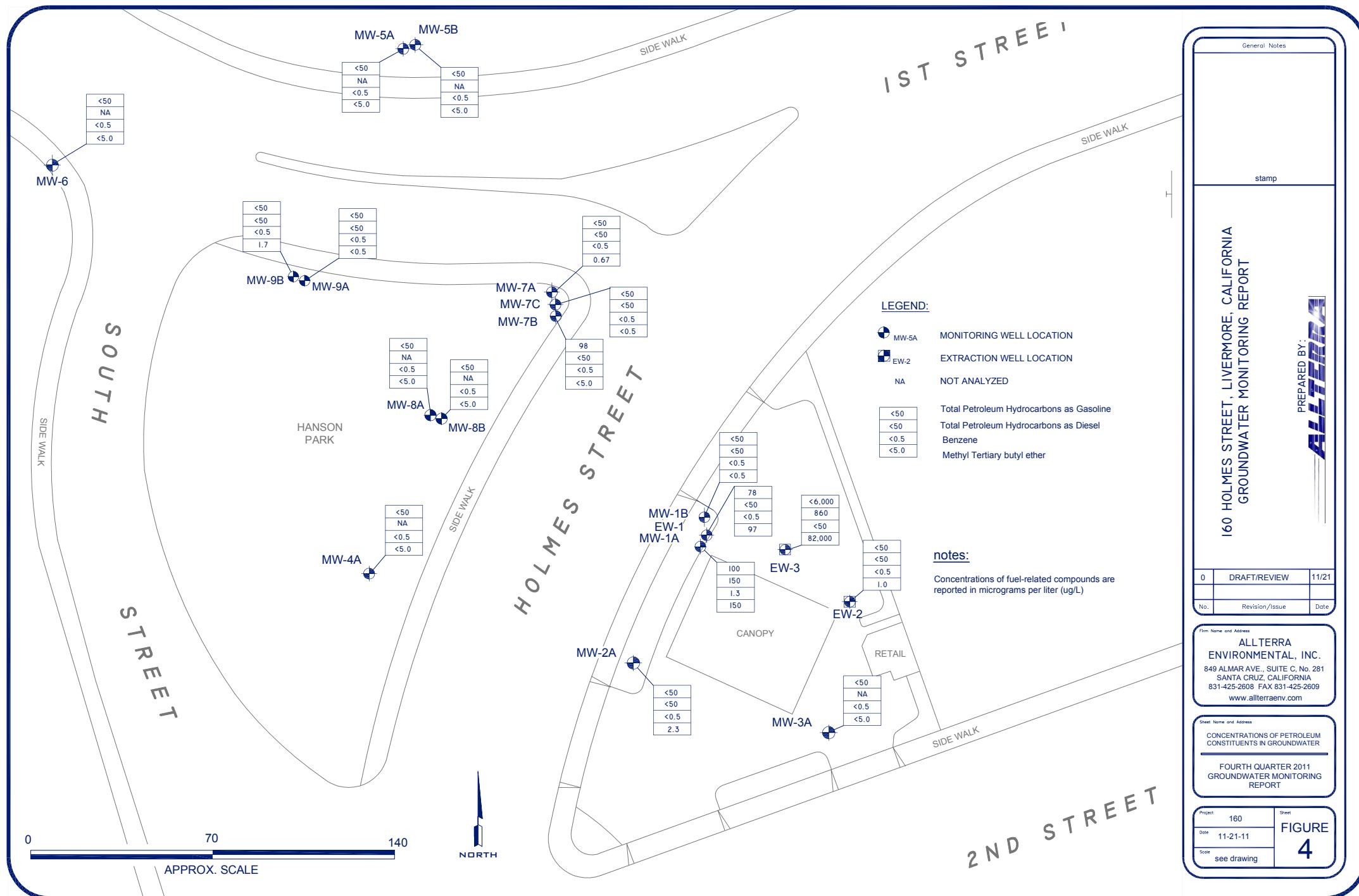
Figure 1

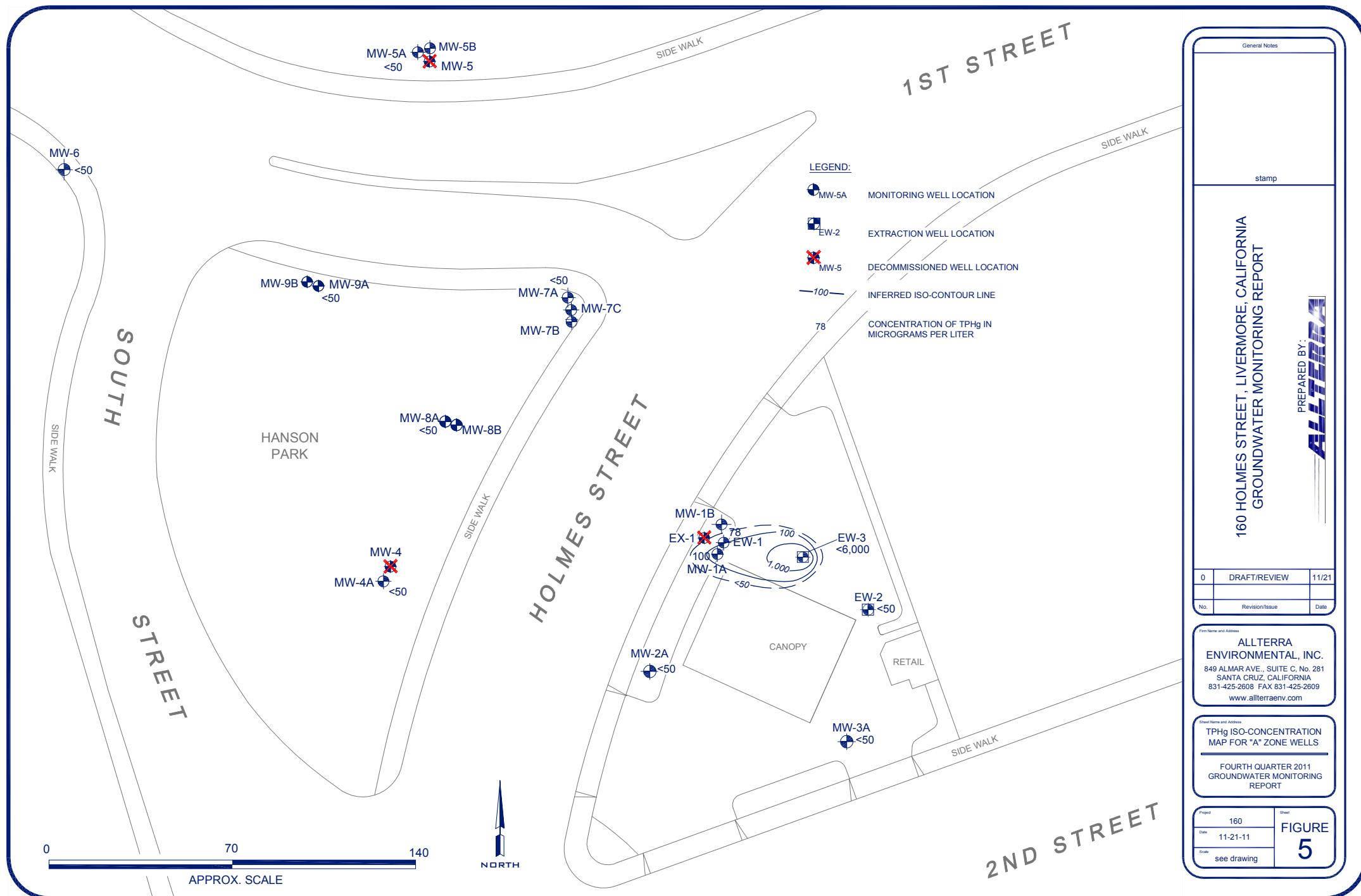
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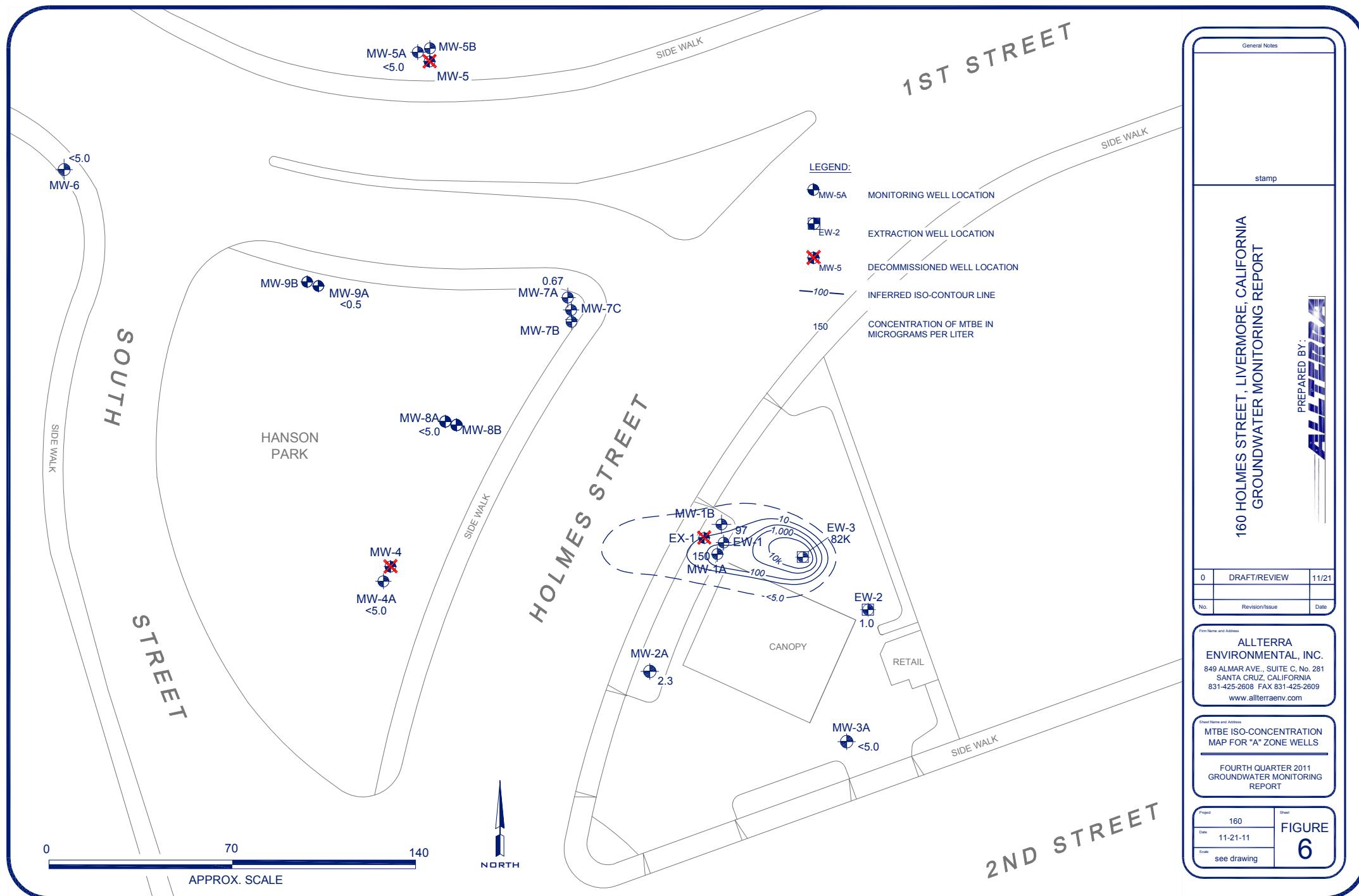


Figure 7
MW-1A TPHg and TPHd Concentrations in Groundwater

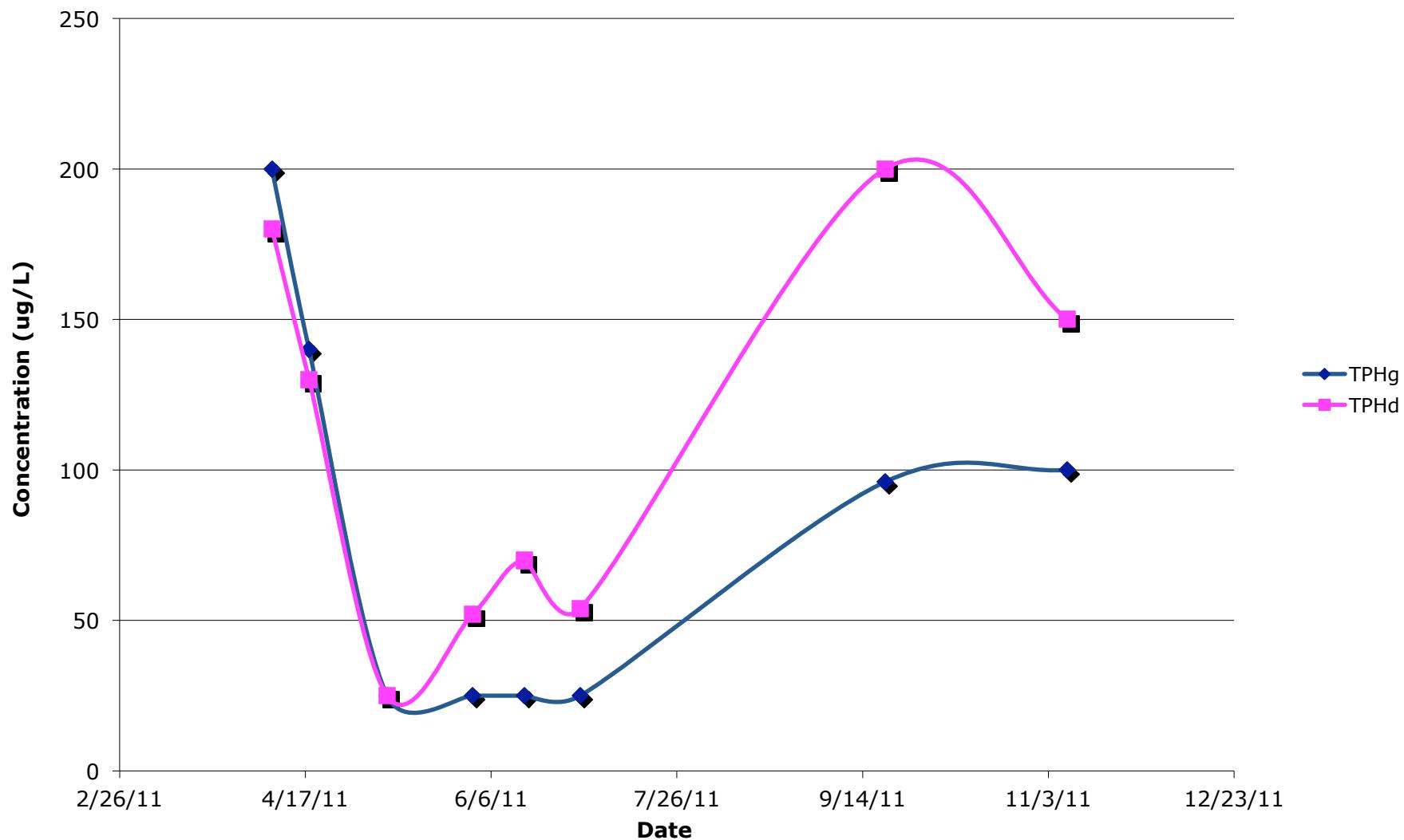


Figure 8
MW-1A MTBE and TBA Concentrations in Groundwater

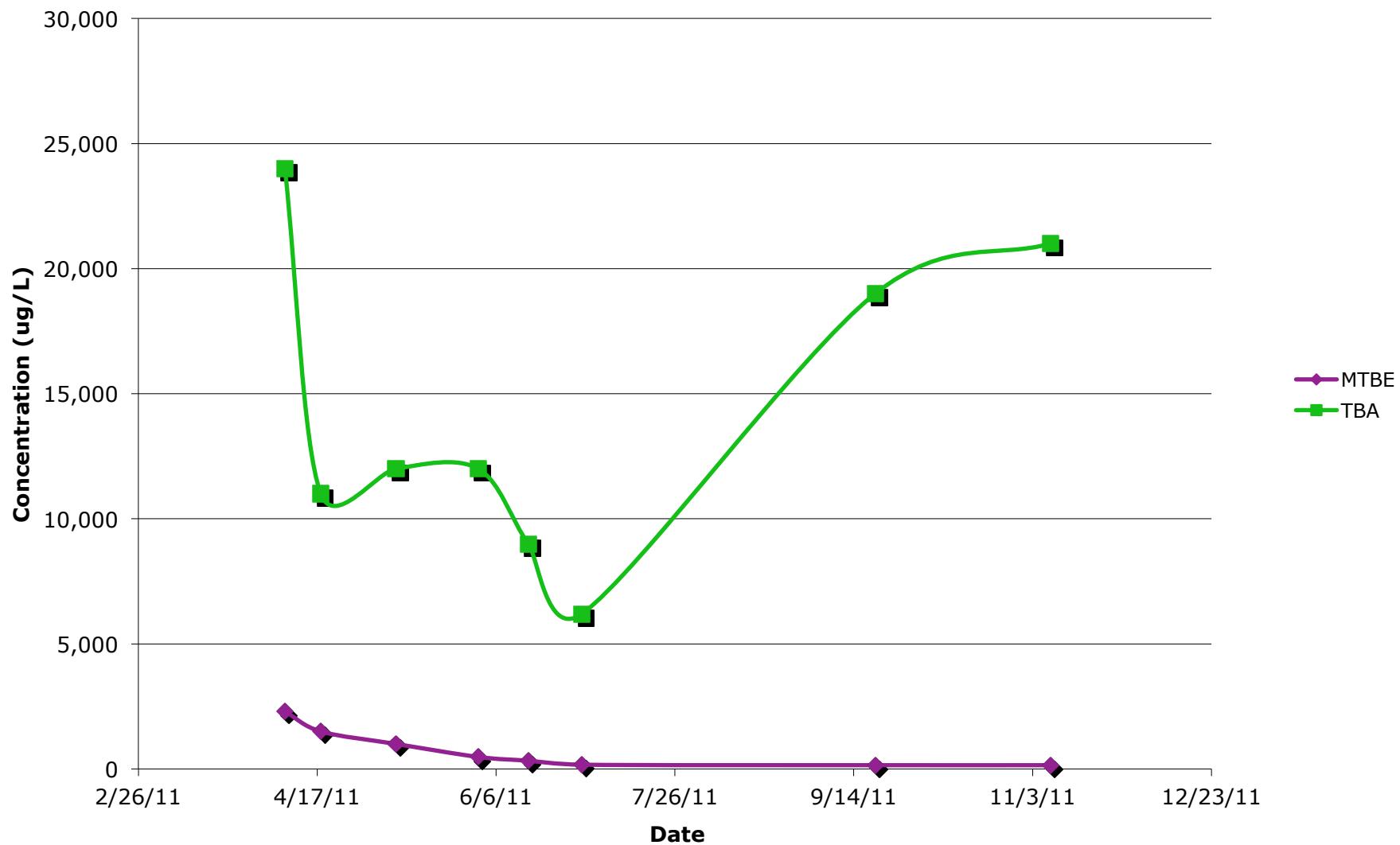


Figure 9
MW-7A TPHg and TPHd Concentrations in Groundwater

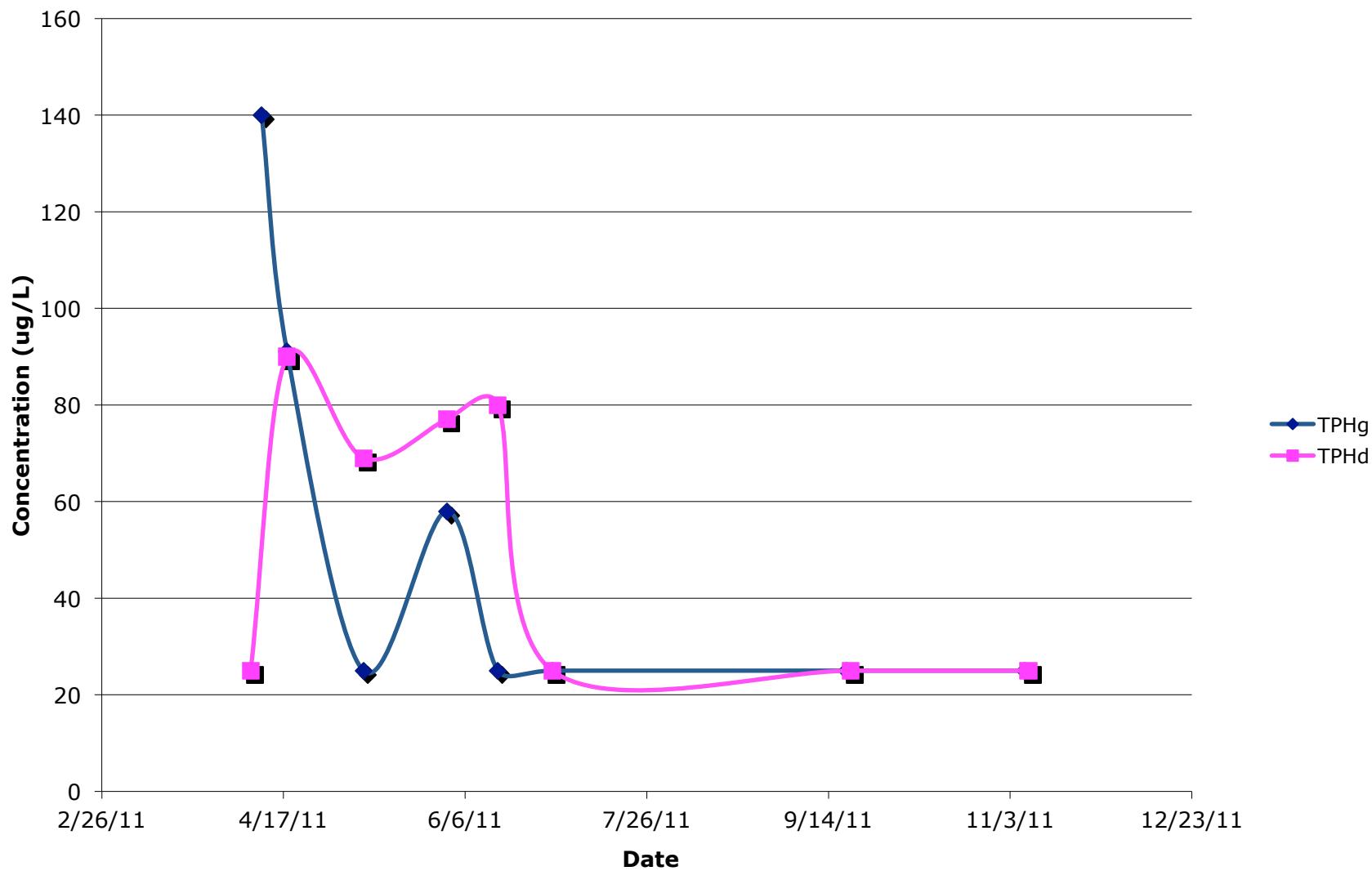


Figure 10
MW-7A MTBE and TBA Concentrations in Groundwater

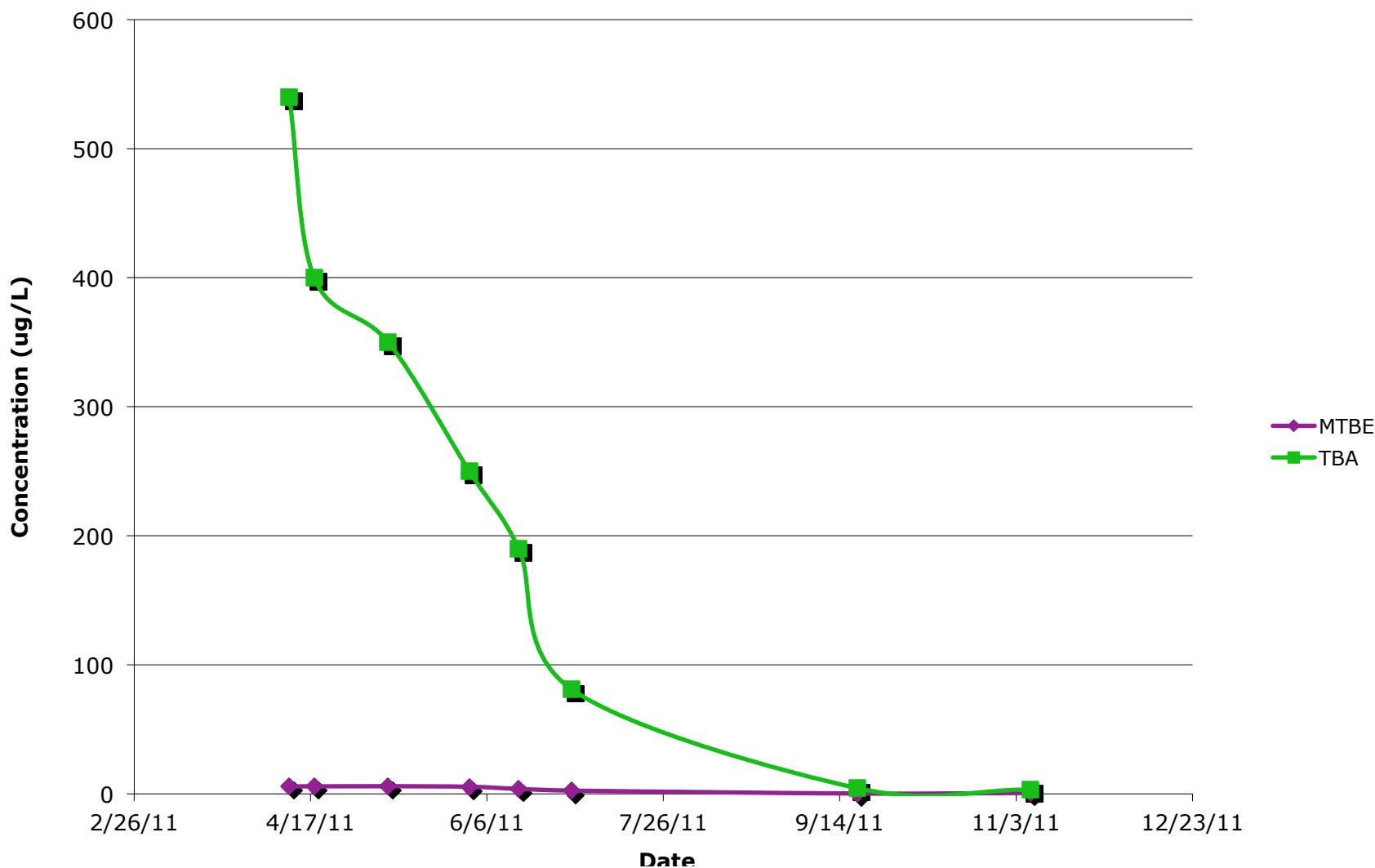


Figure 11
EW-1 TPHg and TPhd Concentrations in Groundwater

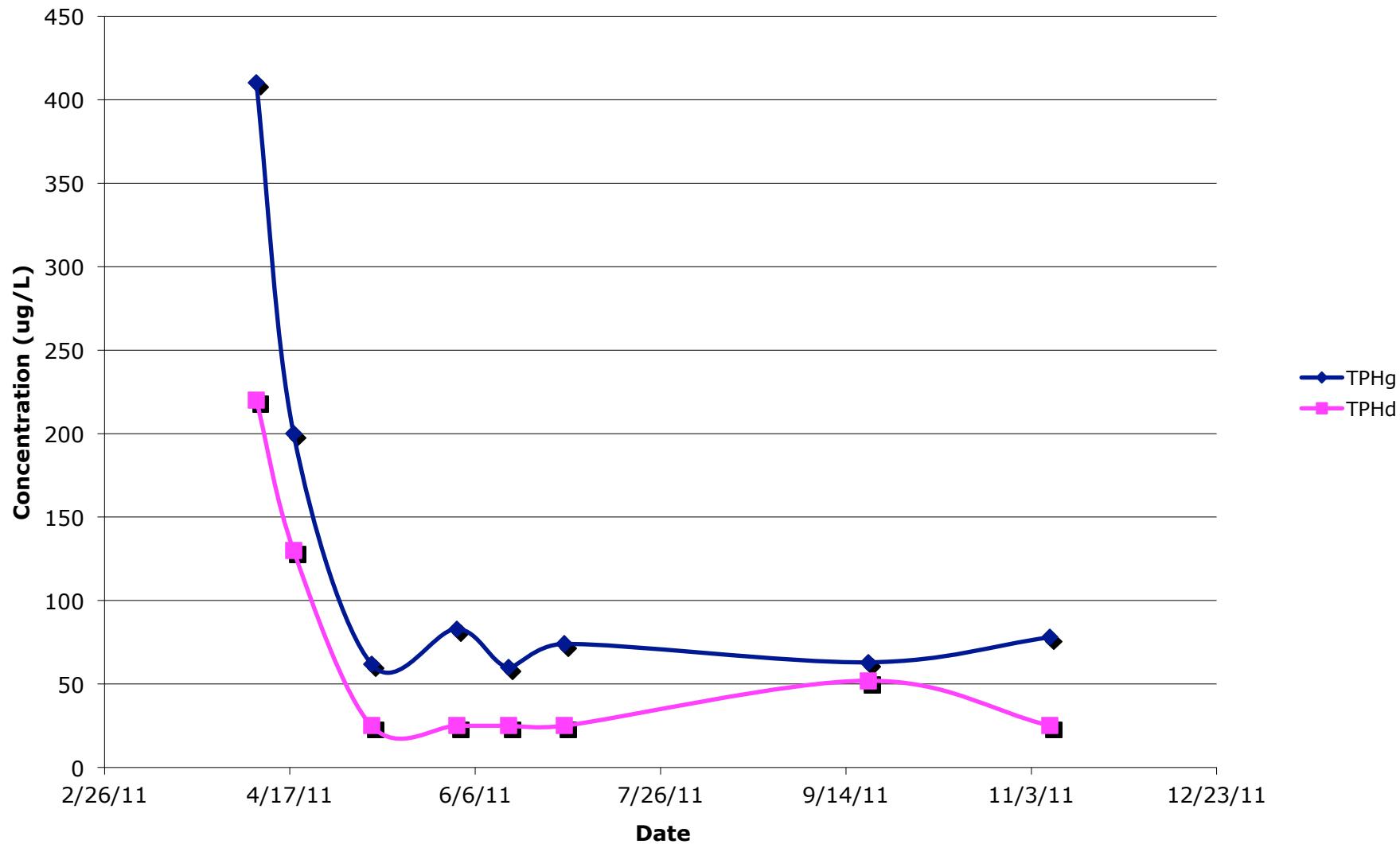


Figure 12
EW-1 MTBE and TBA Concentrations in Groundwater

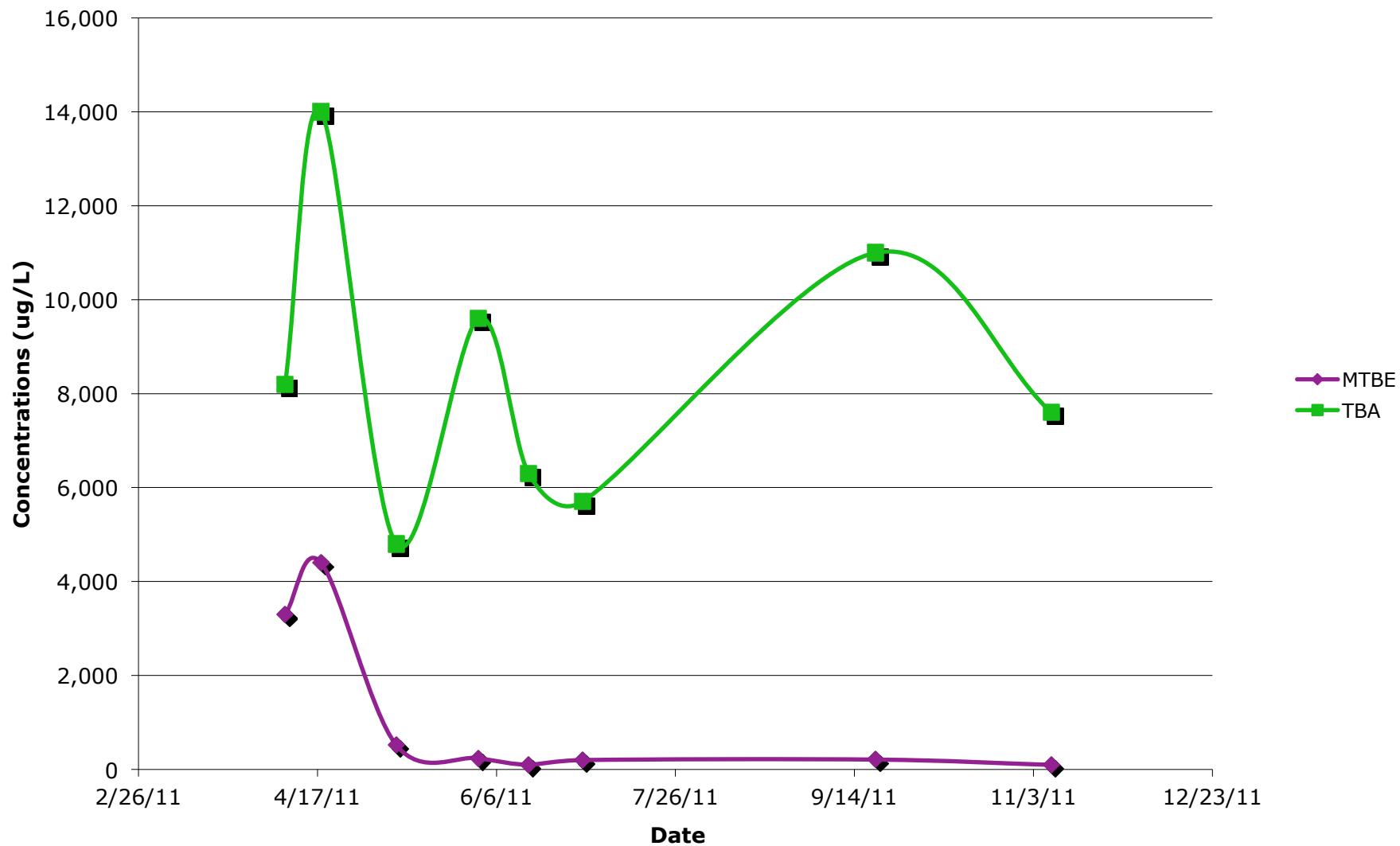


Figure 13
EW-3 TPHg and TPHd Concentrations in Groundwater

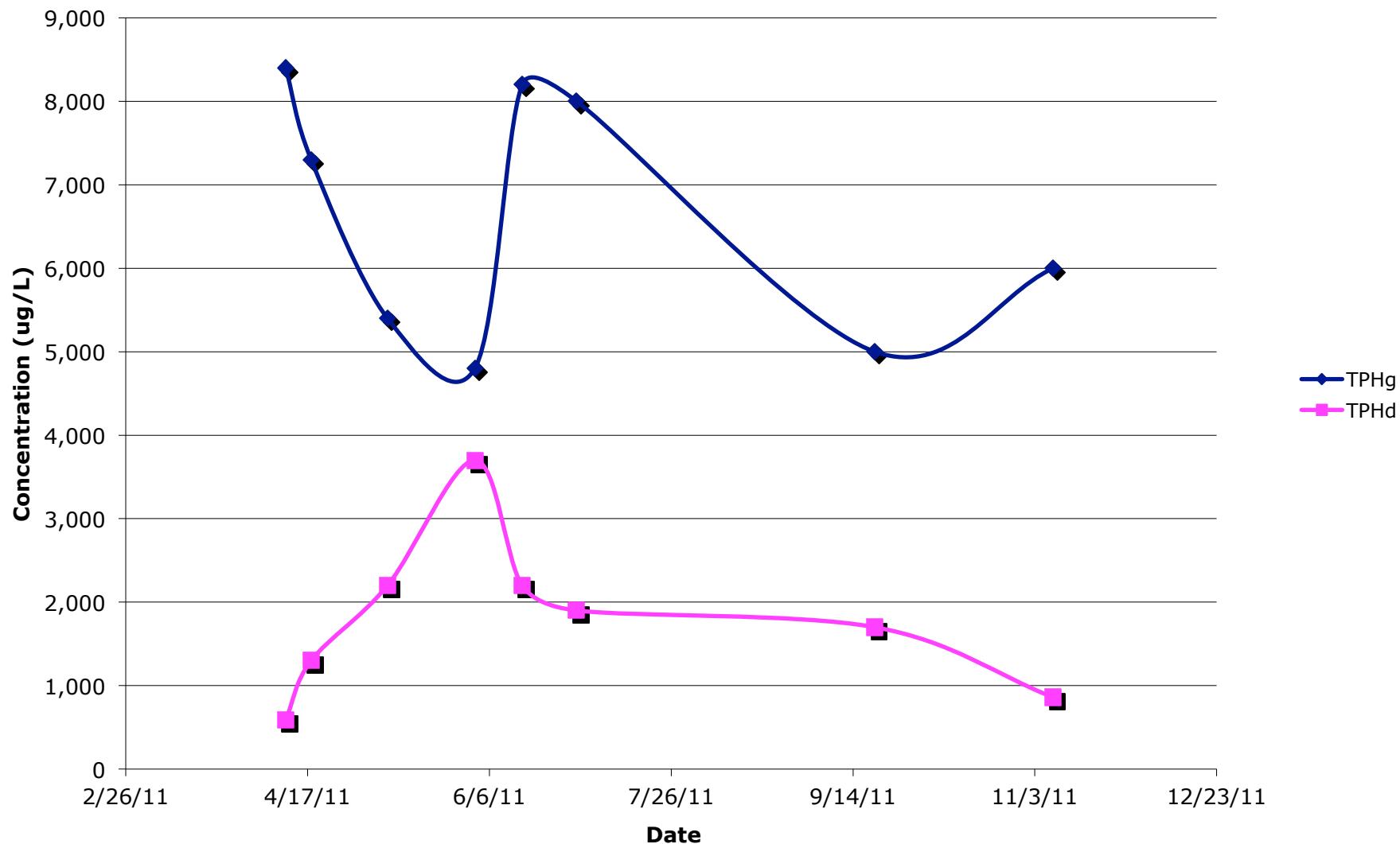
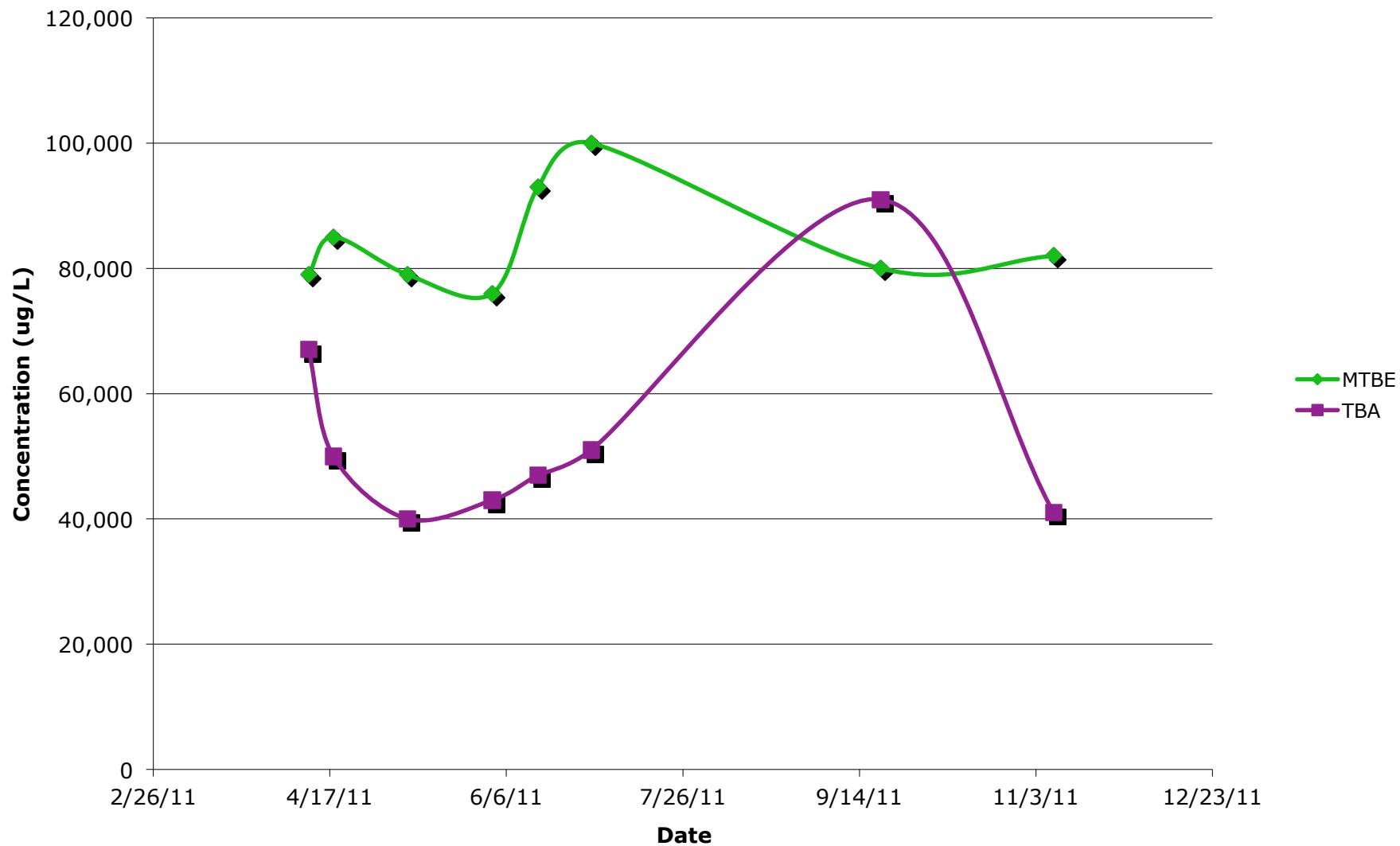


Figure 14
EW-3 MTBE and TBA Concentrations in Groundwater



TABLES 1 - 2

Table 1
Groundwater Elevation Data
160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
MW-1*	8/11/00	465.03	15-30	NM	NC
	10/19/00	465.03	15-30	21.94	443.09
	2/22/01	465.03	15-30	22.91	442.12
	5/30/01	465.03	15-30	Dry	NC
	11/14/01	465.03	15-30	Dry	NC
	5/7/02	465.03	15-30	Dry	NC
	9/11/02	465.03	15-30	26.16	438.87
	12/1/02	465.03	15-30	27.55	437.48
	3/14/03	465.03	15-30	22.63	442.40
	6/25/03	465.03	15-30	22.10	442.93
	9/16/03	465.03	15-30	24.91	440.12
	12/22/03	465.03	15-30	21.75	443.28
	3/10/04	465.03	15-30	17.45	447.58
	6/15/04	465.03	15-30	22.38	442.65
	9/17/04	465.03	15-30	25.61	439.42
	12/10/04	465.03	15-30	22.18	442.85
	3/2/05	465.03	15-30	16.95	448.08
	5/27/05	465.03	15-30	18.42	446.61
	7/21/05	465.03	15-30	21.38	443.65
	10/10/05	465.03	15-30	22.49	442.54
	1/9/06	465.03	15-30	18.05	446.98
MW-1A*	4/6/06	465.03	15-30	15.60	449.43
	7/27/06	465.03	15-30	22.42	442.61
	10/12/06	465.03	15-30	23.46	441.57
	1/3/07	465.03	15-30	21.00	444.03
	4/13/07	465.03	15-30	23.24	441.79
	7/16/07	465.03	15-30	Dry	NC
	10/29/07	465.03	15-30	Dry	NC
	2/1/08	465.03	15-30	Dry	NC
	4/18/08	465.03	15-30	27.34	437.69
	7/28/08	465.03	15-30	Dry	NC
	11/18/08	465.03	15-30	Dry	NC
	2/4/09	465.03	15-30	Dry	NC
	4/21/09	465.03	15-30	Dry	NC
	9/24/09	465.03	15-30	35.00	430.03
	3/4/10	465.03	15-30	28.05	436.98
	7/19/10	465.03	15-30	23.85	441.18
	1/19/11	465.03	15-30	23.12	441.91
	4/6/11	465.03	15-30	18.40	446.63
	4/18/11	465.03	15-30	18.70	446.33
	5/9/11	465.03	15-30	19.26	445.77
	6/1/11	465.03	15-30	20.10	444.93
	6/15/11	465.03	15-30	20.44	444.59
	6/30/11	465.03	15-30	20.73	444.30
	9/19/11	465.03	15-30	22.91	442.12
	11/4/11	465.03	15-30	23.00	442.03
MW-1B**	4/6/06	465.02	50-55	15.59	449.43
	7/27/06	465.02	50-55	22.47	442.55
	10/12/06	465.02	50-55	23.51	441.51
	1/3/07	465.02	50-55	21.04	443.98
	4/13/07	465.02	50-55	23.30	441.72
	7/16/07	465.02	50-55	35.57	429.45
	10/29/07	465.02	50-55	47.32	417.70
	2/1/08	465.02	50-55	33.90	431.12
	4/18/08	465.02	50-55	27.35	437.67
	7/28/08	465.02	50-55	44.03	420.99
	11/18/08	465.02	50-55	48.50	416.52
	2/4/09	465.02	50-55	46.83	418.19
	4/21/09	465.02	50-55	37.10	427.92
	9/24/09	465.02	50-55	37.76	427.26
	3/4/10	465.02	50-55	27.41	437.61
	7/19/10	465.02	50-55	NM	NC
	1/19/11	465.02	50-55	23.10	441.92
	4/6/11	465.02	50-55	18.40	446.62
	4/18/11	465.02	50-55	18.60	446.42
	5/9/11	465.02	50-55	19.11	445.91
	6/1/11	465.02	50-55	20.10	444.92
	6/15/11	465.02	50-55	20.44	444.58
	6/30/11	465.02	50-55	20.74	444.28
	9/19/11	465.02	50-55	22.92	442.10
	11/4/11	465.02	50-55	22.95	442.07

Table 1
Groundwater Elevation Data
160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
MW-2*	8/11/00	464.94	15-30	NM	NC
	10/19/00	464.94	15-30	21.80	443.14
	2/22/01	464.94	15-30	22.87	442.07
	5/30/01	464.94	15-30	Dry	NC
	11/14/01	464.94	15-30	Dry	NC
	5/7/02	464.94	15-30	26.70	438.24
	9/11/02	464.94	15-30	25.96	438.98
	12/11/02	464.94	15-30	27.56	437.38
	3/14/03	464.94	15-30	22.41	442.53
	6/25/03	464.94	15-30	21.97	442.97
	9/16/03	464.94	15-30	24.70	440.24
	12/22/03	464.94	15-30	21.58	443.36
	3/10/04	464.94	15-30	17.31	447.63
	6/15/04	464.94	15-30	22.18	442.76
	9/17/04	464.94	15-30	25.44	439.50
	12/10/04	464.94	15-30	22.00	442.94
	3/2/05	464.94	15-30	16.75	448.19
	5/27/05	464.94	15-30	18.29	446.65
	7/21/05	464.94	15-30	20.46	444.48
	10/10/05	464.94	15-30	22.30	442.64
	1/9/06	464.94	15-30	17.67	447.27
MW-2A*	4/6/06	464.94	15-30	15.47	449.47
	7/27/06	464.94	15-30	22.27	442.67
	10/12/06	464.94	15-30	23.35	441.59
	1/3/07	464.94	15-30	20.90	444.04
	4/13/07	464.94	15-30	23.16	441.78
	7/16/07	464.94	15-30	Dry	NC
	10/29/07	464.94	15-30	Dry	NC
	2/1/08	464.94	15-30	Dry	NC
	4/18/08	464.94	15-30	27.26	437.68
	7/28/08	464.94	15-30	Dry	NC
	11/18/08	464.94	15-30	Dry	NC
	2/4/09	464.94	15-30	Dry	NC
	4/21/09	464.94	15-30	Dry	NC
	9/24/09	464.94	15-30	Dry	NC
	3/4/10	464.94	15-30	25.12	439.82
	7/20/10	464.94	15-30	25.90	439.04
	1/19/11	464.94	15-30	25.30	439.64
	4/6/11	464.94	15-30	18.30	446.64
	9/19/11	464.94	15-30	22.45	442.49
	11/4/11	464.94	15-30	22.77	442.17
MW-3*	8/11/00	465.84	15-30	NM	NC
	10/19/00	465.84	15-30	22.45	443.39
	2/22/01	465.84	15-30	23.51	442.33
	5/30/01	465.84	15-30	Dry	NC
	11/14/01	465.84	15-30	Dry	NC
	5/7/02	465.84	15-30	Dry	NC
	9/11/02	465.84	15-30	26.61	439.23
	12/11/02	465.84	15-30	28.18	437.66
	3/14/03	465.84	15-30	23.04	442.80
	6/25/03	465.84	15-30	22.59	443.25
	9/16/03	465.84	15-30	25.33	440.51
	12/22/03	465.84	15-30	22.37	443.47
	3/10/04	465.84	15-30	17.88	447.96
	6/15/04	465.84	15-30	22.82	443.02
	9/17/04	465.84	15-30	26.09	439.75
	12/10/04	465.84	15-30	22.65	443.19
	3/5/05	465.84	15-30	17.33	448.51
	5/27/05	465.84	15-30	18.89	446.95
	7/21/05	465.84	15-30	21.10	444.74
	10/10/05	465.84	15-30	22.94	442.90
	1/9/06	465.84	15-30	18.24	447.60

Table 1
Groundwater Elevation Data
160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
MW-3A*	4/6/06	465.84	15-30	16.02	449.82
	7/27/06	465.84	15-30	22.90	442.94
	10/12/06	465.84	15-30	23.99	441.85
	1/3/07	465.84	15-30	21.52	444.32
	4/13/07	465.84	15-30	23.78	442.06
	7/16/07	465.84	15-30	Dry	NC
	10/29/07	465.84	15-30	Dry	NC
	2/1/08	465.84	15-30	Dry	NC
	4/18/08	465.84	15-30	27.86	437.98
	7/28/08	465.84	15-30	Dry	NC
	11/18/08	465.84	15-30	Dry	NC
	2/4/09	465.84	15-30	Dry	NC
	4/21/09	465.84	15-30	Dry	NC
	9/24/09	465.84	15-30	Dry	NC
	3/4/10	465.84	15-30	27.95	437.89
	7/19/10	465.84	15-30	26.55	439.29
	1/19/11	465.84	15-30	23.63	442.21
	4/6/11	465.84	15-30	18.90	446.94
	9/19/11	465.85	15-30	23.40	442.45
	11/4/11	465.85	15-30	23.60	442.25
MW-4***	11/14/01	465.15	15-30	33.84	431.31
	5/7/02	465.15	15-30	26.75	438.40
	9/11/02	465.15	15-30	26.66	438.49
	12/11/02	465.15	15-30	28.39	436.76
	3/14/03	465.15	15-30	23.14	442.01
	6/25/03	465.15	15-30	22.72	442.43
	9/16/03	465.15	15-30	25.39	439.76
	12/22/03	465.15	15-30	22.42	442.73
	3/4/04	465.15	15-30	18.20	446.95
	6/15/04	465.15	15-30	22.95	442.20
	9/17/04	465.15	15-30	26.12	439.03
	12/10/04	465.15	15-30	22.73	442.42
	3/2/05	465.15	15-30	17.60	447.55
	5/27/05	465.15	15-30	19.14	446.01
	7/21/05	465.15	15-30	21.25	443.90
	10/10/05	465.15	15-30	22.85	442.30
	1/9/06	465.15	15-30	18.54	446.61
MW-4A**	4/6/06	464.96	15-30	16.19	448.77
	7/27/06	464.96	15-30	22.87	442.09
	10/12/06	464.96	15-30	23.90	441.06
	1/3/07	464.96	15-30	21.52	443.44
	4/13/07	464.96	15-30	23.78	441.18
	7/16/07	464.96	15-30	Dry	NC
	10/29/07	464.96	15-30	Dry	NC
	2/1/08	464.96	15-30	Dry	NC
	4/18/08	464.96	15-30	27.91	437.05
	7/28/08	464.96	15-30	Dry	NC
	11/18/08	464.96	15-30	Dry	NC
	2/4/09	464.96	15-30	Dry	NC
	4/21/09	464.96	15-30	Dry	NC
	3/4/10	464.96	15-30	25.66	439.30
	7/20/10	464.96	15-30	24.25	440.71
	1/19/11	464.96	15-30	23.64	441.32
	4/6/11	464.96	15-30	18.90	446.06
	9/19/11	464.96	15-30	23.43	441.53
	11/4/11	464.96	15-30	23.40	441.56

Table 1
Groundwater Elevation Data
160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
MW-5***	11/14/01	464.65	20-50	34.94	429.71
	5/7/02	464.65	20-50	27.90	436.75
	9/11/02	464.65	20-50	27.99	436.66
	12/11/02	464.65	20-50	29.50	435.15
	3/14/03	464.65	20-50	24.26	440.39
	6/25/03	464.65	20-50	24.01	440.64
	9/16/03	464.65	20-50	26.83	437.82
	12/22/03	464.65	20-50	23.68	440.97
	3/10/04	464.65	20-50	19.22	445.43
	6/15/04	464.65	20-50	24.20	440.45
	9/17/04	464.65	20-50	27.68	436.97
	12/10/04	464.65	20-50	23.93	440.72
	3/2/05	464.65	20-50	18.56	446.09
	5/27/05	464.65	20-50	20.15	444.50
	7/21/05	464.65	20-50	22.55	442.10
MW-5A**	10/10/05	464.65	20-50	23.35	441.30
	1/9/06	464.65	20-50	19.53	445.12
MW-5A**	4/6/06	464.64	20-35	17.35	447.29
	7/27/06	464.64	20-35	24.40	440.24
	10/12/06	464.64	20-35	25.58	439.06
	1/3/07	464.64	20-35	22.53	442.11
	4/13/07	464.64	20-35	24.77	439.87
	7/16/07	464.64	20-35	Dry	NC
	10/29/07	464.64	20-35	Dry	NC
	2/1/08	464.64	20-35	34.03	430.61
	4/18/08	464.64	20-35	28.13	436.51
	7/28/08	464.64	20-35	Dry	NC
	11/18/08	464.64	20-35	33.82	430.82
	2/4/09	464.64	20-35	Dry	NC
	4/21/09	464.64	20-35	Dry	NC
	9/24/09	464.64	20-35	Dry	NC
	3/4/10	464.64	20-35	28.77	435.87
	7/20/10	464.64	20-35	24.57	440.07
	1/19/11	464.64	20-35	24.52	440.12
	4/6/11	464.64	20-35	19.98	444.66
	9/19/11	464.64	20-35	24.62	440.02
MW-5B**	11/4/11	464.64	20-35	24.50	440.14
	4/6/06	464.59	50-55	17.44	447.15
	7/27/06	464.59	50-55	24.09	440.50
	10/12/06	464.59	50-55	25.17	439.42
	1/3/07	464.59	50-55	22.44	442.15
	4/13/07	464.59	50-55	25.33	439.26
	7/16/07	464.59	50-55	36.50	428.09
	10/29/07	464.59	50-55	47.90	416.69
	2/1/08	464.59	50-55	33.25	431.34
	4/18/08	464.59	50-55	28.77	435.82
	7/28/08	464.59	50-55	44.76	419.83
	11/18/08	464.59	50-55	51.65	412.94
	2/4/09	464.59	50-55	47.63	416.96
	4/21/09	464.59	50-55	37.00	427.59
	9/24/09	464.59	50-55	39.73	424.86
	3/4/10	464.59	50-55	28.97	435.62
	7/19/10	464.59	50-55	25.40	439.19
	1/19/11	464.59	50-55	24.52	440.07
	4/6/11	464.59	50-55	20.05	444.54
	9/19/11	464.59	50-55	24.50	440.09
	11/4/11	464.59	50-55	24.40	440.19

Table 1
Groundwater Elevation Data
160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
MW-6	11/14/01	464.13	20-50	33.88	430.25
	5/7/02	464.13	20-50	27.01	437.12
	9/11/02	464.13	20-50	27.03	437.10
	12/11/02	464.13	20-50	28.77	435.36
	3/14/03	464.13	20-50	23.46	440.67
	6/25/03	464.13	20-50	23.08	441.05
	9/16/03	464.13	20-50	25.77	438.36
	12/22/03	464.13	20-50	22.59	441.54
	3/10/04	464.13	20-50	18.65	445.48
	6/15/04	464.13	20-50	23.31	440.82
	9/17/04	464.13	20-50	26.56	437.57
	12/10/04	464.13	20-50	23.09	441.04
	3/2/05	464.13	20-50	18.04	446.09
	5/27/05	464.13	20-50	19.57	444.56
	7/21/05	464.13	20-50	21.60	442.53
	10/10/05	464.13	20-50	22.21	441.92
	1/9/06	464.13	20-50	18.99	445.14
	4/6/06	464.13	20-50	17.00	447.13
	7/27/06	464.13	20-50	23.45	440.68
	10/12/06	464.13	20-50	24.36	439.77
	1/3/07	464.13	20-50	22.03	442.10
	4/13/07	464.13	20-50	24.40	439.73
	7/16/07	464.13	20-50	NM	NC
	10/29/07	464.13	20-50	Dry	NC
	2/1/08	464.13	20-50	33.05	431.08
	4/18/08	464.13	20-50	28.20	435.93
	7/28/08	464.13	20-50	Dry	NC
	11/18/08	464.13	20-50	Dry	NC
	2/4/09	464.13	20-50	Dry	NC
	4/21/09	464.13	20-50	38.71	425.42
	9/24/09	464.13	20-50	38.26	425.87
	3/4/10	464.13	20-50	26.02	438.11
	7/19/10	464.13	20-50	24.65	439.48
	1/19/11	464.13	20-50	24.00	440.13
	4/6/11	464.13	20-50	21.76	442.37
	9/19/11	464.13	20-50	23.76	440.37
	11/4/11	464.13	20-50	23.00	441.13
MW-7A**	4/6/06	465.32	15-30	16.61	448.71
	7/27/06	465.32	15-30	23.40	441.92
	10/12/06	465.32	15-30	24.50	440.82
	1/3/07	465.32	15-30	21.80	443.52
	4/13/07	465.32	15-30	24.05	441.27
	7/16/07	465.32	15-30	Dry	NC
	10/29/07	465.32	15-30	Dry	NC
	2/1/08	465.32	15-30	Dry	NC
	4/18/08	465.32	15-30	28.16	437.16
	7/28/08	465.32	15-30	Dry	NC
	11/18/08	465.32	15-30	Dry	NC
	2/4/09	465.32	15-30	Dry	NC
	4/21/09	465.32	15-30	Dry	NC
	9/24/09	465.32	15-30	Dry	NC
	3/4/10	465.32	15-30	26.30	439.02
	7/19/10	465.32	15-30	24.78	440.54
	1/19/11	465.32	15-30	23.60	441.72
	4/6/11	465.32	15-30	19.35	445.97
	4/18/11	465.32	15-31	19.59	445.73
	5/9/11	465.32	15-32	21.15	444.17
	6/1/11	465.32	15-33	21.01	444.31
	6/15/11	465.32	15-34	21.45	443.87
	6/30/11	465.32	15-35	21.87	443.45
	9/19/11	465.32	15-30	23.96	441.36
	11/4/11	465.32	15-30	23.45	441.87

Table 1
Groundwater Elevation Data
160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
MW-7B**	4/6/06	465.39	45-50	16.85	448.54
	7/27/06	465.39	45-50	23.72	441.67
	10/12/06	465.39	45-50	24.74	440.65
	1/3/07	465.39	45-50	22.18	443.21
	4/13/07	465.39	45-50	24.41	440.98
	7/16/07	465.39	45-50	36.40	428.99
	10/29/07	465.39	45-50	Dry	NC
	2/1/08	465.39	45-50	33.84	431.55
	4/18/08	465.39	45-50	28.52	436.87
	7/28/08	465.39	45-50	44.92	420.47
	11/18/08	465.39	45-50	Dry	NC
	2/4/09	465.39	45-50	46.65	418.74
	4/21/09	465.39	45-50	36.83	428.56
	9/24/09	465.39	45-50	39.26	426.13
	3/4/10	465.39	45-50	28.63	436.76
	7/19/10	465.39	45-50	25.05	440.34
	1/19/11	465.39	45-50	24.15	441.24
	4/6/11	465.39	45-50	21.78	443.61
	4/18/11	465.39	45-50	19.75	445.64
	5/9/11	465.39	45-50	20.40	444.99
	6/1/11	465.39	45-50	21.25	444.14
	6/15/11	465.39	45-50	21.45	443.94
	6/30/11	465.39	45-50	21.65	443.74
	9/19/11	465.39	45-50	24.10	441.29
	11/4/11	465.39	45-50	24.10	441.29
MW-7C**	4/6/06	465.39	65-70	17.18	448.21
	7/27/06	465.39	65-70	24.15	441.24
	10/12/06	465.39	65-70	24.74	440.65
	1/3/07	465.39	65-70	22.53	442.86
	4/13/07	465.39	65-70	24.73	440.66
	7/16/07	465.39	65-70	36.70	428.69
	10/29/07	465.39	65-70	48.25	417.14
	2/1/08	465.39	65-70	34.00	431.39
	4/18/08	465.39	65-70	28.75	436.64
	7/28/08	465.39	65-70	45.00	420.39
	11/18/08	465.39	65-70	49.62	415.77
	2/4/09	465.39	65-70	47.89	417.50
	4/21/09	465.39	65-70	36.98	428.41
	9/24/09	465.39	65-70	39.49	425.90
	3/4/10	465.39	65-70	26.66	438.73
	7/19/10	465.39	65-70	25.38	440.01
	1/19/11	465.39	65-70	24.50	440.89
	4/6/11	465.39	65-70	19.88	445.51
	9/19/11	465.39	65-70	23.50	441.89
	11/4/11	465.39	65-70	24.40	440.99
EW-1**	4/6/06	465.45	15-40	15.99	449.46
	7/27/06	465.45	15-40	23.85	441.60
	10/12/06	465.45	15-40	23.51	441.94
	1/3/07	465.45	15-40	21.45	444.00
	4/13/07	465.45	15-40	23.69	441.76
	10/29/07	465.45	15-40	NM	NC
	2/1/08	465.45	15-40	NM	NC
	4/18/08	465.45	15-40	27.83	437.62
	7/28/08	465.45	15-40	NM	NC
	11/18/08	465.45	15-40	Dry	NC
	2/4/09	465.45	15-40	Dry	NC
	4/21/09	465.45	15-40	Dry	NC
	9/24/09	465.45	15-40	Dry	NC
	3/4/10	465.45	15-40	27.87	NC
	7/20/10	465.45	15-40	24.35	441.10
	1/19/11	465.45	15-40	23.58	441.87
	4/6/11	465.45	15-40	18.85	446.60
	4/18/11	465.45	15-40	19.70	445.75
	5/9/11	465.45	15-40	19.69	445.76
	6/1/11	465.45	15-40	20.52	444.93
	6/15/11	465.45	15-40	21.11	444.34
	6/30/11	465.45	15-40	21.41	444.04
	9/19/11	465.45	15-40	22.35	443.10
	11/4/11	465.45	15-40	23.35	442.10

Table 1
Groundwater Elevation Data
160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
EW-2**	4/6/06	465.99	15-40	16.20	449.79
	7/27/06	465.99	15-40	23.10	442.89
	10/12/06	465.99	15-40	21.48	444.51
	1/3/07	465.99	15-40	21.66	444.33
	4/13/07	465.99	15-40	23.93	442.06
	10/29/07	465.99	15-40	Dry	NC
	2/1/08	465.99	15-40	NM	NC
	4/18/08	465.99	15-40	28.04	437.95
	7/28/08	465.99	15-40	NM	NC
	11/18/08	465.99	15-40	Dry	NC
	2/4/09	465.99	15-40	Dry	NC
	4/21/09	465.99	15-40	Dry	NC
	9/24/09	465.99	15-40	Dry	NC
	3/4/10	465.99	15-40	25.89	NC
	7/20/10	465.99	15-40	24.45	441.54
	1/19/11	465.99	15-40	23.72	442.27
	4/6/11	465.99	15-40	19.00	446.99
	4/18/11	465.99	15-40	19.19	446.80
	5/9/11	465.99	15-40	19.67	446.32
	6/1/11	465.99	15-40	20.71	445.28
	6/15/11	465.99	15-40	21.00	444.99
	6/30/11	465.99	15-40	21.31	444.68
	9/19/11	465.99	15-40	23.55	442.44
	11/4/11	465.99	15-40	23.60	442.39
EW-3 ^(a)	11/18/08	NC	25-30	Dry	NC
	2/4/09	NC	25-30	33.80	NC
	4/21/09	NC	25-30	Dry	NC
	9/24/09	NC	25-30	Dry	NC
	3/4/10	NC	25-30	28.02	NC
	7/20/10	NC	25-30	NM	NC
	1/19/11	NC	25-30	23.50	NC
	4/6/11	NC	25-30	18.30	NC
	4/18/11	NC	25-30	19.40	NC
	5/9/11	NC	25-30	19.67	NC
	6/1/11	NC	25-30	20.72	NC
	6/15/11	NC	25-30	20.92	NC
	6/30/11	NC	25-30	21.11	NC
	9/19/11	NC	25-30	23.25	NC
	11/4/11	NC	25-30	23.30	NC
MW-8A	7/28/08	NC	16-36	Dry	NC
	11/18/08	NC	16-36	35.40	NC
	2/4/09	NC	16-36	Dry	NC
	4/21/09	NC	16-36	Dry	NC
	9/24/09	NC	16-36	Dry	NC
	3/4/10	NC	16-36	26.33	NC
	7/20/10	NC	16-36	25.00	NC
	1/19/11	NC	16-36	24.30	NC
	4/6/11	NC	16-36	19.22	NC
	9/19/11	NC	16-36	24.05	NC
	11/4/11	NC	16-36	24.10	NC

Table 1
Groundwater Elevation Data
160 Holmes Street, Livermore, California

Monitoring Well ID	Date	Top of Casing Elevation* (feet, msl)	Screen Interval (feet, bgs)	Depth to Groundwater (feet)	Groundwater Elevation (feet, msl)
MW-8B	7/28/08	NC	46-51	44.90	NC
	11/18/08	NC	46-51	49.85	NC
	2/4/09	NC	46-51	47.95	NC
	4/21/09	NC	46-51	38.75	NC
	9/24/09	NC	46-51	38.47	NC
	3/4/10	NC	46-51	28.24	NC
	7/20/10	NC	46-51	24.70	NC
	1/19/11	NC	46-51	24.05	NC
	4/6/11	NC	46-51	19.42	NC
	9/19/11	NC	46-51	23.80	NC
	11/4/11	NC	46-51	23.50	NC
MW-9A	7/28/08	NC	14-36	Dry	NC
	11/18/08	NC	14-36	48.97	NC
	2/4/09	NC	14-36	Dry	NC
	4/21/09	NC	14-36	Dry	NC
	9/24/09	NC	14-36	Dry	NC
	3/4/10	NC	14-36	27.86	NC
	7/20/10	NC	14-36	24.15	NC
	1/19/11	NC	14-36	23.40	NC
	4/6/11	NC	14-36	21.50	NC
	9/19/11	NC	14-36	23.25	NC
	11/4/11	NC	14-36	23.50	NC
MW-9B	7/28/08	NC	47-52	44.05	NC
	11/18/08	NC	47-52	38.28	NC
	2/4/09	NC	47-52	47.03	NC
	4/21/09	NC	47-52	35.94	NC
	9/24/09	NC	47-52	37.93	NC
	3/4/10	NC	47-52	27.68	NC
	7/20/10	NC	47-52	24.30	NC
	1/19/11	NC	47-52	23.55	NC
	4/6/11	NC	47-52	21.21	NC
	9/19/11	NC	47-52	23.12	NC
	11/4/11	NC	47-52	23.35	NC
EX-1***	11/14/01	465.30	30-55	33.41	431.89
	5/7/02	465.30	30-55	27.58	437.72
	9/11/02	465.30	30-55	NM	NC
	12/11/02	465.30	30-55	27.98	437.32
	3/14/03	465.30	30-55	23.02	442.28
	6/25/03	465.30	30-55	22.41	442.89
	9/16/03	465.30	30-55	24.65	440.65
	3/10/04	465.30	30-55	17.99	447.31
	6/15/04	465.30	30-55	22.48	442.82
	9/17/04	465.30	30-55	25.91	439.39
	12/10/04	465.30	30-55	NM	NC
	3/2/05	465.30	30-55	NM	NC
	5/27/05	465.30	30-55	18.68	446.62
	7/21/05	465.30	30-55	21.55	443.75
	10/10/05	465.30	30-55	22.73	442.57
	1/9/06	465.30	30-55	18.05	447.25

Notes:

msl: mean sea level

bgs: below ground surface

NA: well not accessible

NC: elevation not calculated

NM: well not measured

* = Well MW-1, 2, and 3 renamed MW-1A, 2A, and 3A respectively

** = Well installed on 2/22/06-2/28/06

*** = Well destroyed on 2/22/06-2/28/06

(a) = Well EW-3 is 35 feet deep with a screen interval from 25 to 30 feet bgs.

Table 2
Groundwater Analytical Results
 160 Holmes Street, Livermore, California

Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons ($\mu\text{g/L}$)		Aromatic Volatile Organic Compounds ($\mu\text{g/L}$)					Oxygenated Volatile Organics ($\mu\text{g/L}$)						Lead Scavengers ($\mu\text{g/L}$)		
			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
MW-1A*	8/11/00	NC	170,000	57,000	6,400	7,600	4,200	9,700	320,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/19/00	443.09	170,000	17,000	8,400	3,200	2,700	10,000	200,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/22/01	442.12	82,000	11,000	5,100	1,000	13,000	8,700	190,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/30/01	NC	not sampled - well dry		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/14/01	NC	not sampled - well dry		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/7/02	NC	not sampled - well dry		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/11/02	438.87	130,000	NA	7,700	1,100	NS	1,500	<5000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/02	437.48	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/14/03	442.40	180,000	3,800	7,100	3,200	4,300	6,000	220,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/25/03	442.93	71,000	3,100	7,500	4,700	4,800	8,900	210,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/16/03	440.12	37,000	3,600	4,600	220	3,600	930	150,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/22/03	443.28	44,000	4,000	6,800	1,500	4,000	3,800	180,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/10/04	447.58	72,000	3,100	6,000	11,000	3,900	10,000	260,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/15/04	442.65	42,000	4,300	5,000	1,800	3,700	6,000	210,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/17/04	439.42	24,000	2,900	2,800	<33	2,900	500	83,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/10/04	442.85	31,000	2,700	4,600	190	4,400	2,800	200,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/2/05	448.08	58,000	2,800	4,000	2,500	4,500	7,800	230,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/27/05	446.61	79,000	4,600	4,300	6,200	5,100	13,000	240,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/21/05	443.65	80,000	NS	4,300	5,300	5,400	14,000	300,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/10/05	442.54	58,000	NS	4,300	240	5,600	8,300	170,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/9/06	446.98	47,000	3,700	3,100	1,100	4,400	5,900	180,000	<2,500	<25,000	<2,500	<2,500	240,000	<250,000	<2,500,000	<2,500	<2,500
	4/6/06	449.43	18,000	1,900	1,200	280	2,400	2,200	110,000	<2,500	<25,000	<2,500	<2,500	87,000	<250,000	<2,500,000	<2,500	<2,500
	7/27/06	442.61	24,000	2,400	2,100	350	3,400	5,300	130,000	<5000	<50,000	<5000	<5000	160,000	NA	NA	NA	NA
	10/12/06	441.57	19,000	1,700	1,000	26	2,000	1,000	68,000	<1,200	<12,000	<1,200	<1,200	84,000	<120,000	<1,200,000	NA	NA
	1/3/07	444.03	27,000	2,300	1,300	53	2,500	1,900	120,000	<1,700	<1,700	<1,700	<1,700	110,000	<170,000	<1,700,000	<1,700	<1,700
	4/13/07	441.79	28,000	3,000	1,600	74	3,700	1,800	190,000	<5,000	<50,000	<5,000	<5,000	200,000	<500,000	<5,000,000	<5,000	<5,000
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/1/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/08	437.69	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/09	430.03	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/4/10	436.98	1,300	NA	140	<5.0	26	6.0	16,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/10	441.18	400	NA	1.2	1.3	<0.5	0.76	880	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	441.91	150	130	1.4	0.6	<0.5	1.4	300	<250	40,000	<250	<250	330	NA	NA	<250	<250
	4/8/11	442.37	200	180	2.0	1.9	<0.5	4.4	1,300	<120	24,000	<120	<120	2,300	NA	NA	<120	<120
	4/18/11	446.33	140	130	0.56	<0.5	<0.5	4.2	1,500	<50	11,000	<50	<50	1,200	NA	NA	<0.5	<0.5
	5/9/11	445.77	<50	<50	<0.5	<0.5	<0.5	<0.5	880	<50	12,000	<50	<50	1,000	NA	NA	<50	<50
	6/1/11	444.93	<50	52	<0.5	<0.5	<0.5	<0.5	350	<50	12,000	<50	<50	480	NA	NA	<50	<50
	6/15/11	444.59	<50	70	<0.5	<0.5	<0.5	<0.5	310	<100	9,000	<100	<100	330	NA	NA	<100	<100
	6/30/11	444.30	<50	54	<0.5	<0.5	<0.5	<0.5	150	<50	6,200	<50	<50	170	NA	NA	<50	<50
	9/20/11	442.12	96	200	<0.5	0.60	<0.5	0.55	140	<120	19,000	<120	<120	150	NA	NA	<120	<120
	11/8/11	442.03	100	150	1.3	0.99	<0.5	1.1	110	<100	21,000	<100	<100	150	NA	NA	<100	<100
MW-1B	3/13/06	446.44	<50	<50	<0.5	<0.5	<0.5	<0.5	8.2	<0.5	<5.0	<0.5	<0.5	7.9	<50	<500	<0.5	<0.5
	4/6/06	449.43	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	1.0	<50	<500	<0.5	<0.5
	7/27/06	442.55	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	NA	NA	NA	NA
	10/12/06	441.51	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	NA	NA
	1/3/07	443.98	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	4/13/07	441.72	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	7/16/07	429.45	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	10/29/07	417.70	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	2/1/08	431.12	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	4/18/08	437.67	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	7/29/08	420.99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

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 160 Holmes Street, Livermore, California

Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons ($\mu\text{g/L}$)		Aromatic Volatile Organic Compounds ($\mu\text{g/L}$)					Oxygenated Volatile Organics ($\mu\text{g/L}$)						Lead Scavengers ($\mu\text{g/L}$)		
			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
MW-1B cont.	2/4/09	418.19	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/09	427.92	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/24/09	427.26	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	1.1	NA	NA	NA	NA
	3/4/10	437.61	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/10	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	441.92	<50	130	<0.5	<0.5	<0.5	<0.5	<5.0	<250	40,000	<250	<250	330	NA	NA	<250	<250
	4/8/11	446.62	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	4/18/11	446.42	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	5/9/11	445.91	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	6/1/11	444.92	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	6/15/11	444.58	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	6/30/11	444.28	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	9/20/11	442.10	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	11/8/11	442.07	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
MW- 2A*	8/11/00	NC	4,500	1,900	220	52	160	170	3,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/19/00	443.14	3,400	1,300	150	21	100	70	1,900	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/22/01	442.07	7,600	880	25	<10	69	25	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/30/01	NC	not sampled - well dry				not sampled - well dry				NA	NA	NA	NA	NA	NA	NA	NA
	11/14/01	NC	not sampled - well dry				not sampled - well dry				NA	NA	NA	NA	NA	NA	NA	NA
	5/7/02	438.24	400	86	5.4	<0.5	1.9	2.3	230	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/11/02	438.98	260	NA	1.3	<0.5	0.57	0.77	200	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/02	437.38	250	120	7.9	1.6	13	9.9	180	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/14/03	442.53	830	110	56	<0.5	<0.5	<1.0	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/25/03	442.97	260	180	0.92	2.9	3.1	8.1	2,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/16/03	440.24	420	260	3.6	3.4	5.2	2.4	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/22/03	443.36	240	120	0.82	3.1	7.8	3.9	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/10/04	447.63	280	210	9.4	4.2	14	11	1,400	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/15/04	442.76	150	150	2.1	2.4	2.2	1.3	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/17/04	439.50	61	70	<0.5	1.0	<0.5	<0.5	730	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/10/04	442.94	84	110	<0.5	1.2	<0.5	1.5	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/2/05	448.19	63	91	0.55	<0.5	0.63	0.51	1,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/27/05	446.65	270	59	14	3.9	19	6.8	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/21/05	444.48	280	NS	8.6	2.5	17	2.5	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/10/05	442.64	<50	NS	<.5	<.5	<.5	<.5	680	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/9/06	447.27	1,700	890	4.4	1.3	120	18	530	<10	330	<10	<10	590	<1,000	<10,000	<10	<10
	4/7/06	449.47	110	160	0.61	0.80	4.1	<0.5	270	<5.0	660	<5.0	<5.0	240	<500	<5,000	<5.0	<5.0
	7/27/06	442.67	<50	120	<0.5	0.84	<0.5	<0.5	87	<5.0	870	<5.0	<5.0	110	NA	NA	NA	NA
	10/12/06	441.59	<50	70	<0.5	<0.5	<0.5	<0.5	29	<5.0	480	<5.0	<5.0	30	<500	<5,000	NA	NA
	1/3/07	444.04	55	60	0.57	<0.5	<0.5	<0.5	8.5	<2.5	590	<2.5	<2.5	7.8	<250	<2,500	<2.5	<2.5
	4/13/07	441.78	86	130	<0.5	0.60	<0.5	<0.5	16	<5.0	740	<5.0	<5.0	16	<500	<5,000	<5.0	<5.0
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	<10	NS	NS	NS	NS	NS	NS	NS	NS
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/1/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/08	437.68	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/4/10	439.82	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/20/10	439.09	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/21/11	439.64	<50	<50	<0.5	<0.5	<0.5	<0.5	2.8	<5.0	<5.0	<5.0	<5.0	2.8	NA	NA	<5.0	<5.0
	4/8/11	446.64	<50	<50	<0.5	0.77	<0.5	6.2	<5.0	<0.5	15	<0.5	<0.5	3.3	NA	NA	<0.5	<0.5
	9/20/11	442.49	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	7.9	<0.5	<0.5	2.8	NA	NA	<0.5	<0.5
	11/8/11	442.17	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	2.3	NA	NA	<0.5	<0.5

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Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons ($\mu\text{g/L}$)		Aromatic Volatile Organic Compounds ($\mu\text{g/L}$)					Oxygenated Volatile Organics ($\mu\text{g/L}$)						Lead Scavengers ($\mu\text{g/L}$)		
			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
MW-3A*	8/11/00	NC	59	260	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/19/00	443.39	<50	<65	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	2/22/01	442.33	<50	100	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/30/01	NC	not sampled - well dry					NA					NA	NA	NA	NA	NA	NA
	11/14/01	NC	not sampled - well dry					NA					NA	NA	NA	NA	NA	NA
	5/7/02	NC	not sampled - well dry					NA					NA	NA	NA	NA	NA	NA
	9/11/02	439.23	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/02	437.66	NS					NA					NA	NA	NA	NA	NA	NA
	3/14/03	442.80	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/25/03	443.25	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/16/03	440.51	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/22/03	443.47	<50	69	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/10/04	447.96	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/15/04	443.02	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/17/04	439.75	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/10/04	443.19	<50	<50	<0.5	<0.5	<0.5	<0.5	7.6	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/2/05	448.51	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/27/05	446.95	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/21/05	444.74	<50	NS	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/10/05	442.90	<50	NS	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/9/06	447.60	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<500	<500	<0.5	<0.5	<0.5	<0.5
	4/7/06	449.82	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<500	<500	<0.5	<0.5	<0.5	<0.5
	7/27/06	442.94	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<500	<500	NA	NA	NA	NA
	10/12/06	441.85	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<500	<500	NA	NA	NA	NA
	1/3/07	444.32	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<500	<500	<0.5	<0.5	<0.5	<0.5
	4/13/07	442.06	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<500	<500	<0.5	<0.5	<0.5	<0.5
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/1/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/08	437.98	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/4/10	437.89	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/20	439.29	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	442.21	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/8/11	446.94	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/20/11	442.45	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/8/11	442.25	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-4**	11/14/01	431.31	510	90	4.0	<0.5	<0.5	<0.5	14	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/02	438.40	150	<50	3.5	0.5	<0.5	<0.5	48	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/11/02	438.49	<50	NA	<0.5	<0.5	<0.5	<0.5	15	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/02	436.76	<50	<50	<0.5	<0.5	<0.5	<0.5	24	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/14/03	442.01	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/25/03	442.43	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/16/03	439.76	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/22/03	442.73	<50	69	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/10/04	446.95	<50	<50	<0.5	<0.5	<0.5	<0.5	37	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/15/04	442.20	<50	<50	<0.5	<0.5	<0.5	<0.5	7.4	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/17/04	439.03	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/10/04	442.42	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 2
Groundwater Analytical Results
 160 Holmes Street, Livermore, California

Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons ($\mu\text{g/L}$)		Aromatic Volatile Organic Compounds ($\mu\text{g/L}$)					Oxygenated Volatile Organics ($\mu\text{g/L}$)						Lead Scavengers ($\mu\text{g/L}$)			
			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA	
MW-4** cont.	3/2/05	447.55	<50	<50	<0.5	<0.5	<0.5	<0.5	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5/27/05	446.01	<50	<50	<0.5	<0.5	<0.5	<0.5	9.6	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	7/21/05	443.90	<50	NS	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/10/05	442.30	<50	NS	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1/9/06	446.61	<50	<50	<0.5	<0.5	<0.5	<0.5	0.86	<0.5	<5.0	<0.5	0.86	<50	<500	<5.0	<5.0	<5.0	
MW-4A	3/13/06	445.87	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	0.70	<50	<500	<0.5	<0.5	
	4/7/06	448.77	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	1.1	<50	<500	<0.5	<0.5	
	7/28/06	442.09	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	3.0	NA	NA	NA	NA	
	10/13/06	441.06	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	2.0	<50	<500	NA	NA	
	1/4/07	443.44	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	0.79	<50	<500	<0.5	<0.5	
	4/16/07	441.18	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	0.51	<50	<500	<0.5	<0.5	
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/1/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	4/18/08	437.05	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/4/10	439.30	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	7/20/10	440.71	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1/20/11	441.32	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/7/11	436.16	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/19/11	441.53	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	11/7/11	441.56	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	
MW-5**	11/14/01	429.71	<50	<66	<0.5	<0.5	<0.5	<0.5	8.2	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5/7/02	436.75	140	<50	<0.5	<0.5	<0.5	<0.5	110	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/11/02	436.66	<50	NA	<0.5	<0.5	<0.5	<0.5	6.3	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	12/1/02	435.15	73	<50	<0.5	<0.5	<0.5	<0.5	160	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/14/03	440.39	110	<50	<0.5	<0.5	<0.5	<0.5	170	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/25/03	440.64	<50	<50	<0.5	<0.5	<0.5	<0.5	89	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/16/03	437.82	630	<50	<0.5	3.5	<0.5	2.6	1,500	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	12/22/03	440.97	<0.5	<50	<0.5	<0.5	<0.5	<0.5	630	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/10/04	445.43	57	<50	<0.5	<0.5	<0.5	<0.5	1,100	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	6/15/04	440.45	<50	<50	<0.5	<0.5	<0.5	<0.5	750	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	9/17/04	436.97	<50	<50	<0.5	<0.5	<0.5	<0.5	780	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	12/10/04	440.72	<50	<50	<0.5	<0.5	<0.5	<0.5	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	3/2/05	446.09	<50	<50	<0.5	<0.5	<0.5	<0.5	320	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	5/27/05	444.50	<50	<50	<0.5	<0.5	<0.5	<0.5	120	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	7/21/05	442.10	<50	NS	<0.5	<0.5	<0.5	<0.5	97	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	10/10/05	441.30	<50	NS	<0.5	<0.5	<0.5	<0.5	41	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	1/9/06	445.12	<50	<50	<0.5	<0.5	<0.5	<0.5	37	<0.5	<5.0	<0.5	<5.0	<50	<500	<0.5	<0.5	<0.5	
MW-5A	3/13/06	444.48	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<50	<500	<0.5	<0.5	<0.5	
	4/7/06	447.29	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<50	<500	<0.5	<0.5	<0.5	
	7/28/06	440.24	<50	62	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<50	NA	NA	NA	NA	
	10/13/06	439.06	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	6.3	<0.5	<0.5	0.61	<500	NA
	1/4/07	442.11	<50	320	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<5.0	<0.5	<0.5	<50	<500	<0.5
	4/16/07	439.87	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<5.0	<0.5	<0.5	<50	<500	<0.5
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	

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			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
MW-5A cont.	2/1/08	430.61	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.3	<50	<500	<0.5	<0.5
	4/18/08	436.51	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	464.64	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/4/10	435.87	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/20/10	440.07	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/19/11	440.12	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/7/11	436.16	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/19/11	440.02	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/11	440.14	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-5B	3/13/06	444.46	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	0.69	<50	<500	<0.5	<0.5
	4/7/06	447.15	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	0.98	<50	<500	<0.5	<0.5
	7/28/06	440.50	<50	<50	<0.5	<0.5	<0.5	<0.5	6.8	<0.5	6.3	<0.5	<0.5	0.61	NA	NA	NA	NA
	10/13/06	439.42	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	3.6	<50	<500	NA	NA
	1/4/07	442.15	<50	89	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	1.3	<50	<500	<0.5	<0.5
	4/16/07	439.26	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	1.5	<50	<500	<0.5	<0.5
	7/17/07	428.09	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	1.4	NA	NA	NA	NA
	10/29/07	416.69	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	2/1/08	431.34	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.9	<50	<500	<0.5	<0.5
	4/18/08	435.82	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.5	<50	<500	<0.5	<0.5
	7/29/08	419.83	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	11/18/08	412.94	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.2	<50	<500	<0.5	<0.5
	2/4/09	416.96	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/22/09	427.59	<50	NA	<0.5	<0.5	<0.5	<0.5	48	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/24/09	424.86	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.3	<50	<500	<0.5	<0.5
	3/4/10	435.62	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/10	439.19	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/19/11	440.07	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/11	444.66	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/19/11	440.09	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/11	440.19	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-6	11/14/01	430.25	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/02	437.12	<50	67	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/11/02	437.10	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/02	435.36	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/14/03	440.67	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/25/03	441.05	<50	<50	<0.5	<0.5	<0.5	<0.5	<1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/16/03	438.36	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/22/03	441.54	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/10/04	445.48	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/15/04	440.82	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/17/04	437.57	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/10/04	441.04	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/2/05	446.09	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/27/05	444.56	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/21/05	442.53	<50	NS	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/10/05	441.92	<50	NS	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/9/06	445.14	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<5.0	0.86	<50	<500	<0.5	<0.5
	4/6/06	447.13	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<5.0	<0.5	<50	<500	<0.5	<0.5
	7/28/06	440.68	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<5.0	<0.5	NA	NA	NA	NA
	10/13/06	439.77	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<5.0	<0.5	<50	<500	NA	NA

Table 2
Groundwater Analytical Results
 160 Holmes Street, Livermore, California

Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons ($\mu\text{g/L}$)		Aromatic Volatile Organic Compounds ($\mu\text{g/L}$)					Oxygenated Volatile Organics ($\mu\text{g/L}$)						Lead Scavengers ($\mu\text{g/L}$)		
			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
MW-6 cont.	1/4/07	442.10	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	4/16/07	439.73	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/1/08	431.08	<50	<50	<0.5	<0.5	<0.5	0.91	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	4/18/08	435.93	<50	<50	<0.5	<0.5	<0.5	0.91	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/22/09	425.42	<50	NS	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/24/09	425.87	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	3/4/10	438.11	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/20	439.48	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/19/11	440.13	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/6/11	442.37	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/19/11	440.37	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/11	441.13	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-7A ***	3/13/06	445.85	6,200	1,800	140	21	200	560	6,900	<100	4,400	<100	<100	6,300	<10,000	<100,000	<100	<100
	4/7/06	448.71	5,300	1,700	130	26	330	420	5,900	<100	7,500	<100	<100	6,600	<10,000	<100,000	<100	<100
	7/28/06	441.92	2,200	470	28	18	60	0.85	240	<25	4,700	<25	<25	240	NA	NA	NA	NA
	10/12/06	440.82	6,500	2,400	83	38	300	160	980	<17	4,700	<10	<17	1200	<1,700	<17,000	NA	NA
	11/21/06	NM	1,400	NA	25	17	65	<0.5	45	<10	1,400	<10	<10	42	<1,000	<10,000	<10	<10
	1/4/07	443.52	1,000	440	12	18	48	8.3	75	<5.0	1,100	<5.0	<5.0	73	<500	<5,000	<5.0	<5.0
	4/16/07	441.27	520	470	17	5.6	2.6	0.88	140	<12	2,500	<12	<12	170	<1,200	<12,000	<12	<12
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/1/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/08	437.16	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/4/10	439.02	83	NA	<0.5	0.81	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/10	440.54	680	NA	<0.5	10	4.9	4.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	441.72	580	310	<0.5	7.3	7.2	1.5	<5.0	<2.5	490	<2.5	<2.5	5.8	NA	NA	<2.5	<2.5
	4/11/11	445.97	140	<50	<0.5	1.7	<0.5	<0.5	<5.0	<2.5	540	<2.5	<2.5	5.8	NA	NA	<2.5	<2.5
	4/18/11	445.73	91	90	<0.5	0.94	<0.5	<0.5	8.5	400	400	<2.5	<2.5	5.8	NA	NA	<2.5	<2.5
	5/9/11	444.17	<50	69	<0.5	<0.5	<0.5	<0.5	<5.0	<1.7	350	<1.7	<1.7	5.9	NA	NA	<1.7	<1.7
	6/1/11	444.31	58	77	<0.5	0.76	0.79	0.97	5.2	<1.7	250	<1.7	<1.7	5.5	NA	NA	<1.7	<1.7
	6/15/11	443.87	<50	80	<0.5	<0.5	<0.5	<0.5	<5.0	<1.0	190	<1.0	<1.0	3.8	NA	NA	<1.0	<1.0
	6/30/11	443.45	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	81	<0.5	<0.5	2.5	NA	NA	<0.5	<0.5
	9/19/11	441.36	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	4.4	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	11/7/11	441.87	<50	<50	<0.5	0.64	<0.5	<0.5	<5.0	<0.5	3.3	<0.5	<0.5	0.67	NA	NA	<0.5	<0.5
MW-7B ***	3/13/06	445.64	230	<50	1.8	4.7	<0.5	2.2	1,500	<50	7,300	<50	<50	1,300	<5,000	<50,000	<50	<50
	4/7/06	448.54	81	<50	1.9	1.6	1.1	0.58	1,000	<50	9,200	<50	<50	930	<5,000	<50,000	<50	<50
	7/28/06	441.67	150	<50	<0.5	1.9	<0.5	<0.5	1,500	<50	16,000	<50	<50	1,900	NA	NA	NA	NA
	10/12/06	440.65	110	<50	<0.5	1.3	<0.5	<0.5	900	<17	15,000	<17	<17	860	<1700	<17,000	NA	NA
	11/21/06	NM	61	NA	<0.5	0.76	<0.5	<0.5	740	<50	10,000	<50	<50	680	<5,000	<50,000	<50	<50
	1/4/07	443.21	91	<50	<0.5	2.1	<0.5	<0.5	200	<50	11,000	<50	<50	180	<5,000	<50,000	<50	<50
	4/16/07	440.98	94	<50	<0.5	2.6	<0.5	<0.5	35	<50	10,000	<50	<50	<50	<5,000	<50,000	<50	<50
	7/17/07	428.99	<50	<50	0.61	0.63	<0.5	<0.5	13	<17	4,000	<17	<17	<17	NA	NA	NA	NA
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/1/08	431.55	420	<50	0.77	17	<0.5	0.97	45	<25	4,000	<25	<25	49	<2,500	<25,000	<25	<25
	4/18/08	436.87	650	100	3.4	15	8.3	<0.5	150	<25	3,800	<25	<25	140	<2,500	<25,000	<25	<25
	7/28/08	420.47	<50	<50	<0.5	0.56	<0.5	<0.5	17	<5.0	760	<5.0	<5.0	22	<500	<5,000	<5.0	<5.0
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	418.74	620	NA	<0.5	23	<0.5	2.7	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/09	428.56	170	NA	2.1	5.8	<0.5	0.78	190	NA	NA	NA	NA	NA	NA	NA	NA	NA

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Groundwater Analytical Results
 160 Holmes Street, Livermore, California

Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons (µg/L)		Aromatic Volatile Organic Compounds (µg/L)					Oxygenated Volatile Organics (µg/L)							Lead Scavengers (µg/L)	
			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
MW-7B cont.	9/24/09	426.13	<50	NA	<0.5	1.8	<0.5	<0.5	210	<5.0	470	<5.0	<5.0	220	<500	<5,000	<5.0	<5.0
	3/4/10	436.76	140	NA	<0.5	2.1	<0.5	<0.5	25	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/10	440.34	74	NA	<0.5	1.3	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	441.24	190	69	<0.5	4.1	<0.5	<0.5	<5.0	<25.0	4,400	<25.0	<25.0	<25.0	NA	NA	<25.0	<25.0
	4/11/11	443.61	110	<50	<0.5	2.7	<0.5	<0.5	<5.0	<17	2,900	<17	<17	<17	NA	NA	<17	<17
	4/18/11	445.64	160	<50	<0.5	4.3	<0.5	0.6	<5.0	<17	3,300	<17	<17	<17	NA	NA	<17	<17
	5/9/11	444.99	79	<50	<0.5	2.0	<0.5	<0.5	<5.0	<17	3,000	<17	<17	<17	NA	NA	<17	<17
	6/1/11	444.14	72	<50	<0.5	1.9	<0.5	<0.5	<5.0	<50	3,100	<50	<50	<50	NA	NA	<50	<50
	6/15/11	443.94	100	<50	<0.5	2.2	<0.5	<0.5	<5.0	<50	2,700	<50	<50	<50	NA	NA	<50	<50
	6/30/11	443.74	100	<50	<0.5	2.4	<0.5	<0.5	<5.0	<25	2,900	<25	<25	<25	NA	NA	<25	<25
	9/19/11	441.29	<50	56	<0.5	1.1	<0.5	<0.5	<5.0	<17	3,300	<17	<17	<17	NA	NA	<17	<17
MW-7C	11/8/11	465.39	98	<50	<0.5	2.6	<0.5	<0.5	<5.0	<12	1,600	<12	<12	<12	NA	NA	<12	<12
	3/13/06	445.34	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	0.60	<50	<500	<0.5	<0.5
	4/7/06	448.21	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<50	<500	<0.5	<0.5	<0.5
	7/28/06	441.24	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<50	<500	<0.5	<0.5	<0.5
	10/13/06	440.65	89	<50	<0.5	1.4	<0.5	<0.5	900	<17	12,000	<17	<17	820	<1700	<17,000	NA	NA
	11/21/06	NM	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	24	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	1/4/07	442.86	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	24	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	4/16/07	440.66	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	7/17/07	428.69	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	10/29/07	417.14	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
***	2/1/08	431.39	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<5.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	4/18/08	436.64	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	7/28/08	420.39	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	11/18/08	415.77	97	<50	<0.5	<0.5	<0.5	<0.5	<90	<1.0	4.0	<1.0	<1.0	<1.0	<100	<1,000	<1.0	<1.0
	2/4/09	417.50	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/22/09	428.41	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/24/09	425.90	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	<50	<500	<0.5	<0.5
	3/4/10	438.73	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/10	440.01	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	440.89	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8A	4/7/11	445.51	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/20/11	441.89	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	11/8/11	440.99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	NC	67	<50	<0.5	2.6	<0.5	1.6	<5.0	<0.5	<2.0	<0.5	<0.5	4.9	<50	<500	<0.5	<0.5
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/4/10	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/20/10	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
MW-8B	4/7/11	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/19/11	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/7/11	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA

Table 2
Groundwater Analytical Results
 160 Holmes Street, Livermore, California

Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons ($\mu\text{g/L}$)		Aromatic Volatile Organic Compounds ($\mu\text{g/L}$)					Oxygenated Volatile Organics ($\mu\text{g/L}$)						Lead Scavengers ($\mu\text{g/L}$)		
			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
MW-9A	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/4/10	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/20/10	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	NC	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	74	<0.5	<0.5	1.1	<50	<500	<0.5	<0.5
	4/7/11	NC	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	65	<0.5	<0.5	0.74	NA	NA	<0.5	<0.5
	9/19/11	NC	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	120	<0.5	<0.5	1.6	NA	NA	<0.5	<0.5
	11/7/11	NC	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	2.9	<0.5	<0.5	<0.5	NA	NA	<0.5	<0.5
MW-9B	7/29/08	NC	<50	63	<0.5	<0.5	<0.5	<0.5	100	<10	2,800	<10	<10	160	<1,000	<10,000	<10	<10
	11/18/08	NC	<50	1000	<0.5	<0.5	<0.5	<0.5	7.0	<0.5	4.6	<0.5	<0.5	7.5	<50	<500	<0.5	<0.5
	2/4/09	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/22/09	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	470	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/24/09	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	5.4	<0.5	<2.0	<0.5	<0.5	7.2	<50	<500	<0.5	<0.5
	3/4/10	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/20/10	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/20/11	NC	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	8.9	<0.5	<0.5	0.65	<50	<500	<0.5	<0.5
	4/7/11	NC	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	22	<0.5	<0.5	1.2	NA	NA	<0.5	<0.5
	9/19/11	NC	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.2	NA	NA	<0.5	<0.5
	11/7/11	NC	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.7	NA	NA	<0.5	<0.5
EX-1**	11/14/01	431.89	13,000	2,000	180	1,000	330	3,200	2,200	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/7/02	437.72	7,700	560	320	<25	66	150	6,200	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/11/02	NC	2,800	NA	32	<13	14	<13	2,500	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/1/02	437.32	3,000	100	81	<0.5	44	<1.0	4,800	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/14/03	442.28	750	50	<0.5	<0.5	7.7	13	1,200	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/25/03	442.89	120	<50	3.2	3.7	4.2	7.6	260	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/16/03	440.65	170	<50	0.5	1.5	<0.5	0.9	1,600	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/10/04	447.31	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
	6/15/04	442.82	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
	9/17/04	439.39	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/10/04	NC	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
	3/2/05	NC	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/27/05	446.62	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/21/05	443.75	<50	NS	<0.5	<0.5	<0.5	<0.5	610	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/10/05	442.57	<50	NS	<0.5	<0.5	<0.5	<0.5	31	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/9/06	447.25	580	55	40	25	45	43	4,200	<170	<1,700	<170	<170	5,200	<170,000	<17,000	<170	<170
EW-1	3/13/06	446.47	210	120	5.0	4.1	7.5	12	3,400	<50	<100	<50	<50	2,300	<5,000	<50,000	<50	<50
	4/7/06	449.46	1,900	190	66	170	110	380	7,900	<100	<1000	<100	<100	6,400	<10,000	<100,000	<100	<100
	7/27/06	441.60	280	100	7.4	5.5	12	28	8,400	<500	<5,000	<500	<500	12,000	NA	NA	NA	NA
	10/12/06	441.94	2,100	130	86	19	100	310	2,400	<50	1,400	<50	<50	2,800	<5,000	180,000	NA	NA
	1/4/07	444.00	1,600	150	56	27	110	240	5,000	<50	2,900	<50	<50	4,900	<5,000	<50,000	<50	<50
	4/13/07	441.76	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/1/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/18/08	437.62	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Table 2
Groundwater Analytical Results
 160 Holmes Street, Livermore, California

Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons ($\mu\text{g/L}$)		Aromatic Volatile Organic Compounds ($\mu\text{g/L}$)					Oxygenated Volatile Organics ($\mu\text{g/L}$)						Lead Scavengers ($\mu\text{g/L}$)		
			Gasoline	Diesel	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
EW-1 cont.	3/4/10	NC	4,400	NA	460	<25	380	<25	31,000	NA	NA	NA	NA	NA	NA	NA	NA	
	7/20/10	441.10	400	NA	4.4	6.6	1.8	4.4	590	NA	NA	NA	NA	NA	NA	NA	NA	
	1/20/11	441.87	570	190	21	6.4	14	57	3,500	<50	15,000	<50	<50	3,300	NA	NA	<50	
	4/8/11	446.60	410	220	11	4.2	3.1	43	2,400	<50	8,200	<50	<50	3,300	NA	NA	<50	
	4/18/11	445.75	200	130	<0.5	1.7	1.1	3.0	4,400	<50	14,000	<50	<50	3,600	NA	NA	<50	
	5/9/11	445.76	62	<50	1.2	1.4	<0.5	<0.5	520	<25	4,800	<25	<25	390	NA	NA	<25	
	6/2/11	444.93	83	<50	1.3	2.1	<0.5	0.6	180	<100	9,600	<100	<100	240	NA	NA	<100	
	6/15/11	444.34	60	<50	<0.5	1.8	<0.5	<0.5	97	<100	6,300	<100	<100	100	NA	NA	<100	
	6/30/11	444.04	74	<50	<0.5	2.0	<0.5	<0.5	200	<50	5,700	<50	<50	200	NA	NA	<50	
	9/20/11	443.10	63	52	<0.5	2.1	<0.5	<0.5	210	<50	11,000	<50	<50	190	NA	NA	<50	
	11/8/11	442.10	78	<50	<0.5	1.8	<0.5	<0.5	76	<50	7,600	<50	<50	97	NA	NA	<50	
EW-2	3/13/06	446.81	<250	69	<2.5	<2.5	<2.5	<2.5	5,400	<100	<1,000	<100	<100	5,100	<10,000	<100,000	<100	<100
	4/7/06	449.79	470	160	15	2.5	24	13	2,000	<50	<500	<50	<50	1,800	<5,000	<50,000	<50	<50
	7/27/06	442.89	260	350	2.2	1.7	6.1	3.0	8,700	<500	<5,000	<500	<500	12,000	NA	NA	NA	NA
	10/12/06	444.51	110	<50	2.0	1.0	3.1	3.9	620	<12	<120	<12	<12	680	<1,200	<12,000	NA	NA
	1/4/07	444.33	<500	<50	5.3	<5.0	16	7.1	4,500	<50	<500	<50	<50	4,200	<5,000	<50,000	<50	<50
	4/13/07	442.06	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	7/16/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	10/29/07	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/1/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	4/18/08	437.95	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	7/28/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	2/4/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	
	3/4/10	NC	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	
	7/20/10	441.54	<50	NA	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA	NA	NA	NA	NA	NA	NA	
	1/21/11	442.27	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	2.8	<0.5	<0.5	2.1	NA	NA	<0.5	
	4/11/11	446.99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	2.1	<0.5	<0.5	0.65	NA	NA	<0.5	
	4/18/11	446.80	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	0.7	NA	NA	<0.5	
	5/9/11	446.32	<50	<50	<0.5	<0.5	<0.5	<0.5	15	<0.5	2.8	<0.5	<0.5	12	NA	NA	<0.5	
	6/2/11	445.28	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	12	<0.5	<0.5	6.2	NA	NA	<0.5	
	6/15/11	444.99	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	2.3	NA	NA	<0.5	
	6/30/11	444.68	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	2.4	NA	NA	<0.5	
	9/20/11	441.44	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.3	NA	NA	<0.5	
	11/8/11	442.39	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	<0.5	<2.0	<0.5	<0.5	1.0	NA	NA	<0.5	

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Groundwater Analytical Results
 160 Holmes Street, Livermore, California

Well ID	Date Collected	Groundwater Elevation (feet above MSL)	Total Petroleum Hydrocarbons ($\mu\text{g/L}$)		Aromatic Volatile Organic Compounds ($\mu\text{g/L}$)					Oxygenated Volatile Organics ($\mu\text{g/L}$)						Lead Scavengers ($\mu\text{g/L}$)		
			Gasoline	Diesel	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE (8021B)	TAME	TBA	DIPE	ETBE	MTBE	Ethanol	Methanol	EDB	1,2-DCA
EW-3 ^(a)	11/18/08	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/4/09	NC	<10,000	NA	<100	<100	<100	<100	420,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/21/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	9/24/09	NC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
	3/4/10	NC	140,000	NA	240	900	320	28,000	340,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/20/10	NC	23,000	NA	240	940	760	3,100	150,000	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/21/11	NC	15,000	5,200	230	93	1,100	1,900	150,000	<2,500	72,000	<2,500	150,000	NA	NA	<2,500	<2,500	<2,500
	4/11/11	NC	8,400	590	110	37	690	820	68,000	<2,500	67,000	<2,500	<2,500	79,000	NA	NA	<2,500	<2,500
	4/18/11	NC	7,300	1,300	81	100	350	870	85,000	<1,700	50,000	<1,700	<1,700	72,000	NA	NA	<1,700	<1,700
	5/9/11	NC	5,400	2,200	56	<50	160	350	79,000	<1,000	40,000	<1,000	<1,000	62,000	NA	NA	<1,000	<1,000
	6/1/11	NC	4,800	3,700	53	<25	170	300	50,000	<1,000	43,000	<1,000	<1,000	76,000	NA	NA	<1,000	<1,000
	6/15/11	NC	8,200	2,200	66	<50	270	360	93,000	<2,500	47,000	<2,500	<2,500	85,000	NA	NA	<2,500	<2,500
	6/30/11	NC	8,000	1,900	64	<50	260	260	100,000	<2,500	51,000	<2,500	<2,500	100,000	NA	NA	<2,500	<2,500
	9/20/11	NC	<5,000"	1,700	<50"	64	74	100	80,000	<2,500	91,000	<2,500	<2,500	78,000	NA	NA	<2,500	<2,500
	11/8/11	NC	<6,000"	860	<50"	50	60	130	82,000	<2,500	49,000	<2,500	<2,500	67,000	NA	NA	<2,500	<2,500

Notes:

Samples analyzed for TPHg and TPHe by EPA Method 8015Bm, BTEX by EPA Method 8021B, MTBE by EPA Method 8021B and/or 8260B, and the fuel oxygenates

TBA, DIPE, ETBE, TAME, EDB, 1,2-DCA, ethanol, and methanol by EPA Method 8260.

$\mu\text{g/L}$ = micrograms per liter

NS = Not Sampled

" = High concentrations of MTBE caused very high detection limits, both TPHg and Benzene were estimated just below the listed detection limits by McCampbell Analytical

NA = Not Analyzed

EDB = 1,2-Dibromoether

1,2-DCA = 1,2-Dichloroethane

MTBE = methyl tertiary butyl ether

DIPE = Di-isopropyl Ether

ETBE = Ethyl tert-Butyl Ether

TAME - tert-Amyl Methyl Ether

TBA = tert-Butanol

" = High concentrations of MTBE resulted in high reporting limits, both TPHg and benzene were estimated just below the listed reporting limits by laboratory

* = Well MW-1 renamed MW-1A, well MW-2 renamed MW-2A, Well MW-3 renamed MW-3A in February 2006

** = Well destroyed in February 2006

*** = Anomalous data observed in MW-7C from October 12, 2006 sample. Therfore, wells MW-7A, MW-7B, and MW-7C were resampled on November 21, 2006.

(a) = Well EW-3 is 35 feet deep with a screen interval from 25 to 30 feet bgs.

APPENDIX A
Groundwater Monitoring Field Protocol

Appendix A

Groundwater Monitoring Protocol

Well Monitoring and Sample Collection

A Teflon bailer or submersible pump was used to purge a minimum of three well volumes of groundwater from each well. After each well volume is purged, field parameters such as pH, temperature, and conductivity are recorded. Wells are purged until field parameters have stabilized or a maximum of ten (10) well volumes of groundwater have been removed. When possible, purge rates will not exceed the recharge rate for the well. However, if the well yield is low and the well was dewatered, the well is allowed to recharge to 80% of its original volume prior to sample collection. Field parameter measurements and pertinent qualitative observations, such as groundwater color and odor, are recorded in Groundwater Sampling Field Logs. Groundwater samples are collected in appropriate bottles and stored on ice for delivery, under chain-of-custody documentation, to a state-certified laboratory for analysis.

Equipment Decontamination

All drilling, sampling, and well development equipment was cleaned in a solution of laboratory grade detergent and distilled water or steam cleaned before use at each sampling point.

Field Personnel

During groundwater sampling activities, sampling personnel will wear pertinent attire to minimize risks to health and safety. Field personnel will also use a pair of clean, powderless, surgical gloves for each successive sampling point. Used surgical gloves will be placed into waste barrels for future disposal.

Waste Disposal

Water generated during well purging and sampling activities will be placed into DOT-approved 55-gallon waste drums. Waste drums will be temporarily stored on-site pending proper disposal of wastewater to an approved transport, storage, and disposal (TSD) facility.

APPENDIX B
Groundwater Sampling Field Logs

ALLTERRA**Groundwater Sampling Field Log**

Site Address 1100 holmes st

Date 11.8.11

Project Number

Field Personnel

Monitoring Well Information

Monitoring Well ID EW-2

Monitoring Well Diameter (inches) (1.16)

Depth to Water (feet) 23.60

Water Column (feet) 110.4

Total Depth (feet)

80% Recharge Depth (feet)

Depth to Product (feet) 40.0

1 Well Volume (gallons)

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	11	723	19.1	7.56	High	Brown	None	
	22	734	19.1	7.46	/	/	/	/
	33	749	19.0	7.43	/			

Total Purge Volume 33 Comments

Groundwater Sampling Information

Sample ID Sample Time 11130

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address 1100 holmes st

Date 11.8.11

Project Number

Field Personnel

Monitoring Well Information

Monitoring Well ID EW-3

Monitoring Well Diameter (inches) (1.16)

Depth to Water (feet) 23.30

Water Column (feet) 10.7

Total Depth (feet)

80% Recharge Depth (feet)

Depth to Product (feet) 30.0

1 Well Volume (gallons)

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	1	689 m³	19.1	11.97	High	Red/Brown	YES	
	2	647 m³	19.5	12.05	/	/	/	/
	4	0.43 m³	19.8	12.09	/			

Total Purge Volume 4 Comments

Groundwater Sampling Information

Sample ID Sample Time 12102

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address	160 holmes st	Date	11-7-11
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Project Number	Field Personnel		
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Monitoring Well Information

Monitoring Well ID	MW-4A	Monitoring Well Diameter (inches)	(.17)
Depth to Water (feet)	23.40	Water Column (feet)	6.60
Total Depth (feet)		80% Recharge Depth (feet)	
Depth to Product (feet)	30.0	1 Well Volume (gallons)	

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	1	745	19.1	7.93	High	0/16 BW	No	
	2	731	19.0	7.62		/	/	
	3	747	19.0	7.56				

Total Purge Volume 3 Comments

Groundwater Sampling Information

Sample ID	Sample Time	1:30
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Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address	160 holmes st	Date	11-7-11
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Project Number	Field Personnel		
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Monitoring Well Information

Monitoring Well ID	MW-5A	Monitoring Well Diameter (inches)	(.17)
Depth to Water (feet)	24.50	Water Column (feet)	10.5
Total Depth (feet)		80% Recharge Depth (feet)	
Depth to Product (feet)	35.0	1 Well Volume (gallons)	

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	1.5	950	20.8	8.52	MED	light BW	none	
	3	962	20.6	8.18	/	/	/	
	4.5	745	20.4	7.81	/			

Total Purge Volume 4.5 Comments

Groundwater Sampling Information

Sample ID	Sample Time	12:30
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Sample Containers (Number/Type)

Comments

ALLTERRA**Groundwater Sampling Field Log**

Site Address 1100 holmes st Date 11.7.11

Project Number Field Personnel

Monitoring Well Information

Monitoring Well ID MW-5B	Monitoring Well Diameter (inches) (.17)
Depth to Water (feet) 24.40	Water Column (feet) 30.6
Total Depth (feet)	80% Recharge Depth (feet)
Depth to Product (feet) 56.0	1 Well Volume (gallons)

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	5	690	19.5	7.82	low	clear	none	
	10	735	19.7	7.67	med	light Brn	none	
	15	705	19.6	7.68	med	1	1	

Total Purge Volume 15 Comments

Groundwater Sampling Information

Sample ID Sample Time 11:30

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address 1100 holmes st Date 11.7.11

Project Number Field Personnel

Monitoring Well Information

Monitoring Well ID MW-6	Monitoring Well Diameter (inches) (.17)
Depth to Water (feet) 23.0	Water Column (feet) 27
Total Depth (feet)	80% Recharge Depth (feet)
Depth to Product (feet) 50.0	1 Well Volume (gallons)

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	4.5	763	19.2	8.14	med	Brown	none	
	9	718	18.7	8.11	1	1	1	
	13.5	789	18.8	8.02	1			

Total Purge Volume 13.5 Comments

Groundwater Sampling Information

Sample ID Sample Time 11:15

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address 1100 holmes st

Date 11-7-11

Project Number

Field Personnel

Monitoring Well Information

Monitoring Well ID MW- 8B3

Monitoring Well Diameter (inches) (.17)

Depth to Water (feet) 23.50

Water Column (feet) 21.5

Total Depth (feet)

80% Recharge Depth (feet)

Depth to Product (feet) 51.0

1 Well Volume (gallons)

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	4.5	1041		19.3	7.88	Very Low	Clear	NO
	9	1041		19.3	7.80	Low	Light Brown	NO
	13.5	1038		19.4	7.108	Low	Light Brown	NO
Total Purge Volume	13.5							

Groundwater Sampling Information

Sample ID

Sample Time 11:30

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address 1100 holmes st

Date 11-7-11

Project Number

Field Personnel

Monitoring Well Information

Monitoring Well ID MW. 9A

Monitoring Well Diameter (inches) (.17)

Depth to Water (feet) 23.20

Water Column (feet) 12.8

Total Depth (feet)

80% Recharge Depth (feet)

Depth to Product (feet) 36.0

1 Well Volume (gallons)

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	2	1027		19.3	8.26	Very Low	Clear	NO
	4	1077		19.7	8.11	Low	Light Brown	NO
	8	1049		19.2	7.93	Low	Light Brown	NO
Total Purge Volume	8							

Groundwater Sampling Information

Sample ID

Sample Time 11:50

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address	1100 holmes st	Date	11.7.11
Project Number	Field Personnel		
Monitoring Well Information			
Monitoring Well ID	MW-7A	Monitoring Well Diameter (inches)	(.17)
Depth to Water (feet)	23.45	Water Column (feet)	6.55
Total Depth (feet)		80% Recharge Depth (feet)	
Depth to Product (feet)	30.0	1 Well Volume (gallons)	
Comments			

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conduc-tivity	Temper-ature	pH	Turbidity	Color	Odor
	1	784	19.9	7.39	med	brn	no	
	2	992	19.9	7.33		/	/	/
	3	1037	19.5	7.28				
Total Purge Volume	3			Comments				

Groundwater Sampling Information

Sample ID	Sample Time	1:00
Sample Containers (Number/Type)		
Comments		

Groundwater Sampling Field Log

Site Address	1100 holmes st	Date	11.8.11
Project Number	Field Personnel		
Monitoring Well Information			
Monitoring Well ID	MW-7B	Monitoring Well Diameter (inches)	(.17)
Depth to Water (feet)	24.10	Water Column (feet)	25.9
Total Depth (feet)		80% Recharge Depth (feet)	
Depth to Product (feet)	50.0	1 Well Volume (gallons)	
Comments			

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conduc-tivity	Temper-ature	pH	Turbidity	Color	Odor
	4.5	788	19.1	8.84	low	clear	none	
	9	844	19.3	8.09		/	/	/
	13.5	821	19.2	8.02				
Total Purge Volume	13.5			Comments				

Groundwater Sampling Information

Sample ID	Sample Time	10:30
Sample Containers (Number/Type)		
Comments		

ALLTERRA**Groundwater Sampling Field Log**

Site Address	1100 holmes st	Date	11-8-11
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Project Number	Field Personnel		
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Monitoring Well Information

Monitoring Well ID	MW-7C	Monitoring Well Diameter (inches)	(.17)
Depth to Water (feet)	24.40	Water Column (feet)	45.10
Total Depth (feet)		80% Recharge Depth (feet)	
Depth to Product (feet)	70.0	1 Well Volume (gallons)	

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	7.5	372	19.0	7.81	Very Low	Clear	No	
	15	628	19.0	7.60	Very Low	Light tan	No	
	22.5	647	19.0	7.61	Low	Light Brown	No	

Total Purge Volume 22.5 Comments

Groundwater Sampling Information

Sample ID	Sample Time
10:40 AM	
Sample Containers (Number/Type)	
Comments	

Groundwater Sampling Field Log

Site Address	1100 holmes st	Date	11-7-11
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Project Number	Field Personnel		
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Monitoring Well Information

Monitoring Well ID	MW-8A	Monitoring Well Diameter (inches)	(.17)
Depth to Water (feet)	24.10	Water Column (feet)	11.9
Total Depth (feet)		80% Recharge Depth (feet)	
Depth to Product (feet)	36.0	1 Well Volume (gallons)	

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	2	1008	19.2	7.85	MED	Brown	NO	
	4	996	19.1	7.65	MED	Brown	NO	
	8	989	19.1	7.54	MED	Brown	NO	

Total Purge Volume 9 Comments

Groundwater Sampling Information

Sample ID	Sample Time
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2:18 PM	
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Sample Containers (Number/Type)	
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Comments	
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Groundwater Sampling Field Log

Site Address 160 holmes st Date 11-8-11

Project Number	Field Personnel
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Monitoring Well Information

Monitoring Well ID MW-1A **Monitoring Well Diameter (inches)** (.17)

Depth to Water (feet) 23.00 Water Column (feet) 7.0

Total Depth (feet) 80% Recharge Depth (feet)

Depth to Product (feet) 30' **1 Well Volume (gallons)**

Comments

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Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
		1	2.51	18.9	8.20	High	Grey	NO
		2	2.96	18.9	8.34	High	Grey	NO
		3	2.93	18.16	8.40	High	Grey	NO

Total Purge Volume 3 Comments

Groundwater Sampling Information

Sample ID Sample Time 11:20 AM

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address 160 holmes st Date 11-8-11

Project Number **Field Personnel**

Monitoring Well Information

Monitoring Well ID MW-1B Monitoring Well Diameter (inches) (.17)

Depth to Water (feet) 22.25 **Water Column (feet)** 32.05

Total Depth (feet) 80% Recharge Depth (feet)

Depth to Product (feet) 55' **1 Well Volume (gallons)**

Comments

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Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
		5	60410	18.7	9.100	Very Low	Clear	No
		10	6031	18.8	9.12	Very low	Clear	No
		15	60340	18.8	9.02	Very low	Clear	No

Total Purge Volume /S Comments

Groundwater Sampling Information

Sample ID Sample Time 12:05 PM

Sample Containers (Number/Type)

Comments

ALLTERRA
Groundwater Sampling Field Log

Site Address 160 holmes st Date 11.8.11

Project Number _____ Field Personnel

Monitoring Well Information

Monitoring Well ID MW-2A **Monitoring Well Diameter (inches) (.17)**

Depth to Water (feet) 22, 77 **Water Column (feet)** 7, 23

Total Depth (feet) _____ 80% Recharge Depth (feet) _____

Depth to Product (feet) 30' **1 Well Volume (gallons)**

Comments

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
		1	860	19.7	8.56	med	light brown	No
		2	855	19.7	8.23	1	1	1
		3	854	19.8	7.92	1		

Total Purge Volume 3 Comments 18

Groundwater Sampling Information

Sample ID Sample Time 12:30

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address 160 holmes st Date 11/8/11

Project Number **Field Personnel**

Monitoring Well Information

Monitoring Well ID MW-3A Monitoring Well Diameter (inches) 6-12

Depth to Water (feet) 23.40 Water Column (feet) 10.4

Total Depth (feet) 80% Recharge Depth (feet)

Depth to Product (feet) 30' **1 Well Volume (gallons)**

[Comments](#)

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
		1	674	19.3	8.08	med	brown	none
		2	672	19.3	7.78	1	1	1
		3	667	19.4	7.72	1	1	1

Total Purge Volume	3	Comments
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Groundwater Sampling Information

Sample ID Sample Time 11:00

Sample Containers (Number/Type)

Comments

Groundwater Sampling Field Log

Site Address	1100 holmes st	Date	11-7-11
Project Number		Field Personnel	
Monitoring Well Information			
Monitoring Well ID	MW- 9B	Monitoring Well Diameter (inches)	(.17)
Depth to Water (feet)	23.35	Water Column (feet)	28.65
Total Depth (feet)		80% Recharge Depth (feet)	
Depth to Product (feet)	52.0	1 Well Volume (gallons)	
Comments			

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	5	834	18.9	7.57	MPD	Brown	No	
	10	858	19.0	7.41	Med	Brown	No	
	15	875	19.0	7.35	Med	Brown	No	
Total Purge Volume	15			Comments				

Groundwater Sampling Information

Sample ID	Sample Time	12:40 PM
Sample Containers (Number/Type)		
Comments		

Groundwater Sampling Field Log

Site Address	1100 holmes st	Date	11-8-11
Project Number		Field Personnel	
Monitoring Well Information			
Monitoring Well ID	EW- 1	Monitoring Well Diameter (inches)	(.100)
Depth to Water (feet)	23.35	Water Column (feet)	16.105
Total Depth (feet)		80% Recharge Depth (feet)	
Depth to Product (feet)	40.0	1 Well Volume (gallons)	
Comments			

Field Measurements and Observations

Time	Depth to Water	Purge Volume	Conductivity	Temperature	pH	Turbidity	Color	Odor
	10	700	19.4	7.97	Med	Brown	No	
	20	763	19.4	7.82	Med	Brown	No	
	30	711	19.4	7.79	Med	Brown	No	
Total Purge Volume	30			Comments				

Groundwater Sampling Information

Sample ID	Sample Time	12:35 PM
Sample Containers (Number/Type)		
Comments		

APPENDIX C
Certified Analytical Report and Chain-of-Custody



Analytical Report

Allterra Environmental 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060	Client Project ID: 160 Holmes St, Livermore CA	Date Sampled:	11/07/11-11/08/11
		Date Received:	11/10/11
	Client Contact: James Allen	Date Reported:	11/16/11
	Client P.O.:	Date Completed:	11/16/11

WorkOrder: 1111354

November 16, 2011

Dear James:

Enclosed within are:

- 1) The results of the **18** analyzed samples from your project: **160 Holmes St, Livermore CA,**
- 2) A QC report for the above samples,
- 3) A copy of the chain of custody, and
- 4) An invoice for analytical services.

All analyses were completed satisfactorily and all QC samples were found to be within our control limits.

If you have any questions or concerns, please feel free to give me a call. Thank you for choosing
McCampbell Analytical Laboratories for your analytical needs.

Best regards,

Angela Rydelius
Laboratory Manager
McCampbell Analytical, Inc.

The analytical results relate only to the items tested.

1111354

ALLTERRA

849 Almar Avenue, Suite C, #281

Santa Cruz, California 95060

Website: www.allterraenv.com

Phone: (831) 425-2608 Facsimile: (831) 425-2609

Report and Bill to: Allterra Environmental, Inc.

Project Number:

Project Location: 160 X Holmes St Livermore CA

Project Name:

Sampler Signature:

Chain of Custody Record

Turn Around Time (circle one) RUSH 24HR 48HR 72HR 5 Day

Field Point Name / Sample ID	Sample Collection			Sample Containers		Matrix			Preservation			TPHg/BTEX/MTBE (EPA 8015/8021)	BTEX (EPA 8020)	TPHd (EPA 8015)	5-fuel oxy (EPA 8260)	Ethanol and Methanol (EPA 8260)	Lead Scavengers (8260)	Total VOCs (EPA 8260)	pH, BOD, Fixed Dissolved Solids	Chloride, Sodium, Boron, Sulfate	Nitrite, Nitrate, Total Kjeldahl Nitrogen, and Total Nitrogen (as N)	Priority Pollutants (Inorganics)	Perchlorate	Total Trihalomethanes	Total Haloacetic Acids	EDF required
	Date	Time	Number of Containers	Container Type	Air	Water	Soil	Sludge	Other	Ice	HCl	HNO ₃														
+2 MW-1A	11-8-11	11:20	6	(5) VOA(1)AS	X				X X				X													
+ MW-1B	11-8-11	12:05																								
+1 MW-2A	11-8-11	12:20																								
+ MW-7B	11-8-11	10:30																								
+ MW-7C	11-8-11	10:40																								
+ MW-9A	11-7-11	11:50																								
+ MW-9B	11-7-11	12:40																								
+ EW-1	11-8-11	12:35																								
+ EW-2	11-8-11	11:30																								
+ E-3	11-8-11	12:00																								
+ MW-3A	11-8-11	11:00	4	VOA																						
+ MW-4A	11-7-11	1:30																								
+ MW-5A	11-7-11	12:30																								
+ MW-5B	11-7-11	11:30																								
+ MW-6	11-7-11	1:15																								
+ MW-8A	11-7-11	2:18																								
+ MW-8B	11-7-11	1:30																								
+ MW-1A	11-7-11	1:00	6	(5)VAA(1)AS	↓				↓	↓								X X	X							

Sampled By:
Aaron Powus

Date: 11-8-11 Time: Received By:

Comments:

44

GOOD CONDITION ✓ APPROPRIATE
 HEAD SPACE ABSENT ✓ CONTAINERS ✓
 DECHLORINATED IN LAB ✓ PRESERVED IN LAB ✓
 PRESERVATION VOAS ✓ O&G METALS OTHER

Received By:

Date: 11-10-11 Time: Received By: Muna

Received By:

Date: Time: Received By:

REC'D SEALED & INTACT VIA On Track

McCAMPBELL ANALYTICAL, INC.

 1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 1 of 2

WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag

Report to:

James Allen
Allterra Environmental
849 Almar Ave, Ste. C #281
Santa Cruz, CA 95060
831-425-2608 FAX: 831-425-2609

Email: allterraenvironmental@yahoo.com; micah
cc:
PO:
ProjectNo: 160 Holmes St, Livermore CA

Bill to:

Accounts Payable
Allterra Environmental
849 Almar Ave, Ste. C #281
Santa Cruz, CA 95060
micah@allterraenv.com

Requested TAT: 5 days

Date Received: 11/10/2011
Date Printed: 11/10/2011

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1111354-001	MW-1A	Water	11/8/2011 11:20	<input type="checkbox"/>	C	A	A	B								
1111354-002	MW-1B	Water	11/8/2011 12:05	<input type="checkbox"/>	C	A		B								
1111354-003	MW-2A	Water	11/8/2011 12:20	<input type="checkbox"/>	C	A		B								
1111354-004	MW-7B	Water	11/8/2011 10:30	<input type="checkbox"/>	C	A		B								
1111354-005	MW-7C	Water	11/8/2011 10:40	<input type="checkbox"/>	C	A		B								
1111354-006	MW-9A	Water	11/7/2011 12:40	<input type="checkbox"/>	C	A		B								
1111354-007	MW-9B	Water	11/7/2011 12:40	<input type="checkbox"/>	C	A		B								
1111354-008	EW-1	Water	11/8/2011 12:35	<input type="checkbox"/>	C	A		B								
1111354-009	EW-2	Water	11/8/2011 11:30	<input type="checkbox"/>	C	A		B								
1111354-010	EW-3	Water	11/8/2011 12:00	<input type="checkbox"/>	C	A		B								
1111354-011	MW-3A	Water	11/8/2011 11:00	<input type="checkbox"/>		A										
1111354-012	MW-4A	Water	11/7/2011 13:30	<input type="checkbox"/>		A										
1111354-013	MW-5A	Water	11/7/2011 12:30	<input type="checkbox"/>		A										
1111354-014	MW-5B	Water	11/7/2011 11:30	<input type="checkbox"/>		A										

Test Legend:

1	5-OXYS+PBSCV_W	2	G-MBTEX_W	3	PREDF REPORT	4	TPH(D)_W	5	
6		7		8		9		10	
11		12							

Prepared by: Maria Venegas

Comments:

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.

McCAMPBELL ANALYTICAL, INC.


1534 Willow Pass Rd
Pittsburg, CA 94565-1701
(925) 252-9262

CHAIN-OF-CUSTODY RECORD

Page 2 of 2

 WaterTrax WriteOn EDF Excel Fax Email HardCopy ThirdParty J-flag
Report to:

James Allen
Allterra Environmental
849 Almar Ave, Ste. C #281
Santa Cruz, CA 95060
831-425-2608 FAX: 831-425-2609

Email: allterraenvironmental@yahoo.com; micah
cc:
PO:
ProjectNo: 160 Holmes St, Livermore CA

Bill to:

Accounts Payable
Allterra Environmental
849 Almar Ave, Ste. C #281
Santa Cruz, CA 95060
micah@allterraenv.com

Requested TAT: 5 days**Date Received:** 11/10/2011**Date Printed:** 11/10/2011

Lab ID	Client ID	Matrix	Collection Date	Hold	Requested Tests (See legend below)											
					1	2	3	4	5	6	7	8	9	10	11	12
1111354-015	MW-6	Water	11/7/2011 13:15	<input type="checkbox"/>		A										
1111354-016	MW-8A	Water	11/7/2011 14:18	<input type="checkbox"/>		A										
1111354-017	MW-8B	Water	11/7/2011 13:30	<input type="checkbox"/>		A										
1111354-018	MW-7A	Water	11/7/2011 13:00	<input type="checkbox"/>	C	A		B								

Test Legend:

1	5-OXYS+PBSCV_W
6	
11	

2	G-MBTEX_W
7	
12	

3	PREDF REPORT
8	

4	TPH(D)_W
9	

5	
10	

Prepared by: Maria Venegas**Comments:**

NOTE: Soil samples are discarded 60 days after results are reported unless other arrangements are made (Water samples are 30 days).
Hazardous samples will be returned to client or disposed of at client expense.



Sample Receipt Checklist

Client Name: **Allterra Environmental**

Date and Time Received: **11/10/2011 2:21:16 PM**

Project Name: **160 Holmes St, Livermore CA**

Checklist completed and reviewed by: **Maria Venegas**

WorkOrder N°: **1111354**

Matrix: Water

Carrier: OnTrac

Chain of Custody (COC) Information

- | | | |
|---|---|-----------------------------|
| Chain of custody present? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody signed when relinquished and received? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Chain of custody agrees with sample labels? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sample IDs noted by Client on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Date and Time of collection noted by Client on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |
| Sampler's name noted on COC? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> |

Sample Receipt Information

- | | | | |
|---|---|-----------------------------|--|
| Custody seals intact on shipping container/coolier? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Shipping container/coolier in good condition? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Samples in proper containers/bottles? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sample containers intact? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Sufficient sample volume for indicated test? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |

Sample Preservation and Hold Time (HT) Information

- | | | | |
|---|--|-----------------------------|---|
| All samples received within holding time? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Container/Temp Blank temperature | Cooler Temp: 4.4°C NA <input type="checkbox"/> | | |
| Water - VOA vials have zero headspace / no bubbles? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | No VOA vials submitted <input type="checkbox"/> |
| Sample labels checked for correct preservation? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |
| Metal - pH acceptable upon receipt (pH<2)? | Yes <input type="checkbox"/> | No <input type="checkbox"/> | NA <input checked="" type="checkbox"/> |
| Samples Received on Ice? | Yes <input checked="" type="checkbox"/> | No <input type="checkbox"/> | |

(Ice Type: WET ICE)

* NOTE: If the "No" box is checked, see comments below.

Client contacted:

Date contacted:

Contacted by:

Comments:



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Allterra Environmental 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060	Client Project ID: 160 Holmes St, Livermore CA	Date Sampled: 11/07/11-11/08/11
		Date Received: 11/10/11
	Client Contact: James Allen	Date Extracted: 11/11/11-11/15/11
	Client P.O.:	Date Analyzed: 11/11/11-11/15/11

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1111354

Lab ID	1111354-001C	1111354-002C	1111354-003C	1111354-004C	Reporting Limit for DF =1
Client ID	MW-1A	MW-1B	MW-2A	MW-7B	
Matrix	W	W	W	W	
DF	200	1	1	25	

Compound	Concentration				ug/kg	μg/L
tert-Amyl methyl ether (TAME)	ND<100	ND	ND	ND<12	NA	0.5
t-Butyl alcohol (TBA)	21,000	ND	ND	1600	NA	2.0
1,2-Dibromoethane (EDB)	ND<100	ND	ND	ND<12	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND<100	ND	ND	ND<12	NA	0.5
Diisopropyl ether (DIPE)	ND<100	ND	ND	ND<12	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND<100	ND	ND	ND<12	NA	0.5
Methyl-t-butyl ether (MTBE)	150	ND	2.3	ND<12	NA	0.5

Surrogate Recoveries (%)

%SS1:	95	96	98	94	
Comments	b1		b1		

* water and vapor samples are reported in μg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in μg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment



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Allterra Environmental 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060	Client Project ID: 160 Holmes St, Livermore CA	Date Sampled: 11/07/11-11/08/11
		Date Received: 11/10/11
	Client Contact: James Allen	Date Extracted: 11/11/11-11/15/11
	Client P.O.:	Date Analyzed: 11/11/11-11/15/11

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1111354

Lab ID	1111354-005C	1111354-006C	1111354-007C	1111354-008C	Reporting Limit for DF =1
Client ID	MW-7C	MW-9A	MW-9B	EW-1	
Matrix	W	W	W	W	
DF	1	1	1	100	

Compound	Concentration				ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND	ND	ND<50	NA	0.5
t-Butyl alcohol (TBA)	ND	2.9	ND	7600	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND	ND	ND<50	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND	ND	ND<50	NA	0.5
Diisopropyl ether (DIPE)	ND	ND	ND	ND<50	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND	ND	ND<50	NA	0.5
Methyl-t-butyl ether (MTBE)	ND	ND	1.7	97	NA	0.5

Surrogate Recoveries (%)

%SS1:	95	92	95	101	
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Comments					
----------	--	--	--	--	--

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment



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Allterra Environmental 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060	Client Project ID: 160 Holmes St, Livermore CA	Date Sampled: 11/07/11-11/08/11
		Date Received: 11/10/11
	Client Contact: James Allen	Date Extracted: 11/11/11-11/15/11
	Client P.O.:	Date Analyzed: 11/11/11-11/15/11

Oxygenated Volatile Organics + EDB and 1,2-DCA by P&T and GC/MS*

Extraction Method: SW5030B

Analytical Method: SW8260B

Work Order: 1111354

Lab ID	1111354-009C	1111354-010C	1111354-018C		Reporting Limit for DF =1
Client ID	EW-2	EW-3	MW-7A		
Matrix	W	W	W		
DF	1	5000	1		S W

Compound	Concentration			ug/kg	µg/L
tert-Amyl methyl ether (TAME)	ND	ND<2500	ND	NA	0.5
t-Butyl alcohol (TBA)	ND	49,000	3.3	NA	2.0
1,2-Dibromoethane (EDB)	ND	ND<2500	ND	NA	0.5
1,2-Dichloroethane (1,2-DCA)	ND	ND<2500	ND	NA	0.5
Diisopropyl ether (DIPE)	ND	ND<2500	ND	NA	0.5
Ethyl tert-butyl ether (ETBE)	ND	ND<2500	ND	NA	0.5
Methyl-t-butyl ether (MTBE)	1.0	67,000	0.67	NA	0.5

Surrogate Recoveries (%)

%SS1:	95	103	97		
-------	----	-----	----	--	--

Comments		b1		
----------	--	----	--	--

* water and vapor samples are reported in µg/L, soil/sludge/solid samples in mg/kg, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts are reported in mg/L, wipe samples in µg/wipe.

ND means not detected above the reporting limit/method detection limit; N/A means analyte not applicable to this analysis; %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

surrogate diluted out of range or coelutes with another peak; &) low surrogate due to matrix interference.

b1) aqueous sample that contains greater than ~1 vol. % sediment



Allterra Environmental 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060	Client Project ID: 160 Holmes St, Livermore CA	Date Sampled:	11/07/11-11/08/11
		Date Received:	11/10/11
	Client Contact: James Allen	Date Extracted:	11/11/11-11/12/11
	Client P.O.:	Date Analyzed:	11/11/11-11/12/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1111354

Lab ID	Client ID	Matrix	TPH(g)	MTBE	Benzene	Toluene	Ethylbenzene	Xylenes	DF	% SS	Comments
001A	MW-1A	W	100	110	1.3	0.99	ND	1.1	1	110	d1,b1
002A	MW-1B	W	ND	ND	ND	ND	ND	ND	1	108	
003A	MW-2A	W	ND	ND	ND	ND	ND	ND	1	109	b1
004A	MW-7B	W	98	ND	ND	2.6	ND	ND	1	119	d9
005A	MW-7C	W	ND	ND	ND	ND	ND	ND	1	104	
006A	MW-9A	W	ND	ND	ND	ND	ND	ND	1	107	
007A	MW-9B	W	ND	ND	ND	ND	ND	ND	1	107	
008A	EW-1	W	78	76	ND	1.8	ND	ND	1	116	d9
009A	EW-2	W	ND	ND	ND	ND	ND	ND	1	106	
010A	EW-3	W	ND<6000	82,000	ND<50	ND<50	60	130	100	101	a5
011A	MW-3A	W	ND	ND	ND	ND	ND	ND	1	105	
012A	MW-4A	W	ND	ND	ND	ND	ND	ND	1	116	b1
013A	MW-5A	W	ND	ND	ND	ND	ND	ND	1	102	b1
014A	MW-5B	W	ND	ND	ND	ND	ND	ND	1	99	
015A	MW-6	W	ND	ND	ND	ND	ND	ND	1	97	
016A	MW-8A	W	ND	ND	ND	ND	ND	ND	1	103	

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

a5) reporting limit raised due to high MTBE content

b1) aqueous sample that contains greater than ~1 vol. % sediment

d1) weakly modified or unmodified gasoline is significant

d9) no recognizable pattern



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		Date Received:	11/10/11
	Client Contact: James Allen	Date Extracted:	11/11/11-11/12/11
	Client P.O.:	Date Analyzed:	11/11/11-11/12/11

Gasoline Range (C6-C12) Volatile Hydrocarbons as Gasoline with BTEX and MTBE*

Extraction method: SW5030B

Analytical methods: SW8021B/8015Bm

Work Order: 1111354

Reporting Limit for DF=1; ND means not detected at or above the reporting limit	W	50	5.0	0.5	0.5	0.5	0.5	µg/L
	S	1.0	0.05	0.005	0.005	0.005	0.005	mg/Kg

* water and vapor samples are reported in ug/L, soil/sludge/solid samples in mg/kg, wipe samples in µg/wipe, product/oil/non-aqueous liquid samples and all TCLP & SPLP extracts in mg/L.

cluttered chromatogram; sample peak coelutes w/surrogate peak; low surrogate recovery due to matrix interference. %SS = Percent Recovery of Surrogate Standard; DF = Dilution Factor.

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

The following descriptions of the HPLC chromatogram a5) reporting limit raised due to high MTBE content

b1) aqueous sample that contains greater than ~1 vol. % sediment

b1) aqueous sample that contains greater than ~1 vol. % sediment d1) weakly modified or unmodified gasoline is significant

d1) weakly modified or unmodified
d9) no recognizable pattern



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Allterra Environmental 849 Almar Ave, Ste. C #281 Santa Cruz, CA 95060	Client Project ID: 160 Holmes St, Livermore CA	Date Sampled: 11/07/11-11/08/11
	Client Contact: James Allen	Date Received: 11/10/11
	Client P.O.:	Date Extracted 11/10/11
Client P.O.:		Date Analyzed 11/12/11-11/16/11

Total Extractable Petroleum Hydrocarbons*

Extraction method: SW3510C

Analytical methods: SW8015B

Work Order: 1111354

Lab ID	Client ID	Matrix	TPH-Diesel (C10-C23)	DF	% SS	Comments
1111354-001B	MW-1A	W	150	1	95	e11,e2,b1
1111354-002B	MW-1B	W	ND	1	71	
1111354-003B	MW-2A	W	ND	1	84	b1
1111354-004B	MW-7B	W	ND	1	103	
1111354-005B	MW-7C	W	ND	1	93	
1111354-006B	MW-9A	W	ND	1	71	
1111354-007B	MW-9B	W	ND	1	103	
1111354-008B	EW-1	W	ND	1	71	
1111354-009B	EW-2	W	ND	1	93	
1111354-010B	EW-3	W	860	1	95	e4
1111354-018B	MW-7A	W	ND	1	86	b1

Reporting Limit for DF =1; ND means not detected at or above the reporting limit	W	50	µg/L
	S	NA	NA

* water samples are reported in µg/L, wipe samples in µg/wipe, soil/solid/sludge samples in mg/kg, product/oil/non-aqueous liquid samples in mg/L, and all DISTLC / STLC / SPLP / TCLP extracts are reported in µg/L.

cluttered chromatogram resulting in coeluted surrogate and sample peaks, or; surrogate peak is on elevated baseline, or; surrogate has been diminished by dilution of original extract.

%SS = Percent Recovery of Surrogate Standard. DF = Dilution Factor

The following descriptions of the TPH chromatogram are cursory in nature and McCampbell Analytical is not responsible for their interpretation:

- b1) aqueous sample that contains greater than ~1 vol. % sediment
- e2) diesel range compounds are significant; no recognizable pattern
- e4) gasoline range compounds are significant.
- e11) stoddard solvent/mineral spirit (?)



QC SUMMARY REPORT FOR SW8260B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 62643

WorkOrder: 1111354

EPA Method: SW8260B		Extraction: SW5030B								Spiked Sample ID: 1111354-002C			
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
tert-Amyl methyl ether (TAME)	ND	10	83.1	81.6	1.91	83.4	80.4	3.58	70 - 130	30	70 - 130	30	
t-Butyl alcohol (TBA)	ND	50	101	99.3	2.06	94.3	84.1	11.3	70 - 130	30	70 - 130	30	
1,2-Dibromoethane (EDB)	ND	10	98.5	96.4	2.11	97.4	92.6	5.01	70 - 130	30	70 - 130	30	
1,2-Dichloroethane (1,2-DCA)	ND	10	95.4	93.7	1.74	90.7	88.1	2.91	70 - 130	30	70 - 130	30	
Diisopropyl ether (DIPE)	ND	10	85.5	84.4	1.27	73.4	72.3	1.51	70 - 130	30	70 - 130	30	
Ethyl tert-butyl ether (ETBE)	ND	10	92.5	90.1	2.66	90.3	88.3	2.23	70 - 130	30	70 - 130	30	
Methyl-t-butyl ether (MTBE)	ND	10	106	106	0	98.6	93	5.88	70 - 130	30	70 - 130	30	
%SS1:	96	25	105	104	0.744	99	101	1.33	70 - 130	30	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 62643 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1111354-001C	11/08/11 11:20 AM	11/12/11	11/12/11 2:10 AM	1111354-002C	11/08/11 12:05 PM	11/12/11	11/12/11 2:51 AM
1111354-003C	11/08/11 12:20 PM	11/12/11	11/12/11 3:31 AM	1111354-004C	11/08/11 10:30 AM	11/12/11	11/12/11 4:12 AM
1111354-005C	11/08/11 10:40 AM	11/11/11	11/11/11 4:51 AM	1111354-006C	11/07/11 12:40 PM	11/12/11	11/12/11 2:52 PM
1111354-007C	11/07/11 12:40 PM	11/12/11	11/12/11 5:33 AM	1111354-008C	11/08/11 12:35 PM	11/14/11	11/14/11 9:33 PM
1111354-009C	11/08/11 11:30 AM	11/12/11	11/12/11 6:55 AM	1111354-010C	11/08/11 12:00 PM	11/15/11	11/15/11 12:46 AM
1111354-018C	11/07/11 1:00 PM	11/12/11	11/12/11 7:35 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

Laboratory extraction solvents such as methylene chloride and acetone may occasionally appear in the method blank at low levels.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 62631

WorkOrder: 1111354

EPA Method: SW8021B/8015Bm		Extraction: SW5030B		Spiked Sample ID: 1111342-001B									
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex) ^E	ND	60	96.3	96.3	0	97.1	97.2	0.120	70 - 130	20	70 - 130	20	
MTBE	ND	10	107	110	2.99	113	109	3.28	70 - 130	20	70 - 130	20	
Benzene	ND	10	94.3	96	1.86	95.4	96.2	0.792	70 - 130	20	70 - 130	20	
Toluene	ND	10	97.5	98.7	1.22	98.5	98.9	0.454	70 - 130	20	70 - 130	20	
Ethylbenzene	ND	10	103	104	1.33	104	104	0	70 - 130	20	70 - 130	20	
Xylenes	ND	30	105	106	1.09	105	106	0.935	70 - 130	20	70 - 130	20	
%SS:	110	10	89	90	0.175	90	90	0	70 - 130	20	70 - 130	20	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 62631 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1111354-001A	11/08/11 11:20 AM	11/11/11	11/11/11 2:19 AM	1111354-002A	11/08/11 12:05 PM	11/11/11	11/11/11 3:17 AM
1111354-003A	11/08/11 12:20 PM	11/11/11	11/11/11 3:46 AM	1111354-004A	11/08/11 10:30 AM	11/11/11	11/11/11 4:15 AM
1111354-005A	11/08/11 10:40 AM	11/11/11	11/11/11 4:44 AM	1111354-006A	11/07/11 12:40 PM	11/11/11	11/11/11 5:13 AM
1111354-007A	11/07/11 12:40 PM	11/11/11	11/11/11 5:42 AM	1111354-008A	11/08/11 12:35 PM	11/11/11	11/11/11 6:40 AM
1111354-009A	11/08/11 11:30 AM	11/11/11	11/11/11 7:09 AM	1111354-010A	11/08/11 12:00 PM	11/11/11	11/11/11 2:31 PM
1111354-010A	11/08/11 12:00 PM	11/12/11	11/12/11 8:04 PM	1111354-011A	11/08/11 11:00 AM	11/11/11	11/11/11 8:06 AM
1111354-012A	11/07/11 1:30 PM	11/11/11	11/11/11 8:36 AM	1111354-013A	11/07/11 12:30 PM	11/11/11	11/11/11 9:05 AM
1111354-014A	11/07/11 11:30 AM	11/11/11	11/11/11 1:31 PM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

^E TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8021B/8015Bm

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 62654

WorkOrder: 1111354

EPA Method: SW8021B/8015Bm		Extraction: SW5030B		Spiked Sample ID: 1111354-015A									
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH(btex) [£]	ND	60	101	100	0.274	100	102	1.06	70 - 130	20	70 - 130	20	
MTBE	ND	10	110	110	0	112	111	0.843	70 - 130	20	70 - 130	20	
Benzene	ND	10	98.1	97.8	0.314	99.1	96.7	2.40	70 - 130	20	70 - 130	20	
Toluene	ND	10	100	99.6	0.479	101	98.5	2.28	70 - 130	20	70 - 130	20	
Ethylbenzene	ND	10	106	104	1.16	106	105	1.36	70 - 130	20	70 - 130	20	
Xylenes	ND	30	106	105	0.836	107	107	0	70 - 130	20	70 - 130	20	
%SS:	97	10	90	89	0.375	90	89	0.961	70 - 130	20	70 - 130	20	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:
NONE

BATCH 62654 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1111354-015A	11/07/11 1:15 PM	11/11/11	11/11/11 2:01 PM	1111354-016A	11/07/11 2:18 PM	11/11/11	11/11/11 3:01 PM
1111354-017A	11/07/11 1:30 PM	11/12/11	11/12/11 3:58 AM	1111354-018A	11/07/11 1:00 PM	11/12/11	11/12/11 4:58 AM

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

£ TPH(btex) = sum of BTEX areas from the FID.

cluttered chromatogram; sample peak coelutes with surrogate peak.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = matrix interference and/or analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content, or inconsistency in sample containers.



QC SUMMARY REPORT FOR SW8015B

W.O. Sample Matrix: Water

QC Matrix: Water

BatchID: 62630

WorkOrder: 1111354

EPA Method: SW8015B		Extraction: SW3510C		Spiked Sample ID: N/A									
Analyte	Sample	Spiked	MS	MSD	MS-MSD	LCS	LCSD	LCS-LCSD	Acceptance Criteria (%)				
	µg/L	µg/L	% Rec.	% Rec.	% RPD	% Rec.	% Rec.	% RPD	MS / MSD	RPD	LCS/LCSD	RPD	
TPH-Diesel (C10-C23)	N/A	1000	N/A	N/A	N/A	126	125	0.376	N/A	N/A	70 - 130	30	
%SS:	N/A	625	N/A	N/A	N/A	101	101	0	N/A	N/A	70 - 130	30	

All target compounds in the Method Blank of this extraction batch were ND less than the method RL with the following exceptions:

NONE

BATCH 62630 SUMMARY

Lab ID	Date Sampled	Date Extracted	Date Analyzed	Lab ID	Date Sampled	Date Extracted	Date Analyzed
1111354-001B	11/08/11 11:20 AM	11/10/11	11/12/11 10:31 AM	1111354-002B	11/08/11 12:05 PM	11/10/11	11/12/11 9:22 AM
1111354-003B	11/08/11 12:20 PM	11/10/11	11/12/11 8:13 AM	1111354-004B	11/08/11 10:30 AM	11/10/11	11/13/11 5:43 PM
1111354-005B	11/08/11 10:40 AM	11/10/11	11/12/11 10:11 PM	1111354-006B	11/07/11 12:40 PM	11/10/11	11/12/11 3:39 PM
1111354-007B	11/07/11 12:40 PM	11/10/11	11/13/11 4:36 PM	1111354-008B	11/08/11 12:35 PM	11/10/11	11/12/11 9:23 PM
1111354-009B	11/08/11 11:30 AM	11/10/11	11/12/11 8:14 PM	1111354-010B	11/08/11 12:00 PM	11/10/11	11/12/11 7:05 PM
1111354-018B	11/07/11 1:00 PM	11/10/11	11/16/11 4:44 AM				

MS = Matrix Spike; MSD = Matrix Spike Duplicate; LCS = Laboratory Control Sample; LCSD = Laboratory Control Sample Duplicate; RPD = Relative Percent Deviation.

% Recovery = 100 * (MS-Sample) / (Amount Spiked); RPD = 100 * (MS - MSD) / ((MS + MSD) / 2).

MS / MSD spike recoveries and / or %RPD may fall outside of laboratory acceptance criteria due to one or more of the following reasons: a) the sample is inhomogenous AND contains significant concentrations of analyte relative to the amount spiked, or b) the spiked sample's matrix interferes with the spike recovery.

N/A = not enough sample to perform matrix spike and matrix spike duplicate.

NR = analyte concentration in sample exceeds spike amount for soil matrix or exceeds 2x spike amount for water matrix or sample diluted due to high matrix or analyte content.

DHS ELAP Certification 1644

 QA/QC Officer