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**11:35 am, Sep 24, 2012**

Alameda County  
Environmental Health

Mr. Keith Nowell  
Alameda County  
Environmental Health Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Re: Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California  
(ACEHS Case No. RO0000175)

Dear Mr. Nowell:

Stratus Environmental, Inc. (Stratus) has recently prepared a *Groundwater Monitoring Report, Third quarter 2012* on my behalf. The report was prepared in regards to Alameda County Fuel Leak Case No. RO0000175, located at 6600 Foothill Boulevard, Oakland, California.

I have reviewed a copy of this report, sent to me by representatives of Stratus, and "I declare, under penalty of perjury, that the information and or/recommendations contained in the attached document or report is true and correct to the best of my knowledge."

Sincerely,



Ravi Sekhon



3330 Cameron Park Drive, Ste 550  
Cameron Park, California 95682  
(530) 676-6004 ~ Fax: (530) 676-6005

September 18, 2012  
Project No. 2087-6600-01

Mr. Keith Nowell  
Alameda County  
Environmental Health Department  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502-6577

Re: Groundwater Monitoring Report, Third Quarter 2012, for Foothill Mini Mart, located at 6600 Foothill Boulevard, Oakland, California (ACEHD Case No. RO0000175)

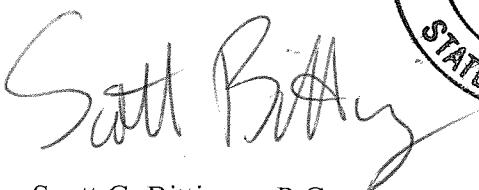
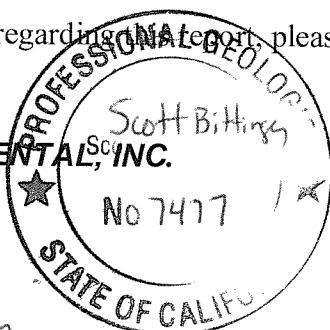
Dear Mr. Nowell:

Stratus Environmental, Inc. (Stratus) is submitting the attached report, on behalf of Mr. Ravi Sekhon, to document the findings of a groundwater monitoring and sampling event conducted during the third quarter 2012 at the Foothill Mini Mart, located at 6600 Foothill Boulevard, Oakland, California (Figure 1). Stratus representatives whose signatures appear below declare under penalty of perjury, that the information contained in the attached report are true and correct to the best of our knowledge.

If you have any questions regarding this report, please contact Scott Bittinger at (530) 676-2062.

Sincerely,

**STRATUS ENVIRONMENTAL, INC.**



Scott G. Bittinger, P.G.  
Project Manager



Stephen J. Carter, P.G.  
Senior Geologist

Attachment: Semi-Annual Groundwater Monitoring Report, Third Quarter 2012

cc: Mr. Ravi Sekhon  
Mr. and Ms. Joseph and Maude LeBlanc

Date September 18, 2012

**FOOTHILL MINI MART  
SEMI-ANNUAL GROUNDWATER MONITORING REPORT**

Facility Address: 6600 Foothill Boulevard, Oakland, California  
Consulting Co./Contact Person: Stratus Environmental, Inc. / Scott Bittinger, P.G.  
Consultant Project No: 2087-6600-01  
Primary Agency/Regulatory ID No: Alameda County Environmental Health Department (ACEHD) / Case No. RO0000175

**WORK PERFORMED THIS PERIOD (Second and Third Quarter 2012):**

1. At the request of ACEHD, Stratus prepared and submitted a *Corrective Action Plan* (CAP), dated June 21, 2012 providing details associated with the design and implementation of an ozone and hydrogen peroxide injection project at the site.
2. On July 23, 2012, Stratus conducted third quarter 2012 groundwater monitoring and sampling activities at the site. During this event, monitoring wells MW-1 through MW-7, MW-10, MW-11, MW-12A, MW-13A, MW-5B, MW-6B, and MW-12B were gauged for depth to water and evaluated for the presence of free product. Following gauging, samples were collected and forwarded to a state-certified analytical laboratory for analysis.

**WORK PROPOSED FOR NEXT PERIOD (Fourth Quarter 2012 and First Quarter 2013):**

1. Based on recent communication with ACEHD personnel, it is our understanding that ACEHD and the UST Cleanup Fund are in discussions as to whether the site can potentially qualify for environmental case closure under the State Water Resources Control Board's recently adopted Low Threat Closure Policy. Future environmental work activities at the site, including possible implementation of the June 21, 2012 CAP, will be based upon this determination.
2. If the site does not qualify for closure, the next groundwater monitoring and sampling event will be performed during the first quarter 2013.

Current Phase of Project:	<u>SC; will request CAP/REM designation if remediation of site is deemed necessary by ACEHD and the UST Cleanup Fund</u>
Frequency of Groundwater Sampling:	<u>Semi-Annual (1<sup>st</sup> &amp; 3<sup>rd</sup>): Wells MW-1 through MW-7, MW-10, MW-11, MW-12A, MW-13A, MW-5B, MW-6B, and MW-12B</u>
Frequency of Groundwater Monitoring:	<u>Semi-Annual (1<sup>st</sup> &amp; 3<sup>rd</sup>): Wells MW-1 through MW-7, MW-10, MW-11, MW-12A, MW-13A, MW-5B, MW-6B, and MW-12B</u>
Groundwater Sampling Date:	<u>July 23, 2012</u>
Is Free Product (FP) Present on Site:	<u>No</u>
Approx. Depth to Groundwater (Upper):	<u>6.68 to 12.51 feet below top of well casing</u>
Approx. Depth to Groundwater (Lower):	<u>13.06 to 38.40 feet below top of well casing</u>
Groundwater Flow Direction (Upper):	<u>Northwesterly</u>
Approximate Groundwater Gradient (Upper):	<u>0.03 to 0.04 ft/ft</u>

Groundwater Flow Direction (Lower):	Not calculated
Approximate Groundwater Gradient (Lower):	Not calculated

## **DISCUSSION:**

On July 23, 2012, Stratus conducted semi-annual groundwater monitoring and sampling activities at the site. During this event, wells MW-1 through MW-7, MW-10, MW-11, MW-12A, MW-13A, MW-5B, MW-6B, and MW-12B were monitored, purged and sampled. Groundwater samples were analyzed at a state-certified analytical laboratory for gasoline range organics (GRO) by EPA Method SW8015B/DHS LUFT Manual, and for benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), tertiary amyl methyl ether (TAME), ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary butyl alcohol (TBA), and low level ethanol, and methanol by EPA Method SW8260B. Field data sheets, sampling procedures and laboratory analytical reports are included as Appendices A, B, and C, respectively. Analytical results of sampled wells and depth to groundwater measurements have been uploaded to the State of California's GeoTracker database. Documentation of these data uploads is attached in Appendix D.

### Shallow Screened Well Network

Depth to groundwater in the monitoring wells ranged between 6.68 and 12.51 feet below the top of the well casing on July 23, 2012. Depth-to-water measurements were converted to feet above mean sea level (MSL) and used to construct a groundwater elevation contour map (Figure 2). A northwesterly groundwater flow was observed in the site vicinity, with a calculated gradient between 0.03 and 0.04 ft/ft. Variable groundwater flow directions have been calculated during historical site work.

Groundwater beneath the site is impacted with GRO, BTEX, MTBE, and TBA. During the third quarter 2012 sampling event, GRO was detected in five of the eleven sampled wells (MW-2, MW-4, MW-6, MW-12A, and MW-13A), with a maximum concentration reported in offsite downgradient well MW-6 (5,800 micrograms per liter [ $\mu\text{g/L}$ ]). Benzene was only detected in well MW-6 (54  $\mu\text{g/L}$ ). MTBE was reported in ten of the eleven sampled wells with a concentration range between 1.6  $\mu\text{g/L}$  (MW-11) and 320  $\mu\text{g/L}$  (MW-6). TBA was detected in samples collected from seven of the shallow screened wells, at concentrations ranging from 12  $\mu\text{g/L}$  (MW-13A) to 2,400  $\mu\text{g/L}$  (MW-4), and TAME was reported in well MW-6 (21  $\mu\text{g/L}$ ). ETBE, DIPE, ethanol, and methanol were not reported in any of the shallow screened wells during the third quarter 2012 sampling event. Figures 4 through 7 illustrate the interpreted lateral extent of GRO, benzene, MTBE, and TBA distribution in shallow groundwater, respectively, using data collected on July 23, 2012. The results of third quarter 2012 well sampling, and the general configuration of the plumes depicted on Figures 4 through 7, are generally consistent with the findings of previous work.

### Deeper Screened Well Network

Depth to groundwater in the monitoring wells ranged from 13.06 to 38.40 feet below the top of the well casing. Groundwater elevations are depicted on Figure 3. Given the large discrepancy in groundwater elevations measured in the three deeper screened monitoring wells, an evaluation of groundwater flow direction at this depth in the subsurface does not appear appropriate using the current data set.

Analytical results of GRO, benzene, MTBE, and TBA for groundwater samples collected from the deeper screened wells during the third quarter 2012 are presented on Figure 8. MTBE was reported in the sample collected from well MW-5B, at a concentration of 16  $\mu\text{g/L}$ . All other petroleum hydrocarbon and fuel oxygenate concentrations in the deeper well samples were reported below laboratory instrument detection levels. While MTBE concentrations in MW-5B remain relatively low, an increasing concentration trend is observed in samples collected from this well.

**ATTACHMENTS:**

- Table 1 Groundwater Elevation and Analytical Summary
- Table 2 Groundwater Analytical Results for Oxygenates and Additives
- Table 3 Well Construction Detail Summary
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map, Shallow Screened Wells (Third Quarter 2012)
- Figure 3 Groundwater Elevation Map, Deep Screened Wells (Third Quarter 2012)
- Figure 4 GRO Iso-Concentration Contour Map, Shallow Screened Wells (Third Quarter 2012)
- Figure 5 Benzene Iso-Concentration Contour Map, Shallow Screened Wells (Third Quarter 2012)
- Figure 6 MTBE Iso-Concentration Contour Map, Shallow Screened Wells (Third Quarter 2012)
- Figure 7 TBA Iso-Concentration Contour Map, Shallow Screened Wells (Third Quarter 2012)
- Figure 8 Groundwater Analytical Summary, Deep Screened Wells (Third Quarter 2012)
- Appendix A Field Data Sheets
- Appendix B Sampling and Analyses Procedures
- Appendix C Laboratory Analytical Reports and Chain-of-Custody Documentation
- Appendix D GeoTracker Electronic Submittal Information

**TABLE 1**  
**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Groundwater Elevation (ft msl) [1]	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
<b>SHALLOW WELLS</b>										
<b>MW-1</b>	06/13/01	9.36	100*	90.64	ND	ND	ND	ND	ND	130
	03/21/02	7.96	100*	92.04	95	ND	ND	ND	ND	72.5
	07/09/02	8.51	100*	91.49	ND	ND	ND	ND	ND	208
	07/11/03	8.66	160.25	151.59	ND	0.7	ND	ND	1.2	636
	11/13/03	8.10	160.25	152.15	<5,000	ND	ND	ND	ND	72,000
	02/19/04	8.24	160.25	152.01	1,350	460	ND	ND	ND	82,000
	05/21/04	8.51	160.25	151.74	ND	<50	<50	<50	<100	12,000
	08/11/05	8.34	160.25	151.91	ND	ND	ND	ND	ND	4,900
	11/30/05	9.86	160.25	150.39	<250	<2.5	<2.5	<2.5	<2.5	8,400
	08/08/08	10.62	60.02	49.40	390	<1.5	<1.5	<1.5	<1.5	720
	11/05/08	10.78	60.02	49.24	350	<5.0	<10	<10	<10	580
	02/06/09	9.05	60.02	50.97	150	<1.5	<1.5	<1.5	<1.5	610
	05/07/09	6.76	60.02	53.26	420	<0.50	<0.50	<0.50	<0.50	210
	06/01/10	7.58	60.02	52.44	190	<0.50	<0.50	<0.50	<0.50	170
	09/07/10	11.33	60.02	48.69					Not Scheduled for Sampling	
	12/08/10	10.61	60.02	49.41	150	<0.50	<0.50	<0.50	<0.50	300
	05/26/11	8.51	60.02	51.51	57	<0.50	<0.50	<0.50	<0.50	100
	12/13/11	10.54	60.02	49.48	<50	<0.50	<0.50	<0.50	<0.50	23
	07/23/12	10.82	60.02	49.20	<50	<0.50	<0.50	<0.50	<0.50	37
<b>MW-2</b>	06/13/01	10.44	98.71*	88.27	5,800	160	210	290	980	94,000
	03/21/02	8.18	98.71*	90.53	452	3.4	ND	1.6	2.1	79,100
	07/09/02	8.35	98.71*	90.36	497	61.6	ND	ND	1.6	37,600
	07/11/03	7.58	158.97	151.39	553	48.9	ND	ND	ND	38,200
	11/13/03	8.01	158.97	150.96	<2,500	NS	ND	ND	ND	47,000
	02/19/04	6.43	158.97	152.54	4,390	410	265	160	490	26,700
	05/21/04	6.83	158.97	152.14	1,150	254	<200	<200	<400	24,600
	08/11/05	7.31	158.97	151.66	91	ND	1.1	ND	ND	6,500
	11/30/05	7.98	158.97	150.99	69	ND	1.4	ND	ND	2,300
	08/08/08	7.19	58.74	51.55	300	<9.0	<9.0	<9.0	<9.0	9.8
	11/05/08	7.14	58.74	51.60	510	<0.50	<1.0	<1.0	<1.0	12
	02/06/09	6.92	58.74	51.82	50	<4.0	<4.0	<4.0	<4.0	10
	05/07/09	6.53	58.74	52.21	860	<4.0	<4.0	<4.0	<4.0	9.7
	06/01/10	9.15	58.74	49.59	<1,000 [3]	<5.0 [3]	<5.0 [3]	<5.0 [3]	<5.0 [3]	69
	09/07/10	9.69	58.74	49.05					Not Scheduled for Sampling	
	12/08/10	8.34	58.74	50.40	<1,000 [3]	<5.0 [3]	<5.0 [3]	<5.0 [3]	<5.0 [3]	21
	05/26/11	10.51	58.74	48.23	<500[3]	<2.5[3]	<2.5[3]	<2.5[3]	<2.5[3]	27
	12/13/11	9.50	58.74	49.24	270	<0.50	<0.50	<0.50	<0.50	22
	07/23/12	9.01	58.74	49.73	120	<0.50	<0.50	<0.50	<0.50	3.7

**TABLE 1**  
**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Groundwater Elevation (ft msl) [1]	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
<b>MW-3</b>	06/13/01	9.69	99.90*	90.21	300	1	ND	0.07	2	450
	03/21/02	8.80	99.90*	91.10	274	1.1	ND	1	2.5	7,520
	07/09/02	9.33	99.90*	90.57	ND	ND	ND	ND	ND	40.8
	07/11/03	9.35	160.17	150.82	ND	ND	ND	ND	ND	24
	11/13/03	8.85	160.17	151.32	ND	ND	ND	ND	ND	37
	02/19/04	8.46	160.17	151.71	83	ND	ND	ND	ND	42.7
	05/21/04	9.09	160.17	151.08	ND	ND	ND	ND	ND	54
	08/11/05	8.87	160.17	151.30	ND	ND	ND	ND	ND	27
	11/30/05	9.73	160.17	150.44	ND	ND	ND	ND	ND	28
	08/08/08	9.64	59.94	50.30	99	<0.50	<0.50	<0.50	<0.50	4.5
	11/05/08	9.33	59.94	50.61	55	<0.50	<1.0	<1.0	<1.0	4.5
	02/06/09	9.37	59.94	50.57	100	<0.50	<0.50	<0.50	<0.50	5.3
	05/07/09	8.98	59.94	50.96	410	<0.50	<0.50	<0.50	<0.50	5.5
	06/01/10	9.82	59.94	50.12	<50	<0.50	<0.50	<0.50	<0.50	5.1
	09/07/10	10.88	59.94	49.06					Not Scheduled for Sampling	
	12/08/10	9.82	59.94	50.12	53	<0.50	<0.50	<0.50	<0.50	6.6
	05/26/11	9.93	59.94	50.01	54	<0.50	<0.50	<0.50	<0.50	4.9
	12/13/11	10.52	59.94	49.42	<50	<0.50	<0.50	<0.50	<0.50	3.3
	07/23/12	10.64	59.94	49.30	<50	<0.50	<0.50	<0.50	<0.50	4.5
<b>MW-4</b>	07/09/02	8.14	98.19*	90.05	9,680	43	17	369	1,990	28,300
	07/11/03	6.73	158.42	151.69	3,170	16.5	6.4	71.7	240	16,600
	11/13/03	6.54	158.42	151.88	<1,000	49	ND	340	900	16,000
	02/19/04	4.37	158.42	154.05	7,230	107	7	497	1,063	14,300
	05/21/04	5.79	158.42	152.63	9,340	194	ND	309	860	7,380
	08/11/05	6.65	158.42	151.77	3,000	15	24	87	190	1,200
	11/30/05	6.05	158.42	152.37	4,300	18	28	84	130	340
	08/08/08	5.91	58.19	52.28	3,600	0.53	0.61	5.6	1.5	24
	11/05/08	5.33	58.19	52.86	2,000	0.58	<1.0	6.8	1.2	31
	02/06/09	5.15	58.19	53.04	3,400	0.81	<0.50	10	1.2	39
	05/07/09	4.86	58.19	53.33	4,500	0.73	<0.50	7.4	1.2	29
	06/01/10	6.00	58.19	52.19	3,300	<1.0 [3]	<1.0 [3]	4.1	<1.0 [3]	9.4
	09/07/10								Inaccessible for monitoring; not scheduled for sampling	
	12/08/10	5.75	58.19	52.44	3,800	<1.0 [3]	<1.0 [3]	7.3	<1.0 [3]	7.6
	05/26/11	5.87	58.19	52.32	4,000	<2.5[3]	<2.5[3]	2.6	<2.5[3]	3.7
	12/13/11	6.36	58.19	51.83	1,500	<0.50	0.54	0.55	1.21	8.2
	07/23/12	6.82	58.19	51.37	2,300	<1.0[3]	<1.0[3]	<1.0[3]	<1.0[3]	4.7

**TABLE 1**  
**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Groundwater Elevation (ft msl) [1]	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
<b>MW-5</b>	07/09/02	8.16	97.81*	89.65	275	30.2	ND	ND	3	18,600
	07/11/03	7.94	158.03	150.09	890	10	0.6	ND	7.1	5,090
	11/13/03	7.41	158.03	150.62	<1,000	ND	ND	ND	ND	3,400
	02/19/04	6.14	158.03	151.89	1,310	ND	0.7	ND	2.2	438
	05/21/04	7.42	158.03	150.61	1,960	9.7	0.7	ND	ND	214
	08/11/05	7.67	158.03	150.36	410 [2]	ND	3.3	ND	ND	100
	11/30/05	8.51	158.03	149.52	240 [2]	ND	1.8	ND	1.4	82
	08/08/08	7.59	57.80	50.21	1,900	<0.50	<0.50	<0.50	4.0	8.6
	11/05/08	6.91	57.80	50.89	1,600	<0.50	<1.0	<1.0	1.1	4.8
	02/06/09	6.98	57.80	50.82	680	<0.50	<0.50	<0.50	2.2	5.5
	05/07/09	6.43	57.80	51.37	1,900	0.72	0.91	<0.50	2.3	4.3
	06/01/10	8.15	57.80	49.65	1,000	<0.50	<0.50	<0.50	<0.50	4.3
	09/07/10	9.37	57.80	48.43				Not Scheduled for Sampling		
	12/08/10	7.78	57.80	50.02	200	<0.50	<0.50	<0.50	<0.50	5.9
	05/26/11	8.08	57.80	49.72	230	<1.0[3]	<1.0[3]	<1.0[3]	<1.0[3]	3.5
	12/13/11	8.63	57.80	49.17	<200[3]	<1.0[3]	<1.0[3]	<1.0[3]	<1.0[3]	2.8
	07/23/12	8.99	57.80	48.81	<100[3]	<0.50	<0.50	<0.50	<0.50	2.5
<b>MW-6</b>	07/09/02	7.45	97*	89.55	12,000	432	22	637	1,740	11,300
	07/11/03	7.98	157.24	149.26	2,970	534	6.3	70.1	278	18,000
	11/13/03	7.47	157.24	149.77	<2,500	300	ND	ND	52	18,000
	02/19/04	5.09	157.24	152.15	5,340	184	5	65	127	5,310
	05/21/04	6.38	157.24	150.86	6,110	340	12.7	205	308.8	3,900
	08/11/05	6.68	157.24	150.56	6,100	470	48	23	30	3,200
	11/30/05	7.43	157.24	149.81	3,700	310	30	16	12	3,400
	08/08/08	6.23	57.01	50.78	6,500	63	2.0	42	98	230
	11/05/08	5.35	57.01	51.66	4,800	74	<5.0	23	42	340
	02/06/09	5.44	57.01	51.57	5,800	34	1.1	16	38	140
	05/07/09	4.91	57.01	52.10	5,800	32	1.2	14	37	150
	06/01/10	5.85	57.01	51.16	7,500	100	<2.5 [3]	28	48	350
	09/07/10	7.84	57.01	49.17				Not Scheduled for Sampling		
	12/08/10	5.15	57.01	51.86	6,200	90	1.1	46	53.7	420
	05/26/11	5.73	57.01	51.28	5,500	54	<1.0[3]	23	30.4	230
	12/13/11	6.28	57.01	50.73	6,400	77	<2.5[3]	19	19	400
	07/23/12	6.88	57.01	50.13	5,800	54	<1.5[3]	9.4	9.3	320

**TABLE 1**  
**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Groundwater Elevation (ft msl) [1]	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
<b>MW-7</b>	06/01/10	9.74	58.66	48.92	<50	<0.50	<0.50	<0.50	<0.50	22
	09/07/10	9.74	58.66	48.92	<50	<0.50	<0.50	<0.50	<0.50	17
	12/08/10	8.95	58.66	49.71	<50	<0.50	<0.50	<0.50	<0.50	7.6
	05/26/11	11.15	58.66	47.51	<50	<0.50	<0.50	<0.50	<0.50	2.8
	12/13/11	9.41	58.66	49.25	<50	<0.50	<0.50	<0.50	<0.50	9.6
	07/23/12	11.20	58.66	47.46	<50	<0.50	<0.50	<0.50	<0.50	6.7
<b>MW-10</b>	06/01/10	8.85	61.89	53.04	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/07/10	11.75	61.89	50.14	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/08/10	13.60	61.89	48.29	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	05/26/11	10.45	61.89	51.44	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/13/11	12.91	61.89	48.98	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/23/12	11.12	61.89	50.77	<50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>MW-11</b>	06/01/10	9.74	60.97	51.23	<50	<0.50	<0.50	<0.50	<0.50	6.7
	09/07/10	11.68	60.97	49.29	59	<0.50	<0.50	<0.50	<0.50	98
	12/08/10	12.19	60.97	48.78	52	<0.50	<0.50	<0.50	<0.50	96
	05/26/11	10.80	60.97	50.17	<50	<0.50	<0.50	<0.50	<0.50	17
	12/13/11	12.27	60.97	48.70	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/23/12	12.51	60.97	48.46	<50	<0.50	<0.50	<0.50	<0.50	1.6
<b>MW-12A</b>	06/01/10	8.07	62.98	54.91	270	<0.50	<0.50	<0.50	<0.50	260
	09/07/10				Inaccessible					
	12/08/10	10.35	62.98	52.63	150	<0.50	<0.50	<0.50	<0.50	300
	05/26/11	8.84	62.98	54.14	140	<0.50	<0.50	<0.50	<0.50	250
	12/13/11	9.45	62.98	53.53	240	<0.50	<0.50	<0.50	<0.50	420
	07/23/12	10.28	62.98	52.70	170	<0.50	<0.50	<0.50	<0.50	260
<b>MW-13A</b>	06/01/10	6.47	60.90	54.43	1,500	<0.50	<0.50	<0.50	<0.50	7.1
	09/07/10				Inaccessible					
	12/08/10	5.45	60.90	55.45	2,200	0.63	<0.50	<0.50	<0.50	15
	05/26/11	6.37	60.90	54.53	840	<0.50	<0.50	<0.50	<0.50	8.3
	12/13/11	6.59	60.90	54.31	1,500	<0.50	<0.50	<0.50	<0.50	6.8
	07/23/12	6.68	60.90	54.22	970	<0.50	<0.50	<0.50	<0.50	2.1
<b>REMEDIATION WELL</b>										
<b>EX-1</b>	05/26/11	10.26	NM	NM	600	<2.5[3]	<2.5[3]	<2.5[3]	<2.5[3]	730
	12/13/11	NM	NM	NM	--	--	--	--	--	--
	07/23/12	NM	NM	NM	--	--	--	--	--	--

**TABLE 1**  
**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Top of Casing Elevation (ft msl)	Groundwater Elevation (ft msl) [1]	GRO (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
<b>DEEPER WELLS</b>										
<b>MW-5B</b>	06/01/10	12.87	57.69	44.82	<50	<0.50	<0.50	<0.50	<0.50	0.70
	09/07/10	13.28	57.69	44.41	<50	<0.50	<0.50	<0.50	<0.50	1.4
	12/08/10	13.95	57.69	43.74	<50	<0.50	<0.50	<0.50	<0.50	1.6
	05/26/11	12.51	57.69	45.18	<50	<0.50	<0.50	<0.50	<0.50	3.2
	12/13/11	11.94	57.69	45.75	<50	<0.50	<0.50	<0.50	<0.50	7.5
	07/23/12	13.06	57.69	44.63	<50	<0.50	<0.50	<0.50	<0.50	16
<b>MW-6B</b>	06/01/10	35.75	56.71	20.96	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	09/07/10	37.24	56.71	19.47	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/08/10	39.82	56.71	16.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	05/26/11	36.70	56.71	20.01	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	12/13/11	39.80	56.71	16.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/23/12	38.40	56.71	18.31	<50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>MW-12B</b>	06/01/10	37.49	62.94	25.45	<50	<0.50	<0.50	<0.50	<0.50	0.84
	09/07/10					Inaccessible				
	12/08/10	39.66	62.94	23.28	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	05/26/11	34.74	62.94	28.20	<50	<0.50	<0.50	<0.50	<0.50	0.80
	12/13/11	38.91	62.94	24.03	<50	<0.50	<0.50	<0.50	<0.50	<0.50
	07/23/12	38.34	62.94	24.60	<50	<0.50	<0.50	<0.50	<0.50	<0.50
<b>Legend/Key:</b> GRO = Gasoline range organics MTBE = Methyl tertiary butyl ether ND= "not-detected" or below the Method Detection Limits										
[1] = The TOC elevations reported in groundwater monitoring reports prior to second quarter 2010 are incorrect. The datum elevation adopted previously was revised on August 4, 2008 using the city of Oakland datum (-D83). The revised TOC elevations are converted to mean sea level elevation and used to calculate all groundwater elevations. [2] = Laboratory reported does not match gasoline pattern. [3] = Reporting limits were increased due to high concentration of target analytes.										
* The top of casing (TOC) elevations originally surveyed on June 31, 2001 used MW-1 as the common datum with assumed elevation of 100.00 feet above mean sea level (msl). All other TOC elevations were surveyed relative to MW-1. All of the wells were again surveyed per GeoTracker standard on July 11, 2003, by PLS Surveys Inc., a California licensed surveyor. All elevations are reported with respect to feet above mean sea level.										

**TABLE 2**  
**ANALYTICAL RESULTS FOR FUEL OXYGENATES AND ADDITIVES**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	
<b>SHALLOW WELLS</b>											
<b>MW-1</b>	06/13/01	130	--	--	--	--	--	--	--	--	
	03/21/02	72.5	--	--	--	--	--	--	--	--	
	07/09/02	208	--	--	--	--	--	--	--	--	
	07/11/03	636	--	--	--	--	--	--	--	--	
	11/13/03	72,000	22,000	--	--	--	--	--	--	--	
	02/19/04	82,000	8,360	--	--	--	--	--	--	--	
	05/21/04	12,000	<1,000	--	--	--	--	--	--	--	
	08/11/05	4,900	--	--	--	--	--	--	--	--	
	11/30/05	8,400	--	--	--	--	--	--	--	--	
	08/08/08	720	7.4J	<1.5	<1.5	<1.5	<300	<15	<1.5	<1.5	
	11/05/08	580	<100	<20	<20	<20	--	<1,000	--	--	
	02/06/09	610	120	<1.5	<1.5	<1.5	<600	<15	--	--	
	05/07/09	210	110	<0.50	<0.50	<0.50	<150	<5.0	--	--	
	06/01/10	170	200	<1.0	<1.0	<1.0	<50	<5.0	--	--	
	09/07/10						Not Scheduled for Sampling				
	12/08/10	300	110	<1.0	<1.0	<1.0	<50	<5.0	--	--	
	05/26/11	100	81	<1.0	<1.0	<1.0	<50	<5.0	--	--	
	12/13/11	23	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--	
	07/23/12	37	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--	
<b>MW-2</b>	06/13/01	94,000	980	--	--	--	--	--	--	--	
	03/21/02	79,100	--	--	--	--	--	--	--	--	
	07/09/02	37,600	--	--	--	--	--	--	--	--	
	07/11/03	38,200	--	--	--	--	--	--	--	--	
	11/13/03	47,000	11,000	--	--	--	--	--	--	--	
	02/19/04	26,700	3,930	--	--	--	--	--	--	--	
	05/21/04	24,600	<4,000	--	--	--	--	--	--	--	
	08/11/05	6,500	--	--	--	--	--	--	--	--	
	11/30/05	2,300	--	--	--	--	--	--	--	--	
	08/08/08	9.8	17,000	<9.0	<9.0	<9.0	<900	<90	<9.0	<9.0	
	11/05/08	12	13,000	<2.0	<2.0	<2.0	--	<100	--	--	
	02/06/09	10	11,000	<4.0	<4.0	<4.0	<400	<40	--	--	
	05/07/09	9.7	12,000	<4.0	<4.0	<4.0	<400	<40	--	--	
	06/01/10	69	7,300	<10 [1]	<10 [1]	<10 [1]	<50	<5.0	--	--	
	09/07/10						Not Scheduled for Sampling				
	12/08/10	21	9,900	<10 [1]	<10 [1]	<10 [1]	<50	<5.0	--	--	
	05/26/11	27	5,400	<5.0[1]	<5.0[1]	<5.0[1]	<50	<5.0	--	--	
	12/13/11	22	840	<1.0	<1.0	<1.0	<50	<5.0	--	--	
	07/23/12	3.7	510	<1.0	<1.0	<1.0	<50	<5.0	--	--	

**TABLE 2**  
**ANALYTICAL RESULTS FOR FUEL OXYGENATES AND ADDITIVES**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
<b>MW-3</b>	06/13/01	450	--	--	--	--	--	--	--	--
	03/21/02	7,520	--	--	--	--	--	--	--	--
	07/09/02	40.8	--	--	--	--	--	--	--	--
	07/11/03	24.3	--	--	--	--	--	--	--	--
	11/13/03	37	27	--	--	--	--	--	--	--
	02/19/04	42.7	508	--	--	--	--	--	--	--
	05/21/04	54	1,100	--	--	--	--	--	--	--
	08/11/05	27	--	--	--	--	--	--	--	--
	11/30/05	28	--	--	--	--	--	--	--	--
	08/08/08	4.5	130	<0.50	<0.50	<0.50	<80	<5.0	<0.50	<0.50
	11/05/08	4.5	500	<2.0	<2.0	<2.0	--	<100	--	--
	02/06/09	5.3	770	<0.50	<0.50	<0.50	<100	<5.0	--	--
	05/07/09	5.5	900	<0.50	<0.50	<0.50	<50	<5.0	--	--
	06/01/10	5.1	36	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10						Not Scheduled for Sampling			
	12/08/10	6.6	680	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	4.9	590	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	3.3	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	4.5	14	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>MW-4</b>	07/09/02	28,300	--	--	--	--	--	--	--	--
	07/11/03	16,600	--	--	--	--	--	--	--	--
	11/13/03	16,000	4,500	--	--	--	--	--	--	--
	02/19/04	14,300	1,440	--	--	--	--	--	--	--
	05/21/04	7,380	<2,000	--	--	--	--	--	--	--
	08/11/05	1,200	--	--	--	--	--	--	--	--
	11/30/05	340	--	--	--	--	--	--	--	--
	08/08/08	24	1,800	<0.50	<0.50	<0.50	<80	<5.0	<0.50	<0.50
	11/05/08	31	760	<2.0	<2.0	<2.0	--	<100	--	--
	02/06/09	39	1,400	<0.50	<0.50	<0.50	<200	<5.0	--	--
	05/07/09	29	1,000	<0.50	<0.50	<0.50	<200	<5.0	--	--
	06/01/10	9.4	900	<2.0 [1]	<2.0 [1]	<2.0 [1]	<50	<5.0	--	--
	09/07/10						Not Scheduled for Sampling			
	12/08/10	7.6	940	<2.0 [1]	<2.0 [1]	<2.0 [1]	<50	<5.0	--	--
	05/26/11	3.7	1,400	<5.0[1]	<5.0[1]	<5.0[1]	<50	<5.0	--	--
	12/13/11	8.2	1,700	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	4.7	2,400	<2.0 [1]	<2.0 [1]	<2.0 [1]	<50	<5.0	--	--

**TABLE 2**  
**ANALYTICAL RESULTS FOR FUEL OXYGENATES AND ADDITIVES**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	ETBE (µg/L)	DIPE (µg/L)	TAME (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
<b>MW-5</b>	07/09/02	18,600	--	--	--	--	--	--	--	--
	07/11/03	5,090	--	--	--	--	--	--	--	--
	11/13/03	3,400	3,100	--	--	--	--	--	--	--
	02/19/04	438	1,340	--	--	--	--	--	--	--
	05/21/04	214	436	--	--	--	--	--	--	--
	08/11/05	100	--	--	--	--	--	--	--	--
	11/30/05	82	--	--	--	--	--	--	--	--
	08/08/08	8.6	510	<0.50	<0.50	<0.50	<50	<5.0	<0.50	<0.50
	11/05/08	4.8	170	<2.0	<2.0	<2.0	--	<100	--	--
	02/06/09	5.5	110	<0.50	<0.50	<0.50	<200	<5.0	--	--
	05/07/09	4.3	60	<0.50	<0.50	<0.50	<50	<5.0	--	--
	06/01/10	4.3	570	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10						Not Scheduled for Sampling			
	12/08/10	5.9	1,300	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	3.5	1,300	<2.0[1]	<2.0[1]	<2.0[1]	<50	<5.0	--	--
	12/13/11	2.8	2,800	<2.0[1]	<2.0[1]	<2.0[1]	<50	<5.0	--	--
	07/23/12	2.5	1,400	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>MW-6</b>	07/09/02	11,300	--	--	--	--	--	--	--	--
	07/11/03	18,000	--	--	--	--	--	--	--	--
	11/13/03	18,000	ND	--	--	--	--	--	--	--
	02/19/04	5,310	4,260	--	--	--	--	--	--	--
	05/21/04	3,900	4,060	--	--	--	--	--	--	--
	08/11/05	3,200	--	--	--	--	--	--	--	--
	11/30/05	3,400	--	--	--	--	--	--	--	--
	08/08/08	230	810	<0.50	<0.50	<0.66	<200	<8.0	<0.50	<0.50
	11/05/08	340	950	<10	<10	<10	--	<500	--	--
	02/06/09	140	690	<0.50	<0.50	<0.50	<200	<5.0	--	--
	05/07/09	150	460	<0.50	<0.50	<0.50	<100	<5.0	--	--
	06/01/10	350	770	<5.0 [1]	<5.0 [1]	<5.0 [1]	<50	<5.0	--	--
	09/07/10						Not Scheduled for Sampling			
	12/08/10	420	890	<2.0 [1]	<2.0 [1]	<2.0 [1]	<50	<5.0	--	--
	05/26/11	230	640	<2.0[1]	<2.0[1]	<2.0[1]	<50	<5.0	--	--
	12/13/11	400	1,200	<5.0[1]	<5.0[1]	<5.0[1]	<50	<5.0	--	--
	07/23/12	320	1,200	<3.0[1]	<3.0[1]	21	<50	<5.0	--	--

**TABLE 2**  
**ANALYTICAL RESULTS FOR FUEL OXYGENATES AND ADDITIVES**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	Methanol ( $\mu\text{g/L}$ )	Ethanol ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )
<b>MW-7</b>	06/01/10	22	18	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10	17	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/08/10	7.6	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	2.8	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	9.6	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	6.7	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>MW-10</b>	06/01/10	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/08/10	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>MW-11</b>	06/01/10	6.7	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10	98	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/08/10	96	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	17	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	1.6	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>MW-12A</b>	06/01/10	260	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10						Inaccessible			
	12/08/10	300	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	250	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	420	66	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	260	90	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>MW-13A</b>	06/01/10	7.1	33	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10						Inaccessible			
	12/08/10	15	61	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	8.3	33	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	6.8	27	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	2.1	12	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>REMEDIATION WELL</b>										
<b>EX-1</b>	05/26/11	730	6,700	<5.0[1]	<5.0[1]	<5.0[1]	<50	<5.0	--	--
	12/13/11	--	--	--	--	--	--	--	--	--
	07/23/12	--	--	--	--	--	--	--	--	--

**TABLE 2**  
**ANALYTICAL RESULTS FOR FUEL OXYGENATES AND ADDITIVES**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Well Number	Date Collected	MTBE ( $\mu\text{g/L}$ )	TBA ( $\mu\text{g/L}$ )	ETBE ( $\mu\text{g/L}$ )	DIPE ( $\mu\text{g/L}$ )	TAME ( $\mu\text{g/L}$ )	Methanol ( $\mu\text{g/L}$ )	Ethanol ( $\mu\text{g/L}$ )	1,2-DCA ( $\mu\text{g/L}$ )	EDB ( $\mu\text{g/L}$ )
<b>DEEPER WELLS</b>										
<b>MW-5B</b>	06/01/10	0.70	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10	1.4	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/08/10	1.6	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	3.2	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	7.5	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	16	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>MW-6B</b>	06/01/10	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/08/10	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
<b>MW-12B</b>	06/01/10	0.84	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10						Inaccessible			
	12/08/10	<50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	05/26/11	0.80	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	12/13/11	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	07/23/12	<0.50	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--

**Legend/Key:**

MTBE = Methyl tertiary butyl ether

1,2-DCA = 1,2-Dichloroethane

TBA = Tertiary butyl alcohol

EDB = 1,2-Dibromoethane

DIPE = Di-isopropyl ether

ND= "not-detected" or below the Method Detection Limits

ETBE = Ethyl tertiary butyl ether

--= Not available/not analyzed

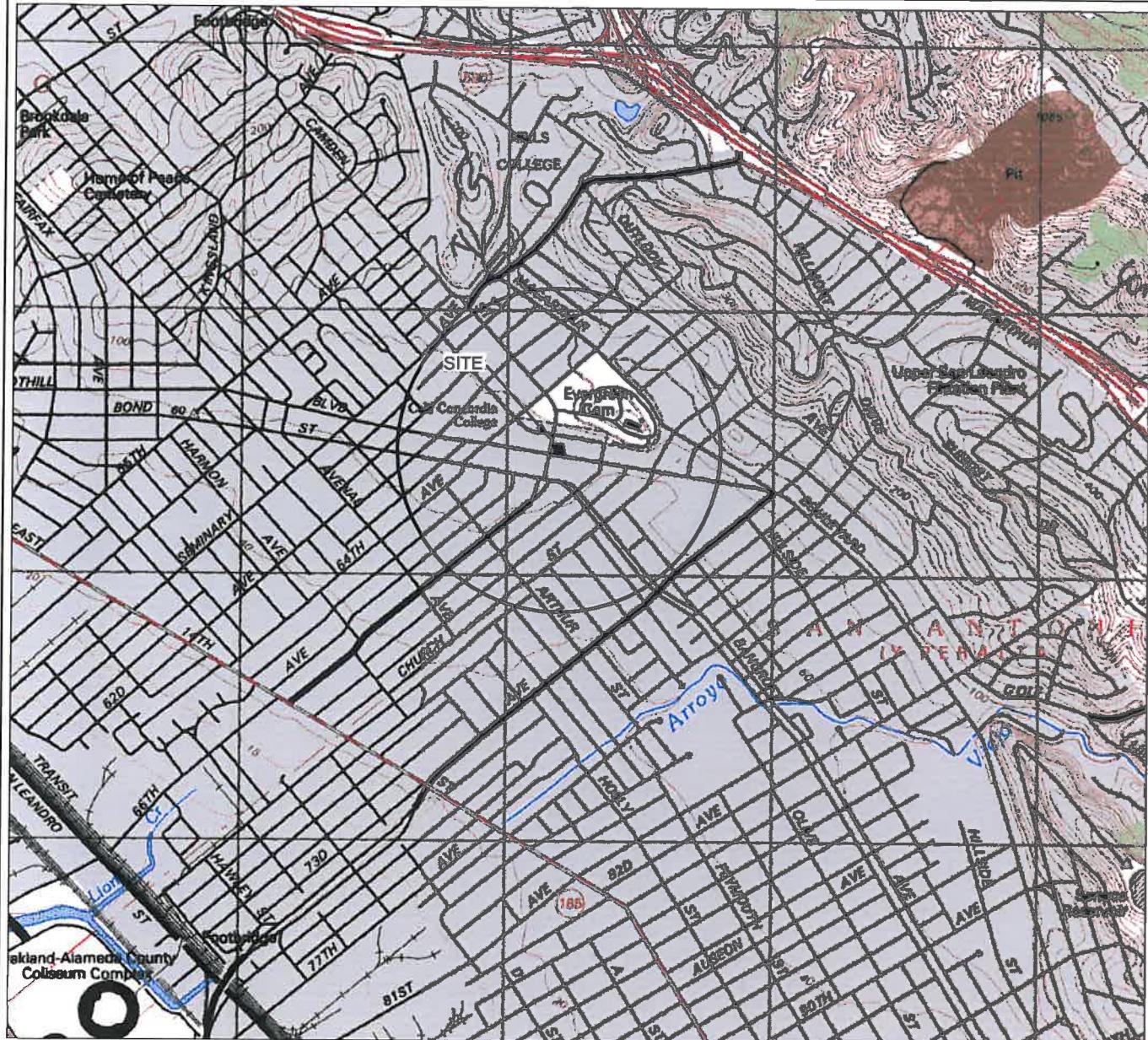
TAME = Tertiary amyl methyl ether

mg/L = micrograms per liter

[1] = Reporting limits were increased due to high concentration of target analytes.

**TABLE 3**  
**WELL CONSTRUCTION DETAIL SUMMARY**  
Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

Boring/Well I.D.	Date Installed	Boring Depth (feet)	Boring Diameter (inches)	Well Diameter (inches)	Well Depth (feet)	Screen Interval (feet bgs)	Slot Size (inches)	Drilling Method
<b>Shallow Groundwater Monitoring Wells</b>								
MW-1	06/04/01	25	8	2	25	10-25	0.01	HSA
MW-2	06/04/01	25	8	2	25	10-25	0.01	HSA
MW-3	06/04/01	25	8	2	25	10-25	0.01	HSA
MW-4	06/26/02	20	8	2	20	7.5-20	0.01	HSA
MW-5	06/26/02	20	8	2	20	7.5-20	0.01	HSA
MW-6	06/26/02	20	8	2	20	7.5-20	0.01	HSA
MW-7	09/23/09	25	8	2	25	10-25	0.01	HSA
MW-10	09/22/09	25	8	2	25	15-25	0.01	HSA
MW-11	09/23/09	25	8	2	25	10-25	0.01	HSA
MW-12A	09/22/09	25	8	2	25	10-25	0.01	HSA
MW-13A	09/24/09	25	8	2	25	5--25	0.01	HSA
<b>Deeper Groundwater Monitoring Wells</b>								
MW-5B	09/23/09	45	8	2	45	35-45	0.01	HSA
MW-6B	09/24/09	50	8	2	50	35-50	0.01	HSA
MW-12B	09/22/09	43	8	2	43	33-43	0.01	HSA
<b>Remediation Wells</b>								
EX-1	04/04/11	30	10	4	30	10-30	0.02	HSA
IW-1A/B	04/06/11	28	8	1	21.5	20.5-21.5	0.02	HSA
				1	27	25-27	microporous	
IW-2A/B	04/06/11	28	8	1	21.5	20.5-21.5	0.02	HSA
				1	27	25-27	microporous	
<b>Soil Gas Monitoring Wells</b>								
SGW-1	04/06/11	2.5	6	0.25	2.5	2-2.5	mesh	hand digging
SGW-2	04/07/11	1.5	6	0.25	1.5	1-1.5	mesh	hand digging
Notes: HSA = hollow stem auger								



GENERAL NOTES:  
 BASE MAP FROM U.S.G.S.  
 OAKLAND EAST, CA.  
 7.5 MINUTE TOPOGRAPHIC  
 PHOTOREVISED 1980



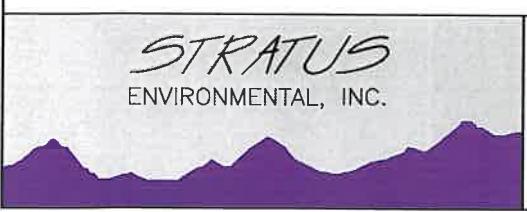
QUADRANGLE LOCATION

0 2000 FT  
 SCALE 1:24,000

FIGURE

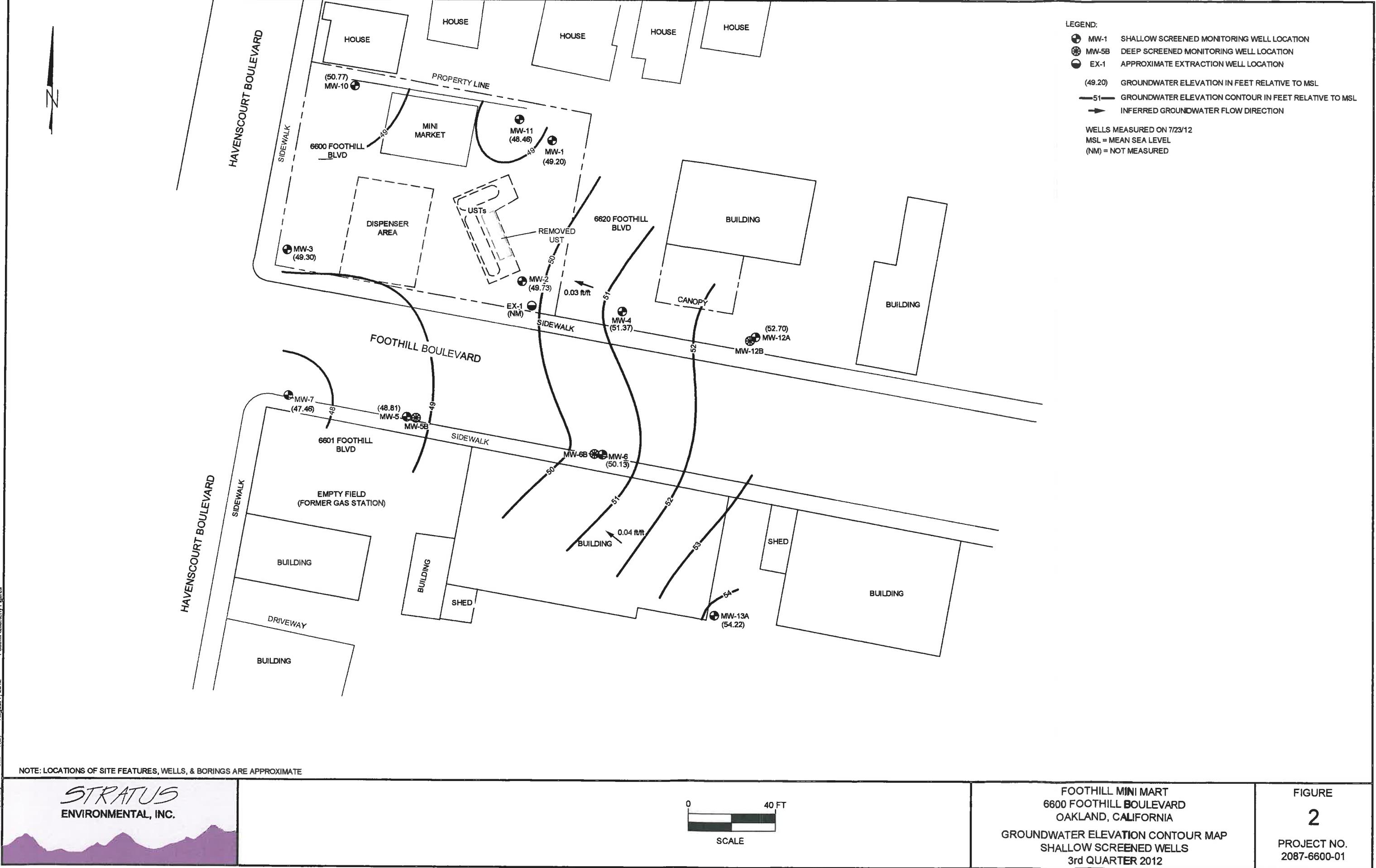
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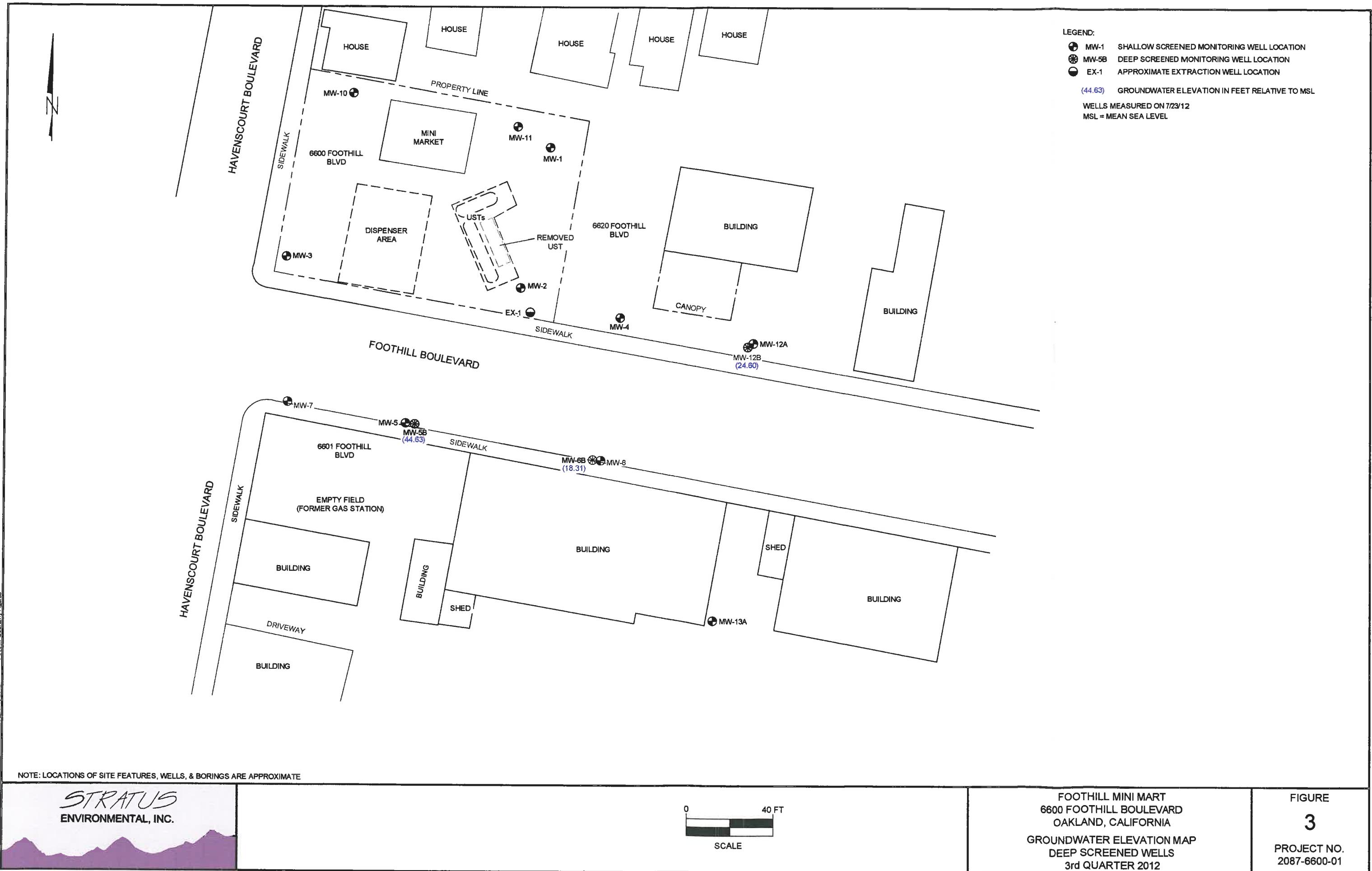
PROJECT NO.  
 2087-6600-01

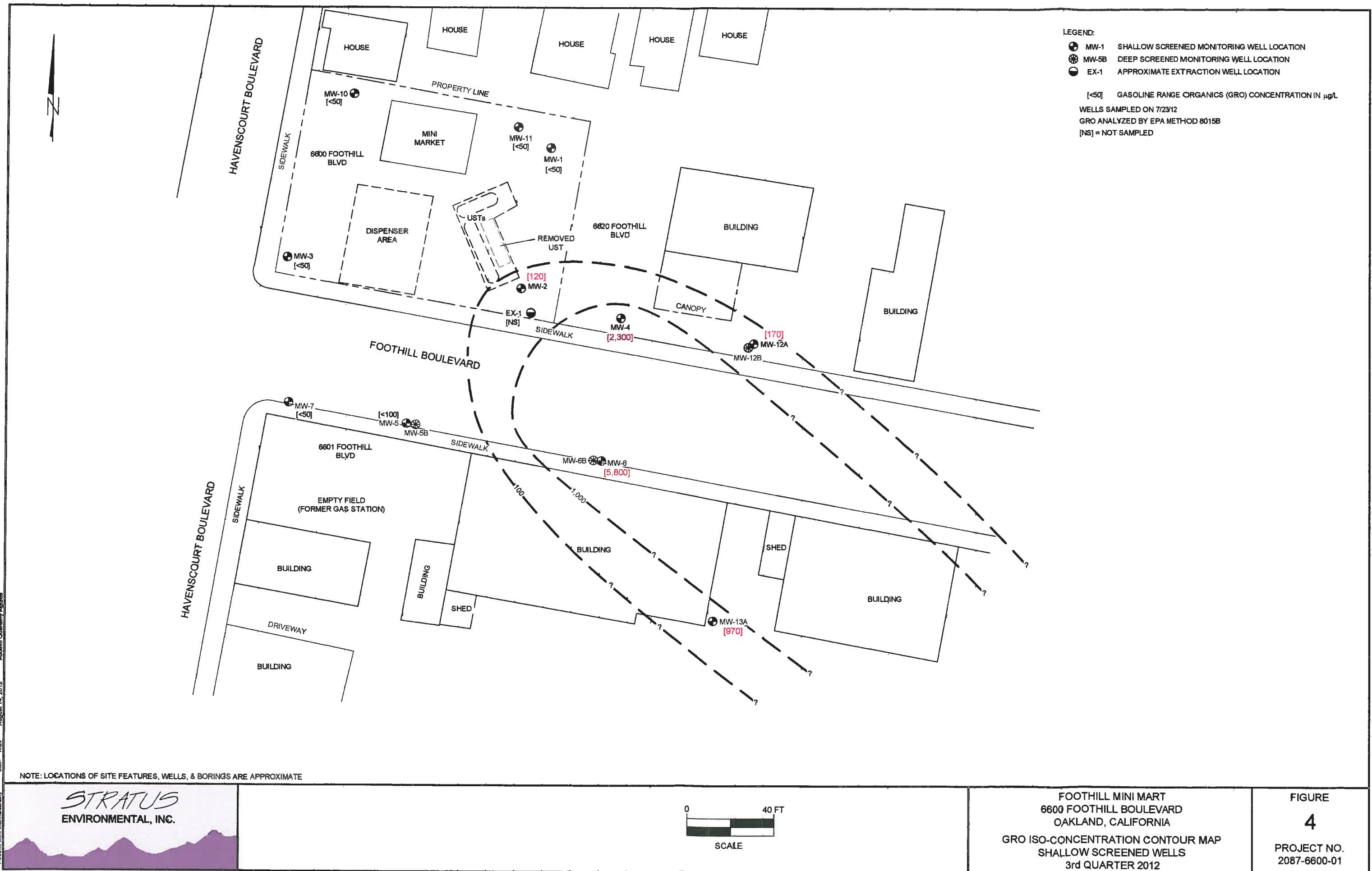


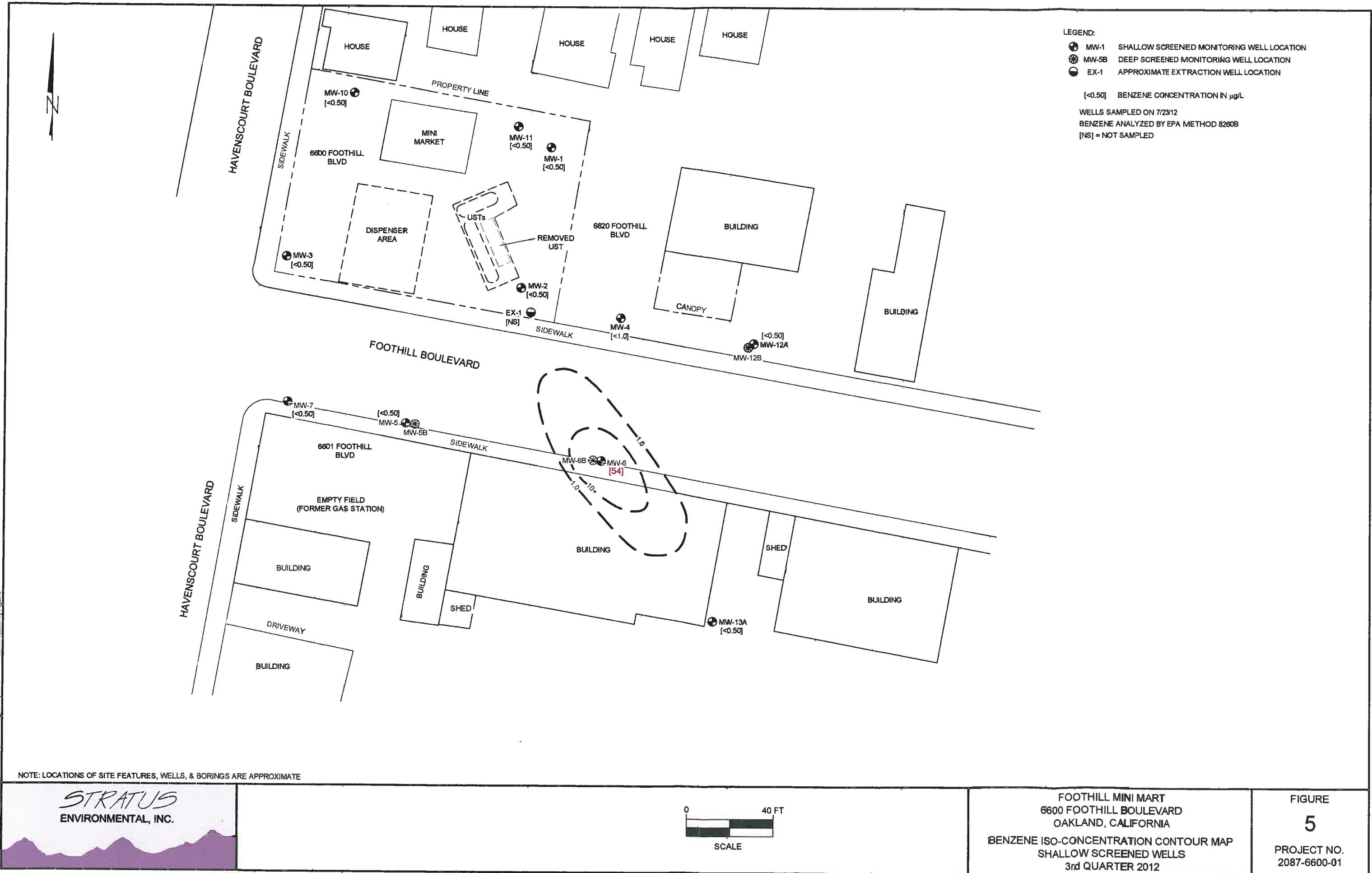
FOOTHILL MINI MART  
 6600 FOOTHILL BOULEVARD  
 OAKLAND, CALIFORNIA

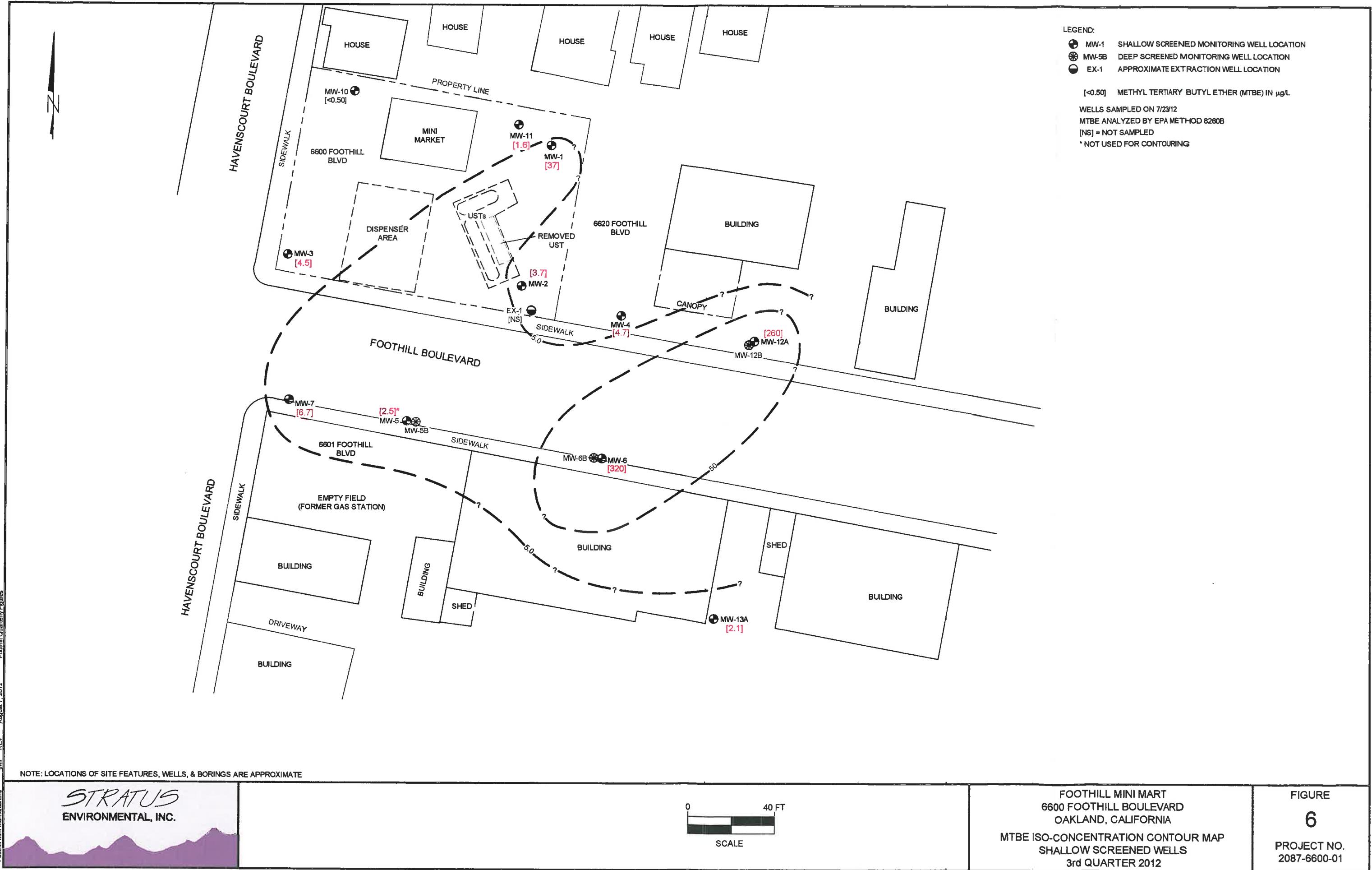
SITE LOCATION MAP

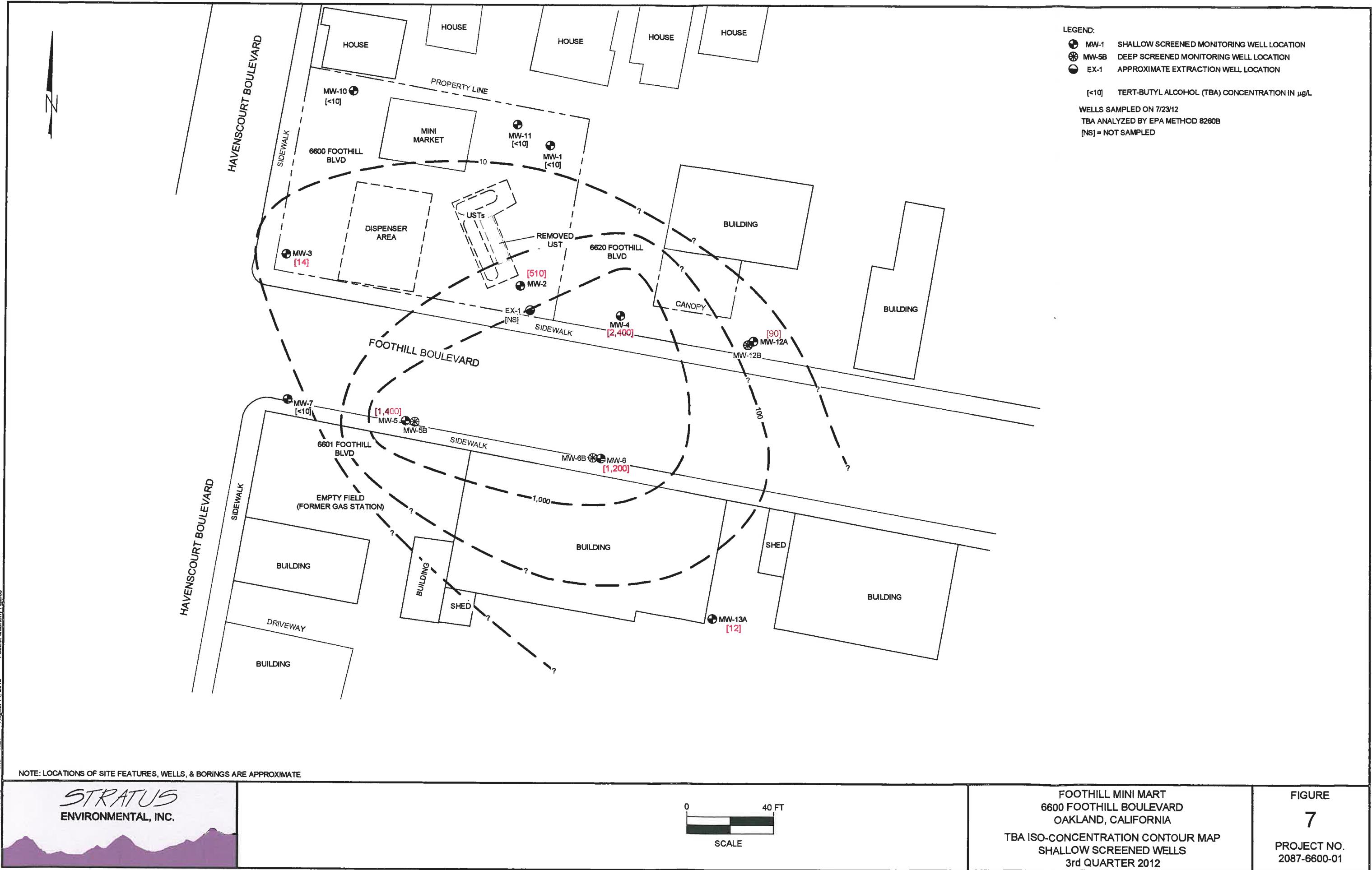


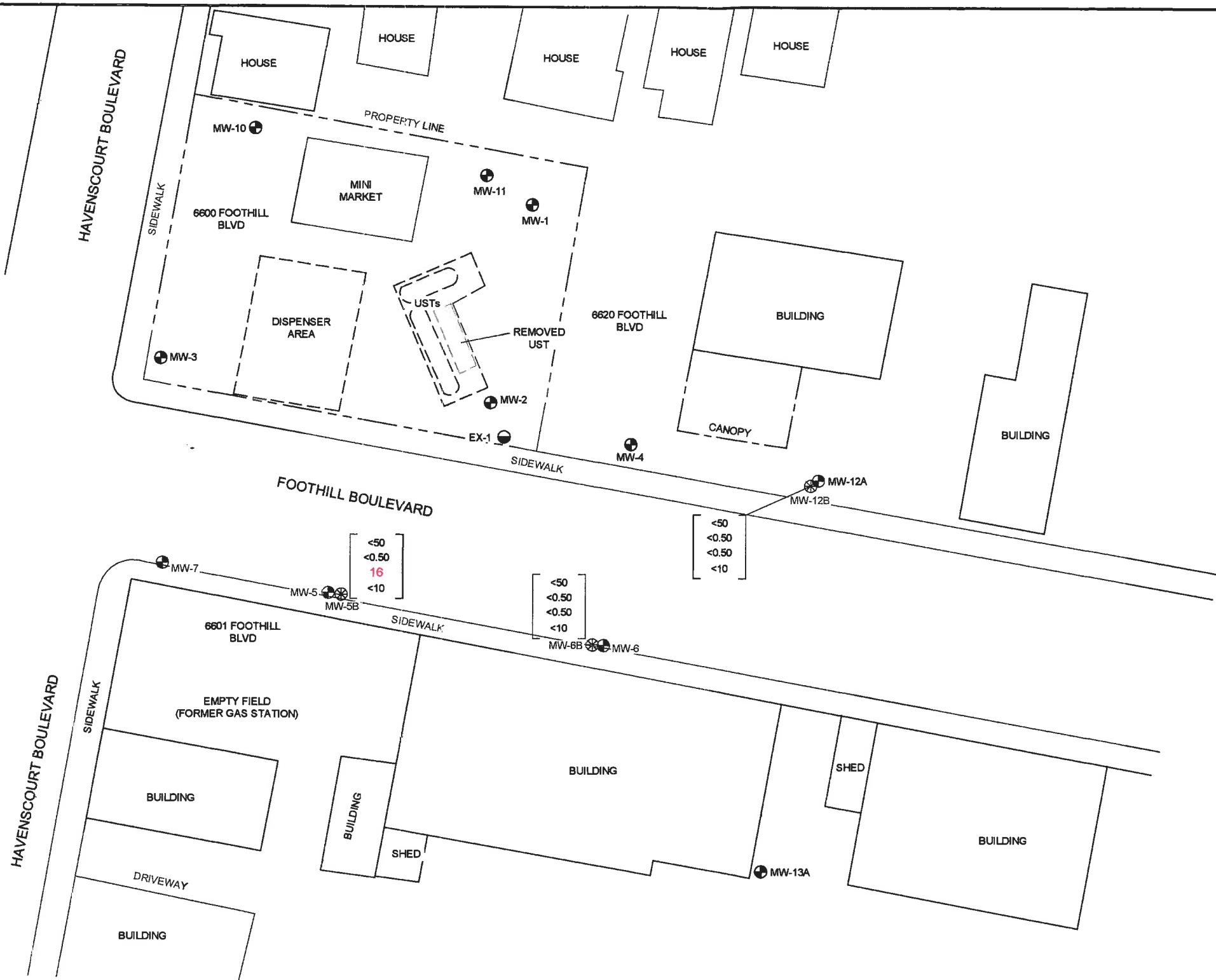




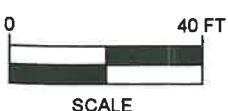








NOTE: LOCATIONS OF SITE FEATURES, WELLS, & BORINGS ARE APPROXIMATE



FOOTHILL MINI MART  
6600 FOOTHILL BOULEVARD  
OAKLAND, CALIFORNIA  
GROUNDWATER ANALYTICAL SUMMARY  
DEEP SCREENED WELLS  
3rd QUARTER 2012

FIGURE  
8  
PROJECT NO.  
2087-6600-01

**APPENDIX A**

**FIELD DATA SHEETS**



Site Address 6600 Foothill Blvd  
City Oakland  
Sampled by: *Shane Edmunds*  
Signature *Shane Edmunds*

Site Number Foothill Mini Mart  
Project Number 2087-6600-01  
Project PM Scott Bittinger  
DATE 7/23/12

**Multiplier**

Please refer to groundwater sampling field procedures  
pH/Conductivity/temperature Meter - Oakton Model PC-10  
DO Meter - Oakton 300 Series (DO is always measured before purge)

T:\Forms

CALIBRATION DATE  
H 7/23 SE  
y Error  
D 7/23 SE

Site Address 6600 Foothill BlvdCity OaklandSampled By: S. EdwardsSignature Sam Edwards

Site Number	Foothill Mini Mart
Project Number	2087-6600-01
Project PM	Scott Bittinger
DATE	<u>7/23/12</u>

Well ID <u>MW - 6</u>					Well ID <u>MW - 10</u>						
Purge start time			Odor	<u>Y</u> <u>N</u>	Purge start time			Odor	<u>Y</u> <u>N</u>		
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons		
time	1112	20.6	6.77	137	0	time	1207	19.8	8.00		
time	1116	19.2	6.70	138	3	time	1211	18.8	7.86		
time	1119	18.7	6.76	134	6	time	1216	18.4	7.74		
time						time			7.88		
purge stop time	$D_o = 1.19$		ORP	53	purge stop time $D_o = 0.93$		ORP	58			
Well ID <u>MW - 3</u>					Well ID <u>MU - 11</u>						
Purge start time			Odor	<u>Y</u> <u>N</u>	Purge start time			Odor	<u>Y</u> <u>N</u>		
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons		
time	1230	21.5	6.76	141	0	time	1255	19.3	6.61		
time	1235	20.9	6.86	134	3.5	time	1259	18.8	6.24		
time	1239	20.8	6.83	129	6.5	time	1303	18.6	6.33		
time						time			6.5		
purge stop time	$D_o = 1.30$		ORP	48	purge stop time $D_o = 1.45$		ORP	58			
Well ID <u>MW - 1</u>					Well ID <u>MW - 2</u>						
Purge start time			Odor	<u>Y</u> <u>N</u>	Purge start time			Odor	<u>Y</u> <u>N</u>		
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons		
time	1309	20.0	6.54	162	0	time	1334	22.5	6.74		
time	1314	19.3	6.25	166	3.5	time	1339	21.3	6.53		
time	1318	19.2	6.35	168	7	time	1344	20.2	6.90		
time						time			7.5		
purge stop time	$D_o = 0.98$		ORP	61	purge stop time $D_o = 0.54$		ORP	46			
Well ID					Well ID						
Purge start time			Odor	<u>Y</u> <u>N</u>	Purge start time			Odor	<u>Y</u> <u>N</u>		
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons		
time					time						
time					time						
time					time						
time					time						
purge stop time	purge stop time		ORP		purge stop time		ORP				

Site Address 6600 Foothill BlvdCity OaklandSampled By: S. EdmundsSignature Steve Edmunds

Site Number	Foothill Mini Mart
Project Number	2087-6600-01
Project PM	Scott Bittinger
DATE	<u>7/23/12</u>

Well ID <u>MW - 12A</u>					Well ID <u>MW - 12R</u>								
Purge start time			Odor	Y <input checked="" type="checkbox"/>	Purge start time			Odor	Y <input checked="" type="checkbox"/>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons				
time <u>0807</u>	<u>19.5</u>	<u>7.70</u>	<u>130</u>	<u>0</u>	time <u>0825</u>	<u>19.6</u>	<u>7.18</u>	<u>184</u>	<u>0</u>				
time <u>0810</u>	<u>19.2</u>	<u>7.47</u>	<u>145</u>	<u>3</u>	time <u>0828</u>	<u>19.2</u>	<u>7.25</u>	<u>187</u>	<u>1.5</u>				
time <u>0813</u>	<u>19.0</u>	<u>7.10</u>	<u>151</u>	<u>6</u>	time <u>0831</u>	<u>18.9</u>	<u>7.34</u>	<u>188</u>	<u>2.5</u>				
time					time								
purge stop time	<u>D<sub>o</sub> = 1.34</u>		ORP	<u>119</u>	purge stop time	<u>D<sub>o</sub> = 2.88</u>		ORP	<u>94</u>				
Well ID <u>MW - 4</u>					Well ID <u>MW - 7</u>								
Purge start time			Odor	Y <input checked="" type="checkbox"/>	Purge start time			Odor	Y <input checked="" type="checkbox"/>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons				
time <u>0842</u>	<u>20.9</u>	<u>6.93</u>	<u>151</u>	<u>0</u>	time <u>0921</u>	<u>19.3</u>	<u>7.13</u>	<u>149</u>	<u>0</u>				
time <u>0845</u>	<u>21.3</u>	<u>6.85</u>	<u>148</u>	<u>2.5</u>	time <u>0926</u>	<u>18.4</u>	<u>7.17</u>	<u>147</u>	<u>3.5</u>				
time <u>0848</u>	<u>20.8</u>	<u>6.85</u>	<u>146</u>	<u>5</u>	time <u>0932</u>	<u>18.4</u>	<u>6.97</u>	<u>152</u>	<u>7</u>				
time					time								
purge stop time	<u>D<sub>o</sub> = 1.39</u>		ORP	<u>91</u>	purge stop time	<u>D<sub>o</sub> = 1.00</u>		ORP	<u>38</u>				
Well ID <u>MW - 5B</u>					Well ID <u>MW - 5</u>								
Purge start time			Odor	Y <input checked="" type="checkbox"/>	Purge start time			Odor	Y <input checked="" type="checkbox"/>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons				
time <u>0949</u>	<u>18.8</u>	<u>7.56</u>	<u>149</u>	<u>0</u>	time <u>0954</u>	<u>19.8</u>	<u>6.92</u>	<u>106</u>	<u>0</u>				
time <u>0956</u>	<u>Dry @ 7 Gallons purged</u>				time <u>0957</u>	<u>19.1</u>	<u>6.82</u>	<u>134</u>	<u>3</u>				
time					time <u>1000</u>	<u>18.3</u>	<u>6.73</u>	<u>141</u>	<u>5.5</u>				
time					time								
purge stop time	<u>D<sub>o</sub> = 0.95</u>		ORP	<u>43</u>	purge stop time	<u>D<sub>o</sub> = 1.66</u>		ORP	<u>48</u>				
Well ID <u>MW - 13</u>					Well ID <u>MW - 6R</u>								
Purge start time			Odor	Y <input checked="" type="checkbox"/>	Purge start time			Odor	Y <input checked="" type="checkbox"/>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons				
time <u>1023</u>	<u>19.9</u>	<u>6.80</u>	<u>127</u>	<u>80</u>	time <u>1050</u>	<u>19.8</u>	<u>7.27</u>	<u>142</u>	<u>0</u>				
time <u>1028</u>	<u>20.0</u>	<u>6.84</u>	<u>127</u>	<u>4.5</u>	time <u>1057</u>	<u>18.8</u>	<u>7.20</u>	<u>140</u>	<u>3</u>				
time <u>1033</u>	<u>18.2</u>	<u>6.85</u>	<u>127</u>	<u>9.5</u>	time <u>1104</u>	<u>18.7</u>	<u>7.17</u>	<u>142</u>	<u>6</u>				
time					time								
purge stop time	<u>D<sub>o</sub> = 2.12</u>		ORP	<u>43</u>	purge stop time	<u>D<sub>o</sub> = 1.30</u>		ORP	<u>50</u>				

**APPENDIX B**

**SAMPLING AND ANALYSES PROCEDURES**

## **SAMPLING AND ANALYSIS PROCEDURES**

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The sampling and analysis procedures as well as the quality assurance plan are contained in this appendix. The procedures and adherence to the quality assurance plan will provide for consistent and reproducible sampling methods; proper application of analytical methods; accurate and precise analytical results; and finally, these procedures will provide guidelines so that the overall objectives of the monitoring program are achieved.

### **Ground Water and Liquid-Phase Petroleum Hydrocarbon Depth Assessment**

A water/hydrocarbon interface probe is used to assess the liquid-phase petroleum hydrocarbon (LPH) thickness, if present, and a water level indicator is used to measure the ground water depth in monitoring wells that do not contain LPH. Depth to ground water or LPH is measured from a datum point at the top of each monitoring well casing. The datum point is typical a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

### **Subjective Analysis of Ground Water**

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

### **Monitoring Well Purging and Sampling**

Monitoring wells are purged using a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water have been removed. If three well volumes can not be removed in one half hour's time the well is allowed to recharge to 80% of original level. After recharging, a ground water sample is then removed from each of the wells using a disposable bailer.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air from remaining in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped.

The water sample is collected, labeled, and handled according to the Quality Assurance Plan. Water generated during the monitoring event is disposed of according to regulatory accepted method pertaining to the site.

## QUALITY ASSURANCE PLAN

Procedures to provide data quality should be established and documented so that conditions adverse to quality, such as deficiencies, deviations, nonconformities, defective material, services, and/or equipment, can be promptly identified and corrected.

### General Sample Collection and Handling Procedures

Proper collection and handling are essential to ensure the quality of a sample. Each sample is collected in a suitable container, preserved correctly for the intended analysis, and stored prior to analysis for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of samples used on this project can be found in this section.

### Soil and Water Sample Labeling and Preservation

Label information includes a unique sample identification number, job identification number, date, and time. After labeling all soil and water samples are placed in a Ziploc® type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Upon recovery, the sample container is sealed to minimize the potential of volatilization and cross-contamination prior to chemical analysis. Soil sampling tubes are typically closed at each end with Teflon® sheeting and plastic caps. The sample is then placed in a Ziploc® type bag and sealed. The sample is labeled and refrigerated at approximately 4° Celsius for delivery, under strict chain-of-custody, to the analytical laboratory.

### Sample Identification and Chain-of-Custody Procedures

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded on the borehole log or in the field records. The samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and

noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

### Equipment Cleaning

Sample bottles, caps, and septa used in sampling for volatile and semivolatile organics will be triple rinsed with high-purity deionized water. After being rinsed, sample bottles will be dried overnight at a temperature of 200°C. Sample caps and septa will be dried overnight at a temperature of 60°C. Sample bottles, caps, and septa will be protected from solvent contact between drying and actual use at the sampling site. Sampling containers will be used only once and discarded after analysis is complete.

Plastic bottles and caps used in sampling for metals will be soaked overnight in a 1-percent nitric acid solution. Next, the bottles and caps will be triple rinsed with deionized water. Finally, the bottles and caps will be air dried before being used at the site. Plastic bottles and caps will be constructed of linear polyethylene or polypropylene. Sampling containers will be used only once and discarded after analysis is complete. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Before the sampling event is started, equipment that will be placed in the well or will come in contact with groundwater will be disassembled and cleaned thoroughly with detergent water, and then steam cleaned with deionized water. Any parts that may absorb contaminants, such as plastic pump valves, etc. will be cleaned as described above or replaced.

During field sampling, equipment surfaces that are placed in the well or contact groundwater will be steam cleaned with deionized water before the next well is purged or sampled. Equipment blanks will be collected and analyzed from non-disposable sampling equipment that is used for collecting groundwater samples at the rate of one blank per twenty samples collected.

### Internal Quality Assurance Checks

Internal quality assurance procedures are designed to provide reliability of monitoring and measurement of data. Both field and laboratory quality assurance checks are necessary to evaluate the reliability of sampling and analysis results. Internal quality assurance procedures generally include:

- Laboratory Quality Assurance

- Documentation of instrument performance checks
- Documentation of instrument calibration
- Documentation of the traceability of instrument standards, samples, and data
- Documentation of analytical and QC methodology (QC methodology includes use of spiked samples, duplicate samples, split samples, use of reference blanks, and check standards to check method accuracy and precision)

- Field Quality Assurance

- Documentation of sample preservation and transportation
- Documentation of field instrument calibration and irregularities in performance

Internal laboratory quality assurance checks will be the responsibility of the contract laboratories. Data and reports submitted by field personnel and the contract laboratory will be reviewed and maintained in the project files.

**Types of Quality Control Checks**

Samples are analyzed using analytical methods outlined in EPA Manual SW 846 and approved by the California Regional Water Quality Control Board-Central Valley Region in the Leaking Underground Fuel Tanks (LUFT) manual and appendices. Standard contract laboratory quality control may include analysis or use of the following:

- Method blanks – reagent water used to prepare calibration standards, spike solutions, etc. is analyzed in the same manner as the sample to demonstrate that analytical interferences are under control.
- Matrix spiked samples – a known amount of spike solution containing selected constituents is added to the sample at concentrations at which the accuracy of the analytical method is to satisfactorily monitor and evaluate laboratory data quality.
- Split samples – a sample is split into two separate aliquots before analysis to assess the reproducibility of the analysis.
- Surrogate samples – samples are spiked with surrogate constituents at known concentrations to monitor both the performance of the analytical system and the effectiveness of the method in dealing with the sample matrix.
- Control charts – graphical presentation of spike or split sample results used to track the accuracy or precision of the analysis.
- Quality control check samples – when spiked sample analysis indicates atypical instrument performance, a quality check sample, which is prepared independently of the calibration standards and contains the constituents of interest, is analyzed to confirm that measurements were performed accurately.

- Calibration standards and devices – traceable standards or devices to set instrument response so that sample analysis results represent the absolute concentration of the constituent.

Field QA samples will be collected to assess sample handling procedures and conditions. Standard field quality control may include the use of the following, and will be collected and analyzed as outlined in EPA Manual SW 846.

- Field blanks – reagent water samples are prepared at the sampling location by the same procedure used to collect field groundwater samples and analyzed with the groundwater samples to assess the impact of sampling techniques on data quality. Typically, one field blank per twenty groundwater samples collected will be analyzed per sampling event.
- Field replicates – duplicate or triplicate samples are collected and analyzed to assess the reproducibility of the analytical data. One replicate groundwater sample per twenty samples collected will be analyzed per sampling event, unless otherwise specified. Triplicate samples will be collected only when specific conditions warrant and generally are sent to an alternate laboratory to confirm the accuracy of the routinely used laboratory.
- Trip blanks – reagent water samples are prepared before field work, transported and stored with the samples and analyzed to assess the impact of sample transport and storage for data quality. In the event that any analyte is detected in the field blank, a trip blank will be included in the subsequent groundwater sampling event.

Data reliability will be evaluated by the certified laboratory and reported on a cover sheet attached to the laboratory data report. Analytical data resulting from the testing of field or trip blanks will be included in the laboratory's report. Results from matrix spike, surrogate, and method blank testing will be reported, along with a statement of whether the samples were analyzed within the appropriate holding time.

Stratus will evaluate the laboratory's report on data reliability and note significant QC results that may make the data biased or unacceptable. Data viability will be performed as outlined in EPA Manual SW 846. If biased or unacceptable data is noted, corrective actions (including re-sample/re-analyze, etc.) will be evaluated on a site-specific basis.

**APPENDIX C**

**LABORATORY ANALYTICAL REPORTS AND  
CHAIN-OF-CUSTODY DOCUMENTATION**



# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Scott Bittinger  
Phone: (530) 676-2062  
Fax: (530) 676-6005  
Date Received : 07/25/12

Job: 2087-6600-01/Foothill Mini Mart

GC/MSD by Direct Injection  
EPA Method SW8260B-DI

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
<b>Client ID: MW-1</b>				
Lab ID : STR12072540-01A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 14:59 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-2</b>				
Lab ID : STR12072540-02A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 15:11 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-3</b>				
Lab ID : STR12072540-03A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 23:44 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-4</b>				
Lab ID : STR12072540-04A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 08:56 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-5</b>				
Lab ID : STR12072540-05A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 14:12 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-5B</b>				
Lab ID : STR12072540-06A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 14:22 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-6</b>				
Lab ID : STR12072540-07A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 11:24 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-6B</b>				
Lab ID : STR12072540-08A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 14:33 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-7</b>				
Lab ID : STR12072540-09A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 14:01 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-10</b>				
Lab ID : STR12072540-10A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 14:47 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12
<b>Client ID: MW-11</b>				
Lab ID : STR12072540-11A Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled 07/23/12 13:25 Ethanol	ND	5.0 µg/L	07/25/12	07/25/12



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**Client ID: MW-12A**

Lab ID :	STR12072540-12A	Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled	07/23/12 08:17	Ethanol	ND	5.0 µg/L	07/25/12	07/25/12

**Client ID: MW-12B**

Lab ID :	STR12072540-13A	Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled	07/23/12 11:42	Ethanol	ND	5.0 µg/L	07/25/12	07/25/12

**Client ID: MW-13A**

Lab ID :	STR12072540-14A	Methanol	ND	50 µg/L	07/25/12	07/25/12
Date Sampled	07/23/12 10:37	Ethanol	ND	5.0 µg/L	07/25/12	07/25/12

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinckman, Quality Assurance Officer  
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Statement of Data Authenticity : Alpha Analytical, Inc. attests that the data reported has not been altered in any way.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

8/1/12

**Report Date**



# Alpha Analytical, Inc.

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## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Scott Bittinger  
Phone: (530) 676-2062  
Fax: (530) 676-6005  
Date Received : 07/25/12

Job: 2087-6600-01/Foothill Mini Mart

Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B  
Volatile Organic Compounds (VOCs) EPA Method SW8260B

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID : MW-1				
Lab ID : STR12072540-01A	TPH-P (GRO)	ND	50 µg/L	07/30/12
Date Sampled 07/23/12 14:59	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	07/30/12
	Methyl tert-butyl ether (MTBE)	37	0.50 µg/L	07/30/12
	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12
	Benzene	ND	0.50 µg/L	07/30/12
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12
	Toluene	ND	0.50 µg/L	07/30/12
	Ethylbenzene	ND	0.50 µg/L	07/30/12
	m,p-Xylene	ND	0.50 µg/L	07/30/12
	o-Xylene	ND	0.50 µg/L	07/30/12
Client ID : MW-2				
Lab ID : STR12072540-02A	TPH-P (GRO)	120	50 µg/L	07/30/12
Date Sampled 07/23/12 15:11	Tertiary Butyl Alcohol (TBA)	510	10 µg/L	07/30/12
	Methyl tert-butyl ether (MTBE)	3.7	0.50 µg/L	07/30/12
	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12
	Benzene	ND	0.50 µg/L	07/30/12
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12
	Toluene	ND	0.50 µg/L	07/30/12
	Ethylbenzene	ND	0.50 µg/L	07/30/12
	m,p-Xylene	ND	0.50 µg/L	07/30/12
	o-Xylene	ND	0.50 µg/L	07/30/12
Client ID : MW-3				
Lab ID : STR12072540-03A	TPH-P (GRO)	ND	50 µg/L	07/30/12
Date Sampled 07/23/12 23:44	Tertiary Butyl Alcohol (TBA)	14	10 µg/L	07/30/12
	Methyl tert-butyl ether (MTBE)	4.5	0.50 µg/L	07/30/12
	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12
	Benzene	ND	0.50 µg/L	07/30/12
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12
	Toluene	ND	0.50 µg/L	07/30/12
	Ethylbenzene	ND	0.50 µg/L	07/30/12
	m,p-Xylene	ND	0.50 µg/L	07/30/12
	o-Xylene	ND	0.50 µg/L	07/30/12



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Client ID :	<b>MW-4</b>					
Lab ID :	STR12072540-04A	TPH-P (GRO)	2,300	200 µg/L	07/30/12	07/30/12
Date Sampled	07/23/12 08:56	Tertiary Butyl Alcohol (TBA)	2,400	20 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	4.7	1.0 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND	V	2.0 µg/L	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	V	2.0 µg/L	07/30/12
		Benzene	ND	V	1.0 µg/L	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND	V	2.0 µg/L	07/30/12
		Toluene	ND	V	1.0 µg/L	07/30/12
		Ethylbenzene	ND	V	1.0 µg/L	07/30/12
		m,p-Xylene	ND	V	1.0 µg/L	07/30/12
		o-Xylene	ND	V	1.0 µg/L	07/30/12
Client ID :	<b>MW-5</b>					
Lab ID :	STR12072540-05A	TPH-P (GRO)	ND	V	100 µg/L	07/30/12
Date Sampled	07/23/12 14:12	Tertiary Butyl Alcohol (TBA)	1,400	10 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	2.5	0.50 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	07/30/12
		Benzene	ND		0.50 µg/L	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	07/30/12
		Toluene	ND		0.50 µg/L	07/30/12
		Ethylbenzene	ND		0.50 µg/L	07/30/12
		m,p-Xylene	ND		0.50 µg/L	07/30/12
		o-Xylene	ND		0.50 µg/L	07/30/12
Client ID :	<b>MW-5B</b>					
Lab ID :	STR12072540-06A	TPH-P (GRO)	ND		50 µg/L	07/30/12
Date Sampled	07/23/12 14:22	Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	07/30/12
		Methyl tert-butyl ether (MTBE)	16		0.50 µg/L	07/30/12
		Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	07/30/12
		Benzene	ND		0.50 µg/L	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	07/30/12
		Toluene	ND		0.50 µg/L	07/30/12
		Ethylbenzene	ND		0.50 µg/L	07/30/12
		m,p-Xylene	ND		0.50 µg/L	07/30/12
		o-Xylene	ND		0.50 µg/L	07/30/12
Client ID :	<b>MW-6</b>					
Lab ID :	STR12072540-07A	TPH-P (GRO)	5,800		300 µg/L	07/30/12
Date Sampled	07/23/12 11:24	Tertiary Butyl Alcohol (TBA)	1,200		30 µg/L	07/30/12
		Methyl tert-butyl ether (MTBE)	320		1.5 µg/L	07/30/12
		Di-isopropyl Ether (DIPE)	ND	V	3.0 µg/L	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	V	3.0 µg/L	07/30/12
		Benzene	54		1.5 µg/L	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	21		3.0 µg/L	07/30/12
		Toluene	ND	V	1.5 µg/L	07/30/12
		Ethylbenzene	9.4		1.5 µg/L	07/30/12
		m,p-Xylene	9.3		1.5 µg/L	07/30/12
		o-Xylene	ND	V	1.5 µg/L	07/30/12



# Alpha Analytical, Inc.

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Client ID :	MW-6B					
Lab ID :	STR12072540-08A	TPH-P (GRO)	ND	50 µg/L	07/30/12	07/30/12
Date Sampled	07/23/12 14:33	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12	07/30/12
		Benzene	ND	0.50 µg/L	07/30/12	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12	07/30/12
		Toluene	ND	0.50 µg/L	07/30/12	07/30/12
		Ethylbenzene	ND	0.50 µg/L	07/30/12	07/30/12
		m,p-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
		o-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
Client ID :	MW-7					
Lab ID :	STR12072540-09A	TPH-P (GRO)	ND	50 µg/L	07/30/12	07/30/12
Date Sampled	07/23/12 14:01	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	6.7	0.50 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12	07/30/12
		Benzene	ND	0.50 µg/L	07/30/12	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12	07/30/12
		Toluene	ND	0.50 µg/L	07/30/12	07/30/12
		Ethylbenzene	ND	0.50 µg/L	07/30/12	07/30/12
		m,p-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
		o-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
Client ID :	MW-10					
Lab ID :	STR12072540-10A	TPH-P (GRO)	ND	50 µg/L	07/30/12	07/30/12
Date Sampled	07/23/12 14:47	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12	07/30/12
		Benzene	ND	0.50 µg/L	07/30/12	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12	07/30/12
		Toluene	ND	0.50 µg/L	07/30/12	07/30/12
		Ethylbenzene	ND	0.50 µg/L	07/30/12	07/30/12
		m,p-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
		o-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
Client ID :	MW-11					
Lab ID :	STR12072540-11A	TPH-P (GRO)	ND	50 µg/L	07/30/12	07/30/12
Date Sampled	07/23/12 13:25	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	1.6	0.50 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12	07/30/12
		Benzene	ND	0.50 µg/L	07/30/12	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12	07/30/12
		Toluene	ND	0.50 µg/L	07/30/12	07/30/12
		Ethylbenzene	ND	0.50 µg/L	07/30/12	07/30/12
		m,p-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
		o-Xylene	ND	0.50 µg/L	07/30/12	07/30/12



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Client ID :	<b>MW-12A</b>					
Lab ID :	STR12072540-12A	TPH-P (GRO)	170	100 µg/L	07/30/12	07/30/12
Date Sampled	07/23/12 08:17	Tertiary Butyl Alcohol (TBA)	90	10 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	260	0.50 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12	07/30/12
		Benzene	ND	0.50 µg/L	07/30/12	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12	07/30/12
		Toluene	ND	0.50 µg/L	07/30/12	07/30/12
		Ethylbenzene	ND	0.50 µg/L	07/30/12	07/30/12
		m,p-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
		o-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
Client ID :	<b>MW-12B</b>					
Lab ID :	STR12072540-13A	TPH-P (GRO)	ND	50 µg/L	07/30/12	07/30/12
Date Sampled	07/23/12 11:42	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12	07/30/12
		Benzene	ND	0.50 µg/L	07/30/12	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12	07/30/12
		Toluene	ND	0.50 µg/L	07/30/12	07/30/12
		Ethylbenzene	ND	0.50 µg/L	07/30/12	07/30/12
		m,p-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
		o-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
Client ID :	<b>MW-13A</b>					
Lab ID :	STR12072540-14A	TPH-P (GRO)	970	50 µg/L	07/30/12	07/30/12
Date Sampled	07/23/12 10:37	Tertiary Butyl Alcohol (TBA)	12	10 µg/L	07/30/12	07/30/12
		Methyl tert-butyl ether (MTBE)	2.1	0.50 µg/L	07/30/12	07/30/12
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	07/30/12	07/30/12
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	07/30/12	07/30/12
		Benzene	ND	0.50 µg/L	07/30/12	07/30/12
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	07/30/12	07/30/12
		Toluene	ND	0.50 µg/L	07/30/12	07/30/12
		Ethylbenzene	ND	0.50 µg/L	07/30/12	07/30/12
		m,p-Xylene	ND	0.50 µg/L	07/30/12	07/30/12
		o-Xylene	ND	0.50 µg/L	07/30/12	07/30/12

Gasoline Range Organics (GRO) C4-C13

V = Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

Reported in micrograms per Liter, per client request.

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
 Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

Alpha Analytical, Inc. certifies that the test results meet all requirements of NELAC unless footnoted otherwise.

Statement of Data Authenticity: Alpha Analytical, Inc. attests that the data reported has not been altered in any way.

Alpha Analytical, Inc. currently holds appropriate and available California (#2019) and NELAC (01154CA) certifications for the data reported. Test results relate only to reported samples.

8/1/12  
**Report Date**



# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

## VOC Sample Preservation Report

Work Order: STR12072540

Job: 2087-6600-01/Foothill Mini Mart

Alpha's Sample ID	Client's Sample ID	Matrix	pH
I2072540-01A	MW-1	Aqueous	2
I2072540-02A	MW-2	Aqueous	2
I2072540-03A	MW-3	Aqueous	2
I2072540-04A	MW-4	Aqueous	2
I2072540-05A	MW-5	Aqueous	2
I2072540-06A	MW-5B	Aqueous	2
I2072540-07A	MW-6	Aqueous	2
I2072540-08A	MW-6B	Aqueous	2
I2072540-09A	MW-7	Aqueous	2
I2072540-10A	MW-10	Aqueous	2
I2072540-11A	MW-11	Aqueous	2
I2072540-12A	MW-12A	Aqueous	2
I2072540-13A	MW-12B	Aqueous	2
I2072540-14A	MW-13A	Aqueous	2

8/1/12

Report Date



# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778  
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date:  
31-Jul-12

## QC Summary Report

Work Order:  
12072540

### Method Blank

		Type: MBLK	Test Code: EPA Method SW8260B-DI						
File ID: C:\HPCHEM\MS11\DATA\120725\12072508.D		Batch ID: 29132			Analysis Date: 07/25/2012 17:36				
Sample ID:	MBLK-29132	Units : µg/L	Run ID: MSD_11_120725A		Prep Date: 07/25/2012 14:22				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)
Methanol	ND	50							
Ethanol	ND	5							
Surr: Hexafluoro-2-propanol	541	500	108	61	134				

### Laboratory Control Spike

		Type: LCS	Test Code: EPA Method SW8260B-DI						
File ID: C:\HPCHEM\MS11\DATA\120725\12072504.D		Batch ID: 29132			Analysis Date: 07/25/2012 16:20				
Sample ID:	LCS-29132	Units : µg/L	Run ID: MSD_11_120725A		Prep Date: 07/25/2012 14:22				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)
Methanol	174	50	250	70	44	145			
Ethanol	295	5	250	118	62	150			
Surr: Hexafluoro-2-propanol	534	500	107	61	134				

### Sample Matrix Spike

		Type: MS	Test Code: EPA Method SW8260B-DI						
File ID: C:\HPCHEM\MS11\DATA\120725\12072506.D		Batch ID: 29132			Analysis Date: 07/25/2012 16:58				
Sample ID:	12072540-02AMS	Units : µg/L	Run ID: MSD_11_120725A		Prep Date: 07/25/2012 14:22				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)
Methanol	198	50	250	0	79	33	159		
Ethanol	333	5	250	0	133	56	153		
Surr: Hexafluoro-2-propanol	516	500	103	61	134				

### Sample Matrix Spike Duplicate

		Type: MSD	Test Code: EPA Method SW8260B-DI						
File ID: C:\HPCHEM\MS11\DATA\120725\12072507.D		Batch ID: 29132			Analysis Date: 07/25/2012 17:17				
Sample ID:	12072540-02AMSD	Units : µg/L	Run ID: MSD_11_120725A		Prep Date: 07/25/2012 14:22				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)
Methanol	205	50	250	0	82	33	159	198.4	3.4(28)
Ethanol	324	5	250	0	130	56	153	333.1	2.7(40)
Surr: Hexafluoro-2-propanol	552	500	110	61	134				

### Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



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Date:  
01-Aug-12

Work Order:  
12072540

## QC Summary Report

Method Blank						
File ID: 12073005.D		Type: MBLK	Test Code: EPA Method SW8015B/C			
Sample ID: MBLK MS15W0730B		Units : µg/L	Run ID: MSD_15_120730B		Analysis Date: 07/30/2012 13:28	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME) UCL(ME) RPDRefVal %RPD(Limit) Qual
TPH-P (GRO)	ND	50				
Sur: 1,2-Dichloroethane-d4	10.3		10	103	70	130
Sur: Toluene-d8	9.63		10	96	70	130
Sur: 4-Bromofluorobenzene	10.9		10	109	70	130
Laboratory Control Spike						
File ID: 12073003.D		Type: LCS	Test Code: EPA Method SW8015B/C			
Sample ID: GLCS MS15W0730B		Units : µg/L	Run ID: MSD_15_120730B		Analysis Date: 07/30/2012 12:37	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME) UCL(ME) RPDRefVal %RPD(Limit) Qual
TPH-P (GRO)	410	50	400	102	70	130
Sur: 1,2-Dichloroethane-d4	10.3		10	103	70	130
Sur: Toluene-d8	9.51		10	95	70	130
Sur: 4-Bromofluorobenzene	10.8		10	108	70	130
Sample Matrix Spike						
File ID: 12073028.D		Type: MS	Test Code: EPA Method SW8015B/C			
Sample ID: 12072540-01AGS		Units : µg/L	Run ID: MSD_15_120730B		Analysis Date: 07/30/2012 21:47	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME) UCL(ME) RPDRefVal %RPD(Limit) Qual
TPH-P (GRO)	2020	250	2000	0	101	51 144
Sur: 1,2-Dichloroethane-d4	51.4		50	103	70	130
Sur: Toluene-d8	47.1		50	94	70	130
Sur: 4-Bromofluorobenzene	52.7		50	105	70	130
Sample Matrix Spike Duplicate						
File ID: 12073029.D		Type: MSD	Test Code: EPA Method SW8015B/C			
Sample ID: 12072540-01AGSD		Units : µg/L	Run ID: MSD_15_120730B		Analysis Date: 07/30/2012 22:09	
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME) UCL(ME) RPDRefVal %RPD(Limit) Qual
TPH-P (GRO)	2190	250	2000	0	110	51 144 2016 8.3(29)
Sur: 1,2-Dichloroethane-d4	51.2		50	102	70	130
Sur: Toluene-d8	47.4		50	95	70	130
Sur: 4-Bromofluorobenzene	52.3		50	105	70	130

### Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

Reported in micrograms per Liter, per client request.



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Date:  
01-Aug-12

Work Order:  
12072540

## QC Summary Report

Method Blank		Type: MBLK	Test Code: EPA Method SW8260B		Analysis Date: 07/30/2012 13:28	
Sample ID:	File ID:	Units : µg/L	Run ID:	Batch ID:	Prep Date:	RPDRefVal %RPD(Limit)
Analyte		Result	PQL	SpkVal SpkRefVal %REC LCL(ME) UCL(ME)		Qual
Tertiary Butyl Alcohol (TBA)		ND	10			
Methyl tert-butyl ether (MTBE)		ND	0.5			
Di-isopropyl Ether (DIPE)		ND	1			
Ethyl Tertiary Butyl Ether (ETBE)		ND	1			
Benzene		ND	0.5			
Tertiary Amyl Methyl Ether (TAME)		ND	1			
Toluene		ND	0.5			
Ethylbenzene		ND	0.5			
m,p-Xylene		ND	0.5			
o-Xylene		ND	0.5			
Surr: 1,2-Dichloroethane-d4		10.3		10 103 70 130		
Surr: Toluene-d8		9.63		10 96 70 130		
Surr: 4-Bromofluorobenzene		10.9		10 109 70 130		
Laboratory Control Spike		Type: LCS	Test Code: EPA Method SW8260B		Analysis Date: 07/30/2012 12:15	
Sample ID:	File ID:	Units : µg/L	Run ID:	Batch ID:	Prep Date:	RPDRefVal %RPD(Limit)
Analyte		Result	PQL	SpkVal SpkRefVal %REC LCL(ME) UCL(ME)		Qual
Methyl tert-butyl ether (MTBE)		8.15	0.5	10 82 65 140		
Benzene		9.85	0.5	10 99 70 130		
Toluene		9.09	0.5	10 91 80 120		
Ethylbenzene		9.35	0.5	10 94 80 120		
m,p-Xylene		8.88	0.5	10 89 70 130		
o-Xylene		8.96	0.5	10 90 70 130		
Surr: 1,2-Dichloroethane-d4		11.2		10 112 70 130		
Surr: Toluene-d8		9.6		10 96 70 130		
Surr: 4-Bromofluorobenzene		10.9		10 109 70 130		
Sample Matrix Spike		Type: MS	Test Code: EPA Method SW8260B		Analysis Date: 07/30/2012 21:04	
Sample ID:	File ID:	Units : µg/L	Run ID:	Batch ID:	Prep Date:	RPDRefVal %RPD(Limit)
Analyte		Result	PQL	SpkVal SpkRefVal %REC LCL(ME) UCL(ME)		Qual
Methyl tert-butyl ether (MTBE)		60.6	1.3	50 9.94 101 47 150		
Benzene		51.4	1.3	50 0 103 59 138		
Toluene		47.9	1.3	50 0 96 68 130		
Ethylbenzene		48.7	1.3	50 0 97 68 130		
m,p-Xylene		46.8	1.3	50 0 94 68 131		
o-Xylene		47.8	1.3	50 0 96 70 130		
Surr: 1,2-Dichloroethane-d4		51.3		50 103 70 130		
Surr: Toluene-d8		47.4		50 95 70 130		
Surr: 4-Bromofluorobenzene		52.3		50 105 70 130		
Sample Matrix Spike Duplicate		Type: MSD	Test Code: EPA Method SW8260B		Analysis Date: 07/30/2012 21:25	
Sample ID:	File ID:	Units : µg/L	Run ID:	Batch ID:	Prep Date:	RPDRefVal %RPD(Limit)
Analyte		Result	PQL	SpkVal SpkRefVal %REC LCL(ME) UCL(ME)		Qual
Methyl tert-butyl ether (MTBE)		62.4	1.3	50 9.94 105 47 150 60.64 2.9(40)		
Benzene		54.2	1.3	50 0 108 59 138 51.42 5.2(21)		
Toluene		50.9	1.3	50 0 102 68 130 47.9 6.2(20)		
Ethylbenzene		51	1.3	50 0 102 68 130 48.67 4.7(20)		
m,p-Xylene		49	1.3	50 0 98 68 131 46.83 4.5(20)		
o-Xylene		50.2	1.3	50 0 100 70 130 47.77 4.9(20)		
Surr: 1,2-Dichloroethane-d4		50.7		50 101 70 130		
Surr: Toluene-d8		48.2		50 96 70 130		
Surr: 4-Bromofluorobenzene		53.3		50 107 70 130		



# *Alpha Analytical, Inc.*

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

---

Date:  
01-Aug-12

## QC Summary Report

Work Order:  
12072540

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

# CHAIN-OF-CUSTODY RECORD

**Alpha Analytical, Inc.**

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778  
TEL: (775) 355-1044 FAX: (775) 355-0406

## Client:

Stratus Environmental  
3330 Cameron Park Drive  
Suite 550  
Cameron Park, CA 95682-8861

## PO :

Client's COC # : 57621, 57637

Report Attention	Phone Number	Email Address
Scott Bittinger	(530) 676-2062 x	sbittinger@stratusinc.net

WorkOrder : STR12072540

Report Due By : 5:00 PM On : 01-Aug-12

EDD Required : Yes

Sampled by : Shane Edmunds

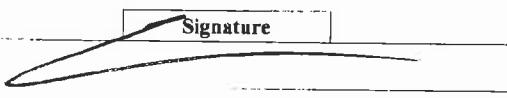
Cooler Temp	Samples Received	Date Printed
3 °C	25-Jul-12	25-Jul-12

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Collection Matrix	No. of Bottles	Requested Tests								Sample Remarks
				Date	Alpha	Sub	TAT	ALCOHOL_W	TPH/P_W	VOC_W		
STR12072540-01A	MW-1	AQ	07/23/12 14:59	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY-C			
STR12072540-02A	MW-2	AQ	07/23/12 15:11	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY-C			
STR12072540-03A	MW-3	AQ	07/23/12 23:44	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY-C			
STR12072540-04A	MW-4	AQ	07/23/12 08:56	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY-C			
STR12072540-05A	MW-5	AQ	07/23/12 14:12	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY-C			
STR12072540-06A	MW-5B	AQ	07/23/12 14:22	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY-C			
STR12072540-07A	MW-6	AQ	07/23/12 11:24	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY-C			
STR12072540-08A	MW-6B	AQ	07/23/12 14:33	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY-C			

## Comments:

Security seals intact. Frozen ice. Low level Alcohols, per COC. Sample -14A ID labeled MW-13A, confirmed as sample ID, per phone call with Scott 7/25/12. Sample -03A sampling time logged in per VOA containers. :

Logged in by:		<input type="text" value="Sarah Nem"/>	<input type="text" value="Company"/>
		<input type="text" value="Print Name"/>	<input type="text" value="Date/Time"/>
		<input type="text" value="Alpha Analytical, Inc."/>	<input type="text" value="7/25/12 11:00"/>

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.  
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.  
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other)      Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

# CHAIN-OF-CUSTODY RECORD

**Alpha Analytical, Inc.**

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778

TEL: (775) 355-1044 FAX: (775) 355-0406

Client:

Stratus Environmental  
3330 Cameron Park Drive  
Suite 550  
Cameron Park, CA 95682-8861

PO :

Client's COC # : 57621, 57637

Report Attention	Phone Number	Email Address
Scott Bittinger	(530) 676-2062 x	sbbittinger@stratusinc.net

# CA

**WorkOrder : STR12072540**

**Report Due By : 5:00 PM On : 01-Aug-12**

EDD Required : Yes

Sampled by : Shane Edmunds

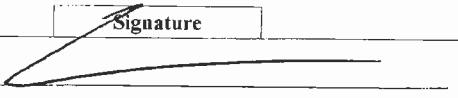
Cooler Temp	Samples Received	Date Printed
3 °C	25-Jul-12	25-Jul-12

QC Level : S3 = Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Collection Matrix	No. of Bottles	Alpha	Sub	TAT	Requested Tests						Sample Remarks
							ALCOHOL_W	TPH/P_W	VOC_W				
STR12072540-09A	MW-7	AQ	07/23/12 14:01	6	0	5	Low Level MeOH/EtOH	GAS-C	BTEX/OXY-C				
STR12072540-10A	MW-10	AQ	07/23/12 14:47	6	0	5	Low Level MeOH/EtOH	GAS-C	BTEX/OXY-C				
STR12072540-11A	MW-11	AQ	07/23/12 13:25	6	0	5	Low Level MeOH/EtOH	GAS-C	BTEX/OXY-C				
STR12072540-12A	MW-12A	AQ	07/23/12 08:17	6	0	5	Low Level MeOH/EtOH	GAS-C	BTEX/OXY-C				
STR12072540-13A	MW-12B	AQ	07/23/12 11:42	6	0	5	Low Level MeOH/EtOH	GAS-C	BTEX/OXY-C				
STR12072540-14A	MW-13A	AQ	07/23/12 10:37	6	0	5	Low Level MeOH/EtOH	GAS-C	BTEX/OXY-C				

**Comments:**

Security seals intact. Frozen ice. Low level Alcohols, per COC. Sample -14A ID labeled MW-13A, confirmed as sample ID, per phone call with Scott 7/25/12. Sample -03A sampling time logged in per VOA containers. :

Logged in by:		Print Name <i>Sarah Neri</i>	Company Alpha Analytical, Inc.
			Date/Time 7/25/12 11:07

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

The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other)      Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

# Alpha Analytical, Inc.

Phone : (775) 355-1044 FAX : (775) 355-0406

Date Report is due to Client : 8/1/2012

## Sample Receipt Checklist

Date of Notice : 7/25/2012 11:00:25 AM

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

**Client Name:** Stratus Environmental

**Project ID :** 2087-6600-01/Foothill Mini Mart

**Project Manager:** Scott Bittinger

**Client's EMail:** sbuttinger@stratusinc.net

**Work Order Number:** STR12072540

**Client's Phone:** (530) 676-2062

**Client's FAX:** (530) 676-6005

**Date Received:** 7/25/2012

**Received by:** Sarah Neri

### Chain of Custody (COC) Information

Carrier name: FedEx

Chain of custody present ? Yes   No

Custody seals intact on shipping container/coolier ? Yes   No Not Present

Custody seals intact on sample bottles ? Yes   No Not Present

Chain of custody signed when relinquished and received ? Yes   No

Chain of custody agrees with sample labels ? Yes   No

Sample ID noted by Client on COC ? Yes   No

Date and time of collection noted by Client on COC ? Yes   No

Samplers's name noted on COC ? Yes   No

Internal Chain of Custody (COC) requested ? Yes   No

Sub Contract Lab Used : None   See Comments

### Sample Receipt Information

Shipping container/coolier in good condition? Yes   No Not Present

Samples in proper container/bottle? Yes   No

Sample containers intact? Yes   No

Sufficient sample volume for indicated test? Yes   No

### Sample Preservation and Hold Time (HT) Information

All samples received within holding time? Yes   No

Cooler Temperature

3°C

Container/Temp Blank temperature in compliance (0-6°C)? Yes   No

Samples arrived in a timely manner? Yes   No

Client attempted to be contacted? Yes   No If YES : see Comments

Water - VOA vials have zero headspace / no bubbles? Yes   No N/A  No VOA vials submitted

Sample labels checked for correct preservation? Yes   No

TOC Water - pH acceptable upon receipt (H<sub>2</sub>SO<sub>4</sub> pH<2)? Yes   No N/A

Are NV non-SDWA 314 samples field filtered (0.2μ)? Yes   No N/A

### Analytical Requirement Information

Are non-Standard or Modified methods requested ? Yes   No

Are there client specific Project requirements ? Yes   No If YES : see the Chain of Custody (COC)

Is this a Drinking Water regulatory sample ? Yes   No

Comments : Sample -14A ID labeled MW-13A, confirmed as sample ID, per phone call with Scott 7/25/12. Sample -03A sampling time logged in per VOA containers.

## **Sarah Neri**

---

**From:** Sarah Neri  
**Sent:** Wednesday, July 25, 2012 12:23 PM  
**To:** Allan Dudding (adudding@stratusinc.net); Debbie Barr (dbarr@stratusinc.net); Renee Scherr (rscherr@stratusinc.net); Sarah Salcedo (ssalcedo@stratusinc.net)  
**Subject:** STR12072540, 41 Sample Receipts  
**Attachments:** STR12072541SR.pdf; STR12072540SR.pdf

Please see attached file(s).

*Sarah Neri*

Sample Custodian

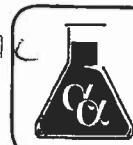
Alpha Analytical, Inc.

800-283-1183 Ext. 118

The information contained in this communication is confidential and intended only for the use of the individual or entity named above. Any other use, dissemination, distribution, or copying of this communication is prohibited. If you have received this communication in error, please notify us and return the original message.

**Billing Information:**

Company Name STRATUS ENVIRONMENTAL  
 Attn: \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_



**Alpha Analytical, Inc.**  
 255 Glendale Avenue, Suite 21  
 Sparks, Nevada 89431-5778  
 Phone (775) 355-1044  
 Fax (775) 355-0406

**Samples Collected From Which State?** 5/6/21  
 AZ  CA  NV  WA  DOD Site \_\_\_\_\_  
 ID  OR  OTHER   
 Page # 1 of 2

Phone Number \_\_\_\_\_ Fax \_\_\_\_\_

Consultant / Client Name <i>Foothill Minimart</i>		Job # <u>2087-6600 01</u>	Job Name													
Address <u>6600 Foothill Blvd</u>		Report Attention / Project Manager <i>Scott Bittinger</i>														
City, State, Zip <u>Oakland</u>		Name: _____														
Time Sampled	Date Sampled	Matrix* See Key Below	P.O. #	Lab ID Number (Office Use Only)		Sample Description	TAT	Field Filtered	# Containers**							
1439	7/27	AQ	STD	MW - 1	STD	6v	X	X	X	X	X					
1511				MW - 2												
1244				MW - 3												
0856				MW - 4												
1412				MW - 5												
1422				MW - 5B												
1124				MW - 6												
1433				MW - 6B												
1401				MW - 7												
1447				MW - 10												
1325				MW - 11												
0517				MW - 12A												
1142				MW - 12B												

Analyses Required										Data Validation Level: III or IV	
GR0	BTX	SOxS	Methanol	Ethanol						EDD / EDF? YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	
										Global ID # <u>7600102286</u>	
										REMARKS	
										<i>* Please use low detection levels for ethanol and methanol</i>	

**ADDITIONAL INSTRUCTIONS:**

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled By: Shane Edwards

Relinquished by: (Signature/Affiliation) <u>Shane Edwards</u>	Received by: (Signature/Affiliation) <u>S. Sadehki</u>	Date: <u>7-24-12</u>	Time: <u>1600</u>
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date: <u>7/25/12</u>	Time: <u>1024</u>
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date: _____	Time: _____

\*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air \*\*: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

## Billing Information:

Company Name STRATUS ENV.  
 Attn: \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, State, Zip \_\_\_\_\_  
 Phone Number \_\_\_\_\_ Fax \_\_\_\_\_



**Alpha Analytical, Inc.**  
 255 Glendale Avenue, Suite 21  
 Sparks, Nevada 89431-5778  
 Phone (775) 355-1044  
 Fax (775) 355-0406

Samples Collected From Which State? 57637  
**AZ** **CA** **NV** **WA** **DOD Site**  
**ID** **OR** **OTHER** \_\_\_\_\_  
 Page # 2 of 2

Consultant / Client Name <u>Foothill Mini Mart</u>				Job # <u>3 2087-6600-01</u>	Job Name			
Address				Report Attention / Project Manager <u>Scott Bittinger</u>				
City, State, Zip				Name: _____	Email: _____	_____		
Time Sampled	Date Sampled	Matrix* See Key Below	P.O. #	Lab ID Number (Use Only)	Sample Description	TAT	Field Filtered	# Containers**
1037	7/23	AQ	-14A		MW - 13B	STD		6V
<i>[Handwritten notes and signatures over the table]</i>								

Analyses Required									Data Validation Level: III or IV
GK	BTC	S Oxy	Hg (are)	Mercury	PCP	PCP	PCP	PCP	PCP
X	X	X	X	X	X	X	X	X	X
REMARKS									
* See Page									

## ADDITIONAL INSTRUCTIONS:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action. Sampled By: <u>Shane Elmendorf</u>			
Relinquished by: (Signature/Affiliation) <u>Shane Elmendorf</u>	Received by: (Signature/Affiliation) <u>John Anderson</u>	Date: <u>7-24-12</u>	Time: <u>1600</u>
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:
Relinquished by: (Signature/Affiliation)	Received by: (Signature/Affiliation)	Date:	Time:

\*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other AR - Air \*\*: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

**NOTE:** Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this coc. The liability of the laboratory is limited to the amount paid for the report.

**APPENDIX D**

**GEOTRACKER ELECTRONIC SUBMITTAL  
CONFIRMATIONS**

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STATE WATER RESOURCES CONTROL BOARD  
**GEOTRACKER ESI**

UPLOADING A GEO\_WELL FILE

**SUCCESS**

Processing is complete. No errors were found!  
Your file has been successfully submitted!

<u>Submittal Type:</u>	GEO_WELL
<u>Report Title:</u>	3Q12 QMR GeoWell 7-23-12
<u>Facility Global ID:</u>	T0600102286
<u>Facility Name:</u>	FOOTHILL MINI MART
<u>File Name:</u>	GEO_WELL.zip
<u>Organization Name:</u>	Stratus Environmental, Inc.
<u>Username:</u>	STRATUS NOCAL
<u>IP Address:</u>	12.186.106.98
<u>Submittal Date/Time:</u>	8/17/2012 2:53:06 PM
<u>Confirmation Number:</u>	<b>4616194963</b>

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STATE WATER RESOURCES CONTROL BOARD  
**GEOTRACKER ESI**

UPLOADING A EDF FILE

## SUCCESS

Processing is complete. No errors were found!  
Your file has been successfully submitted!

Submittal Type: EDF  
Report Title: 3Q12 QMR - ANALYTICAL 7-23-12  
Report Type: Monitoring Report - Quarterly  
Facility Global ID: T0600102286  
Facility Name: FOOTHILL MINI MART  
File Name: 12072540\_EDF.zip  
Organization Name: Stratus Environmental, Inc.  
Username: STRATUS NOCAL  
IP Address: 12.186.106.98  
Submittal Date/Time: 8/20/2012 7:02:49 AM  
Confirmation Number: 8322906434

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

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