

**RECEIVED**

8:47 am, Oct 05, 2010

Alameda County  
Environmental Health

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

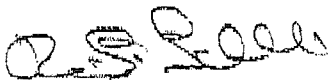
Re: Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California  
(ACEHS Case No. RO0000175)

Dear Mr. Khatri:

Stratus Environmental, Inc. (Stratus) has recently prepared a *Quarterly Monitoring Report – Third Quarter 2010* 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 30, 2010  
Project No. 2087-6600-01

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

Re: Groundwater Monitoring Report, Third Quarter 2010, for Foothill Mini Mart, located at 6600 Foothill Boulevard, Oakland, California (ACEHS Case No. RO0000175)

Dear Mr. Khatri:

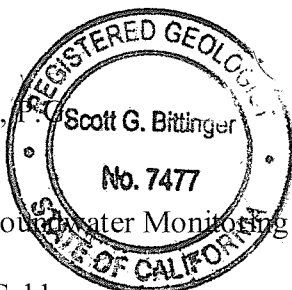
Stratus Environmental, Inc. (Stratus) is submitting the attached report, on behalf of Mr. Ravi Sekhon, to document the findings of a groundwater monitoring and sampling event conducted during the third quarter 2010 at the Foothill Mini Mart, located at 6600 Foothill Boulevard, Oakland, California (Figure 1). This report has been prepared in compliance with Alameda County Environmental Health Services (ACEHS) requirements for underground storage tank (UST) investigations.

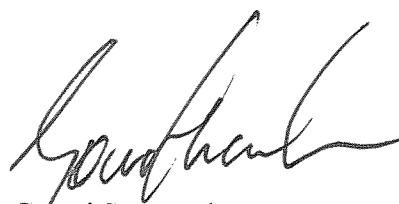
If you have any questions regarding this report, please contact Scott Bittinger at (530) 676-2062.

Sincerely,

**STRATUS ENVIRONMENTAL, INC.**

  
Scott G. Bittinger, P.E.  
Project Manager



  
Gowri S. Kowtha, P.E.  
Principal Engineer

Attachment: Groundwater Monitoring Report, Third Quarter 2010

cc: Mr. Ravi Sekhon

Date September 30, 2010

## FOOTHILL MINI MART GROUNDWATER MONITORING REPORT

Facility Address: 6600 Foothill Boulevard, 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 Services / Case No. RO0000175

### WORK PERFORMED THIS PERIOD (Third Quarter 2010):

1. Stratus conducted groundwater monitoring and sampling activities on September 7, 2010. During this event, wells MW-1 through MW-3, MW-5 through MW-7, MW-10, MW-11, MW-5B and MW-6B were gauged to determine depth to groundwater, and evaluated for the presence of free product. Monitoring wells MW-5B, MW-6B, MW-7, MW-10, and MW-11 were purged and groundwater samples were collected. Stratus was unable to coordinate access to offsite properties to the east and southeast of the site in order to gauge and/or sample wells MW-4, MW-12A/B, and MW-13A.
2. 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), ethanol, and methanol by EPA Method SW8260B.
3. Stratus submitted a Feasibility Study/Corrective Action Plan (FS/CAP) report for the site on August 3, 2010.

### WORK PROPOSED FOR NEXT PERIOD (Fourth Quarter 2010):

1. Conduct fourth quarter 2010 groundwater monitoring and sampling activities. During this event, all wells will be gauged, purged, and sampled. Groundwater samples will be 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), ethanol, and methanol by EPA Method SW8260B.

Current Phase of Project: Monitoring/Assessment  
Frequency of Groundwater Sampling: Wells MW-1 through MW-6 : Semi-Annually  
Wells MW-7, MW-10, MW-11, MW-12A, MW-13A, MW-5B, MW-6B, and MW-12B : Quarterly until initial 4 sampling events completed, then semi-annually  
Frequency of Groundwater Monitoring: All Wells : Quarterly  
Groundwater Sampling Date: September 7, 2010  
Is Free Product (FP) Present on Site: No

Approx. Depth to Groundwater (Upper):	7.84 to 11.75 feet below top of well casing
Approx. Depth to Groundwater (Lower):	13.28 to 37.24 feet below top of well casing
Groundwater Flow Direction (Upper):	South-southeast
Approximate Groundwater Gradient (Upper):	0.005 to 0.01 ft/ft
Groundwater Flow Direction (Lower):	Not calculated
Approximate Groundwater Gradient (Lower):	Not calculated

**DISCUSSION:**

Shallow Screened Well Network

Depth to groundwater in the monitoring wells ranged from 7.84 to 11.75 feet below the top of the well casing. Depth-to-water measurements were converted to feet above mean sea level (MSL) and used to construct a groundwater elevation contour map (Figure 2). South-southeast groundwater flow direction was observed in the site vicinity, using the September 7, 2010 groundwater level measurements, with groundwater gradients ranging from approximately 0.005 to 0.01 ft/ft. MTBE was reported in samples collected from MW-7 and MW-11 at concentrations of 17 micrograms per liter (µg/L) and 98 µg/L, respectively. GRO was only reported in well MW-11 at 59 µg/L. No other analytes were detected in sampled shallow screened wells. 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.

Deeper Screened Well Network

Depth to groundwater in the monitoring wells ranged from 13.28 to 37.24 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. MTBE was detected at very low concentrations in the sample collected from well MW-5B (1.4 µg/L). No other analytes were detected in any samples collected from the deeper screened monitoring wells.

**ATTACHMENTS:**

- Table 1 Groundwater Elevation and Analytical Summary
- Table 2 Groundwater Analytical Results for Oxygenates
- Table 3 Drilling and Well Construction Summary
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map, Shallow Screened Wells (Third Quarter 2010)
- Figure 3 Groundwater Elevation Map, Deep Screened Wells (Third Quarter 2010)
- Figure 4 Groundwater Analytical Summary, Shallow Screened Wells (Third Quarter 2010)
- Figure 5 Groundwater Analytical Summary, Deep Screened Wells (Third Quarter 2010)
- 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)	Ethylbenzene (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						

**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)
MW-2	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					

**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)
MW-3	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			

**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)
MW-4	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								



**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)
MW-5	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			

**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)
MW-6	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			

**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)
MW-7	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
MW-10	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
MW-11	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
MW-12A	06/01/10	8.07	62.98	54.91	270	<0.50	<0.50	<0.50	<0.50	260
	09/07/10				Inaccessible					
MW-13A	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					
<b>DEEPER WELLS</b>										
MW-5B	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
MW-6B	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
MW-12B	06/01/10	37.49	62.94	25.45	<50	<0.50	<0.50	<0.50	<0.50	0.84
	09/07/10				Inaccessible					

**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)
<p><b>Legend/Key:</b></p> <p>GRO = Gasoline range organics                      MTBE = Methyl tertiary butyl ether                      ND= "not-detected" or below the Method Detection Limits</p> <p>-- = Not available/not analyzed                      ft msl = feet above mean sea level                      µg/L = micrograms per liter</p> <p>[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.</p> <p>[2] = Laboratory reported does not match gasoline pattern.</p> <p>[3] = Reporting limits were increased due to high concentration of target analytes.</p> <p>* 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.</p>										

**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									
<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									

**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									
<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									

**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)
MW-5	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								
MW-6	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								

**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)
MW-7	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	--	--
MW-10	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	--	--
MW-11	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	--	--
MW-12A	06/01/10	260	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10					Inaccessible				
MW-13A	06/01/10	7.1	33	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10					Inaccessible				
<b>DEEPER WELLS</b>										
MW-5B	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	--	--
MW-6B	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	--	--
MW-12B	06/01/10	0.84	<10	<1.0	<1.0	<1.0	<50	<5.0	--	--
	09/07/10					Inaccessible				

**Legend/Key:**

MTBE = Methyl tertiary butyl ether  
 TBA = Tertiary butyl alcohol  
 DIPE = Di-isopropyl ether  
 ETBE = Ethyl tertiary butyl ether  
 TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichloroethane  
 EDB = 1,2-Dibromoethane  
 ND= "not-detected" or below the Method Detection Limits  
 --= Not available/not analyzed  
 mg/L = micrograms per liter

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

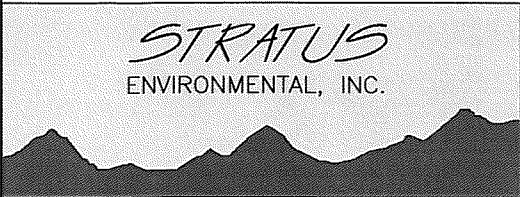
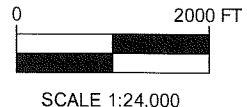


**TABLE 3**  
**WELL CONSTRUCTION DETAIL SUMMARY**  
 Foothill Mini Mart, 6600 Foothill Boulevard, Oakland, California

<b>Boring/Well I.D.</b>	<b>Date Installed</b>	<b>Boring Depth (feet)</b>	<b>Boring Diameter (inches)</b>	<b>Well Diameter (inches)</b>	<b>Well Depth (feet)</b>	<b>Screen Interval (feet bgs)</b>	<b>Slot Size (inches)</b>	<b>Drilling Method</b>
<i>Shallow Groundwater Monitoring Wells</i>								
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
<i>Deeper Groundwater Monitoring Wells</i>								
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
Notes: HSA = hollow stem auger								



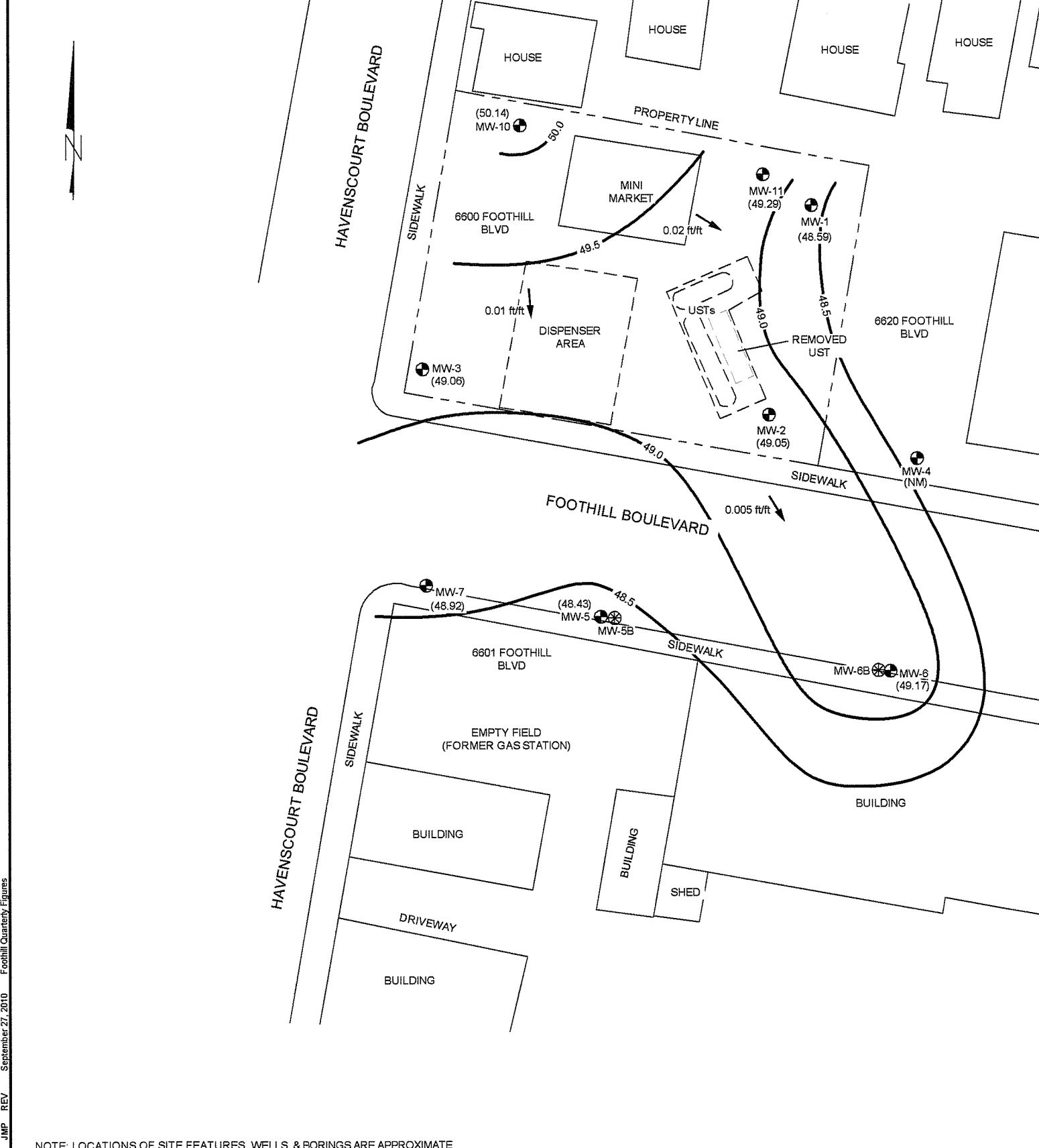
GENERAL NOTES:  
 BASE MAP FROM U.S.G.S.  
 OAKLAND EAST, CA.  
 7.5 MINUTE TOPOGRAPHIC  
 PHOTOREVISED 1980



FOOTHILL MINI MART  
 6600 FOOTHILL BOULEVARD  
 OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE  
 1  
 PROJECT NO.  
 2087-600-01



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

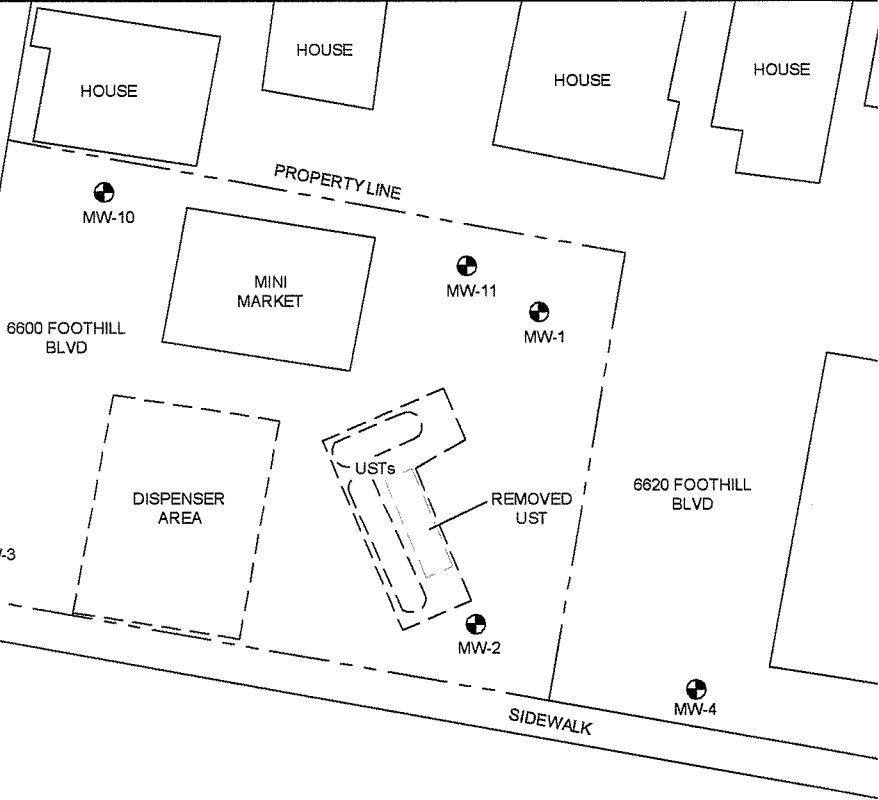
**STRATUS**  
ENVIRONMENTAL, INC.





HAVENSCOURT BOULEVARD

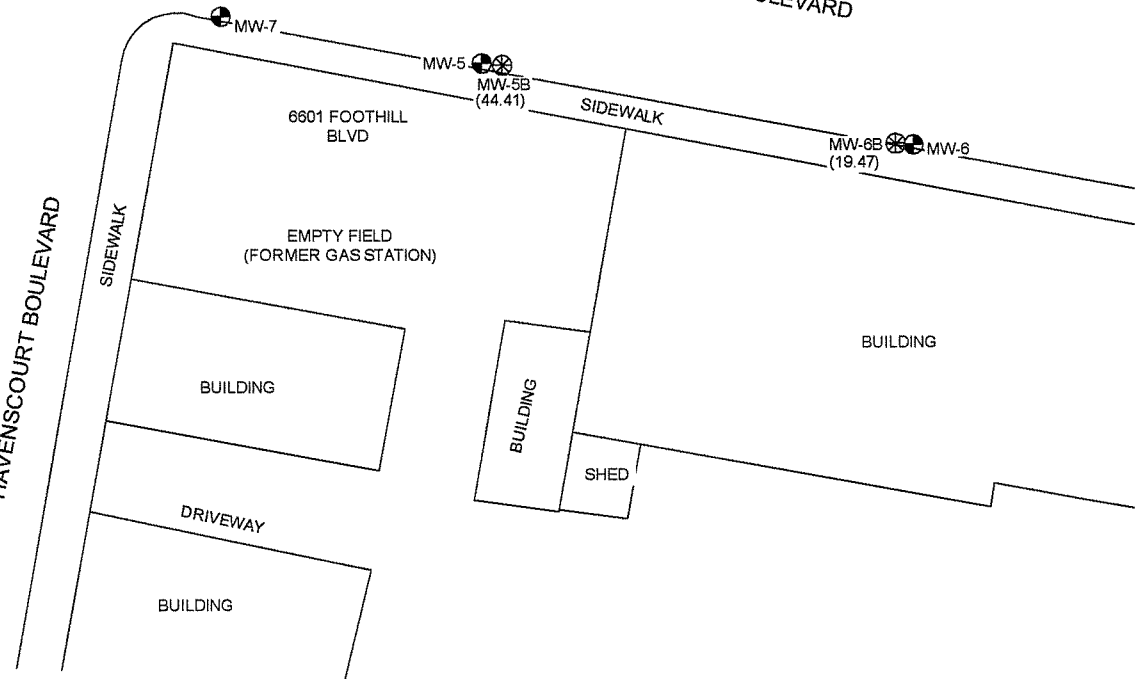
SIDEWALK



FOOTHILL BOULEVARD

HAVENSCOURT BOULEVARD

SIDEWALK



FootHill Mini Mart/Convenience  
JMP REV  
September 27, 2010  
FootHill Quarterly Figures

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

**STRATUS**  
ENVIRONMENTAL, INC.





HAVENSCOURT BOULEVARD

SIDEWALK

MW-10  
-50  
-0.50  
-0.50  
-10  
6600 FOOHILL BLVD

PROPERTY LINE

HOUSE

HOUSE

HOUSE

HOUSE

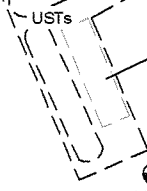
MINI MARKET

MW-11

MW-1 [NS]

59  
-0.50  
98  
-10

DISPENSER AREA



REMOVED UST

6620 FOOHILL BLVD

MW-3 [NS]

MW-2 [NS]

MW-4 [NS]

SIDEWALK

FOOTHILL BOULEVARD

-50  
-0.50  
17  
-10

MW-7

[NS] MW-5

MW-5B

SIDEWALK

6601 FOOHILL BLVD

MW-6B

MW-6 [NS]

EMPTY FIELD (FORMER GAS STATION)

BUILDING

BUILDING

BUILDING

SHED

DRIVEWAY

BUILDING

HAVENSCOURT BOULEVARD

SIDEWALK

IMP REV September 27, 2010 Foothill Quarterly Figures Foothill Mini Mart Quarterly

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

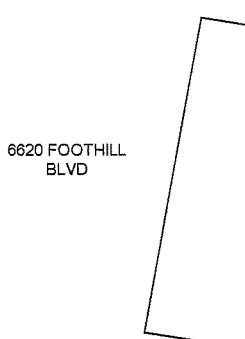
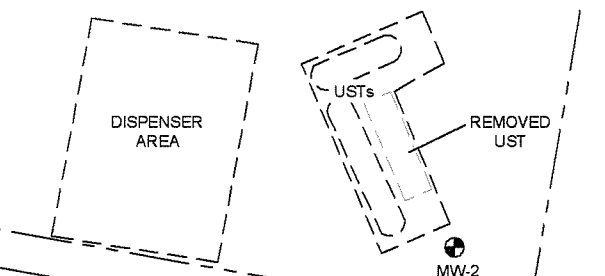
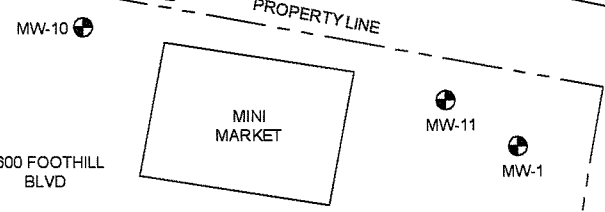
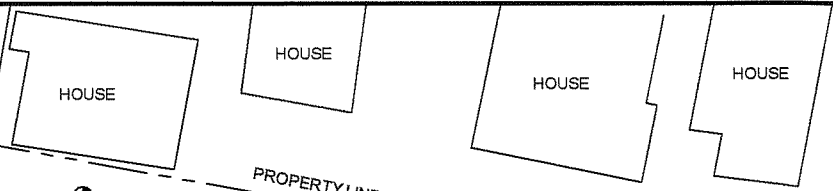
**STRATUS**  
ENVIRONMENTAL, INC.





HAVENSCOURT BOULEVARD

SIDEWALK



6600 FOOHILL BLVD

6620 FOOHILL BLVD

FOOTHILL BOULEVARD

SIDEWALK

MW-3

MW-10

MW-11

MW-1

MW-2

MW-4

MW-7

MW-5

MW-5B

MW-6B

MW-6

6601 FOOHILL BLVD

EMPTY FIELD (FORMER GAS STATION)

BUILDING

BUILDING

BUILDING

SHED

BUILDING

DRIVEWAY

HAVENSCOURT BOULEVARD

SIDEWALK

SIDEWALK

<50  
<0.50  
1.4  
<10

<50  
<0.50  
<0.50  
<10

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

**STRATUS**  
ENVIRONMENTAL, INC.



**APPENDIX A**  
**FIELD DATA SHEETS**



Site Address 6600 Foothill Blvd.  
 City Oakland CA  
 Sampled By: Levi Ford  
 Signature [Signature]

Site Number Foothill Mini Mart  
 Project Number 2087-6600-01  
 Project PM Scott Bittinger  
 DATE 9/7/2010



Water Level Data					Purge Volume Calculations					Purge Method				Sample Record			Field Data	
Well ID	Time	Depth to Product (feet)	Depth to Water (feet)	Total Depth (feet)	Water Column (feet)	Diameter (inches)	Multiplier	3 casing volumes (gallons)	Actual Water Purged (gallons)	No Purge	Bailer	Pump	Other	DTW at sample time (feet)	Sample I.D.	Sample Time	DO (mg/L)	
MW-1	0627		11.33	24.21	12.88	2	0.50	6.44							MW-1			
1	-2		9.69	24.35	14.66			7.33							02			
	-3		10.88	23.60	12.72			6.36							03			
	-4	Access Denied													04			
	-5		9.37	19.41	10.04			5.02							05			
-5B	0656		13.28	45.17	31.89			15.95	14.50		X	Dry @ 14.5		28.95	05B	1107	0.84	
-6	0703		7.84	18.79	10.95			5.48							06			
-6B	0701		37.24	49.91	12.67			6.35	6.50		X			43.79	06B	1140	0.79	
-7	0652		9.74	24.74	15.00			7.50	7.50		X			18.12	07	1030	0.75	
<del>8</del>															0			
<del>9</del>															0			
-10	0636		11.75	24.92	13.17			6.58	5.50		X	Dry @ 5.5		19.68	010	0949	1.83	
-11	0625		11.68	24.82	13.14	↓	↓	6.57	6.50		X			14.15	011	0757	0.82	
-12A		Access Denied													02A			
-12B															02B			
-13A		No Contact #													03A			
															0			
															0			
															0			
															0			
															0			
															0			
															0			
															0			
															0			
															0			
															0			
															0			
															0			
															0			

Multiplier  
 2" = 0.5, 3" = 1.0, 4" = 2.0, 6" = 4.4

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

CALIBRATION DATE LF 9/7/10  
 pH \_\_\_\_\_  
 Conductivity \_\_\_\_\_  
 DO \_\_\_\_\_



**ORIGINAL**

Well ID <u>MW-10</u> <u>Bail</u>					Well ID <u>MW-11</u> <u>Bail</u>				
purge start time <u>0725</u>					purge start time <u>0744</u>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time <u>0725</u>	<u>19.5</u>	<u>7.11</u>	<u>93.0</u>	<u>0</u>	time <u>0744</u>	<u>19.5</u>	<u>5.96</u>	<u>134.8</u>	<u>0</u>
time <u>0731</u>	<u>19.1</u>	<u>6.54</u>	<u>100.7</u>	<u>3.5</u>	time <u>0748</u>	<u>19.5</u>	<u>5.82</u>	<u>147.3</u>	<u>3.5</u>
time <u>0736</u>	<u>Dry at 5.5 gallons</u>				time <u>0754</u>	<u>19.3</u>	<u>5.80</u>	<u>159.5</u>	<u>6.50</u>
time <u>0945</u>	<u>18.7</u>	<u>7.01</u>	<u>124.0</u>	<u>5.5</u>	time				
purge stop time <u>0736</u> <u>ORP=113</u>					purge stop time <u>0754</u> <u>ORP=128</u>				
Well ID <u>MW-7</u> <u>Bail</u>					Well ID <u>MW-5B</u> <u>Bail</u>				
purge start time <u>0821</u>					purge start time <u>0840</u>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time <u>0821</u>	<u>19.9</u>	<u>6.10</u>	<u>148.2</u>	<u>0</u>	time <u>0840</u>	<u>19.8</u>	<u>6.73</u>	<u>121.0</u>	<u>0</u>
time <u>0826</u>	<u>19.9</u>	<u>6.34</u>	<u>139.0</u>	<u>4.0</u>	time <u>0851</u>	<u>19.3</u>	<u>6.63</u>	<u>119.9</u>	<u>8</u>
time <u>0829</u>	<u>19.4</u>	<u>6.36</u>	<u>145.1</u>	<u>7.5</u>	time <u>0902</u>	<u>Dry at 14.5 gallons</u>			
time					time <u>1103</u>	<u>19.8</u>	<u>6.27</u>	<u>134.6</u>	<u>14.5</u>
purge stop time <u>0829</u> <u>ORP=132</u>					purge stop time <u>0902</u> <u>ORP=118</u>				
Well ID <u>MW-6B</u> <u>Bail</u>					Well ID				
purge start time <u>0925</u>					purge start time				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time <u>0925</u>	<u>19.4</u>	<u>6.79</u>	<u>118.1</u>	<u>0</u>	time				
time <u>0931</u>	<u>19.3</u>	<u>6.86</u>	<u>120.2</u>	<u>3.5</u>	time				
time <u>0937</u>	<u>19.4</u>	<u>6.91</u>	<u>124.3</u>	<u>6.5</u>	time				
time					time				
purge stop time <u>0937</u> <u>ORP=122</u>					purge stop time				
Well ID					Well ID				
purge start time					purge start time				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time					time				
time					time				
time					time				
time					time				
purge stop time					purge stop time				

## **APPENDIX B**

### **SAMPLING AND ANALYSES PROCEDURES**

## **SAMPLING AND ANALYSIS PROCEDURES**

---

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 typically 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, nonconformants, 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<sup>®</sup> 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<sup>®</sup> sheeting and plastic caps. The sample is then placed in a Ziploc<sup>®</sup> 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 : 09/08/10

Job: 2087-6600-01/Foothill Mini Mart

GC/MSD by Direct Injection  
EPA Method SW8260B-DI

Parameter	Concentration	Reporting Limit	Date Extracted	Date Analyzed
Client ID: <b>MW-5B</b>				
Lab ID : STR10090843-01A Methanol	ND	50 µg/L	09/09/10 11:25	09/09/10
Date Sampled 09/07/10 11:07 Ethanol	ND	5.0 µg/L	09/09/10 11:25	09/09/10
Client ID: <b>MW-6B</b>				
Lab ID : STR10090843-02A Methanol	ND	50 µg/L	09/09/10 11:25	09/09/10
Date Sampled 09/07/10 11:40 Ethanol	ND	5.0 µg/L	09/09/10 11:25	09/09/10
Client ID: <b>MW-7</b>				
Lab ID : STR10090843-03A Methanol	ND	50 µg/L	09/09/10 11:25	09/09/10
Date Sampled 09/07/10 10:30 Ethanol	ND	5.0 µg/L	09/09/10 11:25	09/09/10
Client ID: <b>MW-10</b>				
Lab ID : STR10090843-04A Methanol	ND	50 µg/L	09/09/10 11:25	09/09/10
Date Sampled 09/07/10 09:49 Ethanol	ND	5.0 µg/L	09/09/10 11:25	09/09/10
Client ID: <b>MW-11</b>				
Lab ID : STR10090843-05A Methanol	ND	50 µg/L	09/09/10 11:25	09/09/10
Date Sampled 09/07/10 07:57 Ethanol	ND	5.0 µg/L	09/09/10 11:25	09/09/10

ND = Not Detected

*Roger Scholl*

*Randy Gardner*

*Walter Hinchman*

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) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

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

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.

*RS*

9/15/10

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

## 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 : 09/08/10

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 :	<b>MW-5B</b>				
Lab ID :	STR10090843-01A	TPH-P (GRO)	ND	50 µg/L	09/09/10
Date Sampled	09/07/10 11:07	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	09/09/10
		Methyl tert-butyl ether (MTBE)	1.4	0.50 µg/L	09/09/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/09/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/09/10
		Benzene	ND	0.50 µg/L	09/09/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/09/10
		Toluene	ND	0.50 µg/L	09/09/10
		Ethylbenzene	ND	0.50 µg/L	09/09/10
		m,p-Xylene	ND	0.50 µg/L	09/09/10
		o-Xylene	ND	0.50 µg/L	09/09/10
Client ID :	<b>MW-6B</b>				
Lab ID :	STR10090843-02A	TPH-P (GRO)	ND	50 µg/L	09/10/10
Date Sampled	09/07/10 11:40	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	09/10/10
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	09/10/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/10/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/10/10
		Benzene	ND	0.50 µg/L	09/10/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/10/10
		Toluene	ND	0.50 µg/L	09/10/10
		Ethylbenzene	ND	0.50 µg/L	09/10/10
		m,p-Xylene	ND	0.50 µg/L	09/10/10
		o-Xylene	ND	0.50 µg/L	09/10/10
Client ID :	<b>MW-7</b>				
Lab ID :	STR10090843-03A	TPH-P (GRO)	ND	50 µg/L	09/10/10
Date Sampled	09/07/10 10:30	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	09/10/10
		Methyl tert-butyl ether (MTBE)	17	0.50 µg/L	09/10/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/10/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/10/10
		Benzene	ND	0.50 µg/L	09/10/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/10/10
		Toluene	ND	0.50 µg/L	09/10/10
		Ethylbenzene	ND	0.50 µg/L	09/10/10
		m,p-Xylene	ND	0.50 µg/L	09/10/10
		o-Xylene	ND	0.50 µg/L	09/10/10



# Alpha Analytical, Inc.

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

Client ID :	<b>MW-10</b>					
Lab ID :	STR10090843-04A	TPH-P (GRO)	ND	50 µg/L	09/10/10	09/10/10
Date Sampled	09/07/10 09:49	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	09/10/10	09/10/10
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	09/10/10	09/10/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/10/10	09/10/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/10/10	09/10/10
		Benzene	ND	0.50 µg/L	09/10/10	09/10/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/10/10	09/10/10
		Toluene	ND	0.50 µg/L	09/10/10	09/10/10
		Ethylbenzene	ND	0.50 µg/L	09/10/10	09/10/10
		m,p-Xylene	ND	0.50 µg/L	09/10/10	09/10/10
		o-Xylene	ND	0.50 µg/L	09/10/10	09/10/10

Client ID :	<b>MW-11</b>					
Lab ID :	STR10090843-05A	TPH-P (GRO)	59	50 µg/L	09/10/10	09/10/10
Date Sampled	09/07/10 07:57	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	09/10/10	09/10/10
		Methyl tert-butyl ether (MTBE)	98	0.50 µg/L	09/10/10	09/10/10
		Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	09/10/10	09/10/10
		Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	09/10/10	09/10/10
		Benzene	ND	0.50 µg/L	09/10/10	09/10/10
		Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	09/10/10	09/10/10
		Toluene	ND	0.50 µg/L	09/10/10	09/10/10
		Ethylbenzene	ND	0.50 µg/L	09/10/10	09/10/10
		m,p-Xylene	ND	0.50 µg/L	09/10/10	09/10/10
		o-Xylene	ND	0.50 µg/L	09/10/10	09/10/10

Gasoline Range Organics (GRO) C4-C13

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) 736-7522 / Carson, CA • (714) 386-2901 / info@alpha-analytical.com

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

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.

9/15/10

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:  
13-Sep-10

## QC Summary Report

Work Order:  
10090843

### Method Blank

Type: MBLK Test Code: EPA Method SW8260B-DI

File ID: C:\HPCHEM\MS11\DATA\100909\10090909.D

Batch ID: 25014

Analysis Date: 09/09/2010 17:06

Sample ID: MBLK-25014

Units: µg/L

Run ID: MSD\_11\_100909A

Prep Date: 09/09/2010 11:25

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methanol	ND	50								
Ethanol	ND	5								
Surr: Hexafluoro-2-propanol	512		500		102	70	130			

### Laboratory Control Spike

Type: LCS Test Code: EPA Method SW8260B-DI

File ID: C:\HPCHEM\MS11\DATA\100909\10090905.D

Batch ID: 25014

Analysis Date: 09/09/2010 15:49

Sample ID: LCS-25014

Units: µg/L

Run ID: MSD\_11\_100909A

Prep Date: 09/09/2010 11:25

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methanol	264	50	250		106	54	132			
Ethanol	254	5	250		102	70	142			
Surr: Hexafluoro-2-propanol	518		500		104	70	130			

### Sample Matrix Spike

Type: MS Test Code: EPA Method SW8260B-DI

File ID: C:\HPCHEM\MS11\DATA\100909\10090907.D

Batch ID: 25014

Analysis Date: 09/09/2010 16:28

Sample ID: 10090843-02AMS

Units: µg/L

Run ID: MSD\_11\_100909A

Prep Date: 09/09/2010 11:25

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methanol	203	50	250	0	81	48	142			
Ethanol	230	5	250	0	92	68	143			
Surr: Hexafluoro-2-propanol	466		500		93	70	130			

### Sample Matrix Spike Duplicate

Type: MSD Test Code: EPA Method SW8260B-DI

File ID: C:\HPCHEM\MS11\DATA\100909\10090908.D

Batch ID: 25014

Analysis Date: 09/09/2010 16:47

Sample ID: 10090843-02AMSD

Units: µg/L

Run ID: MSD\_11\_100909A

Prep Date: 09/09/2010 11:25

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methanol	211	50	250	0	84	48	142	203.3	3.5(20)	
Ethanol	247	5	250	0	99	68	143	230.1	6.9(20)	
Surr: Hexafluoro-2-propanol	447		500		89	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.



# Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

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

Date:

13-Sep-10

## QC Summary Report

Work Order:

10090843

### Method Blank

Type: MBLK Test Code: EPA Method SW8015

File ID: C:\HPCHEM\MS07\DATA\100909\10090905.D

Batch ID: MS07W0909B

Analysis Date: 09/09/2010 17:31

Sample ID: MBLK MS07W0909B

Units: µg/L

Run ID: MSD\_07\_100909A

Prep Date: 09/09/2010 17:31

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	10.4		10		104	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	9.47		10		95	70	130			

### Laboratory Control Spike

Type: LCS Test Code: EPA Method SW8015

File ID: C:\HPCHEM\MS07\DATA\100909\10090903.D

Batch ID: MS07W0909B

Analysis Date: 09/09/2010 16:43

Sample ID: GLCS MS07W0909B

Units: µg/L

Run ID: MSD\_07\_100909A

Prep Date: 09/09/2010 16:43

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	418	50	400		105	70	130			
Surr: 1,2-Dichloroethane-d4	10.1		10		101	70	130			
Surr: Toluene-d8	9.95		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.83		10		98	70	130			

### Sample Matrix Spike

Type: MS Test Code: EPA Method SW8015

File ID: C:\HPCHEM\MS07\DATA\100909\10090908.D

Batch ID: MS07W0909B

Analysis Date: 09/09/2010 18:41

Sample ID: 10090843-01AGS

Units: µg/L

Run ID: MSD\_07\_100909A

Prep Date: 09/09/2010 18:41

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	2210	250	2000		0	110	58	135		
Surr: 1,2-Dichloroethane-d4	49.9		50		99.8	70	130			
Surr: Toluene-d8	49.9		50		99.8	70	130			
Surr: 4-Bromofluorobenzene	49.1		50		98	70	130			

### Sample Matrix Spike Duplicate

Type: MSD Test Code: EPA Method SW8015

File ID: C:\HPCHEM\MS07\DATA\100909\10090909.D

Batch ID: MS07W0909B

Analysis Date: 09/09/2010 19:05

Sample ID: 10090843-01AGSD

Units: µg/L

Run ID: MSD\_07\_100909A

Prep Date: 09/09/2010 19:05

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1990	250	2000		0	99.6	58	135	2208	10.3(20)
Surr: 1,2-Dichloroethane-d4	50.3		50		101	70	130			
Surr: Toluene-d8	49.4		50		99	70	130			
Surr: 4-Bromofluorobenzene	49.1		50		98	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.



# Alpha Analytical, Inc.

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

Date:  
13-Sep-10

## QC Summary Report

Work Order:  
10090843

### Method Blank

Type: MBLK Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS07\DATA\100909\10090905.D

Batch ID: MS07W0909A

Analysis Date: 09/09/2010 17:31

Sample ID: MBLK MS07W0909A

Units: µg/L

Run ID: MSD\_07\_100909A

Prep Date: 09/09/2010 17:31

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	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	10.4		10		104	70	130			
Surr: Toluene-d8	10.1		10		101	70	130			
Surr: 4-Bromofluorobenzene	9.47		10		95	70	130			

### Laboratory Control Spike

Type: LCS Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS07\DATA\100909\10090904.D

Batch ID: MS07W0909A

Analysis Date: 09/09/2010 17:07

Sample ID: LCS MS07W0909A

Units: µg/L

Run ID: MSD\_07\_100909A

Prep Date: 09/09/2010 17:07

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	9.25	0.5	10		93	62	136			
Benzene	10.6	0.5	10		106	70	130			
Toluene	10.4	0.5	10		104	80	120			
Ethylbenzene	10.2	0.5	10		102	80	120			
m,p-Xylene	10.3	0.5	10		103	70	130			
o-Xylene	11.4	0.5	10		114	70	130			
Surr: 1,2-Dichloroethane-d4	9.89		10		99	70	130			
Surr: Toluene-d8	10		10		100	70	130			
Surr: 4-Bromofluorobenzene	9.54		10		95	70	130			

### Sample Matrix Spike

Type: MS Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS07\DATA\100909\10090906.D

Batch ID: MS07W0909A

Analysis Date: 09/09/2010 17:54

Sample ID: 10090843-01AMS

Units: µg/L

Run ID: MSD\_07\_100909A

Prep Date: 09/09/2010 17:54

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	47.1	1.3	50	1.38	92	56	141			
Benzene	65.7	1.3	50	0	131	67	130			M1
Toluene	48.9	1.3	50	0	98	66	130			
Ethylbenzene	48.9	1.3	50	0	98	68	130			
m,p-Xylene	48.6	1.3	50	0	97	64	130			
o-Xylene	53.8	1.3	50	0	108	70	130			
Surr: 1,2-Dichloroethane-d4	51.1		50		102	70	130			
Surr: Toluene-d8	49.4		50		99	70	130			
Surr: 4-Bromofluorobenzene	47.7		50		95	70	130			

### Sample Matrix Spike Duplicate

Type: MSD Test Code: EPA Method SW8260B

File ID: C:\HPCHEM\MS07\DATA\100909\10090907.D

Batch ID: MS07W0909A

Analysis Date: 09/09/2010 18:18

Sample ID: 10090843-01AMSD

Units: µg/L

Run ID: MSD\_07\_100909A

Prep Date: 09/09/2010 18:18

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LCL(ME)	UCL(ME)	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	46.4	1.3	50	1.38	90	56	141	47.14	1.7(20)	
Benzene	67	1.3	50	0	134	67	130	65.68	1.9(20)	M1
Toluene	49.5	1.3	50	0	99	66	130	48.92	1.2(20)	
Ethylbenzene	48.8	1.3	50	0	98	68	130	48.87	0.1(20)	
m,p-Xylene	48.8	1.3	50	0	98	64	130	48.61	0.3(20)	
o-Xylene	54	1.3	50	0	108	70	130	53.8	0.3(20)	
Surr: 1,2-Dichloroethane-d4	49.6		50		99	70	130			
Surr: Toluene-d8	49.5		50		99	70	130			
Surr: 4-Bromofluorobenzene	48		50		96	70	130			



# *Alpha Analytical, Inc.*

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

**Date:**  
13-Sep-10

## QC Summary Report

**Work Order:**  
10090843

**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.

M1 = Matrix spike recovery was high, the method control sample recovery was acceptable.

**Billing Information :**

# CHAIN-OF-CUSTODY RECORD

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

# CA

**WorkOrder : STR10090843**  
**Report Due By : 5:00 PM On : 15-Sep-10**

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

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

EDD Required : **Yes**

Sampled by : Levi

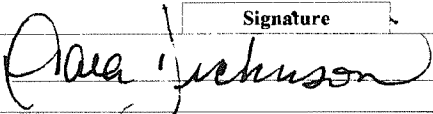
PO :  
 Client's COC # : 24870                      Job : 2087-6600-01/Foothill Mini Mart

<u>Cooler Temp</u>	<u>Samples Received</u>	<u>Date Printed</u>
4 °C	08-Sep-10	08-Sep-10

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

Alpha Sample ID	Client Sample ID	Collection Matrix	Collection Date	No. of Bottles			Requested Tests			Sample Remarks
				Alpha	Sub	TAT	ALCOHOL W	TPHP_W	VOC_W	
STR10090843-01A	MW-5B	AQ	09/07/10 11:07	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY C	
STR10090843-02A	MW-6B	AQ	09/07/10 11:40	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY C	
STR10090843-03A	MW-7	AQ	09/07/10 10:30	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY C	
STR10090843-04A	MW-10	AQ	09/07/10 09:49	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY C	
STR10090843-05A	MW-11	AQ	09/07/10 07:57	6	0	5	Low Level MeOH / EtOH	GAS-C	BTEX/OXY C	

**Comments:**                      Security seals intact. Frozen ice. :

Logged in by:	Signature	Print Name	Company	Date/Time
		Tara Dickerson	Alpha Analytical, Inc.	9/8/10 1351

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



**Billing Information:**

Name Stratus Environmental  
 Address 3330 Cameron Park Dr. #550  
 City, State, Zip Cameron Park, CA 95682  
 Phone Number 676 6004 Fax 676 6005



**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?

AZ  CA  NV  WA   
 ID  OR  OTHER

24870

Page # 1 of 1

Client Name		P.O. #		Job #		Analyses Required				Required QC Level?				
Feothill Mini Mart				2087-6600-01		GRO BTEX 5-OXY'S low detection level Ethene + Methane				I II III IV				
Address 6600 Feothill Blvd.		E-Mail Address								EDD / EDF? YES ___ NO ___				
City, State, Zip Oakland, CA		Phone #		Fax #						Global ID # T0600102280				
Time Sampled	Date Sampled	Matrix* See Key Below	Sampled by	Report Attention	Lab ID Number (Office Use Only)	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	REMARKS				
			Levi	Stratusinc.net										
1107	9/7	AQ			STR10090843-01	MW - 5B	STD	N/A	6 V	X	X	X	X	
1140					-02	-6B								
1030					-03	-7								
0949					-04	-10								
0757					-05	-11								
						-12A								LF 9/7/2010
						-12B								LF 9/7/2010

**ADDITIONAL INSTRUCTIONS:**

Signature	Print Name	Company	Date	Time
	Levi Ford	Stratus Environmental	9/7/2010	1515
	Lisa de Silva	ALPHA	9-7-10	1515
	Lisa de Silva	ALPHA	9-7-10	1600
	Tare Dickinson	Alpha	9/8/10	1350
Relinquished by				
Received by				

\*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**

---

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!

<b><u>Submittal Type:</u></b>	EDF - Monitoring Report - Quarterly
<b><u>Submittal Title:</u></b>	3Q10 9-7-10
<b><u>Facility Global ID:</u></b>	T0600102286
<b><u>Facility Name:</u></b>	FOOTHILL MINI MART
<b><u>File Name:</u></b>	10090843.zip
<b><u>Organization Name:</u></b>	Stratus Environmental, Inc.
<b><u>Username:</u></b>	STRATUS NOCAL
<b><u>IP Address:</u></b>	12.186.106.98
<b><u>Submittal Date/Time:</u></b>	9/28/2010 12:38:10 PM
<b><u>Confirmation Number:</u></b>	4435297667

[VIEW QC REPORT](#)

[VIEW DETECTIONS REPORT](#)

Copyright © 2008 State of California

---

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!

<b><u>Submittal Type:</u></b>	GEO_WELL
<b><u>Submittal Title:</u></b>	3q10 9-7-10
<b><u>Facility Global ID:</u></b>	T0600102286
<b><u>Facility Name:</u></b>	FOOTHILL MINI MART
<b><u>File Name:</u></b>	GEO_WELL.zip
<b><u>Organization Name:</u></b>	Stratus Environmental, Inc.
<b><u>Username:</u></b>	STRATUS NOCAL
<b><u>IP Address:</u></b>	12.186.106.98
<b><u>Submittal Date/Time:</u></b>	9/28/2010 12:57:04 PM
<b><u>Confirmation Number:</u></b>	2684701383

Copyright © 2008 State of California