STRATUS
ENVIRONMENTAL, INC.

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

R0232

October 15, 2004
Project No. 2007-0057-01

Mr. Amir Gholami
Alameda County Health Care Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Alameda County
OCT 19 2004
Environmental Health

Re: Recommendation for Interim Remedial Action
Former USA Service Station No. 57
10700 MacArthur Boulevard, Oakland, California

Dear Mr. Gholami:

On behalf of USA Gasoline Corporation (USA), Stratus Environmental, Inc. (Stratus) is submitting the two attached reports. A dual phase extraction (DPE) test was performed n July 2004, and results of the test indicated that DPE is a viable remedial alternative to mitigate the subsurface petroleum hydrocarbon impact. Quarterly monitoring and sampling performed subsequent to the DPE test continues to indicate the presence of residual hydrocarbons beneath the site. Stratus recommends that an additional DPE event be performed at the site.

Redevelopment activities at this site are scheduled to begin in the first quarter 2005. We propose to implement the recommended DPE during November and December 2004, to allow further assessment of the DPE effectiveness before January 1, 2005. If warranted, additional DPE could be performed in January and February 2005, before redevelopment activities are initiated. We would greatly appreciate your expedited review of the attached documents.

Sincerely,
STRATUS ENVIRONMENTAL, INC.

Stephen J. Carter, R.G.
Project Manager

Attachments: Dual Phase Extraction Test Report (dated October 15, 2004)
Quarterly Groundwater Monitoring Report, 3rd Quarter 2004 (dated October 15, 2004)

cc: Mr. Charles Miller, USA Gasoline Corporation
Mr. Ken Phares, Jay-Phares Corporation
Mr. Peter McIntyre, AEI Consultants

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ENVIRONMENTAL, INC.

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

October 15, 2004
Project No. 2007-0057-01

Mr. Amir Gholami
Alameda County Health Agency
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

Re: Quarterly Groundwater Monitoring Report, Third Quarter 2004, for USA Service Station No. 57, Located at 10700 MacArthur Boulevard, Oakland, California

Dear Mr. Gholami:

Stratus Environmental, Inc. (Stratus) is submitting the attached report which presents the results of the third quarter 2004 quarterly monitoring and sampling program on behalf of USA Gasoline Corporation (USA) for the former USA Service Station No. 57, located at 10700 MacArthur Boulevard, Oakland, California (Figure 1). This report is in compliance with Alameda County Department of Environmental Health requirements for underground storage tank (UST) investigations.

If you have any questions regarding this report, please contact Steve Carter at (530) 676-6008.

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Gowri S. Kowtha, P.E.
Senior Engineer

Stephen J. Carter, R.G.
Project Manager

REGISTERED GEOLOGIST
STEPHEN J. CARTER
No. 5577
STATE OF CALIFORNIA

Attachment: Quarterly Groundwater Monitoring Report, Third Quarter 2004

cc: Mr. Charles Miller, USA Gasoline Corporation
Mr. Ken Phares, Jay-Phares Corporation
Mr. Peter McIntyre, AEI Consultants

Date October 15, 2004

USA GASOLINE QUARTERLY GROUNDWATER MONITORING REPORT

Facility No: 57 Address: 10700 MacArthur Blvd., Oakland, California

USA Gasoline Project Supervisor: Charles Miller

Consulting Co./Contact Person: Stratus Environmental, Inc./ Stephen J. Carter, R.G.

Consultant Project No: 2007-0057-01

Primary Agency/Regulatory ID No: Amir Gholami, Alameda County Department of Environmental Health / 4490

WORK PERFORMED THIS QUARTER (Third 2004):

1. Stratus measured groundwater elevations and collected groundwater samples from wells S-1, S-2, MW-3 through MW-5, MW-7, and MW-8 on August 10, 2004. Well MW-6 was dry and could not be monitored or sampled.

2. Stratus compiled and evaluated groundwater monitoring data.

3. Stratus performed a dual-phase extraction (DPE) feasibility evaluation from July 6, 2004 to July 27, 2004.

WORK PROPOSED FOR NEXT QUARTER (Fourth 2004):

1. The next sampling event is tentatively scheduled for November 2004. Groundwater samples will be collected for laboratory analysis from wells S-1, S-2, and MW-3 through MW-8.

2. Groundwater samples will be analyzed for total petroleum hydrocarbons as gasoline (TPHG) using U.S. Environmental Protection Agency Method (EPA) Method SW8015B/DHS Luft Manual, and for benzene, toluene, ethylbenzene, total xylenes (BTEX), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), ethyl tertiary butyl ether (ETBE), di-isopropyl ether (DIPE), tertiary amyl methyl ether (TAME), 1,2-dichloroethane (1,2-DCA), 1,2-dibromoethane (EDB), methanol, and ethanol using EPA Method SW8260B.

3. Stratus will prepare and submit a DPE feasibility evaluation report.

4. Upon concurrence by ACEHD with the recommendations in the DPE Feasibility Report, Stratus will initiate the proposed interim remedial action.

Current Phase of Project: Monitoring

Frequency of Groundwater Sampling: All Wells = Quarterly

Frequency of Groundwater Monitoring: Quarterly

Groundwater Sampling Date: August 10, 2004

Is Free Product (FP) Present on Site: Yes (MW-2, sheen)

FP Recovered This Quarter: No

Cumulative FP Recovered to Date: NA

Approximate Depth to Groundwater: 12.62 to 20.98 feet below top of well casing

Groundwater Flow Direction:	Toward a groundwater low near well S-1, and away from a groundwater high centered around well MW-3
Groundwater Gradient:	0.033 to 0.059 ft/ft

DISCUSSION:

At the time of the third quarter 2004 monitoring event, groundwater elevations had decreased between 1.57 and 3.83 feet in wells S-2, MW-3, MW-4, MW-5, MW-7, and MW-8, and increased 0.43 feet in well S-1 since the previous monitoring event (April 8, 2004). Depth-to-water measurements were corrected to mean sea level (MSL) and used to construct a groundwater elevation contour map (Figure 2). The groundwater flow direction on August 10, 2004, was toward a groundwater low in the vicinity of well S-1, and away from a groundwater high centered around well MW-3. Gradients ranged from 0.033 to 0.059 ft/ft. Similar groundwater flow patterns have been observed during previous monitoring events.

TPHG, benzene, and MTBE were reported in wells S-1, S-2, and MW-3. TPHG was also reported in well MW-5 and MTBE was also reported in well MW-7. The highest concentrations of TPHG (10,000 µg/L) and benzene (76 µg/L) were reported in well S-2, and the highest concentration of MTBE (300 µg/L) was reported in well MW-3. TBA was reported in wells S-1 (28 µg/L) and MW-3 (2,000 µg/L), 1,2-DCA was reported in wells S-1 (16 µg/L), S-2 (74 µg/L), and MW-3 (270 µg/L), and DIPE was reported in well MW-3 (2.2 µg/L). ETBE, TAME, EDB, methanol, or ethanol were not reported in any of the wells. Concentrations reported during the third quarter 2004 are generally consistent with historical analytical data. The laboratory noted that the pH in samples for wells MW-3 and S-2 were above the EPA recommended limit of 2. As the reported results for these wells appear to be generally consistent with historical data, it appears that the elevated pH has not affected data quality. Analytical results of TPHG, benzene, and MTBE for groundwater samples collected on August 10, 2004, are presented in Figure 3.

ATTACHMENTS:

- Table 1 Groundwater Elevation and Analytical Summary
- Table 2 Groundwater Analytical Results for Oxygenates and Additional Compounds
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map (Third Quarter 2004)
- Figure 3 Groundwater Analytical Summary (Third Quarter 2004)
- Appendix A Field Data Sheets
- Appendix B Sampling and Analysis Procedures
- Appendix C Certified Analytical Reports and Chain-of-Custody Documentation

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

Former USA Station No. 57

10700 MacArthur Blvd., Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	TPHG (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
S-1	03/03/95	13.10	74.74	61.64	910	5,900	260	7.6	16	14	NA
	07/24/95	12.35		62.39	NA	NA	NA	NA	NA	NA	NA
	11/22/95	19.30	78.68	59.38	460	6100	13	0.69	0.99	1.1	460*
	12/06/95	19.59		59.09	NA	NA	NA	NA	NA	NA	NA
	01/04/96	19.52		59.16	NA	NA	NA	NA	NA	NA	NA
	01/31/97	15.07		63.61	1,100	200	11	6	3	6	200*
	10/10/97	18.90		59.78	530	2,000	<0.5	2.1	<0.5	<2	230*
	01/20/98	16.79		61.89	1,800	200	<0.5	<0.5	1.5	10	87*
	04/28/98	8.37		70.31	130	7,300	1.9	3.2	<0.5	<0.5	310*
	07/31/98	11.61		67.07	310	2,000	0.54	4.6	3.8	0.82	280*
	06/10/99	14.35		64.33	660	150	0.99	<0.5	<0.5	2.4	80*[1]
	10/18/00	17.56		61.12	<50	330	<0.5	0.93	<0.5	<0.5	44
	03/12/02	16.29		62.39	500	<50	2.8	4.8	0.79	4.4	63
	11/19/02	19.53		59.15	190	NA	<0.50	<0.50	<0.50	<0.50	190
	01/09/03	18.14		60.54	510	NA	1.1	<0.50	0.52	<0.50	11
	04/14/03	18.04		60.64	300	NA	<1.0[2]	<1.0[2]	<1.0[2]	<1.0[2]	27
	07/21/03	20.31		58.37	300	NA	<0.50	<0.50	<0.50	<0.50	11
	10/09/03	19.46		59.22	390	NA	<0.50	<0.50	<0.50	<0.50	8.8
	01/15/04	18.21	79.66	61.45	200	NA	<0.50	<0.50	<0.50	<0.50	6.0
	04/08/04	19.29		60.37	140	NA	<0.50	<0.50	<0.50	<0.50	12
	08/10/04	18.86		60.80	110	NA	4.6	<0.50	<0.50	0.51	73

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S-2	03/03/95	15.39	76.86	61.47	24,000	6,000	1,900	440	600	2,500	NA
	07/24/95	14.47		62.39	NA	NA	NA	NA	NA	NA	NA
	11/22/95	21.52	80.93	59.41	NA	NA	NA	NA	NA	NA	NA
	12/06/95	21.78		59.15	NA	NA	NA	NA	NA	NA	NA
	01/04/96	21.75		59.18	NA	NA	NA	NA	NA	NA	NA
	01/31/97	17.25		63.68	NA	NA	NA	NA	NA	NA	NA
	10/10/97	21.21		59.72	13,000	<50	260	38	190	280	600*
	01/20/98	19.07		61.86	1,900	2300	4.6	6.3	<0.5	4.6	190*
	04/28/98	10.47		70.46	22,000	<100	980	160	320	680	570*
	07/31/98	13.71		67.22	160,000	<50	950	290	550	1,700	550*
	11/02/98	17.31		63.62	14,000	<500	170	70	170	230	490*
	06/10/99	16.48		64.45	17,000	<50	650	230	<25	750	490*[1]
	10/18/00	19.70		61.23	4,400	<50	2	64	5.1	12	270
	03/12/02	18.56		62.37	5,100	660	62	44	52	78	430
	11/19/02	21.70		59.23	26,000	NA	1,400	180	520	340	750
	01/09/03	20.37		60.56	16,000	NA	120	32	76	214	270
	04/14/03	19.93		61.00	16,000	NA	160	76	210	290	400
	07/21/03	22.00		58.93	9,700	NA	270	90	200	277	410
	10/09/03	21.58		59.35	10,000	NA	39	9.2	52	26.5	180
	01/15/04	20.44	81.90	61.46	6,300	NA	21	<2.0 [3]	20	3.1	130
	04/08/04	17.15		64.75	13,000	NA	160	76	170	231	430
	08/10/04	20.98		60.92	10,000	NA	76	13	<5.0[3]	500	92

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MW-3	03/03/95	13.99	76.30	62.31	2,500	1,600	540	92	36	200	NA
	07/24/95	13.33		62.97	NA	NA	NA	NA	NA	NA	NA
	11/22/95	20.94	80.32	59.38	14,000	5,400	5,700	230	430	650	820*
	12/06/95	17.48		62.84	NA	NA	NA	NA	NA	NA	NA
	01/04/96	20.01		60.31	NA	NA	NA	NA	NA	NA	NA
	01/31/97	16.63		63.69	1,100	<50	130	8	5	5	NA
	10/10/97	20.62		59.70	3,400	1,100	830	4	100	<10	160*
	01/20/98	15.40		64.92	3,900	550	7.9	4.1	<0.5	3.7	<5.0*
	04/28/98	10.51		69.81	800	1,000	82	5.2	5.7	5.4	240*
	07/31/98	13.46		66.86	2,200	610	510	7.6	16	5.27	310*
	11/02/98	17.11		63.21	4,900	1,600	220	16	13	13.7	180*
	06/10/99	15.24		65.08	1,000	120	<0.5	<0.5	<0.5	1.1	120*[1]
	10/18/00	15.41		64.91	<50	<50	<0.5	<0.5	<0.5	<0.5	12
	04/08/04	13.70		66.62	<50	NA	<0.50	<0.50	<0.50	<0.50	19
	08/10/04	16.96		63.36	580	NA	19	<1.0[3]	<1.0[3]	3.3	300

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MW-4	11/22/95	14.99	76.42	61.43	<50	200	<0.5	1.5	<0.5	1.7	6.4*
	12/06/95	11.21		65.21	NA	NA	NA	NA	NA	NA	NA
	01/04/96	14.62		61.80	NA	NA	NA	NA	NA	NA	NA
	01/31/97	8.18		68.24	<50	<50	<0.5	2	<0.5	2	11*
	10/10/97	14.14		62.28	<50	<50	<0.5	<0.5	<0.5	<2	<5.0*
	01/20/98	7.05		69.37	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	04/28/98	5.88		70.54	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	07/31/98	8.40		68.02	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	11/02/98	16.08		60.34	NA	NA	NA	NA	NA	NA	NA
	06/10/99	14.81		61.61	NA	NA	NA	NA	NA	NA	NA
	10/18/00	12.71		63.71	<50	<50	<0.5	0.59	0.82	0.53	<5.0*
	03/12/02	8.92		67.50	<50	<50	<0.5	0.61	0.72	2.5	1.8
	11/19/02	13.24		-13.24	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/09/03	11.00		-11.00	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/14/03	11.03		-11.03	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	07/21/03	13.10		-13.10	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	10/09/03	13.33		-13.33	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/15/04	12.14		-12.14	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/08/04	10.76		65.66	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	08/10/04	12.62		63.80	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50

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MW-5	11/22/95	19.56	80.52	60.96	<50	280	<0.5	1.8	<0.5	3	2.2*
	12/06/95	15.84		64.68	NA	NA	NA	NA	NA	NA	NA
	01/04/96	19.36		61.16	NA	NA	NA	NA	NA	NA	NA
	01/31/97	13.31		67.21	80	<50	<0.5	0.6	<0.5	2	6*
	10/10/97	17.80		62.72	<50	<50	<0.5	<0.5	<0.5	<2	<5*
	01/20/98	12.58		67.94	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	04/28/98	9.45		71.07	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	07/31/98	7.38		73.14	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	11/02/98	15.98		64.54	<50	<500	<0.5	<0.5	<0.5	<0.5	<5.0*
	06/10/99	14.60		65.92	NA	NA	NA	NA	NA	NA	NA
	10/18/00	17.77		62.75	<50	<50	<0.5	0.75	<0.5	0.79	28
	03/12/02	15.72		64.80	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	11/19/02	NM		NM				Well Damaged			
	01/09/03	NM		NM				Well Damaged			
	04/14/03	NM		NM				Well Damaged			
	07/21/03	NM		NM				Well Damaged			
	10/09/03	NM		NM				Well Damaged			
	01/15/04	NM		NM				Well Damaged			
	04/08/04	16.80		63.72	<100	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	08/10/04	18.58		61.94	89	NA	<0.50	<0.50	<0.50	<0.50	<0.50

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MW-6	11/22/95	21.73	81.64	59.91	<50	140	<0.5	1.2	<0.5	1.5	5.3*
	12/06/95	18.03		63.61	NA	NA	NA	NA	NA	NA	NA
	01/04/96	21.67		59.97	NA	NA	NA	NA	NA	NA	NA
	01/31/97	16.01		65.63	70	<50	<0.5	2	<0.5	<1	5*
	10/10/97	20.55		61.09	80	<50	<0.5	<0.5	<0.5	<2	<5*
	01/20/98	15.74		65.90	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	04/28/98	10.78		70.86	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	07/31/98	13.97		67.67	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	11/02/98	17.97		63.67	NA	NA	NA	NA	NA	NA	NA
	06/10/99	16.92		64.72	NA	NA	NA	NA	NA	NA	NA
	04/08/04	NM		NM	Well Obstructed - Not Sampled						
	08/10/04	NM		NM	Dry - Not Sampled						

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MW-7	11/22/95	19.38	78.86	59.48	<50	180	<0.5	0.57	<0.5	0.62	0.73*
	12/06/95	19.72		59.14	NA	NA	NA	NA	NA	NA	NA
	01/04/96	19.76		59.10	NA	NA	NA	NA	NA	NA	NA
	01/31/97	15.25		63.61	70	<50	0.7	1	<0.5	<1	8*
	10/10/97	19.03		59.83	<50	<50	<0.5	<0.5	<0.5	<2	15*
	01/20/98	17.11		61.75	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	04/28/98	8.22		70.64	<50	<50	<0.5	<0.5	<0.5	<0.5	9.3*
	07/31/98	11.53		67.33	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	11/02/98	15.15		63.71	NA	NA	NA	NA	NA	NA	NA
	06/10/99	14.23		64.63	NA	NA	NA	NA	NA	NA	NA
	10/18/00	17.59		61.27	NA	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	03/12/02	16.54		62.32	<50	<50	<0.5	<0.5	<0.5	<0.5	2.9
	11/19/02	19.59		-19.59	<50	NA	<0.50	<0.50	<0.50	<0.50	3.8
	01/09/03	18.38		-18.38	<50	NA	<0.50	<0.50	<0.50	<0.50	2.7
	04/14/03	18.17		-18.17	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	07/21/03	20.29		-20.29	<50	NA	<0.50	<0.50	<0.50	<0.50	1.8
	10/09/03	19.48		-19.48	<50	NA	<0.50	<0.50	<0.50	<0.50	2.9
	01/15/04	18.45	79.81	61.36	<50	NA	<0.50	<0.50	<0.50	<0.50	2.6
	04/08/04	17.28		62.53	<50	NA	<0.50	<0.50	<0.50	<0.50	0.81
	08/10/04	18.85		60.96	<50	NA	<0.50	<0.50	<0.50	<0.50	2.1

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

Former USA Station No. 57

10700 MacArthur Blvd., Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	TPHG (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-8	11/22/95	33.33	79.55	46.22	<50	360	<0.5	1.3	<0.5	2.1	2.1*
	12/06/95	17.57		61.98	NA	NA	NA	NA	NA	NA	NA
	01/04/96	20.08		59.47	NA	NA	NA	NA	NA	NA	NA
	01/31/97	18.72		60.83	80	<50	0.6	1	<0.5	1	8*
	10/10/97	20.26		59.29	50	<50	<0.5	<0.5	<0.5	<2	<5*
	01/20/98	15.91		63.64	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	04/28/98	10.39		69.16	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	07/31/98	12.93		66.62	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	11/02/98	16.90		62.65	<50	<500	<0.5	<0.5	<0.5	<0.5	<5.0*
	06/10/99	14.98		64.57	NA	NA	NA	NA	NA	NA	NA
	10/18/00	16.27		63.28	<50	<50	<0.5	<0.5	1.1	6.3	8.6*
	03/12/02	14.56		64.99	<50	<50	<0.5	0.63	0.55	1.7	0.94
	11/19/02	21.14		-21.14	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/09/03	17.90		-17.90	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/14/03	17.84		-17.84	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	07/21/03	19.79		-19.79	<100[2]	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	10/09/03	21.02		-21.02	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/15/04	18.10	80.50	62.40	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/08/04	17.51		62.99	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	08/10/04	20.76		59.74	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

Former USA Station No. 57

10700 MacArthur Blvd., Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	TPHG (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)

Note:

* = MTBE analyzed using EPA Method 8020/8021B

MTBE = Methyl tert-butyl ether

TPHD = Total petroleum hydrocarbons as diesel

TPHG = Total petroleum hydrocarbons as gasoline

TPHG analyzed using EPA Method 8015B and the remaining analytes using EPA Method 8260B

msl = Mean sea level

µg/L = micrograms per liter

NA = Not analyzed

NM = Not measured

[1] Laboratory indicates the chromatogram does not match the diesel hydrocarbon range pattern.

[2] Reporting limits were increased due to sample foaming.

[3] Reporting limits were increased due to high concentrations of target analytes.

Monitoring wells surveyed by Morrow Surveying on February 10, 2004.

Data prior to November 19, 2002 provided by GHH Engineering.

TABLE 2

GROUNDWATER ANALYTICAL RESULTS FOR OXYGENATES AND ADDITIONAL COMPOUNDS

Former USA Station No. 57

10700 MacArthur Blvd., Oakland, California

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
S-1	11/19/02	190	<10	<1.0	<1.0	<1.0	NA	NA	NA	NA
	01/09/03	11	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	04/14/03	27	<20[2]	<2.0[2]	<2.0[2]	<2.0[2]	NA	NA	NA	NA
	07/21/03	11	<10[2]	<1.0	<1.0	<1.0	NA	NA	NA	NA
	10/09/03	8.8	6.4	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	01/15/04	6.0	10	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	04/08/04	12	8.5	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	08/10/04	73	28	<1.0	<1.0	<1.0	16	<2.0	<5,000	<5,000
S-2	11/19/02	750	<200[1]	<20[1]	<20[1]	<20[1]	NA	NA	NA	NA
	01/09/03	270	<100[1]	<10[1]	<10[1]	<10[1]	NA	NA	NA	NA
	04/14/03	400	95	<5.0[1]	<5.0[1]	<5.0[1]	NA	NA	NA	NA
	07/21/03	410	110	<5.0[1]	<5.0[1]	<5.0[1]	NA	NA	NA	NA
	10/09/03	180	57	<5.0[1]	<5.0[1]	<5.0[1]	<5.0[1]	<20[1]	NA	NA
	01/15/04	130	48	<4.0[1]	<4.0[1]	<4.0[1]	<4.0[1]	<16[1]	NA	NA
	04/08/04	430	130	<5.0[1]	<5.0[1]	<5.0[1]	<5.0[1]	<20[1]	<5,000	<5,000
	08/10/04	92	<100[1]	<10[1]	<10[1]	<10[1]	74	<40[1]	<5,000	<5,000
MW-3	04/08/04	19	7.6	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	08/10/04	300	2,000	2.2	<2.0[1]	<2.0[1]	270	<8.0[1]	<5,000	<5,000

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
FOR OXYGENATES AND ADDITIONAL COMPOUNDS

Former USA Station No. 57
10700 MacArthur Blvd., Oakland, California

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-4	11/19/02	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	01/09/03	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	04/14/03	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	07/21/03	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	10/09/03	<0.50	<5.0	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	01/15/04	<0.50	7.8	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	04/08/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	08/10/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
MW-5	11/19/02					Well Damaged				
	01/09/03					Well Damaged				
	04/14/03					Well Damaged				
	07/21/03					Well Damaged				
	10/09/03					Well Damaged				
	01/15/04					Well Damaged				
	04/08/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<4.0[2]	<5,000	<5,000
	08/10/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
FOR OXYGENATES AND ADDITIONAL COMPOUNDS

Former USA Station No. 57
10700 MacArthur Blvd., Oakland, California

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-6	04/08/04	Well Obstructed - Not Sampled								
	08/10/04	Dry - Not Sampled								
MW-7	11/19/02	3.8	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	01/09/03	2.7	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	04/14/03	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	07/21/03	1.8	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	10/09/03	2.9	<5.0	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	01/15/04	2.6	7.9	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	04/08/04	0.81	9.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	08/10/04	2.1	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
MW-8	11/19/02	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	01/09/03	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	04/14/03	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	07/21/03	<0.50	<10[2]	<1.0	<1.0	<1.0	NA	NA	NA	NA
	10/09/03	<0.50	<5.0	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	01/15/04	<0.50	9.9	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	04/08/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	08/10/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
FOR OXYGENATES AND ADDITIONAL COMPOUNDS

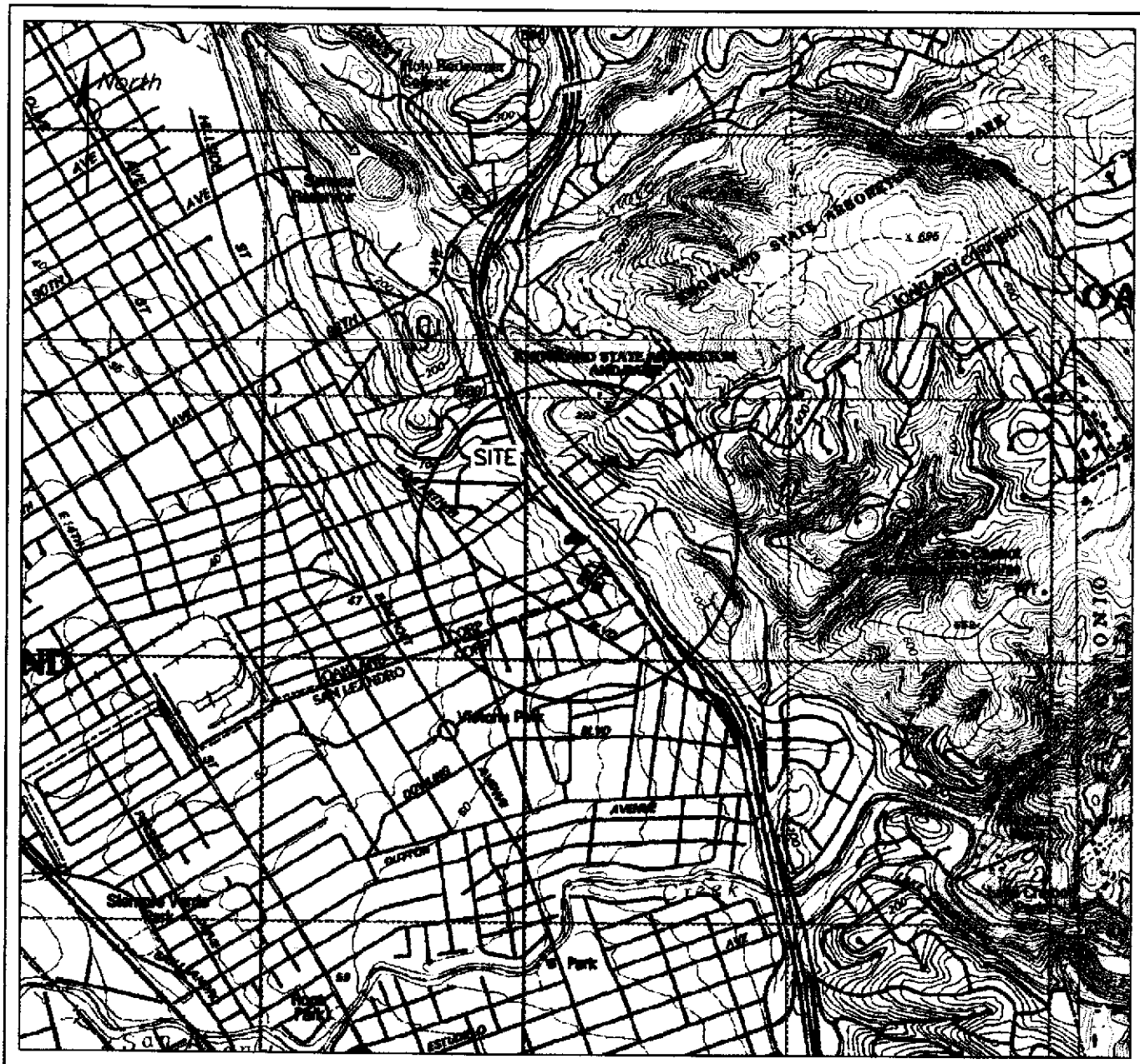
Former USA Station No. 57
10700 MacArthur Blvd., Oakland, California

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)

Note:
Oxygenates analyzed using EPA Method 8260B
µg/L = micrograms per liter
NA = Not analyzed

[1] Reporting limits were increased due to high concentrations of target analytes
[2] Reporting limits were increased due to sample foaming

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



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

QUADRANGLE LOCATION

0 2000 FT

SCALE 1:24,000

STRATUS ENVIRONMENTAL, INC.

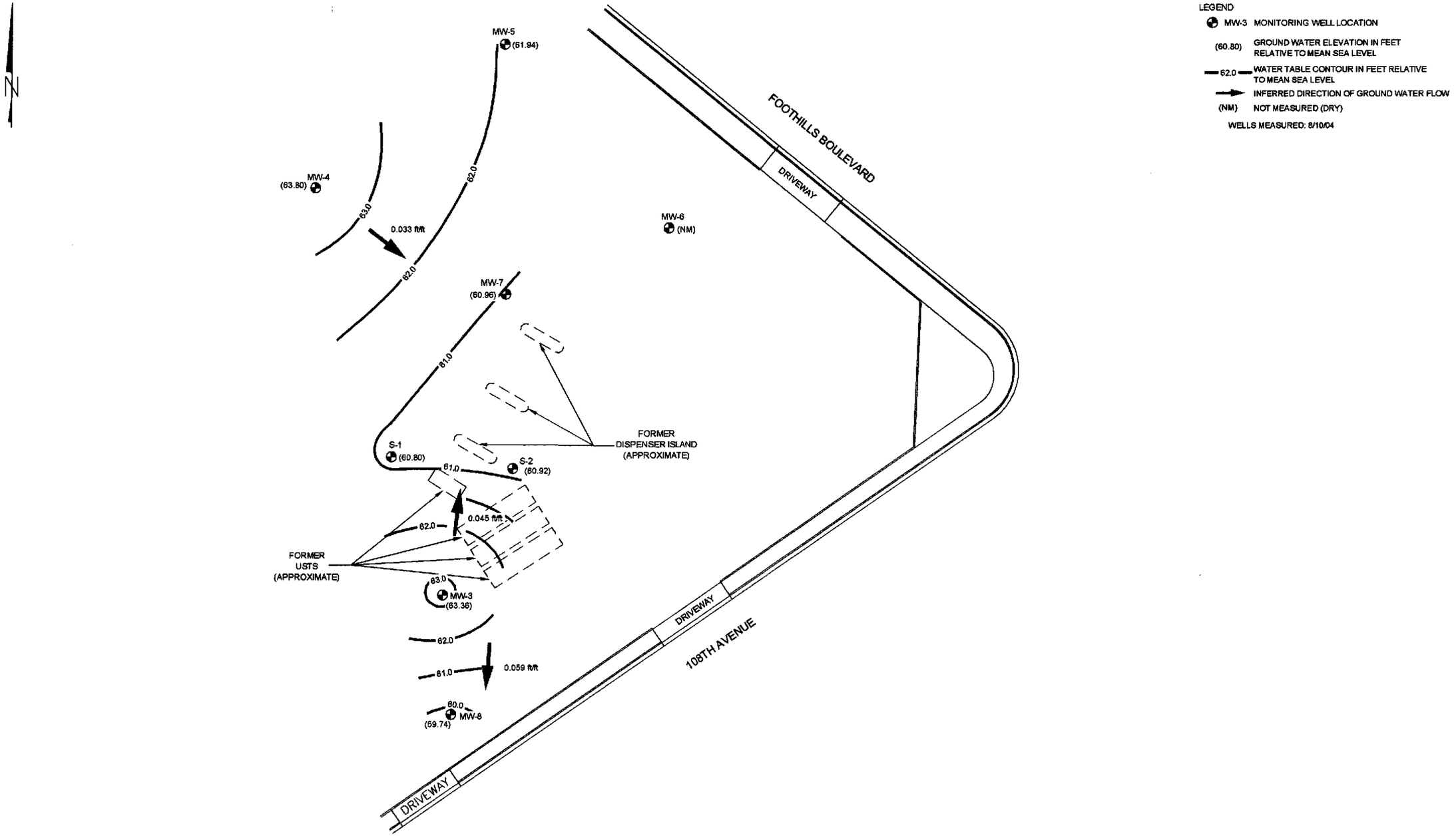
FORMER USA SERVICE STATION NO. 57
10500 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE
1

PROJECT NO.
2007-0057-01

USA\57\Quarterly JMP Aug 26, 2004 USA 57Site Location Map.dwg



STRATUS
ENVIRONMENTAL, INC.

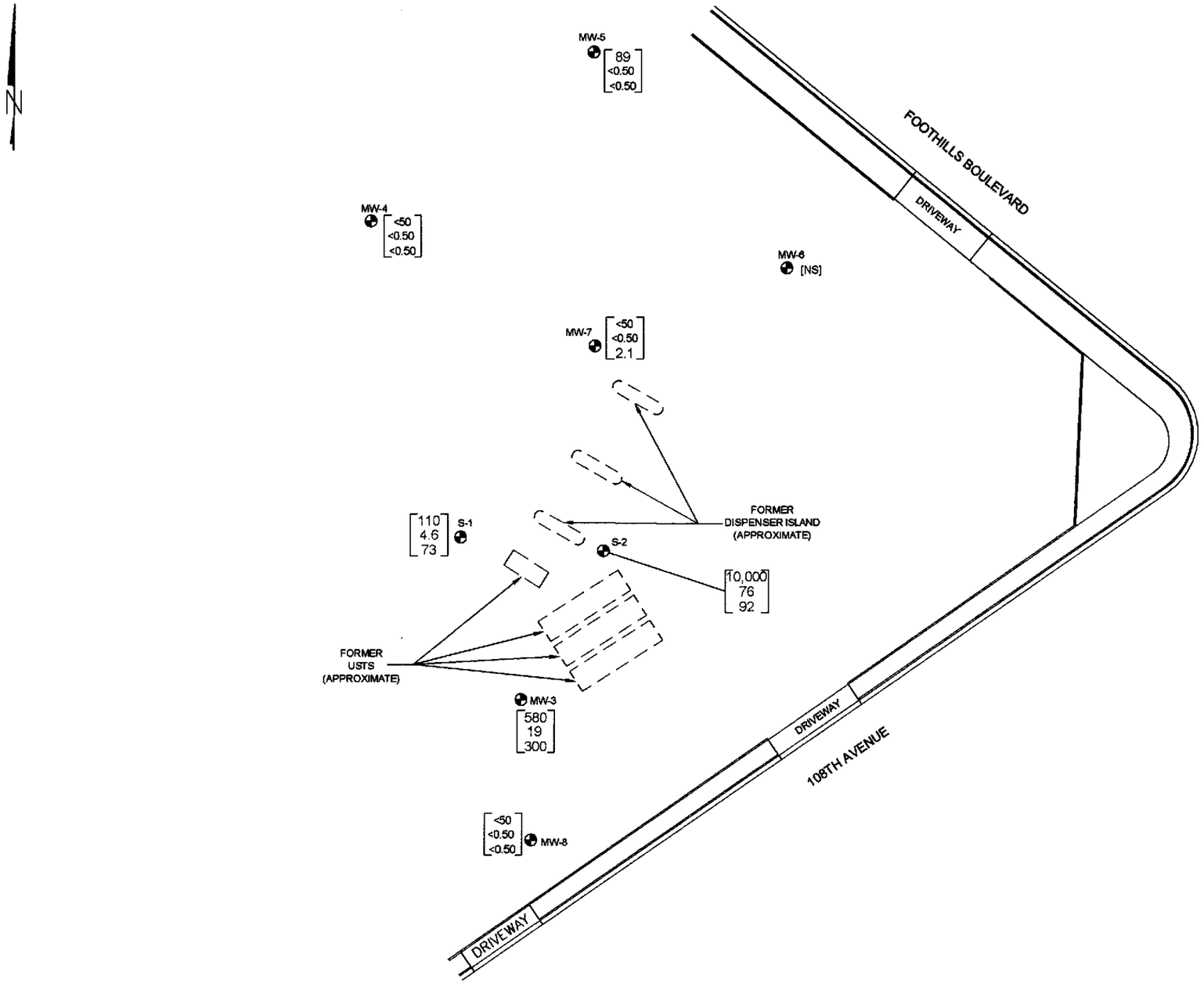
0 40 FT
HORZ. SCALE

FORMER USA SERVICE STATION NO. 57
10500 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
3rd QUARTER 2004

FIGURE
2
PROJECT NO.
2007-0057-01

JMP REV Sep 20, 2004 USA 57 Quarterly Figure.dwg USA/STQuarterly



LEGEND

MW-3 MONITORING WELL LOCATION

[NS] NOT SAMPLED (DRY)

[<50 / <0.50 / <0.50] TOTAL PETROLEUM HYDROCARBONS AS GASOLINE IN µg/L; BENZENE CONCENTRATION IN µg/L; METHYL TERTIARY BUTYL ETHER CONCENTRATION IN µg/L

SAMPLES COLLECTED ON 8/10/04

TPHG ANALYZED BY EPA METHOD 8015B

BENZENE & MTBE ANALYZED BY EPA METHOD 8260B

STRATUS ENVIRONMENTAL, INC.

0 40 FT

HORZ. SCALE

FORMER USA SERVICE STATION NO. 57
10500 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

GROUNDWATER ANALYTICAL SUMMARY
3rd QUARTER 2004

FIGURE
3

PROJECT NO.
2007-0057-01

USA57Quarterly JMP REV Aug 26, 2004 USA 57 Quarterly Report

APPENDIX A

FIELD DATA SHEETS

STRATUS ENVIRONMENTAL, INC.

Site Address: 10700 MacArthur Blvd.
City Oakland
Sampled By MWMorgan

ORIGINAL

Site Number: USA57
Project No. 2007-0057-01
Project PM Gowri Kowtha
Date Sampled 8/10/04

Site Contact Phone No.

Water Level Data					Purge Volume Calculations					Well Purge Method				Sample Record			Field Data
Well ID	Time	Depth to water feet	Top of Screen feet	Total Depth of Well feet	Casing Water Column (A)	Well Diameter (inches)	Multiplier Value (B)	Three Casing Volumes (gallons)	Actual Water Purged (gallons)	No Purge	Bailer	Pump	Other	DTW At Sample Time	Sample I.D.	Sample Time	Dissolved Oxygen (mg/L)
MW-3	0604	16.96		42.80	25.84	4	2.0	52				X					
MW-4	0555	12.62		42.45	29.83	4	2.0	60				X					
MW-5	0556	18.58		37.60	19.02	4	2.0	38				X					
MW-6	0601	Dry		17.50	—	4	2.0	—	—			—					
MW-7	0558	18.85		41.85	23.00	4	2.0	46				X					
MW-8	0603	20.76		37.70	16.94	4	2.0	34				X					
S-1	0606	18.86		40.80	21.94	3	1.0	~~44~~ 22				X					
S-2	0608	20.98		42.85	21.87	3	1.0	~~44~~ 22				X					
S-1	TD = 33.55'																

(A) Casing water Column
Depth wtr. Depth to Bottom

Multiplier Values
2"=0.5 4"=2.0 6"=4.4

ORIGINAL

STRATUS ENVIRONMENTAL, INC.

Site Address 10700 MacArthur Blvd Site Number USA 57
City Oakland Project No. 2007-0057-01
Site Sampled by MW Morgan Project PM Gauri Kowtha
Date Sampled 8/10/04

Well ID MW-4				
purge start time 0650				
DO: 6.71	Temp C	pH	cond	gallons
time 0650	20.0	7.46	904	0
time 0705	21.6	7.29	904	30
time 0720	21.8	7.26	904	60
Sample time 0724				
purge stop time 0720 pumped				

Well ID MW-5				
purge start time 0738				
DO: 2.99	Temp C	pH	cond	gallons
time 0738	20.6	10.40	1919	0
time 0752	25.2	10.20	1883	19
time 0810	20.9	9.52	1649	38
Sample time 0813				
pugre stop time 0810 pumped & hand bailed				

Well ID MW-7				
purge start time 0825				
DO: 3.40	Temp C	pH	cond	gallons
time 0825	19.6	7.55	1252	0
time 0838	21.0	7.34	1154	23
time 0905	21.6	7.27	1222	46
Sample time 0910				
purge stop time 0908 pumped				

Well ID MW-8				
purge start time 0925				
DO: 5.06	Temp C	pH	cond	gallons
time 0925	20.5	6.67	1031	0
time 0952	19.6	6.68	10.80	17
time 0956	19.5	6.69	10.76	34
Sample time 1000				
purge stop time 0956 pumped & hand bailed				

Well ID S-1				
purge start time 1015				
DO: 3.03	Temp C	pH	cond	gallons
time 1015	20.3	7.09	2.49	0
time 1025	20.2	7.02	2.40	9
time 1034	20.0	7.03	2.39	15
Sample time 1036				
purge stop time 1034				

Well ID MW-3				
purge start time 1044				
DO: 3.88	Temp C	pH	cond	gallons
time 1044	20.2	6.85	3.79	0
time 1114	20.4	6.84	3.57	26
time 1130	20.3	6.92	3.88	40
Sample time 1150				
purge stop time 1130 well pumped & hand baled dry after ~40gal				

Well ID S-2				
purge start time 1205				
DO:	Temp C	pH	cond	gallons
time 1205	24.3	7.29	1246	0
time 1215	20.4	7.14	1198	11
time 1233	20.4	7.09	1184	22
Sample time 1236	sheen & odor			
purge stop time 1233 pumped & hand bailed				

Well ID				
purge start time				
	Temp C	pH	cond	gallons
time				
time				
time				
time				
purge stop time				

APPENDIX B

SAMPLING AND ANALYSIS 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 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 accruing 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, nonconforments, 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

CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION

Alpha Analytical, Inc.

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COPY

ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone: (530) 676-6002
Fax: (530) 676-6005
Date Received 08/12/04

Job#: 2007-0057-01/USA 57

Methanol by GC/MSD - Direct Injection
EPA Method SW8260B-DI

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	MW-3					
Lab ID :	STR04081203-01A	Methanol	ND	5,000 µg/L	08/10/04	08/17/04
		Ethanol	ND	5,000 µg/L	08/10/04	08/17/04
Client ID :	MW-4					
Lab ID :	STR04081203-02A	Methanol	ND	5,000 µg/L	08/10/04	08/17/04
		Ethanol	ND	5,000 µg/L	08/10/04	08/17/04
Client ID :	MW-5					
Lab ID :	STR04081203-03A	Methanol	ND	5,000 µg/L	08/10/04	08/17/04
		Ethanol	ND	5,000 µg/L	08/10/04	08/17/04
Client ID :	MW-7					
Lab ID :	STR04081203-04A	Methanol	ND	5,000 µg/L	08/10/04	08/17/04
		Ethanol	ND	5,000 µg/L	08/10/04	08/17/04
Client ID :	MW-8					
Lab ID :	STR04081203-05A	Methanol	ND	5,000 µg/L	08/10/04	08/17/04
		Ethanol	ND	5,000 µg/L	08/10/04	08/17/04
Client ID :	S-1					
Lab ID :	STR04081203-06A	Methanol	ND	5,000 µg/L	08/10/04	08/17/04
		Ethanol	ND	5,000 µg/L	08/10/04	08/17/04
Client ID :	S-2					
Lab ID :	STR04081203-07A	Methanol	ND	5,000 µg/L	08/10/04	08/17/04
		Ethanol	ND	5,000 µg/L	08/10/04	08/17/04

Reported in micrograms per liter, per client request.

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) 281-4848 / info@alpha-analytical.com

8/19/04
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Stratus Environmental
3330 Cameron Park Drive
Cameron Park, CA 956828861

Attn: Gowri Kowtha
Phone (530) 676-6002
Fax: (530) 676-6005
Date Received 08/12/04

Job#: 2007-0057-01/USA 57

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

	Parameter	Concentration		Reporting Limit	Date Sampled	Date Analyzed
Client ID : **MW-3** Lab ID : STR04081203-01A	TPH Purgeable	580		200 µg/L	08/10/04	08/13/04
	Tertiary Butyl Alcohol (TBA)	2,000		20 µg/L	08/10/04	08/13/04
	Methyl tert-butyl ether (MTBE)	300		1.0 µg/L	08/10/04	08/13/04
	Di-isopropyl Ether (DIPE)	2.2		2.0 µg/L	08/10/04	08/13/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND	V	2.0 µg/L	08/10/04	08/13/04
	1,2-Dichloroethane	270		2.0 µg/L	08/10/04	08/13/04
	Benzene	19		1.0 µg/L	08/10/04	08/13/04
	Tertiary Amyl Methyl Ether (TAME)	ND	V	2.0 µg/L	08/10/04	08/13/04
	Toluene	ND	V	1.0 µg/L	08/10/04	08/13/04
	1,2-Dibromoethane (EDB)	ND	V	8.0 µg/L	08/10/04	08/13/04
	Ethylbenzene	ND	V	1.0 µg/L	08/10/04	08/13/04
	m,p-Xylene	ND	V	1.0 µg/L	08/10/04	08/13/04
	o-Xylene	3.3		1.0 µg/L	08/10/04	08/13/04
Client ID : **MW-4** Lab ID : STR04081203-02A	TPH Purgeable	ND		50 µg/L	08/10/04	08/13/04
	Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	08/10/04	08/13/04
	Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	08/10/04	08/13/04
	Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	08/10/04	08/13/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	08/10/04	08/13/04
	1,2-Dichloroethane	ND		1.0 µg/L	08/10/04	08/13/04
	Benzene	ND		0.50 µg/L	08/10/04	08/13/04
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	08/10/04	08/13/04
	Toluene	ND		0.50 µg/L	08/10/04	08/13/04
	1,2-Dibromoethane (EDB)	ND		2.0 µg/L	08/10/04	08/13/04
	Ethylbenzene	ND		0.50 µg/L	08/10/04	08/13/04
	m,p-Xylene	ND		0.50 µg/L	08/10/04	08/13/04
	o-Xylene	ND		0.50 µg/L	08/10/04	08/13/04
Client ID : **MW-5** Lab ID : STR04081203-03A	TPH Purgeable	89		50 µg/L	08/10/04	08/13/04
	Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	08/10/04	08/13/04
	Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	08/10/04	08/13/04
	Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	08/10/04	08/13/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	08/10/04	08/13/04
	1,2-Dichloroethane	ND		1.0 µg/L	08/10/04	08/13/04
	Benzene	ND		0.50 µg/L	08/10/04	08/13/04
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	08/10/04	08/13/04
	Toluene	ND		0.50 µg/L	08/10/04	08/13/04
	1,2-Dibromoethane (EDB)	ND		2.0 µg/L	08/10/04	08/13/04
	Ethylbenzene	ND		0.50 µg/L	08/10/04	08/13/04
	m,p-Xylene	ND		0.50 µg/L	08/10/04	08/13/04
	o-Xylene	ND		0.50 µg/L	08/10/04	08/13/04

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Client ID :	TPH Purgeable	ND		50 µg/L	08/10/04	08/13/04
MW-7	Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	08/10/04	08/13/04
Lab ID :	Methyl tert-butyl ether (MTBE)	2.1		0.50 µg/L	08/10/04	08/13/04
STR04081203-04A	Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	08/10/04	08/13/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	08/10/04	08/13/04
	1,2-Dichloroethane	ND		1.0 µg/L	08/10/04	08/13/04
	Benzene	ND		0.50 µg/L	08/10/04	08/13/04
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	08/10/04	08/13/04
	Toluene	ND		0.50 µg/L	08/10/04	08/13/04
	1,2-Dibromoethane (EDB)	ND		2.0 µg/L	08/10/04	08/13/04
	Ethylbenzene	ND		0.50 µg/L	08/10/04	08/13/04
	m,p-Xylene	ND		0.50 µg/L	08/10/04	08/13/04
	o-Xylene	ND		0.50 µg/L	08/10/04	08/13/04
Client ID :	TPH Purgeable	ND		50 µg/L	08/10/04	08/13/04
MW-8	Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	08/10/04	08/13/04
Lab ID :	Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	08/10/04	08/13/04
STR04081203-05A	Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	08/10/04	08/13/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	08/10/04	08/13/04
	1,2-Dichloroethane	ND		1.0 µg/L	08/10/04	08/13/04
	Benzene	ND		0.50 µg/L	08/10/04	08/13/04
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	08/10/04	08/13/04
	Toluene	ND		0.50 µg/L	08/10/04	08/13/04
	1,2-Dibromoethane (EDB)	ND		2.0 µg/L	08/10/04	08/13/04
	Ethylbenzene	ND		0.50 µg/L	08/10/04	08/13/04
	m,p-Xylene	ND		0.50 µg/L	08/10/04	08/13/04
	o-Xylene	ND		0.50 µg/L	08/10/04	08/13/04
Client ID :	TPH Purgeable	110		50 µg/L	08/10/04	08/13/04
S-1	Tertiary Butyl Alcohol (TBA)	28		10 µg/L	08/10/04	08/13/04
Lab ID :	Methyl tert-butyl ether (MTBE)	73		0.50 µg/L	08/10/04	08/13/04
STR04081203-06A	Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	08/10/04	08/13/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	08/10/04	08/13/04
	1,2-Dichloroethane	16		1.0 µg/L	08/10/04	08/13/04
	Benzene	4.6		0.50 µg/L	08/10/04	08/13/04
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	08/10/04	08/13/04
	Toluene	ND		0.50 µg/L	08/10/04	08/13/04
	1,2-Dibromoethane (EDB)	ND		2.0 µg/L	08/10/04	08/13/04
	Ethylbenzene	ND		0.50 µg/L	08/10/04	08/13/04
	m,p-Xylene	0.51		0.50 µg/L	08/10/04	08/13/04
	o-Xylene	ND		0.50 µg/L	08/10/04	08/13/04
Client ID :	TPH Purgeable	10,000		1,000 µg/L	08/10/04	08/16/04
S-2	Tertiary Butyl Alcohol (TBA)	ND	V	100 µg/L	08/10/04	08/16/04
Lab ID :	Methyl tert-butyl ether (MTBE)	92		5.0 µg/L	08/10/04	08/16/04
STR04081203-07A	Di-isopropyl Ether (DIPE)	ND	V	10 µg/L	08/10/04	08/16/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND	V	10 µg/L	08/10/04	08/16/04
	1,2-Dichloroethane	74		10 µg/L	08/10/04	08/16/04
	Benzene	76		5.0 µg/L	08/10/04	08/16/04
	Tertiary Amyl Methyl Ether (TAME)	ND	V	10 µg/L	08/10/04	08/16/04
	Toluene	13		5.0 µg/L	08/10/04	08/16/04
	1,2-Dibromoethane (EDB)	ND	V	40 µg/L	08/10/04	08/16/04
	Ethylbenzene	ND	V	5.0 µg/L	08/10/04	08/16/04
	m,p-Xylene	340		5.0 µg/L	08/10/04	08/16/04
	o-Xylene	160		5.0 µg/L	08/10/04	08/16/04

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Reported in micrograms per liter, per client request.

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

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

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8/19/04

Report Date

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VOC pH Report

Work Order STR04081203 **Project:** 2007-0057-01/USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
04081203-01A	MW-3	Aqueous	6
04081203-02A	MW-4	Aqueous	2
04081203-03A	MW-5	Aqueous	2
04081203-04A	MW-7	Aqueous	2
04081203-05A	MW-8	Aqueous	2
04081203-06A	S-1	Aqueous	2
04081203-07A	S-2	Aqueous	6

8/19/04
Report Date

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Date: *23-Aug-04*

QC Summary Report

Work Order: 04081203

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B-DI**

File ID: **C:\HPCHEM\MS11\DATA\040817\04081703.D** Batch ID: **10559** Analysis Date: **08/17/2004 12:05**

Sample ID: **MBLK-10559** Units : **µg/L** Run ID: **MSD_11_040817A** Prep Date: **08/17/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	ND	5000								
Ethanol	ND	5000								
Surr: Hexafluoro-2-propanol	494		500		99	69	135			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B-DI**

File ID: **C:\HPCHEM\MS11\DATA\040817\04081704.D** Batch ID: **10559** Analysis Date: **08/17/2004 12:25**

Sample ID: **LCS-10559** Units : **µg/L** Run ID: **MSD_11_040817A** Prep Date: **08/17/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	189	50	250		75	51	161			
Ethanol	181	5	250		72	47	137			
Surr: Hexafluoro-2-propanol	499		500		99.7	69	135			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B-DI**

File ID: **C:\HPCHEM\MS11\DATA\040817\04081706.D** Batch ID: **10559** Analysis Date: **08/17/2004 13:05**

Sample ID: **04081203-02AMS** Units : **µg/L** Run ID: **MSD_11_040817A** Prep Date: **08/17/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	198	50	250	0	79	51	161			
Ethanol	181	5	250	0	72	47	137			
Surr: Hexafluoro-2-propanol	501		500		100	69	135			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B-DI**

File ID: **C:\HPCHEM\MS11\DATA\040817\04081707.D** Batch ID: **10559** Analysis Date: **08/17/2004 13:25**

Sample ID: **04081203-02AMSD** Units : **µg/L** Run ID: **MSD_11_040817A** Prep Date: **08/17/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	198	50	250	0	79	51	161	198	0.1(39)	
Ethanol	179	5	250	0	72	47	137	181.1	1.0(34)	
Surr: Hexafluoro-2-propanol	507		500		101	69	135			

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: 23-Aug-04

QC Summary Report

Work Order: 04081203

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS10\DATA\040813\04081312.D** Batch ID: **MS10W0813B** Analysis Date: **08/13/2004 11:08**

Sample ID: **MBLK MS10W0813B** Units : **µg/L** Run ID: **MSD_10_040813B** Prep Date: **08/13/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	50								
Surr: 1,2-Dichloroethane-d4	9.6		10		96	72	126			
Surr: Toluene-d8	9.69		10		97	71	128			
Surr: 4-Bromofluorobenzene	10.3		10		103	76	121			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS10\DATA\040813\04081310.D** Batch ID: **MS10W0813B** Analysis Date: **08/13/2004 10:25**

Sample ID: **GLCS MS10W0813B** Units : **µg/L** Run ID: **MSD_10_040813B** Prep Date: **08/13/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	393	50	400		98	67	136			
Surr: 1,2-Dichloroethane-d4	9.36		10		94	72	126			
Surr: Toluene-d8	9.59		10		96	71	128			
Surr: 4-Bromofluorobenzene	10.2		10		102	76	121			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS10\DATA\040813\04081322.D** Batch ID: **MS10W0813B** Analysis Date: **08/13/2004 14:41**

Sample ID: **04081204-02AGS** Units : **µg/L** Run ID: **MSD_10_040813B** Prep Date: **08/13/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	1940	250	2000	0	97	54	154			
Surr: 1,2-Dichloroethane-d4	48.6		50		97	72	126			
Surr: Toluene-d8	47.6		50		95	71	128			
Surr: 4-Bromofluorobenzene	51.5		50		103	76	121			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/DHS LUFT Manual**

File ID: **D:\HPCHEM\MS10\DATA\040813\04081323.D** Batch ID: **MS10W0813B** Analysis Date: **08/13/2004 15:02**

Sample ID: **04081204-02AGSD** Units : **µg/L** Run ID: **MSD_10_040813B** Prep Date: **08/13/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	1790	250	2000	0	90	54	154	1939	7.9(66)	
Surr: 1,2-Dichloroethane-d4	46.3		50		93	72	126			
Surr: Toluene-d8	48		50		96	71	128			
Surr: 4-Bromofluorobenzene	51.2		50		102	76	121			

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: 23-Aug-04

QC Summary Report

Work Order: 04081203

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS10\DATA\040813\04081312.D** Batch ID: **MS10W0813A** Analysis Date: **08/13/2004 11:08**

Sample ID: **MBLK MS10W0813A** Units : **µg/L** Run ID: **MSD_10_040813B** Prep Date: **08/13/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	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								
1,2-Dichloroethane	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
1,2-Dibromoethane (EDB)	ND	2								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	9.6		10		96	72	126			
Surr: Toluene-d8	9.69		10		97	71	128			
Surr: 4-Bromofluorobenzene	10.3		10		103	76	121			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS10\DATA\040813\04081309.D** Batch ID: **MS10W0813A** Analysis Date: **08/13/2004 10:04**

Sample ID: **LCS MS10W0813A** Units : **µg/L** Run ID: **MSD_10_040813B** Prep Date: **08/13/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	11.1	0.5	10		111	83	119			
Toluene	10.7	0.5	10		107	80	120			
Ethylbenzene	11.4	0.5	10		114	80	120			
m,p-Xylene	12	0.5	10		120	77	125			
o-Xylene	11.3	0.5	10		113	77	124			
Surr: 1,2-Dichloroethane-d4	9.79		10		98	72	126			
Surr: Toluene-d8	9.82		10		98	71	128			
Surr: 4-Bromofluorobenzene	9.99		10		99.9	76	121			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS10\DATA\040813\04081324.D** Batch ID: **MS10W0813A** Analysis Date: **08/13/2004 15:24**

Sample ID: **04081204-02AMS** Units : **µg/L** Run ID: **MSD_10_040813B** Prep Date: **08/13/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	49.9	1.3	50	0	99.7	59	145			
Toluene	49.3	1.3	50	0	99	39	161			
Ethylbenzene	52.3	1.3	50	0	105	57	145			
m,p-Xylene	54.9	1.3	50	0	110	37	163			
o-Xylene	51.9	1.3	50	0	104	47	156			
Surr: 1,2-Dichloroethane-d4	46.6		50		93	72	126			
Surr: Toluene-d8	48.9		50		98	71	128			
Surr: 4-Bromofluorobenzene	51.5		50		103	76	121			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS10\DATA\040813\04081325.D** Batch ID: **MS10W0813A** Analysis Date: **08/13/2004 15:45**

Sample ID: **04081204-02AMSD** Units : **µg/L** Run ID: **MSD_10_040813B** Prep Date: **08/13/2004**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	48.4	1.3	50	0	97	59	145	49.87	3.1(22)	
Toluene	47.2	1.3	50	0	94	39	161	49.3	4.4(22)	
Ethylbenzene	50.6	1.3	50	0	101	57	145	52.26	3.3(22)	
m,p-Xylene	53.1	1.3	50	0	106	37	163	54.91	3.4(23)	
o-Xylene	50.3	1.3	50	0	101	47	156	51.92	3.1(50)	
Surr: 1,2-Dichloroethane-d4	48.2		50		96	72	126			
Surr: Toluene-d8	48.1		50		96	71	128			
Surr: 4-Bromofluorobenzene	50.6		50		101	76	121			

Alpha Analytical, Inc.

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

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

Date: *23-Aug-04*

QC Summary Report

Work Order: 04081203

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.

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

Sample Receipt Checklist

Date Report is due to Client : 8/20/2004 Date of Notice : 8/12/2004 11:37:27

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 : 2007-0057-01/USA 57

Project Manager : Gowri Kowtha Client's Phone (530) 676-6002 Client's FAX (530) 676-6005

Work Order Number STR04081203 Date Received : 8/12/2004 Received by: Laura Long

Chain of Custody (COC) Information

Carrier name FedEx

Chain of custody present ?	Yes ☑	☐ No	
Custody seals intact on shippping container/cooler ?	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 ☑	☐ SEM	Other (see comments) ☐

Sample Receipt Information

Shipping container/cooler 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
Container/Temp Blank temperature in compliance (0-6°C)?	Yes ☑	☐ No	4 °C
Water - VOA vials have zero headspace / no bubbles?	Yes ☑	☐ No	No VOA vials submitted ☐
Sample labels checked for correct preservation?	Yes ☑	☐ No	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	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)

Comments : Note on COC says MW-3 & S-2 are non-preserved samples. VOAs are marked that samples are preserved.

Billing Information :

CHAIN-OF-CUSTODY RECORD

CA

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

WorkOrder : STR04081203

Report Due By : 5:00 PM On : 20-Aug-04

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

Report Attention : Gowri Kowtha
CC Report :

Gowri Kowtha
TEL : (530) 676-6002
FAX : (530) 676-6005

Job : 2007-0057-01/USA 57
PO :

Client's COC # : 07771

EDD Required : **Yes**

Sampled by : MW Morgan

Cooler Temp : 4 °C

12-Aug-04

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

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests ALCOHOL_W	TPH/P_W	VOC_W						Sample Remarks
STR04081203-01A	MW-3	AQ	08/10/04 11:50	5	0	6		MeOH/EtOH	GAS-C	BTEX/OXY_C/EDB/1,2-DCA						
STR04081203-02A	MW-4	AQ	08/10/04 07:24	5	0	6		MeOH/EtOH	GAS-C	BTEX/OXY_C/EDB/1,2-DCA						
STR04081203-03A	MW-5	AQ	08/10/04 08:13	5	0	6		MeOH/EtOH	GAS-C	BTEX/OXY_C/EDB/1,2-DCA						
STR04081203-04A	MW-7	AQ	08/10/04 09:10	5	0	6		MeOH/EtOH	GAS-C	BTEX/OXY_C/EDB/1,2-DCA						
STR04081203-05A	MW-8	AQ	08/10/04 10:00	5	0	6		MeOH/EtOH	GAS-C	BTEX/OXY_C/EDB/1,2-DCA						
STR04081203-06A	S-1	AQ	08/10/04 10:36	5	0	6		MeOH/EtOH	GAS-C	BTEX/OXY_C/EDB/1,2-DCA						
STR04081203-07A	S-2	AQ	08/10/04 12:36	5	0	6		MeOH/EtOH	GAS-C	BTEX/OXY_C/EDB/1,2-DCA						

Comments: Frozen ice. Security seals. Send copy of receipt checklist with final report. Note on COC says MW-3 & S-2 are non-preserved samples. VOAs are marked that samples are preserved. Gobal ID T0600101808. :

	Signature	Print Name	Company	Date/Time
Received by:	Laura Long	Laura Long	**Alpha Analytical, Inc.**	8/12/04 1135

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 Inc.
Address 3330 Cameron Park Dr. #550
City, State, Zip Cameron Park, CA 95682
Phone Number 5306766004 Fax 5306766005

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

Page # 1 of 1

07771

Client Name USA 57	P.O. #	Job # 2007-0057-01	
Address 10700 MacArthur Blvd	PWS #	DWR #	
City, State, Zip Oakland, CA	Phone #	Fax #	

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sampled by: MW Morgan / Sample Description	Report Attention: Gowri Kowtha / Total and type of containers ** See below	BTEX, TPHs	5 oxy's	EDB	1,2-DCA	Methanol	Ethanol			Analyses Required: EDF / REMARKS
1150	8/10/04	AQ	STR04081203-01 *	MW-3 [redacted]	5-V	X	X	X	X	X	X			Standard TAT
0724	8/10/04	AQ	02	MW-4	5-V	X	X	X	X	X	X			
0813	8/10/04	AQ	03	MW-5	5-V	X	X	X	X	X	X			
0910	8/10/04	AQ	04	MW-7	5-V	X	X	X	X	X	X			
1000	8/10/04	AQ	05	MW-8	5-V	X	X	X	X	X	X			
1036	8/10/04	AQ	06	~~MW-9~~ S-1	5-V	X	X	X	X	X	X			
1236	8/10/04	AQ	07 *	S-2 [redacted]	5-V	X	X	X	X	X	X			Standard TAT
														MW-3 & S-2 are VOA's
														* ANALYSE AS REQUESTED

ADDITIONAL INSTRUCTIONS:
Global ID # T0600101808

	Signature	Print Name	Company	Date	Time
Relinquished by		Martin Morgan	Stratus	8/11/04	0815
Received by		LISA BRYLW	ALPHA	8-11-04	0815
Relinquished by					
Received by	Laura Long	Laura Long	Alpha	8/12/04	1130
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: 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.