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STRATUS
ENVIRONMENTAL, INC.

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(530) 676-6004 ~ Fax: (530) 676-6005

July 18, 2005
Project No. 2007-0057-01

Alameda County
JUL 21 2005
Environmental Health

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

Re: Quarterly Groundwater Monitoring Report, Second Quarter 2005, for former USA Service Station No. 57, located at 10700 MacArthur Boulevard, Oakland, California (RO0000232)

Dear Mr. Chan:

Stratus Environmental, Inc. (Stratus) is submitting the attached report which presents the results of the second quarter 2005 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.

PROFESSIONAL GEOLOGIST
Stephen J. Carter
No. 5577
STATE OF CALIFORNIA

Stephen J. Carter, P.G. ★ Gowri S. Kowtha, P.E.
Sr. Project Supervisor Project Manager

Attachment: Quarterly Groundwater Monitoring Report, Second Quarter 2005

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

Date May 20, 2005

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, P.G.

Consultant Project No: 2007-0057-01

Primary Agency/Regulatory ID No: Barnie Chan, Alameda County Department of Environmental Health / RO0000232

WORK PERFORMED THIS QUARTER (Second 2005):

1. Stratus measured groundwater elevations and collected groundwater samples from wells S-1, S-2, and MW-3 through MW-8 on April 14, 2005.

2. Stratus compiled and evaluated groundwater monitoring data.

3. Stratus met with the Alameda County Department of Environmental Health on April 7, 2005, to discuss site conditions and options for moving site toward closure.

4. On April 12, 2005, Stratus replaced the well box for well MW-3, and removed the stovepipe and cut down the well casings for wells MW-4 and MW-5.

5. To remove petroleum hydrocarbon mass from beneath the site, Stratus utilized a DPE system to extract soil vapor and groundwater from wells S-1, S-2, and MW-3. The DPE system operated continuously from June 6, 2005 through June 30, 2005.

6. Stratus prepared and submitted a *Site Conceptual Model* report (dated May 6, 2005).

Alameda County
JUL 21 2005
Environmental Health

WORK PROPOSED FOR NEXT QUARTER (Third 2005):

1. The next sampling event is tentatively scheduled for July 2005. 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 submit a report for the DPE mass removal event by August 9, 2005.

Current Phase of Project: Monitoring

Frequency of Groundwater Sampling: All Wells = Quarterly

Frequency of Groundwater Monitoring: Quarterly

Groundwater Sampling Date: April 14, 2005

Is Free Product (FP) Present on Site: No

FP Recovered This Quarter:	NA
Cumulative FP Recovered to Date:	NA
Approximate Depth to Groundwater:	5.66 to 16.17 feet below top of well casing
Groundwater Flow Direction:	Radial away from a groundwater high centered around MW-3
Groundwater Gradient:	0.069 to 0.088 ft/ft

DISCUSSION:

At the time of the second quarter 2005 monitoring event, groundwater elevations had increased between 4.16 and 5.42 feet in all wells since the previous monitoring event (January 19, 2005). Depth-to-water measurements were corrected to mean sea level (MSL) and used to construct a groundwater elevation contour map (Figure 2). The casings for wells MW-4 and MW-5 have been modified but not re-surveyed. These wells were not utilized in contouring. The groundwater flow direction was generally radial away from an apparent groundwater high centered around well MW-3. Gradients ranged from 0.069 to 0.088 ft/ft. Similar groundwater flow patterns have been observed during previous monitoring events.

TPHG, benzene, and MTBE were reported in well S-2. TPHG and MTBE were also reported in well S-1, and benzene and MTBE were reported in well MW-3. The highest concentrations of TPHG (20,000 µg/L), benzene (830 µg/L), and MTBE (510 µg/L) were reported in well S-2. TBA was reported in wells S-1 (10 µg/L), S-2 (150 µg/L), and MW-3 (25 µg/L). 1,2-DCA was reported in wells S-1 (1.4 µg/L) and MW-3 (6.2 µg/L). DIPE, ETBE, TAME, EDB, methanol, or ethanol were not reported in any of the wells. These results are generally consistent with historical analytical data. The laboratory noted that the pH in the samples for wells S-1 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 April 14, 2005, 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 (Second Quarter 2005)
- Figure 3 Groundwater Analytical Summary (Second Quarter 2005)
- 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 Service 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	02/12/87						630	4.4	3.5	37	NA
	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	6,100	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
	11/11/04	19.81		59.85	160	NA	<0.50	<0.50	<0.50	<0.50	150
	01/19/05	18.12		61.54	440	NA	<0.50	<0.50	1.4	<0.50	140
	04/14/05	13.94		65.72	320	NA	<0.50	<0.50	<0.50	<0.50	120

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S-2	02/12/87		Sheen				3,400	3,800	1,300	11,000	NA
	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
Sheen	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
Sheen	10/10/97	21.21		59.72	13,000	<50	260	38	190	280	600*
Sheen	01/20/98	19.07		61.86	1,900	2,300	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
	11/11/04	21.95		59.95	20,000	NA	530	240	370	1,730	420
	01/19/05	20.33		61.57	17,000	NA	590	150	250	990	580
	04/14/05	16.17		65.73	20,000	NA	830	230	570	1,980	510

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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
	11/11/04	17.40		62.92	3,000	NA	810	<5.0[3]	43	<5.0[3]	690
	01/19/05	13.28		67.04	92	NA	18	<0.50	0.77	<0.50	17
	04/14/05	8.73		71.59	<50	NA	0.52	<0.50	<0.50	<0.50	11

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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
	11/11/04	11.93		64.49	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/19/05	10.34		66.08	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/14/05	5.66	[4]	NM	<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
	11/11/04	NM		NM				Well Damaged			
	01/19/05	NM		NM				Well Damaged			
	04/14/05	10.57	[4]	NM	<50	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
	10/18/00	NM		NM	Unable to Locate						
	03/12/02	NM		NM	Unable to Locate						
	11/19/02	NM		NM	Unable to Locate						
	01/09/03	NM		NM	Unable to Locate						
	04/14/03	NM		NM	Unable to Locate						
	07/21/03	NM		NM	Unable to Locate						
	10/19/03	NM		NM	Unable to Locate						
	01/15/04	NM		NM	Unable to Locate						
	04/08/04	NM		NM	Well Obstructed - Not Sampled						
	08/10/04	NM		NM	Well Obstructed - Not Sampled						
	11/11/04	17.20		64.44	Well Obstructed - Not Sampled						
	01/19/05	NM		NM	Well Obstructed - Not Sampled						
	04/14/05	15.78		65.86	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50

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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
	11/11/04	19.85		59.96	<50	NA	<0.50	<0.50	<0.50	<0.50	1.0
	01/19/05	19.59		60.22	<50	NA	<0.50	<0.50	<0.50	<0.50	1.5
	04/14/05	14.17		65.64	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

Former USA Service 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
	11/11/04	21.38		59.12	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/19/05	17.20		63.30	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/14/05	12.68		67.82	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

Former USA Service 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.

[4] Casing elevation invalid - well casing modified (cut) on April 12, 2005.

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 Service 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
	11/11/04	150	14	<1.0	<1.0	<1.0	7.3	<2.0	<5,000	<5,000
	01/19/05	140	14	<1.0	<1.0	<1.0	3.8	<2.0	<5,000	<5,000
	04/14/05	120	10	<1.0	<1.0	<1.0	1.4	<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
	11/11/04	420	<200[1]	<20[1]	<20[1]	<20[1]	<20[1]	<80[1]	<5,000	<5,000
	01/19/05	580	200	<5.0[1]	<5.0[1]	<5.0[1]	8.2	<20[1]	<5,000	<5,000
	04/14/05	510	150	<10[1]	<10[1]	<10[1]	<10[1]	<40[1]	<5,000	<5,000

TABLE 2

GROUNDWATER ANALYTICAL RESULTS FOR OXYGENATES AND ADDITIONAL COMPOUNDS

Former USA Service 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-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
	11/11/04	690	1,400	<10[1]	<10[1]	<10[1]	140	<40[1]	<5,000	<5,000
	01/19/05	17	19	<1.0	<1.0	<1.0	1.4	<2.0	<5,000	<5,000
	04/14/05	11	25	<1.0	<1.0	<1.0	6.2	<2.0	<5,000	<5,000
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
	11/11/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	01/19/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	04/14/05	<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 Service 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-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
	11/11/04					Well Damaged				
	01/19/05					Well Damaged				
	04/14/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
MW-6	11/19/02					Unable to Locate				
	01/09/03					Unable to Locate				
	04/14/03					Unable to Locate				
	07/21/03					Unable to Locate				
	10/19/03					Unable to Locate				
	01/15/04					Unable to Locate				
	04/08/04					Well Obstructed - Not Sampled				
	08/10/04					Well Obstructed - Not Sampled				
	11/11/04					Well Obstructed - Not Sampled				
	01/19/05					Well Obstructed - Not Sampled				
	04/14/05	<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 Service 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-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
	11/11/04	1.0	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	01/19/05	1.5	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	04/14/05	<0.50	<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
	11/11/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	01/19/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	04/14/05	<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

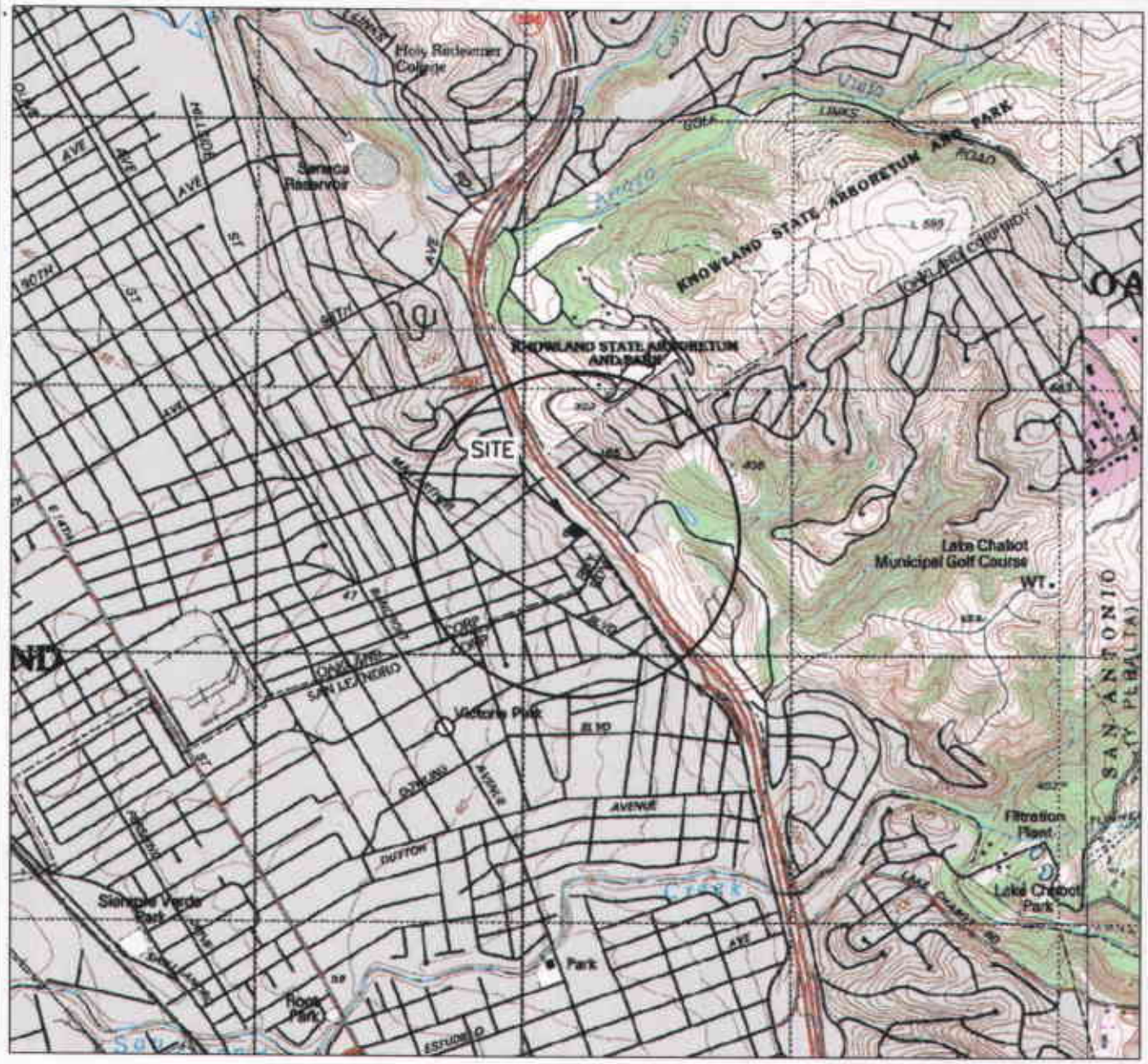
Former USA Service Station No. 57
10700 MacArthur Blvd., Oakland, California

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

North

0 2000 FT

SCALE 1:24,000

STRATUS ENVIRONMENTAL, INC.

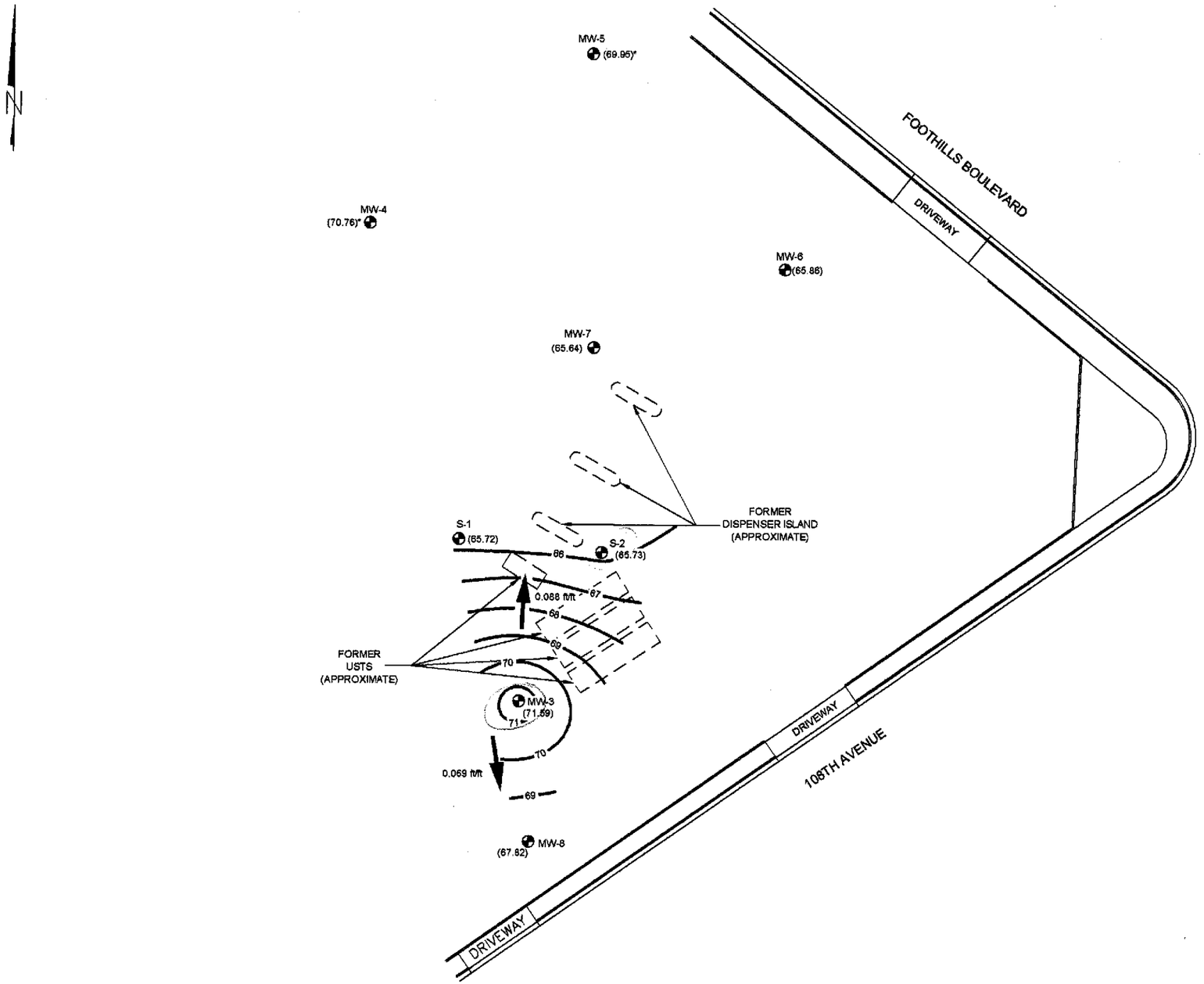
FORMER USA SERVICE STATION NO. 57
10500 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE
1

PROJECT NO.
2007-0057-01

USA ST Site Location Map.dwg Feb 22, 2008 JMP USA ST Quarterly



LEGEND

- MW-3 MONITORING WELL LOCATION
- (65.72) GROUND WATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL
- —66— WATER TABLE CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL
- INFERRED DIRECTION OF GROUND WATER FLOW

WELLS MEASURED: 4/14/05

* CASING ELEVATION ALTERED, WELL NOT USED IN CONTOURING

JMP REV May 20, 2005 USA 57 Quarterly Figure.dwg

USA57\Quarterly

STRATUS ENVIRONMENTAL, INC.

0 40 FT

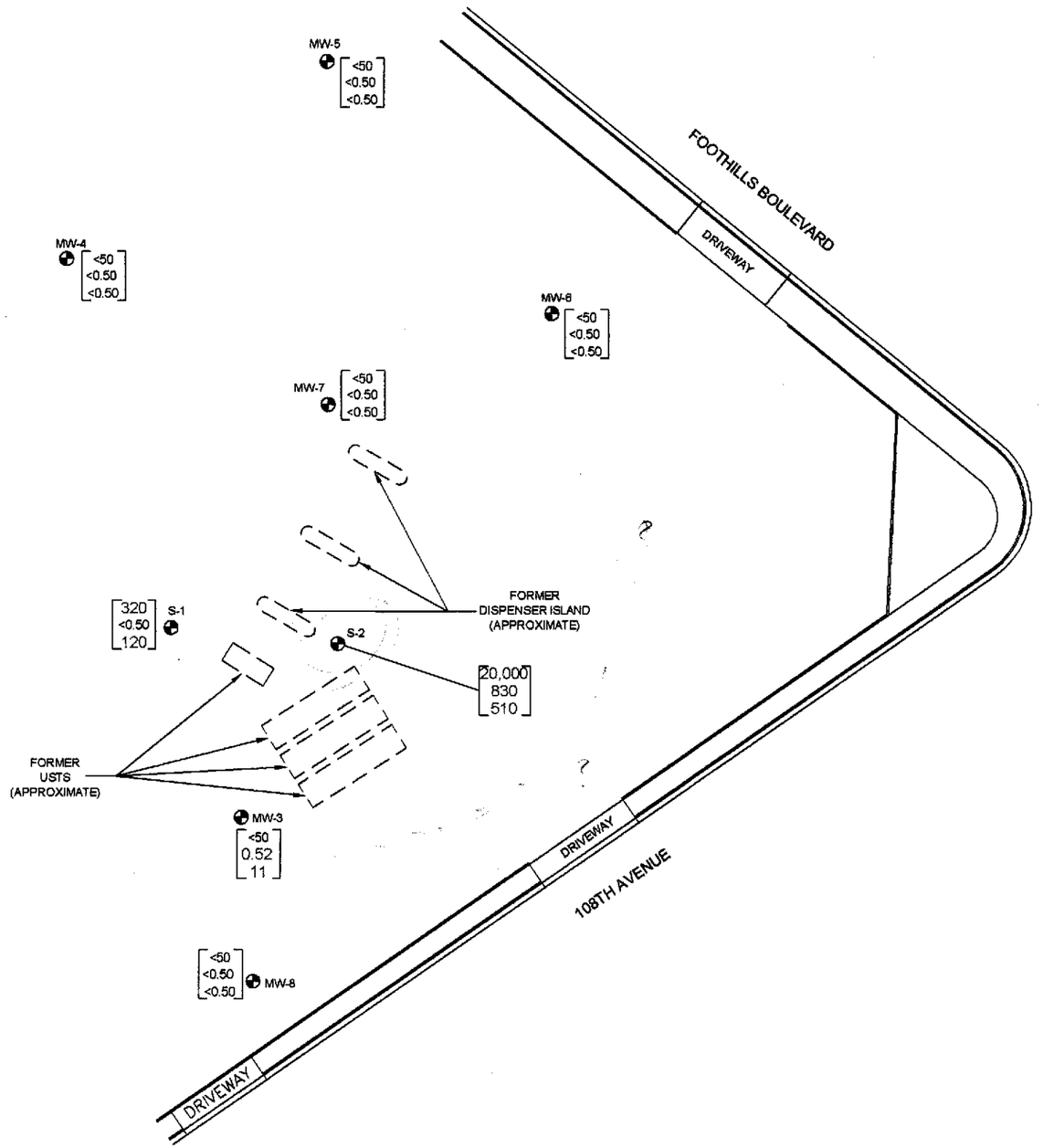
HORZ. SCALE

FORMER USA SERVICE STATION NO. 57
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP
2nd QUARTER 2005

FIGURE
2

PROJECT NO.
2007-0057-01



LEGEND

MW-3 MONITORING WELL LOCATION

[<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 4/14/05

TPHG ANALYZED BY EPA METHOD 8015B

BENZENE & MTBE ANALYZED BY EPA METHOD 8260B

USA57Quarterly JMP REV May 19, 2005 USA 57 Quarterly Figure.dwg

STRATUS ENVIRONMENTAL, INC.

0 40 FT

HORZ. SCALE

FORMER USA SERVICE STATION NO. 57
10700 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

GROUNDWATER ANALYTICAL SUMMARY
2nd QUARTER 2005

FIGURE
3

PROJECT NO.
2007-0057-01

APPENDIX A

FIELD DATA SHEETS

STRATUS ENVIRONMENTAL, INC

Global ID: T0600101808
Site Address 10700 Macarthur Blvd
City Oakland, CA
Sampled By: Vince Zalutka

ORIGINAL

Site Number USA 57
Project No U 57
Project PM
Date 04/14/05

* 6 ≈ 40' but blocked @ 17' • Less 3' on MW-4, MW-5 new caps @ ground level.

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	0719	8.73		42.8	34.07	4	2	68	37			X		36.70	MW-3	1021	1.08
• MW-4	0710	5.66		39 42.45	33.34	4	2	66	66			X		26.70	MW-4	0854	5.48
• MW-5	0702	10.57		34 37.6	23.43	4	2	48	18			X		19.30	MW-5	0803	5.40
* MW-6	0656	15.78		40/17.5	1.63	4	2	3	3		X			16.23	MW-6	1320	2.75
MW-7	0729	14.17		41.85	27.68	4	2	55	55			X		24.95	MW-7	1151	1.85
MW-8	0725	12.68		37.7	25.02	4	2	50	50			X		33.39	MW-8	1100	9.58
S-1	0715	13.94		40.8	26.86	3	1	27	13			X		25.55	S-1	0941	2.52
S-2	0732	16.17		42.85	26.68	3	1	27	27			X		31.82	S-2	1240	4.80

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

Locks ✓
4" Caps ✓

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

STRATUS ENVIRONMENTAL INC

Site Address 10700 Macarthur Blvd
City Oakland, CA
Sampled By: Vince Zalutka

Site Number USA 57
Project No U 57
Project PM 0
Date 04/14/05

ORIGINAL

Well ID	MW-3 1021			
purge start time	1000	Lite Odor		
	Temp C	pH	cond	gallons
time	20.4	7.35	452	☒
time	21.2	7.03	178.8	34
time	DRY @	37		
time	20.5	6.62	292	37
purge stop time				

Well ID	MW-4 0854			
purge start time	0825	No Odor		
	Temp C	pH	cond	gallons
time	21.3	7.40	363	☒
time	20.5	7.19	341	33
time	21.0	7.24	440	66
time				
purge stop time	0845			

Well ID	MW-5 0803			
purge start time	0750	No Odor		
	Temp C	pH	cond	gallons
time	21.4	7.94	270	☒
time	DRY @ 18 gal			
time	18.9	8.34	507	(18)
time				
purge stop time				

Well ID	MW-6 1320			
purge start time	Bailer	Odor		
	Temp C	pH	cond	gallons
time	20.5	6.33	2.72m	☒
time	19.1	6.42	2.80m	1.5
time	21.0	6.86	2.75m	3
time				
purge stop time				

Well ID	MW-7 1151			
Purge start time	1120	No Odor		
	Temp C	pH	cond	gallons
time	21.0	6.84	1045	☒
time	20.8	6.92	944	28
time	20.3	6.75	1006	55
time				
purge stop time	1142			

Well ID	MW-8 1100			
Purge start time	1036			
	Temp C	pH	cond	gallons
time	20.5	6.50	6.23m	☒
time	19.2	6.56	6.79m	25
time	19.1	6.71	6.93m	50
time				
purge stop time	1052			

Well ID	S-1 0941			
purge start time	0928	No Odor		
	Temp C	pH	cond	gallons
time	20.4	6.81	950	☒
time	18.4	6.42	1392	13
time	DRY @	13 gal		
time				
purge stop time				

Well ID	S-2 1240			
purge start time	1221	ODOR		
	Temp C	pH	cond	gallons
time	21.3	6.32	1001	☒
time	20.4	6.38	922	14
time	21.4	6.30	1058	27
time				
purge stop time	1230			

USA 57 - Oakland
April 12, 2005

Per Marty Morgan, well box for MW-3 was replaced, well casing not altered. Stovepipes for wells MW-4, MW-5 removed and replaced w/ flush mounted boxes. Casing for MW-4 cut, needs re-survey. Casing for MW-5 broken ~ 28" bsg, repaired, needs re-survey.

S/Carter

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

FILE 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 04/18/05

Job#: USA 57

GC/MSD by Direct Injection
EPA Method SW8260B-DI

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MW-3**					
Lab ID :	STR05041801-01A	Methanol	ND	5,000 µg/L	04/14/05	04/20/05
		Ethanol	ND	5,000 µg/L	04/14/05	04/20/05
Client ID :	**MW-5**					
Lab ID :	STR05041801-02A	Methanol	ND	5,000 µg/L	04/14/05	04/20/05
		Ethanol	ND	5,000 µg/L	04/14/05	04/20/05
Client ID :	**MW-4**					
Lab ID :	STR05041801-03A	Methanol	ND	5,000 µg/L	04/14/05	04/20/05
		Ethanol	ND	5,000 µg/L	04/14/05	04/20/05
Client ID :	**MW-6**					
Lab ID :	STR05041801-04A	Methanol	ND	5,000 µg/L	04/14/05	04/21/05
		Ethanol	ND	5,000 µg/L	04/14/05	04/21/05
Client ID :	**MW-7**					
Lab ID :	STR05041801-05A	Methanol	ND	5,000 µg/L	04/14/05	04/21/05
		Ethanol	ND	5,000 µg/L	04/14/05	04/21/05
Client ID :	**MW-8**					
Lab ID :	STR05041801-06A	Methanol	ND	5,000 µg/L	04/14/05	04/21/05
		Ethanol	ND	5,000 µg/L	04/14/05	04/21/05
Client ID :	**S-1**					
Lab ID :	STR05041801-07A	Methanol	ND	5,000 µg/L	04/14/05	04/21/05
		Ethanol	ND	5,000 µg/L	04/14/05	04/21/05
Client ID :	**S-2**					
Lab ID :	STR05041801-08A	Methanol	ND	5,000 µg/L	04/14/05	04/21/05
		Ethanol	ND	5,000 µg/L	04/14/05	04/21/05

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

4/25/05
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 04/18/05

Job#: 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 :	TPH Purgeable	ND	50 µg/L	04/14/05	04/21/05
MW-3	Tertiary Butyl Alcohol (TBA)	25	10 µg/L	04/14/05	04/21/05
Lab ID :	Methyl tert-butyl ether (MTBE)	11	0.50 µg/L	04/14/05	04/21/05
STR05041801-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	04/14/05	04/21/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	04/14/05	04/21/05
	1,2-Dichloroethane	6.2	1.0 µg/L	04/14/05	04/21/05
	Benzene	0.52	0.50 µg/L	04/14/05	04/21/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	04/14/05	04/21/05
	Toluene	ND	0.50 µg/L	04/14/05	04/21/05
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	04/14/05	04/21/05
	Ethylbenzene	ND	0.50 µg/L	04/14/05	04/21/05
	m,p-Xylene	ND	0.50 µg/L	04/14/05	04/21/05
	o-Xylene	ND	0.50 µg/L	04/14/05	04/21/05
Client ID :	TPH Purgeable	ND	50 µg/L	04/14/05	04/20/05
MW-5	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	04/14/05	04/20/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/14/05	04/20/05
STR05041801-02A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	04/14/05	04/20/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	04/14/05	04/20/05
	1,2-Dichloroethane	ND	1.0 µg/L	04/14/05	04/20/05
	Benzene	ND	0.50 µg/L	04/14/05	04/20/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	04/14/05	04/20/05
	Toluene	ND	0.50 µg/L	04/14/05	04/20/05
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	04/14/05	04/20/05
	Ethylbenzene	ND	0.50 µg/L	04/14/05	04/20/05
	m,p-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
	o-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
Client ID :	TPH Purgeable	ND	50 µg/L	04/14/05	04/20/05
MW-4	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	04/14/05	04/20/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/14/05	04/20/05
STR05041801-03A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	04/14/05	04/20/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	04/14/05	04/20/05
	1,2-Dichloroethane	ND	1.0 µg/L	04/14/05	04/20/05
	Benzene	ND	0.50 µg/L	04/14/05	04/20/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	04/14/05	04/20/05
	Toluene	ND	0.50 µg/L	04/14/05	04/20/05
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	04/14/05	04/20/05
	Ethylbenzene	ND	0.50 µg/L	04/14/05	04/20/05
	m,p-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
	o-Xylene	ND	0.50 µg/L	04/14/05	04/20/05

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Client ID :	TPH Purgeable	ND	50 µg/L	04/14/05	04/20/05
MW-6	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	04/14/05	04/20/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/14/05	04/20/05
STR05041801-04A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	04/14/05	04/20/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	04/14/05	04/20/05
	1,2-Dichloroethane	ND	1.0 µg/L	04/14/05	04/20/05
	Benzene	ND	0.50 µg/L	04/14/05	04/20/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	04/14/05	04/20/05
	Toluene	ND	0.50 µg/L	04/14/05	04/20/05
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	04/14/05	04/20/05
	Ethylbenzene	ND	0.50 µg/L	04/14/05	04/20/05
	m,p-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
	o-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
Client ID :	TPH Purgeable	ND	50 µg/L	04/14/05	04/20/05
MW-7	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	04/14/05	04/20/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/14/05	04/20/05
STR05041801-05A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	04/14/05	04/20/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	04/14/05	04/20/05
	1,2-Dichloroethane	ND	1.0 µg/L	04/14/05	04/20/05
	Benzene	ND	0.50 µg/L	04/14/05	04/20/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	04/14/05	04/20/05
	Toluene	ND	0.50 µg/L	04/14/05	04/20/05
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	04/14/05	04/20/05
	Ethylbenzene	ND	0.50 µg/L	04/14/05	04/20/05
	m,p-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
	o-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
Client ID :	TPH Purgeable	ND	50 µg/L	04/14/05	04/20/05
MW-8	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	04/14/05	04/20/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/14/05	04/20/05
STR05041801-06A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	04/14/05	04/20/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	04/14/05	04/20/05
	1,2-Dichloroethane	ND	1.0 µg/L	04/14/05	04/20/05
	Benzene	ND	0.50 µg/L	04/14/05	04/20/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	04/14/05	04/20/05
	Toluene	ND	0.50 µg/L	04/14/05	04/20/05
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	04/14/05	04/20/05
	Ethylbenzene	ND	0.50 µg/L	04/14/05	04/20/05
	m,p-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
	o-Xylene	ND	0.50 µg/L	04/14/05	04/20/05
Client ID :	TPH Purgeable	320	50 µg/L	04/14/05	04/19/05
S-1	Tertiary Butyl Alcohol (TBA)	10	10 µg/L	04/14/05	04/19/05
Lab ID :	Methyl tert-butyl ether (MTBE)	120	0.50 µg/L	04/14/05	04/19/05
STR05041801-07A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	04/14/05	04/19/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	04/14/05	04/19/05
	1,2-Dichloroethane	1.4	1.0 µg/L	04/14/05	04/19/05
	Benzene	ND	0.50 µg/L	04/14/05	04/19/05
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	04/14/05	04/19/05
	Toluene	ND	0.50 µg/L	04/14/05	04/19/05
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	04/14/05	04/19/05
	Ethylbenzene	ND	0.50 µg/L	04/14/05	04/19/05
	m,p-Xylene	ND	0.50 µg/L	04/14/05	04/19/05
	o-Xylene	ND	0.50 µg/L	04/14/05	04/19/05

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Client ID :						
S-2	TPH Purgeable	20,000		1,000 µg/L	04/14/05	04/19/05
Lab ID :	Tertiary Butyl Alcohol (TBA)	150		100 µg/L	04/14/05	04/19/05
STR05041801-08A	Methyl tert-butyl ether (MTBE)	510		5.0 µg/L	04/14/05	04/19/05
	Di-isopropyl Ether (DIPE)	ND	V	10 µg/L	04/14/05	04/19/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	V	10 µg/L	04/14/05	04/19/05
	1,2-Dichloroethane	ND	V	10 µg/L	04/14/05	04/19/05
	Benzene	830		5.0 µg/L	04/14/05	04/19/05
	Tertiary Amyl Methyl Ether (TAME)	ND	V	10 µg/L	04/14/05	04/19/05
	Toluene	230		5.0 µg/L	04/14/05	04/19/05
	1,2-Dibromoethane (EDB)	ND	V	40 µg/L	04/14/05	04/19/05
	Ethylbenzene	570		5.0 µg/L	04/14/05	04/19/05
	m,p-Xylene	1,400		5.0 µg/L	04/14/05	04/19/05
	o-Xylene	580		5.0 µg/L	04/14/05	04/19/05

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

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

4/25/05

Report Date

Alpha Analytical, Inc.

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

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

VOC Sample Preservation Report

Work Order STR05041801 **Project:** USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05041801-01A	MW-3	Aqueous	2
05041801-02A	MW-5	Aqueous	2
05041801-03A	MW-4	Aqueous	2
05041801-04A	MW-6	Aqueous	2
05041801-05A	MW-7	Aqueous	2
05041801-06A	MW-8	Aqueous	2
05041801-07A	S-1	Aqueous	6
05041801-08A	S-2	Aqueous	4

4/25/05

Report Date

Billing Information:
Name STRATUS ENV., Inc.
Address 3330 Cameron Park Dr. #550
City, State, Zip Cameron Park, CA
Phone Number 530-676-6009 Fax 530-676-6005

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 X NV ___ WA ___
ID ___ OR ___ OTHER ___

Page # 1 of 1

Analyses Required

05389

Client Name USA 57
Address 10500 Macarthur Blvd.
City, State, Zip Oakland, CA
P.O. # | Job #
EMail Address
Phone # | Fax #
Report Attention
Sampled by Vince Z.

Required QC Level? I II III IV

EDD / EDF? YES X NO ___

Global ID # T0600101808

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPHG-BTEX	5 Oxy's	EDB	1,2-DCA	Methanol	Ethanol	REMARKS
1021	2005 04/14	AQ	STR0504180[1]-01	MW-3	Std		5.V	X	X	X	X	X	X	
0803			-02	MW-5										
0854			-03	MW-4										
1320			-04	MW-6										
1151			-05	MW-7										
1100			-06	MW-8										
0941			-07	S-1										
1240	04/14	AQ	-08	S-2	Std		5.V	X	X	X	X	X	X	

ADDITIONAL INSTRUCTIONS:

	Signature	Print Name	Company	Date	Time
Relinquished by	Vince Zalutka	Vince Zalutka	Stratus Env., Inc.	4-15-05	10:10
Received by		Mike Gilbert	Alpha Analytical Inc.	4-15-05	10:10
Relinquished by					
Received by	Stacy M Strock	Stacy Strock	Alpha	4/18/05	10:30
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.

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 : STR05041801

Report Due By : 5:00 PM On : 26-Apr-05

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

Gowri Kowtha
TEL : (530) 676-6002 x
FAX : (530) 676-6005
EMail gkowtha@stratusinc.net

EDD Required : Yes PDF Required : No

Sampled by : VINCE Z

Report Attention : Gowri Kowtha
CC Report :

Job : USA 57
PO :

Cooler Temp : 4 °C

Client's COC # : 05389

18-Apr-05

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
STR05041801-01A	MW-3	AQ	04/14/05 10:21	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-02A	MW-5	AQ	04/14/05 08:03	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-03A	MW-4	AQ	04/14/05 08:54	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-04A	MW-6	AQ	04/14/05 13:20	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-05A	MW-7	AQ	04/14/05 11:51	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-06A	MW-8	AQ	04/14/05 11:00	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-07A	S-1	AQ	04/14/05 09:41	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-08A	S-2	AQ	04/14/05 12:40	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	

Comments: Security seals intact-frozen ice. Saturday delivery-samples kept secure and on ice until log-in on Monday 04/18/05. Send copy of receipt checklist with final report. Global ID: T0600101808. :

	Signature	Print Name	Company	Date/Time
Received by:	Stacy M Strock	Stacy Strock	Alpha Analytical, Inc.	4/18/05 10:30

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

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

Alpha Analytical, Inc.

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

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

Date: *02-May-05*

QC Summary Report

Work Order: 05041801

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: 02-May-05

QC Summary Report

Work Order: 05041801

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B-DI**
File ID: **C:\HPCHEM\MS11\DATA\050420\05042013.D** Batch ID: **12103** Analysis Date: **04/20/2005 19:49**
Sample ID: **MBLK-12103** Units : **µg/L** Run ID: **MSD_11_050420A** Prep Date: **04/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	ND	5000								
Ethanol	ND	5000								
Surr: Hexafluoro-2-propanol	501		500		100	63	137			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B-DI**
File ID: **C:\HPCHEM\MS11\DATA\050420\05042014.D** Batch ID: **12103** Analysis Date: **04/20/2005 20:09**
Sample ID: **LCS-12103** Units : **µg/L** Run ID: **MSD_11_050420A** Prep Date: **04/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	230	50	250		92	45	155			
Ethanol	198	5	250		79	51	144			
Surr: Hexafluoro-2-propanol	494		500		99	63	137			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B-DI**
File ID: **C:\HPCHEM\MS11\DATA\050420\05042016.D** Batch ID: **12103** Analysis Date: **04/20/2005 20:51**
Sample ID: **05041801-02AMS** Units : **µg/L** Run ID: **MSD_11_050420A** Prep Date: **04/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	262	50	250	0	105	45	163			
Ethanol	241	5	250	0	96	50	149			
Surr: Hexafluoro-2-propanol	502		500		100	63	137			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B-DI**
File ID: **C:\HPCHEM\MS11\DATA\050420\05042017.D** Batch ID: **12103** Analysis Date: **04/20/2005 21:11**
Sample ID: **05041801-02AMSD** Units : **µg/L** Run ID: **MSD_11_050420A** Prep Date: **04/20/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	252	50	250	0	101	45	163	261.8	3.8(22)	
Ethanol	212	5	250	0	85	50	149	240.9	12.9(15)	
Surr: Hexafluoro-2-propanol	511		500		102	63	137			

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: *02-May-05*

QC Summary Report

Work Order: 05041801

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B/DHS LUFT Manual**
File ID: **C:\HPCHEM\MS06\DATA\050419\05041912.D** Batch ID: **MS06W0419B** Analysis Date: **04/19/2005 13:26**
Sample ID: **MBLK MS06W0419B** Units : **µg/L** Run ID: **MSD_06_050419A** Prep Date: **04/19/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	ND	50								
Surr: 1,2-Dichloroethane-d4	9.5		10		95	76	128			
Surr: Toluene-d8	10.1		10		101	84	113			
Surr: 4-Bromofluorobenzene	10.1		10		101	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**
File ID: **C:\HPCHEM\MS06\DATA\050419\05041911.D** Batch ID: **MS06W0419B** Analysis Date: **04/19/2005 13:03**
Sample ID: **GLCS MS06W0419B** Units : **µg/L** Run ID: **MSD_06_050419A** Prep Date: **04/19/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	387	50	400		97	78	127			
Surr: 1,2-Dichloroethane-d4	9.64		10		96	76	128			
Surr: Toluene-d8	9.76		10		98	84	113			
Surr: 4-Bromofluorobenzene	10.2		10		102	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B/DHS LUFT Manual**
File ID: **C:\HPCHEM\MS06\DATA\050419\05041916.D** Batch ID: **MS06W0419B** Analysis Date: **04/19/2005 15:25**
Sample ID: **05041801-01AGS** Units : **µg/L** Run ID: **MSD_06_050419A** Prep Date: **04/19/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2120	250	2000	0	106	70	139			
Surr: 1,2-Dichloroethane-d4	47.7		50		95	76	128			
Surr: Toluene-d8	49		50		98	84	113			
Surr: 4-Bromofluorobenzene	52.8		50		106	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B/DHS LUFT Manual**
File ID: **C:\HPCHEM\MS06\DATA\050419\05041917.D** Batch ID: **MS06W0419B** Analysis Date: **04/19/2005 15:48**
Sample ID: **05041801-01AGSD** Units : **µg/L** Run ID: **MSD_06_050419A** Prep Date: **04/19/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH Purgeable	2250	250	2000	0	112	70	139	2120	5.8(12)	
Surr: 1,2-Dichloroethane-d4	47.7		50		95	76	128			
Surr: Toluene-d8	49.7		50		99	84	113			
Surr: 4-Bromofluorobenzene	53.2		50		106	79	119			

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.

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

Sample Receipt Checklist

Date Report is due to Client : **4/26/2005**

Date of Notice : **4/18/2005 10:29:16**

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 : **USA 57**

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

Project Manager: **Gowri Kowtha**

Client's Phone: **(530) 676-6002**

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

Work Order Number: **STR05041801**

Date Received: **4/18/2005**

Received by: Stacy Marie Strock

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 :

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 : STR05041801

Report Due By : 5:00 PM On : 26-Apr-05

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

Gowri Kowtha
TEL : (530) 676-6002 x
FAX : (530) 676-6005
EMail gkowtha@stratusinc.net

EDD Required : **Yes** PDF Required : **No**

Sampled by : VINCE Z

Report Attention : Gowri Kowtha Job : USA 57 Cooler Temp : 4 °C **18-Apr-05**

CC Report : PO : Client's COC # : 05389

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
STR05041801-01A	MW-3	AQ	04/14/05 10:21	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-02A	MW-5	AQ	04/14/05 08:03	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-03A	MW-4	AQ	04/14/05 08:54	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-04A	MW-6	AQ	04/14/05 13:20	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-05A	MW-7	AQ	04/14/05 11:51	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-06A	MW-8	AQ	04/14/05 11:00	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-07A	S-1	AQ	04/14/05 09:41	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	
STR05041801-08A	S-2	AQ	04/14/05 12:40	5	0	6		MeOH / EtOH	GAS-C	BTEX/OXY_ C/1,2DCA/E DB	

Comments: Security seals intact-frozen ice. Saturday delivery-samples kept secure and on ice until log-in on Monday 04/18/05. Send copy of receipt checklist with final report. Global ID: T0600101808. ;

	Signature	Print Name	Company	Date/Time
Received by:	Stacy M Strock	Stacy Strock	**Alpha Analytical, Inc.**	4/18/05 10:50

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 ENV., Inc.
Address 3330 Cameron Park Dr. #550
City, State, Zip Cameron Park, CA
Phone Number 530-676-6009 Fax 530-676-6005

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 X NV ___ WA ___
ID ___ OR ___ OTHER ___

Page # 1 of 1

05383

Client Name	P.O. #	Job #
USA 57		
Address	**EMail Address**	
10500 Macarthur Blvd.		
City, State, Zip	**Phone #**	**Fax #**
Oakland, CA		

Sampled by: Vince Z.

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sample Description	TAT	Field Filtered	Total and type of containers ** See below	TPHG-BTEX	5 oxy's	EDB	1,2-DCA	Methanol	Ethanol
1021	2005 04/14	AQ	STR0504E01-01	MW-3	Std		5.V	X	X	X	X	X	X
0803			-02	MW-5									
0854			-03	MW-4									
1320			-04	MW-6									
1151			-05	MW-7									
1100			-06	MW-8									
0941			-07	S-1									
1240	04/14	AQ	-08	S-2	Std		5.V	X	X	X	X	X	X

Analyses Required

Required QC Level? I II III IV

EDD / EDF? YES X NO ___

Global ID # T0600101808

REMARKS

ADDITIONAL INSTRUCTIONS:

Signature	Print Name	Company	Date	Time
Relinquished by: Vince Zalutka	Vince Zalutka	Stratus Env., Inc.	4-15-05	10:10
Received by: [illegible]	[illegible]	Alpha Analytical Inc.	4-15-05	10:10
Relinquished by:				
Received by: Stacy Strock	Stacy Strock	Alpha	4/18/05	10:30
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