



Alameda County

SEP 2 9 2005

<u>Environ</u>mental Health

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

September 27, 2005 Project No. 2007-0057-01

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

Quarterly Groundwater Monitoring Report, Third Quarter 2005, for former USA Service Station No. 57, located at 10700 MacArthur Boulevard, Oakland, CA (LOP No. RO0000232)

Dear Mr. Chan:

Stratus Environmental, Inc. (Stratus) is submitting the attached report which presents the results of the third 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 Gowri Kowtha at (530) 676-6001.

Sincerely,

STRATUS ENVIRONMENTAL, INC

Stephen J. Carter, P.G.

Sr. Project Supervisor

Stephen J. Carter

No. 5577

ect/Manager

Quarterly Groundwife Monatoring Report, Third Quarter 2005 Attachment:

Mr. Charles Miller, USA Gasoline Corporation cc:

Mr. Ken Phares, Jay-Phares Corporation

Mr. Peter McIntyre, AEI Consultants

Alameda County

SEP 2 9 2005

Environmental Health

Date September 27, 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./ Gowri S. Kowtha, P.E.

Consultant Project No: 2007-0057-01

Primary Agency/Regulatory ID No: Barney Chan, Alameda County Department of Environmental Health / R00000232

WORK PERFORMED THIS QUARTER (Third 2005):

- 1. Stratus measured groundwater elevations and collected groundwater samples from wells S-1, S-2, and MW-3 through MW-5, MW-7, and MW-8 on July 19, 2005. Well MW-6 was dry.
- 2. Stratus compiled and evaluated groundwater monitoring data.
- Stratus prepared and submitted a report for the DPE mass removal event on August 24, 2005.
- 4. Stratus conducted a quarterly DPE mass removal event between August 29 and September 16, 2005.
- 5. Stratus prepared and submitted a Work Plan for Well Installation and In-Situ Groundwater Remediation (dated, August 31, 2005).

WORK PROPOSED FOR NEXT QUARTER (Fourth 2005):

- The next sampling event is tentatively scheduled for October 2005. Groundwater samples will be collected for laboratory analysis from wells S-1, S-2, and MW-3 through MW-8.
- 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. The work plan was approved by Alameda County on September 9, 2005. The proposed wells are scheduled to be installed on October 5 and October 6, 2005.
- Stratus will obtain necessary permits and install the iSOC™ system.
- 5. Stratus will conduct the fourth quarter 2005 DPE mass removal event.

Current Phase of Project:	Monitoring / Interim Remediation
Frequency of Groundwater Sampling:	All Wells = Quarterly
Frequency of Groundwater Monitoring:	Quarterly
Groundwater Sampling Date:	July 19, 2005
Is Free Product (FP) Present on Site:	No

FP Recovered This Quarter:

Cumulative FP Recovered to Date:

Approximate Depth to Groundwater:

Groundwater Flow Direction:

Radial away from a groundwater high centered around MW-3

Groundwater Gradient:

0.047 to 0.065 ft/ft

DISCUSSION:

At the time of the third quarter 2005 monitoring event, groundwater elevations had decreased between 0.08 and 3.21 feet in all wells except MW-7, which increased 0.01 feet since the previous monitoring event (April 14, 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 0.047 to 0.065 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. MTBE was also reported in well MW-7. The highest concentration of TPHG (970 μ g/L) was reported in well S-2, and the highest concentrations of benzene (82 μ g/L) and MTBE (200 μ g/L) were reported in well MW-3. TBA was reported in wells S-1 (11 μ g/L), S-2 (37 μ g/L), and MW-3 (1,000 μ g/L). 1,2-DCA was reported in wells S-1 (9.6 μ g/L), S-2 (38 μ g/L), and MW-3 (240 μ g/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 sample for well S-1 was above the EPA recommended limit of 2. As the reported results for this well 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 July 19, 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 (Third Quarter 2005)
•	Figure 3	Groundwater Analytical Summary (Third Quarter 2005)
	A 17 A	

Appendix A Field Data Sheets

Appendix B Sampling and Analysis Procedures

Appendix C Certified Analytical Reports and Chain-of-Custody Documentation

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Service Station No. 57

		Depth to	Well	Groundwater					= :: .	Total	
Well	Date	Water	Elevation	Elevation	TPHG	TPHD	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
Number	Collected	(feet)	(ft msl)	(ft msl)	(µg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)
	00400						620	4.4	2.5	27	NT.
S-1	02/12/87				010	5.000	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
1	03/12/02	16.29		62.39	500	< 50	2.8	4.8	0.79	4.4	63
1	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
4	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
1	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
	07/19/05	14.11		65.55	240	NA	6.1	< 0.50	0.60	< 0.50	60

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Service Station No. 57

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)
0.0	03/13/97		Sheen				3,400	3,800	1,300	11,000	NA
S-2	02/12/87	15.20		61.47	24,000	6,000	1,900	440	600	2,500	NA
	03/03/95	15.39	76.86	62.39	24,000 NA	NA	1,900 NA	NA	NA	2,500 NA	NA
C)	07/24/95	14.47	80.93	59.41	NA NA	NA NA	NA NA	NA	NA NA	NA	NA
Sheen	11/22/95	21.52	80.93	59.41 59.15	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA
	12/06/95	21.78		59.15 59.18	NA NA	NA	NA NA	NA NA	NA NA	NA	NA
	01/04/96	21.75		63.68	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA NA
01	01/31/97	17.25 21.21		59.72	13,000	<50	260	38	190	280	600*
Sheen	10/10/97	19.07		61.86	1,900	2,300	4.6	6.3	< 0.5	4.6	190*
Sheen	01/20/98	19.07		70.46	22,000	<100	980	160	320	680	570*
	04/28/98	13.71		67.22	160,000	<50	950	290	550	1,700	550*
	07/31/98			63.62	14,000	<500	170	70	170	230	490*
	11/02/98	17.31 16.48		64.45	17,000	<50 <50	650	230	<25	750	490*[1]
	06/10/99			61,23	4,400	<50	2	64	5.1	12	270
	10/18/00	19.70		62.37	5,100	660	62	44	52	78	430
	03/12/02	18.56		62.37 59.23	26,000	NA	1,400	180	520	340	750
	11/19/02	21.70		59.23 60.56	•	NA NA	1,400	32	76	214	270
	01/09/03	20.37			16,000	NA NA	160	76	210	290	400
	04/14/03	19.93		61.00	16,000	NA NA	270	70 90	200	290 277	410
	07/21/03	22.00		58.93	9,700		39	9.2	52	26.5	180
	10/09/03	21.58	01.00	59.35	10,000	NA	39 21		20	3.1	130
	01/15/04	20.44	81.90	61.46	6,300	NA	160	<2.0 [3] 76	170	231	430
	04/08/04	17.15		64.75	13,000	NA NA	76	13	<5.0[3]	500	92
	08/10/04	20.98		60.92	10,000		530	240	<3.0[3] 370	1,730	420
	11/11/04	21.95		59.95	20,000	NA	530 590	150	370 250	990	580
	01/19/05	20.33		61.57	17,000	NA			570	1,980	510
	04/14/05 07/19/05	16.17 16.25		65.73 65.65	20,000 970	NA NA	830 48	230 13	370 16 -	1,980 57	72

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Service Station No. 57

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)
		. 3	<u> </u>								
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
	07/19/05	11.94		68.38	390	NA	82	2.3	1.8	9.2	200

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Service Station No. 57

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-4	11/22/95	14.99	76.42	61.43	<50	200	<0.5	1.5	<0.5	1.7	6.4*
IVI VV	12/06/95	11.21	70.42	65.21	NA	NA	NA	NA	NA	NA	NA
	01/04/96	14.62		61.80	NA	NA NA	NA	NA	NA NA	NA	NA
	01/04/90	8.18		68.24	<50	<50	<0.5	2	<0.5	2	11*
	10/10/97	14.14		62.28	<50 <50	<50	<0.5	< 0.5	<0.5	<2	<5.0*
	01/20/98	7.05		69.37	<50 <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
	07/19/05	7.55	[4]	NM	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Service Station No. 57

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-5	11/22/95	19.56	80.52	60.96	<50	280	<0.5	1.8	<0.5	3	2.2*
101 00 -0	12/06/95	15.84	00.52	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*
<u> </u>	11/19/02	NM		NM				Well Dam	aged		
	01/09/03	NM		NM				Well Dam	aged		
	04/14/03	NM		NM				Well Dam	aged		
	07/21/03	NM		NM				Well Dam	aged		
	10/09/03	NM		NM				Well Dam	aged		
	01/15/04	NM		NM				Well Dam	aged		
	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 Dam	aged		
	01/19/05	NM		NM				Well Dam	aged		
	04/14/05	10.57	[4]	NM	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	07/19/05	11.77	[4]	NM	<100[2]	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Service Station No. 57

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 Xylencs (µg/L)	MTBE (μg/L)
MW-6	11/22/95	21.73	81.64	59.91	<50	140	<0.5	1.2	<0.5	1.5	5,3*
IVI VV -0	11/22/93	18.03	01.04	63.61	NA	NA	NA	NA	NA	NA	NA
	01/04/96	21.67		59.97	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
	01/04/90	16.01		65.63	70	<50	<0.5	2	<0.5	<1	5*
	10/10/97	20.55		61.09	70 80	<50	<0.5	< 0.5	<0.5	<2	<5*
		20.33 15.74		65.90	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	01/20/98					<50	<0.5	<0.5	<0.5 <0.5	<0.5	<5.0*
	04/28/98	10.78		70.86	<50		<0.5 <0.5	<0.5	<0.5 <0.5	<0.5 <0.5	<5.0*
	07/31/98	13.97		67.67	<50	<50		<0.5 NA			NA
	11/02/98	17.97		63.67	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 I			
	03/12/02	NM		NM				Unable to I			
	11/19/02	NM		NM				Unable to I			
	01/09/03	NM		NM				Unable to I			
	04/14/03	NM		NM				Unable to I			
	07/21/03	NM		NM				Unable to I	Locate		
	10/19/03	NM		NM			٠	Unable to I	Locate		
	01/15/04	NM		NM				Unable to I	Locate		
	04/08/04	NM		NM			Well O	bstructed -	Not Sampled		
	08/10/04	NM		NM			Well C	bstructed -	Not Sampled		
	11/11/04	17.20		64.44			Well C	bstructed -	Not Sampled		
	01/19/05	NM		ŃМ			Well C	bstructed -	Not Sampled		
	04/14/05	15.78		65.86	< 50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	07/19/05	16.43		65.21				11 Dry - No	t Sampled		

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Service Station No. 57

		Depth to	Well	Groundwater						Total	
Well	Date	Water	Elevation	Elevation	TPHG	TPHD	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
Number	Collected	(feet)	(ft msl)	(ft msl)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(μg/L)
NATIO 7	11/22/05	10.20	70.07	EO 49	<50	180	<0.5	0.57	<0.5	0.62	0.73*
MW-7	11/22/95	19.38	78.86	59.48							
	12/06/95	19.72		59.14	NA	NA	NA	NA	NA NA	NA	NA
	01/04/96	19.76		59.10	NA	NA 10	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
1	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	19.83		60.22	<50	NA NA	< 0.50	< 0.50	< 0.50	<0.50	1.5
							<0.50 <0.50	< 0.50	<0.50	< 0.50	< 0.50
	04/14/05	14.17		65.64	<50	NA					
	07/19/05	14.16		65.65	<50	NA	<0.50	< 0.50	< 0.50	<0.50	1.9

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Service Station No. 57

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*
1411 0	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*
				69.16	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	04/28/98	10.39 12.93		66.62	<50 <50	<50	<0.5 <0.5	<0.5	<0.5 <0.5	<0.5	<5.0*
	07/31/98 11/02/98	16.90		62.65	<50 <50	<500	<0.5	<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	ΝA	< 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
	07/19/05	15.78		64.72	< 50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

337.011	Date	Depth to	Well Elevation	Groundwater	TPHG	TPHD	Benzene	Toluene	Ethylbenzene	Total Xylenes	мтве
Well		Water		Elevation					•	·	
Number	Collected	(feet)	(ft msl)	(ft msl)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)
Note:											
* = MTBE a	nalyzed using E	PA Method 80	20/8021B						msl = Mean sea leve	el	
MTBE = Me	thyl tert-butyl e	ther							μg/L = micrograms	per liter	
TPHD = Tot	al petroleum hyd	drocarbons as	diesel								:
TPHG = Tot	al petroleum hyd	drocarbons as	gasoline						NA = Not analyzed		:
TPHG analyz	zed using EPA N	Method 8015B	and the remain	ning analytes using H	EPA Method 8	3260B			NM = Not measured	i	
[1] Laborato	ry indicates the	chromatogram	does not mate	h the diesel hydrocar	bon range pa	ttern.					
[2] Reporting	g limits were inc	reased due to	sample foamin	g.							:
[3] Reporting	g limits were inc	reased due to	high concentra	tions of target analyt	es.						
[4] Casing el	- levation invalid	- well casing r	nodified (cut) o	on April 12, 2005.							
		•									
Monitoring v	wells surveyed b	v Morrow Sur	veving on Febr	uary 10, 2004.							
		,									
Data prior to	November 19,	2002 provided	by GHH Engi	neerina							
prata prior to	resvember 19,	2002 provided	o, om angi	neering.							

TABLE 2

GROUNDWATER ANALYTICAL RESULTS
FOR OXYGENATES AND ADDITIONAL COMPOUNDS

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
	07/19/05	60	11	<1.0	<1.0	<1.0	9.6	<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
	07/19/05	72	37	<1.0	<1.0	<1.0	38	<2.0	<5,000	<5,000

TABLE 2

GROUNDWATER ANALYTICAL RESULTS FOR OXYGENATES AND ADDITIONAL COMPOUNDS

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
	07/19/05	200	1,000	<2.0[1]	<2.0[1]	<2.0[1]	240	<8.0[1]	<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
	07/19/05	< 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

Well	Date	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB	Methanol	Ethanol
Number	Collected	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)
MW-5	11/19/02					Well Damage	d			
	01/09/03					Well Damaged				
	04/14/03					Well Damage	d			
	07/21/03					Well Damageo				
	10/09/03					Well Damage	1			
	01/15/04					Well Damageo	đ			
	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	d			
	01/19/05					Well Damageo	d			
	04/14/05	< 0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	07/19/05	< 0.50	<10	<1.0	<1.0	<1.0	<1.0	<4.0[2]	<5,000	<5,000
MW-6	11/19/02				Ţ	Inable to Loca	ite			
	01/09/03				τ	Inable to Loca	ite			
	04/14/03				τ	Jnable to Loca	ıte			
	07/21/03				τ	Unable to Loca	ıte			
	10/19/03				Ţ	Jnable to Loca	ite			
	01/15/04			•	Į	Jnable to Loca	ite			
	04/08/04				Well O	ostructed - Not	Sampled			
	08/10/04				Well O	ostructed - Not	Sampled			
	11/11/04				Well Ol	ostructed - Not	Sampled			
	01/19/05				Well Ol	ostructed - Not	Sampled			
	04/14/05	< 0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	07/19/05				Wel	l Dry - Not Sai	mpled			

TABLE 2

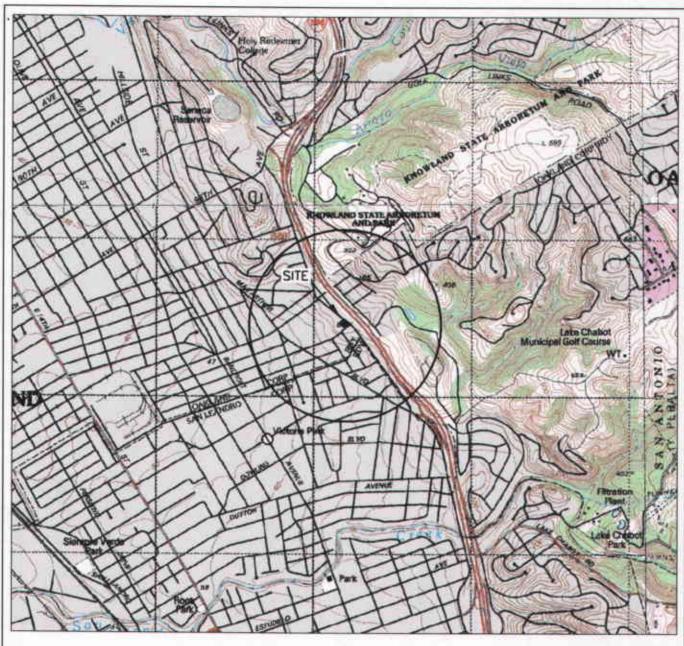
GROUNDWATER ANALYTICAL RESULTS FOR OXYGENATES AND ADDITIONAL COMPOUNDS

Well	Date	MTBE	TBA	DIPE	ETBE	TAME	1,2-DCA	EDB	Methanol	Ethanol
Number	Collected	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(µg/L)	(μg/L)	(μg/L)	(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
	07/19/05	1.9	<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
	07/19/05	< 0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000

TABLE 2

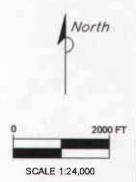
GROUNDWATER ANALYTICAL RESULTS FOR OXYGENATES AND ADDITIONAL COMPOUNDS

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 analy	zed using EPA Me	ethod 8260B				MTRF = Methyl	tertiary butyl ether			
μg/L = microgra	-	Alloa ozoob				TBA = Tertiary b	2 2			
NA = Not analyz	ed					DIPE = Di-isopro	opyl ether			
						ETBE = Ethyl ter	rtiary butyl ether			
[1] Reporting lin	its were increased	due to high concer	ntrations of target	analytes		TAME = Tertiary	amyl methyl ether			
[2] Reporting lin	its were increased	due to sample foat	ming			1,2-DCA = 1,2-D	Dichloroethane			
						EDB = 1.2-Dibro	moethane			



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



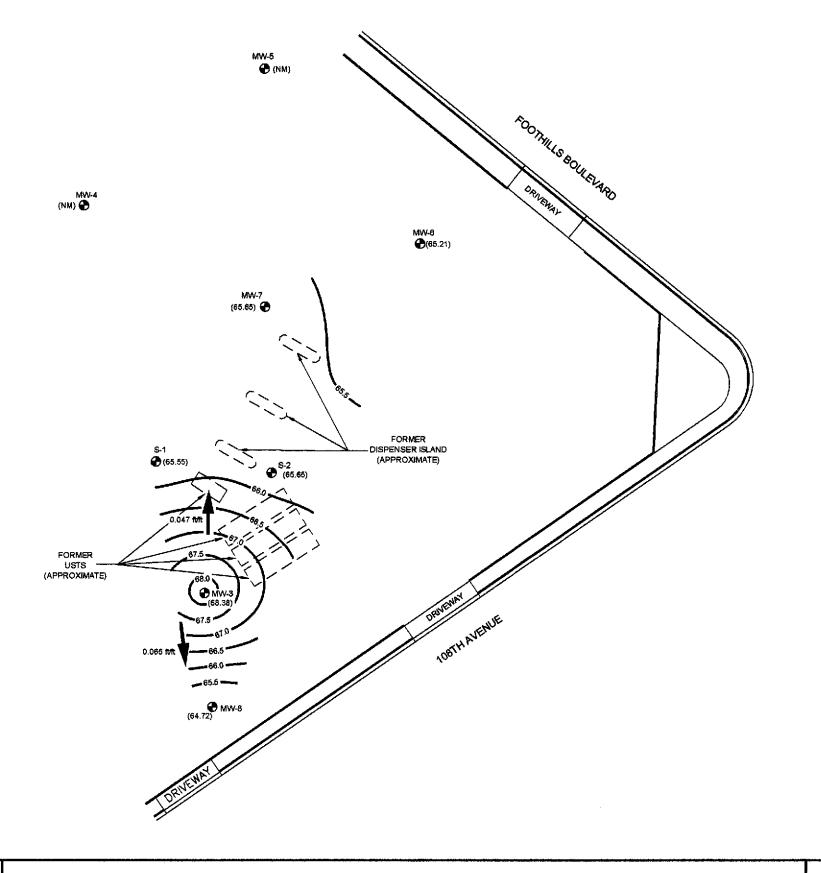


STRATUS ENVIRONMENTAL, INC.

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

1 PROJECT NO. 2007-0057-01

FIGURE



LEGEND

MW-3 MONITORING WELL LOCATION

(65.56) GROUND WATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL

INFERRED DIRECTION OF GROUND WATER FLOW

(NM) NOT MEASURED, CASING ELEVATION ALTERED

.....

WELLS MEASURED: 7/19/05

STRATUS ENVIRONMENTAL, INC.

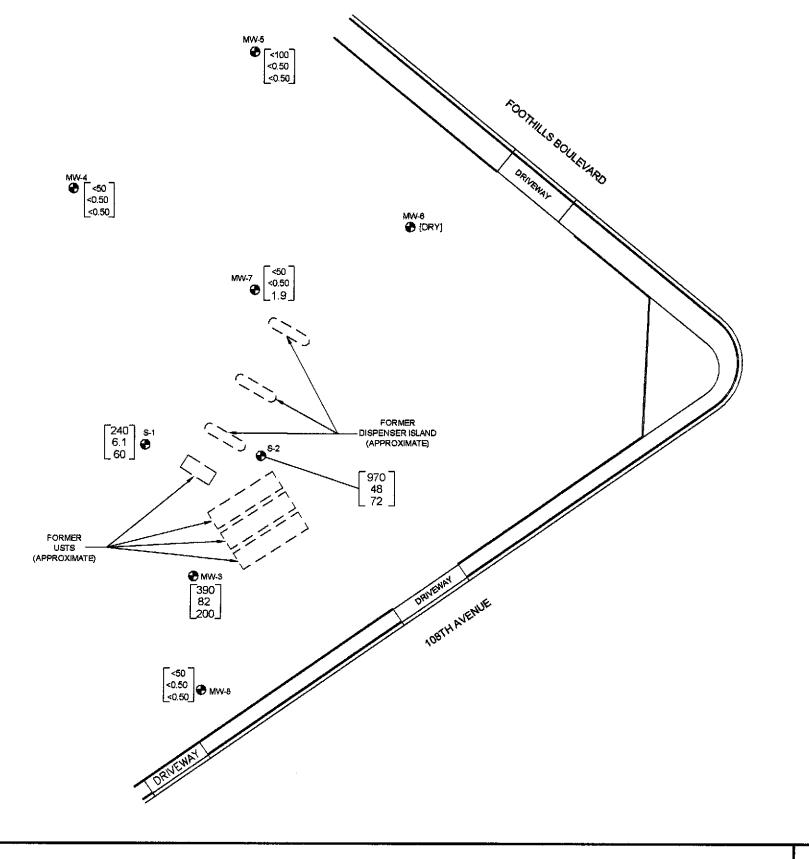


FORMER USA SERVICE STATION NO. 57 10700 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP 3rd QUARTER 2005

FIGURE

PROJECT NO. 2007-0057-01



LEGEND

♠ MW-3 MONITORING WELL LOCATION

| TOTAL PETROLEUM HYDROCARBONS AS GASOLINE IN µg/L | 40.50 | BENZENE CONCENTRATION IN µg/L | METHYL TERTIARY BUTYL ETHER CONCENTRATION IN µg/L

SAMPLES COLLECTED ON 7/19/05

TPHG ANALYZED BY EPA METHOD 8015B

BENZENE & MTBE ANALYZED BY EPA METHOD 8260B

STRATUS ENVIRONMENTAL, INC.



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

GROUNDWATER ANALYTICAL SUMMARY 3rd QUARTER 2005

FIGURE 3

PROJECT NO. 2007-0057-01

APPENDIX A FIELD DATA SHEETS



Global ID: T0600101808

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

Site Number	USA 57
Project No	U 57
Project PM	
Date	07/19/05



	Water	Level Data	-		F	Purge Vo	olume Ca	alculations		W	ell Pur	ge Mei	hod	Sa	mple Rec	ord	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	0411	11.94		42.5	30.56	4	2	61	22- Drx		Χ			35.49	MW-3	1100	.53
MW-4	0421	7.55		39	31.45	4	2	63	30-Pry			X		16.17	MW-4	0757	2.95
MW-5	0425	11.77		34	22.23	4	2	44	7 2-Dry			X		15.70	MW-5	0710	5.71
MW-6	0633	16.43		17/40	.57	4	2	DRY	DRY	X				NIM	MW-6	N/5	N/M
MW-7	0429	14.16		42	27.84	4	2	55	55			x		23.15	MW-7	0626	1.00
8-WM	0407	15.78		37.5	21.72	4	2	43	43		X			33.27	MW-8	1047	7.55
S-1	0416	14.11		41	26.89	3	1	27	27		X	•		25.47	S-1	0957	. 44
S-2	0435	16.25		42	25.75	3	1	26	26		`	X		30.35	S-2	0537	.74
								_								,	
			-														



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

Site Number <u>USA 57</u>

Project No <u>U 57</u>

Project PM <u>0</u>

Date <u>07/19/05</u>



Well ID		MV	V-3		Well ID	- V	MV	V-4 07	5 7	
purge start time	B	ailer	Na	0601	purge start time	071	9	N=	odor	
	Temp C	рН	cond	gallons		Temp C	pН	cond	gailons	
time	19.3	7.20	784	Ø	time	20.9	7.51	589	Ø	
time	19.7	6.85	775	动	tìme	DR	YC	30 gg	130	
time Dry	19.7	6.85	775	(2)	time	20.1	7.38		(30)	
time <i>C 54m</i>	19.5	7.05	753		time					
purge stop time					purge stop time					
Well ID		MV	V-5		Well ID		MV	V-6		
purge start time	0652		C	POR	purge start time		DRY	/		
	Temp C	рН	cond	gallons		Temp C	pΗ	cond	gallons	
time	19.9	8.88	412	Ø	time					
time	DA	XX	22 gel	2 22	time		\times	·		
time	19.8	8.56	629	44	time					
time			(time					
purge stop time					purge stop time					
Well ID		MV	V-7 0	1626	Well ID		MV	V-8 /	1047	
Purge start time	0554	, 0	No c	DOR	Purge start time Bailer No Od					
	Temp C	рН	cond	gallons		Temp C	pН	cond	gallons	
time	19.6	7.46	651	D	time	19.2	7.14	798	Ø	
time	19.7	7,48	642	27	time	19.4	7.02	776	22	
time	18.8	7.55	658	55	time	19.3	7.21	790	43	
time					time					
purge stop time	061	4			purge stop time			104- 1-4-1/V		
Well ID		S-	1 0	957	Well ID		S	-2 0	537	
purge start time	Ва	ila	· E	dor	purge start time	0508	3	No 01	DOR	
	Temp C	pН	cond	gallons		Temp C	pН	cond	gallons	
time	19.6	6.89	681	<i>₹</i>	time	19.8	7.24	669	83	
time	19.7	6.97	746	14	time	19.4	7.11	657	13	
time	19.2	6.99	788	27	time	19.0	7.18	643	26	
time			T-A-C		time					
purge stop time				•	purge stop time	0518	2			

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



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



ANALYTICAL REPORT

Stratus Environmental 3330 Cameron Park Drive Cameron Park, CA 956828861 Attn:

Gowri Kowtha

Phone:

(530) 676-6001

Fax:

(530) 676-6005

Date Received: 07/20/05

Job#:

2007-0057-01/USA 57

GC/MSD by Direct Injection EPA Method SW8260B-DI

		Parameter	Concentration	Reporting Limit	Date Date Sampled Analyzed
Client ID:	S-1				
Lab ID :	STR05072160-01A	Methanol	ND	5,000 μg/L	07/19/05 07/25/05
		Ethanol	ND	5,000 μg/L	07/19/05 07/25/05
Client ID:	S-2				
Lab ID:	STR05072160-02A	Methanol	ND	5,000 μg/L	07/19/05 07/25/05
		Ethanol	ND	5,000 μg/L	07/19/05 07/25/05
Client ID:	MW-3				
Lab ID:	STR05072160-03A	Methanol	ND	5,000 μg/L	07/19/05 07/25/05
		Ethanol	ND	5,000 μg/L	07/19/05 07/25/05
Client ID:	MW-4				
Lab ID:	STR05072160-04A	Methanol	ND	5,000 µg/L	07/19/05 07/25/05
		Ethanol	ND	5,000 µg/L	07/19/05 07/25/05
Client ID:	MW-5				27/27/77 27/05/05
Lab ID:	STR05072160-05A	Methanol	ND	5,000 μg/L	07/19/05 07/25/05
		Ethanol	ND	5,000 μg/L	07/19/05 07/25/05
Client ID:	MW-7				
Lab ID:	STR05072160-06A	Methanol	ND	5,000 μg/L	07/19/05 07/25/05
		Ethanol	ND	5,000 µg/L	07/19/05 07/25/05
Client ID:	MW-8				
Lab ID:	STR05072160-07A	Methanol	ND	5,000 μg/L	07/19/05 07/25/05
		Ethanol	ND	5,000 μg/L	07/19/05 07/25/05

Reported in micrograms per liter, per client request.

ND = Not Detected

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

7/27/05

Report Date



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

ANALYTICAL REPORT

Stratus Environmental 3330 Cameron Park Drive Cameron Park, CA 956828861 Attn: Gowri Kowtha Phone: (530) 676-6001 Fax: (530) 676-6005 Date Received: 07/20/05

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	Concentr	ation	Reporting	Date	Date
				Limit	Sampled	Analyzed
Client ID:	TPH Purgeable	240		50 μg/L	07/19/05	07/22/05
S-1	Tertiary Butyl Alcohol (TBA)	11		10 μg/L	07/19/05	07/22/05
Lab ID:	Methyl tert-butyl ether (MTBE)	60		0.50 μg/L	07/19/05	07/22/05
STR05072160-01A	Di-isopropyl Ether (DIPE)	ND		1.0 μg/L	07/19/05	07/22/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	07/19/05	07/22/05
	1,2-Dichloroethane	9.6		1.0 µg/L	07/19/05	07/22/05
	Benzene	6.1		0,50 μg/L	07/19/05	07/22/05
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	07/19/05	07/22/05
	Toluene	ND		0.50 µg/L	07/19/05	07/22/05
	1,2-Dibromoethane (EDB)	ND		2.0 μg/L	07/19/05	07/22/05
	Ethylbenzene	0.60		0.50 μg/L	07/19/05	07/22/05
	m,p-Xylene	ND		0.50 μg/L	07/19/05	07/22/05
	o-Xylene	ND		0.50 μg/L	07/19/05	07/22/05
	- y					
Client ID:	TPH Purgeable	9 70		50 μg/L	07/19/05	07/22/05
S-2	Tertiary Butyl Alcohol (TBA)	37		10 μg/L	07/19/05	07/22/05
Lab ID :	Methyl tert-butyl ether (MTBE)	72		0.50 μg/L	07/19/05	07/22/05
STR05072160-02A	Di-isopropyl Ether (DIPE)	ND		1.0 μ g/ L	07/19/05	07/22/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/[.	07/19/05	07/22/05
	1,2-Dichloroethane	38		1.0 µg/L	07/19/05	07/22/05
	Benzene	48		0.50 μg/L	07/19/05	07/22/05
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	07/19/05	07/22/05
	Toluene	13		0.50 μg/L	07/19/05	07/22/05
	1,2-Dihromoethane (EDB)	ND		2.0 μg/L	07/19/05	07/22/05
	Ethylbenzene	16		0.50 μg/L	07/19/05	07/22/05
	m.p-Xylene	36		0.50 µg/L	07/19/05	07/22/05
	o-Xylene	21		0.50 μg/L	07/19/05	07/22/05
Client ID:	TPH Purgeable	390		200 μg/L	07/19/05	07/22/05
MW-3	Tertiary Butyl Alcohol (TBA)	1,000		20 μg/L	07/19/05	07/22/05
Lab ID :	Methyl tert-butyl ether (MTBE)	200		1.0 μg/L	07/19/05	07/22/05
STR05072160-03A	Di-isopropyl Ether (DIPE)	ND	v	2.0 μg/L	07/19/05	07/22/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND	V	2.0 μg/L	07/19/05	07/22/05
	1,2-Dichloroethane	240		2.0 μg/L	07/19/05	07/22/05
	Benzene	82		1,0 µg/L	07/19/05	07/22/05
	Tertiary Amyl Methyl Ether (TAME)	ND	v	2.0 μg/L	07/19/05	07/22/05
	Toluene	2.3		1.0 μg/L	07/19/05	07/22/05
	1,2-Dibromoethane (EDB)	ND	v	8.0 µg/L	07/19/05	07/22/05
	Ethylbenzene	1.8		1.0 µg/L	07/19/05	07/22/05
	m,p-Xylene	6.1		1.0 μg/L	07/19/05	07/22/05
	o-Xylene	3.1		1.0 μg/L	07/19/05	07/22/05
	•					



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Client ID:	TPH Purgeable	ND		50 μg/L	07/19/05	07/22/05
MW-4	Tertiary Butyl Alcohol (TBA)	ND		10 μg/L	07/19/05	07/22/05
Lab ID :	Methyl tert-butyl ether (MTBE)	ND		0.50 μg/L	07/19/05	07/22/05
STR05072160-04A	Di-isopropyl Ether (DIPE)	ND		1.0 μg/L	07/19/05	07/22/05
521000010100	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 μg/L	07/19/05	07/22/05
	1,2-Dichloroethane	ND		1.0 μg/L	07/19/05	07/22/05
	Benzene	ND		0.50 μg/L	07/19/05	07/22/05
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 μg/L	07/19/05	07/22/05
	Toluene	ND		0.50 μg/L	07/19/05	07/22/05
	1,2-Dibromoethane (EDB)	ND		2.0 μg/L	07/19/05	07/22/05
	Ethylbenzene	ND		0. 50 μg/L	07/19/05	07/22/05
	m,p-Xylene	ND		0.50 μg/L	07/19/05	07/22/05
	o-Xylene	ND		0.50 μg/L	07/19/05	07/22/05
	0-Aylene	ND		0100 762		
Client ID:	TPH Purgeable	ND	0	100 µg/L	07/19/05	07/22/05
MW-5	Tertiary Butyl Alcohol (TBA)	ND		10 μg/L	07/19/05	07/22/05
Lah ID:	Methyl tert-butyl ether (MTBE)	ND		0.50 μg/L	07/19/05	07/22/05
STR05072160-05A	Di-isopropyl Ether (DIPE)	ND		1.0 μg/L	07/19/05	07/22/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 μg/L	07/19/05	07/22/05
	1,2-Dichloroethane	ND		1.0 μg/L	07/19/05	07/22/05
	Benzene	ND		0.50 μg/L	07/19/05	07/22/05
	Tertiary Amyl Methyl Ether (TAME)	ND		$1.0~\mu \mathrm{g/L}$	07/19/05	07/22/05
	Toluene	ND		0.50 μg/L	07/19/05	07/22/05
	1,2-Dibromoethane (EDB)	ND	0	4.0 μg/L	07/19/05	07/22/05
	Ethylbenzene	ND		$0.50~\mu g/L$	07/19/05	07/22/05
	m,p-Xylene	ND		0.50 μg/L	07/19/05	07/22/05
	o-Xylene	ND		0.50 μg/L	07/19/05	07/22/05
Client ID:	TPH Purgeable	ND		50 μg/L	07/19/05	07/22/05
MW-7	Tertiary Butyl Alcohol (TBA)	ND		10 μg/L	07/19/05	07/22/05
Lab ID:	Methyl tert-butyl ether (MTBE)	1.9		0.50 μg/L	07/19/05	07/22/05
STR05072160-06A	Di-isopropyl Ether (DIPE)	ND		1.0 μg/L	07/19/05	07/22/05
3 [K03072100-007.	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 μg/L	07/19/05	07/22/05
	1,2-Dichloroethane	ND		1.0 μg/L	07/19/05	07/22/05
	Benzene	ND		0.50 μg/L	07/19/05	07/22/05
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	07/19/05	07/22/05
	Toluene	ND		0.50 μg/L	07/19/05	07/22/05
	1,2-Dibromoethane (EDB)	ND		2.0 μg/L	07/19/05	07/22/05
	Ethylbenzene	ND		0.50 µg/L	07/19/05	07/22/05
	m,p-Xylene	ND		0.50 μg/L	07/19/05	07/22/05
	o-Xylene	ND		0,50 μg/L	07/19/05	07/22/05
	•	NID		50/T	07/10/05	07/22/05
Client ID :	TPH Purgeable	ND		50 μg/L	07/19/05	07/22/05
MW-8	Tertiary Butyl Alcohol (TBA)	ND		10 μg/L	07/19/05	07/22/05
Lab ID:	Methyl tert-butyl ether (MTBE)	ND		0.50 μg/L	07/19/05	07/22/05
STR05072160-07A	Di-isopropyl Ether (DIPE)	ND		1.0 μg/L	07/19/05	07/22/05
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 μg/L t 04	07/19/05	07/22/05
	1,2-Dichloroethane	ND		1.0 μg/L	07/19/05	
	Benzene	ND		0.50 μg/L	07/19/05	07/22/05 07/22/05
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	07/19/05	
	Toluene	ND		0.50 μg/L	07/19/05	07/22/05
	1,2-Dibromoethane (EDB)	ND		2.0 μg/L	07/19/05	07/22/05
		3.50		0.500	07/10/0¢	ብን/ንን/ቢና
	Ethylbenzene	ND		0.50 μg/L	07/19/05	07/22/05
		ND ND		0.50 μg/L 0.50 μg/L 0.50 μg/L	07/19/05 07/19/05 07/19/05	07/22/05 07/22/05 07/22/05



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

O = Reporting Limits were increased due to sample foaming.

Reported in micrograms per liter, per client request.

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

ND = Not Detected

Roger L. Scholl Kandy Staden Dalter Hinkow Roger L. Scholl, Ph.D., Laboratory Director · Randy Gardner, Laboratory Manager · · Water Hurchman, Quality Assurance Officer Sacramento, CA = (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

Report Date



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: STR05072160 Project: 2007-0057-01/USA 57

WOIR OF MET BITTER TO THE				
Alpha's Sample ID	Client's Sample ID	Matrix	рН	
05072160-01A	S-1	Aqueous	6	
05072160-02A	S-2	Aqueous	2	
05072160-03A	MW-3	Aqueous	2	
05072160-04A	MW-4	Aqueous	2	
05072160-05A	MW-5	Aqueous	2	
05072160-06A	MW-7	Aqueous	2	
05072160-07A	MW-8	Aqueous	2	

7/27/05 Report Date Billing Information:

CHAIN-OF-CUSTODY RECORD

Page: 1 of 1

Alpha Analytical, Inc.

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

Report Due By: 5:00 PM On: 28-Jul-05

Client:

Stratus Environmental 3330 Cameron Park Drive

Suite 550

Cameron Park, CA 95682-8861

TEL: (530) 676-6001 FAX: (530) 676-6005

EMail gkowtha@stratusinc.net

Gowri Kowtha

EDD Required: Yes

Sampled by: Vince Zalutka

Report Attention: Gowri Kowtha

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

Client's COC #: none

Cooler Temp: 4 °C

WorkOrder: STR05072160

Date Printed: 21-Jul-05

CC Report : QC Level: S3

= Final Rpt, MBLK, LCS, MS/MSD With Surrogates

											Requested	Tests				
	Client Sample ID	Matrix	Collection Date	No. of ORG	Bottles SUB	TAT	PWS#	ALCOHOL_ W	тенге_w	voc_w			-			S
	<u> </u>							L							L	Sample Remarks
STR05072160-01A	S-1	AQ	07/19/05 09:57	6	0	6		MeOH / EtOH	GAS-C	BTEX/OXY/ EDB/1,2DC A C						
STR05072160-02A	S-2	AQ	07/19/05 09:37	6	0	6		MeOH / EtOH	GAS-C	BTEX/OXY/ EDB/1,2DC A_C					Ţ <u></u>	
STR05072160-03A	MW-3	AQ	07/19/05 11:00	6	0	6	17.	MeOH / ErOH	GAS-C	BTEX/OXY/ EDB/1,2DC A_C						
STR05072160-04A	MW-4	QA	07/19/05 07:57	6	0	6		MeOH / EtOH	GAS-C	BTEX/OXY/ EDB/1,2DC A_C	T					
STR05072160-05A	MW-5	AQ	07/19/05 07:10	6	0	6		MeOH / EtOH	GAS-C	BTEX/OXY/ EDB/1,2DC A_C				 -		
STR05072160-06A	MW-7	AQ	07/19/05 06:26	6	0	6		MeOH / EtOH	GAS-C	BTEX/OXY/ EDB/1,2DC A C						
STR05072160-07A	MW-8	AQ	07/19/05 10:47	6	0	6		MeOH / ErOH	GAS-C	BTEX/OXY/ EDB/1,2DC A_C			<u>-</u>	_ :		

Comments:	Security seals intact, trozen ice. Send copy of i	eceipt

checklist with final report. Sampling date on COC differs from labels, logged in with sampling date as 7/19/05:

	Signature	Print Name	Company	Date/Time
Received by:	Sypaine Deference	S. SIFUENCES	Alpha Analytical, Inc.	721 05 12:05
				

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:		Stratus Environmental		Global ID:	T0600101808			Т										
Address: 3330 Cameron Park Drive		EDF:	YES			1		1	naly	lica)			Alpha Analytical, Inc.						
City	, State, Zip:		Cameron Park, CA 95567		Project#	2007-0057-01			1	/-	3/			5 \		255 Glendale			
Fax:	1110 110 110 100 I			001	Email:					1		/ 3	λ,	171		Suite 21			
			Copy		Report Atten	tion;			1	13	\ 1	(Sparks, NV 8	9431		
	Client:		USA 57		Sampled By:	Vince Zalutka			1	1	?.\ <u>`</u>		プ/、	7/		(775) 355-104			
	Address:		10700 McArthur Blvd.								.0	mei	3121			(775) 355-0406 Fax			
City, State, Zip: Oakland, CA										e #	1	of	1			(1.10) 000 040	V . U.A		
													Regue	sted]			
Time Sampled	Date Sampled	Matrix	Lab ID (For Lab Use ONLY)		Occupation Description		6 4000	TAT (Working	TPHG	втех	5 OXY's	1,2-DCA	ED8	Ethanol					
0957		AQ	STROS 072160-01		Sample Des	cription	Containers	Days)			<u>~</u>	5.			$oxed{oxed}$		Rem		
0937	07/08//05	AQ AQ		S-1			HCL VOA's	8TD	Х	X	x		x x	X	$oxedsymbol{oxed}$	Sampling de	e du	fers from	(00
1100	07/09//05		<u>~57</u>	T		. .	HCL VOA's	STD	Х	x	X	х .	<u> </u>	X		3-milling Fine	diffe.	& from COC	
0757	07/09//05	AQ	1 "	MW-3	·		HCL VOA's	STO	X	X	<u>x</u>	X	<u> </u>	X					
07/0	07/09//05	AQ	-04	MW-4			HCL VOA's	S7D	X	x	x	x :	<u> </u>	х					
N/3	07/09/106	AQ	-05	MW-5		 .	HCL VOA's	_5TD	X	x	х	X	<u> </u>	X					
	07/09/105	AQ		MW-6			HCL VOA's	sto	Х	X	х	X :	<u> </u>	x		not.	5 M	pled	$\neg \vdash$
0626	07/09/105	AQ	-0%				HCL VOA's	STD	Х	X	X	<u> </u>	<u> </u>	x				,	\neg
047	07/09//05	AQ		MW-8			HCL VOA's	STD	Х	X	х	<u>x </u>	<u>x x</u>	X				_	V
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ADDITIO	NAL INST	RUCTIO	NS:																
		, .	Signature									Co	mpan	····		Date	—т	Time	
Relinquish		my	I Zaliettson		Vince Zalutka				Stratus Environmental						ai	7.20.0	- 	⊘ ၅33	
Received by:				Mills Git House				NA'n							7-20-6		ت در <i>ا</i>		
telinguish:		· P · · · · ·	\ 								J						-	7,5	
Received by: Itphane sifuents				2. SIFWENTES				ALPHA							7-21-	25	12:05		
telinguish																	-	<u> </u>	
eceived l	y:				<u> </u>														
			Key: AQ - Aqueous WA -	Waste 01	- Other	L - Liter V - VOA	S-Soil Jar	O - Ort	ю	T-1	edlar	Ē	- Bras	В	P - Plas	tic OT - Other	3.		
NOTE	: Samples	are disca	rded 60 days after sample receipt applicable only to the	unless other arr ose samples re	angements are ceived by the la	made. Hazardous sa aboratory with this COC	mples will be r	eturned to o	tient	or dis	posed	of at	client	exper	ise. The	e report for the analys	sis of th	e above sample	 #3 is