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

Mr. Don Hwang Alameda County Health Agency Department of Environmental Health 1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor Alameda, California 94502



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

Dear Mr. Hwang:

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

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

Sincerely,

STRATUS ENVIRONMENTAL, INC.

Gowri & Kowtha, P.E.

Senior Engineer

Stephen J. Carter, R.G.

Project Manager

TE OF CALL Attachment: Quarterly Groundwater Monitoring Report, Second Quarter 2004

cc: Mr. Charles Miller, USA Gasoline Corporation

Mr. Ken Phares, Jay-Phares Corporation

Mr. Peter McIntyre, AEI Consultants

Date	July 15, 2004
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#### USA GASOLINE QUARTERLY GROUNDWATER MONITORING REPORT

10700 MacArthur Blvd., Oakland, California
Charles Miller
Stratus Environmental, Inc./ Stephen J. Carter, R.G.
2007-0057-01
Don Hwang, Alameda County Department of Environmental Health / 4490

#### WORK PERFORMED THIS QUARTER (Second 2004):

- Stratus measured groundwater elevations and collected groundwater samples from wells S-1, S-2, MW-3 through MW-5, MW-7, and MW-8 on April 8, 2004. Well MW-6 is obstructed and could not be sampled.
- 2. Stratus compiled and evaluated groundwater monitoring data.

#### **WORK PROPOSED FOR NEXT QUARTER (Third 2004):**

- 1. The next sampling event is tentatively scheduled for July 2004. Groundwater samples will be collected for laboratory analysis from wells S-1, S-2, MW-3, MW-4, MW-5, MW-7, and 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 conduct a DPE feasibility test.

Current Phase of Project:	Monitoring
Frequency of Groundwater Sampling:	All Wells = Quarterly
Frequency of Groundwater Monitoring:	Quarterly
Groundwater Sampling Date:	April 8, 2004
Is Free Product (FP) Present on Site:	No
FP Recovered This Quarter:	No
Cumulative FP Recovered to Date:	NA
Approximate Depth to Groundwater:	10.76 to 19.29 feet below top of well casing
Groundwater Flow Direction:	Toward a groundwater low near well S-1, and away from a groundwater high near well MW-3
Groundwater Gradient:	0.048 to 0.086 ft/ft

#### **DISCUSSION:**

At the time of the second quarter 2004 monitoring event, groundwater elevations had increased between 0.59 and 3.29 feet in wells S-2, MW-4, MW-7, and MW-8, and decreased 1.08 feet in well S-1 since the previous monitoring event (January 15, 2004). Depth-to-water measurements were corrected to mean sea level (MSL) and used to construct a groundwater elevation contour map (Figure 2). The groundwater flow direction on April 8, 2004, was toward a groundwater low in the vicinity of well S-1, and away from a groundwater high in the vicinity of well MW-3. Gradients ranged from 0.048 to 0.086 ft/ft. Groundwater flow toward the southwest, south, southeast, and north has been observed at this site.

TPHG, benzene, and MTBE were reported in the sample collected from well S-2. TPHG and MTBE were also reported in well S-1, and MTBE was reported in wells MW-3 and MW-7. The highest concentrations of TPHG (13,000  $\mu g/L$ ), benzene (160  $\mu g/L$ ), and MTBE (430  $\mu g/L$ ) were reported in well S-2. TBA was reported in wells S-1 (8.5  $\mu g/L$ ), S-2 (130  $\mu g/L$ ), MW-3 (7.6  $\mu g/L$ ), and MW-7 (9.0  $\mu g/L$ ). DIPE, ETBE, TAME, 1,2-DCA, EDB, methanol, or ethanol were not reported in any of the wells. The laboratory noted that the reporting limits for DIPE, ETBE, TAME, 1,2-DCA, and EDB in well S-2 were raised due to high concentrations of target analytes, and the EDB reporting limit in well MW-5 was raised due to sample foaming. Concentrations reported during the second quarter 2004 are generally consistent with historical analytical data. Analytical results of TPHG, benzene, and MTBE for groundwater samples collected on April 8, 2004, are presented in Figure 3.

#### **ATTACHMENTS:**

•	Table 1	Groundwater Elevation and Analytical Summary
•	Table 2	Groundwater Analytical Results for Oxygenates and Additional Compounds

• Figure 1 Site Location Map

Figure 2 Groundwater Elevation Contour Map (Second Quarter 2004)
 Figure 3 Groundwater Analytical Summary (Second Quarter 2004)

Appendix A Field Data Sheets

• Appendix B Sampling and Analysis Procedures

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

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

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

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Station No. 57

<i>y</i>	1	Depth to	Well	Groundwater						Total	
Well	Date	Water	Elevation	Elevation	<b>TPHG</b>	TPHD	Benzene	Toluene	Ethylbenzene	<b>Xylenes</b>	MTBE
Number	Collected	(feet)	(ft msl)	(ft msl)	$(\mu g/L)$	(µg/L)	(µg/L)	(µg/L)	(μ <b>g/L</b> )	(μg/L)	(µg/L)
S-2	03/03/95	15.39	76.86	61.47	24,000	6,000	1,900	440	600	2,500	NA
	07/24/95	14.47		62.39	NA	NA	NA	NA	NA	NA	NA
فللمنافظة والمراجع الماني	11/22/95	21.52	80.93	59.41	NA	NA	NA	NA	NA	NA	NA
	12/06/95	21.78		59.15	NA	NA	NA	NA	NA	NA	NA
	01/04/96	21.75		59.18	NA	NA	NA	NA	NA	NA	NA
	01/31/97	17.25		63.68	NA	NA	NA	NA	NA	NA	NA
	10/10/97	21.21		59.72	13,000	<50	260	38	190	280	600*
	01/20/98	19.07		61.86	1,900	2300	4.6	6.3	< 0.5	4.6	190*
	04/28/98	10.47		70.46	22,000	<100	980	160	320	680	570*
	07/31/98	13.71		67.22	160,000	<50	950	290	550	1,700	550*
	11/02/98	17.31		63.62	14,000	< 500	170	70	170	230	490*
	06/10/99	16.48		64.45	17,000	<50	650	230	<25	750	490*[1]
	10/18/00	19.70		61.23	4,400	< 50	2	64	5.1	12	270
	03/12/02	18.56		62.37	5,100	660	62	44	52	78	430
	11/19/02	21.70		59.23	26,000	NA	1,400	180	520	340	750
	01/09/03	20.37		60.56	16,000	NA	120	32	76	214	270
	04/14/03	19.93		61.00	16,000	NA	160	76	210	290	400
	07/21/03	22.00		58.93	9,700	NA	270	90	200	277	410
	10/09/03	21.58		59.35	10,000	NA	39	9.2	52	26.5	180
	01/15/04	20.44	81.90	61.46	6,300	NA	21	<2.0 [3]	20	3.1	130
	04/08/04	17.15		64.75	13,000	NA	160	76	170	231	430

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

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-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	/97 20.62																				59.70	3,400	1,100	830	4	100	<10
	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																	

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Station No. 57

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	TPHG (μg/L)	TP <b>HD</b> (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*																											
	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																																				
	11/19/02	13.24						63.18	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50																							
	01/09/03	11.00		65.42	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50																											
	04/14/03	11.03		65.39	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50																											
	07/21/03	13.10		63.32	< 50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50																											
	10/09/03	13.33		63.09	< 50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50																											
	01/15/04	12.14		64.28	<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																											

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Extract USA 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*
	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 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	~		
	04/08/04	16.80		63.72	<100	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

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

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA 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-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					59.27	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	3.8																																							
	01/09/03	18.38		60.48	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	2.7																																										
	04/14/03	18.17		60.69	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50																																										
	07/21/03	20.29		58.57	< 50	NA	< 0.50	< 0.50	< 0.50	< 0.50	1.8																																										
	10/09/03	19.48	79.81																																											59.38	< 50	NA	< 0.50	< 0.50	< 0.50	< 0.50	2.9
	01/15/04	18.45		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																																										

TABLE 1

GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY
Former USA Station No. 57

Well Number	Date Collected	Depth to Water	Well Elevation	Groundwater Elevation	TPHG	TPHD	Benzene	Toluene	Ethylbenzene	Total Xylenes	MTBE
MW-8	11/22/95	(feet) 33.33	(ft msl) 79.55	(ft msl)	(μg/L)	(μg/L)	(μg/L)	(μg/L)	(μg/ <b>L</b> )	(µg/L)	(μg/L)
IVI VV -0			19.55	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		58.41	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	01/09/03	17.90		61.65	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	04/14/03	17.84		61.71	<50	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	07/21/03	19.79		59.76	<100[2]	NA	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	10/09/03	21.02		58.53	<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

#### TABLE 1

#### GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY

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 a	= MTBE analyzed using EPA Method 8020/8021B msl = Mean sea level													
MTBE = Me	$\mu g/L = \text{micrograms per liter}$													
TPHD = Tot	PHD = Total petroleum hydrocarbons as diesel													
PHG = Total petroleum hydrocarbons as gasoline  NA = Not analyzed														
TPHG analy	PHG analyzed using EPA Method 8015B and the remaining analytes using EPA Method 8260B  NM = Not measured													
[1] Laborato	ry indicates the	chromatogram	does not mate	h the diesel hydrocar	bon range pa	ttern.								
[2] Reportin	g limits were in-	creased due to	sample foamir	ıg.										
[3] Reportin	g limits were in	creased due to	high concentra	ations of target analyt	es.									
Monitoring v	wells re-surveye	d by Morrow S	Surveying on F	ebruary 10, 2004.										
Data prior to	November 19,	2002 provided	by GHH Engi	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
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
MW-3	04/08/04	19	7.6	<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)
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
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

TABLE 2

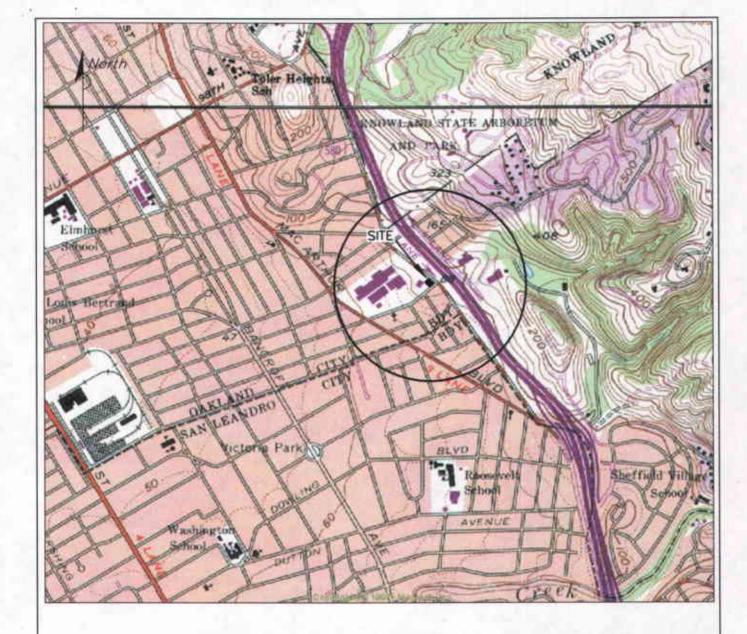
GROUNDWATER ANALYTICAL RESULTS
FOR OXYGENATES AND ADDITIONAL COMPOUNDS

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)	Ethano (μg/L)
MW-6	04/08/04				Well Ob	structed - Not	Sampled			
MW-7	11/19/02	3.8	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	01/09/03	2.7	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	04/14/03	< 0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	07/21/03	1.8	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	10/09/03	2.9	<5.0	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	01/15/04	2.6	7.9	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	04/08/04	0.81	9.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
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

#### 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  µg/L = microgra  NA = Not analyz	•	thod 8260B				MTBE = Methyl tertiary butyl ether TBA = Tertiary butyl alcohol							
[1] Reporting lim	uits were increased of		-	analytes		DIPE = Di-isopro ETBE = Ethyl ter TAME = Tertiary 1,2-DCA = 1,2-D EDB = 1,2-Dibro	tiary butyl ether amyl methyl ether pichloroethane						



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



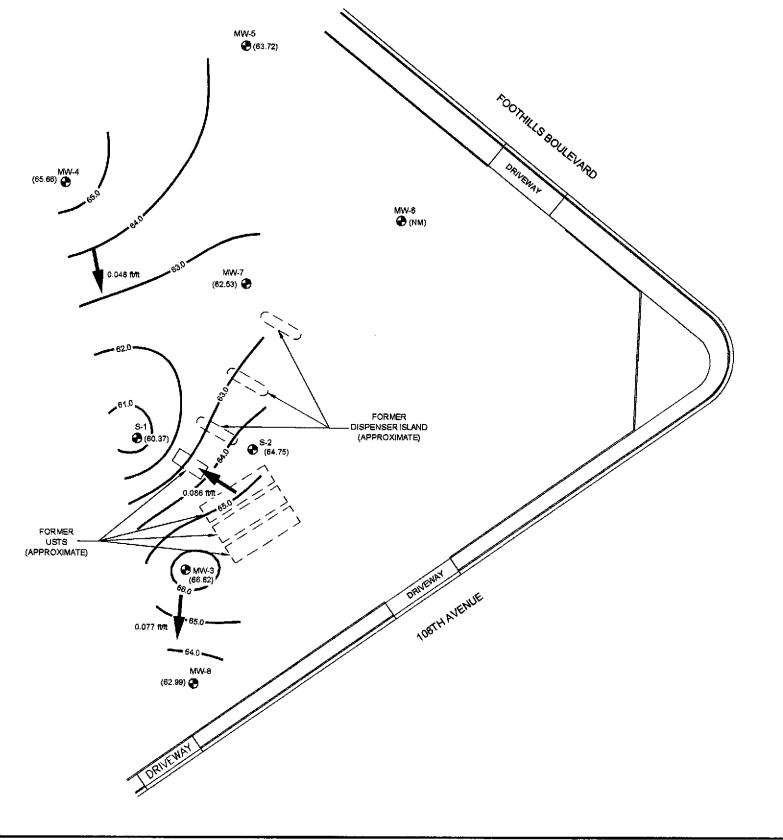


STRATUS ENVIRONMENTAL, INC.

USA SERVICE STATION NO. 57 10700 MACARTHUR BOULEVARD OAKLAND, CALIFORNIA SITE LOCATION MAP FIGURE

1
PROJECT NO.

2007-0057-01



LEGEND

♠ MW-3 MONITORING WELL LOCATION

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

INFERRED DIRECTION OF GROUND WATER FLOW

(NM) NOT MEASURED (WELL OBSTRUCTED)

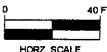
WELLS MEASURED: 4/08/04

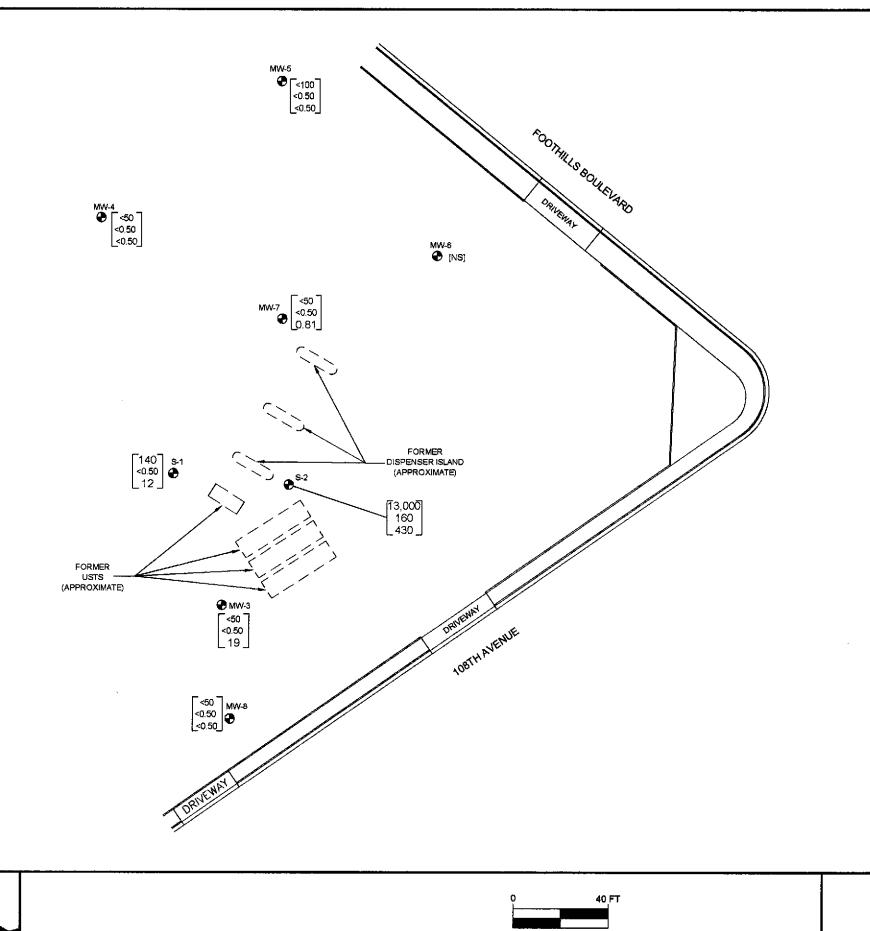
FORMER USA STATION NO. 57
40 FT 10500 MACARTHUR BOULEVARD
OAKLAND, CALIFORNIA

GROUNDWATER ELEVATION CONTOUR MAP 2nd QUARTER 2004 FIGURE 2

PROJECT NO. 2007-0057-01

STRATUS ENVIRONMENTAL, INC.





HORZ. SCALE

LEGEND

→ MW-3 MONITORING WELL LOCATION

[NS] NOT SAMPLED (WELL OBSTRUCTED)

<0.50 BENZENE CONCENTRATION IN µg/L
<0.50 METHYL TERTIARY BUTYL ETHER CONCENTRATION IN µg/L

SAMPLES COLLECTED ON 4/08/04

TPHG ANALYZED BY EPA METHOD 80158

BENZENE & MTBE ANALYZED BY EPA METHOD 8260B

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

**GROUNDWATER ANALYTICAL SUMMARY** 2nd QUARTER 2004

**FIGURE** 3

PROJECT NO. 2007-0057-01

STRATUS ENVIRONMENTAL, INC.



Site Address:	
City	ĺ
Sampled By Auke	_

Site Number:	SA 57
Project No	
Project PM	
Date Sampled_	4/8/04

	Water Le	evel Data	· · · · · · · · · · · · · · · · · · ·			Purge Vol	ume Calcu	lations			Well P	urge M	lethod	Śa	mple Red	ord	Field
	,	-		Total	Casing			Three	Actual		,			DTW			Data
1		Depth to		Depth of	Waler	Well .	Multiplier	Casing	Water					At			Dissolved
		waler	Screen	Well	Column	Diameler		Volumes	Purged	No					Sample		
Well ID	Time	feet	feet	feet	(A)	(inches)	(B)	(gallons)	(gallons)	Purge	Bailer	Pump	Other	Time	I.D.	Time	(mg/L)
70.3	0'103	13.7		42.7	29.1	4	2	58	58						3	0748	
<u> </u>	0413	10.76		43 42	31.69			63	63						4	0641	
5	21116	16.8	<del></del>	3760	70.8	<u> </u>	<u> </u>	441	41	<u> </u>	<u>.</u>				5	0500	
16	0422	17.3		<b>€</b>	<b>\</b>		1 / L	الماي	Bloc	Kca	( <u>(</u>	ر ا	XLY		6		
1 7	0411	17.28		4185	14.57	(	\	29	29						7	0503	
No-8	3400	17.51		37.70	70.19	u	2_	400	40						8	0733	
<u> </u>	ļ		<del></del>														
2	5406	19.29			21.5		1.	21	21	<u> </u>					l	202	
5.2	040%	17.15		42.85	25.7	_3_	1	25	25						7	0556	
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March 17.3 is as FAN As water sounder will Go No water. OBSA rected of DRY Multiplier Values

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

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

Page 1 of 2



Site Address	
City	
Site Sampled	by 171/602

Site	Number 4	SA 57
Proje	ct No	
	ct PM	
Date	Sampled_	4/7/04

Well ID M~	<i>5</i>				Well ID /1-	. 7			Well ID 7-7								
purge start time				_	purge start time												
	Temp C	рН	cond	gallons		Temp C	рН	cond	gallons								
time	18.4	10.10	964	0	time	18.5	7.20	C35	6								
time	193	207	969	20	time	19.9	7.60	645	15								
time	19.6	7.96	900	41	time	19 5	754	663	29								
time					time		<u> </u>										
purge stop time					pugre stop time												
Well ID ≤- Z					Well ID ML	- 4											
purge start time				,	purge start time		·										
	Temp C	pН	cond	gallons		Temp C	рH	cond	galions								
time	97	7.06	652	Ð	time	20.0	6.97	757	B								
time	199	699	658	12	time	20.3	6.83	764	30								
time	19.5	6.5	677	25	time	19.6	6.71	770	63								
time	_				time												
purge stop time					purge stop time												
Well ID 5-1					Well ID 🍎 🖊	14.3											
purge start time					purge start time												
	Temp C	рН	cond	gallons		Temp C	рН	cond	gallons								
time	20.3	734	744	Ø	time	20.5	7.59	896	-0								
time	20.4	7.12	768	10	time	20.7	7.48	912	20								
time	14.7	7.09	790	21	time	19.6	7.20	98	58								
time					time												
purge stop time					purge stop time												
Well ID / - ·	8				Well ID												
purge start time					purge start time												
	Temp C	рН	cond	gallons		Temp C	рН	cond	gallons								
time	9	6.76	1076	2	time												
time 7	21.3	6.41	1091	20	time												
time	15.7	6.45	1187	40	time												
time				·	time												
purge stop time					purge stop time												

#### 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<sup>®</sup> type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Upon recovery, the sample container is sealed to minimize the potential of volatilization and cross-contamination prior to chemical analysis. Soil sampling tubes are typically closed at each end with Teflon® 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.



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#### ANALYTICAL REPORT

Stratus Environmental 3330 Cameron Park Drive Cameron Park, CA 956828861 Attn: Gowri Kowtha Phone: (530) 676-6002

APR 3 0 2004

Fax:

(530) 676-6005

Date Received 04/10/04

Job#:

1 1× 5 7 m

**USA 57** 

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

	Parameter	Concentration	Reporting	Date	Date
			Limit	Sampled	Analyzed
Client ID:	TPH Purgeable	ND	50 μg/L	04/08/04	04/14/04
MW-3	Tertiary Butyl Alcohol (TBA)	7.6	5.0 μg/L	04/08/04	04/14/04
Lab ID:	Methyl tert-butyl ether (MTBE)	19	0.50 µg/L	04/08/04	04/14/04
STR04041241-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	04/08/04	04/14/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	04/08/04	04/14/04
	1,2-Dichloroethane	ND	1.0 µg/L	04/08/04	04/14/04
	Benzene	ND	0.50 µg/L	04/08/04	04/14/04
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 μg/L	04/08/04	04/14/04
	Toluene	ND	0.50 μg/L	04/08/04	04/14/04
	1,2-Dibromoethane (EDB)	ND	2.0 μg/L	04/08/04	04/14/04
	Ethylbenzene	ND	0.50 μg/L	04/08/04	04/14/04
	m,p-Xylene	ND	0.50 μg/L	04/08/04	04/14/04
	o-Xylene	ND	0.50 μg/L	04/08/04	04/14/04
Client ID:	TPH Purgeable	ND	50 μg/L	04/08/04	04/14/04
MW-4	Tertiary Butyl Alcohol (TBA)	ND	10 μg/L	04/08/04	04/14/04
Lab ID:	Methyl tert-butyl ether (MTBE)	ND	0.50 μg/L	04/08/04	04/14/04
STR04041241-02A	Di-isopropyl Ether (DIPE)	ND	1.0 μg/L	04/08/04	04/14/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 μg/L	04/08/04	04/14/04
	1,2-Dichloroethane	ND	1.0 μg/L	04/08/04	04/14/04
	Велгене	ND	0.50 μg/L	04/08/04	04/14/04
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	04/08/04	04/14/04
	Toluene	ND	0.50 µg/L	04/08/04	04/14/04
	1,2-Dibromoethane (EDB)	ND	2.0 μ <b>g/</b> L	04/08/04	04/14/04
	Ethylbenzene	ND	0.50 μg/L	04/08/04	04/14/04
•	m,p-Xylene	ND	0.50 μg/L	04/08/04	04/14/04
	o-Xylene	ND	$0.50~\mu g/L$	04/08/04	04/14/04
Client ID:	TPH Purgeable	ND	100 μg/L	04/08/04	04/14/04
MW-5	Tertiary Butyl Alcohol (TBA)	ND	10 μg/L	04/08/04	04/14/04
Lab ID:	Methyl tert-butyl ether (MTBE)	ND	0.50 μg/L	04/08/04	04/14/04
STR04041241-03A	Di-isopropyl Ether (DIPE)	ND	1.0 μg/L	04/08/04	04/14/04
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 μ <b>g</b> /L	04/08/04	04/14/04
	1,2-Dichloroethane	ND	1.0 μg/L	04/08/04	04/14/04
	Benzene	. ND	0.50 μg/L	04/08/04	04/14/04
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 μg/L	04/08/04	. 04/14/04
	Toluene	ND	0.50 µg/L	04/08/04	04/14/04
	1.2-Dibromoethane (EDB)	ND O	4.0 μg/L	04/08/04	04/14/04
	Ethylbenzene	ND	$0.50~\mu g/L$	04/08/04	04/14/04
	m,p-Xylene	ND	0.50 µg/L	04/08/04	04/14/04
	o-Xylene	ND	0.50 μg/L	04/08/04	04/14/04



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MW-7         Tertiary Butyl Alcohol (TBA)         9.0         5.0 μg/L         04/08/04         0.0           Lab ID:         Methyl tert-butyl ether (MTBE)         0.81         0.50 μg/L         04/08/04         0.0           STR04041241-04A         Di-isopropyl Ether (DIPE)         ND         1.0 μg/L         04/08/04         0.0           Ethyl Tertiary Butyl Ether (ETBE)         ND         1.0 μg/L         04/08/04         0.0           1,2-Dichloroethane         ND         1.0 μg/L         04/08/04         0.0           Benzene         ND         0.50 μg/L         04/08/04         0.0           Tertiary Amyl Methyl Ether (TAME)         ND         1.0 μg/L         04/08/04         0.0           Toluene         ND         0.50 μg/L         04/08/04         0.0           1,2-Dibromoethane (EDB)         ND         0.50 μg/L         04/08/04         0.0           Ethylbenzene         ND         0.50 μg/L         04/08/04         0.0           m,p-Xylene         ND         0.50 μg/L         04/08/04         0.0           MW-8         Tertiary Butyl Alcohol (TBA)         ND         10 μg/L         04/08/04         0.0           STR04041241-05A         Methyl tert-butyl ether (MTBE)         ND         <	\(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/04\) \(14/0
Lab ID   Methyl tert-butyl ether (MTBE)   0.81   0.50 µg/L   04/08/04   0.00     STR04041241-04A   Di-isopropyl Ether (DIPE)   ND   1.0 µg/L   04/08/04   0.00     Ethyl Tertiary Butyl Ether (ETBE)   ND   1.0 µg/L   04/08/04   0.00     1,2-Dichloroethane   ND   1.0 µg/L   04/08/04   0.00     Benzene   ND   0.50 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   1.0 µg/L   04/08/04   0.00     1,2-Dibromoethane (EDB)   ND   0.50 µg/L   04/08/04   0.00     1,2-Dibromoethane (EDB)   ND   0.50 µg/L   04/08/04   0.00     1,2-Dibromoethane (EDB)   ND   0.50 µg/L   04/08/04   0.00     Ethylbenzene   ND   0.50 µg/L   04/08/04   0.00     m,p-Xylene   ND   0.50 µg/L   04/08/04   0.00     0-Xylene   ND   0.50 µg/L   04/08/04   0.00     O-Xylene   ND   0.50 µg/L   04/08/04   0.00     MW-8   Tertiary Butyl Alcohol (TBA)   ND   1.0 µg/L   04/08/04   0.00     MW-8   Tertiary Butyl Ether (MTBE)   ND   0.50 µg/L   04/08/04   0.00     STR04041241-05A   Di-isopropyl Ether (MTBE)   ND   1.0 µg/L   04/08/04   0.00     STR04041241-05A   Di-isopropyl Ether (ETBE)   ND   1.0 µg/L   04/08/04   0.00     1,2-Dichloroethane   ND   0.50 µg/L   04/08/04   0.00     1,2-Dichloroethane   ND   0.50 µg/L   04/08/04   0.00     1,2-Dichloroethane   ND   0.50 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   1.0 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   1.0 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   1.0 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   1.0 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   1.0 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   1.0 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   1.0 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   0.50 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   0.50 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   ND   0.50 µg/L   04/08/04   0.00     Tertiary Amyl Methyl Ether (TAME)   N	1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04
STR04041241-04A   Di-isopropyl Ether (DIPE)   ND   1.0 μg/L   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   0	1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04
Ethyl Tertiary Butyl Ether (ETBE) ND   1.0 μg/L   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04	1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04 1/14/04
1,2-Dichloroethane   ND   1.0 μg/L   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/0	7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04 7/14/04
Benzene   ND   0.50 μg/L   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
Tertiary Amyl Methyl Ether (TAME) ND   1.0 μg/L   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
Toluene   ND   0.50 μg/L   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
1,2-Dibromoethane (EDB)   ND   2.0 μg/L   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
Ethylbenzene   ND   0.50 μg/L   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04   04/08/04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
o-Xylene         ND         0.50 μg/L         04/08/04         04/08/04           Client ID :         TPH Purgeable         ND         50 μg/L         04/08/04         04/08/04           MW-8         Tertiary Butyl Alcohol (TBA)         ND         10 μg/L         04/08/04         04/08/04           Lab ID :         Methyl tert-butyl ether (MTBE)         ND         0.50 μg/L         04/08/04         04/08/04           STR04041241-05A         Di-isopropyl Ether (DIPE)         ND         1.0 μg/L         04/08/04         04/08/04           Ethyl Tertiary Butyl Ether (ETBE)         ND         1.0 μg/L         04/08/04         04/08/04           1,2-Dichloroethane         ND         0.50 μg/L         04/08/04         04/08/04           Benzene         ND         0.50 μg/L         04/08/04         04/08/04           Toluene         ND         0.50 μg/L         04/08/04         04/08/04           1,2-Dibromoethane (EDB)         ND         2.0 μg/L         04/08/04         04/08/04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
Client ID : TPH Purgeable ND 50 µg/L 04/08/04 04  MW-8 Tertiary Butyl Alcohol (TBA) ND 10 µg/L 04/08/04 04  Lab ID : Methyl tert-butyl ether (MTBE) ND 0.50 µg/L 04/08/04 04  STR04041241-05A Di-isopropyl Ether (DIPE) ND 1.0 µg/L 04/08/04 04  Ethyl Tertiary Butyl Ether (ETBE) ND 1.0 µg/L 04/08/04 04  1,2-Dichloroethane ND 1.0 µg/L 04/08/04 04  Benzene ND 0.50 µg/L 04/08/04 04  Tertiary Amyl Methyl Ether (TAME) ND 1.0 µg/L 04/08/04 04  Toluene ND 0.50 µg/L 04/08/04 04  1,2-Dibromoethane (EDB) ND 0.50 µg/L 04/08/04 04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
MW-8         Tertiary Butyl Alcohol (TBA)         ND         10 μg/L         04/08/04         04/08/04           Lab ID:         Methyl tert-butyl ether (MTBE)         ND         0.50 μg/L         04/08/04         04/08/04           STR04041241-05A         Di-isopropyl Ether (DIPE)         ND         1.0 μg/L         04/08/04         04/08/04           Ethyl Tertiary Butyl Ether (ETBE)         ND         1.0 μg/L         04/08/04         04/08/04           1,2-Dichloroethane         ND         0.50 μg/L         04/08/04         04/08/04           Benzene         ND         0.50 μg/L         04/08/04         04/08/04           Tertiary Amyl Methyl Ether (TAME)         ND         1.0 μg/L         04/08/04         04/08/04           Toluene         ND         0.50 μg/L         04/08/04         04/08/04         04/08/04           1,2-Dibromoethane (EDB)         ND         2.0 μg/L         04/08/04         04/08/04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
Lab ID:       Methyl tert-butyl ether (MTBE)       ND       0.50 μg/L       04/08/04       04         STR04041241-05A       Di-isopropyl Ether (DIPE)       ND       1.0 μg/L       04/08/04       04         Ethyl Tertiary Butyl Ether (ETBE)       ND       1.0 μg/L       04/08/04       04         1,2-Dichloroethane       ND       1.0 μg/L       04/08/04       04         Benzene       ND       0.50 μg/L       04/08/04       04         Tertiary Amyl Methyl Ether (TAME)       ND       1.0 μg/L       04/08/04       04         Toluene       ND       0.50 μg/L       04/08/04       04         1,2-Dibromoethane (EDB)       ND       2.0 μg/L       04/08/04       04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04 /14/04
STR04041241-05A         Di-isopropyl Ether (DIPE)         ND         1.0 μg/L         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04/08/04         04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04
Ethyl Tertiary Butyl Ether (ETBE)       ND       1.0 μg/L       04/08/04       04         1,2-Dichloroethane       ND       1.0 μg/L       04/08/04       04         Benzene       ND       0.50 μg/L       04/08/04       04         Tertiary Amyl Methyl Ether (TAME)       ND       1.0 μg/L       04/08/04       04         Toluene       ND       0.50 μg/L       04/08/04       04         1,2-Dibromoethane (EDB)       ND       2.0 μg/L       04/08/04       04	/14/04 /14/04 /14/04 /14/04 /14/04 /14/04
1,2-Dichloroethane       ND       1.0 μg/L       04/08/04       04         Benzene       ND       0.50 μg/L       04/08/04       04         Tertiary Amyl Methyl Ether (TAME)       ND       1.0 μg/L       04/08/04       04         Toluene       ND       0.50 μg/L       04/08/04       04         1,2-Dibromoethane (EDB)       ND       2.0 μg/L       04/08/04       04	/14/04 /14/04 /14/04 /14/04 /14/04
Benzene         ND         0.50 μg/L         04/08/04         04           Tertiary Amyl Methyl Ether (TAME)         ND         1.0 μg/L         04/08/04         04           Toluene         ND         0.50 μg/L         04/08/04         04           1,2-Dibromoethane (EDB)         ND         2.0 μg/L         04/08/04         04	/14/04 /14/04 /14/04 /14/04
Tertiary Amyl Methyl Ether (TAME)       ND       1.0 μg/L       04/08/04       04         Toluene       ND       0.50 μg/L       04/08/04       04         1,2-Dibromoethane (EDB)       ND       2.0 μg/L       04/08/04       04	/14/04 /14/04 /14/04
Toluene ND 0.50 μg/L 04/08/04 04 1,2-Dibromoethane (EDB) ND 2.0 μg/L 04/08/04 04	/14/04 /14/04
1,2-Dibromoethane (EDB) ND 2.0 µg/L 04/08/04 04	/14/04
Ethyllaurana ND 0.50 0.400/04 0.4	14/04
Ethylbenzene ND 0.50 µg/L 04/08/04 04	
m,p-Xylene ND 0.50 μg/L 04/08/04 04	/14/04
o-Xylene ND 0.50 μg/L 04/08/04 04	/14/04
Client ID : TPH Purgeable 140 50 µg/L 04/08/04 04	/14/04
S-1 Tertiary Butyl Alcohol (TBA) 8.5 5.0 μg/L 04/08/04 04	14/04
Lab ID : Methyl tert-butyl ether (MTBE) 12 $0.50 \mu g/L$ $04/08/04$ $04$	/14/04
STR04041241-06A Di-isopropyl Ether (DIPE) ND 1.0 μg/L 04/08/04 04	14/04
Ethyl Tertiary Butyl Ether (ETBE) ND 1.0 µg/L 04/08/04 04	14/04
1,2-Dichloroethane ND 1.0 μg/L 04/08/04 04	14/04
Benzene ND 0.50 μg/L 04/08/04 04	14/04
Tertiary Amyl Methyl Ether (TAME) ND 1.0 μg/L 04/08/04 04	14/04
1.6	14/04
· · ·	14/04
	14/04
• •	14/04
o-Xylene ND 0.50 μg/L 04/08/04 04.	14/04
Client ID : TPH Purgeable 13,000 500 µg/L 04/08/04 04	14/04
S-2 Tertiary Butyl Alcohol (TBA) 130 50 μg/L 04/08/04 04/	14/04
Lab ID : Methyl tert-butyl ether (MTBE) 430 2.5 $\mu$ g/L 04/08/04 04/08/04	14/04
STR04041241-07A Di-isopropyl Ether (DIPE) ND V 5.0 μg/L 04/08/04 04/08/04	14/04
Ethyl Tertiary Butyl Ether (ETBE) ND V 5.0 μg/L 04/08/04 04/	14/04
1,2-Dichloroethane ND V 5.0 μg/L 04/08/04 04/	14/04
· <del>·</del>	14/04
	14/04
	14/04
· · · · · · · · · · · · · · · · · · ·	14/04
	14/04
	14/04
o-Xylene 31 2.5 μg/L 04/08/04 04/	14/04



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O = Reporting Limits were increased due to sample foaming.

Reported in micrograms per liter, per client request.

RL's vary due to analyte sensitivities, interferences, sample dilutions and/or problematic environmental matrices.

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

ND = Not Detected

Roger Scholl Kundy Saulner Dalter Arriban 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

4/19/04

Report Date



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VOC pH Report

Work Order STR04041241

Project: USA 57

Alpha's Sample ID	Client's Sample ID	Matrix	pН	
04041241-01A	MW-3	Aqueous	2	
04041241-02A	MW-4	Aqueous	2	
04041241-03A	MW-5	Aqueous	2	
04041241-04A	MW-7	Aqueous	2	
04041241-05A	MW-8	Aqueous	2	
04041241-06A	S-1	Aqueous	2	
04041241-07A	S-2	Aqueous	2	



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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 04/10/04

Job#: USA 57

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

		Parameter	Concentration	Reporting	Date Date
		* *************************************		Limit	Sampled Analyzed
Client ID:	MW-3				
Lab ID:	STR04041241-01A	Methanol	ND	5,000 μg/L	04/08/04 04/20/04
	-	Ethanol	ND	5,000 µg/L	04/08/04 04/20/04
Client ID:	MW-4				
Lab ID:	STR04041241-02A	Methanol	ND	5,000 μg/L	04/08/04 04/20/04
		Ethanol	ND	5,000 μg/L	04/08/04 04/20/04
Client ID:	MW-5			•	
Lab ID:	STR04041241-03A	Methanol	ND	5,000 μg/L.	04/08/04 04/20/04
		Ethanol	ND	5,000 µg/L	04/08/04 04/20/04
Client ID:	MW-7				
Lab ID:	STR04041241-04A	Methanol	ND	5,000 µg/L	04/08/04 04/20/04
		Ethanol	ND	5,000 μg/L	04/08/04 04/20/04
Client ID:	MW-8				
Lab ID:	STR04041241-05A	Methanol	ND	5,000 μg/L	04/08/04 04/20/04
		Ethanol	ND	5,000 μg/L	04/08/04 04/20/04
Client ID:	S-1				
Lab ID:	STR04041241-06A	Methanol	ND	5,000 µg/L	04/08/04 04/20/04
		Ethanol	ND	5,000 μg/L	04/08/04 04/20/04
Client ID:	S-2				
Lab ID:	STR04041241-07A	Methanol	ND	5,000 μg/L	04/08/04 04/20/04
		Ethanol	ND	5,000 μg/L	04/08/04 04/20/04

Reported in micrograms per liter, per client request.

Roger Scholl

ND = Not Detected

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

4/21/04

Report Date



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Date: 22-Apr-04		QC S	ummar	y Repo	rt			<b>Work Order:</b> 04041241
Method Blank File ID: C:\HPCHEM\MS11\DATA\040420\04 Sample ID: MBLK-9738 Analyte	042003.D Units : μg/L Result	Type M	B Run ID: <b>G</b>	est Code: E atch ID: 973 C/MSD_11_ SpkRefVal	8 040420	)A	Analysis Date:	e: <b>04/20/2004 08:27</b> <b>04/20/2004</b> efVal %RPD(Limit) Qual
Methanoi Ethanol Surr: Hexafluoro-2-propanoi	ND ND 496	5000 5000			99	69	135	
Laboratory Control Spike File ID: C:\HPCHEM\MS11\DATA\040420\04 Sample ID: LCS-9738 Analyte	042004.D Units : μg/L Result	Type L	B Run ID: <b>G</b>	est Code: E atch ID: 973 C/MSD_11_	8 040420	PΑ	Analysis Date:	e: 04/20/2004 08:48 04/20/2004
Methanol Ethanol Surr: Hexafluoro-2-propanol	208 241 492	50 5		Spkneival	83 91 98	51 47 69	161 137 135	efVal %RPD(Limit) Qual
Sample Matrix Spike File ID: C:\HPCHEM\MS11\DATA\040420\04 Sample ID: 04041240-02AMS	Units : μg/L		Ban ID: <b>G</b> a	est Code: E atch ID: 973 C/MSD_11_	8 040420	A	Analysis Date Prep Date:	e: 04/20/2004 09:29 04/20/2004
Analyte  Methanol Ethanol Surr: Hexafluoro-2-propanol	Result 212 267 490	PQL 50 5	250 250 500	SpkRefVal 0 0	85 107 98	51 47 69	161 137 135	rVal %RPD(Limit) Qual
Sample Matrix Spike Duplicate File ID: C:\HPCHEM\MS11\DATA\040420\044 Sample ID: 04041240-02AMSD	042007.D Units : աց/L	Туре М	Ва	est Code: El atch ID: 973 C/MSD_11_	8			: 04/20/2004 09:50 04/20/2004
Analyte  Methanol Ethanol Surr: Hexafluoro-2-propanol	Result 201 277 495	PQL 50 5					•	fVal %RPD(Limit) Qual .6 5.0(39)

#### Comments:

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

Reported in micrograms per liter, per client request.



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Date: 22-Apr-04		(	QC S	ummar	y Repo	rt				<b>Work Orde</b> 04041241
Method Bla			Type M	ABLK T	est Code: E	EPA Me	thod SW8	015B/DHS	LUFT M	anuai
File ID: D:\H	PCHEM\MS10\DATA\040414	\04041405.D			atch ID: MS					04/14/2004 09:05
Sample ID:	MBLK MS10W0414B	Units : μg/L		Run ID: G	C/MSD_10	040414	1Δ	Prep [		04/14/2004
Analyte		Result	PQL					•		Val %RPD(Limit) Qu
TPH Purgeab	le	ND	50					<u> </u>		TO STEE DE COME, GE
	lloroethane-d4	10	-	10		100	72	126		
Surr: Toluene		9.54		10		95	71	128		
Surr: 4-Brome	ofluorobenzene	9.66	<del></del>	10		97	76	121		
Laboratory	Control Spike		Type L	.cs T	est Code: E	PA Met	thod SW8	015B/DHS	LUFT M	anual
	CHEM\MS10\DATA\040414	\04041402.D		В	atch ID: MS	10W04	14B	Analys	is Date:	04/14/2004 08:02
Sample ID:	GLCS MS10W0414B	Units : µg/L		Run ID: G	C/MSD_10	040414	IA.	Prep 0	ate:	04/14/2004
Analyte		Result	PQL					t HighLimit I	RPDRef	Val %RPD(Limit) Qu
TPH Purgeab		403	50	400	<del></del> :	101	67	136		
Surr: 1,2-Dich		9.38		10		94	72	126		
Surr: Toluene		9.89		10		99	71	128		
Surr: 4-Bromo	fluorobenzene	9.88		10		99	76	121		
Sample Ma			Type M	IS T	est Code: E	PA Met	hod SW8	015B/DH\$ !	UFT Ma	anual
File ID: D:\HP	CHEM\MS10\DATA\040414\	04041431.D		Ba	atch ID: MS	10W04	14B	Analys	is Date:	04/14/2004 18:07
Sample ID:	04041241-02AGS	Units : µg/L		Run ID: G	C/MSD_10_	040414	A	Prep D	ate:	04/14/2004
Analyte		Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	: HighLimit f	RPDRef\	/al %RPD(Limit) Qu
TPH Purgeabl		2340	250	2000	0	117	54	154		
Surr: 1,2-Dich		51.4		50		103	72	126		
Surr: Toluene		50.5		50		101	71	128		
Surr: 4-Bromo	fluorobenzene	48.6		50		97	76	121		
Sample Mat	rix Spike Duplicate	÷	Type M	SD Te	est Code: E	PA Met	hod SW8	015B/DHS L	.UFT Ma	inual
File ID: D:\HP	CHEM\MS10\DATA\040414\	04041432.D		Ba	atch iD: MS	10W041	4B	Analysi	is Date:	04/14/2004 18:28
Sample ID:	04041241-02AGSD	Units : μg/L		Run ID: Gt	C/MSD_10_	040414	A	Prep D		04/14/2004
Analyte		Result	PQL			-		•		/al %RPD(Limit) Qu
TPH Purgeable	e	2340	250	2000		117	54	154	2342	
Surr: 1,2-Dichl		52.7		50	•	105	72	126		
Surr: Toluene-	d8	50.7		50		101	71	128		
Surr: 4-Bromo	fluorobenzene	48.5		50		97	76	121		

#### Comments:

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

Reported in micrograms per liter, per client request.



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Date: 22-Apr-04		QC S	Summa	ry Repo	rt				<b>Work Order:</b> 04041241
Method Blank		Туре	MBLK	Test Code: I	EPA Me	thod SW	3260B		
File ID: D:\HPCHEM\MS10\DATA\040414\0	4041405.D			Batch ID: MS	S10W04	14A	Analy	sis Date:	04/14/2004 09:05
Sample ID: MBLK MS10W0414A	Units : µg/L		Bun ID:	GC/MSD_10			Prep		04/14/2004
Analyte	Result	PQL							/al %RPD(Limit) Qual
Tertiary Butyl Alcohol (TBA)	ND		5	ar opinior vo	701120		it i ligi iLitint	THE DITE	rai zeni D(Cilili) Quai
Methyl tert-butyl ether (MTBE)	ND	0.							
Di-isopropyl Ether (DIPE)	ND		1						
Ethyl Tertiary Butyl Ether (ETBE)	ND		1					•	
1,2-Dichloroethane	ND		1						
Benzene	ND	0.							
Tertiary Amyl Methyl Ether (TAME) Toluene	ND		1						
1,2-Dibromoethane (EDB)	ND ND	0.							
Ethylbenzene	ND	0.:	2						
m,p-Xylene	ND	0.							
o-Xylene	ND	0.					•		
Surr: 1,2-Dichloroethane-d4	10		10	o o	100	72	126		
Surr: Toluene-d8	9.54		14		95	71	128		
Surr: 4-Bromofluorobenzene	9.66		10	כ	97	76	121		
Laboratory Control Spike	٠	Type I	LCS	Test Code: E	EPA Met	hod SW8	260B		
File ID: D:\HPCHEM\MS10\DATA\040414\04	I041403.D		ì	Batch ID: MS	10W04	14A	Analys	sis Date:	04/14/2004 08:23
Sample ID: LCS MS10W0414A	Units : µg/L		Run ID: 0	GC/MSD_10	_040414	A	Prep (	Date:	04/14/2004
Analyte	Result	PQL					t HighLimit	RPDRefv	al %RPD(Limit) Qual
Benzene	9.72	0.6			97	83	119		
Toluene	9.43	0.5			94	80	120		
Ethylbenzene	9.67	0.5	5 10	)	97	80	120		
m,p-Xylene	10.2	0.5			102	77	125		
o-Xylene	10.4	0.8			104	77	124		
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	9.57		10		96	72	126		
Surr: 4-Bromofluorobenzene	9.83 10.1		10		98 101	71 76	128 121		
Control Madde Colle		7 A			•				
Sample Matrix Spike File ID: D:\HPCHEM\MS10\DATA\040414\04	044 400 D	Type N		Test Code: E					
				Batch ID: MS					04/14/2004 17:26
Sample ID: 04041241-02AMS	Units : µg/L			C/MSD_10_			Prep D		04/14/2004
Analyte	Result	PQL	SpkVa	SpkRefVal	%REC	LowLimit	HighLimit I	RPDRefV	al %RPD(Limit) Qual
Benzene	51.8	1.3				59	145		
Toluene	51.4	1.3				39	161		
Ethylbenzene m,p-Xylene	53.3 56	1.3 1.3				57 07	145		
o-Xylene	57.3	1.3		-		37 47	163 156		
Surr: 1,2-Dichloroethane-d4	50.2	1.0	50		115 100	72	126		
Surr: Toluene-d8	49.3		50		99	71	128		
Surr: 4-Bromofluorobenzene	50.4		50		101	76	121		
Sample Matrix Spike Duplicate		Type N	ISD 7	est Code: E	PA Meti	nod SW8	260B		
File ID: D:\HPCHEM\MS10\DATA\040414\04	041430.D		E	atch ID: MS	10W041	4A	Analys	is Date:	04/14/2004 17:46
Sample ID: 04041241-02AMSD	Units : µg/L		Run ID: 6	C/MSD_10_	040414	A	Prep D	ate: (	04/14/2004
Analyte	Result	PQL							al %RPD(Limit) Qual
Benzene	51.9	1.3				59	145	51.78	
Toluene	51.1	1.3				39	161	51.76	0.6(22)
Ethylbenzene	53.6	1.3				57	145	53.27	0.6(22)
m,p-Xylene	56.2	1.3				37	163	56	0.3(23)
o-Xylene Sure: 1.2 Diobleroethane d4	57.3	1.3				47	156	57.34	0.0(50)
Surr: 1,2-Dichloroethane-d4 Surr: Toluene-d8	50.1		50		100	72	126		
Surr: 4-Bromofluorobenzene	49 50.8		50 50		98 102	71 76	128		
	50.0		ວບ		102	70	121		



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Date:	QC Summary Report	Work Order:
22-Apr-04	UC Summary Report	work Order;
22-7101-04	Q Dammar   Report	04041241
		07071271

Comments:

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

# Alpha Analytical, Inc. Phone: (775) 355-1044 FAX: (775) 355-0406

### Sample Receipt Checklist

Date Report is due to Client: 4/20/2004

Date of Notice: 4/12/2004 8:56:06 A

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
Project Manager: Gowri Kowtha	Client's Phone (530) 676-6002 Client's FAX (530) 676-6005
Work Order Number : STR04041241 Date Re	ceived : 4/10/2004 Received by: Dolly S. Baker
ÇI	ain of Custody (COC) Information
Carrier name <u>FedEx</u>	
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 Pro	servation 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 🗹
An	alytical 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:

Samples received 4/10/04, samples kept cold & secure until log-in 4/12/04.

Billing Information:

Stratus Environmental

3330 Cameron Park Drive

Cameron Park, CA 95682-8861

### **CHAIN-OF-CUSTODY RECORD**

1 of 1

#### Alpha Analytical, Inc.

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

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

WorkOrder: STR04041241

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

Gowri Kowtha

TEL: (530) 676-6002

FAX: (530) 676-6005

Job: USA 57

PO:

Sampled by : Mike

EDD Required: Yes

Cooler Temp:

12-Apr-04

Report Attention: Gowri Kowtha CC Report:

QC Level: S3

Suite 550

Client:

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

			_						Requested Tests	:	
Alpha	Client	(	Collection	No. of	Bottles	5		ALCOHOL_ TPH/P_W VOC_W			
Sample ID	Sample ID	Matrix	Date	ORG	SUB	TAT	PWS#	w / /			Sample Remarks
STR04041241-01A	MW-3	AQ	04/08/04 07:48	5	0	6		MeOH/EiOH BTXE/GAS_BTXE/GAS_C/Soxys/EDB C/Soxys/EDB /1,2DCA /1,2DCA			
STR04041241-02A	MW-4	AQ	04/08/04 06:41	5	0	6		MeOH/EtOH BTXE/GAS_ BTXE/GAS_ C/5oxys/EDB C/5oxys/EDB /1,2DCA /1,2DCA			
STR04041241-03A	MW-5	AQ	04/08/04 05:00	5	0	6		MeOH/EtOH BTXE/GAS_ BTXE/GAS_ C/5oxys/EDB C/5oxys/EDB /1,2DCA /1,2DCA			
STR04041241-04A	MW-7	AQ	04/08/04 05:28	5	0	6		MeOH/EtOH BTXE/GAS_BTXE/GAS_C/Soxys/EDB C/Soxys/EDB /1,2DCA /1,2DCA			,
STR04041241-05A	MVV-8	AQ	04/08/04 08:33	5	0	6		McOH/EtOH BTXE/GAS_ BTXE/GAS_ C/Soxys/EDB C/Soxys/EDB /1,2DCA /1,2DCA			
STR04041241-06A	S-1	AQ	04/08/04 07:02	5	0	6		MeOH/EtOH BTXE/GAS_BTXE/GAS_C/50xys/EDB C/50xys/EDB /1,2DCA /1,2DCA			
STR04041241-07A	S-2	AQ	04/08/04 05:56	5	0	6		MeOH/E(OH BTXE/GAS_BTXE/GAS_C/50xys/EDB C/50xys/EDB /1,2DCA /1,2DCA			

Client's COC #: 07364

Comments:

Custody seal. Frozen ice. EDF. Send copy of receipt checklist with final report. Samples received 4/10/04, samples kept cold & secure until log-in 4/12/04.

Signature

Print Name

Company

Date/Time

Received by:

Distraker

Alpha Analytical, Inc.

4/12/04 853-

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

Name STILLHUS ENU.  Address 330 CAMERAN PONCH DA  City, State, Zip COMONON PANIL CA  Phone Number 306766009 Fax 5306766005  Client Name  City, State, Zip  OALLIAND Office Use Sampled Sampled See Key Below Lab ID Number  ONY MULTUR OF STONE OF SAMPLED OF	Alpha Analytic 255 Glendale Avenu Sparks, Nevada 894 Phone (775) 355-10 Fax (775) 355-0406  P.O. # DWR # Phone # Fax #  Report Attention Sample Description  MW- 3  1	e, Suite 21 31-5778 44			07364 EXE + AND AARD
ADDITIONAL INSTRUCTIONS:					
Received by	Print Name  11/LE Cornell  Note GITHER  DESPONDEN	Compar Stratas Afri Olpha		Date 4/9/04 04-09-04	Time U & 10 0 & 10
	unless other arrangements are made. Hazardoi	oa S-Soil Jar O-Orbo s samples will be returned to cli he laboratory is limited to the a	iont or diagnost of at the		OT-Other ort for the analysis