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January 31, 2007  
Project No. 2007-0057-01

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

Re: Quarterly Groundwater Monitoring Report, Fourth Quarter 2006, for former USA Service Station No. 57, located at 10700 MacArthur Boulevard, Oakland, CA (LOP No. RO0000232)

Dear Mr. Chan:

Stratus Environmental, Inc. (Stratus), on behalf of USA Gasoline Corporation (USA), is submitting the attached report, which presents the results of fourth quarter 2006 quarterly monitoring, and sampling program and an update on remediation efforts at 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 (ACDEH) 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.*

Sarah O. Salcedo, P.G.  
Senior Geologist

Gowri S. Kowtha, P.E.  
Project Manager



Attachment: Quarterly Groundwater Monitoring Report, Fourth Quarter 2006

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

Date January 31, 2007

## 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 / RO0000232

### WORK PERFORMED THIS QUARTER (Fourth 2006):

1. Stratus measured groundwater elevations and collected groundwater samples from wells S-1, S-2, MW-3, MW-6 through MW-8, EX-1, and EX-2 on October 17, 2006. Due to onsite construction activities, wells MW-4, MW-5, and EX-3 were covered by soil and these wells could not be monitored or sampled. In addition, well EX-4 could not be located.
2. Stratus conducted six site visits to collect field and laboratory parameters to evaluate and optimize the performance of the oxygen injection (iSOC™) system.
3. Stratus prepared and submitted the *Sixth Dual Phase Extraction Event Report* on December 12, 2006.
4. Stratus compiled and evaluated groundwater monitoring data.
5. Stratus moved the iSOC™ units from wells S-1 and MW-3 to EX-1 and EX-2.

### WORK PROPOSED FOR NEXT QUARTER (First 2007):

1. The next sampling event is tentatively scheduled for January 2007. Groundwater samples will be collected for laboratory analysis from wells S-1, S-2, MW-3 through MW-8, and EX-1 through EX-4.
2. Groundwater samples will be analyzed for gasoline range organics (GRO) 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), and 1,2-dibromoethane (EDB) using EPA Method SW8260B.

Current Phase of Project: Monitoring / Interim Remediation  
Frequency of Groundwater Sampling: All Wells = Quarterly  
Frequency of Groundwater Monitoring: Quarterly  
Groundwater Sampling Date: October 17, 2006  
Is Free Product (FP) Present on Site: No  
FP Recovered This Quarter: NA  
Cumulative FP Recovered to Date: NA  
Approximate Depth to Groundwater: 9.22 to 16.59 feet below top of well casing  
Groundwater Flow Direction: South-southwest

Groundwater Gradient: 0.016 ft/ft

## INTERIM REMEDIATION SYSTEM OPERATION AND PERFORMANCE

Equipment Inventory:	Oxygen Injection System (iSOC™-Manufactured by inVentures Technologies, Inc.)
System Status:	Operational
Reporting Period:	October 12 through December 18, 2006
Historical Highest GRO Concentration:	160,000 µg/L (S-2, 1998)
Historical Highest Benzene Concentration:	13,000 µg/L (EX-2, 2005)
Historical Highest MTBE Concentration:	820 µg/L (MW-3, 1995)
Highest GRO Concentration this Period:	31,000 µg/L (EX-2)
Highest Benzene Concentration this Period:	10,000 µg/L (EX-2)
Highest MTBE Concentration this Period:	230 µg/L (EX-2)

### DISCUSSION:

At the time of the fourth quarter 2006 monitoring event, groundwater elevations had decreased between 1.90 and 3.61 feet in wells S-1, S-1, MW-3, MW-6 through MW-8, EX-1, and EX-2 since the previous monitoring event (July 12, 2006). Depth-to-water measurements were converted to feet above mean sea level (MSL) and used to construct a groundwater elevation contour map (Figure 2). The groundwater elevations measured in wells EX-1 and EX-2 were not used in contour construction (as these wells are screened to only 25 feet below ground surface). The groundwater flow direction was generally to the south-southwest at an average gradient of approximately 0.016 ft/ft. South and radial groundwater flow patterns have been observed during previous monitoring events.

GRO, benzene, and MTBE were reported in wells S-2, MW-3, EX-1, and EX-2. MTBE was also reported in well S-1. The highest concentrations of GRO (31,000 µg/L), benzene (10,000 µg/L), and MTBE (230 µg/L) were reported in well EX-2. TBA (50 µg/L) was reported in well MW-3. 1,2-DCA was reported in wells MW-3 (21 µg/L), EX-1 (30 µg/L), and EX-2 (400 µg/L). DIPE, ETBE, TAME, EDB, methanol, or ethanol were not reported in any of the wells. These results are generally consistent with historical analytical data. The laboratory noted that the pH in the preserved samples from wells S-1, EX-1, and EX-2 were above the EPA recommended limit of 2. As the reported results for these wells appear to be generally consistent with historical data, it appears that the elevated pH has not affected data quality. Analytical results of GRO, benzene, and MTBE for groundwater samples collected on October 17, 2006, are presented in Figure 3.

### REMEDIATION SYSTEM STATUS

#### System Description

The iSOC™ oxygen injection system is a bioremediation technology that produces high levels of dissolved oxygen for in-situ biodegradation of petroleum hydrocarbon constituents. The iSOC™ system consists of individual injection units (1.62 inches in diameter and approximately 15 inches in length) made of stainless steel, and an industrial grade oxygen cylinder. The individual injections units contain a micro-flow controller that regulates the flow based on the static head and pressure setting at the oxygen cylinder. The injection units also contain micro-porous hollow fibers, which provide a significant mass transfer area and create an ultra saturation zone when oxygen gas pressure is maintained lower than the static groundwater pressure.

The individual injection units were placed in wells S-1, S-2, and MW-3 and each were connected to a 250 cubic centimeter (cc) oxygen cylinder using a single run ¼-inch diameter tubing. On December 18, 2006 iSOC™ units were moved from wells S-1 and S-3 to wells EX-1 and EX-2.

## Monitoring Plan

The iSOC™ oxygen injection system startup was initiated on January 18, 2006. Monitoring wells EX-1 through EX-3 are used as observation wells to monitor the performance of the oxygen injection system. Monitoring wells MW-7 and MW-8 are used as background wells to evaluate and monitor for natural geochemical changes in groundwater. The following field and laboratory parameters are monitored periodically to evaluate and optimize the performance of the oxygen injection system.

Field Parameters: Depth to water, pH, dissolved oxygen (DO), oxidation/reduction potential (ORP), specific conductivity, and temperature.

Laboratory Parameters: GRO, BTEX, BOD, total and ferrous iron, heterotrophic plate counts, total organic carbon, total dissolved solids, nitrates, nitrites, ammonia, sulfates, sulfides, total phosphorus and orthophosphate.

Since system start-up, field parameters are collected on a bi-monthly basis, and laboratory parameters are collected on a quarterly basis. Table 3 presents the sampling frequency, field and laboratory parameters analyzed, and potential significance of both laboratory and field parameters.

## Results

The field and analytical parameters collected to date to evaluate and optimize the performance of the oxygen injection system are presented in Tables 4 and 5.

The average DO levels in the injection wells S-1, S-2, and MW-3 (Figure 4) during the fourth quarter 2006 were at 11.83 mg/L, 6.61 mg/L, and 4.40 mg/L, respectively. The average DO levels in the observation wells (EX-1 and EX-2) and the background monitoring wells (MW-7 and MW-8) were in the ranges of 1.64 mg/L to 2.83 mg/L, and 3.88 mg/L to 5.20 mg/L, respectively (Figure 5). Based on the bio-parameter data available, the heterotrophic plate counts reported for observation wells (EX-1 and EX-2) generally appear to be greater than the plate counts reported for background monitoring wells (MW-7 and MW-8). However, a consistent pattern or correlation of heterotrophic plate counts either with the variation in DO levels or the petroleum hydrocarbon concentrations could not be identified in the data available to date.

The GRO and benzene concentrations appear to have declined at wells S-1, S-2, and MW-3 (these wells were being used as oxygen injection wells at the time of sampling), since the start-up of the oxygen injection system. MTBE concentrations in injection well S-1 also appears to have decreased since the startup of the iSOC™ system; however, MTBE concentrations at injection wells S-2 and MW-3 have remained relatively stable since startup. In observation wells EX-1 and EX-2, increasing trends in GRO, benzene, and MTBE are noted since iSOC™ began. Limited data from observation well EX-3 indicates apparent decreasing trends in GRO and benzene concentrations. The GRO, benzene, MTBE, and depth to water variation with time at wells S-1, S-2, MW-3, EX-1, and EX-2 are shown graphically in Figures 6 through 10.

During the December 18, 2006 site visit, Stratus switched oxygen injection from wells S-1 and MW-3 to wells EX-1 and EX-2. Stratus will continue to operate the oxygen injection system using wells S-2, EX-1, and EX-2 during the first quarter 2007 and to collect field parameters as identified in the monitoring plan to further evaluate and optimize the performance of the oxygen injection system.

## ATTACHMENTS:

- Table 1 Groundwater Elevation and Analytical Summary
- Table 2 Groundwater Analytical Results for Oxygenates and Additional Compounds
- Table 3 Monitoring Plan Summary
- Table 4 Physical Parameter Summary
- Table 5 Analytical Parameter Summary
- Figure 1 Site Location Map
- Figure 2 Groundwater Elevation Contour Map (Fourth Quarter 2006)
- Figure 3 Groundwater Analytical Summary (Fourth Quarter 2006)
- Figure 4 DO Variation with Time at Injection Wells
- Figure 5 DO Variation with Time at Observation and Background Wells
- Figure 6 GRO, Benzene, MTBE, and Depth to Water Variation with Time at S-1
- Figure 7 GRO, Benzene, MTBE, and Depth to Water Variation with Time at S-2
- Figure 8 GRO, Benzene, MTBE, and Depth to Water Variation with Time at MW-3
- Figure 9 GRO, Benzene, MTBE, and Depth to Water Variation with Time at EX-1
- Figure 10 GRO, Benzene, MTBE, and Depth to Water Variation with Time at EX-2
- Appendix A Field Data Sheets
- Appendix B Sampling and Analysis Procedures
- Appendix C Certified Analytical Reports and Chain-of-Custody Documentation

**TABLE 1**

**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**

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

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	GRO[5] (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
S-1	02/12/87						630	4.4	3.5	37	NA
	03/03/95	13.10	74.74	61.64	910	5,900	260	7.6	16	14	NA
	07/24/95	12.35		62.39	NA	NA	NA	NA	NA	NA	NA
	11/22/95	19.30	78.68	59.38	460	6,100	13	0.69	0.99	1.1	460*
	12/06/95	19.59		59.09	NA	NA	NA	NA	NA	NA	NA
	01/04/96	19.52		59.16	NA	NA	NA	NA	NA	NA	NA
	01/31/97	15.07		63.61	1,100	200	11	6	3	6	200*
	10/10/97	18.90		59.78	530	2,000	<0.5	2.1	<0.5	<2	230*
	01/20/98	16.79		61.89	1,800	200	<0.5	<0.5	1.5	10	87*
	04/28/98	8.37		70.31	130	7,300	1.9	3.2	<0.5	<0.5	310*
	07/31/98	11.61		67.07	310	2,000	0.54	4.6	3.8	0.82	280*
	06/10/99	14.35		64.33	660	150	0.99	<0.5	<0.5	2.4	80*[1]
	10/18/00	17.56		61.12	<50	330	<0.5	0.93	<0.5	<0.5	44
	03/12/02	16.29		62.39	500	<50	2.8	4.8	0.79	4.4	63
	11/19/02	19.53		59.15	190	NA	<0.50	<0.50	<0.50	<0.50	190
	01/09/03	18.14		60.54	510	NA	1.1	<0.50	0.52	<0.50	11
	04/14/03	18.04		60.64	300	NA	<1.0[2]	<1.0[2]	<1.0[2]	<1.0[2]	27
	07/21/03	20.31		58.37	300	NA	<0.50	<0.50	<0.50	<0.50	11
	10/09/03	19.46		59.22	390	NA	<0.50	<0.50	<0.50	<0.50	8.8
	01/15/04	18.21	79.66	61.45	200	NA	<0.50	<0.50	<0.50	<0.50	6.0
	04/08/04	19.29		60.37	140	NA	<0.50	<0.50	<0.50	<0.50	12
	08/10/04	18.86		60.80	110	NA	4.6	<0.50	<0.50	0.51	73
	11/11/04	19.81		59.85	160	NA	<0.50	<0.50	<0.50	<0.50	150
	01/19/05	18.12		61.54	440	NA	<0.50	<0.50	1.4	<0.50	140
	04/14/05	13.94		65.72	320	NA	<0.50	<0.50	<0.50	<0.50	120
	07/19/05	14.11		65.55	240	NA	6.1	<0.50	0.60	<0.50	60
	10/24/05	16.53		63.13	320	NA	5.0	<0.50	1.1	<0.50	37
	02/02/06	15.27		64.39	<50	NA	<0.50	<0.50	<0.50	<0.50	45
	04/27/06	9.59		70.07	<50	NA	<0.50	<0.50	<0.50	<0.50	7.7
	07/12/06	11.00		68.66	<50	NA	<0.50	<0.50	<0.50	<0.50	12
	10/17/06	14.54		65.12	<50	NA	<0.50	<0.50	<0.50	<0.50	1.6

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Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	GRO[5] (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
S-2	02/12/87		Sheen				3,400	3,800	1,300	11,000	NA
	03/03/95	15.39	76.86	61.47	24,000	6,000	1,900	440	600	2,500	NA
	07/24/95	14.47		62.39	NA	NA	NA	NA	NA	NA	NA
Sheen	11/22/95	21.52	80.93	59.41	NA	NA	NA	NA	NA	NA	NA
	12/06/95	21.78		59.15	NA	NA	NA	NA	NA	NA	NA
	01/04/96	21.75		59.18	NA	NA	NA	NA	NA	NA	NA
	01/31/97	17.25		63.68	NA	NA	NA	NA	NA	NA	NA
Sheen	10/10/97	21.21		59.72	13,000	<50	260	38	190	280	600*
Sheen	01/20/98	19.07		61.86	1,900	2,300	4.6	6.3	<0.5	4.6	190*
	04/28/98	10.47		70.46	22,000	<100	980	160	320	680	570*
	07/31/98	13.71		67.22	160,000	<50	950	290	550	1,700	550*
	11/02/98	17.31		63.62	14,000	<500	170	70	170	230	490*
	06/10/99	16.48		64.45	17,000	<50	650	230	<25	750	490*[1]
	10/18/00	19.70		61.23	4,400	<50	2	64	5.1	12	270
	03/12/02	18.56		62.37	5,100	660	62	44	52	78	430
	11/19/02	21.70		59.23	26,000	NA	1,400	180	520	340	750
	01/09/03	20.37		60.56	16,000	NA	120	32	76	214	270
	04/14/03	19.93		61.00	16,000	NA	160	76	210	290	400
	07/21/03	22.00		58.93	9,700	NA	270	90	200	277	410
	10/09/03	21.58		59.35	10,000	NA	39	9.2	52	26.5	180
	01/15/04	20.44	81.90	61.46	6,300	NA	21	<2.0 [3]	20	3.1	130
	04/08/04	17.15		64.75	13,000	NA	160	76	170	231	430
	08/10/04	20.98		60.92	10,000	NA	76	13	<5.0[3]	500	92
	11/11/04	21.95		59.95	20,000	NA	530	240	370	1,730	420
	01/19/05	20.33		61.57	17,000	NA	590	150	250	990	580
	04/14/05	16.17		65.73	20,000	NA	830	230	570	1,980	510
	07/19/05	16.25		65.65	970	NA	48	13	16	57	72
	10/24/05	18.07		63.83	1,200	NA	100	13	52	41	69
	02/02/06	17.26		64.64	2,000	NA	17	12	26	108	340
	04/27/06	11.55		70.35	130	NA	5.1	1.1	2.8	8.8	81
	07/12/06	12.98		68.92	140	NA	<0.50	<0.50	<0.50	0.77	180
	10/17/06	16.59		65.31	130	NA	0.98	<0.50	1.1	2.20	160

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MW-3	03/03/95	13.99	76.30	62.31	2,500	1,600	540	92	36	200	NA
	07/24/95	13.33		62.97	NA	NA	NA	NA	NA	NA	NA
	11/22/95	20.94	80.32	59.38	14,000	5,400	5,700	230	430	650	820*
	12/06/95	17.48		62.84	NA	NA	NA	NA	NA	NA	NA
	01/04/96	20.01		60.31	NA	NA	NA	NA	NA	NA	NA
	01/31/97	16.63		63.69	1,100	<50	130	8	5	5	NA
	10/10/97	20.62		59.70	3,400	1,100	830	4	100	<10	160*
	01/20/98	15.40		64.92	3,900	550	7.9	4.1	<0.5	3.7	<5.0*
	04/28/98	10.51		69.81	800	1,000	82	5.2	5.7	5.4	240*
	07/31/98	13.46		66.86	2,200	610	510	7.6	16	5.27	310*
	11/02/98	17.11		63.21	4,900	1,600	220	16	13	13.7	180*
	06/10/99	15.24		65.08	1,000	120	<0.5	<0.5	<0.5	1.1	120*[1]
	10/18/00	15.41		64.91	<50	<50	<0.5	<0.5	<0.5	<0.5	12
	04/08/04	13.70		66.62	<50	NA	<0.50	<0.50	<0.50	<0.50	19
	08/10/04	16.96		63.36	580	NA	19	<1.0[3]	<1.0[3]	3.3	300
	11/11/04	17.40		62.92	3,000	NA	810	<5.0[3]	43	<5.0[3]	690
	01/19/05	13.28		67.04	92	NA	18	<0.50	0.77	<0.50	17
	04/14/05	8.73		71.59	<50	NA	0.52	<0.50	<0.50	<0.50	11
	07/19/05	11.94		68.38	390	NA	82	2.3	1.8	9.2	200
	10/24/05	14.70	77.27	62.57	2,100	NA	460	6.9	7.7	11.9	300
02/02/06	16.48		60.79	530	NA	11	<0.50	1.2	1.1	560	
04/27/06	7.85		69.42	<300[3]	NA	<1.5[3]	<1.5[3]	<1.5[3]	<1.5[3]	180	
07/12/06	10.08		67.19	250	NA	5.5	<1.0[3]	<1.0[3]	<1.0[3]	190	
10/17/06	12.80		64.47	93	NA	8.8	<0.50	<0.50	<0.50	100	



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10700 MacArthur Blvd., Oakland, California

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	GRO[5] (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*
	12/06/95	11.21		65.21	NA	NA	NA	NA	NA	NA	NA
	01/04/96	14.62		61.80	NA	NA	NA	NA	NA	NA	NA
	01/31/97	8.18		68.24	<50	<50	<0.5	2	<0.5	2	11*
	10/10/97	14.14		62.28	<50	<50	<0.5	<0.5	<0.5	<2	<5.0*
	01/20/98	7.05		69.37	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	04/28/98	5.88		70.54	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	07/31/98	8.40		68.02	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	11/02/98	16.08		60.34	NA	NA	NA	NA	NA	NA	NA
	06/10/99	14.81		61.61	NA	NA	NA	NA	NA	NA	NA
	10/18/00	12.71		63.71	<50	<50	<0.5	0.59	0.82	0.53	<5.0*
	03/12/02	8.92		67.50	<50	<50	<0.5	0.61	0.72	2.5	1.8
	11/19/02	13.24		-13.24	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/09/03	11.00		-11.00	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/14/03	11.03		-11.03	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	07/21/03	13.10		-13.10	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	10/09/03	13.33		-13.33	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/15/04	12.14		-12.14	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/08/04	10.76		65.66	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	08/10/04	12.62		63.80	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	11/11/04	11.93		64.49	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/19/05	10.34		66.08	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/14/05	5.66		[4]	NM	<50	NA	<0.50	<0.50	<0.50	<0.50
	07/19/05	7.55		[4]	NM	<50	NA	<0.50	<0.50	<0.50	<0.50
	10/24/05	10.12		76.26	66.14	<50	NA	<0.50	<0.50	<0.50	<0.50
	02/02/06	6.99			69.27	<50	NA	<0.50	<0.50	<0.50	<0.50
	04/27/06	NM			NM			Well Not Monitored or Sampled - Covered			
07/12/06	6.05			70.21	<50	NA	<0.50	<0.50	<0.50	<0.50	
10/17/06	NM			NM			Well Not Monitored or Sampled - Covered				

**TABLE 1**

**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**

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

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater							Total Xylenes (µg/L)	MTBE (µg/L)
				Elevation (ft msl)	GRO[5] (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (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								
	01/09/03	NM	NM									
	04/14/03	NM	NM									
	07/21/03	NM	NM									
	10/09/03	NM	NM									
	01/15/04	NM	NM									
	04/08/04	16.80	63.72	<100	NA	<0.50	<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	<0.50	
11/11/04	NM	NM										
01/19/05	NM	NM										
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		
10/24/05	14.29	80.78	66.49	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50		
02/02/06	NM	NM										
04/27/06	7.42		73.36	<100[2]	NA	<0.50	<0.50	<0.50	<0.50	<0.50		
07/12/06	NM	NM										
10/17/06	NM	NM										

**TABLE 1**

**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**

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

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater							Total Xylenes (µg/L)	MTBE (µg/L)
				Elevation (ft msl)	GRO[5] (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (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	
	10/18/00	NM	NM				Unable to Locate					
	03/12/02	NM	NM				Unable to Locate					
	11/19/02	NM	NM				Unable to Locate					
	01/09/03	NM	NM				Unable to Locate					
	04/14/03	NM	NM				Unable to Locate					
	07/21/03	NM	NM				Unable to Locate					
	10/19/03	NM	NM				Unable to Locate					
	01/15/04	NM	NM				Unable to Locate					
	04/08/04	NM	NM				Well Obstructed - Not Sampled					
	08/10/04	NM	NM				Well Obstructed - Not Sampled					
	11/11/04	NM	NM				Well Obstructed - Not Sampled					
	01/19/05	NM	NM				Well Obstructed - Not Sampled					
	04/14/05	15.78	65.86	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50		
07/19/05	NM	NM				Well Obstructed - Not Sampled						
10/24/05	NM	82.32	NM			Well Obstructed - Not Sampled						
02/02/06	15.93	66.39	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50			
04/27/06	11.00	71.32	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50			
07/12/06	12.75	69.57	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50			
10/17/06	15.95	66.37	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50			

**TABLE 1**

**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**

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

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater							Total	
				Elevation (ft msl)	GRO[5] (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	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	-19.59	<50	NA	<0.50	<0.50	<0.50	<0.50	3.8		
	01/09/03	18.38	-18.38	<50	NA	<0.50	<0.50	<0.50	<0.50	2.7		
	04/14/03	18.17	-18.17	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50		
	07/21/03	20.29	-20.29	<50	NA	<0.50	<0.50	<0.50	<0.50	1.8		
	10/09/03	19.48	-19.48	<50	NA	<0.50	<0.50	<0.50	<0.50	2.9		
	01/15/04	18.45	79.81	61.36	<50	NA	<0.50	<0.50	<0.50	<0.50	2.6	
	04/08/04	17.28		62.53	<50	NA	<0.50	<0.50	<0.50	<0.50	0.81	
08/10/04	18.85	60.96		<50	NA	<0.50	<0.50	<0.50	<0.50	2.1		
11/11/04	19.85	59.96		<50	NA	<0.50	<0.50	<0.50	<0.50	1.0		
01/19/05	19.59	60.22		<50	NA	<0.50	<0.50	<0.50	<0.50	1.5		
04/14/05	14.17	65.64		<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50		
07/19/05	14.16	65.65		<50	NA	<0.50	<0.50	<0.50	<0.50	1.9		
10/24/05	16.65	63.16		<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50		
02/02/06	15.39	64.42		<50	NA	<0.50	<0.50	<0.50	<0.50	1.3		
04/27/06	8.51	71.30	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50			
07/12/06	9.94	69.87	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50			
10/17/06	13.46	66.35	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50			

**TABLE 1**

**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**

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

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	GRO[5] (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-8	11/22/95	33.33	79.55	46.22	<50	360	<0.5	1.3	<0.5	2.1	2.1*
	12/06/95	17.57		61.98	NA	NA	NA	NA	NA	NA	NA
	01/04/96	20.08		59.47	NA	NA	NA	NA	NA	NA	NA
	01/31/97	18.72		60.83	80	<50	0.6	1	<0.5	1	8*
	10/10/97	20.26		59.29	50	<50	<0.5	<0.5	<0.5	<2	<5*
	01/20/98	15.91		63.64	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	04/28/98	10.39		69.16	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	07/31/98	12.93		66.62	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0*
	11/02/98	16.90		62.65	<50	<500	<0.5	<0.5	<0.5	<0.5	<5.0*
	06/10/99	14.98		64.57	NA	NA	NA	NA	NA	NA	NA
	10/18/00	16.27		63.28	<50	<50	<0.5	<0.5	1.1	6.3	8.6*
	03/12/02	14.56		64.99	<50	<50	<0.5	0.63	0.55	1.7	0.94
	11/19/02	21.14		-21.14	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	01/09/03	17.90		-17.90	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/14/03	17.84		-17.84	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	07/21/03	19.79	-19.79	<50	<100[2]	NA	<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
	10/24/05	18.68		61.82	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	02/02/06	14.57		65.93	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	04/27/06	10.48		70.02	<50	<100[2]	NA	<0.50	<0.50	<0.50	<0.50
	07/12/06	13.08		67.42	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50
	10/17/06	15.96		64.54	<50	NA	<0.50	<0.50	<0.50	<0.50	<0.50

**TABLE 1**

**GROUNDWATER ELEVATION AND ANALYTICAL SUMMARY**

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

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater		TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total	
				Elevation (ft msl)	GRO[5] (µg/L)					Xylenes (µg/L)	MTBE (µg/L)
EX-1	10/24/05	14.37	77.72	63.35	5,000	NA	140	8.4	20	195	360
	02/02/06	1.68		76.04	3,000	NA	3.6	<0.50	14	55.5	0.63
	04/27/06	1.76		75.96	130	NA	0.98	<0.50	<0.50	2.42	<0.50
	07/12/06	6.88		70.84	2,600	NA	760	15	34	104	200
	10/17/06	9.79		67.93	3,300	NA	810	<5.0[3]	32	68	170
EX-2	10/24/05	16.00	76.96	60.96	42,000	NA	13,000	1,300	1,300	2,580	410
	02/02/06	8.18		68.78	28,000	NA	9,000	1,300	1,100	3,340	200
	04/27/06	5.22		71.74	24,000	NA	4,000	1,800	650	3,900	86
	07/12/06	7.32		69.64	22,000	NA	6,000	1,300	810	3,280	190
	10/17/06	9.22		67.74	31,000	NA	10,000	1,800	1,200	3,400	230
EX-3	10/24/05	14.85	78.87	63.02	20,000	NA	220	21	660	3,110	<10[3]
	02/02/06	NM		NM		Well Not Monitored or Sampled - Under Soil Pile					
	04/27/06	NM		NM		Well Not Monitored or Sampled - Covered					
	07/12/06	9.01		68.86	5,700	NA	79	19	120	657	<2.5[3]
	10/17/06	NM		NM		Well Not Monitored or Sampled - Covered					
EX-4	10/24/05	14.93	77.96	63.03	1,900	NA	390	69	8.8	90	11
	02/02/06	NM		NM		Well Not Monitored or Sampled - Under Soil Pile					
	04/27/06	NM		NM		Well Not Monitored or Sampled - Covered					
	07/12/06	7.37		70.59	6,400	NA	1,400	400	120	1,220	35
	10/17/06	NM		NM		Well Not Monitored or Sampled - Gone					

**TABLE 1**

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

Well Number	Date Collected	Depth to Water (feet)	Well Elevation (ft msl)	Groundwater Elevation (ft msl)	GRO[5] (µg/L)	TPHD (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
<p><b>Note:</b></p> <p>* = MTBE analyzed using EPA Method 8020/8021B                      msl = Mean sea level                      MTBE = Methyl tert-butyl ether                      µg/L = micrograms per liter                      TPHD = Total petroleum hydrocarbons as diesel                      GRO = Gasoline Range Organics C4-C13                      NA = Not analyzed                      GRO analyzed using EPA Method 8015B and the remaining analytes using EPA Method 8260B                      NM = Not measured</p> <p>[1] Laboratory indicates the chromatogram does not match the diesel hydrocarbon range pattern.                      [2] Reporting limits were increased due to sample foaming.                      [3] Reporting limits were increased due to high concentrations of target analytes.                      [4] Casing elevation invalid - well casing modified (cut) on April 12, 2005.                      [5] Reported as total petroleum hydrocarbons as gasoline (TPHG C3-C14+) prior to second quarter 2006.</p> <p>Monitoring wells surveyed by Morrow Surveying on February 10, 2004, and again on November 29, 2005.</p> <p>Data prior to November 19, 2002 provided by GHH Engineering.</p>											

**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
S-1	11/19/02	190	<10	<1.0	<1.0	<1.0	NA	NA	NA	NA
	01/09/03	11	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	04/14/03	27	<20[2]	<2.0[2]	<2.0[2]	<2.0[2]	NA	NA	NA	NA
	07/21/03	11	<10[2]	<1.0	<1.0	<1.0	NA	NA	NA	NA
	10/09/03	8.8	6.4	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	01/15/04	6.0	10	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	04/08/04	12	8.5	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	08/10/04	73	28	<1.0	<1.0	<1.0	16	<2.0	<5,000	<5,000
	11/11/04	150	14	<1.0	<1.0	<1.0	7.3	<2.0	<5,000	<5,000
	01/19/05	140	14	<1.0	<1.0	<1.0	3.8	<2.0	<5,000	<5,000
	04/14/05	120	10	<1.0	<1.0	<1.0	1.4	<2.0	<5,000	<5,000
	07/19/05	60	11	<1.0	<1.0	<1.0	9.6	<2.0	<5,000	<5,000
	10/24/05	37	<10	<1.0	<1.0	<1.0	2.2	<2.0	<5,000	<5,000
	02/02/06	45	<10	<1.0	<1.0	<1.0	1.2	<2.0	<5,000	<5,000
	04/27/06	7.7	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	07/12/06	12	<10	<1.0	<1.0	<1.0	7.9	<2.0	<5,000	<5,000
10/17/06	1.6	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000	



**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
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
	10/24/05	69	33	<1.0	<1.0	<1.0	35	<4.0[1]	<5,000	<5,000
	02/02/06	340	150	<1.0	<1.0	<1.0	3.2	<4.0[1]	<5,000	<5,000
	04/27/06	81	<10	<1.0	<1.0	<1.0	1.3	<2.0	<5,000	<5,000
	07/12/06	180	42	<1.0	<1.0	<1.0	5.8	<2.0	<5,000	<5,000
10/17/06	160	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000	

**TABLE 2****GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**Former USA Service Station No. 57  
10700 MacArthur Blvd., Oakland, California

<b>Well Number</b>	<b>Date Collected</b>	<b>MTBE (µg/L)</b>	<b>TBA (µg/L)</b>	<b>DIPE (µg/L)</b>	<b>ETBE (µg/L)</b>	<b>TAME (µg/L)</b>	<b>1,2-DCA (µg/L)</b>	<b>EDB (µg/L)</b>	<b>Methanol (µg/L)</b>	<b>Ethanol (µg/L)</b>
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
	10/24/05	300	750	<5.0[1]	<5.0[1]	<5.0[1]	210	<20[1]	<5,000	<5,000
	02/02/06	560	1,300	2.7	<1.0	<1.0	98	<4.0[1]	<5,000	<5,000
	04/27/06	180	330	<3.0[1]	<3.0[1]	<3.0[1]	220	<12[1]	<5,000	<5,000
	07/12/06	190	24	<2.0[1]	<2.0[1]	<2.0[1]	210	<8.0[1]	<5,000	<5,000
	10/17/06	100	50	<1.0	<1.0	<1.0	21	<2.0	<5,000	<5,000

**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-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
	10/24/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	02/02/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	04/27/06					Well Not Monitored or Sampled - Covered				
	07/12/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	10/17/06					Well Not Monitored or Sampled - Covered				

**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-5	11/19/02					Well Damaged				
	01/09/03					Well Damaged				
	04/14/03					Well Damaged				
	07/21/03					Well Damaged				
	10/09/03					Well Damaged				
	01/15/04					Well Damaged				
	04/08/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<4.0[2]	<5,000	<5,000
	08/10/04	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	11/11/04					Well Damaged				
	01/19/05					Well Damaged				
	04/14/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	07/19/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<4.0[2]	<5,000	<5,000
	10/24/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	02/02/06					Well Not Monitored or Sampled - Under Soil Pile				
	04/27/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<4.0[2]	<5,000	<5,000
	07/12/06					Well Not Monitored or Sampled - Covered				
	10/17/06					Well Not Monitored or Sampled - Covered				

**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	
MW-6	11/19/02					Unable to Locate					
	01/09/03					Unable to Locate					
	04/14/03					Unable to Locate					
	07/21/03					Unable to Locate					
	10/19/03					Unable to Locate					
	01/15/04					Unable to Locate					
	04/08/04					Well Obstructed - Not Sampled					
	08/10/04					Well Obstructed - Not Sampled					
	11/11/04					Well Obstructed - Not Sampled					
	01/19/05					Well Obstructed - Not Sampled					
	04/14/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	07/19/05					Well Obstructed - Not Sampled					
	10/24/05					Well Obstructed - Not Sampled					
	02/02/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	04/27/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
07/12/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000	
10/17/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000	

**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-7	11/19/02	3.8	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	01/09/03	2.7	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	04/14/03	<0.50	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	07/21/03	1.8	<5.0	<1.0	<1.0	<1.0	NA	NA	NA	NA
	10/09/03	2.9	<5.0	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	01/15/04	2.6	7.9	<1.0	<1.0	<1.0	<1.0	<2.0	NA	NA
	04/08/04	0.81	9.0	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	08/10/04	2.1	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	11/11/04	1.0	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	01/19/05	1.5	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	04/14/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	07/19/05	1.9	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	10/24/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	02/02/06	1.3	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	04/27/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	07/12/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	10/17/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000

**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)
MW-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
	10/24/05	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	02/02/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
	04/27/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<4.0[2]	<5,000	<5,000
	07/12/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000
10/17/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000	

**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

Well Number	Date Collected	MTBE (µg/L)	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)	Methanol (µg/L)	Ethanol (µg/L)	
EX-1	10/24/05	360	120	<1.0	<1.0	<1.0	<1.0	<4.0[1]	<5,000	<5,000	
	02/02/06	0.63	<10	<1.0	<1.0	<1.0	<1.0	<4.0[1]	<5,000	<5,000	
	04/27/06	<0.50	<10	<1.0	<1.0	<1.0	<1.0	<2.0	<5,000	<5,000	
	07/12/06	200	110	<10[1]	<10[1]	<10[1]	<10[1]	<40[1]	<5,000	<5,000	
	10/17/06	170	<100[1]	<10[1]	<10[1]	<10[1]	30	<40[1]	<5,000	<5,000	
EX-2	10/24/05	410	<2,000[1]	<200[1]	<200[1]	<200[1]	<200[1]	<800[1]	<5,000	<5,000	
	02/02/06	200	<1,000[1]	<100[1]	<100[1]	<100[1]	<100[1]	<400[1]	<5,000	<5,000	
	04/27/06	86	<500[1]	<50[1]	<50[1]	<50[1]	<50[1]	<200[1]	<5,000	<5,000	
	07/12/06	190	<500[1]	<50[1]	<50[1]	<50[1]	<50[1]	<200[1]	<5,000	<5,000	
	10/17/06	230	<1,000[1]	<100[1]	<100[1]	<100[1]	400	<400[1]	<5,000	<5,000	
EX-3	10/24/05	<10[1]	<200[1]	<20[1]	<20[1]	<20[1]	<20[1]	<80[1]	<5,000	<5,000	
	02/02/06				Well Not Monitored or Sampled - Under Soil Pile						
	04/27/06				Well Not Monitored or Sampled - Covered						
	07/12/06	<2.5[1]	<50[1]	<5.0[1]	<5.0[1]	<5.0[1]	<5.0[1]	<20[1]	<5,000	<5,000	
	10/17/06				Well Not Monitored or Sampled - Covered						
EX-4	10/24/05	11	51	<5.0[1]	<5.0[1]	<5.0[1]	<5.0[1]	<20[1]	<5,000	<5,000	
	02/02/06				Well Not Monitored or Sampled - Under Soil Pile						
	04/27/06				Well Not Monitored or Sampled - Covered						
	07/12/06	35	<200[1]	<10[1]	<10[1]	<10[1]	<10[1]	<40[1]	<5,000	<5,000	
	10/17/06				Well Not Monitored or Sampled - Gone						



**TABLE 2**

**GROUNDWATER ANALYTICAL RESULTS  
FOR OXYGENATES AND ADDITIONAL COMPOUNDS**

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

<b>Well Number</b>	<b>Date Collected</b>	<b>MTBE (µg/L)</b>	<b>TBA (µg/L)</b>	<b>DIPE (µg/L)</b>	<b>ETBE (µg/L)</b>	<b>TAME (µg/L)</b>	<b>1,2-DCA (µg/L)</b>	<b>EDB (µg/L)</b>	<b>Methanol (µg/L)</b>	<b>Ethanol (µg/L)</b>
<p><u>Note:</u>                      Oxygenates analyzed using EPA Method 8260B                      µg/L = micrograms per liter                      NA = Not analyzed</p> <p>[1] Reporting limits were increased due to high concentrations of target analytes                      [2] Reporting limits were increased due to sample foaming</p> <p>MTBE = Methyl tertiary butyl ether                      TBA = Tertiary butyl alcohol                      DIPE = Di-isopropyl ether                      ETBE = Ethyl tertiary butyl ether                      TAME = Tertiary amyl methyl ether                      1,2-DCA = 1,2-Dichloroethane                      EDB = 1,2-Dibromoethane</p>										

**Table 3**  
Former USA Service Station No. 57  
10700 MacArthur Boulevard  
Oakland, California  
Monitoring Plan Summary

Parameter	Sampling Frequency	Parameter Significance	Sampling Locations
<u>Field Parameters</u>			
pH	Monthly	Optimum pH range for microbial activity is 6.5 to 7.5.	EX-1 through EX-3, MW-7 MW-8, and all injection wells
Dissolved Oxygen (DO)	Monthly	Oxygen serves as electron acceptor during biodegradation and the microbial activity is directly related to the availability of electron acceptors.	EX-1 through EX-3, MW-7 MW-8, and all injection wells
<u>Laboratory Parameters</u>			
Heterotrophic plate counts	Quarterly	Typical bacterial counts for groundwater range from $10^3$ to $10^8$ counts per liter and in counts below $10^3$ for contaminated groundwater.	EX-1 through EX-3, MW-7 MW-8, and all injection wells
Biochemical Oxygen Demand (BOD)	Quarterly	BOD determines the amount of oxygen required due to biochemical oxidation of organic matter. Increase in BOD is an indication of high oxygen demand (lack of oxygen). A decrease in BOD, accompanied by an increase in DO levels, can be a good indicator of microbial activity in the subsurface.	EX-1 through EX-3, MW-7 MW-8, and all injection wells
Total Iron & Ferrous iron	Quarterly	Oxygen, a by-product of ozone degradation can react with dissolved iron in groundwater to form ferric oxide, a soluble precipitate.	EX-1 through EX-3, MW-7 MW-8, and all injection wells
Petroleum Hydrocarbons & Oxygenates	Quarterly	Chemicals of concern. Baseline and operational concentration levels will be compared in evaluating performance of ozone injection system.	EX-1 through EX-3, MW-7 MW-8, and all injection wells
Total Organic Carbon (TOC)	Quarterly	TOC is a measure of total concentration of organic carbon that may be available for biodegradation. Carbon from the petroleum hydrocarbons is the primary energy source for microbes.	EX-1 through EX-3, MW-7 MW-8, and all injection wells
Bioparameters (Nitrates, sulfates, & phosphates)	Quarterly	Nitrates, sulfates and phosphates are nutrients required for microbial growth and reproduction.	EX-1 through EX-3, MW-7 MW-8, and all injection wells
Total dissolved solids (TDS)	Quarterly	TDS is a measure of dissolved inorganic constituents and small amounts of organic matter. Precipitation of inorganic constituents in groundwater due to oxygen injection can result in scaling.	EX-1 through EX-3, MW-7 MW-8, and all injection wells

**TABLE 4**

**Physical Parameter Summary**

Former USA Service Station No. 57  
10700 McArthur Boulevard Oakland, California

Well Number	Date	Distance to nearest injection well	Depth to water feet bgs	DO mg/L	pH	ORP mV	Specific Conductivity millisiemen
S-1 (injection well)	07/19/05	Injection well	14.11	0.44	6.89	NM	681
	10/24/05	Injection well	16.53	0.95	7.05	NM	503
	01/11/06	Injection well	16.32	NM	NM	NM	NM
	01/20/06	Injection well	15.85	61.1	7.04	155.0	919
	02/02/06	Injection well	15.27	3.02	7.06	151.0	1,069
	02/15/06	Injection well	14.47	26.5	7.08	87.0	887
	03/03/06	Injection well	14.20	18	6.69	96.0	1,004
	03/24/06	Injection well	13.10	8.8[1]	7.50	322.0	924
	04/17/06	Injection well	10.40	18.2	7.10	533.0	916
	04/27/06	Injection well	9.59	15.15	7.27	NM	822
	05/04/06	Injection well	9.55	10.8	7.50	230.0	808
	05/16/06	Injection well	9.63	15.1	7.60	133.0	950
	06/09/06	Injection well	9.86	34.5	8.09	315.0	1,100
	06/30/06	Injection well	10.61	20.8	7.91	183.0	1,070
	07/10/06	Injection well	10.82	29.6	8.03	173.0	949
	07/12/06	Injection well	11.00	NM	7.48	NM	799
	08/03/06	Injection well	11.95	18.3	8.60	144.0	857
	08/25/06	Injection well	12.73	55	7.79	143.0	766
	09/13/06	Injection well	13.44	OR	7.11	NM	NM
	09/27/06	Injection well	14.03	OR	7.73	184.0	683
10/12/06	Injection well	14.43	OR	7.22	239.0	1,198	
10/17/06	Injection well	14.54	11[2]	7.28	NM	1,241	
11/03/06	Injection well	15.19	14.71[2]	6.43	113.0	1,225	
11/20/06	Injection well	15.49	6.5	8.60	381.0	706	
[5]	12/18/06	Observation well	15.89	15.12[2]	6.66	148.0	1,132

**TABLE 4**

**Physical Parameter Summary**

Former USA Service Station No. 57  
10700 McArthur Boulevard Oakland, California

Well Number	Date	Distance to nearest injection well	Depth to water feet bgs	DO mg/L	pH	ORP mV	Specific Conductivity milliemen
S-2 (injection well)	07/19/05	Injection well	16.25	0.74	7.24	NM	669
	10/24/05	Injection well	18.07	NM	6.88	NM	490
	01/11/06	Injection well	18.52	NM	NM	NM	NM
	01/20/06	Injection well	18.05	30.1	6.55	166.0	917
	02/02/06	Injection well	17.26	16.66	6.97	120.0	2.97
	02/15/06	Injection well	16.61	32.6	7.45	93.0	850
	03/03/06	Injection well	16.30	23.0	6.79	120.0	875
	03/24/06	Injection well	14.68	2.8[1]	7.75	283.0	1,050
	04/17/06	Injection well	12.38	19.0	7.11	521.0	790
	04/27/06	Injection well	11.55	4.17	7.17	NM	794
	05/04/06	Injection well	11.04	11.2	7.65	192.0	901
	05/16/06	Injection well	11.47	14.4	7.61	119.0	933
	06/09/06	Injection well	11.76	33.6	8.10	379.0	757
	06/30/06	Injection well	12.53	18.5	8.17	168.0	760
	07/10/06	Injection well	12.77	32.6	8.34	158.0	727
	07/12/06	Injection well	12.98	NM	7.57	NM	648
	08/03/06	Injection well	13.90	10.3	8.70	126.0	814
	08/25/06	Injection well	14.73	47.8	7.73	149.0	679
	09/13/06	Injection well	15.45	OR	6.87	NM	NM
	09/27/06	Injection well	16.03	OR	7.20	193.0	549
10/12/06	Injection well	16.45	OR	6.67	241.0	1,176	
10/17/06	Injection well	16.59	2.71[2]	7.10	NM	1,154	
11/03/06	Injection well	17.21	OR	6.55	120.0	1,221	
11/20/06	Injection well	17.55	7.1	8.46	428.0	682	
12/18/06	Injection well	17.97	10.01[2]	6.43	149.0	1,111	

**TABLE 4**

**Physical Parameter Summary**

Former USA Service Station No. 57  
10700 McArthur Boulevard Oakland, California

Well Number	Date	Distance to nearest injection well	Depth to water feet bgs	DO mg/L	pH	ORP mV	Specific Conductivity milliemen
MW-3 (injection well)	07/19/05	Injection well	11.94	0.53	7.20	NM	784
	10/24/05	Injection well	14.70	1.33	6.66	NM	561
	01/11/06	Injection well	12.57	NM	NM	NM	NM
	01/20/06	Injection well	12.37	30.5	6.14	179.0	1,855
	02/02/06	Injection well	16.48	11.34	6.91	125.0	1,898
	02/15/06	Injection well	10.79	34.6	6.67	96.0	1,760
	03/03/06	Injection well	11.55	31.0	6.47	147.0	1,712
	03/24/06	Injection well	10.73	9.8[1]	7.20	314.0	1,540
	04/17/06	Injection well	7.91	17.5	6.83	567.0	1,442
	04/27/06	Injection well	7.85	19.35	7.10	NM	1,230
	05/04/06	Injection well	8.85	10.2	7.15	259.0	1,357
	05/16/06	Injection well	9.45	15.6	7.28	147.0	1,611
	06/09/06	Injection well	9.09	25.1	6.91	325.0	1,329
	06/30/06	Injection well	9.92	18.8	7.53	152.0	1,596
	07/10/06	Injection well	9.88	29.5	7.79	155.0	NM
	07/12/06	Injection well	10.08	NM	7.28	NM	880
	08/03/06	Injection well	11.66	16.1	8.50	159.0	1,104
	08/25/06	Injection well	11.53	33	7.22	143.0	941
	09/13/06	Injection well	11.46	OR	4.04	NM	NM
	09/27/06	Injection well	12.47	OR	7.75	181.0	3,421
10/12/06	Injection well	12.10	OR	7.19	242.0	3,457	
10/17/06	Injection well	12.80	OR	7.34	NM	3.23	
[3]	11/03/06	Injection well	NM	NM	NM	NM	NM
	11/20/06	Injection well	13.72	4.4	8.28	380.0	851
[5]	12/18/06	Observation well	13.47	OR	6.79	84.0	2,122

**TABLE 4**

**Physical Parameter Summary**

Former USA Service Station No. 57  
10700 McArthur Boulevard Oakland, California

Well Number	Date	Distance to nearest injection well	Depth to water feet bgs	DO mg/L	pH	ORP mV	Specific Conductivity millisiemen
MW-7	07/19/05	70.0	14.16	NM	7.46	NM	651
	10/24/05	70.0	16.65	NM	7.41	NM	493
	01/11/06	70.0	17.05	NM	NM	NM	NM
	01/20/06	70.0	16.20	2.0	6.49	105.0	841
	02/02/06	70.0	15.39	2.04	7.30	38.0	763
	02/15/06	70.0	13.74	2.9	6.91	8.0	828
	03/03/06	70.0	13.26	8.2	7.19	97.0	853
	03/24/06	70.0	11.99	2.6[1]	8.20	202.0	844
	04/17/06	70.0	9.40	7.2	7.68	429.0	876
	04/27/06	70.0	8.51	2.01	8.02	NM	878
	05/04/06	70.0	8.37	5.4	8.29	88.0	855
	05/16/06	70.0	8.43	9.8	7.51	72.0	856
	06/09/06	70.0	8.74	4.6	7.68	376.0	777
	06/30/06	70.0	9.50	4.6	8.26	162.0	787
	07/10/06	70.0	9.77	4.7	8.56	135.0	796
	07/12/06	70.0	9.94	1.82	7.92	12.0	759
	08/03/06	70.0	10.83	3.5	8.70	34.0	760
	08/25/06	70.0	11.71	6.6	7.50	130.0	728
	09/13/06	70.0	12.44	4.34	6.90	NM	NM
	09/27/06	70.0	13.01	3.95	7.79	137.0	1,261
	10/12/06	70.0	13.46	2.96	7.01	244.0	1,194
10/17/06	70.0	13.46	1.69[2]	7.33	NM	1,179	
11/03/06	70.0	14.21	5.11[2]	6.86	210.0	1,185	
11/20/06	70.0	14.54	6.7	9.10	170.0	740	
12/18/06	70.0	14.95	2.94[2]	6.93	142.0	656	

**TABLE 4**

**Physical Parameter Summary**

Former USA Service Station No. 57  
 10700 McArthur Boulevard Oakland, California

Well Number	Date	Distance to nearest injection well	Depth to water feet bgs	DO mg/L	pH	ORP mV	Specific Conductivity millisiemen
MW-8	07/19/05	47.0	15.78	7.55	7.14	NM	798
	10/24/05	47.0	18.68	5.35	6.88	NM	480
	01/11/06	47.0	15.49	NM	NM	NM	NM
	01/20/06	47.0	15.36	8.20	5.97	124.0	541
	02/02/06	47.0	14.57	8.7	6.83	105.0	6.34
	02/15/06	47.0	13.82	6.6	6.28	10.0	459
	03/03/06	47.0	14.38	8.2	6.35	116.0	1,953
	03/24/06	47.0	12.83	2.7[1]	7.30	256.0	1,695
	04/17/06	47.0	10.72	8.1	6.66	510.0	1,464
	04/27/06	47.0	10.48	6.61	7.01	NM	1,400
	05/04/06	47.0	11.04	6.1	7.65	156.0	1,507
	05/16/06	47.0	11.86	8.3	6.97	101.0	1,733
	06/09/06	47.0	12.32	6.6	7.09	406.0	1,336
	06/30/06	47.0	12.79	7.7	7.15	156.0	1,729
	07/10/06	47.0	13.00	7.2	7.37	163.0	1,435
	07/12/06	47.0	13.08	0.63	6.94	69.0	1,018
	08/03/06	47.0	14.10	4.5	8.50	121.0	1,065
	08/25/06	47.0	14.55	7.4	6.82	172.0	815
	09/13/06	47.0	15.02	6.22	6.42	NM	NM
	09/27/06	47.0	15.51	6.28	6.58	122.0	3,999
10/12/06	47.0	15.85	5.67	6.39	77.0	3,999	
10/17/06	47.0	15.96	6.13[2]	6.97	NM	6.70	
[4]	11/03/06	47.0	NM	NM	NM	NM	NM
	11/20/06	47.0	16.87	3.8	7.67	394.0	890
	12/18/06	47.0	NM	NM	NM	NM	NM

**TABLE 4**

**Physical Parameter Summary**

Former USA Service Station No. 57  
10700 McArthur Boulevard Oakland, California

Well Number	Date	Distance to nearest injection well	Depth to water feet bgs	DO mg/L	pH	ORP mV	Specific Conductivity millisiemen
EX-1	10/24/05	20.0	14.37	1.15	6.56	NM	585
	01/11/06	20.0	3.11	NM	NM	NM	NM
	01/20/06	20.0	2.13	2.50	6.79	116.0	631
	02/02/06	20.0	1.68	5.84	7.65	128.0	463
	02/15/06	20.0	2.27	2.00	7.10	4.0	646
	03/03/06	20.0	NM	NM	NM	NM	NM
	03/24/06	20.0	NM	NM	NM	NM	NM
	04/17/06	20.0	1.15	7.1	7.40	542.0	542
	04/27/06	20.0	1.76	2.4	7.39	NM	609
	05/04/06	20.0	NM	NM	NM	NM	NM
	05/16/06	20.0	NM	NM	NM	NM	NM
	06/09/06	20.0	6.77	2.2	7.62	326.0	807
	06/30/06	20.0	6.64	5.2	7.95	183.0	817
	07/10/06	20.0	6.71	2.5	8.02	163.0	767
	07/12/06	20.0	6.88	0.80	7.48	-10.0	944
	08/03/06	20.0	NM	NM	NM	NM	NM
	08/25/06	20.0	9.14	5.4	7.34	121.0	690
	09/13/06	20.0	8.82	3.09	7.01	NM	NM
	09/27/06	20.0	9.25	3.73	7.23	205.0	1,104
	10/12/06	20.0	9.67	2.84	6.93	238.0	1,145
10/17/06	20.0	9.79	1.97[2]	6.90	NM	1,624	
11/03/06	20.0	10.91	2.19[2]	6.50	170.0	1,198	
11/20/06	20.0	10.58	4.4	8.61	398.0	654	
12/18/06	Injection well	5.63	2.74[2]	6.81	149.0	741	



**TABLE 4**

**Physical Parameter Summary**

Former USA Service Station No. 57  
10700 McArthur Boulevard Oakland, California

Well Number	Date	Distance to nearest injection well	Depth to water feet bgs	DO mg/L	pH	ORP mV	Specific Conductivity millisiemen
EX-2	10/24/05	15.0	16.00	2.83	6.85	NM	588
	01/11/06	15.0	10.22	NM	NM	NM	NM
	01/20/06	15.0	8.98	2.90	5.93	157.0	1,570
	02/02/06	15.0	8.18	15.60	6.87	138.0	18.99
	02/15/06	15.0	7.74	2.20	6.49	58.0	1,472
	03/03/06	15.0	NM	NM	NM	NM	NM
	03/24/06	15.0	NM	NM	NM	NM	NM
	04/17/06	15.0	5.74	5.6	6.86	555.0	1,223
	04/27/06	15.0	5.22	2.48	7.17	NM	1,184
	05/04/06	15.0	NM	NM	NM	NM	NM
	05/16/06	15.0	NM	NM	NM	NM	NM
	06/09/06	15.0	8.00	4.6	7.51	374.0	1,190
	06/30/06	15.0	7.37	2.0	7.52	9.0	1,286
	07/10/06	15.0	7.16	1.8	7.69	44.0	1,210
	07/12/06	15.0	7.32	1.0	7.43	-4.0	1,169
	08/03/06	15.0	NM	NM	NM	NM	NM
	08/25/06	15.0	8.69	1.4	7.08	127.0	937
	09/13/06	15.0	8.51	1.25	6.58	NM	NM
	09/27/06	15.0	8.96	1.41	6.78	11.0	2,114
	10/12/06	15.0	9.10	0.63	6.64	38.0	2,062
10/17/06	15.0	9.22	1.97[2]	6.97	NM	1,896	
11/03/06	15.0	9.78	0.72[2]	6.45	84.0	1,903	
11/20/06	15.0	9.87	3.6	8.10	388.0	887	
12/18/06	Injection well	9.70	1.28[2]	6.60	93.0	1,875	

**TABLE 4**

**Physical Parameter Summary**

Former USA Service Station No. 57  
10700 McArthur Boulevard Oakland, California

Well Number	Date	Distance to nearest injection well	Depth to water feet bgs	DO mg/L	pH	ORP mV	Specific Conductivity millisiemen
EX-3	10/24/05	45	14.93	NM	7.06	NM	676
	01/11/06	45	NM	NM	NM	NM	NM
	01/20/06	45	NM	NM	NM	NM	NM
	02/02/06	45	NM	NM	NM	NM	NM
	02/15/06	45	NM	NM	NM	NM	NM
	03/03/06	45	NM	NM	NM	NM	NM
	03/24/06	45	NM	NM	NM	NM	NM
	04/17/06	45	NM	NM	NM	NM	NM
	04/27/06	45	NM	NM	NM	NM	NM
	05/04/06	45	NM	NM	NM	NM	NM
	05/16/06	45	NM	NM	NM	NM	NM
	06/09/06	45	NM	NM	NM	NM	NM
	06/30/06	45	NM	NM	NM	NM	NM
	07/10/06	45	NM	NM	NM	NM	NM
	07/12/06	45	9.01	0.5	7.40	0.0	894
	08/03/06	45	NM	NM	NM	NM	NM
	08/25/06	45	NM	NM	NM	NM	NM
	09/13/06	45	NM	NM	NM	NM	NM
	09/27/06	45	NM	NM	NM	NM	NM
	10/12/06	45	NM	NM	NM	NM	NM
	10/17/06	45	NM	NM	NM	NM	NM
	11/03/06	45	NM	NM	NM	NM	NM
	11/20/06	45	NM	NM	NM	NM	NM
	12/18/06	45	NM	NM	NM	NM	NM

NOTES:

pH, specific conductivity, ORP and DO were measured on site using field instruments

OR = Over the range of the field instrument

[1] DO instrument appears to have malfunctioned

[2] DO was originally measured in % and then converted to mg/L [DO in mg/L = 0.10\* DO in %]

[3] Not measured since well was hidden under dirt pile

[4] Not measured due to well blocked off by spools

[5] Removed iSOC unit from well

TABLE 5

## Analytical Parameter Summary

Former USA Service Station No. 57  
10700 McArthur Boulevard, Oakland, California

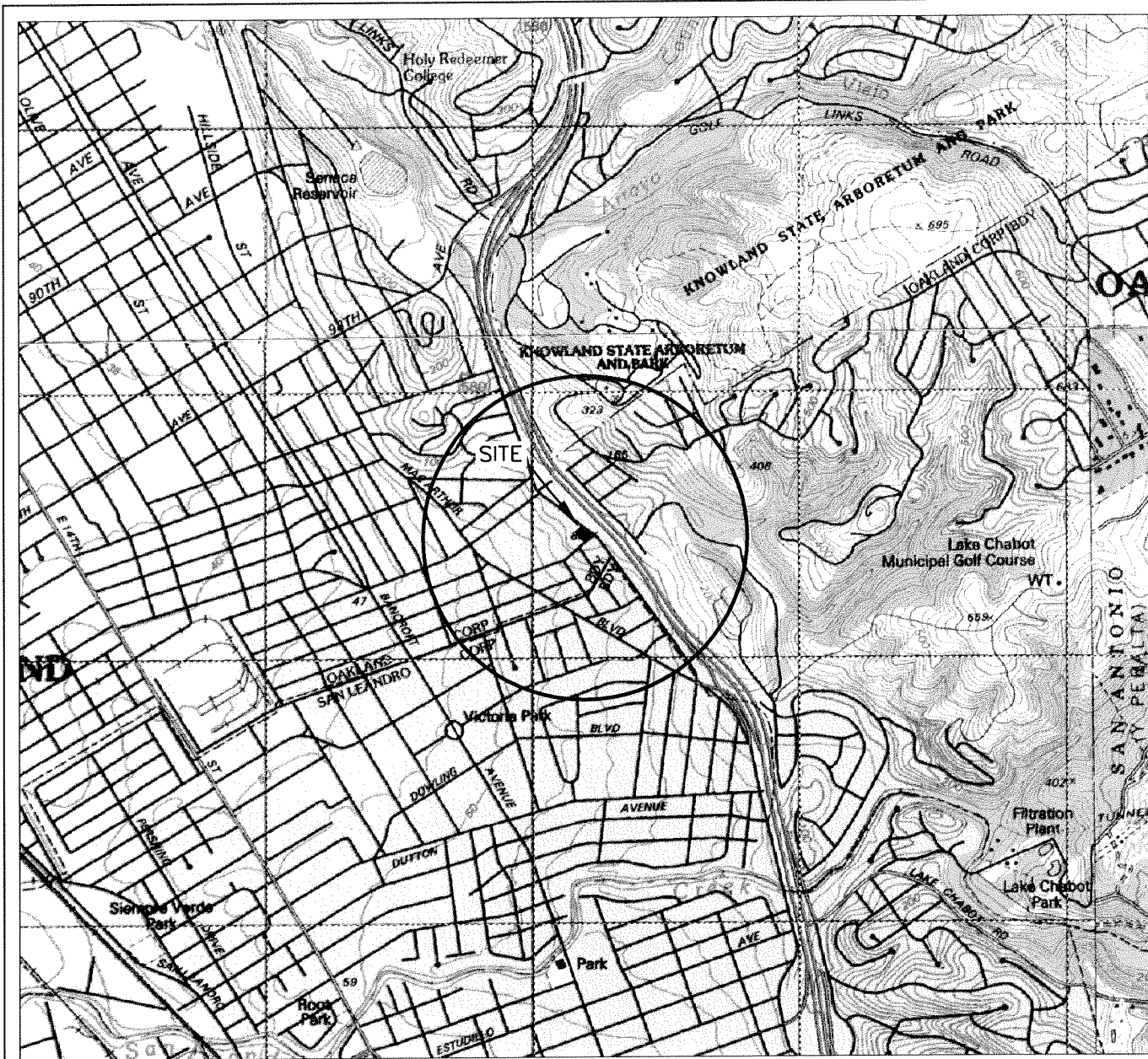
Well Number	Date	Distance to nearest injection well	BOD <sup>1</sup> µg/L	Heterotrophic plate count <sup>2</sup> CFU/ml	TOC <sup>3</sup> µg/L	Ferrous iron <sup>4</sup> µg/L	Total iron <sup>4</sup> µg/L	Nitrite as NO <sub>2</sub> <sup>5</sup> µg/L	Nitrate as NO <sub>3</sub> <sup>5</sup> µg/L	Ammonia Nitrogen <sup>6</sup> µg/L	Sulfate as SO <sub>4</sub> <sup>5</sup> µg/L	Sulfide <sup>7</sup> µg/L	Total Ortho-phosphates <sup>8</sup> µg/L	TDS <sup>9</sup> µg/L	Total Phosphorus <sup>8</sup> µg/L
S-1	01/11/06	Injection well	<3,000	3,000	7,800	<50	690	<250	<250	<100	32,000	<100	190	NA	120
S-2	01/11/06	Injection well	19,000	18,000	6,600	<50	<300	<250	<250	<100	2,500	<100	120	NA	<100
MW-3	01/11/06	Injection well	<3,000	23,000	3,400	<50	420	<250	<250	<100	15,000	<100	130	NA	120
MW-7	01/11/06	70.0	<3,000	19,000	3,900	<50	<300	<250	600	<100	21,000	<100	180	NA	180
	04/27/06	70.0	<3,000	24	2,300	<50	<300	<250	2,400	<100	50,000	<100	210	660,000	150
	07/12/06	70.0	<3,000	33	2,500	<50	<300	<250	2,600	<100	56,000	<100	130	670,000	<100
	10/17/06	70.0	<3,000	8	3,400	<50	1,300	<250	2,200	<100	55,000	<100	<100	650,000	<100
MW-8	01/11/06	47.0	<3,000	380	1,500	<50	1,500	<250	4,100	<100	62,000	<100	190	NA	170
	04/27/06	47.0	<3,000	660	1,000	<50	3,200	<250	4,200	<100	66,000	120	230	5,900,000	140
	07/12/06	47.0	<3,000	S[1]	2,100	<50	5,300	<250	4,800	<100	79,000	<100	180	2,400,000	170
	10/17/06	47.0	<3,000	3,500	1,900	<50	3,600	<250	4,500	<100	79,000	<100	<100	5,400,000	130
EX-1	01/11/06	20.0	<3,000	4,500	9,500	<50	540	<250	1,400	<100	69,000	<100	220	NA	200
	04/27/06	20.0	<3,000	9,800	6,800	<50	6,000	<250	260	<100	69,000	<100	160	400,000	290
	07/12/06	20.0	25,000	19,000	26,000	230	7,400	<250	<250	1,200	8,600	<100	300	1,100,000	220
	10/17/06	20.0	32,000	11,000	30,000	60	53,000	<250	<250	1,800	4,700	<100	<100	1,000,000	330
EX-2	01/11/06	15.0	48,000	85,000	17,000	<50	1,200	<250	<250	120	21,000	<100	230	NA	140
	04/27/06	15.0	22,000	82,000	17,000	<50	770	<250	<250	<100	22,000	<100	140	1,200,000	240
	07/12/06	15.0	23,000	41,000	17,000	<50	2,000	<250	<250	<100	6,700	<100	220	1,200,000	150
	10/17/06	15.0	38,000	3,600	18,000	<50	37,000	<250	<250	<100	<500	<100	<100	1,200,000	<100
EX-3	07/12/06	45.0	9,400	15,000	14,000	<50	14,000	<250	<250	<100	32,000	220	320	930,000	250
	10/17/06	45.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

**TABLE 5**

**Analytical Parameter Summary**

Former USA Service Station No. 57  
10700 McArthur Boulevard, Oakland, California

Well Number	Date	Distance to nearest injection well	BOD <sup>1</sup> µg/L	Heterotrophic plate count <sup>2</sup> CFU/ml	TOC <sup>3</sup> µg/L	Ferrous iron <sup>4</sup> µg/L	Total iron <sup>4</sup> µg/L	Nitrite as NO <sub>2</sub> <sup>5</sup> µg/L	Nitrate as NO <sub>3</sub> <sup>5</sup> µg/L	Ammonia Nitrogen <sup>6</sup> µg/L	Sulfate as SO <sub>4</sub> <sup>5</sup> µg/L	Sulfide <sup>7</sup> µg/L	Total Ortho-phosphates <sup>8</sup> µg/L	TDS <sup>9</sup> µg/L	Total Phosphorus <sup>8</sup> µg/L
<p>NOTES:</p> <p><sup>1</sup> Biochemical oxygen demand (BOD) was analyzed using EPA Method 405.1</p> <p><sup>2</sup> Heterotrophic plate count (HPC) was conducted using SM 9215</p> <p><sup>3</sup> Total organic carbon (TOC) was analyzed using EPA Method 415.1</p> <p><sup>4</sup> Ferrous iron &amp; Total iron was analyzed using SM3500-Fe D</p> <p><sup>5</sup> Nitrite, nitrate and sulfates were analyzed using EPA Method 300.0</p> <p><sup>6</sup> Ammonia nitrogen was analyzed using EPA Method 350.3</p> <p><sup>7</sup> Sulfide was analyzed using EPA Method 376.2</p> <p><sup>8</sup> Total orthophosphate and total phosphorus were analyzed by EPA Method 365.2</p> <p><sup>9</sup> Total dissolved solids (TDS) analyzed using EPA Method 160.1</p> <p>S[1] = Spreaders frequently cover more than half the plate and interfere with obtaining a reliable plate count.</p> <p style="text-align: right;">µg/L = micrograms per liter NA = Not analyzed NS = Not sampled</p>															



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



QUADRANGLE LOCATION



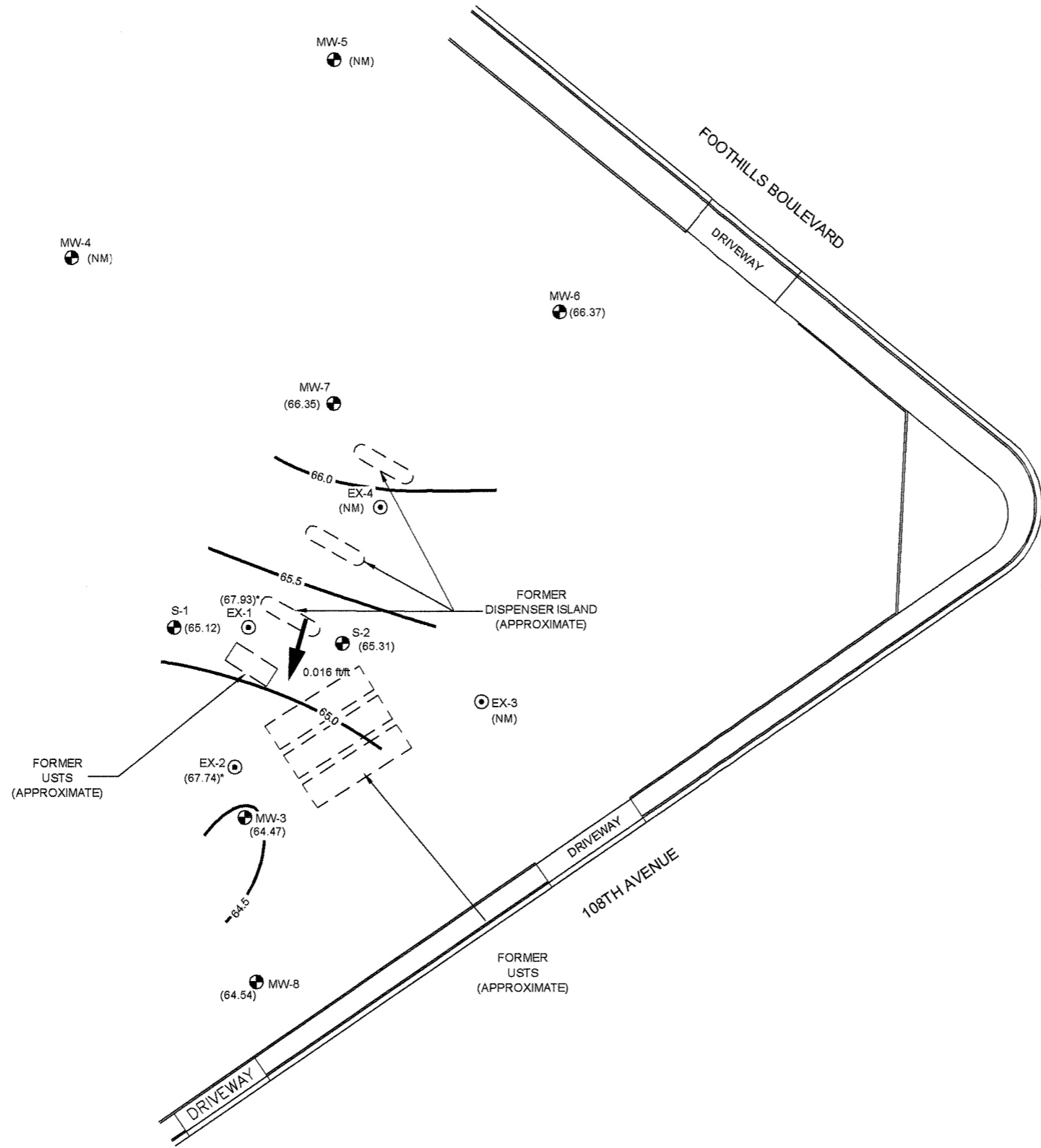
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USA57Site Location Map.dwg  
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 USA57/Quadrant

*STRATUS*  
 ENVIRONMENTAL, INC.

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

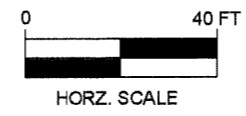
FIGURE  
**1**  
 PROJECT NO.  
 2007-0057-01



- LEGEND**
- MW-3 MONITORING WELL LOCATION
  - ⊙ EX-1 EXTRACTION WELL LOCATION
  - (65.12) GROUND WATER ELEVATION IN FEET RELATIVE TO MEAN SEA LEVEL
  - 65.0 — WATER TABLE CONTOUR IN FEET RELATIVE TO MEAN SEA LEVEL
  - ➔ INFERRED DIRECTION OF GROUND WATER FLOW
  - (NM) NOT MEASURED
- WELLS MEASURED: 10/17/06  
\* NOT USED FOR CONTOURING

USA57/Quantity Figures.dwg  
Nov 16, 2006  
REV  
JMP  
USA57/Quantity

**STRATUS**  
ENVIRONMENTAL, INC.



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

GROUNDWATER ELEVATION CONTOUR MAP  
4th QUARTER 2006

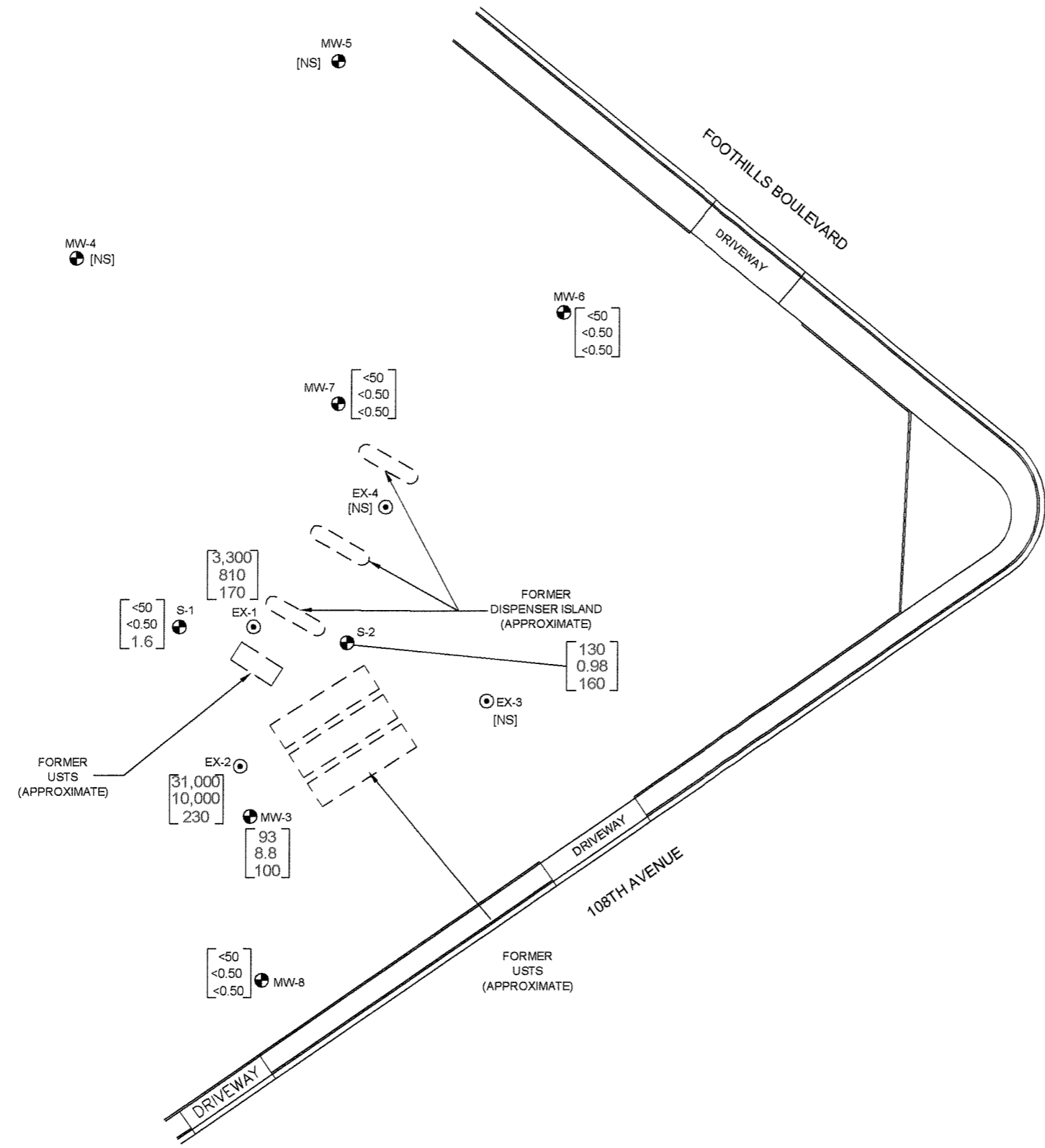
FIGURE  
**2**

PROJECT NO.  
2007-0057-01



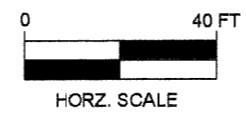
LEGEND

- MW-3 MONITORING WELL LOCATION
- ⊙ EX-1 EXTRACTION WELL LOCATION
- [ <50 ] GASOLINE RANGE ORGANICS (GRO) IN  $\mu\text{g/L}$
- [ <0.50 ] BENZENE CONCENTRATION IN  $\mu\text{g/L}$
- [ <0.50 ] METHYL TERTIARY BUTYL ETHER (MTBE) IN  $\mu\text{g/L}$
- [NS] NOT SAMPLED
- SAMPLES COLLECTED ON 10/17/06
- GRO ANALYZED BY EPA METHOD 8015B
- BENZENE & MTBE ANALYZED BY EPA METHOD 8260B



USA57 Quarterly Emapr.chm  
Nov 16, 2006  
REV  
JMP

**STRATUS**  
ENVIRONMENTAL, INC.

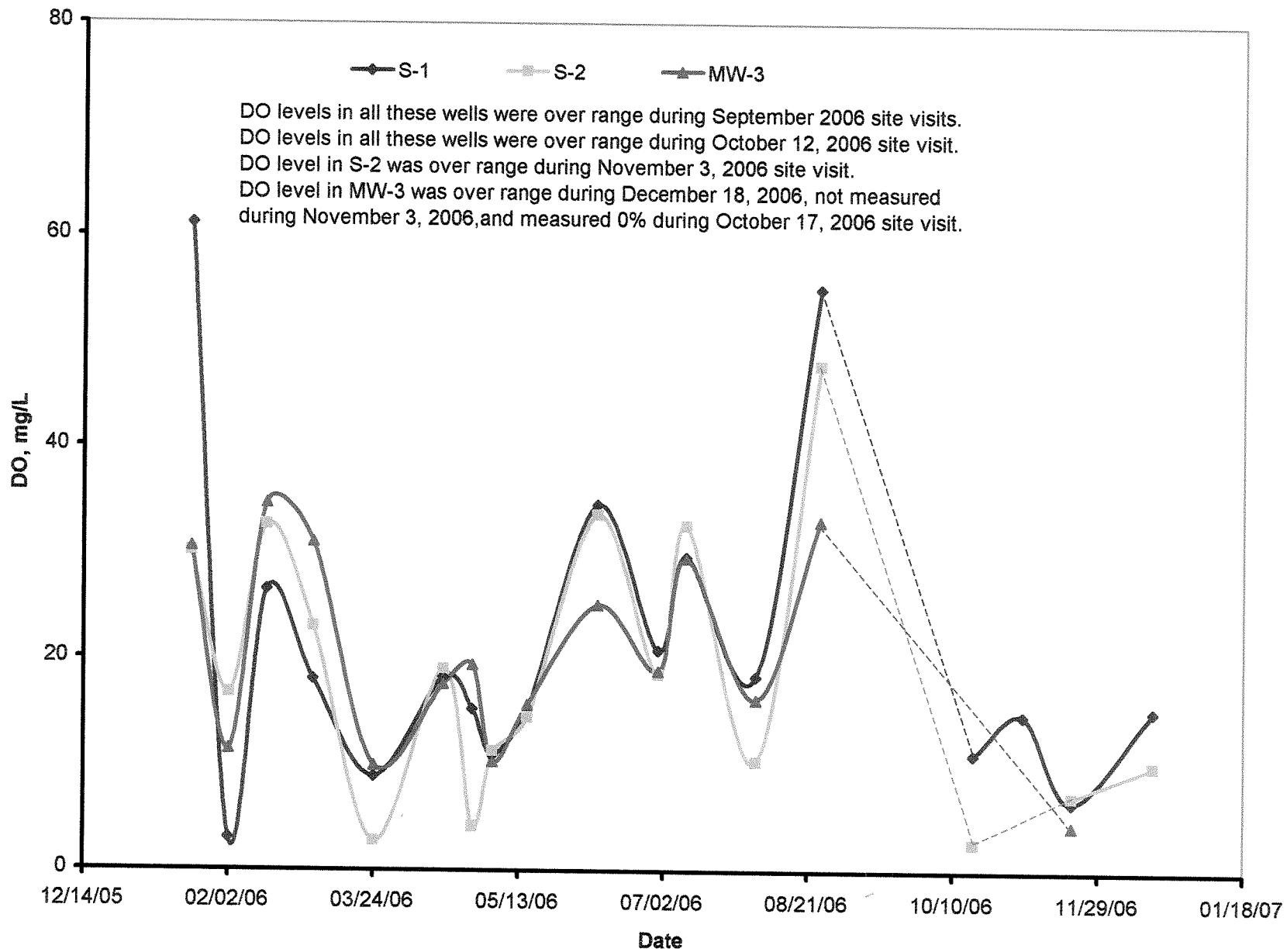


FORMER USA SERVICE STATION NO. 57  
10700 MACARTHUR BOULEVARD  
OAKLAND, CALIFORNIA

**GROUNDWATER ANALYTICAL SUMMARY**  
4th QUARTER 2006

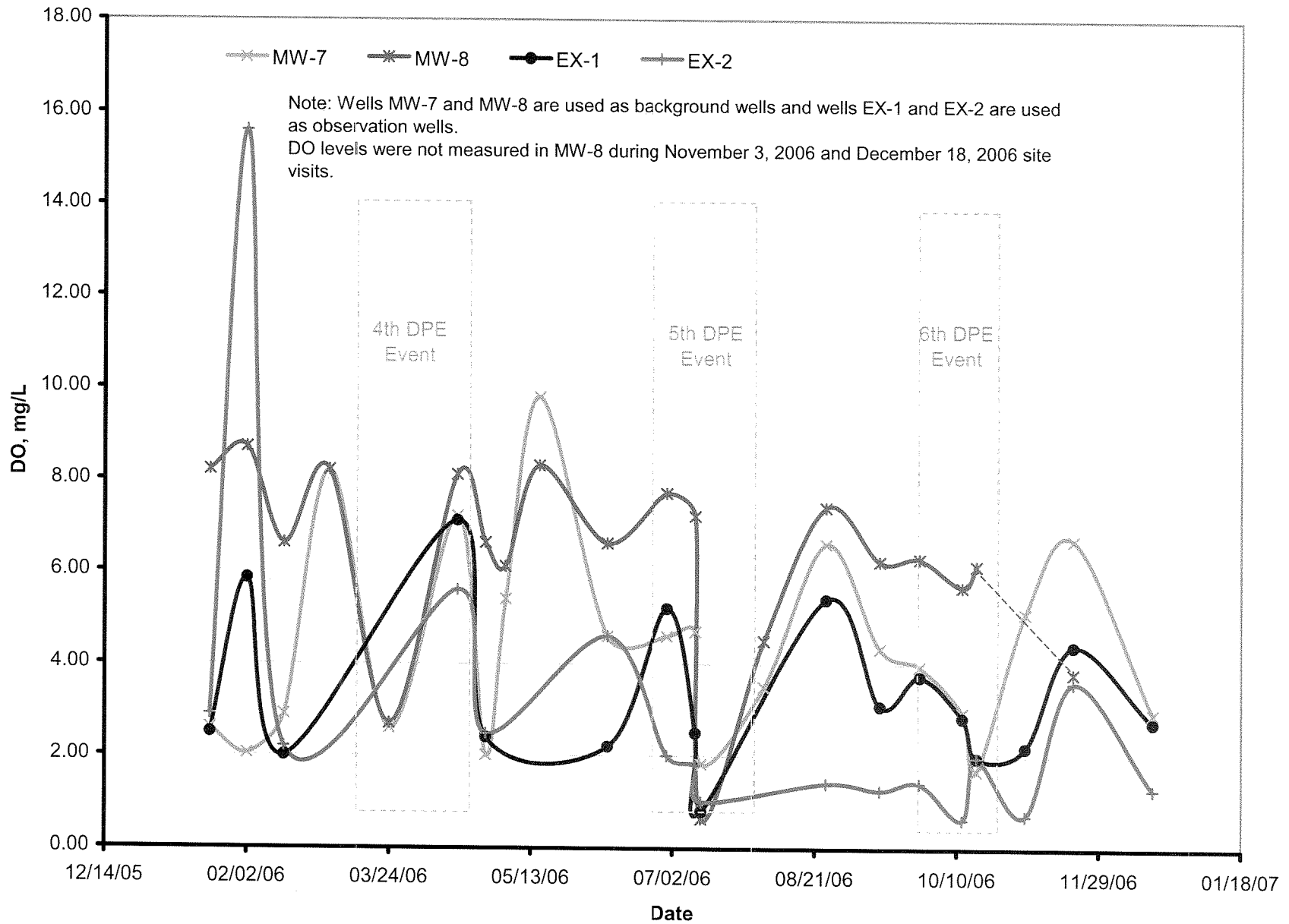
FIGURE  
**3**  
PROJECT NO.  
2007-0057-01

**Figure 4**  
**DO Variation with Time at Injection Wells**  
Former USA Service Station No. 57  
10700 MacArthur Boulevard  
Oakland, California

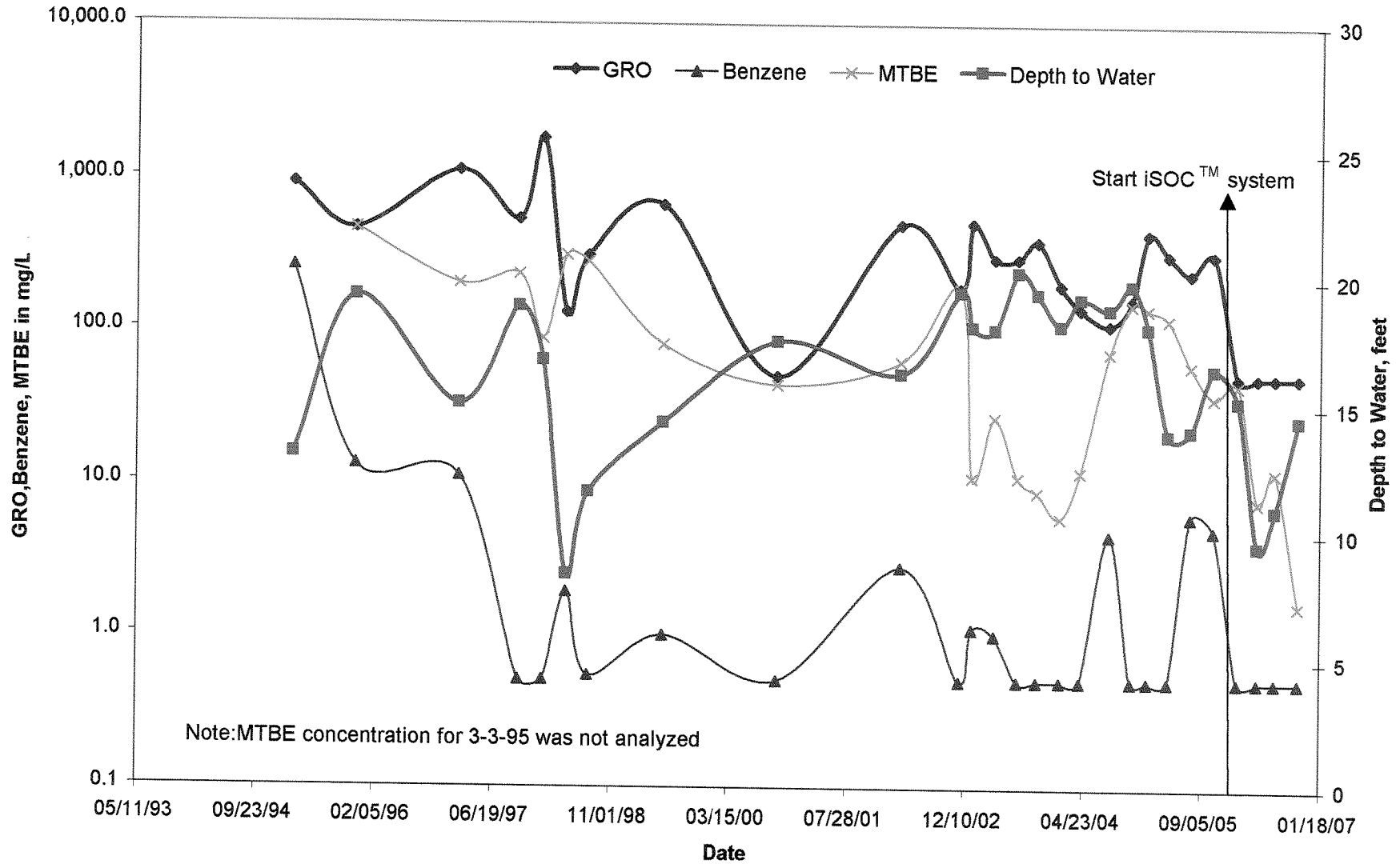




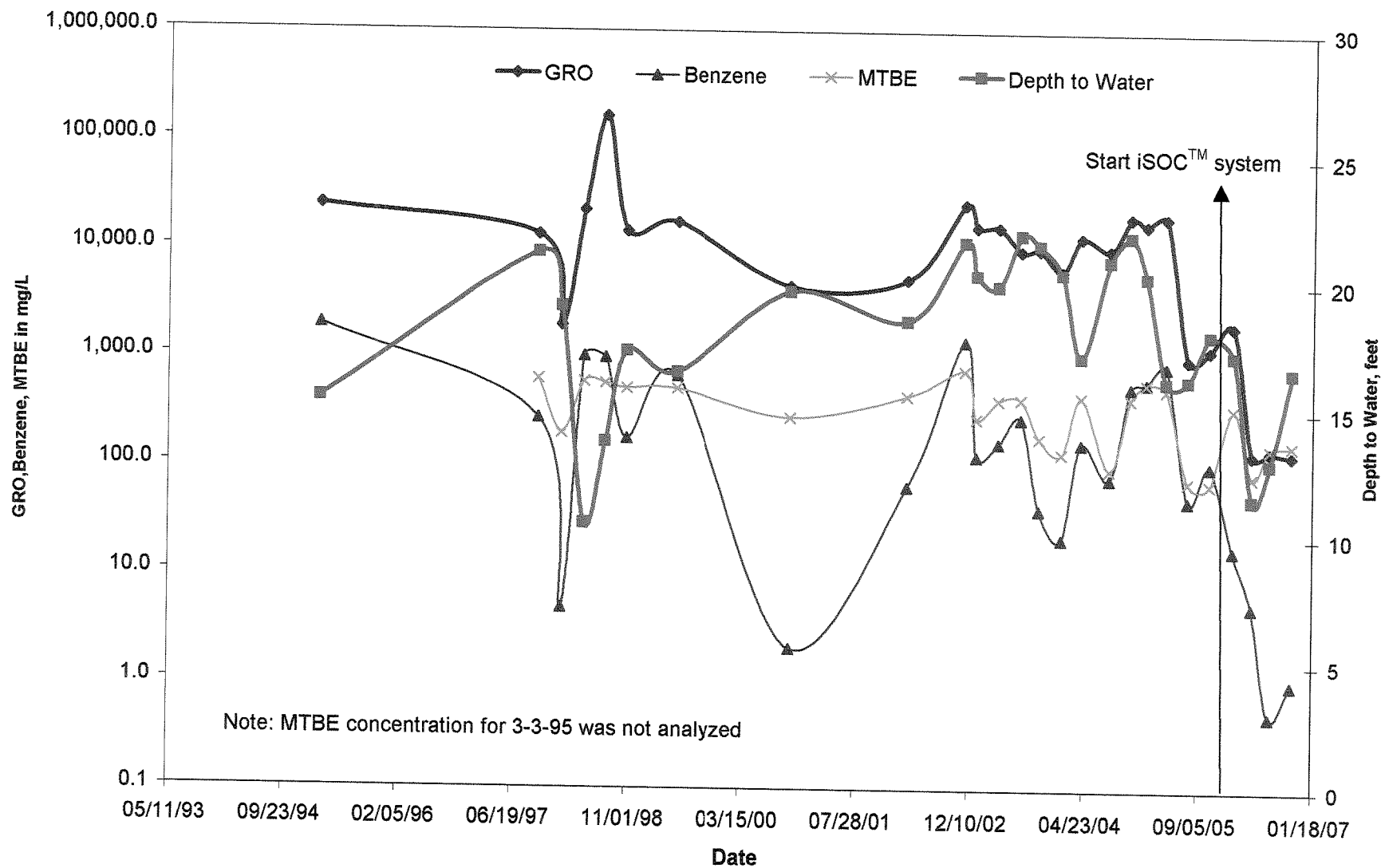
**Figure 5**  
**DO Variation with Time at Observation and Background Wells**  
 Former USA Service Station No. 57  
 10700 MacArthur Boulevard  
 Oakland, California



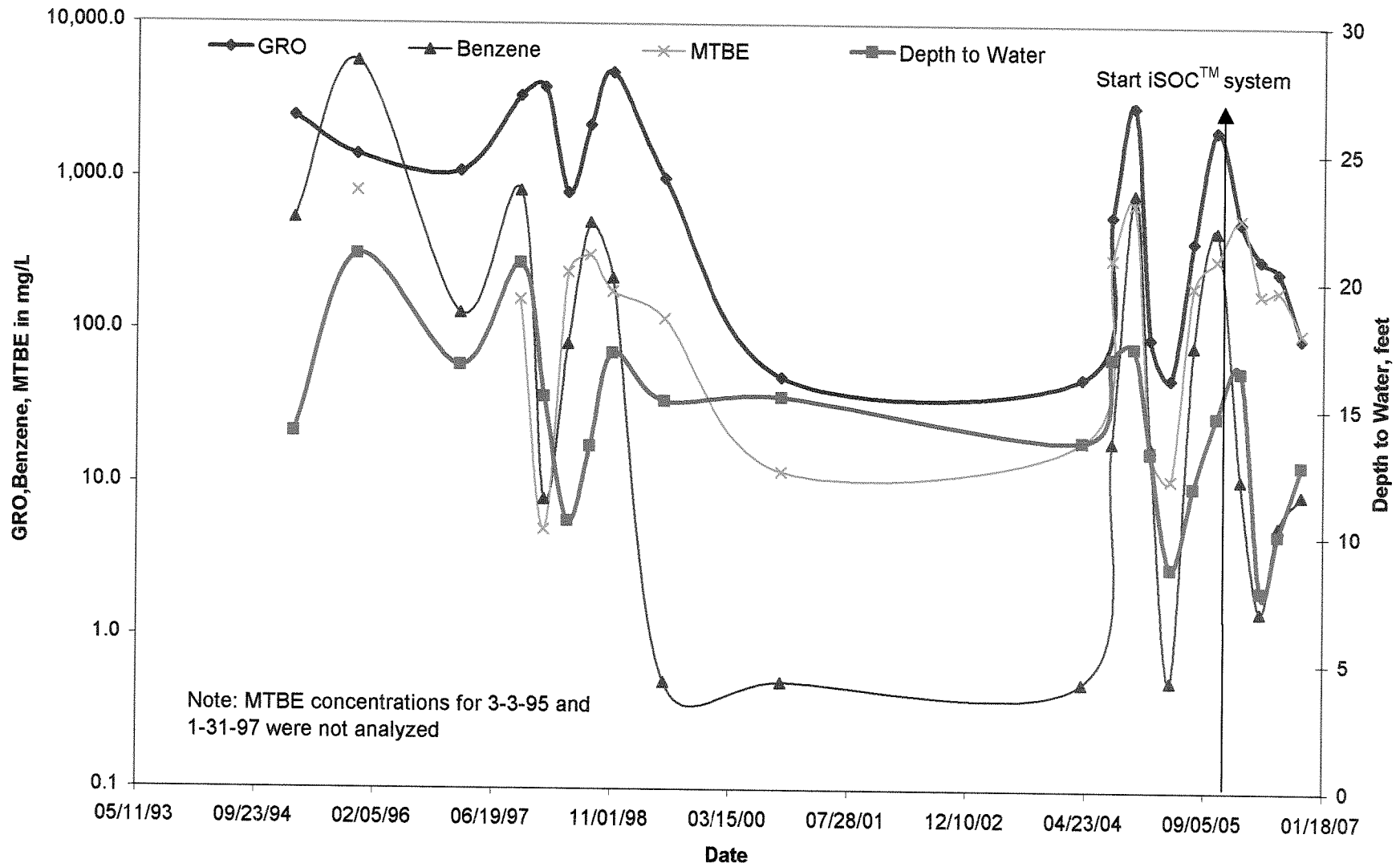
**Figure 6**  
**GRO, Benzene, MTBE, and Depth to Water Variation with Time at S-1**  
 Former USA Service Station No. 57  
 10700 MacArthur Boulevard  
 Oakland, California



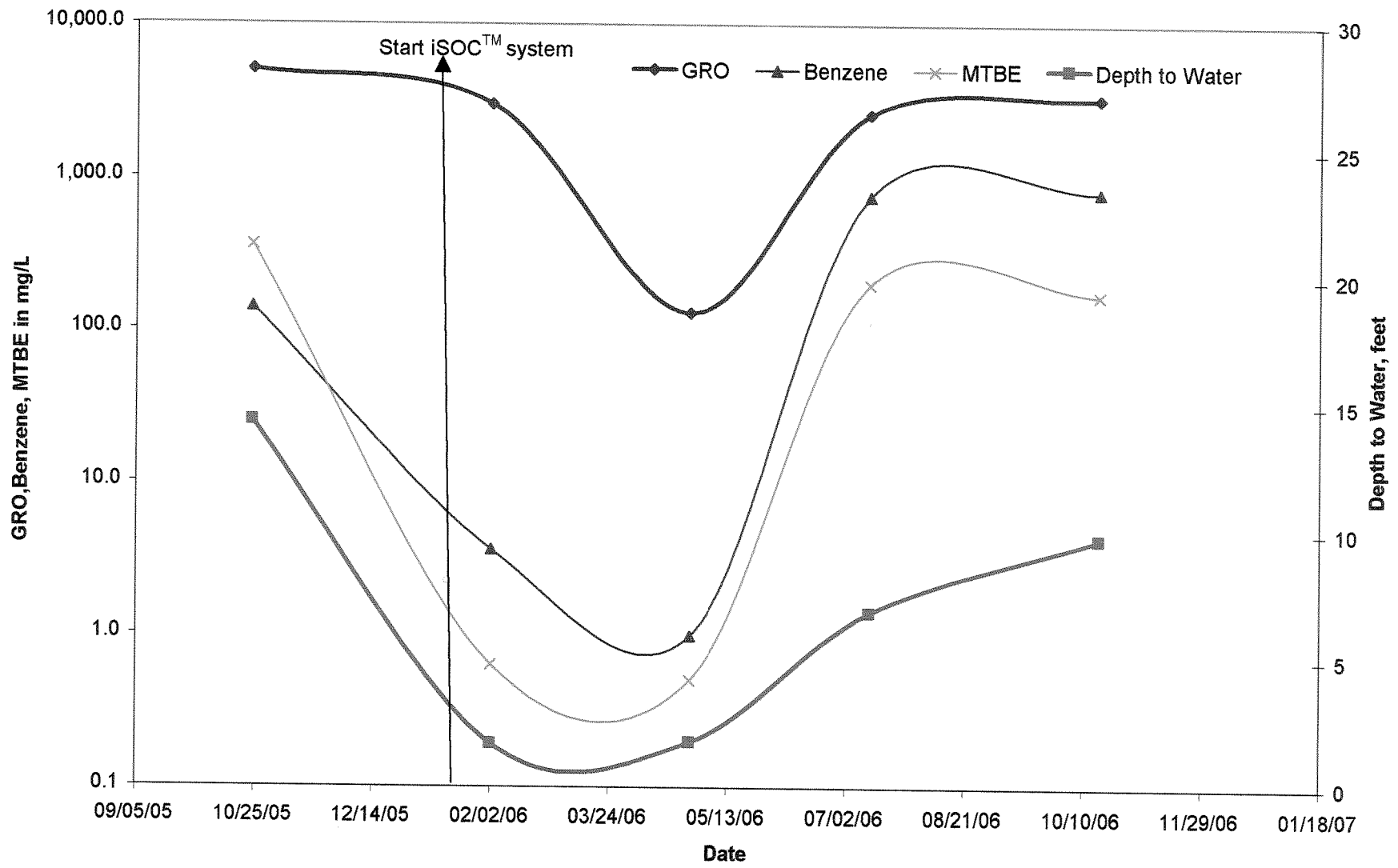
**Figure 7**  
**GRO, Benzene, MTBE, and Depth to Water Variation with Time at S-2**  
 Former USA Service Station No. 57  
 10700 MacArthur Boulevard  
 Oakland, California



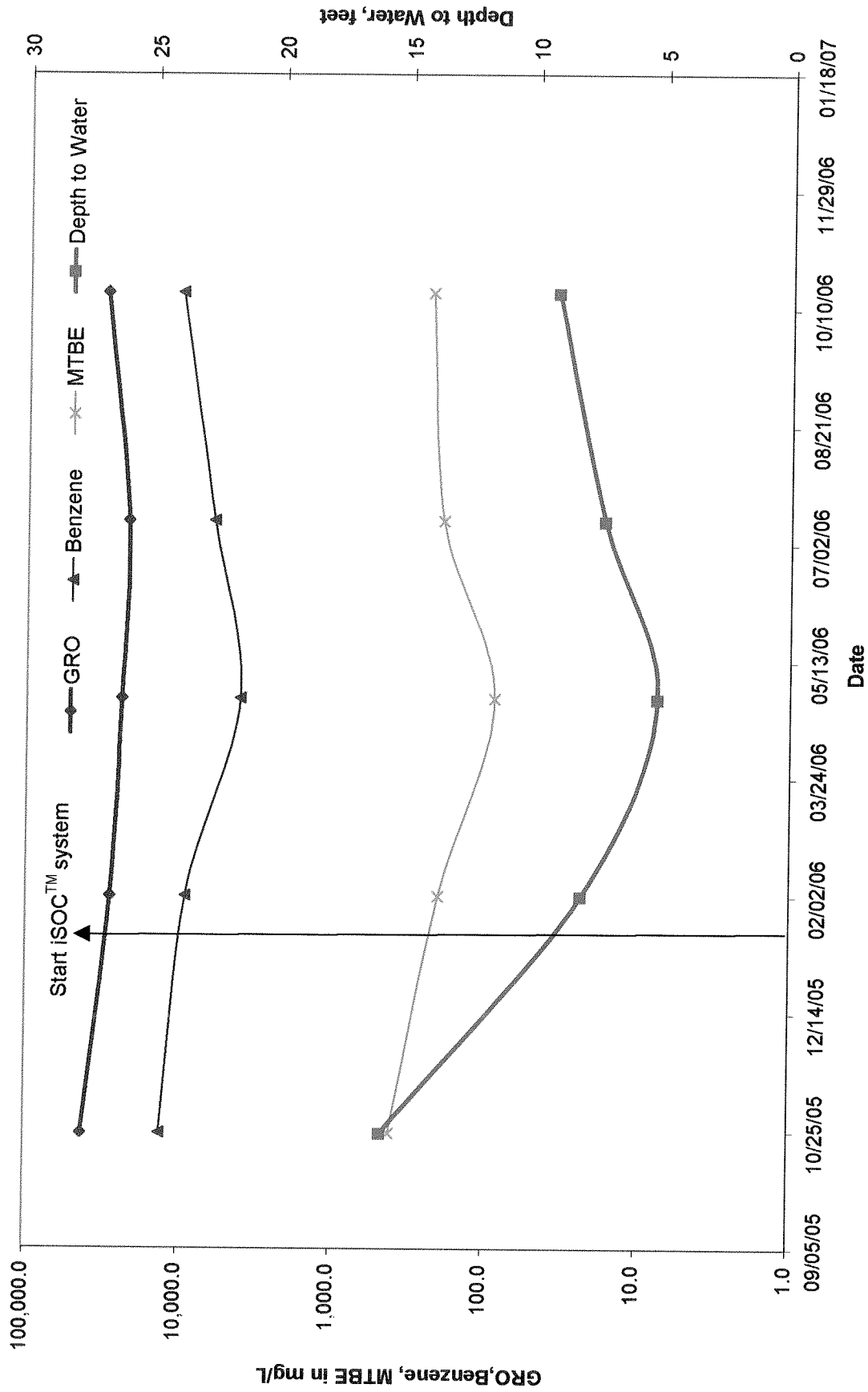
**Figure 8**  
**GRO, Benzene, MTBE, and Depth to Water Variation with Time at MW-3**  
 Former USA Service Station No. 57  
 10700 MacArthur Boulevard  
 Oakland, California



**Figure 9**  
**GRO, Benzene, MTBE, and Depth to Water Variation with Time at EX-1**  
 Former USA Service Station No. 57  
 10700 MacArthur Boulevard  
 Oakland, California



**Figure 10**  
**GRO, Benzene, MTBE, and Depth to Water Variation with Time at EX-2**  
 Former USA Service Station No. 57  
 10700 MacArthur Boulevard  
 Oakland, California



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

ORIGINAL

Global ID: T0600101808  
 Site Address 10700 MCARTHUR  
 City Oakland, CA  
 Sampled By: VinceZ

Site Number USA 57  
 Project No u57  
 Project PM Steve  
 Date 10/17/06

Signature VJ Date: 10-17-06

covered  
covered

Covered  
Gone

Water Level Data						Purge Volume Calculations					Well Purge Method				Sample Record			Field Data
Well ID	Time	Depth to water feet	Top of Screen feet	Total Depth of well feet	Qtr. Meas. 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
MW-3	0538	12.8		43		30.2	4	2	60	31-Dry			X		34.85	MW-3	0641	2.0
MW-4	N/S			42			4							X	N/A	MW-4	N/S	N/A
MW-5	N/S			37			4							X	N/A	MW-5	N/S	N/A
MW-6	0546	15.95		17		1.05	4	2	2	2	X				15.95	MW-6	0551	23.0
MW-7	0459	13.46		42		28.54	4	2	57	57			X		19.28	MW-7	1111	16.9
MW-8	0505	15.96		37.5		21.54	4	2	43	Dry-21			X		32.44	MW-8	1134	61.3
S-1	0517	14.54		41		26.46	3	1	26	13-Dry			X		23.17	S-1	0711	110.0
S-2	0533	16.59		43		26.41	3	1	26	26			X		28.60	S-2	0751	27.1
EX-1	0525	9.79		24		14.21	4	2	28	14-Dry			X		20.59	EX-1	0915	19.7
EX-2	0541	9.22		25		15.78	4	2	31	16-Dry			X		21.12	EX-2	0943	19.7
EX-3	N/S			25			4							X	N/A	EX-3	N/S	N/A
EX-4				25			4									EX-4		

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



Site Address 10700 MCARTHUR  
 City Oakland, CA  
 Sampled By: VinceZ

Site Number USA 57  
 Project No u57  
 Project PM Steve  
 Date 10/17/06

*vj 10/17/06 ORIGINAL*

Well ID MW-3					Well ID MW-4				
purge start time <i>0614</i> <i>No odor</i>					purge start time				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time	<i>17.4</i>	<i>7.76</i>	<i>3.15 m</i>	<i>Q</i>	time				
time	<i>18.3</i>	<i>7.74</i>	<i>3.22 m</i>	<i>30</i>	time				
time	<i>Dry @</i>		<i>31 gal</i>		time				
time	<i>17.9</i>	<i>7.34</i>	<i>3.23 m</i>	<i>(31)</i>	time				
purge stop time					purge stop time				
Well ID MW-5					Well ID MW-6 <i>0551</i>				
purge start time					purge start time <i>Bailer odor</i>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time					time	<i>16.5</i>	<i>6.99</i>	<i>2.56 m</i>	<i>Q</i>
time					time				
time					time				
time					time				
purge stop time					purge stop time				
Well ID MW-7 <i>1111</i>					Well ID MW-8				
Purge start time <i>1027</i> <i>No odor</i>					Purge start time <i>1007</i> <i>No odor</i>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time	<i>18.0</i>	<i>7.62</i>	<i>1157</i>	<i>Q</i>	time	<i>18.2</i>	<i>7.07</i>	<i>6.36 m</i>	<i>Q</i>
time	<i>19.1</i>	<i>7.61</i>	<i>1126</i>	<i>28</i>	time	<i>18.2</i>	<i>6.99</i>	<i>6.38 m</i>	<i>20</i>
time	<i>18.2</i>	<i>7.33</i>	<i>1179</i>	<i>57</i>	time	<i>Dry @</i>		<i>21 gal</i>	
time					time	<i>18.4</i>	<i>6.97</i>	<i>6.70 m</i>	<i>(21)</i>
purge stop time <i>1059</i>					purge stop time				
Well ID S-1					Well ID S-2				
purge start time <i>0700</i> <i>No odor</i>					purge start time <i>0730</i> <i>No odor</i>				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time	<i>18.3</i>	<i>7.75</i>	<i>1170</i>	<i>Q</i>	time	<i>16.5</i>	<i>7.35</i>	<i>1136</i>	<i>Q</i>
time	<i>Dry @</i>		<i>13 gal</i>		time	<i>17.4</i>	<i>7.41</i>	<i>1131</i>	<i>13</i>
time	<i>18.0</i>	<i>7.28</i>	<i>1241</i>	<i>(13)</i>	time	<i>17.1</i>	<i>7.10</i>	<i>1154</i>	<i>26</i>
time					time				
purge stop time					purge stop time <i>0744</i>				

Site Address 10700 MCARTHUR  
 City Oakland, CA  
 Sampled By: VinceZ

Site Number USA 57  
 Project No u57  
 Project PM Steve  
 Date 10/17/06

03 - 10/17/06 ORIGINAL

Well ID EX-1 0915					Well ID EX-2 0943				
purge start time 0828 <del>0828</del> odor					purge start time 0847 <del>0847</del> odor				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time	17.9	6.89	1667	2	time	17.8	6.98	1831	2
time	18.5	6.88	1583	13	time	19.4	6.99	1801	12
time	Dry @ 14 gal				time	Dry @ 16 gal			
time	17.5	6.90	1624	(14)	time	18.5	6.97	1896	(16)
purge stop time					purge stop time				
Well ID EX-3					Well ID EX-4				
purge start time					purge start time				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time					time				
time					time				
time					time				
time					time				
purge stop time					purge stop time				
Well ID 0					Well ID 0				
Purge start time					Purge start time				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time					time				
time					time				
time					time				
time					time				
purge stop time					purge stop time				
Well ID 0					Well ID 0				
purge start time					purge start time				
	Temp C	pH	cond	gallons		Temp C	pH	cond	gallons
time					time				
time					time				
time					time				
time					time				
purge stop time					purge stop time				

Former USA Service Station No. 57  
 10700 McArthur Boulevard  
 Oakland, CA  
 Oxygen Injection System Using iSOC

Date: 10/12/00  
 Onsite Time: 0830  
 Offsite Time: \_\_\_\_\_

Technician: MW Morgan  
 Project Engineer: G. Kowthar  
 Weather Conditions: Clear  
 Ambient Temperature: 60

iSOC™ Panel:

No. of iSOC Panels: Three 3-Injection Well Panels

No. of Oxygen Cylinders On Site: 6

No. of Cylinders Connected to Panels: 3

No. of Empty Cylinders: 1

Field Measurements (Monthly)								
Well ID	Time	DTW	pH	DO	ORP	Cond	Temp	
S-1		14.43	7.22	OVER	239	1198	17.3	
S-2		16.45	6.67	OVER	241	1176	16.8	
MW-3		12.10	7.19	OVER	242	3457	16.8	
EX-1		9.67	6.93	2.84	238	1145	18.0	
EX-2		9.10	6.64	.63	38	2062	18.2	ODOR
EX-3	NM							
MW-7		13.46	7.01	<del>4.94</del>	244	1194	17.7	2.96 DO
MW-8		15.85	6.39	5.67	77	3999	17.4	

Connected Cylinders	
O <sub>2</sub> Cylinder	Pressure
1	60/2400
2	60/800
3	60/600
4	
5	
6	

Changed out O<sub>2</sub> cylinder #1, was 0 psi upon arrival

Lab Parameters	Sampling Frequency	Sample Locations	Analytical Method
Bio-chemical oxygen demand	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 405.1
Total Iron & Ferrous Iron	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	SM3500
Heterotrophic Plate Counts	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	SM 9215B
Total Organic Carbon	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 415.1
Total Dissolved Solids	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 160.1
Nitrates, nitrites and ammonia	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 350.3
Sulfide and Sulfates	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 376.2 & EPA 300.0
Total Phosphorus & orthophosphates	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 365.2

11/3/06 Oakland USA 57

0700 MWM on site; Sys operating

WELL #	DTW	TEMP	PH	cond	DO	ORP
EX-1	10.91	17.4	6.50	1198	21.9	170
EX-2	9.78	17.6	6.45	1903	7.2	84
MW-3	under divt		pile			
S-1	15.19	17.6	6.43	1225	147.1	113
S-2	17.21	16.9	6.55	1221	OVER	120
MW-7	14.21	16.7	6.86	1185	51.1	210
MW-8	Blocked off by		Spools			

cannister #1:  $\emptyset$  changed out ...

2: 800

3: 620

(2) Empty

(1) Full

(3) in use

Former USA Service Station No. 57  
 10700 McArthur Boulevard  
 Oakland, CA  
 Oxygen Injection System Using iSOC

 ORIGINAL

Date: 112000  
 Onsite Time: 0715  
 Offsite Time: 0630

Technician: CHILL  
 Project Engineer: George  
 Weather Conditions: Clear  
 Ambient Temperature: 50

iSOC™ Panel:

No. of iSOC Panels: Three 3-Injection Well Panels

No. of Oxygen Cylinders On Site: 6

No. of Cylinders Connected to Panels: 3

No. of Empty Cylinders: 3

Field Measurements (Monthly)							
Well ID	Time	DTW	pH	DO	Coled	ORP	Temp
S-1		15.49	8.60	6.5	706	381	20.7
S-2		17.55	8.46	7.1	682	428	20.9
MW-3		13.72	8.28	4.4	851	380	21.0
EX-1		10.58	8.61	4.4	654	398	21.1
EX-2		9.87	8.10	3.6	887	388	21.0
EX-3		NM					
MW-7		14.54	9.10	6.7	740	170	19.6
MW-8		16.87	7.67	3.8	890	394	20.3

Connected Cylinders	
O <sub>2</sub> Cylinder	Pressure
1	2400
2	700
3	500
4	0
5	0
6	0

Lab Parameters	Sampling Frequency	Sample Locations	Analytical Method
Bio-chemical oxygen demand	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 405.1
Total Iron & Ferrous Iron	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	SM3500
Heterotrophic Plate Counts	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	SM 9215B
Total Organic Carbon	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 415.1
Total Dissolved Solids	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 160.1
Nitrates, nitrites and ammonia	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 350.3
Sulfide and Sulfates	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 376.2 & EPA 300.0
Total Phosphorus & orthophosphates	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 365.2

Former USA Service Station No. 57  
 10700 McArthur Boulevard  
 Oakland, CA  
 Oxygen Injection System Using iSOC

**ORIGINAL**

Date: 11 29 06  
 Onsite Time: 0500  
 Offsite Time: \_\_\_\_\_

Technician: \_\_\_\_\_  
 Project Engineer: CHILL  
 Weather Conditions: Clear  
 Ambient Temperature: 35

iSOC™ Panel:

No. of iSOC Panels: Three 3-Injection Well Panels

No. of Oxygen Cylinders On Site: 0

No. of Cylinders Connected to Panels: 3

No. of Empty Cylinders: 3

Field Measurements (Monthly)							
Well ID	Time	DTW	pH	DO			
S-1							
S-2							
MW-3							
EX-1							
EX-2							
EX-3							
MW-7							
MW-8							

Connected Cylinders	
O <sub>2</sub> Cylinder	Pressure
1	2200
2	2200
3	2200
4	0
5	0
6	0

*Change out All cylinders*

Lab Parameters	Sampling Frequency	Sample Locations	Analytical Method
Bio-chemical oxygen demand	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 405.1
Total Iron & Ferrous Iron	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	SM3500
Heterotrophic Plate Counts	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	SM 9215B
Total Organic Carbon	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 415.1
Total Dissolved Solids	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 160.1
Nitrates, nitrites and ammonia	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 350.3
Sulfide and Sulfates	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 376.2 & EPA 300.0
Total Phosphorus & orthophosphates	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 365.2

Former USA Service Station No. 57  
 10700 McArthur Boulevard  
 Oakland, CA  
 Oxygen Injection System Using iSOC

**ORIGINAL**

Date: 12/18/06  
 Onsite Time: 0530  
 Offsite Time: 0900

Technician: MW Morgan  
 Project Engineer: G. Kowtha  
 Weather Conditions: Clear  
 Ambient Temperature: < 32°

iSOC™ Panel:

No. of iSOC Panels: Three 3-Injection Well Panels

No. of Oxygen Cylinders On Site: 6

No. of Cylinders Connected to Panels: 3

No. of Empty Cylinders: Ø

Field Measurements (Monthly)							
Well ID	Time	DTW	pH	DO%	ORP	Temp	Cond
S-1		15.54	6.66	151.2	148	15.6	1132
S-2		17.97	6.43	100.1	149	15.7	1111
MW-3		13.47	6.79	OVER	84	15.1	2122
EX-1		563	6.81	27.4	149	14.8	741
EX-2		470	6.60	12.8	93	15.2	1875
EX-3		NM →					
MW-7		14.05	6.93	29.4	142	15.3	656
MW-8		NM →					

Connected Cylinders	
O <sub>2</sub> Cylinder	Pressure
1	2100
2	2200
3	2200
4	Full
5	Full
6	Full

Lab Parameters	Sampling Frequency	Sample Locations	Analytical Method
Bio-chemical oxygen demand	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 405.1
Total Iron & Ferrous Iron	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	SM3500
Heterotrophic Plate Counts	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	SM 9215B
Total Organic Carbon	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 415.1
Total Dissolved Solids	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 160.1
Nitrates, nitrites and ammonia	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 350.3
Sulfide and Sulfates	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 376.2 & EPA 300.0
Total Phosphorus & orthophosphates	Quarterly	EX-1, EX-2, EX-3, MW-7, & MW-8	EPA 365.2

Moved EX-1 1900 ft  
 SI and EX-2 from  
 MW-3. set both at  
 ~2' off bottom  
 set pressure to 55  
 psi. Cleaned MW-  
 up. Tried to locate  
 MW-5, 4 and EX-3  
 MW-5 is buried  
 under soil pile  
 MW-4 is buried under  
 mud of driveway ~6  
 thick all over  
 EX-3 is under mud/  
 Equipment.

## **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 typically a notch cut in the north side of the casing edge. If a water level indicator is used, the tip is subjectively analyzed for hydrocarbon sheen.

### **Subjective Analysis of Ground Water**

Prior to purging, a water sample is collected from the monitoring well for subjective assessment. The sample is retrieved by gently lowering a clean, disposable bailer to approximately one-half the bailer length past the air/liquid interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating LPH and the appearance of a LPH sheen.

### **Monitoring Well Purging and Sampling**

Monitoring wells are purged using a pump or bailer until pH, temperature, and conductivity of the purge water has stabilized and a minimum of three well volumes of water have been removed. If three well volumes can not be removed in one half hour's time, the well is allowed to recharge to 80% of original level. After recharging, a ground water sample is then removed from each of the wells using a disposable bailer.

A Teflon bailer, electric submersible or bladder pump will be the only equipment used for well sampling. When samples for volatile organic analysis are being collected, the pump flow will be regulated at approximately 100 milliliters per minute to minimize pump effluent turbulence and aeration. Glass bottles of at least 40-milliliters volume and fitted with Teflon-lined septa will be used in sampling for volatile organics. These bottles will be filled completely to prevent air from remaining in the bottle. A positive meniscus forms when the bottle is completely full. A convex Teflon septum will be placed over the positive meniscus to eliminate air. After the bottle is capped, it is inverted and tapped to verify that it contains no air bubbles. The sample containers for other parameters will be filled, filtered as required, and capped.

The water sample is collected, labeled, and handled according to the Quality Assurance Plan. Water generated during the monitoring event is disposed of according to regulatory accepted method pertaining to the site.

## **QUALITY ASSURANCE PLAN**

Procedures to provide data quality should be established and documented so that conditions adverse to quality, such as deficiencies, deviations, nonconformants, defective material, services, and/or equipment, can be promptly identified and corrected.

### **General Sample Collection and Handling Procedures**

Proper collection and handling are essential to ensure the quality of a sample. Each sample is collected in a suitable container, preserved correctly for the intended analysis, and stored prior to analysis for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of samples used on this project can be found in this section.

### **Soil and Water Sample Labeling and Preservation**

Label information includes a unique sample identification number, job identification number, date, and time. After labeling all soil and water samples are placed in a Ziploc<sup>®</sup> type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Stratus' office the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain-of-custody form. Trip blanks supplied by the laboratory accompany the groundwater sample containers and groundwater samples.

Upon recovery, the sample container is sealed to minimize the potential of volatilization and cross-contamination prior to chemical analysis. Soil sampling tubes are typically closed at each end with Teflon<sup>®</sup> sheeting and plastic caps. The sample is then placed in a Ziploc<sup>®</sup> type bag and sealed. The sample is labeled and refrigerated at approximately 4° Celsius for delivery, under strict chain-of-custody, to the analytical laboratory.

### **Sample Identification and Chain-of-Custody Procedures**

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded on the borehole log or in the field records. The samples are analyzed by a California-certified laboratory.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and

noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and contain adequate volumes for analysis. These conditions are noted on a Laboratory Sample Receipt Checklist that becomes part of the laboratory report upon request.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally-required log book maintained by the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

### **Equipment Cleaning**

Sample bottles, caps, and septa used in sampling for volatile and semivolatile organics will be triple rinsed with high-purity deionized water. After being rinsed, sample bottles will be dried overnight at a temperature of 200°C. Sample caps and septa will be dried overnight at a temperature of 60°C. Sample bottles, caps, and septa will be protected from solvent contact between drying and actual use at the sampling site. Sampling containers will be used only once and discarded after analysis is complete.

Plastic bottles and caps used in sampling for metals will be soaked overnight in a 1-percent nitric acid solution. Next, the bottles and caps will be triple rinsed with deionized water. Finally, the bottles and caps will be air dried before being used at the site. Plastic bottles and caps will be constructed of linear polyethylene or polypropylene. Sampling containers will be used only once and discarded after analysis is complete. Glass and plastic bottles used by Stratus to collect groundwater samples are supplied by the laboratory.

Before the sampling event is started, equipment that will be placed in the well or will come in contact with groundwater will be disassembled and cleaned thoroughly with detergent water, and then steam cleaned with deionized water. Any parts that may absorb contaminants, such as plastic pump valves, etc. will be cleaned as described above or replaced.

During field sampling, equipment surfaces that are placed in the well or contact groundwater will be steam cleaned with deionized water before the next well is purged or sampled. Equipment blanks will be collected and analyzed from non-disposable sampling equipment that is used for collecting groundwater samples at the rate of one blank per twenty samples collected.

### **Internal Quality Assurance Checks**

Internal quality assurance procedures are designed to provide reliability of monitoring and measurement of data. Both field and laboratory quality assurance checks are necessary to evaluate the reliability of sampling and analysis results. Internal quality assurance procedures generally include:

- Laboratory Quality Assurance

- Documentation of instrument performance checks
- Documentation of instrument calibration
- Documentation of the traceability of instrument standards, samples, and data
- Documentation of analytical and QC methodology (QC methodology includes use of spiked samples, duplicate samples, split samples, use of reference blanks, and check standards to check method accuracy and precision)

- Field Quality Assurance

- Documentation of sample preservation and transportation
- Documentation of field instrument calibration and irregularities in performance

Internal laboratory quality assurance checks will be the responsibility of the contract laboratories. Data and reports submitted by field personnel and the contract laboratory will be reviewed and maintained in the project files.

**Types of Quality Control Checks**

Samples are analyzed using analytical methods outlined in EPA Manual SW 846 and approved by the California Regional Water Quality Control Board-Central Valley Region in the Leaking Underground Fuel Tanks (LUFT) manual and appendices. Standard contract laboratory quality control may include analysis or use of the following:

- Method blanks – reagent water used to prepare calibration standards, spike solutions, etc. is analyzed in the same manner as the sample to demonstrate that analytical interferences are under control.
- Matrix spiked samples – a known amount of spike solution containing selected constituents is added to the sample at concentrations at which the accuracy of the analytical method is to satisfactorily monitor and evaluate laboratory data quality.
- Split samples – a sample is split into two separate aliquots before analysis to assess the reproducibility of the analysis.
- Surrogate samples – samples are spiked with surrogate constituents at known concentrations to monitor both the performance of the analytical system and the effectiveness of the method in dealing with the sample matrix.
- Control charts – graphical presentation of spike or split sample results used to track the accuracy or precision of the analysis.
- Quality control check samples – when spiked sample analysis indicates atypical instrument performance, a quality check sample, which is prepared independently of the calibration standards and contains the constituents of interest, is analyzed to confirm that measurements were performed accurately.

- Calibration standards and devices – traceable standards or devices to set instrument response so that sample analysis results represent the absolute concentration of the constituent.

Field QA samples will be collected to assess sample handling procedures and conditions. Standard field quality control may include the use of the following, and will be collected and analyzed as outlined in EPA Manual SW 846.

- Field blanks – reagent water samples are prepared at the sampling location by the same procedure used to collect field groundwater samples and analyzed with the groundwater samples to assess the impact of sampling techniques on data quality. Typically, one field blank per twenty groundwater samples collected will be analyzed per sampling event.
- Field replicates – duplicate or triplicate samples are collected and analyzed to assess the reproducibility of the analytical data. One replicate groundwater sample per twenty samples collected will be analyzed per sampling event, unless otherwise specified. Triplicate samples will be collected only when specific conditions warrant and generally are sent to an alternate laboratory to confirm the accuracy of the routinely used laboratory.
- Trip blanks – reagent water samples are prepared before field work, transported and stored with the samples and analyzed to assess the impact of sample transport and storage for data quality. In the event that any analyte is detected in the field blank, a trip blank will be included in the subsequent groundwater sampling event.

Data reliability will be evaluated by the certified laboratory and reported on a cover sheet attached to the laboratory data report. Analytical data resulting from the testing of field or trip blanks will be included in the laboratory's report. Results from matrix spike, surrogate, and method blank testing will be reported, along with a statement of whether the samples were analyzed within the appropriate holding time.

Stratus will evaluate the laboratory's report on data reliability and note significant QC results that may make the data biased or unacceptable. Data viability will be performed as outlined in EPA Manual SW 846. If biased or unacceptable data is noted, corrective actions (including re-sample/re-analyze, etc.) will be evaluated on a site-specific basis.

**APPENDIX C**

**CERTIFIED ANALYTICAL REPORTS AND  
CHAIN-OF-CUSTODY DOCUMENTATION**



## 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 : 10/18/06

**NOV 22 2006**

Job#: 2007-0057-01/USA 57

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

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	TPH-P (GRO)	ND	50 µg/L	10/17/06	10/20/06
<b>MW-7</b>	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	10/17/06	10/20/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/17/06	10/20/06
STR06101740-01A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	10/17/06	10/20/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	10/17/06	10/20/06
	1,2-Dichloroethane	ND	1.0 µg/L	10/17/06	10/20/06
	Benzene	ND	0.50 µg/L	10/17/06	10/20/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	10/17/06	10/20/06
	Toluene	ND	0.50 µg/L	10/17/06	10/20/06
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	10/17/06	10/20/06
	Ethylbenzene	ND	0.50 µg/L	10/17/06	10/20/06
	m,p-Xylene	ND	0.50 µg/L	10/17/06	10/20/06
	o-Xylene	ND	0.50 µg/L	10/17/06	10/20/06
Client ID :	TPH-P (GRO)	ND	50 µg/L	10/17/06	10/20/06
<b>MW-8</b>	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	10/17/06	10/20/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/17/06	10/20/06
STR06101740-02A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	10/17/06	10/20/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	10/17/06	10/20/06
	1,2-Dichloroethane	ND	1.0 µg/L	10/17/06	10/20/06
	Benzene	ND	0.50 µg/L	10/17/06	10/20/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	10/17/06	10/20/06
	Toluene	ND	0.50 µg/L	10/17/06	10/20/06
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	10/17/06	10/20/06
	Ethylbenzene	ND	0.50 µg/L	10/17/06	10/20/06
	m,p-Xylene	ND	0.50 µg/L	10/17/06	10/20/06
	o-Xylene	ND	0.50 µg/L	10/17/06	10/20/06
Client ID :	TPH-P (GRO)	3,300	1,000 µg/L	10/17/06	10/20/06
<b>EX-1</b>	Tertiary Butyl Alcohol (TBA)	ND	V	100 µg/L	10/17/06
Lab ID :	Methyl tert-butyl ether (MTBE)	170		5.0 µg/L	10/17/06
STR06101740-03A	Di-isopropyl Ether (DIPE)	ND	V	10 µg/L	10/17/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	V	10 µg/L	10/17/06
	1,2-Dichloroethane	30		10 µg/L	10/17/06
	Benzene	810		5.0 µg/L	10/17/06
	Tertiary Amyl Methyl Ether (TAME)	ND	V	10 µg/L	10/17/06
	Toluene	ND	V	5.0 µg/L	10/17/06
	1,2-Dibromoethane (EDB)	ND	V	40 µg/L	10/17/06
	Ethylbenzene	32		5.0 µg/L	10/17/06
	m,p-Xylene	68		5.0 µg/L	10/17/06
	o-Xylene	ND	V	5.0 µg/L	10/17/06



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Client ID :	TPH-P (GRO)	31,000		10,000 µg/L	10/17/06	10/20/06
<b>EX-2</b>	Tertiary Butyl Alcohol (TBA)	ND	V	1,000 µg/L	10/17/06	10/20/06
Lab ID :	Methyl tert-butyl ether (MTBE)	230		50 µg/L	10/17/06	10/20/06
STR06101740-04A	Di-isopropyl Ether (DIPE)	ND	V	100 µg/L	10/17/06	10/20/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	V	100 µg/L	10/17/06	10/20/06
	1,2-Dichloroethane	400		100 µg/L	10/17/06	10/20/06
	Benzene	10,000		50 µg/L	10/17/06	10/20/06
	Tertiary Amyl Methyl Ether (TAME)	ND	V	100 µg/L	10/17/06	10/20/06
	Toluene	1,800		50 µg/L	10/17/06	10/20/06
	1,2-Dibromoethane (EDB)	ND	V	400 µg/L	10/17/06	10/20/06
	Ethylbenzene	1,200		50 µg/L	10/17/06	10/20/06
	m,p-Xylene	2,400		50 µg/L	10/17/06	10/20/06
	o-Xylene	1,000		50 µg/L	10/17/06	10/20/06
Client ID :	TPH-P (GRO)	ND		50 µg/L	10/17/06	10/24/06
<b>S-1</b>	Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	10/17/06	10/24/06
Lab ID :	Methyl tert-butyl ether (MTBE)	1.6		0.50 µg/L	10/17/06	10/24/06
STR06101740-05A	Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	10/17/06	10/24/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	10/17/06	10/24/06
	1,2-Dichloroethane	ND		1.0 µg/L	10/17/06	10/24/06
	Benzene	ND		0.50 µg/L	10/17/06	10/24/06
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	10/17/06	10/24/06
	Toluene	ND		0.50 µg/L	10/17/06	10/24/06
	1,2-Dibromoethane (EDB)	ND		2.0 µg/L	10/17/06	10/24/06
	Ethylbenzene	ND		0.50 µg/L	10/17/06	10/24/06
	m,p-Xylene	ND		0.50 µg/L	10/17/06	10/24/06
	o-Xylene	ND		0.50 µg/L	10/17/06	10/24/06
Client ID :	TPH-P (GRO)	130		50 µg/L	10/17/06	10/20/06
<b>S-2</b>	Tertiary Butyl Alcohol (TBA)	ND		10 µg/L	10/17/06	10/20/06
Lab ID :	Methyl tert-butyl ether (MTBE)	160		0.50 µg/L	10/17/06	10/20/06
STR06101740-06A	Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	10/17/06	10/20/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	10/17/06	10/20/06
	1,2-Dichloroethane	ND		1.0 µg/L	10/17/06	10/20/06
	Benzene	0.98		0.50 µg/L	10/17/06	10/20/06
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	10/17/06	10/20/06
	Toluene	ND		0.50 µg/L	10/17/06	10/20/06
	1,2-Dibromoethane (EDB)	ND		2.0 µg/L	10/17/06	10/20/06
	Ethylbenzene	1.1		0.50 µg/L	10/17/06	10/20/06
	m,p-Xylene	1.7		0.50 µg/L	10/17/06	10/20/06
	o-Xylene	0.50		0.50 µg/L	10/17/06	10/20/06
Client ID :	TPH-P (GRO)	93		50 µg/L	10/17/06	10/20/06
<b>MW-3</b>	Tertiary Butyl Alcohol (TBA)	50		10 µg/L	10/17/06	10/20/06
Lab ID :	Methyl tert-butyl ether (MTBE)	100		0.50 µg/L	10/17/06	10/20/06
STR06101740-07A	Di-isopropyl Ether (DIPE)	ND		1.0 µg/L	10/17/06	10/20/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND		1.0 µg/L	10/17/06	10/20/06
	1,2-Dichloroethane	21		1.0 µg/L	10/17/06	10/20/06
	Benzene	8.8		0.50 µg/L	10/17/06	10/20/06
	Tertiary Amyl Methyl Ether (TAME)	ND		1.0 µg/L	10/17/06	10/20/06
	Toluene	ND		0.50 µg/L	10/17/06	10/20/06
	1,2-Dibromoethane (EDB)	ND		2.0 µg/L	10/17/06	10/20/06
	Ethylbenzene	ND		0.50 µg/L	10/17/06	10/20/06
	m,p-Xylene	ND		0.50 µg/L	10/17/06	10/20/06
	o-Xylene	ND		0.50 µg/L	10/17/06	10/20/06





# Alpha Analytical, Inc.

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Client ID :	TPH-P (GRO)	ND	50 µg/L	10/17/06	10/20/06
MW-6	Tertiary Butyl Alcohol (TBA)	ND	10 µg/L	10/17/06	10/20/06
Lab ID :	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	10/17/06	10/20/06
STR06101740-08A	Di-isopropyl Ether (DIPE)	ND	1.0 µg/L	10/17/06	10/20/06
	Ethyl Tertiary Butyl Ether (ETBE)	ND	1.0 µg/L	10/17/06	10/20/06
	1,2-Dichloroethane	ND	1.0 µg/L	10/17/06	10/20/06
	Benzene	ND	0.50 µg/L	10/17/06	10/20/06
	Tertiary Amyl Methyl Ether (TAME)	ND	1.0 µg/L	10/17/06	10/20/06
	Toluene	ND	0.50 µg/L	10/17/06	10/20/06
	1,2-Dibromoethane (EDB)	ND	2.0 µg/L	10/17/06	10/20/06
	Ethylbenzene	ND	0.50 µg/L	10/17/06	10/20/06
	m,p-Xylene	ND	0.50 µg/L	10/17/06	10/20/06
	o-Xylene	ND	0.50 µg/L	10/17/06	10/20/06

Gasoline Range Organics (GRO) C4-C13

Reported in micrograms per liter, per client request.

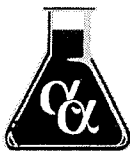
V = Reporting Limits were increased due to high concentrations of target analytes.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
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10/25/06

Report Date



# Alpha Analytical, Inc.

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## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Gowri Kowtha  
Phone: (530) 676-6001  
Fax: (530) 676-6005  
Date Received : 10/18/06

Job#: 2007-0057-01/USA 57

GC/MSD by Direct Injection  
EPA Method SW8260B-DI

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : MW-7					
Lab ID : STR06101740-01A	Methanol	ND	5,000 µg/L	10/17/06	10/18/06
	Ethanol	ND	5,000 µg/L	10/17/06	10/18/06
Client ID : MW-8					
Lab ID : STR06101740-02A	Methanol	ND	5,000 µg/L	10/17/06	10/18/06
	Ethanol	ND	5,000 µg/L	10/17/06	10/18/06
Client ID : EX-1					
Lab ID : STR06101740-03A	Methanol	ND	5,000 µg/L	10/17/06	10/19/06
	Ethanol	ND	5,000 µg/L	10/17/06	10/19/06
Client ID : EX-2					
Lab ID : STR06101740-04A	Methanol	ND	5,000 µg/L	10/17/06	10/18/06
	Ethanol	ND	5,000 µg/L	10/17/06	10/18/06
Client ID : S-1					
Lab ID : STR06101740-05A	Methanol	ND	5,000 µg/L	10/17/06	10/18/06
	Ethanol	ND	5,000 µg/L	10/17/06	10/18/06
Client ID : S-2					
Lab ID : STR06101740-06A	Methanol	ND	5,000 µg/L	10/17/06	10/18/06
	Ethanol	ND	5,000 µg/L	10/17/06	10/18/06
Client ID : MW-3					
Lab ID : STR06101740-07A	Methanol	ND	5,000 µg/L	10/17/06	10/18/06
	Ethanol	ND	5,000 µg/L	10/17/06	10/18/06
Client ID : MW-6					
Lab ID : STR06101740-08A	Methanol	ND	5,000 µg/L	10/17/06	10/18/06
	Ethanol	ND	5,000 µg/L	10/17/06	10/18/06

Reported in micrograms per liter, per client request.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
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## ANALYTICAL REPORT

Stratus Environmental  
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Attn: Gowri Kowtha  
Phone: (530) 676-6001  
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Date Received : 10/18/06

Job#: 2007-0057-01/USA 57

Ammonia as Nitrogen  
EPA Method 350.3 / SM4500-NH3F

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : <b>MW-7</b> Lab ID : STR06101740-01A	Nitrogen, Ammonia (As N)	ND	100 µg/L	10/17/06	10/26/06
Client ID : <b>MW-8</b> Lab ID : STR06101740-02A	Nitrogen, Ammonia (As N)	ND	100 µg/L	10/17/06	10/26/06
Client ID : <b>EX-1</b> Lab ID : STR06101740-03A	Nitrogen, Ammonia (As N)	1,800	100 µg/L	10/17/06	10/26/06
Client ID : <b>EX-2</b> Lab ID : STR06101740-04A	Nitrogen, Ammonia (As N)	ND	100 µg/L	10/17/06	10/26/06

ND = Not Detected

Reported in micrograms per Liter, per client request.

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10/26/06

Report Date



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## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
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Attn: Gowri Kowtha  
Phone: (530) 676-6001  
Fax: (530) 676-6005  
Date Received : 10/18/06

Job#: 2007-0057-01/USA 57

Phosphorus  
EPA Method 365.2 / SM4500PE

Client ID :	Lab ID :	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
MW-7	STR06101740-01A	Phosphorus, Total (As P)	ND	100 µg/L	10/17/06	10/20/06
MW-8	STR06101740-02A	Phosphorus, Total (As P)	130	100 µg/L	10/17/06	10/20/06
EX-1	STR06101740-03A	Phosphorus, Total (As P)	330	100 µg/L	10/17/06	10/20/06
EX-2	STR06101740-04A	Phosphorus, Total (As P)	ND	100 µg/L	10/17/06	10/20/06

ND = Not Detected  
Reported in micrograms per Liter, per client request.

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

10/25/06

Report Date



# Alpha Analytical, Inc.

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

## ANALYTICAL REPORT

Stratus Environmental  
3330 Cameron Park Drive  
Cameron Park, CA 956828861

Attn: Gowri Kowtha  
Phone: (530) 676-6001  
Fax: (530) 676-6005  
Date Received : 10/18/06

Job#: 2007-0057-01/USA 57

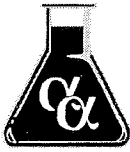
Orthophosphate in Water  
EPA Method 365.2 / SM4500PE

Client ID :	Lab ID :	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
<b>MW-7</b>	STR06101740-01A	Total Orthophosphate	ND	100 µg/L	10/17/06	10/18/06
<b>MW-8</b>	STR06101740-02A	Total Orthophosphate	ND	100 µg/L	10/17/06	10/18/06
<b>EX-1</b>	STR06101740-03A	Total Orthophosphate	ND	100 µg/L	10/17/06	10/18/06
<b>EX-2</b>	STR06101740-04A	Total Orthophosphate	ND	100 µg/L	10/17/06	10/18/06

Reported in micrograms per Liter, per client request.

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

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Job#: 2007-0057-01/USA 57

Total Organic Carbon as NonPurgeable Organic Carbon  
EPA Method SW9060/415.1/SM-5310C

	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : MW-7					
Lab ID : STR06101740-01A	Total Organic Carbon	3,400	1,000 µg/L	10/17/06	10/19/06
Client ID : MW-8					
Lab ID : STR06101740-02A	Total Organic Carbon	1,900	1,000 µg/L	10/17/06	10/19/06
Client ID : EX-1					
Lab ID : STR06101740-03A	Total Organic Carbon	30,000	4,000 µg/L	10/17/06	10/19/06
Client ID : EX-2					
Lab ID : STR06101740-04A	Total Organic Carbon	18,000	4,000 µg/L	10/17/06	10/19/06

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10/25/06

Report Date



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Date Received : 10/18/06

Job#: 2007-0057-01/USA 57

Total Dissolved Solids (TDS)  
EPA Method 160.1 / SM 2540 C

Client ID :	Lab ID :	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
MW-7	STR06101740-01A	Solids, Total Dissolved (TDS)	650,000	10,000 µg/L	10/17/06	10/24/06
MW-8	STR06101740-02A	Solids, Total Dissolved (TDS)	5,400,000	25,000 µg/L	10/17/06	10/25/06
EX-1	STR06101740-03A	Solids, Total Dissolved (TDS)	1,000,000	10,000 µg/L	10/17/06	10/24/06
EX-2	STR06101740-04A	Solids, Total Dissolved (TDS)	1,200,000	10,000 µg/L	10/17/06	10/24/06

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Attn: Gowri Kowtha  
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Date Received : 10/18/06

Job#: 2007-0057-01/USA 57

Anions by IC  
EPA Method 300.0 / 9056

	Parameter	Concentration	Reporting Limit	Date / Time Sampled	Date / Time Analyzed
Client ID : MW-7	Nitrite (NO2) - N	ND	250 µg/L	10/17/06 11:11	10/19/06 08:55
Lab ID : STR06101740-01A	Nitrate (NO3) - N	2,200	250 µg/L	10/17/06 11:11	10/19/06 08:55
	Sulfate (SO4)	55,000	500 µg/L	10/17/06 11:11	10/19/06 08:55
	Client ID : MW-8	Nitrite (NO2) - N	ND	250 µg/L	10/17/06 11:34
Lab ID : STR06101740-02A	Nitrate (NO3) - N	4,500	250 µg/L	10/17/06 11:34	10/19/06 09:13
	Sulfate (SO4)	79,000	500 µg/L	10/17/06 11:34	10/19/06 09:13
	Client ID : EX-1	Nitrite (NO2) - N	ND	250 µg/L	10/17/06 09:15
Lab ID : STR06101740-03A	Nitrate (NO3) - N	ND	250 µg/L	10/17/06 09:15	10/19/06 08:18
	Sulfate (SO4)	4,700	500 µg/L	10/17/06 09:15	10/19/06 08:18
	Client ID : EX-2	Nitrite (NO2) - N	ND	250 µg/L	10/17/06 09:43
Lab ID : STR06101740-04A	Nitrate (NO3) - N	ND	250 µg/L	10/17/06 09:43	10/19/06 08:36
	Sulfate (SO4)	ND	500 µg/L	10/17/06 09:43	10/19/06 08:36

ND = Not Detected  
Reported in micrograms per Liter, per client request.

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Job#: 2007-0057-01/USA 57

Sulfide  
EPA Method 376.2 / SM4500-S D

Client ID :	Lab ID :	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
MW-7	STR06101740-01A	Sulfide	ND	100 µg/L	10/17/06	10/27/06
MW-8	STR06101740-02A	Sulfide	ND	100 µg/L	10/17/06	10/27/06
EX-1	STR06101740-03A	Sulfide	ND	100 µg/L	10/17/06	10/27/06
EX-2	STR06101740-04A	Sulfide	ND	100 µg/L	10/17/06	10/27/06

ND = Not Detected  
Reported in micrograms per Liter, per client request.

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10/27/06

Report Date



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Date Received : 10/18/06

Job#: 2007-0057-01/USA 57

Iron by Spectrophotometer  
SM3500-Fe D

Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID : <b>MW-7</b> Lab ID : STR06101740-01A Iron, Ferrous (+2)	ND	50 µg/L	10/17/06	10/18/06
Client ID : <b>MW-8</b> Lab ID : STR06101740-02A Iron, Ferrous (+2)	ND	50 µg/L	10/17/06	10/18/06
Client ID : <b>EX-1</b> Lab ID : STR06101740-03A Iron, Ferrous (+2)	60	50 µg/L	10/17/06	10/18/06
Client ID : <b>EX-2</b> Lab ID : STR06101740-04A Iron, Ferrous (+2)	ND	50 µg/L	10/17/06	10/18/06

ND = Not Detected

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Date Received : 10/18/06

Job#: 2007-0057-01/USA 57

Iron by Spectrophotometer  
SM3500-Fe D

Client ID :	Lab ID :	Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
MW-7	STR06101740-01A	Iron, Total	1,300	300 µg/L	10/17/06	10/25/06
MW-8	STR06101740-02A	Iron, Total	3,600	300 µg/L	10/17/06	10/25/06
EX-1	STR06101740-03A	Iron, Total	53,000	3,000 µg/L	10/17/06	10/25/06
EX-2	STR06101740-04A	Iron, Total	37,000	3,000 µg/L	10/17/06	10/25/06

Reported in micrograms per Liter, per client request.

*Roger Scholl*

*Randy Gardner*

*Walter Hinchman*

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer  
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*RJ*  
10/25/06

Report Date



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## VOC Sample Preservation Report

**Work Order:** STR06101740

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

Alpha's Sample ID	Client's Sample ID	Matrix	pH
06101740-01A	MW-7	Aqueous	2
06101740-02A	MW-8	Aqueous	2
06101740-03A	EX-1	Aqueous	6
06101740-04A	EX-2	Aqueous	6
06101740-05A	S-1	Aqueous	6
06101740-06A	S-2	Aqueous	2
06101740-07A	MW-3	Aqueous	2
06101740-08A	MW-6	Aqueous	2

**10/25/06**  
**Report Date**



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Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

<b>Method Blank</b>		Type	Test Code: <b>SM3500-Fe D</b>							
File ID:			Batch ID: <b>W061018FER</b>				Analysis Date: <b>10/18/2006 00:00</b>			
Sample ID:	<b>MBLK-W061018FER</b>	Units : <b>µg/L</b>	Run ID: <b>WETLAB_061018D</b>				Prep Date: <b>10/18/2006</b>			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Iron, Ferrous (+2)	ND	50								
<b>Laboratory Control Spike</b>		Type	Test Code: <b>SM3500-Fe D</b>							
File ID:			Batch ID: <b>W061018FER</b>				Analysis Date: <b>10/18/2006 00:00</b>			
Sample ID:	<b>LCS-W061018FER</b>	Units : <b>µg/L</b>	Run ID: <b>WETLAB_061018D</b>				Prep Date: <b>10/18/2006</b>			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Iron, Ferrous (+2)	1490	50	1500		99	85	115			
<b>Sample Matrix Spike</b>		Type	Test Code: <b>SM3500-Fe D</b>							
File ID:			Batch ID: <b>W061018FER</b>				Analysis Date: <b>10/18/2006 00:00</b>			
Sample ID:	<b>06101740-01AMS</b>	Units : <b>µg/L</b>	Run ID: <b>WETLAB_061018D</b>				Prep Date: <b>10/18/2006</b>			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Iron, Ferrous (+2)	1430	50	1500	0	96	70	130			
<b>Sample Matrix Spike Duplicate</b>		Type	Test Code: <b>SM3500-Fe D</b>							
File ID:			Batch ID: <b>W061018FER</b>				Analysis Date: <b>10/18/2006 00:00</b>			
Sample ID:	<b>06101740-01AMSD</b>	Units : <b>µg/L</b>	Run ID: <b>WETLAB_061018D</b>				Prep Date: <b>10/18/2006</b>			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Iron, Ferrous (+2)	1480	50	1500	0	99	70	130	1434	3.2(20)	

### Comments:

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Date:  
03-Nov-06

## QC Summary Report

Work Order:  
06101740

### Method Blank

Type **MBLK** Test Code: **SM3500-Fe D**

File ID: Batch ID: **W061025FET** Analysis Date: **10/25/2006 00:00**

Sample ID: **MBLK-W061025FET** Units : **µg/L** Run ID: **WETLAB\_061025B** Prep Date: **10/25/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Iron, Total	ND	300								

### Laboratory Control Spike

Type **LCS** Test Code: **SM3500-Fe D**

File ID: Batch ID: **W061025FET** Analysis Date: **10/25/2006 00:00**

Sample ID: **LCS-W061025FET** Units : **µg/L** Run ID: **WETLAB\_061025B** Prep Date: **10/25/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Iron, Total	9010	300	10000		90	85	115			

### Sample Matrix Spike

Type **MS** Test Code: **SM3500-Fe D**

File ID: Batch ID: **W061025FET** Analysis Date: **10/25/2006 00:00**

Sample ID: **06102025-08AMS** Units : **µg/L** Run ID: **WETLAB\_061025B** Prep Date: **10/25/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Iron, Total	8310	300	10000		0	83	70	130		

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **SM3500-Fe D**

File ID: Batch ID: **W061025FET** Analysis Date: **10/25/2006 00:00**

Sample ID: **06102025-08AMSD** Units : **µg/L** Run ID: **WETLAB\_061025B** Prep Date: **10/25/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Iron, Total	8780	300	10000		0	88	70	130	8305	5.5(20)

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Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

### Method Blank

Method Blank		Type	Test Code: EPA Method SW8260B-DI							
File ID: C:\HPCHEMMS11\DATA\061018\06101808.D		MBLK	Batch ID: 15870		Analysis Date: 10/18/2006 13:51					
Sample ID: MBLK-15870	Units: µg/L		Run ID: MSD_11_061018A		Prep Date: 10/18/2006					
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	ND	5000								
Ethanol	ND	5000								
Surr: Hexafluoro-2-propanol	480		500		96	63	137			

### Laboratory Control Spike

Laboratory Control Spike		Type	Test Code: EPA Method SW8260B-DI							
File ID: C:\HPCHEMMS11\DATA\061018\06101804.D		LCS	Batch ID: 15870		Analysis Date: 10/18/2006 12:29					
Sample ID: LCS-15870	Units: µg/L		Run ID: MSD_11_061018A		Prep Date: 10/18/2006					
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	990	50	1000		99	45	155			
Ethanol	1210	5	1000		120	51	144			
Surr: Hexafluoro-2-propanol	532		500		106	63	137			

### Sample Matrix Spike

Sample Matrix Spike		Type	Test Code: EPA Method SW8260B-DI							
File ID: C:\HPCHEMMS11\DATA\061018\06101806.D		MS	Batch ID: 15870		Analysis Date: 10/18/2006 13:10					
Sample ID: 06101756-02AMS	Units: µg/L		Run ID: MSD_11_061018A		Prep Date: 10/18/2006					
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	908	50	1000		0 91	45	163			
Ethanol	1100	5	1000	66.34	104	50	149			
Surr: Hexafluoro-2-propanol	507		500		101	63	137			

### Sample Matrix Spike Duplicate

Sample Matrix Spike Duplicate		Type	Test Code: EPA Method SW8260B-DI							
File ID: C:\HPCHEMMS11\DATA\061018\06101807.D		MSD	Batch ID: 15870		Analysis Date: 10/18/2006 13:30					
Sample ID: 06101756-02AMSD	Units: µg/L		Run ID: MSD_11_061018A		Prep Date: 10/18/2006					
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methanol	975	50	1000		0 98	45	163	908.1	7.1(22)	
Ethanol	1230	5	1000	66.34	116	50	149	1102	11.0(15)	
Surr: Hexafluoro-2-propanol	555		500		111	63	137			

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Date:  
03-Nov-06

## QC Summary Report

Work Order:  
06101740

### Method Blank

Type **MBLK** Test Code: **EPA Method 300.0 / 9056**

File ID: **68**

Batch ID: **15881A**

Analysis Date: **10/19/2006 04:54**

Sample ID: **MB-15881**

Units : **µg/L**

Run ID: **IC\_2\_061019A**

Prep Date: **10/18/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Nitrite (NO2) - N	ND	250								
Nitrate (NO3) - N	ND	250								

### Laboratory Fortified Blank

Type **LFB** Test Code: **EPA Method 300.0 / 9056**

File ID: **69**

Batch ID: **15881A**

Analysis Date: **10/19/2006 05:13**

Sample ID: **LFB-15881**

Units : **µg/L**

Run ID: **IC\_2\_061019A**

Prep Date: **10/18/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Nitrite (NO2) - N	521	250	500		104	90	110			
Nitrate (NO3) - N	538	250	500		108	90	110			

### Sample Matrix Spike

Type **LFM** Test Code: **EPA Method 300.0 / 9056**

File ID: **72**

Batch ID: **15881A**

Analysis Date: **10/19/2006 06:08**

Sample ID: **06101854-01ALFM**

Units : **µg/L**

Run ID: **IC\_2\_061019A**

Prep Date: **10/18/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Nitrite (NO2) - N	10500	250	10000		0	105	80	120		
Nitrate (NO3) - N	24900	250	10000	13170	117	80	120			

### Sample Matrix Spike Duplicate

Type **LFMD** Test Code: **EPA Method 300.0 / 9056**

File ID: **73**

Batch ID: **15881A**

Analysis Date: **10/19/2006 06:27**

Sample ID: **06101854-01ALFMD**

Units : **µg/L**

Run ID: **IC\_2\_061019A**

Prep Date: **10/18/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Nitrite (NO2) - N	10500	250	10000		0	105	80	120	10480	0.1(2)
Nitrate (NO3) - N	24700	250	10000	13170	115	80	120	24850	0.6(2)	

### Comments:

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Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

<b>Method Blank</b>		Type	MBLK Test Code: EPA Method 300.0 / 9056							
File ID:	68		Batch ID: 15881B			Analysis Date: 10/19/2006 04:54				
Sample ID:	MB-15881	Units : µg/L	Run ID: IC_2_061019A			Prep Date: 10/18/2006				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Sulfate (SO4)	ND	500								

<b>Laboratory Fortified Blank</b>		Type	LFB Test Code: EPA Method 300.0 / 9056							
File ID:	69		Batch ID: 15881B			Analysis Date: 10/19/2006 05:13				
Sample ID:	LFB-15881	Units : µg/L	Run ID: IC_2_061019A			Prep Date: 10/18/2006				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Sulfate (SO4)	1060	500	1000		106	90	110			

<b>Sample Matrix Spike</b>		Type	LFM Test Code: EPA Method 300.0 / 9056							
File ID:	72		Batch ID: 15881B			Analysis Date: 10/19/2006 06:08				
Sample ID:	06101854-01ALFM	Units : µg/L	Run ID: IC_2_061019A			Prep Date: 10/18/2006				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Sulfate (SO4)	172000	500	20000	148600	116	80	120			

<b>Sample Matrix Spike Duplicate</b>		Type	LFMD Test Code: EPA Method 300.0 / 9056							
File ID:	73		Batch ID: 15881B			Analysis Date: 10/19/2006 06:27				
Sample ID:	06101854-01ALFMD	Units : µg/L	Run ID: IC_2_061019A			Prep Date: 10/18/2006				
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Sulfate (SO4)	170000	500	20000	148600	106	80	120	171800	1.2(2)	

### Comments:

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# Alpha Analytical, Inc.

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

Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

### Method Blank

Type **MBLK** Test Code: **EPA Method 365.2 / SM4500PE**

File ID:			Batch ID: <b>W061018OPHOS</b>	Analysis Date: <b>10/18/2006 00:00</b>						
Sample ID: <b>MBLK-W061018OPHOS</b>	Units : <b>µg/L</b>	Run ID: <b>WETLAB_061018A</b>	Prep Date: <b>10/18/2006</b>							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Total Orthophosphate	ND	100								

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 365.2 / SM4500PE**

File ID:			Batch ID: <b>W061018OPHOS</b>	Analysis Date: <b>10/18/2006 00:00</b>						
Sample ID: <b>LCS-W061018OPHOS</b>	Units : <b>µg/L</b>	Run ID: <b>WETLAB_061018A</b>	Prep Date: <b>10/18/2006</b>							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Total Orthophosphate	1030	100	1000		103	80	116			

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method 365.2 / SM4500PE**

File ID:			Batch ID: <b>W061018OPHOS</b>	Analysis Date: <b>10/18/2006 00:00</b>						
Sample ID: <b>06101740-01AMS</b>	Units : <b>µg/L</b>	Run ID: <b>WETLAB_061018A</b>	Prep Date: <b>10/18/2006</b>							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Total Orthophosphate	1080	100	1000		0 108	80	116			

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method 365.2 / SM4500PE**

File ID:			Batch ID: <b>W061018OPHOS</b>	Analysis Date: <b>10/18/2006 00:00</b>						
Sample ID: <b>06101740-01AMSD</b>	Units : <b>µg/L</b>	Run ID: <b>WETLAB_061018A</b>	Prep Date: <b>10/18/2006</b>							
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Total Orthophosphate	1080	100	1000		0 108	80	116	1083	0.1(20)	

### Comments:

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Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

Method Blank		Type	Test Code: EPA Method 376.2 / SM4500-S D							
File ID:			Batch ID: W061027SULF				Analysis Date: 10/27/2006 00:00			
Sample ID:	MBLK-W061027SULF	Units : µg/L	Run ID: WETLAB_061027B				Prep Date: 10/27/2006			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Sulfide	ND	100								
Laboratory Control Spike		Type	Test Code: EPA Method 376.2 / SM4500-S D							
File ID:			Batch ID: W061027SULF				Analysis Date: 10/27/2006 00:00			
Sample ID:	LCS-W061027SULF	Units : µg/L	Run ID: WETLAB_061027B				Prep Date: 10/27/2006			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Sulfide	1020	100	1000		102	85	115			
Sample Matrix Spike		Type	Test Code: EPA Method 376.2 / SM4500-S D							
File ID:			Batch ID: W061027SULF				Analysis Date: 10/27/2006 00:00			
Sample ID:	06101740-01AMS	Units : µg/L	Run ID: WETLAB_061027B				Prep Date: 10/27/2006			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Sulfide	1130	100	1000		0 113	65	150			
Sample Matrix Spike Duplicate		Type	Test Code: EPA Method 376.2 / SM4500-S D							
File ID:			Batch ID: W061027SULF				Analysis Date: 10/27/2006 00:00			
Sample ID:	06101740-01AMSD	Units : µg/L	Run ID: WETLAB_061027B				Prep Date: 10/27/2006			
Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Sulfide	1190	100	1000		0 119	65	150	1130	5.2(15)	

### Comments:

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Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

### Method Blank

Type **MBLK** Test Code: **EPA Method 160.1 / SM 2540 C**

File ID: Batch ID: **W061020TDS** Analysis Date: **10/20/2006 00:00**

Sample ID: **MBLK-W061020TDS** Units : **µg/L** Run ID: **WETLAB\_061020K** Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
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Solids, Total Dissolved (TDS)	ND	10000								
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### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method 160.1 / SM 2540 C**

File ID: Batch ID: **W061020TDS** Analysis Date: **10/20/2006 00:00**

Sample ID: **LCS-W061020TDS** Units : **µg/L** Run ID: **WETLAB\_061020K** Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
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Solids, Total Dissolved (TDS)	190000	10000	200000		95	84	116			
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### Comments:

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Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

### Method Blank

Type **MBLK** Test Code: **EPA Method SW9060/415.1/SM-5310C**

File ID:		Batch ID: <b>TOC101906</b>	Analysis Date: <b>10/19/2006 12:47</b>
Sample ID: <b>MBLK-101906TOC</b>	Units : <b>µg/L</b>	Run ID: <b>TOC_061019A</b>	Prep Date: <b>10/19/2006</b>
Analyte	Result	PQL	SpkVal SpkRefVal %REC LowLimit HighLimit RPDPRefVal %RPD(Limit) Qual
Total Organic Carbon	ND	1000	

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW9060/415.1/SM-5310C**

File ID:		Batch ID: <b>TOC101906</b>	Analysis Date: <b>10/19/2006 12:24</b>
Sample ID: <b>LCS-101906TOC</b>	Units : <b>µg/L</b>	Run ID: <b>TOC_061019A</b>	Prep Date: <b>10/19/2006</b>
Analyte	Result	PQL	SpkVal SpkRefVal %REC LowLimit HighLimit RPDPRefVal %RPD(Limit) Qual
Total Organic Carbon	5910	1000	5000 118 74 125

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW9060/415.1/SM-5310C**

File ID:		Batch ID: <b>TOC101906</b>	Analysis Date: <b>10/19/2006 15:47</b>
Sample ID: <b>06101242-01AMS</b>	Units : <b>µg/L</b>	Run ID: <b>TOC_061019A</b>	Prep Date: <b>10/19/2006</b>
Analyte	Result	PQL	SpkVal SpkRefVal %REC LowLimit HighLimit RPDPRefVal %RPD(Limit) Qual
Total Organic Carbon	6110	1000	5000 1405 94 56 137

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW9060/415.1/SM-5310C**

File ID:		Batch ID: <b>TOC101906</b>	Analysis Date: <b>10/19/2006 16:14</b>
Sample ID: <b>06101242-01AMSD</b>	Units : <b>µg/L</b>	Run ID: <b>TOC_061019A</b>	Prep Date: <b>10/19/2006</b>
Analyte	Result	PQL	SpkVal SpkRefVal %REC LowLimit HighLimit RPDPRefVal %RPD(Limit) Qual
Total Organic Carbon	6060	1000	5000 1405 93 56 137 6105 0.8(15)

#### Comments:

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Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

### Method Blank

Type **MBLK** Test Code: **EPA Method SW8015B**

File ID: **D:\HPCHEM\MS09\DATA\061020\06102005.D**

Batch ID: **MS09W1020B**

Analysis Date: **10/20/2006 12:12**

Sample ID: **MBLK MS09W1020B**

Units : **µg/L**

Run ID: **MSD\_09\_061020A**

Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	ND	50								
Surr: 1,2-Dichloroethane-d4	11.8		10		118	76	127			
Surr: Toluene-d8	9.66		10		97	84	113			
Surr: 4-Bromofluorobenzene	10.4		10		104	79	119			

### Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015B**

File ID: **D:\HPCHEM\MS09\DATA\061020\06102003.D**

Batch ID: **MS09W1020B**

Analysis Date: **10/20/2006 11:26**

Sample ID: **GLCS MS09W1020B**

Units : **µg/L**

Run ID: **MSD\_09\_061020A**

Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	401	50	400		100	78	127			
Surr: 1,2-Dichloroethane-d4	11.4		10		114	76	127			
Surr: Toluene-d8	9.75		10		98	84	113			
Surr: 4-Bromofluorobenzene	10.3		10		103	79	119			

### Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015B**

File ID: **D:\HPCHEM\MS09\DATA\061020\06102010.D**

Batch ID: **MS09W1020B**

Analysis Date: **10/20/2006 14:07**

Sample ID: **06101740-01AGS**

Units : **µg/L**

Run ID: **MSD\_09\_061020A**

Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1800	250	2000		90	70	139			
Surr: 1,2-Dichloroethane-d4	59.2		50		118	76	127			
Surr: Toluene-d8	47.8		50		96	84	113			
Surr: 4-Bromofluorobenzene	52.2		50		104	79	119			

### Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015B**

File ID: **D:\HPCHEM\MS09\DATA\061020\06102011.D**

Batch ID: **MS09W1020B**

Analysis Date: **10/20/2006 14:30**

Sample ID: **06101740-01AGSD**

Units : **µg/L**

Run ID: **MSD\_09\_061020A**

Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-P (GRO)	1850	250	2000		93	70	139	1803	2.6(12)	
Surr: 1,2-Dichloroethane-d4	58.3		50		117	76	127			
Surr: Toluene-d8	47.6		50		95	84	113			
Surr: 4-Bromofluorobenzene	52		50		104	79	119			

### Comments:

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Date:  
03-Nov-06

## OC Summary Report

Work Order:  
06101740

### Method Blank

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

File ID: **D:\HPCHEM\MS09\DATA\061020\06102005.D**

Batch ID: **MS09W1020A**

Analysis Date: **10/20/2006 12:12**

Sample ID: **MBLK MS09W1020A**

Units: **µg/L**

Run ID: **MSD\_09\_061020A**

Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Tertiary Butyl Alcohol (TBA)	ND	10								
Methyl tert-butyl ether (MTBE)	ND	0.5								
Di-isopropyl Ether (DIPE)	ND	1								
Ethyl Tertiary Butyl Ether (ETBE)	ND	1								
1,2-Dichloroethane	ND	1								
Benzene	ND	0.5								
Tertiary Amyl Methyl Ether (TAME)	ND	1								
Toluene	ND	0.5								
1,2-Dibromoethane (EDB)	ND	2								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	11.8		10		118	76	127			
Surr: Toluene-d8	9.66		10		97	84	113			
Surr: 4-Bromofluorobenzene	10.4		10		104	79	119			

### Laboratory Control Spike

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

File ID: **D:\HPCHEM\MS09\DATA\061020\06102004.D**

Batch ID: **MS09W1020A**

Analysis Date: **10/20/2006 11:49**

Sample ID: **LCS MS09W1020A**

Units: **µg/L**

Run ID: **MSD\_09\_061020A**

Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.24	0.5	10		92	81	122			
Toluene	9.08	0.5	10		91	80	120			
Ethylbenzene	9.52	0.5	10		95	80	120			
m,p-Xylene	9.32	0.5	10		93	80	129			
o-Xylene	9.65	0.5	10		97	80	129			
Surr: 1,2-Dichloroethane-d4	12.2		10		122	76	127			
Surr: Toluene-d8	9.71		10		97	84	113			
Surr: 4-Bromofluorobenzene	10		10		100	79	119			

### Sample Matrix Spike

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

File ID: **D:\HPCHEM\MS09\DATA\061020\06102008.D**

Batch ID: **MS09W1020A**

Analysis Date: **10/20/2006 13:21**

Sample ID: **06101740-01AMS**

Units: **µg/L**

Run ID: **MSD\_09\_061020A**

Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	50.3	1.3	50	0	101	74	125			
Toluene	48.1	1.3	50	0	96	76	120			
Ethylbenzene	50.6	1.3	50	0	101	77	124			
m,p-Xylene	48.7	1.3	50	0	97	73	130			
o-Xylene	51.1	1.3	50	0	102	74	131			
Surr: 1,2-Dichloroethane-d4	62.2		50		124	76	127			
Surr: Toluene-d8	48.6		50		97	84	113			
Surr: 4-Bromofluorobenzene	50.3		50		101	79	119			

### Sample Matrix Spike Duplicate

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

File ID: **D:\HPCHEM\MS09\DATA\061020\06102009.D**

Batch ID: **MS09W1020A**

Analysis Date: **10/20/2006 13:44**

Sample ID: **06101740-01AMSD**

Units: **µg/L**

Run ID: **MSD\_09\_061020A**

Prep Date: **10/20/2006**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	50.7	1.3	50	0	101	74	125	50.31	0.8(13)	
Toluene	49	1.3	50	0	98	76	120	48.07	1.8(13)	
Ethylbenzene	51.4	1.3	50	0	103	77	124	50.61	1.5(13)	
m,p-Xylene	49.1	1.3	50	0	98	73	130	48.69	0.8(14)	
o-Xylene	52.5	1.3	50	0	105	74	131	51.13	2.7(13)	
Surr: 1,2-Dichloroethane-d4	62.9		50		126	76	127			
Surr: Toluene-d8	48.5		50		97	84	113			
Surr: 4-Bromofluorobenzene	50.4		50		101	79	119			



# *Alpha Analytical, Inc.*

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

**Date:**  
*03-Nov-06*

## OC Summary Report

**Work Order:**  
06101740

**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.



# CALIFORNIA LABORATORY SERVICES

3249 Fitzgerald Road Rancho Cordova, CA 95742

October 25, 2006

CLS Work Order #: CPJ0701  
COC #:

Reyna Vallejo  
Alpha Analytical, Inc.-Sparks  
255 Glendale Ave.; Suite 21  
Sparks, NV x120

**Project Name: STR06101740**

Enclosed are the results of analyses for samples received by the laboratory on 10/17/06 15:15. Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. I certify that the results are in compliance both technically and for completeness.

Analytical results are attached to this letter. Please call if we can provide additional assistance.

Sincerely,



James Liang, Ph.D.  
Laboratory Director

CA DOHS ELAP Accreditation/Registration number 1233

# CALIFORNIA LABORATORY SERVICES

10/25/06 11:43

Alpha Analytical, Inc.-Sparks 255 Glendale Ave., Suite 21 Sparks NV, x120	Project: STR06101740 Project Number: STR06101740 Project Manager: Reyna Vallejo	CLS Work Order #: CPJ0701 COC #:
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## Conventional Chemistry Parameters by APHA/EPA Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>STR06101740-01A (MW-7) (CPJ0701-01) Water</b> <b>Sampled: 10/17/06 11:11</b> <b>Received: 10/17/06 15:15</b>									
Biochemical Oxygen Demand	ND	3.0	mg/L	1	CP08087	10/18/06	10/23/06	EPA 405.1	
<b>STR06101740-02A (MW-8) (CPJ0701-02) Water</b> <b>Sampled: 10/17/06 11:34</b> <b>Received: 10/17/06 15:15</b>									
Biochemical Oxygen Demand	ND	3.0	mg/L	1	CP08087	10/18/06	10/23/06	EPA 405.1	
<b>STR06101740-03A (EX-1) (CPJ0701-03) Water</b> <b>Sampled: 10/17/06 09:15</b> <b>Received: 10/17/06 15:15</b>									
Biochemical Oxygen Demand	32	3.0	mg/L	1	CP08087	10/18/06	10/23/06	EPA 405.1	
<b>STR06101740-04A (EX-2) (CPJ0701-04) Water</b> <b>Sampled: 10/17/06 09:43</b> <b>Received: 10/17/06 15:15</b>									
Biochemical Oxygen Demand	38	3.0	mg/L	1	CP08087	10/18/06	10/23/06	EPA 405.1	

# CALIFORNIA LABORATORY SERVICES

10/25/06 11:43

Alpha Analytical, Inc.-Sparks  
255 Glendale Ave., Suite 21  
Sparks NV, x120

Project: STR06101740  
Project Number: STR06101740  
Project Manager: Reyna Vallejo

CLS Work Order #: CPJ0701  
COC #:

## Microbiological Parameters by APHA Standard Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
<b>STR06101740-01A (MW-7) (CPJ0701-01) Water</b> <b>Sampled: 10/17/06 11:11</b> <b>Received: 10/17/06 15:15</b>									
Plate Count	8	1	CFU/mL	1	CP08139	10/17/06	10/19/06	SM 9215	
<b>STR06101740-02A (MW-8) (CPJ0701-02) Water</b> <b>Sampled: 10/17/06 11:34</b> <b>Received: 10/17/06 15:15</b>									
Plate Count	3500	1	CFU/mL	1	CP08139	10/17/06	10/19/06	SM 9215	
<b>STR06101740-03A (EX-1) (CPJ0701-03) Water</b> <b>Sampled: 10/17/06 09:15</b> <b>Received: 10/17/06 15:15</b>									
Plate Count	11000	1	CFU/mL	1	CP08139	10/17/06	10/19/06	SM 9215	
<b>STR06101740-04A (EX-2) (CPJ0701-04) Water</b> <b>Sampled: 10/17/06 09:43</b> <b>Received: 10/17/06 15:15</b>									
Plate Count	3600	1	CFU/mL	1	CP08139	10/17/06	10/19/06	SM 9215	

# CALIFORNIA LABORATORY SERVICES

10/25/06 11:43

Alpha Analytical, Inc.-Sparks 255 Glendale Ave.; Suite 21 Sparks NV, x120	Project: STR06101740 Project Number: STR06101740 Project Manager: Reyna Vallejo	CLS Work Order #: CPJ0701 COC #:
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## Conventional Chemistry Parameters by APHA/EPA Methods - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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### Batch CP08087 - General

<b>Blank (CP08087-BLK1)</b>				Prepared: 10/18/06 Analyzed: 10/23/06						
Biochemical Oxygen Demand	ND	3.0	mg/L							
<b>LCS (CP08087-BS1)</b>				Prepared: 10/18/06 Analyzed: 10/23/06						
Biochemical Oxygen Demand	186	3.0	mg/L	200		93.0	55-125		24	
<b>LCS Dup (CP08087-BSD1)</b>				Prepared: 10/18/06 Analyzed: 10/23/06						
Biochemical Oxygen Demand	183	3.0	mg/L	200		91.5	55-125	1.63	24	

# CALIFORNIA LABORATORY SERVICES

10/25/06 11:43

Alpha Analytical, Inc.-Sparks  
255 Glendale Ave., Suite 21  
Sparks NV, x120

Project: STR06101740  
Project Number: STR06101740  
Project Manager: Reyna Vallejo

CLS Work Order #: CPJ0701  
COC #:

## Notes and Definitions

DET Analyte DETECTED  
ND Analyte NOT DETECTED at or above the reporting limit  
NR Not Reported  
dry Sample results reported on a dry weight basis  
RPD Relative Percent Difference

# Alpha Analytical, Inc.

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

## Sample Receipt Checklist

Date Report is due to Client : 10/26/2006

Date of Notice : 10/18/2006 11:15:50

Please take note of any NO check marks. If we receive no response concerning these items within 24 hours of the date of this notice, all of the samples will be analyzed as requested.

Client Name: **Stratus Environmental**

Project ID : 2007-0057-01/USA 57

Project Manager: **Gowri Kowtha**

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

Work Order Number: **STR06101740**

Client's Phone: **(530) 676-6001**

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

Date Received: **10/18/2006**

Received by: **Latricia Edrosa**

### Chain of Custody (COC) Information

Carrier name FedEx

Chain of custody present ?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Custody seals intact on shipping container/cooler ?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	Not Present <input type="checkbox"/>
Custody seals intact on sample bottles ?	Yes <input type="checkbox"/>	<input type="checkbox"/> No	Not Present <input checked="" type="checkbox"/>
Chain of custody signed when relinquished and received ?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Chain of custody agrees with sample labels ?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Sample ID noted by Client on COC ?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Date and time of collection noted by Client on COC ?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Samplers's name noted on COC ?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Internal Chain of Custody (COC) requested ?	Yes <input type="checkbox"/>	<input checked="" type="checkbox"/> No	
Sub Contract Lab Used :	None <input checked="" type="checkbox"/>	<input type="checkbox"/> SEM	Other (see comments) <input type="checkbox"/>

### Sample Receipt Information

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	Not Present <input type="checkbox"/>
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	

### Sample Preservation and Hold Time (HT) Information

All samples received within holding time?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
Container/Temp Blank temperature in compliance (0-6°C)?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	Cooler Temperature 4 °C
Water - VOA vials have zero headspace / no bubbles?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	No VOA vials submitted <input type="checkbox"/>
Sample labels checked for correct preservation?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	
TOC Water - pH acceptable upon receipt (H2SO4 pH<2)?	Yes <input checked="" type="checkbox"/>	<input type="checkbox"/> No	N/A <input type="checkbox"/>

### Analytical Requirement Information

Are non-Standard or Modified methods requested ?	Yes <input type="checkbox"/>	<input checked="" type="checkbox"/> No	
Are there client specific Project requirements ?	Yes <input type="checkbox"/>	<input checked="" type="checkbox"/> No	If YES : see the Chain of Custody (COC)

Comments : Chain pre-logged in order for SAC office to sub BOD & HPC to CLS. Rest of samples received 10/18/06. Sample numbering unusual as only one page was originally received from SAC office when sub COC was created. Sulfide bottle received but not listed on COC, added it & SO4 per Vince.

# CHAIN-OF-CUSTODY RECORD

# CA

WorkOrder : STR06101740

## 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 : 26-Oct-06

Client:

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

Gowri Kowtha  
 TEL : (530) 676-6001 x  
 FAX : (530) 676-6005  
 EMail gkowtha@stratusinc.net

EDD Required : Yes

Sampled by : Client

Report Attention : Gowri Kowtha  
 CC Report :

Job : 2007-0057-01/USA 57  
 PO : Client's COC # : none

Cooler Temp 4 °C  
 Samples Received 18-Oct-06  
 Date Printed 18-Oct-06

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

Alpha Sample ID	Client Sample ID	Collection Matrix	Collection Date	No. of Bottles				Requested Tests								Sample Remarks
				ORG	SUB	TAT	PWS #	3500FE_20 S_W	3500FE_TO T_W	ALCOHOL_ W	AMMONIA_ W	ANIONS(A)_ W	ANIONS(B)_ W	BOD	HETEROTR OPIC	
STR06101740-01A	MW-7	AQ	10/17/06 11:11	13	2	6		FE+2	FE,Total	MeOH / EtOH	NH3	NO2, NO3, SO4	NO2, NO3, SO4	BOD	SUB	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-02A	MW-8	AQ	10/17/06 11:34	13	2	6		FE+2	FE,Total	MeOH / EtOH	NH3	NO2, NO3, SO4	NO2, NO3, SO4	BOD	SUB	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-03A	EX-1	AQ	10/17/06 09:15	13	2	6		FE+2	FE,Total	MeOH / EtOH	NH3	NO2, NO3, SO4	NO2, NO3, SO4	BOD	SUB	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-04A	EX-2	AQ	10/17/06 09:43	13	2	6		FE+2	FE,Total	MeOH / EtOH	NH3	NO2, NO3, SO4	NO2, NO3, SO4	BOD	SUB	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-05A	S-1	AQ	10/17/06 07:11	5	0	6				MeOH / EtOH						
STR06101740-06A	S-2	AQ	10/17/06 07:51	5	0	6				MeOH / EtOH						
STR06101740-07A	MW-3	AQ	10/17/06 06:41	5	0	6				MeOH / EtOH						
STR06101740-08A	MW-6	AQ	10/17/06 05:51	5	0	6				MeOH / EtOH						

Comments: Security seals intact. Frozen ice. Chain pre-logged in order for SAC office to sub BOD & HPC to CLS. Rest of samples received 10/18/06. Sample numbering unusual as only one page was originally received from SAC office when sub COC was created. : TOC pH=2. Sulfide bottle received but not listed on COC, added it & SO4 per Vince.

Signature	Print Name	Company	Date/Time
	Latricia Edrosa	Alpha Analytical, Inc.	10/18/06 11:16

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

# CHAIN-OF-CUSTODY RECORD

# CA

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

**WorkOrder : STR06101740**

**Report Due By : 5:00 PM On : 26-Oct-06**

**Client:**

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

Gowri Kowtha  
 TEL : (530) 676-6001 x  
 FAX : (530) 676-6005  
 EMail gkowtha@stratusinc.net

EDD Required : Yes

Sampled by : Client

**Report Attention :** Gowri Kowtha

Job : 2007-0057-01/USA 57

<u>Cooler Temp</u>	<u>Samples Received</u>	<u>Date Printed</u>
4 °C	18-Oct-06	18-Oct-06

**CC Report :**

PO :

Client's COC # : none

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

Alpha Sample ID	Client Sample ID	Collection Matrix	Collection Date	No. of Bottles				Requested Tests							Sample Remarks
				ORG	SUB	TAT	PWS #	ORTHOPH OS_W	PHOSPHO RUS_W	SULFIDE	TDS	TOC_W	TPH/P_W	VOC_W	
STR06101740-01A	MW-7	AQ	10/17/06 11:11	13	2	6		Ortho	Total	Sulfide	X	TOC	GAS-C	BTEX/OXY/ EDB/1,2- DCA_C	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-02A	MW-8	AQ	10/17/06 11:34	13	2	6		Ortho	Total	Sulfide	X	TOC	GAS-C	BTEX/OXY/ EDB/1,2- DCA_C	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-03A	EX-1	AQ	10/17/06 09:15	13	2	6		Ortho	Total	Sulfide	X	TOC	GAS-C	BTEX/OXY/ EDB/1,2- DCA_C	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-04A	EX-2	AQ	10/17/06 09:43	13	2	6		Ortho	Total	Sulfide	X	TOC	GAS-C	BTEX/OXY/ EDB/1,2- DCA_C	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-05A	S-1	AQ	10/17/06 07:11	5	0	6							GAS-C	BTEX/OXY/ EDB/1,2- DCA_C	
STR06101740-06A	S-2	AQ	10/17/06 07:51	5	0	6							GAS-C	BTEX/OXY/ EDB/1,2- DCA_C	
STR06101740-07A	MW-3	AQ	10/17/06 06:41	5	0	6							GAS-C	BTEX/OXY/ EDB/1,2- DCA_C	
STR06101740-08A	MW-6	AQ	10/17/06 05:51	5	0	6							GAS-C	BTEX/OXY/ EDB/1,2- DCA_C	

**Comments:** Security seals intact. Frozen ice. Chain pre-logged in order for SAC office to sub BOD & HPC to CLS. Rest of samples received 10/18/06. Sample numbering unusual as only one page was originally received from SAC office when sub COC was created. : TOC pH=2. Sulfide bottle received but not listed on COC, added it & SO4 per Vince.

Signature	Print Name	Company	Date/Time
<i>Patricia Edrosa</i>	Patricia Edrosa	Alpha Analytical, Inc.	10/18/06 11:16

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:	<b>Stratus Environmental</b>	Global ID:	T0600101808
Address:	<b>3330 Cameron Park Drive</b>	EDF:	YES
City, State, Zip:	<b>Cameron Park, CA 95667</b>	Project #	2007-0057-01
Fax:	530-676-6005	Phone:	530-676-6001
		Email:	
		Report Attention:	
Client:	USA 57	Sampled By:	Vince Zalutka
Address:	10700 McArthur Blvd.		
City, State, Zip:	Oakland, CA		



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

Page # 1 of 1

Time Sampled	Date Sampled	Matrix	Lab ID (For Lab Use ONLY)	Sample Description	Containers	TAT (Working Days)	Analysis Requested										Remarks
							TPH-G	BTEX	5 OXY's	1,2-DCA	EDB	Methanol	Ethanol				
0711	10/17	AQ	-05	S-1	HCL VOA's		X	X	X	X	X	X	X	X			
0751	10/17	AQ	-06	S-2	HCL VOA's		X	X	X	X	X	X	X	X			
0641	10/17	AQ	-07	MW-3	HCL VOA's		X	X	X	X	X	X	X	X			
N/S		AQ		MW-4	HCL VOA's		X	X	X	X	X	X	X	X			
N/S		AQ		MW-5	HCL VOA's		X	X	X	X	X	X	X	X			not sampled
0551	10/17	AQ	-08	MW-6	HCL VOA's		X	X	X	X	X	X	X	X			not sampled
1111	10/17	AQ	STR06101740-01	MW-7	HCL VOA's		X	X	X	X	X	X	X	X			
1134	10/17	AQ	-02	MW-8	HCL VOA's		X	X	X	X	X	X	X	X			
0915	10/17	AQ	-03	EX-1	HCL VOA's		X	X	X	X	X	X	X	X			
0943	10/17	AQ	-04	EX-2	HCL VOA's		X	X	X	X	X	X	X	X			
N/S		AQ		EX-3	HCL VOA's		X	X	X	X	X	X	X	X			not sampled
N/S		AQ		EX-4	HCL VOA's		X	X	X	X	X	X	X	X			not sampled

ADDITIONAL INSTRUCTIONS:

Signature	Company	Date	Time
Relinquished by: <i>Vince Zalutka</i>	Vince Zalutka	10-17-06	14:00
Received by: <i>Lisa Bryll</i>	Stratus Environmental	10-17-06	14:00
Relinquished by: <i>Latricia Edmsa</i>	ALDINA		
Received by: <i>Latricia Edmsa</i>	Alpha	10/18/06	11:08
Relinquished by:			
Received by:			

Key: AQ - Aqueous WA - Waste OT - Other L - Liter V - VOA S - Soil Jar O - Orbo T - Tedlar B - Brass P - Plastic OT - Other

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

Billing Information:	<b>Stratus Environmental</b>	Global ID:	T0600101808
Address:	<b>3330 Cameron Park Drive</b>	EDF:	YES
City, State, Zip:	<b>Cameron Park, CA 95667</b>	Project #	2007-0057-01
Fax:	530-676-6005	Phone:	530-676-6001
		Email:	
		Report Attention:	
Client:	USA 57	Sampled By:	Vince Zalutka
Address:	10700 McArthur Blvd.		
City, State, Zip:	Oakland, CA		



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

Page # 1 of 1

Time Sampled	Date Sampled	Matrix	Lab ID (For Lab Use ONLY)	Sample Description	Containers	TAT (Working Days)	Analysis Requested								Remarks
							BO	Total Iron & Ferrous Iron	HPC	TOC	TDS	NO3, NO2 @ Ammonia	Total P & Ortho-P		
1111	1017	AQ	STR06101740-01	MW-7	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times
1134		AQ	-02	MW-8	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times
0915		AQ	-03	EX-1	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times
0943		AQ	-04	EX-2	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times
N/S	1017	AQ		EX-3	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times

**ADDITIONAL INSTRUCTIONS:**

Signature	Company	Date	Time
Relinquished by: <i>Vince Zalutka</i>	Vince Zalutka	10-17-06	1400
Received by: <i>Lisa Bryll</i>	Stratus Environmental	10-17-06	1400
Relinquished by: <i>Latoria Edrosa</i>	Alpha	10/18/06	11:08
Received by: <i>Latoria Edrosa</i>	Alpha		

Key: AQ - Aqueous    WA - Waste    OT - Other    L - Liter    V - VOA    S - Soil Jar    O - Orbo    T - Tedlar    B - Brass    P - Plastic    OT - Other

**NOTE:** Samples are discarded 60 days after sample receipt 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.

p.1  
9163669138

Billing Information:		<b>Stratus Environmental</b>	Global ID: T0600101808
Address:		<b>3330 Cameron Park Drive</b>	EDF: YES
City, State, Zip:		<b>Cameron Park, CA 95667</b>	Project # 2007-0057-01
Fax: 530-676-6005	Phone: 530-676-6001		Email:
Client:		USA 57	Report Attention:
Address:		10700 McArthur Blvd.	Sampled By: Vince Zalulka
City, State, Zip:		Oakland, CA	



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

Page # 1 of 1

Time Sampled	Date Sampled	Matrix	Lab ID (For Lab Use ONLY)	Sample Description	Containers	TAT (Working Days)	Analysis Requested								Remarks
							BOC	Total Iron & Ferrous Iron	HPC	TOC	TDS	NO3, NO2 @ Ammonia	Total P & Ortho-P		
1111	10 17	AQ		MW-7	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times
1134	10 17	AQ		MW-8	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times
0915	10 17	AQ		EX-1	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times
0943	10 17	AQ		EX-2	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times
N/S	10 17	AQ		EX-3	HCL VOA's		X	X	X	X	X	X	X		Watch short holding times

**ADDITIONAL INSTRUCTIONS:**

Signature	Company	Date	Time
Relinquished by: <i>Vince Zalulka</i>	Vince Zalulka	10-17-06	1400
Received by: <i>Lisa Bragg</i>	ALPHA	10-17-06	1430
Relinquished by:			
Received by:			
Relinquished by:			
Received by:			

Key: AQ - Aqueous WA - Waste OT - Other L - Liter V - VOA S - Soil Jar O - Orbo T - Tedlar B - Brass P - Plastic OT - Other

**NOTE:** Samples are discarded 60 days after sample receipt 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.

Oct 17 06 02:04p Alpha Analytical Inc

CP50701

**Alpha Analytical, Inc.**

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

**SUB CHAIN-OF-CUSTODY RECORD**

Page of

**Report Due By : 5:00 PM  
On : 26-Oct-06**

**Work Order : STR06101740**  
**\*Please reference the Work Order number on all reports and invoices.**  
**\*Also please include the dates of analysis and detection limits.**  
**Please send the report to Alpha Analytical (Sparks).**  
**Attention To Revna Vallejo (revna@alpha-analytical.com).**

**Subcontractor:**  
CLS Labs  
3249 Fitzgerald Rd.  
Suite 21  
Rancho Cordova, CA 95742

TEL: (916) 638-7301  
FAX: (916) 638-4510  
Acct #:

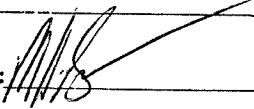

EDD Required:  
**Yes**

Required QC:  
Final Rpt, MBLK, LCS, MS/MSD With Surrogates

17-Oct-06

Alpha's Sample ID	Client's Sample ID	Matrix	Collection Date	Type (#) of Bottles		Requested Tests		Sample Comments
				Preserved	Other	SM5210B	Standard Method 9215B	
STR06101740-01A	MW-7	Aqueous	10/17/06 11:11		OTHER (2)	Biochemical Oxygen Demand	Heterotrophic Plate Count	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-02A	MW-8	Aqueous	10/17/06 11:34		OTHER (2)	Biochemical Oxygen Demand	Heterotrophic Plate Count	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-03A	EX-1	Aqueous	10/17/06 09:15		OTHER (2)	Biochemical Oxygen Demand	Heterotrophic Plate Count	BOD & Heterotrophic Plate Count subbed to CLS.
STR06101740-04A	EX-2	Aqueous	10/17/06 09:43		OTHER (2)	Biochemical Oxygen Demand	Heterotrophic Plate Count	BOD & Heterotrophic Plate Count subbed to CLS.

**Comments:**

Relinquished by: 	Date/Time: 10-17-06 1515	Received by: 	Date/Time: 10-17-06 1515
Relinquished by: _____	_____	Received by: _____	_____

T-492 P.001/002 T-492 P.001/002 +7753550406 +7753550406 From-ALPHA ANALYTICAL Oct-17-2006 14:24