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February 2, 2005

Alameda County  
FEB 0 9 2005  
Environmental Health

QUARTERLY GROUNDWATER MONITORING REPORT  
DECEMBER 2004 GROUNDWATER SAMPLING  
ASE JOB NO. 3540

at  
Oakland Truck Stop  
8255 San Leandro Street  
Oakland, California

Prepared for:  
Mr. Nissan Saidian  
5733 Medallion Court  
Castro Valley, CA 94522

Prepared by:  
AQUA SCIENCE ENGINEERS, INC.  
208 W. El Pintado  
Danville, CA 94526  
(925) 820-9391

## 1.0 INTRODUCTION

### Site Location (Site). See Figure 1

Oakland Truck Stop  
8255 San Leandro Street  
Oakland, California

### Responsible Party

Mr. Nissan Saidian  
5733 Medallion Court  
Castro Valley, CA 94522

### Environmental Consulting Firm

Aqua Science Engineers, Inc. (ASE)  
208 West El Pintado  
Danville, CA 94526  
Contact: Robert Kitay, Senior Geologist  
(925) 820-9391

### Agency Review

Mr. Amir Gholami  
Alameda County Health Care Services Agency (ACHCSA)  
1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502

Mr. Chuck Headlee  
California Regional Water Quality Control Board (RWQCB)  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

The following is a report detailing the methods and findings of the December 30, 2004 quarterly groundwater sampling at the above-referenced site. This sampling was conducted as required by the ACHCSA and RWQCB. ASE has prepared this report on behalf of Mr. Nissan Saidian, owner of the property.

## **2.0 GROUNDWATER FLOW DIRECTION AND GRADIENT**

On December 30, 2004, ASE measured the depth to water in monitoring wells MW-2 through MW-8 using an electric water level sounder. A truck was parked above MW-9 and prevented access to the well. The surface of the groundwater in monitoring wells MW-1 through MW-9 was also checked for the presence of free-phase hydrocarbons or sheen. Monitoring well MW-3 contained a sheen, and monitoring well MW-1 contained approximately 1.8 gallons of free-phase hydrocarbons. The thickness of the hydrocarbons could not be gauged due to a malfunction of the interface probe. No free-phase hydrocarbons or sheen was observed in any of the remaining site monitoring wells. Groundwater elevation data is presented as Table One.

A groundwater potentiometric surface map for December 30, 2004 sampling event is presented as Figure 2. The groundwater flow direction at the site has been inconsistent and highly variable. Groundwater flow this quarter was generally to the northwest with an irregular gradient.

## **3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS**

Groundwater samples were collected from monitoring wells MW-2, MW-3, and MW-6. A truck was parked above monitoring well MW-9 and it, therefore, could not be sampled. Monitoring well MW-1 was not sampled due to the presence of free-phase hydrocarbons. Prior to sampling, the wells were purged of three well casing volumes of groundwater using disposable polyethylene bailers. The parameters pH, temperature, and conductivity were monitored during the well purging, and samples were not collected until these parameters stabilized. Groundwater samples were then collected from each well using the same polyethylene bailers.

All samples were decanted from the bottom of the bailers using low-flow sampling devices into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid, and sealed without headspace. The samples were then labeled and placed in coolers with wet ice for transport to Kiff Analytical, LLC of Davis, California under appropriate chain-of-custody documentation. Well sampling field logs are presented in Appendix A.

The monitoring well purge water was placed in a 55-gallon steel drum, and stored for later removal.

The groundwater samples were analyzed for total petroleum hydrocarbons as diesel (TPH-D) by EPA Method 3550/8015M, and total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and total xylenes (collectively known as BTEX), and oxygenates including ethanol and methanol by EPA Method 8260B. The analytical results are presented in Table Two. The certified analytical report and chain-of-custody documentation are included as Appendix B.

#### **4.0 CONCLUSIONS**

Monitoring well MW-1 contained approximately 1.8 gallons of free-phase hydrocarbons this quarter.

In general, concentrations of dissolved hydrocarbons remained similar to previous results. A notable change was the increase in the TPH-D concentration in the sample collected from monitoring well MW-3 from less than the reporting limit of 5,000 ppb last quarter, to 13,000 ppb this quarter. Hydrocarbon concentrations in the groundwater samples collected from monitoring wells MW-2, MW-3, and MW-6 exceeded Environmental Screening Levels (ESLs) as presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region dated July 2003.

#### **5.0 RECOMMENDATIONS**

ASE recommends that this site remain on a quarterly sampling schedule. The next sampling is scheduled for March 2005.

Oakland Truck Stop staff will continue periodic free-phase hydrocarbon removal from monitoring well MW-1 during the next quarter. In addition, ASE has completed a pilot study for ozone-sparging remediation at the site and prepared a report dated April 7, 2004. ASE will install the ozone-sparging remediation system once approved by the ACHCSA.

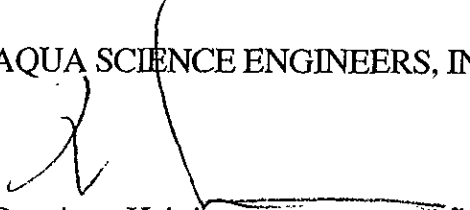
## 6.0 REPORT LIMITATIONS

The results presented in this report represent conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the former underground storage tanks and associated plumbing at the site, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of independent CAL-DHS certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

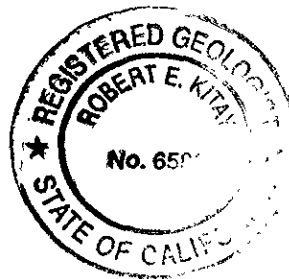
Aqua Science Engineers appreciates the opportunity to provide environmental consulting services for this project, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

  
Damian Hriciga  
Project Geologist

  
Robert E. Kitay, R.G., R.E.A.  
Senior Geologist



Attachments: Table One through Three  
Figures 1 and 2  
Appendices A and B

cc: Mr. Nissan Saidian  
Mr. Amir Gholami, ACHCSA  
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region

# TABLES

**TABLE ONE**  
**Groundwater Elevation Data**  
 Oakland Truck Stop  
 8255 San Leandro Street, Oakland, CA

Well ID & Date Sampled	Top of Casing Elevation (msl)	Depth to Water (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
<u>MW-1</u>				
8/16/99	97.12	Unknown	> 1.0	Unknown
8/27/99		6.90	0.36	90.51*
9/10/99		6.85	0.18	90.41*
9/24/99		6.65	0.08	90.53*
10/8/99		6.87	0.28	90.47*
10/22/99		6.81	0.23	90.49*
11/2/99		6.94	0.31	90.43*
11/19/99		6.91	0.12	90.31*
12/6/99		6.93	0.12	90.29*
3/8/00		5.93	0.21	91.36*
6/14/00		6.57	0.72	90.41*
12/11/00		6.70	0.60	90.90*
3/6/01		5.75	0.40	91.69*
6/6/01		7.60	1.48	90.70*
9/4/01		6.80	0.20	90.48*
3/11/02		approx. 7.47	approx. 3	approx. 92.05*
6/6/02		6.49	0.67	91.17*
9/4/02	11.02	6.89	0.54	4.56*
12/17/02		4.65		6.47*
3/7/03		6.55	1.19	3.52*
6/5/03		9.77	4.63	4.95*
9/19/03		6.56	0.32	4.72*
12/12/03		5.63	0.41	5.72*
3/15/04		7.11	0.40	4.23*
6/22/04		NM	NM	NM
9/21/04		NM	NM	NM
12/30/04			Probe Malfunction	
<u>MW-2</u>				
8/16/99	96.82	6.30	--	90.52
12/6/99		8.46	--	88.36
3/8/00		9.12	--	87.70
6/14/00		8.34	--	88.48
12/11/00		5.94	--	90.88
3/6/01		4.70	--	92.12
6/6/01		6.03	--	90.79
9/4/01		6.34	--	90.48
3/11/02		4.89	--	91.93
6/6/02		5.69	--	91.13
9/4/02	10.70	6.17	--	4.53
12/17/02		4.39	--	6.31
3/7/03		5.44	--	5.26
6/5/03		5.59	--	5.11
9/19/03		6.09	--	4.61
12/12/03		5.13	--	5.57
3/15/04		5.71	--	4.99
6/22/04		5.80	--	4.90
9/21/04		6.64	--	4.06
12/30/04		6.04	--	4.66

TABLE ONE  
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Well ID & Date Sampled	Top of Casing Elevation (msl)	Depth to Water (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
<u>MW-3</u>				
8/16/99	96.43	5.85	--	90.58
12/16/99		5.70	--	90.73
3/8/00		5.32	--	91.11
6/14/00		6.95	--	89.48
12/11/00		6.22	--	90.21
3/6/01		4.83	--	91.60
6/6/01		5.62	--	90.81
9/4/01		5.91	--	90.52
3/11/02		4.42	--	92.01
6/6/02		5.19	--	91.24
9/4/02	10.32	5.72	--	4.60
12/17/02		3.96	--	6.36
3/7/03		4.88	--	5.44
6/5/03		5.05	--	5.27
9/19/03		5.62	--	4.70
12/12/03		4.68	--	5.64
3/15/04		4.52	--	5.80
6/22/04		6.49	--	3.83
9/21/04		5.72	--	4.60
12/30/04		4.72	--	5.60
<u>MW-4</u>				
8/16/99	96.60	6.12	--	90.48
12/16/99		5.98	--	90.62
3/8/00		4.32	--	92.28
6/14/00		5.58	--	91.02
12/11/00		5.70	--	90.90
3/6/01		4.46	--	92.14
6/6/01		5.89	--	90.71
9/4/01		6.16	--	90.44
3/11/02		4.67	--	91.93
6/6/02		5.50	--	91.10
9/4/02	10.50	5.97	--	4.53
12/17/02		4.22	--	6.28
3/7/03		5.23	--	5.27
6/5/03		5.38	--	5.12
9/19/03		5.91	--	4.59
12/12/03		4.91	--	5.59
3/15/04		4.94	--	5.56
6/22/04		5.68	--	4.82
9/21/04		6.01	--	4.49
12/30/04		4.55	--	5.95



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Well ID & Date Sampled	Top of Casing Elevation (msl)	Depth to Water (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
<b>MW-5</b>				
12/6/99	96.30	5.94	--	90.36
3/8/00		4.06	--	92.24
6/14/00		5.25	--	91.05
12/11/00		5.45	--	90.85
3/6/01		4.12	--	92.18
6/6/01		5.56	--	90.74
9/4/01		5.84	--	90.46
3/11/02		4.38	--	91.92
6/6/02		5.16	--	91.14
9/4/02	10.20	5.62	--	4.58
12/17/02		4.12	--	6.08
3/7/03		4.89	--	5.31
6/5/03		5.04	--	5.16
9/19/03		5.56	--	4.64
12/12/03		4.72	--	5.48
3/15/04		4.61	--	5.59
6/22/04		5.26	--	4.94
9/21/04		5.68	--	4.52
9/21/04		4.55	--	5.65
<b>MW-6</b>				
12/6/99	96.79	5.80	--	90.99
3/8/00		4.10	--	92.69
6/14/00		5.64	--	91.15
12/11/00		5.72	--	91.07
3/6/01		4.32	--	92.47
6/6/01		5.81	--	90.98
9/4/01		6.12	--	90.67
3/11/02		4.49	--	92.30
6/6/02		5.33	--	91.46
9/4/02	10.71	5.92	--	4.79
12/17/02		3.85	--	6.86
3/7/03		4.96	--	5.75
6/5/03		5.18	--	5.53
9/19/03		5.81	--	4.90
12/12/03		4.73	--	5.98
3/15/04		4.65	--	6.06
6/22/04		5.34	--	5.37
9/21/04		5.89	--	4.82
12/30/04		4.35	--	6.36
<b>MW-7</b>				
9/4/02	9.17	4.67	--	4.50
12/17/02		3.11	--	6.06
3/7/03		3.89	--	5.28
6/5/03		3.57	--	5.60
9/19/03		4.57	--	4.60
12/12/03		3.48	--	5.69
3/15/04			Truck Parked Over Well	
6/22/04		4.52	--	4.65
9/21/04		4.56	--	4.61
12/30/04		3.17	--	6.00

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Well ID & Date Sampled	Top of Casing Elevation (msl)	Depth to Water (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
<u>MW-8</u>				
9/4/02	9.68	4.94	--	4.74
12/17/02		3.26	--	6.42
3/7/03		4.01	--	5.67
6/5/03		4.28	--	5.40
9/19/03		4.87	--	4.81
12/12/03		3.77	--	5.91
3/15/04		3.53	--	NA**
6/22/04		4.52	--	NA**
9/21/04		4.70	--	NA**
12/30/04		4.23	--	NA**
<u>MW-9</u>				
9/4/02	11.07	6.26	--	4.81
12/17/02		4.23	--	6.84
3/7/03		5.26	--	5.81
6/5/03		5.56	--	5.51
9/19/03		6.25	--	4.82
12/12/03			Truck Parked Over Well	
3/15/04		5.04	--	6.03
6/22/04		5.91	--	5.16
9/21/04		6.24	--	4.83
12/30/04			Truck Parked Over Well	

Notes:

Mid Coast Engineers (MCE) surveyed all site monitoring wells on July 11, 2002 to mean sea level (MSL). The updated elevation data is reflected in the table above.

\* = Groundwater elevation adjusted for the presence of free-floating hydrocarbons by the equation: Adjusted groundwater elevation = Top of casing elevation - depth to groundwater + (0.8 x free-floating hydrocarbon thickness)

\*\* = Top of casing elevation has changed and well has not been resurveyed.

\*\*\* = Product was bailed by OTS staff prior to measurement by ASE.

NM = Not Measured

**TABLE TWO**  
**Summary of Chemical Analysis of GROUNDWATER Samples**  
**Petroleum Hydrocarbons**  
**All results are in parts per billion**

Well ID DATE	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA
<b>MW-1</b>												
8/16/99												
12/16/99												
3/8/00												
6/14/00												
12/11/00												
3/16/01												
6/16/01												
9/14/01												
3/11/02												
6/16/02												
9/14/02												
12/17/02												
3/7/03												
6/15/03												
9/19/03												
12/12/03												
12/12/03												
3/15/04												
6/22/04												
9/21/04												
12/30/04												
<b>MW-2</b>												
8/16/99	2,200	970*	< 500	3.8	< 2.0	3	< 4.0	< 20	NA	NA	NA	NA
12/16/99	1,900	400*	< 500	16	< 0.5	1.5	< 0.5	5.2	NA	NA	NA	NA
3/8/00	1,600*	530*	< 500	9.7	< 0.5	2.7	< 0.5	27	NA	NA	NA	NA
6/14/00	2,000	75	< 100	2.8	< 0.5	3.4	< 0.5	16	3.4	< 0.5	< 0.5	64
12/11/00	1,000	120	< 100	2.6	< 0.5	< 0.5	< 0.5	15	2.9	< 0.5	< 0.5	62
3/16/01	1,500	1,400	NA	2.2	< 0.5	1.7	< 0.5	22	3.4	< 0.5	< 0.5	83
6/16/01	1,700	190	NA	2.6	< 0.5	2.3	< 0.5	26	3.2	< 0.5	< 0.5	83
9/14/01	2,000	450	NA	2.7	< 0.5	2.1	< 0.5	33	3.4	< 0.5	< 0.5	93
3/11/02	1,100	410	NA	1.0	< 0.5	0.5	< 0.5	26	2.5	< 0.5	< 0.5	69
6/16/02	900	430	NA	1.2	< 0.5	< 0.5	< 0.5	23	2.8	< 0.5	< 0.5	73
9/14/02	910	610	NA	1.6	< 0.5	< 0.5	< 0.5	45	2.5	< 0.5	< 0.5	67
12/17/02	190	220	NA	0.65	< 0.5	< 0.5	< 0.5	34	1.5	< 0.5	< 0.5	46
3/7/03	380	300	NA	0.81	< 0.5	< 0.5	< 0.5	50	1.9	< 0.5	< 0.5	73
6/15/03	2,200	2,200	NA	1.7	< 0.5	1.5	< 0.5	180	4.9	< 0.5	1.3	110
9/19/03	2,300	520	NA	2.0	< 0.5	2.1	< 0.5	180	3.7	< 0.5	1.1	120
12/12/03	3,000	2,200	NA	2.1	< 0.5	1.7	< 0.5	250	4.5	< 0.5	1.6	130
3/15/04												
6/22/04	1,600	420	NA	1.3	< 0.5	1.0	< 0.5	580	4.6	< 0.5	3.9	340
9/21/04	2,500	< 400	NA	1.2	< 0.5	1.5	< 0.5	730	5.9	< 0.5	4.9	550
12/30/04	1,800	< 300	NA	1.2	< 1.0	< 1.0	< 1.0	540	5.0	< 1.0	3.6	400
<b>MW-3</b>												
8/16/99	56,000	10,000**	< 500	17,000	2,600	2,600	1,200	6,100	NA	NA	NA	NA
12/16/99	40,000	9,100*	< 500	16,000	140	1,800	100	2,200/4,000#	NA	NA	NA	NA
3/8/00	22,000	4,500*	< 500	11,000	72	1,100	130	3,400	NA	NA	NA	NA
6/14/00	34,000	16,000	< 100	13,000	94	1,300	160	4,800	31	< 10	21	2,700
12/11/00	24,000	14,000	< 100	13,000	88	780	120	4,300	< 50	< 50	< 50	2,300
3/16/01	34,000	12,000	NA	15,000	100	1,100	130	4,000	< 50	< 50	< 50	2,100
6/16/01	34,000	20,000	NA	14,000	94	550	110	4,400	< 50	< 50	< 50	2,300
9/14/01	29,000	19,000	NA	13,000	83	480	83	4,100	< 50	< 50	< 50	3,400
3/11/02	12,000	14,000	NA	2,900	< 20	110	< 20	530	< 20	< 20	< 20	330
6/16/02	20,000	14,000	NA	10,000	< 50	200	51	2,400	< 50	< 50	< 50	1,200
9/14/02	24,000	17,000	NA	11,000	< 50	140	< 50	3,200	< 50	< 50	< 50	1,400
12/17/02	4,900	17,000	NA	2,000	< 10	52	12	360	< 10	< 10	< 10	220
3/7/03	8,700	16,000	NA	2,300	< 10	43	11	770	< 10	< 10	< 10	360
6/15/03	27,000	14,000	NA	10,000	53	220	53	5,000	< 50	< 50	< 50	1,600
9/19/03	120,000	13,000	NA	20,000	170	710	250	6,100	< 25	< 25	< 25	2,600
12/12/03	29,000	27,000	NA	12,000	74	240	79	5,600	17	< 10	30	2,100
3/15/04	28,000	21,000	NA	11,000	72	220	64	8,200	< 50	< 50	< 50	2,900
6/22/04	29,000	7,600	NA	11,000	71	220	54	8,400	< 50	< 50	< 50	3,000
9/21/04	33,000	< 5,000	NA	12,000	67	190	56	8,200	< 25	< 25	47	3,200
12/30/04	30,000	13,000	NA	11,000	62	170	49	8,900	< 25	< 25	49	3,200

**TABLE TWO**  
**Summary of Chemical Analysis of GROUNDWATER Samples**  
**Petroleum Hydrocarbons**  
**All results are in parts per billion**

Well ID DATE	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	DIFE	ETBE	TAME	TBA
<b>MW-4</b>												
3/16/99	61***	1,100*	< 500	< 0.5	< 0.5	< 0.5	< 1.0	86	NA	NA	NA	NA
12/16/99	130***	220*	< 500	< 1.0	< 1.0	< 1.0	< 1.0	130	NA	NA	NA	NA
3/8/00	< 50	220*	< 500	< 0.5	< 0.5	< 0.5	< 0.5	130	NA	NA	NA	NA
6/14/00	< 50	< 50	< 100	< 0.5	< 0.5	< 0.5	< 0.5	100	< 0.5	< 0.5	< 0.5	20
12/11/00	< 50	< 50	< 100	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	16
3/16/01	< 50	670	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	9.9
6/16/01	< 50	790	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	20
9/14/01	< 50	950	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	26
3/11/02	< 50	250	NA	< 0.5	< 0.5	< 0.5	< 0.5	84	< 0.5	< 0.5	< 0.5	21
6/16/02	< 50	710	NA	< 0.5	< 0.5	< 0.5	< 0.5	92	< 0.5	< 0.5	< 0.5	21
9/14/02	< 50	1,100	NA	< 0.5	< 0.5	< 0.5	< 0.5	150	< 0.5	< 0.5	< 0.5	18
12/17/02	< 50	470	NA	< 0.5	< 0.5	< 0.5	< 0.5	120	< 0.5	< 0.5	< 0.5	< 5.0
3/7/03	< 50	470	NA	< 0.5	< 0.5	< 0.5	< 0.5	120	< 0.5	< 0.5	< 0.5	18
6/15/03	< 50	2,000	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	0.52	23
9/19/03	< 50	830	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.50	23
12/12/03	< 50	1,700	NA	< 0.5	< 0.5	< 0.5	< 0.5	120	< 0.5	< 0.5	< 0.5	16
3/15/04	< 50	2,200	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	< 0.5	< 0.5	< 0.5	20
9/21/04	< 50	620	NA	< 0.5	< 0.5	< 0.5	< 0.5	93	< 0.5	< 0.5	< 0.5	31
<b>MW-5</b>												
12/16/99	450***	2,000*	< 500	< 1.0	< 1.0	< 1.0	< 1.0	21	NA	NA	NA	NA
3/8/00	51***	530*	< 500	< 0.5	< 0.5	< 0.5	< 0.5	84	NA	NA	NA	NA
6/14/00	380	1,400	< 100	< 0.5	< 0.5	< 0.5	< 0.5	160	12	< 0.5	< 0.5	22
12/11/00	540	590	< 100	< 0.5	< 0.5	< 0.5	< 0.5	240	9.5	< 0.5	< 0.5	32
3/16/01	510	2,900	NA	< 0.5	< 0.5	< 0.5	< 0.5	140	13	< 0.5	< 0.5	19
6/16/01	280	2,700	NA	< 0.5	< 0.5	< 0.5	< 0.5	180	13	< 0.5	< 0.5	26
9/14/01	630	2,600	NA	< 0.5	< 0.5	< 0.5	< 0.5	180	9.4	< 0.5	< 0.5	29
3/11/02	97	3,500	NA	< 0.5	< 0.5	< 0.5	< 0.5	29	0.79	< 0.5	< 0.5	7.4
6/16/02	61	3,500	NA	< 0.5	< 0.5	< 0.5	< 0.5	150	2.9	< 0.5	< 0.5	34
9/14/02	92	6,100	NA	< 0.5	< 0.5	< 0.5	< 0.5	370	3.6	< 0.5	< 0.5	72
12/17/02	110	2,100	NA	< 0.5	< 0.5	< 0.5	< 0.5	110	4.2	< 0.5	< 0.5	14
3/7/03	71	1,600	NA	< 0.5	< 0.5	< 0.5	< 0.5	150	2.2	< 0.5	< 0.5	35
6/15/03	95	3,300	NA	< 0.5	< 0.5	< 0.5	< 0.5	170	4.6	< 0.5	< 0.5	43
9/19/03	100	1,400	NA	< 0.5	< 0.5	< 0.5	< 0.5	310	5.2	< 0.5	0.68	86
12/12/03	< 50	7,600	NA	< 0.5	< 0.5	< 0.5	< 0.5	270	5.9	< 0.5	0.70	91
3/15/04	95	1,700	NA	< 0.5	< 0.5	< 0.5	< 0.5	290	6.7	< 0.5	0.92	200
9/21/04	78	990	NA	< 0.5	< 0.5	< 0.5	< 0.5	270	4.7	< 0.5	0.96	880
<b>MW-6</b>												
12/16/99	13,000	< 50	< 500	180	21	11	24	< 100	NA	NA	NA	NA
3/8/00	< 10,000	4,600*	< 500	230	26	18	39	12,000	NA	NA	NA	NA
6/14/00	8,400	12,000	< 100	190	12	9.5	22	15,000	< 5.0	< 5.0	70	3,300
12/11/00	< 5,000	10,000	< 100	190	< 50	< 50	< 50	14,000	< 50	< 50	74	2,900
3/16/01	5,300	6,700	NA	220	< 50	< 50	< 50	13,000	< 50	< 50	84	2,100
6/16/01	5,000	23,000	NA	210	< 25	< 25	< 25	12,000	< 25	< 25	84	4,200
9/14/01	5,400	22,000	NA	190	12	< 10	23	15,000	< 10	< 10	79	4,000
3/11/02	4,600	11,000	NA	160	< 25	< 25	< 25	15,000	< 25	< 25	39	5,100
6/16/02	< 5,000	14,000	NA	200	< 50	< 50	< 50	17,000	< 50	< 50	77	8,700
9/14/02	< 5,000	50,000	NA	140	< 50	< 50	< 50	21,000	< 50	< 50	52	7,500
12/17/02	< 5,000	9,100	NA	130	< 50	< 50	< 50	16,000	< 50	< 50	64	6,300
3/7/03	< 5,000	12,000	NA	160	< 50	< 50	< 50	20,000	< 50	< 50	53	7,500
6/15/03	< 5,000	23,000	NA	230	< 50	< 50	< 50	19,000	< 50	< 50	86	7,100
9/19/03	8,900	24,000	NA	220	< 25	< 25	< 25	15,000	< 25	< 25	74	8,100
12/12/03	8,000	24,000	NA	190	< 25	< 25	< 25	14,000	< 25	< 25	65	7,400
3/15/04	4,400	26,000	NA	190	< 25	< 25	< 25	9,900	< 25	< 25	61	6,700
6/22/04	3,500	7,000	NA	150	< 20	< 20	< 20	9,200	< 20	< 20	51	6,100
9/21/04	4,600	12,000	NA	210	< 20	< 20	< 20	8,800	< 20	< 20	55	7,000
12/30/04	5,300	11,000	NA	190	< 20	< 20	< 20	6,300	< 20	< 20	53	4,900

**TABLE TWO**  
**Summary of Chemical Analysis of GROUNDWATER Samples**  
**Petroleum Hydrocarbons**  
**All results are in parts per billion**

Well ID DATE	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA
<b>MW-7</b>												
9/4/02	< 50	130****	NA	< 0.5	< 0.5	< 0.5	< 0.5	3.4	< 0.5	< 0.5	< 0.5	< 5.0
12/17/02	< 50	220	NA	< 0.5	< 0.5	< 0.5	< 0.5	2.8	< 0.5	< 0.5	< 0.5	< 5.0
3/7/03	< 50	140	NA	< 0.5	< 0.5	< 0.5	< 0.5	1.6	< 0.5	< 0.5	< 0.5	< 5.0
6/5/03	< 50	200	NA	< 0.5	< 0.5	< 0.5	< 0.5	2.5	< 0.5	< 0.5	< 0.5	< 5.0
9/19/03	< 50	320	NA	< 0.5	< 0.5	< 0.5	< 0.5	5.0	< 0.5	< 0.5	< 0.5	< 5.0
12/12/03	< 50	380	NA	< 0.5	< 0.5	< 0.5	< 0.5	2.3	< 0.5	< 0.5	< 0.5	< 5.0
3/15/04				Not Sampled - Truck Parked Over Well								
9/21/04	< 50	79	NA	< 0.5	< 0.5	< 0.5	< 0.5	2.6	< 0.5	< 0.5	< 0.5	< 5.0
<b>MW-8</b>												
9/4/02	< 50	170	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
12/17/02	< 50	100	NA	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0
3/7/03	< 50	62	NA	< 0.5	< 0.5	< 0.5	< 0.5	3.3	< 0.5	< 0.5	< 0.5	< 5.0
6/5/03	< 50	270	NA	< 0.5	< 0.5	< 0.5	< 0.5	13	< 0.5	< 0.5	< 0.5	< 5.0
9/19/03	< 50	250	NA	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	< 0.5	< 0.5	< 5.0
12/12/03	< 50	420	NA	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	< 0.5	< 0.5	< 5.0
3/15/04	< 50	250	NA	< 0.5	< 0.5	< 0.5	< 0.5	6.4	< 0.5	< 0.5	< 0.5	< 5.0
9/21/04	< 50	< 50	NA	< 0.5	< 0.5	< 0.5	< 0.5	11	< 0.5	< 0.5	< 0.5	< 5.0
<b>MW-9</b>												
9/4/02	< 2,500	1,000	NA	< 25	< 25	< 25	< 25	12,000	< 25	< 25	70	1,700
12/17/02	< 2,000	880	NA	< 20	< 20	< 20	< 20	4,500	< 20	< 20	23	2,300
3/7/03	< 500	450	NA	< 5.0	< 5.0	< 5.0	< 5.0	1,700	< 5.0	< 5.0	8.4	6,600
6/5/03	< 500	4,500	NA	< 5.0	< 5.0	< 5.0	< 5.0	120	< 5.0	< 5.0	< 5.0	17,000
9/19/03	< 1,000	4,500	NA	< 10	< 10	< 10	< 10	38	< 10	< 10	< 10	15,000
12/12/03				Not Sampled - Truck Parked Over Well								
3/15/04	< 1,000	82	NA	< 10	< 10	< 10	< 10	38	< 10	< 10	< 10	18,000
9/21/04	< 1,000	2,600	NA	< 10	< 10	< 10	< 10	17	< 10	< 10	< 10	16,000
12/30/04				Not Sampled - Truck Parked Over Well								

DHS MCL	NE	NE	NE	150	700	1,750	15	NE	NE	NE	NE	NE
ESL	400	500	500	46	130	290	1	1,200	NE	NE	NE	NE

**Notes:**

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit.  
 Most recent concentrations are in bold.

DHS MCL is the California Department of Health Services maximum contaminant level for drinking water.  
 ESL = Environmental screening levels presented in the "Screening For Environmental Concerns at Sites With Contaminated Soil and Groundwater (July 2003)" document prepared by the California Regional Water Quality Control Board, San Francisco Bay Region.

NE = MCL/ESL not established

NA = Sample not analyzed for this compound.

\* = Non-typical diesel pattern, hydrocarbons in early diesel range.

\*\* = Estimated concentration due to overlapping fuel patterns in the sample

\*\*\* = Non-typical gasoline pattern.

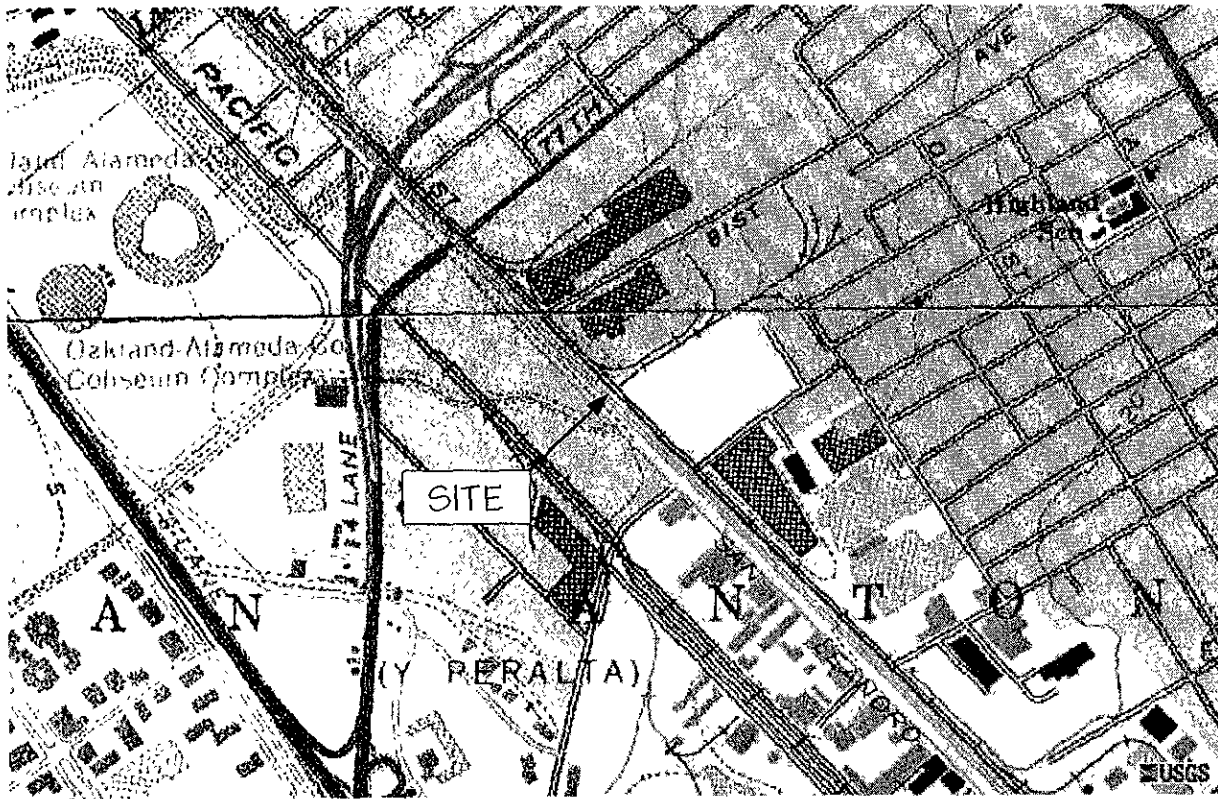
\*\*\*\* = Non-typical diesel pattern

# = MTBE concentration by EPA Method 8260

## **FIGURES**



NORTH



LOCATION MAP

OAKLAND TRUCK STOP  
8255 SAN LEANDRO STREET  
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

Figure 1

PROPERTY BOUNDARIES

CAFE

TRUCK WASH AREA

MW-4  
(5.95')

FORMER WASTE-OIL UST

STATION & MARKET

MW-5  
(5.65')

TRUCK SCALE

DISPENSERS

MW-2  
(4.66')

FORMER WASTE-OIL UST

MW-1  
(NM')

MW-3  
(5.60')

UNDERGROUND STORAGE TANK FARM

MW-7  
(6.00')

FORMER FUEL USTs

TRUCK ACCESS WAY

MW-6  
(6.36')


MW-8  
(NM')


MW-9  
(NM')


SAN LEANDRO STREET

### LEGEND

NM Not Measured

 Potentiometric surface contour with arrow indicating groundwater flow direction

 4-inch diameter monitoring well

 Monitoring well (with groundwater elevation in feet)  
MW-4  
(5.95')



NORTH

SCALE  
1" = 50'

POTENTIOMETRIC  
SURFACE CONTOUR MAP  
12/30/2004

OAKLAND TRUCK STOP  
8255 SAN LEANDRO STREET  
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

Figure 2



# **APPENDIX A**

Well Sampling Field Logs



# WELL SAMPLING FIELD LOG

Project Name and Address: CARLELAND RIVER STOP  
 Job #: 3540 Date of sampling: 12/30/04  
 Well Name: MW-1 Sampled by: RH  
 Total depth of well (feet): \_\_\_\_\_ Well diameter (inches): 2  
 Depth to water before sampling (feet): INTERFERE PROUSE PUMP FUNCTION  
 Thickness of floating product if any: ~ 1.8 GALLONS  
 Depth of well casing in water (feet): \_\_\_\_\_  
 Number of gallons per well casing volume (gallons): \_\_\_\_\_  
 Number of well casing volumes to be removed: \_\_\_\_\_  
 Required volume of groundwater to be purged before sampling (gallons): \_\_\_\_\_  
 Equipment used to purge the well: \_\_\_\_\_  
 Time Evacuation Began: \_\_\_\_\_ Time Evacuation Finished: \_\_\_\_\_  
 Approximate volume of groundwater purged: \_\_\_\_\_  
 Did the well go dry: \_\_\_\_\_ After how many gallons: \_\_\_\_\_  
 Time samples were collected: \_\_\_\_\_  
 Depth to water at time of sampling: \_\_\_\_\_  
 Percent recovery at time of sampling: \_\_\_\_\_  
 Samples collected with: \_\_\_\_\_  
 Sample color: \_\_\_\_\_  
 Description of sediment in sample: \_\_\_\_\_

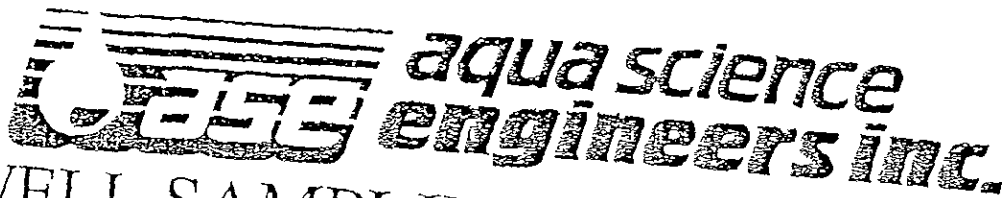
## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

NOT SAMPLED THIS QUARTER



# WELL SAMPLING FIELD LOG

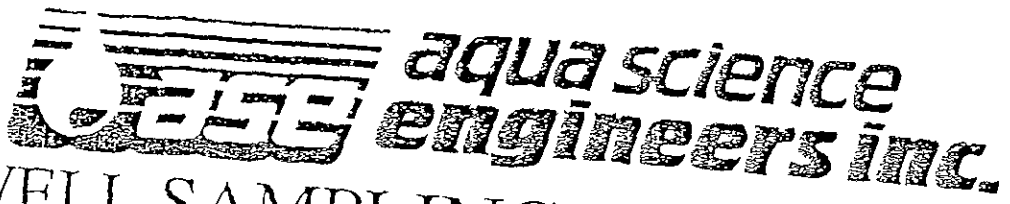
Project Name and Address: OHIO LAND TRUCK STOP  
 Job #: ~~3540~~ 3540 Date of sampling: 12/30/04  
 Well Name: MW-2 Sampled by: DH  
 Total depth of well (feet): 14.9 Well diameter (inches): 2  
 Depth to water before sampling (feet): 6.04  
 Thickness of floating product if any: —  
 Depth of well casing in water (feet): 8.86  
 Number of gallons per well casing volume (gallons): 1.4  
 Number of well casing volumes to be removed: 3  
 Req'd volume of groundwater to be purged before sampling (gallons): 4.3  
 Equipment used to purge the well: BAILER  
 Time Evacuation Began: ~~11:15~~ 11:15 Time Evacuation Finished: ~~11:22~~ 11:22  
 Approximate volume of groundwater purged: 4.3  
 Did the well go dry?: NO After how many gallons: —  
 Time samples were collected: 12:20  
 Depth to water at time of sampling: 6.15  
 Percent recovery at time of sampling: —  
 Samples collected with: BAILER  
 Sample color: — Odor: SLIGHT HC  
 Description of sediment in sample: —

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>1.4</u>	<u>64.1</u>	<u>5.81</u>	<u>2005</u>
<u>2.8</u>	<u>65.1</u>	<u>6.20</u>	<u>1925</u>
<u>11.3</u>	<u>67.2</u>	<u>6.29</u>	<u>1910</u>
—	—	—	—
—	—	—	—

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-2</u>	<u>5</u>	<u>40 ml VFA</u>	<u>HC</u>	<u>Y</u>	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—



# WELL SAMPLING FIELD LOG

Project Name and Address: OAKLAND TRUCK STOP  
 Job #: 3540 Date of sampling: 12/30/97  
 Well Name: MW-3 Sampled by: DL  
 Total depth of well (feet): 15.0 Well diameter (inches): 2  
 Depth to water before sampling (feet): 4.72  
 Thickness of floating product if any: 10.28  
 Depth of well casing in water (feet): 1.6  
 Number of gallons per well casing volume (gallons): 3  
 Number of well casing volumes to be removed: 3.0  
 Req'd volume of groundwater to be purged before sampling (gallons): 3.0  
 Equipment used to purge the well: BALLER  
 Time Evacuation Began: 1000 Time Evacuation Finished: 1035  
 Approximate volume of groundwater purged: 5.0  
 Did the well go dry?: No After how many gallons: —  
 Time samples were collected: 1100  
 Depth to water at time of sampling: 5.98  
 Percent recovery at time of sampling: —  
 Samples collected with: BALLER  
 Sample color: — Odor: Strawb. HCl  
 Description of sediment in sample: —

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>1.6</u>	<u>68.4</u>	<u>6.89</u>	<u>950</u>
<u>3.2</u>	<u>67.4</u>	<u>6.95</u>	<u>1027</u>
<u>5.0</u>	<u>67.2</u>	<u>6.98</u>	<u>1030</u>
—	—	—	—
—	—	—	—

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW3</u>	<u>5</u>	<u>42 mL VOA</u>	<u>HCl</u>	<input checked="" type="checkbox"/>	—
—	—	—	—	—	—
—	—	—	—	—	—
—	—	—	—	—	—



# WELL SAMPLING FIELD LOG

Project Name and Address: AKAKLAND TRUCK STOP  
 Job #: 3540 Date of sampling: 12/30/04  
 Well Name: MW-4 Sampled by: DA  
 Total depth of well (feet): \_\_\_\_\_ Well diameter (inches): 2  
 Depth to water before sampling (feet): 4.55  
 Thickness of floating product if any: \_\_\_\_\_  
 Depth of well casing in water (feet): \_\_\_\_\_  
 Number of gallons per well casing volume (gallons): \_\_\_\_\_  
 Number of well casing volumes to be removed: \_\_\_\_\_  
 Required volume of groundwater to be purged before sampling (gallons): \_\_\_\_\_  
 Equipment used to purge the well: \_\_\_\_\_  
 Time Evacuation Began: \_\_\_\_\_ Time Evacuation Finished: \_\_\_\_\_  
 Approximate volume of groundwater purged: \_\_\_\_\_  
 Did the well go dry: \_\_\_\_\_ After how many gallons: \_\_\_\_\_  
 Time samples were collected: \_\_\_\_\_  
 Depth to water at time of sampling: \_\_\_\_\_  
 Percent recovery at time of sampling: \_\_\_\_\_  
 Samples collected with: \_\_\_\_\_  
 Sample color: \_\_\_\_\_  
 Description of sediment in sample: \_\_\_\_\_

NOT SAMPLED THIS QUARTER

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



# WELL SAMPLING FIELD LOG

Project Name and Address: OAKLAND TRUCK STOP  
 Job #: 3540 Date of sampling: 12/31/04  
 Well Name: MW-5 Sampled by: DH  
 Total depth of well (feet): \_\_\_\_\_ Well diameter (inches): 2  
 Depth to water before sampling (feet): 4.55  
 Thickness of floating product if any: \_\_\_\_\_  
 Depth of well casing in water (feet): \_\_\_\_\_  
 Number of gallons per well casing volume (gallons): \_\_\_\_\_  
 Number of well casing volumes to be removed: \_\_\_\_\_  
 Required volume of groundwater to be purged before sampling (gallons): \_\_\_\_\_  
 Equipment used to purge the well: \_\_\_\_\_  
 Time Evacuation Began: \_\_\_\_\_ Time Evacuation Finished: \_\_\_\_\_  
 Approximate volume of groundwater purged: \_\_\_\_\_  
 Did the well go dry: \_\_\_\_\_ After how many gallons: \_\_\_\_\_  
 Time samples were collected: \_\_\_\_\_  
 Depth to water at time of sampling: \_\_\_\_\_  
 Percent recovery at time of sampling: \_\_\_\_\_  
 Samples collected with: \_\_\_\_\_  
 Sample color: \_\_\_\_\_ Color: \_\_\_\_\_  
 Description of sediment in sample: \_\_\_\_\_

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	iced?	Analysis
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

NOT SAMPLED THIS QUARTER



# WELL SAMPLING FIELD LOG

Project Name and Address: BAKLAND TRUCK STOP  
 Job #: 3540 Date of sampling: 12/30/07  
 Well Name: MW-6 Sampled by: D11  
 Total depth of well (feet): 14.3 Well diameter (inches): 2  
 Depth to water before sampling (feet): 4.35  
 Thickness of floating product if any: SILTY  
 Depth of well casing in water (feet): 9.95  
 Number of gallons per well casing volume (gallons): 1.6  
 Number of well casing volumes to be removed: 3  
 Req'd volume of groundwater to be purged before sampling (gallons): 4.8  
 Equipment used to purge the well: BALLER  
 Time Evacuation Began: 1105 Time Evacuation Finished: 1125  
 Approximate volume of groundwater purged: 4.8  
 Did the well go dry?: NO After how many gallons: -  
 Time samples were collected: 1130  
 Depth to water at time of sampling: 5.10  
 Percent recovery at time of sampling: -  
 Samples collected with: BALLER  
 Sample color: - Odor: STRONG HC  
 Description of sediment in sample: -

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
<u>1.6</u>	<u>67.5</u>	<u>6.41</u>	<u>820</u>
<u>3.2</u>	<u>66.7</u>	<u>6.58</u>	<u>791</u>
<u>4.8</u>	<u>66.2</u>	<u>6.60</u>	<u>791</u>
-----	-----	-----	-----
-----	-----	-----	-----

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>MW-6</u>	<u>5</u>	<u>110 ML VOA</u>	<u>HCC</u>	<u>?</u>	
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
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# WELL SAMPLING FIELD LOG

Project Name and Address: ORCLAND TRUCK STOP  
 Job #: 3540 Date of sampling: 12/3/09  
 Well Name: MW-7 Sampled by: DH  
 Total depth of well (feet): \_\_\_\_\_ Well diameter (inches): 2  
 Depth to water before sampling (feet): 3.17  
 Thickness of floating product if any: \_\_\_\_\_  
 Depth of well casing in water (feet): \_\_\_\_\_  
 Number of gallons per well casing volume (gallons): \_\_\_\_\_  
 Number of well casing volumes to be removed: \_\_\_\_\_  
 Reg'd volume of groundwater to be purged before sampling (gallons): \_\_\_\_\_  
 Equipment used to purge the well: \_\_\_\_\_  
 Time Evacuation Began: \_\_\_\_\_ Time Evacuation Finished: \_\_\_\_\_  
 Approximate volume of groundwater purged: \_\_\_\_\_  
 Did the well go dry: \_\_\_\_\_ After how many gallons: \_\_\_\_\_  
 Time samples were collected: \_\_\_\_\_  
 Depth to water at time of sampling: \_\_\_\_\_  
 Percent recovery at time of sampling: \_\_\_\_\_  
 Samples collected with: \_\_\_\_\_  
 Sample color: \_\_\_\_\_  
 Description of sediment in sample: \_\_\_\_\_

NOT SAMPLED THIS QUARTER

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	iced?	Analysis
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____





# WELL SAMPLING FIELD LOG

Project Name and Address: PAV (AND) TRUCK STOP  
 Job #: 3560 Date of sampling: 12/30/07  
 Well Name: MWS Sampled by: RH  
 Total depth of well (feet): \_\_\_\_\_ Well diameter (inches): 2  
 Depth to water before sampling (feet): 4.23  
 Thickness of floating product if any: \_\_\_\_\_  
 Depth of well casing in water (feet): \_\_\_\_\_  
 Number of gallons per well casing volume (gallons): \_\_\_\_\_  
 Number of well casing volumes to be removed: \_\_\_\_\_  
 Required volume of groundwater to be purged before sampling (gallons): \_\_\_\_\_  
 Equipment used to purge the well: \_\_\_\_\_  
 Time Evacuation Began: \_\_\_\_\_ Time Evacuation Finished: \_\_\_\_\_  
 Approximate volume of groundwater purged: \_\_\_\_\_  
 Did the well go dry: \_\_\_\_\_ After how many gallons: \_\_\_\_\_  
 Time samples were collected: \_\_\_\_\_  
 Depth to water at time of sampling: \_\_\_\_\_  
 Percent recovery at time of sampling: \_\_\_\_\_  
 Samples collected with: \_\_\_\_\_  
 Sample color: \_\_\_\_\_ Color: \_\_\_\_\_  
 Description of sediment in sample: \_\_\_\_\_

NOT SAMPLED THIS QUARTER

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____



# WELL SAMPLING FIELD LOG

Project Name and Address: OXVILAND PARK STOP  
 Job #: 3540 Date of sampling: 12/30/07  
 Well Name: MW-9 Sampled by: PH  
 Total depth of well (feet): \_\_\_\_\_ Well diameter (inches): 2  
 Depth to water before sampling (feet): OBSERVED  
 Thickness of floating product if any: \_\_\_\_\_  
 Depth of well casing in water (feet): \_\_\_\_\_  
 Number of gallons per well casing volume (gallons): \_\_\_\_\_  
 Number of well casing volumes to be removed: \_\_\_\_\_  
 Required volume of groundwater to be purged before sampling (gallons): \_\_\_\_\_  
 Equipment used to purge the well: \_\_\_\_\_  
 Time Evacuation Began: \_\_\_\_\_ Time Evacuation Finished: \_\_\_\_\_  
 Approximate volume of groundwater purged: \_\_\_\_\_  
 Did the well go dry: \_\_\_\_\_ After how many gallons: \_\_\_\_\_  
 Time samples were collected: \_\_\_\_\_  
 Depth to water at time of sampling: \_\_\_\_\_  
 Percent recovery at time of sampling: \_\_\_\_\_  
 Samples collected with: \_\_\_\_\_  
 Sample color: \_\_\_\_\_  
 Description of sediment in sample: \_\_\_\_\_

NOT SAMPLED THIS QUARTER

## CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

## SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	iced?	Analysis
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

## **APPENDIX B**

Certified Analytical Report  
and  
Chain of Custody Documentation



Report Number : 41804

Date : 1/7/2005

Damian Hriciga  
Aqua Science Engineers, Inc.  
208 West El Pintado Rd.  
Danville, CA 94526

Subject : 3 Water Samples  
Project Name : OAKLAND TRUCK STOP  
Project Number :

Dear Mr. Hriciga,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 41804

Date : 1/7/2005

Subject : 3 Water Samples  
Project Name : OAKLAND TRUCK STOP  
Project Number :

## Case Narrative

The Method Reporting Limit for TPH as Diesel is increased due to interference from Gasoline-Range Hydrocarbons for sample MW-2.

Matrix Spike/Matrix Spike Duplicate Results associated with sample MW-2 for the analyte Methyl-t-butyl ether were affected by the analyte concentrations already present in the un-spiked sample.

Approved By:

A handwritten signature in black ink, appearing to read "Joel Kiff". Below the signature, the name "Joel Kiff" is printed in a small, sans-serif font.

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800



Report Number : 41804

Date : 1/7/2005

Project Name : OAKLAND TRUCK STOP

Project Number :

Sample : MW-2

Matrix : Water

Lab Number : 41804-01

Sample Date :12/30/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	1.2	1.0	ug/L	EPA 8260B	1/3/2005
Toluene	< 1.0	1.0	ug/L	EPA 8260B	1/3/2005
Ethylbenzene	< 1.0	1.0	ug/L	EPA 8260B	1/3/2005
Total Xylenes	< 1.0	1.0	ug/L	EPA 8260B	1/3/2005
Methyl-t-butyl ether (MTBE)	540	1.0	ug/L	EPA 8260B	1/3/2005
Diisopropyl ether (DIPE)	5.0	1.0	ug/L	EPA 8260B	1/3/2005
Ethyl-t-butyl ether (ETBE)	< 1.0	1.0	ug/L	EPA 8260B	1/3/2005
Tert-amyl methyl ether (TAME)	3.6	1.0	ug/L	EPA 8260B	1/3/2005
Tert-Butanol	400	10	ug/L	EPA 8260B	1/3/2005
Methanol	< 100	100	ug/L	EPA 8260B	1/3/2005
Ethanol	< 10	10	ug/L	EPA 8260B	1/3/2005
TPH as Gasoline	1800	100	ug/L	EPA 8260B	1/3/2005
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	1/3/2005
4-Bromofluorobenzene (Surr)	107		% Recovery	EPA 8260B	1/3/2005
TPH as Diesel	< 300	300	ug/L	M EPA 8015	1/7/2005
Octacosane (Diesel Surrogate)	107		% Recovery	M EPA 8015	1/7/2005

Approved By:

Joel Kiff



Report Number : 41804

Date : 1/7/2005

Project Name : OAKLAND TRUCK STOP

Project Number :


Sample : MW-3

Matrix : Water

Lab Number : 41804-02

Sample Date :12/30/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>11000</b>	25	ug/L	EPA 8260B	1/4/2005
<b>Toluene</b>	<b>62</b>	25	ug/L	EPA 8260B	1/4/2005
<b>Ethylbenzene</b>	<b>170</b>	25	ug/L	EPA 8260B	1/4/2005
<b>Total Xylenes</b>	<b>49</b>	25	ug/L	EPA 8260B	1/4/2005
<b>Methyl-t-butyl ether (MTBE)</b>	<b>8900</b>	25	ug/L	EPA 8260B	1/4/2005
<b>Diisopropyl ether (DIPE)</b>	<b>&lt; 25</b>	25	ug/L	EPA 8260B	1/4/2005
<b>Ethyl-t-butyl ether (ETBE)</b>	<b>&lt; 25</b>	25	ug/L	EPA 8260B	1/4/2005
<b>Tert-amyl methyl ether (TAME)</b>	<b>49</b>	25	ug/L	EPA 8260B	1/4/2005
<b>Tert-Butanol</b>	<b>3200</b>	250	ug/L	EPA 8260B	1/4/2005
<b>Methanol</b>	<b>&lt; 2500</b>	2500	ug/L	EPA 8260B	1/4/2005
<b>Ethanol</b>	<b>&lt; 250</b>	250	ug/L	EPA 8260B	1/4/2005
<b>TPH as Gasoline</b>	<b>30000</b>	2500	ug/L	EPA 8260B	1/4/2005
Toluene - d8 (Surr)	96.8		% Recovery	EPA 8260B	1/4/2005
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	1/4/2005
<b>TPH as Diesel</b>	<b>13000</b>	50	ug/L	M EPA 8015	1/7/2005
Octacosane (Diesel Surrogate)	103		% Recovery	M EPA 8015	1/7/2005

Approved By:  Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 41804

Date : 1/7/2005

Project Name : OAKLAND TRUCK STOP

Project Number :

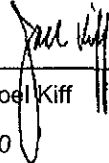
Sample : MW-6

Matrix : Water

Lab Number : 41804-03

Sample Date :12/30/2004

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	190	20	ug/L	EPA 8260B	1/4/2005
Toluene	< 20	20	ug/L	EPA 8260B	1/4/2005
Ethylbenzene	< 20	20	ug/L	EPA 8260B	1/4/2005
Total Xylenes	< 20	20	ug/L	EPA 8260B	1/4/2005
Methyl-t-butyl ether (MTBE)	6300	20	ug/L	EPA 8260B	1/4/2005
Diisopropyl ether (DIPE)	< 20	20	ug/L	EPA 8260B	1/4/2005
Ethyl-t-butyl ether (ETBE)	< 20	20	ug/L	EPA 8260B	1/4/2005
Tert-amyl methyl ether (TAME)	53	20	ug/L	EPA 8260B	1/4/2005
Tert-Butanol	4900	200	ug/L	EPA 8260B	1/4/2005
Methanol	< 2000	2000	ug/L	EPA 8260B	1/4/2005
Ethanol	< 200	200	ug/L	EPA 8260B	1/4/2005
TPH as Gasoline	5300	2000	ug/L	EPA 8260B	1/4/2005
Toluene - d8 (Surr)	97.8		% Recovery	EPA 8260B	1/4/2005
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	1/4/2005
TPH as Diesel	11000	50	ug/L	M EPA 8015	1/7/2005
Octacosane (Diesel Surrogate)	127		% Recovery	M EPA 8015	1/7/2005

Approved By:  Joel Kiff

2795 2nd St., Suite 300 Davis, CA 95616 530-297-4800



Report Number : 41804

Date : 1/7/2005

**QC Report : Method Blank Data**

Project Name : **OAKLAND TRUCK STOP**

Project Number :

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
TPH as Diesel	< 50	50	ug/L	M EPA 8015	1/4/2005
Octacosane (Diesel Surrogate)	108		%	M EPA 8015	1/4/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	1/3/2005
Methanol	< 50	50	ug/L	EPA 8260B	1/3/2005
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	1/3/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/3/2005
Toluene - d8 (Surr)	99.9		%	EPA 8260B	1/3/2005
4-Bromofluorobenzene (Surr)	107		%	EPA 8260B	1/3/2005
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	1/3/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	1/3/2005
Methanol	< 50	50	ug/L	EPA 8260B	1/3/2005
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	1/3/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/3/2005
Toluene - d8 (Surr)	99.0		%	EPA 8260B	1/3/2005
4-Bromofluorobenzene (Surr)	105		%	EPA 8260B	1/3/2005

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2005
Toluene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2005
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	1/4/2005
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	1/4/2005
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	1/4/2005
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	1/4/2005
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	1/4/2005
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	1/4/2005
Tert-Butanol	< 5.0	5.0	ug/L	EPA 8260B	1/4/2005
Methanol	< 50	50	ug/L	EPA 8260B	1/4/2005
Ethanol	< 5.0	5.0	ug/L	EPA 8260B	1/4/2005
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	1/4/2005
Toluene - d8 (Surr)	98.2		%	EPA 8260B	1/4/2005
4-Bromofluorobenzene (Surr)	99.3		%	EPA 8260B	1/4/2005

Approved By: Joel Kiff



KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Report Number : 41804

Date : 1/7/2005

QC Report : Matrix Spike/ Matrix Spike Duplicate

Project Name : OAKLAND TRUCK STOP

Project Number :

Parameter	Spiked Sample	Sample Value	Spike Level	Spike Dup. Level	Spiked Sample Value	Duplicate Spiked Sample Value	Units	Analysis Method	Date Analyzed	Spiked Sample Percent Recov.	Duplicate Spiked Sample Percent Recov.	Relative Percent Diff.	Spiked Sample Percent Recov. Limit	Relative Percent Diff. Limit
TPH as Diesel	Blank	<50	1000	1000	936	959	ug/L	M EPA 8015	1/4/05	93.6	95.9	2.45	70-130	25
Benzene	41743-03	<0.50	40.0	40.0	41.0	39.5	ug/L	EPA 8260B	1/3/05	102	98.6	3.87	70-130	25
Toluene	41743-03	<0.50	40.0	40.0	40.7	39.0	ug/L	EPA 8260B	1/3/05	102	97.5	4.28	70-130	25
Tert-Butanol	41743-03	15	200	200	209	205	ug/L	EPA 8260B	1/3/05	97.2	95.0	2.29	70-130	25
Methyl-t-Butyl Ether	41743-03	260	40.0	40.0	265	259	ug/L	EPA 8260B	1/3/05	0.00	0.00	0.00	70-130	25
Benzene	41805-02	<0.50	40.0	40.0	41.1	38.8	ug/L	EPA 8260B	1/3/05	103	97.1	5.71	70-130	25
Toluene	41805-02	<0.50	40.0	40.0	38.0	38.2	ug/L	EPA 8260B	1/3/05	95.1	95.4	0.265	70-130	25
Tert-Butanol	41805-02	<5.0	200	200	188	193	ug/L	EPA 8260B	1/3/05	94.2	96.4	2.38	70-130	25
Methyl-t-Butyl Ether	41805-02	<0.50	40.0	40.0	41.2	39.8	ug/L	EPA 8260B	1/3/05	103	99.4	3.43	70-130	25
Benzene	41796-01	55	40.0	40.0	98.8	96.6	ug/L	EPA 8260B	1/4/05	110	104	5.04	70-130	25
Toluene	41796-01	12	40.0	40.0	53.4	52.5	ug/L	EPA 8260B	1/4/05	104	101	2.27	70-130	25
Tert-Butanol	41796-01	38	200	200	258	245	ug/L	EPA 8260B	1/4/05	110	104	5.78	70-130	25
Methyl-t-Butyl Ether	41796-01	57	40.0	40.0	106	93.0	ug/L	EPA 8260B	1/4/05	121	90.0	29.7	70-130	25

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By: Joe Kiff



QC Report : Laboratory Control Sample (LCS)

Report Number : 41804

Date : 1/7/2005

Project Name : OAKLAND TRUCK STOP

Project Number :

Parameter	Spike Level	Units	Analysis Method	Date Analyzed	LCS Percent Recov.	LCS Percent Recov. Limit
Benzene	40.0	ug/L	EPA 8260B	1/3/05	99.6	70-130
Toluene	40.0	ug/L	EPA 8260B	1/3/05	99.6	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/3/05	94.2	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/3/05	97.2	70-130
Benzene	40.0	ug/L	EPA 8260B	1/3/05	98.9	70-130
Toluene	40.0	ug/L	EPA 8260B	1/3/05	98.1	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/3/05	92.6	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/3/05	101	70-130
Benzene	40.0	ug/L	EPA 8260B	1/4/05	105	70-130
Toluene	40.0	ug/L	EPA 8260B	1/4/05	102	70-130
Tert-Butanol	200	ug/L	EPA 8260B	1/4/05	103	70-130
Methyl-t-Butyl Ether	40.0	ug/L	EPA 8260B	1/4/05	105	70-130

KIFF ANALYTICAL, LLC

2795 2nd St, Suite 300 Davis, CA 95616 530-297-4800

Approved By:

Joe Kiff



41804

Aqua Science Engineers, Inc.  
 208 W. El Pintado Road  
 Danville, CA 94526  
 (925) 820-9391  
 FAX (925) 837-4858

# Chain of Custody

PAGE 1 OF 1

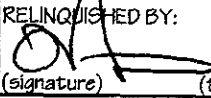
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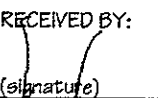

PROJECT NAME OAKLAND TRUCK STOP JOB NO. \_\_\_\_\_  
 ADDRESS 540 LEANDRO ST, OAKLAND, CA

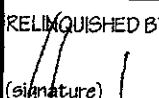
## ANALYSIS REQUEST


SPECIAL INSTRUCTIONS: EPE  
T0600101487

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX	TPH-DIESEL	TPH-MINERAL SPIRITS	PURGEABLE HALOCARBONS	VOLATILE ORGANICS	SEMI-VOLATILE ORGANICS	OIL & GREASE	LUFT METALS (5)	CAM 17 METALS	PCBs & PESTICIDES	ORGANOPHOSPHORUS PESTICIDES	FUEL OXYGENATES	Pb (TOTAL or DISSOLVED)	TPH-G/BTEX/5 OXY'S/12 DCA/PCE (EPA 8260)	LEAD
					OKPS	W Silica Gel Cleanup	W/ Silica Gel Cleanup	(EPA 8260)											
MW-2	12/26/07	1220	U	5	X	X													-01
MW-3	↓	1100	U	5	X	X													-02
MW-6	↓	1150	U	5	X	X													-03

RELINQUISHED BY:  
  
 (signature) (time) 1530  
DAMIAN  
12/26/07  
 (printed name) (date)  
 Company- ASE

RECEIVED BY:  
  
 (signature) (time)  
 (printed name) (date)  
 Company-

RELINQUISHED BY:  
  
 (signature) (time)  
 (printed name) (date)  
 Company-

RECEIVED BY LABORATORY:  
  
 (signature) (time) 1435  
ROBERT P. PUNE 12/26/07  
 (printed name) (date)  
 Company- KIEFF ARMSTRONG

COMMENTS:  
 TURN AROUND TIME  
 STANDARD 24H+ 48H+ 72H+  
 OTHER: