

January 17, 2001

QUARTERLY GROUNDWATER MONITORING REPORT DECEMBER 2000 GROUNDWATER SAMPLING ASE JOB NO. 3540

> a t Oakland Truck Stop 8255 San Leandro Street Oakland, California

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

Prepared by:
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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. Barney Chan
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 2000 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 11, 2000, ASE associate geologist Ian Reed measured the depth to water in each site groundwater monitoring well using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen with a product Monitoring well MW-1 contained 0.60-feet of freethickness bailer. hydrocarbons believed to be diesel. No free-floating floating hydrocarbons or sheen were observed in any of the remaining Groundwater elevation data is presented as Table One. monitoring wells.

A groundwater potentiometric surface map for December 11, 2000 is presented as Figure 2. Groundwater beneath the site has flow components to the south, southeast, and southwest with a gradient of between approximately 0.0015 and 0.024-feet/foot. The primary flow direction is to the south.

3.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, monitoring wells MW-2 through MW-6 were purged of four well casing volumes of groundwater using dedicated polyethylene bailers. Petroleum hydrocarbon odors were present during the purging and sampling of all site groundwater monitoring wells. The parameters pH, temperature and conductivity were monitored during the well purging. Samples were not collected until these parameters stabilized. Groundwater samples were collected from each well using dedicated polyethylene bailers. Since free-floating hydrocarbons were present in monitoring well MW-1, this well was not sampled.

All samples were decanted from the bailers 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 well purge water was placed in 55-gallon steel drums, labeled, and left on-site for temporary storage.

The groundwater samples were analyzed for total petroleum hydrocarbons as diesel (TPH-D) and total petroleum hydrocarbons as motor oil (TPH-MO) by EPA Method 3550/8015M, and total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and

total xylenes (BTEX), and oxygenates by EPA Method 8260. The analytical results are presented in Tables Two and Three. The certified analytical report and chain-of-custody documentation are included as Appendix B.

4.0 CONCLUSIONS

Monitoring well MW-1 contained 0.60-feet of free-floating hydrocarbons The groundwater believed to be diesel. samples collected monitoring well MW-2 contained 1,000 parts per billion (ppb) TPH-G, 120 ppb TPH-D, 2.6 ppb benzene, 15 ppb methyl-t-butyl ether (MTBE), 2.9 ppb ether (DIPE), and 62 ppb tert-butanol (TBA). diisopropyl groundwater samples collected from monitoring well MW-3 contained 24,000 ppb TPH-G, 14,000 ppb TPH-D, 13,000 ppb benzene, 88 ppb toluene, 780 ppb ethyl benzene, 120 ppb total xylenes, 4,300 ppb MTBE, and 2,300 ppb TBA. The groundwater samples collected from monitoring well MW-4 contained 110 ppb MTBE and 16 ppb TBA. The groundwater samples collected from monitoring well MW-5 contained 540 ppb TPH-G, 590 ppb TPH-D, 240 ppb MTBE, 9.5 ppb DIPE, and 32 ppb TBA. groundwater samples collected from monitoring well MW-6 contained 10,000 ppb TPH-D, 190 ppb benzene, 14,000 ppb MTBE, 74 ppb TAME. and 2,900 ppb TBA.

The benzene detected in groundwater samples collected from monitoring wells MW-2, MW-3, and MW-6 exceeded the California Department of Health Services (DHS) maximum contaminant level (MCL) for drinking water. The ethyl benzene detected in groundwater samples collected from monitoring well MW-3 exceeded the DHS MCL for drinking water. The MTBE detected in groundwater samples collected from all five monitoring wells sampled exceeded the DHS MCL for drinking water. Overall, the sample results from this quarter were similar to previous sampling results.

5.0 RECOMMENDATIONS

A workplan to conduct additional environmental assessment activities will be prepared and submitted to the ACHCSA within the next 15 days. ASE also recommends that this site remain on a quarterly sampling schedule. The next sampling is scheduled for March 2001.

6.0 REPORT LIMITATIONS

The results of this report represent the 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-EPA 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.

Ian T. Reed

Associate Geologist

Rahl E. Kitas

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. Barney Chan, ACHCSA

Mr. Chuck Headlee, RWQCB, San Francisco Bay Region

Oakland Truck Stop - December 2000 Sampling

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TABLES

TABLE ONE
Groundwater Elevation Data

Well I.D.	Top of Casing Elevation (msl)	Depth to Water Measurement (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
MW-1 8-16-99 8-27-99 9-10-99 9-24-99 10-22-99 11-02-99 11-19-99 12-06-99 3-08-00 6-14-00 12-11-00	97.12	Unknown 6.90 6.85 6.65 6.87 6.81 6.94 6.91 6.93 5.93 6.57 6.70	>1.0 0.36 0.18 0.08 0.28 0.23 0.31 0.12 0.12 0.72 0.60	Unknown 90.51* 90.41* 90.53* 90.47* 90.49* 90.43* 90.31* 90.29* 91.36* 90.41* 90.90*
MW-2 8-16-99 12-06-99 3-08-00 6-14-00 12-11-00	96.82	6.30 8.46 9.12 8.34 5.94	 	90.52 88.36 87.70 88.48 90.88
MW-3 8-16-99 12-06-99 3-08-00 6-14-00 12-11-00	96.43	5.85 5.70 5.32 6.95 6.22	 	90.58 90.73 91.11 89.48 90.21
MW-4 8-16-99 12-06-99 3-08-00 6-14-00 12-11-00	96.60	6.12 5.98 4.32 5.58 5.7 0	 	90.48 90.62 92.28 91.02 90.90

TABLE ONE
Groundwater Elevation Data

Well I.D.	Top of Casing Elevation (msl)	Depth to Water Measurement (feet)	Free-Floating Hydrocarbon Thickness (feet)	Groundwater Elevation (msl)
MW-5 12-06-99 3-08-00 6-14-00 12-11-00	96.30	5.94 4.06 5.25 5.4 5	 	90.36 92.24 91.05 90.85
MW-6 12-06-99 3-08-00 6-14-00 12-11-00	96.79	5.80 4.10 5.64 5.72	 	90.99 92.69 91.15 91.0 7

Notes:

^{* =} 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)

TABLE TWO

Summary of Chemical Analysis of GROUNDWATER Samples

Petroleum Hydrocarbons All results are in parts per billion

Description		TPH	TPH	TPH	111111111111111111111111111111111111111		Ethyl	Total					
Not Samplad Due to Free-Floating Hydrocarbone Not Samplad Due to Free-Floa	Boring	Gasoline	Diesel	Motor Oil	Benzene	Toluene		Xylenes	MTBE	DIPE	ETBE	TAME	TBA
Not Samplad Due to Free-Floating Hydrocarbone Not Samplad Due to Free-Floa	3.416/-1								_				
12/61/99				Not Garage at Dua	es Euros Elecens	مسمانت و و و ال							
Not Sampled Dux to Free-Floating Hydrocarbone Not Sampled Dux to Free-Floa													
MM/-2 8/16/99 8 2,200 970' <500 3.8 <2.0 3 <4.0 <2.0 NA													
\$\frac{\text{8}}{16\text{9}\text{9}}\$ 2,200 \$\text{970}^{\cdot}\$ <500 \$\text{3.8}\$ <2.0 \$\text{3}\$ <4.0 \$\text{2.0}\$ NA	12/11/00			NOT Samplea Due	to Free-Floating	nyarocarpons							
	MW-2												
126699	8/16/99	2,200	97 <i>0</i> *	< 500	3.8	< 2.0	3	< 40	< 20	NA	NA	NA	NA
\$\frac{3}{8}\frac{1}{8}\frac{0}{0}\$ \ \begin{array}{c ccccccccccccccccccccccccccccccccccc	12/6/99	1,900	400*										
6/14/100	3/8/00	1.600*											
12/11/100	6/14/00	2,000	75										
MM-3 8/16/199 56,000 10,000** <500 17,000 2,600 1,200 6,100 NA	12/11/00	1,000											
											-		
		55.000	10.000**		<i>(</i> 7.000								
\$\frac{378}{16}\frac{100}{00}\$ 22,000 \$\frac{4}{1},500^*\$ \$\frac{500}{10}\$ 11,000 \$\frac{72}{2}\$ 1,100 \$\frac{130}{3}\$ 3,400 \$\frac{1}{10}\$ NA \$\frac{1}{10}		•			•					NA			NA
8/14/00						-					NA		
						72		13 <i>0</i>	3,400	NA	NA	NA	NA
MW-4													
6/16/99 61*** 1,100*	12/11/00	24,000	14,000	< 100	13,000	88	780	120	4,300	< 50	< 5 <i>0</i>	< 50	2,300
6/16/99 61*** 1,100*	N/IN/-4												
12/6/99 130*** 220* <500 <1.0 <1.0 <1.0 <1.0 <10 130 NA		61***	1.100*	4500	-05	٠05	.05	-10	9.6	NΔ	NΙΔ	MA	NI A
\$\frac{3}{5}\frac{1}{6}\frac{1}{00}\$ \{50} \{220^* \{500} \{0.5} \{0.5} \{0.5} \{0.5} \{0.5} \{0.5} \													
6/14/00													
12/11/00													
\(\frac{\text{MW-5}}{22/6/99} \frac{450^***}{2000} \text{2,000*} \text{500} \text{4.00} \text{4.00} \text{4.00} \text{4.00} \text{4.00} \text{4.00} \q													
2/6/99	12/11/00	₹ 50	₹50	< 100	<i>< 0.5</i>	<0.5	<0.5	₹0.5	110	<0.5	₹0.5	<0.5	16
3/8/00 51*** 530* <500 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5 <0.5	<u>MW-5</u>												
518/00 51*** 530* <500 <0.5 <0.5 <0.5 <0.5 <0.5 84 NA NA NA NA NA NA NA N	12/6/99	450***	2,000*	< 500	< 1.0	< 1.0	< 1.0	< 1.0	21	NA	NA	NA	NA
5/14/00 380 1,400 <100 <0.5 <0.5 <0.5 <0.5 160 12 <0.5 <0.5 <2 \\ \begin{array}{c c c c c c c c c c c c c c c c c c c	3/8/00	51***	530*	< 500	< 0.5								
2/11/00	6/14/00	380	1,400										
2/6/99 13.000 < 50	12/11/00	54 <i>0</i>	590										
2/6/99 13.000 < 50	LAW 6												
5/8/00 <10,000 4,600* <500 230 26 18 39 12,000 NA NA NA NA NA 6/14/00 8,400 12,000 <100 190 12 9.5 22 15,000 <5.0 <50 70 3,300		17 000		.500	40.0	04	44	~ .	400	1.1.2			
6/14/00 8,400 12,000 <100 190 12 9.5 22 15,000 <5.0 <5.0 70 3,300 2/11/00 <5,000 10,000 <100 190 <50 <50 <50 14,000 <50 <50 74 2,900													
2/11/00 < 5,000 10,000 < 100 190 < 50 < 50 14,000 < 50 < 50 74 2,900													
2,550													
	12/11/00	< 5,000	10,000	< 100	190	< 50	< 50	< 50	14,000	< 50	<50	74	2,900
	DHS MCL		NE.	NE NE	1	150	700	1,750	45	NF.	NF	a en Ne	NF

Notes:

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

 $\hbox{DHS MCL} \ \hbox{is the California Department of Health Services maximum contaminant level for drinking water.}$

NE = DHS MCLs are 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.

^{# =} MTBE concentration by EPA Method 8260

TABLE THREE

Summary of Chemical Analysis of **GROUNDWATER** Samples HVOCs, SVOCs, PCBs and LUFT 5 Metals All results are in **parts** per billion

	Isopropyl	- Other							
Boring	benzene	VOCs	SVOCs	PCBs	Cd	Cr	Рb	Ni	Zn
<u>MW-2</u>									
8-16-99	11	ND	ND	ND	< 2.0	9.0	< 5.0	19	< 10
<u>MW-4</u>									
8-16-99	< 0.5	ND	ND	ND	2.7	4 5	260	5 5	3 2 0
12-06-99							< 5		
MCL	NE	Various	Various	0.5	5	50	1.5	100	5,000

Notes:

Non-detectable concentrations are noted by the less than symbol (<) followed by the detection limit or are indicated by ND if various detection limits are used for multiple compounds. Please see the original reports for detection limits for these compounds.

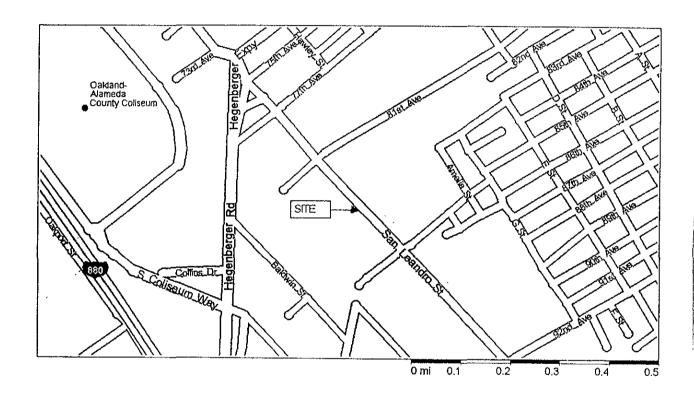
Detectable concentrations are in bold.

MCL is the California Department of Health Services maximum contaminant level for drinking water.

NE = Not established

FIGURES



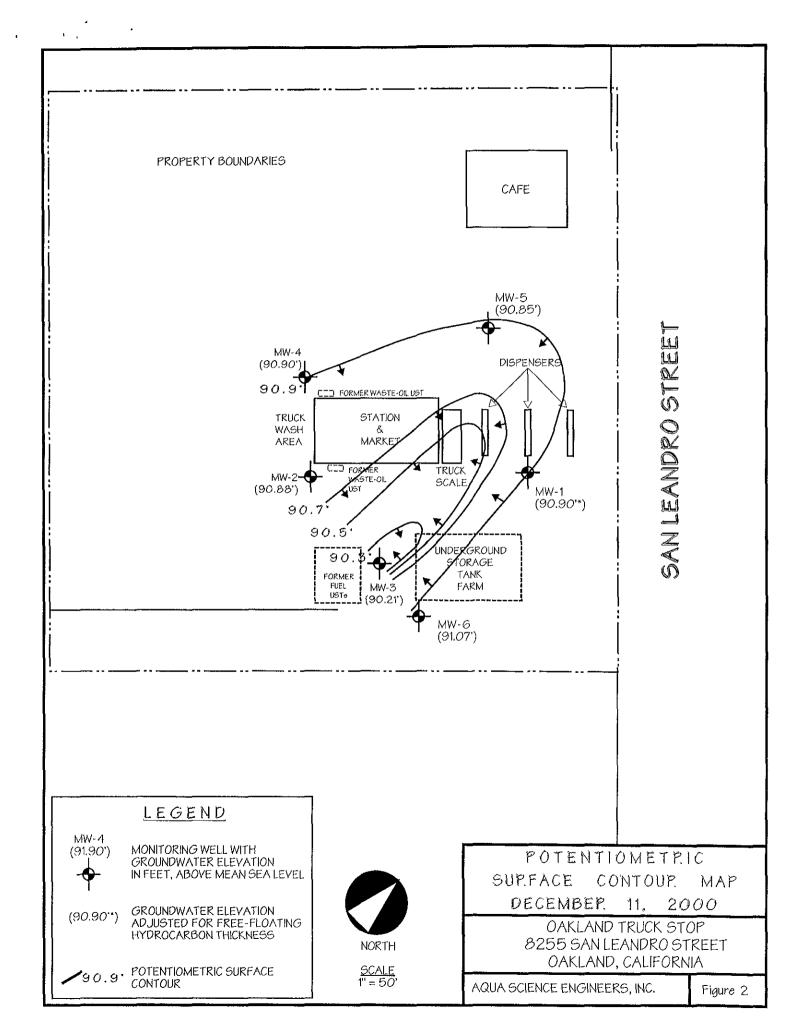


LOCATION MAP

OAKLAND TRUCK STOP 8255 SAN LEANDRO STREET OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC.

Figure 1



APPENDIX A

Well Sampling Field Logs

Project Name and Address:	Oakland Truck Stop						
Job #: Date of sampling: $\frac{12}{1100}$							
Well Name: MIN-1	Sampled by: 177						
Total depth of well (feet): Well diameter (inches): 2'							
Depth to water before sampling (feet): 6.7							
Thickness of floating produc	t if any: め.し						
Depth of well casing in water	er (feet):						
Number of gallons per well	casing volume (gallons):						
Number of well casing volume	mes to be removed:						
Req'd volume of groundwater	r to be purged before sampling (gallons).						
Equipment used to pilyge the	e well:						
Time Evacuation Began.	Time Evacuation Finished:						
Approximate volume of ground	Time Evacuation Finished:undwater purged:						
Did the well go dry?:	After how many gallons:						
Time samples were collected	After how many gallons:						
Donth to water of time of							
Percent recovery at time of	sampline:						
Samples collected with:							
Sample color:	Odor:						
Description of sediment in s	sample:						
•							
CHEMICAL DATA							
	201/2						
Volume Purged Temp	ampling: sampling: pH Conductivity						
	The state of the s						
	DH Conductivity						
	(2)						
SAMPLES COLLECTED	`\						
Sample # of containers Volume	& type container Pres Iced? Analysis						



WELL SAMPLING FIELD LOG



Project Name and Address:	Oakland Truck Stap
Job #:3540	Date of sampling: 12/11/04
Well Name: MW-2	Sampled by:
Total depth of well (feet):	Date of sampling: 12/11/01 Sampled by: 172 15.50' Well diameter (inches): 2" (feet): 5.94 any: 9.50 feet): 9.50 to be removed: 4
Depth to water before sampling	(feet): <u>5.94</u>
Thickness of floating product if	any:
Depth of well casing in water (feel): 9.56
Number of gallons per well cas	ing volume (gallons):
Number of well casing volumes	to be removed:
Reg'd volume of groundwater to	be purged before sampling (gallons): الأيما
Equipment used to purge the w	rell: ded. Sciler
Time Evacuation Began: 1130	Time Evacuation Finished: 1146
Approximate volume of ground	water purged: 65
Did the well go dry!	Aller how many gallons:
Time samples were collected:	1145
Depth to water at time of samp	ling: 6.23
Percent recovery at time of san	npling: 90%
Samples collected with:	deo. baile.
Description of sediment in samp	Odor: now
Description of seminent in samp	ple:
CHEMICAL DATA	•
Volume Purged Temp	pH Conductivity
1 214	7.10 28
21.0	71(D 27
3 21.9	209 28
71.8	7.11 27
SAMPLES COLLECTED	
Sample # of containers Volume & ty	
MV-2 5 LAM.	/ VeA V V

aqua science aqua science engimeers imc. Well sampling field log

Project Name a	and Address:	Oa,	Kland Trud	Stop	
Job #:3	546	Date of	sampling: _	12/11/00	•
		Sampled	by:	<u></u>	
Total depth of	well (feet):	15.50	Well dian	neter (inches):	2 It
Depth to water	before sampling	(feet):	6.20	_	
Thickness of fl	oating product if casing in water (any:			
Depth of well	casing in water (feet):	(1,28	
Number of gall	casing in water (ons per well cas	ing volume	(gallons):	1.6	¥
Number of wel	l casing volumes	to be remo	ved:	Ч	
Rea'd volume o	of groundwater to	be purged	before sam	pling (gallons):	6.4
•	l to purge the w			~ • • • • • • • • • • • • • • • • • • •	
Time Evacuation	n Began: 1100	Tii	ne Evacuat	ion Finished:	1115
	olume of ground				
Did the well go) dry?: \V	Af	ter how m	any gallons:	
Time samples	o dry?: <u>P</u> o were collected:	- 1.50	112	!O	
Denth to water	at time of samp	lino.	10.5	46	
Percent recover	y at time of sar	nnling:	<u>SV\</u>	30.10	
Samples collect	ted with:	~~P*****D*	dea bout		
Sample color:	clealgray	Od	or H	C = d <	
Description of	sediment in sam	nle:	6 E	11-	
		P***		·	
CHEMICAL D	ATA		*,		
Volume Purged	Temp	<u>рН</u>	Conductiv	/ITV	
1	26 (6.14	39	-	
2	210 211 22.3	6.12 6.13 6.18			
3	211	6.13	<u>2</u> 8		
Ч	22.3	6.18	38 38	<u> </u>	
					
SAMPLES COL	LECTED				
$\frac{\text{Sample}}{Mv'-3} \qquad \frac{\text{# of co}}{6}$	ntainers Volume & ty Libert	vpe container I	res Iced?	Analysis	
	·····				
			· · · · · · · · · · · · · · · · · · ·		

Project Name	and Address:	Date of sampling: 12/11/00 Sampled by: 178
Well Name:	HN-4	Sampled by: 172
Total depth of	f well (feet):	14.45 Well diameter (inches): 2'
Depth to water	er before samul	ling (feet). 5.70
Thickness of	floating product	t if any:
Depth of well	casing in wate	er (feet):
Number of ga	illons per well	casing volume (gallons):
		mes to be removed:
Req'd volume	of groundwater	r to be purged before sampling (gallons): 6
Equipment us	ed to purge the	e well: ded taler
Time Evacuat	ion Began: 128	53 Time Evacuation Finished: 1305
Approximate	volume of grou	undwater purged:
Did the well	on dry?· Ut	O After how many gallons: -
Time samples	were collected	i:
Depth to water	er at time of sa	ampling: 5, 99
Percent recov-	ery at time of	sampling: <u>၎ಀ</u> ん
Samples colle	cted with:	Old, Souler
Sample color:	aray	odor: sample: Solt
Description of	f sediment in s	sample: $\Gamma > \ell +$
CHEMICAL :	DATA	:
Valume Purged	Temp	pH Conductivity
1 2 3 4	19.9	<u> </u>
	19,3	
<u>7</u>		9 6.56 32
		9 6.51
SAMPLES CC	LLECTED	
Sample # of 6		& type container Pres Iced? Analysis

Project Name	and Address:	00	Kland Tri	ick Stop	
Job #: Well Name:	3540	Date of	sampling:	12/1/100	
		Sampled	by:	172	
	well (feet):				2"
Depth to water	before sampling	(feet):	5.	45	
Thickness of fl	before sampling loating product if casing in water ()	any:			
Number of gal	lons per well cast	ing volume	(gallons):	1. 1	
Number of we	ll casing volumes	to be remo	oved:	4	
	of groundwater to				: 5.6
Equipment used	d to purge the w	ell:		ded Sailer	-
Time Evacuation	on Began: 1315	_ Ti	me Evacu	ation Finished:	1325
Approximate v	olume of ground	water purge	d:	516	
Did the well go	o dry?:	Āf	ter how r	nany gallons:	
Time samples	were collected:	(53 <i>0</i>		
Depth to water	at time of samp	ling:	5	. 80	
Percent recover	ry at time of san	apling:	(. 80 74%.	
Samples collec	ted with:		de0, 501	ilev	
Sample color:	Clear	Od	lor:	Short Hear	
Description of	sediment in samp	ole:	K sill		
	-				,
CHEMICAL D	ATA		<i>:</i> ,		
Volume Purged	Temp	<u>p H</u>	Conduct	ivity	
)		7,14	3		
		7.13	3	 I	
z	22.3	7,13	3	0	
4	21. 2,	7,12	2,	O	
	·			- 	
SAMPLES COL	LECTED				
	ntainers Volume & ty		res <u>Iced?</u>	Analysis	
Mr-5 5	- you	VOA .	<u> </u>		

Project Name and Address:	Dakland Truck Step
Well Name: MN-/a	Date of sampling: 12/11/00
Total depth of well (feet):	Sampled by:
Depth to water before sampling	(feet): 5,72
Thickness of floating product if	any.
Dopth of well casing in water (fe	(feet): 5.72 any: 8.78
Number of gallons per well casis	ng volume (gallons): 1.4
Number of well casing volumes	to be removed:
Rea'd volume of groundwater to	be purged before sampling (gallons): 516
Equipment used to purge the we	ell: ded boller
Time Evacuation Began: 1035	Time Evacuation Finished: 1050
Approximate volume of groundw	vater purged: 56
Did the well go dry?:	After how many gallons: —
Time samples were collected:	After how many gallons:
Depth to water at time of sampl	ing: 6.10
Percent recovery at time of sam	ing:6.10 pling:9.7
Samples collected with:	dec. bailer
Sample color: _ cirlorov	Odor: v.stignettcoder
Description of sediment in sample	Odor: v.stignt-Hecder le: F.S.A
CHEMICAL DATA	
Volume Purged Temp	pH Conductivity
10 0	$ \begin{array}{c c} \hline pH & Conductivity \\ \hline 7.24 & 24 \\ \hline 7.20 & 27 \\ \hline 7.21 & 27 \end{array} $
Z. <u>Jeq</u>	7.700
3 290	$\frac{7,20}{7,21} \qquad \frac{27}{27}$
4 201	7,21 27
SAMPLES COLLECTED	
Sample # of containers Volume & type MW - 6 5 Lie mi	c container Pres Iced? Analysis

APPENDIX B

Certified Analytical Report and Chain of Custody Documentation



Date: 01/02/2001

Ian Reed Aqua Science Engineers, Inc. 208 W. El Pintado Road Danville, CA 94526

Subject: 5 Water Samples

Project Name: Oakland Truck Stop (OTS)

Project Number: 3540

Dear Mr. Reed,

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,

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800



Date: 01/02/2001

Project Name: Oakland Truck Stop (OTS)

Project Number: 3540

Sample: MW-2

Matrix: Water

Lab Number: 18635-01

Sample Date: 12/11/2000

Sample Date :12/11/2000		Method			
Parameter	Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	2.6	0.50	ug/L	EPA 8260B	12/21/2000
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Methyl-t-butyl ether (MTBE)	15	0.50	ug/L	EPA 8260B	12/21/2000
Diisopropyl ether (DIPE)	2.9	0.50	ug/L	EPA 8260B	12/21/2000
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Tert-Butanol	62	5.0	ug/L	EPA 8260B	12/21/2000
TPH as Gasoline	1000	50	ug/L	EPA 8260B	12/21/2000
Toluene - d8 (Surr)	99.3		% Recovery	EPA 8260B	12/21/2000
4-Bromofluorobenzene (Surr)	106		% Recovery	EPA 8260B	12/21/2000
TPH as Diesel	120	50	ug/L	M EPA 8015	12/26/2000
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	12/26/2000

720 Olive Drive, Suite D. Davis, CA 95616 530-297-4800



Date: 01/02/2001

Project Name: Oakland Truck Stop (OTS)

Project Number: 3540

Sample: MW-3

Matrix : Water

Lab Number: 18635-02

Sample Date :12/11/2000

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	13000	50	ug/L	EPA 8260B	12/22/2000
Toluene	88	50	ug/L	EPA 8260B	12/22/2000
Ethylbenzene	780	50	ug/L	EPA 8260B	12/22/2000
Total Xylenes	120	50	ug/L	EPA 8260B	12/22/2000
Methyl-t-butyl ether (MTBE)	4300	50	ug/L	EPA 8260B	12/22/2000
Diisopropyl ether (DIPE)	< 50	50	ug/L	EPA 8260B	12/22/2000
Ethyl-t-butyl ether (ETBE)	< 50	50	ug/L	EPA 8260B	12/22/2000
Tert-amyl methyl ether (TAME)	< 50	50	ug/L	EPA 8260B	12/22/2000
Tert-Butanol	2300	500	ug/L	EPA 8260B	12/22/2000
TPH as Gasoline	24000	5000	ug/L	EPA 8260B	12/22/2000
Toluene - d8 (Surr)	98.9		% Recovery	EPA 8260B	12/22/2000
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	12/22/2000
TPH as Diesel	14000	50	ug/L	M EPA 8015	12/26/2000
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	12/26/2000



Date: 01/02/2001

Project Name: Oakland Truck Stop (OTS)

Project Number: 3540

Sample: MW-4

Matrix: Water

Lab Number : 18635-03

Sample Date :12/11/2000

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Methyl-t-butyl ether (MTBE)	110	0.50	ug/L	EPA 8260B	12/21/2000
Diisopropyl ether (DIPE)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/21/2000
Tert-Butanol	16	5.0	ug/L	EPA 8260B	12/21/2000
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	12/21/2000
Toluene - d8 (Surr)	99.0		% Recovery	EPA 8260B	12/21/2000
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	12/21/2000
TPH as Diesel	< 50	50	ug/L	M EPA 8015	12/26/2000
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	12/26/2000



Date: 01/02/2001

Project Name: Oakland Truck Stop (OTS)

Project Number: 3540

Sample: MW-5

Matrix : Water

Lab Number: 18635-04

Sample Date :12/11/2000

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	12/22/2000
Toluene	< 0.50	0.50	ug/L	EPA 8260B	12/22/2000
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	12/22/2000
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	12/22/2000
Methyl-t-butyl ether (MTBE)	240	0.50	ug/L	EPA 8260B	12/22/2000
Diisopropyl ether (DIPE)	9.5	0.50	ug/L	EPA 8260B	12/22/2000
Ethyl-t-butyl ether (ETBE)	< 0.50	0.50	ug/L	EPA 8260B	12/22/2000
Tert-amyl methyl ether (TAME)	< 0.50	0.50	ug/L	EPA 8260B	12/22/2000
Tert-Butanol	32	5.0	ug/L	EPA 8260B	12/22/2000
TPH as Gasoline	540	50	ug/L	EPA 8260B	12/22/2000
Toluene - d8 (Surr)	102		% Recovery	EPA 8260B	12/22/2000
4-Bromofluorobenzene (Surr)	99.9		% Recovery	EPA 8260B	12/22/2000
TPH as Diesel TPH as Motor Oil	590 < 100	50 100	ug/L ug/L	M EPA 8015 M EPA 8015	12/26/2000 12/26/2000



Date: 01/02/2001

Project Name: Oakland Truck Stop (OTS)

Project Number: 3540

Sample: MW-6

TPH as Diesel

TPH as Motor Oil

Matrix: Water

Lab Number: 18635-05

	Mothod			
Measured Value	Reporting Limit	Units	Analysis Method	Date Analyzed
190	50	ug/L	EPA 8260B	12/22/2000
< 50	50	ug/L	EPA 8260B	12/22/2000
< 50	50	ug/L	EPA 8260B	12/22/2000
< 50	50	ug/L	EPA 8260B	12/22/2000
14000	50	ug/L	EPA 8260B	12/22/2000
< 50	50	ug/L	EPA 8260B	12/22/2000
< 50	50	ug/L	EPA 8260B	12/22/2000
74	50	ug/L	EPA 8260B	12/22/2000
2900	500	ug/L	EPA 8260B	12/22/2000
< 5000	5000	ug/L	EPA 8260B	12/22/2000
99.4		% Recovery	EPA 8260B	12/22/2000
101		% Recovery	EPA 8260B	12/22/2000
	Value 190 < 50 < 50 < 50 14000 < 50 < 50 74 2900 < 5000	Value Limit 190 50 < 50	Measured Value Reporting Limit Units 190 50 ug/L < 50	Measured Value Reporting Limit Units Analysis Method 190 50 ug/L EPA 8260B < 50

50

100

ug/L

ug/L

M EPA 8015

M EPA 8015

12/26/2000

12/26/2000

10000

< 100

18635

Aqua Science Engineers, Inc. Chain of Custody 208 W. El Pintado Road Danville, CA 94526 (925) 820-9391 FAX (925) 837-4853 SAMPLER (SIGNATURE) (PHONE NO.) PROJECT NAME Oakland Truck Stop (UTS) JOB NO. 3510 8255 San Crandro St. Oakland CA (925) 820-9341 ANALYSIS REQUEST PURGEABLE HALOCARBONS (EPA 601/8010) SEMI-YOLATILE ORGANICS (EPA 625/8270) SPECIAL INSTRUCTIONS: FPH-GAS / MTBE & BTEX EPA 5030/8015-8020) VOLATILE ORGANICS (EPA 624/8240/8260) TPH-G/BTEX/5 0XY'S (EPA 8260) 1PH-DIESEL & MOTOR OIL (EPA 3510/8015) FUEL OXYGENATES (EPA 8260) CAM 17 METALS (EPA 6010+7000) LUFT METALS (5) (EPA 6010+7000) 5-day TAT COMPOSITE NO, OF SAMPLE ID. DATE TIME MATRIX SAMPLES 12/1 1145 WORK MW-L -01 120 -02 MW-3 Walk 1318 Maker ~3 4 - WM MW-5 1330 welv -04 -¢5 MW- 6 1055 July 41 COMMENTS: RELINQUISHED BY: RECEIVED BY: RECEIVED BY LABORATORY: RELINQUISHED BY: Eccept Bowe 1005 (sanature) (time) (signature) (time) (sionature) (time) printed name) (date) HAROID BREWER 121200 TURN AROUND TIME (printed name) (date) (printed name) (date) printed name) STANDARD 24Hr 48Hr 72Hr KIFF Company-Company Compány-Company-A) OTHER:

ANALYLICAL