aqua science engineers inc.

July 17, 2000

#1075

QUARTERLY GROUNDWATER MONITORING REPORT
JUNE 2000 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. 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 June 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 June 14, 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 thickness bailer. Monitoring well MW-1 contained 0.72-feet of free-floating hydrocarbons believed to be diesel. No free-floating hydrocarbons or sheen were observed in any of the remaining site monitoring wells. Groundwater elevation data is presented as Table One.

A groundwater potentiometric surface map for June 14, 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 0.018 and 0.045-feet/foot. The primary flow direction is to the southwest.

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.

The samples to be analyzed for volatile compounds were decanted from the bailers into 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid, and sealed without headspace. The samples collected from monitoring well MW-3 to be analyzed for dissolved lead were contained in 250-ml plastic bottles and were filtered and preserved immediately upon arrival at the laboratory. The samples to be analyzed for total petroleum hydrocarbons as gasoline (TPH-G), total petroleum hydrocarbons as diesel (TPH-D) and motor oil (TPH-MO), benzene, toluene, ethylbenzene and total xylenes (collectively known as BTEX) and oxygenates were labeled and placed in coolers with wet ice for transport to Kiff Analytical, LLC of Davis, California under appropriate chain-of-custody documentation. The samples to be analyzed for dissolved lead were sent to Chromolab, Inc. of Pleasanton, 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 collected from monitoring wells MW-2, MW-3, MW-4, MW-5, and MW-6 were analyzed for TPH-D and TPH-MO by EPA Method 3550/8015M, and TPH-G, BTEX, and oxygenates by EPA Method 8260. The groundwater samples from monitoring well MW-3 were also analyzed for dissolved lead by EPA Method 6010B. 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 0.72-feet of free-floating hydrocarbons believed to be diesel. The groundwater samples collected from monitoring well MW-2 contained 2,000 parts per billion (ppb) TPH-G, 75 ppb TPH-D, 2.8 ppb benzene, 3.4 ppb ethyl benzene, 16 ppb methyl-t-butyl ether (MTBE), 3.4 ppb diisopropyl ether (DIPE), and 64 ppb tert-butanol (TBA). The groundwater samples collected from monitoring well MW-3 contained 34,000 ppb TPH-G, 16,000 ppb TPH-D, 13,000 ppb benzene, 94 ppb toluene, 1,300 ppb ethyl benzene, 160 ppb total xylenes, 4,800 ppb MTBE, 31 ppb DIPE, 21 ppb tert-amyl methyl ether (TAME), and 2,700 ppb TBA. The groundwater samples collected from monitoring well MW-4 contained 100 ppb MTBE and 20 ppb TBA. The groundwater samples collected from monitoring well MW-5 contained 380 ppb TPH-G, 1,400 ppb TPH-D, 160 ppb MTBE, 12 ppb DIPE, and 22 ppb TBA. The groundwater samples collected from monitoring well MW-6 contained 8,400 ppb TPH-G, 12,000 ppb TPH-D, 190 ppb benzene, 12 ppb toluene, 9.5 ppb ethyl benzene, 22 ppb total xylenes, 15,000 ppb MTBE, 70 ppb TAME, and 3,000 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. There was no dissolved lead detected above the laboratory reporting limits in the groundwater samples collected from monitoring well MW-3.

Overall, the sample results from this quarter were similar to previous sampling results.

5.0 RECOMMENDATIONS

Based on the presence of free-floating hydrocarbons in monitoring well MW-1, ASE will continue the measuring of the thickness of these hydrocarbons every two weeks. ASE recommends that this site remain on a quarterly sampling schedule.

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

REGISTERED GEOLOGIST
ROBERT E. KITAY
No. 6586
STATE OF CALIFORNIA

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

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	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*
10-08-99		6.87	0.28	90.47*
10-22-99		6.81	0.23	90.49*
11-02-99		6.94	0.31	90.43*
11-19-99		6.91	0.12	90.31*
12-06-99		6.93	0.12	90.29*
3-08-00		5.93	0.21	91.36*
6-14-00		**6.57**	**0.72**	**90.41***
MW-2				
8-16-99	96.82	6.30	--	90.52
12-06-99		8.46	--	88.36
3-08-00		9.12	--	87.70
6-14-00		**8.34**		**88.48**
MW-3				
8-16-99	96.43	5.85	--	90.58
12-06-99		5.70	--	90.73
3-08-00		5.32	--	91.11
6-14-00		**6.95**		**89.48**
MW-4				
8-16-99	96.60	6.12	--	90.48
12-06-99		5.98	--	90.62
3-08-00		4.32		92.28
6-14-00		**5.58**		**91.02**
MW-5				
12-06-99	96.30	5.94	--	90.36
3-08-00		4.06	--	92.24
6-14-00		**5.25**		**91.05**
MW-6				
12-06-99	96.79	5.80	--	90.99
3-08-00		4.10	--	92.69
6-14-00		**5.64**		**91.15**

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

Boring	TPH Gasoline	TPH Diesel	TPH Motor Oil	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	DIPE	ETBE	TAME	TBA
MW-1												
8/16/99			Not Sampled Due to Free-Floating Hydrocarbons									
12/6/99			Not Sampled Due to Free-Floating Hydrocarbons									
3/8/00			Not Sampled Due to Free-Floating Hydrocarbons									
6/14/00			**Not Sampled Due to Free-Floating Hydrocarbons**									
MW-2												
8/16/99	2,200	970*	< 500	3.8	< 2.0	3	< 4.0	< 20	NA	NA	NA	NA
12/6/99	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**
MW-3												
8/16/99	56,000	10,000**	< 500	17,000	2,600	2,600	1,200	6,100	NA	NA	NA	NA
12/6/99	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**
MW-4												
8/16/99	61***	1,100*	< 500	< 0.5	< 0.5	< 0.5	< 1.0	86	NA	NA	NA	NA
12/6/99	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**
MW-5												
12/6/99	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**
MW-6												
12/6/99	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**
DHS MCL	NE	NE	NE	1	150	700	1,750	13	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.

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**

Boring	Isopropyl-benzene	Other VOCs	SVOCs	PCBs	Cd	Cr	Pb	Ni	Zn
MW-2									
8-16-99	**11**	ND	ND	ND	< 2.0	**9.0**	< 5.0	**19**	< 10
MW-4									
8-16-99	< 0.5	ND	ND	ND	**2.7**	**45**	**260**	**55**	**320**
12-06-99	---	---	---	---	---	---	< 5	---	---
6/14/00							<5		
MCL	NE	Various	Various	0.5	5	50	15	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.

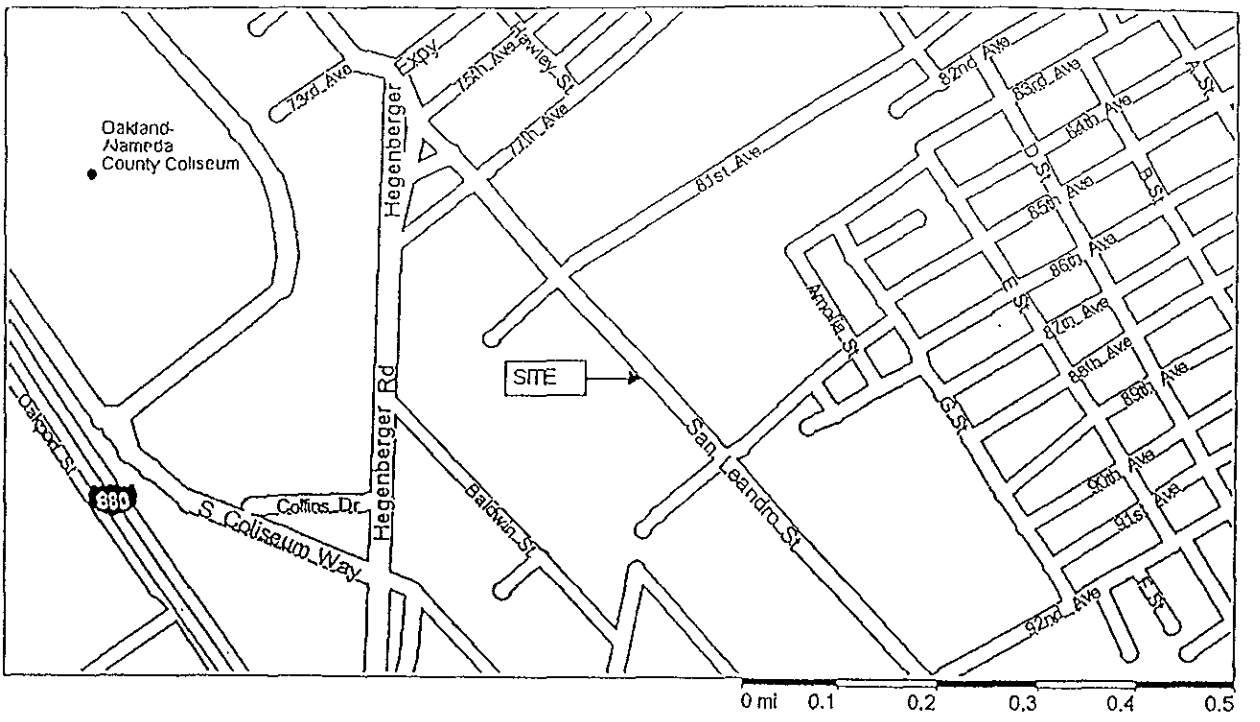
Detectable concentrations are in **bold**.

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

NE = Not established

FIGURES

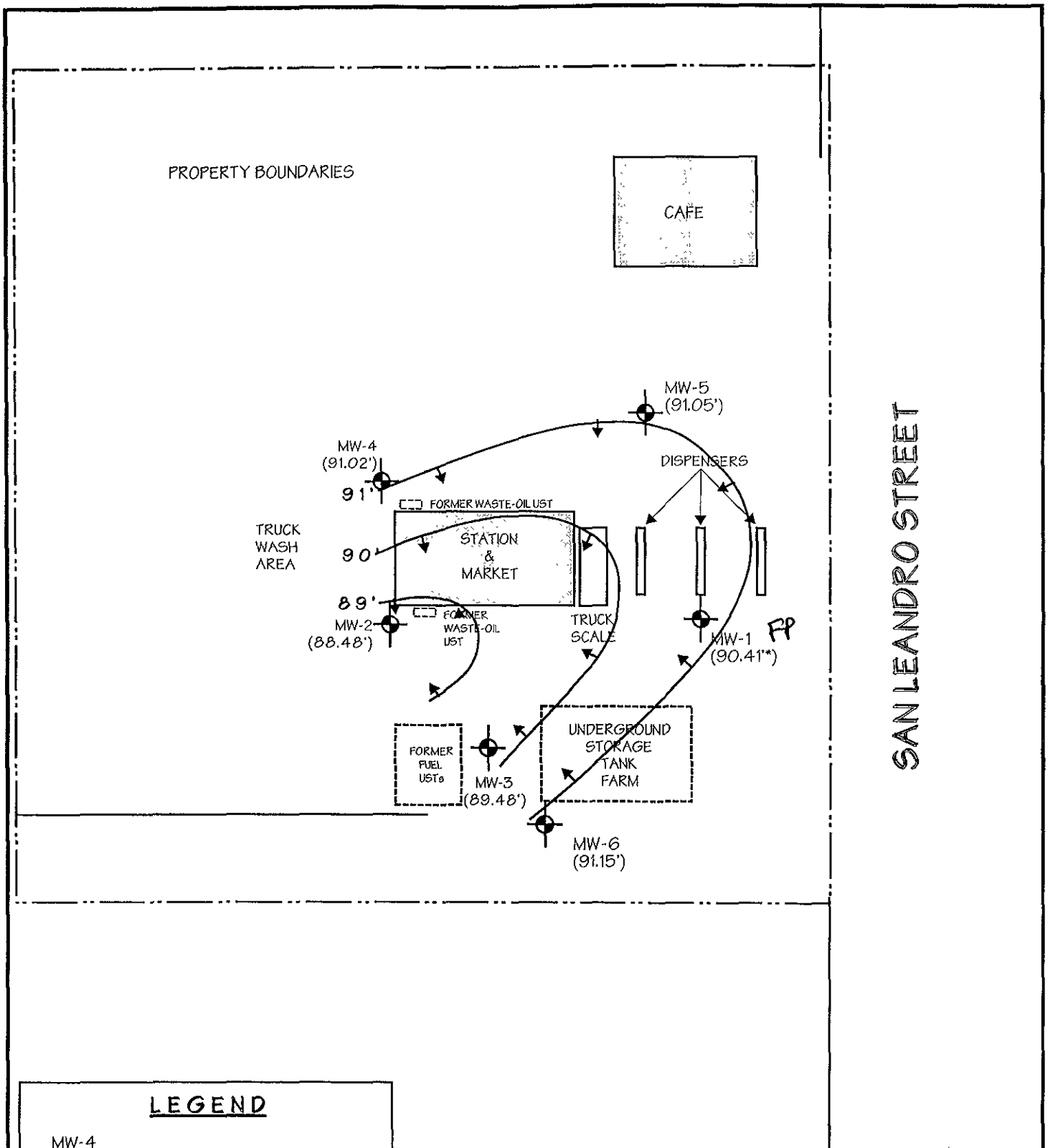
NORTH



LOCATION MAP

OAKLAND TRUCK STOP
8255 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | Figure 1



LEGEND

MW-4 (91.15')	MONITORING WELL WITH GROUNDWATER ELEVATION IN FEET, ABOVE MEAN SEA LEVEL
(90.41'*)	GROUNDWATER ELEVATION ADJUSTED FOR FREE-FLOATING HYDROCARBON THICKNESS
91'	POTENTIOMETRIC SURFACE CONTOUR

NORTH

SCALE
1" = 50'

POTENTIOMETRIC SURFACE CONTOUR MAP
JUNE 14, 2000

OAKLAND TRUCK STOP
8255 SAN LEANDRO STREET
OAKLAND, CALIFORNIA

AQUA SCIENCE ENGINEERS, INC. | Figure 2

APPENDIX A

Well Sampling Field Logs

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WELL SAMPLING FIELD LOG

Project Name and Address: Oakland Truck Stop
Job #: 3540 Date of sampling: 6/14/00
Well Name: MW-1 Sampled by: MR
Total depth of well (feet): _____ Well diameter (inches): 2"
Depth to water before sampling (feet): 6.57'
Thickness of floating product if any: 0.72
Depth of well casing in water (feet): _____
Number of gallons per well casing volume (gallons): _____
Number of well casing volumes to be removed: _____
Req'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?: bailed 3. Gallons 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: _____ Odor: _____
Description of sediment in sample: _____

Free Product

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

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

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Oakland Truck Stop
Job #: 3540 Date of sampling: 6/14/00
Well Name: MW-2 Sampled by: ITR
Total depth of well (feet): 15.50 Well diameter (inches): 2"
Depth to water before sampling (feet): 8.34
Thickness of floating product if any: —
Depth of well casing in water (feet): 7.16
Number of gallons per well casing volume (gallons): 1.2
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 4.8
Equipment used to purge the well: disp. bailer
Time Evacuation Began: 1215 Time Evacuation Finished: 1225
Approximate volume of groundwater purged: 5
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1230
Depth to water at time of sampling: 9.78
Percent recovery at time of sampling: 85%
Samples collected with: disp. bailer
Sample color: clear/l. gray Odor: none
Description of sediment in sample: f. silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	72.3	5.64	320
2	71.0	5.78	397
3	70.9	5.79	410
4	70.8	5.81	357

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	5	40ml VOA	✓	✓	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Oakland Truck Stop
Job #: 3540 Date of sampling: 6/14/00
Well Name: MW-3 Sampled by: MR
Total depth of well (feet): 15.52' Well diameter (inches): 2"
Depth to water before sampling (feet): 6.95'
Thickness of floating product if any: —
Depth of well casing in water (feet): 8.55'
Number of gallons per well casing volume (gallons): 1.4
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 5.6
Equipment used to purge the well: disp. bailer
Time Evacuation Began: 1120 Time Evacuation Finished: 1135
Approximate volume of groundwater purged: 6
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1140
Depth to water at time of sampling: 7.21
Percent recovery at time of sampling: 96%
Samples collected with: disp. bailer
Sample color: gray/clear Odor: slight HC odor
Description of sediment in sample: f silt and f. sand

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	70.2	6.81	654
2	71.0	6.80	690
3	71.1	6.81	710
4	71.9	6.81	687

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	5	40ml VOA	✓	✓	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Oakland TRUCK Stop
Job #: 3540 Date of sampling: 6/14/00
Well Name: MW-4 Sampled by: ITR
Total depth of well (feet): ~15.0' Well diameter (inches): 2"
Depth to water before sampling (feet): 5.58'
Thickness of floating product if any: —
Depth of well casing in water (feet): 9.42'
Number of gallons per well casing volume (gallons): 1.6
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 6.4
Equipment used to purge the well: ded. bailer
Time Evacuation Began: 1250 Time Evacuation Finished: 1305
Approximate volume of groundwater purged: 6.5
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1310
Depth to water at time of sampling: 6.47
Percent recovery at time of sampling: 96%
Samples collected with: dedicated bailer
Sample color: clear/gray Odor: none
Description of sediment in sample: f. silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	72.1	5.81	1120
2	69.?	5.8?	1076
3	69.9	5.87	1081
4	70.2	5.91	1101

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	5	40 ml VOA	✓	✓	
	1	plastic		✓	Diss. Lead

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Oakland Truck Stop
Job #: 3540 Date of sampling: 6/14/00
Well Name: MW-5 Sampled by: ITR
Total depth of well (feet): 13.7' Well diameter (inches): 2"
Depth to water before sampling (feet): 5.25'
Thickness of floating product if any: —
Depth of well casing in water (feet): 8.45'
Number of gallons per well casing volume (gallons): 1.4
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 5.6
Equipment used to purge the well: ded. bailer
Time Evacuation Began: 1325 Time Evacuation Finished: 1345
Approximate volume of groundwater purged: 6
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1350
Depth to water at time of sampling: 5.97
Percent recovery at time of sampling: 88%
Samples collected with: ded bailer
Sample color: clear Odor: none
Description of sediment in sample: fine

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	70.1	7.81	657
2	69.9	7.80	608
3	66.8	7.80	670
4	70.0	7.81	694

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-5	5	1L amber	✓	✓	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Oakland Truck Stop
Job #: 3540 Date of sampling: 6/14/00
Well Name: MW-6 Sampled by: TR
Total depth of well (feet): 19.0' Well diameter (inches): 2"
Depth to water before sampling (feet): 5.64'
Thickness of floating product if any: —
Depth of well casing in water (feet): 8.36
Number of gallons per well casing volume (gallons): 1.42
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 5.6
Equipment used to purge the well: ded. bailer
Time Evacuation Began: 1145 Time Evacuation Finished: 1200
Approximate volume of groundwater purged: ~6
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1205
Depth to water at time of sampling: 5.87
Percent recovery at time of sampling: 90%
Samples collected with: dedicated bailer
Sample color: clear/gray Odor: v. slight HC odor
Description of sediment in sample: fine silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
1	70.2	6.91	473
2	71.3	6.90	491
3	71.4	6.93	520
4	71.3	6.91	537

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-6	5	40 ml VOA	✓	✓	

208 W El Pintado, Danville, California 94526 • 925-820-9391 • Fax 925-837-4853

APPENDIX B

Certified Analytical Report
and
Chain of Custody Documentation

KIFF ANALYTICAL LLC

Report Number : 16938
Date : 6/28/00

Robert Kitay
Aqua Science Engineers, Inc.
208 West El Pintado Rd.
Danville, CA 94526

Subject : 5 Water Samples
Project Name : Oakland Truck Stop
Project Number : 3540

Dear Mr. Kitay,

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,

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 16938
Date : 6/28/00

Project Name : **Oakland Truck Stop**
Project Number : **3540**

Sample : MW-2 Matrix : Water
Sample Date :6/14/00

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	2.8	.5	ug/L	EPA 8260B	6/21/00
Toluene	< 0.50	.5	ug/L	EPA 8260B	6/21/00
Ethylbenzene	3.4	.5	ug/L	EPA 8260B	6/21/00
Total Xylenes	< 0.50	.5	ug/L	EPA 8260B	6/21/00
TPH as Diesel	75	50	ug/L	M EPA 8015	6/20/00
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	6/20/00
Methyl-t-butyl ether (MTBE)	16	.5	ug/L	EPA 8260B	6/21/00
Diisopropyl ether (DIPE)	3.4	.5	ug/L	EPA 8260B	6/21/00
Ethyl-t-butyl ether (ETBE)	< 0.50	.5	ug/L	EPA 8260B	6/21/00
Tert-amyl methyl ether (TAME)	< 0.50	.5	ug/L	EPA 8260B	6/21/00
Tert-Butanol	64	5	ug/L	EPA 8260B	6/21/00
TPH as Gasoline	2000	50	ug/L	EPA 8260B	6/21/00
Toluene - d8 (Surr)	91.5		% Recovery	EPA 8260B	6/21/00
4-Bromofluorobenzene (Surr)	100		% Recovery	EPA 8260B	6/21/00

Approved By: Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 16938

Date : 6/28/00

Project Name : **Oakland Truck Stop**

Project Number : **3540**

Sample : MW-3

Matrix : Water

Sample Date :6/14/00

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	13000	.5	ug/L	EPA 8260B	6/27/00
Toluene	94	.5	ug/L	EPA 8260B	6/21/00
Ethylbenzene	1300	.5	ug/L	EPA 8260B	6/21/00
Total Xylenes	160	.5	ug/L	EPA 8260B	6/21/00
TPH as Diesel	16000	50	ug/L	M EPA 8015	6/20/00
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	6/20/00
Methyl-t-butyl ether (MTBE)	4800	.5	ug/L	EPA 8260B	6/21/00
Diisopropyl ether (DIPE)	31	.5	ug/L	EPA 8260B	6/21/00
Ethyl-t-butyl ether (ETBE)	< 10	.5	ug/L	EPA 8260B	6/21/00
Tert-amyl methyl ether (TAME)	21	.5	ug/L	EPA 8260B	6/21/00
Tert-Butanol	2700	5	ug/L	EPA 8260B	6/21/00
TPH as Gasoline	**34000**	50	ug/L	EPA 8260B	6/21/00
Toluene - d8 (Surr)	94.8		% Recovery	EPA 8260B	6/21/00
4-Bromofluorobenzene (Surr)	94.9		% Recovery	EPA 8260B	6/21/00

Approved By: Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 16938
Date : 6/28/00

Project Name : **Oakland Truck Stop**
Project Number : **3540**

Sample : MW-4 Matrix : Water
Sample Date :6/14/00

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	.5	ug/L	EPA 8260B	6/21/00
Toluene	**< 0.50**	.5	ug/L	EPA 8260B	6/21/00
Ethylbenzene	**< 0.50**	.5	ug/L	EPA 8260B	6/21/00
Total Xylenes	**< 0.50**	.5	ug/L	EPA 8260B	6/21/00
TPH as Diesel	**< 50**	50	ug/L	M EPA 8015	6/20/00
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	6/20/00
Methyl-t-butyl ether (MTBE)	**100**	.5	ug/L	EPA 8260B	6/21/00
Diisopropyl ether (DIPE)	**< 0.50**	.5	ug/L	EPA 8260B	6/21/00
Ethyl-t-butyl ether (ETBE)	**< 0.50**	.5	ug/L	EPA 8260B	6/21/00
Tert-amyl methyl ether (TAME)	**< 0.50**	.5	ug/L	EPA 8260B	6/21/00
Tert-Butanol	**20**	5	ug/L	EPA 8260B	6/21/00
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	6/21/00
Toluene - d8 (Surr)	97.1		% Recovery	EPA 8260B	6/21/00
4-Bromofluorobenzene (Surr)	91.0		% Recovery	EPA 8260B	6/21/00

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 16938
Date : 6/28/00

Project Name : **Oakland Truck Stop**
Project Number : **3540**

Sample : MW-5 Matrix : Water
Sample Date :6/14/00

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	.5	ug/L	EPA 8260B	6/27/00
Toluene	< 0.50	.5	ug/L	EPA 8260B	6/27/00
Ethylbenzene	< 0.50	.5	ug/L	EPA 8260B	6/27/00
Total Xylenes	< 0.50	.5	ug/L	EPA 8260B	6/27/00
TPH as Diesel	1400	50	ug/L	M EPA 8015	6/20/00
TPH as Motor Oil	< 100	100	ug/L	M EPA 8015	6/20/00
Methyl-t-butyl ether (MTBE)	160	.5	ug/L	EPA 8260B	6/27/00
Diisopropyl ether (DIPE)	12	.5	ug/L	EPA 8260B	6/27/00
Ethyl-t-butyl ether (ETBE)	< 0.50	.5	ug/L	EPA 8260B	6/27/00
Tert-amyl methyl ether (TAME)	< 0.50	.5	ug/L	EPA 8260B	6/27/00
Tert-Butanol	22	5	ug/L	EPA 8260B	6/27/00
TPH as Gasoline	380	50	ug/L	EPA 8260B	6/27/00
Toluene - d8 (Surr)	99.1		% Recovery	EPA 8260B	6/27/00
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	6/27/00

Approved By: Joel Kiff

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

KIFF ANALYTICAL LLC

Report Number : 16938
Date : 6/28/00

Project Name : **Oakland Truck Stop**
Project Number : **3540**

Sample : MW-6 Matrix : Water
Sample Date :6/14/00

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**190**	.5	ug/L	EPA 8260B	6/21/00
Toluene	**12**	.5	ug/L	EPA 8260B	6/21/00
Ethylbenzene	**9.5**	.5	ug/L	EPA 8260B	6/21/00
Total Xylenes	**22**	.5	ug/L	EPA 8260B	6/21/00
TPH as Diesel	**12000**	50	ug/L	M EPA 8015	6/20/00
TPH as Motor Oil	**< 100**	100	ug/L	M EPA 8015	6/20/00
Methyl-t-butyl ether (MTBE)	**15000**	.5	ug/L	EPA 8260B	6/26/00
Diisopropyl ether (DIPE)	**< 5.0**	.5	ug/L	EPA 8260B	6/21/00
Ethyl-t-butyl ether (ETBE)	**< 5.0**	.5	ug/L	EPA 8260B	6/21/00
Tert-amyl methyl ether (TAME)	**70**	.5	ug/L	EPA 8260B	6/21/00
Tert-Butanol	**3300**	5	ug/L	EPA 8260B	6/26/00
TPH as Gasoline	**8400**	50	ug/L	EPA 8260B	6/21/00
Toluene - d8 (Surr)	96.5		% Recovery	EPA 8260B	6/21/00
4-Bromofluorobenzene (Surr)	92.5		% Recovery	EPA 8260B	6/21/00

Approved By: Joel Kiff

720 Olive Drive, Suite D, Davis, CA 95616, 530.297.4800

16938

Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526
(925) 820-9391
FAX (925) 837-4853

Chain of Custody

PAGE 1 OF 1

SAMPLER (SIGNATURE) Ian T. Reed (PHONE NO.) (925) 820-9391

PROJECT NAME Oakland Truck Stop JOB NO. 3540

ADDRESS 8253 San Leandro St. Oakland CA DATE 6/15/00

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:

5-day TAT

	SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / BTEX / MTBE & BTEX (EPA 5030/8015-8020)	TPH-GASOLINE (EPA 5030/8015)	TPH-DIESEL & MO (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	PURGEABLE AROMATICS (EPA 602/8020)	VOLATILE ORGANICS (EPA 624/8240)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140) (EPA 608/8080)	ORGANOCHLORINE HERBICIDES (EPA 8150)	FUEL OXYGENATES (EPA 8260)					COMPOSITE
-01	MW-2	6/14	1230	water	5	X		X																
-02	MW-3	6/14	1140			X		X																
-03	MW-4	6/14	1300			X		X																
-04	MW-5	6/14	1350			X		X																
-05	MW-6	6/14	1205			X		X																

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Ian T Reed 0800 (signature) (time)	(signature) (time)	(signature) (time)	T. Pope 15:55 (signature) (time)	
Ian T Reed 6/15 (printed name) (date)	(printed name) (date)	(printed name) (date)	A. Agocs 6/15/00 (printed name) (date)	
Company- AGE	Company-	Company-	Company- KTL	

Aqua Science Engineers, Inc.
208 West El Pintado Road
Danville, CA 94526

Attn.: Mr. Ian T. Reed

Project: 3540
Oakland Truck Stop (OTS)

Dear Mr. Reed,

Attached is our report for your samples received on Wednesday June 14, 2000
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after July 14, 2000 unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,

Vincent Vancil

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0273

Soluble Metals

Aqua Science Engineers, Inc.	✉ 208 West El Pintado Road Danville, CA 94526
Attn: Ian T. Reed	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3540	Project: Oakland Truck Stop (OTS)

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-4	Water	06/14/2000	1

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0273

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 6010B
Prep Method: 3005A

Soluble Metals

Sample ID:	**MW-4**	Lab Sample ID:	**2000-06-0273-001**
Project:	3540 Oakland Truck Stop (OTS)	Received:	06/14/2000 15:13
		Extracted:	06/20/2000 12:17
Sampled:	06/14/2000	QC-Batch:	2000/06/20-04.15
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Lead	ND	0.0050	mg/L	1.00	06/20/2000 23:14	

To: **Aqua Science Engineers, Inc.**
Attn.: Ian T. Reed

Test Method: 6010B
Prep Method: 3005A

Batch QC Report
Soluble Metals

Method Blank | **Water** | **QC Batch # 2000/06/20-04.15**

MB: 2000/06/20-04.15-078 | Date Extracted: 06/20/2000 12:17

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Lead	ND	0.0050	mg/L	06/20/2000 22:39	

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0273

To: **Aqua Science Engineers, Inc.**

Attn: Ian T. Reed

Test Method: 6010B

Prep Method: 3005A

Batch QC Report

Soluble Metals

Laboratory Control Spike (LCS/LCSD) Water **QC Batch # 2000/06/20-04.15**

LCS: 2000/06/20-04.15-079 Extracted: 06/20/2000 12:17 Analyzed 06/20/2000 22:43

LCSD: 2000/06/20-04.15-080 Extracted: 06/20/2000 12:17 Analyzed 06/20/2000 22:47

Compound	Conc. [mg/L]		Exp.Conc. [mg/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Lead	0.474	0.468	0.500	0.500	94.8	93.6	1.3	80-120	20		

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

2000-06-0273

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Fax (925) 484-1096

Reference #: 5276

Chain of Custody

DATE 6/14/00 PAGE 1 OF 1

PROJ MGR Ian T. Reed
COMPANY Aqua Science Eng. Inc.
ADDRESS 208 W El Pintado Danville CA

SAMPLERS (SIGNATURE) Ian Reed
(PHONE NO.) 925 820-9891
(FAX NO.)

SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015,8020) ☐ Gas w/ ☐ BTEX ☐MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) ☐ Diesel ☐ M.O. ☐ Other	PURGEABLE HALOCARBONS (HVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	Oil & Grease ☐ Petrol ☐ Total ☐ 1664		☐ PESTICIDES(EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ Spec Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T. (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24 hr hold time for H20)	Dissolved Lead			NUMBER OF CONTAINERS
MW-4	6/14	1310	water	None																		X			2

PROJECT INFORMATION

PROJECT NAME: Oakland Truck Stop (UTS)
PROJECT NUMBER: 3540
P.O. #:

TAT: STANDARD 5-DAY | 24 | 48 | 72 | OTHER

SAMPLE RECEIPT

TOTAL NO OF CONTAINERS	2
HEAD SPACE	N
TEMPERATURE	
CONFORMS TO RECORD	

SPECIAL INSTRUCTIONS/COMMENTS.
Report: ☐ Routine ☐ Level 2 ☐ Level 3 ☐ Level 4 ☐ Electronic Report
★ Need to filter and Preserve ★

RELINQUISHED BY 1	RELINQUISHED BY 2	RELINQUISHED BY 3
(SIGNATURE) Ian Reed 1500 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) Ian T Reed (DATE) 6/14/00	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY) ASE	(COMPANY)	(COMPANY)
RECEIVED BY 1	**RECEIVED BY 2**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) (TIME)
(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)
(COMPANY)	(COMPANY)	(LAB)

Chris Rowley 1500
Chris Rowley 6/15/00
Chromalab