

00 JUN 30 AM 9:58

June 26, 2000

Mr. Scott Seery
Alameda County Health Care Services Agency
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94501

SUBJECT: IRRIGATION WELL INVESTIGATION
1619 - 1621 162nd Avenue
San Leandro, CA

Dear Mr. Seery:

At the request of our client and the former property owners, Yuen Man and In Leng Lee, Aqua Science Engineers (ASE) mobilized to the subject site on June 13, 2000 to perform the following environmental activities.

TASK I - OIL AND WATER REMOVAL

Using a vacuum truck supplied by Clearwater Environmental, the oil and approximately two well casing volumes of water were removed from the on-site irrigation well in several episodes of active pumping and recharging. In total, approximately 500 gallons of liquid were removed from the well. The volume of the oil is unknown but estimated to be around 50 gallons. The liquids were transported by Clearwater to the Alviso Independent Oil facility in Alviso, California under Hazardous Waste Manifest number 99641733. The manifest is attached in Appendix A.

TASK II - WATER SAMPLE COLLECTION AND ANALYSIS

Once it appeared that the surface of the well water contained no measurable thickness of oil, ASE collected a water sample from the well using a disposable bailer. The samples were decanted from the bailer into six 40-ml volatile organic analysis (VOA) vials, pre-preserved with hydrochloric acid, and four 1-liter amber glass bottles. All samples were labeled, placed in protective foam sleeves, and stored in a cooler with wet ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP #1094) under appropriate chain of custody documentation. The water samples were analyzed for the following compounds: oil & grease by standard method 5520, halogenated volatile organic compounds (HVOCs) by EPA Method 8010, TPH as gasoline by EPA Method 8015M, BTEX and MTBE by EPA Method 8020, TPH as diesel/motor oil by EPA Method 8015M, and semi-volatile compounds by EPA Method 8270.

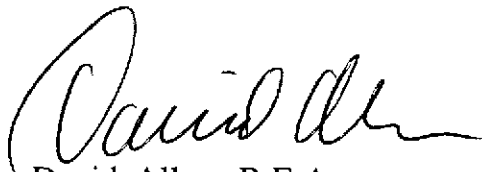
OTE
HVOC
TPH-G
BTEX
MTBE
TPH-D
SVOC

The only compounds detected in the water samples were 340 parts per billion (ppb) TPH as diesel, 1,500 ppb TPH as motor oil, 4,200 ppb oil and grease, and 0.71 ppb trichlorofluoromethane. The analytical results are tabulated in the Tables Section of this report as Tables One through Four. The certified analytical report is attached in Appendix B.

ASE and our client are anxious to receive your Agency's position in writing upon review of this letter report. Should you have any questions or comments, please feel free to give us a call at (925) 820-9391.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.


David Allen, R.E.A.
Senior Project Manager



Attachments:

Tables One through Four
Appendix A, Hazardous Waste Manifest
Appendix B, Certified Analytical Report

Cc: Yuen Man and In Leng Lee, former property owners
Mr. Wilson Wong, Realtor

TABLE ONE

Summary of Chemical Analysis of ~~Water~~ Samples

TPH-G, TPH-D, BTEX and MTBE

Abandoned Irrigation Well 162nd Avenue, San Leandro, CA

All results are in **parts per billion**

SAMPLE NAME	TPH GAS	TPH DIESEL	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	MTBE
OIL WELL	< 50	340	< 0.5	< 0.5	< 0.5	< 0.5	< 5
EPA METHOD	8015M	8015M	8020	8020	8020	8020	8020

NOTES:

Detectable concentrations are in **bold**.

Non-detectable concentrations are noted by the less than sign (<) followed by the laboratory detection limit.

TABLE TWO

Summary of Chemical Analysis of **Water Samples**
TPH-Motor Oil, TPH- Diesel and Oil & Grease
Abandoned Irrigation Well 162nd Avenue, San Leandro, CA
All results are in **parts per billion**

SAMPLE NAME	TPH MOTOR OIL	TPH DIESEL	OIL & GREASE
OIL WELL	1500	340	4200
EPA METHOD	8015M	8015M	5520 B&F

NOTES:

Detectable concentrations are in **bold**.

Non-detectable concentrations are noted by the less than sign (<) followed by the laboratory detection limit.

TABLE THREE

Summary of Chemical Analysis of **Water Samples**
Halogenated Volatile Organic Compounds
Abandoned Irrigation Well 162nd Avenue, San Leandro, CA
All results are in **parts per billion**

SAMPLE NAME	TRICHLOROFLUORO- METHANE	REMAINING VOCs
OIL WELL	0.71	< 0.5 - < 5.0
DHS MCL	150	VARIES
EPA METHOD	8010	8010

NOTES:
Detectable concentrations are in **bold**.

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

Non-detectable concentrations are noted by the less than sign (<) followed by the laboratory detection limit.

TABLE FOUR

Summary of Chemical Analysis of **Water Samples**
Semi-Volatile Organic Compounds
Abandoned Irrigation Well 162nd Avenue, San Leandro, CA
All results are in **parts per Billion**

SAMPLE NAME	ALL SEMI-VOLATILE ORGANIC COMPOUNDS
OIL WELL	< 2.0 - < 10.0
EPA METHOD	8270
NOTES: Detectable concentrations are in bold . Non-detectable concentrations are noted by the less than sign (<) followed by the laboratory detection limit.	

APPENDIX A

Hazardous Water Manifest

99641733

IN CASE OF EMERGENCY OR SPILL, CALL THE NATIONAL RESPONSE CENTER 1-800-424-8802; WITHIN CALIFORNIA, CALL 1-800-852-7550

GENERATOR

TRANSPORTER

FACILITY

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. C A C 0 0 2 2 9 4 1 9 3		Manifest Document No. 4 1 7 3 3		2. Page 1 of 1		Information in the shaded areas is not required by Federal law.									
3. Generator's Name and Mailing Address MRS. In Leng Lee 5075 Bronte Court Fremont CA. 94538						A. State Manifest Document Number 99641733											
4. Generator's Phone 925 820-9391						B. State Generator's ID											
5. Transporter 1 Company Name CLEARWATER ENVIRONMENTAL			6. US EPA ID Number C A R 0 0 0 0 0 7 0 1 3			C. State Transporter's ID [Reserved.]											
7. Transporter 2 Company Name						D. Transporter's Phone (510) 476-1740											
8. US EPA ID Number						E. State Transporter's ID [Reserved.]											
9. Designated Facility Name and Site Address ALYSSO INDEPENDENT OIL 5007 ARCHER STREET ALYSSO, CA 95802						10. US EPA ID Number C A L 0 0 0 1 6 1 7 4 3											
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) oily water Non-RCRA Hazardous Waste Liquid						12. Containers No. Type		13. Total Quantity		14. Unit Wt/Vol		I. Waste Number State 223 EPA/Other NONE					
b.												State					
c.												EPA/Other					
d.												State					
												EPA/Other					
J. Additional Descriptions for Materials Listed Above						K. Handling Codes for Wastes Listed Above											
15. Special Handling Instructions and Additional Information WEAR PPE Emergency Contact: (510) 476-1740 Attn: Kirk Hayward ERG # 171						a.						b.					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						c.						d.					
Printed/Typed Name Kirk Hayward				Signature <i>Kirk Hayward</i>				Month 06		Day 13		Year 00					
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name Rahul Adair				Signature <i>Rahul Adair</i>				Month 06		Day 13		Year 00					
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name				Signature				Month		Day		Year					
19. Discrepancy Indication Space																	
20. Facility Owner or Operator Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. Printed/Typed Name				Signature				Month		Day		Year					

DO NOT WRITE BELOW THIS LINE.

APPENDIX B

Certified Analytical Report And Chain of Custody

Gas/BTEX and MTBE

Aqua Science Engineers, Inc.	☒ 208 West El Pintado Road Danville, CA 94526
Attn: Dave Allen	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3656	Project: 162 nd Ave

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OIL WELL	Water	06/13/2000	1

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8020
8015M

Attn.: Dave Allen

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID: OIL WELL	Lab Sample ID: 2000-06-0335-001
Project: 3656 162 nd Ave	Received: 06/15/2000 18:34
Sampled: 06/13/2000	Extracted: 06/21/2000 17:07
Matrix: Water	QC-Batch: 2000/06/22-01.01

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	06/21/2000 17:07	
Benzene	ND	0.50	ug/L	1.00	06/21/2000 17:07	
Toluene	ND	0.50	ug/L	1.00	06/21/2000 17:07	
Ethyl benzene	ND	0.50	ug/L	1.00	06/21/2000 17:07	
Xylene(s)	ND	0.50	ug/L	1.00	06/21/2000 17:07	
MTBE	ND	5.0	ug/L	1.00	06/21/2000 17:07	
Surrogate(s)						
Trifluorotoluene	92.1	58-124	%	1.00	06/21/2000 17:07	
4-Bromofluorobenzene-FID	90.3	50-150	%	1.00	06/21/2000 17:07	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8020
8015M

Attn.: Dave Allen

Prep Method: 5030

Batch QC Report Gas/BTEX and MTBE

Method Blank	Soil	QC Batch # 2000/06/22-01.01
MB: 2000/06/22-01.01-001		Date Extracted: 06/22/2000 10:06

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	1.0	mg/Kg	06/22/2000 10:06	
Benzene	ND	0.0050	mg/Kg	06/22/2000 10:06	
Toluene	ND	0.0050	mg/Kg	06/22/2000 10:06	
Ethyl benzene	ND	0.0050	mg/Kg	06/22/2000 10:06	
Xylene(s)	ND	0.0050	mg/Kg	06/22/2000 10:06	
MTBE	ND	0.0050	mg/Kg	06/22/2000 10:06	
Surrogate(s)					
Trifluorotoluene	100.2	53-125	%	06/22/2000 10:06	
4-Bromofluorobenzene-FID	96.8	58-124	%	06/22/2000 10:06	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8020
8015M

Attn: Dave Allen

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)		Soil		QC Batch # 2000/06/22-01.01	
LCS:	2000/06/22-01.01-002	Extracted:	06/22/2000 10:40	Analyzed	06/22/2000 10:40
LCSD:	2000/06/22-01.01-003	Extracted:	06/22/2000 11:15	Analyzed	06/22/2000 11:15

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		[%]	Recovery	RPD	LCS
Gasoline	0.441	0.464	0.500	0.500	88.2	92.8	5.1	75-125	35		
Benzene	0.0970	0.0990	0.1000	0.1000	97.0	99.0	2.0	77-123	35		
Toluene	0.0914	0.0929	0.1000	0.1000	91.4	92.9	1.6	78-122	35		
Ethyl benzene	0.0948	0.0962	0.1000	0.1000	94.8	96.2	1.5	70-130	35		
Xylene(s)	0.283	0.287	0.300	0.300	94.3	95.7	1.5	75-125	35		
Surrogate(s)											
Trifluorotoluene	427	442	500	500	85.4	88.4		53-125			
4-Bromofluorobenzene-FI	411	436	500	500	82.2	87.2		58-124			

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

Total Extractable Petroleum Hydrocarbons (TEPH)

Aqua Science Engineers, Inc.	☒ 208 West El Pintado Road Danville, CA 94526
Attn: Dave Allen	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3656	Project: 162 nd Ave

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OIL WELL	Water	06/13/2000	1

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8015m

Attn.: Dave Allen

Prep Method: 3510/8015M

Total Extractable Petroleum Hydrocarbons (TEPH)

Sample ID: OIL WELL	Lab Sample ID: 2000-06-0335-001
Project: 3656 162 nd Ave	Received: 06/15/2000 18:34
Sampled: 06/13/2000	Extracted: 06/19/2000 13:21
Matrix: Water	QC-Batch: 2000/06/19-04.10

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	340	50	ug/L	1.00	06/22/2000 05:02	ldr
Motor Oil	1500	500	ug/L	1.00	06/22/2000 05:02	
Surrogate(s) o-Terphenyl	97.6	60-130	%	1.00	06/22/2000 05:02	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8015m

Attn.: Dave Allen

Prep Method: 3510/8015M

Batch QC Report

Total Extractable Petroleum Hydrocarbons (TEPH)

Method Blank	Water	QC Batch # 2000/06/19-04.10
MB: 2000/06/19-04.10-001		Date Extracted: 06/19/2000 13:21

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	06/22/2000 01:43	
Motor Oil	ND	500	ug/L	06/22/2000 01:43	
<i>Surrogate(s)</i> o-Terphenyl	103.5	60-130	%	06/22/2000 01:43	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Printed on: 06/22/2000 16:45

Page 3 of 4

To: Aqua Science Engineers, Inc.
Attn: Dave Allen

Test Method: 8015m
Prep Method: 3510/8015M

Legend & Notes

Total Extractable Petroleum Hydrocarbons (TEPH)

Analyte Flags

ldr

Hydrocarbon reported is in the late Diesel range, and does not match our Diesel standard

Semi-volatile Organic Compounds

Aqua Science Engineers, Inc.	☒ 208 West El Pintado Road Danville, CA 94526
Attn: Dave Allen	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3656	Project: 162 nd Ave

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OIL WELL	Water	06/13/2000	1

Petroleum Oil & Grease

Aqua Science Engineers, Inc.	☒ 208 West El Pintado Road Danville, CA 94526
Attn: Dave Allen	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3656	Project: 162 nd Ave

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OIL WELL	Water	06/13/2000	1

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.
Attn.: Dave Allen

Test Method: 5520 B & F
Prep Method: 5520 B & F

Petroleum Oil & Grease

Sample ID: OIL WELL	Lab Sample ID: 2000-06-0335-001
Project: 3656 162 nd Ave	Received: 06/15/2000 18:34
Sampled: 06/13/2000	Extracted: 06/20/2000
Matrix: Water	QC-Batch: 2000/06/20-02.23

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Oil and Grease (Petroleum)	4.2	1.0	mg/L	1.00	06/21/2000	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 5520 B & F

Attn.: Dave Allen

Prep Method: 5520 B & F

Batch QC Report
Petroleum Oil & Grease

Method Blank	Water	QC Batch # 2000/06/20-02.23
MB: 2000/06/20-02.23-001		Date Extracted: 06/20/2000

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Oil and Grease (Petroleum)	ND	1	mg/L	06/21/2000	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 5520 B & F

Attr: Dave Allen

Prep Method: 5520 B & F

Batch QC Report

Petroleum Oil & Grease

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2000/06/20-02.23	
LCS:	2000/06/20-02.23-002	Extracted:	06/20/2000	Analyzed	06/21/2000
LCSD:	2000/06/20-02.23-003	Extracted:	06/20/2000	Analyzed	06/21/2000

Compound	Conc. [mg/L]		Exp. Conc. [mg/L]		Recovery [%]			RPD		Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD		
Oil and Grease	38.8	37.2	40.0	40.0	97.0	93.0	4.2	80-120	20				

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Halogenated Volatile Organic Compounds

Aqua Science Engineers, Inc.	✉ 208 West El Pintado Road Danville, CA 94526
Attn: Dave Allen	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3656	Project: 162 nd Ave

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
OIL WELL	Water	06/13/2000	1

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.
Attn: Dave Allen

Test Method: 8010
Prep Method: 5030

Halogenated Volatile Organic Compounds

Sample ID: OIL WELL	Lab Sample ID: 2000-06-0335-001
Project: 3656 162 nd Ave	Received: 06/15/2000 18:34
Sampled: 06/13/2000	Extracted: 06/20/2000 23:05
Matrix: Water	QC-Batch: 2000/06/20-01.25

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	1.00	06/20/2000 23:05	
Vinyl chloride	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Chloroethane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Trichlorofluoromethane	0.71	0.50	ug/L	1.00	06/20/2000 23:05	
1,1-Dichloroethene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Methylene chloride	ND	5.0	ug/L	1.00	06/20/2000 23:05	
trans-1,2-Dichloroethene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
cis-1,2-Dichloroethene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
1,1-Dichloroethane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Chloroform	ND	0.50	ug/L	1.00	06/20/2000 23:05	
1,1,1-Trichloroethane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Carbon tetrachloride	ND	0.50	ug/L	1.00	06/20/2000 23:05	
1,2-Dichloroethane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Trichloroethene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
1,2-Dichloropropane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Bromodichloromethane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
2-Chloroethylvinyl ether	ND	0.50	ug/L	1.00	06/20/2000 23:05	
trans-1,3-Dichloropropene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
cis-1,3-Dichloropropene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
1,1,2-Trichloroethane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Tetrachloroethene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Dibromochloromethane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Chlorobenzene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Bromoform	ND	2.0	ug/L	1.00	06/20/2000 23:05	
1,1,2,2-Tetrachloroethane	ND	0.50	ug/L	1.00	06/20/2000 23:05	
1,3-Dichlorobenzene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
1,4-Dichlorobenzene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
1,2-Dichlorobenzene	ND	0.50	ug/L	1.00	06/20/2000 23:05	
Trichlorotrifluoroethane	ND	2.0	ug/L	1.00	06/20/2000 23:05	
Chloromethane	ND	1.0	ug/L	1.00	06/20/2000 23:05	
Bromomethane	ND	1.0	ug/L	1.00	06/20/2000 23:05	
Surrogate(s)						
1-Chloro-2-fluorobenzene	73.5	50-150	%	1.00	06/20/2000 23:05	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8010

Attn.: Dave Allen

Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Method Blank	Water	QC Batch # 2000/06/20-01.25
MB: 2000/06/20-01.25-001		Date Extracted: 06/20/2000 07:39

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Dichlorodifluoromethane	ND	1.0	ug/L	06/20/2000 07:39	
Vinyl chloride	ND	0.5	ug/L	06/20/2000 07:39	
Chloroethane	ND	0.5	ug/L	06/20/2000 07:39	
Trichlorofluoromethane	ND	0.5	ug/L	06/20/2000 07:39	
1,1-Dichloroethene	ND	0.5	ug/L	06/20/2000 07:39	
Methylene chloride	ND	5.0	ug/L	06/20/2000 07:39	
trans-1,2-Dichloroethene	ND	0.5	ug/L	06/20/2000 07:39	
cis-1,2-Dichloroethene	ND	0.5	ug/L	06/20/2000 07:39	
1,1-Dichloroethane	ND	0.5	ug/L	06/20/2000 07:39	
Chloroform	ND	0.5	ug/L	06/20/2000 07:39	
1,1,1-Trichloroethane	ND	0.5	ug/L	06/20/2000 07:39	
Carbon tetrachloride	ND	0.5	ug/L	06/20/2000 07:39	
1,2-Dichloroethane	ND	0.5	ug/L	06/20/2000 07:39	
Trichloroethene	ND	0.5	ug/L	06/20/2000 07:39	
1,2-Dichloropropane	ND	0.5	ug/L	06/20/2000 07:39	
Bromodichloromethane	ND	0.5	ug/L	06/20/2000 07:39	
2-Chloroethylvinyl ether	ND	0.5	ug/L	06/20/2000 07:39	
trans-1,3-Dichloropropene	ND	0.5	ug/L	06/20/2000 07:39	
cis-1,3-Dichloropropene	ND	0.5	ug/L	06/20/2000 07:39	
1,1,2-Trichloroethane	ND	0.5	ug/L	06/20/2000 07:39	
Tetrachloroethene	ND	0.5	ug/L	06/20/2000 07:39	
Dibromochloromethane	ND	0.5	ug/L	06/20/2000 07:39	
Chlorobenzene	ND	0.5	ug/L	06/20/2000 07:39	
Bromoform	ND	2.0	ug/L	06/20/2000 07:39	
1,1,2,2-Tetrachloroethane	ND	0.5	ug/L	06/20/2000 07:39	
1,3-Dichlorobenzene	ND	0.5	ug/L	06/20/2000 07:39	
1,4-Dichlorobenzene	ND	0.5	ug/L	06/20/2000 07:39	
1,2-Dichlorobenzene	ND	0.5	ug/L	06/20/2000 07:39	
Trichlorotrifluoroethane	ND	2.0	ug/L	06/20/2000 07:39	
Chloromethane	ND	1.0	ug/L	06/20/2000 07:39	
Bromomethane	ND	1.0	ug/L	06/20/2000 07:39	
Surrogate(s)					
1-Chloro-2-fluorobenzene	69.5	50-150	%	06/20/2000 07:39	

1220 Quarry Lane * Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

Printed on: 06/21/2000 09:57

Page 3 of 4

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8010

Attn: Dave Allen

Prep Method: 5030

Batch QC Report

Halogenated Volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD)		Water		QC Batch # 2000/06/20-01.25	
LCS:	2000/06/20-01.25-002	Extracted:	06/20/2000 08:31	Analyzed	06/20/2000 08:31
LCSD:	2000/06/20-01.25-003	Extracted:	06/20/2000 09:23	Analyzed	06/20/2000 09:23

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]			RPD		Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD [%]	Recovery	RPD	LCS	LCSD		
1,1-Dichloroethene	17.7	19.8	20.0	20.0	88.5	99.0	11.2	50-140	20				
Trichloroethene	18.6	19.3	20.0	20.0	93.0	96.5	3.7	50-150	20				
Chlorobenzene	20.0	19.6	20.0	20.0	100.0	98.0	2.0	50-150	20				
Surrogate(s)													
1-Chloro-2-fluorobenzene	18.5	17.3	20	20	92.5	86.5		50-150					

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8270A

Attn.: Dave Allen

Prep Method: 3510/8270A

Semi-volatile Organic Compounds

Sample ID: OIL WELL	Lab Sample ID: 2000-06-0335-001
Project: 3656 162 nd Ave	Received: 06/15/2000 18:34
Sampled: 06/13/2000	Extracted: 06/19/2000 13:19
Matrix: Water	QC-Batch: 2000/06/19-01.11

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Phenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Bis(2-chloroethyl)ether	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2-Chlorophenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
1,3-Dichlorobenzene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
1,4-Dichlorobenzene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Benzyl alcohol	ND	5.0	ug/L	1.00	06/20/2000 19:20	
1,2-Dichlorobenzene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2-Methylphenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Bis(2-chloroisopropyl) ether	ND	2.0	ug/L	1.00	06/20/2000 19:20	
4-Methylphenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
N-Nitroso-di-n-propylamine	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Hexachloroethane	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Nitrobenzene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Isophorone	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2-Nitrophenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2,4-Dimethylphenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Bis(2-chloroethoxy) methane	ND	5.0	ug/L	1.00	06/20/2000 19:20	
2,4-Dichlorophenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
1,2,4-Trichlorobenzene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Naphthalene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
4-Chloroaniline	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Hexachlorobutadiene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
4-Chloro-3-methylphenol	ND	5.0	ug/L	1.00	06/20/2000 19:20	
2-Methylnaphthalene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Hexachlorocyclopentadiene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2,4,6-Trichlorophenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2,4,5-Trichlorophenol	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2-Chloronaphthalene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2-Nitroaniline	ND	10	ug/L	1.00	06/20/2000 19:20	
Dimethyl phthalate	ND	5.0	ug/L	1.00	06/20/2000 19:20	
Acenaphthylene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
3-Nitroaniline	ND	10	ug/L	1.00	06/20/2000 19:20	
Acenaphthene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2,4-Dinitrophenol	ND	10	ug/L	1.00	06/20/2000 19:20	
4-Nitrophenol	ND	10	ug/L	1.00	06/20/2000 19:20	

1220 Quarry Lane * Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8270A

Attn.: Dave Allen

Prep Method: 3510/8270A

Semi-volatile Organic Compounds

Sample ID: OIL WELL	Lab Sample ID: 2000-06-0335-001
Project: 3656 162 nd Ave	Received: 06/15/2000 18:34
Sampled: 06/13/2000	Extracted: 06/19/2000 13:19
Matrix: Water	QC-Batch: 2000/06/19-01.11

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Dibenzofuran	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2,4-Dinitrotoluene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
2,6-Dinitrotoluene	ND	5.0	ug/L	1.00	06/20/2000 19:20	
Diethyl phthalate	ND	5.0	ug/L	1.00	06/20/2000 19:20	
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Fluorene	ND	5.0	ug/L	1.00	06/20/2000 19:20	
4-Nitroaniline	ND	10	ug/L	1.00	06/20/2000 19:20	
2-Methyl-4,6-dinitrophenol	ND	10	ug/L	1.00	06/20/2000 19:20	
N-Nitrosodiphenylamine	ND	2.0	ug/L	1.00	06/20/2000 19:20	
4-Bromophenyl phenyl ether	ND	5.0	ug/L	1.00	06/20/2000 19:20	
Hexachlorobenzene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Pentachlorophenol	ND	10	ug/L	1.00	06/20/2000 19:20	
Phenanthrene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Anthracene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Di-n-butyl phthalate	ND	5.0	ug/L	1.00	06/20/2000 19:20	
Fluoranthene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Pyrene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Butyl benzyl phthalate	ND	5.0	ug/L	1.00	06/20/2000 19:20	
3,3-Dichlorobenzidine	ND	5.0	ug/L	1.00	06/20/2000 19:20	
Benzo(a)anthracene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
bis(2-Ethylhexyl) phthalate	ND	5.0	ug/L	1.00	06/20/2000 19:20	
Chrysene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Di-n-octyl phthalate	ND	5.0	ug/L	1.00	06/20/2000 19:20	
Benzo(b)fluoranthene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Benzo(k)fluoranthene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Benzo(a)pyrene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Indeno(1,2,3-c,d)pyrene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Dibenzo(a,h)anthracene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Benzo(g,h,i)perylene	ND	2.0	ug/L	1.00	06/20/2000 19:20	
Benzoic acid	ND	10	ug/L	1.00	06/20/2000 19:20	
Surrogate(s)						
Nitrobenzene-d5	40.8	35-114	%	1.00	06/20/2000 19:20	
2-Fluorobiphenyl	45.3	43-116	%	1.00	06/20/2000 19:20	
p-Terphenyl-d14	65.9	33-141	%	1.00	06/20/2000 19:20	
Phenol-d5	15.8	10-110	%	1.00	06/20/2000 19:20	

1220 Quarry Lane * Pleasanton, CA 94566-4756

Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8270A

Attn.: Dave Allen

Prep Method: 3510/8270A

Semi-volatile Organic Compounds

Sample ID: OIL WELL	Lab Sample ID: 2000-06-0335-001
Project: 3656 162 nd Ave	Received: 06/15/2000 18:34
Sampled: 06/13/2000	Extracted: 06/19/2000 13:19
Matrix: Water	QC-Batch: 2000/06/19-01.11

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
<i>Surrogate(s)</i>						
2-Fluorophenol	23.5	25-100	%	1.00	06/20/2000 19:20	sl
2,4,6-Tribromophenol	60.0	10-123	%	1.00	06/20/2000 19:20	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.
Attn.: Dave Allen

Test Method: 8270A
Prep Method: 3510/8270A

Batch QC Report Semi-volatile Organic Compounds

Method Blank	Water	QC Batch # 2000/06/19-01.11
MB: 2000/06/19-01.11-001		Date Extracted: 06/19/2000 13:19

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Phenol	ND	2.0	ug/L	06/20/2000 13:46	
Bis(2-chloroethyl)ether	ND	2.0	ug/L	06/20/2000 13:46	
2-Chlorophenol	ND	2.0	ug/L	06/20/2000 13:46	
1,3-Dichlorobenzene	ND	2.0	ug/L	06/20/2000 13:46	
1,4-Dichlorobenzene	ND	2.0	ug/L	06/20/2000 13:46	
Benzyl alcohol	ND	5.0	ug/L	06/20/2000 13:46	
1,2-Dichlorobenzene	ND	2.0	ug/L	06/20/2000 13:46	
2-Methylphenol	ND	2.0	ug/L	06/20/2000 13:46	
Bis(2-chloroisopropyl) ether	ND	2.0	ug/L	06/20/2000 13:46	
4-Methylphenol	ND	2.0	ug/L	06/20/2000 13:46	
N-Nitroso-di-n-propylamine	ND	2.0	ug/L	06/20/2000 13:46	
Hexachloroethane	ND	2.0	ug/L	06/20/2000 13:46	
Nitrobenzene	ND	2.0	ug/L	06/20/2000 13:46	
Isophorone	ND	2.0	ug/L	06/20/2000 13:46	
2-Nitrophenol	ND	2.0	ug/L	06/20/2000 13:46	
2,4-Dimethylphenol	ND	2.0	ug/L	06/20/2000 13:46	
Bis(2-chloroethoxy) methane	ND	5.0	ug/L	06/20/2000 13:46	
2,4-Dichlorophenol	ND	2.0	ug/L	06/20/2000 13:46	
1,2,4-Trichlorobenzene	ND	2.0	ug/L	06/20/2000 13:46	
Naphthalene	ND	2.0	ug/L	06/20/2000 13:46	
4-Chloroaniline	ND	2.0	ug/L	06/20/2000 13:46	
Hexachlorobutadiene	ND	2.0	ug/L	06/20/2000 13:46	
4-Chloro-3-methylphenol	ND	5.0	ug/L	06/20/2000 13:46	
2-Methylnaphthalene	ND	2.0	ug/L	06/20/2000 13:46	
Hexachlorocyclopentadiene	ND	2.0	ug/L	06/20/2000 13:46	
2,4,6-Trichlorophenol	ND	2.0	ug/L	06/20/2000 13:46	
2,4,5-Trichlorophenol	ND	2.0	ug/L	06/20/2000 13:46	
2-Chloronaphthalene	ND	2.0	ug/L	06/20/2000 13:46	
2-Nitroaniline	ND	10	ug/L	06/20/2000 13:46	
Dimethyl phthalate	ND	5.0	ug/L	06/20/2000 13:46	
Acenaphthylene	ND	2.0	ug/L	06/20/2000 13:46	
3-Nitroaniline	ND	10	ug/L	06/20/2000 13:46	
Acenaphthene	ND	2.0	ug/L	06/20/2000 13:46	
2,4-Dinitrophenol	ND	10	ug/L	06/20/2000 13:46	
4-Nitrophenol	ND	10	ug/L	06/20/2000 13:46	
Dibenzofuran	ND	2.0	ug/L	06/20/2000 13:46	
2,4-Dinitrotoluene	ND	2.0	ug/L	06/20/2000 13:46	
2,6-Dinitrotoluene	ND	5.0	ug/L	06/20/2000 13:46	
Diethyl phthalate	ND	5.0	ug/L	06/20/2000 13:46	
4-Chlorophenyl phenyl ether	ND	2.0	ug/L	06/20/2000 13:46	

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-06-0335

To: Aqua Science Engineers, Inc.

Test Method: 8270A

Attn: Dave Allen

Prep Method: 3510/8270A

Batch QC Report

Semi-volatile Organic Compounds

Laboratory Control Spike (LCS/LCSD)		Water	QC Batch # 2000/06/19-01.11	
LCS:	2000/06/19-01.11-002	Extracted: 06/19/2000 13:19	Analyzed	06/20/2000 14:31
LCSD:	2000/06/19-01.11-003	Extracted: 06/19/2000 13:19	Analyzed	06/20/2000 15:24

Compound	Conc. [ug/L]		Exp. Conc. [ug/L]		Recovery [%]			RPD		Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	RPD [%]	Recovery	RPD	LCS	LCSD		
Phenol	16.2	17.4	60.0	60.0	27.0	29.0	7.1	12-89	35				
2-Chlorophenol	33.6	35.0	60.0	60.0	56.0	58.3	4.0	23-134	25				
1,4-Dichlorobenzene	18.3	17.0	30.0	30.0	61.0	56.7	7.3	36-97	30				
N-Nitroso-di-n-propylamin	20.3	21.2	30.0	30.0	67.7	70.7	4.3	10-130	34				
1,2,4-Trichlorobenzene	19.7	18.5	30.0	30.0	65.7	61.7	6.3	44-142	35				
4-Chloro-3-methylphenol	44.7	46.2	60.0	60.0	74.5	77.0	3.3	22-147	31				
Acenaphthene	22.2	22.6	30.0	30.0	74.0	75.3	1.7	56-118	30				
4-Nitrophenol	17.1	19.0	60.0	60.0	28.5	31.7	10.6	1-51	35				
2,4-Dinitrotoluene	22.6	23.5	30.0	30.0	75.3	78.3	3.9	39-139	35				
Pentachlorophenol	38.2	40.4	60.0	60.0	63.7	67.3	5.5	45-125	35				
Pyrene	23.6	24.2	30.0	30.0	78.7	80.7	2.5	52-115	35				
Surrogate(s)													
Nitrobenzene-d5	15.0	15.1	25	25	60.0	60.4		35-114					
2-Fluorobiphenyl	14.7	14.8	25	25	58.8	59.2		43-116					
p-Terphenyl-d14	18.1	18.0	25	25	72.4	72.0		33-141					
Phenol-d5	11.6	12.1	50	50	23.2	24.2		10-110					
2-Fluorophenol	15.9	16.8	50	50	31.8	33.6		25-100					
2,4,6-Tribromophenol	34.2	34.5	50	50	68.4	69.0		10-123					

1220 Quarry Lane * Pleasanton, CA 94566-4756
Telephone: (925) 484-1919 * Facsimile: (925) 484-1096

To: Aqua Science Engineers, Inc.

Attn: Dave Allen

Test Method: 8270A

Prep Method: 3510/8270A

Legend & Notes

Semi-volatile Organic Compounds

Analyte Flags

sl

Surrogate recoveries were lower than QC limit due to matrix interference, confirmed by reanalysis.

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

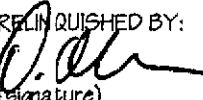
SAMPLER (SIGNATURE)  (PHONE NO.) 820-9391

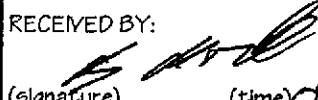
PROJECT NAME 162nd Avenue
 ADDRESS 1619 162nd Ave

JOB NO. 3656
 DATE 6/14/00

ANALYSIS REQUEST
 SPECIAL INSTRUCTIONS:

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 5030/8015-8020)	TPH-GASOLINE (EPA 5030/8015)	TPH-DIESEL / Motor oil (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)	CAM17 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	
OIL WELL	6/13		Water	10	X		X	X			X	X										

RELINQUISHED BY:  (signature) (time) 4:40

RECEIVED BY:  (signature) (time) 4:40

RELINQUISHED BY: (signature) (time)

RECEIVED BY LABORATORY: (signature) (time)

COMMENTS: STANDARD

D. McE (printed name) (date) 6/15

B. Moran (printed name) (date) 6-15-00

(printed name) (date)

(printed name) (date)

T.A.T.

Company- ASE, Inc.

Company- 

Company-

Company-