



July 19, 2000

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

00 JUL 20 PM 4:04
PRODUCTION

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

Dear Mr. Seery:

Here is the information you recently requested in a telephone conversation with Ian Reed of Aqua Science Engineers (ASE).

On March 14, 2000 ASE collected a sample of the oil floating on top of the water within the irrigation well at the subject site. Prior to collecting the sample, ASE attempted to determine the thickness (volume) of the oil in the well using an oil/water interface probe. However, due to the consistency of the oil (extremely dense and viscous), this could not be performed. ASE however was able to determine the **total depth of the well at 54.62 feet below ground surface**, see the attached Well Sampling Field Log in Appendix A.

A sample of the well oil was collected into several new 40ml VOA vials. The samples were analyzed by Chromalab of Pleasanton, CA (ELAP #1094) for PCBs by EPA Method 8080A, and by North State Environmental of South San Francisco (ELAP #1753) for purgeable halocarbons by EPA Method 8260. The oil sample contained 280 ppm MTBE and 53 ppm naphthalene. **No PCBs were identified in the oil sample.** The analytical report is attached in Appendix B.

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

Cc: Yuen and In Lee, Client

APPENDIX A

Well Sampling Field Log



WELL SAMPLING FIELD LOG

Project Name and Address: Lee, 162nd Ave. San Leandro
 Job #: 3656 Date of sampling: [REDACTED]
 Well Name: Oil well Sampled by: DA
 Total depth of well (feet): 54.62 Well diameter (inches): 10
 Depth to water before sampling (feet): UNKNOWN
 Thickness of floating product if any: UNKNOWN
 Depth of well casing in water (feet): UNKNOWN
 Number of gallons per well casing volume (gallons): NOT DETERMINED
 Number of well casing volumes to be removed: NOT DETERMINED
 Req'd volume of groundwater to be purged before sampling (gallons): N/A
 Equipment used to purge the well: NA
 Time Evacuation Began: NA Time Evacuation Finished: NA
 Approximate volume of groundwater purged: NONE
 Did the well go dry?: NO After how many gallons: NA
 Time samples were collected: 11:10
 Depth to water at time of sampling: UNKNOWN
 Percent recovery at time of sampling: NA
 Samples collected with: New Disposable Brewer
 Sample color: Black / gray Odor: Hydrocarbon
 Description of sediment in sample: UNKNOWN

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
<u>WELL OIL</u>	<u>4</u>	<u>40 ml VOAS</u>	<u>NO</u>	<u>YES</u>	<u>PCBS + SOLO</u>
-----	-----	-----	-----	-----	-----
-----	-----	-----	-----	-----	-----
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APPENDIX B

Certified Analytical Report For Oil Sample

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-03-0270

Date: March 22, 2000

Aqua Science Engineers, Inc.

208 West El Pintado Road
Danville, CA 94526

Attn.: Mr. Dave Allen

Project: 3630
162nd Avenue

Site: 1619-1621 162nd Ave.,
San Leandro

Dear Mr. Allen,

Attached is our report for your samples received on Wednesday March 15, 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 April 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

PCBs

Aqua Science Engineers, Inc.	☒ 208 West El Pintado Road Danville, CA 94526
Attn: Dave Allen	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3630	Project: 162nd Avenue
Site: 1619-1621 162nd Ave., San Leandro	

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
Well Oil	Oil	03/14/2000 11:10	1

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-03-0270

To: Aqua Science Engineers, Inc.

Test Method: 8080A

Attn.: Dave Allen

Prep Method: 8080 modified

PCBs

Sample ID: Well Oil	Lab Sample ID: 2000-03-0270-001
Project: 3630 162nd Avenue	Received: 03/15/2000 14:16
Site: 1619-1621 162nd Ave., San Leandro	Extracted: 03/20/2000 09:51
Sampled: 03/14/2000 11:10	QC-Batch: 2000/03/20-01.14
Matrix: Oil	

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Aroclor 1016	ND	0.50	mg/Kg	1.00	03/21/2000 00:53	
Aroclor 1221	ND	0.50	mg/Kg	1.00	03/21/2000 00:53	
Aroclor 1232	ND	0.50	mg/Kg	1.00	03/21/2000 00:53	
Aroclor 1242	ND	0.50	mg/Kg	1.00	03/21/2000 00:53	
Aroclor 1248	ND	0.50	mg/Kg	1.00	03/21/2000 00:53	
Aroclor 1254	ND	0.50	mg/Kg	1.00	03/21/2000 00:53	
Aroclor 1260	ND	0.50	mg/Kg	1.00	03/21/2000 00:53	
Surrogate(s)						
2,4,5,6-Tetrachloro-m-xylene	80.9	65-135	%	1.00	03/21/2000 00:53	
Decachlorobiphenyl	142.3	65-135	%	1.00	03/21/2000 00:53	s

1220 Quarry Lane * Pleasanton, CA 94566-4756

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

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-03-0270

To: Aqua Science Engineers, Inc.

Test Method: 8080A

Attn.: Dave Allen

Prep Method: 8080 modified

Batch QC Report

PCBs

Method Blank	Oil	QC Batch # 2000/03/20-01.14
MB: 2000/03/20-01.14-001		Date Extracted: 03/20/2000 09:51

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Aroclor 1016	ND	0.5	mg/Kg	03/20/2000 23:06	
Aroclor 1221	ND	0.5	mg/Kg	03/20/2000 23:06	
Aroclor 1232	ND	0.5	mg/Kg	03/20/2000 23:06	
Aroclor 1242	ND	0.5	mg/Kg	03/20/2000 23:06	
Aroclor 1248	ND	0.5	mg/Kg	03/20/2000 23:06	
Aroclor 1254	ND	0.5	mg/Kg	03/20/2000 23:06	
Aroclor 1260	ND	0.5	mg/Kg	03/20/2000 23:06	
Surrogate(s)					
2,4,5,6-Tetrachloro-m-xylene	100.8	65-135	%	03/20/2000 23:06	
Decachlorobiphenyl	95.0	65-135	%	03/20/2000 23:06	

1220 Quarry Lane * Pleasanton, CA 94566-4756

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

CHROMALAB, INC.

Environmental Services (SDB)

Submission #: 2000-03-0270

To: Aqua Science Engineers, Inc.

Test Method: 8080A

Attn: Dave Allen

Prep Method: 8080 modified

Batch QC Report

PCBs

Laboratory Control Spike (LCS/LCSD)	Oil	QC Batch # 2000/03/20-01.14
LCS: 2000/03/20-01.14-002	Extracted: 03/20/2000 09:51	Analyzed 03/21/2000 17:17
LCSD: 2000/03/20-01.14-003	Extracted: 03/20/2000 09:51	Analyzed 03/21/2000 00:18

Compound	Conc. [mg/Kg]		Exp. Conc. [mg/Kg]		Recovery [%]		RPD [%]	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD		Recovery	RPD	LCS	LCSD
Aroclor 1016	2.67	2.62	2.50	2.50	106.8	104.8	1.9	65-135	30		
Aroclor 1260	2.59	2.55	2.50	2.50	103.6	102.0	1.6	65-135	30		
Surrogate(s)											
2,4,5,6-Tetrachloro-m-xyI	35.5	50.2	50	50	71.0	100.4		65-135			
Decachlorobiphenyl	36.6	57.7	50	50	73.2	115.4		65-135			

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: 8080A

Prep Method: 8080 modified

Legend & Notes

PCBs

Analyte Flags

s

One surrogate recovery out of control, but second surrogate within QC limits confirms test performance.



North State Environmental Laboratory

CA ELAP# 1753

90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560

C E R T I F I C A T E O F A N A L Y S I S

Job Number: 00-0385
Client : Chromalab
Project : 162nd Ave/3630

Date Sampled : 03/21/2000
Date Analyzed: 03/21/2000
Date Reported: 03/21/2000

Volatile Organics by GC/MS Method 8260

Laboratory Number	00-0385-01
Client ID	WELL OIL
Matrix	OIL
Analyte	ug/Kg
Bromochloromethane	ND<100000
Dichlorodifluoromethane	ND<100000
Chloromethane	ND<100000
Vinyl Chloride	ND<20000
Bromomethane	ND<100000
Chloroethane	ND<100000
Trichlorofluoromethane	ND<20000
1,1-Dichloroethene	ND<20000
Acetone	ND<1000000
Trichlorotrifluoroethane	ND<20000
Methylene Chloride	ND<1000000
t-1,2-Dichloroethene	ND<20000
Methyl-t-butyl Ethane	ND<20000
1,1-Dichloroethane	ND<20000
2,2-Dichloropropane	ND<20000
cis-1,2-Dichloroethene	ND<20000
2-Butanone	ND<200000
Chloroform	ND<20000
1,1,1-Trichloroethane	ND<20000
Carbon Tetrachloride	ND<20000
1,1-Dichloropropene	ND<20000
Benzene	ND<20000
1,2-Dichloroethane	ND<20000
Trichloroethene	ND<20000
1,2-Dichloropropane	ND<20000
Dibromomethane	ND<20000
Bromodichloromethane	ND<20000
trans-1,3-Dichloropropene	ND<20000
4-Methyl-2-Pentanone	ND<200000
Toluene	ND<20000
cis-1,3-Dichloropropene	ND<20000
1,1,2-Trichloroethane	ND<20000
Tetrachloroethene	ND<20000
1,3-Dichloropropane	ND<20000
2-Hexanone	ND<200000
Dibromochloromethane	ND<20000



North State Environmental Laboratory

CA ELAP# 1753

90 South Spruce Avenue, Suite V • South San Francisco, CA 94080 • (650) 266-4563 • FAX (650) 266-4560

C E R T I F I C A T E O F A N A L Y S I S

Job Number: 00-0385
Client : Chromalab
Project : 162nd Ave/3630

Date Sampled : 03/21/2000
Date Analyzed: 03/21/2000
Date Reported: 03/21/2000

Volatile Organics by GC/MS Method 8260

Laboratory Number 00-0385-01
Client ID WELL OIL
Matrix OIL

Analyte	ug/Kg
1,2-Dibromoethane	ND<20000
Chlorobenzene	ND<20000
1,1,1,2-Tetrachloroethane	ND<20000
Ethylbenzene	ND<20000
m,p-Xylene	ND<20000
o-Xylene	ND<20000
Styrene	ND<20000
Bromoform	ND<20000
Isopropyl Benzene	ND<20000
Bromobenzene	ND<20000
1,1,2,2-Tetrachloroethane	ND<20000
n-Propyl Benzene	ND<20000
2-Chlorotoluene	ND<20000
4-Chlorotoluene	ND<20000
1,3,5-Trimethylbenzene	ND<20000
t-Butylbenzene	ND<20000
1,2,4-Trimethylbenzene	ND<20000
1,3-Dichlorobenzene	ND<20000
1,4-Dichlorobenzene	ND<20000
sec-Butylbenzene	ND<20000
1,2-Dichlorobenzene	ND<20000
p-Isopropyltoluene	ND<20000
Butylbenzene	ND<20000
1,2-Dibromo-3-Chloropropa	ND<20000
Naphthalene	23000
1,2,4-Trichlorobenzene	ND<20000
Hexachlorobutadiene	ND<20000
1,2,3-Trichlorobenzene	ND<20000
1,2,3-Trichloropropane	ND<20000
SUR-Dibromofluoromethane	95% Rec
SUR-Toluene d8	100% Rec
SUR-4-Bromofluorobenzene	102% Rec



C E R T I F I C A T E O F A N A L Y S I S

Job Number: 00-0385
Client : Chromalab
Project : 162nd Ave/3630

Date Sampled : 03/21/2000
Date Analyzed: 03/21/2000
Date Reported: 03/21/2000

Volatile Organics by GC/MS Method 8260
Quality Control/Quality Assurance Summary

Table with columns: Laboratory Number, Client ID, Matrix, Analyte, Results, MS/MSD Recovery, %Recoveries, RPD. Lists various chemical analytes and their corresponding results and recovery percentages.



C E R T I F I C A T E O F A N A L Y S I S

Job Number: 00-0385
Client : Chromalab
Project : 162nd Ave/3630

Date Sampled : 03/21/2000
Date Analyzed: 03/21/2000
Date Reported: 03/21/2000

Volatile Organics by GC/MS Method 8260
Quality Control/Quality Assurance Summary

Table with 4 columns: Laboratory Number, Client ID, Matrix, Analyte, Results, %Recoveries, MS/MSD, RPD. Lists various analytes like o-Xylene, Styrene, Bromoform, etc., with their respective results and recovery percentages.

Reviewed and Approved

John A. Murphy
Laboratory Director

From:
ChromaLab, Inc. (CL)
 1220 Quarry Lane
 Pleasanton, CA 94566-4756

To:
 North State Environmental Labs
 90 S. Spruce Street, Suite W
 So San Francisco, CA 94080

Project Manager: Vincent Vancil
 Phone: Ext:
 Fax: (925) 484-1096
 Email: vvancil@chromalab.com

Phone: (650) 266-4563
 Fax: (650) 266-4560
 Contact: John Murphy
 Phone: (650) 266-4582

CL Submission #: **2000-03-0270**
 CL PO #:

Project #: 3630
 Project Name: 162nd Avenue

Client Sample ID	CL#	Sampled	Matrix	Method	Due
Well Oil	001	03/14/2000 11:10	Oil		
Subcontract tests that are not listed.					03/22/2000 17:00

PLEASE INCLUDE QC WITH FAXED AND HARD-COPY RESULTS

PLEASE Run 8260 STD TOT
 Vincent
 3/16/00

RELINQUISHED BY: 1. Signature: <i>[Signature]</i> Time: 10:50 Printed Name: CRUISEBA Date: 03/15/00 Company:	RELINQUISHED BY: 2. Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company:	RELINQUISHED BY: 3. Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company:
RECEIVED BY: 1. Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company:	RECEIVED BY: 2. Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company:	RECEIVED BY: 3. Signature: _____ Time: _____ Printed Name: _____ Date: _____ Company:

2000-03-0270 50990

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) [Signature] (PHONE NO.) 820-9391

PROJECT NAME 162nd Avenue JOB NO. 3630
 ADDRESS 1619-1621 162nd Ave, San Leandro DATE 3-14-00

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 (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 (S) (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	
WELL OIL	3/14	11:10	CIL	1				X											X	

RELINQUISHED BY: [Signature] (signature) 0845 (time)

RECEIVED BY: [Signature] (signature) 0845 (time)

RELINQUISHED BY: [Signature] (signature) 1300 (time)

RECEIVED BY LABORATORY: [Signature] (signature) (time)

COMMENTS: Standard

D. Pike (printed name) 03/15/00 (date)

Tom Wright (printed name) 03/15/00 (date)

Tom Wright (printed name) 3/15/00 (date)

D. Harrington (printed name) 1300 (date)

T.A.T.

Company- ASE

Company- C/L

Company- C/L

Company- Chromalab 3/15/00