

September 19, 2000

# PROTECTION

00 SEP 20 PM 3: 59

Mr. Kelly Engineer 1791 Pine Street Concord, California 94520

RE: Groundwater Sampling Letter Report

3820 San Leandro Street, Oakland, California

ACC Project No. 00-6651-001.00

Dear Mr. Engineer:

ACC Environmental Consultants, Inc., (ACC) has prepared this letter report to document results of groundwater sampling at 3820 San Leandro Street, Oakland, California. The project objectives were to obtain groundwater samples from three onsite monitoring wells, analyze the water samples for constituents of concern, and report the findings.

On your behalf, ACC will forward a copy of this report to Mr. Barney Chan of the Alameda County Health Care Services Agency (ACHCSA) for review.

#### **BACKGROUND**

The site consists of a gasoline and diesel fueling station (Guy's Diesel) located at 3820 San Leandro Street in Oakland, California (Figure 1). In his letter dated June 12, 2000, Mr. Chan of the ACHCSA requested that groundwater monitoring and sampling be performed at the site, and that the groundwater samples be analyzed for total petroleum hydrocarbons as gasoline (TPHg) and diesel (TPHd), benzene, toluene, ethylbenzene and total xylenes (BTEX), and methyl tertiary butyl ether (MTBE). In addition, one groundwater sample was analyzed for all fuel oxygenates in accordance with regulations recently enacted by the Regional Water Quality Control Board (RWQCB).

#### FIELD PROCEDURES

#### **Groundwater Sampling**

ACC performed groundwater sampling at the site on August 10, 2000. The locations of the three monitoring wells are illustrated on Figure 2. Prior to groundwater sampling, the depth to the surface of the water table in each well was measured from the top of the well casing using an electronic water level meter. The water level measurements were recorded to the nearest 0.01 foot. The wells were constructed of 2-inch diameter polyvinyl chloride (PVC) with locked well caps, and appeared to be in good condition. The total depth of each of the wells was approximately 20 feet below ground surface (bgs), and the depth to groundwater was measured to be approximately 11 feet below the top of the well casing.

After water level measurements were collected, wells MW-1, MW-2 and MW-3 were purged by hand using a designated disposable polyethylene bailer for each well. The wells were considered to

Mr. Kelly Engineer September 19, 2000 Page 2

be purged when approximately four volumes were removed from each well. The removed purge water was stored onsite in a steel 55-gallon drum.

After the groundwater level had recovered to a minimum of approximately 80 percent of its static level, water samples were obtained using designated disposable polyethylene bailers. Three 40-milliliter VOA vials and one amber glass liter were filled to overflowing with the water collected from the three wells. The samples were preserved in a pre-chilled, insulated container and submitted to Chromalab, Inc. (Chromalab), a state-certified analytical laboratory, following chain of protocol.

#### **Analytical Results**

Groundwater samples from wells MW-1, MW-2 and MW-3 were submitted to Chromalab for analysis of TPHg, TPHd, BTEX, and MTBE. In addition, the samples from well MW-2 were analyzed for fuel oxygenates as MTBE, tert-butyl alcohol (TBA), di-isopropyl ether (DIPE), ethyl tert-butyl ether (ETBE), and tert-amyl methyl ether (TAME).

Analytical results from the groundwater samples are summarized in Tables 1 and 2. Copies of the analytical results and chain of custody record are attached.

TABLE 1 - GROUNDWATER SAMPLE ANALYTICAL RESULTS PETROLEUM HYDROCARBONS

Sample ID	TPHg (µg/L)	TPHd (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)
MW-1	760 <sup>g</sup>	270 <sup>edr</sup>	19	<0.50	< 0.50	< 0.50	110
MW-2	20,000 <sup>g</sup>	4,200 <sup>ndp</sup>	9,200	70	710	79	6,400
MW-3	1,000 <sup>g</sup>	1,800 <sup>rxlp</sup>	4.8	< 0.50	6.2	1.2	< 5.0

Notes:  $\mu g/L = micrograms per liter (approximately equivalent to parts per billion)$ 

<sup>&</sup>lt; Indicates the sample tested below the indicated laboratory reporting limit

g = hydrocarbon reported does not match the laboratory's gasoline standard

edr = hydrocarbon is in the early diesel range and does not match the laboratory's diesel standard

ndp = hydrocarbon reported does not match the laboratory diesel standard

Mr. Kelly Engineer September 19, 2000 Page 3

TABLE 2 - GROUNDWATER SAMPLE ANALYTICAL RESULTS FUEL OXYGENATES

Sample IID	TBA (µg/L)	MTBE (µg/L)	DIPE (μg/L)	ETBE (µg/L)	TAME (µg/L)
MW-2	<1,000	10,000	<2,000	<1,000	<1,000

Notes:  $\mu g/L = micrograms$  per liter (approximately equivalent to parts per billion) < Indicates the sample tested below the indicated laboratory reporting limit

#### DISCUSSION

This investigation was performed to determine if groundwater at the site has been impacted by a former release from the onsite USTs. The groundwater sample from well MW-2 reported the highest concentrations of petroleum hydrocarbons and related constituents, with 20,000 parts per (ppb) TPHg and 9,200 ppb benzene. TPHd was reported at a concentration of 4,200 ppb in the sample from well MW-2, and MTBE was reported at 10,000 ppb. Concentrations of constituents of concern were significantly less in wells MW-1 an MW-3, indicating that the release(s) may be localized in the vicinity of well MW-2. Low concentrations of BTEX constituents relative to the TPHg concentration suggest a recent release. No fuel oxygenates other than MTBE were detected above laboratory reporting limits.

ACC was not supplied with monitoring well elevation data, so the groundwater flow direction and gradient could not be determined. Due to the site location, the inferred groundwater flow direction is to the west, so well MW-2 would likely be the most downgradient monitoring well.

Mr. Kelly Engineer September 19, 2000 Page 4

#### **CONCLUSIONS**

Based on groundwater sample analytical results, ACC has made the following conclusions:

- Groundwater at the site has been impacted by a past release(s) of petroleum hydrocarbons as TPHg, TPHd, BTEX, and MTBE;
- The majority of impacted groundwater appears to be located in the vicinity of well MW-2; and
- No fuel oxygenates other than MTBE were detected above laboratory reporting limits.

If you have any questions regarding this report or the findings of the work, please contact me at (510) 638-8400, extension 109.

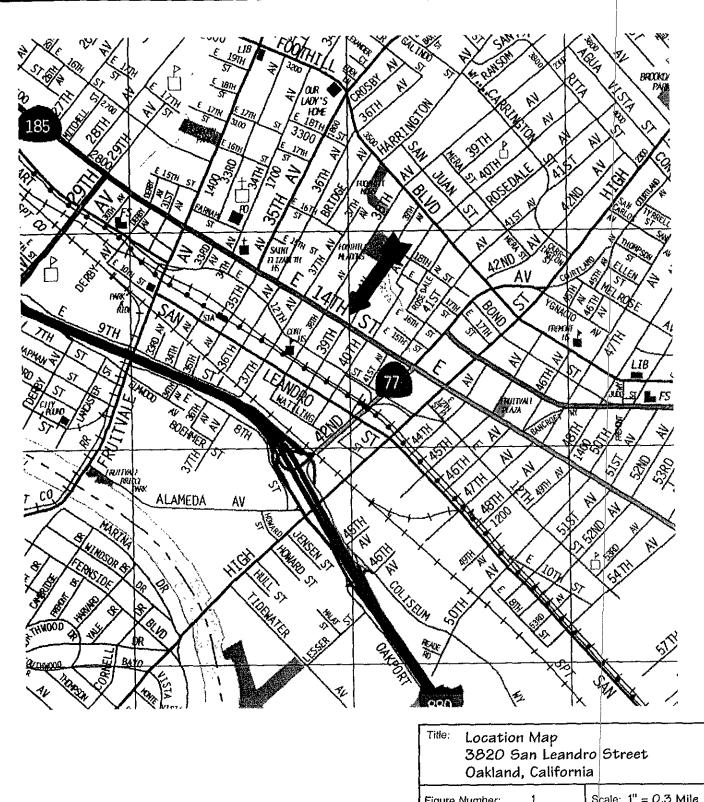
Sincerely,

David R. DeMent, RG

Environmental Division Manager

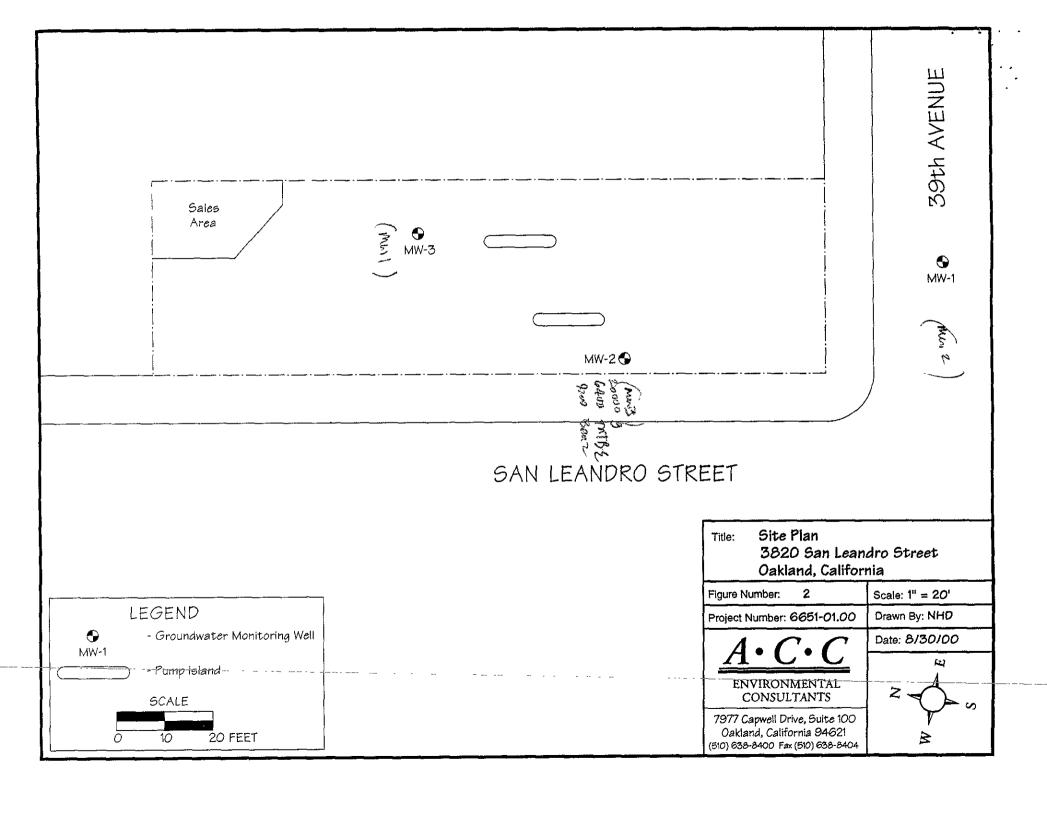
cc: Mr. Barney Chan, ACHCSA

Det



SOURCE: Thomas Guide CD ROM, 1997

Title: Location Map 3820 San Leand Oakland, Californ	i i
Figure Number: 1	Scale: 1" = 0.3 Mile
Project Number: 6651-01.00	Drawn By: NHD
$A \cdot C \cdot C$	Date 8/29/00
ENVIRONMENTAL CONSULTANTS	N W → E
7977 Capwell Drive, Suite 100 Oakland, California 94621 (510) 638-8400 Fax (510) 638-8404	s



**Environmental Services (SDB)** 

Submission #: 2000-08-0273

Date: August 22, 2000

ACC Environmental Consultants 7977 Capwell Drive, Suite 100 Oakland, CA 94621

Attn.: Mr. Neil Doran

Project: 00-6651-001.00

3820 San Leandro Blvd.

Dear Doran,

Attached is our report for your samples received on Friday August 11, 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 September 25, 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

Printed on: 08/22/2000 16:10

Environmental Services (SDB)

#### Gas/BTEX and MTBE

**ACC Environmental Consultants** 

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Attn: Neil Doran

Phone: (510) 638-8400 Fax: (510) 638-8404

Project #: 00-6651-001.00

Project: 3820 San Leandro Blvd.

#### **Samples Reported**

Sample ID	Matrix	Date Sampled	Lab#
· MVV-1	Water	08/10/2000 14:30	1
MW-2	Water	08/10/2000 15:00	2
MVV-3	Water	08/10/2000 15:30	3

Printed on: 08/22/2000 14:30

Submission #: 2000-08-0273

**Environmental Services (SDB)** 

To: **ACC Environmental Consultants**  Test Method:

8020

8015M

Attn.: Neil Doran

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

NW-1

Lab Sample ID: 2000-08-0273-001

Project:

00-6651-001.00

Received:

08/11/2000 18:25

3820 San Leandro Blvd.

Extracted:

08/18/2000 23:06

Sampled:

08/10/2000 14:30

QC-Batch:

2000/08/18-01.01

Matrix:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	760	50	ug/L	1.00	08/18/2000 23:06	g
Benzene	19	0.50	ug/L	1.00	08/18/2000 23:06	•
Toluene	ND	0.50	ug/L	1.00	08/18/2000 23:06	
Ethyl benzene	ND	0.50	ug/L	1.00	08/18/2000 23:06	
Xylene(s)	ND	0.50	ug/L	1.00	08/18/2000 23:06	
MTBE	110	5.0	ug/L	1.00	08/18/2000 23:06	
Surrogate(s)	}					
Trifluorotoluene	93.0	58-124	%	1.00	08/18/2000 23:06	
4-Bromofluorobenzene-FID	81.0	50-150	%	1.00	08/18/2000 23:06	

Submission #: 2000-08-0273

Environmental Services (SDB)

To: **ACC Environmental Consultants**  Test Method:

8020

8015M

Attn.: Neil Doran

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

MW-2

Lab Sample ID: 2000-08-0273-002

Project:

00-6651-001.00

Received:

08/11/2000 18:25

3820 San Leandro Blvd.

Extracted:

08/22/2000 13:25

Sampled:

08/10/2000 15:00

QC-Batch:

2000/08/22-01.01

Matrix:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	20000	5000	ug/L	100.00	08/22/2000 13:25	g
Benzene	9200	50	ug/L	100.00	08/22/2000 13:25	_
Toluene	70	50	ug/L	100.00	08/22/2000 13:25	
Ethyl benzene	710	50	ug/L	100.00	08/22/2000 13:25	
Xylene(s)	79	50	ug/L	100.00	08/22/2000 13:25	
MTBE	6400	500	ug/L	100.00	08/22/2000 13:25	
Surrogate(s)		}	}			
Trifluorotoluene	103.8	58-124	%	1.00	08/22/2000 13:25	
4-Bromofluorobenzene-FID	79 4	50-150	%	1.00	08/22/2000 13:25	

Printed on: 08/22/2000 14:30

Submission #: 2000-08-0273

**Environmental Services (SDB)** 

To: **ACC Environmental Consultants** 

Test Method:

8020

8015M

Attn.: Neil Doran

Prep Method:

5030

Gas/BTEX and MTBE

Sample ID:

MW-3

Lab Sample ID: 2000-08-0273-003

Project:

00-6651-001.00

Received:

08/11/2000 18:25

3820 San Leandro Blvd.

Extracted:

08/19/2000 00:16

Sampled:

08/10/2000 15:30

QC-Batch:

2000/08/18-01.01

Matrix:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	1000	50	ug/L	1.00	08/19/2000 00:16	g
Benzene	4.8	0.50	ug/L	1,00	08/19/2000 00:16	
Toluene	ND	0.50	ug/L	1.00	08/19/2000 00:16	
Ethyl benzene	6.2	0.50	ug/L	1.00	08/19/2000 00:16	
Xylene(s)	1.2	0.50	ug/L	1.00	08/19/2000 00:16	
MTBE	ND	5.0	ug/L	1.00	08/19/2000 00:16	
Surrogate(s)	ŀ					
Trifluorotoluene	107.5	58-124	%	1.00	08/19/2000 00:16	
4-Bromofluorobenzene-FID	78.1	50-150	%	1.00	08/19/2000 00:16	

Submission #: 2000-08-0273

**Environmental Services (SDB)** 

To: ACC Environmental Consultants

Test Method: 80°

8015M

8020

Attn.: Neil Doran

Prep Method:

5030

Batch QC Report
Gas/BTEX and MTBE

**Method Blank** 

Water

QC Batch # 2000/08/18-01.01

MB:

2000/08/18-01.01-001

Date Extracted: 08/18/2000 12:24

Compound	Result	Rep.Limit	Units Analyzed		Flag
Gasoline	ND	50	ug/L	08/18/2000 12:24	
Benzene	ND	0.5	ug/L	08/18/2000 12:24	
Toluene	ND	0.5	ug/L	08/18/2000 12:24	
Ethyl benzene	ND	0.5	ug/L	08/18/2000 12:24	
Xylene(s)	ND	0.5	ug/L	08/18/2000 12:24	
MTBE	ND	5.0	ug/L	08/18/2000 12:24	
Surrogate(s)					
Trifluorotoluene	92.6	58-124	%	08/18/2000 12:24	
4-Bromofluorobenzene-FID	88.6	50-150	%	08/18/2000 12:24	

Submission #: 2000-08-0273

**Environmental Services (SDB)** 

To: **ACC Environmental Consultants**  Test Method:

8015M

8020

Attn.: Neil Doran

Prep Method:

5030

#### **Batch QC Report** Gas/BTEX and MTBE

**Method Blank** 

Water

QC Batch # 2000/08/22-01.01

MB:

2000/08/22-01.01-001

Date Extracted: 08/22/2000 10:45

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	08/22/2000 10:45	
Benzene	ND	0.5	ug/L	08/22/2000 10:45	
Toluene	ND	0.5	ug/L	08/22/2000 10:45	
Ethyl benzene	ND	0.5	ug/L	08/22/2000 10:45	
Xylene(s)	ND	0.5	ug/L	08/22/2000 10:45	
MTBE	ND	5.0	ug/L	08/22/2000 10:45	
Surrogate(s)				}	
Trifluorotoluene	111.0	58-124	%	08/22/2000 10:45	
4-Bromofluorobenzene-FID	84.6	50-150	%	08/22/2000 10:45	

**Environmental Services (SDB)** 

To: **ACC Environmental Consultants**  Test Method: 8020

8015M

Submission #: 2000-08-0273

Attn: Neil Doran Prep Method:

5030

**Batch QC Report** 

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2000/08/18-01.01

LCS:

2000/08/18-01.01-002

Extracted: 08/18/2000 11:50

Analyzed

08/18/2000 11:50

LCSD:

2000/08/18-01.01-003

Extracted: 08/18/2000 12:59

Analyzed

08/18/2000 12:59

Compound	Conc.	Conc. [ug/L]		[ ug/L ]	Recov	ecovery [%] RPD		RPD Ctrl. Limits [%]		Flags	
_	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	544	520	500	500	108.8	104.0	4.5	75-125	20		
Benzene	81.8	80.8	100.0	100.0	81.8	80.8	1.2	77-123	20		}
Toluene	85.2	84.5	100.0	100.0	85.2	84.5	0.8	78-122	20		
Ethyl benzene	81.1	80.9	100.0	100.0	81.1	80.9	0.2	70-130	20		
Xylene(s)	244	244	300	300	81.3	81.3	0.0	75-125	20		
Surrogate(s)	<u> </u>										
Trifluorotoluene	412	415	500	500	82.4	83.0		58-124	]		
4-Bromofluorobenzene-FI	396	391	500	500	79.2	78.2		50-150	į į		
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Submission #: 2000-08-0273

### CHROMALAB, INC.

**Environmental Services (SDB)** 

To: ACC Environmental Consultants

Test Method:

8020

8015M

Attn: Neil Doran

Prep Method:

5030

#### **Batch QC Report**

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2000/08/22-01.01

LCS:

2000/08/22-01.01-002

Extracted: 08/22/2000 07:27

Analyzed

08/22/2000 07:27

LCSD: 2

2000/08/22-01.01-003

Extracted: 08/22/2000 08:02

Analyzed

08/22/2000 08:02

Compound	Conc.	[ ug/L ]	Exp.Conc.	[ ug/L ]	Recov	ery [%]	RPD	Ctrl. Limi	its [%]	Fla	gs
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	554	503	500	500	110.8	100.6	9.7	75-125	20		
Benzene	96.2	94.2	100.0	100.0	96.2	94.2	2.1	77-123	20	1	
Toluene	94.5	92.7	100.0	100.0	94.5	92.7	1.9	78-122	20	ļ	
Ethyl benzene	92.8	92.3	100.0	100.0	92.8	92.3	0.5	70-130	20	-	
Xylene(s)	273	271	300	300	91.0	90.3	0.8	75-125	20		
Surrogate(s)											
Trifluorotoluene	467	453	500	500	93.4	90.6		58-124			
4-Bromofluorobenzene-Fl	391	367	500	500	78.2	73.4		50-150			

Submission #: 2000-08-0273

**Environmental Services (SDB)** 

To: ACC Environmental Consultants

Test Method: 8015M

8020

Attn:Neil Doran

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

**Analyte Flags** 

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Printed on: 08/22/2000 14:30

Environmental Services (SDB)

#### Diesel

**ACC Environmental Consultants** 

Oakland, CA 94621

Attn: Neil Doran

Phone: (510) 638-8400 Fax: (510) 638-8404

Project #: 00-6651-001.00

Project: 3820 San Leandro Blvd.

#### **Samples Reported**

Sample ID	Matrix	Date Sampled	Lab#
MW-1	Water	08/10/2000 14:30	1
MW-2	Water	08/10/2000 15:00	2
MW-3	Water	08/10/2000 15:30	3

**Environmental Services (SDB)** 

To: **ACC Environmental Consultants** 

Test Method: 8015M

Attn.: Neil Doran

Prep Method:

3510/8015M

Submission #: 2000-08-0273

Diesel

Sample ID: MW-1

Lab Sample ID: 2000-08-0273-001

Project:

00-6651-001.00

Received:

08/11/2000 18:25

3820 San Leandro Blvd.

Extracted:

08/14/2000 17:11

Sampled:

08/10/2000 14:30

QC-Batch:

2000/08/14-07.10

Matrix:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	270	50	ug/L	1.00	08/15/2000 12:52	edr
Surrogate(s) o-Terphenyl	94.6	60-130	%	1.00	08/15/2000 12:52	

Submission #: 2000-08-0273

**Environmental Services (SDB)** 

**ACC Environmental Consultants** To:

Test Method:

8015M

Attn.: Neil Doran

Prep Method:

3510/8015M

Diesel

Sample ID:

MW-2

Lab Sample ID: 2000-08-0273-002

Project:

Received:

08/11/2000 18:25

00-6651-001.00

3820 San Leandro Blvd.

Extracted:

08/14/2000 17:11

Sampled:

08/10/2000 15:00

QC-Batch:

2000/08/14-07.10

Matrix:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	4200	50	ug/L	1.00	08/15/2000 13:27	ndp
Surrogate(s) o-Terphenyl	101.0	60-130	%	1.00	08/15/2000 13:27	

**Environmental Services (SDB)** 

To: **ACC Environmental Consultants** 

Attn.: Neil Doran

Test Method:

8015M

Submission #: 2000-08-0273

Prep Method:

3510/8015M

Diesel

Sample ID: MW-3

00-6651-001.00

3820 San Leandro Blvd.

Received:

Lab Sample ID: 2000-08-0273-003

08/11/2000 18:25

Extracted:

08/14/2000 17:11

08/10/2000 15:30

QC-Batch:

2000/08/14-07.10

Matrix:

Sampled:

Project:

Water

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1800	50	ug/L	1.00	08/15/2000 14:01	ndp
Surrogate(s) o-Terphenyl	98.7	60-130	%	1.00	08/15/2000 14:01	

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

Submission #: 2000-08-0273

### · CHROMALAB, INC.

**Environmental Services (SDB)** 

To: ACC Environmental Consultants

Attn.: Neil Doran

Test Method:

8015M

Prep Method:

3510/8015M

**Batch QC Report** 

Diesel

**Method Blank** 

Water

QC Batch # 2000/08/14-07.10

MB:

2000/08/14-07.10-001

Date Extracted: 08/14/2000 17:11

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	08/15/2000 12:18	
Surrogate(s) o-Terphenyl	96.0	60-130	%	08/15/2000 12:18	

**Environmental Services (SDB)** 

**ACC Environmental Consultants** 

Attn: Neil Doran

Test Method: 8015M

Prep Method: 3510/8015M

**Batch QC Report** 

Diesel

**Laboratory Control Spike (LCS/LCSD)** 

Water

QC Batch # 2000/08/14-07.10

Submission #: 2000-08-0273

LCS: LCSD:

2000/08/14-07.10-002 2000/08/14-07.10-003 Extracted: 08/14/2000 17:11 Extracted: 08/14/2000 17:11 Analyzed Analyzed

08/15/2000 14:29 08/15/2000 15:15

Compound	Conc.	[ ug/L ]	Exp.Conc.	[ ug/L ]	Recov	ery [%]	RPD	Ctrl. Limi	ts [%]	Flag	gs
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	878	1010	1250	1250	70.2	80.8	14.0	60-130	25		
Surrogate(s)											
o-Terphenyl	17.8	19.9	20.0	20.0	89.0	99.5		60-130			

**Environmental Services (SDB)** 

Test Method: 8015M

Prep Method: 3510/8015M

Submission #: 2000-08-0273

To: ACC Environmental Consultants

Attn:Neil Doran

#### Legend & Notes

Diesel

**Analyte Flags** 

edr

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

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

Printed on: 08/18/2000 13:18 Page 7 of 7

**Environmental Services (SDB)** 

#### Fuel Oxygenates by 8260B

**ACC Environmental Consultants** 

7977 Capwell Drive, Suite 100

Oakland, CA 94621

Attn: Neil Doran

Phone: (510) 638-8400 Fax: (510) 638-8404

Project #: 00-6651-001.00

Project: 3820 San Leandro Blvd.

#### **Samples Reported**

Sample ID	Matrix	Date Sampled	Lab#
MW-2	Water	08/10/2000 15:00	2

Printed on: 08/18/2000 11:34 Page 1 of 5

Environmental Services (SDB)

**ACC Environmental Consultants** To:

Test Method:

8260B

Submission #: 2000-08-0273

Attn.: Neil Doran

Prep Method:

8260B

Fuel Oxygenates by 8260B

Sample ID:

MW-2

Lab Sample ID: 2000-08-0273-002

Project:

Received:

08/11/2000 18:25

00-6651-001.00

3820 San Leandro Blvd.

Extracted:

08/17/2000 17:52

Sampled:

08/10/2000 15:00

QC-Batch:

2000/08/17-02.27

Matrix:

Water

Sample/Analysis Flag o (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
tert-Butyl alcohoi (TBA)	ND	1000	ug/L	200.00	08/17/2000 17:52	
Methyl tert-butyl ether (MTBE)	10000	1000	ug/L	200.00	08/17/2000 17:52	
Di-isopropyl Ether (DIPE)	ND	2000	ug/L	200.00	08/17/2000 17:52	
Ethyl tert-butyl ether (ETBE)	ND	1000	ug/L	200.00	08/17/2000 17:52	
tert-Amyl methyl ether (TAME)	ND	1000	ug/L	200.00	08/17/2000 17:52	
Surrogate(s) 1,2-Dichloroethane-d4	104.5	76-114	%	1.00	08/17/2000 17:52	

### CHROMALAB, INC. **Environmental Services (SDB)**

To: **ACC Environmental Consultants** 

Test Method: Prep Method:

8260B

8260B

#### **Batch QC Report** Fuel Oxygenates by 8260B

**Method Blank** Water

QC Batch # 2000/08/17-02.27

Submission #: 2000-08-0273

MB:

Attn.: Neil Doran

2000/08/17-02.27-001

Date Extracted: 08/17/2000 15:55

Compound	Result	Rep.Limit	Units	Analyzed	Flag
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	08/17/2000 15:55	
Methyl tert-butyl ether (MTBE)	ND	5.0	ug/L	08/17/2000 15:55	
Di-isopropyl Ether (DIPE)	ND	10.0	ug/L	08/17/2000 15:55	
Ethyl tert-butyl ether (ETBE)	ND	5.0	ug/L	08/17/2000 15:55	
tert-Amyl methyl ether (TAME)	ND	5.0	ug/L	08/17/2000 15:55	
Surrogate(s)	i				
1,2-Dichloroethane-d4	109.4	76-114	%	08/17/2000 15:55	

Printed on: 08/18/2000 11:34

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**Environmental Services (SDB)** 

**ACC Environmental Consultants** 

Attn: Neil Doran

To:

Test Method:

8260B

Submission #: 2000-08-0273

Prep Method:

8260B

#### **Batch QC Report**

Fuel Oxygenates by 8260B

Laboratory Control Spike (LCS/LCSD)

Water

QC Batch # 2000/08/17-02.27

LCS:

2000/08/17-02.27-002

Extracted: 08/17/2000 14:56

Analyzed 08/17/2000 14:56

LCSD:

2000/08/17-02.27-003

Extracted: 08/17/2000 15:25

Analyzed

08/17/2000 15:25

Compound	Conc.	[ ug/L ]	Exp.Conc.	[ ug/L ]	Recov	ery [%]	RPD	Ctrl. Limi	ts [%]	Flag	gs
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Methyl tert-butyl ether Surrogate(s)	53.2	52.8	50.0	50.0	106.4	105.6	0.8	65-165	20		
1,2-Dichloroethane-d4	514	496	500	500	102.8	99.2		76-114			

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Submission #: 2000-08-0273

**Environmental Services (SDB)** 

To: ACC Environmental Consultants

Attn:Neil Doran

Test Method:

8260B

Prep Method: 8260B

#### **Legend & Notes**

Fuel Oxygenates by 8260B

#### **Analysis Flags**

0

Reporting limits were raised due to high level of analyte present in the sample.

1220 Quarry Lane • Pleasanton, California 94566-4756

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C	ha	in	of	Cus	stody

Reference #:

(925) 484-1919 • Fax (925) 484-1096

Enviro	nmental Ser	· vices (SDB	) (DOHS 1:	094)		(92	5) 484	1-1919	9 • Fa	ıx (9)	25) 48	34-109	96			DAT	= <u>8</u>	11/0	20_		PAGE _		(	or	
PROJ MGR <u>NE</u> COMPANY <u>ACC</u> ADDRESS 7977  Ouklo	Envir Capu	onmer sell I	orive 521	HONE NO.)	TPH-(EPA 8015,8020)  S Gas w/-8 BTEX-SMTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesei (EPA 8015M)	8015M) 0. □ Other	FURGEABLE HALOCARBONS, (HVOCs) (EPA 8010)	organics A 8260)	ILES	TOTAL OIL AND GREASE (SM 5520 B+F, E+F)		6	18270 18310		LS: Vi, Zn	TALS 470/7471)	Q	stl.C)	t Chronium hold time for H20)				NUMBER OF CONTAINERS
HOL DO	~~ Date	5 Time	76 • 6 \$2 • 67 F6 6 •	PRESERV.	TPH-(EPA 80 8 Gas w/-8	PURGEABLI BTEX (EP	TPH-Diesei (	TEPH (EPA 8015M)	PURGEABLE (HVOCs) (E	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL , (SM 5520 B	Fuel Oxygenates	() PESTICIDES(EPA 8080) () PCB'S (ERA 8080)	PNA's by 🗅 8270	D Spec. Cond.	LUFT METALS Cd. Cr. Pb. Ni.	CAM 17 METALS (EPA 6010/7470/74	TOTAL LEAD	UWET. (STLC) OTCLP	O Hexavalent Chronium O pH (24 hr hold time fo				NUMBER OF
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MW-3	8/10/00	1530	H20	Herlad	Χ		Χ																		3
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leport: 🛘 Routine 🗘 Le	vel 2 🛮 Leve	13 🛮 Level	4 🛘 Electro	nic Report	•		(SIGN/	ATURE)	<del></del>	<del></del> <del></del>	10	TIME	(SIG	HATURE	}			(TI	ME) (	SIGNATU	RE)		····		(TILLE)
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