

PROTECTION

98 DEC 10 PM 3: 56

December 07, 1998

Mr. Scott Seery, CHMM
Hazardous Materials Specialist
Alameda County Health Care Services
Hazardous Materials Division
1131 Harbor Bay Parkway, 2nd Floor
Oakland, CA 94502

RE: Soil investigation around former underground tank location at Oliver Trust Farms, 28905 Hesperian Boulevard, Hayward, CA.

Dear Mr. Seery;

 ${\rm H_2OGEOL}$  is submitting this report for soil investigation around the former underground tank location at Oliver Trust Farms, 28905 Hesperian Boulevard, Hayward, California (Figure 1) on behalf of DECON Environmental Services, Inc. and Oliver Trust.

Soil and groundwater sampling occurred on November 13, 1998 at the three locations (B5R, B6, and B7) shown in Figure 2. Soil and groundwater samples were collected following the procedures outlined in the August 28, 1998 workplan and in the November 10th and 12th revisions. Borehole lithologic logs are included in Attachment A. Groundwater sampling activities are documented on Field Data Sheets contained in Attachment B. As per the above referenced documents, soil and groundwater samples were delivered under chain-of-custody documentation to Chromalab, Inc. (certification number is 1094) of Pleasanton, California, for analysis by U.S. EPA Method 8015M/8020 for TPH-G and BTEX; U.S. EPA Method 8260 for MTBE; and U.S. EPA Method 160.1 for total dissolved solids (groundwater only). The Chromalab, Inc. Laboratory analytical reports are included in Attachment C and the results are summarized in Table 1.

Augerhole B5R was located outside the building along the wall adjacent to the former underground tank location. Samples from augerhole B5R were the only samples collected that reported positive for petroleum hydrocarbon compounds (Table 1). Soil from augerhole B5R contained 1.4 mg/Kg TPH-gasoline, 0.0068 mg/Kg benzene, and 1.2 mg/Kg MTBE. The sample from 10 feet was reported as containing 0.022 mg/Kg MTBE. Augerholes B6 and B7 are across the access road and were reported as "N.D." for all analyzed petroleum hydrocarbon compounds (Table 1).

Mr. Scott Seery December 07, 1998 Page 2

Groundwater collected from the three augerholes represents three distinct situations. Groundwater was first encountered in augerhole B5R at a depth of 3.8 feet, in augerhole B6 at a depth of 6.3 feet, and in augerhole B7 at a depth of 3.75 feet. Augerhole B5R and B7 first encountered groundwater in a shallow clayey sandy silt. At B5R the yield to the augerhole was substantial and at B7 the yield was very minimal. The first encountered ground at B5R is thought to be in direct communication with the tank removal excavation and was reported as containing 7,800 mg/L total dissolved solids. Groundwater from augerhole B5R was reported to contain: TPH-gasoline, 1.5 mg/L; benzene, 0.130 mg/L; toluene, 0.056 mg/L; ethylbenzene, 0.029 mg/L; total xylene isomers, 0.095 mg/L; and MTBE 6.5 mg/L.

The first groundwater encountered at augerhole B6 was at the depth at which a decomposed wood was encountered. The yield of groundwater to the augerhole was minimal. The second encountered groundwater was at a depth of 11.55 feet and was under confined conditions, rising to a depth of 6.8 feet in a short lapse of time. The concentration of total dissolved solids was reported as 49,000 mg/L. Petroleum hydrocarbon constituents were not reported from augerhole B6 groundwater.

Augerhole B7 could not be advanced deeper than 10.5 feet and was terminated in a very sticky clay. Additional groundwater inflow was also encountered at about this depth. The total dissolved solids reported for the water collected from augerhole B7 was 21,000 mg/L, possibly representing a mix of the two observed water yielding intervals. Petroleum hydrocarbon constituents were not reported from augerhole B7 groundwater.

Please do not hesitate to call me at (925) 373-9211 should you have

ARY D. LOWE

CERTIFIED

any questions.

Sincerely,

Gary D. Lowe, R.G., C.E.G., C.HG.

Principal, Hydrogeologist

xc: Mr. Ray Maiden, DECON Environmental Services, Inc.

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GARY D. LOWE

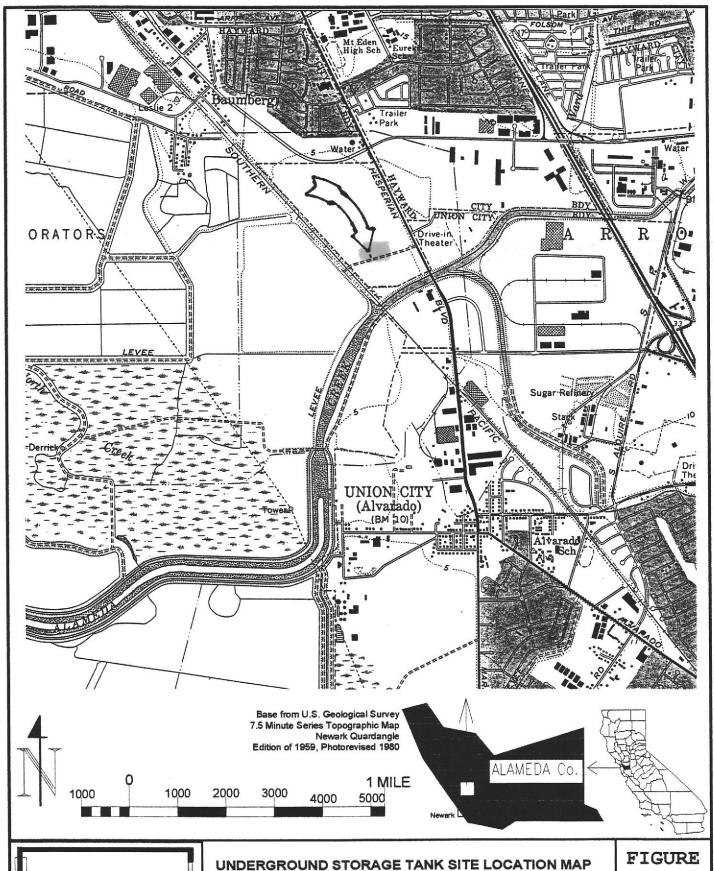
No. 127

CERTIFIED HYDROGEOLOGIST

# TABLE 1 SOIL AND GROUNDWATER ANALYTICAL RESULTS OLIVER TRUST FARMS 28905 HESPERIAN BOULEVARD HAYWARD, CALIFORNIA

(soil analyte concentrations in micrograms per kilogram) (water analyte concentrations in milligrams per liter) (water Total Dissolved Solids in milligrams per liter)

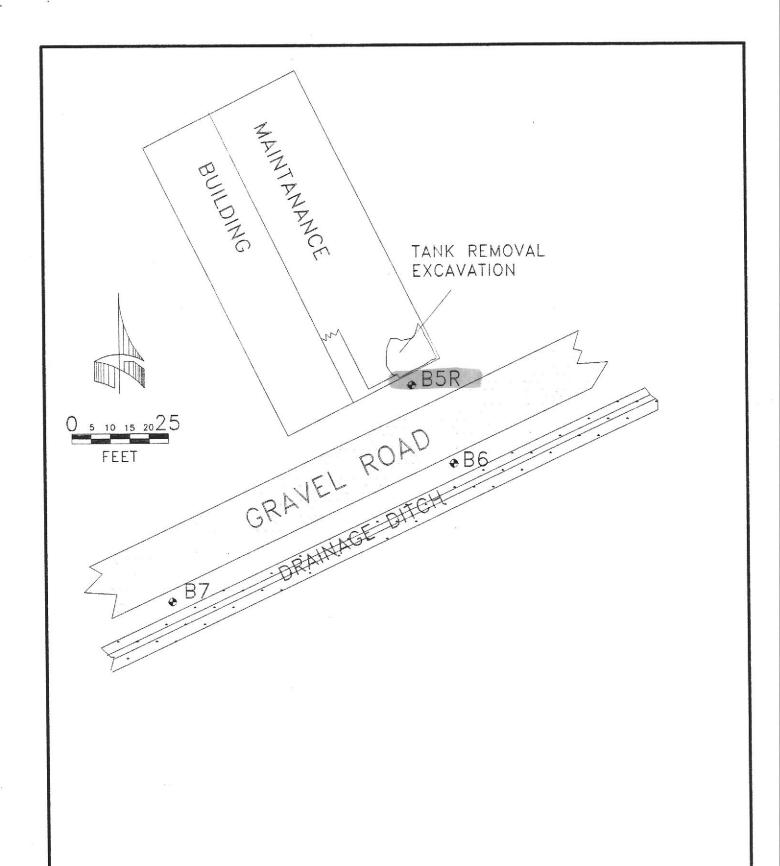
	Total Dissolived Sloids	TPH-gasoline	Benzene	Toluene	Ethylbenzene	Total Xylene isomers	MTBE
B5R/5.5-6		1400	6.8	< 5.0	< 5.0	< 5.0	1200
B5R/10-10.5'		< 1000	< 5.0	< 5.0	< 5.0	< 5.0	22
B5R/GW	7800	1500	130	56	29	95	6500
B6/5.5-6'		< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
B6/10-10.5'		< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
B6/GW	49000	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0
B7/5-5.5'		< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
B7/10-10.5'		< 1000	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
B7/GW	21000	< 50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0



H20GEOL

UNDERGROUND STORAGE TANK SITE LOCATION MAP OLIVER TRUST FARMS 28905 HESPERIAN BOULEVARD HAYWARD, CALIFORNIA

1





UNDERGROUND STORAGE TANK SITE DIAGRAM
SHOWING AUGERHOLE LOCATIONS SAMPLED 11/13/98
OLIVER TRUST FARMS.
28905 HESPERIAN BOULEVARD
HAYWARD, CALIFORNIA

FIGURE

2



P.O. Box 2165 Livermore, California 94551 (925) 373-9211

#### ATTACHMENT A

BOREHOLE LITHOLOGIC LOGS



# BOREHOLE LITHOLOGIC LOG

[22]												
Α	GROUND	WATER	CONSULTA	NCY		灵		BOREHOLE No.	<u>B6</u>	Sheet	1 of1	
Project	No.:		Date:	11/13/9	98		Drilling (	Co.		Drill Model	lwan Auger	
			nental Service	-				Method - Hand C	peration	Borehole Diame	nter 4-in	
	n: Oliver						1	Surface Elevatio			Ave ground sur	face
Location	i. Olivei	ilust Far	1115								8	
	28905 H	lesperiar	Boulevard,	Hayward	, Californ	nia	Borehole	B6 was not co	mpleted as a m	onitoring well.		
Logged	hv:	GDL	Driller:	RCV/GI	21							
Loggod			<u> </u>			Water L	laval	9.48	6.73	6.87		
						water c	-0.001					
_ st						Time		14:10	14:21	14:26		
Sour	( 58€	_	se se	얼달	ω <u>σ</u>	Date		11/13/98	11/13/98	11/13/98		
Sampling Blowcounts	PID/FID HNu/OV/ reading	ept	Sample Soil Sample Number	oi ju	USCS Soil Symbol	Dute			ld Soil Descripti			
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		la l	86/	-	CL	very as	rk grayis	n borwn 10th 3	2 Sitty Clay With	10 %.		60.50
		-1-				Dark br	own 10Y	R 3/3 mottled d	ark grayish brow	n 2.5Y 4/1 clay		
		_2_			CL							
		_3		_		-		D 0/0	ante anno data ta	m 2 EV 4/5 -1	No odor	
	-		$\vdash$	-	CL			'R 3/3 mottled d ddish brown 5YF			, NO OGOF.	
	$\vdash$	<del>4</del>	$\vdash$					ray 5GY 4/1 clay		u <sub>7</sub> ont		1
		E			CL	Saix gi	Section A	-,, -, -, -, -, -, -, -, -, -, -, -,				1
		-5-										]
		-6-	5.5-6		_	CI	Peaty c	lay. High vegeta	tion fiber conter	nt.	· · · · · · · · · · · · · · · · · · ·	
		Ŭ	Ft.							3 Feet. No yield to	augerhole. Y	-
		<del>-7-</del>		-///////	<u> </u>	@6.3 F	t. dusk r	ed 2.5YR 3/2 we	ood, 0.05 Ft.			10.70
	-		$\vdash$	-///////	СН	Dork a	2 FG	/ 4/0; N/4 plastic	clay No odor			-
	+	-8-	$\vdash$			Dark gi	ay 2.00	TO, NA PIASU	J 0107. 140 0001.			
	<b>†</b>											
		9-										
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	-	.0	10-10	<u>.5</u>	CL	-		0.574.410 -11			Portland cemer	1
	-	-11-	Ft.	-		Dark g	rayish bro	own 2.5Y 4/2 sil		untered Water at 1	1.55 Feet.	-
	+		$\vdash$	-					0000110 2710			4
		-12-		-	ML	Light o	live brow	n 2.5Y 5/6 clay	ey silt		***************************************	
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# BOREHOLE LITHOLOGIC LOG

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Α	GROUND	WATER	CON	ISULIAN	1CY				BOREHOLE No.	<u>_E</u>	35R	Sheet	1 of _	11
Project	No.:		Date	):	11/13/	98		Drilling	Co.		Dri	li Model	Iwan Au	ger
Client:	DECON I	Environr	nenta	al Servic	es			Drilling	Method - Hand C	peration	Во	rehole Diame	ter _	4-in
Locatio	n: Oliver	rust Fa	rms					Ground	Surface Elevatio	n <u>L</u>	Jnknown	Datum:	Ave grou	und surface
	28905 H	lecneria	n Rou	levard	Hayward	Californ	nia	Borehol	e B5R was not o	ompleted	as a mon	itorina well.		
Logged		GDL	Drille		RCV/GI		iid	Dorono				**************************************		
							Water L	.evel	8.19	-				
g	(A)						Time		12:08					
Sampling Blowcounts	PID/FID HNWOV reading	st pth	ample	in Smple Imber	Graphic Soil Symbol	SCS The local	Date		11/13/98					
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	+-		-	B5R/	-	CL	Very da	irk grayis	h borwn 10YR 3	/2 sirty ci	ay with it	7% gravei.		
		-1-			1									
		-2-			-	GP	Drain ro	ck. 1-3	inch well rounde	d gravel.	No fines.			
	+		-	-			Dark br	own 10Y	'R 3/3 mottled d	ark gravis	h brown 2	.5Y 4/1 clav		
		—3—				CL	No odo	r.			Fi	rst Encountered	d Water at 3	-
		4_				-			ddish brown 5YF			silt.		▽
			-	-	-	CL	Dark gr	eenish g	ray 5GY 4/1 clay	. No odor	·			
		—5—	$\vdash$			OL.	CL	Peaty c	lay. High vegeta	tion fiber	content.			
				5.5-6		4			at 5.5 feet.					
	-	Ŭ	_	Ft.	_		Dark as	i-b -	ray 5GY 4/1 clay	No odos				
	-	-7-	+	+	-		Dank gr	eenisn g	ray bg + 4/1 clay	. NO Odol	·			
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	+	-9-	+	+	-				< 0.05 Ft., very stiffening.	Tine san	d taminae			
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# BOREHOLE LITHOLOGIC LOG

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А	GROUN	D WATER	CONS	SULTAN	ICY				BOREHOLE No.	<u>E</u>	37	Sh	eet 1 c	of	1
Project	No.:		Date:		11/13/9	98		Drilling (	Co.		D	rill Model	lwa	n Auger	
		Environ	- mental	Service	STATE OF THE PERSON NAMED IN COLUMN			Drilling I	Method - Hand O	peration	В	orehole Di	ameter	4-in	
	-	Trust Fa	-					Ground	Surface Elevation	n L	Jnknown	Dat	um: Ave	ground s	surface
20020								1					11		
Logged		Hesperia GDL	n Boule Driller		RCV/GI		าเอ	Borenoi	e B7 was not co	mpieteu a	as a mon	Itomig we			
Loggoa	~,.						Water I	.evel	6.52						_
ø							Time		15:36						
Sampling Blowcounts	889	<b>}</b> _	e	oer	얼 달	s g	Date		11/13/98						
Samp	PID/FID HNWOV	Sept est	Sample	Sam	Soll	USCS Soil Symbol				ld Soil De	scription	)			
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		1_3_	+			- CI	Dark b	10	/R 3/3 mottled da	ark aravie	h hrown	2 5V 4/1	clay No	odor	
	+	1 .	H			CL	Dark bi	Dark re	ddish brown 5YR	3/4 clay	ey sandy	silt.			$\nabla$
		<del>  4</del> -					Dark gi	reenish g	ray 5GY 4/1 clay	. No odor	. F	irst Encounte	ered Wate	r at 3.75 F	eet.
		<del></del> 5			_	CL									-
	+	٦,		6-5.6 Ft.			CI	Peaty o	lay. High vegeta	tion fiber	content.				
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	+	4 ,	H				Dark g	ray 2.5G	Y 4/0; N/4 plastic	clay. No	odor.				
		_8_													
		<del>-9</del> -			-//////	CH	Dork a	2 FG	Y 4/0; N/4 very p	lactic cla	v No on	or			-
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P.O. Box 2165 Livermore, California 94551 (925) 373-9211

#### ATTACHMENT B

FIELD DATA SHEET LOG OF GROUNDWATER SAMPLING ACTIVITIES

#### LOG OF AUGERHOLE SAMPLING ACTIVITIES

dentification		3 <u>5 / P</u> roj	ect Name:	20500	nespenan ec	uic	/ard, Hayward	<u>, C</u> A D	ate: 11/13/98
Sampled b	y: G. Lowe	e & R. Vorst		Weath	er Conditions:	: .	<del></del>		
Location:	·			Sample	Tube Diame	ter:	2-inch	Depth of Sample	Tube:
Vleasuring	Point: <u>Top</u>	of Sample Tube	Initial D	epth to W	/ater: 8/4 @ 12 0	-6	Final D	epth to Water:	Not measured
lube Volu	me (1 vol./	3 vol):	-	<i>— 9./1</i>	12:43		Borehole Volu	me:	
Purging M		Centrifugal Pump, Grundfos Submer Centrifugal Pump ES-60 Submersibl	sible Pump /ES-60 Sub		×	Sar	npling Method	Grundfos Su Teffon Baile	bmersible Pump
Purging Ra	ate: See	below	Total Disc	harge:			Tube V	olumes Purged:	
Comments	s: <u>[ [ ]                                </u>	7-0 3/14	1. 5.	- z [b d	in 400	-	522 m/	Increm	is to
Weste We	ater Disposa	ıl: To well sid	de drum.				·	<del></del>	
Starting T		15 (15)	o di di i						
Time Pum									
	ip on: /	<u> 2:76                                    </u>							
Date	Time	Gal. Purged	рН	T deg. F	Diluted S.C.	<u> </u>	Dil. Factor	S.C. ( <i>p</i> S/cm)	Color
Date	Time	Gai. Purged			Diluted S.C.	x	Dil. Factor	S.C. (µS/cm)	Color
Date	Time : 1/2://		7.81	65.8	Diluted S.C.	x		11,790	Color
Date	Time : 12://	Gai. Purged	7.81 224	65.8 162	Diluted S.C.	T	=	11,740 11,830	Color
Date	Time : 12:/ 12:/ 12:13 12:15	Gai. Purged	7.8/ 27.9/ 7.70	65.8 U.2 66.6	Diluted S.C.	x	=	11,740 11,830 12,160	Color
Date	Time : 12:/c 12:/7 12:13 12:15 12:17	Gal. Purged  3/4  1  1+405m1  1+480m1	7.8/ 224/ 2.70 7.74	65.8 U.2 66.6 66.6	Diluted S.C.	x	= =	11,740 11,830 12,160 11,940	Color
Date	Time : 12:/ 12:/ 12:13 12:15	3/4 1 1+400m/	7.8/ 224/ 2.70 7.74	65.8 U.2 66.6 66.6	Diluted S.C.	x x	=	11,740 11,830 12,160	Color
Date	Time : 12:/c 12:/7 12:13 12:15 12:17	Gal. Purged  3/4  1  1+405m1  1+480m1	7.8/ 224/ 2.70 7.74	65.8 U.2 66.6 66.6	Diluted S.C.	x x x	=	11,740 11,830 12,160 11,940	Color
Date	Time : 12:/c 12:/7 12:13 12:15 12:17	Gal. Purged  3/4  1  1+405m1  1+480m1	7.8/ 224/ 2.70 7.74	65.8 U.2 66.6 66.6	Diluted S.C.	x x x	= = = = = = = = = = = = = = = = = = = =	11,740 11,830 12,160 11,940	Color
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# LOG OF AUGERHOLE SAMPLING ACTIVITIES

dentification	n: <u>B</u>	<u>  D</u> Proje	ct Name:	28905 H	lesperian Boul	evar	d, Haywai	d, C	<u>Z</u> A Date	11/13/98
Sampled by:	G. Lowe	& R. Vorst		Weather	Conditions:					
Location:					Tube Diameter		2-inch		epth of Sample T	<del></del> .
Measuring F	oint: <u>Top o</u>	f Sample Tube	Initial De	epth to Wa	ter: <u>829 -</u> 1420	-14 - -	2. Final	Dep	oth to Water: <u>h</u>	lot measured
Tube Volum	ne (1 vol./ 3	vol):		<del></del>		В	orehole Vo	lum	e:	
Purging Me	G	entrifugal Pump/ rundfos Submers entrifugal Pump/ S-60 Submersibl	sible Pump ES-60 Subi		x	iamp	oling Meth	od:	Peristaltic Pum Grundfos Subr Teflon Bailer Purge Pump @	
Purging Ra	te: See	oelow	Total Disch	narge: _			_ Tub	e Vo	olumes Purged:	
Comments	: <u>Lu</u>	pul in	130130							
Starting Ti	ter Disposal me: p on: <u>OS</u>		ie drum.							
Date	Time	Gat, Purged	pН	T deg. F	Diluted S.C.	_	Dil. Factor		S.C. (µS/cm)	Color
11/13/98	:					×		=	7201	
	14:30	L	7.33	4.9	18780	_×	3	=		
4 M M	14:27 F	21/2	221	61~	15,770	x	7,4	=		
6XX	W: 96	3	770	100.7	14 7/3	x		=		
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# LOG OF AUGERHOLE SAMPLING ACTIVITIES

entification	n: <u>B</u>	7 Proje	ct Name:		Hesperian Bou	ieva	rd, Haywa	ard, C	A Dat	te: 11/13/98
ampled by:	G. Lowe	& R. Vorst		Weathe	r Conditions:	_				
ocation:	<del></del>			Sample	Tube Diamete	er:	2-inch	De	epth of Sample	Tube:
Aeasuring f	Point: <u>Top</u>	of Sample Tube	Initial D	epth to Wa	ater:		Fina	l Dep	th to Water:	Not measured
ube Volum	ne (1 vol./ 3	3 vol):		<del></del>		В	orehole V	olum	e: <u>-</u>	
Purging Me	· <u> </u>	Centrifugal Pump/ Grundfos Submers Centrifugal Pump/ S-60 Submersibl	sible Pump ES-60 Sub		x	Sam	pling Meth	nod:	Teflon Bailer	mp omersible Pump @ < 1L/Min. X
Purging Ra		00.011	Total Disc						lumes Purged:	
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Date	Time	Gal, Purged	рН	T deg. F	Diluted S.C.		Dil. Factor	-	S.C. (uS/cm)	Color
11/13/98	:			ļ		×		=	·	
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Samp	le Identifica	ation: B?/GW		•	Sample Tim				DITY ANALYSI	s



P.O. Box 2165 Livermore, California 94551 (925) 373-9211

#### ATTACHMENT C

CHROMALAB, INC.
LABORATORY ANALYTICAL RESULTS
AND CHAIN-OF-CUSTODY DOCUMENTATION

Environmental Services (SOB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS

Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: B5R/5.5-6FT

Spl#: 215752

Matrix: SOIL

Sampled: November 13, 1998

Run#:16066

Analyzed: November 19, 1998

BLANK DILUTION

ANALYTE	RESULT	LIMIT (mg/Kg)	RESULT (mg/Kg)	SPIKE (%)	FACTOR	_
GASOLINE BENZENE TOLUENE ETHYL BENZENE XYLENES	1.4 0.0068 N.D. N.D. N.D.	1.2 0.0050 0.0050 0.0050 0.0050	N.D. N.D. N.D. N.D.	97 95 91 89 88	1 1 1 1	

PEPORTING

Vincent Vancil

Analyst

Michael Verona Operations Manager

RLANK

# CHROMALAB, INC.

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

H2OGEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS

Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8240 Modified

Client Sample ID: B5R/5.5-6FT

SpI#: 215752

Matrix: SOIL Sampled: November 13, 1998

Analyzed: November 19, 1998 Run#: 16089

BLANK BLANK DILUTION

REPORTING RESULT LIMIT RESULT SPIKE FACTOR (ug/Kg) (ug/Kg) TERTIARY BUTYL ETHER

June Zhao Analyst

Michael Verona 772 Operations Manager

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS

Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: B5R/10FT

Spl#: 215753

Matrix: SOIL

Sampled: November 13, 1998

Run#:16067

Analyzed: November 19, 1998

ANALYTE	RESULT (mg/Kg)	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	BLANK SPIKE (%)	DILUTION FACTOR	
GASOLINE	N.D.	1.0	N.D.	99	1	
BENZENE	N.D.	0.0050	N.D.	94	1	
TOLUENE	N.D.	0.0050	N.D.	93	1	
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1	
XYLENES	N.D.	0.0050	N.D.	92	ï	

Vincent Vancil

Analyst

Michael Verona Operations Manager CHROMALAB, INC.

Environmental Services (SD8)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS

Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8240 Modified

Client Sample ID: B5R/10FT

Sp1#: 215753

Matrix: SOIL

Sampled: November 13, 1998

Run#: 16089

Analyzed: November 19, 1998

REPORTING BLANK BLANK DILUTION RESULT LIMIT RESULT SPIKE FACTOR (ug/Kg) (ug/Kg) (uq/Kq) 22

TERTIARY BUTYL ETHER (MTBE)

June Zhao Analyst

Michael Verona

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: B6/5.5-6FT

Sp1#: 215754

Matrix: SOIL

Sampled: November 13, 1998

Run#:16066

Analyzed: November 19, 1998

		REPORTING	BLANK	BLANK	DILUTION
	RESULT	LIMIT	RESULT	SPIKE	FACTOR
ANALYTE	(mag/Kag)	(mq/Kq)	(mq/Kq)	(%)	
GASOLINE	N.D.	1.0	N.D.	97	1
BENZENE	N.D.	0.0050	N.D.	95	1
TOLUENE	N.D.	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	89	1
XYLENES ·	N.D.	0.0050	N.D.	88	1

Note: Surrogate Recoveries demonstrate Matrix interference.

Vincent Vancil

Analyst

Michael Verona

Operations Manager

## CHROMALAB, INC.

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS

Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8240 Modified

Client Sample ID: B6/5.5-6FT

Sp1#: 215754 Matrix: SOIL

Sampled: November 13, 1998 Run#: 16056

Analyzed: November 18, 1998

REPORTING BLANK BLANK DILUTION RESULT RESULT LIMIT SPIKE FACTOR (ug/Kg) N.D. (na\ka) (ua/Ka) N.D. ANALYTE METHYL TERTIARY BUTYL ETHER

June Zhao Analyst

(MTBE)

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: B6/10-10.5FT

Spl#: 215755 Sampled: November 13, 1998 Matrix: SOIL Run#:16066

Analyzed: November 19, 1998

		REPORTING	BLANK	BLANK	DILUTION
	RESULT	LIMIT	RESULT	SPIKE	FACTOR
ANALYTE	(mg/Kg)	(mq/Kq)	(mq/Kq)	(%)	
GASOLINE	N.D.	1.0	N.D.	97	1
BENZENE	N.D.	0.0050	N.D.	95	1
TOLUENE	N.D.	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	89	1
XYLENES	Ŋ.D.	0.0050	N.D.	88	1

Vincent Vancil

Analyst

Michael Verona Operations Manager CHROMALAB, INC.

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8240 Modified

Client Sample ID: B6/10-10.5FT

Spl#: 215755 Matrix: SOIL

Sampled: November 13, 1998 Run#: 16056

Analyzed: November 18, 1998

REPORTING BLANK BLANK DILUTION
RESULT LIMIT RESULT SPIKE FACTOR
NALYTE (ug/Kg) (ug/Kg) (ug/Kg) (%)

June Zhao Analyst

Michael Verona for Operations Manager

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

H2OGEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: B7/5-5.5FT

Spl#: 215756

Matrix: SOIL

Sampled: November 13, 1998

Run#:16067 An

Analyzed: November 19, 1998

ANALYTE	RESULT (mg/Kg)	LIMIT (mg/Kg)	RESULT (mg/Kg)	SPIKE (%)	FACTOR
GASOLINE	N.D.	1.0	N.D.	99	1
BENZENE	N.D.	0.0050	N.D.	94	1
TOLUENE	N.D.	0.0050	N.D.	93	1
ETHYL BENZENE	N.D.	0.0050	N.D.	93	1
XYLENES	N.D.	0.0050	N.D.	92	1

Vincent Vancil

Analyst

Michael Verona Operations Manager CHROMALAB, INC.

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8240 Modified

Client Sample ID: B7/5-5.5FT

Spl#: 215756

Matrix: SOIL

Sampled: November 13, 1998 Run#: 16089

Analyzed: November 19, 1998

| REPORTING BLANK BLANK DILUTION | RESULT LIMIT RESULT SPIKE FACTOR | (ug/Kg) (vg/Kg) (%) | HER N.D. 5.0 N.D. 106 1

June Zhao Analyst

(MTBE)

Michael Verona

Operations Manager

Federal ID #68-0140157

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: B7/10-10.5FT

Sp1#: 215757

Matrix: SOIL

Sampled: November 13, 1998

Run#:16066

Analyzed: November 19, 1998

ANALYTE	RESULT	REPORTING LIMIT (mg/Kg)	BLANK RESULT (mg/Kg)	SPIKE (%)	DILUTION FACTOR
GASOLINE	N.D.	1.0	N.D.	97	1.
BENZENE	N.D.	0.0050	N.D.	95	1
TOLUENE	N.D.	0.0050	N.D.	91	1
ETHYL BENZENE	N.D.	0.0050	N.D.	89	1
XYLENES	N.D.	0.0050	N.D.	88	1

Vincent Vancil

Analyst

Operations Manager

#### CHROMALAB, INC.

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

HZOGEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8240 Modified

Client Sample ID: 87/10-10.5FT

Spl#: 215757 Matrix: SOIL

Sampled: November 13, 1998 Run#: 16056 Analyzed: November 18, 1998

REPORTING BLANK BLANK DILUTION RESULT LIMIT RESULT SPIKE FACTOR (ug/Kg) (ug/Kg) (uq/Kq) (MTBE)

June Zhao Analyst

Michael Veronă

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

H2OGEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID+ SSR/GW ..., Spl#: 215758

Sampled: November 13, 1998

Matrix: WATER Run#:16104

Analyzed: November 16, 1998

ANALYTE	RESULT (ug/L)	LIMIT (ug/L)	RESULT (uq/L)	SPIKE FACTOR (%)	*
GASOLINE	1500	50	N.D.	96 i	
BENZENE	130	0.50	N.D.	102 1	
TOLUENE	56	0.50	N.D.	106 1	
ETHYL BENZENE	29	0.50	N.D.	102 1	
XYLENES	95	0.50	N.D.	. 103 1	

Vincent Vancil

Analyst

Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

November 25, 1998

Submission #: 9811227

H20GEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS

Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8260 Modified

Client Sample ID: B5R/GW

Spl#: 215758 Sampled: November 13, 1998

Matrix: WATER

Run#: 16203 Analyzed: November 24, 1998

REPORTING

BLANK BLANK DILUTION

RESULT

RESULT

SPIKE FACTOR

ANALYTE
METHYL TERTIARY BUTYL ETHER

LIMIT (ug/L)

Analyst

Michael Verona

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

**H2OGEOL** 

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: B6/GW

Spl#: 215759

Matrix: WATER

Sampled: November 13, 1998 Run#:16104 Analyzed: November 16, 1998

	RESULT	REPORTING LIMIT	Blank Result	SPIKE	DILUTION FACTOR
ANALYTE	(uq/L)	(uq/ե)	(uq/L)	(%)	
GASOLINE	N.D.	50	ИD	96	1
BENZENE	N.D.	0.50	N.D.	102	1
TOLUENE	N.D.	0.50	N.D.	106	1
ETHYL BENZENE	N.D.	0.50	N.D	102	1
XYLENES	N.D.	0.50	N.D.	103	1

Vincent Vancil

Analyst

Michael Verona Operations Manager CHROMALAB, INC.

Environmental Services (SD8)

November 25, 1998

Submission #: 9811227

H20GEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8260 Modified

Client Sample ID: B6/GW

Sp1#: 215759

Matrix: WATER

Sampled: November 13, 1998

Run#: 16203

Analyzed: November 24, 1998

REPORTING BLANK BLANK DILUTION RESULT SPIKE FACTOR RESULT LIMIT (ug/L) 5.0 (ug/L) (uq/L)

Alex Tam Analyst

METHYL (MTBE)

Michael Verona

Environmental Services (SDB)

November 20, 1998

Submission #: 9811227

H2OGEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS

Received: November 13, 1998

re: One sample for Gasoline BTEX analysis.

Method: SW846 8020A Nov 1990 / 8015Mod

Client Sample ID: B7/ GW

Spl#: 215760

Matrix: WATER

Sampled: November 13, 1998

Run#:16104 Analyzed: November 16, 1998

ANALYTE	RESULT (ug/L)	REPORTING LIMIT (ug/L)	BLANK RESULT (ug/L)	BLANK SPIKE (%)	DILUTION FACTOR
GASOLINE BENZENE TOLUENE ETHYL BENZENE	N.D. N.D. N.D. N.D. N.D.	50 0.50 0.50 0.50	N.D. N.D. N.D. N.D.	96 102 106 102	1 1 1 1
XYLENES	N.D.	0.50	N.D.	103	1

Vincent Vancil

Analyst

Operations Manager

CHROMALAB, INC.

Environmental Services (SDB)

November 25, 1998

Submission #: 9811227

H2OGEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS

Received: November 13, 1998

re: One sample for Fuel Oxygenates by GC/MS analysis.

Method: EPA SW846 Method 8260 Modified

Client Sample ID: B7/ GW

Spl#: 215760

Matrix: WATER

Sampled: November 13, 1998

Run#: 16203

Analyzed: November 24, 1998

BLANK BLANK DILUTION REPORTING RESULT RESULT SPIKE FACTOR LIMIT (uq/L) (ug/L) (ug/L)

(MTBE)

Alex Tam Analyst

Michael Verona

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Environmental Services (SDB)

November 24, 1998

Submission #: 9811227

H2OGEOL

Atten: Gary Lowe

Project: OLIVER TRUST FARMS Received: November 13, 1998

re: 3 samples for Total Dissolved Solids analysis.

Method: EPA 160.1

Matrix: WATER

Sampled: November 13, 1998 Run#: 16043

Analyzed: November 17, 1998

			TOTAL	DISSOLVED SOLI	REPORTING LIMIT	blank Result	BLANK SPIKE	DILUTION FACTOR
Spl#	CLIENT	SPL	ID	(mg/L)	(mg/L)	(mg/L)	(%)	
215758	BSR/GW			7800	100	N.D.	98.2	10
215759	B6/GW			49000	50	N.D.	98.2	5
215760	B7/ GW			21000	100	N.D.	98.2	10

Michael Verona for Operations Manager

925-373-9222 sc 1186

1220 Quarry Lane · Pleasanton, Catilornia 94566-4756 (925) 484-1919 • Facsimile (925) 484-1096 Federal ID #68-0140157

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