



JONAS & ASSOCIATES INC.

Environmental Consultants

2815 Mitchell Drive, Suite 209 • Walnut Creek, CA 94598 • Tel: (510) 933-5360 • Fax: (510) 933-5362

June 5, 1997

Mr. Larry Dreffs
Mother's Cake & Cookie Co.
810-81st Avenue
Oakland, California 94621-2583
(510) 569-2323

Subject: Submittal of a Letter Report of Diesel Spill Preliminary Soil Investigation.
Project: Diesel Spill Investigation
J&A #: MCC-214

Dear Mr. Dreffs,

We have received analytical results for the soil samples collected from the diesel spill area. This letter report presents (1) a summary of background information, (2) soil sampling procedures, (3) soil sampling analyses and results, (4) a summary of findings, and (5) recommendations.

Background Information

As reported by Mother's Cake and Cookie Company (MCC) on May 6, 1997 between 10:13 and 11:03 p.m. an employee overfilled a truck during a fueling operation. As a result approximately 120 to 170 gallons of diesel spilled on the paved parking area, near the fuel island. The spill gradually traveled approximately 150 feet northwest of the island, over the paved parking area. Figure 1 presents the locations of the pump island, soil boreholes, and the spill flow directions.

As soon as the incident was noticed, the fuel pump was shut-off and the facility management was notified. Absorbent material and yellow barrier tape was placed around the spill area. Employees leaving the bakery were notified to avoid driving their vehicles near the spill site and no smoking was allowed. Allwaste was contacted to perform a spill cleanup. Allwaste arrived at the site on May 7, 1997, at 10:18 a.m. Absorbent material placed on the spill area was swept up and placed in a total of six (6) 55-gallon drums. The California State Office of Emergency Services was notified (OES number: 971842) on May 7, 1997. Alameda County Environmental Health Department was also notified (ACEHD). An "Underground Storage Tank Unauthorized Release (Leak)/Contamination Site Report" was completed and submitted to the ACEHD. On May 8, 1997, Jonas & Associates Inc. (J&A) was contracted to perform a preliminary soil investigation in the area of the spill.

Soil Sampling Procedures

On May 9, 1997, J&A collected a total of 10 soil samples (two soil samples from five borehole locations), as shown on Figure 1. Soil samples were collected from the following depths:

Jonas & Associates Inc.

June 5, 1997
 Mr. Larry Dreffs
 Mother's Cake & Cookie Co.

- Shallow: 0.5 - 1 foot below the base of the asphalt
- Deep: 2.0 - 2.5 feet below the base of the asphalt

A hand auger was used to bore through the asphalt and reach the desired depth. A hand-driven auger with a 6-inch brass sleeve was used to retrieve the sample. The samples were labeled and placed in a cooler containing blue ice, and were delivered for analysis to ChromaLab, Inc., a State of California Certified Analytical Laboratory located in Pleasanton, California.

Sampling equipment were decontaminated before, after, and between each sampling location. After sample collection, the boreholes were backfilled with the excavated soil, and the surface asphalted.

Soil Sampling Analyses and Results

Initially the shallow soil samples were analyzed for Total Extractable Petroleum Hydrocarbons (TEPH) as Diesel (-d), Kerosene (-k), and Motor Oil (-mo) (EPA Method 8015M). Deeper samples were only analyzed if the shallower samples showed detectable concentrations of tested analytes. Otherwise, the deeper sample(s) were not analyzed.

A total of five shallow and two deep samples were analyzed for TEPH-d, -k, and -mo. Sample locations and analytical results are presented in Figure 2 and in Table 1.

TABLE 1
 SOIL ANALYTICAL RESULTS

Sample Number	TEPH-d (mg/kg)	TEPH-k (mg/kg)	TEPH-mo (mg/kg)
B1-1'	ND (1.0)	ND (1.0)	ND (50)
B2-1'	ND (1.0)	ND (1.0)	ND (50)
B3-1'	ND (1.0)	ND (1.0)	ND (50)
B4-1'	12 ¹	ND (2.0)	93
B4-2.5'	ND (1.0)	ND (1.0)	ND (50)
B5-1'	1,100 ¹	ND (200)	10,000
B5-2.5	4.8 ¹	ND (1.0)	ND (50)

1/ Hydrocarbon reported is in the late diesel range and does not match ChromaLab's diesel standard.

Jonas & Associates Inc.

June 5, 1997
Mr. Larry Dreffs
Mother's Cake & Cookie Co.

Summary of Findings

None of the soil samples collected around the diesel pump station had detectable concentrations of diesel, kerosene, or motor oil. The two distant samples (B4 and B5) had detectable concentrations of both diesel and motor oil. B5-1' had the highest concentrations of detected chemicals, with 1,100 mg/kg diesel and 10,000 mg/kg motor oil. According to ChromaLab Inc., the diesel (i.e., late diesel range) apparently is not same diesel that would be dispensed from a pump. A late stage diesel may actually be a motor oil. Therefore, these concentrations may be associated with motor oil rather than diesel. Indicating that the detected concentrations are apparently not associated with the May 6, 1997 diesel spill.

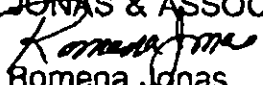
The deeper samples did not have detectable concentrations in sample B4-2.5' and only 4.8 mg/kg late stage diesel in sample B5-2.5'. Therefore, the concentrations in borings B4 and B5 apparently are fairly shallow (<2').

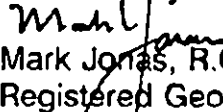
Recommendations

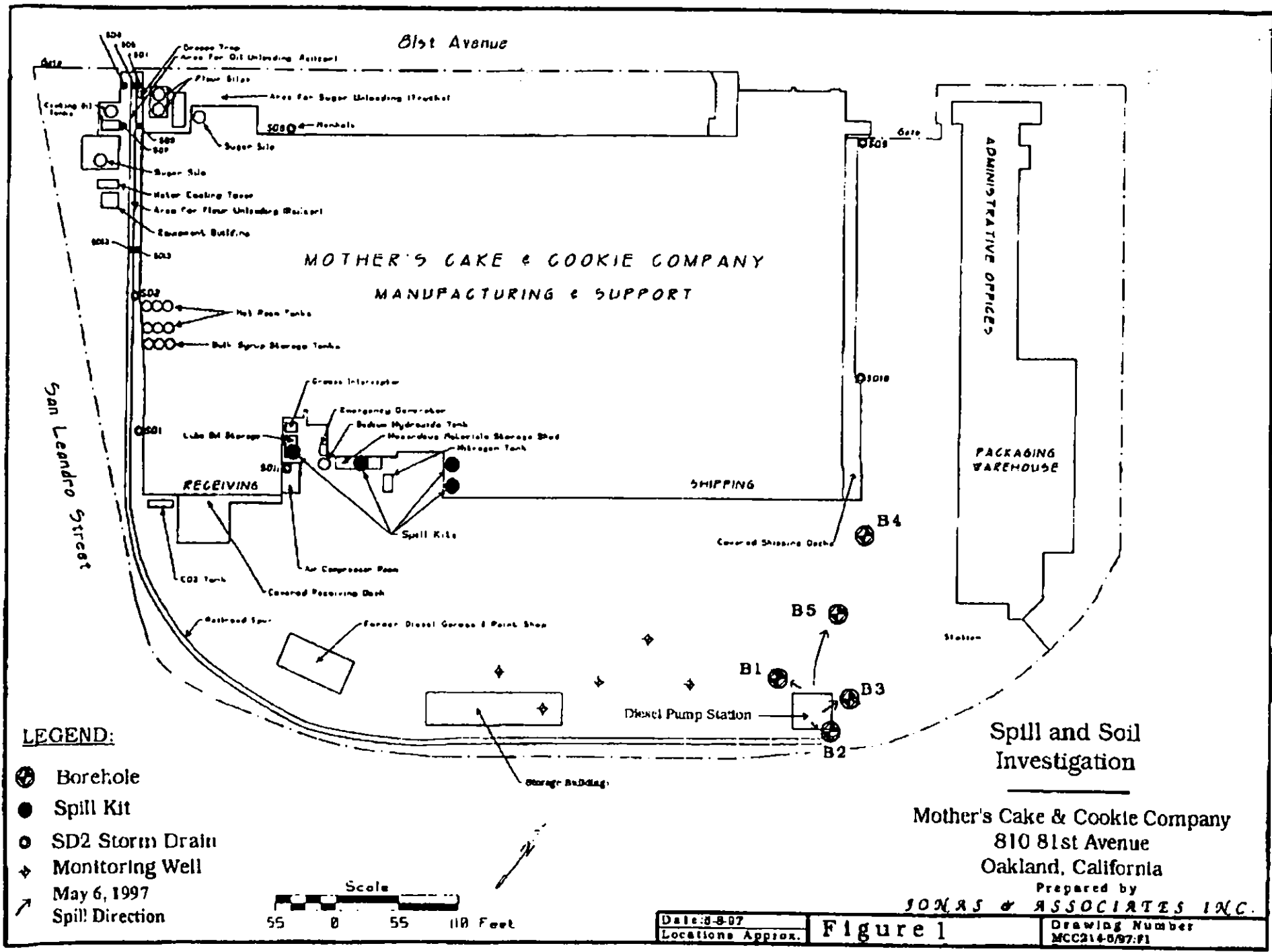
These results should be presented to Alameda County Health Care Services Agency for their review and consideration.

We would be glad to meet with you to discuss our finding.

Please call to discuss any issue.

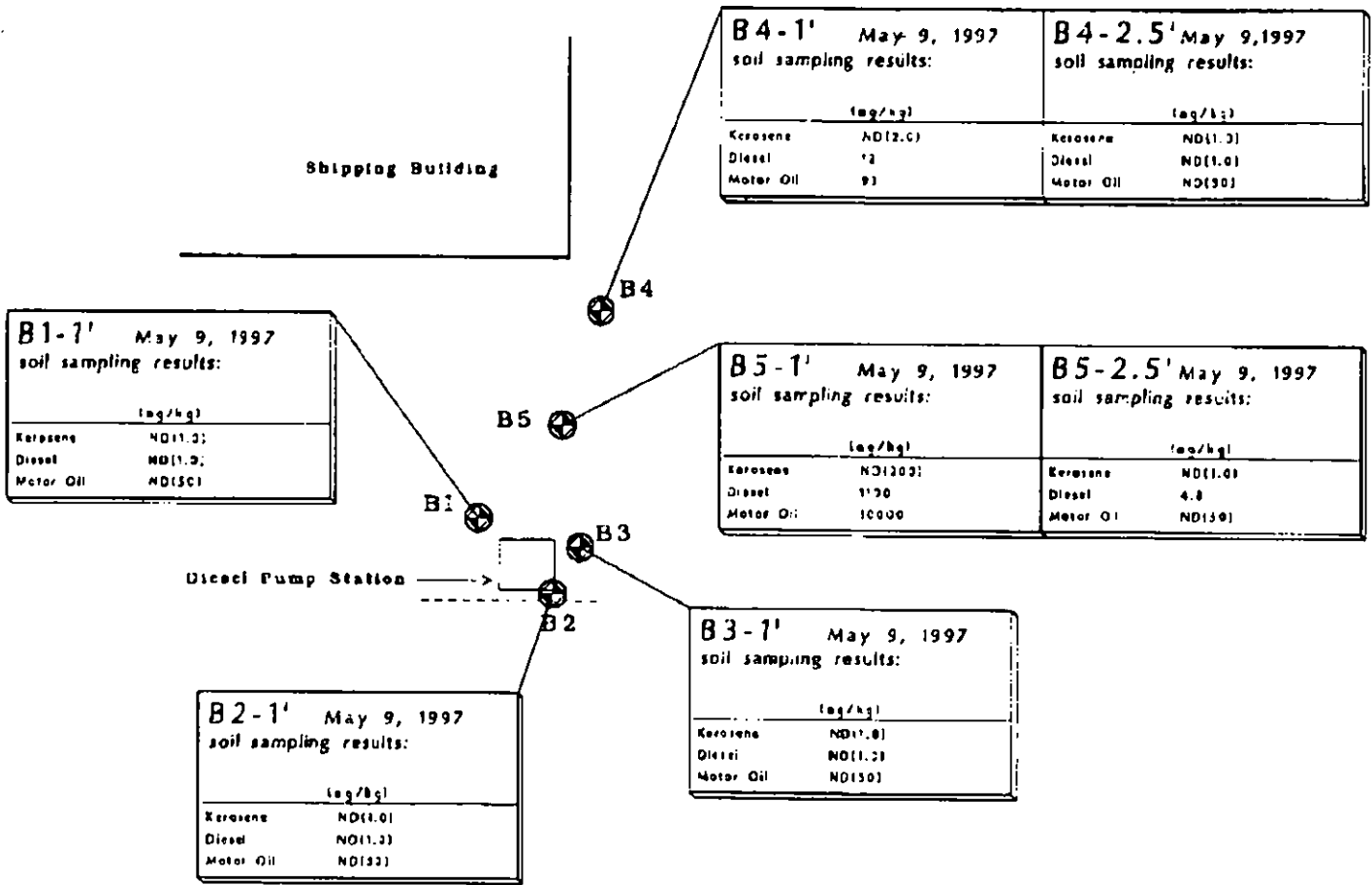
Sincerely,
JONAS & ASSOCIATES INC.

Romena Jonas
Principal

Reviewed by:

Mark Jonas, R.G.
Registered Geologist #6392



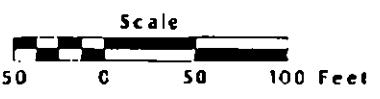
Drawn by J.R.W. 5-28-97
 Drawing Number MCC214-5/97-F1

Figure 2



LEGEND:

⊕ Soil Sample Location



**May 9, 1997
 Soil Samples &
 Analytical Results**

Prepared for
 Mother's Cake & Cookie Co.
 810-81st Avenue, Oakland, CA.

Prepared by
JONAS & ASSOCIATES INC.

Date: 5-28-97	Figure 2	Drawing Number MCC214-5/97-F1
Locations Approx.		

141/131304-101015

CHROMALAB, INC.

CLIENT: JONAS
 DATE: 05/16/97
 REF: 33634

33634
Chain of Custody

Environmental Services (SDB) (OCHS 1094)

DATE May 9, 1997 PAGE 1 OF 1

PROJECT INFORMATION					ANALYSIS REPORT																
PROJ MGR <u>Mark Jonas, R.G.</u> COMPANY <u>Jonas & Associates Inc.</u> ADDRESS <u>2815 Mitchell Drive, Suite 209</u> <u>Walnut Creek, California 94598</u>					TPH - Gasoline (EPA 5030, 8015)	TPH - Gasoline (EPA 5030, 8015) w/RTEX (EPA 602, 8020)	TPH - Diesel, TEPH (EPA 3510/3550, 8015)	PURGEABLE AROMATICS BTX (EPA 602, 8020)	PURGEABLE HALOCARBONS (EPA 601, 8010)	VOLATILE ORGANICS (EPA 624, 8240, 524.2)	BASE/NEUTRALS, ACIDS (EPA 625/627, 8270, 525)	TOTAL OIL & GREASE (EPA 5520, B+F, E+F)	PCB (EPA 608, 8080)	PESTICIDES (EPA 608, 8080)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	LUFT METALS: Cd, Cr, Pb, Zn, Ni	CAM METALS (17)	PRIORITY POLLUTANT METALS (13)	TOTAL LEAD	EXTRACTION (ICLP, STLC)	NUMBER OF CONTAINERS
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.																	
B1-1'	5/9/97	1020	soil	-			X														
B2-1'	5/9/97	1145	soil	-			X														
B3-1'	5/9/97	1108	soil	-			X														
B4-1'	5/9/97	1430	soil	-			X														
B5-1'	5/9/97	1335	soil	-			X														

PROJECT INFORMATION				SAMPLE RECEIPT				RELINQUISHED BY 1			RELINQUISHED BY 2			RELINQUISHED BY 3		
PROJECT NAME <u>Mother's Diesel Spill</u>				TOTAL NO OF CONTAINERS				SIGNATURE <u>Mark Jonas</u> 1615			SIGNATURE			SIGNATURE		
PROJECT NUMBER <u>MCC-214</u>				HEAD SPACE				PRINTED NAME <u>Mark L. Jonas</u> 5/9/97			PRINTED NAME			PRINTED NAME		
P.D.#				REC'D GOOD CONDITION/COLD				COMPANY <u>Jonas & Associates Inc.</u>			COMPANY			COMPANY		
TAT				STANDARD 5-DAY				RECEIVED BY 1			RECEIVED BY 2			RECEIVED BY (LABORATORY)		
				24 48 72 OTHER				SIGNATURE			SIGNATURE			SIGNATURE <u>Mike Naraya</u> 5/9/97		
SPECIAL INSTRUCTIONS/COMMENTS:								PRINTED NAME			PRINTED NAME			PRINTED NAME <u>Chromalab, Inc.</u>		
								COMPANY			COMPANY			COMPANY <u>Chromalab, Inc.</u>		

4-23-1998 2:35PM FROM JONAS ASSOCIATES 510 933 5362

CHROMALAB, INC.

Environmental Services (SDB)

May 20, 1997

Submission #: 9705141

JONAS & ASSOCIATES, INC.

Reissued May 20, 1997

Atten: Mark Jonas

Project: MOTHERS DIESEL SPILL
Received: May 9, 1997

Project#: MCC-214

re: 1 sample for TEPH analysis.
Method: EPA 8015M

Sampled: May 9, 1997

Matrix: SOIL
Run#: 6849

Extracted: May 14, 1997
Analyzed: May 16, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
131313	B5-1'	N.D.	1100	10000

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.

Reporting Limits
Blank Result
Blank Spike Result (%)

200

200


4000


N.D.

--

101

--


Bruce Havlik
Chemist


Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

May 20, 1997

Submission #: 9705141

JONAS & ASSOCIATES, INC.

Reissued May 20, 1997

Atten: Mark Jonas

Project: MOTHERS DIESEL SPILL
Received: May 9, 1997

Project#: MCC-214

re: 1 sample for TEPH analysis.
Method: EPA 8015M


Sampled: May 9, 1997

Matrix: SOTL
Run#: 6849Extracted: May 14, 1997
Analyzed: May 16, 1997


Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
131312	B4-1'	N.D.	12	93

Note: Hydrocarbon reported is in the late Diesel Range and does not match our Diesel Standard.

Reporting Limits	2.0	2.0	50
Blank Result		N.D.	
Blank Spike Result (%)	--	101	--



Bruce Havlik
Chemist



Alex Tam
Semivolatiles Supervisor

CHROMALAB, INC.

Environmental Services (SDB)

May 20, 1997

Submission #: 9705141

JONAS & ASSOCIATES, INC.

Reissued May 20, 1997

Atten: Mark Jonas

Project: MOTHERS DIESEL SPILL,
Received: May 9, 1997


Project#: MCC-214

re: 3 samples for TEPH analysis.
Method: EPA 8015M


Sampled: May 9, 1997

Matrix: SOIL
Run#: 6849Extracted: May 14, 1997
Analyzed: May 15, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
131309	B1-1'	N.D.	N.D.	N.D.
131310	B2-1'	N.D.	N.D.	N.D.
131311	B3-1'	N.D.	N.D.	N.D.
Reporting Limits		1.0	1.0	50
Blank Result			N.D.	
Blank Spike Result (%)		--	101	--



Bruce Havlik
Chemist



Alex Tam
Semivolatiles Supervisor

260/132400 132401

JON #: 9701263 REP: (0)
AGENT: JONAS
JE: 05/27/97
EP #: 33264

Reference #: 33164

CHROMALAB, INC.

Chain of Custody

Environmental Services (SDB) (DHS 1091)

DATE 5-19-97 PAGE 1 OF 1

PROJ MGR Mark Jonas
 COMPANY Jonas & Associates Inc
 ADDRESS 2915 Mitchell Drive Suite 201
Wallich Creek CA 91538
 SAMPLES (SIGNATURE) [Signature] (PHONE NO) (510) 933-5360
[Signature] (FAX NO.) (510) 933-5362

ANALYSIS REPORT																							
SAMPLE ID.	DATE	TIME	MATRIX	PRESERV.	TPH (EPA 8015, 8020) <input type="checkbox"/> Gas w/ <input type="checkbox"/> BTEX (DMRE)	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TPH (EPA 8015M) (Hydrocarbons, (Phenol, (Bm. O.	PURGEABLE HALOCARBONS (HYOCS) (EPA 8010 by 8260)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMI-VOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 6520 B + F, E + F)	TOTAL RECOVERABLE HYDROCARBONS (EPA 418.1)	<input type="checkbox"/> PESTICIDES (EPA 8080) <input type="checkbox"/> PCB'S (EPA 8080)	PNA's by <input type="checkbox"/> 8270 <input type="checkbox"/> 8310	<input type="checkbox"/> pH <input type="checkbox"/> Spec. Cond. <input type="checkbox"/> TSS <input type="checkbox"/> TDS	LUFT METALS Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 8010/7470/7471)	TOTAL LEAD	<input type="checkbox"/> W.E.T. <input type="checkbox"/> TCLP	NUMBER OF CONTAINERS		
B4-2.5'	5-9-97	14:45	Soil					X														1	
B5-2.5'	5-9-97	13:45	Soil					X															1

PROJECT INFORMATION		SAMPLE RECEIPT			
PROJECT NAME <u>Mother's Diesel Spill</u>	TOTAL NO OF CONTAINERS <u>2</u>	HEAD SPACE	TEMPERATURE	CONFORMS TO RECORD	
PROJECT NUMBER <u>MCC-214</u>					
P.O.#					
TAT <u>STANDARD 5-DAY</u>		24	48	72	OTHER
Report: <input checked="" type="checkbox"/> Routine <input type="checkbox"/> Level 2 <input type="checkbox"/> Level 3 <input type="checkbox"/> Level 4	SPECIAL INSTRUCTIONS/COMMENTS:				

RELINQUISHED BY 1		RELINQUISHED BY 2		RELINQUISHED BY	
<u>[Signature]</u> (SIGNATURE)	<u>5/19/97</u> (TIME)	<u>[Signature]</u> (SIGNATURE)	<u> </u> (TIME)	<u>[Signature]</u> (SIGNATURE)	<u> </u> (TIME)
<u>James White</u> (PRINTED NAME)	<u>5-19-97</u> (DATE)	<u>[Signature]</u> (PRINTED NAME)	<u> </u> (DATE)	<u>[Signature]</u> (PRINTED NAME)	<u> </u> (DATE)
<u>Jonas & Associates</u> (COMPANY)		<u>[Signature]</u> (COMPANY)		<u>[Signature]</u> (COMPANY)	
RECEIVED BY 1		RECEIVED BY 2		RECEIVED BY LABORATORY	
<u>[Signature]</u> (SIGNATURE)	<u> </u> (TIME)	<u>[Signature]</u> (SIGNATURE)	<u> </u> (TIME)	<u>[Signature]</u> (SIGNATURE)	<u> </u> (TIME)
<u>[Signature]</u> (PRINTED NAME)	<u> </u> (DATE)	<u>[Signature]</u> (PRINTED NAME)	<u> </u> (DATE)	<u>[Signature]</u> (PRINTED NAME)	<u> </u> (DATE)
<u>[Signature]</u> (COMPANY)		<u>[Signature]</u> (COMPANY)		<u>[Signature]</u> (COMPANY)	

4-23-1998 2:37PM FROM JONAS ASSOCIATES 510 933 5362

P. 5

CHROMALAB, INC.

Environmental Services (SDB)

May 27, 1997

Submission #: 9705260

JONAS & ASSOCIATES, INC.

Allen: Mark Jonas

Project: MOTHER'S DIESEL SPILL
Received: May 19, 1997

Project#: MCC-214

re: 2 samples for TEPH analysis.
Method: EPA 8015M

Sampled: May 9, 1997 Matrix: SOIL Extracted: May 21, 1997
Run#: 6943 Analyzed: May 21, 1997


Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
132406	B4-2.5	N.D.	N.D.	N.D.


Sampled: May 9, 1997 Matrix: SOIL Extracted: May 21, 1997
Run#: 6943 Analyzed: May 22, 1997

Spl#	CLIENT SPL ID	Kerosene (mg/Kg)	Diesel (mg/Kg)	Motor Oil (mg/Kg)
132407	B5-2.5	N.D.	4.8	N.D.

Note: Hydrocarbon reported is in the late Diesel range and does not match our Diesel standard.

Reporting Limits	1.0	1.0	50
Blank Result	N.D.	N.D.	N.D.
Blank Spike Result (%)	--	87.8	--


Bruce Havlik
Chemist


Alex Tam
Semivolatiles Supervisor