

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
 DEPARTMENT OF ENVIRONMENTAL HEALTH
 ENVIRONMENTAL HEALTH LABORATORY

ANALYTICAL REQUEST

Laboratory No. 89-165

Sample Identification Samples from the Marketplace, Emeryville

Analyses Requested by: L. Miller

Date Collected: 9-21-89 Collected by: L. Miller

Date Received: 10-26-89 Received by: B. Chan

Analyses Requested Total Oil and Grease and Total Petroleum Hydrocarbons.

Background Information Samples are from monitoring well and area around well.

ANALYTICAL RESULTS

Parameter	Observation or Result	
Sample Identification-	092189-1	092189-2
	Oil from well 5	Cullings in area near well 5
Total Oil and Grease- Method 503D	86 % by wt.	1.8% by wt.
Total Petroleum Hydrocarbons- DOHS Method -High Boilers.GC-FID.	28% fuel oil & 13% diesel fuel range material.	2800 mg/kg (ppm) fuel oil & 1700 mg/kg diesel fuel range material.

Conclusions: _____

Date Analyses Completed: 11-16-89 Chemist: B.Chan/S.Hugo

Approved: *pc*

Distribution: R.Shahid, E.Howell, T.Shirasawa

ALAMEDA COUNTY HEALTH CARE SERVICES AGENCY
DEPARTMENT OF ENVIRONMENTAL HEALTH
ENVIRONMENTAL HEALTH LABORATORY

ANALYTICAL REQUEST

Laboratory No. 88-132

RECEIVED
OCT 05 1988
HAZARDOUS WASTE ANALYSIS
WASTE PROGRAM

Sample Identification Solid Red Sample from Market Place, Emeryville

Analyses Requested by: L. Miller

Date Collected: 9-16-88

Collected by: L. Miller

Date Received: 9-16-88

Received by: B. Chan

Analyses Requested CAM Metals -TTLC

Background Information Red area under fire hydrant , rear Michelin Tire

ANALYTICAL RESULTS

Parameter

Observation or Result

See attachment.

Conclusions: No metals exceed TTIC limits.

Date Analyses Completed: 9-30-88

Chemist: B. Chan

Approved: bc

Distribution: R. Shahid, T. Shirasawa, G. Winn



SEQUOIA Analytical Laboratory

2549 Middlefield Road
Redwood City, CA 94063 • (415) 364-9222

Earth Metrics, Inc.
859 Cowan Road, 1st Floor
Burlingame, CA 94010
Attn: Marc Papineau

Date Sampled: 04/18/88
Date Received: 04/18/88
Date Analyzed: 04/19/88
Date Reported: 04/21/88

Project: Nielson

Sample Number

8041267

Sample Description

Water, Composite,
Diesel Pit, #1, 2, 3

PRIORITY POLLUTANTS

PURGEABLES BY GC/MS

results in ppb

Benzene.....	740	1,2-Dichloropropane.....	< .100
Bromomethane.....	< 100	1,3-Dichloropropane.....	< 100
Bromodichloromethane.....	< 100	Ethylbenzene.....	350
Bromoform.....	< 100	Methylene chloride.....	< 500
Carbon tetrachloride.....	< 100	1,1,2,2-Tetrachloroethane...	< 100
Chlorobenzene.....	< 100	Tetrachloroethene.....	< 100
Chloroethane.....	< 100	1,1,1-Trichloroethane.....	< 100
2-Chloroethylvinyl ether...	< 500	1,1,2-Trichloroethane.....	< 100
Chloroform.....	< 500	Trichloroethene.....	< 100
Chloromethane.....	< 100	Toluene.....	2500
Dibromochloromethane.....	< 100	Vinyl chloride.....	< 100
1,1-Dichloroethane.....	< 100	Total Xylenes.....	3000
1,2-Dichloroethane.....	< 100		
1,1-Dichloroethene.....	< 100		
trans-1,2-Dichloroethene...	< 100		

Method of Analysis: EPA 624

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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Date Sampled: 04/18/88
Date Received: 04/18/88
Date Reported: 04/21/88
Project: Nielson

TOTAL PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u>	<u>Detection Limit</u> ppb	<u>High Boiling Point Hydrocarbons</u> ppb
8041267	Water, Diesel Pit Composite, #1, 2, 3	50	7,700

Method of Analysis: EPA 3510/8015

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Attn: Marc Papineau

Date Sampled: 04/18/88
Date Received: 04/18/88
Date Reported: 05/03/88
Project: Nielson

TOTAL PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u> Soil, Diesel	<u>Detection Limit</u> ppm	<u>High Boiling Point Hydrocarbons</u> ppm
8041268	Pit #1	1	96
8041269	Pit #2	1	16

Method of Analysis: EPA 3550/8015

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Earth Metrics
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Burlingame, CA 94010
Attn: Marc Papineau

Date Sampled: 04/18/88
Date Received: 04/18/88
Date Reported: 05/09/88
Project: Nielson

<u>Sample Number</u>	<u>Sample Description</u>	<u>Phosphate</u>	<u>Nitrate</u>
	Soil, Diesel	mg/kg	mg/kg
8041268	Pit #1	-	< 10
8041269	Pit #2	< 10	-

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



**FIREMAN'S FUND
INSURANCE COMPANIES**

Environmental Laboratory
3700 Lakeville Highway
Petaluma, CA 94952
800-FFIC-LAB

ENVIRONMENTAL LABORATORY

Karel Detterman
Earth Metrics
859 Cowan Road
Burlingame, CA 94010

LABORATORY RESULTS

Supply/Order No.:
Client's Survey No.:
Contract/PO No.: 02943
Release No.:

Laboratory Job No.: 881774
Date Received: 04/14/88
Date Reported: 04/15/88
Client Code: EART9

ASSAY:WASTE OIL (EPA 413.1 GRAVIMETRIC)

LABNO	SMPLNO	WT. G	COMPOUND	FOUND MG	FOUND MG/KG
-----	-----	---	-----	-----	-----
10332	E	100	OIL & GREASE	60.1	601

NOTE:THIS IS AN AMENDED REPORT 4/28/88.

ANALYST:MIKE GRAY

APPROVED BY
JERRY TUMA, PH.D., CIH
LABORATORY DIRECTOR



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Environmental Laboratory
3700 Lakeville Highway
Petaluma, CA 94952
800-FFIC-LAB

ENVIRONMENTAL LABORATORY

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 881774

ASSAY:TPH/DIESEL (EPA 3550/8015)
MATRIX:SOIL

<u>LABNO</u> <u>SMPLNO-ID</u>	<u>RESULTS</u>	<u>DET.LIM</u>
10328 A DIESEL	310 mg/kg	30 mg/kg
10329 B DIESEL	330 mg/kg	30 mg/kg
10330 C DIESEL	920 mg/kg	30 mg/kg
10332 E DIESEL	DETECTED mg/kg	6.0 mg/kg

ANALYST:JEAN M.BONITE



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Environmental Laboratory
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Petaluma, CA 94952
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ENVIRONMENTAL LABORATORY

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 881774

ASSAY:TPH/GASOLINE (EPA 5020/8015)
MATRIX:SOIL

<u>LABNO</u> <u>SMP LNO-ID</u>	<u>RESULTS</u>	<u>DET.LIM</u>
10330 C GASOLINE	160 mg/kg	2.2 mg/kg
10331 D GASOLINE	8.0 mg/kg	2.2 mg/kg
10333 N/2+S/2 <i>STOCKPILE F</i> GASOLINE <i>THP</i>	<2.2 mg/kg	2.2 mg/kg

NOTE: DOES NOT APPEAR TO BE GASOLINE.

ANALYST:JEAN M.BONITE



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Earth Metrics
859 Cowan Rd.
Burlingame, CA 94010
Attn: Karel Detterman

Date Sampled: 04/18/88
Date Received: 04/19/88
Date Reported: 04/27/88
Project: #B9570.A,
Eastshore

TOTAL OIL AND GREASE

<u>Sample Number</u>	<u>Sample Description</u> Soil,	<u>Detection Limit</u> ppm	<u>Gravimetric Petroleum Oil</u> ppm
8041345	Stock Pile F	30	< 30

Method of Analysis: EPA 3550 with trichlorotrifluoroethane and gravimetric determination.

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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Earth Metrics
859 Cowan Road
Burlingame, CA 94010
Attn: Peter Nance

Date Sampled: 04/21/88
Date Received: 04/22/88
Date Reported: 05/02/88

Project: #9570.A3,
Emeryville

TOTAL PETROLEUM FUEL HYDROCARBONS
WITH BTX DISTINCTION

Sample Number

8041685

Sample Description

Soil, Bldg., Pad 1,
West End

	<u>Detection Limit</u> ppm	<u>Sample Results</u> ppm
Low to Medium Boiling Point Hydrocarbons	1	< 1.0
Benzene	0.1	< 0.1
Toluene	0.1	< 0.1
Xylenes	0.1	< 0.1
Ethyl Benzene	0.1	< 0.1

Method of Analysis: EPA 5020/8015/8020

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Earth Metrics
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Burlingame, CA 94010
Attn: Peter Nance

Date Sampled: 04/21/88
Date Received: 04/22/88
Date Reported: 05/02/88

Project: #9570.A3,
Emeryville

TOTAL PETROLEUM FUEL HYDROCARBONS
WITH BTX DISTINCTION

Sample Number
8041684

Sample Description
Soil, P-7, 6 ft.

	<u>Detection Limit</u> ppm	<u>Sample Results</u> ppm
Low to Medium Boiling Point Hydrocarbons	1	< 1.0
Benzene	0.1	< 0.1
Toluene	0.1	< 0.1
Xylenes	0.1	< 0.1
Ethyl Benzene	0.1	< 0.1

Method of Analysis: EPA 5020/8015/8020

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director



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Earth Metrics
859 Cowan Road
Burlingame, CA 94010
Attn: Peter Nance

Date Sampled: 04/21/88
Date Received: 04/22/88
Date Reported: 05/02/88

Project: #9570.A3,
Emeryville

TOTAL PETROLEUM HYDROCARBONS

<u>Sample Number</u>	<u>Sample Description</u> Soil,	<u>Detection Limit</u> ppm	<u>High Boiling Point Hydrocarbons</u> ppm
8041682	DM1-1	1	2.2
8041683	DM1-2	1	230

Method of Analysis: EPA 3550/8015

SEQUOIA ANALYTICAL LABORATORY

Arthur G. Burton
Laboratory Director

SUPERIOR ANALYTICAL LABORATORY, INC.

1385 FAIRFAX ST., STE D • SAN FRANCISCO, CA 94124 • PHONE (415) 647-2081

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

LABORATORY NO. 50134
CLIENT: Earth Metrics Inc.
CLIENT ID: Marketplace

DATE RECEIVED: 3/7/88
DATE REPORTED: 3/9/88
JOB NO. 9569

**ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 8015**

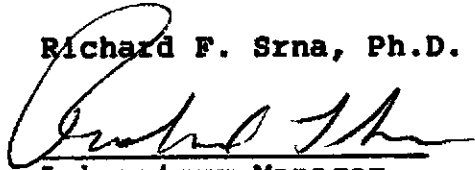
Sample Identification

W - 1C

Concentration (ppM)

Gasoline: ND <1
Kerosene: ND <1
Diesel: ND <1

Richard F. Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

SUPERIOR ANALYTICAL LABORATORY, INC.

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

LABORATORY NO. 50134
CLIENT: Earh Metrics Inc.
CLIENT ID: Marketplace

DATE RECEIVED: 3/7/88
DATE REPORTED: 3/8/88
JOB NO. 9569

**ANALYSIS FOR PCB
by Modified EPA SW-846 Method 8080**

Sample Identification

Concentration (ppM)

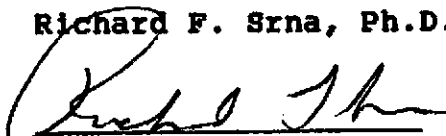
S - 1

ND < .1

W - 1A

ND < .1

Richard F. Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

SUPERIOR ANALYTICAL LABORATORY, INC.

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CERTIFICATE OF ANALYSIS

LABORATORY NO. 50134
CLIENT: Earth Metrics Inc.
CLIENT ID: W - 1B
JOB NO. 9569

DATE SAMPLED: 3/7/88
DATE RECEIVED: 3/7/88
DATE ANALYZED: 3/8/88

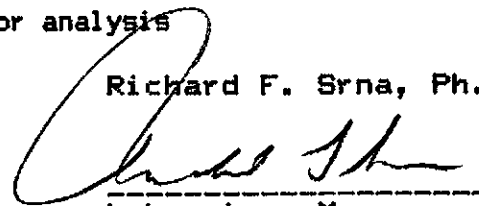
EPA METHOD 601 - PURGABLE HALOCARBONS IN WATER TEST RESULTS

<u>Compound</u>	<u>MDL</u>	<u>RESULTS (ug/l)</u>
Chloromethane	5	ND <5
Bromomethane	5	ND <5
Vinyl chloride	10	ND <10
Dichlorodifluoromethane	5	ND <5
Chloroethane	5	ND <5
Methylene chloride	40	ND <40
Trichlorofluoromethane	5	ND <5
1,1-Dichloroethene	2	ND <2
1,1-Dichloroethane	5	ND <5
trans-1,2-Dichloroethene	5	ND <5
Chloroform	5	ND <5
1,2-Dichloroethane	5	ND <5
1,1,1-Trichloroethane	5	ND <5
Carbon tetrachloride	5	ND <5
Bromodichloromethane	5	ND <5
1,2-Dichloropropane	5	ND <5
cis-1,3-Dichloropropene	5	ND <5
Trichloroethylene	5	ND <5
1,1,2-Trichloroethane	5	ND <5
trans-1,3-Dichloropropene	5	ND <5
Dibromochloromethane	5	ND <5
2-Chloroethylvinyl ether	10	ND <10
Bromoform	5	ND <5
Tetrachloroethene	5	ND <5
1,1,2,2-Tetrachloroethane	5	ND <5
Chlorobenzene	5	ND <5
1,3-Dichlorobenzene	5	ND <5
1,2-Dichlorobenzene	5	ND <5
1,4-Dichlorobenzene	5	ND <5

MDL = Method Detection Limit ug/L = ppb

Note: Sample foamed. Diluted factor of 10 for analysis

Richard F. Srna, Ph.D.



Laboratory Manager

OUTSTANDING QUALITY AND SERVICE

ANALYTICAL RESULTS

Red Solid Sample from Market Place, Emeryville

Analytical Report #88-132

CAM METALS

Lab No.:	LJM 091688-1	STLC mg/L	TTLIC mg/kg wet wt.
Sample I.D.:	Total Metals Analysis		
Parameter	Concentration in mg/kg ww (ppm)		
Antimony	4.0	15	500
Arsenic	3.0	5.0	500
Bismuth	75	100	10,000
Beryllium	0.15	0.75	75
Cadmium	0.78	1.0	100
Chromium VI		5	500
Chromium	27	560	2,500
Cobalt	8.9	80	8,000
Copper	140	25	2,500
Lead	82	5.0	1,000
Mercury	0.25	0.2	20
Molybdenum	< 2.5	550	3,500
Nickel	25	20	2,000
Selenium	< 0.05	1.0	100
Silver	12	5	500
Thallium	3.0	7.0	700
Vanadium	17	24	2,400
Zinc	260	250	5,000

Note: Since the STLC limits are based on an extract of 50g. diluted to 500ml.
The total metal concentration must exceed ten times the STLC limit before
the extract need be analyzed.