

Jennifer -

This is the Amco Chemical  
Sampling data.

Lynn

**HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST**

All applicable items must be completed

1. HML No. To **E147-E154** Page **1**

Collector's Address **James McCann** Phone **510 540-2745**

5. Priority **2**  
a. Authorized by \_\_\_\_\_

Date Sampled **4 August 1988** 7. Time Sampled \_\_\_\_\_ Hours \_\_\_\_\_

8. Codes (fill in all applicable codes)

Activity  Ent  Surv  Site Mit  Permitting  Air Tech  Other

a. STC	<b>003090</b>
b. Region	<b>4</b>
c. TPC	
d. INDEX	<b>6540</b>
e. PCA	<b>32035</b>
f. SITE	
g. County	<b>001</b>

1. SAMPLING LOCATION \_\_\_\_\_ a. EPA ID No. \_\_\_\_\_

b. Site **AMCO Chemical Comp**

c. Address **1414 3rd St Oakland**  
Number Street City Zip

1. ID	2. Collector's No.	3. HML No.	4. Type	5. Type	6. Size	7. Field Information
A.	<b>JMAC 01a</b>	<b>E147</b>	<b>oil-soil</b>	<b>1/2 gal</b>	<b>wide mouth</b>	<b>transformer oil</b>
B.	<b>02a</b>	<b>E148</b>	<b>oily soil</b>	<b>1</b>	<b>glass</b>	<b>oily soil</b>
C.	<b>03a</b>	<b>E147</b>	<b>liquid</b>			<b>unknown - from filter drum</b>
D.	<b>04a</b>	<b>E150</b>	<b>solid</b>			<b>boiler compound (?)</b>
E.	<b>05a</b>	<b>E151</b>	<b>semi solid</b>			<b>soap or grease</b>
F.	<b>06a</b>	<b>E152</b>	<b>liquid</b>			<b>maybe boiler compound</b>
G.	<b>07a</b>	<b>E153</b>	<b>solid</b>			<b>boiler compound (?)</b>
H.	<b>08a</b>	<b>E154</b>	<b>solid</b>	<b>✓</b>	<b>✓</b>	<b>Fee</b>

2. ANALYSIS REQUESTED

1.  PCB **A, B, C, F, D, G** k.  Ext. Org (Screening)

2.  pH **c, D, F, G** g.  VOA l.  Chlorinated Pesticides

3.  Metal Scan **C, D** h.  PAH m.  Organo-P Pesticides

4.  Metals (Spec) **H - test for Ferric chloride** j.  Phenols **C, D, F** n.  toxicity **G**

5.  W.E.T. i.  Carbamates o.

3. CHAIN OF CUSTODY

Signature: <i>James McCann</i>	Name/Title: <b>James McCann AHMS</b>	Inclusive Dates: <b>4/1 Aug 88 - 4/1 Aug 88</b>
Signature: <i>Verne Earl Woodson</i>	Name/Title: <b>VERNE EARL WOODSON/LABASST</b>	Inclusive Dates: <b>8/4/88 - 1/1</b>
Signature: _____	Name/Title: _____	Inclusive Dates: <b>1/1 - 1/1</b>
Signature: _____	Name/Title: _____	Inclusive Dates: <b>1/1 - 1/1</b>

4. SPECIAL REMARKS \_\_\_\_\_

5. RECEIVED BY *[Signature]* a. Title **HCIA** b. Date **8-4-88**

6. SAMPLE ALLOCATION a.  HML-Berkeley b.  HML-SC c.  AIHL d.  Contract b. Date \_\_\_\_\_

7. ANALYSIS REQUESTED **please see above**

RECEIVED  
ENVIRONMENTAL  
LABORATORY  
AUG 28 PM 2:40

FINAL

California Department of Health Services  
Hazardous Materials Laboratory

HML# E150 to E152

GC/MS Analytical Laboratory Report

Collector's Sample Number(s): JMAC04a, JMAC06a  
Collector: James McCammon  
Sampling Location: AMCO Chemical Corp.  
1414 3rd Street, Oakland, CA  
Date Received by GC/MS Laboratory: 12/15/88 from HML chemist: Mandy Mok  
Analytical Procedure Used: EPA 8270

EPA Methods 625 and 8270 Phenol Report

CAS NUMBER	BASE-NEUTRAL COMPOUNDS	HML No.	E150	E152	MET BLANK	Detection Limit
		COL No.	JMAC04a	JMAC06a		
		UNITS	µg/g	µg/g		µg/g
59-50-7	4-chloro-3-methylphenol		ND	ND	ND	10
95-57-8	2-chlorophenol		ND	ND	ND	10
120-83-2	2,4-dichlorophenol		ND	ND	ND	10
105-67-9	2,4-dimethylphenol		ND	ND	ND	10
51-28-5	2,4-dinitrophenol		ND	ND	ND	40
534-52-1	2-methyl-4,6-dinitrophenol		ND	ND	ND	20
88-75-5	2-nitrophenol		ND	ND	ND	20
100-02-7	4-nitrophenol		ND	ND	ND	20
87-86-5	pentachlorophenol		ND	ND	ND	20
108-95-2	phenol		ND	130	ND	10
88-06-2	2,4,6-trichlorophenol		ND	ND	ND	10

Note: ND = Not Detected      NA = Not Analyzed

Remarks: Detection limits for E150 is 4 times of listed values due to dilution factor.

Analyst signature: Jane Tang Date: 2-15-89  
-Analyst/Review's signature: William Lum Date: 2-23-89  
Signature of Supervising Chemist: William Lum Date: 2-23-89

**D.C. Summary of Matrix Spike Duplicate Analysis**

Collector's Name: James McCammon

Sampling Location: AMCO Chemical Corp

1414 3rd Street, Oakland, CA

Analysis for: Phenols Sample Spiked: HML No. E510 Matrix: Soil

COMPOUNDS	FOUND*	AMOUNT ** ADDED	AMOUNT DETECTED RUN 1	AMOUNT DETECTED RUN 2	AVERAGE RECOVERY		RPD	DET. LIMIT
	UNITS	µg/g	µg/g	µg/g	µg/g	%	%	µg/g
PHENOL	ND	200	161	182	172	86	12	10
2-CHLOROPHENOL	ND	200	174	190	182	91	9	10
4-CHLORO-3-METHYLPHENOL	ND	200	121	130	126	63	7	10
4-NITROPHENOL	ND	200	77	100	89	44	26	20
PENTACHLOROPHENOL	ND	200	119	140	130	65	16	20

Note: ND = Not Detected    NA = Not Analyzed    RPD = Relative Percent Difference  
 \* Concentration found in Unspiked Sample  
 \*\* Theoretical value (direct std not submitted)  

$$RPD = \frac{| \text{RUN 1} - \text{RUN 2} |}{(\text{RUN 1} + \text{RUN 2})/2} \times 100\%$$

Analyst: Mandy Mok / Jane Ting    Supervising Chemist: \_\_\_\_\_  
 Signature: Jane Ting    Date: 2/15/89  
 Signature: William S. Lum    Date: Feb 23-89

PHENOLS

Collector's Name James McCammon  
Sampling Location AMCO Chemical Corp.  
1414 3rd Ste, Oakland

Date Collected 8/04/88

Date Received by Lab 8/04/88

Analytical Procedure: Sonication extraction

Reference: HML Methods

HML Number -->		E150				
Collector's Sample Number -->		JMAC04a			METHOD BLANK	Detection Limit
CAS #	Units -->	ug/g			ug/g	ug/g
108-95-2	Phenol	ND			ND	200
95-57-8	2-Chlorophenol					300
88-75-5	2-Nitrophenol					200
105-67-9	2,4-Dimethylphenol					200
120-83-2	2,4-Dichlorophenol					300
59-50-7	4-Chloro-3-methylphenol					300
88-06-2	2,4,6-Trichlorophenol					400
51-28-5	2,4-Dinitrophenol					600
100-02-7	4-Nitrophenol					500
534-52-1	2-Methyl-4,6-dinitrophenol					600
87-86-5	Pentachlorophenol					600
Number of Nontarget Peaks		35			ND	
Total Nontarget Concentration Calculated as 2,4,6-Trichlorophenol		37,000			ND	

Note: ND = Not Detected NA = Not Analyzed

Analyst: Mandy Mok

Supervising Chemist: Howard S. Okamoto

[Signature] 11/27/88  
Signature Date

[Signature] 1/4/89  
Signature Date

California Department of Health Services  
Hazardous Materials Laboratory

HML# E147 to

E154

LABORATORY REPORT

p. 2 of 2

PHENOLS

Collector's Name James McCammon  
Sampling Location Amco Chemical Corps  
1414 3rd St., Oakland

Date Collected 8/04/88

Date Received by Lab 8/04/88

Analytical Procedure: Sonication Extraction for solids. Adjust pH < 2, then extract w/MeCl<sub>2</sub>. (For liquids)

Reference: HML Methods

HML Number →		E149	E152		METHOD BLANK	* Detection Limit
Collector's Sample Number →		JMAC03a	JMAC06a			
CAS #	Units →	ug/ml	ug/g		ppm	ppm
108-95-2	Phenol	ND	67		ND	1
95-57-8	2-Chlorophenol		ND			1.5
88-75-5	2-Nitrophenol					1
105-67-9	2,4-Dimethylphenol					1
120-83-2	2,4-Dichlorophenol					1.5
59-50-7	4-Chloro-3-methylphenol					1.5
88-06-2	2,4,6-Trichlorophenol		44			2
51-28-5	2,4-Dinitrophenol		ND			3
100-02-7	4-Nitrophenol					2.5
534-52-1	2-Methyl-4,6-dinitrophenol					3
87-86-5	Pentachlorophenol	3.2				3
Number of Nontarget Peaks		5	56		ND	
Total Nontarget Concentration Calculated as 2,4,6-Trichlorophenol		2.2	11,000		ND	

Note: ND = Not Detected NA = Not Analyzed

\* The D.L. for E152 is 20 times greater than the stated D.L.

Analyst: Mandy Mole

Supervising Chemist: Howard S. Okamoto

[Signature] 11/17/88  
Signature Date

\_\_\_\_\_  
Signature Date

Hazardous Materials Laboratory

LABORATORY REPORT

E154

QC SUMMARY

p. 1 of 2

Collector's Name James McCammon  
 Sampling Location AMCO Chemical Corp.  
1414 3rd St., Oakland  
 Analysis for Phenols

Matrix <u>soil</u>	MATRIX SPIKE DUPLICATE PERFORMED ON HML NO. <u>E510</u>						
	FOUND**	ADDED	RECOV. 1	RECOV. 2	AVER. RECOVERY		RPD
Units →	ug/g	ug/g	ug/g	ug/g	ug/g	% RECOV.	%
Pentachlorophenol	ND	200	140	152	146	73.0	8.22
Phenol	.		165	177	171	85.5	7.02
2-Chlorophenol	17.4		164	176	170	85.0	7.06
4-Chloro-3-methylphenol	ND		149	160	154	77.0	7.14
4-nitrophenol	.		131	141	136	68.0	7.35

Comments:

Note: NA = Not Analyzed due to matrix interference. RPD = Relative Percent Difference  
 ND = Not Detected.  
 \*\* Concentration found in the unspiked sample. 
$$= \frac{| \text{REC.1} - \text{REC.2} |}{(\text{REC.1} + \text{REC.2})/2} \times 100\%$$

Analyst: Mandy Mok / Ven-Chi Liao  
J. Mok  
 Signature \_\_\_\_\_  
 Date 11/17/88

Supervising Chemist:  
Jamail Garcia  
 Howard S. Okamoto  
 Date 1/4/89

Hazardous Materials Laboratory

LABORATORY REPORT

E154

p. 1 of 1

QC SUMMARY

Collector's Name James McCammon  
 Sampling Location AMCO Chemical Corp.  
1414 3rd St., Oakland

Analysis for Phenols

Matrix <u>liquid</u>	MATRIX SPIKE DUPLICATE PERFORMED ON HML NO. <u>E466</u>						
	FOUND**	ADDED	RECOV. 1	RECOV. 2	AVER. RECOVERY		RPD
Units →	ug/ml	ug/ml	ug/ml	ug/ml	ug/ml	% RECOV.	%
Pentachlorophenol	ND	10	7.15	9.01	8.08	80.8	23.0
Phenol			6.56	7.56	7.06	70.6	14.2
2-Chlorophenol			8.31	9.75	9.03	90.3	16.0
4-Chloro-3-methylphenol			7.54	9.06	8.30	83.0	18.3
4-nitrophenol			4.72	8.65	6.68	66.8	58.9

Comments:

Note: NA = Not Analyzed due to matrix interference. RPD = Relative Percent Difference  
 ND = Not Detected.  
 \*\* Concentration found in the unspiked sample.

$$RPD = \frac{|REC.1 - REC.2|}{(REC.1 + REC.2)/2} \times 100\%$$

Analyst: Mandy Mok/ Ven-Chi Liao

Supervising Chemist:

*Mandy Mok*  
 Signature 11/17/88  
 Date

*Howard S. Okamoto*  
 Signature 11/18/88  
 Date



Laboratory Report

Phenols--Non Target

P. 1 of 2

Collector: James McCarmon  
 Sampling Location: Amco Chemical Corp.  
1414 3rd St.  
Oakland

Date Collected: 8/04/88  
 Date Received by Lab: 8/04/88  
 Lab Results Status:  
 Partial  Final  Supple.

Analytical Procedure: Samples were extracted with methylene chloride, then screened by capillary column GC/FID.

Reference: EPA Method 8040

HML Number -->	E149	E152			
Collector's Sample Number -->	JMAC03a	JMAC06a		Method Blank	Detection Limit
Matrix -->	liquid	solid		liq/solid	
CAS =	Units -->	ug/ml	ug/g	ppm	ppm
Number of Non Target (NT) Peaks	5	56		ND	2/40
Total Conc. Of NT Calc. as 2,4,6 -TCP *	2.2	11,000		ND	2/40

Note: ND = Not Detected

\* 2,4,6-TCP = 2,4,6-Trichlorophenol

Sample Prep.: Mandy Mok  
 Analyst: [Signature]  
 Supervisor: [Signature]

[Signature]  
[Signature]  
Jannail Gardus

3/03/89  
 3/2/89  
 3/3/89

Laboratory Report

Phenols-Non Target

P. 2 of 2

Collector: James McCammon  
Sampling Location: AMCO Chemical Corp.  
1414 3rd St.  
Oakland

Date Collected: 8/04/88  
Date Received by Lab: 8/04/88  
Lab Results Status: Partial  Final  Supple.

Analytical Procedure: Samples were extracted with methylene chloride, then screened by capillary column GC/FID.

Reference: EPA Method 8040

HML Number -->	E150			
Collector's Sample Number -->	JMAC04a	Method Blank		Detection Limit
Matrix -->	solid	solid		
CAS =	Units -->	ug/g	ug/g	ug/g
Number of Non Target (NT) Peaks	35	ND		400
Total Conc. Of NT Calc. as 2,4,6 -TCP *	37000	ND		400

te: ND = Not Detected

\* 2,4,6-TCP = 2,4,6-Trichlorophenol

Sample Prep.: Mandy Mok  
Client: VEH-CHI LTA  
Permitted: Jarnail S. Garono

[Signature]  
Jarnail Garono

3/03/89  
3/2/89  
3/3/89

Date

GC/MS Analytical Laboratory Report

Collector's Sample Number(s): E149  
 Collector: James Mc Cammon  
 Sampling Location: AMCO Chemical Corporation  
1414 3rd Street, Oakland, CA  
 Date Received by GC/MS Laboratory: 12/15/88 from HML chemist: J. Garcha  
 Analytical Procedure Used: Extractable organics - phenols

EPA Methods 625 and 8270 Base-Neutral/Acid Report

CAS NUMBER	BASE-NEUTRAL COMPOUNDS	HML No.	E149		MET BLANK	Detection Limit
		COL No.	JMAC03a			
		UNITS	µg/ml		µg/ml	µg/ml
59-50-7	4-chloro-3-methylphenol		ND		ND	1.5
95-57-8	2-chlorophenol		ND		ND	0.5
120-83-2	2,4-dichlorophenol		ND		ND	1.0
105-67-9	2,4-dimethylphenol		ND		ND	1.0
51-28-5	2,4-dinitrophenol		ND		ND	7.5
534-52-1	2-methyl-4,6-dinitrophenol		ND		ND	5.0
88-75-5	2-nitrophenol		ND		ND	2.0
100-02-7	4-nitrophenol		ND		ND	2.5
87-86-5	pentachlorophenol		ND		ND	5.0
108-95-2	phenol		ND		ND	0.5
88-06-2	2,4,6-trichlorophenol		ND		ND	1.0

Note: ND = Not Detected      NA = Not Analyzed

Remarks: \_\_\_\_\_

Analyst signature: Jane Tang Date: 1/10/89  
 Co-Analyst/Review's signature: William S. Lee Date: 2-1-89  
 Signature of Supervising Chemist: William S. Lee Date: 2-1-89

JT/jt PHE149R.JT 1/10/89

Q.C. Summary of Matrix Spike Duplicate Analysis

Collector's Name: James McCammon

Sampling Location: AMCO Chemical Corporation  
1414 3rd Street, Oakland, CA

Analysis for: Phenols Sample Spiked: HML No. E466 Matrix: Liquid

COMPOUNDS	FOUND*	AMOUNT **	AMOUNT	AMOUNT	AVERAGE		RPD	DET. LIMIT
		ADDED	DETECTED	DETECTED	RECOVERY	RECOVERY		
UNITS	µg/ml	µg/ml	µg/ml	µg/ml	µg/ml	%	%	µg/ml
PHENOL	ND	4.2	3.1	3.4	3.3	79	9	0.5
2-CHLOROPHENOL	ND	6.7	5.9	6.3	6.1	91	7	0.5
4-CHLORO-3-METHYLPHENOL	ND	8.1	6.7	7.4	7.1	88	10	1.5
4-NITROPHENOL	ND	4.1	3.5	3.1	3.3	80	12	2.5
PENTACHLOROPHENOL	ND	ND	ND	ND				5.0

Note: ND = Not Detected      NA = Not Analyzed      RPD = Relative Percent Difference

\* Concentration found in Unspiked Sample  
 \*\* Concentration found in direct std submitted

$$= \frac{| \text{RUN 1} - \text{RUN 2} |}{(\text{RUN 1} + \text{RUN 2})/2} \times 100\%$$

Analyst: Mandy Mok / Jane Tang Supervising Chemist: William Lum

Signature: Jane Tang Date: 1/10/89

Signature: William S. Lum Date: 2-1-89

LABORATORY REPORT

POLYCHLORINATED BIPHENYLS (PCB)

Collector's Name James M<sup>c</sup> Cammar  
Sampling Location AMCO Chemical Corp  
1414 3rd St. Oakland

Date Collected 8/4/88  
Date Received by Lab 8/4/88

Analytical Procedure: Samples were extracted with hexane/acetone solvents. Oil samples were diluted with hexane. The extracts were analyzed by gas chromatography using an electron-capture detector.

Reference: HML Methods

HML Number →		E147	E148	E149	BLANK		Detection Limit	
Collector's Sample Number →		JMAC01a	JMAC02a	JMAC03a	BLANK			
CAS #	Units →	µg/g	µg/g*	µg/g	µg/g**	µg/g	µg/g	µg/g
12674-11-2	Aroclor 1016	ND	ND	ND	ND	ND	ND	1.0 100
11104-28-2	Aroclor 1221	ND	ND	ND	ND	ND	ND	1.0 100
11141-16-5	Aroclor 1232	ND	ND	ND	ND	ND	ND	1.0 100
53469-21-9	Aroclor 1242	ND	ND	ND	ND	ND	ND	1.0 100
12672-29-6	Aroclor 1248	ND	ND	ND	ND	ND	ND	1.0 100
11097-69-1	Aroclor 1254	ND	ND	ND	ND	ND	ND	1.0 100
11096-82-5	Aroclor 1260	ND	ND	ND	ND	ND	ND	1.0 100
37324-23-5	Aroclor 1262	ND	ND	ND	ND	ND	ND	1.0 100

Note: ND = Not Detected NA = Not Analyzed \* Oil Sample \*\* aqueous Sample

Analyst: JAMES CHENG Supervising Chemist: Howard S. Okamoto  
James Cheng 11/18/88 Jarnail Garcher 11/22/88  
Signature Date Signature Date

LABORATORY REPORT

E153

p. 1 of 1

POLYCHLORINATED BIPHENYLS (PCB)

Collector's Name James M<sup>c</sup> Cammar  
Sampling Location AMCO Chemical Corp  
1414 3rd St Oakland

Date Collected 8/4/88  
Date Received by Lab 8/4/88

Analytical Procedure: Samples were extracted with hexane/acetone solvents. Oil samples were diluted with hexane. The extracts were analyzed by gas chromatography using an electron-capture detector.

Reference: HML Methods

HML Number →		E150	E152	E153		Detection Limit
Collector's Sample Number →		JMAC04a	JMAC06a	JMAC07a	BLANK	
CAS #	Units →	µg/g	µg/g	µg/g	µg/g	µg/g
12674-11-2	Aroclor 1016	ND	ND	ND	ND	1.0
11104-28-2	Aroclor 1221	ND	ND	ND	ND	1.0
11141-16-5	Aroclor 1232	ND	ND	ND	ND	1.0
53469-21-9	Aroclor 1242	ND	ND	ND	ND	1.0
12672-29-6	Aroclor 1248	ND	ND	ND	ND	1.0
11097-69-1	Aroclor 1254	ND	ND	ND	ND	1.0
11096-82-5	Aroclor 1260	ND	ND	ND	ND	1.0
37324-23-5	Aroclor 1262	ND	ND	ND	ND	1.0

Note: ND = Not Detected NA = Not Analyzed

Analyst: JAMES C. CHENG Supervising Chemist: Howard S. Okamoto  
James c. Cheng 11/18/88 Garnail Garche 11/22/88  
Signature Date Signature Date

Hazardous Materials Laboratory

E153

LABORATORY REPORT

p. 2 of 2

QC SUMMARY

Collector's Name James M<sup>c</sup>Cammar  
 Sampling Location AMCO Chemical Corp  
1414 3rd St. Oakland.  
 Analysis for PCB

Matrix <u>Liquid.</u>	MATRIX SPIKE DUPLICATE PERFORMED ON HML NO. <u>E149</u>						
	FOUND**	ADDED	RECOV. 1	RECOV. 2	AVER. RECOVERY		RPD
Units →	µg/l	µg/l	µg/l	µg/l	µg/l	% RECOV.	%
PCB 1254	NA	NA	NA	NA	NA	NA	NA

Comments: Insufficient Sample to make duplicate matrix spike.

Note: NA = Not Analyzed due to matrix interference. RPD = Relative Percent Difference  
 ND = Not Detected.  
 \*\* Concentration found in the unspiked sample.

$$= \frac{| \text{REC.1} - \text{REC.2} |}{(\text{REC.1} + \text{REC.2})/2} \times 100\%$$

Analyst: JAMES CHENG  
James Cheng 11/18/88  
 Signature Date

Supervising Chemist: Y  
Jannail Gardner 11/22/88  
 Howard S. Okamoto Date

Hazardous Materials Laboratory

LABORATORY REPORT

E153

p. 1 of 2

QC SUMMARY

Collector's Name James McCammar  
 Sampling Location AMCO Chemical Corp  
1414 3rd St Oakland  
 Analysis for PCB

Matrix <u>Soil</u>		MATRIX SPIKE DUPLICATE PERFORMED ON HML NO. <u>E148</u>						
Units →		FOUND**	ADDED	RECOV. 1	RECOV. 2	AVER. RECOVERY		RPD
		µg/g	µg/g	µg/g	µg/g	µg/g	% RECOV.	%
<u>PCB</u>	<u>1254</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>

Comments: Due to high background interference, no accurate data for duplicate matrix spike can be obtained. The other QC in this package are: 78.7% for method standard recovery, and QC sample measured as 39.0 µg/g compared to the true value of 33.0 µg/g.

Note: NA = Not Analyzed due to matrix interference. RPD = Relative Percent Difference  
 ND = Not Detected.  
 \*\* Concentration found in the unspiked sample.

$$RPD = \frac{|REC.1 - REC.2|}{(REC.1 + REC.2)/2} \times 100\%$$

Analyst: JAMES CHENG  
James Cheng      11/18/88  
 Signature                  Date

Supervising Chemist: Howard S. Okamoto  
Howard S. Okamoto      11/22/88  
 Signature                          Date



LABORATORY REPORT

Supplemental p. E148  
1 of 1

Collector's Name James Mc Carman  
Sampling Location Asco Chemical Corp  
12114 3<sup>rd</sup> St Oakland

Date Collected 4 Aug. 1988  
Date Received by Lab 11/17/88

Analytical Procedure: Freon Extraction

Reference: HML Method

HML Number →		E147	E148			
Collector's Sample Number →		JMAC01	JMAC02		METHOD BLANK	Detection Limit
CAS #	Units →	%	%		%	
	<u>oil &amp; grease</u>	<u>28</u>	<u>27</u>		<u>ND</u>	<u>0.1%</u>

Note: ND = Not Detected    NA = Not Analyzed

Analyst: Ja Lancher  
Ja Lancher    12-6-88  
Signature                      Date

Supervising Chemist: Howard S. Okamoto  
Jarnal Lancher    12/8/88  
Signature                      Date

Hazardous Materials Laboratory

LABORATORY REPORT

E148

p. \_\_\_ of \_\_\_

QC SUMMARY

Collector's Name James McComman

Sampling Location Asico chemical Corp  
1414 3<sup>rd</sup> St. Oakland

Analysis for oil & grease

Matrix <u>soil</u>	MATRIX SPIKE DUPLICATE PERFORMED ON HML NO. <u>E148</u>						
	FOUND**	ADDED	RECOV. 1	RECOV. 2	AVER. RECOVERY		RPD
Units -->	g	g	g	g	g	% RECOV.	%
<u>oil &amp; grease</u>	<u>5.36</u>	<u>1.00</u>	<u>0.86</u>	<u>0.89</u>	<u>0.88</u>	<u>88</u>	<u>3.4</u>

Comments:

Note: NA = Not Analyzed due to matrix interference. RPD = Relative Percent Difference  
 ND = Not Detected.  
 \*\* Concentration found in the unspiked sample.

$$= \frac{| \text{REC.1} - \text{REC.2} |}{(\text{REC.1} + \text{REC.2})/2} \times 100\%$$

Analyst: Y. Linn Chen  
Y. Linn Chen  
 Signature Date 12-6-88

Supervising Chemist:  
Howard S. Okamoto  
 Howard S. Okamoto Date 12/8/88

**HAZARDOUS MATERIALS SAMPLE ANALYSIS REQUEST**

All applicable items must be completed

1. HML No. To **E147-E154** Page **1**

Collector's Address **James McCammon** Phone **415 540-2745**

5. Priority **2**  
a. Authorized by \_\_\_\_\_

Date Sampled **4 August 1988** 7. Time Sampled \_\_\_\_\_ Hours \_\_\_\_\_

8. Codes (fill in all applicable codes)

Activity  Env  Surv  Site Mit  Permitting  Air Tech  Other

a. STC	0	0	3	0	9	0
b. Region	4					
c. TPC						
d. INDEX	6	5	4	0		
e. PCA	3	2	0	3	5	
f. SITE						
g. County	0	0	1			

9. SAMPLING LOCATION \_\_\_\_\_ a. EPA ID No. \_\_\_\_\_

10. Site **AMCO Chemical Corp**

11. Address **1414 3rd St Oakland**  
Number Street City Zip

**1. SAMPLES**

a. ID	b. Collector's No.	c. HML No.	d. Type	e. Type	f. Size	g. Field Information
A.	JMAC 01a	E147	oil-soil	Yel	wide mouth	transformer oil
B.	02a	E148	oily soil		glass	oily soil
C.	03a	F149	liquid			unknown - from filter drum
D.	04a	F150	solid			boiler compound (?)
E.	05a	F151	semi solid			soap or grease
F.	06a	F152	liquid			maybe boiler compound
G.	07a	F153	solid			boiler compound (?)
H.	08a	F154	soils			FeCl

ANALYSIS REQUESTED  
 pH **C, D, F, G**  
 Metal Scan **C, D**  
 Metals (Spec) **H - test for Ferric**  
 W.E.T.  
 PCB **A, B, C, F, D, G**  
 VOA  
 PAH  
 Phenols **C, D, F**  
 Carbamates  
 Ext. Org (Screening)  
 Chlorinated Pesticides  
 Organo-P Pesticides  
 toxicity **G**

CHAIN OF CUSTODY  
 Signature **James McCammon** Name/Title **AHMS** Inclusive Dates **4/1 Aug 88 - 4/1 Aug 88**  
 Signature **VERNE EARL WOODSON** Name/Title **LAB ASST** Inclusive Dates **8/4/88 - 1/1**  
 Signature \_\_\_\_\_ Name/Title \_\_\_\_\_ Inclusive Dates \_\_\_\_\_  
 Signature \_\_\_\_\_ Name/Title \_\_\_\_\_ Inclusive Dates \_\_\_\_\_

SPECIAL REMARKS \_\_\_\_\_

RECEIVED BY **[Signature]** a. Title **HCTA** b. Date **8-4-88**

SAMPLE ALLOCATION a.  HML-Berkeley b.  HML-SC c.  AIHL d.  Contract b. Date \_\_\_\_\_

ANALYSIS REQUESTED **please see above**

CALIFORNIA DEPARTMENT OF HEALTH SERVICES  
HAZARDOUS MATERIALS LABORATORY SECTION

HML# E147 ..... TO  
HML# E154 .....

LABORATORY REPORT FOR TOTAL METAL ANALYSIS

COLLECTOR'S NAME: J MCCOMBO  
SAMPLE LOCATION: AMCO CHEMICAL CORP  
OAKLAND

COLLECTOR'S SAMPLE NO.: JMAC04A  
ACTIVITY:  
DATE RECEIVED: 8-4-88

ANALYTICAL PROCEDURE: SAMPLES ARE DIGESTED WITH CONCENTRATED NITRIC ACID OVER A HOT PLATE. THE DIGESTED SAMPLES ARE FILTERED AND MADE TO 100 ML WITH 5% NITRIC ACID IN DISTILLED DEIONIZED WATER. METAL ANALYSIS OF THE DIGEST IS BY ICPAES. RESULTS ARE REPORTED AS UG/GRAM.

HML NUMBER : E150  
COLLECT SAMP #: JMAC04A  
SAMPLE TYPE : SOLID

*ppm*

AG-SILVER		0.13
AS-ARSENIC	<	0.34
BA-BARIUM		37.7
BE-BERYLLIUM		0.02
CD-CADMIUM		2.36
CO-COBALT		5.42
CR-CHROMIUM		31.0
CU-COPPER		32.9
MO-MOLYBDENUM		2.03
NI-NICKEL		19.9
PB-LEAD		29.4
SB-ANTIMONY		2.10
SE-SELENIUM	<	0.61
V-VANADIUM	<	0.05
ZN-ZINC		63.0
TL-THALLIUM		40.3

NOTE: < = BELOW DETECTION LIMIT OF INSTRUMENT (\*\*\*)=NOT DETERMINED BY ICP

*[Signature]*  
ANALYST'S SIGNATURE

10/12/88  
DATE

*[Signature]*  
MILAD S. ISKANDER, SUPERVISOR

10/17/88  
DATE

*[Signature]*  
10/11/88

*ML (REV.) 10/13/88*

*Note: JMAC03A not done - insufficient sample  
HML E149*

California Department of Health Services  
Hazardous Materials Laboratory

HML#: E147  
To: E154

LABORATORY REPORT

Collector's Name: James Mc Cannon Date Received: 8/4/88  
Location: AMCO Chemical Corp. Collector's #: JMAC031A  
1414 3rd Street, Oakland, Ca. to JMAC036A

Analytical Procedure Used: For solid samples, DI water was added to the sample, mixed, and allowed to equilibrate prior to analysis. pH determined using pH meter Accumet 825 MP Calibrated with pH buffers 4, 7, and 10.

Reference: HML Methods Manual

Analysis Results:

HML NO.	COLLECTOR'S SAMPLE NO.	TYPE OF SAMPLE	pH	% DILUTION
E149	JMAC033A	Liquid	6.24	
E150	JMAC034A	Solid	12.81	33.3
E152	JMAC036A	Liquid	13.88	33.3
E153	JMAC037A	Solid	10.32	33.3

Signatures:

Zaidn Ilyay 8/17/88  
Analyst Date  
me (chw) 10/13/88

Milad Iskander 10/14/88  
Supervisor Date

California Department of Health Services  
Hazardous Materials Laboratory

HML#: E147  
To: E154

LABORATORY REPORT

Collector's Name: James McCannon Date Received: 8/4/88  
Location: AMCO Chemical Corp. Collector's #: JMAC1a  
1414 3rd Street Oakland to: JMAC8a

Analytical Procedure Used: Sample was extracted with deionized water. A filter paper was impregnated with the extract. A drop of potassium ferrocyanide solution was placed on the filter paper. A positive result will give a prussian blue ring or circle.

Reference: Spot Tests in Inorganic Analysis

Analysis Results:

HML NO.	COLLECTOR'S SAMPLE NO.	TYPE OF SAMPLE	RESULT
E150	JMAC4a	solid	negative

Signatures:

Gaida Ileyay  
Analyst

10-7-88  
Date

Milad Iskander  
Supervisor

10/14/88  
Date

ms (rev.) 10/13/88

California Department of Health Services  
Hazardous Materials Laboratory

HML#: E147  
To: E154

LABORATORY REPORT  
**AMENDED**

Collector's Name: James McCammon  
Location: AMCO Chemical Corp.  
1414 3rd Street Oakland

Date Received: 8/4/88  
Collector's #: JMAC1a  
to: JMAC8a

Analytical Procedure Used: Sample was extracted with deionized water. A filter paper was impregnated with the extract. A drop of potassium ferrocyanide solution was placed on the filter paper. A positive result will give a prussian blue ring or circle.

Reference: Spot Tests in Inorganic Analysis

Analysis Results:

HML NO.	COLLECTOR'S SAMPLE NO.	TYPE OF SAMPLE	RESULT
E154	JMAC8a	solid	negative

Signatures:

Janet Dreyer  
Analyst

1/6/89  
Date

Milad Iskander  
Supervisor

1/10/89  
Date