US EPA RECORDS CENTER REGION 5

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3/11/86
D.2

INSPECTION REPORT
FOR
ACME REFINING SCRAP IRON
AND METAL
CHICAGO, IL
ILT180014839
R05-8410-01

MARCH 11, 1986

recycled paper

ecology and environment

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ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

MEMORANDUM

DATE: March 11, 1986
TO: File
FROM: Ruth Ann Jacquette RAJ
SUBJECT: Illinois/R05-8410-01 IL0307
Chicago/Acme Refining Scrap Iron and Metal
ILT180014839

Acme Refining Scrap Iron and Metal Company operated from 1979 until October 1, 1982, at which time it was sold to Chemisphere Incorporated. This site was primarily a metal recycling facility. However, a portion of the property was utilized as a storage area for hazardous wastes. This site was originally identified by the Illinois EPA in the form of a Preliminary Assessment submitted to the U.S. EPA.

On Tuesday, August 20, 1985, FIT members performed a site inspection and collected 5 soil samples at Acme Refining Scrap Iron and Metal. Victor Crivello, Vice President of Environmental Operations at Chemisphere, Incorporated, was interviewed at this time. While the site was in operation, approximately 86, 55 gallon drums of trichloroethylene and other chlorinated solvents were double stacked and stored on pallets at the site. Although at one time the site was entirely fenced and securely locked, vandalism and a past fire has made the site easily accessible to the public.

Sample results indicate the soil is contaminated with Toluene, Chlorobenzene, 4,4'-DDT, Phenol and Aroclor 1248 and 1254.

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Sample Location	Sample Number	Contaminant	Concentration
1	EF935	Toluene	9.7 ug
2	EF936	Toluene Chlorobenzene	9.9 ug 41 ug
3	EF937	Chlorobenzene 4,4'-DDT	9.5 ug 1200 ug
4	EE516	Toluene Chlorobenzene Phenol Aroclor 1254 Aroclor 1248	12 ug 25 ug 7400 ug 2300 ug 4200 ug
5	EE517	4,4'-DDT Aroclor 1254 Aroclor 1248	400 ug 2200 ug 3400 ug

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EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	IT180014839

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Acme Ref. Scrap Iron And Metal	829 W. 22nd Place

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Chicago	IL	60607	Cook	031	05

09 COORDINATES: LATITUDE 41°51'40.0" LONGITUDE 087°38'45.0"

10 TYPE OF OWNERSHIP (Check one): ■ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 8 20 85 (MONTH DAY YEAR)

02 SITE STATUS: ☐ ACTIVE ■ INACTIVE

03 YEARS OF OPERATION: 1979 (BEGINNING YEAR) 1979 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply): ☐ A. EPA ■ B. EPA CONTRACTOR Ecology & Environment, Inc. (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR ___ (Name of firm) ☐ E. STATE ☐ F. STATE CONTRACTOR ___ (Name of firm) ☐ G. OTHER ___ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Ruth Ann Jacquette	Environmental Scientist	E&E, (FIT)	(312) 663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Dave Curnock	Biologist	E&E, (FIT)	(312) 663-9415
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Victor Crivello	V.P. Environmental Operations	5301 W. Dempster St. # 306 Skokie, IL. 60077	(312) 966-4013
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	10:30 Am	Sunny, Clear, 70's

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Larry Winner	I. EPA, HSPS	(217) 782-9848

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Ruth Ann Jacquette	U.S. EPA	E&E, (FIT)	(312) 663-9415	3 11 86 (MONTH DAY YEAR)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: T1800014839

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
Although groundwater can be found within 10 feet of the surface, only the deeper bedrock aquifer is used for industrial purposes. The majority of industries and all residential areas obtain water from Lake Michigan.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
The South Branch of the Chicago River is 528 feet South of the site. Interfering buildings and cross streets would prevent the migration of wastes to the River.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
There is no observed threat of contamination of the air.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
There is no documented or observed threat due to fire or explosion.

01 ■ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,466 — 04 NARRATIVE DESCRIPTION
Although at one time the site was entirely fenced with locked gates, vandalism and a past fire has made the site easily accessible to the public.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE: 8-20-85) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 2 (Acres) — 04 NARRATIVE DESCRIPTION
Sample analysis of the soil indicates Toluene, Chlorobenzene, phenol, 4,4' DDT and Aroclor 1248 and Aroclor 1254 are present at the site.

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
Area residents recieve drinking water from Lake Michigan, water supply intakes for this system are located greater than 3 miles from the site.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 2 — 04 NARRATIVE DESCRIPTION
During the short period of operation there were only 2 employees. There are no records to indicate any injuries or exposures took place.

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,466 — 04 NARRATIVE DESCRIPTION
Due to soil contamination and easy accessability of site, a potential for population exposure / injury exists.
(See part F)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: IL | 02 SITE NUMBER: 118001 4839

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Due to the contamination of soil onsite a potential for damage to flora exists.

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
The site is located in a highly industrialized area, therefore damage to fauna is unlikely.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Contamination of the food chain is unlikely. (see part K.)

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☒ OBSERVED (DATE: 8-20-85) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 40,466 — 04 NARRATIVE DESCRIPTION
Sample Analysis indicates contamination is present in the area in which waste was previously stored.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Due to the extent of soil contamination onsite, a potential for migration of wastes offsite by runoff exists

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
While inspecting the site, a storm drain located adjacent to the site appeared to be clogged due to the amount of standing water surrounding the drain.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
There are no records to indicate illegal or unauthorized dumping has occurred.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
There are no other known, potential or alleged hazards.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 40,466

IV. COMMENTS
None

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
Site Inspection, 8/20/85
Interview with Victor Crivello, Chemisphere, 8/20/85
7.5 minute Topographic Map, Englewood, 1963, PR 1980

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	7180014839

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS 86-90

03 WASTE CHARACTERISTICS (Check all that apply)

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☒ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☒ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	2600	gallons	Trichloroethylene and other chlorinated solvents
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers) None

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION

V. FEEDSTOCKS (See Appendix for CAS Numbers) None

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Interview with Victor Crivello, Chemisphere, Inc., August 20, 1985

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	T180014839

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
■ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
■ C. DRUMS, ABOVE GROUND	2600	gallons
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ■ H. OTHER Storage (Specify)

05 OTHER
- ■ A. BUILDINGS ON SITE 2

06 AREA OF SITE: 2 (Acres)

07 COMMENTS
None

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☐ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.
Drums of Trichloroethyene and other chlorinated solvents were double stacked and stored on pallets.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ■ YES ☐ NO

02 COMMENTS
Site is not completely fenced, Vandalism on the property is frequent.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Site Inspection, 8/20/85
Interview with Victor Crinello, Chemisphere, 8/20/85

EPA FORM 2070-13 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	T180014839

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ■	B. ☐
NON-COMMUNITY	C. ■	D. ☐

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☐
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. >3 (mi)
B. >3 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING
☐ B. DRINKING (Other sources available)
COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)
■ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)
☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 0

03 DISTANCE TO NEAREST DRINKING WATER WELL >3 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
<10 (ft)	East	N/A (ft)	N/A (gpd)	☐ YES ■ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)

Chicago area has scattered industrial wells but the majority of industries and all residential areas obtain water from Lake Michigan.

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES ■ NO	COMMENTS	☐ YES ■ NO	COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

■ A. RESERVOIR, RECREATION DRINKING WATER SOURCE
☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES
☐ C. COMMERCIAL, INDUSTRIAL
☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
South Branch of the Chicago River	☐	.1 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 40,466 NO. OF PERSONS	B. 161,862 NO. OF PERSONS	C. 364,189 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION <1/8 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 42,595

04 DISTANCE TO NEAREST OFF-SITE BUILDING 100 feet (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The site is located in the middle of an industrial and commercial area.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	T1800014839

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ■ C. $10^{-4} - 10^{-3}$ cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☐ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ■ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

Dolomite

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
45 (ft)	unknown (ft)	6.5

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
4 (in)	2.0 (in)	0 %	N/A	0 %

09 FLOOD POTENTIAL: unknown SITE IS IN _____ YEAR FLOODPLAIN

10 N/A ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum): N/A ESTUARINE A. _____ (mi) OTHER B. _____ (mi)

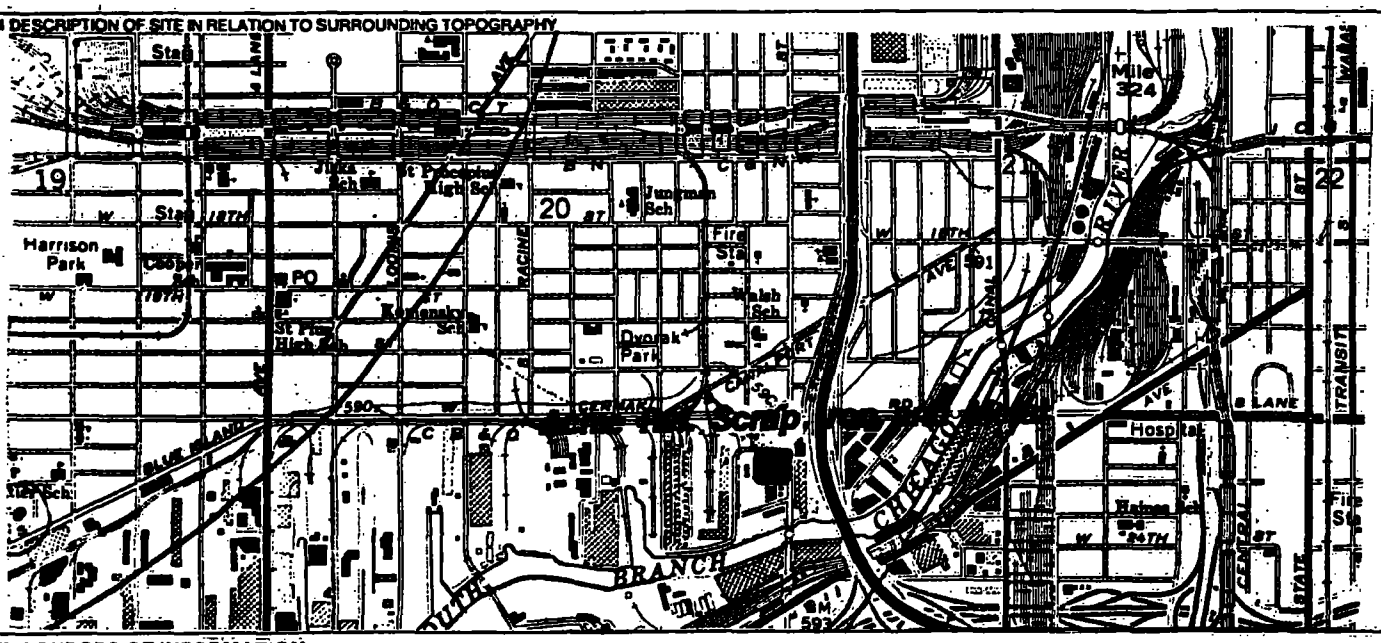
12 DISTANCE TO CRITICAL HABITAT (of endangered species): N/A _____ (mi) ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 0 (mi)	B. 0 (mi)	C. N/A (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Climatic Atlas, 1968 Reprinted 1979
7.5 minute Topographic maps: Englewood 1963 PR 1980
Loop 1963 PR 1972
Jackson Park 1963 PR 1972

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Cook County Soil Survey, U.S.D.A.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	TIS00014839

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	5	Rocky Mountain Analytical Lab, and California Analytical Lab.	12/85-1/86
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU	readings below Background.

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND ☐ AERIAL

02 IN CUSTODY OF Ecology And Environment, Inc. (Name of organization or individual)

03 MAPS ■ YES ☐ NO

04 LOCATION OF MAPS U.S. EPA and FIT files

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

None

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection, 8/20/85

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	T180014839

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Chemisphere, Inc.		5301 W. Dempster St. #306		Skokie	IL	60608

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Acme Ly. Scrap Iron + Metal		829 W. 22nd Place		Chicago	IL	60607

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Interview with Victor Crivello, Chemisphere, Inc. 8/20/85

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	T180014839

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
None	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER
Acme Ref. Scrap Iron + Metal	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
829 W. 22nd Place	

05 CITY	06 STATE	07 ZIP CODE
Chicago	IL	60607

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
1979 - 1979	Acme Ref. Scrap Iron + Metal

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Interview with Victor Civello, Chemisphere, Inc. 8/20/85

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	IL8001 4839

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
None	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
None			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
None			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Interview with Victor Crivello, Chemisphere, Inc. 8/20/85

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	IL8001483 9

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ L. ENCAPSULATION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ N. CUTOFF WALLS — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	TIS 00 14 839

II PAST RESPONSE ACTIVITIES *(Continued)*

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION N/A

III. SOURCES OF INFORMATION *(Cite specific references, e.g., state files, sample analysis, reports)*

Site Inspection 8/20/85
Interview with Victor Crivello, Chemisphere 8/20/85,
IL EPA Files

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	T1800014839

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

none

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Site Inspection 8/20/85
Interview with Victor Ceinello, Chemisphere 8/20/85
IEPA Files

EPA FORM 2070-13 (7-81)

Immediate Removal Action Check Sheet

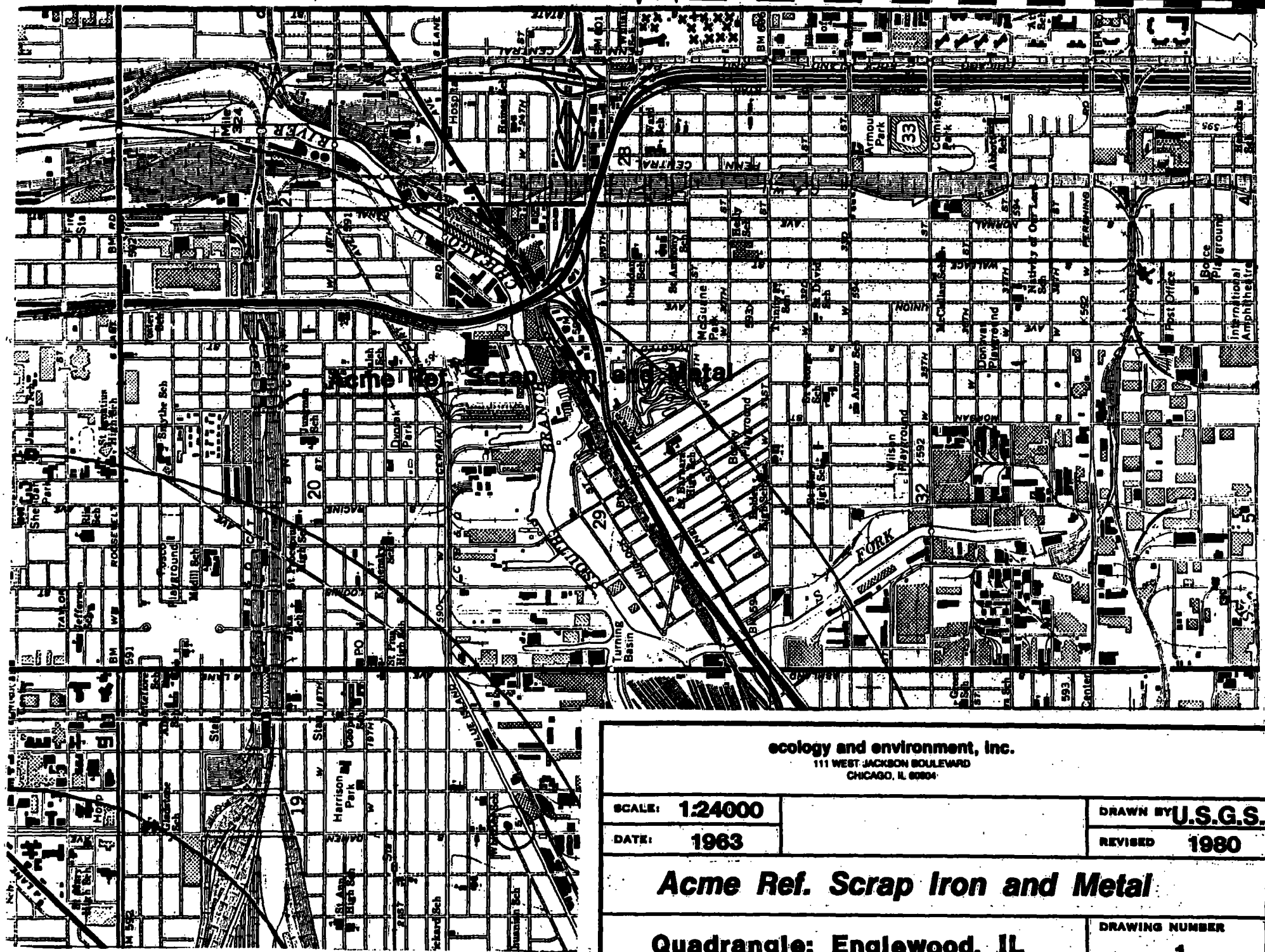
	High	Moderate	Low
Fire and Explosion Hazard			
Flammable Materials n/A			
Explosives n/A			
Incompatable Chemicals n/A			
Direct Contact with Acutely Toxic Chemicals			
Site Security		X	
Leaking Drums or Tanks n/A			
Open Lagoons or pits N/A			
Materials on Surface n/A			
Proximity of Population n/A			
Evidence of Casual Site Use		X	
Contaminated Water Supply			
Exceeds 10 Day Snarl n/A			
Gross Taste or Odors n/A			
Alternate Water Available n/A			
Potential Contamination n/A			
Is the site (abandoned) or active?			

Comments

3

Cardinal

3



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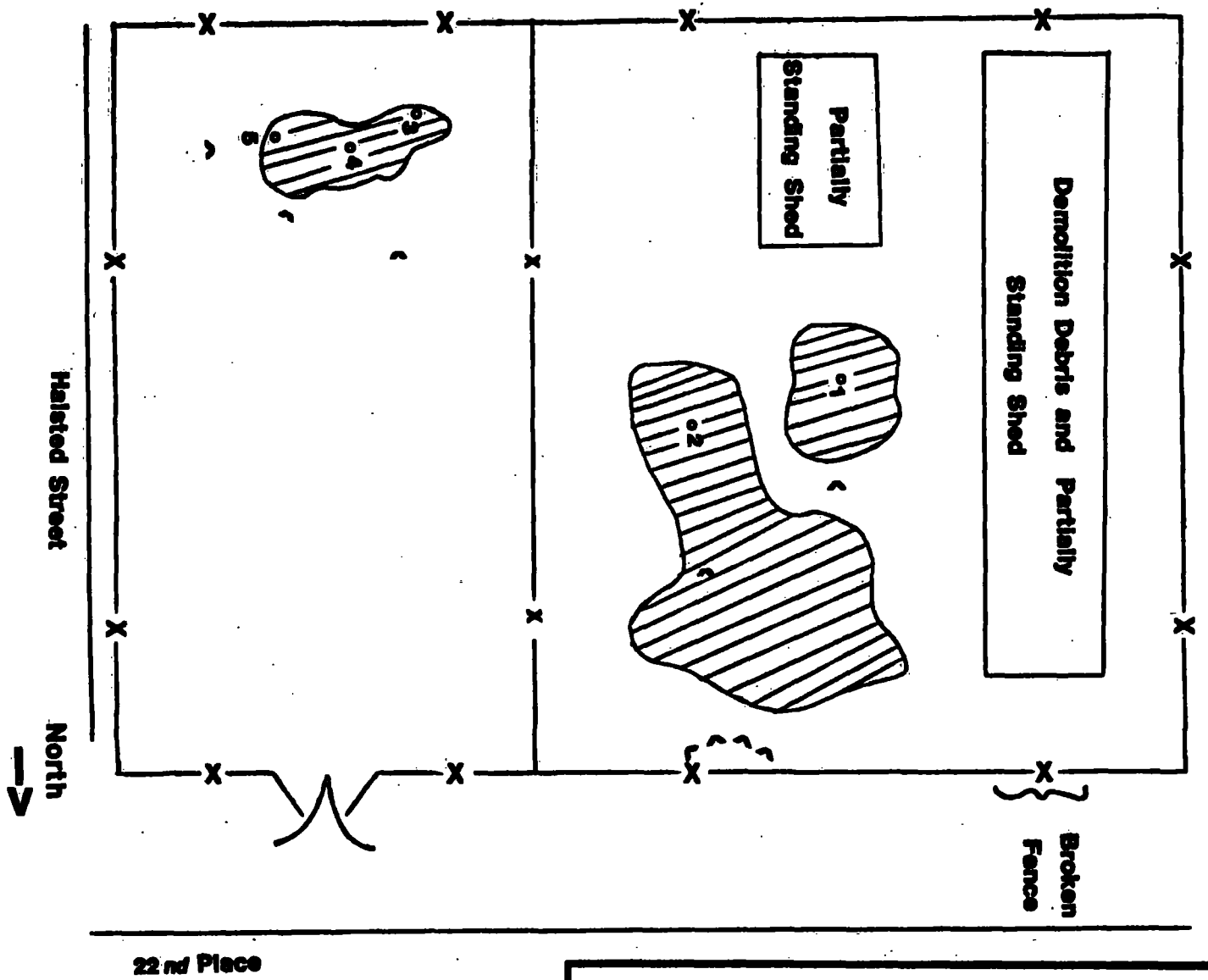
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

SCALE: 1:24000		DRAWN BY: U.S.G.S.
DATE: 1963		REVISED 1980

Acme Ref. Scrap Iron and Metal

Quadrangle: Englewood, IL

DRAWING NUMBER 1



∘ Soil Sampling Point
< Photo-Direction
/// Stained Soil

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CHICAGO, IL 60604

SCALE: NA		DRAWN BY R.A.J.
DATE: 10-29-85		REVISED NA

Acme Ref. Scrap Iron and Metal

Site Map and Sample Locations

DRAWING NUMBER 2

4

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4

FIELD PHOTOGRAPHY LOG SHEET

DATE 8-20-85

TIME 11:45 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
(W) WNW NW NNW

WEATHER Sunny, Clear 70's

SITE Acme Ref. Scrap Iron and metal

TDD# R05 841001

PHOTOGRAPHED BY: Dave Cornock

SAMPLE ID# (if applicable)

DESCRIPTION: debris and oil wastes are shown in the foreground and the old Acme building in the background.

DATE 8-20-85

TIME 11:35 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW (WSW)
W WNW NW NNW

WEATHER Sunny, Clear 70's

SITE Acme Ref Scrap Iron and metal

TDD# R05 8410:01

PHOTOGRAPHED BY: Dave Cornock

SAMPLE ID# (if applicable)

DESCRIPTION: low lying area

recycled paper

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FIELD PHOTOGRAPHY LOG SHEET

DATE 8-20-85

TIME 11:30 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
(S) SSW SW WSW
W WNW NW NNW

WEATHER Sunny, Clear 70's

SITE Acme Ref Scrap Iron and metal.

TDD# R05 8410 01

PHOTOGRAPHED BY: Dave Cunnock

SAMPLE ID# (if applicable)

DESCRIPTION: Debris and Soil stained by oily wastes.

DATE 8-20-85

TIME 11:50 (A.M.) P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Sunny, Clear 70's

SITE Acme Ref. Scrap Iron + Metal

TDD# R05 8410 01

PHOTOGRAPHED BY: Dave Cunnock

SAMPLE ID# (if applicable)

DESCRIPTION: Debris, and stained soil located near the north perimeter of the site

5

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5

INTRODUCTION TO DATA TABLES

A SUMMARY OF THE ANALYTICAL RESULTS FOR SAMPLES WHICH WERE TAKEN DURING FIELD ACTIVITIES CAN BE FOUND IN THE FOLOWING TABLES. ONLY DETECTABLE CONCENTRATIONS ARE REPORTED, HOWEVER, IF THE COMPOUND HAS A FOOTNOTE FOLLOWING THE VALUE, CONSULT THE DEFINITION OF THE FOOTNOTE PROVIDED BELOW. ADDITIONAL QA/QC INFORMATION IS PROVIDED IN THE ATTACHED DATA SHEETS.

I) REPORTING UNITS
- A) ORGANICS
  - 1) Water Samples - ug/l or ppb (parts per billion)
  - 2) Soils or Sediments - ug/kg or ppb (parts per billion)
- B) METALS
  - 1) Water Samples - ug/l or ppb
  - 2) Soils or sediments - mg/kg or ppm

II) DEFINITION OF FOOTNOTES TO ANALYTICAL DATA

A) ORGANICS

Footnote	Definition	Interpretation
UJ	Detection Limit (D.L.) is estimated because of a Quality Control (QC) protocol. D.L. is possibly above or below Contract Required Detection Limit (CRDL).	Compound was not detected
UB	Compound found in laboratory blank. No Value above CRDL.	Compound was not detected
UJB	Compound found in laboratory blank, but not detected in sample. CRDL is estimated because of a QC protocol.	Compound was not detected
B	Compound found in blank. Two interpretations are possible:	
	a) If sample value is equivalent to D.L. to 5x blank concentration	Compound value is semi-quantitative.
	b) If sample value is greater than 5x the blank concentration	Compound value is quantitative
JB	Compound found in blank, value is estimated because of QC protocol.	Compound value is semi-quantitative
R	Do Not Use Value. Major Violation of QC Protocol	Compound value is not usable.
C	Value adjusted for blank (an unacceptable procedure)	Compound value is semi-quantitative
J	Value is above CRDL and is an estimated value because of a QC protocol	Compound value is semi-quantitative
Q	No Analytical Result	Compound was not detected
N	Presumptive evidence for the presence of a compound as used for a Tentatively Identified Compound (TIC)	Compound value is semi-quantitative

B) METALS

FOOTNOTE	DEFINITION	INTERPRETATION
E	Estimated or not reported due to interference. See laboratory narrative.	Compound or element was not detected or value is semi-quantitative
s	Analysis by Method of Standard Additions (Look for a "+" Footnote)	Value is quantative
R	Spike recoveries outside QC protocols which indicates a possible matrix problem. Data may be biased high or low. See spike results and laboratory narrative.	Value may be quantitative or semiquantitative
*	Duplicate value outside QC protocols which indicates a possible matrix problem	Value is semiquantitative
+	Correlation coefficient for standard additions is less than 0.995. See review and laboratory narrative.	Data value is biased
[ ]	Value is real, but is above instrument D.L. and below CRDL	Value may be quantitative or semiquantitative
UJ	D.L. is estimated because of a QC protocol. D.L. is possibly above or below CRDL.	Compound or element was not detected
J	Value is above CRDL and is an estimated value because of a QC protocol.	Value is semiquantitative

ITC	MEF 274	MEF 275	MEF 276	MEF 849	MEF 850							
OTC	EF 935	EF 936	EF 937	EE 516	EE 517							
SAMPLE	1	2	3	4	5							
COMPOUND												
chloromethane												
bromomethane												
vinyl chloride												
dimethyl phthalate												
acenapthylene												
3-nitroaniline												
acenaphthene												
2,4-dinitrophenol												
4-nitrophenol												
dibenzofurnan												
2,4-dinitrotoluene												
2,6-dinitrotoluene												
diethylphthalate												
4-chlorophenyl-phenylether												
flourene												
4-nitroaniline												
4,6-dinitro-2-methylphenol												
N-nitrosodiphenylamine												
4-bromophenyl-phenylether												
hexachlorobenzene												

STATE Illinois SITE Acme Refining Scrap Iron + Metal TDD R05-8410-01 PAGE 1 OF 2, SET # 1

ITC	MEF 274	MEF 275	MEF 276	MEF 849	MEF 850						
OTC	EF 935	EF 936	EF 937	EE 516	EE 517						
SAMPLE	1	2	3	4	5						
COMPOUND											
pentachlorophenol											
phenanthrene											
anthracene											
di-n-butylphthalate											
fluoranthene											
benzidine											
pyrene											
butylbenzylphthalate											
3,3'-dichlorobenzidine											
thallium											
tin											
vanadium											
zinc											
cyanide CHECK IF ANALYZED ( )											
TENTATIVELY IDENTIFIED ORGANICS											

STATE Illinois SITE Acme Refining Scrap Iron + Metal TDD R05-8410-01 PAGE 2 OF 2, SET # 1

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111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

Date Received for Review: 3-4-86 Date Review Completed: 3-6-86

TO: Ruth Ann Jacquette

FROM: Suzanne Kozlowski

SUBJECT: Acme Ref Scrap Iron & Metal
Illinois RD5-8410-01

Sample Description: Case # 4860 EE 517 pesticide page

Project Data Status: Complete

FIT Data Review Findings:

Missing pesticide page
Hits of Aroclor 1248 and Aroclor 1254 were found. 4,4' DDT was detected at an approximate level.

Additional Comments:

Book No. 5
Page No. 16

recycled paper

ecology and environment, inc.
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International Specialists in the Environment

Date Received for Review: 10/30/85 Date Review Completed: 11/19/85

To: RuthAnn Jacquette

From: Cynthia Pugh

Subject: Acme Ref. Scrap Iron + Metal (Illinois)
(R05-8410-01)

Sample Description: Case # 4860: Low Soil Organics

Project Data Status: Still awaiting Pesticide Data for Samples EF 937 and EES97

FIT Data Review Findings:

See attached CRL review.

Additional Comments:

Book No. 5
Page No. 16

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 10/24/85

SUBJECT: Review of Region V CLP Data
Received for Review on 9/23/85

RECEIVED OCT 30 1985

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory
Francine Thomas

TO: Data User: Fit

We have reviewed the data for the following case(s).

SITE NAME: Acme Refg. Scrap Iron & Metals SMO Case No. 4860

EPA Data Set No. SF 2639 No. of Samples: 5 D.U./Activity Numbers 19051 C48500

CRL No. 85FJ12570 - 85FJ12574

SMO Traffic No. EF935-EF937; EE516-517

CLP Laboratory: Cal. Hrs. Required for Review: 7

Following are our findings.

1. The VOA reagent blank contained methylene chloride, acetone and 2-butanone contamination above the CRDL but less than 5X the detection limits.

2. The pesticide matrix spike and matrix spike duplicate data is unreliable due to numerous sample interferences. Pesticide sample reproducibility cannot be easily determined.

Patrick J. Chunille
10-23-85

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Don Trees, ELP/Sample Management Office

EPA FORM 1320-6 (REV. 3-78)

In Reference to Case No(s): 4859 / 4860

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM
Telephone Record Log

RECEIVED OCT 30 1985

Date of Call: 10-17-85

Laboratory Name: CAL

Lab Contact: MIKE MILLE

Region: 5

Regional Contact: PAT CHURILLA

Call Initiated By: ___ Laboratory ✓ Region

In reference to data for the following sample number(s):

CASE 4859 EE504-EE507, EF992

CASE 4860 EE516, EE517, EE935-EE937

Summary of Questions/Issues Discussed:

CASE 4859 VOA BLANK TIME RUN IS 19:14 ON THE BFB TUNING FORM AND 10:03 ON THE RAW DATA. PLEASE RESOLVE THIS DISCREPANCY.

CASE 4860 THE TIMES ON THE PESTICIDE SAMPLE RUN SEQUENCE ARE MIXED UP AND DO NOT ALL MATCH THE RAW DATA. SUPPLYING THE ENTIRE RUN SEQUENCE, INCLUDING STANDARDS WOULD HELP PREVENT THESE TYPES OF DATA TRANSFER ERRORS.

Summary of Resolution:

RESUBMITTED FORMS FOR CASE 4860 WERE RECEIVED ON 10-18-85

RESUBMITTED FORMS FOR CASE 4859 WERE RECEIVED ON 10-21-85

Signature: Patrick J. Churilla Date: 10-21-85

Distribution: (1) Lab Copy, (2) Region Copy, (3) SMO Copy

California Analytical Laboratories, Inc.
2544 Industrial Boulevard • West Sacramento, CA 95691 • (916) 372-1393

RECEIVED OCT 30 1985

September 20, 1985

RECEIVED
SEP 23 1985
U.S. EPA, CENTRAL REGIONAL LAB.
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

Joan Fisk
U.S. EPA
Hazardous Waste Investigation
401 M Street, SW
Washington, DC 20460

Dear Joan Fisk:

Enclosed are data summary sheets and documentation for samples and QA/QC comprising Case 4860 of Contract 68-01-6958. These samples were received 8/21/85 and logged in under the following CAL Lab numbers:

CAL Lab Number	Sample I.D
L1118	EE516
L1119	EE517
L1120	EF935
L1121	EF936
L1122	EF937

The samples were analyzed as low and medium concentration sediment samples. The pesticide recoveries in the low concentration spike and duplicate spike could not be calculated due to the high level of compounds present in the sample. The PCB's detected could not be confirmed by GC/MS.

The following comments pertain to the initial and on-going calibration curves for volatiles and acid/base neutrals. The initial 5--point curve for volatile organics was reduced to a 4--point curve because the high-level standard saturated our systems. This is allowed by the contract. Two of the SPCC compounds are also outside the contract windows on both the initial curve and the on-going calibration curve; bromoform and methyl chloride. The bromoform has been a continual problem for us since the contract switched to the aromatic internal standards for quantitation. We have checked purge rates, temperatures, and replaced the traps, yet the Rf continually runs about 0.20. We have informed the program of this problem, and it is our understanding that the SPCC value is going to be lowered. The difficulties with methyl chloride and vinyl chloride result from highly variable standards which we obtain from Supelco (our sole source for the gas standards). Over 50% of the standards have had incorrect levels of both methyl chloride and vinyl chloride while bromomethane and chloroethane stay quite constant. We are working on this problem with Supelco but until it is resolved the Rf's for these two compounds will be erratic. We have documented that the correct Rf is about 1.2--1.5 for both compounds, and when we have samples that show positive responses for either compound, they are re-run with an accurate standard.

RECEIVED OCT 3 0 1985

In the case of the acid/base neutrals, we have been unable to see benzidine in any of our standards except for the first day they are prepared. This is caused by two problems. First, the method itself is inappropriate for benzidine, as documented in EPA Method 605. Also, it degrades in the standards when combined with the other compounds. These two facts make it impossible to use on either the initial or continuing calibration curve. We also have difficulty with the di-n-octyl phthalate response factor being quite variable. We suspect the difficulty is with the injection port, and that the problem could be solved with an on-column injector. When this is the only CCC value out, we do not re-run the curve since many times the Rf has dropped out of the 25% window in less than 24 hours, then it often falls back in the next day.

These problems have all been discussed in detail with EMSL-LV and at the EPA caucus in Atlanta, and we know that several labs share these difficulties. We firmly believe that the quality of our data is not in question even though we are technically out of contractual compliance concerning the above discussed items.

This report was checked for contractual compliance, assembled, paginated then printed and assembled by a Kodak copier/assembler. Each copy has been checked for completeness. This check may miss some individual pages. Please request by page number if any page is missing. If you have any questions, please give us a call.

Sincerely,

Michael J. Miille, PhD
Director of GC/MS Services

Karin S. Yee
Data Specialist

RECEIVED OCT 30 1985

[illegible]: 4860

Contr[illegible]: CAL

TENTATIVELY IDENTIFIED COMPOUNDS
MATCH ASSE[illegible]T

NOTE: Reviewer should note directly on O[illegible] Analysis Data Sheet (OADS) those matches that in his opinion ([illegible] on contract criteria) are unreasonable

CRITERIA

(1) Relative intensities of major ions (>10%) reference spectrum should be present in the sample spectrum.

(2) Relative intensities of major ions in sample spectrum should agree to within ± 20% of reference spectrum intensities.

(3) Molecular ions present in reference spectrum should be present in sample spectrum.

(4) Ions present in sample spectrum, but not in reference spectrum should be reviewed for possible background contamination or presence of coeluting interferences.

(5) Ions present in reference spectrum, but not in the sample spectrum should be reviewed for possible subtraction from the sample spectrum because of background contamination or coeluting interferences.

(6) If, in the reviewer's opinion, no valid identification can be made the compound should be labelled as "unknown" and the initials and date of the reviewer placed on the OADS.

85FJ12570

Sample Number
EF 935

Sample 1

Organics Analysis Data Sheet
(Page 1)

RECEIVED OCT 30 1985

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4860

Lab Sample ID No: L1120

QC Report No: 95

Sample Matrix: SOIL

Contract No: 68-01-6958

Data Release Authorized By: MCM

Date Sample Received: 8/21/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/27/85

Date Analyzed: 8/27/85

Conc/Dil Factor: 1 pH: 7.0

Percent Moisture: 11

Percent Moisture (Decanted): NR

CAS Number		ug/Kg
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U J
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	8.7 B
67-64-1	Acetone	38 B J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	10 JB
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5 U R

PJC 10-23-85

CAS Number		ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5 U R
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	8.7
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 10-23-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

R = UNUSABLE

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when assessing a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
B See cover letter.
NR Not Required.
S Spiked Compound.

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Laboratory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 4860

Sample Number
EF 935

Sample 1

Organics Analysis Data Sheet
(Page 2)

RECEIVED OCT 30 1985

Semivolatile Compounds

Concentration: Medium

Date Extracted/Prepared: 8/23/85

Date Analyzed: 9/16/85

Conc/DiL Factor: 0.45G/10ML

CAS Number		ug/Kg PJC 10-23-85
62-75-9	N-Nitrosodimethylamine	NA
108-95-2	Phenol	66000 U
62-53-3	Aniline	66000 U
111-44-4	bis(-2-Chloroethyl)Ether	66000 U
95-57-8	2-Chlorophenol	66000 U
541-73-1	1,3-Dichlorobenzene	66000 U
106-46-7	1,4-Dichlorobenzene	66000 U
100-51-6	Benzyl Alcohol	66000 U J
95-50-1	1,2-Dichlorobenzene	66000 U
95-48-7	2-Methylphenol	66000 U
39638-32-9	bis(2-chloroisopropyl)Ether	66000 U
106-44-5	4-Methylphenol	66000 U
621-64-7	N-Nitroso-Di-n-Propylamine	66000 U
67-72-1	Hexachloroethane	66000 U
98-95-3	Nitrobenzene	66000 U
78-59-1	Isophorone	66000 U
88-75-5	2-Nitrophenol	66000 U
105-67-9	2,4-Dimethylphenol	66000 U
65-85-0	Benzoic Acid	280000 J
111-91-1	bis(-2-Chloroethoxy)Methane	66000 U
120-83-2	2,4-Dichlorophenol	66000 U
120-82-1	1,2,4-Trichlorobenzene	66000 U
91-20-3	Naphthalene	66000 U
106-47-8	4-Chloroaniline	66000 U J
87-68-3	Hexachlorobutadiene	66000 U
59-50-7	4-Chloro-3-Methylphenol	66000 U
91-57-6	2-Methylnaphthalene	66000 U
77-47-4	Hexachlorocyclopentadiene	66000 U J
88-06-2	2,4,6-Trichlorophenol	66000 U
95-95-4	2,4,5-Trichlorophenol	320000 U
91-58-7	2-Chloronaphthalene	66000 U
88-74-4	2-Nitroaniline	320000 U
131-11-3	Dimethyl Phthalate	66000 U
208-96-8	Acenaphthylene	66000 U
99-09-2	3-Nitroaniline	320000 U

CAS Number		ug/Kg PJC 10-23-85
83-32-9	Acenaphthene	66000 U
51-28-5	2,4-Dinitrophenol	320000 U
100-02-7	4-Nitrophenol	320000 U
132-64-9	Dibenzofuran	66000 U
121-14-2	2,4-Dinitrotoluene	66000 U
606-20-2	2,6-Dinitrotoluene	66000 U
84-66-2	Diethylphthalate	66000 U
7005-72-3	4-Chlorophenyl-phenylether	66000 U
86-73-7	Fluorene	66000 U
100-01-6	4-Nitroaniline	320000 U
534-52-1	4,6-Dinitro-2-Methylphenol	320000 U
86-30-6	N-Nitrosodiphenylamine(1)	66000 U
101-55-3	4-Bromophenyl-phenylether	66000 U
118-74-1	Hexachlorobenzene	66000 U
87-86-5	Pentachlorophenol	320000 U
85-01-8	Phenanthrene	66000 U
120-12-7	Anthracene	66000 U
84-74-2	Di-n-Butylphthalate	~~66000 J~~ 340000 J
206-44-0	Fluoranthene	~~66000 J~~ 410000 J
92-87-5	Benzidine	52000 U
129-00-0	Pyrene	~~66000 J~~ 350000 J
85-68-7	Butylbenzylphthalate	66000 U J
91-94-1	3,3'-Dichlorobenzidine	13000 U
56-55-3	Benzo(a)Anthracene	66000 U
117-81-7	bis(2-Ethylhexyl)Phthalate	67000 J
218-01-9	Chrysene	~~66000 J~~ 370000 J
117-84-0	Di-n-Octyl Phthalate	66000 U J
205-99-2	Benzo(b)Fluoranthene(2)	~~66000 J~~ 510000 J
207-08-9	Benzo(k)Fluoranthene(2)	~~66000 J~~ 510000 J
50-32-8	Benzo(a)Pyrene	66000 U
193-39-5	Indeno(1,2,3-cd)Pyrene	66000 U
53-70-3	Dibenz(a,h)Anthracene	66000 U
191-24-2	Benzo(g,h,i)Perylene	66000 U

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(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Laboratory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 4860

Sample Number
EF 935

Sample 1

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

RECEIVED OCT 3 0 1985

Concentration: Medium

Date Extracted/Prepared: 8/23/85

Date Analyzed: 9/11/85

Conc/Dil Factor: 0.089G:5ML

CAS Number		ug/Kg
319-84-6	Alpha-BHC	1200 U
319-85-7	Beta-BHC	1200 U
319-86-8	Delta-BHC	1200 U
58-89-9	Gamma-BHC (Lindane)	1200 U
76-44-8	Heptachlor	1200 U
309-00-2	Aldrin	1200 U
1024-57-3	Heptachlor Epoxide	1200 U
959-98-8	Endosulfan I	1200 U
60-57-1	Dieldrin	2400 U
72-55-9	4,4'-DDE	2400 U
72-20-8	Endrin	2400 U
33213-65-9	Endosulfan II	2400 U
72-54-8	4,4'-DDD	2400 U
7421-93-4	Endrin Aldehyde	2400 U
1031-07-8	Endosulfan Sulfate	2400 U
50-29-3	4,4'-DDT	2400 U
72-43-5	Methoxychlor	12000 U
53494-70-5	Endrin Ketone	2400 U
57-74-9	Chlordane	12000 U
8001-35-2	Toxaphene	24000 U
12674-11-2	Aroclor-1016	12000 U
11104-28-2	Aroclor-1221	12000 U
11141-16-5	Aroclor-1232	12000 U
53469-21-9	Aroclor-1242	12000 U
12672-29-6	Aroclor-1248	12000 U
11097-69-1	Aroclor-1254	24000 U
11096-82-5	Aroclor-1260	24000 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s = NR or W_s = 0.089 V_t = 5000 V_i = 5

Form I Prepared by: DB 1/85

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Sample 1

ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4860 SAMPLE NO. EF935.

QC REPORT NO. 95 LAB SAMPLE NO. L112001AB

MGN

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY. SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	150-84-5	6-OCTEN-1-OL, 3, 7-DIMETHYL-, ACE	A/BN	959	522	9.9 UG/G
2.	1921-70-6	PENTADECANE, 2, 6, 10, 14-TETRAMET	A/BN	1060	792	48.7 UG/G
3.	638-36-8	HEXADECANE, 2, 6, 10, 14-TETRAMETH	A/BN	1127	753	46.6 UG/G

COMPOUND NAME	PROBABILITY	COMMENTS
1. 6-OCTEN-1-OL, 3, 7-DIMETHYL-, ACE	1. C	1.
2. PENTADECANE, 2, 6, 10, 14-TETRAMET	2. A	2.
3. HEXADECANE, 2, 6, 10, 14-TETRAMETH	3. B	3.

no volatile compounds

85FJ12371

Sample Number
EF 936

Sample 2

Organics Analysis Data Sheet
(Page 1)

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Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4860

Lab Sample ID No: L1121

QC Report No: 95

Sample Matrix: SOIL

Contract No: 68-01-6958

Data Release Authorized By: [signature]

Date Sample Received: 8/21/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/27/85

Date Analyzed: 8/27/85

Conc/Dil Factor: 1 pH: 7.1

Percent Moisture: 25

Percent Moisture (Decanted): NR

CAS Number		ug/Kg
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U J
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	10 B
67-64-1	Acetone	36 B J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	12 B J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5 U R

PJC 10-23-85

CAS Number		ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5 U R
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	9.9
108-90-7	Chlorobenzene	41
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 10-23-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

R = UNUSABLE

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

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Laboratory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 4860

Sample Number
EF 936

Sample 2

Organics Analysis Data Sheet
(Page 2)

RECEIVED OCT 3 0 1985

Semivolatile Compounds

Concentration: Medium

Date Extracted/Prepared: 8/23/85

Date Analyzed: 9/18/85

Conc/DiL Factor: 0.38G/3ML

CAS Number		ug/Kg PJC 10-23-85
62-75-9	N-Nitrosodimethylamine	NA
108-95-2	Phenol	20000 U
62-53-3	Aniline	20000 U J
111-44-4	bis(-2-Chloroethyl)Ether	20000 U
95-57-8	2-Chlorophenol	20000 U
541-73-1	1,3-Dichlorobenzene	20000 U
106-46-7	1,4-Dichlorobenzene	20000 U
100-51-6	Benzyl Alcohol	20000 U
95-50-1	1,2-Dichlorobenzene	20000 U
95-48-7	2-Methylphenol	20000 U
39638-32-9	bis(2-chloroisopropyl)Ether	20000 U
106-44-5	4-Methylphenol	20000 U J
621-64-7	N-Nitroso-Di-n-Propylamine	20000 U
67-72-1	Hexachloroethane	20000 U
98-95-3	Nitrobenzene	20000 U
78-59-1	Isophorone	20000 U
88-75-5	2-Nitrophenol	20000 U
105-67-9	2,4-Dimethylphenol	20000 U J
65-85-0	Benzoic Acid	96000 U J
111-91-1	bis(-2-Chloroethoxy)Methane	20000 U
120-83-2	2,4-Dichlorophenol	20000 U
120-82-1	1,2,4-Trichlorobenzene	20000 U
91-20-3	Naphthalene	20000 U
106-47-8	4-Chloroaniline	20000 U J
87-68-3	Hexachlorobutadiene	20000 U
59-50-7	4-Chloro-3-Methylphenol	20000 U
91-57-6	2-Methylnaphthalene	20000 U
77-47-4	Hexachlorocyclopentadiene	20000 U J
88-06-2	2,4,6-Trichlorophenol	20000 U
95-95-4	2,4,5-Trichlorophenol	96000 U
91-58-7	2-Chloronaphthalene	20000 U
88-74-4	2-Nitroaniline	96000 U
131-11-3	Dimethyl Phthalate	20000 U
208-96-8	Acenaphthylene	20000 U
99-09-2	3-Nitroaniline	96000 U J

CAS Number		ug/Kg PJC 10-23-85
83-32-9	Acenaphthene	20000 U
51-28-5	2,4-Dinitrophenol	96000 U J
100-02-7	4-Nitrophenol	96000 U J
132-64-9	Dibenzofuran	20000 U
121-14-2	2,4-Dinitrotoluene	20000 U
606-20-2	2,6-Dinitrotoluene	20000 U
84-66-2	Diethylphthalate	20000 U
7005-72-3	4-Chlorophenyl-phenylether	20000 U
86-73-7	Fluorene	20000 U
100-01-6	4-Nitroaniline	96000 U J
534-52-1	4,6-Dinitro-2-Methylphenol	96000 U
86-30-6	N-Nitrosodiphenylamine(1)	20000 U J
101-55-3	4-Bromophenyl-phenylether	20000 U
118-74-1	Hexachlorobenzene	20000 U
87-86-5	Pentachlorophenol	96000 U
85-01-8	Phenanthrene	20000 U
120-12-7	Anthracene	20000 U
84-74-2	Di-n-Butylphthalate	~~20000 J~~ 8500 J
206-44-0	Fluoranthene	20000 U
92-87-5	Benzidine	160000 U
129-00-0	Pyrene	~~20000 J~~ 11000 J
85-68-7	Butylbenzylphthalate	20000 U J
91-94-1	3,3'-Dichlorobenzidine	39000 U
56-55-3	Benzo(a)Anthracene	20000 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~20000 J~~ 18000 J
218-01-9	Chrysene	~~20000 J~~ 10000 J
117-84-0	Di-n-Octyl Phthalate	20000 U J
205-99-2	Benzo(b)Fluoranthene(2)	~~20000 J~~ 25000
207-08-9	Benzo(k)Fluoranthene(2)	~~20000 J~~ 25000
50-32-8	Benzo(a)Pyrene	20000 U
193-39-5	Indeno(1,2,3-cd)Pyrene	20000 U
53-70-3	Dibenz(a,h)Anthracene	20000 U J
191-24-2	Benzo(g,h,i)Perylene	20000 U

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

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Laboratory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 4860

Sample Number
EF 936

Sample 2

Organics Analysis Data Sheet
(Page 3)

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Pesticide/PCBs

Concentration: Medium

Date Extracted/Prepared: 8/23/85

Date Analyzed: 9/11/85

Conc/Dil Factor: 0.075G/5ML

CAS Number		ug/Kg
319-84-6	Alpha-BHC	600 U
319-85-7	Beta-BHC	600 U
319-86-8	Delta-BHC	600 U
58-89-9	Gamma-BHC (Lindane)	600 U
76-44-8	Heptachlor	600 U
309-00-2	Aldrin	600 U
1024-57-3	Heptachlor Epoxide	600 U
959-98-8	Endosulfan I	600 U
60-57-1	Dieldrin	1200 U
72-55-9	4,4'-DDE	1200 U
72-20-8	Endrin	1200 U
33213-65-9	Endosulfan II	1200 U
72-54-8	4,4'-DDD	1200 U
7421-93-4	Endrin Aldehyde	1200 U
1031-07-8	Endosulfan Sulfate	1200 U
50-29-3	4,4'-DDT	1200 U
72-43-5	Methoxychlor	6000 U
53494-70-5	Endrin Ketone	1200 U
57-74-9	Chlordane	6000 U
8001-35-2	Toxaphene	12000 U
12674-11-2	Aroclor-1016	6000 U
11104-28-2	Aroclor-1221	6000 U
11141-16-5	Aroclor-1232	6000 U
53469-21-9	Aroclor-1242	6000 U
12672-29-6	Aroclor-1248	6000 U
11097-69-1	Aroclor-1254	12000 U
11096-82-5	Aroclor-1260	12000 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s = NR or W_s = 0.075 V_t = 5000 V_i = 5

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recycled paper

ecology and environment

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ORGANICS ANALYSIS DATA SHEET

Sample 2

LAB NAME: CAL CASE NO. 4860 SAMPLE NO. EF 936

REPORT NO. 85 LAB SAMPLE NO. L112101AB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	1225-43-0	ANDROSTAN-17-OL, (5. ALPHA. , 17. B	A/BN	1370	192	31.5 UG/G

COMPOUND NAME	PROBABILITY	COMMENTS
1. ANDROSTAN-17-OL, (5. ALPHA. , 17. B	1. C	1.

ORGANICS ANALYSIS DATA SHEET

Sample 2

LAB NAME: CAL CASE NO. 4860 SAMPLE NO. EF 936

QC REPORT NO. 95 LAB SAMPLE NO. L112102VV

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PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SEE EXTRACTABLES

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	589-34-4	HEXANE, 3-METHYL-	VOA	285	911	9.9 UG/K

COMPOUND NAME	PROBABILITY	COMMENTS
1. HEXANE, 3-METHYL-	1. A	1.

85FJ12572

Sample Number
EF 937

Sample 3

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4860

Lab Sample ID No: L1122

QC Report No: 95

Sample Matrix: SOIL

Contract No: 68-01-6958

Data Release Authorized By:

Date Sample Received: 8/21/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/27/85

Date Analyzed: 8/27/85

Conc/Dil Factor: 1 pH: 7.2

Percent Moisture: 17

Percent Moisture (Decanted): NR

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CAS Number		ug/Kg
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U J
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	13 B
67-64-1	Acetone	35 B J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	11 B J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5 U R

PJC 10-23-85

CAS Number		ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5 U R
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 10-23-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

R = UNUSABLE

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

322

recycled paper

ecology and environment

Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.

Sample Number
EF 937

Sample 3

Organics Analysis Data Sheet
(Page 2)

RECEIVED OCT 30 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/22/85

Date Analyzed: 9/16/85

Conc/DiL Factor: 25G/10ML

		ug/Kg PJC 10-23-85
	N-Nitrosodimethylamine	NA
	Phenol	1700 U
	Aniline	1700 U
	bis(-2-Chloroethyl)Ether	1700 U
	2-Chlorophenol	1700 U
	1,3-Dichlorobenzene	1700 U
	1,4-Dichlorobenzene	1700 U
	Benzyl Alcohol	1700 U J
	1,2-Dichlorobenzene	1700 U
	2-Methylphenol	1700 U
	bis(2-chloroisopropyl)Ether	1700 U
	4-Methylphenol	1700 U
	N-Nitroso-Di-n-Propylamine	1700 U
	Hexachloroethane	1700 U
	Nitrobenzene	1700 U
	Isophorone	1700 U
	2-Nitrophenol	1700 U
	2,4-Dimethylphenol	1700 U
	Benzoic Acid	11000 J
	bis(-2-Chloroethoxy)Methane	1700 U
	2,4-Dichlorophenol	1700 U
	1,2,4-Trichlorobenzene	1700 U
	Naphthalene	1800
	4-Chloroaniline	1700 U J
	Hexachlorobutadiene	1700 U
	4-Chloro-3-Methylphenol	1700 U
	2-Methylnaphthalene	~~4700 J~~ 950 J
	Hexachlorocyclopentadiene	1700 U J
	2,4,6-Trichlorophenol	1700 U
	2,4,5-Trichlorophenol	8000 U
	2-Chloronaphthalene	1700 U
	2-Nitroaniline	8000 U
	Dimethyl Phthalate	1700 U
	Acenaphthylene	~~1700 J~~ 980 J
	3-Nitroaniline	8000 U

CAS Number		ug/Kg PJC 10-23-85
83-32-9	Acenaphthene	~~1700 J~~ 1100 J
51-28-5	2,4-Dinitrophenol	8000 U
100-02-7	4-Nitrophenol	8000 U
132-64-9	Dibenzofuran	~~1700 J~~ 1300 J
121-14-2	2,4-Dinitrotoluene	1700 U
606-20-2	2,6-Dinitrotoluene	1700 U
84-66-2	Diethylphthalate	1700 U
7005-72-3	4-Chlorophenyl-phenylether	1700 U
86-73-7	Fluorene	~~1700 J~~ 1300 J
100-01-6	4-Nitroaniline	8000 U
534-52-1	4,6-Dinitro-2-Methylphenol	8000 U
86-30-6	N-Nitrosodiphenylamine(1)	1700 U²
101-55-3	4-Bromophenyl-phenylether	1700 U
118-74-1	Hexachlorobenzene	1700 U
87-86-5	Pentachlorophenol	8000 U
85-01-8	Phenanthrene	22000
120-12-7	Anthracene	3400
84-74-2	Di-n-Butylphthalate	8800 B J
206-44-0	Fluoranthene	29000
92-87-5	Benzidine	13000 U
129-00-0	Pyrene	20000
85-68-7	Butylbenzylphthalate	1700 U J
91-94-1	3,3'-Dichlorobenzidine	3300 U
56-55-3	Benzo(a)Anthracene	15000
117-81-7	bis(2-Ethylhexyl)Phthalate	4700 B J
218-01-9	Chrysene	9600
117-84-0	Di-n-Octyl Phthalate	1700 U J
205-99-2	Benzo(b)Fluoranthene(2)	21000
207-08-9	Benzo(k)Fluoranthene(2)	21000
50-32-8	Benzo(a)Pyrene	13000
193-39-5	Indeno(1,2,3-cd)Pyrene	6000
53-70-3	Dibenz(a,h)Anthracene	2100
191-24-2	Benzo(g,h,i)Perylene	7200

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute,- Analyzed as a single compound

323

324

Laboratory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 4860

Sample Number
EF 937

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 8/22/85

Date Analyzed: 9/11/85

Conc/Dil Factor: 1.2G/5ML

CAS Number		ug/Kg
319-84-6	Alpha-BHC	80 U
319-85-7	Beta-BHC	80 U
319-86-8	Delta-BHC	80 U
58-89-9	Gamma-BHC (Lindane)	80 U
76-44-8	Heptachlor	80 U
309-00-2	Aldrin	80 U
1024-57-3	Heptachlor Epoxide	80 U
959-98-8	Endosulfan I	80 U
60-57-1	Dieldrin	160 U
72-55-9	4,4'-DDE	160 U
72-20-8	Endrin	160 U
33213-65-9	Endosulfan II	160 U
72-54-8	4,4'-DDD	160 U
7421-93-4	Endrin Aldehyde	160 U
1031-07-8	Endosulfan Sulfate	160 U
50-29-3	4,4'-DDT	1200
72-43-5	Methoxychlor	800 U
53494-70-5	Endrin Ketone	160 U
57-74-9	Chlordane	800 U
80001-35-2	Toxaphene	1600 U
12674-11-2	Aroclor-1016	800 U
11104-28-2	Aroclor-1221	800 U
11141-16-5	Aroclor-1232	800 U
53469-21-9	Aroclor-1242	800 U
12672-29-6	Aroclor-1248	800 U
11097-69-1	Aroclor-1254	1600 U
11096-82-5	Aroclor-1260	1600 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s = NR or W_s = 1.2 V_t = 5000 V_i = 5

ORGANICS ANALYSIS DATA SHEET

RECEIVED OCT 3 0 1985

Sample 3

LAB NAME: CAL CASE NO. 4860 SAMPLE NO. EF 937

QC REPORT NO. 95 LAB SAMPLE NO. L112201AB

NCM

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	123-42-2	2-PENTANONE, 4-HYDROXY-4-METHYL	A/BN	230	947	30.2 UG/G
2.	88-99-3	1,2-BENZENEDICARBOXYLICACID	A/BN	768	907	7.2 UG/G
3.	36461-33-3	SILANE, \BICYCLO\4.2.0\OCTA-3,7	A/BN	913	365	2.0 UG/G
4.	486-25-9	9H-FLUOREN-9-ONE	A/BN	1086	782	2.2 UG/G
5.	38186-20-8	STANNANE, CHLORODIMETHYL\(TRIFL	A/BN	1157	155	0.2 UG/G
6.	84-65-1	9,10-ANTHRACENEDIONE	A/BN	1232	663	4.4 UG/G
7.	10544-50-0	SULFUR, MOL. (S8)	A/BN	1270	447	2.0 UG/G
8.	2466-25-3	D-HOMO-17A-OXAANDROSTAN-17-ONE	A/BN	1338	284	2.0 UG/G
9.	82-05-3	7H-BENZ\DE\ANTHRACEN-7-ONE	A/BN	1443	657	2.1 UG/G
10.	82-05-3	7H-BENZ\DE\ANTHRACEN-7-ONE	A/BN	1472	623	2.1 UG/G
11.	2541-69-7	BENZ\A\ANTHRACENE, 7-METHYL-	A/BN	1553	488	2.0 UG/G
12.	7555-67-1	BENZENE, (CYCLOPROPYLIDENEMETHY	A/BN	1580	167	2.3 UG/G
13.	205-82-3	BENZO\J\FLUORANTHENE	A/BN	1665	356	3.4 UG/G
14.	205-82-3	BENZO\J\FLUORANTHENE	A/BN	1703	770	5.2 UG/G

COMPOUND NAME	PROBABILITY	COMMENTS
1. 2-PENTANONE, 4-HYDROXY-4-METHYL	1. A	1.
2. 1,2-BENZENEDICARBOXYLICACID	2. A	2. or isomer
3. SILANE, \BICYCLO\4.2.0\OCTA-3,7	3. C	3.
4. 9H-FLUOREN-9-ONE	4. A	4.
5. STANNANE, CHLORODIMETHYL\(TRIFL	5. C	5.
6. 9,10-ANTHRACENEDIONE	6. A	6. or isomer
7. SULFUR, MOL. (S8)	7. A	7.
8. D-HOMO-17A-OXAANDROSTAN-17-ONE	8. C	8. DFTPP breakdown
9. 7H-BENZ\DE\ANTHRACEN-7-ONE	9. A	9. isomer
10. 7H-BENZ\DE\ANTHRACEN-7-ONE	10. A	10. Dimer
11. BENZ\A\ANTHRACENE, 7-METHYL-	11. B	11.
12. BENZENE, (CYCLOPROPYLIDENEMETHY	12. C	12.
13. BENZO\J\FLUORANTHENE	13. B	13.
14. BENZO\J\FLUORANTHENE	14. A	14. or isomer

note PNA's on given report.

No acetate compounds found

85EJ12973

Sample Number
EE 516

Sample 4

Organics Analysis Data Sheet
(Page 1)

RECEIVED OCT 30 1985

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4860

Lab Sample ID No: L1118

QC Report No: 95

Sample Matrix: SOIL

Contract No: 68-01-6958

Data Release Authorized By:

Date Sample Received: 8/21/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/27/85

Date Analyzed: 8/27/85

Conc/Dil Factor: 1 pH: 6.7

Percent Moisture: 17

Percent Moisture (Decanted): NR

CAS Number		ug/Kg
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U J
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	13 B
67-64-1	Acetone	36 B J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	12 B J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5 U R

PJC 10-23-85

CAS Number		ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5 U R
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	12
108-90-7	Chlorobenzene	25
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	~~44~~ 43

PJC 10-23-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

R = UNUSABLE

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/ dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detecion limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

015

~~01150~~

Laboratory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 4860

Sample Number
EE 516

Sample 4

Organics Analysis Data Sheet
(Page 2)

RECEIVED OCT 30 1985

Semivolatile Compounds

Concentration: Medium

Date Extracted/Prepared: 8/23/85

Date Analyzed: 9/13/85

Conc/DiL Factor: 0.42G/ML

CAS Number		ug/Kg PJC 10-23-85
62-75-9	N-Nitrosodimethylamine	NA
108-95-2	Phenol	7400 —
62-53-3	Aniline	6600 U J
111-44-4	bis(-2-Chloroethyl)Ether	6600 U
95-57-8	2-Chlorophenol	6600 U
541-73-1	1,3-Dichlorobenzene	6600 U
106-46-7	1,4-Dichlorobenzene	6600 U
100-51-6	Benzyl Alcohol	6600 U J
95-50-1	1,2-Dichlorobenzene	6600 U
95-48-7	2-Methylphenol	6600 U
39638-32-9	bis(2-chloroisopropyl)Ether	6600 U
106-44-5	4-Methylphenol	6600 U
621-64-7	N-Nitroso-Di-n-Propylamine	6600 U J
67-72-1	Hexachloroethane	6600 U
98-95-3	Nitrobenzene	6600 U
78-59-1	Isophorone	94000 —
88-75-5	2-Nitrophenol	6600 U
105-67-9	2,4-Dimethylphenol	6600 U J
65-85-0	Benzoic Acid	32000 U J
111-91-1	bis(-2-Chloroethoxy)Methane	6600 U
120-83-2	2,4-Dichlorophenol	6600 U
120-82-1	1,2,4-Trichlorobenzene	6600 U
91-20-3	Naphthalene	6600 U
106-47-8	4-Chloroaniline	6600 U J
87-68-3	Hexachlorobutadiene	6600 U
59-50-7	4-Chloro-3-Methylphenol	6600 U
91-57-6	2-Methylnaphthalene	6600 U
77-47-4	Hexachlorocyclopentadiene	6600 U J
88-06-2	2,4,6-Trichlorophenol	6600 U
95-95-4	2,4,5-Trichlorophenol	32000 U
91-58-7	2-Chloronaphthalene	6600 U
88-74-4	2-Nitroaniline	32000 U
131-11-3	Dimethyl Phthalate	6600 U
208-96-8	Acenaphthylene	6600 U
99-09-2	3-Nitroaniline	32000 U J

CAS Number		ug/Kg PJC 10-23-85
83-32-9	Acenaphthene	6600 U
51-28-5	2,4-Dinitrophenol	32000 U J
100-02-7	4-Nitrophenol	32000 U J
132-64-9	Dibenzofuran	6600 U
121-14-2	2,4-Dinitrotoluene	6600 U
606-20-2	2,6-Dinitrotoluene	6600 U
84-66-2	Diethylphthalate	6600 U
7005-72-3	4-Chlorophenyl-phenylether	6600 U
86-73-7	Fluorene	6600 U
100-01-6	4-Nitroaniline	32000 U J
534-52-1	4,6-Dinitro-2-Methylphenol	32000 U
86-30-6	N-Nitrosodiphenylamine(1)	6600 U J
101-55-3	4-Bromophenyl-phenylether	6600 U
118-74-1	Hexachlorobenzene	6600 U
87-86-5	Pentachlorophenol	32000 U
85-01-8	Phenanthrene	~~6600~~ 2200 J
120-12-7	Anthracene	6600 U
84-74-2	Di-n-Butylphthalate	~~6600~~ 2600 J
206-44-0	Fluoranthene	~~6600~~ 3100 J
92-87-5	Benzidine	52000 U
129-00-0	Pyrene	~~6600~~ 2700 J
85-68-7	Butylbenzylphthalate	6600 U
91-94-1	3,3'-Dichlorobenzidine	13000 U
56-55-3	Benzo(a)Anthracene	6600 U
117-81-7	bis(2-Ethylhexyl)Phthalate	~~6600~~ 5400 J
218-01-9	Chrysene	~~6600~~ 2800 J
117-84-0	Di-n-Octyl Phthalate	6600 U
205-99-2	Benzo(b)Fluoranthene(2)	~~6600~~ 4000 J
207-08-9	Benzo(k)Fluoranthene(2)	~~6600~~ 4000 J
50-32-8	Benzo(a)Pyrene	6600 U
193-39-5	Indeno(1,2,3-cd)Pyrene	6600 U
53-70-3	Dibenz(a,h)Anthracene	6600 U J
191-24-2	Benzo(g,h,i)Perylene	6600 U

016

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

Laboratory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 4860

Sample Number
EE 516

Sample 4

Organics Analysis Data Sheet
(Page 3)

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Pesticide/PCBs

Concentration: Medium

Date Extracted/Prepared: 8/23/85

Date Analyzed: 9/10/85

Conc/Dil Factor: 0.083G/5ML

CAS Number		ug/Kg
319-84-6	Alpha-BHC	120 U
319-85-7	Beta-BHC	120 U
319-86-8	Delta-BHC	120 U
58-89-9	Gamma-BHC (Lindane)	120 U
76-44-8	Heptachlor	120 U
309-00-2	Aldrin	120 U
1024-57-3	Heptachlor Epoxide	120 U
959-98-8	Endosulfan I	120 U
60-57-1	Dieldrin	240 U
72-55-9	4,4'-DDE	240 U
72-20-8	Endrin	240 U
33213-65-9	Endosulfan II	240 U
72-54-8	4,4'-DDD	240 U
7421-93-4	Endrin Aldehyde	240 U
1031-07-8	Endosulfan Sulfate	240 U
50-29-3	4,4'-DDT	420 *
72-43-5	Methoxychlor	1200 U
53494-70-5	Endrin Ketone	240 U
57-74-9	Chlordane	1200 U
8001-35-2	Toxaphene	2400 U
12674-11-2	Aroclor-1016	1200 U
11104-28-2	Aroclor-1221	1200 U
11141-16-5	Aroclor-1232	1200 U
53469-21-9	Aroclor-1242	1200 U
12672-29-6	Aroclor-1248	4200
11097-69-1	Aroclor-1254	2300
11096-82-5	Aroclor-1260	2400 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

* DDT level is approximate due to presence of PCB

017

V_s = NR or W_s = 0.083 V_t = 5000 V_i = 5

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ORGANICS ANALYSIS DATA SHEET

Sample 4

LAB NAME: CAL CASE NO. 4860 SAMPLE NO. EE 516

QC REPORT NO. 95 LAB SAMPLE NO. L111802VV

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SEE EXTRACTABLES

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	110-54-3	HEXANE	VOA	241	947	17.0 UG/K
2.	565-59-3	PENTANE, 2, 3-DIMETHYL-	VOA	269	951	15.5 UG/K
3.	589-34-4	HEXANE, 3-METHYL-	VOA	287	944	28.8 UG/K

COMPOUND NAME	PROBABILITY	COMMENTS
1. HEXANE	1. A	1.
2. PENTANE, 2, 3-DIMETHYL-	2. A	2.
3. HEXANE, 3-METHYL-	3. A	3. or isomers

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ORGANICS ANALYSIS DATA SHEET

LAB NAME: CAL CASE NO. 4860 SAMPLE NO. EE516, Sample 4

QC REPORT NO. 95 LAB SAMPLE NO. L11180IAB

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	56728-10-0	1-HEXENE, 3, 4, 5-TRIMETHYL-	A/BN	1005	510	69.8 UG/G

	COMPOUND NAME	PROBABILITY	COMMENTS
1.	1-HEXENE, 3, 4, 5-TRIMETHYL-	1. C	1.

95FJ12374

Sample Number
EE 517

Organics Analysis Data Sheet
(Page 1)

Sample 5

RECEIVED OCT 30 1985

Laboratory Name: California Analytical Laboratories, Inc.

Case No: 4860

Lab Sample ID No: L1119

QC Report No: 95

Sample Matrix: SOIL

Contract No: 68-01-6958

Data Release Authorized By: [illegible]

Date Sample Received: 8/21/85

Volatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/27/85

Date Analyzed: 8/27/85

Conc/Dil Factor: 1 pH: 7.1

Percent Moisture: 15

Percent Moisture (Decanted): NR

CAS Number		ug/Kg
74-87-3	Chloromethane	10 U J
74-83-9	Bromomethane	10 U J
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	8.9 B
67-64-1	Acetone	36 B J
75-15-0	Carbon Disulfide	5 U
75-35-4	1,1-Dichloroethene	5 U
75-34-3	1,1-Dichloroethane	5 U
156-60-5	Trans-1,2-Dichloroethene	5 U
67-66-3	Chloroform	5 U
107-06-2	1,2-Dichloroethane	5 U
78-93-3	2-Butanone	12 B J
71-55-6	1,1,1-Trichloroethane	5 U
56-23-5	Carbon Tetrachloride	5 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5 U R

PJC 10-23-85

CAS Number		ug/Kg
79-34-5	1,1,2,2-Tetrachloroethane	5 U
78-87-5	1,2-Dichloropropane	5 U
10061-02-6	Trans-1,3-Dichloropropene	5 U
79-01-6	Trichloroethene	5 U
124-48-1	Dibromochloromethane	5 U
79-00-5	1,1,2-Trichloroethane	5 U
71-43-2	Benzene	5 U
10061-01-5	cis-1,3-Dichloropropene	5 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5 U R
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	10 U
127-18-4	Tetrachloroethene	5 U
108-88-3	Toluene	5 U
108-90-7	Chlorobenzene	5 U
100-41-4	Ethylbenzene	5 U
100-42-5	Styrene	5 U
	Total Xylenes	5 U

PJC 10-23-85

Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

R = UNUSABLE

Value If the result is a value greater than or equal to the detection limit, report the value.

U Indicates compound was analyzed for but not detected. Report the minimum detection limit for the sample with the U (e.g. 10U) based on necessary concentration/dilution actions. (This is not necessarily the instrument detection limit.) The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified detection limit but greater than zero. (e.g. 10J).

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides >= 10ng/ul in the final extract should be confirmed by GC/MS

B This flag is used when the analyte is found in the blank as well as a sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action.

Other Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the data summary report.

NA Not Analyzed.
See cover letter.
NR Not Required.
S Spiked Compound.

091

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tory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
No: 4860

Sample Number
EE 517

Sample 5

Organics Analysis Data Sheet
(Page 2)

RECEIVED OCT 30 1985

Semivolatile Compounds

Concentration: Low

Date Extracted/Prepared: 8/22/85

Date Analyzed: 9/13/85

Conc/DiL Factor: 26G/2ML

S nber		ug/Kg PJC 10-23-85
5-	N-Nitrosodimethylamine	NA
85	Phenol	330 U
3-3	Aniline	330 U J
44	bis(-2-Chloroethyl)Ether	330 U
7-	2-Chlorophenol	330 U
73-1	1,3-Dichlorobenzene	330 U
46	1,4-Dichlorobenzene	330 U
51	Benzyl Alcohol	330 U
-1	1,2-Dichlorobenzene	330 U
-7	2-Methylphenol	~~330~~ 160 J
8- 9	bis(2-chloroisopropyl)Ether	330 U
44-5	4-Methylphenol	~~330~~ 770
54	N-Nitroso-Di-n-Propylamine	330 U J
2-	Hexachloroethane	330 U J
5-3	Nitrobenzene	330 U
9-	Isophorone	~~330~~ 230 J
5-	2-Nitrophenol	330 U
57-9	2,4-Dimethylphenol	330 U
3-	Benzoic Acid	1600 U J
91	bis(-2-Chloroethoxy)Methane	330 U
83-2	2,4-Dichlorophenol	330 U
82	1,2,4-Trichlorobenzene	330 U
0-	Naphthalene	480
47-8	4-Chloroaniline	330 U J
8-	Hexachlorobutadiene	330 U
0-	4-Chloro-3-Methylphenol	330 U
7-6	2-Methylnaphthalene	620
7-	Hexachlorocyclopentadiene	330 U J
5-	2,4,6-Trichlorophenol	330 U
5-4	2,4,5-Trichlorophenol	1600 U
5-	2-Chloronaphthalene	330 U
1-	2-Nitroaniline	1600 U
11-3	Dimethyl Phthalate	330 U
95	Acenaphthylene	~~330~~ 150 J
5-	3-Nitroaniline	1600 U J

CAS Number		ug/Kg PJC 10-23-85
83-32-9	Acenaphthene	~~330~~ 765
51-28-5	2,4-Dinitrophenol	1600 U J
100-02-7	4-Nitrophenol	1600 U
132-64-9	Dibenzofuran	~~330~~ 120 J
121-14-2	2,4-Dinitrotoluene	330 U
606-20-2	2,6-Dinitrotoluene	330 U
84-66-2	Diethylphthalate	330 U
7005-72-3	4-Chlorophenyl-phenylether	330 U
86-73-7	Fluorene	~~330~~ 130 J
100-01-6	4-Nitroaniline	1600 U J
534-52-1	4,6-Dinitro-2-Methylphenol	1600 U J
86-30-6	N-Nitrosodiphenylamine(1)	330 U
101-55-3	4-Bromophenyl-phenylether	330 U
118-74-1	Hexachlorobenzene	330 U
87-86-5	Pentachlorophenol	1600 U
85-01-8	Phenanthrene	1700
120-12-7	Anthracene	~~330~~ 180 J
84-74-2	Di-n-Butylphthalate	930 B J
206-44-0	Fluoranthene	2800
92-87-5	Benzidine	2600 U
129-00-0	Pyrene	2600
85-68-7	Butylbenzylphthalate	330 U J
91-94-1	3,3'-Dichlorobenzidine	660 U
56-55-3	Benzo(a)Anthracene	1700
117-81-7	bis(2-Ethylhexyl)Phthalate	810 B J
218-01-9	Chrysene	1700
117-84-0	Di-n-Octyl Phthalate	330 U J
205-99-2	Benzo(b)Fluoranthene(2)	3400
207-08-9	Benzo(k)Fluoranthene(2)	3400
50-32-8	Benzo(a)Pyrene	1600
193-39-5	Indeno(1,2,3-cd)Pyrene	770
53-70-3	Dibenz(a,h)Anthracene	330 U
191-24-2	Benzo(g,h,i)Perylene	770

(1) - Cannot be separated from diphenylamine
(2) - Compounds Co-elute - Analyzed as a single compound

092 093

Laboratory Name: CALIFORNIA ANALYTICAL LABORATORIES, INC.
Case No: 4860

Sample Number
EE 517

Organics Analysis Data Sheet
(Page 3)

RECEIVED MAR 0 4 1986

Pesticide/PCBs

Concentration: LOW

Date Extracted/Prepared: 8/22/85

Date Analyzed: 9/11/85

Conc/Dil Factor: 1.3G/5ML

CAS Number		ug/Kg
319-84-6	Alpha-BHC	8.0 U
319-85-7	Beta-BHC	8.0 U
319-86-8	Delta-BHC	8.0 U
58-89-9	Gamma-BHC (Lindane)	8.0 U
76-44-8	Heptachlor	8.0 U
309-00-2	Aldrin	8.0 U
1024-57-3	Heptachlor Epoxide	8.0 U
959-98-8	Endosulfan I	8.0 U
60-57-1	Dieldrin	16 U
72-55-9	4,4'-DDE	16 U
72-20-8	Endrin	16 U
33213-65-9	Endosulfan II	16 U
72-54-8	4,4'-DDD	16 U
7421-93-4	Endrin Aldehyde	16 U
1031-07-8	Endosulfan Sulfate	16 U
50-29-3	4,4'-DDT	400 *
72-43-5	Methoxychlor	80 U
53494-70-5	Endrin Ketone	16 U
57-74-9	Chlordane	80 U
8001-35-2	Toxaphene	160 U
12674-11-2	Aroclor-1016	80 U
11104-28-2	Aroclor-1221	80 U
11141-16-5	Aroclor-1232	80 U
53469-21-9	Aroclor-1242	80 U
12672-29-6	Aroclor-1248	3400
11097-69-1	Aroclor-1254	2200
11096-82-5	Aroclor-1260	160 U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

* DDT level is approximate due to presence of PCB

V_s = NR or W_s = 1.3 V_t = 5000 V_i = 5

093

ORGANICS ANALYSIS DATA SHEET

RECEIVED OCT 30 1985

LAB NAME: CAL CASE NO. 4860 SAMPLE NO. EE517

QC REPORT NO. 95 LAB SAMPLE NO. L111901AB Sample 5

PROBABILITY THAT IDENTIFICATION IS CORRECT:
A= HIGH B= MODERATE C= LOW D= SOLVENT IMPURITY, SEE VOA

	CAS#	COMPOUND NAME	FRACTION	SCAN NUMBER	PURITY	ESTIMATED CONC. J VALUE
1.	110-02-1	THIOPHENE	A/BN	225	507	1.2 UG/G
2.	123-42-2	2-PENTANONE, 4-HYDROXY-4-METHYL	A/BN	268	898	9.8 UG/G
3.	110-12-3	2-HEXANONE, 5-METHYL-	A/BN	281	753	1.0 UG/G
4.	106-42-3	BENZENE, 1, 4-DIMETHYL-	A/BN	294	907	0.6 UG/G
5.	85-44-9	1, 3-ISOBENZOFURANDIONE	A/BN	792	955	2.1 UG/G
6.	5171-84-6	HEXANE, 3, 3, 4, 4-TETRAMETHYL-	A/BN	1009	613	0.7 UG/G
7.	1921-70-6	PENTADECANE, 2, 6, 10, 14-TETRAMET	A/BN	1082	714	0.6 UG/G
8.	24777-38-6	TRICYCLO[10. 2. 2. 25, 8]OCTADECA-	A/BN	1666	308	6.0 UG/G

	COMPOUND NAME	PROBABILITY		COMMENTS
1.	THIOPHENE	1.	C	1.
2.	2-PENTANONE, 4-HYDROXY-4-METHYL	2.	A	2. see blank
3.	2-HEXANONE, 5-METHYL-	3.	A	3.
4.	BENZENE, 1, 4-DIMETHYL-	4.	D	4.
5.	1, 3-ISOBENZOFURANDIONE	5.	A	5.
6.	HEXANE, 3, 3, 4, 4-TETRAMETHYL-	6.	B	6.
7.	PENTADECANE, 2, 6, 10, 14-TETRAMET	7.	A	7.
8.	TRICYCLO[10. 2. 2. 25, 8]OCTADECA-	8.	C	8.

no volatile compounds

ecology and environment, inc.

111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

International Specialists in the Environment

Date Received for Review: 9/25/85 Date Review Completed: 9/26/85

To: Ruth Ann Jacquette

From: Arlene Pratl

Subject: Acme Ref. Scrap Iron + Metal RAS-SMO-01 (SCC)

Sample Description: Case # 4860 low soil metals

Project Data Status: still awaiting low soil organics

FIT Data Review Findings:

See attached CRL review.

Additional Comments:

Book No. 5
Page No. 16

35X:3M

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 9-23-85

SUBJECT: Review of Region V CLP Data Received for Review on 9-19-85

FROM: Curtis Ross, Director (5SCRL) Central Regional Laboratory Jay Thekker

TO: Data User: FIT

We have reviewed the data for the following case(s).

SITE NAME: Acme Rep. Scrap Iron + Metal SMO Case No. 4860

EPA Data Set No. SF 2639 No. of Samples: 5 D.U./Activity Numbers Y905, C48500

CRL No. 85FJ12570 to 85FJ12574

SMO Traffic No. MEF 274 - MEF 276 MEF 846 - MEF 850

CLP Laboratory: RMAL Hrs. Required for Review: 4 Hrs.

Following are our findings. This Review covers 5 soil samples for Metals Analysis. ① Initial calibration verification source is other than EPA (ERA) which is violate the contract Requirement.
② Spike Recoveries for Cd (2090), Co (384) and Pb (384) are High biased. The spike Added are less than 5 times the sample concentration except cadmium, where spiked concentration are much Higher than the spiked added and the sample concentration. So cadmium data are Questionable
③ Spike Recoveries for Mercury, Selenium and silver are low biased.
④ % RPD FOR Aluminum, (26%), Barium (15%) Manganese (21%) ~~and~~ Mercury (39%) and Silver (64%) are out side the contract limit.
⑤ Cont. Lab has used Antimony and Lead Data from ICP, but failed to Run ICP check Std for these elements.

Jay Thekker 9-23-85

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
( ) Data are unacceptable.

cc: Dr. Alfred Haeberer/Joan Fisk/Gary Ward, EPA Support Services
Ross K. Robeson, EMSL-Las Vegas
Ron Trees, CLP/Sample Management Office

RECEIVED SEP 25 1985

ESD/Central Regional Laboratory

DATA TRACKING - FORM I

Data Set No. SF 2639 ERRIS No. _____

Case No. 4860 Site Name: Acme Ref. Scrap Iron + Metal

Name of Laboratory: RMAL Data User: FIT

No. of Samples: 5 Date Samples Received: 9-19-85

Have chain-of-custody records been received? YES ✓ NO ___

Have Traffic reports been received? YES ✓ NO ___

If no, are Traffic report numbers written on the chain-of-custody record? YES ___ NO ___

If no, which Traffic report numbers are missing?

5. Are basic data forms in? YES ✓ NO ___

6. Number of samples claimed: 5 Number of samples received: 5

7. Checked by: Sylvia Griffin Date: 9-19-85

8. Received by Contract Project Management Section: [illegible] Date: 9-19-85

9. Review Started: 9-23-85 Reviewer Signature: [illegible]

10. Total time spent on review: 4 Date review completed: 9-23-85

11. Copied (xeroxed) by: _____ Date: _____

12. Mailed to Data User by: _____ Date: _____

DATA USERS:

Please fill in the blanks and return this form to:

Charles Elly, DPO, Region V, SSCRL

13. Data received by: Arlene Pace Date: 9/26/85

14. Q.A. review received by: Arlene Pace Date: 9/26/85

15. Received by CRL - CPM Section for file by: _____

Date: _____

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SUPERFUND 2639

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

THIS FORM IS TO BE USED FOR SAMPLES SENT TO CONTRACT ONLY

LOG IN DATE 9/4/8
DUE DATE 9/23/8

CASE NUMBER 48660 SITE NAME Acme Ref Scrap Iron & Metal LABORATORY CAL/RMAL DATE SHIPPED 8/20/85

SUPERFUND DU NUMBER V905 EPA RPM (S.M.S.)/(CES) PAGE 1 OF 1

ACTIVITY NUMBER C48500

CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER	INORGANIC TRAFFIC REPORT NUMBER	WATER OR LIQUIDS												SEDIMENTS									
			ACID-BASE NEUTRAL CPDS ORGANIC SCAN UG/L TOX17574	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG/L TOX17564	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144	WATER CHLORINATED PESTICIDES UG/L PES17134	TOTAL METALS IN WATER UG/L MET1111	WATER CYNANIDE UG/L MIN74919	NITRATE-NITRITE MG/L MIN7284	AMMONIA MG/L MIN7294	RESIDUE, FILTERABLE TDS MG/L MIN7362	RESIDUE, NON-FILT TSS MG/L MIN7372			ACID-BASE NEUTRAL CPDS ORGANIC SCAN MG/KG TOX215722	VOLATILE ORGANIC ANALYSIS SCAN MG/KG TOX215622	SEDIMENTS POLYCHLORINATED BIPHENYLS MG/KG PES211422	SEDIMENT CHLORINATED PESTICIDES MG/KG 211322	TOTAL METALS MG/KG MET413	CYANIDE MG/KG MIN44930	NITRATE-NITRITE MG/KG	AMMONIA MG/KG MIN42925		
85FJ12570	EF935	MEF274													✓	✓	✓	✓	✓					
85FJ12571	EF936	MEF275													✓	✓	✓	✓	✓					
85FJ12572	EF937	MEF276													✓	✓	✓	✓	✓					
85FJ12573	EE516	MEF849													✓	✓	✓	✓	✓					
85FJ12574	EE517	MEF850													✓	✓	✓	✓	✓					

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U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

SF2639

Date 9-10-85

COVER PAGE
INORGANIC ANALYSIS DATA PACKAGE

Lab Name ROCKY MOUNTAIN ANALYTICAL
SOW No. 784

Case No. 4860
QC Report No. 55202

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
MEF274			
MEF275			
MEF276			
MEF849			
MEF850			
[MEF999]			

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SEP 10 1985
U.S. EPA REGIONAL LAB.
CHICAGO, ILLINOIS 60605

Comments: 5 LOW SOILS TASK 1&2 ONLY
SERIAL DILUTION OF SAMPLE MEF850 IDENTIFIED AS [MEF999]
SAMPLE MEF849 WAS DILUTED 5X FOR ANALYSIS BY ICP DUE TO HIGH ZINC CONCENTRATION.

ICP Interelement and background corrections applied? Yes X No ___.
If yes, corrections applied before X or after ___ generation of raw data.

Footnotes:

NR - not required by contract at this time
Form I:
Value - If the result is a value greater than or equal to the instrument detection limit but less than the contract required detection limit, report the value in brackets (i.e., [10]). Indicate the method used with P (for ICP/Flame AA) or F (for furnace).
U - Indicates element was analyzed for but not detected. Report with the detection limit value (e.g., 10U).
E - Indicates a value estimated or not reported due to the presence of interference. Explanatory note included on cover page.
S - Indicates value determined by Method of Standard Addition.
R - Indicates spike sample recovery is not within control limits.
X - Indicates duplicate analysis is not within control limits.
+ - Indicates the correlation coefficient for method of standard addition is Less than 0.995
CV - Indicates Cold Vapor
AS - Indicates Automated Spectrophotometric

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Station 1

85FJ12570

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEF274

Date 9-10-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 4860
QC REPORT NO. 55202

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water ____ Soil X Sludge ____ Other ____

mg/kg dry weight

1.	ALUMINUM	8970	P X	13.	MAGNESIUM	22200	P
2.	ANTIMONY	55	P	14.	MANGANESE	1160	P X
3.	ARSENIC	13	F	15.	MERCURY	0.95	CVXR
4.	BARIUM	537	P X	16.	NICKEL	79	P
5.	BERYLLIUM	[1]	P	17.	POTASSIUM	[897]	P
6.	CADMIUM	34	P R	18.	SELENIUM	2.7U	F R
7.	CALCIUM	68100	P	19.	SILVER	34	P XR
8.	CHROMIUM	468	P	20.	SODIUM	[1160]	P
9.	COBALT	114	P	21.	THALLIUM	1.6U	F
10.	COPPER	2760	P	22.	TIN	47	P
11.	IRON	38300	P	23.	VANADIUM	149	P
12.	LEAD	1450	P	24.	ZINC	1860	P

Cyanide NR

Percent Solids (%) 91

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

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Lab Manager JM

Station 2

85FJ12571

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. MEF275

Date 9-10-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 4860
QC REPORT NO. 55202

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water ____ Soil X Sludge ____ Other ____

mg/kg dry weight

1.	ALUMINUM	23500	P X	13.	MAGNESIUM	27300	P
2.	ANTIMONY	[38]	P	14.	MANGANESE	1410	P X
3.	ARSENIC	86	P	15.	MERCURY	6.5	CVXR
4.	BARIUM	402	P X	16.	NICKEL	313	P
5.	BERYLLIUM	[0.86]	P	17.	POTASSIUM	[641]	P
6.	CADMIUM	31	P R	18.	SELENIUM	3.2U	F R
7.	CALCIUM	50700	P	19.	SILVER	16	P XR
8.	CHROMIUM	2480	P	20.	SODIUM	373U	P
9.	COBALT	94	P	21.	THALLIUM	1.9U	F
10.	COPPER	3810	P	22.	TIN	28	P
11.	IRON	144000	P	23.	VANADIUM	275	P
12.	LEAD	1610	P	24.	ZINC	3130	P

Cyanide NR

Percent Solids (%) 79

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

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Comments:

Lab Manager JM

Station 3

Form I

85FJ12572

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEF276

Date 9-10-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 4860
QC REPORT NO. 55202

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water ____ Soil X Sludge ____ Other ____

mg/kg dry weight

1.	ALUMINUM	5440	P X	13.	MAGNESIUM	34600	P
2.	ANTIMONY	[34]	P	14.	MANGANESE	679	P X
3.	ARSENIC	14	F	15.	MERCURY	0.64	CVXR
4.	BARIUM	1180	P X	16.	NICKEL	75	P
5.	BERYLLIUM	[0.82]	P	17.	POTASSIUM	[669]	P
6.	CADMIUM	32	P R	18.	SELENIUM	3U	F R
7.	CALCIUM	71900	P	19.	SILVER	[4.9]	P XR
8.	CHROMIUM	81	P	20.	SODIUM	355U	P
9.	COBALT	37	P	21.	THALLIUM	1.8U	F
10.	COPPER	338	P	22.	TIN	[18]	P
11.	IRON	61800	P	23.	VANADIUM	[28]	P
12.	LEAD	2670	P	24.	ZINC	3260	P

Cyanide NR

Percent Solids (%) 83

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments:

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Lab Manager JM

Station 3

85FJ12573

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No. MEF849

Date 9-10-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 4860
QC REPORT NO. 55202

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water ____ Soil X Sludge ____ Other ____

mg/kg dry weight

1.	ALUMINUM	5920	P X	13.	MAGNESIUM	23300	P
2.	ANTIMONY	19U	P	14.	MANGANESE	647	P X
3.	ARSENIC	~~88~~ SOR 17	~~P~~ F	15.	MERCURY	0.68	CVXR
4.	BARIUM	434	P X	16.	NICKEL	149	P
5.	BERYLLIUM	[1.2]	P	17.	POTASSIUM	604U	P
6.	CADMIUM	208	P R	18.	SELENIUM	3U	F R
7.	CALCIUM	63500	P	19.	SILVER	1.8U	P XR
8.	CHROMIUM	1200	P	20.	SODIUM	1800U ~~360U~~ JM	P
9.	COBALT	108	P	21.	THALLIUM	1.8U	F
10.	COPPER	1060	P	22.	TIN	1190	P
11.	IRON	64400	P	23.	VANADIUM	541	P
12.	LEAD	2380	P	24.	ZINC	145000	P

Cyanide NR

Percent Solids (%) 82

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: SAMPLE DILUTED 5X FOR ANALYSIS BY ICP DUE TO HIGH ZINC CONCENTRATION

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Lab Manager JM

Station 5

85FJ12574

Form I

U.S. EPA Contract Laboratory Program
Sample Management Office
P.O. Box 818 - Alexandria, VA 22313
703/557-2490 FTS: 8-557-2490

EPA Sample No.
MEF850

Date 9-10-85

INORGANIC ANALYSIS DATA SHEET

LAB NAME ROCKY MOUNTAIN ANALYTICAL
SOW NO. 784
LAB SAMPLE ID. NO. -

CASE NO. 4860
QC REPORT NO. 55202

Elements Identified and Measured

Concentration: Low X Medium ____
Matrix: Water ____ Soil X Sludge ____ Other ____

mg/kg dry weight

1.	ALUMINUM	6550	P X	13.	MAGNESIUM	38500	P
2.	ANTIMONY	50	P	14.	MANGANESE	771	P X
3.	ARSENIC	17	F	15.	MERCURY	0.91	CVXR
4.	BARIUM	358	P X	16.	NICKEL	44	P
5.	BERYLLIUM	[1.2]	P	17.	POTASSIUM	[699]	P
6.	CADMIUM	27	P R	18.	SELENIUM	2.8U	F R
7.	CALCIUM	83000	P	19.	SILVER	6.8	P XR
8.	CHROMIUM	72	P	20.	SODIUM	331U	P
9.	COBALT	[24]	P	21.	THALLIUM	1.7U	F
10.	COPPER	469	P	22.	TIN	82	P
11.	IRON	62800	P	23.	VANADIUM	29	P
12.	LEAD	1650	P	24.	ZINC	10000	P

Cyanide NR

Percent Solids (%) 89

Footnotes: For reporting results to EPA, standard result qualifiers are used as defined on Cover Page. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit and contained on Cover Page, however.

Comments: RECEIVED SEP 25 1985

Lab Manager

SAMPLE DESCRIPTION

SITE NAME/TDD# Acme Rej Scrap Iron + Metal R05841001
CASE NUMBER 4860

SAMPLE #/STATION LOCATION 1

SAMPLING DATE 8-20-85 SAMPLING TIME 1150

ORGANIC TRAFFIC NUMBER E1-735
INORGANIC TRAFFIC NUMBER ME F 274

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 mL	Volatile Org	5-019996	45161052
120 ml	Volatile Org	5-019995	45161052
8 oz	Metals	5-019997	65159082
8 oz	Organics	5-019994	65159082

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: dark

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS N/A
pH N/A
CONDUCTIVITY N/A
TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TDD# Acme Ref Scrap Iron & Metal, R05 841001
CASE NUMBER 4860

SAMPLE #/STATION LOCATION 2

SAMPLING DATE 8-20-85 SAMPLING TIME 1135

ORGANIC TRAFFIC NUMBER EF936
INORGANIC TRAFFIC NUMBER MEF 275

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	Volatile Org	020000	45161052
120 ml	Volatile Org	199999	45161052
8 oz	metals	130930	65159082
8 oz	Organics	5-019998	65159082

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: dark

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: None

INSTRUMENT READINGS N/A
pH N/A
CONDUCTIVITY N/A
TEMPERATURE N/A

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SAMPLE DESCRIPTION

SITE NAME/TDD# Acme Ref Scrap Iron + Metal R05841001

CASE NUMBER 4860

SAMPLE #/STATION LOCATION 3

SAMPLING DATE 8-20-85 SAMPLING TIME 1140

ORGANIC TRAFFIC NUMBER EF937

INORGANIC TRAFFIC NUMBER MEF 276

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	Volatile Org	5-130931	45161052
120 ml	Volatile Org	5-130932	45161052
8 oz	Metals	5-130934	~~4516~~ 65159082
8 oz	Organics	5-130933	65159082

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: dark

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none.

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

recycled paper

ecology and environment

SAMPLE DESCRIPTION

SITE NAME/TDD# Acme Ref Scrap Iron & Metal
CASE NUMBER 4860

SAMPLE #/STATION LOCATION 4

SAMPLING DATE 8-20-85 SAMPLING TIME 1145

ORGANIC TRAFFIC NUMBER EE 516
INORGANIC TRAFFIC NUMBER ME F 849

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
120 ml	Volatile Org	130935	45161052
120 ml	Volatile Org	130936	45161052
8 oz	Metals	130938	65159082
8 oz	Organics	130937	65159082

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: dark

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A
pH N/A
CONDUCTIVITY N/A
TEMPERATURE N/A

SAMPLE DESCRIPTION

SITE NAME/TDD# Acme Ref Scrap Iron & Metal

CASE NUMBER 4860

SAMPLE #/STATION LOCATION 5

SAMPLING DATE 8-20-85 SAMPLING TIME 1150

ORGANIC TRAFFIC NUMBER EE 517

INORGANIC TRAFFIC NUMBER ME F850

BOTTLE	ANALYSIS	TAG NUMBERS	LOT NUMBER
40 ml	Volatile org	130939	45161052
120 ml	Volatile org	130940	45161052
8oz	metals	130942	65159082
8oz	Organic	130941	65159082

PHYSICAL DESCRIPTION AT TIME OF COLLECTION: dark

PHYSICAL CHANGES FROM TIME OF COLLECTION UNTIL SHIPMENT: none

INSTRUMENT READINGS N/A

pH N/A

CONDUCTIVITY N/A

TEMPERATURE N/A

recycled paper

ecology and environment

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: KC 5410001

PROJECT NAME: Kane Ky Scrap Iron & Metal 95 60

SAMPLERS: (Signature) Kurt Ann Jacquette

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Metals 8oz JAR						REMARKS: TOC Concentration ITR	OTR	Soils
1	[illegible]	1130		X	1	1	1						MF [illegible]	FF935	Soils
2	[illegible]	1125		X	2	1	1						MF [illegible]	FF936	Soils
3	[illegible]	1140		X	3	1	1						MF [illegible]	FF937	Soils
4	[illegible]	1145		X	4	1	1						MF [illegible]	FF516	Soils
5	[illegible]	1150		X	5	1	1						MF [illegible]	FF517	Soils
													lot# 65159082		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Kurt Ann Jacquette	[illegible] 1300	Federal Express			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks: Shipped Federal Express TO: Rocky Mountain Analytical Lab Arabin [illegible] Soils: [illegible]	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

recycled paper

ecology and environment

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn St
Chicago, Illinois 606

CHAIN OF CUSTODY RECORD

PROJ. NO.: [illegible]

PROJECT NAME: Acme Rel. Scrap Iron & Metal

SAMPLERS: (Signature) Kathleen Gaouette

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	500 mL	8 OZ					REMARKS MTK	TTR	Soils
1	1/20/05	1130		X	1	3	2	1					[illegible]	MCF074	Soils
2	1/20/05	1135		X	2	3	2	1					[illegible]	MCF015	Soils
3	1/20/05	1140		X	3	3	2	1					[illegible]	MCF076	Soils
4	1/20/05	1145		X	4	3	2	1					[illegible]	MCF849	Soils
5	1/20/05	1150		X	5	3	2	1					[illegible]	MCF050	Soils
													Lab		
													Sent pkg 65715 9002		
													Lab Vaccs HS 16 1052		

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Kathleen Gaouette	1/20/05 1500	Federal Express			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks Shipped Federal Express to Midwest Laboratories Analytical Lab [illegible]	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File