US EPA RECORDS CENTER REGION 5
-511672-

Redacted
929024

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

MEMORANDUM

DATE: June 15, 1987
TO: File
FROM: Larry Lumeh/Paul Sklar PS (for LL)
SUBJECT: Ohio/F05-8611-171/OH0423
Bucyrus/Stetzer Road Landfill
OHD980610869

The Stetzer Road site is a 48-acre landfill located on the north side of Stetzer Road between McCurdy and Peterman roads in Liberty Township, Crawford County, Ohio. It is surrounded by farmland on all sides except on the north where the Sandusky River meanders east to west (Figure 1). The site was owned and operated by Amerace Corporation between 1966 and 1971 when it was used for disposing of scrap plastic, rubber hoses, solvents, scrap metal, general refuse, and probably some 55-gallon drums. Amerace Corporation acquired the property from [redacted], a local farmer, whose current location to unknown. The site was referred to FIT for inspection in the form of a preliminary assessment submitted to the U. S. Environmental Protection Agency (U.S. EPA) by the Ohio Environmental Protection Agency (OEPA).

The history of the operation and types of wastes landfilled at this site is not well documented. The bulk of the wastes are known to be rubber-based plastic hoses, cardboard, and general garbage. Additionally, unspecified quantities of solvents, heavy metals, and lead-contaminated materials were disposed of at this site. Since its closure in 1971, there have been several complaints about leachate problems at the site which prompted a visit by the OEPA in December 1982. During this visit, OEPA personnel documented a leachate stream, soil discoloration, chemical odor, and flooding by the

Sandusky River. OEPA returned in February 1983 for sampling. Results from analyses of soil and leachate samples indicated the presence of lead, barium, iron, zinc, and trichloroethane. These results prompted the OEPA to suggest some corrective measures to Amerace Corporation to alleviate the problem. Amerace Corporation voluntarily implemented some of the measures suggested. A few weeks before FIT's site inspection, Amerace Corporation added a clay cover and resurfaced parts of the landfill that had been severely eroded. The company also contracted a consulting firm to collect soil core and leachate samples to determine if any pollutant migration had occurred.

A FIT inspection, which included sampling, was conducted at this site between September 9 and 12, 1986. Four soil samples (Figure 2), six domestic well samples (Figure 3), and four surface water and sediment samples (Figure 4) were collected. On-site soil samples were collected along paths where leachate had flowed into the river in the past. No leachate was observed on the day of sampling.

Soil samples contained the pesticide beta-BHC which was detected at 48 ppm, 129 ppm, and 34 ppm in samples S1, S2, and S3, respectively. Bis(2-ethylhexyl)phthalate was detected in sample S3 at 1,280 ppm. All of the above analytical values are above background levels. Arsenic, chromium, nickel and zinc were detected in all soil samples, also above background levels. The soil and leachate samples collected by the consultant retained by Amerace Corporation also contained these metals.

Domestic well samples proved to be clean. A few of the wells did show the presence of toluene and bis(2-ethylhexyl)phthalate, but at very low levels. Two of the wells, DW2 and DW3, contained 8.7 ppm and 57.0 ppm of lead, respectively. Samples from all wells contained zinc, and wells DW3, DW4 and DW6 contained low levels of cadmium.

All surface water and sediment samples contained the pesticide beta-BHC. The upstream surface water sample (SS1) was the dirtiest, containing 1,3-and 1,4-dichlorobenzene (9.5 ppm and 9.0 ppm, respectively), 1,2,4-trichlorobenzene (8.6 ppm), acenapthylene (16.0 ppm), 2,4-dinitrotoluene (24.7 ppm), and pyrene (43.5 ppm). Beta-BHC was detected in the upstream and downstream sediment samples at 57.7 ppm and 50.7 ppm, respectively. No metals were detected in the surface water samples, but arsenic was detected in samples SS1, SS3, and SS4 at 7.7 ppm, 9.1 ppm, and 12.0 ppm, respectively. Chromium was detected at 6.1 ppm in sample SS1, 8.4 ppm in sample SS2, 8.1 ppm in sample SS3, and 11.0 ppm in sample SS4. Lead (7.1 ppm, 11.0 ppm, 7.1 ppm, and 195 ppm) were detected in samples SS1 through SS4. See section 5 for complete analytical results.

The site is fenced on the south and the Sandusky River protects it against unlawful entry on the north. Farmland and a wooded area border the site on the east and west. Evidence of illegal entry onto the landfill and wooded areas beyond the site was observed during the inspection. The site is located in a rural area with farmland and grazing fields within one half mile of the site. A home within 1,300 feet of the landfill obtains drinking water from a pond, which is approximately 300 feet from the main entrance of the site. All residents within 3 miles of the site obtain potable water from either private wells or from ponds. The city of Bucyrus obtains its water supply from the Sandusky River. The intake is located approximately 4.5 river miles downstream of the landfill. The nearest well is approximately 2,000 feet from the site, belonging to Mr. Garrett (DW5). The landfill is not lined. The cover was recently reapplied and seeded. Exposed fill material was observed on the north side of the site (see photo log) during the inspection.

92J:6M

SITE INSPECTION REPORT
FOR
STETZER ROAD LANDFILL
BUCYRUS, OHIO
OHD980610869
F05-8611-171

PAN: FOHO423SI

JUNE 15, 1987

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OHD	980610869

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Stetzer Road Landfill	Between McCurdy & Peterman Roads

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Liberty Township, Bucyrus	OH	44820	Crawford	33	17

09 COORDINATES LATITUDE	LONGITUDE
40° 50' 03.9"	082° 53' 15.7"

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 (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION (BEGINNING YEAR / ENDING YEAR)
09, 09, 86	☐ ACTIVE ☐ INACTIVE	1967 / 1971 ___ 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.
Larry Lumeh	Hydrogeologist	E&E	(312) 663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Paul Hess	Environmental Scientist	E&E	(312) 663-9415
Rich Dagnal	Environmental Scientist	E&E	(312) 663-9415
Ken Krueger	Environmental Scientist	E&E	(312) 663-9415
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Arthur Siemering	Corp. Facilities Manager	Newburgh Road Hackettstown, NJ 07840	(201) 852-1122
Michael Kelly	Owner, Adjacent Property	4676 Stetzer Road Bucyrus, OH 44820	(419) 562-5823
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	9:00AM	Sunny, Warm, 56°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Don Josif	US EPA, Region V	(312) 886-0393

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Larry Lumeh		E&E, Inc.	(312) 663-9415	01, 14, 87 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OHD	980610869

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 Unknown

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

WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			Amerace Corp. submitted a
OLW	OILY WASTE			103(c) form in which they
SOL	SOLVENTS	unK.	N/A	stated that solvents, heavy
PSD	PESTICIDES			metals and rubber-based
OCC	OTHER ORGANIC CHEMICALS	unK.	N/A	hoses were disposed of at
IOC	INORGANIC CHEMICALS			site. However, no quantities
ACD	ACIDS			and types were noted.
BAS	BASES			
MES	HEAVY METALS	unK.	N/A	

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Trichloroethylene	90-01-6	Landfilled		ug/Kg
SOL	Methylene Chloride	95-09-2	"	9.7	ug/Kg.
OCC	bis(2-ethylhexyl)phthlate	117-81-7	"	1218.0	"
MES	Cadmium	7740-43-9	"	15.0	mg/Kg.
MES	Copper		"	28.0	mg/Kg.
MES	Lead		"	290.0	mg/Kg.
MES	Zinc		"	161.0	mg/Kg.
MES	Arsenic		"	16.0	mg/Kg
MES	Chromium		"	15.0	mg/Kg.
MES	Nickel		"	38.0	mg/Kg.
OCC	beta-BHC		unKnown	129.0	ug/Kg.

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Acetone	67-64-1	FDS	Lead	
FDS	Cyclohexane		FDS	Cadmium	
FDS	Toluene	168-88-3	FDS	Zinc	
FDS	Methyl Ethyl Toluene		FDS	Rubber Hoses	

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

FIT Site Inspection
State + EPA Files
Owner's Contract Report

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OHD	980610869

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1040 — 04 NARRATIVE DESCRIPTION
All rural population around fill depend upon private wells or ponds for their potable water supply. These sources could be polluted by the site.

01 ■ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 14,200 — 04 NARRATIVE DESCRIPTION
The city of Bycyrus depends upon the Sandusky River for their supplies. The site is a potential pollution threat during high water when the river rises to the fill.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: N/A — 04 NARRATIVE DESCRIPTION
The cover on the fill has been reworked and seeded. Wastes are well covered.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: N/A — 04 NARRATIVE DESCRIPTION
No history of fire at this site.

01 ■ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ■ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unk. — 04 NARRATIVE DESCRIPTION
Evidence of illegal entry upon the fill was observed. Mr. Kelly complained about hunters, and Mr Siemering stated that fire wood collecting on fill was a problem.

01 ■ F. CONTAMINATION OF SOIL — 02 ■ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: unk. (Acres) — 04 NARRATIVE DESCRIPTION
Several areas of exposed fill material and leachate stream were observed on the north side of the fill. Since the river rises to the level of the fill in spring, this could cause soil contamination.

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 15,240 — 04 NARRATIVE DESCRIPTION
Both surface and groundwater are potentially at risk from pollution infiltrating into ground water, or running off into the river from surface or leachate streams.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
No worker or personal injuries are reported or documented for this site.

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1040 — 04 NARRATIVE DESCRIPTION
Illegal entry upon the fill posses a direct contact threat to the population in the vicinity of the fill.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OHD	980610869

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ■ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ■ ALLEGED
04 NARRATIVE DESCRIPTION
A neighbor at one time complained to the OEPA that leachate from the fill was killing grass and trees on his property.

01 ■ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ■ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
A resident told us of a large fish kill in the river about 2 years ago. He did not identify the species and indicated he did not think the landfill was to blame.

01 ■ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Heavy metals, pesticide and solvents could get into food chain through the fish which are consumed locally.

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ■ OBSERVED (DATE: 09-09-86) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 15,240 — 04 NARRATIVE DESCRIPTION
Exposed fill material at the north end of the site could be washed away during floods.

01 ■ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ■ ALLEGED
04 NARRATIVE DESCRIPTION
A resident complained of leachate from site killing trees on his property.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION N/A
Population within 3-miles of site all maintain personal sewer systems (septic tanks).

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No illegal dumping has been observed or suspected.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 15,240

IV. COMMENTS

None

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

Site Inspection + Interviews,
State + Federal Files

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OHD	980610869

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) Ohio	01 (File # 205-31)	1961	Dec. 1969	This was the only permit provided and was supposed to have been extended annually
■ H. LOCAL (Specify) Crawford Co.				
☐ 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		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
■ F. LANDFILL	unk.	N/A
☐ 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 (Specify)

05 OTHER
- ■ A. BUILDINGS ON SITE

06 AREA OF SITE: 48.0 (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.

No liners and no dikes between fill and flood plain of river. However, the clay bottom of the fill provides good protection against infiltration, but leachate and flood problems persist.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ■ NO

02 COMMENTS

Adequate cover, site is in rural area protected the river, farmland and thick vegitation

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

Site Inspection + Interviews
Mr. Michael Kelly

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OHD	980610869

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS	ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ■	B. ☐		A. ☐	B. ☐	C. ■	A. 4.5 (mi)
NON-COMMUNITY	C. ☐	D. ■		D. ☐	E. ☐	F. ☐	B. 300 ft (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 1040

03 DISTANCE TO NEAREST DRINKING WATER WELL 2000 (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
60 (ft)	North	60 (ft)	~1200 (gpd)	■ YES ☐ NO

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

Most wells are used for domestic purposes. Average depth is 60-70 feet with some as deep as 120 feet. Every house around the fill has a well.

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
Sandusky River	☐	~500 ft. (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. 262 NO. OF PERSONS	B. 938 NO. OF PERSONS	C. 2117 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 1300 ft. (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 264

04 DISTANCE TO NEAREST OFF-SITE BUILDING 1300 ft. (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 population within 3-miles of site is mainly rural and agricultural. However, the city of Bucyrus is about 3½ miles SW and downstream of site.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OHD	980610869

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)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
55 (ft)	Unknown (ft)	6.1 – 7.8

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
2.5 (in)	2.0 (in)	12-18 %	Northeast	8.0 %

09 FLOOD POTENTIAL

SITE IS IN Unknown YEAR FLOODPLAIN

10

■ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. >3.0 (mi)

OTHER: B. N/A (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

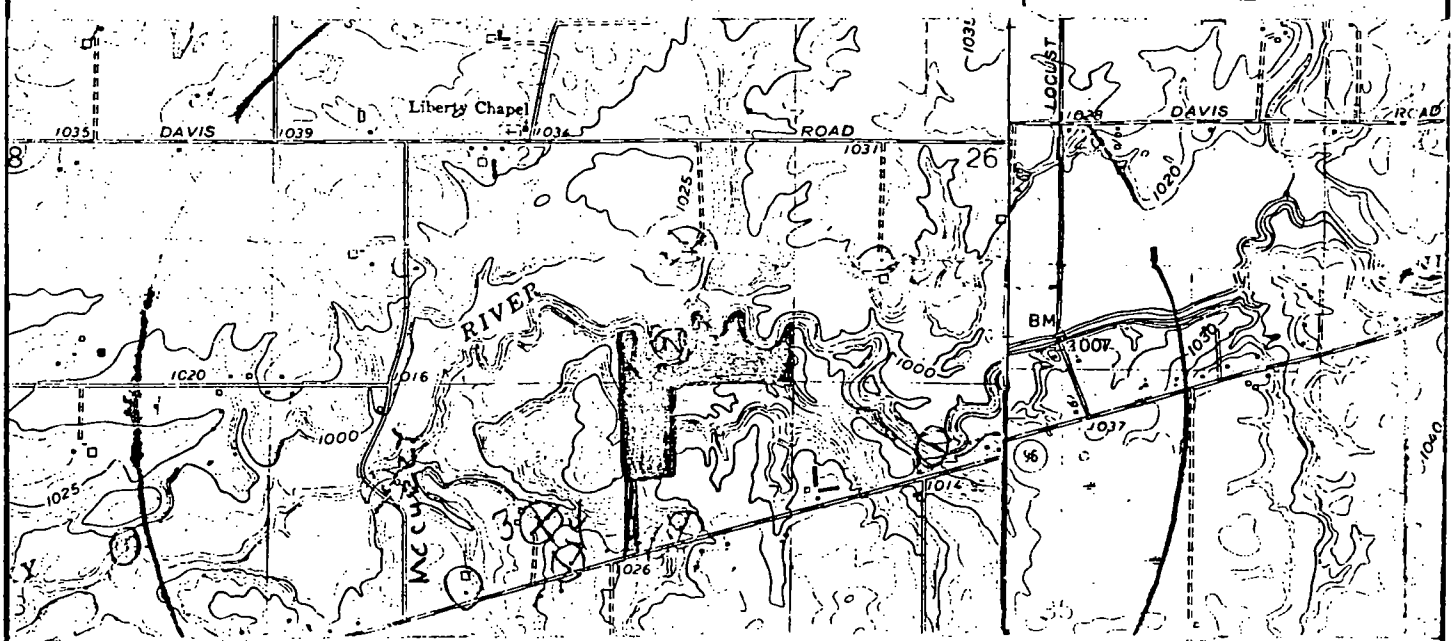
>3.0 (mi)

ENDANGERED SPECIES: Indiana bat.

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. 4.5 (mi)	B. 1500 ft ~~(mi)~~	C. N/A (mi)	D. 200 ft ~~(mi)~~



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

E & E files
Soil Survey of Crawford Co.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OHD	980610869

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	SIX	Inorganics to RMAL Organics to Acurex	Dec. 1986
SURFACE WATER	FOUR	Inorganics to RMAL Organics to Cal Water Lab	"
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL / Sediments	EIGHT	Inorganics to RMAL Organics to Cal Water Lab	Dec. 1986
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU	All entry equipment readings were at background levels.
Rad. Mini	
Explosimeter	

IV. PHOTOGRAPHS AND MAPS

01 TYPE ■ GROUND ☐ AERIAL

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

03 MAPS ■ YES ☐ NO

04 LOCATION OF MAPS Ecology + Environment, Inc. map files

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

None

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

E+E files

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OHD	980610869

II. CURRENT OWNER(S) / PARENT COMPANY (If applicable)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
Amerace Corp.		Amerace Corp.	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
Newburgh Rd.		Newburgh Rd.	

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
Hackettstown	NJ	07840	Hackettstown	NJ	07840

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first) / IV. REALTY OWNER(S) (If applicable; list most recent first)

[redacted]	02 D+B NUMBER	01 NAME N/A	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) UnKnown	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

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)

Arthur Siemering Interview
Michael Kelly Interview

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OHD	980610869

II. CURRENT OPERATOR (Provide if different from owner)			OPERATOR'S PARENT COMPANY (If applicable)		
01 NAME: None	02 D+B NUMBER		10 NAME	11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER				

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)			PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)		
01 NAME: Swan Rubber Hose Co.	02 D+B NUMBER		10 NAME: Amerace Corp.	11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.): Beal Ave. PO Box 311	04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.): Newburgh Rd.	13 SIC CODE	
05 CITY: Bycyrus	06 STATE: OH	07 ZIP CODE: 44820	14 CITY: Hackettstown	15 STATE: NJ	16 ZIP CODE: 07840
08 YEARS OF OPERATION: 1967-1971	09 NAME OF OWNER DURING THIS PERIOD: Amerace Corp.				
[redacted]	02 D+B NUMBER		10 NAME	11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.): unknown	04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				
01 NAME	02 D+B NUMBER		10 NAME	11 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE		12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE	
05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD				

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

Arthur Sremering, Michael Kelly interviews

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OHD	980610869

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
Swan Rubber Hose Co.			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Beal Ave / P.O. Box 311			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Bucyrus	OH	44820			

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
Swan Rubber Hose Co.			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Beal Ave / PO Box 311			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Bucyrus	OH	44820			

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)

Arthur Siemering Interview

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OHD	980610869

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ D. SPILLED MATERIAL REMOVED 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ F. WASTE REPACKAGED 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ H. ON SITE BURIAL 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ L. ENCAPSULATION 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ N. CUTOFF WALLS 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION N/A	02 DATE	03 AGENCY
01 ☐ Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION N/A	02 DATE	03 AGENCY

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OHD	980610869

II. PAST RESPONSE ACTIVITIES (Continued)

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

01 ☐ S. CAPPING/COVERING — 02 DATE 09-09-86 — 03 AGENCY Owners
04 DESCRIPTION Amerace Corp. voluntarily resurfaced part of the fill to improve cover and improve leachate conditions

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

Arthur Siemering Interview
Site Inspection (09-09-86)

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

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
DEB	980610869

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ■ NO

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

N/A

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

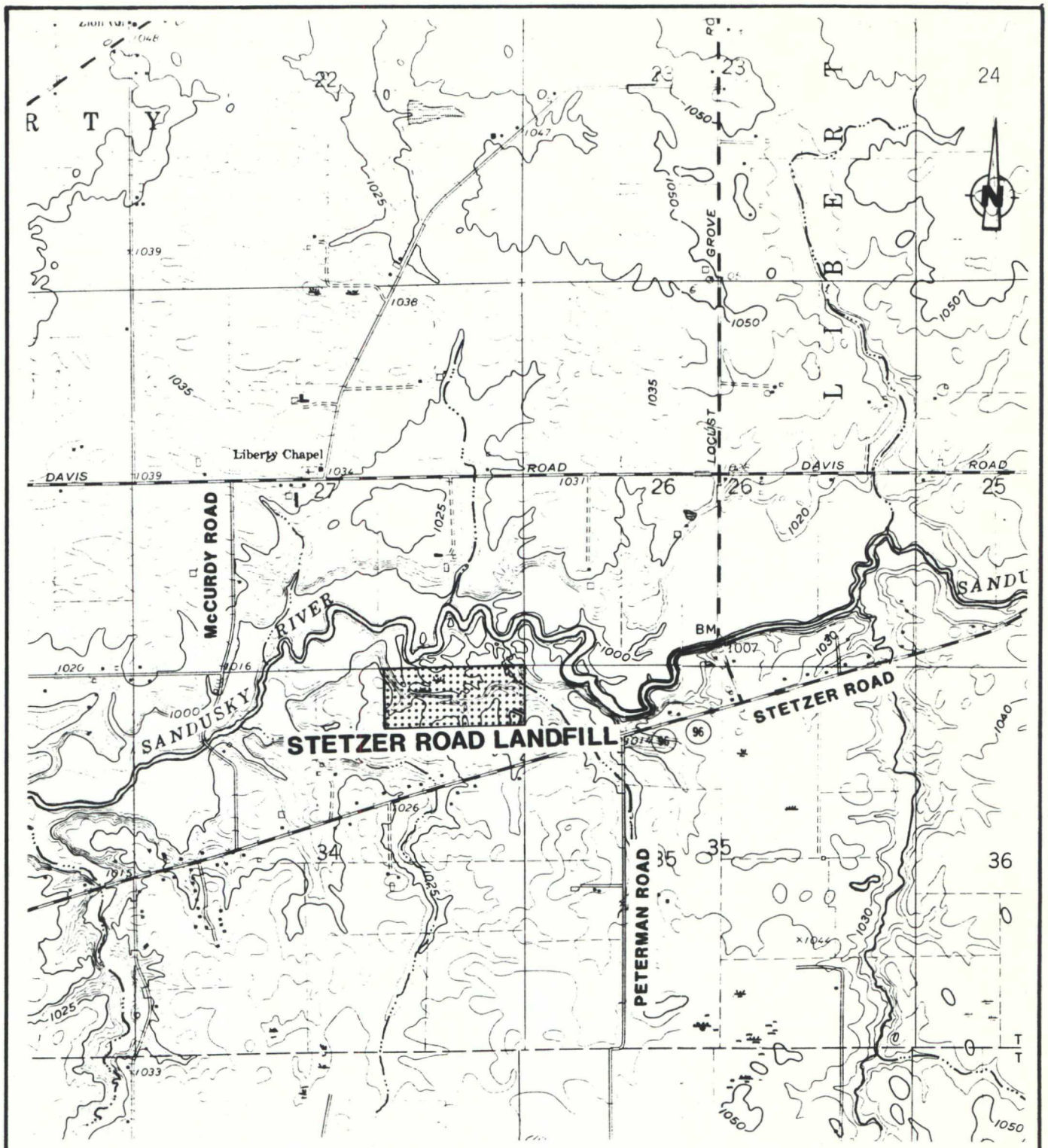
Arthur Siemering Interview.

Immediate Removal Action Check Sheet

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

Comments

With the improved cover, the persistent leachate problem may be arrested in future. More control is needed on entry unto site.

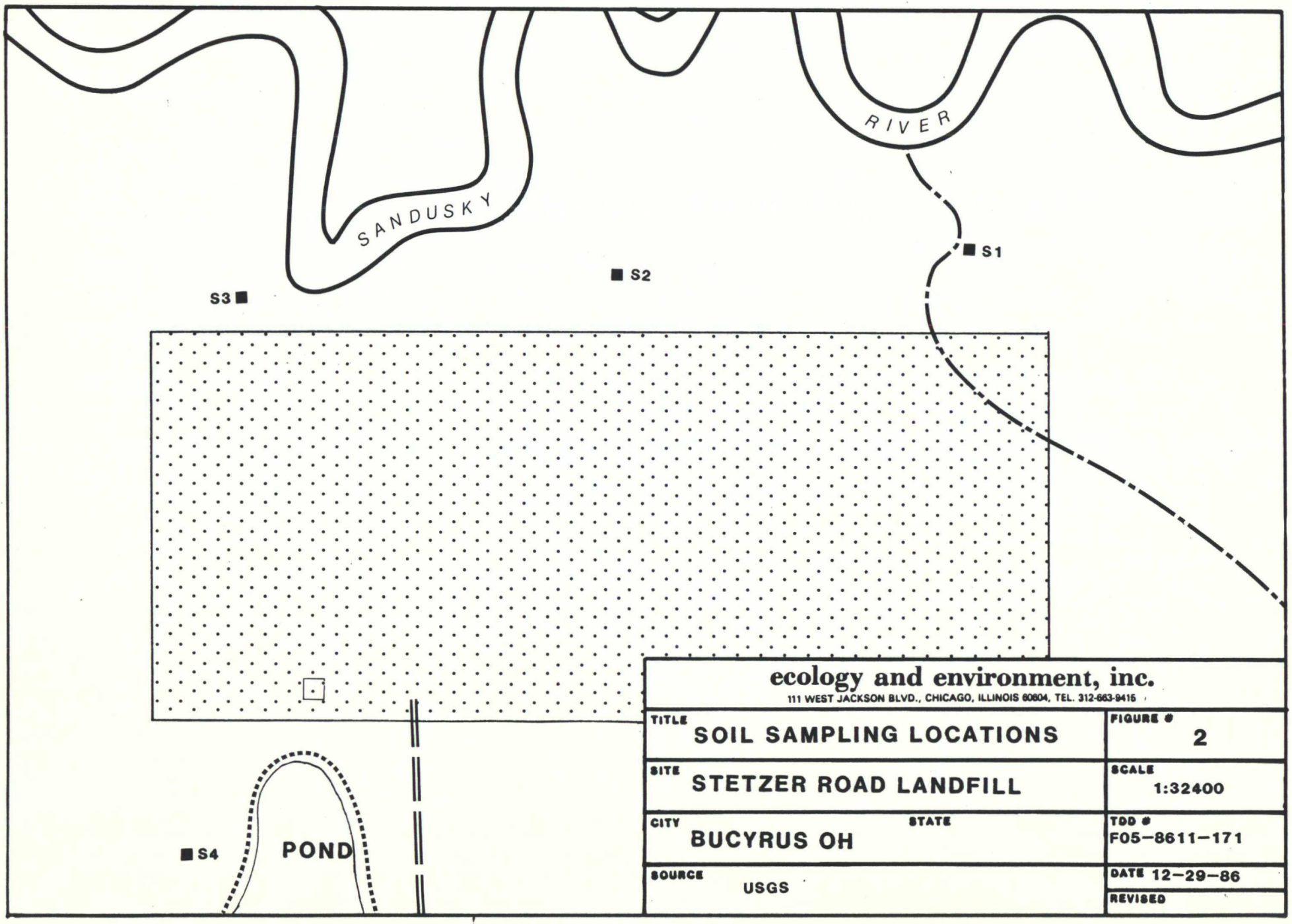


QUADRANGLE LOCATION

ecology and environment, inc.

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

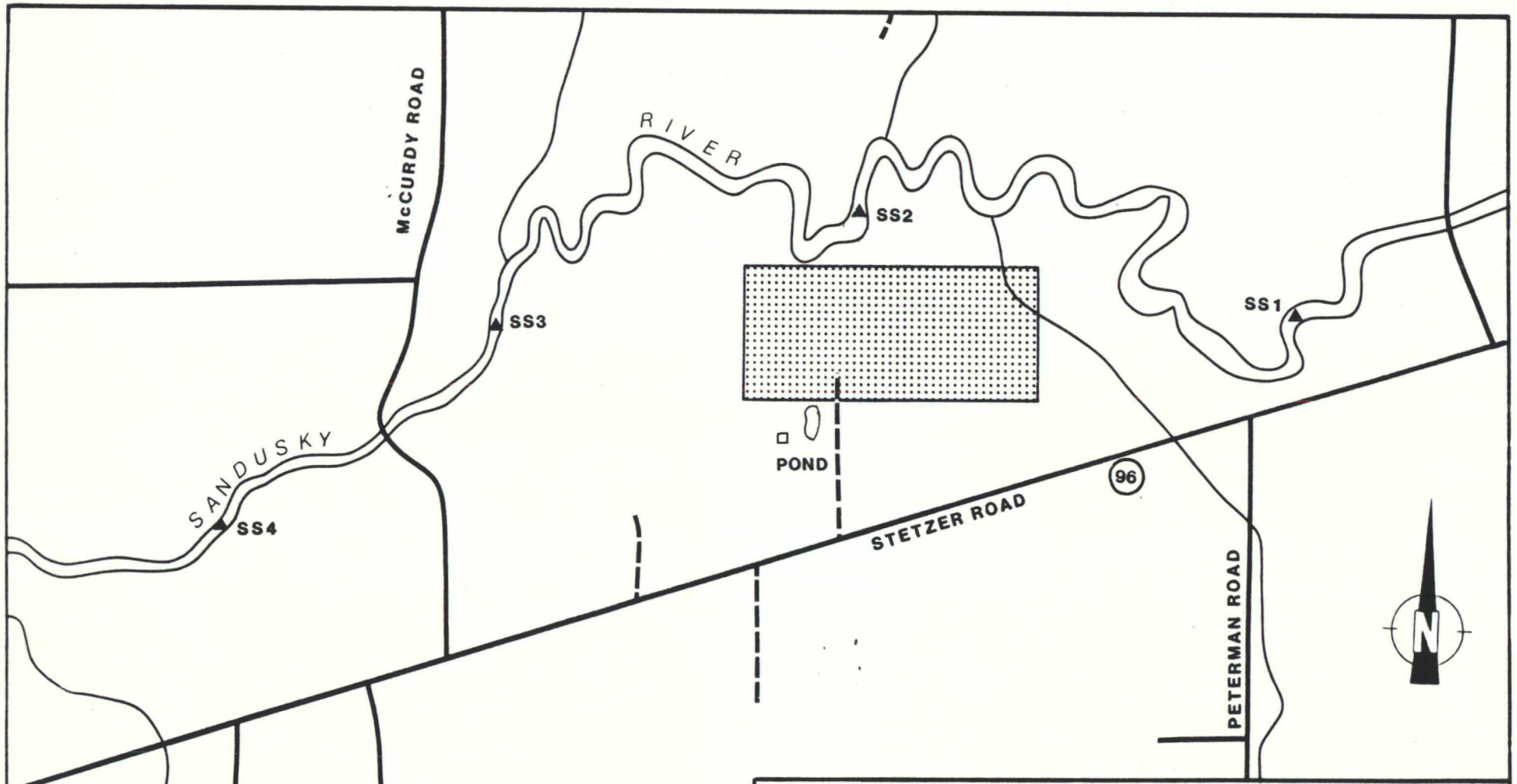
TITLE **SITE LOCATION MAP**	FIGURE # **1**
SITE **STETZER ROAD LANDFILL**	SCALE **1:24,000**
CITY **BUCYRUS OH** STATE	TDD # **F05-8611-171**
SOURCE **USGS**	DATE **12-29-86**
	REVISED



ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

TITLE: SOIL SAMPLING LOCATIONS	FIGURE #: 2
SITE: STETZER ROAD LANDFILL	SCALE: 1:32400
CITY: BUCYRUS OH STATE:	TDD #: F05-8611-171
SOURCE: USGS	DATE: 12-29-86
	REVISED:

PAGE REMOVED
DUE TO
GEOLOGICAL AND GEOPHYSICAL INFORMATION



ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415

TITLE SURFACE WATER & SEDIMENT SAMPLING LOCATIONS	FIGURE # 4
SITE STETZER ROAD LANDFILL	SCALE 1:11580
CITY BUCYRUS OH STATE	TDD # F05-8611-171
SOURCE USGS	DATE 12-29-86
	REVISED

FIELD PHOTOGRAPHY LOG SHEET

DATE 07-18-86

TIME 2:10 A.M. (P.M.)

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

WEATHER Sunny, Warm 78°F

SITE Stetzer Road L.F.

TDD# F05-8611-171

PHOTOGRAPHED BY: Larry Lumeh

SAMPLE ID# (if applicable) —

DESCRIPTION: Entrance gate to the landfill showing cover and grass over the fill in the background.

DATE 07-18-86

TIME 3:15 A.M. (P.M.)

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

WEATHER Sunny Warm 78°F

SITE Stetzer Rd. L.F.

TDD# F05-8611-171

PHOTOGRAPHED BY: Larry Lumeh

SAMPLE ID# (if applicable) —

DESCRIPTION: Pond, about 150 feet from fill area used by [redacted] and his family for drinking.

FIELD PHOTOGRAPHY LOG SHEET

DATE 07-18-86.

TIME 2:45 A.M. (P.M.)

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

WEATHER Warm, Sunny 78°F

SITE Stetzer Rd. LF

TDD# F05-8611-171

PHOTOGRAPHED BY: Larry Lumeh

SAMPLE ID# (if applicable) —

DESCRIPTION: The Sandusky river about 2 miles downstream of site showing receeding flood waters

DATE 09-09-86

TIME 1:10 A.M. (P.M.)

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

WEATHER Sunny, Hot 88°F

SITE Stetzer Rd. LF

TDD# F05-8611-171

PHOTOGRAPHED BY: Larry Lumeh

SAMPLE ID# (if applicable) DW 2 & Dup.

DESCRIPTION: A typical domestic well with hand pump. This sample location is the [redacted] well about 2 miles west of landfill.

FIELD PHOTOGRAPHY LOG SHEET

DATE 09-08-86

TIME 11:00 A.M. P.M.

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

WEATHER Sunny, Hot 85°F

SITE Stetzer Rd.

TDD# F05-8611-171

PHOTOGRAPHED BY: Larry Lunch

SAMPLE ID# (if applicable) —

DESCRIPTION: The erosion effect of flood waters exposed some fill Materials on the northern edge of the fill.

DATE 09-09-86

TIME 10:35 A.M. P.M.

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

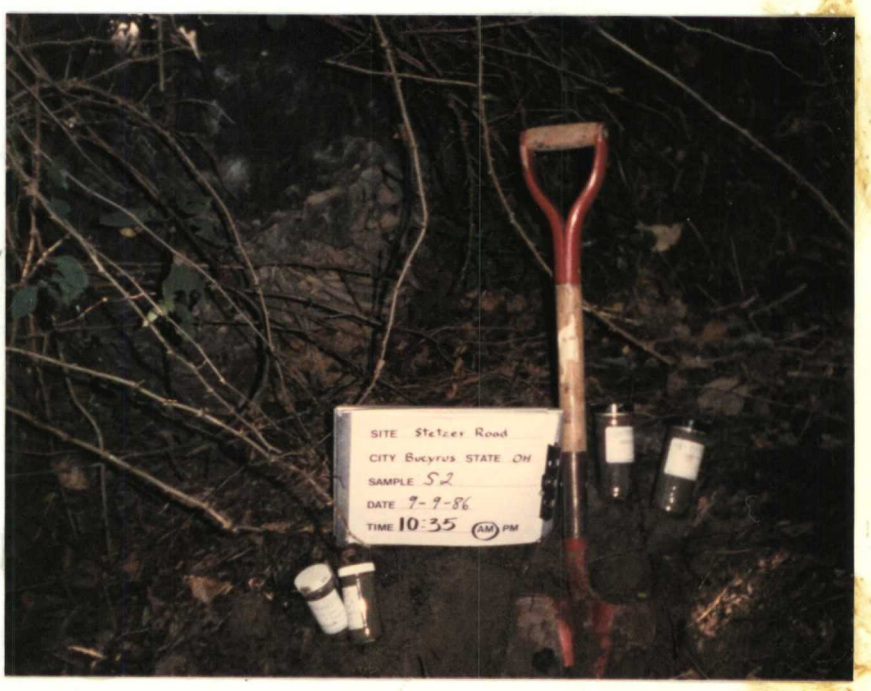
WEATHER Sunny Warm 85°F

SITE Stetzer Rd. LF

TDD# F05-8611-171

PHOTOGRAPHED BY: Larry Lunch

SAMPLE ID# (if applicable) S2 - N.W. Corner Sample.



DESCRIPTION: Sample location of S2 showing exposed fill Material in background. During floods, the waters rise to this level washing away the cover Materials.

DATE 09-09-86

TIME 9:45 A.M. P.M.

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

WEATHER Sunny, Warm 85°F

SITE Setzer Rd. LF

TDD# F05-8611-191

PHOTOGRAPHED BY: Larry Lunch

SAMPLE ID# (if applicable) —

DESCRIPTION: Tire tracks of vehicles unauthorized entrance upon fill to access wooded area to the north of fill, and the river.

DATE 09-09-86

TIME 12:00 A.M. P.M.

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

WEATHER Sunny, Warm 85°F

SITE Setzer Rd. LF

TDD# F05-8611-171

PHOTOGRAPHED BY: Larry Lunch

SAMPLE ID# (if applicable) —

DESCRIPTION: A resurfacing of the cover material voluntarily undertaken by owners a few weeks before the FIT inspection and sampling.

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

SURFACE WATER AND SEDIMENT SAMPLES

ITC	MEJ 311	MEJ 312	MEJ 313	MEJ 314	MEJ 315	MEJ 316	MEJ 317	MEJ 318	MEJ 319	MEJ 320	
OTC	EG 821	EG 822	EG 823	EG 824	EG 825	EG 826	EG 827	EG 828	EG 829	EG 830	
SAMPLE	Upgradient surface water	Surface water alongside site	Downgrad. surface water	Downgrad. Mean intake	Duplicate Downgrad. surface water	Blank	Sed. sample #1. Upgradient	Sed. #2 Alongside site	Sed. #3 Downgrad. of site	Sed. #4 Downgrad. Mean intake.	
COMPOUND											
pentachlorophenol											
phenanthrene											
anthracene											
di-n-butylphthalate											
fluoranthene											
benzidine											
pyrene	43.50										
butylbenzylphthalate											
3,3'-dichlorobenzidine											
benzo(a)anthracene							337.0J	93.0J		105.0J	
bis(2-ethylhexyl)phthlate											
chrysene											
di-n-octyl phthlate											
benzo(b&k)fluoranthene											
benzo(a)pyrene											
indeno(1,2,3-cd)pyrene											
dibenzo(a,h)anthracene											
benzo(g,h,i)perylene											
alpha-BHC											
beta-BHC							57.7		50.7		
delta-BHC											
gamma-BHC(lindane)											
heptachlor											
aldrin											
heptachlor epoxide											
endosulfan I											
dieldrin											
4,4'-DDE											
endrin											
endosulfan II											
4,4'-DDD											
endrin aldehyde											
endosulfan sulfate											
4,4'-DDT											
methoxychlor											
endrin ketone											
chlordane											
toxaphene											
Aroclor-1016											
Aroclor-1221											
Aroclor-1232											
Aroclor-1242											
Aroclor-1248											
Aroclor-1254											
Aroclor-1260											
ELEMENT											
aluminum	253.0	1020.0	266.0	[182.0]	[198.0]						
antimony											
arsenic							7.7		9.1	12.0	
barium	[70.0]	[77.0]	[37.0]	[79.0]	[88.0]		[28.0]	[21.0]	[28.0]	[90.0]	
beryllium											
cadmium											
calcium											
chromium							6.7	8.4	8.1	11.0	
cobalt							[5.0]	[5.9]	[6.7]	[12.0]	
copper	[11.0]J	[11.0]J	[7.2]J	[>4]J	[5.4]J	264.0J	[10.0]	[12.0]	[14.0]	42.0	
iron											
lead							7.1J	11.0	7.1J	13.0J	
magnesium											
manganese											
mercury		0.2 CV	0.3 CV								
nickel	[8.3]					[19.0]	[13.0]	[15.0]	[16.0]	38.0	
potassium											
selenium											
silver											
sodium											
thallium											
tin											
vanadium							[11.0]	[11.0]	[9.9]	[25.0]	
zinc	[15.0]	[18.0]	[9.5]	[10.0]	[7.8]	[14.0]	59.0	51.0	58.0	195.0	
cyanide CHECK IF ANALYZED (✓)											
TENTATIVELY IDENTIFIED ORGANICS											

STATE OHIO SITE SIETZER RD. LANDFILL TDD F05-8611-171 PAGE 2 OF 2, SET # ____

SURFACE WATER & SEDIMENT SAMPLES

ITC	MEJ 311	MEJ 312	MEJ 313	MEJ 314	MEJ 315	MEJ 316	MEJ 317	MEJ 318	MEJ 319	MEJ 320	
OTC	EG 821	EG 822	EG 823	EG 824	EG 825	EG 826	EG 827	EG 828	EG 829	EG 830	
SAMPLE	UPGRADIENT SURFACE WATER	SURFACE WATER ALONGSIDE SITE.	DOWNGRAD. SURFACE WATER	DOWNGRAD. NEAR IN-TAKE SURFACE WATER	DUPLICATE DOWNGRAD. SURFACE WATER	BLANK	SEDIMENT SAMPLE #1 UPGRADIENT	SED. SAMPLE #2 ALONGSIDE SITE	SED. SAMPLE #3 DOWNGRAD. OF SITE	SED. SAMPLE #4 DOWNGRAD. NEAR INTAKE.	
COMPOUND											
chloromethane											
bromomethane											
vinyl chloride							2.8J		3.2J		
chloroethane							136.0B	230.0B	132.0B		
methylene chloride											
acetone											
carbon disulfide											
1,1-dichloroethene											
1,1-dichloroethane											
trans-1,2,-dichloroethene											
chloroform											
1,2-dichloroethane											
2-butanone											
1,1,1-trichloroethane											
carbon tetrachloride											
vinyl acetate											
bromodichloromethane											
1,1,2,2-tetrachloroethane											
1,2-dichloropropane											
trans-1,3-dichloropropene											
trichloroethene											
dibromochloromethane											
1,1,2-trichloroethane											
benzene											
cis-1,3-dichloropropene											
2-chloroethylvinylether											
bromoform											
2-hexanone											
4-methyl-2-pentanone											
tetrachloroethene							2.8J		1.7J		
toluene											
chlorobenzene											
ethylbenzene											
styrene											
total xylenes								43.0J			
N-nitrosodimethylamine											
phenol											
aniline											
bis(2-chloroethyl)ether											
2-chlorophenol											
1,3-dichlorobenzene	9.50										
1,4-dichlorobenzene	9.00										
benzyl alcohol											
1,2-dichlorobenzene											
2-methylphenol											
bis(2-chloroisopropyl)ether											
4-methylphenol											
N-nitroso-di-n-propylamine	330.00										
hexachloroethane											
nitrobenzene											
isophrone											
2-nitrophenol											
2,4-dimethylphenol											
benzoic acid											
bis(2-chloroethoxy)methane											
2,4-dichlorophenol											
1,2,4-trichlorobenzene	8.60										
napthalene											
4-chloroaniline											
hexachlorobutadiene											
4-chloro-3-methylphenol											
2-methylnapthalene											
hexachlorocyclopentadiene											
2,4,6-trichlorophenol											
2,4,5-trichlorophenol											
2-chloronaphthalene											
2-nitroaniline											
dimethyl phthalate											
acenapthylene	16.00										
3-nitroaniline											
acenaphthene											
2,4-dinitrophenol											
4-nitrophenol											
dibenzofuran											
2,4-dinitrotoluene	24.30										
2,6-dinitrotoluene											
diethylphthalate											
4-chlorophenyl-phenylether											
flourene											
4-nitroaniline											
4,6-dinitro-2-methylphenol											
N-nitrosodiphenylamine								43.0J			
4-bromophenyl-phenylether											
hexachlorobenzene											

STATE OHIO SITE STETZER RD. LANDFILL TDD F05-8611-171 PAGE 1 OF 2, SET #

DOMESTIC WELLS

SAMPLE	MEJ 303	MEJ 304	MEJ 308	MEJ 305	MEJ 306	MEJ 309	MEJ 310	MEJ 307
ITC								
OTC	EG 813	EG 814	EG 818	EG 815	EG 816	EG 819	EG 820	EG 817
COMPOUND								BLANK.
chloromethane								
bromomethane								
vinyl chloride								
chloroethane								
methylene chloride	3.0 B	3.0 B	2.0 B	3.0 B	3.0 B	1.0 B	1.0 B	2.0 B
acetone							48.0	
carbon disulfide								
1,1-dichloroethene								
1,1-dichloroethane								
trans-1,2,-dichloroethene								37.0
chloroform								
1,2-dichloroethane								
2-butanone								
1,1,1-trichloroethane								
carbon tetrachloride								
vinyl acetate								
bromodichloromethane								
1,1,2,2-tetrachloroethane								
1,2-dichloropropane								
trans-1,3-dichloropropene								
trichloroethene								
dibromochloromethane								
1,1,2-trichloroethane								
benzene								
cis-1,3-dichloropropene								
2-chloroethylvinylether								
bromoform								
2-hexanone								
4-methyl-2-pentanone								
tetrachloroethene	2.0	1.0	2.0			3.0		
toluene								
chlorobenzene								
ethylbenzene								
styrene								
total xylenes								
N-nitrosodimethylamine								
phenol			3.0					
aniline								
bis(2-chloroethyl)ether								
2-chlorophenol								
1,3-dichlorobenzene								
1,4-dichlorobenzene								
benzyl alcohol								
1,2-dichlorobenzene								
2-methylphenol								
bis(2-chloroisopropyl)ether								
4-methylphenol								
N-nitroso-di-n-propylamine								
hexachloroethane								
nitrobenzene								
isophrone								
2-nitrophenol								
2,4-dimethylphenol								
benzoic acid								
bis(2-chloroethoxy)methane								
2,4-dichlorophenol								
1,2,4-trichlorobenzene								
napthalene								
4-chloroaniline								
hexachlorobutadiene								
2-methylnapthalene								
hexachlorocyclopentadiene								
2,4,6-trichlorophenol								
2,4,5-trichlorophenol								
2-chloronaphthalene								
2-nitroaniline								
dimethyl phthalate								
acenapthylene								
3-nitroaniline								
acenaphthene								
2,4-dinitrophenol								
4-nitrophenol								
dibenzofuran								
2,4-dinitrotoluene								
2,6-dinitrotoluene								
diethylphthalate								
4-chlorophenyl-phenylether								
flourene								
4-nitroaniline								
4,6-dinitro-2-methylphenol								
N-nitrosodiphenylamine	8.0 B	5.0 B	4.0 B	5.0 B	4.0 B	6.0 B	6.0 B	6.0 B
4-bromophenyl-phenylether								
hexachlorobenzene								

STATE OHIO SITE STEITZER RD. LANDFILL TDD F05-8611-171 PAGE 1 OF 2, SET # ____

DOMESTIC WELLS

ITC	MEJ 303	MEJ 304	MEJ 308	MEJ 305	MEJ 306	MEJ 309	MEJ 310	MEJ 307			
OTC	EG 813	EG 814	EG 818	EG 815	EG 816	EG 819	EG 820	EG 817			
SAMPLE	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]	Blank			
COMPOUND											
pentachlorophenol											
phenanthrene											
anthracene											
di-n-butylphthalate											
fluoranthene											
benzidine											
pyrene											
butylbenzylphthalate											
3,3'-dichlorobenzidine											
benzo(a)anthracene		3.0	3.0								
bis(2-ethylhexyl)phthlate											
chrysene											
di-n-octyl phthlate											
benzo(bâk)fluoranthene											
benzo(a)pyrene											
indeno(1,2,3-cd)pyrene											
dibenzo(a,h)anthracene											
benzo(g,h,i)perylene											
alpha-BHC											
beta-BHC											
delta-BHC											
gamma-BHC(lindane)											
heptachlor											
aldrin											
heptachlor epoxide											
endosulfan I											
dieldrin											
4,4'-DDE											
endrin											
endosulfan II											
4,4'-DDD											
endrin aldehyde											
endosulfan sulfate											
4,4'-DDT											
methoxychlor											
endrin ketone											
chlordane											
toxaphene											
Aroclor-1016											
Aroclor-1221											
Aroclor-1232											
Aroclor-1242											
Aroclor-1248											
Aroclor-1254											
Aroclor-1260											
ELEMENT											
aluminum	[44.0]	[47.0]	[123.0]	[49.0]		[55.0]	[56.0]	[40.0]			
antimony											
arsenic											
barium		[74.0]	[87.0]	620.0		[48.0]					
beryllium											
cadmium			2.0		0.75		0.15				
calcium											
chromium							[4.6]				
cobalt											
copper	[6.5]	35.0	104.0	304.0	[16.0]	[16.0]	[8.3]	30.0			
iron											
lead		8.7	57.0								
magnesium											
manganese											
mercury											
nickel			[11.6]	[7.8]		[7.5]					
potassium											
selenium											
silver											
sodium											
thallium											
tin											
vanadium											
zinc	135.0	1040.0	4130.0	27.0	[15.0]	105.0	66.0	[6.9]			
cyanide CHECK IF ANALYZED (✓)											
TENTATIVELY IDENTIFIED ORGANICS											
Phenol 2,2 Methylenebis-											
(-1,1 - Dimethyleth	3.0B										
Sulfur, Mol		4.0B		43.0B							
Hexanedioic Acid								4.0			
Fatty Acid			2.0								
Siloxane						29.0B	20.0B				
Unknown	12.0B	38.0B	13.B			41.0B	20.0B	58.0B			

STATE OHIO SITE STETZER RD. LANDFILL TDD F05-8611-171 PAGE 2 OF 2, SET #

SOIL SAMPLES

ITC	MEI 099	MEI 100	MEJ 301	MEI 255
OTC	EG 109	EG 810	EG 811	EI 125
SAMPLE	S1- N.E. corner sample (ppm)	S2- N. W. Corner sample (ppm)	S3- N. central sample (ppm)	S4- Background sample. (ppm)
COMPOUND				
pentachlorophenol				
phenanthrene				
anthracene				
di-n-butylphthalate				
fluoranthene				
benzidine				
pyrene				
butylbenzylphthalate				
3,3'-dichlorobenzidine				
benzo(a)anthracene			1280.0	
bis(2-ethylhexyl)phthlate				
chrysene				
di-n-octyl phthlate				
benzo(b&k)fluoranthene				
benzo(a)pyrene				
indeno(1,2,3-cd)pyrene				
dibenzo(a,h)anthracene				
benzo(g,h,i)perylene				
alpha-BHC	48.10	129.00	34.00	
beta-BHC				
delta-BHC				
gamma-BHC(lindane)				
heptachlor				
aldrin				
heptachlor epoxide				
endosulfan I				
dieldrin				
4,4'-DDE				
endrin				
endosulfan II				
4,4'-DDD				
endrin aldehyde				
endosulfan sulfate				
4,4'-DDT				
methoxychlor				
endrin ketone				
chlordane				
toxaphene				
Aroclor-1016				
Aroclor-1221				
Aroclor-1232				
Aroclor-1242				
Aroclor-1248				
Aroclor-1254				
Aroclor-1260				
ELEMENT				
aluminum	9380.0	7360.0	10900.0	11300.0
antimony				
arsenic	14.0	15.0	16.0	12.0
barium	[65.0]	[44.0]	[109.0]	[101.0]
beryllium				
cadmium				
calcium				
chromium	15.0	12.0	15.0	13.0
cobalt	[22.0]	[13.0]	[12.0]	[14.0]
copper	27.0	26.0	28.0	[14.0]
iron				
lead	16.0 J	16.0 J	22.0 J	20.0 J
magnesium				
manganese				
mercury				0.1 CV
nickel	37.0	33.0	38.0	[15.0]
potassium				
selenium				
silver				
sodium				
thallium				
tin				
vanadium	[19.0]	[16.0]	[20.0]	[25.0]
zinc	116.0	135.0	161.0	71.0
cyanide CHECK IF ANALYZED (✓)				
TENTATIVELY IDENTIFIED ORGANICS				

STATE OHIO SITE STETZER RD LANDFILL TDD F05-8611-171 PAGE 2 OF 2, SET 0

SOIL SAMPLES

IIC	MEI 099	MEI 100	MEI 301	MEI 255							
OTC	EG 809	EG 810	EG 811	EI 125							
SAMPLE	S1-N.E. Corner sample	S2-N. W. Corner sample	S3-N. Central SAMPLE	S4 - BACKGROUND SAMPLE							
COMPOUND											
chloromethane											
bromomethane											
vinyl chloride											
chloroethane											
methylene chloride	9.7		4.3 J	4.7 J							
acetone	38.0 B	59.0 B	162.0 B	41.0 B							
carbon disulfide											
1,1-dichloroethene											
1,1-dichloroethane											
trans-1,2,-dichloroethene											
chloroform											
1,2-dichloroethane											
2-butanone	7.1 BJ										
1,1,1-trichloroethane											
carbon tetrachloride											
vinyl acetate											
bromodichloromethane											
1,1,2,2-tetrachloroethane											
1,2-dichloropropane											
trans-1,3-dichloropropene											
trichloroethene											
dibromochloromethane											
1,1,2-trichloroethane											
benzene											
cis-1,3-dichloropropene											
2-chloroethylvinylether											
bromoform											
2-hexanone				6.9BJ							
4-methyl-2-pentanone											
tetrachloroethene											
toluene	4.8BJ	3.2 J	4.5J	2.7BJ							
chlorobenzene											
ethylbenzene											
styrene											
total xylenes											
N-nitrosodimethylamine											
phenol											
aniline											
bis(2-chloroethyl)ether											
2-chlorophenol											
1,3-dichlorobenzene											
1,4-dichlorobenzene											
benzyl alcohol											
1,2-dichlorobenzene											
2-methylphenol											
bis(2-chloroisopropyl)ether											
4-methylphenol											
N-nitroso-di-n-propylamine											
hexachloroethane											
nitrobenzene											
isophrone											
2-nitrophenol											
2,4-dimethylphenol											
benzoic acid											
bis(2-chloroethoxy)methane											
2,4-dichlorophenol											
1,2,4-trichlorobenzene											
napthalene											
4-chloroaniline											
hexachlorobutadiene											
4-chloro-3-methylphenol											
2-methylnapthalene											
hexachlorocyclopentadiene											
2,4,6-trichlorophenol											
2,4,5-trichlorophenol											
2-chloronaphthalene											
2-nitroaniline											
dimethyl phthalate											
acenapthylene											
3-nitroaniline											
acenaphthene											
2,4-dinitrophenol											
4-nitrophenol											
dibenzofuran											
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 OHIO SITE STETZER RD. LANDFILL TDD F05-8611-171 PAGE 1 OF 2, SET # ____

UA-0423-(21)
21

ecology and environment, inc.

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

Date Received for Review: 10/14/86 **Date Review Completed:** 10/15/86

TO: Larry Lumeh

FROM: Renee Hix Mays

SUBJECT: Stetzer Road Landfill, Ohio
RS-86001-15A

Sample Description: Case # 6402 SAS 2478E 8 drinking water inorganics

Project Data Status: still awaiting organic drinking waters and all RAS data.

FIT Data Review Findings:
Fe is estimated
Blank is clean.
RPD's between sample MES304 and duplicate MES308 are not good for Cd., Cu, Fe, Pb or Zn.

Additional Comments: In addition, Mn was found in the duplicate but not the sample.
Bracketed data is above the instrument detection limits but below the CRDL's.

Book No. 5
Page No. 206

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 10/10/86

RECEIVED OCT 14 1986

SUBJECT: Review of Region V CLP Data
Received for Review on 10/2/86

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

TO: Data User: Fit

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

SITE NAME: Stetzer Road Landfill SMO Case No. 6402 SAS 2478E

EPA Data Set No. SF3512 No. of Samples: 8 D.U./Activity Numbers 1905 1 C48500

CRL No. 86FL10568 - 86FL10573

SMO Traffic No. MEJ303 - MEJ310

CLP Laboratory: RMAL Hrs. Required for Review: 1

Following are our findings. This review covers 8 drinking water samples analyzed for metals and cyanide.
Laboratory should use drinking water limits for reporting As (2 ug/l), Se (2 ug/l), Pb (2 ug/l).
Spike recovery for Fe is 85%, all Fe data is estimated.
Spike recovery for Zn is 60%, but Zn data are acceptable due to sample concentration greater than 4 times the spike added value.
Samples MEJ304 and MEJ308 are field duplicates. Cu is 35 ug/l and 104 ug/l; Fe is 878 ug/l and 5120 ug/l; Pb is 8.7 ug/l and 57 ug/l; Zn is 1040 ug/l and 4130 ug/l. FIELD DUPLICATES are out of control.
All other QC audits are acceptable.

Ada Leon
10.9.86

( ) 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, CLP/Sample Management Office

EPA FORM 1320-6 (REV 3-76)

SF3512

00001

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

RECEIVED OCT 14 1986

Date 9-24-86

COVER PAGE
INORGANIC ANALYSIS DATA PACKAGE

Lab Name ROCKY MOUNTAIN ANALYTICAL
SOW No. 784

Case No. 6402/2478E
QC Report No. 56320

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
MEJ303		MEJ310	
MEJ303D		[MEJ999]	
MEJ304			
MEJ304S			
MEJ305			
MEJ306			
MEJ307			
MEJ308			
MEJ309			

RECEIVED
SEP 25 1986
U.S. EPA CENTRAL REGIONAL LAB

Comments: 8 LOW WATERS TASK 1,2 & CN
SERIAL DILUTION OF SAMPLE MEJ310 IS IDENTIFIED AS [MEJ999]
15 DAY TURNAROUND SPECIAL QC REQUIREMENTS
ARSENIC, SELENIUM, THALLIUM, LEAD, ANTIMONY & CADMIUM DETERMINED BY MSA

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

RECEIVED OCT 1 4 1986

Narrative

RMA QC # 56320

Case # 6402/2478E

Comments; The Fe matrix spike recovery for Sample MEJ304 is 85%. All other matrix spike recoveries are within the 90-110% control limits. The matrix spike sample was analyzed several times to verify the Fe recovery.

Lab Manager LFD

RECEIVED OCT 14 1986

00003

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

86FL10568
EPA Sample No.
MEJ303

Date 9-24-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402/2478E
QC REPORT NO. 56320

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[44]	P	13.	MAGNESIUM	24300	P
2.	ANTIMONY	~~400~~ 2u	~~P~~ F S	14.	MANGANESE	35	P
3.	ARSENIC	10U	F S	15.	MERCURY	0.2U	CV
4.	BARIUM	1930	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	[2120]	P
6.	CADMIUM	~~50~~ 0.1u	~~P~~ F S	18.	SELENIUM	5U	F S
7.	CALCIUM	82600	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	19700	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F S
10.	COPPER	[6.5]	P	22.	TIN	24U	P
11.	IRON	1480	P J	23.	VANADIUM	4U	P
12.	LEAD	5U	F S	24.	ZINC	135	P

Cyanide 10u AS Percent Solids (%) ____

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: All furnace elements determined by MSA

Lab Manager RLO

RECEIVED OCT 14 1986 00004

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

86FL10569
EPA Sample No.
MEJ304

Date 9-24-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402/2478E
QC REPORT NO. 56320

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[47]	P	13.	MAGNESIUM	26400	P
2.	ANTIMONY	~~40U~~ 2U	~~P~~ F S	14.	MANGANESE	[8.8]	P
3.	ARSENIC	10U	F S	15.	MERCURY	0.2U	CV
4.	BARIUM	[74]	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	[1310]	P
6.	CADMIUM	~~5U~~ 0.7	~~P~~ F S	18.	SELENIUM	5U	F S
7.	CALCIUM	117000	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	8030	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F S
10.	COPPER	35	P	22.	TIN	24U	P
11.	IRON	878	P J	23.	VANADIUM	4U	P
12.	LEAD	8.7	F S	24.	ZINC	1040	P

Cyanide 10U AS Percent Solids (%) ____

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: All furnace elements determined by MSA

Lab Manager KKC

RECEIVED OCT 14 1986

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

86FL10590
EPA Sample No.
MEJ305

Date 9-24-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402/2478E
QC REPORT NO. 56320

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[47]	P	13.	MAGNESIUM	52800	P
2.	ANTIMONY	~~40U~~ 60	~~P~~ F S	14.	MANGANESE	33	P
3.	ARSENIC	10U	F S	15.	MERCURY	0.2U	CV
4.	BARIUM	620	P	16.	NICKEL	[7.8]	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	8210	P
6.	CADMIUM	~~5U~~ 0.1U	~~P~~ F S	18.	SELENIUM	50U	F S
7.	CALCIUM	53500	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	171000	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F S
10.	COPPER	304	P	22.	TIN	24U	P
11.	IRON	942	P J	23.	VANADIUM	4U	P
12.	LEAD	5U	F S	24.	ZINC	27	P

Cyanide 10U AS Percent Solids (%) ____

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: Selenium value reported at a 10X dilution
All furnace elements determined by MSA

Lab Manager LKO

RECEIVED OCT 14 1986

Form I

86 FL10571

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.
MEJ306

Date 9-24-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402/2478E
QC REPORT NO. 56320

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	26U	P	13.	MAGNESIUM	[397]	P
2.	ANTIMONY	~~40U~~ TG 28	~~P~~ TG F S	14.	MANGANESE	6U	P
3.	ARSENIC	10U	F S	15.	MERCURY	0.2U	CV
4.	BARIUM	3U	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	[1290]	P
6.	CADMIUM	~~5U~~ TG 0.75	~~P~~ TG F S	18.	SELENIUM	50U	F S
7.	CALCIUM	[632]	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	656000	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F S
10.	COPPER	[16]	P	22.	TIN	24U	P
11.	IRON	[56]	P J	23.	VANADIUM	4U	P
12.	LEAD	5U	F S	24.	ZINC	[15]	P

Cyanide 10u AS Percent Solids (%)

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: Selenium value reported at a 10x dilution
All furnace elements determined by MSA

Lab Manager [illegible]

RECEIVED OCT 14 1986

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

86FL10R11
EPA Sample No.
MEJ307

Date 9-24-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402/2478E
QC REPORT NO. 56320

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[40]	P	13.	MAGNESIUM	52U	P
2.	ANTIMONY	~~40U~~ 2u	~~P~~ F S	14.	MANGANESE	6U	P
3.	ARSENIC	10U	F S	15.	MERCURY	0.2U	CV
4.	BARIUM	3U	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	108U	P
6.	CADMIUM	~~5U~~ 0.1u	~~P~~ F S	18.	SELENIUM	5U	F S
7.	CALCIUM	[136]	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	960U	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F S
10.	COPPER	30	P	22.	TIN	24U	P
11.	IRON	[28]	P J	23.	VANADIUM	4U	P
12.	LEAD	5U	F S	24.	ZINC	[6.9]	P

Cyanide 10u AS Percent Solids (%) ____

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: All furnace elements determined by MSA
Sample is Blank
Copper value verified by Reanalysis

Lab Manager [illegible]

RECEIVED OCT 14 1986

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

86FL10D69
EPA Sample No.
MEJ308

Date 9-24-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402/2478E
QC REPORT NO. 56320

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[123]	P	13.	MAGNESIUM	26100	P
2.	ANTIMONY	~~40U~~ 2u	~~P~~ F S	14.	MANGANESE	24	P
3.	ARSENIC	10U	F S	15.	MERCURY	0.2U	CV
4.	BARIUM	[87]	P	16.	NICKEL	[11]	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	[2010]	P
6.	CADMIUM	~~5U~~ 2.0	~~P~~ F S	18.	SELENIUM	5U	F S
7.	CALCIUM	116000	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	8220	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F S
10.	COPPER	104	P	22.	TIN	24U	P
11.	IRON	5120	P J	23.	VANADIUM	4U	P
12.	LEAD	57	F S	24.	ZINC	4130	P

Cyanide 10u AS Percent Solids (%) ____

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: All furnace elements determined by MSA

Lab Manager [illegible]

00009

RECEIVED OCT 14 1986

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

86FL10572
EPA Sample No.
MEJ309 --

Date 9-24-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402/2478E
QC REPORT NO. 56320

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[55]	P	13.	MAGNESIUM	14200	P
2.	ANTIMONY	~~40U~~ 2U	~~P~~ F S	14.	MANGANESE	44	P
3.	ARSENIC	10U	F S	15.	MERCURY	0.2U	CV
4.	BARIUM	[48]	P	16.	NICKEL	[7.5]	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	8780	P
6.	CADMIUM	~~5U~~ 0.15	~~P~~ F S	18.	SELENIUM	5U	F S
7.	CALCIUM	71600	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	5710	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F S
10.	COPPER	[16]	P	22.	TIN	24U	P
11.	IRON	106	P J	23.	VANADIUM	4U	P
12.	LEAD	5U	F S	24.	ZINC	105	P

Cyanide 10U AS Percent Solids (%) ____

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: All furnace elements determined by MSA

Lab Manager [illegible]

RECEIVED OCT 1 4 1986

00010

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

86FL10573
EPA Sample No.
MEJ310

Date 9-24-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402/2478E
QC REPORT NO. 56320

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[56]	P	13.	MAGNESIUM	97400	P
2.	ANTIMONY	~~400~~ 2u	~~P~~ FS	14.	MANGANESE	218	P
3.	ARSENIC	10U	F S	15.	MERCURY	0.2U	CV
4.	BARIUM	[19]	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	[3820]	P
6.	CADMIUM	~~50~~ 0.15	~~P~~ F S	18.	SELENIUM	5U	F S
7.	CALCIUM	293000	P	19.	SILVER	5U	P
8.	CHROMIUM	[4.6]	P	20.	SODIUM	58200	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F S
10.	COPPER	[8.3]	P	22.	TIN	24U	P
11.	IRON	1250	P J	23.	VANADIUM	4U	P
12.	LEAD	5U	F S	24.	ZINC	66	P

Cyanide 10u AS Percent Solids (%) ____

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: All furnace elements determined by MSA

Lab Manager LLC

RECEIVED OCT 14 1986 00013

Form III

Q.C. Report No. 56320

BLANKS

LAB NAME ROCKY MOUNTAIN ANALYTICAL
DATE 9-24-86

CASE NO. 6402/2478E
UNITS ug/L

Matrix WATER

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2
Metals:							
1. ALUMINUM	26U	26U	26U			26U	
2. ANTIMONY	40U	40U	40U			40U	
3. ARSENIC	10u	10u	10u				
4. BARIUM	3U	3U	3U			3U	
5. BERYLLIUM	2U	2U	2U			2U	
6. CADMIUM	5U	5U	5U			5U	
7. CALCIUM	54U	54U	54U			[57]	
8. CHROMIUM	4U	4U	4U			4U	
9. COBALT	6U	6U	6U			6U	
10. COPPER	3U	3U	3U			3U	
11. IRON	17U	[28]	[21]			[21]	
12. LEAD	5u	5u	5u	5u			
13. MAGNESIUM	52U	52U	52U			52U	
14. MANGANESE	6U	6U	6U			6U	
15. MERCURY	0.2u	0.2u	0.2u			0.2u	
16. NICKEL	7U	7U	7U			7U	
17. POTASSIUM	108U	108U	108U			108U	
18. SELENIUM	5u	5u	5u	5u			
19. SILVER	5U	5U	5U			5U	
20. SODIUM	960U	960U	960U			960U	
21. THALLIUM	10u	10u	10u				
22. TIN	24U	24U	24U			24U	
23. VANADIUM	4U	4U	4U			4U	
24. ZINC	2U	[4]	2U			[7.1]	
Other: ANTIMONY	2u	2u	2u				
CADMIUM	0.1u	0.1u	0.1u				
Cyanide	10u	10u	10u			10u	

RECEIVED OCT 1 4 1996

Form V

Q.C. Report No. 56320

SPIKE SAMPLE RECOVERY

LAB NAME ROCKY MOUNTAIN ANALYTICAL

ATE 9-24-86

CASE NO. 6402/2478E
EPA Sample No. MEJ304
Lab Sample ID No. -
Units UG/L

MATRIX WATER

ompound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R[1]
Metals:					
1. ALUMINUM	75-125	2000	[47]	2000	98
2. ANTIMONY	75-125	466	40U	500	93
3. ARSENIC	75-125		10U	20	
4. BARIUM	75-125	2020	[74]	2000	97
5. BERYLLIUM	75-125	48	2U	50	96
6. CADMIUM	75-125	45	5U	50	90
7. CALCIUM	75-125	214000	117000	100000	97
8. CHROMIUM	75-125	190	4U	200	95
9. COBALT	75-125	463	6U	500	93
0. COPPER	75-125	281	35	250	98
11. IRON	75-125	1730	878	1000	85
12. LEAD	75-125		8.7	20	
3. MAGNESIUM	75-125	73200	26400	50000	94
14. MANGANESE	75-125	195	[8.8]	200	93
5. MERCURY	75-125	0.9	0.2U	1.0	90
6. NICKEL	75-125	376	7U	400	94
17. POTASSIUM	75-125	50700	[1310]	50000	99
8. SELENIUM	75-125		5U	10	
9. SILVER	75-125	50	5U	50	100
20. SODIUM	75-125	106000	8030	100000	98
1. THALLIUM	75-125		10U	50	
2. TIN	75-125	376	24U	400	94
23. VANADIUM	75-125	483	4U	500	97
4. ZINC	75-125	1160	1040	200	60
Other:					
yanide	75-125	96	10u	100	96

[1] %R = [(SSR - SR)/SA] x 100
"R"- out of control

Comments:

The following elements reported unflagged due to sample concentration greater than 4 times the Spike Added value:
ZINC

RECEIVED OCT 1 4 1986

Form VI

Q.C. Report No. 56320

DUPLICATES

LAB NAME ROCKY MOUNTAIN ANALYTICAL

DATE 9-24-86

CASE NO. 6402/2478E
EPA Sample No. MEJ303
Lab Sample ID No. -
Units UG/L

Matrix WATER

Compound	Control Limit[1]	Sample(S)		Duplicate(D)		RPD[2]
Metals:						
1. ALUMINUM		[44]		[38]		NC
2. ANTIMONY		40U		40U		NC
3. ARSENIC		10U	S	10U	S	NC
4. BARIUM		1930		1930		0
5. BERYLLIUM		2U		2U		NC
6. CADMIUM		5U		5U		NC
7. CALCIUM		82600		82800		0.24
8. CHROMIUM		4U		4U		NC
9. COBALT		6U		6U		NC
10. COPPER		[6.5]		[5.6]		NC
11. IRON		1480		1420		4.1
12. LEAD		5U	S	5U	S	NC
13. MAGNESIUM		24300		24100		0.83
14. MANGANESE		35		34		2.9
15. MERCURY		0.2U		0.2U		NC
16. NICKEL		7U		7U		NC
17. POTASSIUM		[2120]		[2130]		NC
18. SELENIUM		5U	S	5U	S	NC
19. SILVER		5U		5U		NC
20. SODIUM		19700		19000		3.6
21. THALLIUM		10U	S	10U	S	NC
22. TIN		24U		24U		NC
23. VANADIUM		4U		4U		NC
24. ZINC		135		136		0.74
Other: ANTIMONY		2u	S	2u	S	NC
CADMIUM		0.1u	S	0.1u	S	NC
Cyanide		10u		10u		NC

* Out of Control
To be added at a later date.

[2] RPD = [|S-D|/((S+D)/2)] x 100

NC - Non calculable RPD due to value(s) less than CRDL

RS-8601-15

OH-0423-[illegible]
21

ecology and environment, inc.

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

Date Received for Review: 10/14/86 **Date Review Completed:** 10/15/86

TO: Larry Lumeh

FROM: Renee Hix Mays

SUBJECT: Stetzer Rd. Landfill, Ohio
RS-8601-15A

Sample Description: Case # 6402 SAS 2478E 8 100
drinking water organics

Project Data Status: Complete for drinking water; still awaiting all RAS results.

FIT Data Review Findings:
Blank had hits of methylene chloride, chloroform & bromodichloromethane.
RPD's between sample EG814 and duplicate EG815 were not good for toluene. Phenol found in sample duplicate but not in sample (estimated).

Additional Comments:

Book No. 5
Page No. 206

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

RECEIVED OCT 1 4 1986

DATE: 10/10/86

SUBJECT: Review of Region V CLP Data
Received for Review on 10/2/86

FROM: Curtis Ross, Director (5SCRL)
Central Regional Laboratory
Patrick J. Chunilla

TO: Data User: Sit

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

SITE NAME: Stringer Road Landfill SMO Case No. 6402SR52478E

EPA Data Set No. 5F3512 No. of Samples: 8 D.U./Activity Numbers 19051 C48500

CRL No. 86FL10568 - 86FL10573

SMO Traffic No. EG813 - EG820

CLP Laboratory: Acurex Hrs. Required for Review: 8

Following are our findings.

This review covers eight residential well samples analyzed for RAS organic compounds at low detection limits.
The holding times for the SV extraction of samples EG816 and EG818 were exceeded by two days. The lab did not have enough sample to do the VOA MSD for sample # EG813, and the %Rs for the acid spikes for this sample were all <10%. The surrogate recoveries for the acid compounds in this sample were also outside of QC limits (low), but a re-extraction could not be done due to lack of enough sample. The results for the acid compounds in EG813 are estimated and may be biased low.

The SV method blank had 2 B/N surrogates outside of QC limits (low). The lab re-extracted the blank and all recoveries were in. However, the samples were not re-extracted due to lack of sample volume and three of the samples had one B/N surrogate out low and one sample had 2 B/2 out low.

( ) 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, CLP/Sample Management Office

EPA FORM 1320-6 (REV 3-78)

- Continued on 'Data Qualifiers' sheet -

RECEIVED OCT 1 4 1986

DATA QUALIFIERS

- Continued from cover sheet -

Contractor: Acurex

Case 6402 SAS 24178E

Below is a summary of the out of control audits and the possible effect on the data for this case:

All other BN recoveries were on the low side. Results for the B/N compounds in all samples may be biased low and should be considered estimates.

Results for 3-nitroaniline and 4-nitroaniline on 9/15/86 are unusable due to low RFs. Results for 2-hexanone, 4-methyl-2-pentanone, vinyl acetate, and 2-butanone on 9/16/86 are unusable due to low RFs. Results for 4-nitroaniline on 9/17/86 are unusable due to a low RF. Results for 2,4,6-trichlorophenol on 9/17/86 are estimated due to a highly variable RF.

All results for ABN HSL compounds on 9/16/86 are estimated due to highly variable RFs except for: acetone, carbon disulfide, 1,2-dichloroethane, 1,1,1-trichloroethane, 1,2-dichloropropane, trichloroethene, benzene, tetrachloroethene, toluene, ethylbenzene and styrene.

Reviewed by: Jan Pl

Phone:

Date: 10/9/86

ACUREX Corporation

OF3518

RECEIVED OCT 14 1986

Energy & Environmental Division

Sept. 27, 1986

RECEIVED

OCT 1 1986

U.S. EPA, CENTRAL REGIONAL LAB.
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

U.S. Environmental Protection Agency
Contract Laboratory Program
Sample Management Office
300 N. Lee Street, #200
Alexandria, VA 22314

Attention: Linda Boynton

Subject: Data Package for Eight Water Samples
Case 6402
Contract #: SAS 2478E
Protocol: July 1985

Enclosed please find the sample data package and standards package for eight water samples identified as EG813 through EG820.

All detection limits are four times lower than EPA Superfund CRDL's. For volatiles, 20 mLs were purged. For semivolatiles and pesticides, twice the normal volume was extracted and concentrated to one-half the normal volume.

Please note that pages of this report are numbered at the top of the page. The first four digits are the case number and the remaining digits are the sequential page numbers.

Quantitation reports in this package represent final values for those compounds found in each sample. The quantitation lists from which these are generated have been edited to remove false positives based on an inspection of the dual display of the sample spectra and the library spectra. A correction factor has been applied to the calculation so that amounts reported represent the true values relative to the original sample. The equation at the bottom of each quantitation report details how this correction factor was obtained.

485 Clyde Avenue, P.O. Box 7044, Mountain View, CA 94039 (415) 961-5700 Telex: 325961 FAX: (415) 964-5145

RECEIVED OCT 1 4 1986

If you have any questions regarding this package, please call.

Sincerely,

Richard Scott

Richard Scott
Project Manager

RS/ats

cc: USEPA/EMSL
P.O. Box 15027
Las Vegas, NV 89114
Attention: Dr. Gareth Pearson

USEPA Region V
536 South Clark Street
Central Regional Laboratory
10th Floor
Chicago, IL 60605
Attention: Curtis Ross

METHOD BLANK SUMMARY

Case No. SAS 2478E Region 5 Contractor Aurex Contract No. 68-01-7142

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
B0915 V01	9-15-86	VOA	Water	Lo	1020	75-09-2	Methylene chloride	3	ug/L	5
B0916 V02	9-16-86	VOA	Water	Lo	1020	75-09-2	Methylene chloride	1	ug/L	5
↓	↓	↓	↓	↓	↓	—	Unknown siloxane	16	ug/L	—
E0906CMB	9-15-86	BNA	Water	Lo	4500	86-30-6	N-nitroso diphenyl amine	9	ug/L	10
						85-68-7	Butyl benzyl phthalate	1	ug/L	10
						10544-50-0	Sulfur	2	ug/L	—
						—	Unknown	40	ug/L	—
↓	↓	↓	↓	↓	↓	119-47-1	Phenol, 2,2'-methylenebis-(1,1-Dimethyl)	18	ug/L	—
E0906MBR	9-22-86	BNA	Water	Lo	4500	86-30-6	N-nitroso diphenyl amine	10	ug/L	—
Pest blk	9-25-86	Pest	Water	Lo	6000	—	None	—	—	—

Comments:

RECEIVED OCT 14 1986

2478.003

FORM IV 7/85

2478 002

RECEIVED OCT 14 1986

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No: SAS 2478E Contractor: Acurex Contract No: 68-01-7142

Fraction	Compound	Conc. Spike Added	Sample Result	Conc. MS	% Rec	Conc. MSD	% Rec	RPD	QC Limits* RPD	QC Limits* Recovery
VOA	1,1-Dichloroethene	10	0	8	80	0	0 *	200 *	14	61-145
SMO	Trichloroethene	10	0	12	120	0	0 *	200 *	14	71-120
SAMPLE NO.	Chlorobenzene	10	0	12	120	0	0 *	200 *	13	75-130
E6813	Toluene	10	2	14	120	2	0 *	150 *	13	76-125
	Benzene	10	0	12	120	0	0 *	200 *	11	76-127
	1,2,4-Trichlorobenzene	18	0	7	39	8	44	13	28	39-98
B/N	Acenaphthene	18	0	9	50	10	56	11	31	46-118
SMO	2,4-Dinitrotoluene	18	0	8	44	9	50	12	38	24-96
SAMPLE NO.	Pyrene	18	0	13	72	13	72	0	31	26-127
E6813	N-Nitroso-Di-n-Propylamine	18	0	9	50	11	61	20	38	41-116
	1,4-Dichlorobenzene	18	0	7	39	7	39	0	28	36-97
ACID	Pentachlorophenol	36	0	0	0 *	6	17	200 *	50	9-103
SMO	Phenol	36	0	1	3 *	10	28	164 *	42	12-89
SAMPLE NO.	2-Chlorophenol	36	0	1	3 *	11	31	167 *	40	27-123
E6813	4-Chloro-3-Methylphenol	36	0	3	8 *	14	39	129 *	42	23-97
	4-Nitrophenol	36	0	0	0 *	10	28	200 *	50	10-80
	Lindane	.8	0	.83	104	.9	113	8	15	56-123
PEST	Heptachlor	.8	0	.95	119	.81	101	16	20	40-131
SMO	Aldrin	.8	0	.69	86	.74	93	7	22	40-120
SAMPLE NO.	Dieldrin	2	0	1.9	95	1.7	85	11	18	52-126
E6813	Endrin	2	0	2.2	110	1.9	95	15	21	56-121
	4,4'-DDT	2	0	2.1	105	1.9	95	10	27	38-127

Asterisked values are outside QC limits.

RPD: VOAs 5 out of 5 ; outside QC limits
B/N 0 out of 6 ; outside QC limits
ACID 5 out of 5 ; outside QC limits
PEST 0 out of 6 ; outside QC limits

RECOVERY: VOAs 5 out of 10 ; outside of QC limits
B/N 0 out of 12 ; outside of QC limits
ACID 5 out of 10 ; outside of QC limits
PEST 0 out of 12 ; outside of QC limits

Comments: Not enough sample available to repeat E6813 MS VOA - Sample MSD not spiked

FORM III

~~2479 355~~ gn
2478 001

RECEIVED OCT 14 1986

WATER SURROGATE PERCENT RECOVERY SUMMARY

ise No: SAS 2478E Contract Laboratory: Acurex Contract No: 68-01-7142

SMO traffic no.	Volatile: Toluene-d8 (86-110) ⓐ	Volatile: BFB (86-115) ⓐ	Volatile: 1,2-Dichloroethane-d4 (76-114) ⓐ	Semi-Volatile: Nitrobenzene-d5 (35-114)	Semi-Volatile: 2-Fluorobiphenyl (43-116)	Semi-Volatile: Terphenyl-d14 (33-141)	Semi-Volatile: Phenol-d5 (10-94)	Semi-Volatile: 2-Fluorophenol (21-100)	Semi-Volatile: 2,4,6-Tribromophenol (10-123)	Pesticide: Dibutyl-** chlorendate (24-154)
.GB13	100	92	94	31.25 *	35 *	70	40	37.5	53.75	84
EGB14	102	92	89	40	43.75	87.5	51.25	47.5	33.75	86
GB15	96	92	101	63.75	52.5	63.75	63.75	71.25	48.75	84
GB16	98	93	105	56.25	46.25	58.75	63.75	71.25	31.25	83
EGB17	102	94	95	35	41.25 *	73.75	32.5	33.75	35	84
:GB18	101	94	100	46.25	33.75 *	50	51.25	56.25	30	87
:GB19	100	100	96	36.25	40 *	62.5	45	41.25	31.25	89
EGB20	113 *	88	96	43.75	45	71.25	25	21.25	17.5	83
30915V01	107	86	114	NA	NA	NA	NA	NA	NA	NA
30916V02	97	96	94	NA	NA	NA	NA	NA	NA	NA
:0906CMB	NA	NA	NA	31 *	31 *	55	45	40	31	NA
E0906MBR	NA	NA	NA	57	50	66	56	65	35	NA
Pest Blk	NA	NA	NA	NA	NA	NA	NA	NA	NA	89
EGB13MS	95	97	88	91.25	96.25	133.75	7.5 *	2.5 *	0 *	85
EGB13MSD	109	93	96	47.5	50	65	27.5	25	26.25	90

* Values are outside contract required QC limits
**Advisory limits only

Volatiles: 0 out of 36; outside of QC limits
Semi-Volatiles: 10 out of 72; outside of QC limits
Pesticides: 0 out of 11; outside of QC limits

Comments: NA - fraction not analyzed. Not enough B sample EGB13 to re-extract
ⓐ Surrogate recovery range for volatiles is 80 - 120 as per SAS
EG818 re-extracted once, surrogates still out

FORM II

RECEIVED OCT 1 4 1986 2478 013

86FL ID 568

Sample #
E6813

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Acurex Corporation
Lab Sample ID No: B609-006-1
Sample Matrix: Water
Data Release Authorized by: R Scott

Case No: SAS 2478E
QC Report No:
Contract No: 68-01-7142
Date Sample Received: 09/10/86

Volatile Compounds
Concentration: Low
Date Prepared: 09/15/86
Date Analyzed: 09/15/86
Conc. Factor: 4 pH: ---
Percent Moisture (Not Decanted): ---

CAS Number		ug/L	CAS Number		ug/L
74-87-3	Chloromethane	2 U	78-87-5	1,2-dichloropropane	1 U
74-83-9	Bromomethane	2 U	10061-02-6	Trans-1,3-Dichloropropene	1 U
75-01-4	Vinyl Chloride	2 U	79-01-6	Trichloroethene	1 U
75-00-3	Chloroethane	2 U	124-48-1	Dibromochloromethane	1 U
75-09-2	Methylene Chloride	3 B	79-00-51	1,1,2-Trichloroethane	1 U
67-64-1	Acetone	2 U	71-43-2	Benzene	1 U
75-15-0	Carbon Disulfide	1 U	10061-01-5	cis-1,3-Dichloropropene	1 U
75-35-4	1,1-Dichloroethene	1 U	110-75-8	2-Chloroethylvinylether	2 U
75-34-3	1,1-Dichloroethane	1 U	75-25-28	Bromoform	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U	108-10-1	4-Methyl-2-Pentanone	2 U
67-66-3	Chloroform	1 U	591-78-6	2-Hexanone	2 U
107-06-2	1,2-Dichloroethane	1 U	127-18-4	Tetrachloroethene	1 U
78-93-3	2-Butanone	2 U	79-34-5	1,1,2,2-Tetrachloroethane	1 U
71-55-6	1,1,1-Trichloroethane	1 U	108-88-3	Toluene	2
56-23-5	Carbon Tetrachloride	1 U	108-90-7	Chlorobenzene	1 U
108-05-4	Vinyl Acetate	2 U	100-41-4	Ethylbenzene	1 U
75-27-4	Bromodichloromethane	1 U	100-42-5	Styrene	1 U
				Total Xylenes	1 U

Flags
U Compound was analyzed for but not detected.
J Estimated value. Compound present but at less than the specified detection limit.
C Pesticide confirmed by GC/MS.
B Compound found in blank as well as sample. Possible blank contamination.

RECEIVED OCT 1 4 1986 2478 014

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
E6813

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 09/12/86
Date Analyzed: 09/17/86
Conc. Factor: 2300
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	CAS Number		ug/L
108-95-2	Phenol	2 U	83-32-9	Acenaphthene	2 U
111-44-4	bis(2-Chloroethyl)Ether	2 U	51-28-5	2,4-Dinitrophenol	10 U
95-57-8	2-Chlorophenol	2 U	100-02-7	4-Nitrophenol	10 U
541-73-1	1,3-Dichlorobenzene	2 U	132-64-9	Dibenzofuran	2 U
106-46-7	1,4-Dichlorobenzene	2 U	121-14-2	2,4-Dinitrotoluene	2 U
100-51-6	Benzyl Alcohol	2 U	606-20-2	2,6-Dinitrotoluene	2 U
95-50-1	1,2-Dichlorobenzene	2 U	84-66-2	Diethylphthalate	2 U
94-48-7	2-Methylphenol	2 U	7005-72-3	4-Chlorophenyl-phenylether	2 U
39638-32-9	bis(2-Chloroisopropyl)Ether	2 U	86-73-7	Fluorene	2 U
106-44-5	4-Methylphenol	2 U	100-01-6	4-Nitroaniline	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	2 U	534-52-1	4,6-Dinitro-2-Methylphenol	10 U
67-72-1	Hexachloroethane	2 U	86-30-6	N-Nitrosodiphenylamine (1)	8 B
98-95-3	Nitrobenzene	2 U	101-55-3	4-Bromophenyl-phenylether	2 U
78-59-1	Isophorone	2 U	118-74-1	Hexachlorobenzene	2 U
88-75-5	2-Nitrophenol	2 U	87-86-5	Pentachlorophenol	10 U
105-67-9	2,4-Dimethylphenol	2 U	85-01-8	Phenanthrene	2 U
68-85-0	Benzoic Acid	10 U	120-12-7	Anthracene	2 U
111-91-1	bis(-2-Chloroethoxy)Methane	2 U	84-74-2	Di-n-Butylphthalate	2 U
120-83-2	2,4-Dichlorophenol	2 U	206-44-0	Fluoranthene	2 U
120-82-1	1,2,4-Trichlorobenzene	2 U	120-00-0	Pyrene	2 U
91-20-3	Naphthalene	2 U	85-68-7	Butylbenzylphthalate	2 U
106-47-8	4-Chloroaniline	2 U	91-94-1	3,3'-Dichlorobenzidine	4 U
87-68-3	Hexachlorobutadiene	2 U	56-55-3	Benzo(a)Anthracene	2 U
59-50-7	4-Chloro-3-Methylphenol	2 U	117-81-7	bis(2-Ethylhexyl)Phthalate	2 U
91-57-6	2-Methylnaphthalene	2 U	218-01-9	Chrysene	2 U
77-47-4	Hexachlorocyclopentadiene	2 U	117-84-0	Di-n-Octyl Phthalate	2 U
88-06-2	2,4,6-Trichlorophenol	2 U	205-99-2	Benzo(b)Fluoranthene	2 U
95-95-4	2,4,5-Trichlorophenol	10 U	207-08-9	Benzo(k)Fluoranthene	2 U
91-58-7	2-Chloronaphthalene	2 U	50-32-8	Benzo(a)Pyrene	2 U
88-74-4	2-Nitroaniline	10 U	193-39-5	Indeno(1,2,3-cd)Pyrene	2 U
131-11-3	Dimethylphthalate	2 U	53-70-3	Dibenz(a,h)Anthracene	2 U
208-96-8	Acenaphthylene	2 U	191-24-2	Benzo(g,h,i)Perylene	2 U
99-09-2	3-Nitroaniline	10 U			

(1)-Cannot be separated from diphenylamine

RECEIVED OCT 14 1986

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
EG813

Organics Analysis Data Sheet
(Page 3)
Pesticides/PCBs

Concentration: Low
Date Extracted: 09/14/86
Date Analyzed: 09/25/86
Conc. Factor: 400
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	
319-84-6	Alpha-BHC	.01	U
319-85-7	Beta-BHC	.01	U
319-86-8	Delta-BHC	.01	U
58-89-9	Gamma-BHC (Lindane)	.01	U
76-44-8	Heptachlor	.01	U
309-00-2	Aldrin	.01	U
1024-57-3	Heptachlor Epoxide	.01	U
959-98-8	Endosulfan I	.01	U
60-57-1	Dieldrin	.02	U
72-55-9	4,4'-DDE	.02	U
72-20-8	Endrin	.02	U
33213-65-9	Endosulfan II	.02	U
75-54-8	4,4'-DDD	.02	U
1031-07-8	Endosulfan Sulfate	.02	U
50-29-3	4,4'-DDT	.02	U
72-43-5	Methoxychlor	.1	U
53494-70-5	Endrin Ketone	.02	U
57-74-9	Chlordane	.1	U
8001-35-2	Toxaphene	.2	U
12674-11-2	Aroclor-1016	.1	U
11104-28-2	Aroclor-1221	.1	U
11141-16-5	Aroclor-1232	.1	U
53469-21-9	Aroclor-1242	.1	U
12672-29-6	Aroclor-1248	.1	U
11097-69-1	Aroclor-1254	.2	U
11096-82-5	Aroclor-1260	.2	U

V(i) = Volume of extract injected (uL)
V(s) = Volume of water extracted (mL)
W(s) = Weight of soil extracted (g)
V(t) = Volume of total extract (uL)

V(s) = 2000 or W(s) = V(t) = 5000 V(i) = 2

RECEIVED OCT 14 1986 178 035

86 FL 10569

Sample #
E6814

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Acurex Corporation
Lab Sample ID No: 8609-006-2
Sample Matrix: Water
Data Release Authorized by: R. Scott

Case No: SAS 2478E
QC Report No:
Contract No: 68-01-7142
Date Sample Received: 09/10/86

Volatile Compounds
Concentration: Low
Date Prepared: 09/15/86
Date Analyzed: 09/15/86
Conc. Factor: 4 pH: ---
Percent Moisture (Not Decanted): ---

CAS Number		ug/L	CAS Number		ug/L
74-87-3	Chloromethane	2 U	78-87-5	1,2-dichloropropane	1 U
74-83-9	Bromomethane	2 U	10061-02-6	Trans-1,3-Dichloropropene	1 U
75-01-4	Vinyl Chloride	2 U	79-01-6	Trichloroethene	1 U
75-00-3	Chloroethane	2 U	124-48-1	Dibromochloromethane	1 U
75-09-2	Methylene Chloride	3 B	79-00-51	1,1,2-Trichloroethane	1 U
67-64-1	Acetone	2 U	71-43-2	Benzene	1 U
75-15-0	Carbon Disulfide	1 U	10061-01-5	cis-1,3-Dichloropropene	1 U
75-35-4	1,1-Dichloroethene	1 U	110-75-8	2-Chloroethylvinylether	2 U
75-34-3	1,1-Dichloroethane	1 U	75-25-28	Bromoform	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U	108-10-1	4-Methyl-2-Pentanone	2 U
67-66-3	Chloroform	1 U	591-78-6	2-Hexanone	2 U
107-06-2	1,2-Dichloroethane	1 U	127-18-4	Tetrachloroethene	1 U
78-93-3	2-Butanone	2 U	79-34-5	1,1,2,2-Tetrachloroethane	1 U
71-55-6	1,1,1-Trichloroethane	1 U	108-88-3	Toluene	1
56-23-5	Carbon Tetrachloride	1 U	108-90-7	Chlorobenzene	1 U
108-05-4	Vinyl Acetate	2 U	100-41-4	Ethylbenzene	1 U
75-27-4	Bromodichloromethane	1 U	100-42-5	Styrene	1 U
				Total Xylenes	1 U

Flags
U Compound was analyzed for but not detected.
J Estimated value. Compound present but at less than the specified detection limit.
C Pesticide confirmed by GC/MS.
B Compound found in blank as well as sample. Possible blank contamination.

RECEIVED OCT 14 1986

Laboratory Name: Acurex
Case No: SAS 247BE

Sample #
E6814

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 09/12/86
Date Analyzed: 09/15/86
Conc. Factor: 2000
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	CAS Number		ug/L
108-95-2	Phenol	1 J	83-32-9	Acenaphthene	2 U
111-44-4	bis(2-Chloroethyl)Ether	2 U	51-28-5	2,4-Dinitrophenol	10 U
95-57-8	2-Chlorophenol	2 U	100-02-7	4-Nitrophenol	10 U
541-73-1	1,3-Dichlorobenzene	2 U	132-64-9	Dibenzofuran	2 U
106-46-7	1,4-Dichlorobenzene	2 U	121-14-2	2,4-Dinitrotoluene	2 U
100-51-6	Benzyl Alcohol	2 U	606-20-2	2,6-Dinitrotoluene	2 U
95-50-1	1,2-Dichlorobenzene	2 U	84-66-2	Diethylphthalate	2 U
94-48-7	2-Methylphenol	2 U	7005-72-3	4-Chlorophenyl-phenylether	2 U
39638-32-9	bis(2-Chloroisopropyl)Ether	2 U	86-73-7	Fluorene	2 U
106-44-5	4-Methylphenol	2 U	100-01-6	4-Nitroaniline	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	2 U	534-52-1	4,6-Dinitro-2-Methylphenol	10 U
67-72-1	Hexachloroethane	2 U	86-30-6	N-Nitrosodiphenylamine (1)	5 B
98-95-3	Nitrobenzene	2 U	101-55-3	4-Bromophenyl-phenylether	2 U
78-59-1	Isophorone	2 U	118-74-1	Hexachlorobenzene	2 U
88-75-5	2-Nitrophenol	2 U	87-86-5	Pentachlorophenol	10 U
105-67-9	2,4-Dimethylphenol	2 U	85-01-8	Phenanthrene	2 U
68-85-0	Benzoic Acid	10 U	120-12-7	Anthracene	2 U
111-91-1	bis(-2-Chloroethoxy)Methane	2 U	84-74-2	Di-n-Butylphthalate	2 U
120-83-2	2,4-Dichlorophenol	2 U	206-44-0	Fluoranthene	2 U
120-82-1	1,2,4-Trichlorobenzene	2 U	120-00-0	Pyrene	2 U
91-20-3	Naphthalene	2 U	85-68-7	Butylbenzylphthalate	2 U
106-47-8	4-Chloroaniline	2 U	91-94-1	3,3'-Dichlorobenzidine	5 U
87-68-3	Hexachlorobutadiene	2 U	56-55-3	Benzo(a)Anthracene	2 U
59-50-7	4-Chloro-3-Methylphenol	2 U	117-81-7	bis(2-Ethylhexyl)Phthalate	3
91-57-6	2-Methylnaphthalene	2 U	218-01-9	Chrysene	2 U
77-47-4	Hexachlorocyclopentadiene	2 U	117-84-0	Di-n-Octyl Phthalate	2 U
88-06-2	2,4,6-Trichlorophenol	2 U	205-99-2	Benzo(b)Fluoranthene	2 U
95-95-4	2,4,5-Trichlorophenol	10 U	207-08-9	Benzo(k)Fluoranthene	2 U
91-58-7	2-Chloronaphthalene	2 U	50-32-8	Benzo(a)Pyrene	2 U
88-74-4	2-Nitroaniline	10 U	193-39-5	Indeno(1,2,3-cd)Pyrene	2 U
131-11-3	Dimethylphthalate	2 U	53-70-3	Dibenz(a,h)Anthracene	2 U
208-96-8	Acenaphthylene	2 U	191-24-2	Benzo(g,h,i)Perylene	2 U
99-09-2	3-Nitroaniline	10 U			

(1)-Cannot be separated from diphenylamine

RECEIVED OCT 1 4 1986

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
EG814

Organics Analysis Data Sheet
(Page 3)
Pesticides/PCBs

Concentration: Low
Date Extracted: 09/14/86
Date Analyzed: 09/25/86
Conc. Factor: 400
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L
319-84-6	Alpha-BHC	.01 U
319-85-7	Beta-BHC	.01 U
319-86-8	Delta-BHC	.01 U
58-89-9	Gamma-BHC (Lindane)	.01 U
76-44-8	Heptachlor	.01 U
309-00-2	Aldrin	.01 U
1024-57-3	Heptachlor Epoxide	.01 U
959-98-8	Endosulfan I	.01 U
60-57-1	Dieldrin	.02 U
72-55-9	4,4'-DDE	.02 U
72-20-8	Endrin	.02 U
33213-65-9	Endosulfan II	.02 U
75-54-8	4,4'-DDD	.02 U
1031-07-8	Endosulfan Sulfate	.02 U
50-29-3	4,4'-DDT	.02 U
72-43-5	Methoxychlor	.1 U
53494-70-5	Endrin Ketone	.02 U
57-74-9	Chlordane	.1 U
8001-35-2	Toxaphene	.2 U
12674-11-2	Aroclor-1016	.1 U
11104-28-2	Aroclor-1221	.1 U
11141-16-5	Aroclor-1232	.1 U
53469-21-9	Aroclor-1242	.1 U
12672-29-6	Aroclor-1248	.1 U
11097-69-1	Aroclor-1254	.2 U
11096-82-5	Aroclor-1260	.2 U

V(i) = Volume of extract injected (uL)
V(s) = Volume of water extracted (mL)
W(s) = Weight of soil extracted (g)
V(t) = Volume of total extract (uL)

V(s) = 2000 or W(s) = V(t) = 5000 V(i) = 2

RECEIVED OCT 14 1986 2478 061

86FL10570

Sample #
E6815

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Acurex Corporation
Lab Sample ID No: B609-006-3
Sample Matrix: Water
Data Release Authorized by: R. Scott

Case No: SAS 2478E
QC Report No:
Contract No: 68-01-7142
Date Sample Received: 09/10/86

Volatile Compounds
Concentration: Low
Date Prepared: 09/15/86
Date Analyzed: 09/15/86
Conc. Factor: 4 pH: ---
Percent Moisture (Not Decanted): ---

CAS Number		ug/L	CAS Number		ug/L
74-87-3	Chloromethane	2 U	78-87-5	1,2-dichloropropane	1 U
74-83-9	Bromomethane	2 U	10061-02-6	Trans-1,3-Dichloropropene	1 U
75-01-4	Vinyl Chloride	2 U	79-01-6	Trichloroethene	1 U
75-00-3	Chloroethane	2 U	124-48-1	Dibromochloromethane	1 U
75-09-2	Methylene Chloride	3 B	79-00-51	1,1,2-Trichloroethane	1 U
67-64-1	Acetone	2 U	71-43-2	Benzene	1 U
75-15-0	Carbon Disulfide	1 U	10061-01-5	cis-1,3-Dichloropropene	1 U
75-35-4	1,1-Dichloroethene	1 U	110-75-8	2-Chloroethylvinylether	2 U
75-34-3	1,1-Dichloroethane	1 U	75-25-28	Bromoform	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U	108-10-1	4-Methyl-2-Pentanone	2 U
67-66-3	Chloroform	1 U	591-78-6	2-Hexanone	2 U
107-06-2	1,2-Dichloroethane	1 U	127-18-4	Tetrachloroethene	1 U
78-93-3	2-Butanone	2 U	79-34-5	1,1,2,2-Tetrachloroethane	1 U
71-55-6	1,1,1-Trichloroethane	1 U	108-88-3	Toluene	1 U
56-23-5	Carbon Tetrachloride	1 U	108-90-7	Chlorobenzene	1 U
108-05-4	Vinyl Acetate	2 U	100-41-4	Ethylbenzene	1 U
75-27-4	Bromodichloromethane	1 U	100-42-5	Styrene	1 U
				Total Xylenes	1 U

Flags
U Compound was analyzed for but not detected.
J Estimated value. Compound present but at less than the specified detection limit.
C Pesticide confirmed by GC/MS.
B Compound found in blank as well as sample. Possible blank contamination.

RECEIVED OCT 1 4 1986 2478 062

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
E6815

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 09/19/86
Date Analyzed: 09/22/86
Conc. Factor: 2000
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	CAS Number		ug/L
108-95-2	Phenol	3	83-32-9	Acenaphthene	2 U
111-44-4	bis(2-Chloroethyl)Ether	2 U	51-28-5	2,4-Dinitrophenol	10 U
95-57-8	2-Chlorophenol	2 U	100-02-7	4-Nitrophenol	10 U
541-73-1	1,3-Dichlorobenzene	2 U	132-64-9	Dibenzofuran	2 U
106-46-7	1,4-Dichlorobenzene	2 U	121-14-2	2,4-Dinitrotoluene	2 U
100-51-6	Benzyl Alcohol	2 U	606-20-2	2,6-Dinitrotoluene	2 U
95-50-1	1,2-Dichlorobenzene	2 U	84-66-2	Diethylphthalate	2 U
94-48-7	2-Methylphenol	2 U	7005-72-3	4-Chlorophenyl-phenylether	2 U
39638-32-9	bis(2-Chloroisopropyl)Ether	2 U	86-73-7	Fluorene	2 U
106-44-5	4-Methylphenol	2 U	100-01-6	4-Nitroaniline	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	2 U	534-52-1	4,6-Dinitro-2-Methylphenol	10 U
67-72-1	Hexachloroethane	2 U	86-30-6	N-Nitrosodiphenylamine (1)	5 B
98-95-3	Nitrobenzene	2 U	101-55-3	4-Bromophenyl-phenylether	2 U
78-59-1	Isophorone	2 U	118-74-1	Hexachlorobenzene	2 U
88-75-5	2-Nitrophenol	2 U	87-86-5	Pentachlorophenol	10 U
105-67-9	2,4-Dimethylphenol	2 U	85-01-8	Phenanthrene	2 U
68-85-0	Benzoic Acid	10 U	120-12-7	Anthracene	2 U
111-91-1	bis(-2-Chloroethoxy)Methane	2 U	84-74-2	Di-n-Butylphthalate	2 U
120-83-2	2,4-Dichlorophenol	2 U	206-44-0	Fluoranthene	2 U
120-82-1	1,2,4-Trichlorobenzene	2 U	120-00-0	Pyrene	2 U
91-20-3	Naphthalene	2 U	85-68-7	Butylbenzylphthalate	2 U
106-47-8	4-Chloroaniline	2 U	91-94-1	3,3'-Dichlorobenzidine	5 U
87-68-3	Hexachlorobutadiene	2 U	56-55-3	Benzo(a)Anthracene	2 U
59-50-7	4-Chloro-3-Methylphenol	2 U	117-81-7	bis(2-Ethylhexyl)Phthalate	2 U
91-57-6	2-Methylnaphthalene	2 U	218-01-9	Chrysene	2 U
77-47-4	Hexachlorocyclopentadiene	2 U	117-84-0	Di-n-Octyl Phthalate	2 U
88-06-2	2,4,6-Trichlorophenol	2 U	205-99-2	Benzo(b)Fluoranthene	2 U
95-95-4	2,4,5-Trichlorophenol	10 U	207-08-9	Benzo(k)Fluoranthene	2 U
91-58-7	2-Chloronaphthalene	2 U	50-32-8	Benzo(a)Pyrene	2 U
88-74-4	2-Nitroaniline	10 U	193-39-5	Indeno(1,2,3-cd)Pyrene	2 U
131-11-3	Dimethylphthalate	2 U	53-70-3	Dibenz(a,h)Anthracene	2 U
208-96-8	Acenaphthylene	2 U	191-24-2	Benzo(g,h,i)Perylene	2 U
99-09-2	3-Nitroaniline	10 U			

(1)-Cannot be separated from diphenylamine

2478 063

RECEIVED OCT 1 4 1986

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
EG815

Organics Analysis Data Sheet
(Page 3)
Pesticides/PCBs

Concentration: Low
Date Extracted: 09/14/86
Date Analyzed: 09/26/86
Conc. Factor: 400
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L
319-84-6	Alpha-BHC	.01 U
319-85-7	Beta-BHC	.01 U
319-86-8	Delta-BHC	.01 U
58-89-9	Gamma-BHC (Lindane)	.01 U
76-44-8	Heptachlor	.01 U
309-00-2	Aldrin	.01 U
1024-57-3	Heptachlor Epoxide	.01 U
959-98-8	Endosulfan I	.01 U
60-57-1	Dieldrin	.02 U
72-55-9	4,4'-DDE	.02 U
72-20-8	Endrin	.02 U
33213-65-9	Endosulfan II	.02 U
75-54-8	4,4'-DDD	.02 U
1031-07-8	Endosulfan Sulfate	.02 U
50-29-3	4,4'-DDT	.02 U
72-43-5	Methoxychlor	.1 U
53494-70-5	Endrin Ketone	.02 U
57-74-9	Chlordane	.1 U
8001-35-2	Toxaphene	.2 U
12674-11-2	Aroclor-1016	.1 U
11104-28-2	Aroclor-1221	.1 U
11141-16-5	Aroclor-1232	.1 U
53469-21-9	Aroclor-1242	.1 U
12672-29-6	Aroclor-1248	.1 U
11097-69-1	Aroclor-1254	.2 U
11096-82-5	Aroclor-1260	.2 U

V(i) = Volume of extract injected (uL)
V(s) = Volume of water extracted (mL)
W(s) = Weight of soil extracted (g)
V(t) = Volume of total extract (uL)

V(s) = 2000 or W(s) = V(t) = 5000 V(i) = 2

2478 083

86FL10571

Sample #
E6816

RECEIVED OCT 14 1986

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Acurex Corporation
Lab Sample ID No: B609-006-4
Sample Matrix: Water
Data Release Authorized by: R. Scott

Case No: SAS 2478E
QC Report No:
Contract No: 68-01-7142
Date Sample Received: 09/10/86

Volatile Compounds
Concentration: Low
Date Prepared: 09/15/86
Date Analyzed: 09/15/86
Conc. Factor: 4 pH: ---
Percent Moisture (Not Decanted): ---

CAS Number		ug/L	CAS Number		ug/L
74-87-3	Chloromethane	2 U	78-87-5	1,2-dichloropropane	1 U
74-83-9	Bromomethane	2 U	10061-02-6	Trans-1,3-Dichloropropene	1 U
75-01-4	Vinyl Chloride	2 U	79-01-6	Trichloroethene	1 U
75-00-3	Chloroethane	2 U	124-48-1	Dibromochloromethane	1 U
75-09-2	Methylene Chloride	3 B	79-00-51	1,1,2-Trichloroethane	1 U
67-64-1	Acetone	2 U	71-43-2	Benzene	1 U
75-15-0	Carbon Disulfide	1 U	10061-01-5	cis-1,3-Dichloropropene	1 U
75-35-4	1,1-Dichloroethene	1 U	110-75-8	2-Chloroethylvinylether	2 U
75-34-3	1,1-Dichloroethane	1 U	75-25-28	Bromoform	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U	108-10-1	4-Methyl-2-Pentanone	2 U
67-66-3	Chloroform	1 U	591-78-6	2-Hexanone	2 U
107-06-2	1,2-Dichloroethane	1 U	127-18-4	Tetrachloroethene	1 U
78-93-3	2-Butanone	2 U	79-34-5	1,1,2,2-Tetrachloroethane	1 U
71-55-6	1,1,1-Trichloroethane	1 U	108-88-3	Toluene	1 U
56-23-5	Carbon Tetrachloride	1 U	108-90-7	Chlorobenzene	1 U
108-05-4	Vinyl Acetate	2 U	100-41-4	Ethylbenzene	1 U
75-27-4	Bromodichloromethane	1 U	100-42-5	Styrene	1 U
				Total Xylenes	1 U

Flags
U Compound was analyzed for but not detected.
J Estimated value. Compound present but at less than the specified detection limit.
C Pesticide confirmed by GC/MS.
B Compound found in blank as well as sample. Possible blank contamination.

2178 084

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
E6816

RECEIVED OCT 14 1986

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 09/19/86
Date Analyzed: 09/22/86
Conc. Factor: 2000
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	CAS Number		ug/L
108-95-2	Phenol	1 J	83-32-9	Acenaphthene	2 U
111-44-4	bis(2-Chloroethyl)Ether	2 U	51-28-5	2,4-Dinitrophenol	10 U
95-57-8	2-Chlorophenol	2 U	100-02-7	4-Nitrophenol	10 U
541-73-1	1,3-Dichlorobenzene	2 U	132-64-9	Dibenzofuran	2 U
106-46-7	1,4-Dichlorobenzene	2 U	121-14-2	2,4-Dinitrotoluene	2 U
100-51-6	Benzyl Alcohol	2 U	606-20-2	2,6-Dinitrotoluene	2 U
95-50-1	1,2-Dichlorobenzene	2 U	84-66-2	Diethylphthalate	2 U
94-48-7	2-Methylphenol	2 U	7005-72-3	4-Chlorophenyl-phenylether	2 U
39638-32-9	bis(2-Chloroisopropyl)Ether	2 U	86-73-7	Fluorene	2 U
106-44-5	4-Methylphenol	2 U	100-01-6	4-Nitroaniline	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	2 U	534-52-1	4,6-Dinitro-2-Methylphenol	10 U
67-72-1	Hexachloroethane	2 U	86-30-6	N-Nitrosodiphenylamine (1)	4 B
98-95-3	Nitrobenzene	2 U	101-55-3	4-Bromophenyl-phenylether	2 U
78-59-1	Isophorone	2 U	118-74-1	Hexachlorobenzene	2 U
88-75-5	2-Nitrophenol	2 U	87-86-5	Pentachlorophenol	10 U
105-67-9	2,4-Dimethylphenol	2 U	85-01-8	Phenanthrene	2 U
68-85-0	Benzoic Acid	10 U	120-12-7	Anthracene	2 U
111-91-1	bis(-2-Chloroethoxy)Methane	2 U	84-74-2	Di-n-Butylphthalate	2 U
120-83-2	2,4-Dichlorophenol	2 U	206-44-0	Fluoranthene	2 U
120-82-1	1,2,4-Trichlorobenzene	2 U	120-00-0	Pyrene	2 U
91-20-3	Naphthalene	2 U	85-68-7	Butylbenzylphthalate	2 U
106-47-8	4-Chloroaniline	2 U	91-94-1	3,3'-Dichlorobenzidine	5 U
87-68-3	Hexachlorobutadiene	2 U	56-55-3	Benzo(a)Anthracene	2 U
59-50-7	4-Chloro-3-Methylphenol	2 U	117-81-7	bis(2-Ethylhexyl)Phthalate	2 U
91-57-6	2-Methylnaphthalene	2 U	218-01-9	Chrysene	2 U
77-47-4	Hexachlorocyclopentadiene	2 U	117-84-0	Di-n-Octyl Phthalate	2 U
88-06-2	2,4,6-Trichlorophenol	2 U	205-99-2	Benzo(b)Fluoranthene	2 U
95-95-4	2,4,5-Trichlorophenol	10 U	207-08-9	Benzo(k)Fluoranthene	2 U
91-58-7	2-Chloronaphthalene	2 U	50-32-8	Benzo(a)Pyrene	2 U
88-74-4	2-Nitroaniline	10 U	193-39-5	Indeno(1,2,3-cd)Pyrene	2 U
131-11-3	Dimethylphthalate	2 U	53-70-3	Dibenz(a,h)Anthracene	2 U
208-96-8	Acenaphthylene	2 U	191-24-2	Benzo(g,h,i)Perylene	2 U
99-09-2	3-Nitroaniline	10 U			

(1)-Cannot be separated from diphenylamine

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
EG816

Organics Analysis Data Sheet
(Page 3)
Pesticides/PCBs

RECEIVED OCT 1 4 1986

Concentration: Low
Date Extracted: 09/14/86
Date Analyzed: 09/26/86
Conc. Factor: 400
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L
319-84-6	Alpha-BHC	.01 U
319-85-7	Beta-BHC	.01 U
319-86-8	Delta-BHC	.01 U
58-89-9	Gamma-BHC (Lindane)	.01 U
76-44-8	Heptachlor	.01 U
309-00-2	Aldrin	.01 U
1024-57-3	Heptachlor Epoxide	.01 U
959-98-8	Endosulfan I	.01 U
60-57-1	Dieldrin	.02 U
72-55-9	4,4'-DDE	.02 U
72-20-8	Endrin	.02 U
33213-65-9	Endosulfan II	.02 U
75-54-8	4,4'-DDD	.02 U
1031-07-8	Endosulfan Sulfate	.02 U
50-29-3	4,4'-DDT	.02 U
72-43-5	Methoxychlor	.1 U
53494-70-5	Endrin Ketone	.02 U
57-74-9	Chlordane	.1 U
8001-35-2	Toxaphene	.2 U
12674-11-2	Aroclor-1016	.1 U
11104-28-2	Aroclor-1221	.1 U
11141-16-5	Aroclor-1232	.1 U
53469-21-9	Aroclor-1242	.1 U
12672-29-6	Aroclor-1248	.1 U
11097-69-1	Aroclor-1254	.2 U
11096-82-5	Aroclor-1260	.2 U

V(i) = Volume of extract injected (uL)
V(s) = Volume of water extracted (mL)
W(s) = Weight of soil extracted (g)
V(t) = Volume of total extract (uL)

V(s) = 2000 or W(s) = V(t) = 5000 V(i) = 2

2478 104

86FL10 R11

Sample #
E6817

Organics Analysis Data Sheet
(Page 1)

RECEIVED OCT 14 1986

Laboratory Name: Acurex Corporation
Lab Sample ID No: 8609-006-5
Sample Matrix: Water
Data Release Authorized by: R. Scott

Case No: SAS 2478E
QC Report No:
Contract No: 68-01-7142
Date Sample Received: 09/10/86

Volatile Compounds
Concentration: Low
Date Prepared: 09/15/86
Date Analyzed: 09/15/86
Conc. Factor: 4 pH: ---
Percent Moisture (Not Decanted): ---

CAS Number		ug/L	CAS Number		ug/L
74-87-3	Chloromethane	2 U	78-87-5	1,2-dichloropropane	1 U
74-83-9	Bromomethane	2 U	10061-02-6	Trans-1,3-Dichloropropene	1 U
75-01-4	Vinyl Chloride	2 U	79-01-6	Trichloroethene	1 U
75-00-3	Chloroethane	2 U	124-48-1	Dibromochloromethane	1 U
75-09-2	Methylene Chloride	2 B	79-00-51	1,1,2-Trichloroethane	1 U
67-64-1	Acetone	2 U	71-43-2	Benzene	1 U
75-15-0	Carbon Disulfide	1 U	10061-01-5	cis-1,3-Dichloropropene	1 U
75-35-4	1,1-Dichloroethene	1 U	110-75-8	2-Chloroethylvinylether	2 U
75-34-3	1,1-Dichloroethane	1 U	75-25-28	Bromoform	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U	108-10-1	4-Methyl-2-Pentanone	2 U
67-66-3	Chloroform	37	591-78-6	2-Hexanone	2 U
107-06-2	1,2-Dichloroethane	1 U	127-18-4	Tetrachloroethene	1 U
78-93-3	2-Butanone	2 U	79-34-5	1,1,2,2-Tetrachloroethane	1 U
71-55-6	1,1,1-Trichloroethane	1 U	108-88-3	Toluene	1 U
56-23-5	Carbon Tetrachloride	1 U	108-90-7	Chlorobenzene	1 U
108-05-4	Vinyl Acetate	2 U	100-41-4	Ethylbenzene	1 U
75-27-4	Bromodichloromethane	3	100-42-5	Styrene	1 U
				Total Xylenes	1 U

Flags
U Compound was analyzed for but not detected.
J Estimated value. Compound present but at less than the specified detection limit.
C Pesticide confirmed by GC/MS.
B Compound found in blank as well as sample. Possible blank contamination.

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
E6817

RECEIVED OCT 1 4 1986

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 09/12/86
Date Analyzed: 09/15/86
Conc. Factor: 2000
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	CAS Number		ug/L
108-95-2	Phenol	2	83-32-9	Acenaphthene	2 U
111-44-4	bis(2-Chloroethyl)Ether	2 U	51-28-5	2,4-Dinitrophenol	10 U
95-57-8	2-Chlorophenol	2 U	100-02-7	4-Nitrophenol	10 U
541-73-1	1,3-Dichlorobenzene	2 U	132-64-9	Dibenzofuran	2 U
106-46-7	1,4-Dichlorobenzene	2 U	121-14-2	2,4-Dinitrotoluene	2 U
100-51-6	Benzyl Alcohol	2 U	606-20-2	2,6-Dinitrotoluene	2 U
95-50-1	1,2-Dichlorobenzene	2 U	84-66-2	Diethylphthalate	2 U
94-48-7	2-Methylphenol	2 U	7005-72-3	4-Chlorophenyl-phenylether	2 U
39638-32-9	bis(2-Chloroisopropyl)Ether	2 U	86-73-7	Fluorene	2 U
106-44-5	4-Methylphenol	2 U	100-01-6	4-Nitroaniline	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	2 U	534-52-1	4,6-Dinitro-2-Methylphenol	10 U
67-72-1	Hexachloroethane	2 U	86-30-6	N-Nitrosodiphenylamine (1)	6 B
98-95-3	Nitrobenzene	2 U	101-55-3	4-Bromophenyl-phenylether	2 U
78-59-1	Isophorone	2 U	118-74-1	Hexachlorobenzene	2 U
88-75-5	2-Nitrophenol	2 U	87-86-5	Pentachlorophenol	10 U
105-67-9	2,4-Dimethylphenol	2 U	85-01-8	Phenanthrene	2 U
68-85-0	Benzoic Acid	10 U	120-12-7	Anthracene	2 U
111-91-1	bis(-2-Chloroethoxy)Methane	2 U	84-74-2	Di-n-Butylphthalate	2 U
120-83-2	2,4-Dichlorophenol	2 U	206-44-0	Fluoranthene	2 U
120-82-1	1,2,4-Trichlorobenzene	2 U	120-00-0	Pyrene	2 U
91-20-3	Naphthalene	2 U	85-68-7	Butylbenzylphthalate	2 U
106-47-8	4-Chloroaniline	2 U	91-94-1	3,3'-Dichlorobenzidine	5 U
87-68-3	Hexachlorobutadiene	2 U	56-55-3	Benzo(a)Anthracene	2 U
59-50-7	4-Chloro-3-Methylphenol	2 U	117-81-7	bis(2-Ethylhexyl)Phthalate	2 U
91-57-6	2-Methylnaphthalene	2 U	218-01-9	Chrysene	2 U
77-47-4	Hexachlorocyclopentadiene	2 U	117-84-0	Di-n-Octyl Phthalate	2 U
88-06-2	2,4,6-Trichlorophenol	2 U	205-99-2	Benzo(b)Fluoranthene	2 U
95-95-4	2,4,5-Trichlorophenol	10 U	207-08-9	Benzo(k)Fluoranthene	2 U
91-58-7	2-Chloronaphthalene	2 U	50-32-8	Benzo(a)Pyrene	2 U
88-74-4	2-Nitroaniline	10 U	193-39-5	Indeno(1,2,3-cd)Pyrene	2 U
131-11-3	Dimethylphthalate	2 U	53-70-3	Dibenz(a,h)Anthracene	2 U
208-96-8	Acenaphthylene	2 U	191-24-2	Benzo(g,h,i)Perylene	2 U
99-09-2	3-Nitroaniline	10 U			

(1)-Cannot be separated from diphenylamine

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
EG817

Organics Analysis Data Sheet
(Page 3)
Pesticides/PCBs

RECEIVED OCT 14 1986

Concentration: Low
Date Extracted: 09/14/86
Date Analyzed: 09/26/86
Conc. Factor: 400
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L
319-84-6	Alpha-BHC	.01 U
319-85-7	Beta-BHC	.01 U
319-86-8	Delta-BHC	.01 U
58-89-9	Gamma-BHC (Lindane)	.01 U
76-44-8	Heptachlor	.01 U
309-00-2	Aldrin	.01 U
1024-57-3	Heptachlor Epoxide	.01 U
959-98-8	Endosulfan I	.01 U
60-57-1	Dieldrin	.02 U
72-55-9	4,4'-DDE	.02 U
72-20-8	Endrin	.02 U
33213-65-9	Endosulfan II	.02 U
75-54-8	4,4'-DDD	.02 U
1031-07-8	Endosulfan Sulfate	.02 U
50-29-3	4,4'-DDT	.02 U
72-43-5	Methoxychlor	.1 U
53494-70-5	Endrin Ketone	.02 U
57-74-9	Chlordane	.1 U
8001-35-2	Toxaphene	.2 U
12674-11-2	Aroclor-1016	.1 U
11104-28-2	Aroclor-1221	.1 U
11141-16-5	Aroclor-1232	.1 U
53469-21-9	Aroclor-1242	.1 U
12672-29-6	Aroclor-1248	.1 U
11097-69-1	Aroclor-1254	.2 U
11096-82-5	Aroclor-1260	.2 U

V(i) = Volume of extract injected (uL)
V(s) = Volume of water extracted (mL)
W(s) = Weight of soil extracted (g)
V(t) = Volume of total extract (uL)

V(s) = 2000 or W(s) = V(t) = 5000 V(i) = 2

RECEIVED OCT 14 1986 2478 133

86FL10269

Sample #
E6818

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Acurex Corporation
Lab Sample ID No: 8609-006-6
Sample Matrix: Water
Data Release Authorized by: R. Scott

Case No: SAS 2478E
QC Report No:
Contract No: 68-01-7142
Date Sample Received: 09/10/86

Volatile Compounds
Concentration: Low
Date Prepared: 09/15/86
Date Analyzed: 09/15/86
Conc. Factor: 4 pH: ---
Percent Moisture (Not Decanted): ---

CAS Number		ug/L	CAS Number		ug/L
74-87-3	Chloromethane	2 U	78-87-5	1,2-dichloropropane	1 U
74-83-9	Bromomethane	2 U	10061-02-6	Trans-1,3-Dichloropropene	1 U
75-01-4	Vinyl Chloride	2 U	79-01-6	Trichloroethene	1 U
75-00-3	Chloroethane	2 U	124-48-1	Dibromochloromethane	1 U
75-09-2	Methylene Chloride	2 B	79-00-51	1,1,2-Trichloroethane	1 U
67-64-1	Acetone	2 U	71-43-2	Benzene	1 U
75-15-0	Carbon Disulfide	1 U	10061-01-5	cis-1,3-Dichloropropene	1 U
75-35-4	1,1-Dichloroethene	1 U	110-75-8	2-Chloroethylvinylether	2 U
75-34-3	1,1-Dichloroethane	1 U	75-25-28	Bromoform	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U	108-10-1	4-Methyl-2-Pentanone	2 U
67-66-3	Chloroform	1 U	591-78-6	2-Hexanone	2 U
107-06-2	1,2-Dichloroethane	1 U	127-18-4	Tetrachloroethene	1 U
78-93-3	2-Butanone	2 U	79-34-5	1,1,2,2-Tetrachloroethane	1 U
71-55-6	1,1,1-Trichloroethane	1 U	108-88-3	Toluene	2
56-23-5	Carbon Tetrachloride	1 U	108-90-7	Chlorobenzene	1 U
108-05-4	Vinyl Acetate	2 U	100-41-4	Ethylbenzene	1 U
75-27-4	Bromodichloromethane	1 U	100-42-5	Styrene	1 U
				Total Xylenes	1 U

Flags
U Compound was analyzed for but not detected.
J Estimated value. Compound present but at less than the specified detection limit.
C Pesticide confirmed by GC/MS.
B Compound found in blank as well as sample. Possible blank contamination.

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
E6818

RECEIVED OCT 1 4 1986

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low
Date Extracted: 09/19/86
Date Analyzed: 09/22/86
Conc. Factor: 2000
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	CAS Number		ug/L
108-95-2	Phenol	3	83-32-9	Acenaphthene	2 U
111-44-4	bis(2-Chloroethyl)Ether	2 U	51-28-5	2,4-Dinitrophenol	10 U
95-57-8	2-Chlorophenol	2 U	100-02-7	4-Nitrophenol	10 U
541-73-1	1,3-Dichlorobenzene	2 U	132-64-9	Dibenzofuran	2 U
106-46-7	1,4-Dichlorobenzene	2 U	121-14-2	2,4-Dinitrotoluene	2 U
100-51-6	Benzyl Alcohol	2 U	606-20-2	2,6-Dinitrotoluene	2 U
95-50-1	1,2-Dichlorobenzene	2 U	84-66-2	Diethylphthalate	2 U
94-48-7	2-Methylphenol	2 U	7005-72-3	4-Chlorophenyl-phenylether	2 U
39638-32-9	bis(2-Chloroisopropyl)Ether	2 U	86-73-7	Fluorene	2 U
106-44-5	4-Methylphenol	2 U	100-01-6	4-Nitroaniline	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	2 U	534-52-1	4,6-Dinitro-2-Methylphenol	10 U
67-72-1	Hexachloroethane	2 U	86-30-6	N-Nitrosodiphenylamine (1)	4 B
98-95-3	Nitrobenzene	2 U	101-55-3	4-Bromophenyl-phenylether	2 U
78-59-1	Isophorone	2 U	118-74-1	Hexachlorobenzene	2 U
88-75-5	2-Nitrophenol	2 U	87-86-5	Pentachlorophenol	10 U
105-67-9	2,4-Dimethylphenol	2 U	85-01-8	Phenanthrene	2 U
68-85-0	Benzoic Acid	10 U	120-12-7	Anthracene	2 U
111-91-1	bis(-2-Chloroethoxy)Methane	2 U	84-74-2	Di-n-Butylphthalate	2 U
120-83-2	2,4-Dichlorophenol	2 U	206-44-0	Fluoranthene	2 U
120-82-1	1,2,4-Trichlorobenzene	2 U	120-00-0	Pyrene	2 U
91-20-3	Naphthalene	2 U	85-68-7	Butylbenzylphthalate	2 U
106-47-8	4-Chloroaniline	2 U	91-94-1	3,3'-Dichlorobenzidine	5 U
87-68-3	Hexachlorobutadiene	2 U	56-55-3	Benzo(a)Anthracene	2 U
59-50-7	4-Chloro-3-Methylphenol	2 U	117-81-7	bis(2-Ethylhexyl)Phthalate	3
91-57-6	2-Methylnaphthalene	2 U	218-01-9	Chrysene	2 U
77-47-4	Hexachlorocyclopentadiene	2 U	117-84-0	Di-n-Octyl Phthalate	2 U
88-06-2	2,4,6-Trichlorophenol	2 U	205-99-2	Benzo(b)Fluoranthene	2 U
95-95-4	2,4,5-Trichlorophenol	10 U	207-08-9	Benzo(k)Fluoranthene	2 U
91-58-7	2-Chloronaphthalene	2 U	50-32-8	Benzo(a)Pyrene	2 U
88-74-4	2-Nitroaniline	10 U	193-39-5	Indeno(1,2,3-cd)Pyrene	2 U
131-11-3	Dimethylphthalate	2 U	53-70-3	Dibenz(a,h)Anthracene	2 U
208-96-8	Acenaphthylene	2 U	191-24-2	Benzo(g,h,i)Perylene	2 U
99-09-2	3-Nitroaniline	10 U			

(1)-Cannot be separated from diphenylamine

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
EG818

Organics Analysis Data Sheet
(Page 3)
Pesticides/PCBs

RECEIVED OCT 1 4 1986

Concentration: Low
Date Extracted: 09/14/86
Date Analyzed: 09/26/86
Conc. Factor: 400
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L
319-84-6	Alpha-BHC	.01 U
319-85-7	Beta-BHC	.01 U
319-86-8	Delta-BHC	.01 U
58-89-9	Gamma-BHC (Lindane)	.01 U
76-44-8	Heptachlor	.01 U
309-00-2	Aldrin	.01 U
1024-57-3	Heptachlor Epoxide	.01 U
959-98-8	Endosulfan I	.01 U
60-57-1	Dieldrin	.02 U
72-55-9	4,4'-DDE	.02 U
72-20-8	Endrin	.02 U
33213-65-9	Endosulfan II	.02 U
75-54-8	4,4'-DDD	.02 U
1031-07-8	Endosulfan Sulfate	.02 U
50-29-3	4,4'-DDT	.02 U
72-43-5	Methoxychlor	.1 U
53494-70-5	Endrin Ketone	.02 U
57-74-9	Chlordane	.1 U
8001-35-2	Toxaphene	.2 U
12674-11-2	Aroclor-1016	.1 U
11104-28-2	Aroclor-1221	.1 U
11141-16-5	Aroclor-1232	.1 U
53469-21-9	Aroclor-1242	.1 U
12672-29-6	Aroclor-1248	.1 U
11097-69-1	Aroclor-1254	.2 U
11096-82-5	Aroclor-1260	.2 U

V(i) = Volume of extract injected (uL)
V(s) = Volume of water extracted (mL)
W(s) = Weight of soil extracted (g)
V(t) = Volume of total extract (uL)

V(s) = 2000 or W(s) = V(t) = 5000 V(i) = 2

2178 161

86FL10572

Sample #
E6819

RECEIVED OCT 14 1986

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: Acurex Corporation
Lab Sample ID No: 8609-006-7
Sample Matrix: Water
Data Release Authorized by: R. Scott

Case No: SAS 2478E
QC Report No:
Contract No: 68-01-7142
Date Sample Received: 09/10/86

Volatile Compounds
Concentration: Low
Date Prepared: 09/16/86
Date Analyzed: 09/16/86
Conc. Factor: 4 pH: ---
Percent Moisture (Not Decanted): ---

CAS Number		ug/L	CAS Number		ug/L
74-87-3	Chloromethane	2 U	78-87-5	1,2-dichloropropane	1 U
74-83-9	Bromomethane	2 U	10061-02-6	Trans-1,3-Dichloropropene	1 U
75-01-4	Vinyl Chloride	2 U	79-01-6	Trichloroethene	1 U
75-00-3	Chloroethane	2 U	124-48-1	Dibromochloromethane	1 U
75-09-2	Methylene Chloride	1 B	79-00-51	1,1,2-Trichloroethane	1 U
67-64-1	Acetone	2 U	71-43-2	Benzene	1 U
75-15-0	Carbon Disulfide	1 U	10061-01-5	cis-1,3-Dichloropropene	1 U
75-35-4	1,1-Dichloroethene	1 U	110-75-8	2-Chloroethylvinylether	2 U
75-34-3	1,1-Dichloroethane	1 U	75-25-28	Bromoform	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U	108-10-1	4-Methyl-2-Pentanone	2 U
67-66-3	Chloroform	1 U	591-78-6	2-Hexanone	2 U
107-06-2	1,2-Dichloroethane	1 U	127-18-4	Tetrachloroethene	1 U
78-93-3	2-Butanone	2 U	79-34-5	1,1,2,2-Tetrachloroethane	1 U
71-55-6	1,1,1-Trichloroethane	1 U	108-88-3	Toluene	3
56-23-5	Carbon Tetrachloride	1 U	108-90-7	Chlorobenzene	1 U
108-05-4	Vinyl Acetate	2 U	100-41-4	Ethylbenzene	1 U
75-27-4	Bromodichloromethane	1 U	100-42-5	Styrene	1 U
				Total Xylenes	1 U

Flags
U Compound was analyzed for but not detected.
J Estimated value. Compound present but at less than the specified detection limit.
C Pesticide confirmed by GC/MS.
B Compound found in blank as well as sample. Possible blank contamination.

aboratory Name: Acurex
: No: SAS 2478E

Sample #
E6819

RECEIVED OCT 1 4 1986

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

C entration: Low
D... Extracted: 09/12/86
Date Analyzed: 09/15/86
C . Factor: 2000
P ent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

_X_Yes

C Number		ug/L	CAS Number		ug/L
1 -95-2	Phenol	2 U	83-32-9	Acenaphthene	2 U
111-44-4	bis(2-Chloroethyl)Ether	2 U	51-28-5	2,4-Dinitrophenol	10 U
95-57-8	2-Chlorophenol	2 U	100-02-7	4-Nitrophenol	10 U
-73-1	1,3-Dichlorobenzene	2 U	132-64-9	Dibenzofuran	2 U
...-46-7	1,4-Dichlorobenzene	2 U	121-14-2	2,4-Dinitrotoluene	2 U
100-51-6	Benzyl Alcohol	2 U	606-20-2	2,6-Dinitrotoluene	2 U
50-1	1,2-Dichlorobenzene	2 U	84-66-2	Diethylphthalate	2 U
48-7	2-Methylphenol	2 U	7005-72-3	4-Chlorophenyl-phenylether	2 U
39638-32-9	bis(2-Chloroisopropyl)Ether	2 U	86-73-7	Fluorene	2 U
-44-5	4-Methylphenol	2 U	100-01-6	4-Nitroaniline	10 U
-64-7	N-Nitroso-Di-n-Propylamine	2 U	534-52-1	4,6-Dinitro-2-Methylphenol	10 U
67-72-1	Hexachloroethane	2 U	86-30-6	N-Nitrosodiphenylamine (1)	6 J
98-95-3	Nitrobenzene	2 U	101-55-3	4-Bromophenyl-phenylether	2 U
-59-1	Isophorone	2 U	118-74-1	Hexachlorobenzene	2 U
-75-5	2-Nitrophenol	2 U	87-86-5	Pentachlorophenol	10 U
105-67-9	2,4-Dimethylphenol	2 U	85-01-8	Phenanthrene	2 U
-85-0	Benzoic Acid	10 U	120-12-7	Anthracene	2 U
1-91-1	bis(-2-Chloroethoxy)Methane	2 U	84-74-2	Di-n-Butylphthalate	2 U
120-83-2	2,4-Dichlorophenol	2 U	206-44-0	Fluoranthene	2 U
0-82-1	1,2,4-Trichlorobenzene	2 U	120-00-0	Pyrene	2 U
-20-3	Naphthalene	2 U	85-68-7	Butylbenzylphthalate	2 U
106-47-8	4-Chloroaniline	2 U	91-94-1	3,3'-Dichlorobenzidine	5 U
87-68-3	Hexachlorobutadiene	2 U	56-55-3	Benzo(a)Anthracene	2 U
-50-7	4-Chloro-3-Methylphenol	2 U	117-81-7	bis(2-Ethylhexyl)Phthalate	2 U
...-57-6	2-Methylnaphthalene	2 U	218-01-9	Chrysene	2 U
77-47-4	Hexachlorocyclopentadiene	2 U	117-84-0	Di-n-Octyl Phthalate	2 U
1-06-2	2,4,6-Trichlorophenol	2 U	205-99-2	Benzo(b)Fluoranthene	2 U
5-95-4	2,4,5-Trichlorophenol	10 U	207-08-9	Benzo(k)Fluoranthene	2 U
91-58-7	2-Chloronaphthalene	2 U	50-32-8	Benzo(a)Pyrene	2 U
8-74-4	2-Nitroaniline	10 U	193-39-5	Indeno(1,2,3-cd)Pyrene	2 U
31-11-3	Dimethylphthalate	2 U	53-70-3	Dibenz(a,h)Anthracene	2 U
208-96-8	Acenaphthylene	2 U	191-24-2	Benzo(g,h,i)Perylene	2 U
99-09-2	3-Nitroaniline	10 U			

(1)-Cannot be separated from diphenylamine

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
EG819

Organics Analysis Data Sheet
(Page 3)
Pesticides/PCBs

Concentration: Low
Date Extracted: 09/14/86
Date Analyzed: 09/26/86
Conc. Factor: 400
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	
319-84-6	Alpha-BHC	.01	U
319-85-7	Beta-BHC	.01	U
319-86-8	Delta-BHC	.01	U
58-89-9	Gamma-BHC (Lindane)	.01	U
76-44-8	Heptachlor	.01	U
309-00-2	Aldrin	.01	U
1024-57-3	Heptachlor Epoxide	.01	U
959-98-8	Endosulfan I	.01	U
60-57-1	Dieldrin	.02	U
72-55-9	4,4'-DDE	.02	U
72-20-8	Endrin	.02	U
33213-65-9	Endosulfan II	.02	U
75-54-8	4,4'-DDD	.02	U
1031-07-8	Endosulfan Sulfate	.02	U
50-29-3	4,4'-DDT	.02	U
72-43-5	Methoxychlor	.1	U
53494-70-5	Endrin Ketone	.02	U
57-74-9	Chlordane	.1	U
8001-35-2	Toxaphene	.2	U
12674-11-2	Aroclor-1016	.1	U
11104-28-2	Aroclor-1221	.1	U
11141-16-5	Aroclor-1232	.1	U
53469-21-9	Aroclor-1242	.1	U
12672-29-6	Aroclor-1248	.1	U
11097-69-1	Aroclor-1254	.2	U
11096-82-5	Aroclor-1260	.2	U

V(i) = Volume of extract injected (uL)
V(s) = Volume of water extracted (mL)
W(s) = Weight of soil extracted (g)
V(t) = Volume of total extract (uL)

V(s) = 2000 or W(s) = V(t) = 5000 V(i) = 2

2178 184

86FL10573

Sample #
E6820

Organics Analysis Data Sheet
(Page 1)

RECEIVED OCT 14 1986

Laboratory Name: Acurex Corporation
Lab Sample ID No: 8609-006-8
Sample Matrix: Water
Data Release Authorized by: R. Scott

Case No: SAS 2478E
QC Report No:
Contract No: 68-01-7142
Date Sample Received: 09/10/86

Volatile Compounds
Concentration: Low
Date Prepared: 09/16/86
Date Analyzed: 09/16/86
Conc. Factor: 4 pH: ---
Percent Moisture (Not Decanted): ---

CAS Number		ug/L	CAS Number		ug/L
74-87-3	Chloromethane	2 U	78-87-5	1,2-dichloropropane	1 U
74-83-9	Bromomethane	2 U	10061-02-6	Trans-1,3-Dichloropropene	1 U
75-01-4	Vinyl Chloride	2 U	79-01-6	Trichloroethene	1 U
75-00-3	Chloroethane	2 U	124-48-1	Dibromochloromethane	1 U
75-09-2	Methylene Chloride	1 B	79-00-51	1,1,2-Trichloroethane	1 U
67-64-1	Acetone	48	71-43-2	Benzene	1 U
75-15-0	Carbon Disulfide	1 U	10061-01-5	cis-1,3-Dichloropropene	1 U
75-35-4	1,1-Dichloroethene	1 U	110-75-8	2-Chloroethylvinylether	2 U
75-34-3	1,1-Dichloroethane	1 U	75-25-28	Bromoform	1 U
156-60-5	Trans-1,2-Dichloroethene	1 U	108-10-1	4-Methyl-2-Pentanone	2 U
67-66-3	Chloroform	1 U	591-78-6	2-Hexanone	2 U
107-06-2	1,2-Dichloroethane	1 U	127-18-4	Tetrachloroethene	1 U
78-93-3	2-Butanone	2 U	79-34-5	1,1,2,2-Tetrachloroethane	1 U
71-55-6	1,1,1-Trichloroethane	1 U	108-88-3	Toluene	1 U
56-23-5	Carbon Tetrachloride	1 U	108-90-7	Chlorobenzene	1 U
108-05-4	Vinyl Acetate	2 U	100-41-4	Ethylbenzene	1 U
75-27-4	Bromodichloromethane	1 U	100-42-5	Styrene	1 U
				Total Xylenes	1 U

Flags
U Compound was analyzed for but not detected.
J Estimated value. Compound present but at less than the specified detection limit.
C Pesticide confirmed by GC/MS.
B Compound found in blank as well as sample. Possible blank contamination.

2178 185

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
E6820

Organics Analysis Data Sheet
(Page 2)

RECEIVED OCT 14 1986

Semivolatile Compounds

Concentration: Low
Date Extracted: 09/12/86
Date Analyzed: 09/15/86
Conc. Factor: 2000
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L	CAS Number		ug/L
108-95-2	Phenol	2 U	83-32-9	Acenaphthene	2 U
111-44-4	bis(2-Chloroethyl)Ether	2 U	51-28-5	2,4-Dinitrophenol	10 U
95-57-8	2-Chlorophenol	2 U	100-02-7	4-Nitrophenol	10 U
541-73-1	1,3-Dichlorobenzene	2 U	132-64-9	Dibenzofuran	2 U
106-46-7	1,4-Dichlorobenzene	2 U	121-14-2	2,4-Dinitrotoluene	2 U
100-51-6	Benzyl Alcohol	2 U	606-20-2	2,6-Dinitrotoluene	2 U
95-50-1	1,2-Dichlorobenzene	2 U	84-66-2	Diethylphthalate	2 U
94-48-7	2-Methylphenol	2 U	7005-72-3	4-Chlorophenyl-phenylether	2 U
39638-32-9	bis(2-Chloroisopropyl)Ether	2 U	86-73-7	Fluorene	2 U
106-44-5	4-Methylphenol	2 U	100-01-6	4-Nitroaniline	10 U
621-64-7	N-Nitroso-Di-n-Propylamine	2 U	534-52-1	4,6-Dinitro-2-Methylphenol	10 U
67-72-1	Hexachloroethane	2 U	86-30-6	N-Nitrosodiphenylamine (1)	6 B
98-95-3	Nitrobenzene	2 U	101-55-3	4-Bromophenyl-phenylether	2 U
78-59-1	Isophorone	2 U	118-74-1	Hexachlorobenzene	2 U
88-75-5	2-Nitrophenol	2 U	87-86-5	Pentachlorophenol	10 U
105-67-9	2,4-Dimethylphenol	2 U	85-01-8	Phenanthrene	2 U
68-85-0	Benzoic Acid	10 U	120-12-7	Anthracene	2 U
111-91-1	bis(-2-Chloroethoxy)Methane	2 U	84-74-2	Di-n-Butylphthalate	2 U
120-83-2	2,4-Dichlorophenol	2 U	206-44-0	Fluoranthene	2 U
120-82-1	1,2,4-Trichlorobenzene	2 U	120-00-0	Pyrene	2 U
91-20-3	Naphthalene	2 U	85-68-7	Butylbenzylphthalate	2 U
106-47-8	4-Chloroaniline	2 U	91-94-1	3,3'-Dichlorobenzidine	5 U
87-68-3	Hexachlorobutadiene	2 U	56-55-3	Benzo(a)Anthracene	2 U
59-50-7	4-Chloro-3-Methylphenol	2 U	117-81-7	bis(2-Ethylhexyl)Phthalate	2 U
91-57-6	2-Methylnaphthalene	2 U	218-01-9	Chrysene	2 U
77-47-4	Hexachlorocyclopentadiene	2 U	117-84-0	Di-n-Octyl Phthalate	2 U
88-06-2	2,4,6-Trichlorophenol	2 U	205-99-2	Benzo(b)Fluoranthene	2 U
95-95-4	2,4,5-Trichlorophenol	10 U	207-08-9	Benzo(k)Fluoranthene	2 U
91-58-7	2-Chloronaphthalene	2 U	50-32-8	Benzo(a)Pyrene	2 U
88-74-4	2-Nitroaniline	10 U	193-39-5	Indeno(1,2,3-cd)Pyrene	2 U
131-11-3	Dimethylphthalate	2 U	53-70-3	Dibenz(a,h)Anthracene	2 U
208-96-8	Acenaphthylene	2 U	191-24-2	Benzo(g,h,i)Perylene	2 U
99-09-2	3-Nitroaniline	10 U			

(1)-Cannot be separated from diphenylamine

Laboratory Name: Acurex
Case No: SAS 2478E

Sample #
EG820

Organics Analysis Data Sheet
(Page 3)
Pesticides/PCBs

RECEIVED OCT 14 1986

Concentration: Low
Date Extracted: 09/14/86
Date Analyzed: 09/26/86
Conc. Factor: 400
Percent Moisture (Decanted): ---

GPC Cleanup ___Yes _X_No
Separatory Funnel Extraction ___Yes
Continuous Liquid-Liquid Extraction _X_Yes

CAS Number		ug/L
319-84-6	Alpha-BHC	.01 U
319-85-7	Beta-BHC	.01 U
319-86-8	Delta-BHC	.01 U
58-89-9	Gamma-BHC (Lindane)	.01 U
76-44-8	Heptachlor	.01 U
309-00-2	Aldrin	.01 U
1024-57-3	Heptachlor Epoxide	.01 U
959-98-8	Endosulfan I	.01 U
60-57-1	Dieldrin	.02 U
72-55-9	4,4'-DDE	.02 U
72-20-8	Endrin	.02 U
33213-65-9	Endosulfan II	.02 U
75-54-8	4,4'-DDD	.02 U
1031-07-8	Endosulfan Sulfate	.02 U
50-29-3	4,4'-DDT	.02 U
72-43-5	Methoxychlor	.1 U
53494-70-5	Endrin Ketone	.02 U
57-74-9	Chlordane	.1 U
8001-35-2	Toxaphene	.2 U
12674-11-2	Aroclor-1016	.1 U
11104-28-2	Aroclor-1221	.1 U
11141-16-5	Aroclor-1232	.1 U
53469-21-9	Aroclor-1242	.1 U
12672-29-6	Aroclor-1248	.1 U
11097-69-1	Aroclor-1254	.2 U
11096-82-5	Aroclor-1260	.2 U

V(i) = Volume of extract injected (uL)
V(s) = Volume of water extracted (mL)
W(s) = Weight of soil extracted (g)
V(t) = Volume of total extract (uL)

V(s) = 2000 or W(s) = V(t) = 5000 V(i) = 2

RECEIVED OCT 1 4 1986

Case: 6402 SAS 2478 E

Contractor: Acurex

TENTATIVELY IDENTIFIED COMPOUNDS MATCH ASSESSMENT

NOTE: Reviewer should note directly on Organic Analysis Data Sheet (OADS) those matches that in his opinion (based 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.

L 3ORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG813

C 3E NO: 6402

RECEIVED OCT 14 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 4

DATAFILE: E0906V01

TENTATIVELY IDENTIFIED COMPOUNDS

S #	VOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L

NO NON-HSL COMPOUNDS FOUND > 10% OF NEAREST INT. STD.

L IORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG813

C SE NO: 6402

RECEIVED OCT 1-4 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 5

DATAFILE: E0906C01D

TENTATIVELY IDENTIFIED COMPOUNDS

S #	SEMIVOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
-	UNKNOWN	1712	12 B
119-47-1	PHENOL, 2,2'-METHYLENEBIS[6-(1,1-DIMETHYLETH	1903	3 B

L BORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG814

(SE NO: 6402

RECEIVED OCT 14 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 4

DATAFILE: E0906V02

TENTATIVELY IDENTIFIED COMPOUNDS

\S #	VOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
	NO NON-HSL COMPOUNDS FOUND > 10% OF NEAREST INT. STD.		

LABORATORY NAME: ACUREX CORPORATION

SAMPLE NUMBER: EG815

CASE NO: 6402

RECEIVED OCT 14 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 4

DATAFILE: E0906V03

TENTATIVELY IDENTIFIED COMPOUNDS

CAS #	VOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L

NO NON-HSL COMPOUNDS FOUND > 10% OF NEAREST INT. STD.

ORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG815

C SE NO: 6402

RECEIVED OCT 1-4 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 5

DATAFILE: E0906C03R

TENTATIVELY IDENTIFIED COMPOUNDS

S #	SEMIVOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
17233-71-5	HEXATHIEPANE	1396	2
544-50-0	SULFUR, MOL. (S8)	1669	43 B

ONLY 5 INTERNAL STANDARDS USED TO QUANTITATE

LABORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG816

CASE NO: 6402

RECEIVED OCT 14 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 4

DATAFILE: E0906V04

TENTATIVELY IDENTIFIED COMPOUNDS

CAS #	VOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
	NO NON-HSL COMPOUNDS FOUND > 10% OF NEAREST INT. STD.		

L BORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG816

(SE NO: 6402

RECEIVED OCT 1 4 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 5

DATAFILE: E0906C04R

TENTATIVELY IDENTIFIED COMPOUNDS

S #	SEMIVOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
20-68-7	~~UNKNOWN~~ RS 2-Cyclohexen-1-one	468	2

ONLY 5 INTERNAL STANDARDS USED TO QUANTITATE

ABORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG817

ASE NO: 6402

RECEIVED OCT 1 4 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 4

DATAFILE: E0906V05

TENTATIVELY IDENTIFIED COMPOUNDS

AS #	VOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L

NO NON-HSL COMPOUNDS FOUND > 10% OF NEAREST INT. STD.

ORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG817

CASE NO: 6402

RECEIVED OCT 4 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 5

DATAFILE: E0906C05

TENTATIVELY IDENTIFIED COMPOUNDS

CAS #	SEMIVOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
-	UNKNOWN	1714	53 B
87-65-9	HEXANEDIOIC ACID, MONO(2-ETHYLHEXYL)ESTER	1884	4
	UNKNOWN	1904	27 B

LABORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG818

CASE NO: 6402

RECEIVED OCT 14 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 4

DATAFILE: E0906V06

TENTATIVELY IDENTIFIED COMPOUNDS

CAS #	VOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L

NO NON-HSL COMPOUNDS FOUND > 10% OF NEAREST INT. STD.

LABORATORY NAME: ACUREX CORPORATION

SAMPLE NUMBER: EG818

CASE NO: 6402

RECEIVED OCT 14 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 5

DATAFILE: E0906C06R

TENTATIVELY IDENTIFIED COMPOUNDS

CAS #	SEMIVOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
	UNKNOWN fatty acid	1884	2
	UNKNOWN	1904	13 B

ONLY 5 INTERNAL STANDARDS USED TO QUANTITATE

2178 164

ABORATORY NAME: ACUREX CORPORATION

SAMPLE NUMBER: EG819

ASE NO: 6402

RECEIVED OCT 14 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 4

DATAFILE: E0906V07

TENTATIVELY IDENTIFIED COMPOUNDS

AS #	VOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
-	UNKNOWN siloxane	667	29 B

2178 100

ABORATORY NAME: ACUREX CORPORATION

SAMPLE NUMBER: EG819

RECEIVED OCT 14 1986

..E NO: 6402

ORGANICS ANALYSIS DATA SHEET - PAGE 5

DATAFILE: E0906C07

TENTATIVELY IDENTIFIED COMPOUNDS

; #	SEMIVOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
	UNKNOWN	1713	41 B
	UNKNOWN	1903	22 B

2478 187

BORATORY NAME: ACUREX CORPORATION

SAMPLE NUMBER: EG820

SE NO: 6402

RECEIVED OCT 14 1986

ORGANICS ANALYSIS DATA SHEET - PAGE 4

DATAFILE: E0906V08

TENTATIVELY IDENTIFIED COMPOUNDS

S #	VOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
-	UNKNOWN siloxane	663	20 B

RECEIVED OCT 1 4 1988

2148 188

BORATORY NAME: ACUREX CORPORATION SAMPLE NUMBER: EG820

SE NO: 6402

ORGANICS ANALYSIS DATA SHEET - PAGE 5

DATAFILE: E0906C08

TENTATIVELY IDENTIFIED COMPOUNDS

S #	SEMIVOLATILE COMPOUND NAMES	SCAN#	EST. CONC.
			UG/L
	UNKNOWN	1712	20 B
	UNKNOWN	1904	11 B

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

Date Received for Review: 11/10/86 Date Review Completed: 11/11/86

TO: Larry Lumeh

FROM: Renee Hix Mays

SUBJECT: Stetzer Road Landfill, OH
FOS-8611-171
OH0423SI

Sample Description: Case # 6402 8 low soil and 6 low water inorganics

Project Data Status: still awaiting low water & soil organics

FIT Data Review Findings:
Soils - Sb, Mn, Se & Pb are not usable; spike recoveries for Sb, Mn & Se are out of limits and the RPD for Pb is too high.

Additional Comments:
Waters - Fe, Pb, Cu are estimated and not usable
Blank had no usable hits
Sample MES313 had hits for Al & Hg while duplicate MES315 did not. RPD's for all other hits were good except for Pb (not usable anyway). Do not use Al & Hg for these two samples.

Book No. 5
Page No. 206

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 10-30-87

SUBJECT: Review of Region V CLP Data
Received for Review on 10/7/86

RECEIVED NOV 10 1986

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

TO: Data User: Fit

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

SITE NAME: Stetzer Road L.F. SMO Case No. 6402

EPA Data Set No. 5F3512 No. of Samples: 14 D.U./Activity Numbers V7051 C4850

CRL No. 86FL10564 - 86FL10581

SMO Traffic No. MEJ301-320; MEI100, 255, 089

CLP Laboratory: RMAL Hrs. Required for Review: 2

Following are our findings. This review covers 6 low water samples and 8 low soil samples analyzed for metals and cyanide.
For water samples with QC report 56325. Spike recovery for Fe is 70%. Duplicate analysis raise RPD for Fe 26%. All Fe data are estimated. There are high concentrations for Pb (7.6 ug/L), Cu (254 ug/L) in field blank (MEJ316). All Pb, Cu data are estimated.
For soil samples with QC report 56321 Spike recoveries for Sb (34%), Mn (57%), Se (0%) are shown above. All Se data are unuseable. Detection limit for Sb could be elevated and all Sb data are estimated. All Mn data are estimated. The RPD for Pb is high (53%). All Pb data are estimated.

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

Ada Resin 10.29.86.

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

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

SF3512

00001

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

RECEIVED NOV 10 1986

Date 9-30-86

COVER PAGE
INORGANIC ANALYSIS DATA PACKAGE

Lab Name ROCKY MOUNTAIN ANALYTICAL
SOW No. 784

Case No. 6402
QC Report No. 56325

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
MEJ311			
MEJ311D			
MEJ312			
MEJ312S			
MEJ313			
MEJ314			
MEJ315			
MEJ316			
[MEJ999]			

RECEIVED
OCT 7 1986
U.S. EPA, CENTRAL REGIONAL LAB.
535 S. CLARK STREET
CHICAGO, ILLINOIS 60605

Comments: 6 LOW WATERS TASK 1,2 & CN
SERIAL DILUTION OF SAMPLE MEJ315 IS IDENTIFIED AS [MEJ999]
Sample MEJ316 is a blank

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

RECEIVED NOV 10 1986

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

86FL10574
EPA Sample No.
MEJ311

Date 9-30-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56325

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	253	P	13.	MAGNESIUM	26900	P
2.	ANTIMONY	40U	P	14.	MANGANESE	78	P
3.	ARSENIC	10U	F	15.	MERCURY	0.2U	CV
4.	BARIUM	[70]	P	16.	NICKEL	[8.3]	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	6140	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	83500	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	40800	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F
10.	COPPER	[11]	P	22.	TIN	24U	P
11.	IRON	522	P XR	23.	VANADIUM	4U	P
12.	LEAD	5U	F	24.	ZINC	[15]	P

Cyanide 10u AS Percent Solids (%) ____

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: ____

Lab Manager CKO

RECEIVED NOV 10 1986

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

86FL10575
EPA Sample No.
MEJ312

Date 9-30-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56325

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	1020	P	13.	MAGNESIUM	26600	P
2.	ANTIMONY	40U	P	14.	MANGANESE	130	P
3.	ARSENIC	10U	F	15.	MERCURY	~~0.20~~ 0.2	CV
4.	BARIUM	[77]	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	5990	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	83100	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	38200	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F
10.	COPPER	[11]	P	22.	TIN	24U	P
11.	IRON	2090	P XR	23.	VANADIUM	4U	P
12.	LEAD	5U	F	24.	ZINC	[18]	P

Cyanide 10u AS Percent Solids (%)

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:

Lab Manager KLO

RECEIVED NOV 10 1986

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

86FL10576
EPA Sample No.
MEJ313

Date 9-30-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56325

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	266	P	13.	MAGNESIUM	26900	P
2.	ANTIMONY	40U	P	14.	MANGANESE	95	P
3.	ARSENIC	10U	F	15.	MERCURY	0.3	CV
4.	BARIUM	[87]	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	5680	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	83600	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	36000	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F
10.	COPPER	[7.2]	P J	22.	TIN	24U	P
11.	IRON	757	P XR J	23.	VANADIUM	4U	P
12.	LEAD	5U	F J	24.	ZINC	[9.5]	P

Cyanide 10u AS Percent Solids (%)

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:

Lab Manager [illegible]

RECEIVED NOV 10 1986

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

86FL10577
EPA Sample No.
MEJ314

Date 9-30-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56325

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[182]	P	13.	MAGNESIUM	25700	P
2.	ANTIMONY	40U	P	14.	MANGANESE	70	P
3.	ARSENIC	10U	F	15.	MERCURY	0.2U	CV
4.	BARIUM	[79]	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	5020	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	82500	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	31200	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F
10.	COPPER	[9.4]	P J	22.	TIN	24U	P
11.	IRON	459	P XR J	23.	VANADIUM	4U	P
12.	LEAD	5U	F J	24.	ZINC	[10]	P

Cyanide 10u AS Percent Solids (%) ____

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: ____

Lab Manager [illegible]

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

SF3517

RECEIVED NOV 10 1986

Date 10-1-86

COVER PAGE
INORGANIC ANALYSIS DATA PACKAGE

Lab Name ROCKY MOUNTAIN ANALYTICAL
SOW No. 784

Case No. 6402
QC Report No. 56321

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
MEI099D		MEJ320	
MEI099		[MEJ999]	
MEI099S			
MEI100			
MEI255			
MEJ301			
MEJ317			
MEJ318			
MEJ319			

RECEIVED
OCT 7 1986
U.S. EPA, CENTRAL REGIONAL LAB.
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

Comments: 8 LOW SOILS TASK 1,2 & CN
SERIAL DILUTION OF SAMPLE MEJ319 IS IDENTIFIED AS [MEJ999]

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

RECEIVED NOV 10 1986

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

86FL10567
EPA Sample No.
MEJ301

Date 10-1-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56321

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	10900	P	13.	MAGNESIUM	8700	P
2.	ANTIMONY	25U	P R W	14.	MANGANESE	726	P R J
3.	ARSENIC	16	F	15.	MERCURY	0.1u	CV
4.	BARIUM	[109]	P	16.	NICKEL	38	P
5.	BERYLLIUM	1.2U	P	17.	POTASSIUM	[1370]	P
6.	CADMIUM	3.1U	P	18.	SELENIUM	31U	F R R
7.	CALCIUM	22700	P	19.	SILVER	3.1U	P
8.	CHROMIUM	15	P	20.	SODIUM	600U	P
9.	COBALT	[12]	P	21.	THALLIUM	6.3U	F
10.	COPPER	28	P	22.	TIN	15U	P
11.	IRON	29000	P	23.	VANADIUM	[20]	P
12.	LEAD	22	F X J	24.	ZINC	161	P

Cyanide 0.62u AS Percent Solids (%) 80

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: Selenium Value reported at an additional 10x dilution

Lab Manager RKC

Form I

86FL10R12

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.
MEJ316

Date 9-30-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56325

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	26U	P	13.	MAGNESIUM	[55]	P
2.	ANTIMONY	40U	F	14.	MANGANESE	6U	P
3.	ARSENIC	10U	F	15.	MERCURY	0.2U	CV
4.	BARIUM	3U	P	16.	NICKEL	[19]	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	108U	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	[167]	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	960U	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F
10.	COPPER	254	P J	22.	TIN	24U	P
11.	IRON	[17]	P XR J	23.	VANADIUM	4U	P
12.	LEAD	7.6	F J	24.	ZINC	[14]	P

Cyanide 10u AS Percent Solids (%)

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 is Black
Copper + Lead values verified by reanalysis

Lab Manager KKO

Form I

86FL10076

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.
MEJ315

Date 9-30-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56325

Elements Identified and Measured

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

UG/L

1.	ALUMINUM	[198]	P	13.	MAGNESIUM	27000	P
2.	ANTIMONY	40U	P	14.	MANGANESE	96	P
3.	ARSENIC	10U	F	15.	MERCURY	0.2U	CV
4.	BARIUM	[88]	P	16.	NICKEL	7U	P
5.	BERYLLIUM	2U	P	17.	POTASSIUM	5670	P
6.	CADMIUM	5U	P	18.	SELENIUM	5U	F
7.	CALCIUM	83900	P	19.	SILVER	5U	P
8.	CHROMIUM	4U	P	20.	SODIUM	36300	P
9.	COBALT	6U	P	21.	THALLIUM	10U	F
10.	COPPER	[5.4]	P ✓	22.	TIN	24U	P
11.	IRON	634	P XR✓	23.	VANADIUM	4U	P
12.	LEAD	5U	F ✓	24.	ZINC	[7.8]	P

Cyanide 10u AS Percent Solids (%) ____

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: ____

Lab Manager LVC

Form I

RECEIVED NOV 10 1986

86FL10578

EPA Sample No.
MEJ317

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

Date 10-1-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56321

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	3160	P	13.	MAGNESIUM	9160	P
2.	ANTIMONY	26U	P R W	14.	MANGANESE	214	P R J
3.	ARSENIC	7.7	F	15.	MERCURY	0.1	CV
4.	BARIUM	[28]	P	16.	NICKEL	[13]	P
5.	BERYLLIUM	1.3U	P	17.	POTASSIUM	[517]	P
6.	CADMIUM	3.2U	P	18.	SELENIUM	3.2U	F R R
7.	CALCIUM	21300	P	19.	SILVER	3.2U	P
8.	CHROMIUM	6.7	P	20.	SODIUM	[627]	P
9.	COBALT	[5]	P	21.	THALLIUM	6.4U	F
10.	COPPER	[10]	P	22.	TIN	15U	P
11.	IRON	11100	P	23.	VANADIUM	[11]	P
12.	LEAD	7.1	F X J	24.	ZINC	54	P

Cyanide 0.64u AS Percent Solids (%) 78

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:

Lab Manager VLC

RECEIVED NOV 10 1986 00007

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

86FL10579
EPA Sample No.
MEJ318

Date 10-1-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56321

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	3290	P		13.	MAGNESIUM	13300	P	
2.	ANTIMONY	27U	P	R W	14.	MANGANESE	156	P	R J
3.	ARSENIC	6.7U	F		15.	MERCURY	0.1u	CV	
4.	BARIUM	[21]	P		16.	NICKEL	[15]	P	
5.	BERYLLIUM	1.3U	P		17.	POTASSIUM	[485]	P	
6.	CADMIUM	3.3U	P		18.	SELENIUM	3.3U	F	R R
7.	CALCIUM	24400	P		19.	SILVER	3.3U	P	
8.	CHROMIUM	8.4	P		20.	SODIUM	[1360]	P	
9.	COBALT	[5.9]	P		21.	THALLIUM	6.7U	F	
10.	COPPER	[12]	P		22.	TIN	16U	P	
11.	IRON	8920	P		23.	VANADIUM	[11]	P	
12.	LEAD	11	F	XS J	24.	ZINC	51	P	

Cyanide 0.67u AS Percent Solids (%) 75

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: Lead value determined by MSA

Lab Manager LAC

RECEIVED NOV 10 1986

Form I

86FL10580

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.
MEJ319

Date 10-1-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56321

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	3260	P	13.	MAGNESIUM	19300	P
2.	ANTIMONY	26U	P R UJ	14.	MANGANESE	359	P R J
3.	ARSENIC	9.1	F	15.	MERCURY	0.1 UL	CV
4.	BARIUM	[28]	P	16.	NICKEL	[16]	P
5.	BERYLLIUM	1.3U	P	17.	POTASSIUM	[709]	P
6.	CADMIUM	3.2U	P	18.	SELENIUM	3.2U	F R R
7.	CALCIUM	58300	P	19.	SILVER	3.2U	P
8.	CHROMIUM	8.1	P	20.	SODIUM	[1140]	P
9.	COBALT	[6.7]	P	21.	THALLIUM	6.5U	F
10.	COPPER	[14]	P	22.	TIN	16U	P
11.	IRON	11200	P	23.	VANADIUM	[9.7]	P
12.	LEAD	7.1	F X J	24.	ZINC	58	P

Cyanide 0.65 UL AS Percent Solids (%) 77

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:

Lab Manager CRC

RECEIVED NOV 10 1986 00003

Form I

86FL10581

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.
MEJ320

Date 10-1-86

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 6402
QC REPORT NO. 56321

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	6610	P	13.	MAGNESIUM	15700	P
2.	ANTIMONY	29U	P R W	14.	MANGANESE	574	P R J
3.	ARSENIC	12	F	15.	MERCURY	0.2 W	CV
4.	BARIUM	[90]	P	16.	NICKEL	38	P
5.	BERYLLIUM	1.5U	P	17.	POTASSIUM	[940]	P
6.	CADMIUM	3.7U	P	18.	SELENIUM	37U	F R R
7.	CALCIUM	52400	P	19.	SILVER	3.7U	P
8.	CHROMIUM	11	P	20.	SODIUM	[1230]	P
9.	COBALT	[12]	P	21.	THALLIUM	7.4U	F
10.	COPPER	42	P	22.	TIN	18U	P
11.	IRON	43200	P	23.	VANADIUM	[25]	P
12.	LEAD	13	F X J	24.	ZINC	195	P

Cyanide 0.74 W AS Percent Solids (%) 68

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: Selenium value reported at an additional 10x dilution

Lab Manager [illegible]

QC EXCEPTION SUMMARY REPORT

CASE # 6402 SITE Stetzer Road LF MATRIX: GW, BS WATER SAMPLE SPK. MEJ312
DATA SET # SF3512 LAB RMAL CONC. : 6L + 8L WATER SAMPLE DUP. MEJ312
LAB Q.C.# 56325, 56321 REVIEWED BY [illegible] SOIL SAMPLE SPK. MEI099
DATE: 10.29.86 SOIL SAMPLE DUP. MEI099

Parameter	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER/ COMMENTS
	Holding Time	Cal Blanks	Init Calver	Contin. Calver	Prep Blk AQ	Prep Blk SOL	ICS %R	LCS % AQ	LCS % SOL	Sol Dup RPD	Sol Spk. %R	AQ Dup RPD	AQ Spk. %R	Ser Dilu AQ	Ser Dilu SOL	GFAA Dup	GFAA Spike	Blank	Dup RPD	Spike %R	Blind Blank	Blind Spike %R	Split Sample RPD	
Aluminum																								
Antimony											34													
Arsenic																								
Barium																								
Beryllium																								
Cadmium																								
Calcium																								
Chromium																								
Cobalt																								
Copper																		254						
Iron												26	70											
Lead										53								7.6						
Magnesium																								
Manganese											57													
Mercury																								
Nickel																								
Potassium																								
Selenium											0													
Silver																								
Sodium																								
Thallium																								
Tin																								
Vanadium																								
Zinc																								
Cyanide																								

RECEIVED NOV 10 1986

Form III

RECEIVED NOV 10 1986

Q.C. Report No. 56325

BLANKS

LAB NAME ROCKY MOUNTAIN ANALYTICAL
DATE 9-30-86

CASE NO. 6402
UNITS ug/L

Matrix WATER

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2
Metals:							
1. ALUMINUM	26U	26U	26U			26U	
2. ANTIMONY	40U	40U	40U			40U	
3. ARSENIC	10u	10u	10u	10u		10u	
4. BARIUM	3U	3U	3U			3U	
5. BERYLLIUM	2U	2U	2U			2U	
6. CADMIUM	5U	5U	5U			5U	
7. CALCIUM	54U	54U	54U			[104]	
8. CHROMIUM	4U	4U	4U			4U	
9. COBALT	6U	6U	6U			6U	
10. COPPER	3U	3U	3U			3U	
11. IRON	[21]	17U	17U			[17]	
12. LEAD	5u	5u	5u			5u	
13. MAGNESIUM	[55]	52U	52U			[138]	
14. MANGANESE	6U	6U	6U			6U	
15. MERCURY	0.2u	0.2u				0.2u	
16. NICKEL	7U	7U	7U			7U	
17. POTASSIUM	108U	108U	108U			108U	
18. SELENIUM	5u	5u	5u	5u		5u	
19. SILVER	5U	5U	5U			5U	
20. SODIUM	960U	960U	960U			[972]	
21. THALLIUM	10u	10u	10u	10u		10u	
22. TIN	24U	24U	24U			24U	
23. VANADIUM	4U	4U	4U			4U	
24. ZINC	2U	2U	2U			2U	
Other:							
Cyanide	10u	10u	10u			10u	

Form V

00012

Q.C. Report No. 56325 RECEIVED NOV 10 1986

SPIKE SAMPLE RECOVERY

NAME ROCKY MOUNTAIN ANALYTICAL

E 9-30-86

CASE NO. 6402
EPA Sample No. MEJ312
Lab Sample ID No. -
Units UG/L

MATRIX WATER

pound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spike Added (SA)	%R'	
tals:						
. ALUMINUM	75-125	2660	1020	2000	82	
. ANTIMONY	75-125	436	40U	500	87	
. ARSENIC	75-125	22	10U	20	110	
. BARIUM	75-125	1990	[77]	2000	96	
. BERYLLIUM	75-125	49	2U	50	98	
. CADMIUM	75-125	49	5U	50	98	
. CALCIUM	75-125	187000	83100	100000	104	
. CHROMIUM	75-125	187	4U	200	94	
. COBALT	75-125	450	6U	500	90	
. COPPER	75-125	249	[11]	250	95	
. IRON	75-125	2790	2090	1000	70	R
. LEAD	75-125	18	5U	20	90	
. MAGNESIUM	75-125	74600	26600	50000	96	
. MANGANESE	75-125	306	130	200	88	
. MERCURY	75-125	1.2	~~100 20~~ 0.2	1.0	~~120~~ 100	
. NICKEL	75-125	375	7U	400	94	
. POTASSIUM	75-125	54700	5990	50000	97	
. SELENIUM	75-125	10 S	5U	10	100	
. SILVER	75-125	40	5U	50	80	
. SODIUM	75-125	135000	38200	100000	97	
. THALLIUM	75-125	46 S	10U	50	92	
. TIN	75-125	369	24U	400	92	
. VANADIUM	75-125	472	4U	500	94	
. ZINC	75-125	195	[18]	200	88	
her:						
anide	75-125		0	100	8	

R = [(SSR - SR)/SA] x 100
"- out of control

mments: Selenium + thallium values determined by MSA

Form III

Q.C. Report No. 56321

RECEIVED NOV 10 1986

BLANKS

LAB NAME ROCKY MOUNTAIN ANALYTICAL CASE NO. 6402
DATE 10-1-86 UNITS ug/L
Matrix SOIL

Preparation Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank 1	2
Metals:							
1. ALUMINUM	26U	26U	26U			[45]	
2. ANTIMONY	40U	40U	40U			40U	
3. ARSENIC	10U	10U	10U	10U		10U	
4. BARIUM	3U	3U	3U			3U	
5. BERYLLIUM	2U	2U	2U			2U	
6. CADMIUM	5U	5U	5U			5U	
7. CALCIUM	54U	[71]	[57]			[235]	
8. CHROMIUM	4U	4U	4U			4U	
9. COBALT	6U	6U	6U			6U	
10. COPPER	3U	3U	3U			3U	
11. IRON	17U	17U	17U			[38]	
12. LEAD	5U	5U	5U	5U	5U	5U	
13. MAGNESIUM	52U	52U	[85]			52U	
14. MANGANESE	6U	6U	6U			6U	
15. MERCURY	0.2U	0.2U	0.2U			0.2U	
16. NICKEL	7U	7U	7U			7U	
17. POTASSIUM	108U	108U	108U			108U	
18. SELENIUM	5U	5U	5U	5U	5U	5U	
19. SILVER	5U	5U	5U			5U	
20. SODIUM	960U	960U	[1240]			960U	
21. THALLIUM	10U	10U	10U	10U		10U	
22. TIN	24U	24U	24U			[38]	
23. VANADIUM	4U	4U	4U			4U	
24. ZINC	2U	2U	2U			[8.5]	
Other:							
Cyanide	10U	10U	10U			10U	

Form VI

Q.C. Report No. 56321

RECEIVED NOV 10 1986

DUPLICATES

I ME ROCKY MOUNTAIN ANALYTICAL

10-1-86

CASE NO. 6402
EPA Sample No. MEI099D
Lab Sample ID No. -
Units mg/kg

Matrix SOIL

ound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]	
UMINUM		7970	8040	0.87	
ANTIMONY		20U	20U	NC	R
SENIC		12	14	15	
L..RIUM		[55]	[61]	NC	
RERYLLIUM		1U	1U	NC	
DMIUM		2.5U	2.5U	NC	
CALCIUM		39100	34500	12	
ROMIUM		12	12	0	
BALT		[11]	[13]	NC	
COPPER		23	23	0	
ON		23300	23000	1.3	
AD		14	24	53	X
MAGNESIUM		8660	9340	7.6	
NGANESE		443	491	10	R
RCURY		0.1u	0.1u	NC	
NICKEL		32	30	6.5	
TASSIUM		[1470]	[1410]	NC	
SELENIUM		25U	25U	NC	R
LVER		2.5U	2.5U	NC	
DIUM		480U	[789]	NC	
THALLIUM		5U	5U	NC	
N		12U	12U	NC	
NADIUM		[16]	[16]	NC	
ZINC		98	113	14	
% Solids		85	86	1.2	
ide		0.5u	0.5u	NC	

[1] of Control
[b] added at a later date.
[2] RPD = [|S-D|/((S+D)/2)] x 100
on calculable RPD due to value(s) less than CRDL

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

Date Received for Review: 12/9/86 Date Review Completed: 12/11/86

TO: Larry Lumeh

FROM: Renee Hix Mays

SUBJECT: Stetzer Road Landfill, Ohio
RS-8601-15A
FS-8611-187 OH0423

Sample Description: Case # 6402 8 low soil and 5 low water organics

Project Data Status: Complete for all data

FIT Data Review Findings:
Data for EG822, EG824 & EG830 VOA's and A10/10 for EG821 were unacceptable and were returned to the lab. Therefore there is no data in this package corresponding to the above samples and analysis indicated.

Additional Comments:
Blank was clean.
Neither sample EG823 or its duplicate EG825 had any hits.
Also see VIAR review narrative.

Book No. 5
Page No. 206

recycled paper

Review

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

11/25/86

Review of Region V CLP Data
Received for Review on 11/24/86

RECEIVED DEC 0 9 1986

Curtis Ross, Director (5SCRL) Patrick J. Chinilla
Central Regional Laboratory

Data User: Fit

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

SITE NAME: Stetzer Road Landfill SMO Case No. 6402

EPA Data Set No. SF 3512 No. of Samples: 14 D.U./Activity Numbers Y905 / ~~C51500~~ C72100

CRL No. 86FL10564 - 86FL10581

SMO Traffic No. EG809 - EG830 ; EI125

CLP Laboratory: Cal H2O Hrs. Required for Review: 4.5

Following are our findings.

IN ADDITION TO THE COMMENT MADE IN THE FOLLOWING VIAR REVIEW, DATA FOR THE FOLLOWING SAMPLES IS REJECTED AS UNUSABLE: VOA FRACTION EG822, EG824, EG830
ABN FRACTION EG821

THESE SAMPLES DID NOT MEET HOLDING TIME OR SURROGATE RECOVERY REQUIREMENTS AND REANALYSIS DID NOT MEET INSTRUMENT CALIBRATION REQUIREMENTS. EG821 MS/MSD ALSO SHOWED POOR REPRODUCIBILITY

THIS DATA IS BEING RETURNED TO THE LAB TO AVOID PAYMENT FOR THIS WORK.

Patrick J. Chinilla
11-25-86

( ) Data are acceptable for use.
(X) Data are acceptable for use with qualifications noted above.
( ) Data are preliminary - pending verification by Contractor Laboratory.
(X) Data are unacceptable. VOA EG822, EG824, EG830 ABN EG821

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

EPA FORM 1320-4 (REV 3-78)

U.S. ENVIRONMENTAL PROTECTION AGENCY
Contract Laboratory Program

FIT Copy

SAMPLE MANAGEMENT OFFICE

RECEIVED DEC 0 9 1986

MEMORANDUM

RECEIVED NOV 2 1 1986 US ... ONAL LAB. ... STREET ... ILLINOIS 60605

DATE: November 20, 1986

TO: Chuck Elley
USEPA Region V

FROM: Peter Isaacson
SMO Data Review Team

SUBJECT: QA/QC Compliance Review Summary for a Contract Laboratory Program Organic Sample Data Package: Case No. 6402

As requested, quality control and performance measures for the data packages noted have been examined and compared to EPA standards for compliance. Measures for the following general areas were evaluated:

Data Completeness	Blanks
Spectra Matching Quality	DFTPP and BFB Tuning
Surrogate Spikes	Chromatography
Matrix Spikes/Duplicates	Holding Times
Calibration	Compound ID (HSL, TIC)

Any statistical measures used to support the following conclusions are attached so that the review may be reviewed by others.

Summary of Results

	I Volatiles	II B/N/A	III Pesticide
Acceptable as Submitted			
Acceptable with Comments	✓	✓	✓
Unacceptable, Action Pending			
Unacceptable			

Data Reviewed by: William P. Eckel Date: 11-18-86
Review Authorized By: Peter Isaacson Date: 11/19/86
Signature: Peter Isaacson
Area Code/Phone No.: 703-683-0885
FTS Line: 8-557-2490

RECEIVED DEC 0 9 1986

NARRATIVE
CASE NO. 6402

SITE NAME STETZER ROAD LANDFILL
BUCYRUS, OHIO

LAB NAME CALIFORNIA WATER LABS

Laboratory

The laboratory's portion of this Case consisted of 8 soil, 5 water, and 1 blank sample collected on September 10, 1986.

The laboratory reported no problem(s) with the receipt of these samples.

The laboratory reported numerous problem(s) with the analyses of all fractions. These problems were addressed in the laboratory narrative.

The evaluator has commented on the criteria specified under each fraction heading. All criteria have been assessed, but no discussion is given whre the evaluator has determined that criteria were adequately performed or require no comment. Details relevant to these comments are given on the forms in Appendix A. Amounts of detected compounds are summarized in Appendix B.

RECEIVED DEC 0 9 1986

Evaluation by Fraction

I. Volatiles (VOAs)

X	Holding Times
	GC/MS Tuning
X	Calibration, Initial
X	Calibration, Continuing
X	Blank
X	Surrogate Recovery
X	MS/MSD
	Compound ID (HSL, TIC)
	Spectra Quality
	Standards
	Chromatography
	Data Completeness

Comments:

No HSL or confirmed TIC compounds were reported for water samples. Five HSL compounds and 5 TICs were reported in the soil samples. Because of blank contamination, all results for 3 of these HSLs (2-butanone, 4-methyl-2-pentanone and toluene) must be used as detection limits (UJ). Acetone results below 132 ug/kg must also be used as detection limits for the same reason. Methylene chloride was not found in the blank on any day on which it was detected in the samples.

Only seven of the 35 VOA HSLs did not have a problem with calibration on at least one day. Surrogate recoveries for 3 water and 3 soil samples were outside QC limits. The water MS/MSD analysis resulted in one recovery for toluene below the QC limit, and 5 of 5 RPDs over the QC limit (15 - 38%).

The response factors for 2 compounds (2-butanone and 2-chloro-ethylvinylether) fell below 0.05 on 5 and 8 occasions, respectively. Data for these 2 compounds are therefore unusable (R).

Due to the numerous quality control problems noted, and the missed holding times on the soil samples (9 days), all VOA analyses are considered useful only for demonstration of the presence or absence of the determined compounds. All detection limits should be considered estimated (UJ).

RECEIVED DEC 0 9 1986

II. Base/Neutral/Acids (BNAs)

	Holding Times
	GC/MS Tuning
X	Calibration, Initial
X	Calibration, Continuing
X	Blank
X	Surrogate Recovery
X	MS/MSD
	Compound ID (HSL, TIC)
	Standards
	Chromatography
	Data Completeness

Comments:

Three HSL compounds were found in the samples. One of these, bis(2-ethylhexyl)phthalate, was also found in the method blank and the field blank. Results for this compound in the water samples should be treated as detection limits (UJ).

Many TICs were reported, especially in the soil samples. A large proportion of these were laboratory artifacts, such as polymethylcyclosiloxanes (column bleed) and chlorofluorocarbons. Those TICs which appear to be true components of the extracts listed on Appendix B. Most of these are hydrocarbons.

Due to having response factors consistently below 0.05, the following compounds' results are unusable (R): benzyl alcohol, 4-nitroaniline and 3,3'-dichlorobenzidine.

Base/neutral surrogate recoveries were outside QC limits in many water samples and blanks. The laboratory received permission to re-extract one such soil blank, which was noted as a noncompliant item in CCS. Holding times were missed by 9 or 10 days in the water samples.

MS/MSD results were poor for water, but this analysis was done on the sample which had the poorest surrogate recoveries.

Because of the surrogate recovery problems and holding time violations, all detection limits for water samples are considered estimated (UJ).

Compounds marked UJ on Appendix B have estimated DLs due to calibration problems.

RECEIVED DEC 0 9 1986

III. Pesticides/PCBs

	Holding Times
	Instrument Performance
	DDT RT/12 Minute?
	Retention Time Window
	Analytical Sequence
X	DDT/Endrin Degradation
X	RT Check for DBC
	Resolution Check
X	Calibration Linearity
X	Calibration, Continuing
	Blank
X	Surrogate Recovery
X	MS/MSD
X	Compound ID (HSL, TIC)
	Standards
	Chromatography
	Data Completeness

Comments:

Beta-BHC was reported in five soil samples. No HSLs were reported in the water samples. Review of the chromatograms indicates that small amounts of the following compounds may also be present: Endosulfan I (EG821), gamma-BHC (EG825), Endosulfan sulfate (EG828) and beta-BHC (EG828).

There were problems with %Ds and %RSDs during calibration on both quantitation and confirmation columns, and some problems with MS/MSD analysis. These problems do not affect the reported results, however.

RECEIVED DEC 0 9 1988

REVIEW MATRIX

APPENDIX B - VOA COMPOUNDS

Case No. 6402

Laboratory Name CAL Water

← Soil | Water →

Compounds		Samples								Soil Blanks		
		EG 809	EG809 R	EG 810	EG810 R	EG811 R	EG 821	EG 822R	EG 823	#26	#24	#3
Chloromethane	UJ	✓		✓		✓						
Bromomethane	UJ											
Vinyl Chloride												
Chloroethane	UJ											
Methylene Chloride	UJ	9.7	5.2 J		3.0 J	4.3 J						1.2
Acetone	UJ	38. (B)	77. (B)	59. (B)	73. (B)	169. B				9.8	8.1	34
Carbon Disulfide	UJ											
1,1-Dichloroethene												
1,1-Dichloroethane												
Trans-1,2-Dichloroethene												
Chloroform	UJ											
1,2-Dichloroethane	UJ											
2-Butanone	(R)	7.1 BJ	6.6 BJ									
1,1,1-Trichloroethane	UJ											
Carbon Tetrachloride	UJ											
Vinyl Acetate	UJ											
Bromodichloromethane	UJ											
1,2-Dichloropropane	UJ											
Trans-1,3-Dichloropropene	UJ											
Trichloroethene	UJ											
Dibromochloromethane	UJ											
1,1,2-Trichloroethane	UJ											
Benzene	UJ											
cis-1,3-Dichloropropene	UJ											
2-Chloroethylvinylether	(R)											
Bromoform	UJ											
4-Methyl-2-Pentanone	UJ									2.7		
2-Hexanone	UJ											
Tetrachloroethene												
1,1,2,2-Tetrachloroethane	UJ											
Toluene		4.8 (BJ)	6.1 (B)	3.2 (BJ)	3.1 (BJ)	4.5 (BJ)				1.2	present	
Chlorobenzene												
Ethylbenzene	UJ											
Styrene	UJ											
Total Xylenes	UJ											

Sample/Blank Association

RECEIVED DEC 0 9 1986

REVIEW MATRIX

APPENDIX B - VOA COMPOUNDS

Page 2 of 9

Case No. 6402

Laboratory Name Cal. Water

← Water | Soil →

Compounds	EG824	EG824	EG825	EG826	EG82	EG828	EG829	EG830	Blanks
	Water Samples								
Chloromethane									
Bromomethane									
Vin Chloride									
Chloroethane									
Meth ene Chloride					2.8 J		3.2 J	3.6 J	
Acetone					136. B	230. B	132 B	5350. B	
Carbon Disulfide									
1 1-Dichloroethene									
1 1-Dichloroethane									
Trans-1 2-Dichloroethene									
Chloroform									
1 -Dichloroethane									
2-Butanone									
1 1 1-Trichloroethane									
Carbon Tetrachloride									
V Acetate									
Bromodichloromethane									
1 2-Dichlo									
Trans-1 3-Dichlo									
Trichloroethene									
Dibromochloromethane									
1 -Trichloroethane									
ene									
cis-1 3-Dichlo									
2-Chloroet v ether									
Bromoform									
-2-Pentanone									
ene									
Tetrachloroethene									
1,1,2,2-Tetrachloroethane									
Toluene					2.8		1.7 B		
Chlorobenzene									
E benzene									
S									
Total X enes									

Sample/Blank Association

RECEIVED DEC 0 9 1986

REVIEW MATRIX

APPENDIX B - VOA COMPOUNDS

Case No. 6402

Laboratory Name Cal. Water

Soil

Compounds	Samples									Blanks
	E6830 R	EI 125								
Chloromethane										
Bromomethane										
Vinyl Chloride										
Chloroethane										
Methylene Chloride		4.7 J								
Acetone	37. B	41. B								
Carbon Disulfide										
1,1-Dichloroethene										
1,1-Dichloroethane										
Trans-1,2-Dichloroethene										
Chloroform										
1,2-Dichloroethane										
2-Butanone										
1,1,1-Trichloroethane										
Carbon Tetrachloride										
Vinyl Acetate										
Bromodichloromethane										
1,2-Dichloropropane										
Trans-1,3-Dichloropropene										
Trichloroethene										
Dibromochloromethane										
1,1,2-Trichloroethane										
Benzene										
cis-1,3-Dichloropropene										
2-Chloroethylvinylether										
Bromoform										
4-Methyl-2-Pentanone		6.9 BJ								
2-Hexanone										
Tetrachloroethene										
1,1,2,2-Tetrachloroethane										
Toluene	3.2 J	2.7 BJ								
Chlorobenzene										
Ethylbenzene										
Styrene										
Total Xylenes										
	Sample/Blank Association									

REVIEW MATRIX
APPENDIX B BNA COMPOUNDS

RECEIVED DEC 0 9 1986

Page 9

Case No. 6402

Laboratory Name Cal. Water

← Soil | Water →

Compounds	Samples									Blanks	
	EG809	EG810	EG811	EG821	EG821R	EG821RE	EG822	EG823R	#22		
Phenol											
bis(2-Chloroethyl)Ether											
2-Chlorophenol											
1,3-Dichlorobenzene				9.5							
1,4-Dichlorobenzene				9.0							
Benzyl Alcohol (R)											
1,2-Dichlorobenzene											
2-Methylphenol											
bis(2-Chloropropyl)Ether											
4-Methylphenol UJ											
N-Nitroso-Di-n-Propylamine UJ				330.							
Hexachloroethane											
Nitrobenzene											
Isophorone											
2-Nitrophenol											
2,4-Dimethylphenol											
Benzoic Acid UJ											
bis(2-Chloroethoxy)Methane											
2,4-Dichlorophenol											
1,2,4-Trichlorobenzene				8.6							
Naphthalene											
4-Chloroaniline UJ											
Hexachlorobutadiene											
4-Chloro-3-Methylphenol											
2-Methylnaphthalene UJ											
Hexachlorocyclopentadiene UJ											
2,4,6-Trichlorophenol											
2,4,5-Trichlorophenol											
2-Chloronaphthalene											
2-Nitroaniline UJ											
Dimethyl Phthalate											
Acenaphthylene											
3-Nitroaniline UJ											
Acenaphthene				16.							
2,4-Dinitrophenol UJ											
4-Nitrophenol UJ											
Dibenzofuran											
2,4-Dinitrotoluene UJ				24.7							
2,6-Dinitrotoluene UJ											
Diethylphthalate											
4-Chlorophenyl-phenylether											
Fluorene											
4-Nitroaniline (R)											
4,6-Dinitro-2-Methylphenol UJ											
N-Nitrosodiphenylamine(1)		12. J									
4-Bromophenyl-phenylether UJ											
Hexachlorobenzene											
Pentachlorophenol UJ											
Phenanthrene											
Anthracene											
Di-n-Butylphthalate						12 J					
Fluoranthene											
Pyrene UJ				43.5							
Butylbenzylphthalate UJ											
3,3-Dichlorobenzidiene (R)											
Benzo(a)Anthracene											
bis(2-Ethylhexyl)Phthalate	59. J	97. J	1280.		4.2 (BJ)	38 (B)			present		
Chrysene											
Di-n-Octyl Phthalate UJ											
Benzo(b)Fluoranthene											
Benzo(b)Fluoranthene											
Benzo(a)Pyrene											
Indeno(1,2,3-cd)Pyrene UJ											
Dibenz(a-h)Anthracene											
Benzo(g,h,i)Perylene											

Sample/Blank Association

RECEIVED DEC 0 9 1986

REVIEW MATRIX

APPENDIX B BNA COMPOUNDS

Case No. 6402

Laboratory Name Cal. Water

← Water | Soil →

Compounds	EG824R	EG825R	EG826	EG826R	EG827	EG828	EG829R	EG830R	EI 125RE	Blanks	
	(blank) Samples										
Phenol											
bis(2-Chloroethyl)Ether											
2-Chlorophenol											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
Benzyl Alcohol											
1,2-Dichlorobenzene											
2-Methylphenol											
bis(2-Chloropropyl)Ether											
4-Methylphenol											
N-Nitroso-Di-n-Propylamine											
Hexachloroethane											
Nitrobenzene											
Isophorone											
2-Nitrophenol											
2,4-Dimethylphenol											
Benzoic Acid											
bis(2-Chloroethoxy)Methane											
2,4-Dichlorophenol											
1,2,4-Trichlorobenzene											
Naphthalene											
4-Chloroaniline											
Hexachlorobutadiene											
4-Chloro-3-Methylphenol											
2-Methylnaphthalene											
Hexachlorocyclopentadiene											
2,4,6-Trichlorophenol											
2,4,5-Trichlorophenol											
2-Chloronaphthalene											
2-Nitroaniline											
Dimethyl Phthalate											
Acenaphthylene											
3-Nitroaniline											
Acenaphthene											
2,4-Dinitrophenol											
4-Nitrophenol											
Dibenzofuran											
2,4-Dinitrotoluene											
2,6-Dinitrotoluene											
Diethylphthalate											
4-Chlorophenyl-phenylether											
Fluorene											
4-Nitroaniline											
4,4-Dinitro-2-Methylphenol											
N-Nitrosodiphenylamine(1)						43 J					
4-Bromophenyl-phenylether											
Hexachlorobenzene											
Pentachlorophenol											
Phenanthrene											
Anthracene											
Di-n-Butylphthalate											
Fluoranthene											
Pyrene											
Butylbenzylphthalate											
3,3-Dichlorobenzidiene											
Benzo(a)Anthracene											
bis(2-Ethylhexyl)Phthalate				7.2 J	337 J	93 J		105 J			
Chrysene											
Di-n-Octyl Phthalate											
Benzo(b)Fluoranthene											
Benzo(b)Fluoranthene											
Benzo(a)Pyrene											
Indeno(1,2,3-cd)Pyrene											
Dibenz(a-h)Anthracene											
Benzo(g,h,i)Perylene											
	Sample/Blank Association										

RECEIVED DEC 0 9 1986

REVIEW MATRIX

APPENDIX B. - PESTICIDE/PCB COMPOUNDS

Case No. 6402

Laboratory Name Cal. Water

Compounds	EG 809	EG 810	EG 811	EG 821	EG 822	EG 823			Blanks		
Alpha-BHC											
Beta-BHC	48.1	129.	34.6								
Delta-BHC											
Gamma-BHC											
Heptachlor											
Aldrin											
Heptachlor Epoxide											
Endosulfan I				trace							
Dieldrin											
4,4-DDE											
Endrin											
Endosulfan II											
4,4-DDD											
Endosulfan Sulfate											
4,4-DDT											
Methoxychlor											
Endrin Ketone											
Chlordane											
Toxaphene											
Aroclor-1016											
Aroclor-1221											
Aroclor-1232											
Aroclor-1242											
Aroclor-1248											
Aroclor-1254											
Aroclor-1260											
Sample/Blank Association											

RECEIVED DEC 0 9 1986

REVIEW MATRIX

APPENDIX B - PESTICIDE/PCB COMPOUNDS

Case No. 6402

Laboratory Name Cal. Water

← Water | Soil →

Compounds	Blank Samples								Blanks		
	EG 824	EG 825	EG 826	EG 827	EG 828	EG 829	EG 830	EI 125			
Alpha-BHC											
Beta-BHC				57.7	trace	50.7					
Delta-BHC											
Gamma-BHC		trace									
Heptachlor											
Aldrin											
Heptachlor Epoxide											
Endosulfan I											
Dieldrin											
4,4-DDE											
Endrin											
Endosulfan II											
4,4-DDD											
Endosulfan Sulfate					trace						
4,4-DDT											
Methoxychlor											
Endrin Ketone											
Chlordane											
Toxaphene											
Aroclor-1016											
Aroclor-1221											
Aroclor-1232											
Aroclor-1242											
Aroclor-1248											
Aroclor-1254											
Aroclor-1260											
	Sample/Blank Association										
				1.3		1.3					

RECEIVED DEC 0 9 1986

REVIEW MATRIX

APPENDIX B - TIC COMPOUNDS

Case No. 6402

Laboratory Name CAL Water

	Scan #	Compound	EG809	EG809R	EG810	EG810R	EG811	EG811R	EG821	EG821R	EG821RE	EG822R	EG823	EG823R	EG824	EG824R	EG825	EG825R	EG826	EG827	EG828	EG[illegible]
V	86	Acetonitrile (75-05-8)	1																			
V	113-5	2,2,3-trimethyl-3-oxetanol (25910-96-7) ?				1.4		4											3		3	
V	119	2-methylbutane (78-78-4)			1.2																	
V	358-61	Hexanes ? (110-54-3)	2	2.2	2	2		1.3											1	1	2	
SV	397	Oxirane, 2,2-dimethyl-3-propyl- (?)			142																	
SV	419	UK																		210		
SV	419-29	1-methylethyl benzene (98-82-8)	191		218		243													195	160	
SV	643-5	UK					227												169			
SV	687-90	Hydrocarbon	168		181														212		105	
SV	812-14	Hydrocarbon			214														188		112	
SV	829	2,6,8-trimethyl-decane (62108-26-3)			154																	
SV	927-8	Hydrocarbon	239		255		94												288		147	
SV	1034-5	Hydrocarbon	257		268		103												202		99	
SV	1094	Hydrocarbon																		122		
SV	1134-5	Hydrocarbon	296		261		131												228		99	
SV	1271	Hydrocarbon																		155		
SV	1229	Hydrocarbon	264		214		107												179		104	
SV	1302	2(3H)-benzothiazole (934-34-9)			625																	
SV	1319	Hydrocarbon	276				131												232		122	
SV	1324-5	Hydrocarbon	337		233		165												320	277	196	
SV	1404-5	Hydrocarbon	237		147		108												176		108	
SV	1411-2	Hydrocarbon	176																	152	81	
SV	1485-6	Hydrocarbon	221		147														170	86	126	
SV	1526-34	Hexadecanoic Acid					188															
SV	1534	UK - Phthalate	132																			
SV	1563-8	Hydrocarbon	193				97															
SV	1586	Mol. Sulfur - S_8			331														186	428	90	
SV	1637-8	Hydrocarbon	333		396																	
SV	1709-10	Hydrocarbon	253																292		151	
SV	1777-8	Hydrocarbon	204		212														274		97	
SV	1843-4	Hydrocarbon	192		132														223			
SV	1854-5	Ethanol, 2-butoxy-phosphate (3:1) (78-51-3)			3939		305															
SV	1906-7	Hydrocarbon	171				153												223	243		
SV	1945	UK - PNA																		243		
SV	2018-2027	Hydrocarbon					294												186	190		
SV	2130-39	Hydrocarbon	225		359		1025												346	418	130	

REVIEW MATRIX
APPENDIX B - TIC COMPOUNDS

RECEIVED [illegible] U 9 [illegible] Page [illegible] of [illegible]

Case No. 6402

Laboratory Name CAL Water

	Scan #	Compound		EG830	EG830R	EI105	EI105RE		EG809	EG810	EG811	EG827	EG828	EG829								
V	355-9	Hexanes (?)		3	1	1																
V	448	Hexanal 66-25-1					?															
SV	359	UK					59															
SV	419-29	1-methylethylbenzene (98-82-8)		212																		
SV	427	5-methyl-5-hexen-2-one (3240-09-3)					78															
SV	509	2,4-dimethyl-3-heptanone (18641-71-9)					137															
SV	927-8	Hydrocarbon		140																		
SV	1034-5	Hydrocarbon		150																		
SV	1134-5	Hydrocarbon		150																		
SV	1229	Hydrocarbon		150																		
SV	1319	Hydrocarbon		217																		
SV	1323-5	Hydrocarbon		243																		
SV	1404-5	Hydrocarbon		157																		
SV	1411-2	Hydrocarbon		122																		
SV	1417	UK					70															
SV	1423	Hydrocarbon					44															
SV	1485-6	Hydrocarbon		147																		
SV	1526	Hexadecanoic Acid					136															
SV	1586	Mol. Sulfur S_8		460																		
SV	1709-10	Hydrocarbon		195																		
SV	1777-8	Hydrocarbon		195																		
SV	1843-4	Hydrocarbon		125																		
SV	1906-7	Hydrocarbon		153																		
SV	2018-27	Hydrocarbon		181			69															
SV	2130-39	Hydrocarbon		377			218															
SV	2232-5	UK - HC					480				153											
SV	2242-3	Hydrocarbon		419					253		1202		318	94								
SV	2332	UK - PNA?					182															
SV	2342	Hydrocarbon					109															
SV	2353-8	Hydrocarbon					48				318		129									
SV	2371	UK - PNA?									153		259									
SV	2384	UK											875									

RECEIVED DEC 0 8 1986

California Water Labs
A Division of Condor Laboratories Inc

Modesto ..... (209) 527-4050
Fresno ..... (209) 291-5900
Sacramento ..... (916) 448-5560
San Jose ..... (408) 984-7999
Stockton ..... (209) 465-0229

CASE NARRATIVE

6402

Soil samples EI-125, EG-809, EG-810, EG-811, EG-827, EG-828, EG-829 and EG-830 were analyzed for volatile compounds beyond the contract required holding times because of instrument failure. California Water Laboratories notified the EPA Region of this failure via the SMO and was instructed to proceed with the analysis of the samples when the instrument was repaired.

BNA surrogate compounds were inadvertantly ommitted from the extraction blank on 9/15/86 for the soil samples EI-125, EG-809, EG-810, EG-811, EG-827, EG-828, EG-829 and EG-830. California Water Laboratories notified the EPA Region of this problem via the SMO and was instructed to re-extract only the blank and proceed with analysis of the samples and the re-extracted blank.

The blank for the soils was re-extracted on 9/22/86, but the d_{14}-terphenyl surrogate was above the contract required recovery limits. Another blank was extracted for the soils on 9/30/86 and was analyzed but, the recovery of d_{14}-terphenyl was high in this blank also. Both blanks are reported with this case. The high recovery of the d_{14}-terphenyl was due to low recovery of the internal standard (IS) used to quantitate the d_{14}-terphenyl. The cause of this low IS recovery is being investigated.

P.O. BOX 4249, MODESTO, CALIFORNIA 95352

RECEIVED DEC 0 9 1986

California Water Labs
A Division of Condor Laboratories Inc

Modesto ..... (209) 527-4050
Fresno ..... (209) 291-5900
Sacramento ..... (916) 448-5560
San Jose ..... (408) 984-7999
Stockton ..... (209) 465-0229

CASE NARRATIVE

 # 6402

Water samples EG-821, EG-822, EG-823, EG-824, EG-825 and EG-826 were extracted on 9/15/86. Samples EG-821, EG-822, EG-823, EG-824 and EG-825 were re-extracted on 9/25/86 because of poor surrogate recoveries. The data from these re-extracted samples are designated with the suffix **R**.

Sample EG-821 was used for the MS and MSD. Matrix Spiking solution was inadvertantly added to the sample as well as the two aliquots chosen for the MS & MSD when it was extracted on 9/15/86. The surrogate recoveries in the sample were outside the contract limits and the sample was re-extracted on 9/25/86. This re-extracted sample had surrogate recoveries outside contract limits and it was re-extracted again on 10/10/86 and this re-extracted sample had surrogates outside contract limits. We are reporting the results of all three sample analyses to verify the surrogate recoveries on the first extract of the sample.

Only 0.185 liters of sample EG-821 was available for re-extraction on 10/10/86. The final volume of the extract was 0.5ml instead of 0.2ml resulting in a dilution of the surrogate by a factor of 2.5. In order to achieve the proper level of surrogates for analysis 2.5 times more sample (5ul) was injected which led to 2.5 times more (100ng) of the internal standards also being injected. The increased amounts of internal standards were accounted for when calculating percent recovery of the surrogates.

P.O. BOX 4249, MODESTO, CALIFORNIA 95352

RECEIVED DEC 0 9 1986

California Water Labs

Modesto ..... (209) 527-4050
Fresno ..... (209) 291-5900
Sacramento ..... (916) 448-5560
San Jose ..... (408) 984-7999
Stockton ..... (209) 465-0229

CASE NARRATIVE

6402

The first Pesticide matrix spike reults for sample EG-821 were poor because of Endrin breakdown to Endrin Ketone. The Matrix Spike and Matrix Spike Duplicate were re-extracted and re-analyzed with better results. The results of both Matrix Spikes and Matrix Spike Duplicates are reported.

Bennett J Tyson

P.O. BOX 4249, MODESTO, CALIFORNIA 95352

WATER SURROGATE PERCENT RECOVERY SUMMARY

Case No. 6402 Contract Laboratory CALIF. WATER LABS. Contract No. 68-01-7277

000002

	VOLATILE			SEMI-VOLATILE								PESTICIDE**
SMO TRAFFIC NO.	TOLUENE-D8 (88-110)	BFB (86-115)	1,2 DICHLORO-ETHANE-D4 (76-114)	NITRO-BENZENE-D5 (35-114)	2-FLUORO-BIPHENYL (43-116)	TERPHENYL-D14 (33-141)			PHENOL-D5 (10-94)	2-FLUORO-PHENOL (21-100)	2,4,6 TRIBROMO-PHENOL (10-123)	DIBUTYL CHLORENDATE (24-154)
EG821	97	96	112	9*	10*	28*			~~0~~*	~~0~~*	~~0~~*	
EG821R				34*	32*	66			21	40	46	
EG821RE				32*	42*	145*			33	31	103	
EG821MS	98	88	120*	88	82	56			63	58	71	
EG821MSD	105	120*	91	52	49	88			40	47	49	
EG822R	96	111	80	39	38*	83			30	44	40	
EG823	102	110	86									
EG823R				42	35*	83			18	37	43	
EG824	99	81*	112	37	37*	72			24	47	53	
EG824R	48*	89	263*									
EG825	101	86*	106									
EG825R				43	33*	71			26	46	46	
EG826	101	90	101	58	101	154*			27	58	120	
BLANK 10				58	53	84			25	41	73	
BLANK 15				13*	15*	100			12	15*	66	
BLANK 16	97	93	100									
BLANK 17	92	88	76									
BLANK 18	96	113	87									
BLANK 25				44	45	98			29	45	63	

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

**ADVISORY LIMITS ONLY

Volatiles: 6 out of 36 ; outside of QC limits

Semi-Volatiles: 19 out of 78 ; outside of QC limits

Pesticides: ~~0~~ out of ~~0~~ ; outside of QC limits

Comments:

RECEIVED DEC 09 1986

FORM II 7/85

WATER SURROGATE PERCENT RECOVERY SUMMARY

Case No. 6403 Contract Laboratory CALIFORNIA WATER LABS Contract No. 68-01-7277

000003

SMO TRAFFIC NO.	VOLATILE: TOLUENE-D8 (88-110)	VOLATILE: BFB (86-115)	VOLATILE: 1,2 DICHLORO-ETHANE-D4 (76-114)	SEMI-VOLATILE: NITRO-BENZENE-D5 (35-114)	SEMI-VOLATILE: 2-FLUORO-BIPHENYL (43-116)	SEMI-VOLATILE: TERPHENYL-D14 (33-141)	SEMI-VOLATILE:	SEMI-VOLATILE:	SEMI-VOLATILE: PHENOL-D5 (10-94)	SEMI-VOLATILE: 2-FLUORO-PHENOL (21-100)	SEMI-VOLATILE: 2,4,6 TRIBROMO-PHENOL (10-123)	PESTICIDE: DIBUTYL CHLORENDATE ** (24-154)
BLANK 9/9												99
EG821												101
EG821MS												42
EG821MSD												86
EG822												96
EG823												98
EG824												102
EG825												61
EG826												101
BLANK 9/16												100
EG821MSR												98
EG821MSDR												99
EG821MS/10R												93
EG821MSD/10R												93

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

Volatiles: — out of — ; outside of QC limits

Semi-Volatiles: — out of — ; outside of QC limits

Pesticides: 0 out of 14 ; outside of QC limits

Comments:

RECEIVED DEC 09 1986

FORM II 7/85

S S O TE . ERCENT RECOVERY SUMMARY

000004

Case No. 6402 Contract Laboratory CALIFORNIA WATER LABS Contract No. 68-01-7277

Low ✓ Medium _____

SMO TRAFFIC NO.	VOLATILE: TOLUENE-D8 (81-117)	VOLATILE: BFB (74-121)	VOLATILE: 1,2 DICHLORO-ETHANE-D4 (70-121)	SEMI-VOLATILE: NITRO-BENZENE-D5 (23-120)	SEMI-VOLATILE: 2-FLUORO-BIPHENYL (30-115)	SEMI-VOLATILE: TERPHENYL-D14 (18-137)			SEMI-VOLATILE: PHENOL-D5 (24-113)	SEMI-VOLATILE: 2-FLUORO-PHENOL (25-121)	SEMI-VOLATILE: 2,4,6 TRIBROMO-PHENOL (19-122)	PESTICIDE: DIBUTYL-CHLORENDATE ** (20-150)
EI125	105	77	96									
EI125RE				79	81	160 *			75	83	76	
EG809	114	72 *	92	78	75	91			80	84	66	
EG809R	121 *	94	93									
EG810	129 *	91	54 *	84	78	85			81	90	62	
EG810R	122 *	94	106									
EG811				87	75	89			78	90	70	
EG811R	114	87	97									
EG811MS	84	112	108									
EG811MSD	114	81	106									
EG827	112	86	105	95	79	119			66	86	64	
EG827MS				68	63	71			77	73	75	
EG827MSD				78	71	71			83	74	77	
EG828	110	86	106	66	83	84			78	88	48	
EG829	107	89	102									
EG829R				62	60	87			77	85	62	
EG830	113	82	44 *									
EG830R	122 *	67 *	82	77	75	94			77	94	61	
BLANK22				65	59	150 *			60	72	59	
BLANK26	95	95	96									
BLANK29	102	98	95									
BLANKV30	108	103	101									
BLANK30				71	71	191 *			75	75	57	

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

Volatiles: 8 out of 78 ; outside of QC limits

Semi-Volatiles: 3 out of 72 ; outside of QC limits

Pesticides: 0 out of 0 ; outside of QC limits

7/85

Comments: _____

FORM II

RECEIVED DEC 0 9 1986

RECOVERY SUMMARY

Case No. 6700 Contract Laboratory CALIFORNIA WATER LABS Contract No. 68-01-7277

000005

Low _____ Medium _____

SMO TRAFFIC NO.	VOLATILE: TOLUENE-D8 (81-117)	VOLATILE: BFB (74-121)	VOLATILE: 1,2 DICHLORO-ETHANE-D4 (70-121)	SEMI-VOLATILE: NITRO-BENZENE-D5 (23-120)	SEMI-VOLATILE: 2-FLUORO-BIPHENYL (30-116)	SEMI-VOLATILE: TERPHENYL-D14 (18-137)	SEMI-VOLATILE:	SEMI-VOLATILE:	SEMI-VOLATILE: PHENOL-D5 (24-113)	SEMI-VOLATILE: 2-FLUORO-PHENOL (25-121)	SEMI-VOLATILE: 2,4,6 TRIBROMO-PHENOL (19-122)	PESTICIDE: DIBUTYL-CHLORENDATE ** (20-150)
BLANK 9/15												93
EI 125												91
EG809												93
EG809/10												81
EG810												128
EG810/10												109
EG811												110
EG811/10												91
EG827												116
EG827/10												95
EG827ms												104
EG827ms/10												91
EG827msD												103
EG827msD/10												93
EG828												241 **
EG829												135
EG829/10												92
EG830												110

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

Volatiles: — out of — ; outside of QC limits

Semi-Volatiles: — out of — ; outside of QC limits

Pesticides: 1 out of 18 ; outside of QC limits

7/85

Comments:

FORM II

RECEIVED DEC 09 1986

000006

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 6402 Contractor CALIFORNIA WATER LABS Contract No. 68-01-7277

Low Level X Medium Level _____

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/Kg)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY
VOA SMO SAMPLE NO. EG 811R	1,1-Dicholorethene	50	0	64	128	61	122	4.8	22	59-172
	Trichloroethene		0	56	112	57	114	1.8	24	62-137
	Chlorobenzene		0	44	88	49	98	10.8	21	60-133
	Toluene		4.5	49	98	52	104	5.9	21	59-139
	Benzene		0	49	98	50	100	2.0	21	66-142
B/N SMO SAMPLE NO. EG 827	1,2,4-Trichlorobenzene	200	0	140	70	150	75	6.9	23	38-107
	Acenaphthene		0	150	75	160	80	6.5	19	31-137
	2,4 Dinitrotoluene		0	190	95*	190	95*	0	47	28-89
	Pyrene		0	160	80	150	75	6.5	36	35-142
	N-Nitrosodi-n-Propylamine		0	12	6*	27	14*	80*	38	41-126
	1,4-Dichlorobenzene		0	134	67	130	65	3	27	28-104
ACID SMO SAMPLE NO. EG 827	Pentachlorophenol	400	0	410	102	340	85	18	47	17-109
	Phenol		0	280	70	308	77	9.5	35	26-90
	2-Chlorophenol		0	310	78	327	82	5	50	25-102
	4-Chloro-3-Methylphenol		0	320	80	330	83	3.7	33	26-103
	4-Nitrophenol		0	640	160*	660	165*	3.1	50	11-114
PEST SMO SAMPLE NO. EG 827	Lindane	40	0	31.8	80	32	79	0.25	50	46-127
	Heptachlor	40	0	100	250*	73	182*	32*	31	35-130
	Aldrin	40	0	39.8	100	37	92	7.6	43	34-132
	Dieldrin	100	0	79.4	79	77	77	2.7	38	31-134
	Endrin	100	0	89.9	90	86	86	4.3	45	42-139
	4,4'-DDT	100	0	142	142*	132	132	7.3	50	23-134

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 0 out of 5 ; outside QC limits
B/N 1 out of 6 ; outside QC limits
ACID 0 out of 5 ; outside QC limits
PEST 1 out of 6 ; outside QC limits

RECOVERY: VOAs 0 out of 10 ; outside QC limits
B/N 4 out of 12 ; outside QC limits
ACID 2 out of 10 ; outside QC limits
PEST 3 out of 12 ; outside QC limits

Comments: _____

RECEIVED DEC 09 1986

FORM III

000007

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 6402 Contractor California Water Labs Contract No. 68-01-7277

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/L)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY
VOA SMO SAMPLE NO. EG821	1,1-Dichloroethene	50	0	40	80	59	118	38 *	14	61-145
	Trichloroethene		0	42	84	49	98	15 *	14	71-120
	Chlorobenzene		0	41	82	51	102	22 *	13	75-130
	Toluene		0	36	72 *	53	106	38 *	13	76-125
	Benzene		0	40	80	59	118	38 *	11	76-127
B/N SMO SAMPLE NO. EG821R	1,2,4-Trichlorobenzene	100	0	64	64	47	47	30 *	28	39-98
	Acenaphthene		0	90	90	51	51	55 *	31	46-118
	2,4 Dinitrotoluene		0	105	105 *	45	45	80 *	38	24-96
	Pyrene		0	130	130 *	100	100	26	31	26-127
	N-Nitroso-Di-n-Propylamine		0	7.6	7.6 *	2.7	2.7 *	95 *	38	41-116
	1,4-Dichlorobenzene		0	57	57	49	49	15	28	36-97
ACID SMO SAMPLE NO. EG821R	Pentachlorophenol	200	0	190	95	64	32	99 *	50	9-103
	Phenol		0	113	57	63	32	56 *	42	12-89
	2-Chlorophenol		0	120	60	110	55	8.7	40	27-123
	4-Chloro-3-Methylphenol		0	130	65	85	42	42	42	23-97
	4-Nitrophenol		0	370	185 *	186	93 *	66 *	50	10-80
PEST * SMO SAMPLE NO. EG821	Lindane	0.2	0	0.0902	45.1 *	0.208	104	79 *	15	56-123
	Heptachlor	0.2	0	0.0681	34.1 *	0.154	77	77 *	20	40-131
	Aldrin	0.2	0	0.101	51.0	0.193	96.5	62 *	22	40-120
	Dieldrin	0.5	0.005	0.239	46.7 *	0.155	31 *	40 *	18	52-126
	Endrin	0.5	0	0.219	43.8 *	0	0 *	200 *	21	56-121
	4,4'-DDT	0.5	0	0.248	49.6 *	0.596	119	82 *	27	38-127

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 5 out of 5 ; outside QC limits
B/N 4 out of 6 ; outside QC limits
ACID 3 out of 5 ; outside QC limits
PEST 6 out of 6 ; outside QC limits

RECOVERY: VOAs 1 out of 10 ; outside QC limits
B/N 4 out of 12 ; outside QC limits
ACID 2 out of 10 ; outside QC limits
PEST 6 out of 12 ; outside QC limits

Comments: * Bad matrix spike and matrix spike duplicate results caused by Endrin breaking down to Endrin Ketone. Pesticide matrix spike and matrix spike duplicate were re-extracted on 4/26/86, results of these spikes are on next page.

RECEIVED DEC 09 1986

FORM III 8/85

000008

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 6402 Contractor CALIFORNIA WATER LABS Contract No. 68-01-7277

FRACTION	COMPOUND	CONC. SPIKE ADDED (ug/L)	SAMPLE RESULT	CONC. MS	% REC	CONC. MSD	% REC	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY
VOA SMO SAMPLE NO.	1,1-Dichloroethene								14	61-145
	Trichloroethene								14	71-120
	Chlorobenzene								13	75-130
	Toluene								13	76-125
	Benzene								11	78-127
B/N SMO SAMPLE NO.	1,2,4-Trichlorobenzene								28	39-98
	Acenaphthene								31	46-118
	2,4 Dinitrotoluene								38	24-96
	Pyrene								31	26-127
	N-Nitroso-Di-n-Propylamine								38	41-116
	1,4-Dichlorobenzene								28	36-97
ACID SMO SAMPLE NO.	Pentachlorophenol								50	9-103
	Phenol								42	12-89
	2-Chlorophenol								40	27-123
	4-Chloro-3-Methylphenol								42	23-97
	4-Nitrophenol								50	10-80
PEST SMO SAMPLE NO.	Lindane	.2	Ø	.199	99.5	.209	104	4.4	15	56-123
	Heptachlor	.2	Ø	.196	98	.191	96	2.1	20	40-131
	Aldrin	.2	Ø	.227	114	.221	111	2.7	22	40-120
	Dieldrin	.5	.005	.535	106	.595	118	11	18	52-126
	Endrin	.5	Ø	.528	106	.533	107	9.4	21	56-121
EG 821	4,4'-DDT	.5	Ø	.745	*149	.703	*141	5.5	27	38-127

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs ____ out of ____ ; outside QC limits
B/N ____ out of ____ ; outside QC limits
ACID ____ out of ____ ; outside QC limits
PEST Ø out of 6 ; outside QC limits

RECOVERY: VOAs ____ out of ____ ; outside QC limits
B/N ____ out of ____ ; outside QC limits
ACID ____ out of ____ ; outside QC limits
PEST 2 out of 12 ; outside QC limits

Comments: matrix spike results for sc-extracted pesticide MS+MSD

RECEIVED DEC 09 1986

FORM III

0/85

METHOD BLANK SUMMARY

Case No. 6402 Region 5 Contractor CALIFORNIA WATER LABS Contract No. 68-01-7277

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRQL
BLANK 16	9/16/86	VOA	H_2O	L	#1	541-05-9	hexamethylcyclotrisiloxane	1	ug/L	none
							unknown	4		
BLANK 17	9/17/86						unknown	2		
BLANK 18	9/18/86	VOA	H_2O	L	#1		unknown	4	ug/L	none
BLANK 26	9/26/86		soil			67-64-1	acetone	9.5	ug/kg	10
						108-10-1	4-methyl-2-pentanone	2.7		10
						108-88-3	Toluene	1.2		5.0
BLANK 29	9/29/86					67-64-1	acetone	8.1		10
BLANK V30	9/30/86					75-09-2	methylene chloride	1.2		5
						67-64-1	acetone	34		10
							unknown	1		none
							unknown	1.2		none
BLANK 15	9/22/86	BNA	H_2O	L	#2		unknown	12	ug/L	
							unknown	142		
BLANK 25	10/1/86							6		
								4		
								9		
								3		
								13		

Comments:

RECEIVED DEC 09 1986

METHOD BLANK SUMMARY

Case No. 6402 Region 5 Contractor CALIFORNIA WATER LABS Contract No. 68-01-7277

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRQL
BLANK 25	10/1/86	BNA	H_2O	L	#2		unknown	27	ug/L	none
BLANK 10	10/14/86	↓	↓	↓	↓		↓	5.4	↓	↓
								3.4		
								4		
		↓	↓	↓	↓	6006-01-5	4,8,12-Trimethyl-3,7,11-Trideca-	131	↓	↓
							trienenitrile			
BLANK 22	9/24/86	BNA	Soil	L	#2		unknown	26	ug/Kg	none
		↓	↓	↓	↓		↓	54	↓	↓
								4		
								4		
								10		
		↓	↓	↓	↓		↓	24	↓	↓
BLANK 30	10/1/86	BNA	Soil	L	#2		unknown	4	ug/Kg	none
		↓	↓	↓	↓		↓	2	↓	↓
BLANK 9/19	9/25/86	PEST	H_2O	L	B		none found			
BLANK 9/26	10/7/86	↓	↓	↓	↓		none found			
BLANK 9/15	10/2/86	PEST	Soil	L	B		none found			

Comments:

RECEIVED DEC 09 1986

RECEIVED DEC 0 9 1986 000028

Sample Number
EI125

86-FL-10564

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Water Labs
Case No: 6402
Lab Sample ID No: C00287C
QC Report No:
Sample Matrix: Soil
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 09/10/86

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 09/26/86

Conc./Dil Factor: 1 pH 5.34

Percent Moisture: (Not Decanted) 14.5

CAS Number		ug/l or ~~ug/Kg~~ (Circle One)
74-87-3	Chloromethane	12. U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	4.7 J
67-64-1	Acetone	41. B
75-15-0	Carbon Disulfide	5.8 U
75-35-4	1, 1-Dichloroethene	
75-34-3	1, 1-Dichloroethane	
156-60-5	Trans-1, 2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1, 2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1, 1, 1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	12. U
75-27-4	Bromodichloromethane	5.8 U

CAS Number		ug/l or ~~ug/Kg~~ (Circle One)
78-87-5	1, 2-Dichloropropane	5.8 U
10061-02-6	Trans-1, 3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1, 1, 2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	12. U
75-25-2	Bromoform	5.8 U
591-78-6	4-Methyl-2-Pentanone	6.9 BJ
108-10-1	2-Hexanone	12. U
127-18-4	Tetrachloroethene	5.8 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	12. U
108-88-3	Toluene	2.7 BJ
108-90-7	Chlorobenzene	5.8 U
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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

Laboratory Name: CAL WATER LABS
Case No: 6402

Sample Number
EI125 RE

ORGANICS ANALYSIS DATA SHEET
(Page 2)

RECEIVED DEC 0 9 1986

SEMIVOLATILE COMPOUNDS

Concentration: LOW
Date Extracted/Prepared: 09/30/86
Date Analyzed: 10/01/86
Conc/Dil Factor: 1.
Percent Moisture: (Decanted) 14.5

GPC Cleanup X Yes ___ No
Separatory Funnel Extraction ___ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	390. U	83-32-9	Acenaphthene	390. U
111-44-4	bis(2-Chloroethyl)Ether	390. U	51-28-5	2,4-Dinitrophenol	1900. U
95-57-8	2-Chlorophenol	390. U	100-02-7	4-Nitrophenol	1900. U
541-73-1	1,3-Dichlorobenzene	390. U	132-64-9	Dibenzofuran	390. U
106-46-7	1,4-Dichlorobenzene	390. U	121-14-2	2,4-Dinitrotoluene	390. U
100-51-6	Benzyl Alcohol	390. U	606-20-2	2,6-Dinitrotoluene	390. U
95-50-1	1,2-Dichlorobenzene	390. U	84-66-2	Diethylphthalate	390. U
95-48-7	2-Methylphenol	390. U	7005-72-3	4-Chlorophenyl-phenylether	390. U
39638-32-9	bis(2-Chloroisopropyl)Ether	390. U	86-73-7	Fluorene	390. U
106-44-5	4-Methylphenol	390. U	100-10-6	4-Nitroaniline	1900. U
621-64-7	N-Nitroso-Di-n-Propylamine	390. U	534-52-1	4,6-Dinitro-2-Methylphenol	1900. U
67-72-1	Hexachloroethane	390. U	86-30-6	N-Nitrosodiphenylamine (1)	390. U
98-95-3	Nitrobenzene	390. U	101-55-3	4-Bromophenyl-phenylether	390. U
78-59-1	Isophorone	390. U	118-74-1	Hexachlorobenzene	390. U
88-75-5	2-Nitrophenol	390. U	87-86-5	Pentachlorophenol	1900. U
105-67-9	2,4-Dimethylphenol	390. U	85-01-8	Phenanthrene	390. U
65-85-0	Benzoic Acid	1900. U	120-12-7	Anthracene	390. U
111-91-1	bis(2-Chloroethoxy)Methane	390. U	84-74-2	Di-n-Butylphthalate	390. U
120-83-2	2,4-Dichlorophenol	390. U	206-44-0	Fluoranthene	390. U
120-82-1	1,2,4-Trichlorobenzene	390. U	129-00-0	Pyrene	390. U
91-20-3	Naphthalene	390. U	85-68-7	Butylbenzylphthalate	390. U
106-47-8	4-Chloroaniline	390. U	91-94-1	3,3'-Dichlorobenzidine	770. U
87-68-3	Hexachlorobutadiene	390. U	56-55-3	Benzo(a)Anthracene	390. U
59-50-7	4-Chloro-3-Methylphenol	390. U	117-81-7	bis(2-Ethylhexyl)Phthalate	390. U
91-57-6	2-Methylnaphthalene	390. U	218-01-9	Chrysene	390. U
77-47-4	Hexachlorocyclopentadiene	390. U	117-84-0	Di-n-Octyl Phthalate	390. U
88-06-2	2,4,6-Trichlorophenol	390. U	205-99-2	Benzo(b)Fluoranthene	390. U
95-95-4	2,4,5-Trichlorophenol	1900. U	207-08-9	Benzo(k)Fluoranthene	390. U
91-58-7	2-Chloronaphthalene	390. U	50-32-8	Benzo(a)Pyrene	390. U
88-74-4	2-Nitroaniline	1900. U	193-39-5	Indeno(1,2,3-cd)Pyrene	390. U
131-11-3	Dimethyl Phthalate	390. U	53-70-3	Dibenz(a,h)Anthracene	390. U
208-96-8	Acenaphthylene	390. U	191-24-2	Benzo(g,h,i)Perylene	390. U
99-09-2	3-Nitroaniline	1900. U			

(1) - Cannot be separated from diphenylamine

Laboratory Name CALIFORNIA TOXICOL LABS

Case No 6402

SAMPLE NUMBER
EI 125

RECEIVED DEC 0 9 1986

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCB'S

Concentration (Low) Medium (Circle One)

GPC Cleanup ✓ yes __ no

Date Extracted/Prepared 9/15/86

Separatory Funnel Extraction __ yes

Date Analyzed 10/2/86

Continuous Liquid Extraction __ yes

Conc/Dil Factor 1

Percent Moisture (decanted) 14.46

CAS NUMBER		Ug/l or (Ug/kg) (Circle one)
319-84-6	ALPHA-BHC	9.4
319-85-7	BETA-BHC	9.4
319-86-8	DELTA-BHC	9.4
58-89-9	GAMMA-BHC (LINDANE)	9.4
76-44-8	HEPTACHLOR	9.4
309-00-2	ALDRIN	9.4
1024-57-3	HEPTACHLOR EPOXIDE	9.4
959-98-8	ENDOSULFAN I	9.4
60-57-1	DIELDRIN	18.7
72-55-9	4 4'-DDE	18.7
72-20-8	ENDRIN	18.7
33213-65-9	ENDOSULFAN II	18.7
72-54-8	4 4'-DDD	18.7
1031-07-8	ENDOSULFAN SULFATE	18.7
50-29-3	4 4'DDT	18.7
72-43-5	METHOXYCHLOR	93.5
53494-70-5	ENDRIN KEYTONE	18.7
57-74-9	CHLORDANE	93.5
8001-35-2	TOXAPHENE	187
12674-11-2	AROCLOR-1016	93.5
11104-28-2	AROCLOR-1221	93.5
11141-16-5	AROCLOR-1232	93.5
53469-21-9	AROCLOR-1242	93.5
12672-29-6	AROCLOR-1248	93.5
11097-69-1	AROCLOR-1254	187
11096-82-5	AROCLOR-1260	187

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 _____ or W/s 30.21 G V/t 2000 ul V/i 5 ul

Laboratory Name CALIFORNIA WATER LABS

Case No 6462

31

Sample Number EI125

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. 109-99-9	TETRAHYDROFURAN	VOA	174	1
2. 110-54-3	HEXANE		359	1
3. 66-25-1	HEXANAL		448	<10%
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name CALIFORNIA WATER LAB

Case No 6402

000032

Sample Number EI 125 RE

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. —	UNKNOWN	BNA	363	98
12. —	↓		389	59
13. 3240-09-3	5-METHYL-5-HEXEN-2-ONE		427	78
14. 18641-71-9	2,4-DIMETHYL-3-HEPTANONE		509	137
15. —	UNKNOWN		1417	70
16. —	UNKNOWN HYDROCARBON		1423	44
17. 57-10-3	HEXADECANOIC ACID		1526	136
18. —	UNKNOWN		2018	69
19. —	UNKNOWN HYDROCARBON		2130	218
20. —	↓		2235	400
21. —	UNKNOWN		2332	182
22. —	UNKNOWN HYDROCARBON		2342	109
23. —	UNKNOWN		2358	418
24				
25.				
26				
27.				
28.				
29.				
30				

Sample Number 000074
EG809

Organics Analysis Data Sheet
(Page 1)

RECEIVED DEC 09 1986

Laboratory Name: California Water Labs
Case No: 6402
Lab Sample ID No: C0002970
QC Report No:
Sample Matrix: Soil
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 09/10/86

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 9/26/86

Conc/Dil Factor: 1 pH 6.5

Percent Moisture: (Not Decanted) 10.8

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	11. U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	9.7
67-64-1	Acetone	38. B
75-15-0	Carbon Disulfide	5.6 U
75-35-4	1, 1-Dichloroethene	
75-34-3	1, 1-Dichloroethane	
156-60-5	Trans-1, 2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1, 2-Dichloroethane	
78-93-3	2-Butanone	~~7.1 BJ~~ 11.U DCM
71-55-6	1, 1, 1-Trichloroethane	5.6 U
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	11. U
75-27-4	Bromodichloromethane	5.6 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5.6 U
10061-02-6	Trans-1, 3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1, 1, 2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	11. U
75-25-2	Bromoform	5.6 U
591-78-6	4-Methyl-2-Pentanone	11. U
108-10-1	2-Hexanone	11. U
127-18-4	Tetrachloroethene	5.6 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	11. U
108-88-3	Toluene	4.8 BJ
108-90-7	Chlorobenzene	5.6 U
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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.

000075

Sample Number
EG809K

RECEIVED ... 0 0 1986

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Water Labs
Case No: 6402
Lab Sample ID No: C00029 VOA
QC Report No:
Sample Matrix: SOIL
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 09/10/86

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 09/26/86

Conc./Dil Factor: 1 pH 6.5

Percent Moisture: (Not Decanted) 10.8

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	11. U
74-83-9	Bromomethane	↓
75-01-4	Vinyl Chloride	↓
75-00-3	Chloroethane	↓
75-09-2	Methylene Chloride	5.2 J
67-64-1	Acetone	37. B
75-15-0	Carbon Disulfide	5.6 U
75-35-4	1, 1-Dichloroethene	↓
75-34-3	1, 1-Dichloroethane	↓
156-60-5	Trans-1, 2-Dichloroethene	↓
67-66-3	Chloroform	↓
107-06-2	1, 2-Dichloroethane	↓
78-93-3	2-Butanone	6.6 BJ
71-55-6	1, 1, 1-Trichloroethane	5.6 U
56-23-5	Carbon Tetrachloride	↓
108-05-4	Vinyl Acetate	11. U
75-27-4	Bromodichloromethane	5.6 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5.6 U
10061-02-6	Trans-1, 3-Dichloropropene	↓
79-01-6	Trichloroethene	↓
124-48-1	Dibromochloromethane	↓
79-00-5	1, 1, 2-Trichloroethane	↓
71-43-2	Benzene	↓
10061-01-5	cis-1, 3-Dichloropropene	↓
110-75-8	2-Chloroethylvinylether	11. U
75-25-2	Bromoform	5.6 U
591-78-6	4-Methyl-2-Pentanone	11. U
108-10-1	2-Hexanone	~~5.6 U~~ 11 U DCM
127-18-4	Tetrachloroethene	↓
79-34-5	1, 1, 2, 2-Tetrachloroethane	11. U
108-88-3	Toluene	6.1 B
108-90-7	Chlorobenzene	5.6 U
100-41-4	Ethylbenzene	↓
100-42-5	Styrene	↓
	Total Xylenes	↓

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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.

RECEIVED DEC 0 9 1986 000076

ıboratory Name: CAL WATER LABS
ıse No: 6402

Sample Number
E6809

ORGANICS ANALYSIS DATA SHEET
(Page 2)

SEMIVOLATILE COMPOUNDS

Concentration: LOW
te Extracted/Prepared: 09/15/86
te Analyzed: 09/24/86
Conc/Dil Factor: 1.
Percent Moisture: (Decanted) 10.8

GPC Cleanup X Yes ___ No
Separatory Funnel Extraction ___ Yes
Continuous Liquid-Liquid Extraction ___ Yes

S Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	370. U	83-32-9	Acenaphthene	370. U
1-44-4	bis(2-Chloroethyl)Ether	370. U	51-28-5	2,4-Dinitrophenol	1800. U
-57-8	2-Chlorophenol	370. U	100-02-7	4-Nitrophenol	1800. U
541-73-1	1,3-Dichlorobenzene	370. U	132-64-9	Dibenzofuran	370. U
6-46-7	1,4-Dichlorobenzene	370. U	121-14-2	2,4-Dinitrotoluene	370. U
)-51-6	Benzyl Alcohol	370. U	606-20-2	2,6-Dinitrotoluene	370. U
95-50-1	1,2-Dichlorobenzene	370. U	84-66-2	Diethylphthalate	370. U
95-48-7	2-Methylphenol	370. U	7005-72-3	4-Chlorophenyl-phenylether	370. U
38-32-9	bis(2-Chloroisopropyl)Ether	370. U	86-73-7	Fluorene	370. U
-44-5	4-Methylphenol	370. U	100-10-6	4-Nitroaniline	1800. U
621-64-7	N-Nitroso-Di-n-Propylamine	370. U	534-52-1	4,6-Dinitro-2-Methylphenol	1800. U
72-1	Hexachloroethane	370. U	86-30-6	N-Nitrosodiphenylamine (1)	370. U
95-3	Nitrobenzene	370. U	101-55-3	4-Bromophenyl-phenylether	370. U
78-59-1	Isophorone	370. U	118-74-1	Hexachlorobenzene	370. U
75-5	2-Nitrophenol	370. U	87-86-5	Pentachlorophenol	1800. U
-67-9	2,4-Dimethylphenol	370. U	85-01-8	Phenanthrene	370. U
85-0	Benzoic Acid	1800. U	120-12-7	Anthracene	370. U
-91-1	bis(2-Chloroethoxy)Methane	370. U	84-74-2	Di-n-Butylphthalate	370. U
-83-2	2,4-Dichlorophenol	370. U	206-44-0	Fluoranthene	370. U
-82-1	1,2,4-Trichlorobenzene	370. U	129-00-0	Pyrene	370. U
1-20-3	Naphthalene	370. U	85-68-7	Butylbenzylphthalate	370. U
-47-8	4-Chloroaniline	370. U	91-94-1	3,3'-Dichlorobenzidine	740. U
68-3	Hexachlorobutadiene	370. U	56-55-3	Benzo(a)Anthracene	370. U
9-50-7	4-Chloro-3-Methylphenol	370. U	117-81-7	bis(2-Ethylhexyl)Phthalate	59. J
37-6	2-Methylnaphthalene	370. U	218-01-9	Chrysene	370. U
7-4	Hexachlorocyclopentadiene	370. U	117-84-0	Di-n-Octyl Phthalate	370. U
06-2	2,4,6-Trichlorophenol	370. U	205-99-2	Benzo(b)Fluoranthene	370. U
5-95-4	2,4,5-Trichlorophenol	1800. U	207-08-9	Benzo(k)Fluoranthene	370. U
8-7	2-Chloronaphthalene	370. U	50-32-8	Benzo(a)Pyrene	370. U
4-4	2-Nitroaniline	1800. U	193-39-5	Indeno(1,2,3-cd)Pyrene	370. U
31-11-3	Dimethyl Phthalate	370. U	53-70-3	Dibenz(a,h)Anthracene	370. U
96-8	Acenaphthylene	370. U	191-24-2	Benzo(g,h,i)Perylene	370. U
9-2	3-Nitroaniline	1800. U			

) - Cannot be separated from diphenylamine

Form I

000077

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

SAMPLE NUMBER
EG 809/10

RECEIVED DEC 0 9 1986

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCB'S

Concentration (Low) Medium (Circle One)

GPC Cleanup ✓ yes __ no

Date Extracted/Prepared 9/15/86

Separatory Funnel Extraction __ yes

Date Analyzed 10/3/86

Continuous Liquid Extraction __ yes

Conc/Dil Factor 10

Percent Moisture (decanted) __ 10.8 ___

CAS NUMBER		Ug/l or (Ug/kg) (Circle one)
319-84-6	ALPHA-BHC	9.0
319-85-7	BETA-BHC	~~9.0~~ 48.1 SS
319-86-8	DELTA-BHC	9.0
58-89-9	GAMMA-BHC (LINDANE)	9.0
76-44-8	HEPTACHLOR	9.0
309-00-2	ALDRIN	9.0
1024-57-3	HEPTACHLOR EPOXIDE	9.0
959-98-8	ENDOSULFAN I	9.0
60-57-1	DIELDRIN	17.9
72-55-9	4 4'-DDE	17.9
72-20-8	ENDRIN	17.9
33213-65-9	ENDOSULFAN II	17.9
72-54-8	4 4'-DDD	17.9
1031-07-8	ENDOSULFAN SULFATE	17.9
50-29-3	4 4'DDT	17.9
72-43-5	METHOXYCHLOR	89.7
53494-70-5	ENDRIN KEYTONE	17.9
57-74-9	CHLORDANE	89.7
8001-35-2	TOXAPHENE	179
12674-11-2	AROCLOR-1016	89.7
11104-28-2	AROCLOR-1221	89.7
11141-16-5	AROCLOR-1232	89.7
53469-21-9	AROCLOR-1242	89.7
12672-29-6	AROCLOR-1248	89.7
11097-69-1	AROCLOR-1254	179
11096-82-5	AROCLOR-1260	179

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 _____ or W/s 30.56 g V/t 2000 ml V/i 5 ul

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

000078

Sample Number EG 809

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	75-05-8	ACETONITRILE	VOA	80	1
2.	109-99-9	TETRAHYDROFURAN	↓	176	1
3.	—	UNKNOWN	↓	359	2
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.	98-82-8	(1-METHYLETHYL) BENZENE	BNA	427	191
12.	—	UNKNOWN HYDROCARBON		689	168
13.	—	↓		928	239
14.	54105-67-8	2,6-DIMETHYL HEPTADECANE		1034	257
15.	—	UNKNOWN		1134	299
16.	—	UNKNOWN HYDROCARBON		1229	264
17.	—	↓		1319	276
18.	—	UNKNOWN HYDROCARBON		1324	337
19.	—	UNKNOWN HYDROCARBON		1404	237
20.	54833-48-6	2,6,10,15-TETRAMETHYL HEPTADECANE		1412	176
21.	544-76-3	HEXADECANE		1486	221
22.	—	UNKNOWN		1534	132
23.	—	UNKNOWN HYDROCARBON		1563	193
24.	—	UNKNOWN HYDROCARBON		1638	333
25.	629-97-0	DOCOSANE		1709	253
26.	—	UNKNOWN		1778	204
27.	—	UNKNOWN HYDROCARBON		1843	192
28.	—			1907	171
29.	—			2138	225
30.	—	↓	↓	2243	253

Laboratory Name CALIFORNIA WATER LABS

Case No

000079

Sample Number
EC-809R

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VOA	51	1.2
2. 109-99-9	TETRAHYDRO FURAN	↓	175	1.
3. 110-54-3	HEXANE	↓	359	2.2
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26				
27.				
28.				
29.				
30				

RECEIVED DEC 0 9 1986 000144

Sample Number
EG-81C

86FL10566

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Water Labs
Case No: 6402
Lab Sample ID No: C0C030V6
QC Report No:
Sample Matrix: SOIL
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 09/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 9/26/86

Conc./Dil Factor: 1 pH 7.0

Percent Moisture: (Not Decanted) 16.3

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	12. U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	6.0 U
67-64-1	Acetone	59. B
75-15-0	Carbon Disulfide	6.0 U
75-35-4	1, 1-Dichloroethene	
75-34-3	1, 1-Dichloroethane	
156-60-5	Trans-1, 2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1, 2-Dichloroethane	
78-93-3	2-Butanone	
71-55-6	1, 1, 1-Trichloroethane	
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	12. U
75-27-4	Bromodichloromethane	6.0 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	6.0 U
10061-02-6	Trans-1, 3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1, 1, 2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	12. U
75-25-2	Bromoform	6.0 U
591-78-6	4-Methyl-2-Pentanone	12. U
108-10-1	2-Hexanone	
127-18-4	Tetrachloroethene	6.0 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	12. U
108-88-3	Toluene	3.2 J
108-90-7	Chlorobenzene	6.0 U
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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.

000145

Sample Number
EG81CK

RECEIVED DEC 09 1986

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: CALIFORNIA WATER LABS
Case No: 6402
Lab Sample ID No: CCOC30VOA
QC Report No:
Sample Matrix: SOIL
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 09/10/86

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 09/26/86
Conc./Dil Factor: 1 pH 7.0
Percent Moisture: (Not Decanted) 16.3

CAS Number		ug/l or (ug/Kg) (Circle One)
74-87-3	Chloromethane	12. U
74-83-9	Bromomethane	↓
75-01-4	Vinyl Chloride	↓
75-00-3	Chloroethane	↓
75-09-2	Methylene Chloride	3.0 J
67-64-1	Acetone	73. B
75-15-0	Carbon Disulfide	6.0 U
75-35-4	1, 1-Dichloroethene	↓
75-34-3	1, 1-Dichloroethane	↓
156-60-5	Trans-1, 2-Dichloroethene	↓
67-66-3	Chloroform	↓
107-06-2	1, 2-Dichloroethane	↓
78-93-3	2-Butanone	12. U
71-55-6	1, 1, 1-Trichloroethane	6.0 U
56-23-5	Carbon Tetrachloride	↓
108-05-4	Vinyl Acetate	12. U
75-27-4	Bromodichloromethane	6.0 U

CAS Number		ug/l or (ug/Kg) (Circle One)
78-87-5	1, 2-Dichloropropane	6.0 U
10061-02-6	Trans-1, 3-Dichloropropene	↓
79-01-6	Trichloroethene	↓
124-48-1	Dibromochloromethane	↓
79-00-5	1, 1, 2-Trichloroethane	↓
71-43-2	Benzene	↓
10061-01-5	cis-1, 3-Dichloropropene	↓
110-75-8	2-Chloroethylvinylether	12. U
75-25-2	Bromoform	6.0 U
591-78-6	4-Methyl-2-Pentanone	12. U
108-10-1	2-Hexanone	↓
127-18-4	Tetrachloroethene	6.0 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	12. U
108-88-3	Toluene	3.1 BJ
108-90-7	Chlorobenzene	6.0 U
100-41-4	Ethylbenzene	↓
100-42-5	Styrene	↓
	Total Xylenes	↓

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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.

RECEIVED DEC 0 9 1986

L oratory Name: CAL WATER LABS
C e No: 6402

Sample Number
EG810

ORGANICS ANALYSIS DATA SHEET
(Page 2)

SEMIVOLATILE COMPOUNDS

Concentration: LOW
D e Extracted/Prepared: 09/15/86
D e Analyzed: 09/24/86
Conc/Dil Factor: 1.
P cent Moisture: (Decanted) 16.3

GPC Cleanup X Yes ___ No
Separatory Funnel Extraction ___ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/KG	CAS Number		UG/KG
1 -95-2	Phenol	390. U	83-32-9	Acenaphthene	390. U
1 -44-4	bis(2-Chloroethyl)Ether	390. U	51-28-5	2,4-Dinitrophenol	1900. U
9 5Z-8	2-Chlorophenol	390. U	100-02-7	4-Nitrophenol	1900. U
541-73-1	1,3-Dichlorobenzene	390. U	132-64-9	Dibenzofuran	390. U
-46-7	1,4-Dichlorobenzene	390. U	121-14-2	2,4-Dinitrotoluene	390. U
-51-6	Benzyl Alcohol	390. U	606-20-2	2,6-Dinitrotoluene	390. U
5-50-1	1,2-Dichlorobenzene	390. U	84-66-2	Diethylphthalate	390. U
48-7	2-Methylphenol	390. U	7005-72-3	4-Chlorophenyl-phenylether	390. U
38-32-9	bis(2-Chloroisopropyl)Ether	390. U	86-73-7	Fluorene	390. U
06-44-5	4-Methylphenol	390. U	100-10-6	4-Nitroaniline	1900. U
-64-7	N-Nitroso-Di-n-Propylamine	390. U	534-52-1	4,6-Dinitro-2-Methylphenol	1900. U
72-1	Hexachloroethane	390. U	86-30-6	N-Nitrosodiphenylamine (1)	12. J
5-3	Nitrobenzene	390. U	101-55-3	4-Bromophenyl-phenylether	390. U
8-59-1	Isophorone	390. U	118-74-1	Hexachlorobenzene	390. U
5-5	2-Nitrophenol	390. U	87-86-5	Pentachlorophenol	1900. U
67-9	2,4-Dimethylphenol	390. U	85-01-8	Phenanthrene	390. U
5-85-0	Benzoic Acid	1900. U	120-12-7	Anthracene	390. U
1 91-1	bis(2-Chloroethoxy)Methane	390. U	84-74-2	Di-n-Butylphthalate	390. U
2 83-2	2,4-Dichlorophenol	390. U	206-44-0	Fluoranthene	390. U
2 -82-1	1,2,4-Trichlorobenzene	390. U	129-00-0	Pyrene	390. U
1-20-3	Naphthalene	390. U	85-68-7	Butylbenzylphthalate	390. U
0 47-8	4-Chloroaniline	390. U	91-94-1	3,3'-Dichlorobenzidine	790. U
7 8-3	Hexachlorobutadiene	390. U	56-55-3	Benzo(a)Anthracene	390. U
9-50-7	4-Chloro-3-Methylphenol	390. U	117-81-7	bis(2-Ethylhexyl)Phthalate	97. J
1 7-6	2-Methylnaphthalene	390. U	218-01-9	Chrysene	390. U
7 7-4	Hexachlorocyclopentadiene	390. U	117-84-0	Di-n-Octyl Phthalate	390. U
3-06-2	2,4,6-Trichlorophenol	390. U	205-99-2	Benzo(b)Fluoranthene	390. U
5 5-4	2,4,5-Trichlorophenol	1900. U	207-08-9	Benzo(k)Fluoranthene	390. U
8-7	2-Chloronaphthalene	390. U	50-32-8	Benzo(a)Pyrene	390. U
-4-4	2-Nitroaniline	1900. U	193-39-5	Indeno(1,2,3-cd)Pyrene	390. U
1-11-3	Dimethyl Phthalate	390. U	53-70-3	Dibenz(a,h)Anthracene	390. U
96-8	Acenaphthylene	390. U	191-24-2	Benzo(g,h,i)Perylene	390. U
9-2	3-Nitroaniline	1900. U			

) - Cannot be separated from diphenylamine

Laboratory Name CALIFORNIA WATER LABS

Case No 6492

SAMPLE NUMBER
EG 810/10

RECEIVED DEC 09 1986

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCB'S

Concentration (Low) Medium (Circle One)

GPC Cleanup ✓ yes __ no

Date Extracted/Prepared 9/15/86

Separatory Funnel Extraction __ yes

Date Analyzed 10/7/86

Continuous Liquid Extraction __ yes

Conc/Dil Factor 1.0

Percent Moisture (decanted) 16.28

CAS NUMBER		Ug/l or (Ug/kg) (Circle one)
319-84-6	ALPHA-BHC	9.6 u
319-85-7	BETA-BHC	~~9.6~~ 129. SS
319-86-8	DELTA-BHC	9.6 u
58-89-9	GAMMA-BHC (LINDANE)	9.6
76-44-8	HEPTACHLOR	9.6
309-00-2	ALDRIN	9.6
1024-57-3	HEPTACHLOR EPOXIDE	9.6
959-98-8	ENDOSULFAN I	9.6
60-57-1	DIELDRIN	19.1
72-55-9	4 4'-DDE	19.1
72-20-8	ENDRIN	19.1
33213-65-9	ENDOSULFAN II	19.1
72-54-8	4 4'-DDD	19.1
1031-07-8	ENDOSULFAN SULFATE	19.1
50-29-3	4 4'DDT	19.1
72-43-5	METHOXYCHLOR	95.5
53494-70-5	ENDRIN KEYTONE	19.1
57-74-9	CHLORDANE	95.5
8001-35-2	TOXAPHENE	191
12674-11-2	AROCLOR-1016	95.5
11104-28-2	AROCLOR-1221	95.5
11141-16-5	AROCLOR-1232	95.5
53469-21-9	AROCLOR-1242	95.5
12672-29-6	AROCLOR-1248	95.5
11097-69-1	AROCLOR-1254	191
11096-82-5	AROCLOR-1260	191

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 _____ or W/s 30.19 V/t 2.000 ml V/i 5 ul

Laboratory Name CALIFORNIA WATER LABS

Case No 6462

000148

Sample Number EG510

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ~~ug/kg~~)
1. 78-78-4	2-METHYL BUTANE	VOA	196	1.2
2. 110-54-3	HEXANE	↓	358	2
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. —	UNKNOWN	BNA	343	226
12. —	↓		397	142
13. 98-82-8	(1-METHYLETHYL) BENZENE		419	218
14. —	UNKNOWN HYDROCARBON		687	181
15. —	↓		812	214
16. 62108-26-3	2,6,8-TRIMETHYLDECANE		829	154
17. —	UNKNOWN HYDROCARBON		927	255
18. —			1034	268
19. —			1134	261
20. —	↓		1229	214
21. 934-34-9	2(3H)-BENZOTHIAZALONE		1300	625
22. 54105-67-8	2,6-DIMETHYLHEPTADECANE		1324	233
23. 544-76-3	HEXADECANE		1404	147
24. —	UNKNOWN HYDROCARBON		1485	147
25. 14024-17-0	MOL. (S8) SULFUR		1586	331
26. —	UNKNOWN		1637	396
27. —	UNKNOWN HYDROCARBON		1777	212
28. —	↓		1843	132
29. —	UNKNOWN		1855	3939
30. —	UNKNOWN HYDROCARBON	↓	2138	359

Laboratory Name CALIFORNIA WATER LABS

Case No

000149

Sample Number
EG-810 K

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VOA	53	1
2. 25910-96-7	2,2,3-TRIMETHYL-3-OXETANOL	↓	113	1.4
3. 109-99-9	TETRAHYDROFURAN	↓	176	1
4. —	UNKNOWN	↓	359	2
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

RECEIVED DEC 0 9 1986

000214
Sample Number
EC 811 K

86FL10567

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: CALIFORNIA WATER LABS
Case No: 6402
Lab Sample ID No: C0003170G
QC Report No:
Sample Matrix: SOIL
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 9/10/86

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 9/29/86

Conc./Dil Factor: 1 pH 6.5

Percent Moisture: (Not Decanted) 13.6

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	12. U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	4.3 J
67-64-1	Acetone	169. B
75-15-0	Carbon Disulfide	5.8 U
75-35-4	1, 1-Dichloroethene	
75-34-3	1, 1-Dichloroethane	
156-60-5	Trans-1, 2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1, 2-Dichloroethane	
78-93-3	2-Butanone	12. U
71-55-6	1, 1, 1-Trichloroethane	5.8 U
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	12. U
75-27-4	Bromodichloromethane	5.8 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5.8 U
10061-02-6	Trans-1, 3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1, 1, 2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	12. U
75-25-2	Bromoform	5.8 U
591-78-6	4-Methyl-2-Pentanone	12. U
108-10-1	2-Hexanone	
127-18-4	Tetrachloroethene	5.8 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	12. U
108-88-3	Toluene	4.5 J
108-90-7	Chlorobenzene	5.8 U
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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.

aboratory Name: CAL WATER LABS
ase No: 6402

Sample Number
EG811

ORGANICS ANALYSIS DATA SHEET
(Page 2)

RECEIVED DEC 0 9 1986

SEMIVOLATILE COMPOUNDS

Concentration: LOW
ite Extracted/Prepared: 09/15/86
ite Analyzed: 09/24/86
onc/Dil Factor: 1.
Percent Moisture: (Decanted) 13.6

GPC Cleanup X Yes ___ No
Separatory Funnel Extraction ___ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	380. U	83-32-9	Acenaphthene	380. U
1-44-4	bis(2-Chloroethyl)Ether	380. U	51-28-5	2,4-Dinitrophenol	1900. U
-57-8	2-Chlorophenol	380. U	100-02-7	4-Nitrophenol	1900. U
541-73-1	1,3-Dichlorobenzene	380. U	132-64-9	Dibenzofuran	380. U
6-46-7	1,4-Dichlorobenzene	380. U	121-14-2	2,4-Dinitrotoluene	380. U
0-51-6	Benzyl Alcohol	380. U	606-20-2	2,6-Dinitrotoluene	380. U
-50-1	1,2-Dichlorobenzene	380. U	84-66-2	Diethylphthalate	380. U
95-48-7	2-Methylphenol	380. U	7005-72-3	4-Chlorophenyl-phenylether	380. U
638-32-9	bis(2-Chloroisopropyl)Ether	380. U	86-73-7	Fluorene	380. U
6-44-5	4-Methylphenol	380. U	100-10-6	4-Nitroaniline	1900. U
621-64-7	N-Nitroso-Di-n-Propylamine	380. U	534-52-1	4,6-Dinitro-2-Methylphenol	1900. U
-72-1	Hexachloroethane	380. U	86-30-6	N-Nitrosodiphenylamine (1)	380. U
-95-3	Nitrobenzene	380. U	101-55-3	4-Bromophenyl-phenylether	380. U
78-59-1	Isophorone	380. U	118-74-1	Hexachlorobenzene	380. U
-75-5	2-Nitrophenol	380. U	87-86-5	Pentachlorophenol	1900. U
5-67-9	2,4-Dimethylphenol	380. U	85-01-8	Phenanthrene	380. U
-85-0	Benzoic Acid	1900. U	120-12-7	Anthracene	380. U
111-91-1	bis(2-Chloroethoxy)Methane	380. U	84-74-2	Di-n-Butylphthalate	380. U
0-83-2	2,4-Dichlorophenol	380. U	206-44-0	Fluoranthene	380. U
0-82-1	1,2,4-Trichlorobenzene	380. U	129-00-0	Pyrene	380. U
91-20-3	Naphthalene	380. U	85-68-7	Butylbenzylphthalate	380. U
5-47-8	4-Chloroaniline	380. U	91-94-1	3,3'-Dichlorobenzidine	760. U
-68-3	Hexachlorobutadiene	380. U	56-55-3	Benzo(a)Anthracene	380. U
59-50-7	4-Chloro-3-Methylphenol	380. U	117-81-7	bis(2-Ethylhexyl)Phthalate	~~63. J~~ 1280.
91-57-6	2-Methylnaphthalene	380. U	218-01-9	Chrysene	380. U
-47-4	Hexachlorocyclopentadiene	380. U	117-84-0	Di-n-Octyl Phthalate	380. U
-06-2	2,4,6-Trichlorophenol	380. U	205-99-2	Benzo(b)Fluoranthene	380. U
95-95-4	2,4,5-Trichlorophenol	1900. U	207-08-9	Benzo(k)Fluoranthene	380. U
-58-7	2-Chloronaphthalene	380. U	50-32-8	Benzo(a)Pyrene	380. U
-74-4	2-Nitroaniline	1900. U	193-39-5	Indeno(1,2,3-cd)Pyrene	380. U
131-11-3	Dimethyl Phthalate	380. U	53-70-3	Dibenz(a,h)Anthracene	380. U
1-96-8	Acenaphthylene	380. U	191-24-2	Benzo(g,h,i)Perylene	380. U
-09-2	3-Nitroaniline	1900. U			

1) - Cannot be separated from diphenylamine

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

SAMPLE NUMBER

E6 811/10

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

RECEIVED DEC 0 9 1986

PESTICIDE/PCB'S

Concentration Low Medium (Circle One)

GPC Cleanup ✓ yes __ no

Date Extracted/Prepared 9/15/86

Separatory Funnel Extraction __ yes

Date Analyzed 10/3/86

Continuous Liquid Extraction __ yes

Conc/Dil Factor 10

Percent Moisture (decanted) 13.62

CAS NUMBER		Ug/l or Ug/kg (Circle one)
319-84-6	ALPHA-BHC	9.3
319-85-7	BETA-BHC	~~9.3~~ 34.0 SS
319-86-8	DELTA-BHC	9.3
58-89-9	GAMMA-BHC (LINDANE)	9.3
76-44-8	HEPTACHLOR	9.3
309-00-2	ALDRIN	9.3
1024-57-3	HEPTACHLOR EPOXIDE	9.3
959-98-8	ENDOSULFAN I	9.3
60-57-1	DIELDRIN	18.5
72-55-9	4 4'-DDE	18.5
72-20-8	ENDRIN	18.5
33213-65-9	ENDOSULFAN II	18.5
72-54-8	4 4'-DDD	18.5
1031-07-8	ENDOSULFAN SULFATE	18.5
50-29-3	4 4'DDT	18.5
72-43-5	METHOXYCHLOR	92.6
53494-70-5	ENDRIN KEYTONE	18.5
57-74-9	CHLORDANE	92.6
8001-35-2	TOXAPHENE	185
12674-11-2	AROCLOR-1016	92.6
11104-28-2	AROCLOR-1221	92.6
11141-16-5	AROCLOR-1232	92.6
53469-21-9	AROCLOR-1242	92.6
12672-29-6	AROCLOR-1248	92.6
11097-69-1	AROCLOR-1254	185
11096-82-5	AROCLOR-1260	185

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 _____ or W/s 30.12 G V/t 2000 ul V/i 5 ul

aboratory Name CALIFORNIA WATER LABS

a No 64102

000217

Sample Number
EG 811 R

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

	CAS umber	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1	—	/ / /	N	115	
2	—				/
3.					

000267

86FL10574

RECEIVED DEC 0 9 1986

Sample Number
EG821

ORGANICS ANALYSIS DATA SHEET

(Page 1)

Laboratory Name: CAL WATER LABS
Lab Sample ID No: C00036VO
Sample Matrix: WATER
Data Release Authorized By: B. Tyson

Case No: 6402
QC Report No:
Contract No: 68-01-7277
Date Sample Received: 09/11/86

VOLATILE COMPOUNDS

Concentration: LOW
Date Extracted/Prepared:
Date Analyzed: 09/16/86
Conc/Dil Factor: 1. pH 7.0
Percent Moisture: (Not Decanted)

CAS Number		UG/L	CAS Number		UG/L
1-87-3	Chloromethane	10. U	78-87-5	1,2-Dichloropropane	5.0U
1-83-9	Bromomethane	10. U	10061-02-6	Trans-1,3-Dichloroproene	5.0U
75-01-4	Vinyl Chloride	10. U	79-01-6	Trichloroethene	5.0U
75-00-3	Chloroethane	10. U	124-48-1	Dibromochloromethane	5.0U
5-09-2	Methylene Chloride	5.0U	79-00-5	1,1,2-Trichloroethane	5.0U
7-64-1	Acetone	10. U	71-43-2	Benzene	5.0U
75-15-0	Carbon Disulfide	5.0U	10061-01-5	cis-1,3-Dichloropropene	5.0U
-35-4	1,1-Dichloroethene	5.0U	110-75-8	2-Chloroethylvinylether	10. U
-35-3	1,1-Dichloroethane	5.0U	75-25-2	Bromoform	5.0U
156-60-5	Trans-1,2-Dichloroethene	5.0U	591-78-6	2-Hexanone	10. U
7-66-3	Chloroform	5.0U	108-10-1	4-Methyl-2-Pentanone	10. U
07-06-2	1,2-Dichloroethane	5.0U	127-18-4	Tetrachloroethene	5.0U
78-93-3	2-Butanone	10. U	79-34-5	1,1,2,2-Tetrachloroethane	10. U
71-55-6	1,1,1-Trichloroethane	5.0U	108-88-3	Toluene	5.0U
5-23-5	Carbon Tetrachloride	5.0U	108-90-7	Chlorobenzene	5.0U
08-05-4	Vinyl Acetate	10. U	100-41-4	Ethylbenzene	5.0U
75-27-4	Bromodichloromethane	5.0U	100-42-5	Styrene	5.0U
				Total Xylenes	5.0U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

See page 1A for complete definitions of the data reporting qualifiers.

Form I

000271

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

Sample Number EG321

Organics Analysis Data Sheet
(Page 3)

RECEIVED DEC 0 9 1986

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 9/15/86

Date Analyzed: 9/25/86

Conc/Dil Factor: 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4,4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4,4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4,4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.00u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.00u
11096-82-5	Aroclor-1260	1.00u

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 500 mL or W_s 5000 uL V_t _____ V_i 5uL

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

000272

Sample Number

EG 821

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VOA	173	4
2. —	UNKNOWN	↓	1331	1
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

boratory Name: CAL WATER LABS
se No: 6402

Sample Number
ES822 R

ORGANICS ANALYSIS DATA SHEET
(Page 2)

RECEIVED DEC 0 9 1986

SEMIVOLATILE COMPOUNDS

Concentration: LOW
te Extracted/Prepared: 09/25/86
te Analyzed: 09/26/86
Conc/Dil Factor: 1.
rcent Moisture: (Decanted) _____

GPC Cleanup ___ Yes _X_ No
Separatory Funnel Extraction _X_ Yes
Continuous Liquid-Liquid Extraction ___ Yes

S Number		UG/L	CAS Number		UG/L
108-95-2	Phenol	10. U	83-32-9	Acenaphthene	10. U
1-44-4	bis(2-Chloroethyl)Ether	10. U	51-28-5	2,4-Dinitrophenol	50. U
-57-8	2-Chlorophenol	10. U	100-02-7	4-Nitrophenol	50. U
541-73-1	1,3-Dichlorobenzene	10. U	132-64-9	Dibenzofuran	10. U
6-46-7	1,4-Dichlorobenzene	10. U	121-14-2	2,4-Dinitrotoluene	10. U
0-51-6	Benzyl Alcohol	10. U	606-20-2	2,6-Dinitrotoluene	10. U
95-50-1	1,2-Dichlorobenzene	10. U	84-66-2	Diethylphthalate	10. U
95-48-7	2-Methylphenol	10. U	7005-72-3	4-Chlorophenyl-phenylether	10. U
638-32-9	bis(2-Chloroisopropyl)Ether	10. U	86-73-7	Fluorene	10. U
6-44-5	4-Methylphenol	10. U	100-10-6	4-Nitroaniline	50. U
621-64-7	N-Nitroso-Di-n-Propylamine	10. U	534-52-1	4,6-Dinitro-2-Methylphenol	50. U
-72-1	Hexachloroethane	10. U	86-30-6	N-Nitrosodiphenylamine (1)	10. U
-95-3	Nitrobenzene	10. U	101-55-3	4-Bromophenyl-phenylether	10. U
78-59-1	Isophorone	10. U	118-74-1	Hexachlorobenzene	10. U
-75-5	2-Nitrophenol	10. U	87-86-5	Pentachlorophenol	50. U
5-67-9	2,4-Dimethylphenol	10. U	85-01-8	Phenanthrene	10. U
-85-0	Benzoic Acid	50. U	120-12-7	Anthracene	10. U
1-91-1	bis(2-Chloroethoxy)Methane	10. U	84-74-2	Di-n-Butylphthalate	10. U
0-83-2	2,4-Dichlorophenol	10. U	206-44-0	Fluoranthene	10. U
0-82-1	1,2,4-Trichlorobenzene	10. U	129-00-0	Pyrene	10. U
91-20-3	Naphthalene	10. U	85-68-7	Butylbenzylphthalate	10. U
6-47-8	4-Chloroaniline	10. U	91-94-1	3,3'-Dichlorobenzidine	20. U
-68-3	Hexachlorobutadiene	10. U	56-55-3	Benzo(a)Anthracene	10. U
59-50-7	4-Chloro-3-Methylphenol	10. U	117-81-7	bis(2-Ethylhexyl)Phthalate	10. U
-57-6	2-Methylnaphthalene	10. U	218-01-9	Chrysene	10. U
-47-4	Hexachlorocyclopentadiene	10. U	117-84-0	Di-n-Octyl Phthalate	10. U
-06-2	2,4,6-Trichlorophenol	10. U	205-99-2	Benzo(b)Fluoranthene	10. U
95-95-4	2,4,5-Trichlorophenol	50. U	207-08-9	Benzo(k)Fluoranthene	10. U
-58-7	2-Chloronaphthalene	10. U	50-32-8	Benzo(a)Pyrene	10. U
-74-4	2-Nitroaniline	50. U	193-39-5	Indeno(1,2,3-cd)Pyrene	10. U
131-11-3	Dimethyl Phthalate	10. U	53-70-3	Dibenz(a,h)Anthracene	10. U
8-96-8	Acenaphthylene	10. U	191-24-2	Benzo(g,h,i)Perylene	10. U
-09-2	3-Nitroaniline	50. U			

(1) - Cannot be separated from diphenylamine

000328

Laboratory Name CALIFORNIA WATER LABS

Case No [illegible]

Sample Number EG 522

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

RECEIVED DEC 0 9 1986

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 9/15/86

Date Analyzed: 9/25/86

Conc/Dil Factor: 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	o.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.00u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.00u
11096-82-5	Aroclor-1260	1.00u

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 500 mL or W_s _____ V_t 5000 uL V_i 5 uL

Laboratory Name CALIFORNIA WATER LABS

Case No

000329

Sample Number EG 822 R

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VOA	170	3
2.				
3.				
4.				
5.				
6.				
7.				
8. —	UNKNOWN	B/A	1251	5
9. —	↓	↓	2100	48
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

000351

RECEIVED DEC 0 9 1986

26FL10376

Sample Number
EG823

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Laboratory Name: CAL WATER LABS
b Sample ID No: C00038V0
mple Matrix: WATER
Data Release Authorized By: B. Tyson

Case No: 6402
QC Report No:
Contract No: 68-01-7277
Date Sample Received: 09/11/86

VOLATILE COMPOUNDS

Concentration: LOW
Date Extracted/Prepared:
Date Analyzed: 09/16/86
Conc/Dil Factor: 1. pH 7.0
Percent Moisture: (Not Decanted)

CAS Number		UG/L	CAS Number		UG/L
74-87-3	Chloromethane	10. U	78-87-5	1,2-Dichloropropane	5.0U
-83-9	Bromomethane	10. U	10061-02-6	Trans-1,3-Dichloropropene	5.0U
-01-4	Vinyl Chloride	10. U	79-01-6	Trichloroethene	5.0U
75-00-3	Chloroethane	10. U	124-48-1	Dibromochloromethane	5.0U
-09-2	Methylene Chloride	5.0U	79-00-5	1,1,2-Trichloroethane	5.0U
-64-1	Acetone	10. U	71-43-2	Benzene	5.0U
75-15-0	Carbon Disulfide	5.0U	10061-01-5	cis-1,3-Dichloropropene	5.0U
-35-4	1,1-Dichloroethene	5.0U	110-75-8	2-Chloroethylvinylether	10. U
-35-3	1,1-Dichloroethane	5.0U	75-25-2	Bromoform	5.0U
156-60-5	Trans-1,2-Dichloroethene	5.0U	591-78-6	2-Hexanone	10. U
67-66-3	Chloroform	5.0U	108-10-1	4-Methyl-2-Pentanone	10. U
1 -06-2	1,2-Dichloroethane	5.0U	127-18-4	Tetrachloroethene	5.0U
7 93-3	2-Butanone	10. U	79-34-5	1,1,2,2-Tetrachloroethane	10. U
71-55-6	1,1,1-Trichloroethane	5.0U	108-88-3	Toluene	5.0U
-23-5	Carbon Tetrachloride	5.0U	108-90-7	Chlorobenzene	5.0U
1 1-05-4	Vinyl Acetate	10. U	100-41-4	Ethylbenzene	5.0U
75-27-4	Bromodichloromethane	5.0U	100-42-5	Styrene	5.0U
				Total Xylenes	5.0U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

ee page 1A for complete definitions of the data eporting qualifiers.

Form I

RECEIVED DEC 0 9 1986

boratory Name: CAL WATER LABS
ase No: 6402

Sample Number
EG823R

ORGANICS ANALYSIS DATA SHEET
(Page 2)

SEMIVOLATILE COMPOUNDS

ncentration: LOW
te Extracted/Prepared: 09/25/86
te Analyzed: 09/26/86
Conc/Dil Factor: 1.
rcent Moisture: (Decanted) _____

GPC Cleanup ___ Yes _X_ No
Separatory Funnel Extraction _X_ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/L	CAS Number		UG/L
8-95-2	Phenol	10. U	83-32-9	Acenaphthene	10. U
1-44-4	bis(2-Chloroethyl)Ether	10. U	51-28-5	2,4-Dinitrophenol	50. U
-57-8	2-Chlorophenol	10. U	100-02-7	4-Nitrophenol	50. U
541-73-1	1,3-Dichlorobenzene	10. U	132-64-9	Dibenzofuran	10. U
6-46-7	1,4-Dichlorobenzene	10. U	121-14-2	2,4-Dinitrotoluene	10. U
0-51-6	Benzyl Alcohol	10. U	606-20-2	2,6-Dinitrotoluene	10. U
95-50-1	1,2-Dichlorobenzene	10. U	84-66-2	Diethylphthalate	10. U
-48-7	2-Methylphenol	10. U	7005-72-3	4-Chlorophenyl-phenylether	10. U
638-32-9	bis(2-Chloroisopropyl)Ether	10. U	86-73-7	Fluorene	10. U
106-44-5	4-Methylphenol	10. U	100-10-6	4-Nitroaniline	50. U
1-64-7	N-Nitroso-Di-n-Propylamine	10. U	534-52-1	4,6-Dinitro-2-Methylphenol	50. U
-72-1	Hexachloroethane	10. U	86-30-6	N-Nitrosodiphenylamine (1)	10. U
-95-3	Nitrobenzene	10. U	101-55-3	4-Bromophenyl-phenylether	10. U
78-59-1	Isophorone	10. U	118-74-1	Hexachlorobenzene	10. U
-75-5	2-Nitrophenol	10. U	87-86-5	Pentachlorophenol	50. U
5-67-9	2,4-Dimethylphenol	10. U	85-01-8	Phenanthrene	10. U
65-85-0	Benzoic Acid	50. U	120-12-7	Anthracene	10. U
1-91-1	bis(2-Chloroethoxy)Methane	10. U	84-74-2	Di-n-Butylphthalate	10. U
)-83-2	2,4-Dichlorophenol	10. U	206-44-0	Fluoranthene	10. U
0-82-1	1,2,4-Trichlorobenzene	10. U	129-00-0	Pyrene	10. U
91-20-3	Naphthalene	10. U	85-68-7	Butylbenzylphthalate	10. U
5-47-8	4-Chloroaniline	10. U	91-94-1	3,3'-Dichlorobenzidine	20. U
-68-3	Hexachlorobutadiene	10. U	56-55-3	Benzo(a)Anthracene	10. U
59-50-7	4-Chloro-3-Methylphenol	10. U	117-81-7	bis(2-Ethylhexyl)Phthalate	10. U
-57-6	2-Methylnaphthalene	10. U	218-01-9	Chrysene	10. U
-47-4	Hexachlorocyclopentadiene	10. U	117-84-0	Di-n-Octyl Phthalate	10. U
88-06-2	2,4,6-Trichlorophenol	10. U	205-99-2	Benzo(b)Fluoranthene	10. U
95-95-4	2,4,5-Trichlorophenol	50. U	207-08-9	Benzo(k)Fluoranthene	10. U
-58-7	2-Chloronaphthalene	10. U	50-32-8	Benzo(a)Pyrene	10. U
-74-4	2-Nitroaniline	50. U	193-39-5	Indeno(1,2,3-cd)Pyrene	10. U
131-11-3	Dimethyl Phthalate	10. U	53-70-3	Dibenz(a,h)Anthracene	10. U
3-96-8	Acenaphthylene	10. U	191-24-2	Benzo(g,h,i)Perylene	10. U
-09-2	3-Nitroaniline	50. U			

(1) - Cannot be separated from diphenylamine

000353

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

RECEIVED DEC 0 9 1986

Sample Number EG 023

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration Low Medium (Circle One)

Date Extracted/Prepared 9/15/86

Date Analyzed 9/25/86

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	o.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.00u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.00u
11096-82-5	Aroclor-1260	1.00u

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 500 mL or W_s _____ V_t 5000 uL V_i 5 uL

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

000351

Sample Number

EG 523

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

RECEIVED DEC 0 9 1986

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VGA	173	4
2. —	UNKNOWN	↓	1330	1
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

000355

Sample Number EG-823 R

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8. —	UNKNOWN	BNA	1065	<1
9. —	↓	↓	1253	3.5
10. —			2102	29
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

L oratory Name: CAL WATER LABS
C e No: 6402

Sample Number
EG824R

ORGANICS ANALYSIS DATA SHEET
(Page 2)

RECEIVED DEC 0 9 1986

SEMIVOLATILE COMPOUNDS

Concentration: LOW
D e Extracted/Prepared: 09/25/86
D e Analyzed: 09/26/86
Conc/Dil Factor: 1.
P cent Moisture: (Decanted)

GPC Cleanup ___ Yes _X_ No
Separatory Funnel Extraction _X_ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/L	CAS Number		UG/L
108-95-2	Phenol	10. U	83-32-9	Acenaphthene	10. U
1 -44-4	bis(2-Chloroethyl)Ether .	10. U	51-28-5	2,4-Dinitrophenol	50. U
9 57-8	2-Chlorophenol	10. U	100-02-7	4-Nitrophenol	50. U
541-73-1	1,3-Dichlorobenzene . . .	10. U	132-64-9	Dibenzofuran	10. U
1 -46-7	1,4-Dichlorobenzene . . .	10. U	121-14-2	2,4-Dinitrotoluene	10. U
1 -51-6	Benzyl Alcohol	10. U	606-20-2	2,6-Dinitrotoluene	10. U
95-50-1	1,2-Dichlorobenzene . . .	10. U	84-66-2	Diethylphthalate	10. U
9 48-7	2-Methylphenol	10. U	7005-72-3	4-Chlorophenyl-phenylether	10. U
3 38-32-9	bis(2-Chloroisopropyl)Ether	10. U	86-73-7	Fluorene	10. U
1 -44-5	4-Methylphenol	10. U	100-10-6	4-Nitroaniline	50. U
6 -64-7	N-Nitroso-Di-n-Propylamine	10. U	534-52-1	4,6-Dinitro-2-Methylphenol	50. U
6 72-1	Hexachloroethane	10. U	86-30-6	N-Nitrosodiphenylamine (1)	10. U
9 95-3	Nitrobenzene	10. U	101-55-3	4-Bromophenyl-phenylether	10. U
78-59-1	Isophorone	10. U	118-74-1	Hexachlorobenzene	10. U
8 75-5	2-Nitrophenol	10. U	87-86-5	Pentachlorophenol	50. U
1 -67-9	2,4-Dimethylphenol	10. U	85-01-8	Phenanthrene	10. U
5-85-0	Benzoic Acid	50. U	120-12-7	Anthracene	10. U
1 -91-1	bis(2-Chloroethoxy)Methane	10. U	84-74-2	Di-n-Butylphthalate . . .	10. U
1 -83-2	2,4-Dichlorophenol	10. U	206-44-0	Fluoranthene	10. U
120-82-1	1,2,4-Trichlorobenzene . .	10. U	129-00-0	Pyrene	10. U
1-20-3	Naphthalene	10. U	85-68-7	Butylbenzylphthalate . . .	10. U
-47-8	4-Chloroaniline	10. U	91-94-1	3,3'-Dichlorobenzidine . .	20. U
8-3	Hexachlorobutadiene . . .	10. U	56-55-3	Benzo(a)Anthracene	10. U
9-50-7	4-Chloro-3-Methylphenol .	10. U	117-81-7	bis(2-Ethylhexyl)Phthalate	10. U
7-6	2-Methylnaphthalene . . .	10. U	218-01-9	Chrysene	10. U
7-4	Hexachlorocyclopentadiene	10. U	117-84-0	Di-n-Octyl Phthalate . . .	10. U
8-06-2	2,4,6-Trichlorophenol . .	10. U	205-99-2	Benzo(b)Fluoranthene . . .	10. U
5 95-4	2,4,5-Trichlorophenol . .	50. U	207-08-9	Benzo(k)Fluoranthene . . .	10. U
8-7	2-Chloronaphthalene . . .	10. U	50-32-8	Benzo(a)Pyrene	10. U
4-4	2-Nitroaniline	50. U	193-39-5	Indeno(1,2,3-cd)Pyrene . .	10. U
31-11-3	Dimethyl Phthalate	10. U	53-70-3	Dibenz(a,h)Anthracene . .	10. U
96-8	Acenaphthylene	10. U	191-24-2	Benzo(g,h,i)Perylene . . .	10. U
9-2	3-Nitroaniline	50. U			

) - Cannot be separated from diphenylamine

000382

Laboratory Name CALIFORNIA WATER LABS

Case No [illegible]

Sample Number
EG-24

Organics Analysis Data Sheet
(Page 3)

RECEIVED DEC 0 9 1986

Pesticide/PCBs

Concentration Low Medium (Circle One)

Date Extracted/Prepared 9/15/86

Date Analyzed 9/25/86

Conc/Dil Factor 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☒No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	o.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.00u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.00u
11096-82-5	Aroclor-1260	1.00u

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 500 mL or W_s _____ V_t 5000 uL V_i 5 uL

Laboratory Name CALIFORNIA WATER LABS

Case No. 64/07

000385

Sample Number EG-824R

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. —	UNKNOWN	BNA	2102	32
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

000412

26FL10D76

Sample Number
EG825

ORGANICS ANALYSIS DATA SHEET

(Page 1)

RECEIVED DEC 0 9 1986

Laboratory Name: CAL WATER LABS
b Sample ID No: C00040VO
mple Matrix: WATER
Data Release Authorized By: B. Tyson

Case No: 6402
QC Report No:
Contract No: 68-01-7277
Date Sample Received: 09/11/86

VOLATILE COMPOUNDS

Concentration: LOW
Date Extracted/Prepared:
Date Analyzed: 09/16/86
Conc/Dil Factor: 1. pH 7.0
Percent Moisture: (Not Decanted)

CAS Number		UG/L	CAS Number		UG/L
-87-3	Chloromethane	10. U	78-87-5	1,2-Dichloropropane	5.0U
-83-9	Bromomethane	10. U	10061-02-6	Trans-1,3-Dichloropropene	5.0U
-01-4	Vinyl Chloride	10. U	79-01-6	Trichloroethene	5.0U
75-00-3	Chloroethane	10. U	124-48-1	Dibromochloromethane	5.0U
-09-2	Methylene Chloride	5.0U	79-00-5	1,1,2-Trichloroethane	5.0U
-64-1	Acetone	10. U	71-43-2	Benzene	5.0U
75-15-0	Carbon Disulfide	5.0U	10061-01-5	cis-1,3-Dichloropropene	5.0U
-35-4	1,1-Dichloroethene	5.0U	110-75-8	2-Chloroethylvinylether	10. U
-35-3	1,1-Dichloroethane	5.0U	75-25-2	Bromoform	5.0U
6-60-5	Trans-1,2-Dichloroethene	5.0U	591-78-6	2-Hexanone	10. U
-66-3	Chloroform	5.0U	108-10-1	4-Methyl-2-Pentanone	10. U
7-06-2	1,2-Dichloroethane	5.0U	127-18-4	Tetrachloroethene	5.0U
-93-3	2-Butanone	10. U	79-34-5	1,1,2,2-Tetrachloroethane	10. U
71-55-6	1,1,1-Trichloroethane	5.0U	108-88-3	Toluene	5.0U
-23-5	Carbon Tetrachloride	5.0U	108-90-7	Chlorobenzene	5.0U
3-05-4	Vinyl Acetate	10. U	100-41-4	Ethylbenzene	5.0U
75-27-4	Bromodichloromethane	5.0U	100-42-5	Styrene	5.0U
				Total Xylenes	5.0U

U - Compound analyzed for but not detected. The reported value is the minimum attainable detection limit for the sample.

ee page 1A for complete definitions of the data eporting qualifiers.

Form I

ıboratory Name: CAL WATER LABS
Case No: 6402

Sample Number
EG825R

ORGANICS ANALYSIS DATA SHEET
(Page 2)

RECEIVED DEC 0 9 1986

SEMIVOLATILE COMPOUNDS

ncentration: LOW
te Extracted/Prepared: 09/25/86
Date Analyzed: 09/26/86
nc/Dil Factor: 1.
rcent Moisture: (Decanted) _____

GPC Cleanup ___ Yes _X_ No
Separatory Funnel Extraction _X_ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/L	CAS Number		UG/L
8-95-2	Phenol	10. U	83-32-9	Acenaphthene	10. U
1-44-4	bis(2-Chloroethyl)Ether	10. U	51-28-5	2,4-Dinitrophenol	50. U
95-57-8	2-Chlorophenol	10. U	100-02-7	4-Nitrophenol	50. U
1-73-1	1,3-Dichlorobenzene	10. U	132-64-9	Dibenzofuran	10. U
6-46-7	1,4-Dichlorobenzene	10. U	121-14-2	2,4-Dinitrotoluene	10. U
100-51-6	Benzyl Alcohol	10. U	606-20-2	2,6-Dinitrotoluene	10. U
95-50-1	1,2-Dichlorobenzene	10. U	84-66-2	Diethylphthalate	10. U
-48-7	2-Methylphenol	10. U	7005-72-3	4-Chlorophenyl-phenylether	10. U
638-32-9	bis(2-Chloroisopropyl)Ether	10. U	86-73-7	Fluorene	10. U
106-44-5	4-Methylphenol	10. U	100-10-6	4-Nitroaniline	50. U
1-64-7	N-Nitroso-Di-n-Propylamine	10. U	534-52-1	4,6-Dinitro-2-Methylphenol	50. U
-72-1	Hexachloroethane	10. U	86-30-6	N-Nitrosodiphenylamine (1)	10. U
98-95-3	Nitrobenzene	10. U	101-55-3	4-Bromophenyl-phenylether	10. U
-59-1	Isophorone	10. U	118-74-1	Hexachlorobenzene	10. U
-75-5	2-Nitrophenol	10. U	87-86-5	Pentachlorophenol	50. U
105-67-9	2,4-Dimethylphenol	10. U	85-01-8	Phenanthrene	10. U
65-85-0	Benzoic Acid	50. U	120-12-7	Anthracene	10. U
1-91-1	bis(2-Chloroethoxy)Methane	10. U	84-74-2	Di-n-Butylphthalate	10. U
0-83-2	2,4-Dichlorophenol	10. U	206-44-0	Fluoranthene	10. U
120-82-1	1,2,4-Trichlorobenzene	10. U	129-00-0	Pyrene	10. U
-20-3	Naphthalene	10. U	85-68-7	Butylbenzylphthalate	10. U
6-47-8	4-Chloroaniline	10. U	91-94-1	3,3'-Dichlorobenzidine	20. U
87-68-3	Hexachlorobutadiene	10. U	56-55-3	Benzo(a)Anthracene	10. U
-50-7	4-Chloro-3-Methylphenol	10. U	117-81-7	bis(2-Ethylhexyl)Phthalate	10. U
-57-6	2-Methylnaphthalene	10. U	218-01-9	Chrysene	10. U
77-47-4	Hexachlorocyclopentadiene	10. U	117-84-0	Di-n-Octyl Phthalate	10. U
88-06-2	2,4,6-Trichlorophenol	10. U	205-99-2	Benzo(b)Fluoranthene	10. U
-95-4	2,4,5-Trichlorophenol	50. U	207-08-9	Benzo(k)Fluoranthene	10. U
-58-7	2-Chloronaphthalene	10. U	50-32-8	Benzo(a)Pyrene	10. U
88-74-4	2-Nitroaniline	50. U	193-39-5	Indeno(1,2,3-cd)Pyrene	10. U
1 -11-3	Dimethyl Phthalate	10. U	53-70-3	Dibenz(a,h)Anthracene	10. U
2 -96-8	Acenaphthylene	10. U	191-24-2	Benzo(g,h,i)Perylene	10. U
99-09-2	3-Nitroaniline	50. U			

(1) - Cannot be separated from diphenylamine

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

000414

Sample Number
EG 825

Organics Analysis Data Sheet
(Page 3)

RECEIVED DEC 0 9 1986

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 9/15/86

Date Analyzed: 9/25/86

Conc/Dil Factor: 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☑Yes

CAS Number		(ug/l) or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	0.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4,4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4,4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4,4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.00u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.00u
11096-82-5	Aroclor-1260	1.00u

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 500 mL or W_s _____ V_t 5000 uL V_i 5 uL

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

000115

Sample Number
EG 825

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VOA	175	4
2. —	UNKNOWN	↓	196	17
3. —	UNKNOWN	↓	1332	1
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name: CALIFORNIA WATER LABS

Case No: 6402

000116

Sample Number: EC-825 R

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. 3790-71-4	3, 7, 11-TRIMETHYL-(Z, E)-	BNA	2101	1193
12.	2, 6, 10-DODECATRIEN-1-OL			
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

000439

86FL10R12

Sample Number
EG826

ORGANICS ANALYSIS DATA SHEET

(Page 1)

RECEIVED DEC 0 9 1986

aboratory Name: CAL WATER LABS
a Sample ID No: C00041V0
a le Matrix: WATER
ata Release Authorized By: B. Tyson

Case No: 6402
QC Report No:
Contract No: 68-01-7277
Date Sample Received: 09/11/86

VOLATILE COMPOUNDS

Concentration: LOW
Date Extracted/Prepared:
Date Analyzed: 09/16/86
Conc/Dil Factor: 1. pH 7.0
Percent Moisture: (Not Decanted)

S Number		UG/L	CAS Number		UG/L
- -3	Chloromethane	10. U	78-87-5	1,2-Dichloropropane	5.0U
- -9	Bromomethane	10. U	10061-02-6	Trans-1,3-Dichloropropene	5.0U
-01-4	Vinyl Chloride	10. U	79-01-6	Trichloroethene	5.0U
-00-3	Chloroethane	10. U	124-48-1	Dibromochloromethane	5.0U
-2	Methylene Chloride	5.0U	79-00-5	1,1,2-Trichloroethane	5.0U
-1	Acetone	10. U	71-43-2	Benzene	5.0U
15-0	Carbon Disulfide	5.0U	10061-01-5	cis-1,3-Dichloropropene	5.0U
-4	1,1-Dichloroethene	5.0U	110-75-8	2-Chloroethylvinylether	10. U
-3	1,1-Dichloroethane	5.0U	75-25-2	Bromoform	5.0U
-60-5	Trans-1,2-Dichloroethene	5.0U	591-78-6	2-Hexanone	10. U
3	Chloroform	5.0U	108-10-1	4-Methyl-2-Pentanone	10. U
- -2	1,2-Dichloroethane	5.0U	127-18-4	Tetrachloroethene	5.0U
93-3	2-Butanone	10. U	79-34-5	1,1,2,2-Tetrachloroethane	10. U
5 -6	1,1,1-Trichloroethane	5.0U	108-88-3	Toluene	5.0U
2 5	Carbon Tetrachloride	5.0U	108-90-7	Chlorobenzene	5.0U
- -4	Vinyl Acetate	10. U	100-41-4	Ethylbenzene	5.0U
27-4	Bromodichloromethane	5.0U	100-42-5	Styrene	5.0U
				Total Xylenes	5.0U

- ompound analyzed for but not detected. The reported alue is the minimum attainable detection limit for the sample.

e age 1A for complete definitions of the data p ting qualifiers.

Form I

aboratory Name: CAL WATER LABS
Case No: 6402

Sample Number
EG826R

ORGANICS ANALYSIS DATA SHEET
(Page 2)

RECEIVED DEC 0 9 1986

SEMIVOLATILE COMPOUNDS

Concentration: LOW
ate Extracted/Prepared: 09/15/86
Date Analyzed: 09/26/86
Conc/Dil Factor: 1.
rcent Moisture: (Decanted)

GPC Cleanup ___ Yes X No
Separatory Funnel Extraction X Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/L	CAS Number		UG/L
8-95-2	Phenol	10. U	83-32-9	Acenaphthene	10. U
1-44-4	bis(2-Chloroethyl)Ether	10. U	51-28-5	2,4-Dinitrophenol	50. U
95-57-8	2-Chlorophenol	10. U	100-02-7	4-Nitrophenol	50. U
1-73-1	1,3-Dichlorobenzene	10. U	132-64-9	Dibenzofuran	10. U
6-46-7	1,4-Dichlorobenzene	10. U	121-14-2	2,4-Dinitrotoluene	10. U
0-51-6	Benzyl Alcohol	10. U	606-20-2	2,6-Dinitrotoluene	10. U
95-50-1	1,2-Dichlorobenzene	10. U	84-66-2	Diethylphthalate	10. U
-48-7	2-Methylphenol	10. U	7005-72-3	4-Chlorophenyl-phenylether	10. U
38-32-9	bis(2-Chloroisopropyl)Ether	10. U	86-73-7	Fluorene	10. U
106-44-5	4-Methylphenol	10. U	100-10-6	4-Nitroaniline	50. U
6 -64-7	N-Nitroso-Di-n-Propylamine	10. U	534-52-1	4,6-Dinitro-2-Methylphenol	50. U
6 72-1	Hexachloroethane	10. U	86-30-6	N-Nitrosodiphenylamine (1)	10. U
98-95-3	Nitrobenzene	10. U	101-55-3	4-Bromophenyl-phenylether	10. U
7 59-1	Isophorone	10. U	118-74-1	Hexachlorobenzene	10. U
8 75-5	2-Nitrophenol	10. U	87-86-5	Pentachlorophenol	50. U
1 -67-9	2,4-Dimethylphenol	10. U	85-01-8	Phenanthrene	10. U
65-85-0	Benzoic Acid	50. U	120-12-7	Anthracene	10. U
-91-1	bis(2-Chloroethoxy)Methane	10. U	84-74-2	Di-n-Butylphthalate	10. U
-83-2	2,4-Dichlorophenol	10. U	206-44-0	Fluoranthene	10. U
20-82-1	1,2,4-Trichlorobenzene	10. U	129-00-0	Pyrene	10. U
1 0-3	Naphthalene	10. U	85-68-7	Butylbenzylphthalate	10. U
47-8	4-Chloroaniline	10. U	91-94-1	3,3'-Dichlorobenzidine	20. U
7-68-3	Hexachlorobutadiene	10. U	56-55-3	Benzo(a)Anthracene	10. U
9-50-7	4-Chloro-3-Methylphenol	10. U	117-81-7	bis(2-Ethylhexyl)Phthalate	7.2J
1 7-6	2-Methylnaphthalene	10. U	218-01-9	Chrysene	10. U
7 7-4	Hexachlorocyclopentadiene	10. U	117-84-0	Di-n-Octyl Phthalate	10. U
8-06-2	2,4,6-Trichlorophenol	10. U	205-99-2	Benzo(b)Fluoranthene	10. U
5 5-4	2,4,5-Trichlorophenol	50. U	207-08-9	Benzo(k)Fluoranthene	10. U
1 8-7	2-Chloronaphthalene	10. U	50-32-8	Benzo(a)Pyrene	10. U
8-74-4	2-Nitroaniline	50. U	193-39-5	Indeno(1,2,3-cd)Pyrene	10. U
11-3	Dimethyl Phthalate	10. U	53-70-3	Dibenz(a,h)Anthracene	10. U
96-8	Acenaphthylene	10. U	191-24-2	Benzo(g,h,i)Perylene	10. U
-09-2	3-Nitroaniline	50. U			

(1) - Cannot be separated from diphenylamine

000442

Laboratory Name CALIFORNIA WATER LABS

Case No [illegible]

Sample Number
E[illegible] 826

Organics Analysis Data Sheet
(Page 3)

RECEIVED DEC 0 9 1986

Pesticide/PCBs

Concentration Low Medium (Circle One)

Date Extracted/Prepared 9/15/86

Date Analyzed 9/25/86

Conc/Dil Factor: 1

Percent Moisture (decanted) _____

GPC Cleanup ☐Yes ☑No

Separatory Funnel Extraction ☐Yes

Continuous Liquid - Liquid Extraction ☒Yes

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	0.05u
319-85-7	Beta-BHC	0.05u
319-86-8	Delta-BHC	o.05u
58-89-9	Gamma-BHC (Lindane)	0.05u
76-44-8	Heptachlor	0.05u
309-00-2	Aldrin	0.05u
1024-57-3	Heptachlor Epoxide	0.05u
959-98-8	Endosulfan I	0.05u
60-57-1	Dieldrin	0.10u
72-55-9	4, 4'-DDE	0.10u
72-20-8	Endrin	0.10u
33213-65-9	Endosulfan II	0.10u
72-54-8	4, 4'-DDD	0.10u
1031-07-8	Endosulfan Sulfate	0.10u
50-29-3	4, 4'-DDT	0.10u
72-43-5	Methoxychlor	0.50u
53494-70-5	Endrin Ketone	0.10u
57-74-9	Chlordane	0.50u
8001-35-2	Toxaphene	1.00u
12674-11-2	Aroclor-1016	0.50u
11104-28-2	Aroclor-1221	0.50u
11141-16-5	Aroclor-1232	0.50u
53469-21-9	Aroclor-1242	0.50u
12672-29-6	Aroclor-1248	0.50u
11097-69-1	Aroclor-1254	1.00u
11096-82-5	Aroclor-1260	1.00u

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 500 ml or W_s _____ V_t 5000 ul V_i 5 ul

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

000113

Sample Number EC-826

Organics Analysis Data Sheet
(Page 4)

RECEIVED DEC 0 9 1986

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	UNKNOWN	VOA	176	4
2. 541-05-9	hexamethylcyclotrisiloxane	↓	1333	0.5
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.	UNKNOWN	BNA	307	3.6
11.	↓		317	15
12.	octamethylcyclotetrasiloxane		557	112
13.	decamethylcyclopentasiloxane		766	21
14.	UNKNOWN		958	5
15.	dodecamethylcyclohexasiloxane		963	9
16.	UNKNOWN		1066	4
17.	2,6-bis(1,1-dimethylethyl)-4-methyl		1147	8
18.	phenol			
19.	UNKNOWN		1253	4
20.			1333	0.60
21.			1477	17
22.			1540	3.3
23.			1582	7.3
24.			1815	4.8
25.			2129	20
26.			2141	40
27.			2158	20
28.			2184	20
29.			2248	30
30.	↓	↓	2259	20

000181

RECEIVED DEC 09 1986

Sample Number
EG827

86FL10578

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Water Labs
Case No: 6402
Lab Sample ID No: C000327U
QC Report No:
Sample Matrix: Soil
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 09/11/86

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared:

Date Analyzed: 09/29/86

Conc./Dil Factor: 1 pH 6.0

Percent Moisture: (Not Decanted) 11.4

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	11. U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	2.8 J
67-64-1	Acetone	136. B
75-15-0	Carbon Disulfide	5.6 U
75-35-4	1, 1-Dichloroethene	
75-34-3	1, 1-Dichloroethane	
156-60-5	Trans-1, 2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1, 2-Dichloroethane	
78-93-3	2-Butanone	11. U
71-55-6	1, 1, 1-Trichloroethane	5.6 U
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	11. U
75-27-4	Bromodichloromethane	5.6 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5.6 U
10061-02-6	Trans-1, 3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1, 1, 2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	11. U
75-25-2	Bromoform	5.6 U
591-78-6	4-Methyl-2-Pentanone	11. U
108-10-1	2-Hexanone	11. U
127-18-4	Tetrachloroethene	5.6 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	11. U
108-88-3	Toluene	2.8 J
108-90-7	Chlorobenzene	5.6 U
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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.

Laboratory Name: CAL WATER LABS
Case No: 6402

Sample Number
EG827

ORGANICS ANALYSIS DATA SHEET
(Page 2)

RECEIVED DEC 0 9 1986

SEMIVOLATILE COMPOUNDS

Concentration: LOW
Date Extracted/Prepared: 09/15/86
Date Analyzed: 09/24/86
Conc/Dil Factor: 1.
Percent Moisture: (Decanted) 114

GPC Cleanup X Yes ___ No
Separatory Funnel Extraction ___ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	370. U	83-32-9	Acenaphthene	370. U
111-44-4	bis(2-Chloroethyl)Ether	370. U	51-28-5	2,4-Dinitrophenol	1800. U
-57-8	2-Chlorophenol	370. U	100-02-7	4-Nitrophenol	1800. U
1-73-1	1,3-Dichlorobenzene	370. U	132-64-9	Dibenzofuran	370. U
106-46-7	1,4-Dichlorobenzene	370. U	121-14-2	2,4-Dinitrotoluene	370. U
0-51-6	Benzyl Alcohol	370. U	606-20-2	2,6-Dinitrotoluene	370. U
-50-1	1,2-Dichlorobenzene	370. U	84-66-2	Diethylphthalate	370. U
95-48-7	2-Methylphenol	370. U	7005-72-3	4-Chlorophenyl-phenylether	370. U
38-32-9	bis(2-Chloroisopropyl)Ether	370. U	86-73-7	Fluorene	370. U
1 -44-5	4-Methylphenol	370. U	100-10-6	4-Nitroaniline	1800. U
6 -64-7	N-Nitroso-Di-n-Propylamine	370. U	534-52-1	4,6-Dinitro-2-Methylphenol	1800. U
67-72-1	Hexachloroethane	370. U	86-30-6	N-Nitrosodiphenylamine (1)	370. U
9 95-3	Nitrobenzene	370. U	101-55-3	4-Bromophenyl-phenylether	370. U
7 59-1	Isophorone	370. U	118-74-1	Hexachlorobenzene	370. U
8-75-5	2-Nitrophenol	370. U	87-86-5	Pentachlorophenol	1800. U
(67-9	2,4-Dimethylphenol	370. U	85-01-8	Phenanthrene	370. U
5 5-0	Benzoic Acid	1800. U	120-12-7	Anthracene	370. U
11-91-1	bis(2-Chloroethoxy)Methane	370. U	84-74-2	Di-n-Butylphthalate	370. U
2 83-2	2,4-Dichlorophenol	370. U	206-44-0	Fluoranthene	370. U
2 82-1	1,2,4-Trichlorobenzene	370. U	129-00-0	Pyrene	370. U
1 0-3	Naphthalene	370. U	85-68-7	Butylbenzylphthalate	370. U
06-47-8	4-Chloroaniline	370. U	91-94-1	3,3'-Dichlorobenzidine	740. U
3-3	Hexachlorobutadiene	370. U	56-55-3	Benzo(a)Anthracene	370. U
0-7	4-Chloro-3-Methylphenol	370. U	117-81-7	bis(2-Ethylhexyl)Phthalate	~~19. J~~ 337. J
-57-6	2-Methylnaphthalene	370. U	218-01-9	Chrysene	370. U
-4	Hexachlorocyclopentadiene	370. U	117-84-0	Di-n-Octyl Phthalate	370. U
-2	2,4,6-Trichlorophenol	370. U	205-99-2	Benzo(b)Fluoranthene	370. U
-95-4	2,4,5-Trichlorophenol	1800. U	207-08-9	Benzo(k)Fluoranthene	370. U
-7	2-Chloronaphthalene	370. U	50-32-8	Benzo(a)Pyrene	370. U
-4	2-Nitroaniline	1800. U	193-39-5	Indeno(1,2,3-cd)Pyrene	370. U
1-3	Dimethyl Phthalate	370. U	53-70-3	Dibenz(a,h)Anthracene	370. U
-96-8	Acenaphthylene	370. U	191-24-2	Benzo(g,h,i)Perylene	370. U
-2	3-Nitroaniline	1800. U			

1 - Cannot be separated from diphenylamine

Laboratory Name CALIFORNIA WATER LABS

Case No 62402

SAMPLE NUMBER
EG 827/10

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCB'S

RECEIVED DEC 0 9 1986

Concentration (Low) Medium (Circle One)

GPC Cleanup ✓ yes __ no

Date Extracted/Prepared 9/15/86

Separatory Funnel Extraction __ yes

Date Analyzed 10/3/86

Continuous Liquid Extraction __ yes

Conc/Dil Factor 10

Percent Moisture (decanted) 11.44

CAS NUMBER		Ug/l or Ug/kg (Circle one)
319-84-6	ALPHA-BHC	9.0 u
319-85-7	BETA-BHC	~~9.0~~ 57.7
319-86-8	DELTA-BHC	9.0 u
58-89-9	GAMMA-BHC (LINDANE)	9.0
76-44-8	HEPTACHLOR	9.0
309-00-2	ALDRIN	9.0
1024-57-3	HEPTACHLOR EPOXIDE	9.0
959-98-8	ENDOSULFAN I	9.0
60-57-1	DIELDRIN	18.1
72-55-9	4 4'-DDE	18.1
72-20-8	ENDRIN	18.1
33213-65-9	ENDOSULFAN II	18.1
72-54-8	4 4'-DDD	18.1
1031-07-8	ENDOSULFAN SULFATE	18.1
50-29-3	4 4'DDT	18.1
72-43-5	METHOXYCHLOR	90.3
53494-70-5	ENDRIN KEYTONE	18.1
57-74-9	CHLORDANE	90.3
8001-35-2	TOXAPHENE	181
12674-11-2	AROCLOR-1016	90.3
11104-28-2	AROCLOR-1221	90.3
11141-16-5	AROCLOR-1232	90.3
53469-21-9	AROCLOR-1242	90.3
12672-29-6	AROCLOR-1248	90.3
11097-69-1	AROCLOR-1254	181
11096-82-5	AROCLOR-1260	181

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 _____ or W/s 30.016 V/t 2000 ml V/i 5 ul

Laboratory Name CALIFORNIA WATER LAB

Case No 6402

000187

Sample Number EG827

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

RECEIVED DEC 09 1986

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VOA	114	3
2. —	↓	↓	359	1
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. —	UNKNOWN	BNA	643	169
12. —	UNKNOWN HYDROCARBON		688	212
13. —			813	188
14. —			928	288
15. —			1035	202
16. —			1135	228
17. —			1229	179
18. —			1319	232
19. —			1325	320
20. —			1405	176
21. —	↓		1486	170
22. 14024-17-0	MOL. (S8) SULFUR		1586	186
23. —	UNKNOWN HYDROCARBON		1710	292
24. 544-76-3	HEXADECANE		1778	274
25. —	UNKNOWN HYDROCARBON		1844	223
26. —			1907	223
27. —			2027	186
28. —			2101	212
29. —	↓		2139	346
30. —	UNKNOWN		2248	611

RECEIVED DEC 0 9 1986

000538
Sample Number
EG-828

86FL10579

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: California Water Labs
Case No: 6402
Lab Sample ID No: CC0337C
QC Report No:
Sample Matrix: Soil
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 09/10/86

Volatile Compounds

Concentration: ~~Low~~ Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 09/29/86
Conc./Dil Factor: 1 pH 6.0
Percent Moisture: (Not Decanted) 22.5

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	13. U
74-83-9	Bromomethane	↓
75-01-4	Vinyl Chloride	↓
75-00-3	Chloroethane	↓
75-09-2	Methylene Chloride	6.5 U
67-64-1	Acetone	230. B
75-15-0	Carbon Disulfide	6.5 U
75-35-4	1, 1-Dichloroethene	↓
75-34-3	1, 1-Dichloroethane	↓
156-60-5	Trans-1, 2-Dichloroethene	↓
67-66-3	Chloroform	↓
107-06-2	1, 2-Dichloroethane	↓
78-93-3	2-Butanone	13. U
71-55-6	1, 1, 1-Trichloroethane	6.5 U
56-23-5	Carbon Tetrachloride	↓
108-05-4	Vinyl Acetate	13. U
75-27-4	Bromodichloromethane	6.5 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	6.5 U
10061-02-6	Trans-1, 3-Dichloropropene	↓
79-01-6	Trichloroethene	↓
124-48-1	Dibromochloromethane	↓
79-00-5	1, 1, 2-Trichloroethane	↓
71-43-2	Benzene	↓
10061-01-5	cis-1, 3-Dichloropropene	↓
110-75-8	2-Chloroethylvinylether	13. U
75-25-2	Bromoform	6.5 U
591-78-6	4-Methyl-2-Pentanone	13. U
108-10-1	2-Hexanone	↓
127-18-4	Tetrachloroethene	6.5 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	13. U
108-88-3	Toluene	6.5 U
108-90-7	Chlorobenzene	↓
100-41-4	Ethylbenzene	↓
100-42-5	Styrene	↓
	Total Xylenes	↓

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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

RECEIVED DEC 0 9 1986

Laboratory Name: CAL WATER LABS
Case No: 6402

Sample Number
EG828

ORGANICS ANALYSIS DATA SHEET
(Page 2)

SEMIVOLATILE COMPOUNDS

Concentration: LOW
Date Extracted/Prepared: 09/15/86
Date Analyzed: 09/22/86
Conc/Dil Factor: 1.
Percent Moisture: (Decanted) 22.5

GPC Cleanup X Yes ___ No
Separatory Funnel Extraction ___ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	430. U	83-32-9	Acenaphthene	430. U
1-44-4	bis(2-Chloroethyl)Ether	430. U	51-28-5	2,4-Dinitrophenol	2100. U
-57-8	2-Chlorophenol	430. U	100-02-7	4-Nitrophenol	2100. U
541-73-1	1,3-Dichlorobenzene	430. U	132-64-9	Dibenzofuran	430. U
106-46-7	1,4-Dichlorobenzene	430. U	121-14-2	2,4-Dinitrotoluene	430. U
0-51-6	Benzyl Alcohol	430. U	606-20-2	2,6-Dinitrotoluene	430. U
-50-1	1,2-Dichlorobenzene	430. U	84-66-2	Diethylphthalate	430. U
95-48-7	2-Methylphenol	430. U	7005-72-3	4-Chlorophenyl-phenylether	430. U
638-32-9	bis(2-Chloroisopropyl)Ether	430. U	86-73-7	Fluorene	430. U
6-44-5	4-Methylphenol	430. U	100-10-6	4-Nitroaniline	2100. U
621-64-7	N-Nitroso-Di-n-Propylamine	430. U	534-52-1	4,6-Dinitro-2-Methylphenol	2100. U
67-72-1	Hexachloroethane	430. U	86-30-6	N-Nitrosodiphenylamine (1)	~~17. J~~ 43.J
98-95-3	Nitrobenzene	430. U	101-55-3	4-Bromophenyl-phenylether	430. U
78-59-1	Isophorone	430. U	118-74-1	Hexachlorobenzene	430. U
88-75-5	2-Nitrophenol	430. U	87-86-5	Pentachlorophenol	2100. U
1 -67-9	2,4-Dimethylphenol	430. U	85-01-8	Phenanthrene	430. U
6 85-0	Benzoic Acid	2100. U	120-12-7	Anthracene	430. U
111-91-1	bis(2-Chloroethoxy)Methane	430. U	84-74-2	Di-n-Butylphthalate	430. U
1 -83-2	2,4-Dichlorophenol	430. U	206-44-0	Fluoranthene	430. U
1 -82-1	1,2,4-Trichlorobenzene	430. U	129-00-0	Pyrene	430. U
91-20-3	Naphthalene	430. U	85-68-7	Butylbenzylphthalate	430. U
10 -47-8	4-Chloroaniline	430. U	91-94-1	3,3'-Dichlorobenzidine	850. U
8-3	Hexachlorobutadiene	430. U	56-55-3	Benzo(a)Anthracene	430. U
50-7	4-Chloro-3-Methylphenol	430. U	117-81-7	bis(2-Ethylhexyl)Phthalate	~~11. J~~ 93.J
1-57-6	2-Methylnaphthalene	430. U	218-01-9	Chrysene	430. U
7 7-4	Hexachlorocyclopentadiene	430. U	117-84-0	Di-n-Octyl Phthalate	430. U
8 6-2	2,4,6-Trichlorophenol	430. U	205-99-2	Benzo(b)Fluoranthene	430. U
5-95-4	2,4,5-Trichlorophenol	2100. U	207-08-9	Benzo(k)Fluoranthene	430. U
1 8-7	2-Chloronaphthalene	430. U	50-32-8	Benzo(a)Pyrene	430. U
8 4-4	2-Nitroaniline	2100. U	193-39-5	Indeno(1,2,3-cd)Pyrene	430. U
31-11-3	Dimethyl Phthalate	430. U	53-70-3	Dibenz(a,h)Anthracene	430. U
0 96-8	Acenaphthylene	430. U	191-24-2	Benzo(g,h,i)Perylene	430. U
9 9-2	3-Nitroaniline	2100. U			

(1) - Cannot be separated from diphenylamine

000510

RECEIVED DEC 09 1986

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

SAMPLE NUMBER

EG828

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCB'S

Concentration Low Medium (Circle One)

GPC Cleanup ✓ yes __ no

Date Extracted/Prepared 9/15/86

Separatory Funnel Extraction __ yes

Date Analyzed 10/3/86

Continuous Liquid Extraction __ yes

Conc/Dil Factor 1

Percent Moisture (decanted) 22.46

CAS NUMBER		Ug/l or Ug/kg (Circle one)
319-84-6	ALPHA-BHC	10.3
319-85-7	BETA-BHC	10.3
319-86-8	DELTA-BHC	10.3
58-89-9	GAMMA-BHC (LINDANE)	10.3
76-44-8	HEPTACHLOR	10.3
309-00-2	ALDRIN	10.3
1024-57-3	HEPTACHLOR EPOXIDE	10.3
959-98-8	ENDOSULFAN I	10.3
60-57-1	DIELDRIN	20.6
72-55-9	4 4'-DDE	20.6
72-20-8	ENDRIN	20.6
33213-65-9	ENDOSULFAN II	20.6
72-54-8	4 4'-DDD	20.6
1031-07-8	ENDOSULFAN SULFATE	20.6
50-29-3	4 4'DDT	20.6
72-43-5	METHOXYCHLOR	103
53494-70-5	ENDRIN KEYTONE	20.6
57-74-9	CHLORDANE	103
8001-35-2	TOXAPHENE	206
12674-11-2	AROCLOR-1016	103
11104-28-2	AROCLOR-1221	103
11141-16-5	AROCLOR-1232	103
53469-21-9	AROCLOR-1242	103
12672-29-6	AROCLOR-1248	103
11097-69-1	AROCLOR-1254	206
11096-82-5	AROCLOR-1260	206

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 _____ or W/s 30.45 G V/t 2000 uL V/i 5 uL

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

RECEIVED DEC 0 9 1986

000541

Sample Number EG-828

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VOA	359	1
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11. —	UNKNOWN	BNA	358	210
12. —	↓		409	110
13. —	↓		419	210
14. 98-82-8	(1-METHYLETHYL) BENZENE		429	195
15. 628-68-2	2,2'-OXYBIS, DIACETATE ETHANOL		560	178
16. —	UNKNOWN		1094	122
17. 423-38-1	1,1,3,4-TETRACHLORO-1,2,2,3,4,4-HEXAFLUOROBUTANE		1250	136
18.				
19. —	UNKNOWN HYDROCARBON		1271	155
20. —	↓		1323	277
21. —	↓		1411	150
~~22. 15541-50-0~~	UNKNOWN		1485	80
23. 10544-50-0	MOL. (S8) SULFUR		1586	428
24. —	UNKNOWN HYDROCARBON		1907	243
25. —	UNKNOWN		1995	243
26. —	UNKNOWN HYDROCARBON		2027	190
27. —	↓		2138	415
28. —	↓		2243	318
29. —	↓		2353	DCM ~~259~~ 129
30. —	UNKNOWN		2371	DCM ~~875~~ 259
—	↓	↓	2384	875

RECEIVED DEC 0 9 1986

000587
Sample Number
EG-829

86FL10580

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: CALIFORNIA WATER LABS
Case No: 6402
Lab Sample ID No: CC00347C
QC Report No:
Sample Matrix: SOIL
Contract No: 68-01-7277
Data Release Authorized By: B. Tyson
Date Sample Received: 09/11/86

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared:
Date Analyzed: 9/29/86
Conc./Dil Factor: 1 pH 6.0
Percent Moisture: (Not Decanted) 13.6

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	12. U
74-83-9	Bromomethane	
75-01-4	Vinyl Chloride	
75-00-3	Chloroethane	
75-09-2	Methylene Chloride	3.2 J
67-64-1	Acetone	132. B
75-15-0	Carbon Disulfide	5.8 U
75-35-4	1, 1-Dichloroethene	
75-34-3	1, 1-Dichloroethane	
156-60-5	Trans-1, 2-Dichloroethene	
67-66-3	Chloroform	
107-06-2	1, 2-Dichloroethane	
78-93-3	2-Butanone	12. U
71-55-6	1, 1, 1-Trichloroethane	5.8 U
56-23-5	Carbon Tetrachloride	
108-05-4	Vinyl Acetate	12. U
75-27-4	Bromodichloromethane	5.8 U

CAS Number		ug/l or ug/Kg (Circle One)
78-87-5	1, 2-Dichloropropane	5.8 U
10061-02-6	Trans-1, 3-Dichloropropene	
79-01-6	Trichloroethene	
124-48-1	Dibromochloromethane	
79-00-5	1, 1, 2-Trichloroethane	
71-43-2	Benzene	
10061-01-5	cis-1, 3-Dichloropropene	
110-75-8	2-Chloroethylvinylether	12. U
75-25-2	Bromoform	5.8 U
591-78-6	4-Methyl-2-Pentanone	12. U
108-10-1	2-Hexanone	
127-18-4	Tetrachloroethene	5.8 U
79-34-5	1, 1, 2, 2-Tetrachloroethane	12. U
108-88-3	Toluene	1.7 J
108-90-7	Chlorobenzene	5.8 U
100-41-4	Ethylbenzene	
100-42-5	Styrene	
	Total Xylenes	

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.

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 action. (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 indicated 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). If limit of detection is 10 µg/l and a concentration of 3 µg/l is calculated, report as 3J.

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥10 ng/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.

RECEIVED DEC 0 9 1986

aboratory Name: CAL WATER LABS
Case No: 6402

Sample Number
EG829 R

ORGANICS ANALYSIS DATA SHEET
(Page 2)

SEMIVOLATILE COMPOUNDS

ncentration: LOW
te Extracted/Prepared: 09/15/86
Date Analyzed: 09/25/86
nc/Dil Factor: 1.
rcent Moisture: (Decanted) 13.6

GPC Cleanup X Yes ___ No
Separatory Funnel Extraction ___ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/KG	CAS Number		UG/KG
8-95-2	Phenol	380. U	83-32-9	Acenaphthene	380. U
1-44-4	bis(2-Chloroethyl)Ether	380. U	51-28-5	2,4-Dinitrophenol	1900. U
95-57-8	2-Chlorophenol	380. U	100-02-7	4-Nitrophenol	1900. U
1-73-1	1,3-Dichlorobenzene	380. U	132-64-9	Dibenzofuran	380. U
6-46-7	1,4-Dichlorobenzene	380. U	121-14-2	2,4-Dinitrotoluene	380. U
100-51-6	Benzyl Alcohol	380. U	606-20-2	2,6-Dinitrotoluene	380. U
5-50-1	1,2-Dichlorobenzene	380. U	84-66-2	Diethylphthalate	380. U
-48-7	2-Methylphenol	380. U	7005-72-3	4-Chlorophenyl-phenylether	380. U
38-32-9	bis(2-Chloroisopropyl)Ether	380. U	86-73-7	Fluorene	380. U
106-44-5	4-Methylphenol	380. U	100-10-6	4-Nitroaniline	1900. U
-64-7	N-Nitroso-Di-n-Propylamine	380. U	534-52-1	4,6-Dinitro-2-Methylphenol	1900. U
72-1	Hexachloroethane	380. U	86-30-6	N-Nitrosodiphenylamine (1)	~~5.73~~ 380 U DCH
98-95-3	Nitrobenzene	380. U	101-55-3	4-Bromophenyl-phenylether	380. U
59-1	Isophorone	380. U	118-74-1	Hexachlorobenzene	380. U
75-5	2-Nitrophenol	380. U	87-86-5	Pentachlorophenol	1900. U
105-67-9	2,4-Dimethylphenol	380. U	85-01-8	Phenanthrene	380. U
85-0	Benzoic Acid	1900. U	120-12-7	Anthracene	380. U
-91-1	bis(2-Chloroethoxy)Methane	380. U	84-74-2	Di-n-Butylphthalate	380. U
-83-2	2,4-Dichlorophenol	380. U	206-44-0	Fluoranthene	380. U
20-82-1	1,2,4-Trichlorobenzene	380. U	129-00-0	Pyrene	380. U
20-3	Naphthalene	380. U	85-68-7	Butylbenzylphthalate	380. U
-47-8	4-Chloroaniline	380. U	91-94-1	3,3'-Dichlorobenzidine	760. U
7-68-3	Hexachlorobutadiene	380. U	56-55-3	Benzo(a)Anthracene	380. U
50-7	4-Chloro-3-Methylphenol	380. U	117-81-7	bis(2-Ethylhexyl)Phthalate	~~5.93~~ 380 U DCH
57-6	2-Methylnaphthalene	380. U	218-01-9	Chrysene	380. U
7-47-4	Hexachlorocyclopentadiene	380. U	117-84-0	Di-n-Octyl Phthalate	380. U
8-06-2	2,4,6-Trichlorophenol	380. U	205-99-2	Benzo(b)Fluoranthene	380. U
5-4	2,4,5-Trichlorophenol	1900. U	207-08-9	Benzo(k)Fluoranthene	380. U
8-7	2-Chloronaphthalene	380. U	50-32-8	Benzo(a)Pyrene	380. U
3-74-4	2-Nitroaniline	1900. U	193-39-5	Indeno(1,2,3-cd)Pyrene	380. U
11-3	Dimethyl Phthalate	380. U	53-70-3	Dibenz(a,h)Anthracene	380. U
96-8	Acenaphthylene	380. U	191-24-2	Benzo(g,h,i)Perylene	380. U
-09-2	3-Nitroaniline	1900. U			

(1) - Cannot be separated from diphenylamine

RECEIVED DEC 0 9 1986

000589

Laboratory Name CALIFORNIA WATER LABS

SAMPLE NUMBER

EG 829/10

Case No 6402

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCB'S

Concentration Low Medium (Circle One)

GPC Cleanup ✓ yes __ no

Date Extracted/Prepared 9/15/86

Separatory Funnel Extraction __ yes

Date Analyzed 10/8/86

Continuous Liquid Extraction __ yes

Conc/Dil Factor 10

Percent Moisture (decanted) 13.61

CAS NUMBER		Ug/l or Ug/kg (Circle one)
319-84-6	ALPHA-BHC	9.3
319-85-7	BETA-BHC	~~9.3~~ 50.70
319-86-8	DELTA-BHC	9.3
58-89-9	GAMMA-BHC (LINDANE)	9.3
76-44-8	HEPTACHLOR	9.3
309-00-2	ALDRIN	9.3
1024-57-3	HEPTACHLOR EPOXIDE	9.3
959-98-8	ENDOSULFAN I	9.3
60-57-1	DIELDRIN	18.5
72-55-9	4 4'-DDE	18.5
72-20-8	ENDRIN	18.5
33213-65-9	ENDOSULFAN II	18.5
72-54-8	4 4'-DDD	18.5
1031-07-8	ENDOSULFAN SULFATE	18.5
50-29-3	4 4'DDT	18.5
72-43-5	METHOXYCHLOR	92.6
53494-70-5	ENDRIN KEYTONE	18.5
57-74-9	CHLORDANE	92.6
8001-35-2	TOXAPHENE	185
12674-11-2	AROCLOR-1016	92.6
11104-28-2	AROCLOR-1221	92.6
11141-16-5	AROCLOR-1232	92.6
53469-21-9	AROCLOR-1242	92.6
12672-29-6	AROCLOR-1248	92.6
11097-69-1	AROCLOR-1254	185
11096-82-5	AROCLOR-1260	185

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 _____ or W/s 30.90 V/t 2000 ml V/i 5 ul

Laboratory Name CALIFORNIA WATER LABS RECEIVED DEC 0 9 1986

Case No 6462

000590

Sample Number EG-829

YOA C000 34VO
BNA C000 34BN R

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1. —	UNKNOWN	VOA	115	3
2. —	↓		359	2
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.	UNKNOWN	BNA	358	167
12. 17612-35-0	2,2-DIMETHYL-3-PROPYL-OXIRANE		406	109
13. 98-82-8	(1-METHYLETHYL) BENZENE		427	160
14. 17302-23-7	4,5-DIMETHYL NONANE		690	105
15. —	UNKNOWN HYDROCARBON		814	112
16. —	↓		928	147
17. —			1034	99
18. —	↓		1134	99
19. 544-76-3	HEXADECANE		1229	104
20. 6418-41-3	3-METHYL-TRIDECANE		1319	122
21. 55045-11-9	5-PROPYL-TRIDECANE		1324	190
22. —	UNKNOWN HYDROCARBON		1405	108
23. —	↓		1412	81
24. —	↓		1486	126
25. 10024-17-0	MOL. (S8) SULFUR		1586	90
26. —	UNKNOWN HYDROCARBON		1709	151
27. —	↓		1778	97
28. —			2100	94
29. —			2138	130
30. —	↓		2242	94

000639

RECEIVED DEC 0 9 1986

boratory Name: CAL WATER LABS
se No: 6402

Sample Number
EG830 R

ORGANICS ANALYSIS DATA SHEET
(Page 2)

SEMIVOLATILE COMPOUNDS

Concentration: LOW
Date Extracted/Prepared: 09/15/86
Date Analyzed: 09/25/86
Conc/Dil Factor: 1.
Percent Moisture: (Decanted) 14.0

GPC Cleanup X Yes ___ No
Separatory Funnel Extraction ___ Yes
Continuous Liquid-Liquid Extraction ___ Yes

CAS Number		UG/KG		CAS Number		UG/KG	
1[illegible]-95-2	Phenol	380.	U	83-32-9	Acenaphthene	380.	U
1 -44-4	bis(2-Chloroethyl)Ether	380.	U	51-28-5	2,4-Dinitrophenol	1900.	U
9[illegible] 57-8	2-Chlorophenol	380.	U	100-02-7	4-Nitrophenol	1900.	U
541-73-1	1,3-Dichlorobenzene	380.	U	132-64-9	Dibenzofuran	380.	U
1 -46-7	1,4-Dichlorobenzene	380.	U	121-14-2	2,4-Dinitrotoluene	380.	U
1 -51-6	Benzyl Alcohol	380.	U	606-20-2	2,6-Dinitrotoluene	380.	U
95-50-1	1,2-Dichlorobenzene	380.	U	84-66-2	Diethylphthalate	380.	U
9 48-7	2-Methylphenol	380.	U	7005-72-3	4-Chlorophenyl-phenylether	380.	U
3 38-32-9	bis(2-Chloroisopropyl)Ether	380.	U	86-73-7	Fluorene	380.	U
106-44-5	4-Methylphenol	380.	U	100-10-6	4-Nitroaniline	1900.	U
6[illegible]-64-7	N-Nitroso-Di-n-Propylamine	380.	U	534-52-1	4,6-Dinitro-2-Methylphenol	1900.	U
6 72-1	Hexachloroethane	380.	U	86-30-6	N-Nitrosodiphenylamine (1)	380.	U
9 95-3	Nitrobenzene	380.	U	101-55-3	4-Bromophenyl-phenylether	380.	U
78-59-1	Isophorone	380.	U	118-74-1	Hexachlorobenzene	380.	U
3 75-5	2-Nitrophenol	380.	U	87-86-5	Pentachlorophenol	1900.	U
1 -67-9	2,4-Dimethylphenol	380.	U	85-01-8	Phenanthrene	380.	U
5-85-0	Benzoic Acid	1900.	U	120-12-7	Anthracene	380.	U
-91-1	bis(2-Chloroethoxy)Methane	380.	U	84-74-2	Di-n-Butylphthalate	380.	U
-83-2	2,4-Dichlorophenol	380.	U	206-44-0	Fluoranthene	380.	U
20-82-1	1,2,4-Trichlorobenzene	380.	U	129-00-0	Pyrene	380.	U
1-20-3	Naphthalene	380.	U	85-68-7	Butylbenzylphthalate	380.	U
-47-8	4-Chloroaniline	380.	U	91-94-1	3,3'-Dichlorobenzidine	770.	U
58-3	Hexachlorobutadiene	380.	U	56-55-3	Benzo(a)Anthracene	380.	U
9-50-7	4-Chloro-3-Methylphenol	380.	U	117-81-7	bis(2-Ethylhexyl)Phthalate	~~8.11~~ 1055 Dim	
1 7-6	2-Methylnaphthalene	380.	U	218-01-9	Chrysene	380.	U
7-4	Hexachlorocyclopentadiene	380.	U	117-84-0	Di-n-Octyl Phthalate	380.	U
8-06-2	2,4,6-Trichlorophenol	380.	U	205-99-2	Benzo(b)Fluoranthene	380.	U
5 95-4	2,4,5-Trichlorophenol	1900.	U	207-08-9	Benzo(k)Fluoranthene	380.	U
1 68-7	2-Chloronaphthalene	380.	U	50-32-8	Benzo(a)Pyrene	380.	U
6-74-4	2-Nitroaniline	1900.	U	193-39-5	Indeno(1,2,3-cd)Pyrene	380.	U
31-11-3	Dimethyl Phthalate	380.	U	53-70-3	Dibenz(a,h)Anthracene	380.	U
0 96-8	Acenaphthylene	380.	U	191-24-2	Benzo(g,h,i)Perylene	380.	U
9 9-2	3-Nitroaniline	1900.	U				

) - Cannot be separated from diphenylamine

Form I

RECEIVED DEC 09 1986

000610

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

SAMPLE NUMBER

EG830

ORGANICS ANALYSIS DATA SHEET
(PAGE 3)

PESTICIDE/PCB'S

Concentration Low Medium (Circle One)

GPC Cleanup ✓ yes __ no

Date Extracted/Prepared 9/15/86

Separatory Funnel Extraction __ yes

Date Analyzed 10/9/86

Continuous Liquid Extraction __ yes

Conc/Dil Factor 1

Percent Moisture (decanted) 14.01

CAS NUMBER		Ug/l or Ug/kg (Circle one)
319-84-6	ALPHA-BHC	9.3
319-85-7	BETA-BHC	9.3
319-86-8	DELTA-BHC	9.3
58-89-9	GAMMA-BHC (LINDANE)	9.3
76-44-8	HEPTACHLOR	9.3
309-00-2	ALDRIN	9.3
1024-57-3	HEPTACHLOR EPOXIDE	9.3
959-98-8	ENDOSULFAN I	9.3
60-57-1	DIELDRIN	18.6
72-55-9	4 4'-DDE	18.6
72-20-8	ENDRIN	18.6
33213-65-9	ENDOSULFAN II	18.6
72-54-8	4 4'-DDD	18.6
1031-07-8	ENDOSULFAN SULFATE	18.6
50-29-3	4 4'DDT	18.6
72-43-5	METHOXYCHLOR	93.0
53494-70-5	ENDRIN KEYTONE	18.6
57-74-9	CHLORDANE	93.0
8001-35-2	TOXAPHENE	186
12674-11-2	AROCLOR-1016	93.0
11104-28-2	AROCLOR-1221	93.0
11141-16-5	AROCLOR-1232	93.0
53469-21-9	AROCLOR-1242	93.0
12672-29-6	AROCLOR-1248	93.0
11097-69-1	AROCLOR-1254	186
11096-82-5	AROCLOR-1260	186

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 _____ or W/s 30.02 g V/t 2000 ul V/i 5 ul

RECEIVED DEC 0 9 1986

Laboratory Name CALIFORNIA WATER LABS

Case No 6402

000641

Sample Number EG830

VOA C00035 VO

BNA C00035BNR

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	—	UNKNOWN	VOA	359	3
2.					
3.					
4.					
5.					
6.					
7.					
8.					
9.					
10.					
11.	—	UNKNOWN	BNA	345	182
12.	—	↓		400	129
13.	98-82-8	(1-METHYLETHYL) BENZENE		421	212
14.	—	UNKNOWN HYDROCARBON		927	140
15.	—			1034	150
16.	—			1134	150
17.	—			1229	150
18.	—			1319	217
19.	—			1324	243
20.	—			1404	157
21.	—	↓		1412	122
22.	54105-67-8	2,6-DIMETHYL HEPTADECANE		1486	147
23.	14024-17-0	MOL. (S8) SULFUR		1586	460
24.	—	UNKNOWN HYDROCARBON		1709	195
25.	—			1777	195
26.	—			1843	125
27.	—			1906	153
28.	—			2026	181
29.	—			2138	377
30.	—	↓	↓	2243	419