965680

Site Inspection Report

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	980500391

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
LaPorte Old City Dump	McClung Rd and Hwy. 39

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
LaPorte	IN	46350	LaPorte	127	5

09 COORDINATES: LATITUDE 41° 37' 30" | LONGITUDE 86° 43' 30"

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: 4 / 23 / 85 (MONTH DAY YEAR)

02 SITE STATUS: ☐ ACTIVE ☒ INACTIVE

03 YEARS OF OPERATION: 1961 (BEGINNING YEAR) / 1979 (ENDING YEAR) ____ UNKNOWN

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

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO
Robert Hingtgen	Hydrologist	E&E	(312) 663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
John Sternberg	Civil Engineer	E&E	(312) 663-9415
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
William Hump	City Engineer	City Hall	(219) 362-2327
Marion Galloway	Street Dept. Superintendent	801 Michigan Ave LaPorte, IN 46350	( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	10:30 am	Sunny, Windy, 70°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
HARRY ATKINSON	Indiana State Board of Health	(317) 243-5

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Robert Hingtgen	USEPA	E&E (FIT)	312/663-9415	7 / 15 / 85 (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
IN	980500391

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A SOLID
- [ ] B POWDER, FINES
- [X] 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 Unknown

NO. OF DRUMS Unknown

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	Unknown	Wastewater Treatment Sludge	
OLW	OILY WASTE		disposed 1979	
SOL	SOLVENTS			
PSD	PESTICIDES		Local Industries hauled their own	
OCC	OTHER ORGANIC CHEMICALS		waste to the landfill, city hauled	
IOC	INORGANIC CHEMICALS		municipal garbage.	
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

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
	None				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

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

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

FIT SI interview 4/23/85

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	980500391

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [X] OBSERVED (DATE 4/23/85) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~24,000 (3-mi radius) — 04 NARRATIVE DESCRIPTION

Results of inorganic analysis by RMAL of FIT samples collected 4/23/85 shows presence of barium 124 ug/L, copper 7.1 ug/L, zinc 352 ug/L.

01 [X] B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) [X] POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

Fishtrap Lake, Pine Lake, and Clear Lake could become contaminated depending on groundwater flow. Leachate was observed flowing into a private pond at Sample point 2.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: — 04 NARRATIVE DESCRIPTION

N/A

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: — 04 NARRATIVE DESCRIPTION

N/A

01 [X] E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE:) [X] POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~70 — 04 NARRATIVE DESCRIPTION

Site is accessible to surrounding residents.
Workers still dispose of tree limbs at the landfill.

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE 4/23/85) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 30 (Acres) — 04 NARRATIVE DESCRIPTION

Contamination of soil by numerous leachate seeps

01 [X] G. DRINKING WATER CONTAMINATION — 02 [X] OBSERVED (DATE: 4/23/85) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~24,000 (3-mi radius) — 04 NARRATIVE DESCRIPTION

NON-RESPONSIVE

Samples mentioned in A were drawn from private wells residence adjacent to landfill entrance, switched to city water as a result of sampling done by ISBH 5-6 yrs. ago.

01 [X] H. WORKER EXPOSURE/INJURY — 02 [X] OBSERVED (DATE: 4/23/85) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: ~5 — 04 NARRATIVE DESCRIPTION

Workers still dispose of tree limbs at the landfill.

01 [X] I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) [X] POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~70 — 04 NARRATIVE DESCRIPTION

SEE E

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	930500391

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☒ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

A local resident observed ducks on or near the landfill which were "so full of gunk they couldn't fly."

01 ☒ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Surrounding lakes are used extensively for fishing.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☒ OBSERVED (DATE 4/23/85) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ~70 — 04 NARRATIVE DESCRIPTION

Exposed barrel and three leachate seeps observed.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☒ OBSERVED (DATE: 4/23/85) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Leachate observed flowing into private pond at Sample point 2.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

N/A

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☒ OBSERVED (DATE: 7/13/76) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Violation letter for accepting 20 cubic yards of sludge from Modine in LaPorte, by David Lamm, Solid Waste Mgmt. Section, ISBH, To Mayor Smith of LaPorte

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

N/A

III. TOTAL POPULATION POTENTIALLY AFFECTED: 24,000

IV. COMMENTS

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

FIT SI 4/23/85
E&E Files

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
TN	980508391

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)	Unknown			
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☒ F. LANDFILL	Unknown	
☐ 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 N/A (Specify)

05 OTHER

☐ A. BUILDINGS ON SITE

N/A

06 AREA OF SITE

30 (Acres)

07 COMMENTS

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.

Three leachate seeps were observed, one was flowing into an off-site pond at Sample point 2. Also, an exposed barrel was present at Sample Point 1.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS Landfill is not fenced. Several residences border the landfill as well as a city park.

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

FIT SI 4/23/85

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	980 500 391

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. <1.25 (mi)
NON-COMMUNITY	C. ☐	D. ☒		D. ☒	E. ☒	F. ☐	B. <0.01 (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 ~24,000

03 DISTANCE TO NEAREST DRINKING WATER WELL <0.01 (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
20 (ft)	North	20 (ft)	Unknown (gpd)	☒ YES ☐ NO

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

wells near the landfill are ~60 ft deep in sand. In the LaPorte area wells are less than 200' deep in the glaciofluvial sand and gravel aquifer, which is more than 170' Thick. This aquifer is the chief source for domestic, industrial supply.

10 RECHARGE AREA		11 DISCHARGE AREA	
☒ YES ☐ NO	COMMENTS Tom Ditebbo, ISBH Geologic Description 8/24/77	☐ 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
Fish Trap lake	☐	<0.1 (mi)
Clear Lake	☐	<0.3 (mi)
Pine Lake	☐	<0.4 (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. 2,000 NO. OF PERSONS	B. 13,000 NO. OF PERSONS	C. 24000 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION <0.1 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 3400

04 DISTANCE TO NEAREST OFF-SITE BUILDING <0.1 (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)

~20 homes within 1/4 mi radius of entrance to landfill on McClung Road.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	980500391

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
400 (ft)	Unknown (ft)	Unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
3.0 (in)	2.4 (in)	4 %	South	4 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS *(5 acre minimum)*

ESTUARINE: A. N/A (mi)

OTHER: B. 0.5 (mi)

12 DISTANCE TO CRITICAL HABITAT *(of endangered species)*

Unknown (mi)

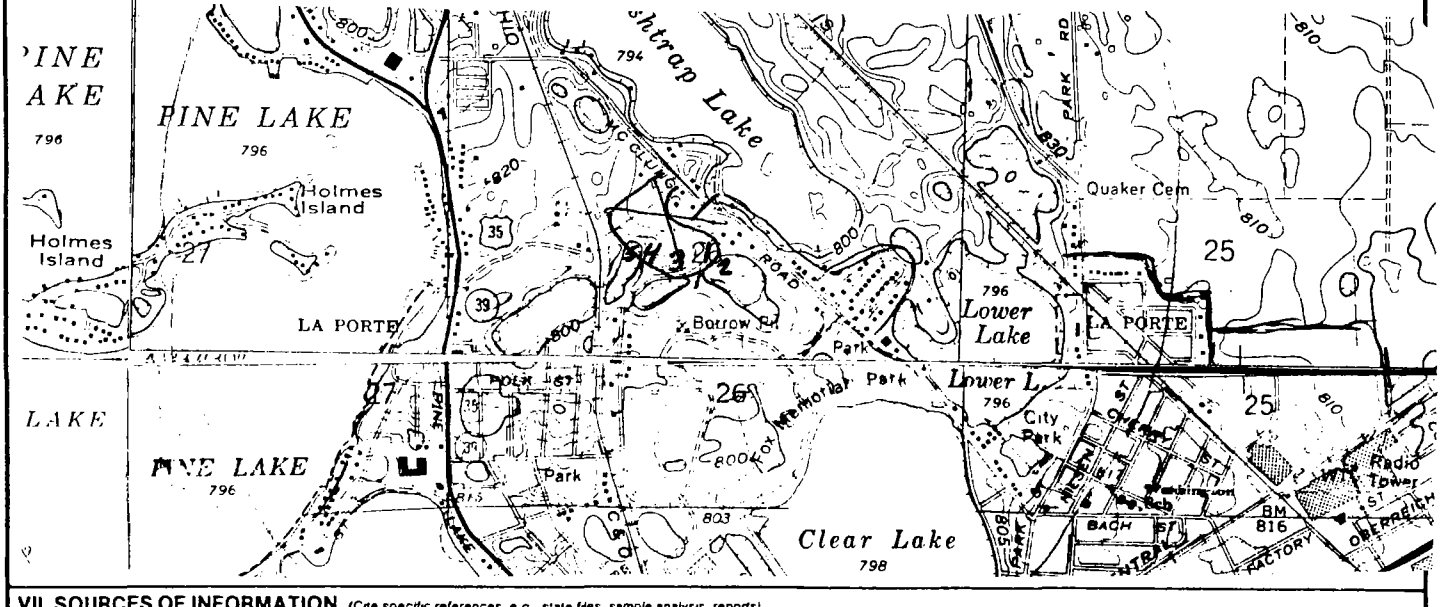
ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. <0.75 (mi)	B. <0.5 (mi)	C. <0.2 (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



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

U.S.G.S. 7.5' Quads LaPorte East and Springville
U.S.D.A. Soil Survey of LaPorte County, IN
FIT SI 4/23/85
Ground water Resources of Northwestern IN: LaPorte County, USGS

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	980500371

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	3	Inorganics To Rocky Mtn. Analytical	
SURFACE WATER		Organics To IT Analytical Services	
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	5	Inorganics To Rocky Mtn. Analytical	
VEGETATION		Organics To IT Analytical Services	
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
	Reading of 4 ppm with the OVA was observed
	a sample point 1

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☐ AERIAL

02 IN CUSTODY OF _____ (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS E&E office (Topo maps)

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

NA

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

FIT SI 4/23/85

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	986500391

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
City of LaPorte			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
City Hall, 801 Michigan Ave.			

05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE
LaPorte	IN	46350			

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)

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

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

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

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

FIT SI 4/23/85

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	980 508 391

II. CURRENT OPERATOR *(Provide if different from owner)*

01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY *(If applicable)*

10 NAME	11 D+B NUMBER
12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
14 CITY	15 STATE / 16 ZIP CODE

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

01 NAME: Indiana Sanitation	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*: State Rd. 49 North	04 SIC CODE
05 CITY: Portage	06 STATE: IN / 07 ZIP CODE: 46368
08 YEARS OF OPERATION: 4-5 yrs. in late 70's	09 NAME OF OWNER DURING THIS PERIOD: City of LaPorte

PREVIOUS OPERATORS' PARENT COMPANIES *(If applicable)*

10 NAME	11 D+B NUMBER
12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
14 CITY	15 STATE / 16 ZIP CODE

01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER
12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
14 CITY	15 STATE / 16 ZIP CODE

01 NAME	02 D+B NUMBER
03 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER
12 STREET ADDRESS *(P.O. Box, RFD #, etc.)*	13 SIC CODE
14 CITY	15 STATE / 16 ZIP CODE

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

FIT SI 4/23/85

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	980500391

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER

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
Modine		Allis Chalmers	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
239 Factory		11 Pine Lake Ave	

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
LaPorte	IN	46350	LaPorte	IN	46350

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
American Rubber			

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

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
LaPorte	IN	46350			

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Modine		Allis Chalmers	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
239 Factory		11 Pine Lake Ave	

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
LaPorte	IN	46350	LaPorte	IN	46350

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
American Rubber			

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

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
LaPorte	IN	46350			

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

FIT SI interview 4/23/85

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	980500391

II. PAST RESPONSE ACTIVITIES

NON-RESPONSIVE

02 DATE 1979-1980 03 AGENCY ISBH

residence switched to city water as a result of ISBH sampling 5-6 years ago.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	980500391

II PAST RESPONSE ACTIVITIES *(Continued)*

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

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

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

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

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

01 ☒ W. GAS CONTROL — 02 DATE 1982 — 03 AGENCY ISBH
04 DESCRIPTION Methane Vents required by State 1982

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

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

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

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

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

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

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

FIT SI interview 4/23/85

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	980500391

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

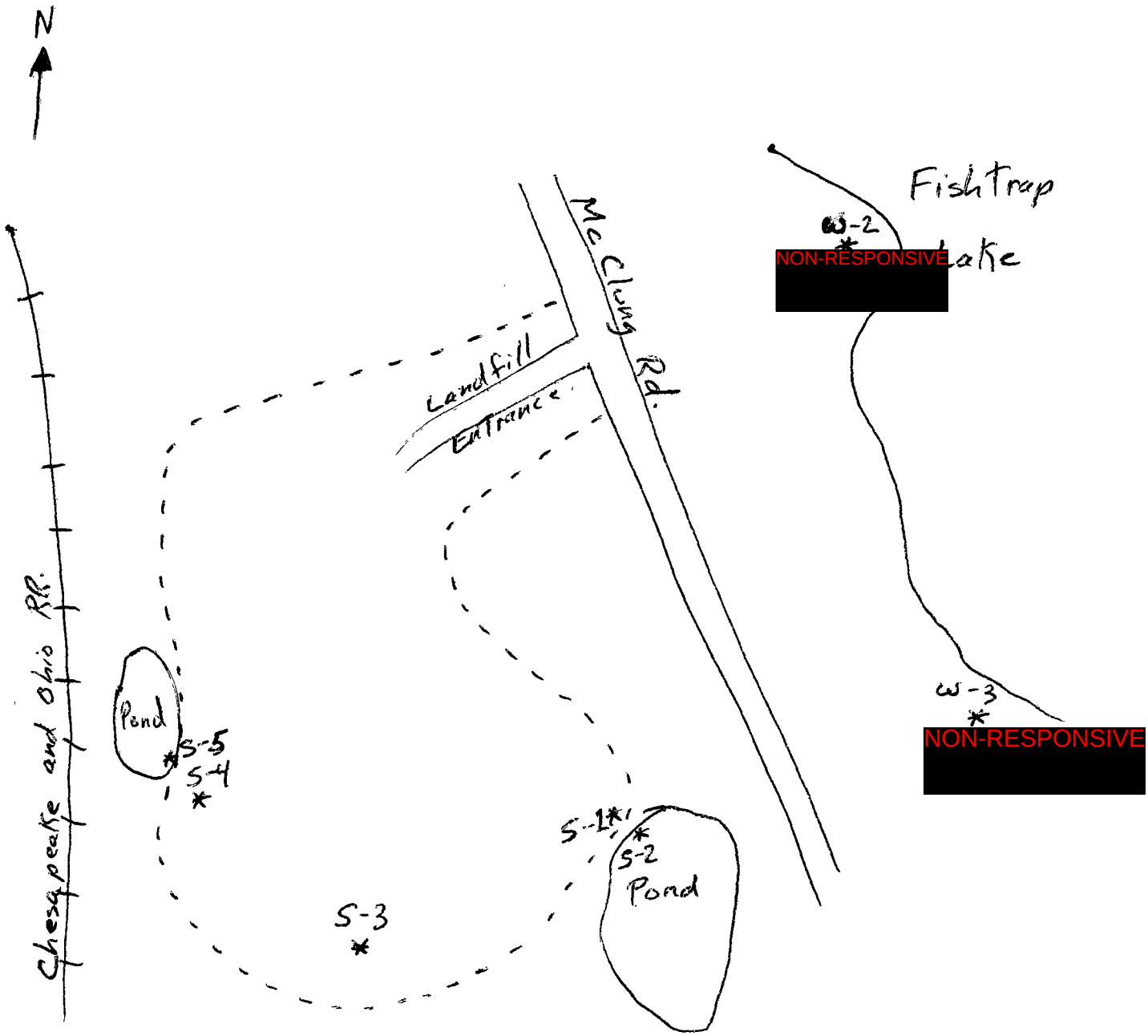
02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

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

FIT SI interview 4/23/85

EPA FORM 2070-13 (7-81)

Location of Sampling Points at LaPorte Old City Dump.
IN D980500391 / ROS-8410-02B / LaPorte, Indiana



Sample	Inorganic #	Organic #
W-1	MED 398	E8600 → This sample was from a LaPorte municipal well at NON-RESPONSIVE about 1.25 miles South of Landfill.
W-2	MED 399	E8601
W-3	MED 400	E8602
S-1	ME 3781	E8604
S-2	ME 3782	E8605
S-3	ME 3783	E8606
S-4	ME 3784	E8607
S-5	ME3785	E8608
Blank	ME 3780	E8603

Immediate Removal Action Check Sheet

	High	Moderate	Low
Fire and Explosion Hazard			

Flammable Materials N/A

Explosives N/A

Incompatable Chemicals N/A

Direct Contact with Acutely Toxic Chemicals

Site Security Chain across entrance road, but no fence.

Leaking Drums or Tanks N/A

Open Lagoons or pits N/A

Materials on Surface Exposed barrel (empty, rusty) at Sample point 1.

Proximity of Population <0.1 mi.

Evidence of Casual Site Use Workers dispose of tree limbs.

Contaminated Water Supply

Exceeds 10 Day Snarl N/A

Gross Taste or Odors N/A

Alternate Water Available No

Potential Contamination ✓

Is the site abandoned or active?

Site has been abandoned except for the disposal of tree limbs.

Site Name / TDD#: LaPorte Old City Dump 05-8410-0213

Case Number : 4217

Sampling Date: 4/23/85

Sampling Time: 9:10 Am

Sample/Station Location: W-1 LaPorte City Well [redacted]

NON-RESPONSIVE

Organic Traffic Number E 8600

Inorganic Traffic Number MED 398

~~High Hazard Traffic Number E~~ Tags 5-130551 - 5-130555

Physical Description

At time of collection: clear, water

(Includes Matrix Spike Duplicate)

Physical Changes (if any)

From time of collection until shipment: N/A

Instrument Readings (i.e. - pH, conductivity...): pH 7.0

Sampling Date: 4/23/85

Sampling Time: 10:55 Am

Sample/Station Location: W-2 [redacted]

NON-RESPONSIVE

outside faucet

Organic Traffic Number E 8601

Inorganic Traffic Number MED 399

~~High Hazard Traffic Number E~~ Tags 5-130556 To 5-130560

Physical Description

At time of collection: clear water

Physical Changes (if any)

From time of collection until shipment: N/A

Instrument Readings (i.e. - ph, conductivity...): pH 7.0

Site Name / TDD#: La Porte Old City Dump 05-8410-02B
Case Number : 4217
Sampling Date: 4/23/85
Sampling Time: 1:50 PM
Sample/Station Location: W-3

NON-RESPONSIVE

Organic Traffic Number E 8602
Inorganic Traffic Number MED 400
~~High Hazard Traffic Number E~~ Tags 5-130561 To 5-130565

Physical Description
At time of collection: clear water

Physical Changes (if any)
From time of collection until shipment: N/A

Instrument Readings (i.e. - pH, conductivity...): pH 7.0

Sampling Date: 4/23/85
Sampling Time: 11:40 AM
Sample/Station Location: BLANK, Distilled water

Organic Traffic Number E 8603
Inorganic Traffic Number ME 3780
~~High Hazard Traffic Number E~~ Tags 5-130566 To 5-130570

Physical Description
At time of collection: clear, distilled water

Physical Changes (if any)
From time of collection until shipment: NA

Instrument Readings (i.e. - ph, conductivity...): pH 6.0

Site Name / TDD#: La Porte Old City Dump 05-8410-0223
Case Number : 4217
Sampling Date: 4/23/85
Sampling Time: 12:16 PM
Sample/Station Location: S-1 Leachate Seep East side

Organic Traffic Number E 8604
Inorganic Traffic Number ME 3781
~~High Hazard Traffic Number E~~ Tags 5-130571 To 5-130574

Physical Description
At time of collection: Red-Orange Stained soil

Physical Changes (if any)
From time of collection until shipment: NONE

Instrument Readings (i.e. - pH, conductivity...): ☒
OVA - 4ppm

Sampling Date: 4/23/85
Sampling Time: 12:23 PM
Sample/Station Location: S-2 Pond Sediment below S-1

Organic Traffic Number E 8605
Inorganic Traffic Number ME 3782
~~High Hazard Traffic Number E~~ Tags 5-130575 To 5-130578

Physical Description
At time of collection: Lightly Stained sandy soil

Physical Changes (if any)
From time of collection until shipment: NONE

Instrument Readings (i.e. - ph, conductivity...): —

Site Name / TDD#: LaPorte Old City Dump 05-8410-02B
Case Number : 4217
Sampling Date: 4/23/84
Sampling Time: 12:41 PM
Sample/Station Location: S-3 Leachate Seep on Top of fill

Organic Traffic Number E 8606
Inorganic Traffic Number ME 3783
~~High Hazard Traffic Number E~~ Tags 5-130579 To 5-130582

Physical Description
At time of collection: Red-Orange Stained soil

Physical Changes (if any)
From time of collection until shipment: NONE

Instrument Readings (i.e. - pH, conductivity...): -

Sampling Date: 4/23/84
Sampling Time: 1:05 PM
Sample/Station Location: S-4 Leachate Seep West side of fill

Organic Traffic Number E 8607
Inorganic Traffic Number ME 3784
~~High Hazard Traffic Number E~~ Tags 5-130583 To 5-130586

Physical Description
At time of collection: Red-Orange Stained soil

Physical Changes (if any)
From time of collection until shipment: NONE

Instrument Readings (i.e. - ph, conductivity...): -

Site Name / TDD#: La Porte Old City Dump 05-8410-02B

Case Number : 4217

Sampling Date: 4/23/85

Sampling Time: 1:20 PM

Sample/Station Location: S-5 Pond Sediment below S-4

Organic Traffic Number E 8608

Inorganic Traffic Number ME 3785

~~High Hazard Traffic Number E~~ Tags 5-130587 To 5-130590

Physical Description

At time of collection: Sandy soil (brown)

Physical Changes (if any)

From time of collection until shipment: NONE

Instrument Readings (i.e. - pH, conductivity...): —

Sampling Date:

Sampling Time:

Sample/Station Location:

Organic Traffic Number E

Inorganic Traffic Number ME

High Hazard Traffic Number E

Physical Description

At time of collection:

Physical Changes (if any)

From time of collection until shipment:

Instrument Readings (i.e. - ph, conductivity...):

ecology and environment, inc.
223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415
International Specialists in the Environmental Sciences

Date Received for Review: 6-4-85 Date Review Completed: 6-5-85

To: John Sternberg

From: Cynthia Bachunas / Cindy Pugh

Subject: LaPORTE OLD CITY DUMP (Indiana)
(R5-8410-28)

Sample Description: CASE 4217- Low Soil + Low Water Metals

Project Data Status: Still awaiting Low Soil + Low Water Organics

FIT Data Review Findings: Data acceptable with qualifications* noted below and on attached review sheet.

The low water blank ME 3780 contains 32 ug/l of copper and 2.3 ug/l of lead. Use copper and lead data with caution.

* Se data for low soil samples ME 3781 - ME 3785 cannot be used. (see attached review sheet).

Additional Comments:

More Q.A. info. is available in Rene Hix' file if needed.

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 5-30-85

SUBJECT: Review of Region V CLP Data
Received for Review on 5-28-85

RECEIVED JUN 04 1985

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: La Porte Old City Dump SMO Case No. 4217

EPA Data Set No. SF2295 No. of Samples: 9 D.U./Activity Numbers 1/905, C48500

CRL No. 85FS05S91 to 85FS05S98

SMO Traffic No. MED398-MED400 ME3780 - ME3785

CLP Laboratory: RMAL Hrs. Required for Review: 6

Following are our findings. This review covers 9 samples, 4 are low water samples and 5 are low soil samples.

For the 4 low water samples: Spike recoveries for Fe (58 %) & Tl (66%) are low as shown; data for these two elements is biased low. The data for Zn was unnecessarily flagged with an "E" due to improper application of serial dilution test criteria.

For the 5 low soil samples: Data for Fe cannot be used as the spike recovery of 34% is too low. Duplicate analysis of Fe (26%), Mn (122%) Zn (38%) & Al (27%) gave RPD's as shown, the data for these elements lacks precision.

( ) Data are acceptable for use. Aaron O. Synstaby 5-30-85.
(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 1320-4 (REV 3-78)

REGION V, U.S. ENVIRONMENTAL PROTECTION AGENCY
ESD/Central Regional Laboratory

DATA TRACKING - FORM I

RECEIVED JUN 04 1985

CRL Data Set No. SF 2295 ERRIS No. _____

SMO Case No. 4217 Site Name: LaPorte Old City Dump

Name of Laboratory: RMAL Data User: FIT

No. of Samples: 9 Date Samples Received: 5/28/85

1. Have chain-of-custody records been received? YES ✓ NO ___
2. Have Traffic reports been received? YES ✓ NO ___
3. If no, are Traffic report numbers written on the chain-of-custody record? YES ___ NO ___
4. If no, which Traffic report numbers are missing?

5. Are basic data forms in? YES ✓ NO ___
6. Number of samples claimed: 9 Number of samples received: 9
7. Checked by: Sylvia A. Griffin Date: 5/28/85
8. Received by Contract Project Management Section: JR Date: 5-28-85
9. Review Started: 5-29-85 Reviewer Signature: A. D. Lynatch
10. Total time spent on review: 6 hrs Date review completed: 5-30-85
11. Copied (xeroxed) by: Willie E. Gller Date: 5-31-85
12. Mailed to Data User by: _____ Date: _____

TO DATA USERS:

Please fill in the blanks and return this form to:

9/Inorganics

Charles Elly, DPO, Region V, SSCRL

13. Data received by: Cynthia Pugh Date: 6-4-85
14. Q.A. review received by: Cynthia Pugh Date: 6-4-85
15. Received by CRL - CPM Section for file by: _____

Data for MED398-MED400, & ME3780-ME3785 rec'd. Date: _____

Complete

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

RECEIVED JUN 0 4 1985

Date 5-24-85

SF2295

COVER PAGE
INORGANIC ANALYSIS DATA PACKAGE

Lab Name ROCKY MOUNTAIN ANALYTICAL
SOW No. 784

Case No. 4217
QC Report No. 5816

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
MED398			
MED399			
MED400			
ME3780			
[MED999]			

Comments: 4 LOW WATERS FOR TASKS 1&2 ONLY
THE ICAP 10X SERIAL DILUTION FOR SAMPLE MED400 IS IDENTIFIED AS MED999.
ZINC CONCENTRATION OF SERIAL DILUTION > 10% OF EXPECTED VALUE.

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.
* - 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
MS - Indicates Manual Spectrophotometric

LaPorte city well

RECEIVED JUN 0 4 1985

Form I

85F505591

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. MED398

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5816

Elements Identified and Measured

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

ug/L

1.	ALUMINUM	[32]	P	13.	MAGNESIUM	26700	P
2.	ANTIMONY	46U	P	14.	MANGANESE	208	P
3.	ARSENIC	4u	F	15.	MERCURY	0.1u	CV
4.	BARIUM	[124]	P	16.	NICKEL	5U	P
5.	BERYLLIUM	0.5U	P	17.	POTASSIUM	[3540]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5u	F R
7.	CALCIUM	96600	P	19.	SILVER	4U	P
8.	CHROMIUM	4U	P	20.	SODIUM	32600	P
9.	COBALT	7U	P	21.	THALLIUM	10u	F R
10.	COPPER	[4.4]	P	22.	TIN	36U	P
11.	IRON	4400	P	23.	VANDIUM	4U	P
12.	LEAD	2u	F	24.	ZINC	41	P E

Cyanide NR

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 [signature]

Hartke

RECEIVED JUN 8 4 1985

Form I

85FS055 92

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.
MED399

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5816

Elements Identified and Measured

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

ug/L

1.	ALUMINUM	23U	P	13.	MAGNESIUM	40600	P
2.	ANTIMONY	46U	P	14.	MANGANESE	21	P
3.	ARSENIC	4u	F	15.	MERCURY	0.1u	CV
4.	BARIUM	[44]	P	16.	NICKEL	5U	P
5.	BERYLLIUM	0.5U	P	17.	POTASSIUM	16400	P
6.	CADMIUM	5U	P	18.	SELENIUM	5u	F R
7.	CALCIUM	94700	P	19.	SILVER	4U	P
8.	CHROMIUM	4U	P	20.	SODIUM	10500	P
9.	COBALT	7U	P	21.	THALLIUM	10u	F R
10.	COPPER	[7.1]	P	22.	TIN	36U	P
11.	IRON	[51]	P	23.	VANDIUM	4U	P
12.	LEAD	2u	F	24.	ZINC	240	P E

Cyanide NR

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 [signature]

slater

RECEIVED JUN 0 4 1985

Form I

85F505593

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.
MED400

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5816

Elements Identified and Measured

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

ug/L

1.	ALUMINUM	23U	P	13.	MAGNESIUM	21600	P
2.	ANTIMONY	46U	P	14.	MANGANESE	292	P
3.	ARSENIC	4u	F	15.	MERCURY	0.1u	CV
4.	BARIUM	[44]	P	16.	NICKEL	5U	P
5.	BERYLLIUM	0.5U	P	17.	POTASSIUM	[1490]	P
6.	CADMIUM	5U	P	18.	SELENIUM	5u	F R
7.	CALCIUM	108000	P	19.	SILVER	4U	P
8.	CHROMIUM	4U	P	20.	SODIUM	[4040]	P
9.	COBALT	7U	P	21.	THALLIUM	10u	F R
10.	COPPER	4U	P	22.	TIN	36U	P
11.	IRON	11000	P	23.	VANDIUM	4U	P
12.	LEAD	[3.9]	F	24.	ZINC	352	P E

Cyanide NR 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 [signature]

Blank

RECEIVED JUN 0 4 1985

85FS05R09

Form I

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

EPA Sample No. ME3780

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5816

Elements Identified and Measured

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

ug/L

1.	ALUMINUM	23U	P	13.	MAGNESIUM	330U	P
2.	ANTIMONY	46U	P	14.	MANGANESE	3U	P
3.	ARSENIC	4u	F	15.	MERCURY	0.1u	CV
4.	BARIUM	12U	P	16.	NICKEL	5U	P
5.	BERYLLIUM	0.5U	P	17.	POTASSIUM	470U	P
6.	CADMIUM	5U	P	18.	SELENIUM	5u	F R
7.	CALCIUM	290U	P	19.	SILVER	4U	P
8.	CHROMIUM	4U	P	20.	SODIUM	880U	P
9.	COBALT	7U	P	21.	THALLIUM	4u	F R
10.	COPPER	32	P	22.	TIN	36U	P
11.	IRON	11U	P	23.	VANDIUM	4U	P
12.	LEAD	[2,3]	F	24.	ZINC	2U	P E

Cyanide NR

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: Blank

Lab Manager [signature]

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

RECEIVED JUN 0 4 1985

SF 2255

Date 5-24-85

COVER PAGE
INORGANIC ANALYSIS DATA PACKAGE

Lab Name ROCKY MOUNTAIN ANALYTICAL
SOW No. 784

Case No. 4217
QC Report No. 5817

Sample Numbers

EPA No.	Lab ID No.	EPA No.	Lab ID No.
ME3781			
ME3782			
ME3783			
ME3784			
ME3785			
[ME9999]			

RECEIVED
MAY 2[illegible] 1985
US EPA [illegible] LAB.
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

Comments: 5 LOW SOILS FOR TASKS 1&2 ONLY
THE ICAP 10X SERIAL DILUTION FOR SAMPLE ME3785 IS IDENTIFIED AS [ME9999]

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.
* - 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
MS - Indicates Manual Spectrophotometric

S-2

RECEIVED JUN 0 4 1985

Form I

85F505594

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.
ME3781

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5817

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	2220	P *	13.	MAGNESIUM	[1770]	P
2.	ANTIMONY	39U	P	14.	MANGANESE	820	P *R
3.	ARSENIC	3.4U	F	15.	MERCURY	0.085U	CV
4.	BARIUM	[134]	P	16.	NICKEL	[12]	P
5.	BERYLLIUM	0.42U	P	17.	POTASSIUM	398U	P
6.	CADMIUM	4.9	P	18.	SELENIUM	4.2u	F R
7.	CALCIUM	[4200]	P	19.	SILVER	3.4U	P
8.	CHROMIUM	9.5	P ~~*~~	20.	SODIUM	746U	P
9.	COBALT	[12]	P	21.	THALLIUM	3.4U	F
10.	COPPER	37	P ~~*~~	22.	TIN	31U	P
11.	IRON	52800	P *	23.	VANDIUM	[8]	P
12.	LEAD	24	F	24.	ZINC	996	P *R

Cyanide NR

Percent Solids (%) 59

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 JM

S-2

RECEIVED JUN 0 4 1985

Form I

85FS05S95

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. ME3782

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5817

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	1640	P *	13.	MAGNESIUM	[1880]	P
2.	ANTIMONY	28U	P	14.	MANGANESE	139	P *R
3.	ARSENIC	2.5U	F	15.	MERCURY	0.062U	CV
4.	BARIUM	[14]	P	16.	NICKEL	[7.8]	P
5.	BERYLLIUM	0.31U	P	17.	POTASSIUM	290U	P
6.	CADMIUM	3.1U	P	18.	SELENIUM	3.1u	F R
7.	CALCIUM	[2860]	P	19.	SILVER	2.5U	P
8.	CHROMIUM	[4.1]	P ~~*~~ uo	20.	SODIUM	543U	P
9.	COBALT	4.3U	P	21.	THALLIUM	2.5U	F
10.	COPPER	[11]	P ~~*~~ uo	22.	TIN	22U	P
11.	IRON	5750	P *	23.	VANDIUM	[5]	P
12.	LEAD	15	F	24.	ZINC	42	P *R

Cyanide NR

Percent Solids (%) 81

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 JM

5-3

RECEIVED JUN 04 1985

Form I

85FS05596

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.
ME3783

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5817

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	1540	P *	13.	MAGNESIUM	[1480]	P
2.	ANTIMONY	30U	P	14.	MANGANESE	90	P *R
3.	ARSENIC	[3.1]	F	15.	MERCURY	0.065U	CV
4.	BARIUM	[24]	P	16.	NICKEL	[7.2]	P
5.	BERYLLIUM	0.32U	P	17.	POTASSIUM	305U	P
6.	CADMIUM	3.2U	P	18.	SELENIUM	3.2 ~	F R
7.	CALCIUM	[2300]	P	19.	SILVER	2.6U	P
8.	CHROMIUM	[5.1]	P ~~*~~	20.	SODIUM	571U	P
9.	COBALT	4.5U	P	21.	THALLIUM	2.6U	F
10.	COPPER	[11]	P ~~*~~	22.	TIN	23U	P
11.	IRON	7730	P *	23.	VANDIUM	[5]	P
12.	LEAD	37	P	24.	ZINC	40	P *R

Cyanide NR

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 JM

S-4

RECEIVED JUN 0 4 1985

Form I

85FS05597

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.
ME3784

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5817

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	1400	P *	13.	MAGNESIUM	[689]	P
2.	ANTIMONY	32U	P	14.	MANGANESE	167	P *R
3.	ARSENIC	[2.7]	F	15.	MERCURY	0.068U	CV
4.	BARIUM	[12]	P	16.	NICKEL	[11]	P
5.	BERYLLIUM	0.34U	P	17.	POTASSIUM	322U	P
6.	CADMIUM	3.4U	P	18.	SELENIUM	3.4u	F R
7.	CALCIUM	[1440]	P	19.	SILVER	2.7U	P
8.	CHROMIUM	[3.7]	P ~~*~~	20.	SODIUM	603U	P
9.	COBALT	4.8U	P	21.	THALLIUM	2.7U	F
10.	COPPER	[9.5]	P ~~*~~	22.	TIN	25U	P
11.	IRON	8240	P *	23.	VANDIUM	[4.4]	P
12.	LEAD	14	F	24.	ZINC	32	P *R

Cyanide NR

Percent Solids (%) 73

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 JM

S-5

RECEIVED JUN 04 1985

Form I

85FS05S98

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.
ME3785

Date 5-24-85

INORGANIC ANALYSIS DATA SHEET

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

CASE NO. 4217
QC REPORT NO. 5817

Elements Identified and Measured

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

mg/kg dry weight

1.	ALUMINUM	2700	P *	13.	MAGNESIUM	[1250]	P
2.	ANTIMONY	31U	P	14.	MANGANESE	230	P *R
3.	ARSENIC	[4.7]	F	15.	MERCURY	0.068U	CV
4.	BARIUM	[23]	P	16.	NICKEL	[20]	P
5.	BERYLLIUM	0.34U	P	17.	POTASSIUM	[501]	P
6.	CADMIUM	3.4U	P	18.	SELENIUM	3.4U	F R
7.	CALCIUM	[1020]	P	19.	SILVER	2.7U	P
8.	CHROMIUM	13	P ~~*~~	20.	SODIUM	595U	P
9.	COBALT	[7.8]	P	21.	THALLIUM	2.7U	F
10.	COPPER	25	P ~~*~~	22.	TIN	24U	P
11.	IRON	16400	P *	23.	VANDIUM	[7.9]	P
12.	LEAD	20	F	24.	ZINC	77	P *R

Cyanide NR

Percent Solids (%) 74

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 JM

RECEIVED JUN 0 4 1985

DATA QUALIFIERS

Contractor: RMAL

Case 4217 SF-2295

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

For the four low water samples:

Field blank data shows the presence of Cu in the amount of 32 ug/L; this has no impact on sample results as they all have much less copper in them. The spike recoveries for Se (58%) + Tl (66%) are low as shown; data for these two elements is biased low. Contractor lab has not applied the serial dilution test criteria properly in the dilution test for Zn. Data for Zn is flagged with an "E" when it does not need to be flagged.

For the five low soil samples:

~~Both Ca + Zn fail the serial dilution 10% agreement test. Data for these elements should have been flagged~~

Contractor has not reported on form III the prep. blanks for furnace Pb, they only show the plasma prep blanks for Pb.

Data for Se cannot be used as the spike recovery of 36% is too low. Duplicate analysis of Fe (26%), Mn (122) + Zn (38%) + Al (27%) gave RPD's as shown; the data for these elements lacks precision.

Reviewed by: Aaron O Lynstby

Phone: 886-1973

Date: 5-30-85

ecology and environment, inc.
223 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60606, TEL. 312-663-9415
International Specialists in the Environmental Sciences

Date Received for Review: 7-8-85 Date Review Completed: 7-11-85

To: John Sternberg

From: Cynthia Bachunas / Cindy Pugh

Subject: La Porte Old City Dump (Indiana)
(RS-8410-2B)

Sample Description: CASE 4217- Low Water + Low Soil Organics

Project Data Status: Still awaiting Low Water + Low Soil Metals

FIT Data Review Findings: Data acceptable with qualifications noted below and on attached review sheet.

The field blank (E 8603) contains 7.8 ug/l 2 Butanone and 3.1 ug/l 4-methyl-2-Pentanone (both at est. values or below detection limits). These elements indicate probable blank contamination. Use data for those elements with caution.

Additional Comments:

recycled paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

RECEIVED JUL 0 8 1985

DATE: 7/1/85

SUBJECT: Review of Region V CLP Data
Received for Review on 5/28/85

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

TO: Data User: Fit

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

SITE NAME: La Porte Old City Dump SMO Case No. 4217

EPA Data Set No. SF 2295 No. of Samples: 9 D.U./Activity Numbers 1905 / C48500

CRL No. 85F505591 - 85F505598

SMO Traffic No. E8600 - E8608

CLP Laboratory: It Stuart Hrs. Required for Review: 6

Following are our findings.

This review is for 4 low water and 5 low level soil samples numbered E8600 to E8608.
Holding times, surrogates & matrix spikes were OK. Field blank OK.
The ABN soil blank had relatively high levels of 4 Non-HSL compounds.
SPCC & CCC compounds were acceptable for all initial and continuing calibrations. In the VOA continuing calibrations on 4-26-85 and 4-29-85, Acetone, 2-Butanone and 2-Hexanone had %D > 25%.
ABN Initial Calibration HSL 4-Nitroaniline had %RSD = 65.9%
ABN Continuing Calibration 5-20-85 14:17
HSL Hexachlorocyclopentadiene, 3-Nitroaniline and 3,3'-Dichlorobenzidine had %D > 25%

continued →

Patrick J. Chrulla
6-28-85

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

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

EPA FORM 1320-4 (REV 3-76)

REGION V, U.S. ENVIRONMENTAL PROTECTION AGENCY
ESD/Central Regional Laboratory

DATA TRACKING - FORM I

RECEIVED JUL 0 8 1985

CRL Data Set No. SF 2295 ERRIS No. _____

SMO Case No. 4217 Site Name: LaPorte Old City Dump

Name of Laboratory: It Stuart Data User: Fit

No. of Samples: 9 Date Samples Received: 5/28/85

1. Have chain-of-custody records been received? YES ✓ NO ___
2. Have Traffic reports been received? YES ___ NO ✓
3. If no, are Traffic report numbers written on the chain-of-custody record? YES ✓ NO ___
4. If no, which Traffic report numbers are missing?

5. Are basic data forms in? YES ✓ NO ___
6. Number of samples claimed: 9 Number of samples received: 9
7. Checked by: Melia Feliciano Date: 5/28/85
8. Received by Contract Project Management Section: _____ Date: _____
9. Review Started: 6-27-85 Reviewer Signature: Patrick J. Chuilli
10. Total time spent on review: 6 Hrs Date review completed: 6-28-85
11. Copied (xeroxed) by: Willie E. Green Date: 7/1/85
12. Mailed to Data User by: _____ Date: _____

TO DATA USERS:

Please fill in the blanks and return this form to:

Charles Elly, DPO, Region V, 5SCRL

13. Data received by: Cynthia Pugh Date: 7-8-85
14. Q.A. review received by: Cynthia Pugh Date: 7-8-85
15. Received by CRL - CPM Section for file by: _____

Data for E 8600-8608 rec'd. Complete Date: _____

RECEIVED JUL 0 8 1985

DATA QUALIFIERS

Contractor: I.T. STUART

Case 4217

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

ABN continuing calibration 5-21-85 11:56
HSL Benzyl alcohol, 4-chloroaniline, hexachlorocyclopentadiene, 3-nitroaniline, 2,4-dinitrophenol, benzidine, benzo(c)fluoranthene and benzo(k)fluoranthene had %D > 25%
ABN continuing calibration 5-23-85 11:49
HSL Aniline, benzyl alcohol, hexachloroethane, 4-chloroaniline, hexachlorocyclopentadiene, 3-nitroaniline, 2,4-dinitrophenol, 4-nitrophenol, 4-nitroaniline, benzidine, pyrene and benzo(k)fluoranthene had %D > 25%. All initial and continuing calibration outliers are flagged as estimated.

Reviewed by: Patrick J. Chuville

Phone: 353-2730

Date: 6-28-85

Region V

RECEIVED JUL 0 8 1985

Case #4217
Contract #68-01-7025
IT Project #EPAL 20008

Data Receipt Acknowledgement - Please Sign, Date and Return in envelope provided.

Signature Ildia Tebinnap

Date 5/28/85

RECEIVED

MAY 28 1985

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

SF2295

RECEIVED JUL 0 8 1985

IT CORPORATION

IT ANALYTICAL SERVICES

STEWART LABORATORIES DIVISION

May 24, 1985

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

ATTN: Curtis Ross

MAY 28 1985

Case Narrative

Case #4217
Contract #68-01-7025
IT Project #EPAL 20008

Enclosures

Enclosed are results for samples in Case #4217. The results enclosed are for samples listed in Table 1.

Sample Receipt

Samples for this case were received in one shipment. The shipment was received on April 24, 1985. It contained five (5) low soil samples and four (4) low water samples in good condition. The analysis requested was for volatile compounds, semi-volatile compounds, and pesticides/PCB's. Sample #E8600 (water) had duplicates of all sample containers and was processed as a designated QC sample. Sample #E8608 (soil) was processed as a designated QC sample.

Soil Screening

The soil samples were prepped as low level samples and screened by GC/MS. All samples screened low and were analyzed as such.

Approved by Snell A. Mills III
Snell A. Mills III, Project Manager

TABLE 1

RECEIVED JUL 0 8 1985

Case #4217
Contract #68-01-7025
IT Project # EPAL 20008

SMO Sample #	SMO TAG #	ITAS Sample #	Analysis Requested
E8600	5-062807	B5041	Semi-volatiles/Pesticides/PCBS
	5-062808	B5041	Semi-volatiles/Pesticides/PCBs
	5-130551	B5042	QC-MS
	5-130552	B5046	QC-MSD
	5-062809	B5035	Volatiles
	5-062810	B5035	Volatiles
	5-130553	B5036	QC-MS
	5-130554	B5040	QC-MSD
E8601	5-130556	B5043	Semi-volatiles/Pesticides/PCBs
	5-130557	B5043	Semi-volatiles/Pesticides/PCBs
	5-130558	B5037	Volatiles
	5-130559	B5037	Volatiles
E8602	5-130561	B5044	Semi-volatiles/Pesticides/PCBs
	5-130562	B5044	Semi-volatiles/Pesticides/PCBs
	5-130563	B5038	Volatiles
	5-130564	B5038	Volatiles
E-8603	5-130566	B5045	Semi-volatiles/Pesticides/PCBs
	5-130567	B5045	Semi-volatiles/Pesticides/PCBs
	5-130568	B5039	Volatiles
	5-130569	B5039	Volatiles
E8604	5-130571	B5028	Semi-volatiles/Pesticides/PCBs
	5-130573	B5021	Volatiles
	5-130574	B5021	Volatiles
E8605	5-130575	B5029	Semi-volatiles/Pesticides/PCBs
	5-130576	B5022	Volatiles
	5-130577	B5022	Volatiles
E8606	5-130579	B5030	Semi-volatiles/Pesticides/PCBs
	5-130580	B5023	Volatiles
	5-130581	B5023	Volatiles
E8607	5-130583	B5031	Semi-volatiles/Pesticides/PCBs
	5-130584	B5024	Volatiles
	5-130585	B5024	Volatiles
E8608	5-130587	B5032	Semi-volatiles/Pesticides/PCBs
	5-130587	B5033	QC-MS
	5-130587	B5034	QC-MS
	5-130588	B5025	Volatiles
	5-130589	B5026	QC-MS
	5-130589	B5027	QC-MSD

WATER SURROGATE PERCENT RECOVERY SUMMARY

Case No. 4217 Contract Laboratory ITAS-Knoxville Contract No. 68-01-7225

SMO TRAFFIC NO.	VOLATILE: TOLUENE-D8 (88-110)	VOLATILE: BFB (85-121)	VOLATILE: 1,2 DICHLORO-ETHANE-D4 (77-120)	SEMI-VOLATILE: NITRO-BENZENE-D5 (41-120)	SEMI-VOLATILE: 2-FLUORO-BIPHENYL (44-119)	SEMI-VOLATILE: TERPHENYL-D14 (33-128)	SEMI-VOLATILE:	SEMI-VOLATILE:	SEMI-VOLATILE: PHENOL-D5 (15-103)	SEMI-VOLATILE: 2-FLUORO-PHENOL (23-121)	SEMI-VOLATILE: 2,4,6 TRIBROMO-PHENOL (10-130)	PESTICIDE: ** DIBUTYL-CHLORENDATE (48-130)
E8600	100	102	100	51	61	63			23%	40%	69	70.
E8601	97	99	101	56	61	74			20	39	61	73.
E8602	97	95	103	57	60	53			28	44	77	75.
E8603	95	92	97	100	113	103			47	76	123	65
E8600MS	94	100	101	62	82	73			15	32	69	82.
E8600MSD	98	104	94	67	70	58			32	41	81	75
Method Blank-1	99	100	93	49	65	99			22	37	60	74.

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

**ADVISORY LIMITS ONLY

Volatiles: 0 out of 21 ; outside of QC limits

Semi-Volatiles: 0 out of 42 ; outside of QC limits

Pesticides: 0 out of 7 ; outside of QC limits

Comments:

FORM II

10/84

RECEIVED JUL 0 8 1985

SOIL SURROGATE PERCENT RECOVERY SUMMARY

Case No. 4217 Contract Laboratory ITAS · Knoxville Contract No. 68-01-7025

Low ✓ Medium _____

	VOLATILE			SEMI-VOLATILE								PESTICIDE
SMO TRAFFIC NO.	TOLUENE-D8 (50-160)	BFB (50-160)	1,2 DICHLORO-ETHANE-D4 (50-160)	NITRO-BENZENE-D5 (20-140)	2-FLUORO-BIPHENYL (20-140)	TERPHENYL-D14 (20-150)			PHENOL-D5 (20-140)	2-FLUORO-PHENOL (20-140)	2,4,6 TRIBROMO-PHENOL (10-140)	DIBUTYL-CHLORENDATE ** (20-150)
E8604	94	86	94	65	73	71			65	69	68	81
E8605	92	93	100	72	75	60			72	71	74	110
E8606	90	90	93	66	76	78			63	69	71	82
E8607	97	91	88	63	67	57			61	64	64	72
E8608	103	87	95	67	72	57			64	66	70	84
E8608MS	99	83	98	62	69	55			61	65	67	119
E8608MSD	102	90	98	61	61	52			62	61	65	87
MB2	100	99	99	42	42	41			41	42	33	85
MB3	93	95	95	—	—	—			—	—	—	—

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

**ADVISORY LIMITS ONLY

Volatiles: 0 out of 27 ; outside of QC limits

Semi-Volatiles: 0 out of 48 ; outside of QC limits

Pesticides: 0 out of 8 ; outside of QC limits

Comments: _____

FORM II

10/84

RECEIVED JUL 0 8 1985

WATER MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 4217 **Contractor** ITAS-Knoxville **Contract No.** EPA 68-01-7025

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. E8600	1,1-Dichloroethene	50	0.	47	94	45	90	4.4	14	61-145
	Trichloroethene	50	0.	42	84	43	86	-2.3	14	71-120
	Chlorobenzene	50	0.	47	94	47	95	-1.1	13	75-130
	Toluene	50	0.	47	94	47	94	0.	13	76-125
	Benzene	50	0.	46	92	46	92	0.	11	76-127
B/N SMO SAMPLE NO. E8600	1,2,4-Trichlorobenzene	100	0.	58	58	62	62	-6.7	28	39-98
	Acenaphthene	100	0.	88	88	82	82	7.1	31	46-118
	2,4 Dinitrotoluene	100	0.	56	56	60	60	-6.9	38	24-96
	Di-n-Butylphthalate	100	4.	100	96	84	80	18.	40	11-117
	Pyrene	100	0.	84	84	68	68	21.	31	26-127
	N-Nitroso-Di-n-Propylamine	100	0.	56	56	52	52	7.4	38	41-116
	1,4-Dichlorobenzene	100	0.	54	54	56	56	-3.6	28	36-97
ACID SMO SAMPLE NO. E8600	Pentachlorophenol	200	0.	130.	65	150	75	-14.	50	9-103
	Phenol	200	0.	44	22	58	29	-27.	42	12-89
	2-Chlorophenol	200	0.	100	50	120	60	-18.	40	27-123
	4-Chloro-3-Methylphenol	200	0.	96	48	120	60	-22.	42	23-97
	4-Nitrophenol	200	0.	22	11	32	16	-37.	50	10-80
PEST SMO SAMPLE NO. E8600	Lindane	0.2	0	0.14	70%	0.14	70%	0%	15	56-123
	Heptachlor	0.2	0	0.10	50%	0.086	43%	15%	20	40-131
	Aldrin	0.2	0	0.099	49.5%	0.084	42%	16%	22	40-120
	Dieldrin	0.5	0	0.37	74%	0.33	66%	11%	18	52-126
	Endrin	0.5	0	0.37	74%	0.36	72%	3%	21	56-121
	4,4'-DDT	0.5	0	0.37	74%	0.36	72%	3%	27	38-127

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 0 out of 5 outside QC limits
B/N 0 out of 7 outside QC limits
ACID 0 out of 5 outside QC limits
PEST 0 out of 6 outside QC limits

RECOVERY: VOAs 0 out of 10 outside QC limits
B/N 0 out of 14 outside QC limits
ACID 0 out of 10 outside QC limits
PEST 0 out of 12 outside QC limits

Comments:

FORM III 1/85

RECEIVED JUL 08 1985

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 4217 **Contractor** ITAS-Knoxville **Contract No.** EPA 68-01-7025

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. E8608	1,1-Dichloroethene	50.	0.	52	104	50	100	3.9	22	59-172
	Trichloroethene	50.	0.	48	96	49	98	-2.1	24	62-137
	Chlorobenzene	50.	0.	48	96	49	98	-2.1	21	60-133
	Toluene	50.	0.	48	96	48	96	0	21	59-139
	Benzene	50.	0.	44	88	45	90	-2.3	21	66-142
B/N SMO SAMPLE NO. E8608	1,2,4-Trichlorobenzene	1700.	0.	880.	52.	820.	48.	8.0	23	38-107
	Acenaphthene	1700.	0.	980.	58	950.	56	3.5	19	31-137
	2,4 Dinitrotoluene	1700.	0.	690.	41	730.	43	-4.8	47	28-89
	Di-n-Butylphthalate	1700	0.	980	58	1100.	65	11.	47	29-135
	Pyrene	1700.	0.	820	48	820.	48	0.	36	35-142
	N-Nitrosodi-n-Propylamine	1700	0.	720.	42	700.	41	2.4	38	41-126
	1,4-Dichlorobenzene	1700.	0.	760	45	730.	43	4.6	27	28-104
ACID SMO SAMPLE NO. E8608	Pentachlorophenol	3300	0.	1300.	39.	1400.	42	-7.4	47	17-109
	Phenol	3300.	0.	1800.	55.	1900.	58	-5.3	35	26-90
	2-Chlorophenol	3300.	0.	1700.	52.	1600.	48	8.0	50	25-102
	4-Chloro-3-Methylphenol	3300.	0.	1600.	48.	1700.	52	-8.0	33	26-103
	4-Nitrophenol	3300.	0.	1700.	52.	1800.	55	-5.6	50	11-114
PEST SMO SAMPLE NO. E8608	Lindane	34.	0	29.	85%	28.	82%	4%	50	46-127
	Heptachlor	34.	0	26.	76%	27.	79%	4%	31	35-130
	Aldrin	34.	0	21.	62%	22.	65%	5%	43	34-132
	Dieldrin	84.	0	77.	92%	68.	81%	12%	38	31-134
	Endrin	84.	0	79.	94%	73.	87%	8%	45	42-139
	4,4'-DDT	84.	0	110.	130%	88.	105%	22%	50	23-134

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

RPD: VOAs 0 out of 5 ; outside QC limits
B/N 0 out of 7 ; outside QC limits
ACID 0 out of 5 ; outside QC limits
PEST 0 out of 6 ; outside QC limits

RECOVERY: VOAs 0 out of 10 ; outside QC limits
B/N 0 out of 14 ; outside QC limits
ACID 0 out of 5 ; outside QC limits
PEST 0 out of 12 ; outside QC limits

Comments: _____

RECEIVED JUL 08 1985

REAGENT BLANK SUMMARY

Case No. 4217 Contractor ITAS - KNOXVILLE Contract No. 68-01-7025

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRQL
VOBLK04252	4-25-85	VOA	WATER	LOW	OWA-1	75-09-2	METHYLENE CHLORIDE	4.9	µg/L	5.0
						67-64-1	ACETONE	5.6	"	10.
						78-93-3	2-BUTANONE	8.0	"	10.
						108-10-1	4-METHYL-2-PENTANONE	1.1	"	10.
4217BLK	4-25-85	VOA	WATER	LOW	OWA-1	75-09-2	METHYLENE CHLORIDE	4.4	µg/L	5.0
						67-64-1	ACETONE	6.3	"	10.
						78-93-3	2-BUTANONE	6.4	"	10.
						108-10-1	4-METHYL-2-PENTANONE	1.7	"	10.
VOBLO4261	4-26-85	VOA	WATER	LOW	OWA-1	75-09-2	METHYLENE CHLORIDE	4.6	µg/L	5.0
						67-64-1	ACETONE	10.7	"	10.
						78-93-3	~~2-BUTANONONE~~ 2-BUTANONE MP 4-26-85	9.0	"	10.
						108-10-1	4-METHYL-2-PENTANONE	2.2	"	10.
VOBLO4291	4-29-85	VOA	SOIL	LOW	OWA-1	75-09-2	METHYLENE CHLORIDE	5.4	µg/kg	5.0
						78-93-3	2-BUTANONE	6.3	µg/kg	10
						108-10-1	4-METHYL-2-PENTANONE	1.7	µg/kg	10

Comments:

RECEIVED JUL 08 1985

0005

FORM IV

4/84

REAGENT BLANK SUMMARY

Case No. 4217 Contractor ITAS - Knoxville Contract No. 68-01-7025

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
BNABL0521	5-21-85	BNA	Soil	Low	4023	—	Acetic acid, 1-Methyl ester	540	ug/kg	
	↓	↓	↓	↓	↓	—	4-Hydroxy-4-Methyl-2-Pentanone	6100	ug/kg	
						—	5-Methyl-2-Hexanone	700.	ug/kg	
						—	Acetic acid, 1-Methyl propyl ester	700.	ug/kg	
BNABL0523	5-23-85	BNA	Water	Low	4023	84-74-2	Di-N-Butyl phthalate	4.	ug/L	10.
	"	"	"	"	"	—	7-Oxabicyclo.[4.1.0.] Heptane	10.	ug/L	

Comments:

FORM IV

4/84

RECEIVED JUL 0 8 1985

REAGENT BLANK SUMMARY

ase No. 4217 Contractor ITAS-Knoxville Contract No. EPA 68-01-7025

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL,TIC OR UNKNOWN)	CONC.	UNITS	CRQL
MB1-4217	4/22,29/85	Pest	Water	Low	V-3740A+B ~~T-565~~	EYTS-23-85	none detected			
MB2-4217	5-14,22-85	Pest	Sediment	Low	V-3740A T-565		none detected			

mments:

FORM IV

RECEIVED JUL 0 8 1985

RECEIVED JUL 0 8 1985 0008

GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CASE NO.: 4217 CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025
INSTRUMENT ID: 4023 DATE: 04/29/85 TIME: 9:06
LAB ID: CLP500429 DATA RELEASE AUTHORIZED BY: Snell A. Mills III

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % OF MASS 198	54.3
68	LESS THAN 2.0 % OF MASS 69	0.00 (0.00)[1]
69	MASS 69 RELATIVE ABUNDANCE	46.9
70	LESS THAN 2.0 % OF MASS 69	0.00 (0.00)[1]
127	40.0 - 60.0 % OF MASS 198	46.5
197	LESS THAN 1.0 % OF MASS 198	0.00
198	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.
199	5.0 - 9.0 % OF MASS 198	5.47
275	10.0 - 30.0 % OF MASS 198	23.7
365	GREATER THAN 1.0 % OF MASS 198	1.28
441	PRESENT BUT LESS THAN MASS 443	8.2
442	GREATER THAN 40.0 % OF MASS 198	68.6
443	17.0 - 23.0 % OF MASS 442	12.1 (17.7)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 69
[2]VALUE IN PARENTHESIS IS % OF MASS 442
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
Initial Calibration	CLP500429	4-29-85	9:06
Initial Calibration	CLP1600429	4-29-85	9:59
Initial Calibration	CLP120 0429	4-29-85	10:51
Initial Calibration	CLP 80 0429	4-29-85	11:39
Initial Calibration	CLP 20 0429	4-29-85	12:31

RECEIVED JUL 0 8 1985

0005

GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CASE NO.: 4217 CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025
INSTRUMENT ID: 4023 DATE: 04/29/85 TIME: 23:44
LAB ID: DFTPP0429 DATA RELEASE AUTHORIZED BY: Snell A. Mills III

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % OF MASS 198	55.8
68	LESS THAN 2.0 % OF MASS 69	0.00 (0.00)[1]
69	MASS 69 RELATIVE ABUNDANCE	52.2
70	LESS THAN 2.0 % OF MASS 69	0.00 (0.00)[1]
127	40.0 - 60.0 % OF MASS 198	51.2
197	LESS THAN 1.0 % OF MASS 198	0.00
198	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.
199	5.0 - 9.0 % OF MASS 198	6.26
275	10.0 - 30.0 % OF MASS 198	21.7
365	GREATER THAN 1.0 % OF MASS 198	1.29
441	PRESENT BUT LESS THAN MASS 443	5.8
442	GREATER THAN 40.0 % OF MASS 198	45.8
443	17.0 - 23.0 % OF MASS 442	8.0 (17.5)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 69
[2]VALUE IN PARENTHESIS IS % OF MASS 442

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
Initial Calibration	BEN800429	4-30-85	0:13
Initial Calibration	BEN1200429	4-30-85	1:10
Initial Calibration	BEN1600429	4-30-85	2:06

RECEIVED JUL 08 1985

0010

GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CASE NO.: 4217 CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025
INSTRUMENT ID: 4023 DATE: 05/20/85 TIME: 14:17
LAB ID: BNASTD05202 DATA RELEASE AUTHORIZED BY: Snell A. Mills III

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % OF MASS 198	55.2
68	LESS THAN 2.0 % OF MASS 69	0.00 (0.00)[1]
69	MASS 69 RELATIVE ABUNDANCE	54.0
70	LESS THAN 2.0 % OF MASS 69	0.39 (0.73)[1]
127	40.0 - 60.0 % OF MASS 198	51.4
197	LESS THAN 1.0 % OF MASS 198	0.00
198	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.
199	5.0 - 9.0 % OF MASS 198	6.47
275	10.0 - 30.0 % OF MASS 198	20.7
365	GREATER THAN 1.0 % OF MASS 198	1.40
441	PRESENT BUT LESS THAN MASS 443	7.0
442	GREATER THAN 40.0 % OF MASS 198	55.5
443	17.0 - 23.0 % OF MASS 442	9.8 (17.7)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 69
[2]VALUE IN PARENTHESIS IS % OF MASS 442
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
Daily Standard	BNASTD05202	5-20-85	14:17
Benzidine Std.	BENSTD0520	5-20-85	15:48
MB2	BNABL05202	5-20-85	18:48
E8604	BS028	5-20-85	19:34
E8605	BS029	5-20-85	20:22
E8606	BS030	5-20-85	21:18
E8607	BS031	5-20-85	22:23
E8608	BS032	5-20-85	23:13
E8608MS	BS033MS	5-20-85	0:10
E8608MSD	BS034MSD	5-20-85	1:00

RECEIVED JUL 08 1985
0011

GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CASE NO.: 4217 CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025
INSTRUMENT ID: 4023 DATE: 05/21/85 TIME: 11:56
LAB ID: BNASTD0521 DATA RELEASE AUTHORIZED BY: Snell A. Mely III

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0 % OF MASS 198	50.2
68	LESS THAN 2.0 % OF MASS 69	1.05 (1.84)[1]
69	MASS 69 RELATIVE ABUNDANCE	57.1
70	LESS THAN 2.0 % OF MASS 69	0.00 (0.00)[1]
127	40.0 - 60.0 % OF MASS 198	52.9
197	LESS THAN 1.0 % OF MASS 198	0.00
198	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.
199	5.0 - 9.0 % OF MASS 198	6.24
275	10.0 - 30.0 % OF MASS 198	19.4
365	GREATER THAN 1.0 % OF MASS 198	1.22
441	PRESENT BUT LESS THAN MASS 443	6.0
442	GREATER THAN 40.0 % OF MASS 198	49.5
443	17.0 - 23.0 % OF MASS 442	8.5 (17.2)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 69
[2]VALUE IN PARENTHESIS IS % OF MASS 442

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
Daily Std.	BNASTD0521	5-21-85	11:56
Benzidine Std.	BENSTD0521	5-21-85	13:11
E8603	B5045	5-21-85	22:23
E8600 MSD	B5046 MSD	5-21-85	23:09
E8602	B5044 R	5-21-85	23:53
MB2	BNABL0521	5-21-85	14:08

RECEIVED JUL 20 8 1985

GC/MS TUNING AND MASS CALIBRATION
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

CASE NO.: 4217 CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025
INSTRUMENT ID: 4023 DATE: 05/23/85 TIME: 11:49
LAB ID: BNASTD0523 DATA RELEASE AUTHORIZED BY: Snell A. Mills III

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0 % OF MASS 198	43.5	
68	LESS THAN 2.0 % OF MASS 69	0.12	(0.27)[1]
69	MASS 69 RELATIVE ABUNDANCE	44.8	
70	LESS THAN 2.0 % OF MASS 69	0.00	(0.00)[1]
127	40.0 - 60.0 % OF MASS 198	46.4	
197	LESS THAN 1.0 % OF MASS 198	0.00	
198	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.	
199	5.0 - 9.0 % OF MASS 198	5.01	
275	10.0 - 30.0 % OF MASS 198	23.0	
365	GREATER THAN 1.0 % OF MASS 198	1.18	
441	PRESENT BUT LESS THAN MASS 443	9.1	
442	GREATER THAN 40.0 % OF MASS 198	82.8	
443	17.0 - 23.0 % OF MASS 442	14.2	(17.2)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 69
[2]VALUE IN PARENTHESIS IS % OF MASS 442
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
Daily Std.	BNASTD0523	5-23-85	11:49
Benzidine std.	BENSTD0523	5-23-85	12:47
MB1	BNABL0523	5-23-85	13:39
E8600	B5041	5-23-85	14:27
E8600 ms	B5042MS	5-23-85	15:18
E8601	B5043	5-23-85	16:06

RECEIVED JUL 0 8 1985

0013

SCIMS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

4/217 SAW 5-23-85

CASE NO.: [redacted] CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025

INSTRUMENT ID: OWA1 DATE: 04/25/85 TIME: 6:31

LAB ID: BFB0425 DATA RELEASE AUTHORIZED BY: Snell A. W. S. H.

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % OF THE BASE PEAK	37.2	
75	30.0 - 60.0 % OF THE BASE PEAK	56.3	
95	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.	
96	5.0 - 9.0 % OF THE BASE PEAK	8.50	
173	< 1.0 % OF THE BASE PEAK	0.00	
174	> 50.0 % OF THE BASE PEAK	75.1	
175	5.0 - 9.0 % OF MASS 174	3.83	(5.10)[1]
176	> 95.0 % BUT < 101.0 % OF MASS 174	75.3	(100.2)[1]
177	5.0 - 9.0 % OF MASS 176	6.66	(8.84)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 174
[2]VALUE IN PARENTHESIS IS % OF MASS 176

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 PPB CAL. STD.	CLPST 50	4-25-85	7:21
20 PPB CAL. STD	CLPST 20	4-25-85	8:21
100 PPB CAL. STD	CLPST 100	4-25-85	9:11
150 PPB CAL. STD	CLPST 150	4-25-85	10:00
200 PPB CAL. STD	CLPST 200	4-25-85	10:55

RECEIVED JUL 0 8 1985

0014

GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

CASE NO.: ~~20000~~ 4217 SDG 5B05 CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025
INSTRUMENT ID: OWA1 DATE: 04/25/85 TIME: 17: 5
LAB ID: BFB04252 DATA RELEASE AUTHORIZED BY: Sarell A Nelson II

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % OF THE BASE PEAK	29.6
75	30.0 - 60.0 % OF THE BASE PEAK	46.9
95	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.
96	5.0 - 9.0 % OF THE BASE PEAK	8.49
173	< 1.0 % OF THE BASE PEAK	0.00
174	> 50.0 % OF THE BASE PEAK	79.4
175	5.0 - 9.0 % OF MASS 174	7.13 (8.97)[1]
176	> 95.0 % BUT < 101.0 % OF MASS 174	77.0 (96.9)[1]
177	5.0 - 9.0 % OF MASS 176	5.66 (7.35)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 174
[2]VALUE IN PARENTHESIS IS % OF MASS 176
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
DAILY STANDARD #2	VOSTD04252	4-25-85	17:35
SYSTEM BLANK #2	VOBLK04252	"	18:36
HOLDING BLANK	4217BLK	"	19:33
E8600	B5035	"	20:33
E8600 MS	B5040 MS	"	21:24
E8600 MSD	B5036 MSD	"	22:15
E8601	B5037	"	23:07

RECEIVED 0015 0 8 1985

GC/MS TUNING AND MASS CALIBRATION
BROMOFLUOROBENZENE (BFB)

W217 SAM 5-23-85

CASE NO.: ~~2~~ CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025
INSTRUMENT ID: OWA1 DATE: 04/26/85 TIME: 8:44
LAB ID: BFB0426 DATA RELEASE AUTHORIZED BY: Sneell A. Smith III

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % OF THE BASE PEAK	39.4
75	30.0 - 60.0 % OF THE BASE PEAK	53.9
95	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.
96	5.0 - 9.0 % OF THE BASE PEAK	6.04
173	< 1.0 % OF THE BASE PEAK	0.00
174	> 50.0 % OF THE BASE PEAK	74.3
175	5.0 - 9.0 % OF MASS 174	4.88 (6.56)[1]
176	> 95.0 % BUT < 101.0 % OF MASS 174	72.1 (97.0)[1]
177	5.0 - 9.0 % OF MASS 176	5.23 (7.25)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 174
[2]VALUE IN PARENTHESIS IS % OF MASS 176
THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
DAILY CAL. STD	V0ST00426I	4-26-85	9:03
INSTRUMENT BLANK	V0BL04261	4-26-85	10:00
E8602	B5038	4-26-85	10:50
E8603	B5039	4-26-85	11:39
E8608	B5025	4-26-85	12:28
E8608 MS	B5026MS	4-26-85	13:18
E8608 MSD	B5027 MSD	4-26-85	14:07
E8604	B5021	4-26-85	16:02
E8605	B5022	4-26-85	17:03
E8606	B5023	4-26-85	17:54
E8607	B5024	4-26-85	18:59
E8605	B5022 R	4-26-85	19:58
E8607	B5024 R	4-26-85	20:52

RECEIVED JUL 0 8 1985

0016

GC/MS TUNING AND MASS CALIBRATION

BROMOFLUOROBENZENE (BFB)

CASE NO.: ~~10606~~ 4217 SDWG 5-2385 CONTRACTOR: ITAS-KNOXVILLE CONTRACT NO.: 68-01-7025

INSTRUMENT ID: OWA1 DATE: 04/29/85 TIME: 6:51

LAB ID: BFB0429 DATA RELEASE AUTHORIZED BY: Sweell A. Mills III

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % OF THE BASE PEAK	28.0
75	30.0 - 60.0 % OF THE BASE PEAK	52.8
95	BASE PEAK, 100 % RELATIVE ABUNDANCE	100.
96	5.0 - 9.0 % OF THE BASE PEAK	8.83
173	< 1.0 % OF THE BASE PEAK	0.00
174	> 50.0 % OF THE BASE PEAK	87.4
175	5.0 - 9.0 % OF MASS 174	7.23 (8.27)[1]
176	> 95.0 % BUT < 101.0 % OF MASS 174	86.5 (98.9)[1]
177	5.0 - 9.0 % OF MASS 176	5.60 (6.47)[2]

[1]VALUE IN PARENTHESIS IS % OF MASS 174

[2]VALUE IN PARENTHESIS IS % OF MASS 176

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS, AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
DAILY CAL STD	VOSTD04291	4-29-85	7:12
INSTRUMENT BLANK	VOBL04291	4-29-85	8:07
E8607	B5024R2	4-29-85	8:57

RECEIVED JUL 0 8 1985

Case: 4217

Contractor: I.T. STUART

VOLATILES INITIAL AND CONTINUING CALIBRATION OUTLIERS

I = Initial
C = Continuing

List only outliers below

COMPOUND	CCC %RSD (Limit ≤ 25%)	SPCC $\overline{RF}$ (Limit ≥ 0.3)	I or C	Date/Time
NONE				

IMPACT ON ASSOCIATED SAMPLE DATA:

NONE

LAB CORRECTIVE ACTION TAKEN (i.e. new 5 point curve)

RECEIVED JUL 0 8 1985

Case: 4217

Contractor: I.S. STUART

ABN INITIAL AND CONTINUING CALBRATION OUTLIERS

I = Initial
C = Continuing

List only outliers below.

COMPOUND	CCC % RSD Limit ≤25%	SPCC $\overline{RF}$ Limit >.05	I or C	Date/Time
NONE				

IMPACT ON ASSOCIATED SAMPLE DATA:

NONE

LAB CORRECTIVE ACTION TAKEN (i.e. new 5 point curve)

RECEIVED JUL 0 8 1985

Pesticide Evaluation Standards Summary

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401

Date of Analysis 4/26-27/85 Instrument ID V-3740A

EVALUATION CHECK FOR LINEARITY

LABORATORY ID	File 191	File 192	File 193	
PESTICIDE	CALIBRATION FACTOR EVAL. MIX A	CALIBRATION FACTOR EVAL. MIX B	CALIBRATION FACTOR EVAL. MIX C	% RSD (≤10%)
ALDRIN	35712143	34690000	32994048	4.0%
ENDRIN	18046154	16730215	18582323	5.4%
4,4'-DDT(1)	13922273	14303051	16970970	11.0%
DIBUTYL CHLORENDATE	22520469	23370987	22176190	2.7%

EVALUATION CHECK FOR 4,4'-DDT/ENDRIN BREAKDOWN

	PERCENT BREAKDOWN EXPRESSED AS TOTAL DEGRADATION			
	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B
LABORATORY ID	File 192	File 210	File 222	
TIME OF ANALYSIS	4-26-85 12:48.3	4-26-85 21:41.1	4-27-85 3:48.2	
ENDRIN	6.0%	5.4%	7.8%	
4,4'-DDT	4.8%	2.9%	1.8%	
COMBINED(2)				

EVALUATION OF RETENTION TIME SHIFT FOR DIBUTYLCHLORENDATE

SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.	SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.
Eval B		12:48.3	0.05%	H-1781	B4824 1/50	20:39.9	0.10%
Eval C		13:14.7	0.14%		Hexane	21:10.5	none added
EPA-A		13:45.3	0%	Eval B		21:41.1	0.10%
EPA-B		14:15.9	0.14%	H-1781 MS	B4825 1/50	22:11.7	0.24%
Toxaphene		14:42.6	0.05%	H-1782	B4826 1/10	22:42.3	0.10%
Chlordane		15:21.1	0.05%	H-1781 MSD	B4827 1/50	23:12.9	0.39%
Aroclors 1016/1260		15:52.8	0.19%	MB1-4183	19970818 1/10	23:43.5	0.05%
Aroclor 1221		16:35.2	0.05%		Hexane	00:14.1	none added
Aroclor 1232		17:05.8	0.10%	EPA-A		00:44.7	0.29%
Aroclor 1242		17:36.4	0.14%	E 8600 MS	B5041 1/5	1:15.3	0.14%
Aroclor 1248		18:07.0	0.05%	E 8600 MS	B5041	1:45.9	0.10%
Aroclor 1254		18:37.6	0.05%	E 8600	B5042	2:16.5	0.24%
ED 180	B4763	19:01.1	0.05%	E 8601	B5043	2:47.1	0.29%
ED 181	B4764	19:38.8	0.14%	E 8602	B5044	3:17.7	0.24%
EB892	B-4767 1/5	20:09.3	0.10%	Eval B		3:48.2	0.19%

(1) SEE EXHIBIT E, SECTION 7.5.4

(2) SEE EXHIBIT E, SECTION 7.3.1.2.2.1

RECEIVED JUL 0 8 1985
0655

page 2

Pesticide Evaluation Standards Summary

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 QC Column 1.5% SP-2250/1.95% SP 2401

Date of Analysis _____ Instrument ID V-3740A

EVALUATION CHECK FOR LINEARITY

LABORATORY ID				
PESTICIDE	CALIBRATION FACTOR EVAL. MIX A	CALIBRATION FACTOR EVAL. MIX B	CALIBRATION FACTOR EVAL. MIX C	% RSD (≤10%)
ALDRIN				
ENDRIN				
4,4'-DDT(1)				
DIBUTYL CHLORENDATE				

See page 1

EVALUATION CHECK FOR 4,4'-DDT/ENDRIN BREAKDOWN

	PERCENT BREAKDOWN EXPRESSED AS TOTAL DEGRADATION			
	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B
LABORATORY ID				
TIME OF ANALYSIS				
ENDRIN				
4,4'-DDT				
COMBINED(2)				

See page 1

EVALUATION OF RETENTION TIME SHIFT FOR DIBUTYLCHLORENDATE

SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.	SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.
E 8603	B5045	4:18.8	0.14%				
E 8600 MSD	B5046	4:49.4	0.14%				
E 8600 MSD	B 5046	5:20.0	0.14%				
MB1 4217	20008-Blank	5:50.6	0.10%				
EPA-B		6:21.2	0.24%				

(1) SEE EXHIBIT E, SECTION 7.5.4

(2) SEE EXHIBIT E, SECTION 7.3.1.2.2.1

RECEIVED JUL 08 1985

0656

Pesticide Evaluation Standards Summary

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 QC Column 1.5% SP-2250/1.95% SP 2401

Date of Analysis 5/13-14/85 Instrument ID V-3740A

EVALUATION CHECK FOR LINEARITY

LABORATORY ID	EPAL 20008.028a	EPAL 20008.032a	EPAL 20008.033a	
PESTICIDE	CALIBRATION FACTOR EVAL. MIX A	CALIBRATION FACTOR EVAL. MIX B	CALIBRATION FACTOR EVAL. MIX C	% RSD (≤10%)
ALDRIN	30112857	28572063	27840952	4.0%
ENDRIN	12228269	11397382	11444688	4.0%
4,4'-DDT(1)	8273000	9296828	10016091	9.5%
DIBUTYL CHLORENDATE	18219840	18956693	18476160	2.0%

EVALUATION CHECK FOR 4,4'-DDT/ENDRIN BREAKDOWN

	PERCENT BREAKDOWN EXPRESSED AS TOTAL DEGRADATION			
	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B
LABORATORY ID	EPAL 20008.032a	EPAL 20008.050a	EPAL 20008.062a	EPAL 20008.074a
TIME OF ANALYSIS	5-13-85 14:22.6	5-14-85 1:09	5-14-85 7:28	5-14-85 14:20
ENDRIN	0%	8.7%	9.4%	0%
4,4'-DDT	0%	0%	0%	0%
COMBINED(2)				

EVALUATION OF RETENTION TIME SHIFT FOR DIBUTYLCHLORENDATE

SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.	SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.
Eval B		14:22.6	0.23%	E8600MSD	B-5046 1/5	5-14-85 00:03	0.66%
Eval C		14:53.3	0.05%	E8604	B-5028 1/10	00:37	0.48%
EPA-A		15:21.3	0.06%	Eval B		1:09	0.46%
EPA-B		17:43	0.06%	E8605	B-5029 1/10	1:40	0.03%
Toxaphene		18:14.6	0.005%	E8606	B-5030 1/50	2:12	0.32%
Chlordane		18:46	0.20%	E8607	B-5031 1/10	2:43	0.02%
Aroclors 1016/1260		19:17	0.17%	E8608MS	B-5033 1/50	3:15	0.02%
Aroclor 1221		19:49	0.38%	E8608	B-5032 1/50	3:47	0.50%
Aroclor 1232		20:24	0.52%	EPA-A		4:18	0.25%
Aroclor 1242		20:56	0.40%	E8608MSD	B-5034 1/50	4:50	0.15%
Aroclor 1248		21:27	0.41%	E8608	B-5032 1/5	5:21	0.20%
Aroclor 1254		21:59	0.55%	E8608MSD	B-5034 1/5	5:53	0.15%
E8600MS	B-5041	22:28	0.95%	MB2-4217	20008 Sed. Blank 1/10	6:25	0.23%
E8600MS	B-5041 1/5	23:00	1.26%		Hexane	6:56	none added
E8600MSD	B-5046	23:31	1.20%	Eval B		7:28	0.26%

(1) SEE EXHIBIT E, SECTION 7.5.4

(2) SEE EXHIBIT E, SECTION 7.3.1.2.2.1

continued on page 2

RECEIVED JUL 08 1985

0657

Pesticide Evaluation Standards Summary

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 QC Column 1.5% SP-2250/1.95% SP 2401

Date of Analysis 5/13-14/85 Instrument ID V-3740A

EVALUATION CHECK FOR LINEARITY

LABORATORY ID				
PESTICIDE	CALIBRATION FACTOR EVAL. MIX A	CALIBRATION FACTOR EVAL. MIX B	CALIBRATION FACTOR EVAL. MIX C	% RSD (≤10%)
ALDRIN				
ENDRIN				
4,4'-DDT(1)				
DIBUTYL CHLORENDATE				

See page 1

EVALUATION CHECK FOR 4,4'-DDT/ENDRIN BREAKDOWN

	PERCENT BREAKDOWN EXPRESSED AS TOTAL DEGRADATION			
	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B
LABORATORY ID				
TIME OF ANALYSIS				
ENDRIN				
4,4'-DDT				
COMBINED(2)				

See page 1

EVALUATION OF RETENTION TIME SHIFT FOR DIBUTYLCHLORENDATE

SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.	SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.
Alumina Ck Hex/Ac		7:59	0.42%				
Alumina Ck - BN		8:31	0.08%				
Alumina Ck-EPA-AS		9:02	none added				
Alumina Ck-EPA BS		9:34	none added				
Alumina Ck-EPA-AS V5		10:04	none added				
EPA-B		10:36	0.17%				
E 8604	B-5028	11:15	0.46%				
Alumina Ck EPA-BS V5		12:11	none added				
E 8605	B-5029	12:49	0.38%				
E 8606	B-5030	13:20	0.36%				
E 8607	B-5031	13:50	0.40%				
Eval B		14:20	0.005%				
EPA-A		14:53	0.10%				

(1) SEE EXHIBIT E, SECTION 7.5.4

(2) SEE EXHIBIT E, SECTION 7.3.1.2.2.1

RECEIVED JUL 0 8 1985

Pesticide Evaluation Standards Summary

0658

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401

Date of Analysis 5-22-85 Instrument ID V-740A

EVALUATION CHECK FOR LINEARITY

LABORATORY ID	File 46	File 47	File 48	
PESTICIDE	CALIBRATION FACTOR EVAL. MIX A	CALIBRATION FACTOR EVAL. MIX B	CALIBRATION FACTOR EVAL. MIX C	% RSD (≤10%)
ALDRIN	6733390	6060280	6043000	6.3%
ENDRIN	2604760	2555830	2649880	1.8%
4,4'-DDT(1)	1735909	5841333	6962283	57%
DIBUTYL CHLORENDATE	4106270	4128100	4132420	0.3%

EVALUATION CHECK FOR 4,4'-DDT/ENDRIN BREAKDOWN

	PERCENT BREAKDOWN EXPRESSED AS TOTAL DEGRADATION			
	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B
LABORATORY ID	File 46	File 64		
TIME OF ANALYSIS	12:16	20:52		
ENDRIN	3.0%	6.4%		
4,4'-DDT	8.9%	16.0%		
COMBINED(2)				

EVALUATION OF RETENTION TIME SHIFT FOR DIBUTYLCHLORENDATE

SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.	SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.
Eval B		12:16	0%	MB2-4217	20008 Sed Blank	19:55	0.49%
Eval C		12:47	0%	E8608 MS	B-5033 ½5	20:21	0.15%
EPA-A		13:17	0.10%	Eval B		20:52	0.69%
EPA-B		14:04	0.20%	EPA-B		21:52	0.74%
Toxaphene		14:36	0.10%	EPA-A		22:23	0.79%
Chlordane		15:07	0.10%				
Aroclors 1016/1260		15:34	0%				
Aroclor 1221		16:05	0.05%				
Aroclor 1232		16:30	0.05%				
Aroclor 1242		16:56	0.10%				
Aroclor 1248		17:23	0.34%				
Aroclor 1254		17:49	0.25%				
DEDT1		18:18	0.15%				
DEDT2		18:44	0.25%				
DEDT3		19:10	0.69%				

(1) SEE EXHIBIT E, SECTION 7.5.4

(2) SEE EXHIBIT E, SECTION 7.3.1.2.2.1

RECEIVED JUL 0 8 1985

Pesticide Evaluation Standards Summary

0660

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 3% OV-1

Date of Analysis 4/29/85 Instrument ID V-3740B

EVALUATION CHECK FOR LINEARITY

LABORATORY ID	File 151	File 152	File 153	
PESTICIDE	CALIBRATION FACTOR EVAL. MIX A	CALIBRATION FACTOR EVAL. MIX B	CALIBRATION FACTOR EVAL. MIX C	% RSD (≤10%)
ALDRIN	95466429	105689580	100276910	5.1%
ENDRIN	51944808	57144716	54224236	4.8%
4,4'-DDT(1)	40047091	48808128	48732605	11.0%
DIBUTYL CHLORENDATE	69959120	67644160	66843430	0.7%

EVALUATION CHECK FOR 4,4'-DDT/ENDRIN BREAKDOWN

	PERCENT BREAKDOWN EXPRESSED AS TOTAL DEGRADATION			
	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B
LABORATORY ID	File 152	File 164		
TIME OF ANALYSIS	9:50.7	17:07.5		
ENDRIN				
4,4'-DDT				
COMBINED(2)	12.2%	12.0%		

EVALUATION OF RETENTION TIME SHIFT FOR DIBUTYLCHLORENDATE

SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.	SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.
Eval B		9:50.7	0.08%				
Eval C		10:23.3	0.24%				
DEDT 4		11:05.7	0%				
DEDT5		11:38.3	0.28%				
DEDT6		12:09.8	0%				
EPA-AS		12:42.4	0%				
EPA-BS		13:15.0	0%				
MBI-4217	20008 BLK	14:24.5	0.12%				
E8600 MS	B-5041	14:57.1	0.04%				
E8600 MS	B-5041 1/5	15:29.7	0.08%				
E8600 MSD	B-5046	16:02.3	0.04%				
E8600 MSD	B-5046 1/5	16:34.9	0.04%				
Eval B		17:07.5	0.08%				
EPA-AS		17:40.1	0.16%				
EPA-BS		18:12.7	0.08%				

(1) SEE EXHIBIT E, SECTION 7.5.4

(2) SEE EXHIBIT E, SECTION 7.3.1.2.2.1

RECEIVED JUL 08 1985

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 3% OV-1 0661

Date of Analysis 4/29/85 Instrument ID V-3740 B

Evaluation Check for Linearity

Laboratory ID	File 154	File 155	File 156	
Pesticide	DEDT #4 Calibration Factor	DEDT #5 Calibration Factor	DEDT #6 Calibration Factor	% RSD ≤ 10%
4,4'-DDE	90700333	93562262	91285833	1.6%
4,4'-DDD	67859000	68477857	66834048	1.2%
4,4'-DDT	43605188	47486183	47141875	4.7%
Dibutyl Chorendate	68928240	68756880	67383310	1.2%

RECEIVED JUL 0 8 1985

Pesticide Evaluation Standards Summary

0662

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 3% OV-1

Date of Analysis 5-22-85 Instrument ID T-565

EVALUATION CHECK FOR LINEARITY

LABORATORY ID	File 262	File 263	File 264	
PESTICIDE	CALIBRATION FACTOR EVAL. MIX A	CALIBRATION FACTOR EVAL. MIX B	CALIBRATION FACTOR EVAL. MIX C	% RSD (≤10%)
ALDRIN	1278890	1413830	1539270	9.2
ENDRIN	1078250	1207610	1302200	9.4
4,4'-DDT(1)	899838	1093990	1177270	13.5
DIBUTYL CHLORENDATE	1216170	1287170	1294130	3.4

EVALUATION CHECK FOR 4,4'-DDT/ENDRIN BREAKDOWN

	PERCENT BREAKDOWN EXPRESSED AS TOTAL DEGRADATION			
	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B	EVAL. MIX B
LABORATORY ID	File 263	File 272		
TIME OF ANALYSIS	12:47	17:46		
ENDRIN				
4,4'-DDT				
COMBINED(2)	1.9%	2.1%		

EVALUATION OF RETENTION TIME SHIFT FOR DIBUTYLCHLORENDATE

SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.	SMO SAMPLE NO.	LAB ID	TIME OF ANALYSIS	PERCENT DIFF.
Eval B		12:47	0.12%	EPA-B		21:57	0.47%
Eval C		13:19	0.20%				
EPA-A		14:03	0.24%				
EPA-B		14:35	0.20%				
MB2-4217	20008 Sed Blank	15:06	0.24%				
E-8604	B-5028	15:37	Interference				
E-8605	B-5029	16:12	Interference				
E-8607	B-5031	16:43	0.20%				
E-8608	B-5032 1/50	17:14	diluted out				
Eval B		17:46	0.36%				
E-8608	B-5032 1/5	18:17	0.67%				
E-8608 MS	B-5033 1/5	19:24	0.83%				
E-8608 MSD	B-5034 1/5	19:57	0.99%				
	Hexane	20:28	none added				
EPA-A		20:39	0.24%				

(1) SEE EXHIBIT E, SECTION 7.5.4

(2) SEE EXHIBIT E, SECTION 7.3.1.2.2.1

RECEIVED JUL 0 8 1985

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 3% OV-1 0659

Date of Analysis 5-22-85 Instrument ID T-5605 ~~V-3740B~~ EJT 5/23/85

Evaluation Check for Linearity

Laboratory ID	59	60	61	
Pesticide	DEDT 1 Calibration Factor	DEDT 2 Calibration Factor	DEDT 3 Calibration Factor	% RSD ≤ 10%
4,4'-DDE	23001000	23314333	23420083	0.9%
4,4'-DDD	15747667 ~~15#~~ EJT 5-23-85	14895667	15994438	3.7%
4,4'-DDT	4759344	6972363	8062133	26%
Dibutyl Chorendate	19301720	18885547	17764570	4.3%

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401 GC Instrument ID V-3740A

	DATE OF ANALYSIS 4-26-85 TIME OF ANALYSIS 13:45.3 LABORATORY ID File 194 (EPA-A)				DATE OF ANALYSIS 4-27-85 TIME OF ANALYSIS 00:44.7 LABORATORY ID File 216 (EPA-A)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC	2.406	2.391-2.421	33170169	Quant.	2.404	34222373	Quant.	3.2%
Heptachlor	2.92	2.909-2.931	37153346	Quant.	2.924	40160236	Quant.	8.1%
Aldrin	3.50	3.48-3.52	39086700	Quant.	3.500	40264000	Quant.	3.0%
Heptachlor Epoxide	5.06	5.03-5.09	35058349	Quant.	5.044	39220130	Quant.	11.9%
Endosulfan I	6.30	6.27-6.33	31531202	Quant.	6.289	33692459	Quant.	6.9%
Dieldrin	7.57	7.524-7.616	33913939	Quant.	7.568	35450909	Quant.	4.5%
4,4'-DDE								
Endrin	9.10	9.025-9.175	18518380	Quant.	9.081	17649577	Quant.	4.7%
Endosulfan II	10.85	10.745-10.955	29670774	Quant.	10.83	29357390	Quant.	1.1%
4,4'-DDD								
Endrin Aldehyde								
Endosulfan Sulfate								
4,4'-DDT								
Methoxychlor	22.31	22.214-22.406	7362444.4	Quant.	22.28	7421066.7	Quant.	0.8%
Endrin Ketone								
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<25% DIFFERENCE)

FORM IX

1/85

RECEIVED JUL 08 1985

0660

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401 GC Instrument ID V-3740A

	DATE OF ANALYSIS 4-26-85 TIME OF ANALYSIS 14:15.9 LABORATORY ID File 195 (EPA-B)				DATE OF ANALYSIS 4-27-85 TIME OF ANALYSIS 6:21.2 LABORATORY ID File 227 (EPA-B)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC	1.945	1.934-1.956	34359385	Quant.	1.946	34488026	Quant.	0.4%
beta-BHC	2.662	2.632-2.692	15118019	Quant.	2.665	15414151	Quant.	2.0%
delta-BHC	3.093	3.063-3.123	37138232	Quant.	3.093	37539671	Quant.	1.1%
gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE	6.95	6.904-6.996	28047130	Conf.	6.96	28728430	Conf.	2.4%
Endrin								
Endosulfan II								
4,4'-DDD	10.32	10.274-10.366	21743615	Conf.	10.33	21818839	Conf.	0.3%
Endrin Aldehyde	13.86	13.785-13.935	21516580	Quant.	13.88	21379940	Quant.	0.6%
Endosulfan Sulfate	16.64	16.532-16.748	18951161	Quant.	16.65	18756696	Quant.	1.0%
4,4'-DDT	12.33	12.24-12.41	17768352	Conf.	12.35	18034499	Conf.	1.5%
Methoxychlor								
Endrin Ketone	22.39	22.27-22.51	27650280	Quant.	22.39	27426520	Quant.	0.8%
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<5% DIFFERENCE)

FORM IX

RECEIVED JUL 0 8 1985

0664

1/85

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville
Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401 GC Instrument ID V-3740A

	DATE OF ANALYSIS 5-13-85 TIME OF ANALYSIS 15:21 LABORATORY ID EPAL20008.034a (EPA-A)				DATE OF ANALYSIS 5-14-85 TIME OF ANALYSIS 14:53 LABORATORY ID EPAL20008.056a (EPA-A)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF.**
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC	2.487	2.463-2.511	27484407	Quant.	2.487	29811695	Quant.	8.5%
Heptachlor	3.017	2.989-3.045	29041339	Quant.	3.020	30150984	Quant.	3.8%
Aldrin	3.604	3.567-3.641	33890000	Quant.	3.612	34210700	Quant.	0.9%
Heptachlor Epoxide	5.164	5.119-5.209	29526716	Quant.	5.169	30812152	Quant.	4.4%
Endosulfan I	6.417	6.338-6.496	26429235	Quant.	6.433	28014863	Quant.	6.0%
Dieldrin	7.708	7.621-7.795	28311091	Quant.	7.727	29017333	Quant.	2.5%
4,4'-DDE								
Endrin	9.255	9.190-9.320	14051444	Quant.	9.279	13438627	Quant.	4.4%
Endosulfan II	11.02	10.906-11.134	24441062	Quant.	11.049	25377876	Quant.	3.8%
4,4'-DDD								
Endrin Aldehyde								
Endosulfan Sulfate								
4,4'-DDT								
Methoxychlor	22.732	22.550-22.914	3709209	Conf.	22.777	4380720	Conf.	18 %
Endrin Ketone								
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<5% DIFFERENCE)

FORM IX

1/85

RECEIVED JUL 08 1985
0665

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401 GC Instrument ID V-3740A

	DATE OF ANALYSIS 5-13-85 TIME OF ANALYSIS 17:43 LABORATORY ID EPAL 20008.036a (EPA-B)				DATE OF ANALYSIS 5-14-85 TIME OF ANALYSIS 10:36.3 LABORATORY ID EPAL 20008.068a (EPA-B)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC	2.021	2.010-2.032	29844175	Quant.	2.016	32055825	Quant.	7.4%
beta-BHC	2.753	2.723-2.783	12656792	Quant.	2.753	13992453	Quant.	10.6%
delta-BHC	3.191	3.161-3.221	30432682	Quant.	3.193	33627852	Quant.	10.5%
gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE	7.121	7.075-7.167	25470269	Quant.	7.137	25793677	Quant.	1.3%
Endrin								
Endosulfan II								
4,4'-DDD	10.529	10.483-10.575	16350818	Quant.	10.567	18632929	Quant.	14.%
Endrin Aldehyde	14.087	14.012-14.162	15578600	Conf.	14.113	18642800	Conf.	19.7%
Endosulfan Sulfate	16.775	16.667-16.883	12090313	Conf.	16.823	14100580	Conf.	16.6%
4,4'-DDT	12.583	12.493-12.673	12076441	Quant.	12.604	13737553	Quant.	13.8%
Methoxychlor								
Endrin Ketone	22.673	22.553-22.793	21790220		22.684	24359700		11.8%
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<5% DIFFERENCE)

FORM IX

RECEIVED JUL 08 1985 0666

1/85

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401 GC Instrument ID V-3740A

	DATE OF ANALYSIS 5-14 TIME OF ANALYSIS 4:18 LABORATORY ID EPAL20008.056a (EPA-A)				DATE OF ANALYSIS 5-14 TIME OF ANALYSIS 11:04 LABORATORY ID EPAL20008.076 (EPA-A)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF.**
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC	2.487	2.463-2.511	29811695	Quant.	2.480	30427797	Quant.	2.1%
Heptachlor	3.020	2.992-3.048	30150984	Quant.	3.013	28447047	Quant.	5.7%
Aldrin	3.612	3.575-3.649	34210700	Quant.	3.601	34343100	Quant.	0.4%
Heptachlor Epoxide	5.169	5.124-5.214	30812152	Quant.	5.164	31344249	Quant.	1.7%
Endosulfan I	6.433	6.354-6.512	28014863	Quant.	6.425	32207914	Quant	15.0%
Dieldrin	7.727	7.640-7.814	29017333	Quant.	7.708	29468242	Quant.	1.6%
4,4'-DDE								
Endrin	9.279	9.217-9.341	13438627	Quant.	9.257	15032113	Quant.	11.9%
Endosulfan II	11.049	10.935-11.163	25377876	Quant.	11.023	25662398	Quant.	1.1%
4,4'-DDD								
Endrin Aldehyde								
Endosulfan Sulfate								
4,4'-DDT								
Methoxychlor	22.777	22.595-22.959	4380720	Conf.	22.724	3553253	Conf.	18.9%
Endrin Ketone								
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<15% DIFFERENCE)

FORM IX

RECEIVED JUL 08 1985
0667

1/85

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville
Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401 GC Instrument ID V-3740A

	DATE OF ANALYSIS 5-22-85 TIME OF ANALYSIS 13:17 LABORATORY ID File 49 (EPA-A)				DATE OF ANALYSIS 5-22-85 TIME OF ANALYSIS 22:23 LABORATORY ID File 66 (EPA-A)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF.**
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC	2.76	2.704-2.816	25432034	Quant.	2.777	24003729	Quant.	5.6%
Heptachlor	3.30	3.273-3.327	2606460457	Quant.	3.31	23316142	Quant.	12.5%
Aldrin	3.89	3.894-3.936	31651500	Quant.	3.91	29886200	Quant.	5.6%
Heptachlor Epoxide	5.49	5.394-5.586	28692208	Quant.	5.52	28690909	Quant.	0.5%
Endosulfan I	6.78	6.666-6.894	29739508	Quant.	6.82	26245902	Quant.	11.7%
Dieldrin	8.08	7.966-8.194	28514424	Quant.	8.12	26960061	Quant.	5.5%
4,4'-DDE								
Endrin	9.65	9.468-9.832	12942535	Quant.	9.69	12514965	Quant.	3.3%
Endosulfan II	11.40	11.218-11.582	26915781	Quant.	11.46	26195205	Quant.	2.7%
4,4'-DDD								
Endrin Aldehyde								
Endosulfan Sulfate								
4,4'-DDT								
Methoxychlor	22.11	21.597-21.623	3538231	Quant.	22.26	3726524	Quant.	5.3%
Endrin Ketone								
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<5% DIFFERENCE)

FORM IX

1/85

RECEIVED JUL 08 1985
0668

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 1.5% SP-2250/1.95% SP 2401 GC Instrument ID V-3740A

	DATE OF ANALYSIS 5-22-85 TIME OF ANALYSIS 14:04 LABORATORY ID File 50 (EPA-B)				DATE OF ANALYSIS 5-22-85 TIME OF ANALYSIS 21:52 LABORATORY ID File 66 (EPA-B)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF.**
alpha-BHC	2.28	2.246-2.314	24860518	Quant.	2.297	25131553	Quant.	1.1 %
beta-BHC	3.03	2.984-3.076	14222642	Quant.	3.04	14189434	Quant.	0.2 %
delta-BHC	3.48	3.434-3.494	23047893	Quant.	3.50	23345838	Quant.	1.3 %
gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE	7.32	7.206-7.434	24459686	Quant.	7.36	23950493	Quant.	2.1 %
Endrin								
Endosulfan II								
4,4'-DDD	10.70	10.496-10.904	14623325	Quant.	10.75	15414776	Quant.	5.4 %
Endrin Aldehyde	14.53	14.32-14.74	17877520	Quant.	14.60	19022980	Quant.	6.4 %
Endosulfan Sulfate	17.31	17.048-17.572	13191496	Quant.	17.41	13145335	Quant.	0.3 %
4,4'-DDT	12.65	12.423-12.877	7143317	Quant.	12.71	7331850	Quant.	2.6 %
Methoxychlor								
Endrin Ketone	23.11	22.737-23.483	18286040	Quant.	23.22	18355460	Quant.	0.4 %
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (≤ 5% DIFFERENCE)

FORM IX

RECEIVED JUL 0 8 1985 0669

1/85

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025 GC Column 3% OV-1 GC Instrument ID V-3740 B

	DATE OF ANALYSIS 4-29-85 TIME OF ANALYSIS 12:42.4 LABORATORY ID File 157 (EPA-AS)				DATE OF ANALYSIS 4-29-85 TIME OF ANALYSIS 17:40.1 LABORATORY ID File 165 (EPA-AS)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC	2.122	2.111-2.133	105381640	Conf.	2.116	110639830	Conf.	5.0%
Heptachlor	3.43	3.413-3.447	91540328		3.42	85239672		6.9%
Aldrin	4.26	4.243-4.277	126956500		4.25	122599500		3.4%
Heptachlor Epoxide	5.19	5.173-5.207	110824110		5.18	105993350		4.4%
Endosulfan I	6.47	6.44-6.50	101461380		6.46	97998816		3.4%
Dieldrin	7.56	7.53-7.59	102630510		7.55	99238990		3.3%
4,4'-DDE								
Endrin	8.61	8.58-8.64	79934012		8.61	78571557		1.7%
Endosulfan II								
4,4'-DDD								
Endrin Aldehyde								
Endosulfan Sulfate								
4,4'-DDT								
Methoxychlor	18.37	18.265-18.475	186664667			17106444		8.3%
Endrin Ketone								
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<5% DIFFERENCE)

FORM IX

RECEIVED JUL 08 1985

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville
Contract No. EPA 68-01-7025 GC Column 3% OV-1 GC Instrument ID V-3740 B

	DATE OF ANALYSIS 4-29-85 TIME OF ANALYSIS 13:15.0 LABORATORY ID File 158 (EPA-BS)				DATE OF ANALYSIS 4-29-85 TIME OF ANALYSIS 18:12.7 LABORATORY ID File 166 (EPA-BS)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC	1.804	1.776-1.832	105753910	Conf.	1.802	100737740	Conf.	4.7%
beta-BHC	1.925	1.896-1.954	48890723	Conf.	1.925	47646541	Conf.	2.5%
delta-BHC	2.186	2.154-2.218	100248290	Conf.	2.185	101002050	Conf.	0.8%
gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE	7.50	7.369-7.631	96259179	Quant.	7.49	96035746	Quant.	0.2%
Endrin								
Endosulfan II								
4,4'-DDD	9.49	9.325-9.655	59193610	Quant.	9.48	59152692	Quant.	0.07% *
Endrin Aldehyde								
Endosulfan Sulfate	11.09	10.89-11.29	43690067	Conf.	11.09	44408371	Conf.	1.6%
4,4'-DDT	12.36	12.16-12.56	52654365	Quant.	12.35	51471352	Quant.	2.2%
Methoxychlor								
Endrin Ketone	14.23	13.986-14.474	68565433	Conf.	14.22	69022700	Conf.	0.7%
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

4,4'-DDD quantified using DDD peak in DEDTS std.

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (~5% DIFFERENCE)

FORM IX

RECEIVED JUL 08 1985

0671

1/85

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville
Contract No. EPA-68-01-7025 GC Column 3% OV-1 GC Instrument ID I-565

	DATE OF ANALYSIS 5-22-85 TIME OF ANALYSIS 14:03 LABORATORY ID File 265 (EPA-A)				DATE OF ANALYSIS 5-22-85 TIME OF ANALYSIS 20:39 LABORATORY ID File 277 (EPA-A)			
COMPOUND	RT	RETENTION TIME WINDOW	*CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF. **
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC	1.964	1.949-1.979	6583559	Conf.	1.965	6911186	Conf.	5.0%
Heptachlor	3.22	3.203-3.237	10018898		3.22	10331299		3.1%
Aldrin	4.01	3.964-4.056	7775200		4.01	8358400		7.5%
Heptachlor Epoxide	4.93	4.90-4.96	8958813	+Quant.	4.92	9054174	+Quant.	1.0%
Endosulfan I	6.17	6.124-6.216	8073771		6.17	8437814		4.5%
Dieldrin	7.25	7.188-7.312	6803333		7.25	7134667		4.9%
4,4'-DDE								
Endrin	8.24	8.161-8.319	7758011		8.22	8360016		7.8%
Endosulfan II								
4,4'-DDD								
Endrin Aldehyde								
Endosulfan Sulfate								
4,4'-DDT								
Methoxychlor	18.27	18.073-18.467	4329031	Quant.	18.26	4219040	Quant.	2.5%
Endrin Ketone								
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<5% DIFFERENCE)

FORM IX

RECEIVED JUL 0 8 1985

PESTICIDE/PCB STANDARDS SUMMARY

Case No. 4217 Laboratory ITAS-Knoxville
Contract No. EPA 68-01-7025 GC Column 3% OV-1 GC Instrument ID T-565

	DATE OF ANALYSIS 5-22-85 TIME OF ANALYSIS 14:35 LABORATORY ID File 266 (EPA-B)				DATE OF ANALYSIS 5-22-85 TIME OF ANALYSIS 21:57 LABORATORY ID File 278 (EPA-B)			
COMPOUND	RT	RETENTION TIME WINDOW	CALIBRATION FACTOR	CONF. OR QUANT.	RT	CALIBRATION FACTOR	CONF. OR QUANT.	PERCENT DIFF.**
alpha-BHC	1.661	1.649-1.673	6174272	Conf.	1.661	6432848	Conf.	4.2%
beta-BHC	1.778	1.763-1.793	5079623	Conf.	1.780	5127264	Conf.	0.9%
delta-BHC	2.021	2.004-2.038	7638746	Conf.	2.021	8072251	Conf.	5.7%
gamma-BHC								
Heptachlor								
Aldrin								
Heptachlor Epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE	7.25	7.204-7.296	6549731	Conf.	7.23	6799238	Conf.	3.8%
Endrin								
Endosulfan II								
4,4'-DDD	9.19	9.115-9.265	6324790	Conf.+Quant.	9.16	6560273	Conf.+Quant.	3.7%
Endrin Aldehyde								
Endosulfan Sulfate	10.73	10.622-10.838	6136473	Quant.+Conf.	10.70	6429955	Quant.+Conf.	4.8%
4,4'-DDT	12.11	11.973-12.247	5754277	Conf.+Quant.	12.08	5690718	Conf.+Quant.	1.1%
Methoxychlor								
Endrin Ketone	13.84	13.703-13.977	6974920	Conf.	13.80	7435040	Conf.	6.6%
Tech. Chlordane								
alpha-Chlordane*								
gamma-Chlordane*								
Toxaphene								
Aroclor - 1016								
Aroclor - 1221								
Aroclor - 1232								
Aroclor - 1242								
Aroclor - 1248								
Aroclor - 1254								
Aroclor - 1260								

* SEE EXHIBIT E, PART 7

** CONF. = CONFIRMATION (<20% DIFFERENCE)
QUANT. = QUANTITATION (<5% DIFFERENCE)

FORM IX

RECEIVED JUL 08 1985 0673

1/85

Pesticide/PCB Identification

Case No. 4217 Laboratory ITAS-Knoxville

Contract No. EPA 68-01-7025

SAMPLE ID	PRIMARY COLUMN	PESTICIDE/ PCB	RT OF TENTATIVE ID	RT WINDOW OF APPROPRIATE STANDARD	CONFIRMATION COLUMN	RT ON CONFIRMATORY COLUMN	RT WINDOW OF APPROPRIATE STANDARD	GC/MS CONFIRMED (Y or N)
E-8600MS	1.5% SP 2250 1.95% SP 2401	Lindane	2.397	2.391 - 2.421	3% OV-1	2.118	2.111 - 2.133	Y
		Heptachlor	2.917	2.909 - 2.931		3.428	3.413 - 3.447	
		Aldrin	3.493	3.48 - 3.52		4.252	4.243 - 4.277	
		Dieldrin	7.56	7.524 - 7.616		7.54	7.53 - 7.59	
		Endrin	9.07	9.025 - 9.175		8.44 *	8.58 - 8.64	
	3% OV-1	4,4'-DDT	12.37	12.16 - 12.56	1.5% SP 2250 1.95% SP 2401	12.33	12.24 - 12.41	
E 8600MSD	1.5% SP 2250 1.95% SP 2401	Lindane	2.406	2.391 - 2.421	3% OV-1	2.118	2.111 - 2.133	
		Heptachlor	2.928	2.909 - 2.931		3.429	3.413 - 3.447	
		Aldrin	~~3.044~~ 3.631	3.567 - 3.641		4.248	4.243 - 4.277	
		Dieldrin	7.77	7.621 - 7.795		7.54	7.53 - 7.59	
		Endrin	9.32	9.19 - 9.32		8.42 *	8.58 - 8.64	
		4,4'-DDT	12.66	12.493 - 12.673		12.36	12.16 - 12.56	
E8608	3% OV-1	Endosulfan Sulfate	10.67	10.622 - 10.838	1.5% SP 2250 1.95% SP 2401	16.81	16.667 - 16.883	
E8608MS	1.5% SP 2250 1.95% SP 2401	Lindane	2.485	2.463 - 2.511	3% OV-1	1.965	1.949 - 1.979	
		Heptachlor	3.025	2.989 - 3.045		3.22	3.203 - 3.237	
		Aldrin	3.62	3.567 - 3.641		4.01	3.964 - 4.056	
		Dieldrin	7.70	7.621 - 7.795		7.24	7.188 - 7.312	
		Endrin	9.32	9.19 - 9.32		8.09 *	8.161 - 8.319	
		4,4'-DDT	12.73	12.423 - 12.877		12.09	11.973 - 12.247	
		Endosulfan Sulfate	17.22	17.048 - 17.572		10.66	10.622 - 10.838	
E8608MSD		Lindane	2.488	2.463 - 2.511		1.961	1.949 - 1.979	
		Heptachlor	3.013	2.989 - 3.045		3.22	3.203 - 3.237	
		Aldrin	3.612	3.567 - 3.641		4.00	3.964 - 4.056	
		Dieldrin	7.73	7.621 - 7.795		7.24	7.188 - 7.312	
		Endrin	9.28	9.19 - 9.32		8.10 *	8.161 - 8.319	
		4,4'-DDT	12.61	12.493 - 12.673		~~12.61~~ 12.10	11.973 - 12.247	
	3% OV-1	Endosulfan Sulfate	10.63	10.622 - 10.838	1.5% SP 2250 1.95% SP 2401	16.80	16.667 - 16.883	

* value outside window due to RT shift because of co-elution of Endrin + Endosulfan II.

RECEIVED JUL 0 8 1986

RECEIVED JUL 0 8 1985

Case: 4217

Contractor: I.T. STUART

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.

85-56591

Environmental Protection Agency CLP Sample Management Office
P O Box 818 Alexandria Virginia 22313 703/557-2490

RECEIVED JUL 0 8 1985

Sample Number
E8600

Organics Analysis Data Sheet
(Page 1)

0017

Laboratory Name: ITAS - KNOXVILLE
Case No: 4217
Lab Sample ID No: B5035
QC Report No:
Sample Matrix: WATER
Contract No: 68-01-7025
Data Release Authorized By: Snell A. [illegible]
Date Sample Received: 4-24-85

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 4-25-85
Date Analyzed: 4-25-85
Conc/Dil Factor: 1 pH
Percent Moisture: NA
Percent Moisture (Decanted): NA

CAS Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	5.0 U
67-64-1	Acetone	5.6 BJ
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1, 1-Dichloroethene	5.0 U
75-34-3	1, 1-Dichloroethane	5.0 U
156-60-5	Trans-1, 2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1, 2-Dichloroethane	5.0 U
78-93-3	2-Butanone	6.6 BJ
71-55-6	1, 1, 1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		(ug/l) or ug/Kg (Circle One)
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0 U
78-87-5	1, 2-Dichloropropane	5.0 U
10061-02-6	Trans-1, 3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1, 1, 2-Trichloroethane	5.0 U
71-43-2	Benzene	5.0 U
10061-01-5	cis-1, 3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	1.5 BJ
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

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

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥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 JUL 0 8 1985

0018

Environmental Protection Agency, CLP Sample Management Office,
P O Box 818 Alexandria, Virginia 22313 703/557-2490

Sample Number
E8600

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed: 5-23-85

Conc/Dil Factor: $\frac{1000}{1} \times \frac{1}{2} = 500/1$

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

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	10.	U
51-28-5	2, 4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2, 4-Dinitrotoluene		
606-20-2	2, 6-Dinitrotoluene		
84-66-2	Diethylphthalate		
7005-72-3	4-Chlorophenyl-phenylether		
86-73-7	Fluorene		
100-01-6	4-Nitroaniline	50.	U
534-52-1	4, 6-Dinitro-2-Methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether		
118-74-1	Hexachlorobenzene		
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene	10.	U
84-74-2	Di-n-Butylphthalate	4.	J
206-44-0	Fluoranthene	10.	U
92-87-5	Benzidine	80.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3, 3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)Anthracene	10.	U
117-81-7	bis(2-Ethylhexyl)Phthalate		
218-01-9	Chrysene		
117-84-0	Di-n-Octyl Phthalate		
205-99-2	Benzo(b)Fluoranthene		
207-08-9	Benzo(k)Fluoranthene		
50-32-8	Benzo(a)Pyrene		
193-39-5	Indeno(1, 2, 3-cd)Pyrene		
53-70-3	Dibenz(a, h)Anthracene		
191-24-2	Benzo(g, h, i)Perylene		

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985

0019

Laboratory Name ITAS-Knoxville

Case No 4217

Sample Number E8600

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4/24/85

Date Analyzed 4/27/85

Conc/Dil Factor: 1

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	0.1U
72-55-9	4, 4'-DDE	0.1U
72-20-8	Endrin	0.1U
33213-65-9	Endosulfan II	0.1U
72-54-8	4, 4'-DDD	0.1U
7421-93-4	Endrin Aldehyde	0.1U
1031-07-8	Endosulfan Sulfate	0.1U
50-29-3	4, 4'-DDT	0.1U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.1U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	0.1U
11096-82-5	Aroclor-1260	0.1U

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 1000 ml or W_s _____ V_t 10000 µl V_i 4 µl

RECEIVED JUL 0 8 1985

0020

Environmental Protection Agency, CLP Sample Management Office,
P O Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E8600

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Concentration (dg/l or ug/kg)
1.	7-Oxabicyclo[4.1.0.] Heptane	BNA	159	8.2 J
2.	No Volatile compounds detected	VOA		
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.				

Environmental Protection Agency CLP Sample Management Office
P O Box 818 Alexandria Virginia 22313 703/557-2490

RECEIVED JUL 0 8 1985

85F515912

Sample Number: E8601

Organics Analysis Data Sheet
(Page 1)

0060

Laboratory Name: ITAS- KNOXVILLE
Case No: 4217
Lab Sample ID No: B5037
QC Report No:
Sample Matrix: WATER
Contract No: 68-01-7025
Data Release Authorized By: Sneell A. [illegible]
Date Sample Received: 4-24-85

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 4-25-85
Date Analyzed: 4-25-85
Conc/Dil Factor: 1 pH
Percent Moisture: NA
Percent Moisture (Decanted): NA

CAS Number		(ug/l) or ug/Kg (Circle One)
74-87-3	Chloromethane	10 U
74-83-9	Bromomethane	10 U
75-01-4	Vinyl Chloride	10 U
75-00-3	Chloroethane	10 U
75-09-2	Methylene Chloride	5.0 U
67-64-1	Acetone	5.5BJ
75-15-0	Carbon Disulfide	5.0 U
75-35-4	1, 1-Dichloroethene	5.0 U
75-34-3	1, 1-Dichloroethane	5.0 U
156-60-5	Trans-1, 2-Dichloroethene	5.0 U
67-66-3	Chloroform	5.0 U
107-06-2	1, 2-Dichloroethane	5.0 U
78-93-3	2-Butanone	6.5BJ
71-55-6	1, 1, 1-Trichloroethane	5.0 U
56-23-5	Carbon Tetrachloride	5.0 U
108-05-4	Vinyl Acetate	10 U
75-27-4	Bromodichloromethane	5.0 U

CAS Number		(ug/l) or ug/Kg (Circle One)
79-34-5	1, 1, 2, 2-Tetrachloroethane	5.0 U
78-87-5	1, 2-Dichloropropane	5.0 U
10061-02-6	Trans-1, 3-Dichloropropene	5.0 U
79-01-6	Trichloroethene	5.0 U
124-48-1	Dibromochloromethane	5.0 U
79-00-5	1, 1, 2-Trichloroethane	5.0 U
71-43-2	Benzene	5.0 U
10061-01-5	cis-1, 3-Dichloropropene	5.0 U
110-75-8	2-Chloroethylvinylether	10 U
75-25-2	Bromoform	5.0 U
591-78-6	2-Hexanone	10 U
108-10-1	4-Methyl-2-Pentanone	1.5 BJ
127-18-4	Tetrachloroethene	5.0 U
108-88-3	Toluene	5.0 U
108-90-7	Chlorobenzene	5.0 U
100-41-4	Ethylbenzene	5.0 U
100-42-5	Styrene	5.0 U
	Total Xylenes	5.0 U

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

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

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥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 JUL 08 1985 0061

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E8601

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 4-24-85
Date Analyzed: 5-23-85
Conc/Dil Factor: 1000/1 x 1/2 = 500/1

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

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	10.	U
51-28-5	2, 4-Dinitrophenol	50.	U
100-02-7	4-Nitrophenol	50.	U
132-64-9	Dibenzofuran	10.	U
121-14-2	2, 4-Dinitrotoluene		
606-20-2	2, 6-Dinitrotoluene		
84-66-2	Diethylphthalate		
7005-72-3	4-Chlorophenyl-phenylether		
86-73-7	Fluorene		
100-01-6	4-Nitroaniline	50.	U
534-52-1	4, 6-Dinitro-2-Methylphenol	50.	U
86-30-6	N-Nitrosodiphenylamine (1)	10.	U
101-55-3	4-Bromophenyl-phenylether		
118-74-1	Hexachlorobenzene		
87-86-5	Pentachlorophenol	50.	U
85-01-8	Phenanthrene	10.	U
120-12-7	Anthracene		
84-74-2	Di-n-Butylphthalate		
206-44-0	Fluoranthene		
92-87-5	Benzidine	80.	U
129-00-0	Pyrene	10.	U
85-68-7	Butylbenzylphthalate	10.	U
91-94-1	3, 3'-Dichlorobenzidine	20.	U
56-55-3	Benzo(a)Anthracene	10.	U
117-81-7	bis(2-Ethylhexyl)Phthalate	6.	J
218-01-9	Chrysene	10.	U
117-84-0	Di-n-Octyl Phthalate		
205-99-2	Benzo(b)Fluoranthene		
207-08-9	Benzo(k)Fluoranthene		
50-32-8	Benzo(a)Pyrene		
193-39-5	Indeno(1, 2, 3-cd)Pyrene		
53-70-3	Dibenz(a, h)Anthracene		
191-24-2	Benzo(g, h, i)Perylene		

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985

0062

Laboratory Name ITAS-Knoxville

Case No 4217

Sample Number E-8601

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4/24/85

Date Analyzed 4/27/85

Conc/Dil Factor: 1

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	0.1U
72-55-9	4, 4'-DDE	0.1U
72-20-8	Endrin	0.1U
33213-65-9	Endosulfan II	0.1U
72-54-8	4, 4'-DDD	0.1U
7421-93-4	Endrin Aldehyde	0.1U
1031-07-8	Endosulfan Sulfate	0.1U
50-29-3	4, 4'-DDT	0.1U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.1U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	0.1U
11096-82-5	Aroclor-1260	0.1U

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 1000 ml or W_s _____ V_t 10000 µl V_i 4 µl

RECEIVED JUL 0 8 1985 0065

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E8121

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	BNA	157	8.2 J
2.	Dioctylester Hexanedioic Acid	BNA	1348	120. J
3.	No volatile compounds detected	VOA		
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.				

Environmental Protection Agency CLP Sample Management Office
P O Box 818 Alexandria Virginia 22313 703/557-2490

RECEIVED JUL 0 8 1985

Sample Number
E8602

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ITAS-KNOXVILLE
Case No 4217 0106
Lab Sample ID No B5038
QC Report No
Sample Matrix: WATER
Contract No 68-01-7025
Data Release Authorized By: Snell A. [illegible] III
Date Sample Received: 4-24-85

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared 4-26-85
Date Analyzed: 4-26-85
Conc/Dil Factor: 1 pH
Percent Moisture: NA
Percent Moisture (Decanted): NA

CAS Number		ug/l or ug/Kg (Circle One)
74-87-3	Chloromethane	U 10
74-83-9	Bromomethane	U 10
75-01-4	Vinyl Chloride	U 10
75-00-3	Chloroethane	U 10
75-09-2	Methylene Chloride	2.0 JB
67-64-1	Acetone	U 10
75-15-0	Carbon Disulfide	U 5.0
75-35-4	1, 1-Dichloroethene	U 5.0
75-34-3	1, 1-Dichloroethane	U 5.0
156-60-5	Trans-1, 2-Dichloroethene	U 5.0
67-66-3	Chloroform	U 5.0
107-06-2	1, 2-Dichloroethane	U 5.0
78-93-3	2-Butanone	6.2JB
71-55-6	1, 1, 1-Trichloroethane	U 5.0
56-23-5	Carbon Tetrachloride	U 5.0
108-05-4	Vinyl Acetate	U 10
75-27-4	Bromodichloromethane	U 5.0

CAS Number		ug/l or ug/Kg (Circle One)
79-34-5	1, 1, 2, 2-Tetrachloroethane	U 5.0
78-87-5	1, 2-Dichloropropane	U 5.0
10061-02-6	Trans-1, 3-Dichloropropene	U 5.0
79-01-6	Trichloroethene	U 5.0
124-48-1	Dibromochloromethane	U 5.0
79-00-5	1, 1, 2-Trichloroethane	U 5.0
71-43-2	Benzene	U 5.0
10061-01-5	cis-1, 3-Dichloropropene	U 5.0
110-75-8	2-Chloroethylvinylether	U 10
75-25-2	Bromoform	U 5.0
591-78-6	2-Hexanone	U 10
108-10-1	4-Methyl-2-Pentanone	2.2 JB
127-18-4	Tetrachloroethene	U 5.0
108-88-3	Toluene	U 5.0
108-90-7	Chlorobenzene	U 5.0
100-41-4	Ethylbenzene	U 5.0
100-42-5	Styrene	U 5.0
	Total Xylenes	U 5.0

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

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

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥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 JUL 08 1985

0107

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E8602

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed: 5-21-85

Conc/Dil Factor: 1000/1 x 1/2 = 500/1

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

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	10.	u
51-28-5	2, 4-Dinitrophenol	50.	u
100-02-7	4-Nitrophenol	50.	u
132-64-9	Dibenzofuran	10.	u
121-14-2	2, 4-Dinitrotoluene		
606-20-2	2, 6-Dinitrotoluene		
84-66-2	Diethylphthalate		
7005-72-3	4-Chlorophenyl-phenylether		
86-73-7	Fluorene		
100-01-6	4-Nitroaniline	50.	u
534-52-1	4, 6-Dinitro-2-Methylphenol	50.	u
86-30-6	N-Nitrosodiphenylamine (1)	10.	u
101-55-3	4-Bromophenyl-phenylether		
118-74-1	Hexachlorobenzene		
87-86-5	Pentachlorophenol	50.	u
85-01-8	Phenanthrene	10.	u
120-12-7	Anthracene		
84-74-2	Di-n-Butylphthalate		
206-44-0	Fluoranthene		
92-87-5	Benzidine	80.	u
129-00-0	Pyrene	10.	u
85-68-7	Butylbenzylphthalate	10.	u
91-94-1	3, 3'-Dichlorobenzidine	20.	u
56-55-3	Benzo(a)Anthracene	10.	u
117-81-7	bis(2-Ethylhexyl)Phthalate		
218-01-9	Chrysene		
117-84-0	Di-n-Octyl Phthalate		
205-99-2	Benzo(b)Fluoranthene		
207-08-9	Benzo(k)Fluoranthene		
50-32-8	Benzo(a)Pyrene		
193-39-5	Indeno(1, 2, 3-cd)Pyrene		
53-70-3	Dibenz(a, h)Anthracene		
191-24-2	Benzo(g, h, i)Perylene		

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985

0108

Laboratory Name ITAS-Knoxville

Case No 4217

Sample Number E 8602

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 4/24/85

Date Analyzed 4/27/85

Conc/(Dil Factor) 1

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	0.1U
72-55-9	4, 4'-DDE	0.1U
72-20-8	Endrin	0.1U
33213-65-9	Endosulfan II	0.1U
72-54-8	4, 4'-DDD	0.1U
7421-93-4	Endrin Aldehyde	0.1U
1031-07-8	Endosulfan Sulfate	0.1U
50-29-3	4, 4'-DDT	0.1U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.1U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	0.1U
11096-82-5	Aroclor-1260	0.1U

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 1000 ml or W_s _____ V_t 10000 µl V_i 4 µl

RECEIVED JUL 0 8 1985

0109

Environmental Protection Agency, CLP Sample Management Office,
P O Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E 8602

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.	7-Oxabicyclo[4.1.0] Heptane	BNA	161	13.5
2.	Dioctylester Hexanedioic acid	BNA	1352	18.5
3.	No Volatile compounds detected.	VOA		
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.				

85F515R19

Environmental Protection Agency. CLP Sample Management Office
P O Box 818 Alexandria, Virginia 22313 703/557-2490

RECEIVED JUL 08 1985

Sample Number
E8603

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ITAS-KNOXVILLE
Case No 4217 0148
Lab Sample ID No D5039
QC Report No
Sample Matrix: WATER
Contract No 68-01-7025
Data Release Authorized By: Snell A. Kelly III
Date Sample Received: 4-24-85

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 4-26-85
Date Analyzed: 4-26-85
Conc/Dil Factor: 1 pH
Percent Moisture: NA
Percent Moisture (Decanted): NA

CAS Number		(ug/l) or ug/Kg (Circle One)	
74-87-3	Chloromethane	U	10
74-83-9	Bromomethane	U	10
75-01-4	Vinyl Chloride	U	10
75-00-3	Chloroethane	U	10
75-09-2	Methylene Chloride	23 B	
67-64-1	Acetone MB 4-26-85	~~4~~ 11	
75-15-0	Carbon Disulfide	U	5.0
75-35-4	1, 1-Dichloroethene	U	5.0
75-34-3	1, 1-Dichloroethane	U	5.0
156-60-5	Trans-1, 2-Dichloroethene	U	5.0
67-66-3	Chloroform	U	5.0
107-06-2	1, 2-Dichloroethane	U	5.0
78-93-3	2-Butanone	7.8 JB	
71-55-6	1, 1, 1-Trichloroethane	U	5.0
56-23-5	Carbon Tetrachloride	U	5.0
108-05-4	Vinyl Acetate	U	10
75-27-4	Bromodichloromethane	U	5.0

CAS Number		(ug/l) or ug/Kg (Circle One)	
79-34-5	1, 1, 2, 2-Tetrachloroethane	U	5.0
78-87-5	1, 2-Dichloropropane	U	5.0
10061-02-6	Trans-1, 3-Dichloropropene	U	5.0
79-01-6	Trichloroethene	U	5.0
124-48-1	Dibromochloromethane	U	5.0
79-00-5	1, 1, 2-Trichloroethane	U	5.0
71-43-2	Benzene	U	5.0
10061-01-5	cis-1, 3-Dichloropropene	U	5.0
110-75-8	2-Chloroethylvinylether	U	10
75-25-2	Bromoform	U	5.0
591-78-6	2-Hexanone	U	10
108-10-1	4-Methyl-2-Pentanone	3.1 JB	
127-18-4	Tetrachloroethene	U	5.0
108-88-3	Toluene	U	5.0
108-90-7	Chlorobenzene	U	5.0
100-41-4	Ethylbenzene	U	5.0
100-42-5	Styrene	U	5.0
	Total Xylenes	U	5.0

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

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

C This flag applies to pesticide parameters where the identification has been confirmed by GC/MS. Single component pesticides ≥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 JUL 0 8 1985

0149

Environmental Protection Agency, CLP Sample Management Office,
P O Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E8603

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed: 5-21-85

Conc/Dil Factor: 1000/1 x 1/2 = 500/1

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

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	10.	u
51-28-5	2, 4-Dinitrophenol	50.	u
100-02-7	4-Nitrophenol	50.	u
132-64-9	Dibenzofuran	10.	u
121-14-2	2, 4-Dinitrotoluene		
606-20-2	2, 6-Dinitrotoluene		
84-66-2	Diethylphthalate		
7005-72-3	4-Chlorophenyl-phenylether		
86-73-7	Fluorene		
100-01-6	4-Nitroaniline	50.	u
534-52-1	4, 6-Dinitro-2-Methylphenol	50.	u
86-30-6	N-Nitrosodiphenylamine (1)	10.	u
101-55-3	4-Bromophenyl-phenylether		
118-74-1	Hexachlorobenzene		
87-86-5	Pentachlorophenol	50.	u
85-01-8	Phenanthrene	10.	u
120-12-7	Anthracene	10.	u
84-74-2	Di-n-Butylphthalate	2.	J
206-44-0	Fluoranthene	10.	u
92-87-5	Benzidine	80.	u
129-00-0	Pyrene	10.	u
85-68-7	Butylbenzylphthalate	10.	u
91-94-1	3, 3'-Dichlorobenzidine	20.	u
56-55-3	Benzo(a)Anthracene	10.	u
117-81-7	bis(2-Ethylhexyl)Phthalate		
218-01-9	Chrysene		
117-84-0	Di-n-Octyl Phthalate		
205-99-2	Benzo(b)Fluoranthene		
207-08-9	Benzo(k)Fluoranthene		
50-32-8	Benzo(a)Pyrene		
193-39-5	Indeno(1, 2, 3-cd)Pyrene		
53-70-3	Dibenz(a, h)Anthracene		
191-24-2	Benzo(g, h, i)Perylene		

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985

0150

Laboratory Name ITAS-Knoxville

Case No 4217

Sample Number E 8603

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 4/24/85

Date Analyzed 4/27/85

Conc/(Dil Factor) 1

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	0.1U
72-55-9	4, 4'-DDE	0.1U
72-20-8	Endrin	0.1U
33213-65-9	Endosulfan II	0.1U
72-54-8	4, 4'-DDD	0.1U
7421-93-4	Endrin Aldehyde	0.1U
1031-07-8	Endosulfan Sulfate	0.1U
50-29-3	4, 4'-DDT	0.1U
72-43-5	Methoxychlor	0.5U
53494-70-5	Endrin Ketone	0.1U
57-74-9	Chlordane	0.5U
8001-35-2	Toxaphene	1.0U
12674-11-2	Aroclor-1016	0.5U
11104-28-2	Aroclor-1221	0.5U
11141-16-5	Aroclor-1232	0.5U
53469-21-9	Aroclor-1242	0.5U
12672-29-6	Aroclor-1248	0.5U
11097-69-1	Aroclor-1254	0.1U
11096-82-5	Aroclor-1260	0.1U

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 1000 ml or W_s _____ V_t 10000 µl V_i 4 µl

RECEIVED JUL 0 8 1985

0151

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E8603

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.	7-Oxabicyclo [4.1.0] Heptane	BNA	165	9.4 J
2.	NO Volatile compounds detected	VOA		
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.				

Environmental Protection Agency. CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490 RECEIVED JUL 0 8 1985

Sample Number
E 8604

85F5C5594

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ITAS - KNOXVILLE
Case No: 4217 0191
Lab Sample ID No: B 5021
QC Report No:
Sample Matrix: SOIL
Contract No: 68-01-7025
Data Release Authorized By: Sonell A. Hill III
Date Sample Received: 4-24-85

Volatile Compounds

Concentration: (Low) Medium (Circle One)
Date Extracted/Prepared: 4-26-85
Date Analyzed: 4-26-85
Conc/Dil Factor: 1 pH 7.28
Percent Moisture: ~~2222~~ 21. SAM 5 25 85
Percent Moisture (Decanted):

CAS Number		ug/l or (ug/Kg) (Circle One)	
74-87-3	Chloromethane	U	10
74-83-9	Bromomethane	U	10
75-01-4	Vinyl Chloride	U	10
75-00-3	Chloroethane	U	10
75-09-2	Methylene Chloride	32	B
67-64-1	Acetone	U	10
75-15-0	Carbon Disulfide	U	5.0
75-35-4	1, 1-Dichloroethene	U	5.0
75-34-3	1, 1-Dichloroethane	10	
156-60-5	Trans-1, 2-Dichloroethene	U	5.0
67-66-3	Chloroform	1.3	J
107-06-2	1, 2-Dichloroethane	U	5.0
78-93-3	2-Butanone	9.0	JB
71-55-6	1, 1, 1-Trichloroethane	2.6	J
56-23-5	Carbon Tetrachloride	U	5.0
108-05-4	Vinyl Acetate	U	10
75-27-4	Bromodichloromethane	U	5.0

CAS Number		ug/l or (ug/Kg) (Circle One)	
79-34-5	1, 1, 2, 2-Tetrachloroethane	U	5.0
78-87-5	1, 2-Dichloropropane	U	5.0
10061-02-6	Trans-1, 3-Dichloropropene	U	5.0
79-01-6	Trichloroethene	2.6	J
124-48-1	Dibromochloromethane	U	5.0
79-00-5	1, 1, 2-Trichloroethane	U	5.0
71-43-2	Benzene	U	5.0
10061-01-5	cis-1, 3-Dichloropropene	U	5.0
110-75-8	2-Chloroethylvinylether	U	10
75-25-2	Bromoform	U	5.0
591-78-6	2-Hexanone	U	10
108-10-1	4-Methyl-2-Pentanone	10	B
127-18-4	Tetrachloroethene	3.9	J
108-88-3	Toluene	4P	
108-90-7	Chlorobenzene	U	5.0
100-41-4	Ethylbenzene	U	5.0
100-42-5	Styrene	U	5.0
	Total Xylenes	U	5.0

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence

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 JUL 0 8 1985

0192

Environmental Protection Agency. CLP Sample Management Office.
P. O. Box 818. Alexandria, Virginia 22313 703/557-2490

Sample Number
E8604

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed: 5-20-85

Conc/Dil Factor: 31.58

CAS Number		ug/l or ug/Kg (Circle One)	
62-75-9	N-Nitrosodimethylamine	330	U
108-95-2	Phenol		
62-53-3	Aniline		
111-44-4	bis(-2-Chloroethyl)Ether		
95-57-8	2-Chlorophenol		
541-73-1	1, 3-Dichlorobenzene		
106-46-7	1, 4-Dichlorobenzene		
100-51-6	Benzyl Alcohol		
95-50-1	1, 2-Dichlorobenzene		
95-48-7	2-Methylphenol	63	J
39638-32-9	bis(2-chloroisopropyl)Ether	330	U
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine		
67-72-1	Hexachloroethane		
98-95-3	Nitrobenzene		
78-59-1	Isophorone		
88-75-5	2-Nitrophenol		
105-67-9	2, 4-Dimethylphenol		
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(-2-Chloroethoxy)Methane	330	U
120-83-2	2, 4-Dichlorophenol		
120-82-1	1, 2, 4-Trichlorobenzene		
91-20-3	Naphthalene	63	J
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene		
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene	63	J
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2, 4, 6-Trichlorophenol	330	U
95-95-4	2, 4, 5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	32	J
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	1600	U

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	330	U
51-28-5	2, 4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2, 4-Dinitrotoluene		
606-20-2	2, 6-Dinitrotoluene		
84-66-2	Diethylphthalate		
7005-72-3	4-Chlorophenyl-phenylether		
86-73-7	Fluorene		
100-01-6	4-Nitroaniline	1600	U
534-52-1	4, 6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether		
118-74-1	Hexachlorobenzene		
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	32	J
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	126	J
206-44-0	Fluoranthene	330	U
92-87-5	Benzidine	2600	U
129-00-0	Pyrene	32	J
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3, 3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	320	J
218-01-9	Chrysene	63	J
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene		
207-08-9	Benzo(k)Fluoranthene		
50-32-8	Benzo(a)Pyrene		
193-39-5	Indeno(1, 2, 3-cd)Pyrene		
53-70-3	Dibenz(a, h)Anthracene		
191-24-2	Benzo(g, h, i)Perylene		

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985

Laboratory Name ITAS-Knoxville

Case No 4217

Sample Number E8604

0193

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed 5/14,22/85

Conc/(Dil Factor): 1, 1/10

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	10.U
319-85-7	Beta-BHC	10.U
319-86-8	Delta-BHC	10.U
58-89-9	Gamma-BHC (Lindane)	10.U
76-44-8	Heptachlor	10.U
309-00-2	Aldrin	10.U
1024-57-3	Heptachlor Epoxide	10.U
959-98-8	Endosulfan I	10.U
60-57-1	Dieldrin	20.U
72-55-9	4, 4'-DDE	20.U
72-20-8	Endrin	20.U
33213-65-9	Endosulfan II	20.U
72-54-8	4, 4'-DDD	20.U
7421-93-4	Endrin Aldehyde	20.U
1031-07-8	Endosulfan Sulfate	20.U
50-29-3	4, 4'-DDT	20.U
72-43-5	Methoxychlor	100.U
53494-70-5	Endrin Ketone	20.U
57-74-9	Chlordane	100.U
8001-35-2	Toxaphene	200.U
12674-11-2	Aroclor-1016	100.U
11104-28-2	Aroclor-1221	100.U
11141-16-5	Aroclor-1232	100.U
53469-21-9	Aroclor-1242	100.U
12672-29-6	Aroclor-1248	100.U
11097-69-1	Aroclor-1254	200.U
11096-82-5	Aroclor-1260	200.U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.08 V_t 10000 ul V_i 4 ul

RECEIVED JUL 0 8 1985

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

0191
Sample Number
E8604

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.	2,5-Dimethyl-1-Hexene	BNA	76	130. J
2.	1-Methylethylester Acetic Acid		122	620 J
3.	4-Hydroxy-4-Methyl-2-Pentanone (AL-DOL)		157	8800. J
4.	5-Methyl-2-Hexanone		168	1500. J
5.	4-Hydroxy-4-methyl-2-pentanone		237	850. J
6.	1,2,3-Trimethylbenzene		321	190. J
7.	1-Methylethylester 2-Butenoic acid		654	260 J
8.	Unknown		873	290 J
9.	UNKNOWN		986	150. J
10.	UNKNOWN		1334	390. J
11.	UNKNOWN		1355	450. J
12.	UNKNOWN		1373	260. J
13.	UNKNOWN ca. C_{20}-Hydrocarbon		1401	160. J
14.	Heneicosane		1498	210. J
15.	Unknown ~ C_{15}-C_{20} Hydrocarbon		1566	610. J
16.	Heneicosane		1589	1900. J
17.	Heneicosane		1678	1300. J
18.	Unknown ~C_{20} Hydrocarbon		1796	810. J
19.	Hexamethycyclo trisiloxane	VOA	912	26. J
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

P. O. Box 818 Alexandria, Virginia 22313 703/557-2490

RECEIVED JUL 0 8 1985

Sample Number E8605

85F5C5595

0303

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ITAS - KNOXVILLE

Case No: 4217

Lab Sample ID No: B 5022

QC Report No:

Sample Matrix: SOIL

Contract No: 68-01-7025

Data Release Authorized By: Snell A. Hills II

Date Sample Received: 4-24-85

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4-26-85

Date Analyzed: 4-26-85

Conc/Dil Factor: 1 pH 7.03

Percent Moisture: ~~0.8285~~ 19. SAH 5-23-85

Percent Moisture (Decanted):

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	U	10
74-83-9	Bromomethane	U	10
75-01-4	Vinyl Chloride	U	10
75-00-3	Chloroethane	U	10
75-09-2	Methylene Chloride	26 B	
67-64-1	Acetone	U	10
75-15-0	Carbon Disulfide	U	5.0
75-35-4	1, 1-Dichloroethene	U	5.0
75-34-3	1, 1-Dichloroethane	6.2	
156-60-5	Trans-1, 2-Dichloroethene	U	5.0
67-66-3	Chloroform	U	5.0
107-06-2	1, 2-Dichloroethane	U	5.0
78-93-3	2-Butanone	7.4 JB	
71-55-6	1, 1, 1-Trichloroethane	U	5.0
56-23-5	Carbon Tetrachloride	U	5.0
108-05-4	Vinyl Acetate	U	10
75-27-4	Bromodichloromethane	U	5.0

CAS Number		ug/l or ug/Kg (Circle One)	
79-34-5	1, 1, 2, 2-Tetrachloroethane	U	5.0
78-87-5	1, 2-Dichloropropane	U	5.0
10061-02-6	Trans-1, 3-Dichloropropene	U	5.0
79-01-6	Trichloroethene	U	5.0
124-48-1	Dibromochloromethane	U	5.0
79-00-5	1, 1, 2-Trichloroethane	U	5.0
71-43-2	Benzene	U	5.0
10061-01-5	cis-1, 3-Dichloropropene	U	5.0
110-75-8	2-Chloroethylvinylether	U	10
75-25-2	Bromoform	U	5.0
591-78-6	2-Hexanone	U	10
108-10-1	4-Methyl-2-Pentanone	U	10
127-18-4	Tetrachloroethene	U	5.0
108-88-3	Toluene	U	5.0
108-90-7	Chlorobenzene	U	5.0
100-41-4	Ethylbenzene	U	5.0
100-42-5	Styrene	U	5.0
	Total Xylenes	U	5.0

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but

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 JUL 0 8 1985

Environmental Protection Agency CLP Sample Management Office.
P O Box 818 Alexandria Virginia 22313 703 557-2490

Sample Number
E8605

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed: 5-20-85

Conc/Dil Factor: 31.67

CAS Number		ug/l or ug/Kg (Circle One)	
62-75-9	N-Nitrosodimethylamine	330	U
108-95-2	Phenol		
62-53-3	Aniline		
111-44-4	bis(-2-Chloroethyl)Ether		
95-57-8	2-Chlorophenol		
541-73-1	1, 3-Dichlorobenzene		
106-46-7	1, 4-Dichlorobenzene		
100-51-6	Benzyl Alcohol		
95-50-1	1, 2-Dichlorobenzene		
95-48-7	2-Methylphenol		
39638-32-9	bis(2-chloroisopropyl)Ether		
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine		
67-72-1	Hexachloroethane		
98-95-3	Nitrobenzene		
78-59-1	Isophorone		
88-75-5	2-Nitrophenol		
105-67-9	2, 4-Dimethylphenol		
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(-2-Chloroethoxy)Methane	330	U
120-83-2	2, 4-Dichlorophenol		
120-82-1	1, 2, 4-Trichlorobenzene		
91-20-3	Naphthalene		
106-47-8	4-Chloroaniline		
87-68-3	Hexachlorobutadiene		
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene		
77-47-4	Hexachlorocyclopentadiene		
88-06-2	2, 4, 6-Trichlorophenol		
95-95-4	2, 4, 5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	1600	U

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	330	U
51-28-5	2, 4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2, 4-Dinitrotoluene		
606-20-2	2, 6-Dinitrotoluene		
84-66-2	Diethylphthalate		
7005-72-3	4-Chlorophenyl-phenylether		
86-73-7	Fluorene		
100-01-6	4-Nitroaniline	1600	U
534-52-1	4, 6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether		
118-74-1	Hexachlorobenzene		
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	63	J
206-44-0	Fluoranthene	330	U
92-87-5	Benzidine	2600	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3, 3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	63	J
218-01-9	Chrysene	32	J
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene		
207-08-9	Benzo(k)Fluoranthene		
50-32-8	Benzo(a)Pyrene		
193-39-5	Indeno(1, 2, 3-cd)Pyrene		
53-70-3	Dibenz(a, h)Anthracene		
191-24-2	Benzo(g, h, i)Perylene		

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985 0305

Laboratory Name ITAS-Knoxville

Case No 4217

Sample Number E 8605

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 4-24-85

Date Analyzed 5/14, 22/85

Conc/Dil Factor: 1, 1/10

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	10.U
319-85-7	Beta-BHC	10.U
319-86-8	Delta-BHC	10.U
58-89-9	Gamma-BHC (Lindane)	10.U
76-44-8	Heptachlor	10.U
309-00-2	Aldrin	10.U
1024-57-3	Heptachlor Epoxide	10.U
959-98-8	Endosulfan I	10.U
60-57-1	Dieldrin	20.U
72-55-9	4, 4'-DDE	20.U
72-20-8	Endrin	20.U
33213-65-9	Endosulfan II	20.U
72-54-8	4, 4'-DDD	20.U
7421-93-4	Endrin Aldehyde	20.U
1031-07-8	Endosulfan Sulfate	20.U
50-29-3	4, 4'-DDT	20.U
72-43-5	Methoxychlor	99.U
53494-70-5	Endrin Ketone	20.U
57-74-9	Chlordane	99.U
8001-35-2	Toxaphene	200.U
12674-11-2	Aroclor-1016	99.U
11104-28-2	Aroclor-1221	99.U
11141-16-5	Aroclor-1232	99.U
53469-21-9	Aroclor-1242	99.U
12672-29-6	Aroclor-1248	99.U
11097-69-1	Aroclor-1254	200.U
11096-82-5	Aroclor-1260	200.U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.00g V_t 10000 µl V_i 4 µl

RECEIVED JUL 0 8 1985

0306

Environmental Protection Agency, CLP Sample Management Office,
P O Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E8605

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.	2,5-Dimethyl-1-Hexene	BNA	71	170. J
2.	1-Methylethyl ester Acetic acid		118	520 J
3.	4-Hydroxy-4-methyl-2-pentanone		154	7200. J
4.	5-Methyl-2-hexanone		163	980. J
5.	4-Hydroxy-4-methyl-2-pentanone		233	1000. J
6.	Heptadecane		924	130. J
7.	UNKNOWN		1333	210. J
8.	UNKNOWN		1354	350. J
9.	O-Decyl hydroxylamine		1400	150 J
10.	Heneicosane		1497	240. J
11.	Heneicosane		1591	1400. J
12.	Heneicosane		1683	1700. J
13.	Heneicosane		1776	300. J
14.	UNKNOWN		1830	320. J
15.	Olean-12-ene		1843	620. J
16.	UNKNOWN		1859	310. J
17.	UNKNOWN		1867	550. J
18.	UNKNOWN		1883	290. J
19.	Hexane	VOA	642	7.0 J
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Environmental Protection Agency. CLP Sample Management Office
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

RECEIVED JUL 8 1985

Sample Number
E8606

85FSC5596

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ITAS - KNOXVILLE
Case No: 4217
Lab Sample ID No: B5023
QC Report No: 0382
Sample Matrix: SOIL
Contract No: 68-01-7025
Data Release Authorized By: Snell A. Mills
Date Sample Received: 4-24-85

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 4-26-85
Date Analyzed: 4-26-85
Conc/Dil Factor: 1 pH 7.48
Percent Moisture: ~~0.8102~~ 19. SAM 5-23-85
Percent Moisture (Decanted):

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	U	10
74-83-9	Bromomethane	U	10
75-01-4	Vinyl Chloride	U	10
75-00-3	Chloroethane	U	10
75-09-2	Methylene Chloride	16 B	
67-64-1	Acetone	22 B	
75-15-0	Carbon Disulfide	U	5.0
75-35-4	1, 1-Dichloroethene	U	5.0
75-34-3	1, 1-Dichloroethane	U	5.0
156-60-5	Trans-1, 2-Dichloroethene	U	5.0
67-66-3	Chloroform	U	5.0
107-06-2	1, 2-Dichloroethane	U	5.0
78-93-3	2-Butanone	9.8 JB	
71-55-6	1, 1, 1-Trichloroethane	U	5.0
56-23-5	Carbon Tetrachloride	U	5.0
108-05-4	Vinyl Acetate	U	10
75-27-4	Bromodichloromethane	U	5.0

CAS Number		ug/l or ug/Kg (Circle One)	
79-34-5	1, 1, 2, 2-Tetrachloroethane	U	5.0
78-87-5	1, 2-Dichloropropane	U	5.0
10061-02-6	Trans-1, 3-Dichloropropene	U	5.0
79-01-6	Trichloroethene	U	5.0
124-48-1	Dibromochloromethane	U	5.0
79-00-5	1, 1, 2-Trichloroethane	U	5.0
71-43-2	Benzene	3.7 J	
10061-01-5	cis-1, 3-Dichloropropene	U	5.0
110-75-8	2-Chloroethylvinylether	U	10
75-25-2	Bromoform	U	5.0
591-78-6	2-Hexanone	U	10
108-10-1	4-Methyl-2-Pentanone	2.5 JB	
127-18-4	Tetrachloroethene	U	5.0
108-88-3	Toluene	U	5.0
108-90-7	Chlorobenzene	U	5.0
100-41-4	Ethylbenzene	U	5.0
100-42-5	Styrene	U	5.0
	Total Xylenes	U	5.0

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but

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 JUL 0 8 1985

0383

Sample Number
E8606

Environmental Protection Agency. CLP Sample Management Office.
P. O. Box 818. Alexandria, Virginia 22313 703/557-2490

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed: 5-20-85

Conc/Dil Factor: 31.51

CAS Number		ug/l or ug/Kg (Circle One)	
62-75-9	N-Nitrosodimethylamine	330	U
108-95-2	Phenol		
62-53-3	Aniline		
111-44-4	bis(-2-Chloroethyl)Ether		
95-57-8	2-Chlorophenol		
541-73-1	1, 3-Dichlorobenzene		
106-46-7	1, 4-Dichlorobenzene		
100-51-6	Benzyl Alcohol		
95-50-1	1, 2-Dichlorobenzene		
95-48-7	2-Methylphenol		
39638-32-9	bis(2-chloroisopropyl)Ether		
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine		
67-72-1	Hexachloroethane		
98-95-3	Nitrobenzene		
78-59-1	Isophorone		
88-75-5	2-Nitrophenol		
105-67-9	2, 4-Dimethylphenol	32	J
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(-2-Chloroethoxy)Methane	330	U
120-83-2	2, 4-Dichlorophenol		
120-82-1	1, 2, 4-Trichlorobenzene		
91-20-3	Naphthalene		
106-47-8	4-Chloroaniline		
87-68-3	Hexachlorobutadiene		
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene		
77-47-4	Hexachlorocyclopentadiene		
88-06-2	2, 4, 6-Trichlorophenol		
95-95-4	2, 4, 5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	1600	U

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	330	U
51-28-5	2, 4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2, 4-Dinitrotoluene		
606-20-2	2, 6-Dinitrotoluene		
84-66-2	Diethylphthalate		
7005-72-3	4-Chlorophenyl-phenylether		
86-73-7	Fluorene		
100-01-6	4-Nitroaniline	1600	U
534-52-1	4, 6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether		
118-74-1	Hexachlorobenzene		
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	126	J
206-44-0	Fluoranthene	330	U
92-87-5	Benzidine	2600	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3, 3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate		
218-01-9	Chrysene		
117-84-0	Di-n-Octyl Phthalate		
205-99-2	Benzo(b)Fluoranthene		
207-08-9	Benzo(k)Fluoranthene		
50-32-8	Benzo(a)Pyrene		
193-39-5	Indeno(1, 2, 3-cd)Pyrene		
53-70-3	Dibenz(a, h)Anthracene		
191-24-2	Benzo(g, h, i)Perylene		

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985

Laboratory Name ITAS-Knoxville

Case No 4217

Sample Number
E8606

Organics Analysis Data Sheet
(Page 3)

0384

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed 5-14-85

Conc/(Dil Factor): 1, 1/50

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	10.U
319-85-7	Beta-BHC	10.U
319-86-8	Delta-BHC	10.U
58-89-9	Gamma-BHC (Lindane)	10.U
76-44-8	Heptachlor	10.U
309-00-2	Aldrin	10.U
1024-57-3	Heptachlor Epoxide	10.U
959-98-8	Endosulfan I	10.U
60-57-1	Dieldrin	20.U
72-55-9	4, 4'-DDE	20.U
72-20-8	Endrin	20.U
33213-65-9	Endosulfan II	20.U
72-54-8	4, 4'-DDD	20.U
7421-93-4	Endrin Aldehyde	20.U
1031-07-8	Endosulfan Sulfate	20.U
50-29-3	4, 4'-DDT	20.U
72-43-5	Methoxychlor	99.U
53494-70-5	Endrin Ketone	20.U
57-74-9	Chlordane	99.U
8001-35-2	Toxaphene	200.U
12674-11-2	Aroclor-1016	99.U
11104-28-2	Aroclor-1221	99.U
11141-16-5	Aroclor-1232	99.U
53469-21-9	Aroclor-1242	99.U
12672-29-6	Aroclor-1248	99.U
11097-69-1	Aroclor-1254	200.U
11096-82-5	Aroclor-1260	200.U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.15 V_t 10000 µl V_i 4 µl

RECEIVED JUL 0 8 1985
0385

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

Sample Number
E8606

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.	2-methyl-1-Heptene	BNA	95	230. J
2.	Octane		107	180. J
3.	1-Methylethylester Acetic acid		134	640. J
4.	4-Hydroxy-4-methyl-2-pentanone		168	6900. J
5.	5-methyl-2hexanone		176	1200. J
6.	1-Methylpropylester Acetic acid		241	1100. J
7.	UNKNOWN		1155	140. J
8.	Molecular Sulfur (S8)		1187	220. J
9.	Octacosane		1590	380. J
10.	Unknown C_{15}-C_{20} Oxygenated Hydrocarbon		1803	1300. J
11.	No Volatile compounds Detected	VOA		
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

RECEIVED JUL 0 8 1985

Sample Number
P607

85F-X-5597

0446

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ITAS - KNOXVILLE
Case No: 4217
Lab Sample ID No: B5024R
QC Report No:
Sample Matrix: SOIL
Contract No: 68-01-7025
Data Release Authorized By: Snell A. Hills III
Date Sample Received: 4-24-85

Volatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: ~~4-26-85~~ 4-29-85 MP 4-29-85

Date Analyzed: ~~4-26-85~~ 4-29-85 MP 4-29-85

Conc/Dil Factor: 1 pH 7.04

Percent Moisture: ~~0.8139~~ 19. SAM 5-23-85

Percent Moisture (Decanted):

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	U	10
74-83-9	Bromomethane	U	10
75-01-4	Vinyl Chloride	U	10
75-00-3	Chloroethane	U	10
75-09-2	Methylene Chloride	18	B
67-64-1	Acetone		
75-15-0	Carbon Disulfide	U	5.0
75-35-4	1, 1-Dichloroethene	U	5.0
75-34-3	1, 1-Dichloroethane	U	5.0
156-60-5	Trans-1, 2-Dichloroethene	U	5.0
67-66-3	Chloroform	U	5.0
107-06-2	1, 2-Dichloroethane	U	5.0
78-93-3	2-Butanone	~~2.5~~ ~~JB~~ 3.1	JB MP 4-30-85
71-55-6	1, 1, 1-Trichloroethane	U	5.0
56-23-5	Carbon Tetrachloride	U	5.0
108-05-4	Vinyl Acetate	U	10
75-27-4	Bromodichloromethane	U	5.0

CAS Number		ug/l or ug/Kg (Circle One)	
79-34-5	1, 1, 2, 2-Tetrachloroethane	U	5.0
78-87-5	1, 2-Dichloropropane	U	5.0
10061-02-6	Trans-1, 3-Dichloropropene	U	5.0
79-01-6	Trichloroethene	U	5.0
124-48-1	Dibromochloromethane	U	5.0
79-00-5	1, 1, 2-Trichloroethane	U	5.0
71-43-2	Benzene	U	5.0
10061-01-5	cis-1, 3-Dichloropropene	U	5.0
110-75-8	2-Chloroethylvinylether	U	10
75-25-2	Bromoform	U	5.0
591-78-6	2-Hexanone	U	10
108-10-1	4-Methyl-2-Pentanone	U	10
127-18-4	Tetrachloroethene	U	5.0
108-88-3	Toluene	U	5.0
108-90-7	Chlorobenzene	U	5.0
100-41-4	Ethylbenzene	U	5.0
100-42-5	Styrene	U	5.0
	Total Xylenes	U	5.0

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but

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 JUL 0 8 1985

0447

Environmental Protection Agency. CLP Sample Management Office.
P O Box 818 Alexandria Virginia 22313 703/557-2490

Sample Number
E8607

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 4-24-85
Date Analyzed: 5-20-85
Conc/Dil Factor: 31.62

CAS Number		ug/l or ug/Kg (Circle One)	
62-75-9	N-Nitrosodimethylamine	330	U
108-95-2	Phenol		
62-53-3	Aniline		
111-44-4	bis(-2-Chloroethyl)Ether		
95-57-8	2-Chlorophenol		
541-73-1	1, 3-Dichlorobenzene		
106-46-7	1, 4-Dichlorobenzene		
100-51-6	Benzyl Alcohol		
95-50-1	1, 2-Dichlorobenzene		
95-48-7	2-Methylphenol		
39638-32-9	bis(2-chloroisopropyl)Ether		
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine		
67-72-1	Hexachloroethane		
98-95-3	Nitrobenzene		
78-59-1	Isophorone		
88-75-5	2-Nitrophenol		
105-67-9	2, 4-Dimethylphenol		
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(-2-Chloroethoxy)Methane	330	U
120-83-2	2, 4-Dichlorophenol		
120-82-1	1, 2, 4-Trichlorobenzene		
91-20-3	Naphthalene	32	J
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene		
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene		
77-47-4	Hexachlorocyclopentadiene		
88-06-2	2, 4, 6-Trichlorophenol		
95-95-4	2, 4, 5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	63	J
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	1600	U

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

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985

0448

Laboratory Name IITAS-Knoxville

Case No 4217

Sample Number E8607

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: (Low) Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed 5/14,22/85

Conc/(Dil Factor) 1, 1/10

CAS Number		ug/l or (ug/Kg) (Circle One)
319-84-6	Alpha-BHC	10.U
319-85-7	Beta-BHC	10.U
319-86-8	Delta-BHC	10.U
58-89-9	Gamma-BHC (Lindane)	10.U
76-44-8	Heptachlor	10.U
309-00-2	Aldrin	10.U
1024-57-3	Heptachlor Epoxide	10.U
959-98-8	Endosulfan I	10.U
60-57-1	Dieldrin	20.U
72-55-9	4, 4'-DDE	20.U
72-20-8	Endrin	20.U
33213-65-9	Endosulfan II	20.U
72-54-8	4, 4'-DDD	20.U
7421-93-4	Endrin Aldehyde	20.U
1031-07-8	Endosulfan Sulfate	20.U
50-29-3	4, 4'-DDT	20.U
72-43-5	Methoxychlor	98.U
53494-70-5	Endrin Ketone	20.U
57-74-9	Chlordane	98.U
8001-35-2	Toxaphene	200.U
12674-11-2	Aroclor-1016	98.U
11104-28-2	Aroclor-1221	98.U
11141-16-5	Aroclor-1232	98.U
53469-21-9	Aroclor-1242	98.U
12672-29-6	Aroclor-1248	98.U
11097-69-1	Aroclor-1254	200.U
11096-82-5	Aroclor-1260	200.U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.04g V_t 10000ul V_i 4ul

RECEIVED JUL 08 1985

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

~~0449~~ Sample Number
E8607

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.	2,5-Dimethyl-1-Hexene	BNA	88	250. J
2.	Octane		100	160. J
3.	1-Methylethylester Acetic acid		127	470. J
4.	4-Hydroxy-4methyl-2-pentanone		163	5100. J
5.	5-Methyl-2-hexanone		170	1100. J
6.	1-Methylpropylester Acetic acid		235	920. J
7.	UNKNOWN		1307	210. J
8.	UNKNOWN		1330	390. J
9.	UNKNOWN		1350	390. J
10.	UNKNOWN		1368	310. J
11.	UNKNOWN		1562	180. J
12.	Heneicosane		1586	220. J
13.	Octacosane		1677	170 J
14.	UNKNOWN		1798	170 J
15.	No volatile compounds detected	VOA		
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Environmental Protection Agency. CLP Sample Management Office,
P. O Box 818, Alexandria, Virginia 22313 703/557-2490

RECEIVED JUL 0 8 1985

Sample Number
2-8608

85FS05598

Organics Analysis Data Sheet
(Page 1)

Laboratory Name: ITAS-KNOXVILLE
Case No: 4217 0527
Lab Sample ID No: B5025
QC Report No:
Sample Matrix: SOIL
Contract No: 68-01-7025
Data Release Authorized By: Snell A. Mills III
Date Sample Received: 4-24-85

Volatile Compounds

Concentration: Low Medium (Circle One)
Date Extracted/Prepared: 4-26-85
Date Analyzed: 4-26-85
Conc/Dil Factor: 1 pH 7.10
Percent Moisture: ~~0.7805~~ 22 - Sam 5-23-85
Percent Moisture (Decanted):

CAS Number		ug/l or ug/Kg (Circle One)	
74-87-3	Chloromethane	U	10
74-83-9	Bromomethane	U	10
75-01-4	Vinyl Chloride	U	10
75-00-3	Chloroethane	U	10
75-09-2	Methylene Chloride	15	B
67-64-1	Acetone	U	10
75-15-0	Carbon Disulfide	U	5.0
75-35-4	1, 1-Dichloroethene	U	5.0
75-34-3	1, 1-Dichloroethane	U	5.0
156-60-5	Trans-1, 2-Dichloroethene	U	5.0
67-66-3	Chloroform	U	5.0
107-06-2	1, 2-Dichloroethane	U	5.0
78-93-3	2-Butanone	U	10
71-55-6	1, 1, 1-Trichloroethane	U	5.0
56-23-5	Carbon Tetrachloride	U	5.0
108-05-4	Vinyl Acetate	U	10
75-27-4	Bromodichloromethane	U	5.0

CAS Number		ug/l or ug/Kg (Circle One)	
79-34-5	1, 1, 2, 2-Tetrachloroethane	U	5.0
78-87-5	1, 2-Dichloropropane	U	5.0
10061-02-6	Trans-1, 3-Dichloropropene	U	5.0
79-01-6	Trichloroethene	U	5.0
124-48-1	Dibromochloromethane	U	5.0
79-00-5	1, 1, 2-Trichloroethane	U	5.0
71-43-2	Benzene	U	5.0
10061-01-5	cis-1, 3-Dichloropropene	U	5.0
110-75-8	2-Chloroethylvinylether	U	10
75-25-2	Bromoform	U	5.0
591-78-6	2-Hexanone	U	10
108-10-1	4-Methyl-2-Pentanone	U	10
127-18-4	Tetrachloroethene	U	5.0
108-88-3	Toluene	U	5.0
108-90-7	Chlorobenzene	U	5.0
100-41-4	Ethylbenzene	U	5.0
100-42-5	Styrene	U	5.0
	Total Xylenes	U	5.0

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 actions. (This is not necessarily the instrument detection limit.) The footnote should read: U-Compound was analyzed for but not detected. The number is the minimum attainable detection limit for the sample.

J Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but

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 JUL 0 8 1985

0528

Environmental Protection Agency. CLP Sample Management Office.
P. O Box 818. Alexandria. Virginia 22313 703/557-2490

Sample Number
E8603

Organics Analysis Data Sheet
(Page 2)

Semivolatile Compounds

Concentration: Low Medium (Circle One)

Date Extracted/Prepared 4-24-85

Date Analyzed 5-20-85

Conc/Dil Factor 31.28

CAS Number		ug/l or ug/Kg (Circle One)	
62-75-9	N-Nitrosodimethylamine	330	U
108-95-2	Phenol		
62-53-3	Aniline		
111-44-4	bis(-2-Chloroethyl)Ether		
95-57-8	2-Chlorophenol		
541-73-1	1, 3-Dichlorobenzene		
106-46-7	1, 4-Dichlorobenzene		
100-51-6	Benzyl Alcohol		
95-50-1	1, 2-Dichlorobenzene		
95-48-7	2-Methylphenol		
39638-32-9	bis(2-chloroisopropyl)Ether		
106-44-5	4-Methylphenol		
621-64-7	N-Nitroso-Di-n-Propylamine		
67-72-1	Hexachloroethane		
98-95-3	Nitrobenzene		
78-59-1	Isophorone		
88-75-5	2-Nitrophenol		
105-67-9	2, 4-Dimethylphenol		
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(-2-Chloroethoxy)Methane	330	U
120-83-2	2, 4-Dichlorophenol	330	U
120-82-1	1, 2, 4-Trichlorobenzene	330	U
91-20-3	Naphthalene	94	J
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene		
59-50-7	4-Chloro-3-Methylphenol		
91-57-6	2-Methylnaphthalene		
77-47-4	Hexachlorocyclopentadiene		
88-06-2	2, 4, 6-Trichlorophenol		
95-95-4	2, 4, 5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	125	J
208-96-8	Acenaphthylene	330	U
99-09-2	3-Nitroaniline	1600	U

CAS Number		ug/l or ug/Kg (Circle One)	
83-32-9	Acenaphthene	330	U
51-28-5	2, 4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2, 4-Dinitrotoluene		
606-20-2	2, 6-Dinitrotoluene		
84-66-2	Diethylphthalate		
7005-72-3	4-Chlorophenyl-phenylether		
86-73-7	Fluorene		
100-01-6	4-Nitroaniline	1600	U
534-52-1	4, 6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether		
118-74-1	Hexachlorobenzene		
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	31	J
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
92-87-5	Benzidine	2600	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3, 3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	125	J
117-81-7	bis(2-Ethylhexyl)Phthalate	31	J
218-01-9	Chrysene	340	
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	63	J
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1, 2, 3-cd)Pyrene	63	J
53-70-3	Dibenz(a, h)Anthracene	330	U
191-24-2	Benzo(g, h, i)Perylene	330	U

(1)-Cannot be separated from diphenylamine

RECEIVED JUL 0 8 1985

0529

Laboratory Name ITAS-Knoxville

Case No 4217

Sample Number E8608

Organics Analysis Data Sheet
(Page 3)

Pesticide/PCBs

Concentration: Low Medium (Circle One)

Date Extracted/Prepared: 4-24-85

Date Analyzed 5/14,22/85

Conc/Dil Factor 1/5, 1/50

CAS Number		ug/l or ug/Kg (Circle One)
319-84-6	Alpha-BHC	10.U
319-85-7	Beta-BHC	10.U
319-86-8	Delta-BHC	10.U
58-89-9	Gamma-BHC (Lindane)	10.U
76-44-8	Heptachlor	10.U
309-00-2	Aldrin	10.U
1024-57-3	Heptachlor Epoxide	10.U
959-98-8	Endosulfan I	10.U
60-57-1	Dieldrin	20.U
72-55-9	4, 4'-DDE	20.U
72-20-8	Endrin	20.U
33213-65-9	Endosulfan II	20.U
72-54-8	4, 4'-DDD	20.U
7421-93-4	Endrin Aldehyde	20.U
1031-07-8	Endosulfan Sulfate	37.
50-29-3	4, 4'-DDT	20.U
72-43-5	Methoxychlor	100.U
53494-70-5	Endrin Ketone	20.U
57-74-9	Chlordane	100.U
8001-35-2	Toxaphene	200.U
12674-11-2	Aroclor-1016	100.U
11104-28-2	Aroclor-1221	100.U
11141-16-5	Aroclor-1232	100.U
53469-21-9	Aroclor-1242	100.U
12672-29-6	Aroclor-1248	100.U
11097-69-1	Aroclor-1254	200.U
11096-82-5	Aroclor-1260	200.U

V_i = Volume of extract injected (ul)

V_s = Volume of water extracted (ml)

W_s = Weight of sample extracted (g)

V_t = Volume of total extract (ul)

V_s _____ or W_s 30.37 V_t 10000 µl V_i 4 µl

RECEIVED JUL 08 1985

0530

Sample Number
E8608

Environmental Protection Agency, CLP Sample Management Office,
P. O. Box 818, Alexandria, Virginia 22313 703/557-2490

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.	1-Methylethylester Aceticacid	BNA	123	460. J
2.	4-Hydroxy-4-Methyl-2-pentanone		158	8000. J
3.	5-Methyl-2-Hexanone		168	1200. J
4.	1-Methylpropylester Aceticacid		236	630. J
5.	UNKNOWN		1311	280 J
6.	UNKNOWN		1328	690 J
7.	UNKNOWN		1334	2700. J
8.	UNKNOWN		1355	2400. J
9.	UNKNOWN		1373	2100. J
10.	UNKNOWN		1380	380. J
11.	Heptadecane		1401	370. J
12.	2-Methyltriphenyl		1482	840. J
13.	2-Methylchrysene		1488	500. J
14.	Heneicosane		1498	420 J
15.	Unknown		1550	310. J
16.	Heneicosane		1589	570. J
17.	Benzo[J] Fluoranthene		1615	360. J
18.	UNKNOWN		1621	450. J
19.	UNKNOWN		1664	410. J
20.	Heptadecane		1674	330. J
21.	Unknown C_{15}-C_{20} Hydrocarbon		1706	510. J
22.	No Volatile Compounds detected	VOA		
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				