SITE INSPECTION REPORT
FOR
SWIFT ADHESIVES AND COATINGS
HAMMOND, IN
IND060370343
F05-8703-227
PAN: FIN0126SI

DECEMBER 7, 1987

US EPA RECORDS CENTER REGION 5
504568

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INDEX SYSTEM

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ecology and environment, inc.

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

International Specialists in the Environment

MEMORANDUM

DATE: November 19, 1987

TO: File

FROM: Thomas A. Kouris TAK

SUBJECT: Indiana/F05-8703-227/FIN0126SI
Hammond/Swift Adhesives and Coatings
IND060370343

Swift Adhesives and Coatings is located between 165th and 167th Streets, one block west of Indianapolis Blvd. in Hammond, Indiana. Swift manufactured epoxy resins from animal fats, vegetable fats, and phenols at this location. The site is currently owned by [redacted] of San Francisco, California. [redacted] has not used the site for any purpose since the time of its purchase. This site was tasked to FIT for a site inspection following its identification by the U.S. EPA - Region V in the form of a preliminary assessment.

This site covers approximately 20 acres and is completely enclosed by a fence. The site is surrounded to the north by an industrial complex, to the east by a shopping mall, to the west by a field, and to the south by a residential neighborhood. Since the site has been closed, many of the buildings have been demolished. All that remains is a sheet metal building, a couple of small buildings, and some concrete pads where tanks and other operations were previously located. The small lagoon on-site appears to have been formed by diked debris. Precipitation has accumulated in this lagoon.

On March 18, 1987, FIT inspected the site and collected seven on-site soil samples. The sample results revealed only traces of the presence of

recycled paper

inorganic contamination. However, the organic sample results indicated PCBs, such as Aroclor 1260 at 66,000 ug/kg and several polyaromatic hydrocarbons (PAHs) in various concentrations. Past file information indicated there the presence of several transformers containing PCBs and drums containing PAHs prior to demolition.

All contaminants were found in soil samples. While no groundwater samples were taken, the groundwater could contain contaminants leaching off-site. Because there is evidence of trespassing on site, direct contact is also a potential exposure route. While this site is not defined by the Hammond Fire Department as a potential fire/explosion hazard, several fires set by trespassers are also a concern.

The work plan for this site inspection was followed without deviation. Although the work plan cited asbestos at this site, FIT did not observe any forms of asbestos.

TG:Nov:2

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

II. ON-SITE GENERATOR NA

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) NA

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

IV. TRANSPORTER(S) NA

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

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

Ecology & Environment Inc. (FIT) files

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

II. PAST RESPONSE ACTIVITIES

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

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

II. PAST RESPONSE ACTIVITIES (continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ S. CAPPING COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

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

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
NA

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

Ecology + Environment Inc. (E IT) Files
Site Inspection Log Book for Swift Adhesive + Coatings 3/18/87

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY ENFORCEMENT ACTION ☐ YES ☒ NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY ENFORCEMENT ACTION

NO ENFORCEMENT ACTIONS. HOWEVER, USEPA AND HAMMOND AIR POLLUTION DID A SITE INSPECTION PRIOR TO SITE DEMOLITION WHICH REVEALED ASBESTOS AND PCB'S. NO ACTIONS WERE TAKEN DUE THIS INSPECTION.

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

Ecology & Environment Inc. (FIT) files

EPA FORM 2070-13 (7-81)

Immediate Removal Action Check Sheet

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

Comments

NONE

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	060370343

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Swift Adhesive + Coatings	1801 167th Street

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Hammond	IN	46324	Lake	089	01

09 COORDINATES LATITUDE	LONGITUDE
41° 35' 40.0" N	87° 29' 07.3" W

10 TYPE OF OWNERSHIP (Check one)
- [x] A. PRIVATE
- [ ] B. FEDERAL
- [ ] C. STATE
- [ ] D. COUNTY
- [ ] E. MUNICIPAL
- [ ] F. OTHER
- [ ] G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION (BEGINNING YEAR / ENDING YEAR)
3, 18, 87	[ ] ACTIVE [x] INACTIVE	1958 / 1980 ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
- [ ] A. EPA
- [x] 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.
Thomas A. Kouris	Civil Engineer / FIT Team	E&E	(312) 663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Michael Selway	Industrial Hygenist / FIT	E&E	(312) 663-9415
Catriona Mortell	Geographer / FIT	E&E	(312) 663-9415
Margaret Hein	Biologist / FIT	E&E	(312) 663-9415
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
No Site Representatives Were Interviewed. Swift			( )
Adhesives Owners Could Not Be Located. Current Owner			( )
Does Not Have Knowledge Of Past Activities And			( )
Has Yet To Use The Facility For Any Purpose.			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
[x] PERMISSION [ ] WARRANT	9:30 am	45°F, rain, some wind

IV. INFORMATION AVAILABLE FROM

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

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE (MONTH DAY YEAR)
Thomas A. Kouris	EPA	Ecology & Environment Inc (FIT)	(312) 663-9415	6, 3, 87

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	060370343

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

UNKNOWN
TONS _____
CUBIC YARDS _____
NO. OF DRUMS (5 Empty)

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	UNKNOWN	—	FOUND AT WASTE PIT
OLW	OILY WASTE	UNKNOWN	—	DRUMS ON SITE / ROTATED CHEMICALS
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	UNKNOWN	—	AROCLOR 1260 FOUND AT SITE
IOC	INORGANIC CHEMICALS			
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
OCC	AROCLOR 1260	11096	FOUND IN SOIL	66000	ug/kg
OCC	ANTRACENE	120		6994	
OCC	PHENANTHRENE	85		108232	
OCC	FLUORANTHENE	206		167683	
OCC	PYRENE	129		167683	
OCC	BENZO(a) ANTHRACENE	56		82317	
OCC	CHRYSENE	218		86890	
OCC	BENZO(b) FLUORANTHENE	205		71646	
OCC	BENZO(k) FLUORANTHENE	207		41159	
OCC	BENZO(a) PYRENE	50		74695	
OCC	INDENO(1,2,3-cd) PYRENE	193		91463	
OCC	BENZO(g,h,i)-PERYLENE	191	FOUND IN SOIL	74695	ug/kg

V. FEEDSTOCKS (See Appendix for CAS Numbers) N/A - PLANT IS NO LONGER IN OPERATION

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)

EPA-CAS LISTINGS
E&E(FIT)-FILES
SITE INSPECTION (FIT)-3/18/87

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ≈30
04 NARRATIVE DESCRIPTION
BECAUSE OF THE CHEMICALS PRESENT IN SOIL SAMPLES AND THE SHALLOW CALUMET AQUIFER, THE POTENTIAL EXISTS FOR GROUNDWATER CONTAMINATION. THE ONLY USE FOR GROUNDWATER IN THE IMMEDIATE AREA IS FOR NON-DRINKING WATER PURPOSES. HOWEVER, AQUIFER CAN AFFECT ANY LEACHATE FROM SITE.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
N/A - NO SURFACE WATER ROUTE

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
N/A - PLANT IS INACTIVE AND CHEMICALS PRESENT ARE PERSISTENT TO THE SOIL

01 ■ D. FIRE/~~EXPLOSIVE CONDITIONS~~ — 02 ■ OBSERVED (DATE: 3-18-87) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0
04 NARRATIVE DESCRIPTION
DURING THE SITE INSPECTION, IT WAS OBSERVED THAT THERE HAVE BEEN ON SITE FIRES. THE HAMMOND FIRE DEPT. STATED THAT THERE ARE SEVERAL FIRES ON THAT PROPERTY. THEY SAID THE FIRES ARE MAN-MADE FROM PEOPLE TRESPASSING ON SITE. THEY DO NOT CONSIDER THE SITE TO BE A FIRE/EXPLOSION HAZARD.

01 ■ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ≈2000
04 NARRATIVE DESCRIPTION
WHILE THE SITE IS FENCED AND LOCKED, THERE IS EVIDENCE OF TRESPASSING ON SITE. REFUSE FROM FOOD & LIQUIDS HAVE BEEN RECENTLY PUT THERE. POPULATION FIGURE IS FOR A ONE MILE RADIUS, YET AFFECTED POPULATION WILL LIKELY BE MUCH LESS.

01 ■ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 20 (Acres)
04 NARRATIVE DESCRIPTION
BECAUSE AROCLOR 1260 WAS FOUND IN SITE SOIL SAMPLES, THERE IS A GREAT POTENTIAL THAT THE ENTIRE SITE IS CONTAMINATED.

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0
04 NARRATIVE DESCRIPTION
N/A - NO DRINKING WATER WELLS ARE IN HAMMOND, INDIANA.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
N/A - SITE IS INACTIVE

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ≈2000
04 NARRATIVE DESCRIPTION
BECAUSE THERE IS A POTENTIAL DIRECT CONTACT PROBLEM, THERE EXISTS POTENTIAL EXPOSURE/INJURY PROBLEMS. POPULATION AFFECTED IS FOR ONE MILE RADIUS AND MAY BE EXTREME TO THE CIRCUMSTANCES. SEE COMMENTS UNDER DIRECT CONTACT (ABOVE PART 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	060370343

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ■ J. DAMAGE TO FLORA — 02 ■ OBSERVED (DATE 3/18/87) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
THERE IS A BURNT FIELD ON SITE. CAUSE OF THE FIRE IS UNKNOWN. (SEE FIGURE 1 OF REPORT)

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include names of species)
N/A - DUE TO NATURE OF AREA, THERE ARE NO SUSPECTED FAUNA AFFECTED

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A - DUE TO NATURE OF AREA, THE FOOD CHAIN IS NOT AFFECTED.

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ■ OBSERVED (DATE: 3/18/87) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
THERE IS A SLUDGE PIT NORTH OF THE WAREHOUSE. (SEE FIGURE 1, PICTURES PG 4) THERE IS UNSTABLE CONTAINMENT OF WASTES SINCE SAMPLES SHOW SOIL CONTAMINATION.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A

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: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
N/A - SITE IS FENCED AND LOCKED

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: ≈2000

IV. COMMENTS
NONE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
E&E (FIT) Files
[illegible] - E&E (FIT)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IN	060370343

II. PERMIT INFORMATION

NA - FACILITY NO LONGER IN OPERATION

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

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply) NA	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		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply) NA

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- ■ A. BUILDINGS ON SITE

06 AREA OF SITE

≈16 (Acres)

07 COMMENTS

NONE

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

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

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

THERE IS AN OPEN PIT FILLED WITH AN ORANGE SLUDGE WHICH HAS RUN OVER DUE TO PRECIPITATION. THERE ARE A COUPLE OF EMPTY DRUMS AT SITE. THERE IS EVIDENCE OF A FIRE AT SITE (BURNT GRASS). THERE ARE CONCRETE PADS COVERED BY TOP SOIL. THERE IS A LAGOON DIKED BY DIRT CONTAINING RUBBISH.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ■ NO

02 COMMENTS

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

E&E (FIT) FILES

LOG BOOK - SITE INSPECTION - E&E (3/18/87) - FIT

PHOTOGRAPHS

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	060370343

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check all applicable)

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

02 STATUS NA

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

03 DISTANCE TO SITE

A. 5.7 (mi)
B. >3 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

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

02 POPULATION SERVED BY GROUND WATER 30

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

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
10 (ft)	north	10 (ft)	unknown (gpd)	☐ YES ■ NO

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

Very few wells are in use in the vicinity of the site, if any. Wells for the area are generally completed in the Calumet aquifer, at depths of 20 to 40 ft.

10 RECHARGE AREA
■ YES
☐ NO
COMMENTS Recharge through percolation of rain water

11 DISCHARGE AREA
☐ YES
■ NO
COMMENTS NONE

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
Lake Michigan	☐	5.7 (mi)
Grand Calumet River	☐	1.33 (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 2000 NO OF PERSONS	B. 8000 NO OF PERSONS	C. 18000 NO OF PERSONS

02 DISTANCE TO NEAREST POPULATION <1/4 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 2105

04 DISTANCE TO NEAREST OFF-SITE BUILDING <1/4 (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)

Population within the vicinity of the site includes densely populated urban areas.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

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^{-2} cm/sec ☐ D. GREATER THAN 10^{-2} 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
50 (ft)	unknown (ft)	unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
6.0 (in)	2.5 (in)	0 %	none	0 %

09 FLOOD POTENTIAL NA

SITE IS IN _____ YEAR FLOODPLAIN

10 NA

☐ 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. N/A (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

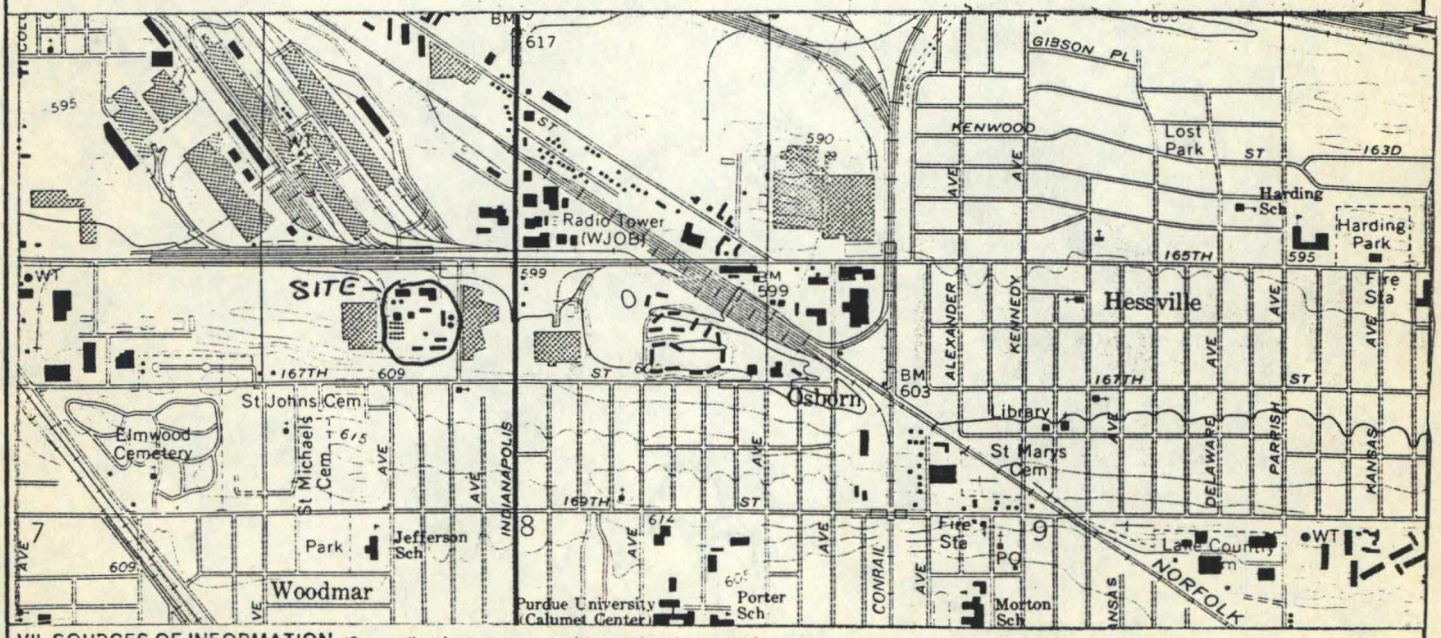
N/A (mi)

ENDANGERED SPECIES: N/A

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. < 1/4 (mi)	B. < 1/4 (mi)	C. >3 (mi)	D. >3 (mi)



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

POPULATION FIGURES ARE APPROXIMATED FROM US CENSUS BUREAU
"ENVIRONMENTAL GEOLOGY OF LAKE AND PORTER COUNTIES, INDIANA"
"SOIL SURVEY LAKE COUNTY, INDIANA" - U.S. DEPT of Agriculture
E & E (SIT) Files.
USGS TOPOGRAPHIC MAP (HIGHLAND QUADRANGLE)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	8	organics: PEI Associates Inc. inorganics: Environmental Science & Engineering	6/4/87
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU	onsite reading in breathing zone: 0.2-0.5 ppm
Explosimeter	no reading above background
rad-mini	no reading above background
O_2 meter	20.2 %
Dracger Pump (HCN)	no reading

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF Tom Kouris - Ecology & Environment Inc.
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS Ecology & Environment Inc. files

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

none

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

Site Inspection Log Book for Swift Adhesive & Coatings 3/18/87

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

II. CURRENT OWNER(S)			PARENT COMPANY (If applicable) NA		
01 NAME Irving Rabin		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 660 3RD St.		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY San Fransisco	06 STATE CA	07 ZIP CODE 94107	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
01 NAME		02 D+B NUMBER	08 NAME		09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)		11 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)			IV. REALTY OWNER(S) (If applicable, list most recent first) NA		
01 NAME Estech Specialty Chemicals Corp.		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 30 N. La Salle St.		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY Chicago	06 STATE IL	07 ZIP CODE 60602	05 CITY	06 STATE	07 ZIP CODE
01 NAME Swift Adhesive & Coatings		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 1801-167th St.		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY Hammond	06 STATE In	07 ZIP CODE 46320	05 CITY	06 STATE	07 ZIP CODE
01 NAME		02 D+B NUMBER	01 NAME		02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)		04 SIC CODE
05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

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

Ecology & Environment Inc. (FIT) files

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IN	060370343

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

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	14 CITY / 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER		

OPERATOR'S PARENT COMPANY (If applicable) NA

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

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable) NA

01 NAME (ASHLAND CHEMICAL Co) Estech Specialty Chemical Corp.	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 30 N. La Salle St.	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY Chicago / 06 STATE IL	07 ZIP CODE 60602	14 CITY / 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1970-1980	09 NAME OF OWNER DURING THIS PERIOD same		
01 NAME Swift Adhesive & Coatings	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.) 1801 167th ST.	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY Hammond / 06 STATE In	07 ZIP CODE 46320	14 CITY / 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION 1958-1970	09 NAME OF OWNER DURING THIS PERIOD same		
01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	14 CITY / 15 STATE	16 ZIP CODE
08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD		

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

Ecology & Environment, Inc (FIT) Files

3

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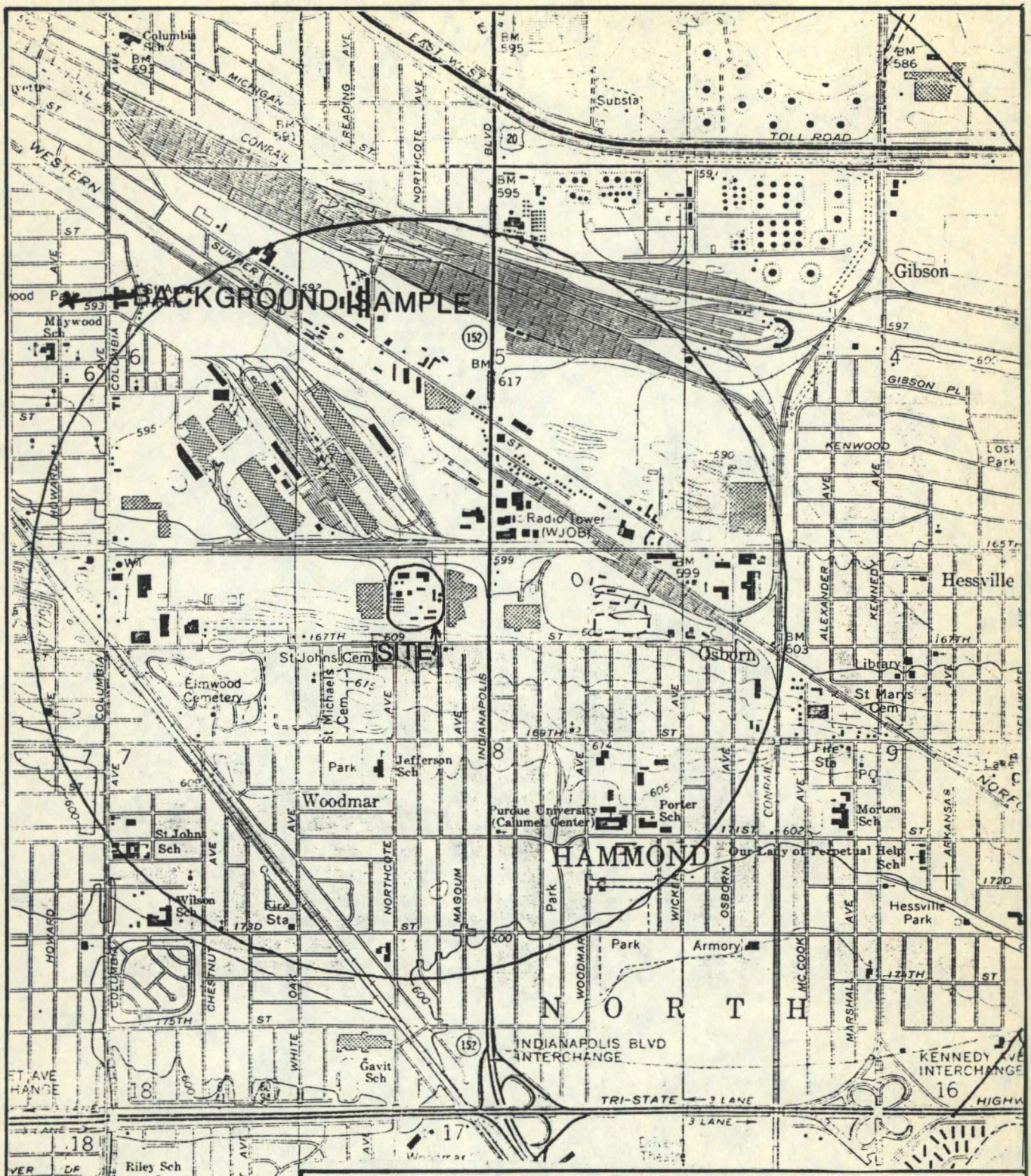


ecology and environment, inc.

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

TITLE: SITE MAP	FIGURE #: 2
SITE: SWIFT ADHESIVES & COATINGS	SCALE: 1:24000
CITY: HAMMOND STATE: IN	P.A.N.: FIN0126
SOURCE: USGS 7.5 MINUTE TOPO MAP HIGHLAND QUAD	DATE: 1968 REVISED: 1980

4

dinal®

FIELD PHOTOGRAPHY LOG SHEET

DISK # A124239

DATE 3-18-87

TIME 12:30 A.M. P.M.

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

WEATHER 45° F; RAIN; SOME WIND SWIFT

SITE ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #6

DESCRIPTION: BACKGROUND

DATE 3-18-87

TIME 12:30 A.M. P.M.

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

WEATHER 45° F; RAIN; SOME WIND SWIFT

SITE ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #6

DESCRIPTION: MAYWOOD PARK - SOUTHEAST SIDE OF PARK.

FIELD PHOTOGRAPHY LOG SHEET

DISK # A124239

DATE 3-18-87

TIME 12:30 A.M. P.M.

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

WEATHER 45° F; RAIN; SOME WIND SWIFT

SITE ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #6

DESCRIPTION: BACKGROUND

DATE 3-18-87

TIME 2:30 A.M. P.M.

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

WEATHER 45° F; RAIN; SOME WIND SWIFT

SITE ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #1

DESCRIPTION: NEAR WEST FENCE.

FIELD PHOTOGRAPHY LOG SHEET

DISK # A124239

DATE 3-18-87

TIME 2:30 A.M. P.M.

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

WEATHER 45° F; RAIN; SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #1

DESCRIPTION: ACROSS ROAD BY MIDDLE of WAREHOUSE. (NEAR DRUM)

DATE 3-18-87

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

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

WEATHER 45°F; RAIN; SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #2

DESCRIPTION: BY FLOOR DRAIN RUNOFF - NORTH SIDE of BUILDING.

FIELD PHOTOGRAPHY LOG SHEET

Page 4

DISK # A124239

DATE 3-18-87

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

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

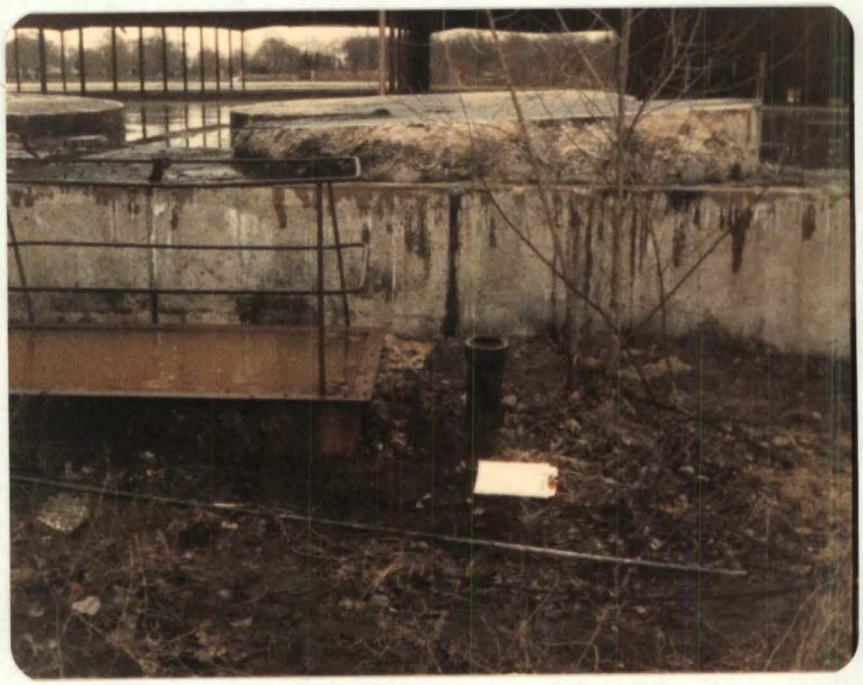
WEATHER 45°F; RAIN; SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #2



DESCRIPTION: OLD TANK SITE - WAREHOUSE.

DATE 3-18-87

TIME 2:47 A.M. P.M.

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

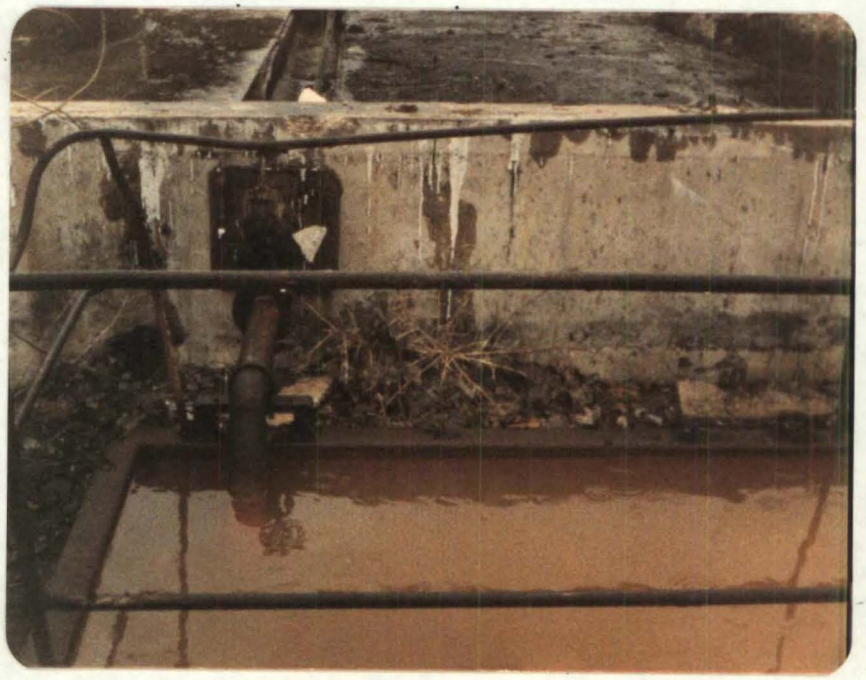
WEATHER 45°F; RAIN; SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A



DESCRIPTION: SLUDGE PIT, FLOOR DRAINS BY SAMPLE #2

FIELD PHOTOGRAPHY LOG SHEET

DISK# A124239

DATE 3-18-87

TIME 3:00 A.M. P.M.

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

WEATHER 45°F; RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #3

DESCRIPTION: NORTH SIDE BUILDING ACROSS PATH FROM SAMPLE #2.

DATE 3-18-87

TIME 3:00 A.M. P.M.

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

WEATHER 45°F; RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #3

DESCRIPTION: BY OPEN DRUMS.

FIELD PHOTOGRAPHY LOG SHEET

DISK # A124239

DATE 3-18-87

TIME 3:20 A.M. P.M.

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

WEATHER 45°F RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #4

DESCRIPTION: NORTHEAST CORNER OF BUILDING.

DATE 3-18-87

TIME 3:20 A.M. P.M.

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

WEATHER 45°F RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #4

DESCRIPTION: NEAR SEWAGE INTAKE

FIELD PHOTOGRAPHY LOG SHEET

DISK # A124239

DATE 3-18-87

TIME 3:30 A.M. P.M.

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

WEATHER 45° F; RAIN; SOME WIND SWIFT

SITE ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #5

DESCRIPTION: NORTH EAST SIDE of WAREHOUSE.

DATE 3-18-87

TIME 3:30 A.M. P.M.

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

WEATHER 45° F; RAIN; SOME WIND SWIFT

SITE ADHESIVES + COATING

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #5

DESCRIPTION: NEAR CONCRETE PAD AND SPRINKLERS EAST

FIELD PHOTOGRAPHY LOG SHEET DISK # 124238 PAGE 8.

DATE 3-18-87

TIME 3:45 A.M. P.M.

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

WEATHER 45°F; RAIN; SOME WIND.

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #7

DESCRIPTION: EAST SIDE OF WAREHOUSE NEAR CONCRETE PAD AND SPRINKLERS.

DATE 3-18-87

TIME 3:45 A.M. P.M.

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

WEATHER 45°F; RAIN; SOME WIND.

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) #7

DESCRIPTION: EAST OF ACCESS ROAD (N-S ROAD)

FIELD PHOTOGRAPHY LOG SHEET DISK # 124238 PAGE 9

DATE 3-18-87

TIME 3:47 A.M. P.M.

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

WEATHER 45°F, RAIN, SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: NORTH TANK PADS AND CORNER OF WAREHOUSE.

DATE 3-18-87

TIME 3:47 A.M. P.M.

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

WEATHER 45°F, RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: NORTH SIDE OF WAREHOUSE.

FIELD PHOTOGRAPHY LOG SHEET DISK # 124238 PAGE 10

DATE 3-18-87

TIME 3:50 A.M. P.M.

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

WEATHER 45°F, RAIN; SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: NORTH FENCE AND BURN FIELD

DATE 3-18-87

TIME 3:50 A.M. (P.M.)

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

WEATHER 45°F; RAIN; SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: BURNT FIELD BORDERED TO EAST BY RAILROAD TRACKS.

FIELD PHOTOGRAPHY LOG SHEET DISK # 124238 PAGE 11

DATE 3-18-87

TIME 3:51 A.M. P.M.

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

WEATHER 45°F; RAIN; SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: NORTH EAST CORNER OF BUILDING.

DATE 3-18-87

TIME 3:54 A.M. P.M.

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

WEATHER 45°F; RAIN; SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: EAST OF WAREHOUSE (PHOTO TAKEN FROM SOUTH END).

FIELD PHOTOGRAPHY LOG SHEET DISK # 124238 PAGE 12

DATE 3-18-87

TIME 3:54 A.M. P.M.

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

WEATHER 45° F; RAIN
SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY:
T. KOURIS

SAMPLE ID# (if applicable)
N/A

DESCRIPTION: SOUTH END OF WAREHOUSE - TANK PADS - FRONT OF WAREHOUSE.

DATE 3-18-87

TIME 3:55 A.M. P.M.

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

WEATHER 45°F, RAIN,
SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY:
T. KOURIS

SAMPLE ID# (if applicable)
N/A

DESCRIPTION: TANK PADS ON SOUTH END OF WAREHOUSE FRONT.

FIELD PHOTOGRAPHY LOG SHEET DISK # 124238 PAGE 13

DATE 3-18-87

TIME 3:56 A.M. P.M.

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

WEATHER 45° F, RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: SOUTH EAST CORNER OF WAREHOUSE (TAKEN FROM FRONT GATE).

DATE 3-18-87

TIME 3:56 A.M. P.M.

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

WEATHER 45° F, RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: OLD WARNING SIGNS.

FIELD PHOTOGRAPHY LOG SHEET DISK # 124238 PAGE 14

DATE 3-18-87

TIME 3:56 A.M. P.M.

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

WEATHER 45° F, RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: WOODS EAST of WAREHOUSE.

DATE 3-18-87

TIME 3:56 A.M. P.M.

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

WEATHER 45° F, RAIN, SOME WIND

SITE SWIFT ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: WEIGH STATION - FRONT GATE

FIELD PHOTOGRAPHY LOG SHEET

DISK # 124238

DATE 3-18-87

TIME 3:57 A.M. (P.M.)

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

WEATHER 45°F; RAIN; SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOORIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: OFFICE BUILDING - FRONT GATE

FIELD PHOTOGRAPHY LOG SHEET

DISK # A 124234

DATE 3-18-87

TIME 4:15 A.M. P.M.

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

WEATHER 45° F; RAIN SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOORIS

SAMPLE ID# (if applicable) #8

DESCRIPTION: NORTH of OFFICE BUILDING NEAR LAGOON RUNOFF.

DATE 3-18-87

TIME 4:15 A.M. P.M.

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

WEATHER 45° F; RAIN SOME WIND

SITE SWIFT ADHESIVES & COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOORIS

SAMPLE ID# (if applicable) #8

DESCRIPTION: RELATIONSHIP TO LAGOON

FIELD PHOTOGRAPHY LOG SHEET

DISK # A 124234

DATE 3-18-87

TIME 4:15 A.M. P.M.

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

WEATHER 45° F. RAIN SOME WIND SWIFT

SITE ADHESIVE + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: LAGOON NEAR SAMPLE #8

DATE 3-18-87

TIME 4:15 A.M. P.M.

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

WEATHER 45° F. RAIN, SOME WIND SWIFT

SITE ADHESIVES + COATINGS

TDD# F05-8703-227

PHOTOGRAPHED BY: T. KOURIS

SAMPLE ID# (if applicable) N/A

DESCRIPTION: LAGOON IN REFERENCE TO OFFICE BUILDING.

ecology and environment, inc.

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

International Specialists in the Environment

Date Received for Review: 8 May 87 Date Review Completed: 11 May 87

TO: Tom Kouris (Indiana)

FROM: Brenda Robbins Jones

SUBJECT: Swift Adhesives & Coatings

Sample Description: Case # 6941 - 8 soil samples metals / CN- analysis

Project Data Status: incomplete - awaiting organics

FIT Data Review Findings:

Addtional Comments:

see enclosed Chem. Eval. Sheet

Book No. 6

Page No. 39

recycled paper

Lift & Adhesives = Coatings

Case # 6941

11 May 87

RECEIVED MAY 8 1987

CHEMICAL EVALUATION SHEET

(units = mg/kg dry wt)

TOX/PEST	COMPOUND	CRDL	3-5x CRDL	M&L 045 Smpl	046 Smpl	257 Smpl	258 Smpl	259 Smpl	260 Smpl	261 Smpl	262 Smpl	Smpl	Smpl	HIT ✓
	Iron	20	60-100	20000	125000	2650	6500	4300	17800	15700	13800			
	Lead	1	3-5	4360	543	176	118	406	1880	357	148			
	Cyanide	2	6-10	1.37	1.3	1.4	—	—	—	—	—			
	Mercury	.008	.024-.040	0.10	.06	—	—	0.34	0.31	0.89	—			
	Nickel	8	24-40	61	102	8.9	26	—	21	543	29			
	Vanadium	10	30-50	52	35	2.9	—	—	28	—	23			

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

RECEIVED MAY 8 1987

T 5-7-87

CT. Review of Region V CLP Data
Received for Review on 4/24/87

DM. 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: Sheriff Adhesives & Coatings SMO Case No. 6841

EPA Data Set No. 3F3846 No. of Samples: 8 D.U./Activity Numbers [illegible]

CRL No. 87FK03512 - 87FK03519

SMO Traffic No. MEL045-046; MEL257-268

CLP Laboratory: ESE Hrs. Required for Review: 4½

Following are our findings.

This review covers 8 soil samples analyzed for metals and cyanide. Spike recoveries for Se (60%) and As (72%) are biased low and detection limits may be elevated. Selenium and arsenic data are estimated (J). Spike recoveries for Ba and Cr are 132% and 140%, respectively, and are biased high. The data for Ba and Cr are estimated (J).
Duplicate RPD values for Co and Cu are 38% and 37%, respectively, and these data are estimated (J).
Zinc serial dilution is 23% difference + outside control window. Zinc data is estimated (J).
Other data o.k.

( ) 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.

R. Rinne 5/6/87

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

CENTRAL REGIONAL LABORATORY SAMPLE DATA REPORT
ORGANICS/INORGANICS

SUPERFUND 3846

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

DUE DATE: 5/27/87

CASE NUMBER/SAS No. 20941 SITE NAME Swift Adhesives & Coatings LABORATORY PEI/ESE DATE SHIPPED 3/18/87

SUPERFUND DU NUMBER U9905 EPA RPM or OSC (S.M.S.)/(CES) CERCLIS NUMBER IND060370342 PAGE 1 OF 1

ACTIVITY NUMBER C72100

CRL LOG NUMBER	ORGANIC TRAFFIC REPORT NUMBER or SAS Packing List No.	INORGANIC TRAFFIC REPORT NUMBER	WATER OR LIQUIDS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN UG/L TOX17574	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN UG/L TOX17584	WATER POLYCHLORINATED BIPHENYLS UG/L PES17144	WATER CHLORINATED PESTICIDES UG/L PES17134	TOTAL METALS IN WATER UG/L MET111	WATER CYANIDE UG/L MIN74919	NITRATE/NITRITE MG/L MIN7284	AMMONIA MG/L MIN7294	RESIDUE, FILTERABLE TDS MG/L MIN7362	RESIDUE, NON-FILT TSS MG/L MIN7372			SEDIMENTS or SOILS: ACID-BASE NEUTRAL CPDS ORGANIC SCAN MG/KG TOX215722	VOLATILE ORGANIC ANALYSIS ORGANIC SCAN MG/KG TOX215622	SEDIMENTS POLYCHLORINATED BIPHENYLS MG/KG PES211422	SEDIMENT CHLORINATED PESTICIDES MG/KG 211322	TOTAL METALS MG/KG MET413	CYANIDE MG/KG MIN44930	EP TOXICITY METALS MG/KG	AMMONIA MG/KG MIN42925				
37FK03512	EJ499	MEL045													✓	✓	✓	✓	✓	✓						
37FK03513	EJ500	MEL046													✓	✓	✓	✓	✓	✓						
37FK03514	EK462	MEL257													✓	✓	✓	✓	✓	✓						
37FK03515	EK463	MEL258													✓	✓	✓	✓	✓	✓						
37FK03516	EK464	MEL259													✓	✓	✓	✓	✓	✓						
37FK03517	EK465	MEL260													✓	✓	✓	✓	✓	✓						
37FK03518	EK466	MEL261													✓	✓	✓	✓	✓	✓						
37FK03519	EK467	MEL262													✓	✓	✓	✓	✓	✓						

RECEIVED MAY 8 1987

In Reference to Case No(s): 6941

RECEIVED MAY 8 1987

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM

Telephone Record Log

Date of Call: 5/7/87

Laboratory Name: ~~Mike Ritter~~ Environmental Science + Engineering, Inc.

Lab Contact: ~~Fro~~ Mike Ritter

Region: V

Regional Contact: Ray Piccione

Call Initiated By: return Laboratory ____ Region

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

Summary of Questions/Issues Discussed:

Obliterated data 8, 9/Pb ; 11/Tl
V % diff ser dilu 3%
See Form I MEL046 [ ], MEL258 [ ]
Tl all "U" except MEL260 which should be [ ]
Hg ~~all "U"~~ 046, 257, 258, 762 "U"
CN^- 046 Form I ~~1.37~~ 1.4

Summary of Resolution:

Will recheck & resubmit

Ray Piccione
Signature

5/7/87
Date

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

QC EXCEPTION SUMMARY REPORT

CASE # 6941
DATA SET # SF 3846
LAB Q.C.# 6941
DATE: 5/

SITE Swift Adhesives & Coatings
LAB Environmental Science and Engineering, Inc.
REVIEWED BY R Biscione

MATRIX: soil
CONC. : low

WATER SAMPLE SPK.
WATER SAMPLE DUP.
SOIL SAMPLE SPK. MEL 046
SOIL SAMPLE DUP. MEL 045

	OVERALL CASE QC									MATRIX SPECIFIC QC						SAMPLE SPECIFIC QC		FIELD QC			REGIONAL QC			OTHER/ COMMENTS
	Holding Time	Cal Blanks	Init. Calver	Contin. Calver	Prep. Blk AQ	Prep Blk SOL	ICS %R	LCS % AQ	LCS % SOL	Sol Dup RPD	Sol Spk. %R	AQ Dup RPD	AQ Spk. %R	Ser Dilu AQ	Ser Dilu SOL	GFAA Dup	GFAA Spike	Blank	Dup RPD	Spike %R	Blind Blank	Blind Spike %R	Split Sample RPD	
ninum	✓	✓	✓	✓				✓	✓					✗	✓									
mony																								
nic		✓	✓	✓		✓					78													
um											132													
llium																								
nium																								
um																								
mium									64		140				~~64~~									
lt										38														
er										37														
		✓	✓	✓																				
nesium																								
anese																								
ury																								
l									64						~~64~~									
sium																								
um											60													
m																								
um																								
lium									243															
															23									
de																								

RECEIVED MAY 8 1987

Form I

RECEIVED MAY 8 1987

87FK03

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. ME1045

Date 4-23-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ESE, INC.

CASE NO. 6941

SOW NO. 785

Lab Receipt Date 3/19/87

LAB SAMPLE ID. NO. CLP6941*1

QC REPORT NO. 6941

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ____ Soil ✓ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One) Cem 4-23-87

1.	Aluminum	7580	P* RP 5/10/87	13.	Magnesium	16500	P
2.	Antimony	~~7.6~~ DMR 4-23-87 7.2	PU	14.	Manganese	1260	PN* RP Cem 4-23-87
3.	Arsenic (J)	11	FN	15.	Mercury	0.10	C
4.	Barium (J)	432	PN* RP	16.	Nickel	61	P* RP
5.	Beryllium	2.1	PU	17.	Potassium	[942]	P
6.	Cadmium	12	P* RP	18.	Selenium	2.4	FN*S (J) RP
7.	Calcium	33800	P	19.	Silver	[1.9]	P
8.	Chromium (J)	89	PN* RP	20.	Sodium	[682]	P
9.	Cobalt (J)	158	P*	21.	Thallium	0.59	U RP F
10.	Copper (J)	489	Cem 4-23-87 PN*	22.	Vanadium	52	P* RP
11.	Iron	20000	Cem 4-23-87 P*	23.	Zinc (J)	1650	E PN* RP Cem 4-23-87
12.	Lead	4360	F		Precent Solids (%)	44	

Cyanide ~~2.2~~ 1.37 RP 5/19

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: Black, fine texture, with some plant matter

Lab Manager Charles G. Marvel

IFB Amend. One

RECEIVED MAY 8 1987

Form I

87FK03513

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. MEL046

Date 4-23-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ESE, Inc.

CASE NO. 6941

SOW NO. 785

Lab Receipt Date 3/19/87

LAB SAMPLE ID. NO. CLP6941*2

QC REPORT NO. 6941

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ____ Soil ✓ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	4650	P ~~*~~ RP S/6	13.	Magnesium	2930	P
2.	Antimony	12	P	14.	Manganese	890	P ~~N*~~ RP CRM 4-23-87 S/6/87
3.	Arsenic (J)	5.2	FN	15.	Mercury	0.06 U RP SP	C
4.	Barium (J)	87	PN ~~*~~ RP	16.	Nickel	102	P ~~*~~ RP
5.	Beryllium	1.5	P	17.	Potassium	[620]	P
6.	Cadmium	12	P ~~*~~ RP	18.	Selenium	[0.84] RP SP	FN ~~*~~ RP (J)
7.	Calcium	13000	P	19.	Silver	[1.3]	P
8.	Chromium (J)	33	PN ~~*~~ RP	20.	Sodium	[409]	P
9.	Cobalt (J)	6.5	P ~~*~~	21.	Thallium	0.42 U RP SP	F
10.	Copper (J)	211 CRM 4-23-87	P ~~N*~~	22.	Vanadium	35	P ~~*~~ RP
11.	Iron	125000 CRM 4-23-87	P ~~*~~	23.	Zinc (J)	4000	E P ~~N*~~ RP CRM 4-23-87
12.	Lead	543	FS		Precent Solids (%)	62	

Cyanide 1.3

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: Brown, fine texture, with some plant matter and small rocks.

Lab Manager Charles G. Manor

IFB Amend. One

RECEIVED MAY 8 1987

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

27FK03514
EPA Sample No.
MEL257

Date 4-23-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ESE, Inc. CASE NO. 6941
SOW NO. 785 Lab Receipt Date 3/19/87
LAB SAMPLE ID. NO. CCP6941#3 QC REPORT NO. 6941

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ____ Soil ✓ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	1370	P	13.	Magnesium	5420	P
2.	Antimony	7.7	P	14.	Manganese	52	P N* Clm 4-23-87
3.	Arsenic (J)	1.6	F N	15.	Mercury	0.04 U	C
4.	Barium (J)	[17]	P N*	16.	Nickel	8.9	P*
5.	Beryllium	1.0	P	17.	Potassium	[133]	P
6.	Cadmium	5.2	P*	18.	Selenium	0.21	F U N* (UJ)
7.	Calcium	9170	P	19.	Silver	[0.90]	P
8.	Chromium (J)	4.3	P N*	20.	Sodium	[205]	P
9.	Cobalt (J)	4.3	P*	21.	Thallium	0.28 U	F
10.	Copper (J)	30 Clm 4-23-87	P N*	22.	Vanadium	2.9	P*
11.	Iron	2650 Clm 4-23-87	P*	23.	Zinc (J)	59	E P N* Clm 4-23-87
12.	Lead	176	F		Precent Solids (%)	94	
	Cyanide	1.4					

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: Grey-Brown, Fine texture; appears clayey with some plant matter

Lab Manager Charles G. Menoff

IFB Amend. One

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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

87FK03515
EPA Sample No.
MEL 258

Date 4-23-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ESE, Inc.
CASE NO. 6941
SOW NO. 785
Lab Receipt Date 3/19/87
LAB SAMPLE ID. NO. CLP6941*4
QC REPORT NO. 6941

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ____ Soil ✓ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	2000	P ~~*~~ RP	13.	Magnesium	1240	P
2.	Antimony	8.2	P	14.	Manganese	83	P ~~N*~~ RP CRM 4-23-87
3.	Arsenic (J)	1.8	F N	15.	Mercury	0.05 U RP STP	C
4.	Barium (J)	[23]	P ~~N*~~ RP	16.	Nickel	26	P ~~*~~ RP
5.	Beryllium	1.1	P	17.	Potassium	[159]	P
6.	Cadmium	2.4	P ~~*~~ RP	18.	Selenium	[0.77] RP STP	F ~~N*~~ RP (J)
7.	Calcium	2480	P	19.	Silver	[0.95]	P
8.	Chromium (J)	31	P ~~N*~~ RP	20.	Sodium	[253]	P
9.	Cobalt (J)	4.5	P *	21.	Thallium	0.30 U RP STP	F
10.	Copper (J)	114	P ~~N*~~ CRM 4-23-87	22.	Vanadium	[7.6]	P ~~*~~ RP
11.	Iron	6500	P ~~*~~ CRM 4-23-87	23.	Zinc (J)	989	E P ~~N*~~ RP CRM 4-23-87
12.	Lead	118	F S		Precent Solids (%)	88	

Cyanide 0.57 U CRM 4-23-87 ~~0.50 U~~

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: Grey - Brown, Fine texture; appears clayey with some plant matter

Lab Manager Charles G. Mason

IFB Amend. One

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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. 87FK02516 MEL 259

Date 4-23-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ESE, Inc.
CASE NO. 6941
SOW NO. 785
Lab Receipt Date 3/19/87
LAB SAMPLE ID. NO. CLP6941*5
QC REPORT NO. 6941

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ____ Soil ✓ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	1960	P * RP	13.	Magnesium	[577]	P
2.	Antimony	7.8	PU	14.	Manganese	89	PN* RP CRM 4-23-87
3.	Arsenic (J)	3.4	F N	15.	Mercury	0.39	C
4.	Barium (J)	[32]	PN* RP	16.	Nickel	[7.6]	P * RP
5.	Beryllium	1.0	PU	17.	Potassium	[2776]	P
6.	Cadmium	7.3	PU* RP	18.	Selenium	0.22	FUN* RP (UJ)
7.	Calcium	1580	P	19.	Silver	[0.91]	PU
8.	Chromium (J)	5.3	PN* RP	20.	Sodium	[250]	P
9.	Cobalt (J)	4.3	P *	21.	Thallium	0.28	U RP 4-7 F
10.	Copper (J)	43	PN* CRM 4-23-87	22.	Vanadium	[7.3]	P * RP
11.	Iron	4200	P * CRM 4-23-87	23.	Zinc (J)	553	E PN* RP CRM 4-23-87
12.	Lead	406	F S		Precent Solids (%)	92	

Cyanide 0.54 U CRM 4-23-87 ~~0.60 U~~

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: Grey-Brown, Fine texture; appears clayey with some plant matter

Lab Manager Charles H. Manor

IFB Amend. One

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

RECEIVED MAY 8 1987

EPA Sample No.
MEL 260

Date 4-23-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ESE Inc.
CASE NO. 6941
SOW NO. 785
Lab Receipt Date 3/19/87
LAB SAMPLE ID. NO. CLP6941#6
QC REPORT NO. 6941

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: water ____ Soil ✓ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	7070	P	13.	Magnesium	3370	P
2.	Antimony	8.9	PU	14.	Manganese	482	PN* Com 4-23-87
3.	Arsenic (J)	93 OK RP 5/15/87 ~~93~~ ~~93~~ RP 5/15/87	F NS	15.	Mercury	0.31	C
4.	Barium (J)	172	PN*	16.	Nickel	21	P*
5.	Beryllium	1.2	PU	17.	Potassium	[817]	P
6.	Cadmium	10	P*	18.	Selenium	1.5	FUN*S (UJ)
7.	Calcium	[956]	P	19.	Silver	[1.0]	PU
8.	Chromium (J)	165	PN*	20.	Sodium	[397]	P
9.	Cobalt (J)	[6.2]	P*	21.	Thallium	[0.62]	F
10.	Copper (J)	94	PN* Com 4-23-87	22.	Vanadium	28	P*
11.	Iron	17800	P* Com 4-23-87	23.	Zinc (J)	373	E PN* Com 4-23-87
12.	Lead	1880	F		Precent Solids (%)	81	

Cyanide 0.62U Com 4-23-87 ~~0.00U~~

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: Black, Fine texture; with some plant matter

Lab Manager Charles H Manos

IFB Amend. One

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. MEL 261

RECEIVED MAY 8 1987

Date 4-23-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ESE, Inc.

CASE NO. 6941

SOW NO. 785

Lab Receipt Date 3/19/87

LAB SAMPLE ID. NO. CLP6941*7

QC REPORT NO. 6941

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ____ Soil ✓ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	4440	P * 5/6/87	13.	Magnesium	8100	P
2.	Antimony	[15]	P	14.	Manganese	260	P N * Cam 4-23-87
3.	Arsenic (J)	4.0	F N	15.	Mercury	0.89	C
4.	Barium (J)	91	P N *	16.	Nickel	543	P *
5.	Beryllium	1.2	P U	17.	Potassium	[526]	P
6.	Cadmium	7.7	P *	18.	Selenium	1.3	F U N * (UJ)
7.	Calcium	29700	P	19.	Silver	[1.1]	P U
8.	Chromium (J)	59	P N *	20.	Sodium	[462]	P
9.	Cobalt (J)	5.3	P U * Cam 4-23-87	21.	Thallium	2.65	F
10.	Copper (J)	106	P N *	22.	Vanadium	[13]	P *
11.	Iron	15100	P * Cam 4-23-87	23.	Zinc (J)	375	E P N * Cam 4-23-87
12.	Lead	357	F		Precent Solids (%)	75	

Cyanide 0.67 U Cam 4-23-87 ~~0.00 U~~

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: Grey, medium texture; with some small rocks

Lab Manager Charles H. Manoni

ISB Amend. One

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

87FK03 RECEIVED MAY 8 1987

EPA Sample No. MEL262

Date 4-23-87

INORGANIC ANALYSIS DATA SHEET

LAB NAME ESE, Inc.
CASE NO. 6941
SOW NO. 785
Lab Receipt Date 3/19/87
LAB SAMPLE ID. NO. CLP6941#8
QC REPORT NO. 6941

Elements Identified and Measured

Concentration: Low ✓ Medium ____

Matrix: Water ____ Soil ✓ Sludge ____ Other ____

ug/L or mg/kg dry weight (Circle One)

1.	Aluminum	6540	P * RR	13.	Magnesium	3100	P RP 5/6/87 CRM
2.	Antimony	8.4	PU	14.	Manganese	260	PN * 4-23-87
3.	Arsenic (J)	4.1	FN	15.	Mercury	0.04 U RP	C
4.	Barium (J)	[36]	PN * RR	16.	Nickel	29	P * RR
5.	Beryllium	1.3	P	17.	Potassium	[688]	P
6.	Cadmium	0.68	PU * RR	18.	Selenium	1.2	FUN * RR (UJ)
7.	Calcium	20200	P	19.	Silver	0.98	PU
8.	Chromium (J)	8.1	PN * RR	20.	Sodium	[458]	P
9.	Cobalt (J)	[4.7]	P * CRM 4-23-87	21.	Thallium	0.31	F
10.	Copper (J)	21	PN * 4-23-87	22.	Vanadium	23	P * RR RR CRM 4-23-87
11.	Iron	13800	P * CRM 4-23-87	23.	Zinc (J)	57 CRM 4-23-87	PN * E
12.	Lead	148	F		Precent Solids (%)	85	

Cyanide 0.59U CRM 4-23-87 ~~0.50U~~

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: Grey, medium texture; with some small rocks

Lab Manager Charles G. Manoch

IFB Amend. One

RECEIVED MAY 8 1987

Form III

Q. C. Report No. 6941

BLANKS

LAB NAME ESE, Inc. CASE NO. 6941

DATE 4-23-87 UNITS µg/L

Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank Matrix: Soil 1	Matrix: 2
Metals:						mg/Kg	
1. Aluminum	29 PU	29 PU	29 PU			~~[63] P~~ [13] P CLM 4-23-87	
2. Antimony	36 PU	36 PU	36 PU			7.2 PU	
3. Arsenic	1.3 FU	1.3 FU	1.3 FU	1.3 FU		0.26 FU	
4. Barium	4.2 PU	4.2 PU	4.2 PU			2.6 P	
5. Beryllium	4.7 PU	4.7 PU	4.7 PU			0.94 PU	
6. Cadmium	2.9 PU	2.9 PU	2.9 PU			[0.88] P	
7. Calcium	95 PU	95 PU	95 PU			19 PU	
8. Chromium	9.4 PU	9.4 PU	9.4 PU			1.9 PU	
9. Cobalt	20 PU	20 PU	20 PU			4 PU	
10. Copper	2.8 PU	2.8 PU	2.8 PU			0.56 PU	
11. Iron	25 PU	25 PU	25 PU			5 PU	
12. Lead	1.3 FU	1.3 FU	1.3 FU	1.3 FU	1.3 FU	0.26 FU	
13. Magnesium	87 PU	87 PU	87 PU			17 PU	
14. Manganese	1.3 PU	1.3 PU	1.3 PU			2.6 PU	
15. Mercury	0.2 CU	0.2 CU	0.2 CU			~~0.2~~ 0.04 CU	
16. Nickel	22 PU	22 PU	22 PU			4.4 PU	
17. Potassium	306 PU	306 PU	306 PU			61 PU	
18. Selenium	~~337 PU~~ 1.0 FU	1.0 FU	1.0 FU			0.20 FU	
19. Silver	4.2 PU	4.2 PU	4.2 PU			0.84 PU	
20. Sodium	337 PU	337 PU	337 PU			67 PU	
21. Thallium	1.3 FU	1.3 FU	1.3 FU	1.3 FU		~~1.3~~ 0.26 FU	
22. Vanadium	9.4 PU	9.4 PU	9.4 PU			1.9 PU	
23. Zinc	5.9 PU	5.9 PU	5.9 PU			[26] P	
Other:							
Cyanide	10 U	10 U				~~10 U~~ 0.5 U CLM 4-23-87	

[1] Reporting Units: aqueous, ug/L; solid mg/kg

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Form III*A*

Q. C. Report No. 6941

BLANKS

LAB NAME ESE, INC. CASE NO. 6941

DATE 4-23-87 UNITS µg/L

Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank Matrix: 1	Matrix: 2
Metals:							
1. Aluminum							
2. Antimony							
3. Arsenic							
4. Barium							
5. Beryllium							
6. Cadmium							
7. Calcium							
8. Chromium							
9. Cobalt							
10. Copper							
11. Iron							
12. Lead		1.3FU	1.3FU	1.3FU	1.3FU		
13. Magnesium							
14. Manganese							
15. Mercury							
16. Nickel							
17. Potassium							
18. Selenium		1.0 F					
19. Silver							
20. Sodium							
21. Thallium							
22. Vanadium							
23. Zinc							
Other:							
Cyanide							

[1] Reporting Units: aqueous, ug/L; solid mg/kg

Form III B

Q. C. Report No. 6941

BLANKS

RECEIVED MAY 8 1987

LAB NAME ESE, INC. CASE NO. 6941

DATE 4-23-87 UNITS ug/L

Compound	Initial Calibration Blank Value	Continuing Calibration Blank Value 1	2	3	4	Preparation Blank Matrix: 1	Matrix: 2
Metals:							
1. Aluminum							
2. Antimony							
3. Arsenic							
4. Barium							
5. Beryllium							
6. Cadmium							
7. Calcium							
8. Chromium							
9. Cobalt							
10. Copper							
11. Iron							
12. Lead		1.3 ug					
13. Magnesium							
14. Manganese							
15. Mercury							
16. Nickel							
17. Potassium							
18. Selenium							
19. Silver							
20. Sodium							
21. Thallium							
22. Vanadium							
23. Zinc							
Other:							
Cyanide							

[1] Reporting Units: aqueous, ug/L; solid mg/kg

Form V

Q. C. Report No. 6941

SPIKE SAMPLE RECOVERY

RECEIVED MAY 8 1987

LAB NAME ESE, INC

DATE 4-23-87

CASE NO. 6941

EPA Sample No. MEL045

Lab Sample ID No. CLP6941*1

Units mg/kg

Matrix SOIL

Compound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	%R[1]	
Metals:						
1. Aluminum	75-125	NR	NR	NR	NR	
2. Antimony	"	209	7.2 PU	228	92	P
3. Arsenic	"	24	11	18	72	FN
4. Barium	"	1630	432	911	132	PN
5. Beryllium	"	23	2.1 PU	23	100	P
6. Cadmium	"	34	12	23	96	P
7. Calcium	"	NR	NR	NR	NR	
8. Chromium	"	216	89	91	140	PN
9. Cobalt	"	413	158	228	112	P
10. Copper	"	843	489	114	310	PN CRM 4-23-87
11. Iron	"	NR	NR	NR	NR	
12. Lead	"	3940	4360	23	-18	FN CRM 4-23-87
13. Magnesium	"	NR	NR	NR	NR	
14. Manganese	"	1770	1260	228	223	PN CRM 4-23-87
15. Mercury	"	2.4	0.10	2.6	89	C
16. Nickel	"	306	61	228	107	P
17. Potassium	"	NR	NR	NR	NR	I
18. Selenium	"	5.1	2.4	4.5	60	FN
19. Silver	"	23	1.9 PU	23	100	P
20. Sodium	"	NR	NR	NR	NR	
21. Thallium	"	20	0.59	23	90	F
22. Vanadium	"	301	52	228	109	P
23. Zinc	"	2460	1650	228	355	PN CRM 4-23-87
Other:						
Cyanide	"					

[1] %R = [(SSR - SR)/SA] x 100

"N" - out of control

"NR" - Not required

Comments:

Form VA

RECEIVED MAY 8 1987

Q. C. Report No. 6941

SPIKE SAMPLE RECOVERY

LAB NAME ESE, INC.

DATE 4-23-87

CASE NO. 6941

EPA Sample No. MEL 257

Lab Sample ID No. CLP6941*3

Units mg/kg

Matrix SOIL

Compound	Control Limit %R	Spiked Sample Result (SSR)	Sample Result (SR)	Spiked Added (SA)	%R[1]
Metals:					
1. Aluminum	75-125				
2. Antimony	"				
3. Arsenic	"				
4. Barium	"				
5. Beryllium	"				
6. Cadmium	"				
7. Calcium	"				
8. Chromium	"				
9. Cobalt	"				
10. Copper	"				
11. Iron	"				
12. Lead	"				
13. Magnesium	"				
14. Manganese	"				
15. Mercury	"				
16. Nickel	"				
17. Potassium	"				
18. Selenium	"				
19. Silver	"				
20. Sodium	"				
21. Thallium	"				
22. Vanadium	"				
23. Zinc	"				
Other:					
Cyanide	"	5.6	1.4	5.3	79

[1] %R = [(SSR - SR)/SA] x 100

"N" - out of control

"NR" - Not required

Comments:

Form VI

Q. C. Report No. 6941

DUPLICATES

RECEIVED MAY 8 1987

LAB NAME ESE, Inc

DATE

CASE NO. 6941
EPA Sample No. MEL045
Lab Sample ID No. CLP6941*1
Units mg/kg

Matrix Soil

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]	
Metals:					
1. Aluminum	± 20%	7580	9770	25	P*
2. Antimony	NC	CLM 4-23-87 ~~NC~~ 7.2 UP	NC	NC	
3. Arsenic	± 20%	11	12	8.7	F
4. Barium	± 20%	432	533	23	P*
5. Beryllium	NC	CLM 4-23-87 ~~NC~~ 2.1 PV	NC	NC	
6. Cadmium	± 20%	12	16	29	P*
7. Calcium	± 20%	33800	38000	11.7	P
8. Chromium	± 20%	89	122	31	P*
9. Cobalt	± 20%	158	232	38	P*
10. Copper	± 20%	489	715	37	P*
11. Iron	± 20%	20000	24000	~~20~~ 18	~~P*~~ CLM 4-23-8
12. Lead	± 20%	4360	3930	10	F
13. Magnesium	± 20%	16400	17500	6.5	P
14. Manganese	± 20%	1260	1680	29	P*
15. Mercury	± 0.04	0.04 CU	0.04 CU	N.C. DMR	
16. Nickel	± 20%	61	83	31	P*
17. Potassium	NC	CLM 4-23-87 ~~NC~~ [942]P	NC	NC	
18. Selenium	± 20%	2.4	3.1	25	F*
19. Silver	NC	CLM 4-23-87 ~~NC~~ [1.9]P	NC	NC	
20. Sodium	NC	CLM 4-23-87 ~~NC~~ [682]P	NC	NC	
21. Thallium	± ~~0.20~~ 2	0.59 FU	0.59 FU	~~0~~ NC	CLM F 4-23-87
22. Vanadium	± 20%	52	65	22	P*
23. Zinc	± 20%	1650	2240	30	P*
Other:					
Cyanide		~~7.3~~ DMR	~~7.8~~ DMR		

* Out of Control

[1] To be added at a later date.

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

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

Form VIA

Q. C. Report No. 6941

DUPLICATES

RECEIVED MAY 8 1987

LAB NAME ESE, INC.

DATE 4-23-87

CASE NO. 6941

EPA Sample No. MEZ046

Lab Sample ID No. CLP6941*-2

Units mg/kg

Matrix SOIL

Compound	Control Limit[1]	Sample(S)	Duplicate(D)	RPD[2]
Metals:				
1. Aluminum				
2. Antimony				
3. Arsenic				
4. Barium				
5. Beryllium				
6. Cadmium				
7. Calcium				
8. Chromium				
9. Cobalt				
10. Copper				
11. Iron				
12. Lead				
13. Magnesium				
14. Manganese				
15. Mercury				
16. Nickel				
17. Potassium				
18. Selenium				
19. Silver				
20. Sodium				
21. Thallium				
22. Vanadium				
23. Zinc				
Other:				
Cyanide	± 0.5	1.3	1.8	32 *

* CLM 4-23-87

* Out of Control

[1] To be added at a later date.

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

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

ory Name: PEI Associates, Inc.

e No: 6941

Sample Number
EK465

Re

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND	✓		
3.				
9.				
0.				
1				
2				
3.				
4				
5.				
6				
7				
18.				
19				
20				
21.				
22				
23				
24.				
25				
26.				
27				
28				
29.				
30				

ABORATORY NAME - PEI ASSOCIATES, INC.

E NUMBER - 6941

****
* SAMPLE NUMBER *
* EK465 *
****

RECEIVED

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	UNKNOWN	BNA	430	3000
2.	"	BNA	491	40000
3.	Alkane	BNA	503	700
4.	UNKNOWN	BNA	511	2000
5.	Alkane	BNA	519	1000
6.	"	BNA	533	3000
7.	UNKNOWN	BNA	623	600
8.	"	BNA	647	900
9.	Trimethyl Benzene	BNA	714	400
10.	UNKNOWN	BNA	757	1000
11.	UNKNOWN	BNA	1394	400
12.	"	BNA	1648	500
13.	Alkane	BNA	1660	900
14.	Phthalate	BNA	1773	800
15.	PAH	BNA	1804	300
16.	UNKNOWN	BNA	1941	600
17.	Alkane	BNA	1989	400
18.	"	BNA	2049	600
19.	"	BNA	2212	600
20.	UNKNOWN	BNA	2476	500
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ıtory Name: PEI Associates, Inc.
Nc 6991

Sample Number
ER465

365

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND	✓		
17.				
18				
19				
20.				
23.				
2				
2				
2				
2				
28.				

ecology and environment, inc.

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

Date Received for Review: 19 May 87 26 May 87 Date Review Completed: 27 May 87

TO: Tom Kouris Indiana

FROM: Brenda Robbins Jones

SUBJECT: Swift Adhesives & Coatings

Sample Description: Case # 6941 — 8 low soil organics

Project Data Status: "complete"

FIT Data Review Findings:
Several PNA and Pesticide hits as well as one PCB hit.

Addtional Comments:
See enclosed Chem. Eval. Form

Book No. 6
Page No. 37

recycled paper

ecology and environment, inc.
CHICAGO, ILLINOIS

CHEMICAL EVALUATION FORM

SITE NAME: Swift Adhesives & Coatings PAN#: DATE: 27 May 87

CASE #: 6941 UNITS: µg/kg REVIEWER: BRS

TOX/ PERS	COMPOUND	CRDL	3-5xCRDL	ES 499	ES 500	EK 462	EK 463	EK 465	EK 466D
	Aroclor-1260	160	480-800	66000	13000		250		540
	Anthracene	330	990-1650						6994
	phenanthrene	330			108232				21114
	fluoranthene	330			167653				29031
	pyrene	330			167653				31671
	Benzo(a)anthracene	330			53317				19794
	Chrysene	330			36890				22433
	Benzo(b)fluoranthene	330			71646				
	Benzo(k)fluoranthene	330			41159				36949
	Benzo(a)pyrene	330			74695				17155
	Indeno(1,2,3-cd) pyrene	330	✓		91463				
	Benzo(g,h,i) perylene	330	990-1650		74695				
	Heptachlor	8	24-40					23.0	
	Aldrin	8	↓					41.0	
	Heptachlor Epoxide	8	↓					9.6	
	4,4'-DDE	16	48-80					23.0	
	4,4'-DDT	16	48-80					88.0	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

RECEIVED MAY 19 1987

TI 5/18/87

CT. Review of Region V CLP Data
Received for Review on April 20, 1987

A. Curtis Ross, Director (SSCRL) Patrick J. Chirillo
Central Regional Laboratory

TL. Data User: FIT

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

SITE NAME: Swift Adhesives + Coatings SMO Case No. 6941

EPA Data Set No. SF 3846 No. of Samples: 08 D.U./Activity Numbers Y9051 C72100

CRL No. 87FK03S12 to 87FK03S19

SMO Traffic No. EJ499-500 EK462-467

CLP Laboratory: PEI Hrs. Required for Review: 1

Following are our findings.

SEE ATTACHED REVIEW

- PJC
5-18-87

( ) Data are acceptable for use.
( ) 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

FORM 1320-4 (REV 3-76)

In Reference to Case No(s):
6941

Contract Laboratory Program
REGIONAL/LABORATORY COMMUNICATION SYSTEM
Telephone Record Log

Date of Call: _____

Laboratory Name: PEI

Lab Contact: CRAIG CAULDWELL

Region: 5

Regional Contact: PATRICK CHURILLA

Call Initiated By: ____ Laboratory X Region

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

EJ499, EJ500 PESTICIDE FRACTION

Summary of Questions/Issues Discussed:

USER CAN NOT USE RESULTS BECAUSE ORIGIONAL VALUE WAS WHITED OUT AND NEW VALUE IS NOT INITIAKED BY THE LAB. THE REGION WILL ACCEPT VERBAL CONFIRMATION FROM THE LAB THAT AROCLOR-1260 IS IN EJ499 AT 66000 ug/KG AND THAT AROCLOR-1260 IS IN EJ500 AT 13000 ug/KG.

Summary of Resolution:

LABORATORY CONFIRMED THAT THESE WERE THE VALUES THAT THE LAB REPORTED

Patrick J. Churilla
Signature

5/21/97
Date

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

MEMORANDUM

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MAY 1 2 1987
US EPA CENTRAL REGIONAL LAB.
CHICAGO, ILLINOIS 60605
RECEIVED MAY 1 9 1987

DATE: May 8, 1987

TO: Chuck Elly
USEPA Region V

FROM: Peter Isaacson
SMO Data Review Team

SUBJECT: QA/QC Compliance Review Summary for a Contract Laboratory Program Organic Sample Data Package: Case No. 6941

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

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

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

Summary of Results

	Volatile	B/N/A	Pesticide
Acceptable as Submitted			
Acceptable with Comments	✓	✓	✓
Unacceptable, Action Pending			
Unacceptable			

Data Reviewed By: William P. Eckel Date: 5/6/87

Reviewed Authorized By: Peter Isaacson Date: 5/6/87

Signature: Peter Isaacson

Area Code/Phone No.: [redacted]

FTS Line: [redacted]

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Evaluation by Fraction

I. Volatiles (VOAs)

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

Comments:

Five volatile HSLs were reported in the samples, and up to eleven TICs, including chlorofluorocarbons, and C7-C9 hydrocarbons.

Most of the VOA samples required reanalysis due to high toluene-d_8 recoveries. In only one instance was a compound found in both the original analysis and the reanalysis (acetone in EK462, for which the results were quite different, 130 and 304 ug/Kg). Methylene chloride was a blank contaminant in all samples.

The lack of agreement between the sets of results leads the reviewer to conclude that all HSL results were due to laboratory contamination of the samples. All HSL results should therefore be used as detection limits (UJ).

Data for 2-butanone are unusable (R) due to low response factors (less than 0.010) and data for six others are approximate (UJ) due to calibration problems.

All VOA chromatograms exhibited a high falling baseline at the beginning of the run.

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NARRATIVE
CASE NO. 6941

SITE NAME Swift Adhesives & Coatings, IN

LABORATORY NAME PEI Associates

Laboratory

The laboratory's portion of this Case consisted of eight soil samples collected on March 18, 1987.

The laboratory reported no problems with the receipt of these samples.

The laboratory reported two problems with the analyses of volatile and pesticide (PCB) compounds. VOA surrogate recoveries were out-of-QC window, necessitating reanalysis. Minor problems with the pesticide (PCB) analysis were addressed in the laboratory narrative.

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

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II. Base/Neutral/Acids (BNAs)

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

Comments:

Seventeen HSL compounds were detected in the samples; all but two were polycyclic aromatic hydrocarbons (PAH or PNA). Reported concentrations ranged as high as 108,000 ug/Kg. Two phthalate esters were found in the laboratory blanks; results below 1000 ug/Kg should be treated as detection limits (UJ). No compounds were reported in EK462, a medium-level sample; this is probably due to high detection limits for this sample.

Many TIC compounds were reported, including more PAHs and a borane compound. TICs marked "B" should be disregarded as blank contaminants.

HSL compounds marked J or UJ have approximate results due to calibration problems.

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III. Pesticides/PCBs

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

Comments:

Aroclor-1260 was reported in 4 samples, ranging from 250 to 66,000 ug/Kg in concentration. Five pesticides were reported in EK465.

A problem with calibration linearity for DDT was reported in the narrative, but this did not affect the reported results.

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REVIEW MATRIX

APPENDIX B - VOA COMPOUNDS

Case No. 6941

Laboratory Name PEI

Compounds	Samples								Blanks	
	EJ499	RE	EJ500	RE	EK462	RE	EK463	RE	A-F	
Chloromethane										
Bromomethane										
Vinyl Chloride										
Chloroethane										
Methylene Chloride (B) J	89 B	41 B	38 B	20 B	23 B	8 B	20 B	8 B	3-17	
Acetone J					130	304	9 J			
Carbon Disulfide										
1,1-Dichloroethene										
1,1-Dichloroethane										
Trans-1,2-Dichloroethene										
Chloroform		31		24		10		11		
1,2-Dichloroethane UJ										
2-Butanone (R)						27				
1,1,1-Trichloroethane UJ										
Carbon Tetrachloride UJ										
Vinyl Acetate										
Bromodichloromethane UJ										
1,2-Dichloropropane										
Trans-1,3-Dichloropropene										
Trichloroethene										
Dibromochloromethane										
1,1,2-Trichloroethane										
Benzene										
cis-1,3-Dichloropropene										
2-Chloroethylvinylether										
Bromoform										
4-Methyl-2-Pentanone										
2-Hexanone										
Tetrachloroethene										
1,1,2,2-Tetrachloroethane										
Toluene					32		12			
Chlorobenzene										
Ethylbenzene										
Styrene										
Total Xylenes										
	Sample/Blank Association									

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REVIEW MATRIX
APPENDIX B - VOA COMPOUNDS

Case No. 6941

Laboratory Name PE 1

Compounds	Samples										
	EK464	EK465	RE	EK466	EK467	RE					Blank
Chloromethane											
Bromomethane											
Vinyl Chloride											
Chloroethane											
Methylene Chloride	16 B	25 B	12 B	16 B	9 B	25 B					
Acetone	18	19									
Carbon Disulfide											
1,1-Dichloroethene											
1,1-Dichloroethane											
Trans-1,2-Dichloroethene											
Chloroform			12	28	12						
1,2-Dichloroethane											
2-Butanone											
1,1,1-Trichloroethane											
Carbon Tetrachloride											
Vinyl Acetate											
Bromodichloromethane											
1,2-Dichloropropane											
Trans-1,3-Dichloropropene											
Trichloroethene											
Dibromochloromethane											
1,1,2-Trichloroethane											
Benzene											
cis-1,3-Dichloropropene											
2-Chloroethylvinylether											
Bromoform											
4-Methyl-2-Pentanone											
2-Hexanone											
Tetrachloroethene											
1,1,2,2-Tetrachloroethane											
Toluene					8						
Chlorobenzene											
Ethylbenzene											
Styrene											
Total Xylenes											
	Sample/Blank Association										

REVIEW MATRIX

APPENDIX B BNA-COMPOUNDS

Case No. 6941

Laboratory Name PE

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Compounds	Samples									Blanks	
	EJ499	EJ500	EK462	EK463	EK464	EK465	EK466	EK467	G	H	
Phenol			19800 U								
bis(2-Chloroethyl)Ether			↓								
2-Chlorophenol											
1,3-Dichlorobenzene											
1,4-Dichlorobenzene											
Benzyl Alcohol											
1,2-Dichlorobenzene											
2-Methylphenol UJ											
bis(2-Chloropropyl)Ether UJ											
4-Methylphenol UJ											
N-Nitroso-Di-n-Propylamine	UJ										
Hexachloroethane											
Nitrobenzene											
Isophorone UJ											
2-Nitrophenol											
2,4-Dimethylphenol											
Benzoic Acid											
bis(2-Chloroethoxy)Methane											
2,4-Dichlorophenol											
1,2,4-Trichlorobenzene											
Naphthalene											
4-Chloroaniline UJ											
Hexachlorobutadiene UJ											
4-Chloro-3-Methylphenol											
2-Methylnaphthalene											
Hexachlorocyclopentadiene											
2,4,6-Trichlorophenol											
2,4,5-Trichlorophenol											
2-Chloronaphthalene											
2-Nitroaniline											
Dimethyl Phthalate											
Acenaphthylene											
3-Nitroaniline UJ											
Acenaphthene		10518					1979				
2,4-Dinitrophenol											
4-Nitrophenol UJ											
Dibenzofuran		4421					920				
2,4-Dinitrotoluene											
2,6-Dinitrotoluene											
Diethylphthalate											
4-Chlorophenyl-phenylether											
Fluorene		10671					2243				
4-Nitroaniline UJ											
4,4-Dinitro-2-Methylphenol											
N-Nitrosodiphenylamine(1)											
4-Bromophenyl-phenylether											
Hexachlorobenzene UJ											
Pentachlorophenol											
Phenanthrene		108232		220		566	21114				
Anthracene		25915					6994				
Di-n-Butylphthalate					279 B			158 B	160	190	
Fluoranthene	22169	167683		604		630	29031				
Pyrene	17590	167683		637		654	31671	158			
Butylbenzylphthalate											
3,3-Dichlorobenzidiene											
Benzo(a)Anthracene	10602	82317					19794				
bis(2-Ethylhexyl)Phthalate		19817			376 B	778		645 B		270	
Chrysene		86890		483		469	22433				
Di-n-Octyl Phthalate											
Benzo(b)Fluoranthene		71646		220							
Benzo(b)Fluoranthene (K)		41159					36949				
Benzo(a)Pyrene		74695		362			17155				
Indeno(1,2,3-cd)Pyrene J		91463									
Dibenz(a-h)Anthracene J							2243				
Benzo(g,h,i)Perylene		74695	↓								

Sample/Blank Association

REVIEW MATRIX

APPENDIX B - PESTICIDE/PCB COMPOUNDS

Case No. 6941

Laboratory Name PEI

RECEIVED MAY 19 1987

Compounds	Samples								Blanks		
	EJ 499	EJ 500	EK 462	EK 463	EK 464	EK 465	EK 466	EK 467			
Alpha-BHC											
Beta-BHC											
Delta-BHC											
Gamma-BHC											
Heptachlor						23.0					
Aldrin						41.0					
Heptachlor Epoxide						9.6					
Endosulfan I											
Dieldrin											
4,4-DDE						23.0					
Endrin											
Endosulfan II											
4,4-DDD											
Endosulfan Sulfate											
4,4-DDT						88.0					
Methoxychlor											
Endrin Ketone											
Chlordane											
Toxaphene											
Aroclor-1016											
Aroclor-1221											
Aroclor-1232											
Aroclor-1242											
Aroclor-1248											
Aroclor-1254											
Aroclor-1260	66 000	13 000		250			540				
	Sample/Blank Association										

REVIEW MATRIX
APPENDIX B - TIC COMPOUNDS

Case No. 6941 Laboratory Name PEI Associates

RECEIVED MAY 19 1987

µg/kg

	Scan	VOA T.I.C. Compound	EJ 499	EJ 500	EK 462	EK 463	EK 464	EK 465	EK 466	EK 467	Blanks G	Blanks H	Blanks J
	117	$CFCl_3$	2										
	174	C.F.C.	10										
	185-199	C.F.C.	10							10			
	279	methyl silane ?		8									
	395	methyl cyclohexane		10	6								
	419	2,3-dimethyl pentane			2								
	452	3-methyl hexane ?			5								
	466	2-methyl hexane ?			3								
	692	2-heptanone ?			2								
	700-1	octanal			30	10							
	732	bicyclic nonene ?			6								
		BNA TIC Compound											
B	428-31	U.K. HC w/o				$4\cdot10^3$	$5\cdot10^3$	$3\cdot10^3$		$4\cdot10^3$	$4\cdot10^3$	$5\cdot10^3$	
	437	hexamethylcyclo-trisiloxane			$2\cdot10^5$								
B	459-60	$C_{10}H_{22}$				500	500			500	500	900	
B	476-9	U.K. HC w/o	$3\cdot10^4$	$2\cdot10^4$	$3\cdot10^5$				$6\cdot10^4$				$1\cdot10^4$
B	490-2	U.K. HC w/o				$5\cdot10^4$	$5\cdot10^4$	$4\cdot10^4$		$4\cdot10^4$	$4\cdot10^4$	$5\cdot10^4$	
B	502-3	C_9H_{20} ?				1000	1000	700		900	1000	2000	
B	508-11	C_7 ketone ?		9000		2000	2000	2000		2000	2000	2000	9000
B	518-19	U.K. HC				2000	2000	1000		2000	2000		
B	522	U.K. HC								3000		3000	
B	530-31	Xylene or Ethylbenzene	$2\cdot10^4$	$1\cdot10^4$									$1\cdot10^4$
B	533-36	U.K. Alkane				4000	4000	3000		3000	4000	7000	
B	620-3	organic acid ?				700	800	600		500	600	900	
	646-7	U.K. HC				1000	700	900		300			
B	678-80	U.K. Ketone				500					400	400	
	686	U.K. amine			$4\cdot10^5$								
B	713-4	trimethylbenzene(s)		7000		500	500	400		500	400	500	8000
B	754-7	C_9 Ketone ?				2000		1000		1000	500	800	
	762	a siloxane			$2\cdot10^5$								
	848	U.K. HC w/o								1000			
	925	U.K. HC					4000						
	967-72	U.K. Borane		$1\cdot10^4$	$9\cdot10^5$	1000	2000						
	1394	U.K. HC						400					
	1401	U.K. HC			$1\cdot10^6$								
	1415	chloro-alkane			$2\cdot10^5$								
	1422	U.K.				600							
B	1556	alkane or acid ?					600					300	
	1602	U.K. HC w/o		9000									
	1622	alkane ?			$5\cdot10^5$								
	1637	U.K. HC			$1\cdot10^5$								
	1648	dodecene				800		500					
	1660	alkane						900					
	1699	U.K. HC		9000									
	1730	alkyl pyridine			$2\cdot10^5$								
	1764-7	carbazole ?	$2\cdot10^4$						6000				
B	1771-3	phthalate ester					600	800		600	500	1000	
	1774	PNA-decahydro. Naphthalene deriv. ?	$3\cdot10^4$		$3\cdot10^5$								
	1797-8	U.K.	$2\cdot10^4$		$2\cdot10^5$								
	1800-4	3-ring methyl PNA		7000	$1\cdot10^5$			300	$1\cdot10^4$				
	1805	U.K. HC	$6\cdot10^4$										

REVIEW MATRIX

APPENDIX B - TIC COMPOUNDS

Case No. 6941

Laboratory Name PEI Associates

µg/kg

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Scan	BNA TIC Compound	EJ499	EJ500	EK462	EK463	EK464	EK465	EK466	EK467	Blanks G	Blanks H	Blanks J
1810-3	3-ring PNA		$1\cdot10^4$					$3\cdot10^4$				
1812-4	org. acid ?	$3\cdot10^4$			$2\cdot10^4$							
1817	alkane	$4\cdot10^4$		$2\cdot10^5$								
1830-6	3-ring PNA ?		$1\cdot10^4$	$1\cdot10^5$				$1\cdot10^4$				
1833-7	U.K. HC	$2\cdot10^4$			600							
1841	U.K. HC	$2\cdot10^4$										
1846	U.K. HC	$2\cdot10^4$										
1851	org. acid				600							
1854	U.K.	$2\cdot10^4$										
1859	U.K. HC			$1\cdot10^5$								
1862	3-ring PNA							6000				
1864	alkane					800						
1883	U.K.	$2\cdot10^4$										
1887	U.K.	$2\cdot10^4$										
1889	methoxy phenanthrene							6000				
1894-6	org. acid ?	$3\cdot10^4$		$1\cdot10^5$	$4\cdot10^4$							
1909	U.K. HC	$2\cdot10^4$										
1923-6	3-ring PNA		$1\cdot10^4$					4000				
1929	HC-alkene ?	$3\cdot10^4$										
1938-41	3-ring PNA $C_{17}H_{12}$		$1\cdot10^4$					$2\cdot10^4$				
1940-43	alkane ?	$1\cdot10^4$				300	600					
1946	PNA - $C_{17}H_{12}$							$1\cdot10^4$				
1952	methyl pyrene $C_{17}H_{12}$							$1\cdot10^4$				
1957-61	U.K.	$1\cdot10^4$		$2\cdot10^5$								
1970	methyl pyrene $C_{17}H_{12}$							7000				
1985-9	alkane ?	$2\cdot10^4$					400					
2019	PNA-ketone $C_{17}H_{10}O$		$2\cdot10^4$									
2034	PNA - $C_{16}H_{10}S$							9000				
2039	PNA - $C_{18}H_{12}$							7000				
2043	benzo (ghi) fluoranthene 203-12-3							$1\cdot10^4$				
2049-52	alkane					400	600					
2052	PNA-ketone $C_{17}H_{10}O$							7000				
2107	PNA - $C_{18}H_{12}$							$1\cdot10^4$				
2176	methyl-PNA $C_{19}H_{14}$							8000				
2196	alkane					900						
2212	alkane						600					
2216	PNA- $C_{20}H_{16}$							$1\cdot10^4$				
2388	4-ring PNA				800							
2407	UK			$1\cdot10^5$								
2429	4-ring PNA $C_{20}H_{12}$		$1\cdot10^4$									
2476	UK						500					
2490-X01	PNA - $C_{20}H_{12}$		$3\cdot10^4$				$1\cdot10^4$					
2491	U.K. HC					300						
2932	alkane ?					1000						
2997	alkene ?			$4\cdot10^5$								

PEI ASSOCIATES, INC.
(FORMERLY PEDCo ENVIRONMENTAL, INC.)

11499 CHESTER ROAD
CINCINNATI, OHIO 45246
(513) 782-4700
TELECOPIER (513) 782-4807

SF 3846

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April 18, 1987

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APR 20 1987
US EPA CENTRAL REGIONAL LAB.
536 S. CLARK STREET
CHICAGO, ILLINOIS 60605

Ms. Leslie Braun
U.S. EPA Contract Lab Program
Sample Management Office (SMO)
300 North Lee Street
Alexandria, VA 22314

Re: Contract No. 68-01-7084
PN 3665

Dear Leslie:

Enclosed is the data package for Case 6941, whose eight soil samples were received March 19, 1987. The SMO sample numbers are EJ499, EJ500, and EK462-467.

Samples EJ499, EJ500, and EK462 were first extracted for semi-volatiles and pesticides as low level samples. Screening showed them to be medium level and they were reextracted accordingly.

The volatile fractions of all samples except EK464 and EK466 had at least one surrogate out of specification. They all were reanalyzed; surrogate recoveries were again out, confirming the matrix effects.

Please call me if you have any questions.

Sincerely,

PEI/IT

Craig H. Caldwell
Laboratory Operations Manager

PEI Associates, Inc.

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CASE NARRATIVE, PESTICIDES
CASE 6941

Primary Analysis Column:

#291: 1.5% SP2250/1.95% SP2401 on 100/120 Supelcoport

Confirmation Column:

#316: 3% SP2100 on 100/120 Supelcoport

Quantitation Column:

#316 for Aldrin, Endrin and Aroclor 1260
#291 for all other target compounds

Definitions and Abbreviations

"Volume injected" is in uL
"Conversion factor" is a multiplier to account for dilutions, concentrations and conversion of units.
"Calibration factor" is computed in terms of total area units per total ng(nanograms) on column.

RT	Retention time
AU	Area units of integrated peak(s)
BL	Base correction code for integrated peak(s): Code is - B: indicates a baseline intercept; E indicates an exponetial skim; V indicates a valley intercept of the baseline
C#	Case number
SMO#	Sample management office number

NOTES

1. The data system used for pesticide analysis is not capable of printing the ng injected of the standard compounds. It does print the concentration of the standards and the volume injected, from which the ng injected can be determined if needed.

2. The data system also prints two date/time legends on the report. These are the date/times of data acquisition and of report generation. The former ("Acq. Date") is the one which is used in Forms VIII and IX. The times are expressed in civilian (am/pm) format, which is translated to military format for Forms VIII and IX.

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3. The only multiple peak target compound found in the samples was Aroclor 1260. Its response factors for the Form IX's were calculated from the sums of the applicable peaks. The response factors for the other multiple peak targets were calculated from the most prominent peak in each chromatogram.

4. Although some Aroclor 1260 RT's reported on Form X lie outside of the window, the PCB was positively identified by peak pattern.

5. Due to coelution of PCB peaks and MS/ MSD compounds, the levels of Aroclor 1260 reported for the spiked samples may be high.

6. DDT response in the confirmation run's evaluation standards was not linear, and its RSD was greater than 10%. Therefore, quantitation for the DDT series was done on the primary run, and the confirmation run was used only for identification of these compounds.

PEI Associates, Inc.

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NAMING CONVENTIONS FOR GC/MS FILES

These conventions are followed for the filenames of GC/MS standards:

Levels: L (low), ML (medium low), M (medium), MH (medium high), H (high)

Fraction: V (volatile), S (semivolatile), P (pesticide/PCB)

Date: Month and day, each in two-digit format

Examples: MLV0602 is a medium-low volatile standard analyzed on June 2.
HS1220 is a high semivolatile standard analyzed on December 20.

These conventions are followed for the filenames of GC/MS blanks (all begin with B for Blank):

Type: D (daily), G (GPC), H (holding), M (methanol), S (soil), W (water), Y (system)

Level: L (low), M (medium), H (high)

Date: Month and day, each in two-digit format

Examples: BDL0102 is the daily blank for January 2
BSM1124 is a medium soil blank extracted November 24

These conventions are followed for the filenames of GC/MS samples:

SMO Number plus suffixes: MS (matrix spike), MSD (matrix spike duplicate), RE (reextract), Rx (rerun, where x is a number), Dx (dilution, where x is a number)

Examples: AB123RE is a reextract of sample AB123
CC456D2 is the second dilution of sample CC456

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EXAMPLE QUANTITATION CALCULATIONS

WATER SAMPLES

$$\text{VOA-}\frac{\text{AMT. ON QUAN. LIST}}{\text{5(ML. SAMPLE)}} = \text{UG/L.}$$

BNA-AMT. ON QUAN. LIST X 2* = UG/L

*- DILUTION FROM MIXING ACID AND BN FRACTIONS.

SOIL SAMPLES

$$\text{VOA-}\frac{\text{AMT. ON QUAN LIST}}{\text{GRAMS SAMPLE PURGED}} = \text{UG/KG.}$$

$$\text{BNA-}\frac{\text{AMT. ON QUAN LIST X EXTRACT VOL., ML}}{\text{GRAMS SAMPLE EXTRACTED}} \text{ X 1000=UG/KG}$$

PER CENT MOISTURE CORRECTIONS FOR SOIL SAMPLES ARE MADE ON FORM I PRINTOUTS.

SOIL SURROGATE PERCENT RECOVERY SUMMARY

Case No. 6941 Contract Laboratory PEI Associates, Inc. Contract No. 68-01-7084

Low ✓ Medium _____ Region V

	SMO TRAFFIC NO.	VOLATILE: TOLUENE-D8 (81-117)	VOLATILE: BFB (74-121)	VOLATILE: 1,2 DICHLORO-ETHANE-D4 (70-121)	SEMI-VOLATILE: NITRO-BENZENE-D5 (23-120)	SEMI-VOLATILE: 2-FLUORO-BIPHENYL (30-115)	SEMI-VOLATILE: TERPHENYL-D14 (18-137)	SEMI-VOLATILE:	SEMI-VOLATILE:	SEMI-VOLATILE: PHENOL-D5 (24-113)	SEMI-VOLATILE: 2-FLUORO-PHENOL (25-121)	SEMI-VOLATILE: 2,4,6 TRIBROMO-PHENOL (19-122)	PESTICIDE: DIBUTYL-CHLORENDATE ** (20-150)
	EJ499	126*	77	106									
Re	EJ499	114	71*	95									
	EJ500	132*	79	101									
Re	EJ500	130*	70*	93									
	EK462	135*	84	97									
Re	EK462	119*	86	99									
	EK463	120*	85	95									
Re	EK463	123*	83	92									
	EK464	113	85	99									
MS	EK464	112	78	104									
MSD	EK464	111	80	105									
	EK465	135*	77	102									
Re	EK465	128*	79	102									
	EK466	115	82	102									
	EK467	135*	71*	99									
Re	EK467	135*	71*	99									
3-19	BLANK	104	93	85									
3-20		104	102	85									
3-21		100	94	102									
3-23		110	96	97									
3-24		107	97	88									
3-25	BLANK	105	100	87									

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

**ADVISORY LIMITS ONLY

Volatiles: 15 out of 66 ; outside of QC limits

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

Pesticides: _____ out of _____ ; outside of QC limits

7/85

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Comments:

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SOIL SURROGATE RECOVERY

Case No. 6941 Contract Laboratory PEI Associates, Inc. Contract No. 68- 70

Low X Medium _____ Region V

	VOLATILE			SEMI-VOLATILE								PESTICIDE**
SMO TRAFFIC NO.	TOLUENE-D8 (81-117)	BFB (74-121)	1,2 DICHLORO-ETHANE-D4 (70-121)	NITRO-BENZENE-D5 (23-120)	2-FLUORO-BIPHENYL (30-115)	TERPHENYL-D14 (18-137)			PHENOL-D5 (24-113)	2-FLUORO-PHENOL (25-121)	2,4,6 TRIBROMO-PHENOL (19-122)	DIBUTYL-CHLORENDATE (20-150)
3/25 Blank G				81	77	77			82	73	74	
3/27 Blank H				86	80	83			87	79	74	
EK467				88	78	91			88	77	91	103
EK464				93	78	79			83	59	39	112
EK464MS				90	74	79			82	65	84	
EK464MSD				101	78	80			91	70	87	
EK463				97	78	80			95	82	85	103
EK465				82	74	84			89	70	84	106
EK466D				80	105	139			90	70	95	160
EK 463MS												111
EK 463MSD												79
Blank K												105
Blank L												96

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

**ADVISORY LIMITS ONLY

Volatiles: _____ out of _____ ; outside of QC limits

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

Pesticides: _____ out of _____ ; outside of QC limits

7/85

Comments: _____

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FORM II

10

SOIL SURROGATE PERCENT RECOVERY SUMMARY

Case No. 6941 Contract Laboratory PEI Associates, Inc. Contract No. 68 7 7

Low _____ Medium X Region V

	VOLATILE			SEMI-VOLATILE								PESTICIDE
SMO TRAFFIC NO.	TOLUENE-D8 (81-117)	BFB (74-121)	1,2 DICHLORO-ETHANE-D4 (70-121)	NITRO-BENZENE-D5 (23-120)	2-FLUORO-BIPHENYL (30-115)	TERPHENYL-D14 (18-137)			PHENOL-D5 (24-113)	2-FLUORO-PHENOL (25-121)	2,4,6 TRIBROMO-PHENOL (19-122)	DIBUTYL-CHLORENDATE ** (20-150)
Blank 3/27												
Blank 5				88 ✓	86 ✓	98 ✓			90 ✓	82 ✓	86 ✓	
EK462				100	86	76			156 *	80	60	84
EJ500				94 ✓	80 ✓	92 ✓			94 ✓	78 ✓	50	133
EJ500MS				86	90	108			90	70	74	150
EJ500MSD				94	90	108			98	78	82	132
ET 499				106	84	88			96	80	70	129
Blank M												105

* VALUES ARE OUTSIDE OF CONTRACT REQUIRED QC LIMITS

** ADVISORY LIMITS ONLY

Volatiles: _____ out of _____ ; outside of QC limits

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

Pesticides: _____ out of _____ ; outside of QC limits

7/85

Comments: _____

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FORM II

11

SOIL [redacted]ATRIX SPIKE/MA[redacted]TRIX [redacted]IKE [redacted]UP[redacted]ATE [redacted]RE [redacted]ERY [redacted]

Case No. 6941 Contractor PEI Associates, Inc. Contract No. 68-01-7089

Low Level ✓ Medium Level _____ Region V

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. EK465	1,1-Dicholorethene	48.9	0	43.1	88	42.7	87	1	22	59-172
	Trichloroethene	48.5		37.8	78	38.5	79	2	24	62-137
	Chlorobenzene	48.7		41.7	86	41.4	85	1	21	60-133
	Toluene	48.0		47.6	97	47.3	97	1	21	59-139
	Benzene	48.1		43.3	90	47.8	99	10	21	66-142
B/N SMO SAMPLE NO.	1,2,4-Trichlorobenzene								23	38-107
	Acenaphthene								19	31-137
	2,4 Dinitrotoluene								47	28-89
	Pyrene								36	35-142
	N-Nitrosodi-n-Propylamine								38	41-126
	1,4-Dichlorobenzene								27	28-104
ACID SMO SAMPLE NO.	Pentachlorophenol								47	17-109
	Phenol								35	26-90
	2-Chlorophenol								50	25-102
	4-Chloro-3-Methylphenol								33	26-103
	4-Nitrophenol								50	11-114
PEST SMO SAMPLE NO.	Lindane								50	46-127
	Heptachlor								31	35-130
	Aldrin								43	34-132
	Dieldrin								38	31-134
	Endrin								45	42-139
	4,4'-DDT								50	23-134

*ASTERISKED VALUES ARE OUTSIDE QC LIMITS.

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

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

Comments:

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FORM III 7/85

SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 6941 Contractor : PEI Associates, Inc. Contract No.: 68-01-7084

Low Level ● Medium Level

Fraction	Compound	Conc. Spike Added	Sample Result	Conc. MS	% Rec	Conc. MSD	% Rec	RPD	QC Limits * RPD	QC Limits * RECOVERY
VOA	1,1-Dichloroethene								22	59 - 172
SMO	Trichloroethene								24	62 - 137
Sample #	Chlorobenzene								21	60 - 133
	Toluene								21	59 - 139
	Benzene								21	66 - 142
B/N	1,2,4-Trichlorobenzene	6660	0	4388	66%	4659	70%	6	23	38 - 107
SMO	Acenaphthene	6660	0	5416	81%	5650	85%	4	19	31 - 137
Sample #	2,4-Dinitrotoluene	6660	0	8546	128% *	9054	136% *	6	47	28 - 89
EK464	Pyrene	6660	0	4897	74%	4780	72%	2	36	35 - 142
	N-Nitrosodi-n-Propylamine	6660	0	4416	66%	4779	72%	8	38	41 - 126
	1,4-Dichlorobenzene	6660	0	4302	65%	4774	72%	10	27	28 - 104
Acid	Pentachlorophenol	13320	0	3409	26%	5898	44%	53 *	47	17 - 109
SMO	Phenol	13320	0	10411	78%	11551	87%	10	35	26 - 90
Sample #	2-Chlorophenol	13320	0	9273	70%	10397	78%	11	50	25 - 102
EK464	4-Chloro-3-Methylphenol	13320	0	15246	114% *	16175	121% *	6	33	26 - 103
	4-Nitrophenol	13320	0	11088	83%	14307	107%	25	50	11 - 114
Pesticide	Lindane	58.5	0	66.5	114	41.8	71	46	50	46 - 127
SMO	Heptachlor	58.5		55.9	96	45.9	78	20	31	35 - 130
Sample #	Aldrin	58.5		65.2	111	55.0	94	17	43	34 - 132
	Dieldrin	146		124	85	104	71	18	38	31 - 134
EK463	Endrin	146		129	88	95.7	66	30	45	42 - 139
	4,4'-DDT	146		203	139 *	167	114	20	50	23 - 134

* Asterisked values are outside QC limits.

RPD: VOA: ____ out of 5 are outside of QC Limits
B/N: 0 out of 6 are outside of QC Limits
ACID: 1 out of 5 are outside of QC Limits
PEST: 0 out of 6 are outside of QC Limits

RECOVERY: VOA: ____ out of 10 are outside of QC Limits
B/N: 2 out of 12 are outside of QC Limits
ACID: 2 out of 10 are outside of QC Limits
PEST: 1 out of 12 are outside of QC Limits

Comments:

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SOIL MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Case No. 6941 Contractor: PEI Associates, Inc. Contract No. 68-01-7084

Low Level ____ Medium Level ●

Fraction	Compound	Conc Spike Added	Sample Result	Conc. MS	% Rec	Conc. MSD	% Rec	RPD	QC Limits * RPD	QC Limits * RECOVERY
VOA	1,1-Dichloroethene								22	59 - 172
SM10	Trichloroethene								24	62 - 137
Sample #	Chlorobenzene								21	60 - 133
	Toluene								21	59 - 139
	Benzene								21	66 - 142
B/N	1,2,4-Trichlorobenzene	100000	0	71224	71%	72588	73%	2	23	38 - 107
SM10	Acenaphthene	100000	6931	92507	86%	94036	87%	2	19	31 - 137
Sample #	2,4-Dinitrotoluene	100000	0	117402	117% *	118066	118% *	1	47	28 - 89
EJ5001	Pyrene	100000	104627	167456	63%	174765	70%	11	36	35 - 142
	N-Nitrosodi-n-Propylamine	100000	0	65722	66%	76915	77%	16	38	41 - 126
	1,4-Dichlorobenzene	100000	0	68481	68%	71818	72%	5	27	28 - 104
Acid	Pentachlorophenol	200000	0	0	0% *	42671	21%	200 *	47	17 - 109
SM10	Phenol	200000	0	140719	70%	152016	76%	8	35	26 - 90
Sample #	2-Chlorophenol	200000	0	163796	82%	175852	88%	7	50	25 - 102
EJ5001	4-Chloro-3-Methylphenol	200000	0	230064	115% *	240914	120% *	5	33	26 - 103
	4-Nitrophenol	200000	0	169384	85%	269311	135% *	46	50	11 - 114
Pesticide	Lindane	3030	0	3260	108	4000	132 *	20	50	46 - 127
SM10	Heptachlor	3030		2760	91	2410	80	14	31	35 - 130
Sample #	Aldrin	3030		3600	119	3680	121	2	43	34 - 132
ES 500	Dieldrin	7600		7270	96	7990	105	5	38	31 - 134
	Endrin	7600		7680	101	6730	89	13	45	42 - 139
	4,4'-DDT	7600		9360	123	9010	119	4	50	23 - 134

* Asterisked values are outside QC limits

RPD: VOA: __ out of 5 are outside of QC Limits
B/N: __0__ out of 6 are outside of QC Limits
ACID: __1__ out of 5 are outside of QC Limits
PEST: __0__ out of 6 are outside of QC Limits

RECOVERY: VOA: ____ out of 10 are outside of QC Limits
B/N: __2__ out of 12 are outside of QC Limits
ACID: __4__ out of 10 are outside of QC Limits
PEST: __1__ out of 12 are outside of QC Limits

Comments:

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ME 'HOD BLANK SUMMARY

Case No. 6941 Region V Contractor PEI Associates, Inc. Contract No. 68-01- 7054

	FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
Blank A	BCDC0319 X A	3-19	V	S	L	X	75-09-2	DICHLOROMETHANE	9	ug/Kg	5
Blank B	BCDC0320 X B	3-20	V	S	L	X	75-09-2	DICHLOROMETHANE	3		5
							—	UNKNOWN	5		—
							—	4	20		—
Blank C	BCDC0321 X C	3-21	V	S	L	X	75-09-2	DICHLOROMETHANE	5		5
							—	UNKNOWN	5		—
Blank D	BCDC0323 X R D	3-23	V	S	L	X	75-09-2	DICHLOROMETHANE	9		5
Blank E	BCDC0324 X R E	3-24	V	S	L	X	75-09-2	DICHLOROMETHANE	17		5
Blank F	BCDC0325 X F	3-25	V	S	L	X	75-09-2	DICHLOROMETHANE	13		5
							—	UNKNOWN	50		—

Comments:

RECEIVED MAY 19 1987

METHOD BLANK SUMMARY

Case No. 6941 Region II Contractor PEI Associates, Inc. Contract No. 68-01-7084

	FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRQL
Blank M	ML SOIL BLANK M	4/8/87	P	S	M	D1	—	NONE	—	—	—
	0327PSB3	4/14/87	P	S	M	C	—	NONE	—	—	—
Blank K	LC SOIL BLANK K	4/8/87	P	S	L	D1	—	NONE	—	—	—
		4/14/87	P	S	L	C	—	NONE	—	—	—
Blank L	LC SOIL BLANK L	4/8/87	P	S	L	D1	—	NONE	—	—	—
		4/14/87	P	S	L	C	—	NONE	—	—	—

Comments: ML SOIL BLANK 1: Medium Level Soil Blank extr. 3/27/87; ML BLK M on form I 0327PSB3
LC SOIL BLANK 2: Low Level Soil Blank extr. 3/25/87; LL BLK K on form I 0325PSB1
LC SOIL BLANK 3: Low Level Soil Blank extr. 3/27/87; LL BLK L on form I 0327PSB1

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FORM IV 7/85

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METHOD BLANK SUMMARY

Case No. 6941 Region V Contractor PEI Associates, Inc. Contract No. 68-01-7089

	FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
Blank J	03275562	4-15	B	S	M	Y		Unknown	10000	ug/kg	
								Unknown Ketone	9000	J	
								Alkyl Benzene	10000		
								Trimethyl Benzene	8000		
Blank G	03255561	4-14	B	S	L	Y	84-74-2	Di-n-butyl Phthalate	160		660
								Unknown	4000		
								Alkane	500		
								Unknown	40000		
								Alkane	1000		
								Unknown	2000		
								Alkane	2000		
								"	4000		
								Unknown	600		
								"	400		
								Trimethyl Benzene	400		
								Unknown Ketone	500		
								Phthalate	500		
								"	300		

Comments:

FORM IV

7/85

RECEIVED MAY 19 1987

METHOD BLANK SUMMARY

Case No. 6941 Region V Contractor PEI Associates, Inc. Contract No. 68-01-7089

Blank H

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND (HSL, TIC OR UNKNOWN)	CONC.	UNITS	CRDL
032755.81	4-18	B	S	L	Y	84-74-2	Di-n-butyl Phthalate	150	ug/kg	660
						117-81-7	Bis(2-ethylhexyl) Phthalate	270		660
							UNKNOWN	5000		
							Alkane	900		
							UNKNOWN	50000		
							Alkane	2000		
							UNKNOWN Ketone	2000		
							Alkane	3000		
							"	7000		
							UNKNOWN	900		
							UNKNOWN Ketone	400		
							Trimethyl Benzene	500		
							UNKNOWN	800		
							UNKNOWN acid	300		
							Phthalate	1000		

Comments:

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FORM IV 7/85

87FK63518

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK4[illegible]6

RECEIVED MAY 19 1987

PEI Associates, Inc

Case No.: 694[illegible]
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-07B
Sample Matrix: SOIL
Data Release Authorized by: NG

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87 ✓
Conc/ Dil Factor 0.87 ✓
pH 7.0 ✓
Per Cent Moisture 24.2 ✓

CAS Number		UG/KG	CAS Number		UG/KG
[illegible]4 [illegible]7-3	Chloromethane----------	13 U	78-87-5	1,2-dichloropropane------	7 U
[illegible]4-83-9	Bromomethane----------	13 U	10061-02-6	Trans-1,3-dichloropropene	7 U
[illegible]1-4	Vinyl Chloride----------	13 U	79-01-6	Trichloroethene----------	7 U
[illegible]0-3	Chloroethane----------	13 U	124-48-1	Dibromochloromethane-----	7 U
75-09-2	Methylene Chloride-------	16 B	79-00-5	1,1,2-trichloroethane----	7 U
[illegible]4-1	Acetone----------	13 U	71-43-2	Benzene----------	7 U
[illegible]15-0	Carbon Disulfide---------	7 U	10061-01-5	Cis-1,3-dichloropropene--	7 U
75-35-4	1,1-Dichloroethene-------	7 U	110-75-8	2-chloroethylvinylether--	13 U
75-35-3	1,1-Dichloroethane-------	7 U	75-25-2	Bromoform----------	7 U
1 -60-5	Trans-1,2-dichloroethene-	7 U	108-10-1	4-methyl-2-pentanone-----	13 U
7 93-3	Chloroform----------	28 UJ*	591-78-6	2-hexanone----------	13 U
107-06-2	1,2-dichloroethane-------	7 U	127-18-4	Tetrachloroethene--------	7 U
7 -93-3	2-butanone----------	13 U	79-34-5	1,1,2,2-tetrachloroethane	7 U
7 -55-6	1,1,1-trichloroethane----	7 U	108-88-3	Toluene----------	7 U
56-23-5	Carbon Tetrachloride-----	7 U	108-90-7	Chlorobenzene----------	7 U
[illegible]3-05-4	Vinyl Acetate----------	13 U	100-41-4	Ethylbenzene----------	7 U
-27-4	Bromodichloromethane-----	7 U	100-42-5	Styrene----------	7 U
			1330-20-7	Total Xylenes----------	7 U

*per reviewer bl BJS

ta Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

SAMPLE NO
EK466 D

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/16/87
Conc/ Dil. Factor 333
Per Cent Moisture 24.2

MULTIPLY D.L. X 5

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	871 U	83-32-9	Acenapthene	1979 J
111-44-4	bis(2-chloroethyl)ether	871 U	51-28-5	2,4-Dinitrophenol	4223 U
95-57-8	2-Chlorophenol	871 U	100-02-7	4-Nitrophenol	4223 U
541-73-1	1,3-Dichlorobenzene	871 U	132-64-9	Dibenzofuran	920 J
106-47-7	1,4-Dichlorobenzene	871 U	121-14-2	2,4-Dinitrotoluene	871 U
100-51-6	Benzyl Alcohol	871 U	606-20-2	2,6-Dinitrotoluene	871 U
95-50-1	1,2-Dichlorobenzene	871 U	84-66-2	Diethyl Phthalate	871 U
95-48-7	2-Methylphenol	871 U	7005-72-34	Chlorophenylphenyl ether	871 U
39638-32-9	bis(2chloroisopropyl)ether	871 U	86-73-7	Fluorene	2243 J
106-44-5	4-Methylphenol	871 U	100-01-6	4-Nitroaniline	4223 U
621-64-7	N-nitroso-di-n-propylamine	871 U	534-52-1	4,6-dinitro-2-methylphenol	4223 U
67-72-1	Hexachloroethane	871 U	534-52-1	N-Nitrosodiphenylamine	871 U
98-95-3	Nitrobenzene	871 U	101-55-3	4bromophenylphenylether	871 U
78-59-1	Isophorone	871 U	118-74-1	Hexachlorobenzene	871 U
88-75-5	2-Nitrophenol	871 U	87-86-5	Pentachlorophenol	4223 U
105-67-9	2,4-Dimethylphenol	871 U	85-01-8	Phenanthrene	21114
65-85-0	Benzoic Acid	4223 U	120-12-7	Anthracene	6994
111-91-1	bis(2-chlorethoxy)methane	871 U	84-74-2	Di-n-butyl phthalate	871 U
120-83-2	2,4-Dichlorophenol	871 U	206-44-0	Fluoranthene	29031
120-82-1	1,2,4-Trichlorobenzene	871 U	129-00-0	Pyrene	31671
91-20-3	Napthalene	871 U	85-68-7	Butylbenzylphthalate	871 U
106-47-8	4-Chloroaniline	871 U	91-94-1	3,3'-Dichlorobenzidine	1715 U
87-68-3	Hexachlorobutadiene	871 U	56-55-3	Benzo(a)anthracene	19794
59-50-7	4-Chloro-3-methylphenol	871 U	117-81-7	bis-(2-ethylhexyl)phthalate	871 U
91-57-6	2-Methylnapthalene	871 U	218-01-9	Chrysene	22433
77-47-4	Hexachlorocyclopentadiene	871 U	117-84-0	Di-n-octyl phthalate	871 U
88-06-2	2,4,6-Trichlorophenol	871 U	205-99-2	Benzo(b)fluoranthene	871 U
95-95-4	2,4,5-Trichlorophenol	4223 U	207-08-9	Benzo(k)fluoranthene	36949
91-58-7	2-Chloronapthalene	871 U	50-32-8	Benzo(a)pyrene	17155
88-74-4	2-Nitroaniline	4223 U	193-39-5	Indeno(1,2,3-cd)pyrene	871 U
131-11-3	Dimethyl Phthalate	871 U	53-70-3	Dibenzo(a,h)anthracene	2243 J
208-96-8	Acenapthylene	871 U	191-24-2	Benzo(g,h,i) perylene	871 U
99-09-2	3-Nitroaniline	4223 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

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CASE NUMBER: 6941 SAMPLE NO: EK466

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
ATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 24

GPC CLEANUP: yes
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	540.0

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 22.82 G
EXTRACT VOLUME:VT= 1000 UL

Name: PEI Associates, Inc.

6991

Sample Number

EK466

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND			

1/5 Dil

ORATORY NAME - PEI ASSOCIATES, INC.

NUMBER - 6941

SAMPLE NUMBER

EK466 D

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	Unknown	BNA	477	60000
2. 86-74-8	Carbazole	BNA	1764	6000
3.	Polynuclear Aromatic	BNA	1800	10000
4.	" " "	BNA	1810	30000
5.	" " "	BNA	1830	10000
6.	" " "	BNA	1862	6000
7.	" " "	BNA	1889	6000
8.	" " "	BNA	1923	9000
9.	" " "	BNA	1938	20000
0.	" " "	BNA	1946	10000
11.	" " "	BNA	1952	10000
2.	" " "	BNA	1970	7000
3.	" " "	BNA	2034	9000
4.	" " "	BNA	2039	7000
15. 205-12-8	Benzo (ghi) Fluoranthene	BNA	2043	10000
16.	PNA	BNA	2052	7000
17.	"	BNA	2107	10000
18.	"	BNA	2176	8000
19.	"	BNA	2216	10000
20.	"	BNA	2490	10000
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

87F-K-0519

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ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK467

PEI Associates, Inc

Case No.: 6941
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-08B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.83
pH 7.0
Per Cent Moisture 11.6

CAS Number		UG/KG	CAS Number		UG/KG
-87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane--------	6 U
74-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	6 U
75-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	6 U
5-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	6 U
75-09-2	Methylene Chloride-------	9 B	79-00-5	1,1,2-trichloroethane----	6 U
67-64-1	Acetone----------	11 U	71-43-2	Benzene----------	6 U
5-15-0	Carbon Disulfide---------	6 U	10061-01-5	Cis-1,3-dichloropropene--	6 U
5-35-4	1,1-Dichloroethene-------	6 U	110-75-8	2-chloroethylvinylether--	11 U
75-35-3	1,1-Dichloroethane-------	6 U	75-25-2	Bromoform----------	6 U
56-60-5	Trans-1,2-dichloroethene-	6 U	108-10-1	4-methyl-2-pentanone-----	11 U
3-93-3	Chloroform----------	12 U*	591-78-6	2-hexanone----------	11 U
107-06-2	1,2-dichloroethane-------	6 U	127-18-4	Tetrachloroethene--------	6 U
78-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
1-55-6	1,1,1-trichloroethane----	6 U	108-88-3	Toluene----------	8 U*
56-23-5	Carbon Tetrachloride-----	6 U	108-90-7	Chlorobenzene----------	6 U
108-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	6 U
5-27-4	Bromodichloromethane-----	6 U	100-42-5	Styrene----------	6 U
			1330-20-7	Total Xylenes----------	6 U

* per review by BMS

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

ORGANICS ANALYSIS DATA SHEET
Page 1

RECEIVED MAY 1987

SAMPLE NO.
EK467RE

PEI Associates, Inc

Case No.: 5341
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-08B
Sample Matrix: SOIL
Data Release Authorized by: KG
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 3/25/87
Conc/ Dil Factor 0.90
pH 7.0
Per Cent Moisture 11.6

CAS Number		UG/KG	CAS Number		UG/KG
-87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	6 U
74-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	6 U
-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	6 U
-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	6 U
75-09-2	Methylene Chloride-------	25 B	79-00-5	1,1,2-trichloroethane----	6 U
67-64-1	Acetone----------	11 U	71-43-2	Benzene----------	6 U
-15-0	Carbon Disulfide---------	6 U	10061-01-5	Cis-1,3-dichloropropene--	6 U
75-35-4	1,1-Dichloroethene-------	6 U	110-75-8	2-chloroethylvinylether--	11 U
75-35-3	1,1-Dichloroethane-------	6 U	75-25-2	Bromoform----------	6 U
6-60-5	Trans-1,2-dichloroethene-	6 U	108-10-1	4-methyl-2-pentanone-----	11 U
-93-3	Chloroform----------	6 U	591-78-6	2-hexanone----------	11 U
107-06-2	1,2-dichloroethane-------	6 U	127-18-4	Tetrachloroethene--------	6 U
-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
-55-6	1,1,1-trichloroethane----	6 U	108-88-3	Toluene----------	6 U
56-23-5	Carbon Tetrachloride-----	6 U	108-90-7	Chlorobenzene----------	6 U
108-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	6 U
6-27-4	Bromodichloromethane-----	6 U	100-42-5	Styrene----------	6 U
			1330-20-7	Total Xylenes----------	6 U

ata Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

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SAMPLE NO
EK467
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ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 11.6

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	747 U	83-32-9	Acenapthene	747 U
111-44-4	bis(2-chloroethyl)ether	747 U	51-28-5	2,4-Dinitrophenol	3621 U
95-57-8	2-Chlorophenol	747 U	100-02-7	4-Nitrophenol	3621 U
541-73-1	1,3-Dichlorobenzene	747 U	132-64-9	Dibenzofuran	747 U
106-47-7	1,4-Dichlorobenzene	747 U	121-14-2	2,4-Dinitrotoluene	747 U
100-51-6	Benzyl Alcohol	747 U	606-20-2	2,6-Dinitrotoluene	747 U
95-50-1	1,2-Dichlorobenzene	747 U	84-66-2	Diethyl Phthalate	747 U
95-48-7	2-Methylphenol	747 U	7005-72-3	4Chlorophenylphenyl ether	747 U
39638-32-9	bis(2chloroisopropyl)ether	747 U	86-73-7	Fluorene	747 U
106-44-5	4-Methylphenol	747 U	100-01-6	4-Nitroaniline	3621 U
621-64-7	N-nitroso-di-n-propylamine	747 U	534-52-1	4,6-dinitro-2-methylphenol	3621 U
67-72-1	Hexachloroethane	747 U	534-52-1	N-Nitrosodiphenylamine	747 U
98-95-3	Nitrobenzene	747 U	101-55-3	4bromophenylphenylether	747 U
78-59-1	Isophorone	747 U	118-74-1	Hexachlorobenzene	747 U
88-75-5	2-Nitrophenol	747 U	87-86-5	Pentachlorophenol	3621 U
105-67-9	2,4-Dimethylphenol	747 U	85-01-8	Phenanthrene	747 U
65-85-0	Benzoic Acid	3621 U	120-12-7	Anthracene	747 U
111-91-1	bis(2-chlorethoxy)methane	747 U	84-74-2	Di-n-butyl phthalate	158 JB
120-83-2	2,4-Dichlorophenol	747 U	206-44-0	Fluoranthene	747 U
120-82-1	1,2,4-Trichlorobenzene	747 U	129-00-0	Pyrene	158 J
91-20-3	Napthalene	747 U	85-68-7	Butylbenzylphthalate	747 U
106-47-8	4-Chloroaniline	747 U	91-94-1	3,3'-Dichlorobenzidine	1471 U
87-68-3	Hexachlorobutadiene	747 U	56-55-3	Benzo(a)anthracene	747 U
59-50-7	4-Chloro-3-methylphenol	747 U	117-81-7	bis-(2-ethylhexyl)phthalate	645 J
91-57-6	2-Methylnapthalene	747 U	218-01-9	Chrysene	747 U
77-47-4	Hexachlorocyclopentadiene	747 U	117-84-0	Di-n-octyl phthalate	747 U
88-06-2	2,4,6-Trichlorophenol	747 U	205-99-2	Benzo(b)fluoranthene	747 U
95-95-4	2,4,5-Trichlorophenol	3621 U	207-08-9	Benzo(k)fluoranthene	747 U
91-58-7	2-Chloronapthalene	747 U	50-32-8	Benzo(a)pyrene	747 U
88-74-4	2-Nitroaniline	3621 U	193-39-5	Indeno(1,2,3-cd)pyrene	747 U
131-11-3	Dimethyl Phthalate	747 U	53-70-3	Dibenzo(a,h)anthracene	747 U
208-96-8	Acenapthylene	747 U	191-24-2	Benzo(g,h,i) perylene	747 U
99-09-2	3-Nitroaniline	3621 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

CASE NUMBER: 6941

SAMPLE NO.: EK467

499

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ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 12

GPC CLEANUP: yes
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	160.0U

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 26.55 G
EXTRACT VOLUME:VT= 1000 UL

Name: PEI Associates, Inc.

6941

Sample Number

EK467

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

umber	Compound Name	Fraction	Scan Number	Estimated Concentrat (ug/l /kg)
).				
).				
1.				
2.				
3.				
4.				
5.				
6				
7				
8.				
29				
3(				

ory Name: PEI Associates, Inc.

No: 6941

Sample Number

EK4C

Re

501

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

C Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	Chlorofluorocarbon	V	199	10
0.				
1.				
2.				
3				
4				
5.				
6				
7				
18.				
19				
20.				
21				
22				
23.				
24				
25				
26.				
27				
28.				
29				
30				

LABORATORY NAME - PEI ASSOCIATES, INC.

(SE NUMBER - 6941

****
* SAMPLE NUMBER *
* EK467 *
****

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.		Unknown	BNA	428	4000
2.		Alkane	BNA	459	500
3.		Unknown	BNA	490	40000
4.		Alkane	BNA	502	900
5.		Unknown	BNA	510	2000
6.		Alkane	BNA	518	2000
7.		"	BNA	532	3000
8.		Unknown	BNA	620	500
9.		Unknown	BNA	647	300
10.		Trimethyl Benzene isomer	BNA	713	500
11.		Unknown	BNA	754	1000
12.		"	BNA	848	1000
13.		Phthalate	BNA	1772	600
14.					
15.					
16.					
17.					
18.					
19.					
20.					
21.					
22.					
23.					
24.					
25.					
26.					
27.					
28.					
29.					
30.					

87FK03512

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EJ499

PEI Associates, Inc

Lab Sample ID No.: T7-03-104-01B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.89
pH 7.0
Per Cent Moisture 58.5

Case No.: 6141
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/16/87

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S Number		UG/KG	CAS Number		UG/KG
-87-3	Chloromethane----------	24 U	78-87-5	1,2-dichloropropane------	12 U
-83-9	Bromomethane----------	24 U	10061-02-6	Trans-1,3-dichloropropene	12 U
75-01-4	Vinyl Chloride----------	24 U	79-01-6	Trichloroethene----------	12 U
-00-3	Chloroethane----------	24 U	124-48-1	Dibromochloromethane-----	12 U
-09-2	Methylene Chloride-------	89 B	79-00-5	1,1,2-trichloroethane----	12 U
67-64-1	Acetone----------	24 U	71-43-2	Benzene----------	12 U
75-15-0	Carbon Disulfide---------	12 U	10061-01-5	Cis-1,3-dichloropropene--	12 U
5-35-4	1,1-Dichloroethene-------	12 U	110-75-8	2-chloroethylvinylether--	24 U
5-35-3	1,1-Dichloroethane-------	12 U	75-25-2	Bromoform----------	12 U
156-60-5	Trans-1,2-dichloroethene-	12 U	108-10-1	4-methyl-2-pentanone-----	24 U
3-93-3	Chloroform----------	12 U	591-78-6	2-hexanone----------	24 U
07-06-2	1,2-dichloroethane-------	12 U	127-18-4	Tetrachloroethene--------	12 U
78-93-3	2-butanone----------	24 U	79-34-5	1,1,2,2-tetrachloroethane	12 U
71-55-6	1,1,1-trichloroethane----	12 U	108-88-3	Toluene----------	12 U
5-23-5	Carbon Tetrachloride-----	12 U	108-90-7	Chlorobenzene----------	12 U
108-05-4	Vinyl Acetate----------	24 U	100-41-4	Ethylbenzene----------	12 U
75-27-4	Bromodichloromethane-----	12 U	100-42-5	Styrene----------	12 U
			1330-20-7	Total Xylenes----------	12 U

Data Reporting Qualifiers

alue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EJ499RE

PEI Associates, Inc
Lab Sample ID No.: T7-03-104-01B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/24/87
Date Analyzed: 3/24/87
Conc/ Dil Factor 0.83
pH 7.0
Per Cent Moisture 58.5

Case No. 6941
QC Report No.
Contract No. 68-01-7084
Date Sample Received: 3/19/87

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CAS Number		UG/KG	CAS Number		UG/KG
7 87-3	Chloromethane----------	24 U	78-87-5	1,2-dichloropropane------	12 U
7- 83-9	Bromomethane----------	24 U	10061-02-6	Trans-1,3-dichloropropene	12 U
75-01-4	Vinyl Chloride----------	24 U	79-01-6	Trichloroethene----------	12 U
7 00-3	Chloroethane----------	24 U	124-48-1	Dibromochloromethane-----	12 U
7 09-2	Methylene Chloride-------	41 B	79-00-5	1,1,2-trichloroethane----	12 U
67-64-1	Acetone----------	24 U	71-43-2	Benzene----------	12 U
7 15-0	Carbon Disulfide---------	12 U	10061-01-5	Cis-1,3-dichloropropene--	12 U
7 35-4	1,1-Dichloroethene-------	12 U	110-75-8	2-chloroethylvinylether--	24 U
75-35-3	1,1-Dichloroethane-------	12 U	75-25-2	Bromoform----------	12 U
156-60-5	Trans-1,2-dichloroethene-	12 U	108-10-1	4-methyl-2-pentanone-----	24 U
-93-3	Chloroform----------	31 J	591-78-6	2-hexanone----------	24 U
7-06-2	1,2-dichloroethane-------	12 U	127-18-4	Tetrachloroethene--------	12 U
78-93-3	2-butanone----------	24 U	79-34-5	1,1,2,2-tetrachloroethane	12 U
-55-6	1,1,1-trichloroethane----	12 U	108-88-3	Toluene----------	12 U
-23-5	Carbon Tetrachloride-----	12 U	108-90-7	Chlorobenzene----------	12 U
108-05-4	Vinyl Acetate----------	24 U	100-41-4	Ethylbenzene----------	12 U
-27-4	Bromodichloromethane-----	12 U	100-42-5	Styrene----------	12 U
			1330-20-7	Total Xylenes----------	12 U

Data Reporting Qualifiers

alue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

SAMPLE NO
EJ499

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ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: MEDIUM
Date Extracted/ Prepared: 3/27/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 2000
Per Cent Moisture 58.5

C Number		UG/KG	CAS Number		UG/KG
8-95-2	Phenol	47711 U	83-32-9	Acenapthene	47711 U
1-44-4	bis(2-chloroethyl)ether	47711 U	51-28-5	2,4-Dinitrophenol	47711 U
95-57-8	2-Chlorophenol	47711 U	100-02-7	4-Nitrophenol	47711 U
1-73-1	1,3-Dichlorobenzene	47711 U	132-64-9	Dibenzofuran	47711 U
6-47-7	1,4-Dichlorobenzene	47711 U	121-14-2	2,4-Dinitrotoluene	47711 U
0-51-6	Benzyl Alcohol	47711 U	606-20-2	2,6-Dinitrotoluene	47711 U
95-50-1	1,2-Dichlorobenzene	47711 U	84-66-2	Diethyl Phthalate	47711 U
95-48-7	2-Methylphenol	47711 U	7005-72-3	Chlorophenylphenyl ether	47711 U
638-32-9	bis(2chloroisopropyl)ether	47711 U	86-73-7	Fluorene	47711 U
106-44-5	4-Methylphenol	47711 U	100-01-6	4-Nitroaniline	47711 U
21-64-7	N-nitroso-di-n-propylamine	47711 U	534-52-1	4,6-dinitro-2-methylphenol	47711 U
67-72-1	Hexachloroethane	47711 U	534-52-1	N-Nitrosodiphenylamine	47711 U
98-95-3	Nitrobenzene	47711 U	101-55-3	4bromophenylphenylether	47711 U
78-59-1	Isophorone	47711 U	118-74-1	Hexachlorobenzene	47711 U
88-75-5	2-Nitrophenol	47711 U	87-86-5	Pentachlorophenol	47711 U
05-67-9	2,4-Dimethylphenol	47711 U	85-01-8	Phenanthrene	47711 U
65-85-0	Benzoic Acid	47711 U	120-12-7	Anthracene	47711 U
11-91-1	bis(2-chlorethoxy)methane	47711 U	84-74-2	Di-n-butyl phthalate	47711 U
20-83-2	2,4-Dichlorophenol	47711 U	206-44-0	Fluoranthene	22169 J
120-82-1	1,2,4-Trichlorobenzene	47711 U	129-00-0	Pyrene	17590 J
91-20-3	Napthalene	47711 U	85-68-7	Butylbenzylphthalate	47711 U
106-47-8	4-Chloroaniline	47711 U	91-94-1	3,3'-Dichlorobenzidine	47711 U
87-68-3	Hexachlorobutadiene	47711 U	56-55-3	Benzo(a)anthracene	10602 J
59-50-7	4-Chloro-3-methylphenol	47711 U	117-81-7	bis-(2-ethylhexyl)phthalate	47711 U
91-57-6	2-Methylnapthalene	47711 U	218-01-9	Chrysene	47711 U
77-47-4	Hexachlorocyclopentadiene	47711 U	117-84-0	Di-n-octyl phthalate	47711 U
88-06-2	2,4,6-Trichlorophenol	47711 U	205-99-2	Benzo(b)fluoranthene	47711 U
95-95-4	2,4,5-Trichlorophenol	47711 U	207-08-9	Benzo(k)fluoranthene	47711 U
91-58-7	2-Chloronapthalene	47711 U	50-32-8	Benzo(a)pyrene	47711 U
88-74-4	2-Nitroaniline	47711 U	193-39-5	Indeno(1,2,3-cd)pyrene	47711 U
131-11-3	Dimethyl Phthalate	47711 U	53-70-3	Dibenzo(a,h)anthracene	47711 U
208-96-8	Acenapthylene	47711 U	191-24-2	Benzo(g,h,i) perylene	47711 U
99-09-2	3-Nitroaniline	47711 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

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CASE NUMBER: 6941

SAMPLE NO. EJ499

RECEIVED MAY 1

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: MED
DATE EXTRACTED: 3/27/87
DATE ANALYZED: 4/9&14/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 59

GPC CLEANUP: NO
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	120.0U
319-85-7	BETA - BHC	120.0U
319-86-8	DELTA - BHC	120.0U
58-89-9	GAMMA-BHC (LINDANE)	120.0U
76-44-8	HEPTACHLOR	120.0U
309-00-2	ALDRIN	120.0U
1024-57-3	HEPTACHLOR EPOXIDE	120.0U
959-98-8	ENDOSULFAN I	120.0U
60-57-1	DIELDRIN	240.0U
72-55-9	4,4'-DDE	240.0U
72-20-8	ENDRIN	240.0U
33213-65-9	ENDOSULFAN II	240.0U
72-54-8	4,4'-DDD	240.0U
1031-07-8	ENDOSULFAN SULFATE	240.0U
50-29-3	4,4'-DDT	240.0U
72-43-5	METHOXYCHLOR	1200 U
53494-70-5	ENDRIN KETONE	240.0U
57-74-9	CHLORDANE	1200.0U
8001-35-2	TOXAPHENE	2400.0U
12674-11-2	AROCLOR-1016	1200.0U
11104-28-2	AROCLOR-1221	1200.0U
11141-16-5	AROCLOR-1232	1200.0U
53469-21-9	AROCLOR-1242	1200.0U
12672-29-6	AROCLOR-1248	1200.0U
11097-69-1	AROCLOR-1254	2400.0U
11096-82-5	AROCLOR-1260	66000.0

OK POC 5-21-87

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= .43 G
EXTRACT VOLUME:VT= 1000 UL

ry Name: PEI Associates, Inc.

D: 6941

Sample Number
EJ499

Organics Analysis Data Sheet
(Page 4)

RECEIVED MAY 19 1987

Tentatively Identified Compounds

ber	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	Chlorofluoro carbon	V	117	2.
5.				
6				
7				
8.				
9				
10				
11.				
12				
13.				
14				
15				
16.				
17				
18				
19.				
20				

y Name: PEI Associates, Inc.

D: 6941

Sample Number
EJ499

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Re

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l ug/kg)
	Unknown	V	17	10
			FST	10

2
3.
4
5
6.
9

L 3ORATORY NAME - PEI ASSOCIATES, INC.

(3E NUMBER - 6941

****
* SAMPLE NUMBER *
* EJ499 *
****

:36

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	unknown	BNA	477	30000
2.	alkyl Benzene	BNA	531	20000
3.	unknown	BNA	1767	20000
4.	PNA	BNA	1774	30000
5.	unknown	BNA	1797	20000
6.	Alkane	BNA	1805	60000
7.	unknown	BNA	1812	30000
8.	"	BNA	1817	40000
9.	"	BNA	1837	20000
10.	"	BNA	1841	20000
11.	"	BNA	1846	20000
12.	"	BNA	1854	20000
13.	"	BNA	1883	20000
14.	"	BNA	1887	20000
15.	"	BNA	1896	30000
16.	"	BNA	1909	20000
17.	"	BNA	1929	30000
18.	"	BNA	1940	10000
19.	"	BNA	1961	10000
20.	"	BNA	1985	20000
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

87FK03513

ORGANICS ANALYSIS DATA SHEET

Page 1

SAMPLE NO.
EJ500

PEI Associates, Inc

Case No.: 6941

Lab Sample ID No.: T7-03-104-028

QC Report No.

Sample Matrix: SOIL

Contract No. 68-01-7084

Data Release Authorized by: KJ

Date Sample Received: 3/19/87

RECEIVED MAY 19 1987

VOLATILE COMPOUNDS

Concentration: Low

Date Extracted/ Prepared: 3/20/87

Date Analyzed: 3/20/87

Conc/ Dil Factor 0.89

pH 6.5

Per Cent Moisture 34.4

S Number		UG/KG	CAS Number		UG/KG
-87-3	Chloromethane----------	15 U	78-87-5	1,2-dichloropropane------	8 U
-83-9	Bromomethane----------	15 U	10061-02-6	Trans-1,3-dichloropropene	8 U
75-01-4	Vinyl Chloride----------	15 U	79-01-6	Trichloroethene----------	8 U
75-00-3	Chloroethane----------	15 U	124-48-1	Dibromochloromethane-----	8 U
-09-2	Methylene Chloride------	38 B	79-00-5	1,1,2-trichloroethane----	8 U
-64-1	Acetone----------	15 U	71-43-2	Benzene----------	8 U
75-15-0	Carbon Disulfide---------	8 U	10061-01-5	Cis-1,3-dichloropropene--	8 U
-35-4	1,1-Dichloroethene-------	8 U	110-75-8	2-chloroethylvinylether--	15 U
-35-3	1,1-Dichloroethane-------	8 U	75-25-2	Bromoform----------	8 U
156-60-5	Trans-1,2-dichloroethene-	8 U	108-10-1	4-methyl-2-pentanone-----	15 U
-93-3	Chloroform----------	8 U	591-78-6	2-hexanone----------	15 U
07-06-2	1,2-dichloroethane-------	8 U	127-18-4	Tetrachloroethene--------	8 U
78-93-3	2-butanone----------	15 U	79-34-5	1,1,2,2-tetrachloroethane	8 U
71-55-6	1,1,1-trichloroethane----	8 U	108-88-3	Toluene----------	8 U
5-23-5	Carbon Tetrachloride-----	8 U	108-90-7	Chlorobenzene----------	8 U
08-05-4	Vinyl Acetate----------	15 U	100-41-4	Ethylbenzene----------	8 U
75-27-4	Bromodichloromethane-----	8 U	100-42-5	Styrene----------	8 U
			1330-20-7	Total Xylenes----------	8 U

Data Reporting Qualifiers

alue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EJ500RE

RECEIVED MAY 15, 1987

PEI Associates, Inc
Lab Sample ID No.: T7-03-104-02B
Sample Matrix: SOIL
Data Release Authorized by:

Case No. 6941
QC Report No.:
Contract No. 68-01- 7084.
Date Sample Received: 3/19/87

VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.92
pH 6.5
Per Cent Moisture 34.4

CAS Number		UG/KG	CAS Number		UG/KG
-87-3	Chloromethane----------	15 U	78-87-5	1,2-dichloropropane------	8 U
-83-9	Bromomethane----------	15 U	10061-02-6	Trans-1,3-dichloropropene	8 U
75-01-4	Vinyl Chloride----------	15 U	79-01-6	Trichloroethene----------	8 U
-00-3	Chloroethane----------	15 U	124-48-1	Dibromochloromethane-----	8 U
-09-2	Methylene Chloride-------	20 B	79-00-5	1,1,2-trichloroethane----	8 U
67-64-1	Acetone----------	15 U	71-43-2	Benzene----------	8 U
75-15-0	Carbon Disulfide---------	8 U	10061-01-5	Cis-1,3-dichloropropene--	8 U
-35-4	1,1-Dichloroethene-------	8 U	110-75-8	2-chloroethylvinylether--	15 U
-35-3	1,1-Dichloroethane-------	8 U	75-25-2	Bromoform----------	8 U
156-60-5	Trans-1,2-dichloroethene-	8 U	108-10-1	4-methyl-2-pentanone-----	15 U
-93-3	Chloroform----------	24 J B	591-78-6	2-hexanone----------	15 U
07-06-2	1,2-dichloroethane-------	8 U	127-18-4	Tetrachloroethene--------	8 U
78-93-3	2-butanone----------	15 U	79-34-5	1,1,2,2-tetrachloroethane	8 U
1-55-6	1,1,1-trichloroethane----	8 U	108-88-3	Toluene----------	8 U
-23-5	Carbon Tetrachloride-----	8 U	108-90-7	Chlorobenzene----------	8 U
108-05-4	Vinyl Acetate----------	15 U	100-41-4	Ethylbenzene----------	8 U
75-27-4	Bromodichloromethane-----	8 U	100-42-5	Styrene----------	8 U
			1330-20-7	Total Xylenes----------	8 U

Data Reporting Qualifiers

alue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

RECEIVED MAY 19 1987

SAMPLE NO
EJ 500

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Concentration: MEDIUM
Sep. Funnel Extraction?N/A
Date Extracted/ Prepared: 3/27/87
Cont. Liq/ Liq. Extraction?N/A
Date Analyzed: 4/15/87
Conc/ Dil. Factor 2000
MULTIPLY DETECTION LIMITS X 1
Per Cent Moisture 34.4

AS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	30183 U	83-32-9	Acenapthene	10518 J
111-44-4	bis(2-chloroethyl)ether	30183 U	51-28-5	2,4-Dinitrophenol	30183 U
95-57-8	2-Chlorophenol	30183 U	100-02-7	4-Nitrophenol	30183 U
541-73-1	1,3-Dichlorobenzene	30183 U	132-64-9	Dibenzofuran	4421 J
106-47-7	1,4-Dichlorobenzene	30183 U	121-14-2	2,4-Dinitrotoluene	30183 U
100-51-6	Benzyl Alcohol	30183 U	606-20-2	2,6-Dinitrotoluene	30183 U
95-50-1	1,2-Dichlorobenzene	30183 U	84-66-2	Diethyl Phthalate	30183 U
95-48-7	2-Methylphenol	30183 U	7005-72-3	4Chlorophenylphenyl ether	30183 U
39638-32-9	bis(2chloroisopropyl)ether	30183 U	86-73-7	Fluorene	10671 J
106-44-5	4-Methylphenol	30183 U	100-01-6	4-Nitroaniline	30183 U
621-64-7	N-nitroso-di-n-propylamine	30183 U	534-52-1	4,6-dinitro-2-methylphenol	30183 U
67-72-1	Hexachloroethane	30183 U	534-52-1	N-Nitrosodiphenylamine	30183 U
98-95-3	Nitrobenzene	30183 U	101-55-3	4bromophenylphenylether	30183 U
78-59-1	Isophorone	30183 U	118-74-1	Hexachlorobenzene	30183 U
88-75-5	2-Nitrophenol	30183 U	87-86-5	Pentachlorophenol	30183 U
105-67-9	2,4-Dimethylphenol	30183 U	85-01-8	Phenanthrene	108232
65-85-0	Benzoic Acid	30183 U	120-12-7	Anthracene	25915 J
111-91-1	bis(2-chlorethoxy)methane	30183 U	84-74-2	Di-n-butyl phthalate	30183 U
120-83-2	2,4-Dichlorophenol	30183 U	206-44-0	Fluoranthene	167683
120-82-1	1,2,4-Trichlorobenzene	30183 U	129-00-0	Pyrene	167683
91-20-3	Napthalene	30183 U	85-68-7	Butylbenzylphthalate	30183 U
106-47-8	4-Chloroaniline	30183 U	91-94-1	3,3'-Dichlorobenzidine	30183 U
87-68-3	Hexachlorobutadiene	30183 U	56-55-3	Benzo(a)anthracene	82317
59-50-7	4-Chloro-3-methylphenol	30183 U	117-81-7	bis-(2-ethylhexyl)phthalate	19817 J
91-57-6	2-Methylnapthalene	30183 U	218-01-9	Chrysene	86890
77-47-4	Hexachlorocyclopentadiene	30183 U	117-84-0	Di-n-octyl phthalate	30183 U
88-06-2	2,4,6-Trichlorophenol	30183 U	205-99-2	Benzo(b)fluoranthene	71646
95-95-4	2,4,5-Trichlorophenol	30183 U	207-08-9	Benzo(k)fluoranthene	41159
91-58-7	2-Chloronapthalene	30183 U	50-32-8	Benzo(a)pyrene	74695
88-74-4	2-Nitroaniline	30183 U	193-39-5	Indeno(1,2,3-cd)pyrene	91463
131-11-3	Dimethyl Phthalate	30183 U	53-70-3	Dibenzo(a,h)anthracene	30183 U
208-96-8	Acenapthylene	30183 U	191-24-2	Benzo(g,h,i) perylene	74695
99-09-2	3-Nitroaniline	30183 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

RECEIVED MAY 19 1987

CASE NUMBER: 6941 SAMPLE NO: EJ500

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: MED
DATE EXTRACTED: 3/27/87
DATE ANALYZED: 4/9&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 34

GPC CLEANUP: NO
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	120.0U
319-85-7	BETA - BHC	120.0U
319-86-8	DELTA - BHC	120.0U
58-89-9	GAMMA-BHC (LINDANE)	120.0U
76-44-8	HEPTACHLOR	120.0U
309-00-2	ALDRIN	120.0U
1024-57-3	HEPTACHLOR EPOXIDE	120.0U
959-98-8	ENDOSULFAN I	120.0U
60-57-1	DIELDRIN	240.0U
72-55-9	4,4'-DDE	240.0U
72-20-8	ENDRIN	240.0U
33213-65-9	ENDOSULFAN II	240.0U
72-54-8	4,4'-DDD	240.0U
1031-07-8	ENDOSULFAN SULFATE	240.0U
50-29-3	4,4'-DDT	240.0U
72-43-5	METHOXYCHLOR	1200 U
53494-70-5	ENDRIN KETONE	240.0U
57-74-9	CHLORDANE	1200.0U
8001-35-2	TOXAPHENE	2400.0U
12674-11-2	AROCLOR-1016	1200.0U
11104-28-2	AROCLOR-1221	1200.0U
11141-16-5	AROCLOR-1232	1200.0U
53469-21-9	AROCLOR-1242	1200.0U
12672-29-6	AROCLOR-1248	1200.0U
11097-69-1	AROCLOR-1254	~~2400.0U~~
11096-82-5	AROCLOR-1260	13000 OK PSC 5-21-87

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= .66 G
EXTRACT VOLUME:VT= 1000 UL

ry Name: PEI Associates, Inc.

No: 6441

Sample Number
EJ520

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RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CN ber	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	Unknown	V	279	8
	Hydrocarbon		395	10
0.				
1.				
2				
3.				
4				
5.				
6				
7				
8.				
21.				
2				
2				
24				
2				
26.				
2				
2				
29.				

99A

BORATORY NAME - PEI ASSOCIATES, INC.

SE NUMBER - 6941

SAMPLE NUMBER

EJ500

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	Unknown	BNA	476	20000
2.	"	BNA	508	9000
3.	Alkyl Benzene	BNA	530	10000
4.	Trimethyl Benzene isom	BNA	713	7000
5.	Unknown Boranes Cont.	BNA	969	10000
6.	Unknown	BNA	1602	9000
7.	"	BNA	1699	9000
8.	PNA	BNA	1803	7000
9.	"	BNA	1813	10000
10.	"	BNA	1836	10000
11.	"	BNA	1926	10000
12.	"	BNA	1941	10000
13.	"	BNA	2019	20000
14.	"	BNA	2429	10000
15.	"	BNA	2501	30000
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ory Name: PEI Associates, Inc.

No: 6941

Sample Number

EJ520

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Re

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

S	Compound Name	Fraction	Scan Number	Estimated Concent (ug/l o g/kg)
	NO VOLATILES FOUND			

1

2.

3

5.

8.

1.

26.

29.

87FK03514

175

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK462

RECEIVED MAR 19 1987

PEI Associates, Inc

Case No.: 5941
QC Report No.:
Contract No. 68-01- 7024
Date Sample Received: 3/18/87

Lab Sample ID No.: T7-03-104-03B
Sample Matrix: SOIL
Data Release Authorized by:

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.05
pH 7.0
Per Cent Moisture 8.0

CAS Number		UG/KG	CAS Number		UG/KG
7 87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	5 U
7- 83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	5 U
75-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	5 U
7 00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	5 U
7 09-2	Methylene Chloride-------	23 B	79-00-5	1,1,2-trichloroethane----	5 U
67-64-1	Acetone----------	130 USJ*	71-43-2	Benzene----------	5 U
-15-0	Carbon Disulfide---------	5 U	10061-01-5	Cis-1,3-dichloropropene--	5 U
-35-4	1,1-Dichloroethene-------	5 U	110-75-8	2-chloroethylvinylether--	11 U
75-35-3	1,1-Dichloroethane-------	5 U	75-25-2	Bromoform----------	5 U
156-60-5	Trans-1,2-dichloroethene-	5 U	108-10-1	4-methyl-2-pentanone-----	11 U
-93-3	Chloroform----------	5 U	591-78-6	2-hexanone----------	11 U
7-06-2	1,2-dichloroethane-------	5 U	127-18-4	Tetrachloroethene--------	5 U
78-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	5 U
-55-6	1,1,1-trichloroethane----	5 U	108-88-3	Toluene----------	32 USJ*
-23-5	Carbon Tetrachloride-----	5 U	108-90-7	Chlorobenzene----------	5 U
108-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	5 U
-27-4	Bromodichloromethane-----	5 U	100-42-5	Styrene----------	5 U
			1330-20-7	Total Xylenes----------	5 U

*per review by BCS

Data Reporting Qualifiers

alue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

SAMPLE NO
EK462
========

ORGANICS ANALYSIS DATA SHEET
Page 2

RECEIVED MAY 19 1987

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: MEDIUM
Date Extracted/ Prepared: 3/27/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 2000
Per Cent Moisture 8.0

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	19800 U	83-32-9	Acenapthene	19800 U
111-44-4	bis(2-chloroethyl)ether	19800 U	51-28-5	2,4-Dinitrophenol	19800 U
95-57-8	2-Chlorophenol	19800 U	100-02-7	4-Nitrophenol	19800 U
541-73-1	1,3-Dichlorobenzene	19800 U	132-64-9	Dibenzofuran	19800 U
106-47-7	1,4-Dichlorobenzene	19800 U	121-14-2	2,4-Dinitrotoluene	19800 U
100-51-6	Benzyl Alcohol	19800 U	606-20-2	2,6-Dinitrotoluene	19800 U
95-50-1	1,2-Dichlorobenzene	19800 U	84-66-2	Diethyl Phthalate	19800 U
95-48-7	2-Methylphenol	19800 U	7005-72-3	4Chlorophenylphenyl ether	19800 U
39638-32-9	bis(2chloroisopropyl)ether	19800 U	86-73-7	Fluorene	19800 U
106-44-5	4-Methylphenol	19800 U	100-01-6	4-Nitroaniline	19800 U
621-64-7	N-nitroso-di-n-propylamine	19800 U	534-52-1	4,6-dinitro-2-methylphenol	19800 U
67-72-1	Hexachloroethane	19800 U	534-52-1	N-Nitrosodiphenylamine	19800 U
98-95-3	Nitrobenzene	19800 U	101-55-3	4bromophenylphenylether	19800 U
78-59-1	Isophorone	19800 U	118-74-1	Hexachlorobenzene	19800 U
88-75-5	2-Nitrophenol	19800 U	87-86-5	Pentachlorophenol	19800 U
105-67-9	2,4-Dimethylphenol	19800 U	85-01-8	Phenanthrene	19800 U
65-85-0	Benzoic Acid	19800 U	120-12-7	Anthracene	19800 U
111-91-1	bis(2-chlorethoxy)methane	19800 U	84-74-2	Di-n-butyl phthalate	19800 U
120-83-2	2,4-Dichlorophenol	19800 U	206-44-0	Fluoranthene	19800 U
120-82-1	1,2,4-Trichlorobenzene	19800 U	129-00-0	Pyrene	19800 U
91-20-3	Napthalene	19800 U	85-68-7	Butylbenzylphthalate	19800 U
106-47-8	4-Chloroaniline	19800 U	91-94-1	3,3'-Dichlorobenzidine	19800 U
87-68-3	Hexachlorobutadiene	19800 U	56-55-3	Benzo(a)anthracene	19800 U
59-50-7	4-Chloro-3-methylphenol	19800 U	117-81-7	bis-(2-ethylhexyl)phthalate	19800 U
91-57-6	2-Methylnapthalene	19800 U	218-01-9	Chrysene	19800 U
77-47-4	Hexachlorocyclopentadiene	19800 U	117-84-0	Di-n-octyl phthalate	19800 U
88-06-2	2,4,6-Trichlorophenol	19800 U	205-99-2	Benzo(b)fluoranthene	19800 U
95-95-4	2,4,5-Trichlorophenol	19800 U	207-08-9	Benzo(k)fluoranthene	19800 U
91-58-7	2-Chloronapthalene	19800 U	50-32-8	Benzo(a)pyrene	19800 U
88-74-4	2-Nitroaniline	19800 U	193-39-5	Indeno(1,2,3-cd)pyrene	19800 U
131-11-3	Dimethyl Phthalate	19800 U	53-70-3	Dibenzo(a,h)anthracene	19800 U
208-96-8	Acenapthylene	19800 U	191-24-2	Benzo(g,h,i) perylene	19800 U
99-09-2	3-Nitroaniline	19800 U			

(1) Cannot be separated from diphenylamine

ORGANICS ANALYSIS DATA SHEET

Page 1

SAMPLE NO.
EK462RE

PEI Associates, Inc

Case No.: 6941
Lab Sample ID No.: T7-03-104-03B
QC Report No.:
Sample Matrix: SOIL
Contract No. 68-01- 7084
Data Release Authorized by: KG
Date Sample Received: 3/19/87

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.93
pH 7.0
Per Cent Moisture 8.0

CAS Number		UG/KG	CAS Number		UG/KG
-87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	5 U
-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	5 U
75-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	5 U
-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	5 U
-09-2	Methylene Chloride-------	8 B	79-00-5	1,1,2-trichloroethane----	5 U
67-64-1	Acetone----------	304 UJ*	71-43-2	Benzene----------	5 U
-15-0	Carbon Disulfide---------	5 U	10061-01-5	Cis-1,3-dichloropropene--	5 U
-35-4	1,1-Dichloroethene-------	5 U	110-75-8	2-chloroethylvinylether--	11 U
-35-3	1,1-Dichloroethane-------	5 U	75-25-2	Bromoform----------	5 U
156-60-5	Trans-1,2-dichloroethene-	5 U	108-10-1	4-methyl-2-pentanone-----	11 U
-93-3	Chloroform----------	10 UJ*	591-78-6	2-hexanone----------	11 U
07-06-2	1,2-dichloroethane-------	5 U	127-18-4	Tetrachloroethene--------	5 U
78-93-3	2-butanone----------	27 R*	79-34-5	1,1,2,2-tetrachloroethane	5 U
-55-6	1,1,1-trichloroethane----	5 U	108-88-3	Toluene----------	5 U
-23-5	Carbon Tetrachloride-----	5 U	108-90-7	Chlorobenzene----------	5 U
108-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	5 U
75-27-4	Bromodichloromethane-----	5 U	100-42-5	Styrene----------	5 U
			1330-20-7	Total Xylenes----------	5 U

Data Reporting Qualifiers

*per review by BAS

alue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

PEI ASSOCIATES, INC.

RECEIVED MAY 19 1987

CASE NUMBER: 6941 SAMPLE NO.: EK462

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION:	MED	GPC CLEANUP:	NO
DATE EXTRACTED:	3/27/87	SEP FUN EXT:	NO
DATE ANALYZED:	4/9&15/87	CONTINUOUS EXT.:	NO
CONC/DIL FACTOR:	NONE		
PERCENT MOISTURE:	8		

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	120.0U
319-85-7	BETA - BHC	120.0U
319-86-8	DELTA - BHC	120.0U
58-89-9	GAMMA-BHC (LINDANE)	120.0U
76-44-8	HEPTACHLOR	120.0U
309-00-2	ALDRIN	120.0U
1024-57-3	HEPTACHLOR EPOXIDE	120.0U
959-98-8	ENDOSULFAN I	120.0U
60-57-1	DIELDRIN	240.0U
72-55-9	4,4'-DDE	240.0U
72-20-8	ENDRIN	240.0U
33213-65-9	ENDOSULFAN II	240.0U
72-54-8	4,4'-DDD	240.0U
1031-07-8	ENDOSULFAN SULFATE	240.0U
50-29-3	4,4'-DDT	240.0U
72-43-5	METHOXYCHLOR	1200 U
53494-70-5	ENDRIN KETONE	240.0U
57-74-9	CHLORDANE	1200.0U
8001-35-2	TOXAPHENE	2400.0U
12674-11-2	AROCLOR-1016	1200.0U
11104-28-2	AROCLOR-1221	1200.0U
11141-16-5	AROCLOR-1232	1200.0U
53469-21-9	AROCLOR-1242	1200.0U
12672-29-6	AROCLOR-1248	1200.0U
11097-69-1	AROCLOR-1254	2400.0U
11096-82-5	AROCLOR-1260	2400.0U

VOLUME INJECTED:VI=	5.00	UL
VOLUME EXTRACTED:VS=	N/A	ML
WEIGHT EXTRACTED:WS=	.94	G
EXTRACT VOLUME:VT=	1000	UL

ry Name: PEI Associates, Inc.

No: 6901

Sample Number: EK462

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RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

ber	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	Hydrocarbon	V	395	6
	"		419	2
	"		452	5
	"		466	3
	oxygenated hydrocarbon		692	2
	unknown		732	6
3.				
4				
5.				
6				
7				
8.				
9				
1.				
24				
2				
26.				
2				
2				
29.				

y Name: PEI Associates, Inc.

D: 6401

Sample Number
EK462

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Re

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

ber	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	unknown	V	70	30

1.
2
3.
4
5.
9.
3

LABORATORY NAME - PEI ASSOCIATES, INC.

(SE NUMBER - 6941

****
* SAMPLE NUMBER *
* EK462 *
****

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	Unknown	BNA	437	200000
2.	"	BNA	479	300000
3.	"	BNA	686	400000
4.	Silaxane Compound	BNA	762	200000
5.	Unknown Boraxane Compound	BNA	972	900000
6.	Unknown	BNA	1401	1000000
7.	Chloro alkane	BNA	1415	200000
8.	Unknown	BNA	1622	500000
9.	"	BNA	1637	100000
10.	"	BNA	1730	200000
11.	"	BNA	1771	300000
12.	"	BNA	1798	200000
13.	"	BNA	1803	100000
14.	"	BNA	1817	200000
15.	"	BNA	1832	100000
16.	"	BNA	1859	100000
17.	"	BNA	1895	100000
18.	"	BNA	1957	200000
19.	"	BNA	2407	100000
20.	"	BNA	2997	4000000
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

87FK03S15 243

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK463

PEI Associates, Inc

Case No.: 6947
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-04B
Sample Matrix: SOIL
Data Release Authorized by:

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.95
pH 6.5
Per Cent Moisture 8.9

S Number		UG/KG	CAS Number		UG/KG
-97-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	5 U
-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	5 U
75-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	5 U
-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	5 U
-09-2	Methylene Chloride-------	20 B	79-00-5	1,1,2-trichloroethane----	5 U
-64-1	Acetone----------	9 J	71-43-2	Benzene----------	5 U
75-15-0	Carbon Disulfide---------	5 U	10061-01-5	Cis-1,3-dichloropropene--	5 U
-35-4	1,1-Dichloroethene-------	5 U	110-75-8	2-chloroethylvinylether--	11 U
-35-3	1,1-Dichloroethane-------	5 U	75-25-2	Bromoform----------	5 U
156-60-5	Trans-1,2-dichloroethene-	5 U	108-10-1	4-methyl-2-pentanone-----	11 U
-93-3	Chloroform----------	5 U	591-78-6	2-hexanone----------	11 U
07-06-2	1,2-dichloroethane-------	5 U	127-18-4	Tetrachloroethene--------	5 U
78-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	5 U
71-55-6	1,1,1-trichloroethane----	5 U	108-88-3	Toluene----------	12 UJ
-23-5	Carbon Tetrachloride-----	5 U	108-90-7	Chlorobenzene----------	5 U
08-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	5 U
75-27-4	Bromodichloromethane-----	5 U	100-42-5	Styrene----------	5 U
			1330-20-7	Total Xylenes----------	5 U

Data Reporting Qualifiers

alue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

ORGANICS ANALYSIS DATA SHEET

Page 1

SAMPLE NO.
EK63RE

RECEIVED MAY 19 1987

PEI Associates, Inc

Case No.: 6941

Lab Sample ID No.: T7-03-104-04B

QC Report No.:

Sample Matrix: SOIL

Contract No. 68-01- 7084

Data Release Authorized by:

Date Sample Received: 3/19/87

VOLATILE COMPOUNDS

Concentration: Low

Date Extracted/ Prepared: 3/23/87

Date Analyzed: 3/23/87

Conc/ Dil Factor 0.89

pH 6.5

Per Cent Moisture 8.9

CAS Number		UG/KG	CAS Number		UG/KG
37-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	5 U
33-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	5 U
5-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	5 U
00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	5 U
09-2	Methylene Chloride-------	8 B	79-00-5	1,1,2-trichloroethane----	5 U
7-64-1	Acetone----------	11 U	71-43-2	Benzene----------	5 U
15-0	Carbon Disulfide---------	5 U	10061-01-5	Cis-1,3-dichloropropene--	5 U
35-4	1,1-Dichloroethene-------	5 U	110-75-8	2-chloroethylvinylether--	11 U
35-3	1,1-Dichloroethane-------	5 U	75-25-2	Bromoform----------	5 U
-60-5	Trans-1,2-dichloroethene-	5 U	108-10-1	4-methyl-2-pentanone-----	11 U
93-3	Chloroform----------	11 U	591-78-6	2-hexanone----------	11 U
-06-2	1,2-dichloroethane-------	5 U	127-18-4	Tetrachloroethene--------	5 U
78-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	5 U
55-6	1,1,1-trichloroethane----	5 U	108-88-3	Toluene----------	5 U
23-5	Carbon Tetrachloride-----	5 U	108-90-7	Chlorobenzene----------	5 U
108-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	5 U
27-4	Bromodichloromethane-----	5 U	100-42-5	Styrene----------	5 U
			1330-20-7	Total Xylenes----------	5 U

Data Reporting Qualifiers

lue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

RECEIVED MAY 19 1987

SAMPLE NO
BK463

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 8.9

S Number		UG/KG	CAS Number		UG/KG
08-95-2	Phenol	725 U	83-32-9	Acenapthene	725 U
11-44-4	bis(2-chloroethyl)ether	725 U	51-28-5	2,4-Dinitrophenol	3513 U
95-57-8	2-Chlorophenol	725 U	100-02-7	4-Nitrophenol	3513 U
541-73-1	1,3-Dichlorobenzene	725 U	132-64-9	Dibenzofuran	725 U
06-47-7	1,4-Dichlorobenzene	725 U	121-14-2	2,4-Dinitrotoluene	725 U
00-51-6	Benzyl Alcohol	725 U	606-20-2	2,6-Dinitrotoluene	725 U
95-50-1	1,2-Dichlorobenzene	725 U	84-66-2	Diethyl Phthalate	725 U
95-48-7	2-Methylphenol	725 U	7005-72-34	Chlorophenylphenyl ether	725 U
638-32-9	bis(2chloroisopropyl)ether	725 U	86-73-7	Fluorene	725 U
106-44-5	4-Methylphenol	725 U	100-01-6	4-Nitroaniline	3513 U
621-64-7	N-nitroso-di-n-propylamine	725 U	534-52-1	4,6-dinitro-2-methylphenol	3513 U
67-72-1	Hexachloroethane	725 U	534-52-1	N-Nitrosodiphenylamine	725 U
98-95-3	Nitrobenzene	725 U	101-55-3	4bromophenylphenylether	725 U
78-59-1	Isophorone	725 U	118-74-1	Hexachlorobenzene	725 U
88-75-5	2-Nitrophenol	725 U	87-86-5	Pentachlorophenol	3513 U
105-67-9	2,4-Dimethylphenol	725 U	85-01-8	Phenanthrene	220 J
65-85-0	Benzoic Acid	3513 U	120-12-7	Anthracene	725 U
111-91-1	bis(2-chlorethoxy)methane	725 U	84-74-2	Di-n-butyl phthalate	725 U
120-83-2	2,4-Dichlorophenol	725 U	206-44-0	Fluoranthene	604 J
120-82-1	1,2,4-Trichlorobenzene	725 U	129-00-0	Pyrene	637 J
91-20-3	Napthalene	725 U	85-68-7	Butylbenzylphthalate	725 U
106-47-8	4-Chloroaniline	725 U	91-94-1	3,3'-Dichlorobenzidine	1427 U
87-68-3	Hexachlorobutadiene	725 U	56-55-3	Benzo(a)anthracene	725 U
59-50-7	4-Chloro-3-methylphenol	725 U	117-81-7	bis-(2-ethylhexyl)phthalate	725 U
91-57-6	2-Methylnapthalene	725 U	218-01-9	Chrysene	483 J
77-47-4	Hexachlorocyclopentadiene	725 U	117-84-0	Di-n-octyl phthalate	725 U
88-06-2	2,4,6-Trichlorophenol	725 U	205-99-2	Benzo(b)fluoranthene	220 J
95-95-4	2,4,5-Trichlorophenol	3513 U	207-08-9	Benzo(k)fluoranthene	725 U
91-58-7	2-Chloronapthalene	725 U	50-32-8	Benzo(a)pyrene	362 J
88-74-4	2-Nitroaniline	3513 U	193-39-5	Indeno(1,2,3-cd)pyrene	725 U
131-11-3	Dimethyl Phthalate	725 U	53-70-3	Dibenzo(a,h)anthracene	725 U
208-96-8	Acenapthylene	725 U	191-24-2	Benzo(g,h,i) perylene	725 U
99-09-2	3-Nitroaniline	3513 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

CASE NUMBER: 6941

SAMPLE NO.: EK463

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RECEIVED MAY 19 1987

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/9&15/87
DNC/DIL FACTOR: NONE
PERCENT MOISTURE: 9

GPC CLEANUP: yes
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	250.0

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 27.33 G
EXTRACT VOLUME:VT= 1000 UL

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IND	480269062

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Ashland Chemical Co.	1801 167th Street

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Hammond	IN	46320	Lake	089	01

09 COORDINATES LATITUDE	LONGITUDE	
31°35'30"	87°29'00"	Highland, IND Quadrangle (7.5 min)

10 DIRECTIONS TO SITE (Starting from nearest public road)
I-80 East to 152 North. Approx 1.3 mi. north on 152 to 167th St. East on 167th to 1801.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Machinery and Equipment Co.	Box 3132

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
San Francisco	CA	94119	(800) 792-2975

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Ashland Chemical Company	P.O. Box 2219

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
Columbus	OH	43216	(614) 889-3333

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

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ■ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
■ YES DATE 10/9/80 (MONTH DAY YEAR)
☐ NO

BY (Check all that apply)
■ A. EPA ☐ B. EPA CONTRACTOR ☐ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
☐ A. ACTIVE ■ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
unknown (BEGINNING YEAR) | 1980 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Asbestos (persistent/toxic)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Air (population)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☐ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Harry Atkinson	Division of Land Pollution Indiana State Board of Health	(317) 243-5132

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
David Vaughan	Ecology & Environment	US EPA	(312) 663-9415	9/19/85 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IND	980269062

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS _____
CUBIC YARDS Unknown
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	13 transformers containing PCB oils. These transformers were kept in a sealed building. There is no indication of any leaks. In April of 1987, attorneys representing the owners reported that these transformers had been stolen from the property. See ref #5		
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS	Unknown (insulation).		
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
IOC	Asbestos		Contained in building insulation		
OLW	Oils containing PCB's		See above "comments"		

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)

see attached source pages

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IND	980269062

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ■ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <100 — 04 NARRATIVE DESCRIPTION
See item F below. Asbestos fibers found in the soil could reach groundwater. Surficials soils in area are primarily sand and have high permeabilities making them susceptible to contamination.

01 ☐ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
Not likely. Nearest surface water is >1 mile away.

01 ■ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 100,000 — 04 NARRATIVE DESCRIPTION
Careless demolition of buildings on site could allow asbestos fibers to become airborne.

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

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION
Not likely. site is fenced

01 ■ F. CONTAMINATION OF SOIL — 02 ■ OBSERVED (DATE: Sept 1980) — ☐ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: <5 (Acres) — 04 NARRATIVE DESCRIPTION
Asbestos fibers detected in soil samples taken from site.

01 ■ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: <100 — 04 NARRATIVE DESCRIPTION
Entire area is on municipal. A few wells are used around 20th Ave. by Cline Ave. Not likely. Hammond's water supply (and surrounding communities') is Lake Michigan. Hammond supplies water to Highland, Munster, and Peoples Water Company.

01 ■ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 15-20 — 04 NARRATIVE DESCRIPTION
Careless demolition of buildings could cause workers to become exposed to airborne asbestos fibers.

01 ■ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ■ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 100,000 — 04 NARRATIVE DESCRIPTION
See Section C above.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IND	980269062

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

Not likely – N/A

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

Not likely – N/A

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

Not likely – N/A

01 ■ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 100,000
04 NARRATIVE DESCRIPTION

Asbestos could become uncontained if removal methods are not correctly utilized and present hazard to workers. See items C, F & H.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None known of or suspected.

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

None know of or suspected.

01 ■ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ■ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Since site is abandoned site security is greatly diminished. This could allow unauthorized dumping to occur.

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

III. TOTAL POPULATION POTENTIALLY AFFECTED: 100,600

IV. COMMENTS

At this time (sept 1985) demolition of on site buildings is proceeding. Work is being done by C and C Industrial Maint. of Hammond, under the supervision of US EPA and Hammond Air Pollution Control personnel.

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

See attached source pages

PA DOCUMENTATION SHEET

SITE Ashland Chemical
IDENTIFICATION NUMBER IND980769062

SOURCE NUMBER	DESCRIPTION OF SOURCE
1A, 1B, 1C, 1D	1A) QUAD NAME Highland IN SIZE: 7.5 or 15 YEAR 1968 (photorevised 1980) 1B) QUAD NAME Lake Calumet, ILL-IN SIZE: 7.5 or 15 YEAR 1968 (photorevised 1980) 1C) QUAD NAME Calumet City, ILL-IN SIZE: 7.5 or 15 YEAR 1968 (photorevised 1980) 1D) QUAD NAME _____ SIZE: 7.5 or 15 YEAR _____
2	Geoh drol [illegible] rain [illegible] ater Potentia [illegible] C Lake Cou[illegible] Indiana [illegible] diana [illegible] t of tu[illegible] sources [illegible] 1968
3	Groun[illegible] t[illegible] sour[illegible] of [illegible] diana [illegible] t. of [illegible] [illegible] ivision of Wat[illegible] 196
4	9 0 Survey of [illegible] t[illegible] Indiana [illegible] diana [illegible] of [illegible] Resources [illegible] of Water 19[illegible]
5	tter [illegible] re[illegible] of [illegible] F[illegible] [illegible] Ind. [illegible] Hea[illegible] [illegible]
6	[illegible] Va[illegible] (F[illegible] Mr. of [illegible] Hamm[illegible] A[illegible] llutio[illegible] Co[illegible] 18 15 (21) 853-630
	Letter from [illegible] at Industrial [illegible] Lab. [illegible] F[illegible] [illegible] llutio[illegible]
8	Indiana Census [illegible]
9	Letter f[illegible] [illegible] revisi[illegible] [illegible] E[illegible] [illegible] Indian[illegible] Bd. [illegible]
10	[illegible] tes[illegible] [illegible]
	G[illegible] C[illegible] Indus[illegible] (219 937-1006)

PA DOCUMENTATION SHEET

SITE Ashland Chemical Co
IDENTIFICATION NUMBER IND980269062

SOURCE NUMBER	DESCRIPTION OF SOURCE
11	Population Survey of Groundwater Usage In The Vicinity of Midco II, Gary, Indiana Ecology & Environment, Inc

rEI Associates, Inc.

6941

Sample Number EK463

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLAT			

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LABORATORY NAME - PEI ASSOCIATES, INC.

ASE NUMBER - 6941

SAMPLE NUMBER

EK463

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	UNKNOWN	BNA	431	4000
2.	Alkane	BNA	459	500
3.	UNKNOWN	BNA	491	50000
4.	Alkane	BNA	502	1000
5.	UNKNOWN	BNA	510	2000
6.	Alkane	BNA	518	2000
7.	"	BNA	533	4000
8.	Aromatic	BNA	622	700
9.	UNKNOWN	BNA	646	1000
10.	UNKNOWN Ketone	BNA	678	500
11.	Trimethyl Benzene isomer	BNA	713	500
12.	UNKNOWN Ketone	BNA	756	2000
13.	unknown Bromine cmpd.	BNA	969	1000
14.	UNKNOWN	BNA	1422	600
15.	"	BNA	1648	800
16.	UNKNOWN Acid	BNA	1814	20000
17.	UNKNOWN	BNA	1833	600
18.	"	BNA	1851	600
19.	UNKNOWN Acid	BNA	1894	40000
20.	Polynuclear Aromatic	BNA	2388	800
21.				
22.				
23.				
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30.				

ry Name: PEI Associates, Inc.

No: 6941

Sample Number: EK463

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Pe

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

ber	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	UNKNOWN	V	7002	10
5				
7				
8.				
9				
1.				
4.				
6.				
2				
29.				

87FK03516

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK464

RECEIVED 19 1987

PEI Associates, Inc

Lab Sample ID No.: T7-03-104-05B
Sample Matrix: SOIL
Data Release Authorized by:

Case No.: 6941
QC Report No.:
Contract No.: 68-01-7084
Date Sample Received: 3/19/87

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.80
pH 7.0
Per Cent Moisture 6.8

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane	11 U	78-87-5	1,2-dichloropropane	5 U
74-83-9	Bromomethane	11 U	10061-02-6	Trans-1,3-dichloropropene	5 U
75-01-4	Vinyl Chloride	11 U	79-01-6	Trichloroethene	5 U
75-00-3	Chloroethane	11 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	16 B	79-00-5	1,1,2-trichloroethane	5 U
67-64-1	Acetone	18 J*	71-43-2	Benzene	5 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	Cis-1,3-dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-chloroethylvinylether	11 U
75-35-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-dichloroethene	5 U	108-10-1	4-methyl-2-pentanone	11 U
78-93-3	Chloroform	5 U	591-78-6	2-hexanone	11 U
107-06-2	1,2-dichloroethane	5 U	127-18-4	Tetrachloroethene	5 U
78-93-3	2-butanone	11 U	79-34-5	1,1,2,2-tetrachloroethane	5 U
71-55-6	1,1,1-trichloroethane	5 U	108-88-3	Toluene	5 U
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	11 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	5 U	100-42-5	Styrene	5 U
			1330-20-7	Total Xylenes	5 U

*per review by BRJ

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

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SAMPLE NO
EK464

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 6.8

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	708 U	83-32-9	Acenapthene	708 U
111-44-4	bis(2-chloroethyl)ether	708 U	51-28-5	2,4-Dinitrophenol	3435 U
95-57-8	2-Chlorophenol	708 U	100-02-7	4-Nitrophenol	3435 U
541-73-1	1,3-Dichlorobenzene	708 U	132-64-9	Dibenzofuran	708 U
106-47-7	1,4-Dichlorobenzene	708 U	121-14-2	2,4-Dinitrotoluene	708 U
100-51-6	Benzyl Alcohol	708 U	606-20-2	2,6-Dinitrotoluene	708 U
95-50-1	1,2-Dichlorobenzene	708 U	84-66-2	Diethyl Phthalate	708 U
95-48-7	2-Methylphenol	708 U	7005-72-3	4Chlorophenylphenyl ether	708 U
39638-32-9	bis(2chloroisopropyl)ether	708 U	86-73-7	Fluorene	708 U
106-44-5	4-Methylphenol	708 U	100-01-6	4-Nitroaniline	3435 U
621-64-7	N-nitroso-di-n-propylamine	708 U	534-52-1	4,6-dinitro-2-methylphenol	3435 U
67-72-1	Hexachloroethane	708 U	534-52-1	N-Nitrosodiphenylamine	708 U
98-95-3	Nitrobenzene	708 U	101-55-3	4bromophenylphenylether	708 U
78-59-1	Isophorone	708 U	118-74-1	Hexachlorobenzene	708 U
88-75-5	2-Nitrophenol	708 U	87-86-5	Pentachlorophenol	3435 U
105-67-9	2,4-Dimethylphenol	708 U	85-01-8	Phenanthrene	708 U
65-85-0	Benzoic Acid	3435 U	120-12-7	Anthracene	708 U
111-91-1	bis(2-chlorethoxy)methane	708 U	84-74-2	Di-n-butyl phthalate	279 J
120-83-2	2,4-Dichlorophenol	708 U	206-44-0	Fluoranthene	708 U
120-82-1	1,2,4-Trichlorobenzene	708 U	129-00-0	Pyrene	708 U
91-20-3	Napthalene	708 U	85-68-7	Butylbenzylphthalate	708 U
106-47-8	4-Chloroaniline	708 U	91-94-1	3,3'-Dichlorobenzidine	1395 U
87-68-3	Hexachlorobutadiene	708 U	56-55-3	Benzo(a)anthracene	708 U
59-50-7	4-Chloro-3-methylphenol	708 U	117-81-7	bis-(2-ethylhexyl)phthalate	376 J
91-57-6	2-Methylnapthalene	708 U	218-01-9	Chrysene	708 U
77-47-4	Hexachlorocyclopentadiene	708 U	117-84-0	Di-n-octyl phthalate	708 U
88-06-2	2,4,6-Trichlorophenol	708 U	205-99-2	Benzo(b)fluoranthene	708 U
95-95-4	2,4,5-Trichlorophenol	3435 U	207-08-9	Benzo(k)fluoranthene	708 U
91-58-7	2-Chloronapthalene	708 U	50-32-8	Benzo(a)pyrene	708 U
88-74-4	2-Nitroaniline	3435 U	193-39-5	Indeno(1,2,3-cd)pyrene	708 U
131-11-3	Dimethyl Phthalate	708 U	53-70-3	Dibenzo(a,h)anthracene	708 U
208-96-8	Acenapthylene	708 U	191-24-2	Benzo(g,h,i) perylene	708 U
99-09-2	3-Nitroaniline	3435 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

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CASE NUMBER: 6941 SAMPLE NO.: EK464

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/9&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 7

GPC CLEANUP: YES
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	160.0U

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 27.93 G
EXTRACT VOLUME:VT= 1000 UL

b ıtory Name: PEI Associates, Inc.

r No: 6981

Sample Number: EK46 46

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NO VOLATILES FOUND			
4.				
7.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
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30.				

A RATORY NAME - PEI ASSOCIATES, INC.

A NUMBER - 6941

****
* SAMPLE NUMBER *
*
* EK464 *
****

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS umber	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	unknown	BNA	430	5000
2.	Alkane	BNA	460	500
3.	unknown	BNA	492	50000
4.	Alkane	BNA	503	1000
5.	Unknown Ketone	BNA	511	2000
6.	Alkane	BNA	519	2000
7.	"	BNA	533	4000
8.	unknown	BNA	622	800
9.	"	BNA	647	700
10.	Trimethyl Benzene isomer	BNA	713	500
11.	Alkane	BNA	925	4000
12.	unknown Boranc compd.	BNA	967	2000
13.	Alkane	BNA	1556	600
14.	Phthalate	BNA	1772	600
15.	Alkane	BNA	1864	800
16.	"	BNA	1943	300
17.	"	BNA	2052	400
18.	"	BNA	2196	900
19.	unknown	BNA	2691	300
20.	"	BNA	2932	1000
21.				
22.				
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ORGANICS ANALYSIS DATA SHEET

Page 1

SAMPLE NO.
EK455RE

PEI Associates, Inc

Case No.: 6941
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-06B
Sample Matrix: SOIL
Data Release Authorized by:

RECEIVED MAY 19 1987

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.96
pH 7.0
Per Cent Moisture 19.0

CAS Number		UG/KG	CAS Number		UG/KG
7 87-3	Chloromethane----------	12 U	78-87-5	1,2-dichloropropane--------	6 U
74-83-9	Bromomethane----------	12 U	10061-02-6	Trans 1,3-dichloropropene	6 U
01-4	Vinyl Chloride----------	12 U	79-01-6	Trichloroethene----------	6 U
00-3	Chloroethane----------	12 U	124-48-1	Dibromochloromethane-----	6 U
75-09-2	Methylene Chloride-------	12 B	79-00-5	1,1,2-trichloroethane----	6 U
67-64-1	Acetone----------	12 U	71-43-2	Benzene----------	6 U
-15-0	Carbon Disulfide---------	6 U	10061-01-5	Cis-1,3-dichloropropene--	6 U
-35-4	1,1-Dichloroethene-------	6 U	110-75-8	2-chloroethylvinylether--	12 U
75-35-3	1,1-Dichloroethane-------	6 U	75-25-2	Bromoform----------	6 U
-60-5	Trans-1,2-dichloroethene-	6 U	108-10-1	4-methyl-2-pentanone-----	12 U
-93-3	Chloroform----------	12 U*	591-78-6	2-hexanone----------	12 U
107-06-2	1,2-dichloroethane-------	6 U	127-18-4	Tetrachloroethene--------	6 U
-93-3	2-butanone----------	12 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
-55-6	1,1,1-trichloroethane----	6 U	108-88-3	Toluene----------	6 U
56-23-5	Carbon Tetrachloride-----	6 U	108-90-7	Chlorobenzene----------	6 U
108-05-4	Vinyl Acetate----------	12 U	100-41-4	Ethylbenzene----------	6 U
-27-4	Bromodichloromethane-----	6 U	100-42-5	Styrene----------	6 U
			1330-20-7	Total Xylenes----------	6 U

* per Review by BLS

ta Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

87FK03517

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK465

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PEI Associates, Inc
Case No. 6941
Lab Sample ID No.: T7-03-104-06B
QC Report No.
Sample Matrix: SOIL
Contract No. 68-01-7084
Data Release Authorized by: 119
Date Sample Received: 3/19/87
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.94
pH 7.0
Per Cent Moisture 19.0

CAS Number		UG/KG
-87-3	Chloromethane----------	12 U
74-83-9	Bromomethane----------	12 U
-01-4	Vinyl Chloride----------	12 U
-00-3	Chloroethane----------	12 U
-09-2	Methylene Chloride-------	25 B
67-64-1	Acetone----------	19 J*
-15-0	Carbon Disulfide---------	6 U
-35-4	1,1-Dichloroethene-------	6 U
75-35-3	1,1-Dichloroethane-------	6 U
6-60-5	Trans-1,2-dichloroethene-	6 U
-93-3	Chloroform----------	6 U
107-06-2	1,2-dichloroethane-------	6 U
78-93-3	2-butanone----------	12 U
-55-6	1,1,1-trichloroethane----	6 U
-23-5	Carbon Tetrachloride-----	6 U
108-05-4	Vinyl Acetate----------	12 U
-27-4	Bromodichloromethane-----	6 U

CAS Number		UG/KG
78-87-5	1,2-dichloropropane------	6 U
10061-02-6	Trans-1,3-dichloropropene	6 U
79-01-6	Trichloroethene----------	6 U
124-48-1	Dibromochloromethane-----	6 U
79-00-5	1,1,2-trichloroethane----	6 U
71-43-2	Benzene----------	6 U
10061-01-5	Cis-1,3-dichloropropene--	6 U
110-75-8	2-chloroethylvinylether--	12 U
75-25-2	Bromoform----------	6 U
108-10-1	4-methyl-2-pentanone-----	12 U
591-78-6	2-hexanone----------	12 U
127-18-4	Tetrachloroethene--------	6 U
79-34-5	1,1,2,2-tetrachloroethane	6 U
108-88-3	Toluene----------	6 U
108-90-7	Chlorobenzene----------	6 U
100-41-4	Ethylbenzene----------	6 U
100-42-5	Styrene----------	6 U
1330-20-7	Total Xylenes----------	6 U

* per Review by BLJ

ata Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

SAMPLE NO
EK465

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 19.0

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	815 U	83-32-9	Acenapthene	815 U
111-44-4	bis(2-chloroethyl)ether	815 U	51-28-5	2,4-Dinitrophenol	3951 U
95-57-8	2-Chlorophenol	815 U	100-02-7	4-Nitrophenol	3951 U
541-73-1	1,3-Dichlorobenzene	815 U	132-64-9	Dibenzofuran	815 U
106-47-7	1,4-Dichlorobenzene	815 U	121-14-2	2,4-Dinitrotoluene	815 U
100-51-6	Benzyl Alcohol	815 U	606-20-2	2,6-Dinitrotoluene	815 U
95-50-1	1,2-Dichlorobenzene	815 U	84-66-2	Diethyl Phthalate	815 U
95-48-7	2-Methylphenol	815 U	7005-72-3	4Chlorophenylphenyl ether	815 U
108638-32-9	bis(2chloroisopropyl)ether	815 U	86-73-7	Fluorene	815 U
106-44-5	4-Methylphenol	815 U	100-01-6	4-Nitroaniline	3951 U
621-64-7	N-nitroso-di-n-propylamine	815 U	534-52-1	4,6-dinitro-2-methylphenol	3951 U
67-72-1	Hexachloroethane	815 U	534-52-1	N-Nitrosodiphenylamine	815 U
98-95-3	Nitrobenzene	815 U	101-55-3	4bromophenylphenylether	815 U
78-59-1	Isophorone	815 U	118-74-1	Hexachlorobenzene	815 U
88-75-5	2-Nitrophenol	815 U	87-86-5	Pentachlorophenol	3951 U
105-67-9	2,4-Dimethylphenol	815 U	85-01-8	Phenanthrene	556 J
65-85-0	Benzoic Acid	3951 U	120-12-7	Anthracene	815 U
111-91-1	bis(2-chlorethoxy)methane	815 U	84-74-2	Di-n-butyl phthalate	815 U
120-83-2	2,4-Dichlorophenol	815 U	206-44-0	Fluoranthene	630 J
120-82-1	1,2,4-Trichlorobenzene	815 U	129-00-0	Pyrene	654 J
91-20-3	Napthalene	815 U	85-68-7	Butylbenzylphthalate	815 U
106-47-8	4-Chloroaniline	815 U	91-94-1	3,3'-Dichlorobenzidine	1605 U
87-68-3	Hexachlorobutadiene	815 U	56-55-3	Benzo(a)anthracene	815 U
59-50-7	4-Chloro-3-methylphenol	815 U	117-81-7	bis-(2-ethylhexyl)phthalate	778 J
91-57-6	2-Methylnapthalene	815 U	218-01-9	Chrysene	469 J
77-47-4	Hexachlorocyclopentadiene	815 U	117-84-0	Di-n-octyl phthalate	815 U
88-06-2	2,4,6-Trichlorophenol	815 U	205-99-2	Benzo(b)fluoranthene	815 U
95-95-4	2,4,5-Trichlorophenol	3951 U	207-08-9	Benzo(k)fluoranthene	815 U
91-58-7	2-Chloronapthalene	815 U	50-32-8	Benzo(a)pyrene	815 U
88-74-4	2-Nitroaniline	3951 U	193-39-5	Indeno(1,2,3-cd)pyrene	815 U
131-11-3	Dimethyl Phthalate	815 U	53-70-3	Dibenzo(a,h)anthracene	815 U
208-96-8	Acenapthylene	815 U	191-24-2	Benzo(g,h,i) perylene	815 U
99-09-2	3-Nitroaniline	3951 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

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CASE NUMBER: 6941 SAMPLE NO.: EK465

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
ONC/DIL FACTOR: NONE
RCENT MOISTURE: 19

GPC CLEANUP: YES
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	23.0
309-00-2	ALDRIN	41.0
1024-57-3	HEPTACHLOR EPOXIDE	9.6
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	23.0
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	88.0
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	160.0U

VOLUME INJECTED:VI=	5.00	UL
VOLUME EXTRACTED:VS=	N/A	ML
WEIGHT EXTRACTED:WS=	24.31	G
EXTRACT VOLUME:VT=	1000	UL

Name: PEI Associates, Inc.
6991

Sample Number
E8465

365

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

A u ber	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND	✓		

PEI ASSOCIATES, INC.

RECEIVED MAY 19 1987

CASE NUMBER: 6941 SAMPLE NO.: EK465

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 19

GPC CLEANUP: YES
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	23.0
309-00-2	ALDRIN	41.0
1024-57-3	HEPTACHLOR EPOXIDE	9.6
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	23.0
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	88.0
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	160.0U

VOLUME INJECTED:VI=	5.00	UL
VOLUME EXTRACTED:VS=	N/A	ML
WEIGHT EXTRACTED:WS=	24.31	G
EXTRACT VOLUME:VT=	1000	UL

L BORATORY NAME - PEI ASSOCIATES, INC.

CL.SE NUMBER - 6941

****
* SAMPLE NUMBER *
* EK465 *
****

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	UNKNOWN	BNA	430	3000
2.	"	BNA	491	40000
3.	Alkane	BNA	503	700
4.	UNKNOWN	BNA	511	2000
5.	Alkane	BNA	519	1000
6.	"	BNA	533	3000
7.	UNKNOWN	BNA	623	600
8.	" " "	BNA	647	900
9.	Trimethyl Benzene	BNA	714	400
10.	UNKNOWN	BNA	757	1000
11.	UNKNOWN	BNA	1394	400
12.	"	BNA	1648	500
13.	Alkane	BNA	1660	900
14.	Phthalate	BNA	1773	800
15.	PAH	BNA	1804	300
16.	UNKNOWN	BNA	1941	600
17.	Alkane	BNA	1989	400
18.	"	BNA	2049	600
19.	"	BNA	2212	600
20.	UNKNOWN	BNA	2476	500
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Case No: 6941

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SAMPLE NO
EK467

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 11.6

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	747 U	83-32-9	Acenapthene	747 U
111-44-4	bis(2-chloroethyl)ether	747 U	51-28-5	2,4-Dinitrophenol	3621 U
95-57-8	2-Chlorophenol	747 U	100-02-7	4-Nitrophenol	3621 U
541-73-1	1,3-Dichlorobenzene	747 U	132-64-9	Dibenzofuran	747 U
106-47-7	1,4-Dichlorobenzene	747 U	121-14-2	2,4-Dinitrotoluene	747 U
100-51-6	Benzyl Alcohol	747 U	606-20-2	2,6-Dinitrotoluene	747 U
95-50-1	1,2-Dichlorobenzene	747 U	84-66-2	Diethyl Phthalate	747 U
95-48-7	2-Methylphenol	747 U	7005-72-3	4Chlorophenylphenyl ether	747 U
39638-32-9	bis(2chloroisopropyl)ether	747 U	86-73-7	Fluorene	747 U
106-44-5	4-Methylphenol	747 U	100-01-6	4-Nitroaniline	3621 U
621-64-7	N-nitroso-di-n-propylamine	747 U	534-52-1	4,6-dinitro-2-methylphenol	3621 U
67-72-1	Hexachloroethane	747 U	534-52-1	N-Nitrosodiphenylamine	747 U
98-95-3	Nitrobenzene	747 U	101-55-3	4bromophenylphenylether	747 U
78-59-1	Isophorone	747 U	118-74-1	Hexachlorobenzene	747 U
88-75-5	2-Nitrophenol	747 U	87-86-5	Pentachlorophenol	3621 U
105-67-9	2,4-Dimethylphenol	747 U	85-01-8	Phenanthrene	747 U
65-85-0	Benzoic Acid	3621 U	120-12-7	Anthracene	747 U
111-91-1	bis(2-chlorethoxy)methane	747 U	84-74-2	Di-n-butyl phthalate	158 JB
120-83-2	2,4-Dichlorophenol	747 U	206-44-0	Fluoranthene	747 U
120-82-1	1,2,4-Trichlorobenzene	747 U	129-00-0	Pyrene	158 J
91-20-3	Napthalene	747 U	85-68-7	Butylbenzylphthalate	747 U
106-47-8	4-Chloroaniline	747 U	91-94-1	3,3'-Dichlorobenzidine	1471 U
87-68-3	Hexachlorobutadiene	747 U	56-55-3	Benzo(a)anthracene	747 U
59-50-7	4-Chloro-3-methylphenol	747 U	117-81-7	bis-(2-ethylhexyl)phthalate	645 J
91-57-6	2-Methylnapthalene	747 U	218-01-9	Chrysene	747 U
77-47-4	Hexachlorocyclopentadiene	747 U	117-84-0	Di-n-octyl phthalate	747 U
88-06-2	2,4,6-Trichlorophenol	747 U	205-99-2	Benzo(b)fluoranthene	747 U
95-95-4	2,4,5-Trichlorophenol	3621 U	207-08-9	Benzo(k)fluoranthene	747 U
91-58-7	2-Chloronapthalene	747 U	50-32-8	Benzo(a)pyrene	747 U
88-74-4	2-Nitroaniline	3621 U	193-39-5	Indeno(1,2,3-cd)pyrene	747 U
131-11-3	Dimethyl Phthalate	747 U	53-70-3	Dibenzo(a,h)anthracene	747 U
208-96-8	Acenapthylene	747 U	191-24-2	Benzo(g,h,i) perylene	747 U
99-09-2	3-Nitroaniline	3621 U			

(1) Cannot be separated from diphenylamine

lory Name: PEI Associates, Inc.
6991

Sample Number
EK466

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND			
3				
4.				
5				
7.				
20.				
25.				
7.				
28.				
9.				
0.				

BORATORY NAME - PEI ASSOCIATES, INC.

A! NUMBER - 6941

1/5 Dil

SAMPLE NUMBER

EK466 D

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS umber	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	Unknown	BNA	477	60000
2. 86-74-8	Carbazole	BNA	1764	6000
3.	Polynuclear Aromatic	BNA	1800	10000
4.	" " "	BNA	1810	30000
5.	" " "	BNA	1830	10000
6.	" " "	BNA	1862	6000
7.	" " "	BNA	1889	6000
8.	" " "	BNA	1923	9000
9.	" " "	BNA	1938	20000
10.	" " "	BNA	1946	10000
11.	" " "	BNA	1952	10000
12.	" " "	BNA	1970	7000
13.	" " "	BNA	2034	9000
14.	" " "	BNA	2039	7000
15. 205-12-8	Benzo (ghi) Fluoranthene	BNA	2043	10000
16.	PNA	BNA	2052	7000
17.	"	BNA	2107	10000
18.	"	BNA	2176	8000
19.	"	BNA	2216	10000
20.	"	BNA	2490	10000
21.				
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30.				

Case No: 6941

SAMPLE NO
EK466 D

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Concentration: Low
Sep. Funnel Extraction?N/A
Date Extracted/ Prepared: 3/25/87
Cont. Liq/ Liq. Extraction?N/A
Date Analyzed: 4/16/87
Conc/ Dil. Factor 333
MULTIPLY D.L. X 5
Per Cent Moisture 24.2

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	871 U	83-32-9	Acenapthene	1979 J
111-44-4	bis(2-chloroethyl)ether	871 U	51-28-5	2,4-Dinitrophenol	4223 U
95-57-8	2-Chlorophenol	871 U	100-02-7	4-Nitrophenol	4223 U
541-73-1	1,3-Dichlorobenzene	871 U	132-64-9	Dibenzofuran	920 J
106-47-7	1,4-Dichlorobenzene	871 U	121-14-2	2,4-Dinitrotoluene	871 U
100-51-6	Benzyl Alcohol	871 U	606-20-2	2,6-Dinitrotoluene	871 U
95-50-1	1,2-Dichlorobenzene	871 U	84-66-2	Diethyl Phthalate	871 U
95-48-7	2-Methylphenol	871 U	7005-72-3	4Chlorophenylphenyl ether	871 U
39638-32-9	bis(2chloroisopropyl)ether	871 U	86-73-7	Fluorene	2243 J
106-44-5	4-Methylphenol	871 U	100-01-6	4-Nitroaniline	4223 U
621-64-7	N-nitroso-di-n-propylamine	871 U	534-52-1	4,6-dinitro-2-methylphenol	4223 U
67-72-1	Hexachloroethane	871 U	534-52-1	N-Nitrosodiphenylamine	871 U
98-95-3	Nitrobenzene	871 U	101-55-3	4bromophenylphenylether	871 U
78-59-1	Isophorone	871 U	118-74-1	Hexachlorobenzene	871 U
88-75-5	2-Nitrophenol	871 U	87-86-5	Pentachlorophenol	4223 U
105-67-9	2,4-Dimethylphenol	871 U	85-01-8	Phenanthrene	21114
65-85-0	Benzoic Acid	4223 U	120-12-7	Anthracene	6994
111-91-1	bis(2-chlorethoxy)methane	871 U	84-74-2	Di-n-butyl phthalate	871 U
120-83-2	2,4-Dichlorophenol	871 U	206-44-0	Fluoranthene	29031
120-82-1	1,2,4-Trichlorobenzene	871 U	129-00-0	Pyrene	31671
91-20-3	Napthalene	871 U	85-68-7	Butylbenzylphthalate	871 U
106-47-8	4-Chloroaniline	871 U	91-94-1	3,3'-Dichlorobenzidine	1715 U
87-68-3	Hexachlorobutadiene	871 U	56-55-3	Benzo(a)anthracene	19794
59-50-7	4-Chloro-3-methylphenol	871 U	117-81-7	bis-(2-ethylhexyl)phthalate	871 U
91-57-6	2-Methylnapthalene	871 U	218-01-9	Chrysene	22433
77-47-4	Hexachlorocyclopentadiene	871 U	117-84-0	Di-n-octyl phthalate	871 U
88-06-2	2,4,6-Trichlorophenol	871 U	205-99-2	Benzo(b)fluoranthene	871 U
95-95-4	2,4,5-Trichlorophenol	4223 U	207-08-9	Benzo(k)fluoranthene	36949
91-58-7	2-Chloronapthalene	871 U	50-32-8	Benzo(a)pyrene	17155
88-74-4	2-Nitroaniline	4223 U	193-39-5	Indeno(1,2,3-cd)pyrene	871 U
131-11-3	Dimethyl Phthalate	871 U	53-70-3	Dibenzo(a,h)anthracene	2243 J
208-96-8	Acenapthylene	871 U	191-24-2	Benzo(g,h,i) perylene	871 U
99-09-2	3-Nitroaniline	4223 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

RECEIVED MAY 19 1987

CASE NUMBER: 6941 SAMPLE NO: EK466

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
CONC/DIL FACTOR: NONE
ERCENT MOISTURE: 24

GPC CLEANUP: yes
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	540.0

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 22.82 G
EXTRACT VOLUME:VT= 1000 UL

·atory Name: PEI Associates, Inc.

6941

Sample Number
EK467

500

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND			
).				
1.				
2.				
3				
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5				
6				
7.				
0.				
25.				
28.				

LABORATORY NAME - PEI ASSOCIATES, INC.

ASE NUMBER - 6941

SAMPLE NUMBER

EK467

502

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.		Unknown	BNA	428	4000
2.		Alkane	BNA	459	500
3.		Unknown	BNA	490	40000
4.		Alkane	BNA	502	900
5.		Unknown	BNA	510	2000
6.		Alkane	BNA	518	2000
7.		"	BNA	532	3000
8.		Unknown	BNA	620	500
9.		Unknown	BNA	647	300
10.		Trimethyl Benzene isomer	BNA	713	500
11.		Unknown	BNA	754	1000
12.		"	BNA	848	1000
13.		Phthalate	BNA	1772	600
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ORGANICS ANALYSIS DATA SHEET
Page 1

RECEIVED MAY 4 1987

SAMPLE NO.
EK467RE

PEI Associates, Inc
Lab Sample ID No.: T7-03-104-08B
Sample Matrix: SOIL
Data Release Authorized by: KG
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 3/25/87
Conc/ Dil Factor 0.90
pH 7.0
Per Cent Moisture 11.6

Case No.: 0341
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

CAS Number		UG/KG	CAS Number		UG/KG
4-87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	6 U
74-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	6 U
5-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	6 U
5-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	6 U
75-09-2	Methylene Chloride-------	25 B	79-00-5	1,1,2-trichloroethane----	6 U
7-64-1	Acetone----------	11 U	71-43-2	Benzene----------	6 U
5-15-0	Carbon Disulfide---------	6 U	10061-01-5	Cis-1,3-dichloropropene--	6 U
75-35-4	1,1-Dichloroethene-------	6 U	110-75-8	2-chloroethylvinylether--	11 U
75-35-3	1,1-Dichloroethane-------	6 U	75-25-2	Bromoform----------	6 U
56-60-5	Trans-1,2-dichloroethene-	6 U	108-10-1	4-methyl-2-pentanone-----	11 U
8-93-3	Chloroform----------	6 U	591-78-6	2-hexanone----------	11 U
107-06-2	1,2-dichloroethane-------	6 U	127-18-4	Tetrachloroethene--------	6 U
8-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
1-55-6	1,1,1-trichloroethane----	6 U	108-88-3	Toluene----------	6 U
56-23-5	Carbon Tetrachloride-----	6 U	108-90-7	Chlorobenzene----------	6 U
08-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	6 U
5-27-4	Bromodichloromethane-----	6 U	100-42-5	Styrene----------	6 U
			1330-20-7	Total Xylenes----------	6 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

bo ..tory Name: PEI Associates, Inc.

is No: 6941

Sample Number

EK4C

Re

501

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	Chlorofluorocarbon	V	199	10
2				
3				
4.				
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LABORATORY NAME - PEI ASSOCIATES, INC.

CASE NUMBER - 6941

SAMPLE NUMBER

EK465

RECEIVED

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

	CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.		UNKNOWN	BNA	430	3000
2.		"	BNA	491	40000
3.		Alkane	BNA	503	700
4.		UNKNOWN	BNA	511	2000
5.		Alkane	BNA	519	1000
6.		"	BNA	533	3000
7.		UNKNOWN	BNA	623	600
8.		"	BNA	647	900
9.		Trimethyl Benzene	BNA	714	400
10.		UNKNOWN	BNA	757	1000
11.		UNKNOWN	BNA	1394	400
12.		"	BNA	1648	500
13.		Alkane	BNA	1660	900
14.		Phthalate	BNA	1773	800
15.		PNA	BNA	1804	300
16.		UNKNOWN	BNA	1941	600
17.		Alkane	BNA	1989	400
18.		"	BNA	2049	600
19.		"	BNA	2212	600
20.		UNKNOWN	BNA	2476	500
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87F-K-5519

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ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK467

PEI Associates, Inc

Lab Sample ID No.: T7-03-104-08B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.83
pH 7.0
Per Cent Moisture 11.6

Case No.: 6041
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane	11 U	78-87-5	1,2-dichloropropane	6 U
74-83-9	Bromomethane	11 U	10061-02-6	Trans-1,3-dichloropropene	6 U
75-01-4	Vinyl Chloride	11 U	79-01-6	Trichloroethene	6 U
75-00-3	Chloroethane	11 U	124-48-1	Dibromochloromethane	6 U
75-09-2	Methylene Chloride	9 B	79-00-5	1,1,2-trichloroethane	6 U
67-64-1	Acetone	11 U	71-43-2	Benzene	6 U
75-15-0	Carbon Disulfide	6 U	10061-01-5	Cis-1,3-dichloropropene	6 U
75-35-4	1,1-Dichloroethene	6 U	110-75-8	2-chloroethylvinylether	11 U
75-35-3	1,1-Dichloroethane	6 U	75-25-2	Bromoform	6 U
156-60-5	Trans-1,2-dichloroethene	6 U	108-10-1	4-methyl-2-pentanone	11 U
78-93-3	Chloroform	12	591-78-6	2-hexanone	11 U
107-06-2	1,2-dichloroethane	6 U	127-18-4	Tetrachloroethene	6 U
78-93-3	2-butanone	11 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
71-55-6	1,1,1-trichloroethane	6 U	108-88-3	Toluene	8
56-23-5	Carbon Tetrachloride	6 U	108-90-7	Chlorobenzene	6 U
108-05-4	Vinyl Acetate	11 U	100-41-4	Ethylbenzene	6 U
75-27-4	Bromodichloromethane	6 U	100-42-5	Styrene	6 U
			1330-20-7	Total Xylenes	6 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

ol_tory Name: PEI Associates, Inc.

e D: 6441

Sample Number
EK465

Re

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND	V		
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87FK63518

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK446

PEI Associates, Inc
Lab Sample ID No.: T7-03-104-07B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.87
pH 7.0
Per Cent Moisture 24.2

Case No.: 694
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

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Number		UG/KG	CAS Number		UG/KG
7-3	Chloromethane	13 U	78-87-5	1,2-dichloropropane	7 U
3-9	Bromomethane	13 U	10061-02-6	Trans-1,3-dichloropropene	7 U
01-4	Vinyl Chloride	13 U	79-01-6	Trichloroethene	7 U
-00-3	Chloroethane	13 U	124-48-1	Dibromochloromethane	7 U
9-2	Methylene Chloride	16 B	79-00-5	1,1,2-trichloroethane	7 U
4-1	Acetone	13 U	71-43-2	Benzene	7 U
-15-0	Carbon Disulfide	7 U	10061-01-5	Cis-1,3-dichloropropene	7 U
35-4	1,1-Dichloroethene	7 U	110-75-8	2-chloroethylvinylether	13 U
35-3	1,1-Dichloroethane	7 U	75-25-2	Bromoform	7 U
5-60-5	Trans-1,2-dichloroethene	7 U	108-10-1	4-methyl-2-pentanone	13 U
93-3	Chloroform	28 UJ	591-78-6	2-hexanone	13 U
-05-2	1,2-dichloroethane	7 U	127-18-4	Tetrachloroethene	7 U
-93-3	2-butanone	13 U	79-34-5	1,1,2,2-tetrachloroethane	7 U
-55-6	1,1,1-trichloroethane	7 U	108-88-3	Toluene	7 U
-23-5	Carbon Tetrachloride	7 U	108-90-7	Chlorobenzene	7 U
3-05-4	Vinyl Acetate	13 U	100-41-4	Ethylbenzene	7 U
-27-4	Bromodichloromethane	7 U	100-42-5	Styrene	7 U
			1330-20-7	Total Xylenes	7 U

*pce Reviewed by BJS

ata Reporting Qualifiers

lue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

SAMPLE NO
EK466 D

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Concentration: Low
Sep. Funnel Extraction?N/A
Date Extracted/ Prepared: 3/25/87
Cont. Liq/ Liq. Extraction?N/A
Date Analyzed: 4/16/87
Conc/ Dil. Factor 333
MULTIPLY D.L. X 5
Per Cent Moisture 24.2

S Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	871 U	83-32-9	Acenapthene	1979 J
11-44-4	bis(2-chloroethyl)ether	871 U	51-28-5	2,4-Dinitrophenol	4223 U
95-57-8	2-Chlorophenol	871 U	100-02-7	4-Nitrophenol	4223 U
541-73-1	1,3-Dichlorobenzene	871 U	132-64-9	Dibenzofuran	920 J
106-47-7	1,4-Dichlorobenzene	871 U	121-14-2	2,4-Dinitrotoluene	871 U
100-51-6	Benzyl Alcohol	871 U	606-20-2	2,6-Dinitrotoluene	871 U
95-50-1	1,2-Dichlorobenzene	871 U	84-66-2	Diethyl Phthalate	871 U
95-48-7	2-Methylphenol	871 U	7005-72-3	4Chlorophenylphenyl ether	871 U
9638-32-9	bis(2chloroisopropyl)ether	871 U	86-73-7	Fluorene	2243 J
106-44-5	4-Methylphenol	871 U	100-01-6	4-Nitroaniline	4223 U
621-64-7	N-nitroso-di-n-propylamine	871 U	534-52-1	4,6-dinitro-2-methylphenol	4223 U
67-72-1	Hexachloroethane	871 U	534-52-1	N-Nitrosodiphenylamine	871 U
98-95-3	Nitrobenzene	871 U	101-55-3	4bromophenylphenylether	871 U
78-59-1	Isophorone	871 U	118-74-1	Hexachlorobenzene	871 U
88-75-5	2-Nitrophenol	871 U	87-86-5	Pentachlorophenol	4223 U
105-67-9	2,4-Dimethylphenol	871 U	85-01-8	Phenanthrene	21114
65-85-0	Benzoic Acid	4223 U	120-12-7	Anthracene	6994
111-91-1	bis(2-chlorethoxy)methane	871 U	84-74-2	Di-n-butyl phthalate	871 U
120-83-2	2,4-Dichlorophenol	871 U	206-44-0	Fluoranthene	29031
120-82-1	1,2,4-Trichlorobenzene	871 U	129-00-0	Pyrene	31671
91-20-3	Napthalene	871 U	85-68-7	Butylbenzylphthalate	871 U
106-47-8	4-Chloroaniline	871 U	91-94-1	3,3'-Dichlorobenzidine	1715 U
87-68-3	Hexachlorobutadiene	871 U	56-55-3	Benzo(a)anthracene	19794
59-50-7	4-Chloro-3-methylphenol	871 U	117-81-7	bis-(2-ethylhexyl)phthalate	871 U
91-57-6	2-Methylnapthalene	871 U	218-01-9	Chrysene	22433
77-47-4	Hexachlorocyclopentadiene	871 U	117-84-0	Di-n-octyl phthalate	871 U
88-06-2	2,4,6-Trichlorophenol	871 U	205-99-2	Benzo(b)fluoranthene	871 U
95-95-4	2,4,5-Trichlorophenol	4223 U	207-08-9	Benzo(k)fluoranthene	36949
91-58-7	2-Chloronapthalene	871 U	50-32-8	Benzo(a)pyrene	17155
88-74-4	2-Nitroaniline	4223 U	193-39-5	Indeno(1,2,3-cd)pyrene	871 U
131-11-3	Dimethyl Phthalate	871 U	53-70-3	Dibenzo(a,h)anthracene	2243 J
208-96-8	Acenapthylene	871 U	191-24-2	Benzo(g,h,i) perylene	871 U
99-09-2	3-Nitroaniline	4223 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

RECEIVED MAY 19 1987

CASE NUMBER: 6941 SAMPLE NO: EK466

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
DNC/DIL FACTOR: NONE
RCENT MOISTURE: 24

GPC CLEANUP: yes
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	~~160.0U~~
11096-82-5	AROCLOR-1260	540.0

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 22.82 G
EXTRACT VOLUME:VT= 1000 UL

Name: PEI Associates, Inc.
6991

Sample Number
EK466

RECEIVED MAY 19 1987

427

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND			
30.				

1/5 Dil

428

ATORY NAME - PEI ASSOCIATES, INC.

NUMBER - 6941

SAMPLE NUMBER

EK466 D

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
.	Unknown	BNA	477	60000
86-74-8	Carbazole	BNA	1764	6000
3.	Polynuclear Aromatic	BNA	1800	10000
4.	" " "	BNA	1810	30000
5.	" " "	BNA	1830	10000
6.	" " "	BNA	1862	6000
7.	" " "	BNA	1889	6000
8.	" " "	BNA	1923	9000
9.	" " "	BNA	1938	20000
10.	" " "	BNA	1946	10000
11.	" " "	BNA	1952	10000
12.	" " "	BNA	1970	7000
13.	" " "	BNA	2034	9000
14.	" " "	BNA	2039	7000
5 205-12-8	Benzo (ghi) Fluoranthene	BNA	2043	10000
16.	PNA	BNA	2052	7000
17.	"	BNA	2107	10000
18.	"	BNA	2176	8000
19.	"	BNA	2216	10000
20.	"	BNA	2490	10000
21.				
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87F-K-3519

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ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK467

PEI Associates, Inc

Case No.: 6041
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-08B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.83
pH 7.0
Per Cent Moisture 11.6

CAS Number		UG/KG	CAS Number.		UG/KG
74-87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane-------	6 U
4-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	6 U
5-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	6 U
5-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	6 U
5-09-2	Methylene Chloride-------	9 B	79-00-5	1,1,2-trichloroethane----	6 U
7-64-1	Acetone----------	11 U	71-43-2	Benzene----------	6 U
5-15-0	Carbon Disulfide---------	6 U	10061-01-5	Cis-1,3-dichloropropene--	6 U
75-35-4	1,1-Dichloroethene-------	6 U	110-75-8	2-chloroethylvinylether--	11 U
5-35-3	1,1-Dichloroethane-------	6 U	75-25-2	Bromoform----------	6 U
56-60-5	Trans-1,2-dichloroethene-	6 U	108-10-1	4-methyl-2-pentanone-----	11 U
8-93-3	Chloroform----------	12 U*	591-78-6	2-hexanone----------	11 U
07-06-2	1,2-dichloroethane------	6 U	127-18-4	Tetrachloroethene--------	6 U
8-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
1-55-6	1,1,1-trichloroethane----	6 U	108-88-3	Toluene----------	8 U*
56-23-5	Carbon Tetrachloride-----	6 U	108-90-7	Chlorobenzene----------	6 U
08-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	6 U
5-27-4	Bromodichloromethane-----	6 U	100-42-5	Styrene----------	6 U
			1330-20-7	Total Xylenes----------	6 U

* per Review by BKS

ata Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

ORGANICS ANALYSIS DATA SHEET
Page 1

RECEIVED MAY 1987

SAMPLE NO.
EK467RE

PEI Associates, Inc

Case No.: 6341
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-08B
Sample Matrix: SOIL
Data Release Authorized by: K9
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 3/25/87
Conc/ Dil Factor 0.90
pH 7.0
Per Cent Moisture 11.6

S Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	6 U
-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	6 U
-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	6 U
75-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	6 U
-09-2	Methylene Chloride-------	25 B	79-00-5	1,1,2-trichloroethane----	6 U
-64-1	Acetone----------	11 U	71-43-2	Benzene----------	6 U
5-15-0	Carbon Disulfide---------	6 U	10061-01-5	Cis-1,3-dichloropropene--	6 U
-35-4	1,1-Dichloroethene-------	6 U	110-75-8	2-chloroethylvinylether--	11 U
-35-3	1,1-Dichloroethane-------	6 U	75-25-2	Bromoform----------	6 U
56-60-5	Trans-1,2-dichloroethene-	6 U	108-10-1	4-methyl-2-pentanone-----	11 U
78-93-3	Chloroform----------	6 U	591-78-6	2-hexanone----------	11 U
07-06-2	1,2-dichloroethane-------	6 U	127-18-4	Tetrachloroethene--------	6 U
3-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
1-55-6	1,1,1-trichloroethane----	6 U	108-88-3	Toluene----------	6 U
5-23-5	Carbon Tetrachloride-----	6 U	108-90-7	Chlorobenzene----------	6 U
03-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	6 U
5-27-4	Bromodichloromethane-----	6 U	100-42-5	Styrene----------	6 U
			1330-20-7	Total Xylenes----------	6 U

ata Reporting Qualifiers

alue — 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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

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RECEIVED MAY 19 1987

SAMPLE NO
EK467

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 11.6

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	747 U	83-32-9	Acenapthene	747 U
111-44-4	bis(2-chloroethyl)ether	747 U	51-28-5	2,4-Dinitrophenol	3621 U
95-57-8	2-Chlorophenol	747 U	100-02-7	4-Nitrophenol	3621 U
541-73-1	1,3-Dichlorobenzene	747 U	132-64-9	Dibenzofuran	747 U
106-47-7	1,4-Dichlorobenzene	747 U	121-14-2	2,4-Dinitrotoluene	747 U
100-51-6	Benzyl Alcohol	747 U	606-20-2	2,6-Dinitrotoluene	747 U
95-50-1	1,2-Dichlorobenzene	747 U	84-66-2	Diethyl Phthalate	747 U
95-48-7	2-Methylphenol	747 U	7005-72-3	4Chlorophenylphenyl ether	747 U
9638-32-9	bis(2chloroisopropyl)ether	747 U	86-73-7	Fluorene	747 U
106-44-5	4-Methylphenol	747 U	100-01-6	4-Nitroaniline	3621 U
621-64-7	N-nitroso-di-n-propylamine	747 U	534-52-1	4,6-dinitro-2-methylphenol	3621 U
67-72-1	Hexachloroethane	747 U	534-52-1	N-Nitrosodiphenylamine	747 U
98-95-3	Nitrobenzene	747 U	101-55-3	4bromophenylphenylether	747 U
78-59-1	Isophorone	747 U	118-74-1	Hexachlorobenzene	747 U
88-75-5	2-Nitrophenol	747 U	87-86-5	Pentachlorophenol	3621 U
105-67-9	2,4-Dimethylphenol	747 U	85-01-8	Phenanthrene	747 U
65-85-0	Benzoic Acid	3621 U	120-12-7	Anthracene	747 U
111-91-1	bis(2-chlorethoxy)methane	747 U	84-74-2	Di-n-butyl phthalate	158 JB
120-83-2	2,4-Dichlorophenol	747 U	206-44-0	Fluoranthene	747 U
120-82-1	1,2,4-Trichlorobenzene	747 U	129-00-0	Pyrene	158 J
91-20-3	Napthalene	747 U	85-68-7	Butylbenzylphthalate	747 U
106-47-8	4-Chloroaniline	747 U	91-94-1	3,3'-Dichlorobenzidine	1471 U
87-68-3	Hexachlorobutadiene	747 U	56-55-3	Benzo(a)anthracene	747 U
59-50-7	4-Chloro-3-methylphenol	747 U	117-81-7	bis-(2-ethylhexyl)phthalate	645 J
91-57-6	2-Methylnapthalene	747 U	218-01-9	Chrysene	747 U
77-47-4	Hexachlorocyclopentadiene	747 U	117-84-0	Di-n-octyl phthalate	747 U
88-06-2	2,4,6-Trichlorophenol	747 U	205-99-2	Benzo(b)fluoranthene	747 U
95-95-4	2,4,5-Trichlorophenol	3621 U	207-08-9	Benzo(k)fluoranthene	747 U
91-58-7	2-Chloronapthalene	747 U	50-32-8	Benzo(a)pyrene	747 U
88-74-4	2-Nitroaniline	3621 U	193-39-5	Indeno(1,2,3-cd)pyrene	747 U
131-11-3	Dimethyl Phthalate	747 U	53-70-3	Dibenzo(a,h)anthracene	747 U
208-96-8	Acenapthylene	747 U	191-24-2	Benzo(g,h,i) perylene	747 U
99-09-2	3-Nitroaniline	3621 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

CASE NUMBER: 6941

SAMPLE NO.: EK467

499

RECEIVED 1 9 1987

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 11

GPC CLEANUP: yes
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	160.0U

VOLUME INJECTED:VI=	5.00	UL
VOLUME EXTRACTED:VS=	N/A	ML
WEIGHT EXTRACTED:WS=	26.55	G
EXTRACT VOLUME:VT=	1000	UL

y Name: PEI Associates, Inc.

N 6941

Sample Number: EK467

500

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NO VOLATILES FOUND			
2.				
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.				

ratory Name: PEI Associates, Inc.

o: 6941

Sample Number

EK4C

Re

501

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	Chloro fluoro carbon	V	199	10
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
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22				
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27				
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30				
31				
32				
33				
34				
35				

BORATORY NAME - PEI ASSOCIATES, INC.

SE NUMBER - 6941

****
* SAMPLE NUMBER *
* EK467 *
****

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	unknown	BNA	428	4000
2.	Alkane	BNA	459	500
3.	unknown	BNA	490	40000
4.	Alkane	BNA	502	900
5.	unknown	BNA	510	2000
6.	Alkane	BNA	518	2000
7.	"	BNA	532	3000
8.	unknown	BNA	620	500
9.	unknown	BNA	647	300
10.	Trimethyl Benzene isomer	BNA	713	500
11.	unknown	BNA	754	1000
12.	"	BNA	848	1000
13.	Phthalate	BNA	1772	600
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
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26.				
27.				
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29.				
30.				

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

RECEIVED MAY 19 1982

Date Received for Review: 5/19 Date Review Completed: 5/19

TO: Tom Kouris

FROM: Zena Gold-Kaufman ZGK

SUBJECT: Swift Adhesive
IN0126

Sample Description: Case #6941 - 8 soils

Project Data Status:

FIT Date Review Findings:

Note - this is a copy of the data package. The original has been sent back to sample management. PCB's were detected; the operator hand wrote the value in without initialling the entry. Until we receive an "initialled" copy all data that is handwritten + not initialled is on "hold"

Additional Comments:

Also - use RE samples (rerun) in lieu of non-RE samples

Book No. 6

Page No. 36

recycled paper

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CHICAGO, ILLINOIS

CHEMICAL EVALUATION FORM

SITE NAME: Swift Adhesive PAN# IN0126 DATE: 5/19

CASE # 6941 UNITS-. µg/kg REVIEWER: ZOK

TOX/ PERS	COMPOUND	CRDL	3-5xCRDL	EJ 499	EJ 499RE	EJ 500	EJ 500RE	EK 462	EK 462 RE	463
	Aroclor-1260			66000		13000				250
	Chloroform				31		24		10	
	Toluene							32		12
	2-Butanone								27	
				EK 463RE	EK 465	EK 465RE	EK 466			
	Chloroform			11		12	28			
	Heptachlor				23					
	Aldrin				41					
	Heptachlor Epoxide				96					
	4,4'DDE				23					
	4,4' DDT				88					
	Phenanthrene						21114			
	Anthracene						6994			
	Fluoranthene						29031			
	Pyrene						31671			
	Benzo(a)anthracene						19794			
	Chrysene						22433			
	Benzo(k)fluoranthene						36949			
	Benzo(a)pyrene						17155			

ecology and environment, inc.
CHICAGO, ILLINOIS

CHEMICAL EVALUATION FORM

SITE NAME: Swift Adhesive PAN# IN0126 DATE: 6/19

CASE # 6941 UNITS= µg/Kg REVIEWER: ZGK

TOX/ PERS	COMPOUND	CRDL	3-5xCRDL	EK 466	EK 467	EK 467				
	Aroclor-1260			540						
	Chloroform				12					
	Benzene				8					

87FK03512

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EJ499

PEI Associates, Inc

Case No.: 6341
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/16/87

Lab Sample ID No.: T7-03-104-01B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.89
pH 7.0
Per Cent Moisture 58.5

RECEIVED MAY 19 1987

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane	24 U	78-87-5	1,2-dichloropropane	12 U
74-83-9	Bromomethane	24 U	10061-02-6	Trans-1,3-dichloropropene	12 U
75-01-4	Vinyl Chloride	24 U	79-01-6	Trichloroethene	12 U
75-00-3	Chloroethane	24 U	124-48-1	Dibromochloromethane	12 U
75-09-2	Methylene Chloride	89 B	79-00-5	1,1,2-trichloroethane	12 U
67-64-1	Acetone	24 U	71-43-2	Benzene	12 U
75-15-0	Carbon Disulfide	12 U	10061-01-5	Cis-1,3-dichloropropene	12 U
75-35-4	1,1-Dichloroethene	12 U	110-75-8	2-chloroethylvinylether	24 U
75-35-3	1,1-Dichloroethane	12 U	75-25-2	Bromoform	12 U
156-60-5	Trans-1,2-dichloroethene	12 U	108-10-1	4-methyl-2-pentanone	24 U
78-93-3	Chloroform	12 U	591-78-6	2-hexanone	24 U
107-06-2	1,2-dichloroethane	12 U	127-18-4	Tetrachloroethene	12 U
78-93-3	2-butanone	24 U	79-34-5	1,1,2,2-tetrachloroethane	12 U
71-55-6	1,1,1-trichloroethane	12 U	108-88-3	Toluene	12 U
56-23-5	Carbon Tetrachloride	12 U	108-90-7	Chlorobenzene	12 U
108-05-4	Vinyl Acetate	24 U	100-41-4	Ethylbenzene	12 U
75-27-4	Bromodichloromethane	12 U	100-42-5	Styrene	12 U
			1330-20-7	Total Xylenes	12 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

SAMPLE NO
EJ499

RECEIVED MAY 19 1987

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: MEDIUM
Date Extracted/ Prepared: 3/27/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 2000
Per Cent Moisture 58.5

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	47711 U	83-32-9	Acenapthene	47711 U
111-44-4	bis(2-chloroethyl)ether	47711 U	51-28-5	2,4-Dinitrophenol	47711 U
95-57-8	2-Chlorophenol	47711 U	100-02-7	4-Nitrophenol	47711 U
541-73-1	1,3-Dichlorobenzene	47711 U	132-64-9	Dibenzofuran	47711 U
106-47-7	1,4-Dichlorobenzene	47711 U	121-14-2	2,4-Dinitrotoluene	47711 U
100-51-6	Benzyl Alcohol	47711 U	606-20-2	2,6-Dinitrotoluene	47711 U
95-50-1	1,2-Dichlorobenzene	47711 U	84-66-2	Diethyl Phthalate	47711 U
95-48-7	2-Methylphenol	47711 U	7005-72-34	Chlorophenylphenyl ether	47711 U
39638-32-9	bis(2chloroisopropyl)ether	47711 U	86-73-7	Fluorene	47711 U
106-44-5	4-Methylphenol	47711 U	100-01-6	4-Nitroaniline	47711 U
621-64-7	N-nitroso-di-n-propylamine	47711 U	534-52-1	4,6-dinitro-2-methylphenol	47711 U
67-72-1	Hexachloroethane	47711 U	534-52-1	N-Nitrosodiphenylamine	47711 U
98-95-3	Nitrobenzene	47711 U	101-55-3	4bromophenylphenylether	47711 U
78-59-1	Isophorone	47711 U	118-74-1	Hexachlorobenzene	47711 U
88-75-5	2-Nitrophenol	47711 U	87-86-5	Pentachlorophenol	47711 U
105-67-9	2,4-Dimethylphenol	47711 U	85-01-8	Phenanthrene	47711 U
65-85-0	Benzoic Acid	47711 U	120-12-7	Anthracene	47711 U
111-91-1	bis(2-chlorethoxy)methane	47711 U	84-74-2	Di-n-butyl phthalate	47711 U
120-83-2	2,4-Dichlorophenol	47711 U	206-44-0	Fluoranthene	22169 J
120-82-1	1,2,4-Trichlorobenzene	47711 U	129-00-0	Pyrene	17590 J
91-20-3	Napthalene	47711 U	85-68-7	Butylbenzylphthalate	47711 U
106-47-8	4-Chloroaniline	47711 U	91-94-1	3,3'-Dichlorobenzidine	47711 U
87-68-3	Hexachlorobutadiene	47711 U	56-55-3	Benzo(a)anthracene	10602 J
59-50-7	4-Chloro-3-methylphenol	47711 U	117-81-7	bis-(2-ethylhexyl)phthalate	47711 U
91-57-6	2-Methylnapthalene	47711 U	218-01-9	Chrysene	47711 U
77-47-4	Hexachlorocyclopentadiene	47711 U	117-84-0	Di-n-octyl phthalate	47711 U
88-06-2	2,4,6-Trichlorophenol	47711 U	205-99-2	Benzo(b)fluoranthene	47711 U
95-95-4	2,4,5-Trichlorophenol	47711 U	207-08-9	Benzo(k)fluoranthene	47711 U
91-58-7	2-Chloronapthalene	47711 U	50-32-8	Benzo(a)pyrene	47711 U
88-74-4	2-Nitroaniline	47711 U	193-39-5	Indeno(1,2,3-cd)pyrene	47711 U
131-11-3	Dimethyl Phthalate	47711 U	53-70-3	Dibenzo(a,h)anthracene	47711 U
208-96-8	Acenapthylene	47711 U	191-24-2	Benzo(g,h,i) perylene	47711 U
99-09-2	3-Nitroaniline	47711 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

33

CASE NUMBER: 6941

SAMPLE NO. EJ499

RECEIVED MAY 1 1987

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: MED
DATE EXTRACTED: 3/27/87
DATE ANALYZED: 4/9&14/87
CONC/DIL FACTOR: NONE
ERCENT MOISTURE: 59

GPC CLEANUP: NO
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	120.0U
319-85-7	BETA - BHC	120.0U
319-86-8	DELTA - BHC	120.0U
58-89-9	GAMMA-BHC (LINDANE)	120.0U
76-44-8	HEPTACHLOR	120.0U
309-00-2	ALDRIN	120.0U
1024-57-3	HEPTACHLOR EPOXIDE	120.0U
959-98-8	ENDOSULFAN I	120.0U
60-57-1	DIELDRIN	240.0U
72-55-9	4,4'-DDE	240.0U
72-20-8	ENDRIN	240.0U
33213-65-9	ENDOSULFAN II	240.0U
72-54-8	4,4'-DDD	240.0U
1031-07-8	ENDOSULFAN SULFATE	240.0U
50-29-3	4,4'-DDT	240.0U
72-43-5	METHOXYCHLOR	1200 U
53494-70-5	ENDRIN KETONE	240.0U
57-74-9	CHLORDANE	1200.0U
8001-35-2	TOXAPHENE	2400.0U
12674-11-2	AROCLOR-1016	1200.0U
11104-28-2	AROCLOR-1221	1200.0U
11141-16-5	AROCLOR-1232	1200.0U
53469-21-9	AROCLOR-1242	1200.0U
12672-29-6	AROCLOR-1248	1200.0U
11097-69-1	AROCLOR-1254	2400.0U
11096-82-5	AROCLOR-1260	66000.0

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= .43 G
EXTRACT VOLUME:VT= 1000 UL

or ory Name: PEI Associates, Inc.

e 6941

Sample Number

EJ499

:1

Organics Analysis Data Sheet
(Page 4)

RECEIVED MAY 19 1987

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	Chlorofluoro carbon	V	117	2.
2.				
3.				
4.				
5				
6				
7.				
8				
9.				
10				
11				
12.				
13				
14				
15.				
16				
17.				
18				
20.				
23.				
26.				
27.				
28.				
29.				
30.				

LABORATORY NAME - PEI ASSOCIATES, INC.

CASE NUMBER - 6941

SAMPLE NUMBER

EJ499

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	unknown	BNA	477	30000
2.	alkyl Benzene	BNA	531	20000
3.	unknown	BNA	1767	20000
4.	PNA	BNA	1774	30000
5.	unknown	BNA	1797	20000
6.	Alkane	BNA	1805	60000
7.	unknown	BNA	1812	30000
8.	"	BNA	1817	40000
9.	"	BNA	1837	20000
10.	"	BNA	1841	20000
11.	"	BNA	1846	20000
12.	"	BNA	1854	20000
13.	"	BNA	1883	20000
14.	"	BNA	1887	20000
15.	"	BNA	1896	30000
16.	"	BNA	1909	20000
17.	"	BNA	1929	30000
18.	"	BNA	1940	10000
19.	"	BNA	1961	10000
20.	"	BNA	1985	20000
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EJ499RE

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PEI Associates, Inc

Case No. 6941
QC Report No.
Contract No. 68-01-7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-01B
Sample Matrix: SOIL
Data Release Authorized by:

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/24/87
Date Analyzed: 3/24/87
Conc/ Dil Factor 0.83
pH 7.0
Per Cent Moisture 58.5

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane----------	24 U	78-87-5	1,2-dichloropropane------	12 U
74-83-9	Bromomethane----------	24 U	10061-02-6	Trans-1,3-dichloropropene	12 U
75-01-4	Vinyl Chloride----------	24 U	79-01-6	Trichloroethene----------	12 U
75-00-3	Chloroethane----------	24 U	124-48-1	Dibromochloromethane-----	12 U
75-09-2	Methylene Chloride-------	41 B	79-00-5	1,1,2-trichloroethane----	12 U
67-64-1	Acetone----------	24 U	71-43-2	Benzene----------	12 U
75-15-0	Carbon Disulfide---------	12 U	10061-01-5	Cis-1,3-dichloropropene--	12 U
75-35-4	1,1-Dichloroethene-------	12 U	110-75-8	2-chloroethylvinylether--	24 U
75-35-3	1,1-Dichloroethane-------	12 U	75-25-2	Bromoform----------	12 U
156-60-5	Trans-1,2-dichloroethene-	12 U	108-10-1	4-methyl-2-pentanone-----	24 U
67-66-3	Chloroform----------	31	591-78-6	2-hexanone----------	24 U
107-06-2	1,2-dichloroethane-------	12 U	127-18-4	Tetrachloroethene--------	12 U
78-93-3	2-butanone----------	24 U	79-34-5	1,1,2,2-tetrachloroethane	12 U
71-55-6	1,1,1-trichloroethane----	12 U	108-88-3	Toluene----------	12 U
56-23-5	Carbon Tetrachloride-----	12 U	108-90-7	Chlorobenzene----------	12 U
108-05-4	Vinyl Acetate----------	24 U	100-41-4	Ethylbenzene----------	12 U
75-27-4	Bromodichloromethane-----	12 U	100-42-5	Styrene----------	12 U
			1330-20-7	Total Xylenes----------	12 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Laboratory Name: PEI Associates, Inc.

6941

Sample Number

E5499

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	Unknown	V	124	10
			185	10
1				
2.				
3				
4				
5.				
6				
7.				
8				
9				
20.				
2				
2				
23.				
2				
2				
26				
28.				

87FK03513

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EJ500

PEI Associates, Inc

Case No.: 6941
QC Report No.:
Contract No. 68-01-7084
Date Sample Received: 3/19/87

RECEIVED MAY 19 1987

Lab Sample ID No.: T7-03-104-02B
Sample Matrix: SOIL
Data Release Authorized by: KG
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.89
pH 6.5
Per Cent Moisture 34.4

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane	15 U	78-87-5	1,2-dichloropropane	8 U
74-83-9	Bromomethane	15 U	10061-02-6	Trans-1,3-dichloropropene	8 U
75-01-4	Vinyl Chloride	15 U	79-01-6	Trichloroethene	8 U
75-00-3	Chloroethane	15 U	124-48-1	Dibromochloromethane	8 U
75-09-2	Methylene Chloride	38 B	79-00-5	1,1,2-trichloroethane	8 U
67-64-1	Acetone	15 U	71-43-2	Benzene	8 U
75-15-0	Carbon Disulfide	8 U	10061-01-5	Cis-1,3-dichloropropene	8 U
75-35-4	1,1-Dichloroethene	8 U	110-75-8	2-chloroethylvinylether	15 U
75-35-3	1,1-Dichloroethane	8 U	75-25-2	Bromoform	8 U
156-60-5	Trans-1,2-dichloroethene	8 U	108-10-1	4-methyl-2-pentanone	15 U
78-93-3	Chloroform	8 U	591-78-6	2-hexanone	15 U
107-06-2	1,2-dichloroethane	8 U	127-18-4	Tetrachloroethene	8 U
78-93-3	2-butanone	15 U	79-34-5	1,1,2,2-tetrachloroethane	8 U
71-55-6	1,1,1-trichloroethane	8 U	108-88-3	Toluene	8 U
56-23-5	Carbon Tetrachloride	8 U	108-90-7	Chlorobenzene	8 U
108-05-4	Vinyl Acetate	15 U	100-41-4	Ethylbenzene	8 U
75-27-4	Bromodichloromethane	8 U	100-42-5	Styrene	8 U
			1330-20-7	Total Xylenes	8 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

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SAMPLE NO
EJ 500

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Concentration: MEDIUM
Sep. Funnel Extraction?N/A
Date Extracted/ Prepared: 3/27/87
Cont. Liq/ Liq. Extraction?N/A
Date Analyzed: 4/15/87
Conc/ Dil. Factor 2000
MULTIPLY DETECTION LIMITS X 1
Per Cent Moisture 34.4

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	30183 U	83-32-9	Acenapthene	10518 J
111-44-4	bis(2-chloroethyl)ether	30183 U	51-28-5	2,4-Dinitrophenol	30183 U
95-57-8	2-Chlorophenol	30183 U	100-02-7	4-Nitrophenol	30183 U
541-73-1	1,3-Dichlorobenzene	30183 U	132-64-9	Dibenzofuran	4421 J
106-47-7	1,4-Dichlorobenzene	30183 U	121-14-2	2,4-Dinitrotoluene	30183 U
100-51-6	Benzyl Alcohol	30183 U	606-20-2	2,6-Dinitrotoluene	30183 U
95-50-1	1,2-Dichlorobenzene	30183 U	84-66-2	Diethyl Phthalate	30183 U
95-48-7	2-Methylphenol	30183 U	7005-72-3	4Chlorophenylphenyl ether	30183 U
39638-32-9	bis(2chloroisopropyl)ether	30183 U	86-73-7	Fluorene	10671 J
106-44-5	4-Methylphenol	30183 U	100-01-6	4-Nitroaniline	30183 U
621-64-7	N-nitroso-di-n-propylamine	30183 U	534-52-1	4,6-dinitro-2-methylphenol	30183 U
67-72-1	Hexachloroethane	30183 U	534-52-1	N-Nitrosodiphenylamine	30183 U
98-95-3	Nitrobenzene	30183 U	101-55-3	4bromophenylphenylether	30183 U
78-59-1	Isophorone	30183 U	118-74-1	Hexachlorobenzene	30183 U
88-75-5	2-Nitrophenol	30183 U	87-86-5	Pentachlorophenol	30183 U
105-67-9	2,4-Dimethylphenol	30183 U	85-01-8	Phenanthrene	108232
65-85-0	Benzoic Acid	30183 U	120-12-7	Anthracene	25915 J
111-91-1	bis(2-chlorethoxy)methane	30183 U	84-74-2	Di-n-butyl phthalate	30183 U
120-83-2	2,4-Dichlorophenol	30183 U	206-44-0	Fluoranthene	167683
120-82-1	1,2,4-Trichlorobenzene	30183 U	129-00-0	Pyrene	167683
91-20-3	Napthalene	30183 U	85-68-7	Butylbenzylphthalate	30183 U
106-47-8	4-Chloroaniline	30183 U	91-94-1	3,3'-Dichlorobenzidine	30183 U
87-68-3	Hexachlorobutadiene	30183 U	56-55-3	Benzo(a)anthracene	82317
59-50-7	4-Chloro-3-methylphenol	30183 U	117-81-7	bis-(2-ethylhexyl)phthalate	19817 J
91-57-6	2-Methylnapthalene	30183 U	218-01-9	Chrysene	86890
77-47-4	Hexachlorocyclopentadiene	30183 U	117-84-0	Di-n-octyl phthalate	30183 U
88-06-2	2,4,6-Trichlorophenol	30183 U	205-99-2	Benzo(b)fluoranthene	71646
95-95-4	2,4,5-Trichlorophenol	30183 U	207-08-9	Benzo(k)fluoranthene	41159
91-58-7	2-Chloronapthalene	30183 U	50-32-8	Benzo(a)pyrene	74695
88-74-4	2-Nitroaniline	30183 U	193-39-5	Indeno(1,2,3-cd)pyrene	91463
131-11-3	Dimethyl Phthalate	30183 U	53-70-3	Dibenzo(a,h)anthracene	30183 U
208-96-8	Acenapthylene	30183 U	191-24-2	Benzo(g,h,i) perylene	74695
99-09-2	3-Nitroaniline	30183 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

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CASE NUMBER: 6941 SAMPLE NO. EJ500

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION:	MED	GPC CLEANUP:	NO
DATE EXTRACTED:	3/27/87	SEP FUN EXT:	NO
DATE ANALYZED:	4/9&15/87	CONTINUOUS EXT.:	NO
CONC/DIL FACTOR:	NONE		
PERCENT MOISTURE:	34		

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	120.0U
319-85-7	BETA - BHC	120.0U
319-86-8	DELTA - BHC	120.0U
58-89-9	GAMMA-BHC (LINDANE)	120.0U
76-44-8	HEPTACHLOR	120.0U
309-00-2	ALDRIN	120.0U
1024-57-3	HEPTACHLOR EPOXIDE	120.0U
959-98-8	ENDOSULFAN I	120.0U
60-57-1	DIELDRIN	240.0U
72-55-9	4,4'-DDE	240.0U
72-20-8	ENDRIN	240.0U
33213-65-9	ENDOSULFAN II	240.0U
72-54-8	4,4'-DDD	240.0U
1031-07-8	ENDOSULFAN SULFATE	240.0U
50-29-3	4,4'-DDT	240.0U
72-43-5	METHOXYCHLOR	1200 U
53494-70-5	ENDRIN KETONE	240.0U
57-74-9	CHLORDANE	1200.0U
8001-35-2	TOXAPHENE	2400.0U
12674-11-2	AROCLOR-1016	1200.0U
11104-28-2	AROCLOR-1221	1200.0U
11141-16-5	AROCLOR-1232	1200.0U
53469-21-9	AROCLOR-1242	1200.0U
12672-29-6	AROCLOR-1248	1200.0U
11097-69-1	AROCLOR-1254	2400.0U
11096-82-5	AROCLOR-1260	13000

VOLUME INJECTED:VI=	5.00	UL
VOLUME EXTRACTED:VS=	N/A	ML
WEIGHT EXTRACTED:WS=	.66	G
EXTRACT VOLUME:VT=	1000	UL

ory Name: PEI Associates, Inc.

6441

Sample Number
EJ520

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

S Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	Unknown	V	279	8
	Hydrocarbon		355	10
3				
4.				
5				
6				
7.				
10				
1				
12.				
1				
15.				
18.				
23.				
4.				
5.				
26.				
7.				
8.				
29.				
30.				

99A

LABORATORY NAME - PEI ASSOCIATES, INC.

ASE NUMBER - 6941

SAMPLE NUMBER

EJ500

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	Unknown	BNA	476	20000
2.	"	BNA	508	9000
3.	Alkyl Benzene	BNA	530	10000
4.	Trimethyl Benzene isomer	BNA	713	7000
5.	Unknown Butanoic Contd	BNA	969	10000
6.	Unknown	BNA	1602	9000
7.	"	BNA	1699	9000
8.	PNA	BNA	1803	7000
9.	"	BNA	1813	10000
10.	"	BNA	1836	10000
11.	"	BNA	1926	10000
12.	"	BNA	1941	10000
13.	"	BNA	2019	20000
14.	"	BNA	2429	10000
15.	"	BNA	2501	30000
16.				
17.				
18.				
19.				
20.				
21.				
22.				
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30.				

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EJ500RC

RECEIVED MAY 1, 1987

PEI Associates, Inc
Lab Sample ID No.: T7-03-104-02B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.92
pH 6.5
Per Cent Moisture 34.4

Case No. 6941
QC Report No.:
Contract No. 68-01- 7084.
Date Sample Received: 3/19/87

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane----------	15 U	78-87-5	1,2-dichloropropane------	8 U
74-83-9	Bromomethane----------	15 U	10061-02-6	Trans-1,3-dichloropropene	8 U
75-01-4	Vinyl Chloride----------	15 U	79-01-6	Trichloroethene----------	8 U
75-00-3	Chloroethane----------	15 U	124-48-1	Dibromochloromethane-----	8 U
75-09-2	Methylene Chloride-------	20 6	79-00-5	1,1,2-trichloroethane----	8 U
67-64-1	Acetone----------	15 U	71-43-2	Benzene----------	8 U
75-15-0	Carbon Disulfide---------	8 U	10061-01-5	Cis-1,3-dichloropropene--	8 U
75-35-4	1,1-Dichloroethene-------	8 U	110-75-8	2-chloroethylvinylether--	15 U
75-35-3	1,1-Dichloroethane-------	8 U	75-25-2	Bromoform----------	8 U
156-60-5	Trans-1,2-dichloroethene-	8 U	108-10-1	4-methyl-2-pentanone-----	15 U
67-66-3	Chloroform----------	24	591-78-6	2-hexanone----------	15 U
107-06-2	1,2-dichloroethane-------	8 U	127-18-4	Tetrachloroethene--------	8 U
78-93-3	2-butanone----------	15 U	79-34-5	1,1,2,2-tetrachloroethane	8 U
71-55-6	1,1,1-trichloroethane----	8 U	108-88-3	Toluene----------	8 U
56-23-5	Carbon Tetrachloride-----	8 U	108-90-7	Chlorobenzene----------	8 U
108-05-4	Vinyl Acetate----------	15 U	100-41-4	Ethylbenzene----------	8 U
75-27-4	Bromodichloromethane-----	8 U	100-42-5	Styrene----------	8 U
			1330-20-7	Total Xylenes----------	8 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

b ıtory Name: PEI Associates, Inc.

s^ No: 6941

Sample Number
EJ500

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

AS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NO VOLATILES FOUND			
4.				
7.				
12.				
15.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

87FK03514

ORGANICS ANALYSIS DATA SHEET

Page 1

SAMPLE NO.
EK462

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PEI Associates, Inc

Lab Sample ID No.: T7-03-104-03B
Sample Matrix: SOIL
Data Release Authorized by:

Case No.: 5941
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/18/87

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.85
pH 7.0
Per Cent Moisture 8.0

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	5 U
74-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	5 U
75-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	5 U
75-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	5 U
75-09-2	Methylene Chloride-------	23 B	79-00-5	1,1,2-trichloroethane----	5 U
67-64-1	Acetone----------	130	71-43-2	Benzene----------	5 U
75-15-0	Carbon Disulfide---------	5 U	10061-01-5	Cis-1,3-dichloropropene--	5 U
75-35-4	1,1-Dichloroethene-------	5 U	110-75-8	2-chloroethylvinylether--	11 U
75-35-3	1,1-Dichloroethane-------	5 U	75-25-2	Bromoform----------	5 U
156-60-5	Trans-1,2-dichloroethene-	5 U	108-10-1	4-methyl-2-pentanone-----	11 U
67-66-3	Chloroform----------	5 U	591-78-6	2-hexanone----------	11 U
107-06-2	1,2-dichloroethane-------	5 U	127-18-4	Tetrachloroethene--------	5 U
78-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	5 U
71-55-6	1,1,1-trichloroethane----	5 U	108-88-3	Toluene----------	32
56-23-5	Carbon Tetrachloride-----	5 U	108-90-7	Chlorobenzene----------	5 U
108-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	5 U
75-27-4	Bromodichloromethane-----	5 U	100-42-5	Styrene----------	5 U
			1330-20-7	Total Xylenes----------	5 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

RECEIVED MAY 19 1987

SAMPLE NO
EK462
========

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: MEDIUM
Date Extracted/ Prepared: 3/27/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 2000
Per Cent Moisture 8.0

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	19800 U	83-32-9	Acenapthene	19800 U
111-44-4	bis(2-chloroethyl)ether	19800 U	51-28-5	2,4-Dinitrophenol	19800 U
95-57-8	2-Chlorophenol	19800 U	100-02-7	4-Nitrophenol	19800 U
541-73-1	1,3-Dichlorobenzene	19800 U	132-64-9	Dibenzofuran	19800 U
106-47-7	1,4-Dichlorobenzene	19800 U	121-14-2	2,4-Dinitrotoluene	19800 U
100-51-6	Benzyl Alcohol	19800 U	606-20-2	2,6-Dinitrotoluene	19800 U
95-50-1	1,2-Dichlorobenzene	19800 U	84-66-2	Diethyl Phthalate	19800 U
95-48-7	2-Methylphenol	19800 U	7005-72-34	Chlorophenylphenyl ether	19800 U
39638-32-9	bis(2chloroisopropyl)ether	19800 U	86-73-7	Fluorene	19800 U
106-44-5	4-Methylphenol	19800 U	100-01-6	4-Nitroaniline	19800 U
621-64-7	N-nitroso-di-n-propylamine	19800 U	534-52-1	4,6-dinitro-2-methylphenol	19800 U
67-72-1	Hexachloroethane	19800 U	534-52-1	N-Nitrosodiphenylamine	19800 U
98-95-3	Nitrobenzene	19800 U	101-55-3	4bromophenylphenylether	19800 U
78-59-1	Isophorone	19800 U	118-74-1	Hexachlorobenzene	19800 U
88-75-5	2-Nitrophenol	19800 U	87-86-5	Pentachlorophenol	19800 U
105-67-9	2,4-Dimethylphenol	19800 U	85-01-8	Phenanthrene	19800 U
65-85-0	Benzoic Acid	19800 U	120-12-7	Anthracene	19800 U
111-91-1	bis(2-chlorethoxy)methane	19800 U	84-74-2	Di-n-butyl phthalate	19800 U
120-83-2	2,4-Dichlorophenol	19800 U	206-44-0	Fluoranthene	19800 U
120-82-1	1,2,4-Trichlorobenzene	19800 U	129-00-0	Pyrene	19800 U
91-20-3	Napthalene	19800 U	85-68-7	Butylbenzylphthalate	19800 U
106-47-8	4-Chloroaniline	19800 U	91-94-1	3,3'-Dichlorobenzidine	19800 U
87-68-3	Hexachlorobutadiene	19800 U	56-55-3	Benzo(a)anthracene	19800 U
59-50-7	4-Chloro-3-methylphenol	19800 U	117-81-7	bis-(2-ethylhexyl)phthalate	19800 U
91-57-6	2-Methylnapthalene	19800 U	218-01-9	Chrysene	19800 U
77-47-4	Hexachlorocyclopentadiene	19800 U	117-84-0	Di-n-octyl phthalate	19800 U
88-06-2	2,4,6-Trichlorophenol	19800 U	205-99-2	Benzo(b)fluoranthene	19800 U
95-95-4	2,4,5-Trichlorophenol	19800 U	207-08-9	Benzo(k)fluoranthene	19800 U
91-58-7	2-Chloronapthalene	19800 U	50-32-8	Benzo(a)pyrene	19800 U
88-74-4	2-Nitroaniline	19800 U	193-39-5	Indeno(1,2,3-cd)pyrene	19800 U
131-11-3	Dimethyl Phthalate	19800 U	53-70-3	Dibenzo(a,h)anthracene	19800 U
208-96-8	Acenapthylene	19800 U	191-24-2	Benzo(g,h,i) perylene	19800 U
99-09-2	3-Nitroaniline	19800 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

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CASE NUMBER: 6941 SAMPLE NO.: EK462

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: MED
DATE EXTRACTED: 3/27/87
DATE ANALYZED: 4/9&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 8

GPC CLEANUP: NO
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	120.0U
319-85-7	BETA - BHC	120.0U
319-86-8	DELTA - BHC	120.0U
58-89-9	GAMMA-BHC (LINDANE)	120.0U
76-44-8	HEPTACHLOR	120.0U
309-00-2	ALDRIN	120.0U
1024-57-3	HEPTACHLOR EPOXIDE	120.0U
959-98-8	ENDOSULFAN I	120.0U
60-57-1	DIELDRIN	240.0U
72-55-9	4,4'-DDE	240.0U
72-20-8	ENDRIN	240.0U
33213-65-9	ENDOSULFAN II	240.0U
72-54-8	4,4'-DDD	240.0U
1031-07-8	ENDOSULFAN SULFATE	240.0U
50-29-3	4,4'-DDT	240.0U
72-43-5	METHOXYCHLOR	1200 U
53494-70-5	ENDRIN KETONE	240.0U
57-74-9	CHLORDANE	1200.0U
8001-35-2	TOXAPHENE	2400.0U
12674-11-2	AROCLOR-1016	1200.0U
11104-28-2	AROCLOR-1221	1200.0U
11141-16-5	AROCLOR-1232	1200.0U
53469-21-9	AROCLOR-1242	1200.0U
12672-29-6	AROCLOR-1248	1200.0U
11097-69-1	AROCLOR-1254	2400.0U
11096-82-5	AROCLOR-1260	2400.0U

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= .94 G
EXTRACT VOLUME:VT= 1000 UL

lory Name: PEI Associates, Inc.

se No: 6941

Sample Number: EK462

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
1	Hydrocarbon	V	395	6
2.	"		419	2
3	"		452	5
4.	"		466	3
5	oxygenated hydrocarbon		692	2
6	unknown		732	6
7.				
10.				
11				
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LABORATORY NAME - PEI ASSOCIATES, INC.

CASE NUMBER - 6941

SAMPLE NUMBER

EK462

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	Unknown	BNA	437	200000
2.	"	BNA	479	300000
3.	"	BNA	686	400000
4.	Silaxane Compound	BNA	762	200000
5.	Unknown Borane Compound	BNA	972	900000
6.	Unknown	BNA	1401	1000000
7.	Chloro alkane	BNA	1415	200000
8.	Unknown	BNA	1622	500000
9.	"	BNA	1637	100000
10.	"	BNA	1730	200000
11.	"	BNA	1771	300000
12.	"	BNA	1798	200000
13.	"	BNA	1803	100000
14.	"	BNA	1817	200000
15.	"	BNA	1832	100000
16.	"	BNA	1859	100000
17.	"	BNA	1895	100000
18.	"	BNA	1957	200000
19.	"	BNA	2407	100000
20.	"	BNA	2997	4000000
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ORGANICS ANALYSIS DATA SHEET

Page 1

SAMPLE NO.
EK462RE

PEI Associates, Inc

Case No.: 6941
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-03B
Sample Matrix: SOIL
Data Release Authorized by: KG

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.93
pH 7.0
Per Cent Moisture 8.0

CAS Number		UG/KG
74-87-3	Chloromethane----------	11 U
74-83-9	Bromomethane----------	11 U
75-01-4	Vinyl Chloride----------	11 U
75-00-3	Chloroethane----------	11 U
75-09-2	Methylene Chloride-------	8 B
67-64-1	Acetone----------	304
75-15-0	Carbon Disulfide---------	5 U
75-35-4	1,1-Dichloroethene-------	5 U
75-35-3	1,1-Dichloroethane-------	5 U
156-60-5	Trans-1,2-dichloroethene-	5 U
78-93-3	Chloroform----------	10
107-06-2	1,2-dichloroethane-------	5 U
78-93-3	2-butanone----------	27
71-55-6	1,1,1-trichloroethane----	5 U
56-23-5	Carbon Tetrachloride-----	5 U
108-05-4	Vinyl Acetate----------	11 U
75-27-4	Bromodichloromethane-----	5 U

CAS Number		UG/KG
78-87-5	1,2-dichloropropane------	5 U
10061-02-6	Trans-1,3-dichloropropene	5 U
79-01-6	Trichloroethene----------	5 U
124-48-1	Dibromochloromethane-----	5 U
79-00-5	1,1,2-trichloroethane----	5 U
71-43-2	Benzene----------	5 U
10061-01-5	Cis-1,3-dichloropropene--	5 U
110-75-8	2-chloroethylvinylether--	11 U
75-25-2	Bromoform----------	5 U
108-10-1	4-methyl-2-pentanone-----	11 U
591-78-6	2-hexanone----------	11 U
127-18-4	Tetrachloroethene--------	5 U
79-34-5	1,1,2,2-tetrachloroethane	5 U
108-88-3	Toluene----------	5 U
108-90-7	Chlorobenzene----------	5 U
100-41-4	Ethylbenzene----------	5 U
100-42-5	Styrene----------	5 U
1330-20-7	Total Xylenes----------	5 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

ory Name: PEI Associates, Inc.

No: 6441

Sample Number

EK462

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Re

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	unknown	V	701	30
2.				
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87FK03S15 243

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK463

PEI Associates, Inc

Case No.: 6341
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-04B
Sample Matrix: SOIL
Data Release Authorized by:

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.95
pH 6.5
Per Cent Moisture 8.9

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane	11 U	78-87-5	1,2-dichloropropane	5 U
74-83-9	Bromomethane	11 U	10061-02-6	Trans-1,3-dichloropropene	5 U
75-01-4	Vinyl Chloride	11 U	79-01-6	Trichloroethene	5 U
75-00-3	Chloroethane	11 U	124-48-1	Dibromochloromethane	5 U
75-09-2	Methylene Chloride	20 B	79-00-5	1,1,2-trichloroethane	5 U
67-64-1	Acetone	9 J	71-43-2	Benzene	5 U
75-15-0	Carbon Disulfide	5 U	10061-01-5	Cis-1,3-dichloropropene	5 U
75-35-4	1,1-Dichloroethene	5 U	110-75-8	2-chloroethylvinylether	11 U
75-35-3	1,1-Dichloroethane	5 U	75-25-2	Bromoform	5 U
156-60-5	Trans-1,2-dichloroethene	5 U	108-10-1	4-methyl-2-pentanone	11 U
78-93-3	Chloroform	5 U	591-78-6	2-hexanone	11 U
107-06-2	1,2-dichloroethane	5 U	127-18-4	Tetrachloroethene	5 U
78-93-3	2-butanone	11 U	79-34-5	1,1,2,2-tetrachloroethane	5 U
71-55-6	1,1,1-trichloroethane	5 U	108-88-3	Toluene	12
56-23-5	Carbon Tetrachloride	5 U	108-90-7	Chlorobenzene	5 U
108-05-4	Vinyl Acetate	11 U	100-41-4	Ethylbenzene	5 U
75-27-4	Bromodichloromethane	5 U	100-42-5	Styrene	5 U
			1330-20-7	Total Xylenes	5 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

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SAMPLE NO
EK463

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 8.9

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	725 U	83-32-9	Acenapthene	725 U
111-44-4	bis(2-chloroethyl)ether	725 U	51-28-5	2,4-Dinitrophenol	3513 U
95-57-8	2-Chlorophenol	725 U	100-02-7	4-Nitrophenol	3513 U
541-73-1	1,3-Dichlorobenzene	725 U	132-64-9	Dibenzofuran	725 U
106-47-7	1,4-Dichlorobenzene	725 U	121-14-2	2,4-Dinitrotoluene	725 U
100-51-6	Benzyl Alcohol	725 U	606-20-2	2,6-Dinitrotoluene	725 U
95-50-1	1,2-Dichlorobenzene	725 U	84-66-2	Diethyl Phthalate	725 U
95-48-7	2-Methylphenol	725 U	7005-72-3	4Chlorophenylphenyl ether	725 U
39638-32-9	bis(2chloroisopropyl)ether	725 U	86-73-7	Fluorene	725 U
106-44-5	4-Methylphenol	725 U	100-01-6	4-Nitroaniline	3513 U
621-64-7	N-nitroso-di-n-propylamine	725 U	534-52-1	4,6-dinitro-2-methylphenol	3513 U
67-72-1	Hexachloroethane	725 U	534-52-1	N-Nitrosodiphenylamine	725 U
98-95-3	Nitrobenzene	725 U	101-55-3	4bromophenylphenylether	725 U
78-59-1	Isophorone	725 U	118-74-1	Hexachlorobenzene	725 U
88-75-5	2-Nitrophenol	725 U	87-86-5	Pentachlorophenol	3513 U
105-67-9	2,4-Dimethylphenol	725 U	85-01-8	Phenanthrene	220 J
65-85-0	Benzoic Acid	3513 U	120-12-7	Anthracene	725 U
111-91-1	bis(2-chlorethoxy)methane	725 U	84-74-2	Di-n-butyl phthalate	725 U
120-83-2	2,4-Dichlorophenol	725 U	206-44-0	Fluoranthene	604 J
120-82-1	1,2,4-Trichlorobenzene	725 U	129-00-0	Pyrene	637 J
91-20-3	Napthalene	725 U	85-68-7	Butylbenzylphthalate	725 U
106-47-8	4-Chloroaniline	725 U	91-94-1	3,3'-Dichlorobenzidine	1427 U
87-68-3	Hexachlorobutadiene	725 U	56-55-3	Benzo(a)anthracene	725 U
59-50-7	4-Chloro-3-methylphenol	725 U	117-81-7	bis-(2-ethylhexyl)phthalate	725 U
91-57-6	2-Methylnapthalene	725 U	218-01-9	Chrysene	483 J
77-47-4	Hexachlorocyclopentadiene	725 U	117-84-0	Di-n-octyl phthalate	725 U
88-06-2	2,4,6-Trichlorophenol	725 U	205-99-2	Benzo(b)fluoranthene	220 J
95-95-4	2,4,5-Trichlorophenol	3513 U	207-08-9	Benzo(k)fluoranthene	725 U
91-58-7	2-Chloronapthalene	725 U	50-32-8	Benzo(a)pyrene	362 J
88-74-4	2-Nitroaniline	3513 U	193-39-5	Indeno(1,2,3-cd)pyrene	725 U
131-11-3	Dimethyl Phthalate	725 U	53-70-3	Dibenzo(a,h)anthracene	725 U
208-96-8	Acenapthylene	725 U	191-24-2	Benzo(g,h,i) perylene	725 U
99-09-2	3-Nitroaniline	3513 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

CASE NUMBER: 6941 SAMPLE NO.: EK463

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ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/9&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 9

GPC CLEANUP: YES
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	250.0

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 27.33 G
EXTRACT VOLUME:VT= 1000 UL

r... ry Name: PEI Associates, Inc.

No: 6941

Sample Number: EK463

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND	✓		
0.				
13.				
18.				
21.				
24.				
26.				
7.				
8.				
29.				
0.				

LABORATORY NAME - PEI ASSOCIATES, INC.

CASE NUMBER - 6941

****
* SAMPLE NUMBER *
* EK463 *
****

RECEIVED MAY 19 1987

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	Unknown	BNA	431	4000
2.	Alkane	BNA	459	500
3.	Unknown	BNA	491	50000
4.	Alkane	BNA	502	1000
5.	Unknown	BNA	510	2000
6.	Alkane	BNA	518	2000
7.	"	BNA	533	4000
8.	Aromatic	BNA	622	700
9.	Unknown	BNA	646	1000
10.	Unknown Ketone	BNA	678	500
11.	Trimethyl Benzene isomer	BNA	713	500
12.	Unknown Ketone	BNA	756	2000
13.	Unknown Benzene cmpd.	BNA	969	1000
14.	Unknown	BNA	1422	600
15.	"	BNA	1648	800
16.	Unknown Acid	BNA	1814	20000
17.	Unknown	BNA	1833	600
18.	"	BNA	1851	600
19.	Unknown Acid	BNA	1894	40000
20.	Polynuclear Aromatic	BNA	2388	800
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22.				
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ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK463RE

RECEIVED MAY 19 1987

PEI Associates, Inc

Case No.: 6941
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-04B
Sample Matrix: SOIL
Data Release Authorized by:

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.89
pH 6.5
Per Cent Moisture 8.9

CAS Number		UG/KG	CAS Number		UG/KG
87-3	Chloromethane----------	11 U	78-87-5	1,2-dichloropropane------	5 U
74-83-9	Bromomethane----------	11 U	10061-02-6	Trans-1,3-dichloropropene	5 U
-01-4	Vinyl Chloride----------	11 U	79-01-6	Trichloroethene----------	5 U
-00-3	Chloroethane----------	11 U	124-48-1	Dibromochloromethane-----	5 U
75-09-2	Methylene Chloride-------	8 B	79-00-5	1,1,2-trichloroethane----	5 U
7-64-1	Acetone----------	11 U	71-43-2	Benzene----------	5 U
5-15-0	Carbon Disulfide---------	5 U	10061-01-5	Cis-1,3-dichloropropene--	5 U
75-35-4	1,1-Dichloroethene-------	5 U	110-75-8	2-chloroethylvinylether--	11 U
75-35-3	1,1-Dichloroethane-------	5 U	75-25-2	Bromoform----------	5 U
56-60-5	Trans-1,2-dichloroethene-	5 U	108-10-1	4-methyl-2-pentanone-----	11 U
8-93-3	Chloroform----------	11	591-78-6	2-hexanone----------	11 U
107-06-2	1,2-dichloroethane-------	5 U	127-18-4	Tetrachloroethene--------	5 U
* 8-93-3	2-butanone----------	11 U	79-34-5	1,1,2,2-tetrachloroethane	5 U
1-55-6	1,1,1-trichloroethane----	5 U	108-88-3	Toluene----------	5 U
56-23-5	Carbon Tetrachloride-----	5 U	108-90-7	Chlorobenzene----------	5 U
108-05-4	Vinyl Acetate----------	11 U	100-41-4	Ethylbenzene----------	5 U
75-27-4	Bromodichloromethane-----	5 U	100-42-5	Styrene----------	5 U
			1330-20-7	Total Xylenes----------	5 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

ory Name: PEI Associates, Inc.

e No: 6941

Sample Number: EK463

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Pe

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

S Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	Unknown	V	700	10
4.				
5				
6				
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ORGANICS ANALYSIS DATA SHEET
Page 1

87FK03516

SAMPLE NO.
EK464
========

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PEI Associates, Inc

Lab Sample ID No.: T7-03-104-05B
Sample Matrix: SOIL
Data Release Authorized by:

Case No.: 6941
QC Report No.:
Contract No.: 68-01-7084
Date Sample Received: 3/19/87

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.80
pH 7.0
Per Cent Moisture 6.8

CAS Number		UG/KG
74-87-3	Chloromethane----------	11 U
74-83-9	Bromomethane----------	11 U
75-01-4	Vinyl Chloride----------	11 U
75-00-3	Chloroethane----------	11 U
75-09-2	Methylene Chloride-------	16 B
67-64-1	Acetone----------	18
75-15-0	Carbon Disulfide--------	5 U
75-35-4	1,1-Dichloroethene-------	5 U
75-35-3	1,1-Dichloroethane-------	5 U
156-60-5	Trans-1,2-dichloroethene-	5 U
78-93-3	Chloroform----------	5 U
107-06-2	1,2-dichloroethane-------	5 U
78-93-3	2-butanone----------	11 U
71-55-6	1,1,1-trichloroethane----	5 U
56-23-5	Carbon Tetrachloride-----	5 U
108-05-4	Vinyl Acetate----------	11 U
75-27-4	Bromodichloromethane-----	5 U

CAS Number		UG/KG
78-87-5	1,2-dichloropropane------	5 U
10061-02-6	Trans-1,3-dichloropropene	5 U
79-01-6	Trichloroethene----------	5 U
124-48-1	Dibromochloromethane-----	5 U
79-00-5	1,1,2-trichloroethane----	5 U
71-43-2	Benzene----------	5 U
10061-01-5	Cis-1,3-dichloropropene--	5 U
110-75-8	2-chloroethylvinylether--	11 U
75-25-2	Bromoform----------	5 U
108-10-1	4-methyl-2-pentanone-----	11 U
591-78-6	2-hexanone----------	11 U
127-18-4	Tetrachloroethene--------	5 U
79-34-5	1,1,2,2-tetrachloroethane	5 U
108-88-3	Toluene----------	5 U
108-90-7	Chlorobenzene----------	5 U
100-41-4	Ethylbenzene----------	5 U
100-42-5	Styrene----------	5 U
1330-20-7	Total Xylenes----------	5 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

RECEIVED MAY 19 1987

SAMPLE NO
EK464

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 6.8

CAS Number		UG/KG	CAS Number		UG/KG
108-95-2	Phenol	708 U	83-32-9	Acenapthene	708 U
111-44-4	bis(2-chloroethyl)ether	708 U	51-28-5	2,4-Dinitrophenol	3435 U
95-57-8	2-Chlorophenol	708 U	100-02-7	4-Nitrophenol	3435 U
541-73-1	1,3-Dichlorobenzene	708 U	132-64-9	Dibenzofuran	708 U
106-47-7	1,4-Dichlorobenzene	708 U	121-14-2	2,4-Dinitrotoluene	708 U
100-51-6	Benzyl Alcohol	708 U	606-20-2	2,6-Dinitrotoluene	708 U
95-50-1	1,2-Dichlorobenzene	708 U	84-66-2	Diethyl Phthalate	708 U
95-48-7	2-Methylphenol	708 U	7005-72-3	4Chlorophenylphenyl ether	708 U
39638-32-9	bis(2chloroisopropyl)ether	708 U	86-73-7	Fluorene	708 U
106-44-5	4-Methylphenol	708 U	100-01-6	4-Nitroaniline	3435 U
621-64-7	N-nitroso-di-n-propylamine	708 U	534-52-1	4,6-dinitro-2-methylphenol	3435 U
67-72-1	Hexachloroethane	708 U	534-52-1	N-Nitrosodiphenylamine	708 U
98-95-3	Nitrobenzene	708 U	101-55-3	4bromophenylphenylether	708 U
78-59-1	Isophorone	708 U	118-74-1	Hexachlorobenzene	708 U
88-75-5	2-Nitrophenol	708 U	87-86-5	Pentachlorophenol	3435 U
105-67-9	2,4-Dimethylphenol	708 U	85-01-8	Phenanthrene	708 U
65-85-0	Benzoic Acid	3435 U	120-12-7	Anthracene	708 U
111-91-1	bis(2-chlorethoxy)methane	708 U	84-74-2	Di-n-butyl phthalate	279 J
120-83-2	2,4-Dichlorophenol	708 U	206-44-0	Fluoranthene	708 U
120-82-1	1,2,4-Trichlorobenzene	708 U	129-00-0	Pyrene	708 U
91-20-3	Napthalene	708 U	85-68-7	Butylbenzylphthalate	708 U
106-47-8	4-Chloroaniline	708 U	91-94-1	3,3'-Dichlorobenzidine	1395 U
87-68-3	Hexachlorobutadiene	708 U	56-55-3	Benzo(a)anthracene	708 U
59-50-7	4-Chloro-3-methylphenol	708 U	117-81-7	bis-(2-ethylhexyl)phthalate	376 J
91-57-6	2-Methylnapthalene	708 U	218-01-9	Chrysene	708 U
77-47-4	Hexachlorocyclopentadiene	708 U	117-84-0	Di-n-octyl phthalate	708 U
88-06-2	2,4,6-Trichlorophenol	708 U	205-99-2	Benzo(b)fluoranthene	708 U
95-95-4	2,4,5-Trichlorophenol	3435 U	207-08-9	Benzo(k)fluoranthene	708 U
91-58-7	2-Chloronapthalene	708 U	50-32-8	Benzo(a)pyrene	708 U
88-74-4	2-Nitroaniline	3435 U	193-39-5	Indeno(1,2,3-cd)pyrene	708 U
131-11-3	Dimethyl Phthalate	708 U	53-70-3	Dibenzo(a,h)anthracene	708 U
208-96-8	Acenapthylene	708 U	191-24-2	Benzo(g,h,i) perylene	708 U
99-09-2	3-Nitroaniline	3435 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

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CASE NUMBER: 6941 SAMPLE NO.: EK464

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/9&15/87
CONC/DIL FACTOR: NONE
PERCENT MOISTURE: 7

GPC CLEANUP: YES
SEP FUN EXT.: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	160.0U

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 27.93 G
EXTRACT VOLUME:VT= 1000 UL

boratory Name: PEI Associates, Inc.

No: 6981

Sample Number: EK46 [illegible]

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
1.	NO VOLATILES FOUND			
2.				
3.				
4.				
5.				
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ORATORY NAME - PEI ASSOCIATES, INC.

ASE NUMBER - 6941

****
* SAMPLE NUMBER *
* EK464 *
****

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated CONCENTRATION (UG/L OR UG/KG)
1.	unknown	BNA	430	5000
2.	Alkane	BNA	460	500
3.	unknown	BNA	492	50000
4.	Alkane	BNA	503	1000
5.	Unknown Ketone	BNA	511	2000
6.	Alkane	BNA	519	2000
7.	"	BNA	533	4000
8.	unknown	BNA	622	800
9.	"	BNA	647	700
10.	Trimethyl Benzene isomer	BNA	713	500
11.	Alkane	BNA	925	4000
12.	unknown Boraane cmpd.	BNA	967	2000
13.	Alkane	BNA	1556	600
14.	Phthalate	BNA	1772	600
15.	Alkane	BNA	1864	800
16.	"	BNA	1943	300
17.	"	BNA	2052	400
18.	"	BNA	2196	900
19.	unknown	BNA	2691	300
20.	"	BNA	2932	1000
21.				
22.				
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87FK03517

ORGANICS ANALYSIS DATA SHEET

Page 1

SAMPLE NO.
EK465

RECEIVED 2/4/ 1 3 1987

PEI Associates, Inc

Case No.: 6941
QC Report No.:
Contract No. 68-01-7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-06B
Sample Matrix: SOIL
Data Release Authorized by: 119
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/20/87
Date Analyzed: 3/20/87
Conc/ Dil Factor 0.94
pH 7.0
Per Cent Moisture 19.0

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane----------	12 U	78-87-5	1,2-dichloropropane------	6 U
74-83-9	Bromomethane----------	12 U	10061-02-6	Trans-1,3-dichloropropene	6 U
01-4	Vinyl Chloride----------	12 U	79-01-6	Trichloroethene----------	6 U
00-3	Chloroethane----------	12 U	124-48-1	Dibromochloromethane-----	6 U
75-09-2	Methylene Chloride-------	25 B	79-00-5	1,1,2-trichloroethane----	6 U
-64-1	Acetone----------	19	71-43-2	Benzene----------	6 U
-15-0	Carbon Disulfide---------	6 U	10061-01-5	Cis-1,3-dichloropropene--	6 U
75-35-4	1,1-Dichloroethene-------	6 U	110-75-8	2-chloroethylvinylether--	12 U
5-35-3	1,1-Dichloroethane-------	6 U	75-25-2	Bromoform----------	6 U
56-60-5	Trans-1,2-dichloroethene-	6 U	108-10-1	4-methyl-2-pentanone-----	12 U
3-93-3	Chloroform----------	6 U	591-78-6	2-hexanone----------	12 U
107-06-2	1,2-dichloroethane-------	6 U	127-18-4	Tetrachloroethene--------	6 U
3-93-3	2-butanone----------	12 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
1-55-6	1,1,1-trichloroethane----	6 U	108-88-3	Toluene----------	6 U
56-23-5	Carbon Tetrachloride-----	6 U	108-90-7	Chlorobenzene----------	6 U
08-05-4	Vinyl Acetate----------	12 U	100-41-4	Ethylbenzene----------	6 U
5-27-4	Bromodichloromethane-----	6 U	100-42-5	Styrene----------	6 U
			1330-20-7	Total Xylenes----------	6 U

ata Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

Case No: 6941

SAMPLE NO
EK465

ORGANICS ANALYSIS DATA SHEET
Page 2

SEMIVOLATILE COMPOUNDS

GPC Cleanup? YES
Sep. Funnel Extraction?N/A
Cont. Liq/ Liq. Extraction?N/A

Concentration: Low
Date Extracted/ Prepared: 3/25/87
Date Analyzed: 4/15/87
Conc/ Dil. Factor 67
Per Cent Moisture 19.0

CAS Number		UG/KG	CAS Number		UG/KG
08-95-2	Phenol	815 U	83-32-9	Acenapthene	815 U
111-44-4	bis(2-chloroethyl)ether	815 U	51-28-5	2,4-Dinitrophenol	3951 U
95-57-8	2-Chlorophenol	815 U	100-02-7	4-Nitrophenol	3951 U
541-73-1	1,3-Dichlorobenzene	815 U	132-64-9	Dibenzofuran	815 U
106-47-7	1,4-Dichlorobenzene	815 U	121-14-2	2,4-Dinitrotoluene	815 U
100-51-6	Benzyl Alcohol	815 U	606-20-2	2,6-Dinitrotoluene	815 U
95-50-1	1,2-Dichlorobenzene	815 U	84-66-2	Diethyl Phthalate	815 U
95-48-7	2-Methylphenol	815 U	7005-72-3	Chlorophenylphenyl ether	815 U
39638-32-9	bis(2chloroisopropyl)ether	815 U	86-73-7	Fluorene	815 U
106-44-5	4-Methylphenol	815 U	100-01-6	4-Nitroaniline	3951 U
621-64-7	N-nitroso-di-n-propylamine	815 U	534-52-1	4,6-dinitro-2-methylphenol	3951 U
67-72-1	Hexachloroethane	815 U	534-52-1	N-Nitrosodiphenylamine	815 U
98-95-3	Nitrobenzene	815 U	101-55-3	4bromophenylphenylether	815 U
78-59-1	Isophorone	815 U	118-74-1	Hexachlorobenzene	815 U
88-75-5	2-Nitrophenol	815 U	87-86-5	Pentachlorophenol	3951 U
105-67-9	2,4-Dimethylphenol	815 U	85-01-8	Phenanthrene	556 J
65-85-0	Benzoic Acid	3951 U	120-12-7	Anthracene	815 U
111-91-1	bis(2-chlorethoxy)methane	815 U	84-74-2	Di-n-butyl phthalate	815 U
120-83-2	2,4-Dichlorophenol	815 U	206-44-0	Fluoranthene	630 J
120-82-1	1,2,4-Trichlorobenzene	815 U	129-00-0	Pyrene	654 J
91-20-3	Napthalene	815 U	85-68-7	Butylbenzylphthalate	815 U
106-47-8	4-Chloroaniline	815 U	91-94-1	3,3'-Dichlorobenzidine	1605 U
87-68-3	Hexachlorobutadiene	815 U	56-55-3	Benzo(a)anthracene	815 U
59-50-7	4-Chloro-3-methylphenol	815 U	117-81-7	bis-(2-ethylhexyl)phthalate	778 J
91-57-6	2-Methylnapthalene	815 U	218-01-9	Chrysene	469 J
77-47-4	Hexachlorocyclopentadiene	815 U	117-84-0	Di-n-octyl phthalate	815 U
88-06-2	2,4,6-Trichlorophenol	815 U	205-99-2	Benzo(b)fluoranthene	815 U
95-95-4	2,4,5-Trichlorophenol	3951 U	207-08-9	Benzo(k)fluoranthene	815 U
91-58-7	2-Chloronapthalene	815 U	50-32-8	Benzo(a)pyrene	815 U
88-74-4	2-Nitroaniline	3951 U	193-39-5	Indeno(1,2,3-cd)pyrene	815 U
131-11-3	Dimethyl Phthalate	815 U	53-70-3	Dibenzo(a,h)anthracene	815 U
208-96-8	Acenapthylene	815 U	191-24-2	Benzo(g,h,i) perylene	815 U
99-09-2	3-Nitroaniline	3951 U			

(1) Cannot be separated from diphenylamine

PEI ASSOCIATES, INC.

RECEIVED MAY 19 1987

CASE NUMBER: 6941 SAMPLE NO.: EK465

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
ONC/DIL FACTOR: NONE
RCENT MOISTURE: 19

GPC CLEANUP: YES
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	23.0
309-00-2	ALDRIN	41.0
1024-57-3	HEPTACHLOR EPOXIDE	9.6
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	23.0
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	88.0
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	160.0U

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 24.31 G
EXTRACT VOLUME:VT= 1000 UL

ory Name: PEI Associates, Inc.
6941

Sample Number
EK465

365

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Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

S ber	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND	✓		
2				
3				
4.				
7.				
22.				
25.				
130.				

ORGANICS ANALYSIS DATA SHEET

Page 1

SAMPLE NO.
EK455RE

PEI Associates, Inc

Case No.: 6941
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-06B
Sample Matrix: SOIL
Data Release Authorized by:

RECEIVED MAY 19 1987

VOLATILE COMPOUNDS

Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.96
pH 7.0
Per Cent Moisture 19.0

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane----------	12 U	78-87-5	1,2-dichloropropane-------	6 U
74-83-9	Bromomethane----------	12 U	10061-02-6	Trans-1,3-dichloropropene	6 U
5-01-4	Vinyl Chloride----------	12 U	79-01-6	Trichloroethene----------	6 U
5-00-3	Chloroethane----------	12 U	124-48-1	Dibromochloromethane-----	6 U
75-09-2	Methylene Chloride-------	12 B	79-00-5	1,1,2-trichloroethane----	6 U
7-64-1	Acetone----------	12 U	71-43-2	Benzene----------	6 U
5-15-0	Carbon Disulfide---------	6 U	10061-01-5	Cis-1,3-dichloropropene--	6 U
75-35-4	1,1-Dichloroethene-------	6 U	110-75-8	2-chloroethylvinylether--	12 U
5-35-3	1,1-Dichloroethane-------	6 U	75-25-2	Bromoform----------	6 U
56-60-5	Trans-1,2-dichloroethene-	6 U	108-10-1	4-methyl-2-pentanone-----	12 U
78-93-3	Chloroform----------	12	591-78-6	2-hexanone----------	12 U
107-06-2	1,2-dichloroethane-------	6 U	127-18-4	Tetrachloroethene--------	6 U
78-93-3	2-butanone----------	12 U	79-34-5	1,1,2,2-tetrachloroethane	6 U
71-55-6	1,1,1-trichloroethane----	6 U	108-88-3	Toluene----------	6 U
56-23-5	Carbon Tetrachloride-----	6 U	108-90-7	Chlorobenzene----------	6 U
108-05-4	Vinyl Acetate----------	12 U	100-41-4	Ethylbenzene----------	6 U
75-27-4	Bromodichloromethane-----	6 U	100-42-5	Styrene----------	6 U
			1330-20-7	Total Xylenes----------	6 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

tory Name: PEI Associates, Inc.

No: 6941

Sample Number
EK465

Re

RECEIVED MAY 19

Organics Analysis Data Sheet
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	Scan Number	Estimated Concentration (ug/l or ug/kg)
	NO VOLATILES FOUND	V		
1.				
2				
3				
4.				
5				
6				
7.				
10				
11				
12.				
13				
14				
15.				
18.				
23.				
26.				
27.				
28.				
29.				
30.				

87FK63518

ORGANICS ANALYSIS DATA SHEET
Page 1

SAMPLE NO.
EK426

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PEI Associates, Inc

Case No.: 6941
QC Report No.:
Contract No. 68-01- 7084
Date Sample Received: 3/19/87

Lab Sample ID No.: T7-03-104-07B
Sample Matrix: SOIL
Data Release Authorized by:
VOLATILE COMPOUNDS
Concentration: Low
Date Extracted/ Prepared: 3/23/87
Date Analyzed: 3/23/87
Conc/ Dil Factor 0.87
pH 7.0
Per Cent Moisture 24.2

CAS Number		UG/KG	CAS Number		UG/KG
74-87-3	Chloromethane----------	13 U	78-87-5	1,2-dichloropropane------	7 U
74-83-9	Bromomethane----------	13 U	10061-02-6	Trans-1,3-dichloropropene	7 U
75-01-4	Vinyl Chloride----------	13 U	79-01-6	Trichloroethene----------	7 U
75-00-3	Chloroethane----------	13 U	124-48-1	Dibromochloromethane-----	7 U
75-09-2	Methylene Chloride-------	16 B	79-00-5	1,1,2-trichloroethane----	7 U
67-64-1	Acetone----------	13 U	71-43-2	Benzene----------	7 U
75-15-0	Carbon Disulfide---------	7 U	10061-01-5	Cis-1,3-dichloropropene--	7 U
75-35-4	1,1-Dichloroethene-------	7 U	110-75-8	2-chloroethylvinylether--	13 U
75-35-3	1,1-Dichloroethane-------	7 U	75-25-2	Bromoform----------	7 U
156-60-5	Trans-1,2-dichloroethene-	7 U	108-10-1	4-methyl-2-pentanone-----	13 U
67-66-3	Chloroform----------	28	591-78-6	2-hexanone----------	13 U
107-06-2	1,2-dichloroethane-------	7 U	127-18-4	Tetrachloroethene--------	7 U
78-93-3	2-butanone----------	13 U	79-34-5	1,1,2,2-tetrachloroethane	7 U
71-55-6	1,1,1-trichloroethane----	7 U	108-88-3	Toluene----------	7 U
56-23-5	Carbon Tetrachloride-----	7 U	108-90-7	Chlorobenzene----------	7 U
108-05-4	Vinyl Acetate----------	13 U	100-41-4	Ethylbenzene----------	7 U
75-27-4	Bromodichloromethane-----	7 U	100-42-5	Styrene----------	7 U
			1330-20-7	Total Xylenes----------	7 U

Data Reporting Qualifiers

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 (not the instrument detection limit)

J — Indicates an estimated value. This flag is used 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.

C — This flag applies to pesticide parameters where the identification has been confirmed by GC/MSD

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

PEI ASSOCIATES, INC.

CASE NUMBER: 6941

SAMPLE NO.: EK467

499

RECEIVED JUN 19 1987

ORGANIC ANALYSIS DATA
PAGE 3
PESTICIDES/PCBS

CONCENTRATION: LOW
DATE EXTRACTED: 3/25/87
DATE ANALYZED: 4/10&15/87
CONC/DIL FACTOR: NONE
ERCENT MOISTURE: 12

GPC CLEANUP: yes
SEP FUN EXT: NO
CONTINUOUS EXT.: NO

CAS NUMBER	COMPOUND NAME	UG/KG
319-84-6	ALPHA - BHC	8.0U
319-85-7	BETA - BHC	8.0U
319-86-8	DELTA - BHC	8.0U
58-89-9	GAMMA-BHC (LINDANE)	8.0U
76-44-8	HEPTACHLOR	8.0U
309-00-2	ALDRIN	8.0U
1024-57-3	HEPTACHLOR EPOXIDE	8.0U
959-98-8	ENDOSULFAN I	8.0U
60-57-1	DIELDRIN	16.0U
72-55-9	4,4'-DDE	16.0U
72-20-8	ENDRIN	16.0U
33213-65-9	ENDOSULFAN II	16.0U
72-54-8	4,4'-DDD	16.0U
1031-07-8	ENDOSULFAN SULFATE	16.0U
50-29-3	4,4'-DDT	16.0U
72-43-5	METHOXYCHLOR	80.0U
53494-70-5	ENDRIN KETONE	16.0U
57-74-9	CHLORDANE	80.0U
8001-35-2	TOXAPHENE	160.0U
12674-11-2	AROCLOR-1016	80.0U
11104-28-2	AROCLOR-1221	80.0U
11141-16-5	AROCLOR-1232	80.0U
53469-21-9	AROCLOR-1242	80.0U
12672-29-6	AROCLOR-1248	80.0U
11097-69-1	AROCLOR-1254	160.0U
11096-82-5	AROCLOR-1260	160.0U

VOLUME INJECTED:VI= 5.00 UL
VOLUME EXTRACTED:VS= N/A ML
WEIGHT EXTRACTED:WS= 26.55 G
EXTRACT VOLUME:VT= 1000 UL