6 pg.

NUS CORPORATION

A Halliburton Company

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PROJECT FOR PERFORMANCE OF REMEDIAL RESPONSE ACTIVITIES AT UNCONTROLLED HAZARDOUS SUBSTANCE FACILITIES—ZONE 1

NUS CORPORATION
SUPERFUND DIVISION

AR100155

1A.

ORIGINAL
(Red)

R-585-6-5-14

SITE INSPECTION OF EASTERN DIVERSIFIED METALS PREPARED UNDER

TDD NO. F3-8402-08
EPA NO. PA-989
CONTRACT NO. 68-01-6699

FOR THE

HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

SEPTEMBER 19, 1985

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY	REVIEWED BY	APPROVED BY
MARCIA IRWIN HEALTH & SAFETY COOR. PUBLIC HEALTH SPECIALIST	THOMAS FROMM ASSISTANT MANAGER	GARTH GLENN MANAGER, FIT III

AR100156

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ORIGINAL
(Red)

Site Name: Eastern Diversified Mtls
TDD No.: F3-8402-08

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SECTION 1

1.0 INTRODUCTION

1.1 Authorization

NUS Corporation performed this work under Environmental Protection Agency Contract No. 68-01-6699. This specific report was prepared in accordance with Technical Directive Document No. F3-8402-08 for the Eastern Diversified Metals site located in Schuylkill County, Hometown, Pennsylvania.

1.2 Scope of Work

NUS FIT III was tasked to conduct a site inspection and complete an Hazard Ranking System (HRS) for the Eastern Diversified Metals site. The site inspection was conducted by FIT III on April 12, 1984. The HRS was completed under a separate TDD No. (F3-8502-09).

1.3 Summary

The Eastern Diversified Metals site was used from 1966 until 1977 to dispose of insulation waste from a copper wire recycling operation. It is estimated that 157 million pounds of "fluff" (waste wire insulation material) were disposed of in an open pile. The approximate dimensions of this pile were 500 by 3,000 by 60 feet. The waste pile began to produce a phenolic leachate. In 1974, as a result of a consent agreement with the Pennsylvania Department of Environmental Resources (PA DER), a wastewater treatment plant, diversion ditches, and a groundwater interceptor were installed. The surface impoundment associated with the wastewater treatment plant is subject to hydraulic overloads into a tributary to the Little Schuylkill River.

The Pennsylvania Geologic Survey Water Well Inventory for Schuylkill County and the single monitoring well (MW) on site indicate that wells in the study area produce groundwater, under confined conditions, from shales, siltstones, and sandstones of the Mauch Chunk Formation. The Mauch Chunk is noted as perhaps the most important water-bearing formation in Schuylkill County due to its areal extent and fractured nature. The interconnection of the Mauch Chunk with adjacent formations cannot be determined with available data. Similarly, information is not available to indicate that the Little Schuylkill River is a groundwater divide.

Samples were collected during the site inspection conducted by NUS FIT III on April 12, 1984. The major concerns posed by the identified contaminants are the degradation of the groundwater and the contamination of the tributary to the Little Schuylkill River. Some residents in the area use groundwater as a potable water supply. The river is used for recreational fishing. Recognized or suspect human and animal carcinogens were among the identified organic priority pollutants.

SECTION 2

AR100162

2.0 THE SITE

2.1 Location

The Eastern Diversified Metals site is located approximately 1,000 feet off Lincoln Avenue in Schuylkill County, Hometown, Pennsylvania.

2.2 Site Layout

The Eastern Diversified Metals site occupies approximately 25 acres. The site can be accessed via a paved road off Lincoln Avenue, immediately south of the United Parcel Service (UPS) building. Approximately 900 feet down the access road, off to the right, is a building that was once used by Diversified Industries, Incorporated, but is now used as a warehouse. Approximately 1,000 feet down the access road from Lincoln Avenue, the pavement ends. The dirt road continues but a gate blocks site entrance. To the right of the access road is an extremely large waste pile. The dimensions of the waste pile are approximately 500 feet wide by 3,000 feet long by 60 feet high. Leachate diversion ditches are located on the northern and southern boundaries of the waste pile. In addition, a surface water diversion ditch is located on the northern boundary of the site between the leachate diversion ditch and the ConRail railroad tracks. To the south, a groundwater interceptor is located between the leachate diversion ditch and the access road. The water treatment plant is located on the southwest border of the site. A holding lagoon is located next to the treatment plant.

2.3 Ownership History

Prior to 1966, the property now known as the Eastern Diversified Metals site was owned by a manufacturing company. Background information did not identify the name of the company. In 1966, the property was purchased and run by Diversified Industries, Incorporated, which is based in St. Louis, Missouri. In 1974, the deed was turned over to Theodore Sall, Incorporated, whose main responsibility at this point is to run the water treatment plant.

2.4 Site Use History

Prior to 1966, the Eastern Diversified Metals site was owned by a manufacturing company that used the building. According to John Koin, the treatment plant caretaker, the remainder of the land was a vacant lot. On the other hand, at the time of the site inspection, John Laskoski of PA DER explained that he found documentation suggesting that the area had once been used as a landfill.

In 1966, Diversified Industries, Incorporated began a copper wire recycling operation at the site. The plant received wire from A T & T. This wire was ground up and sent through an air and water separator to remove the waste insulating materials from the copper wire. This waste material, known as fluff, was then skimmed off the top and deposited on the lot behind the building. The wire was then recycled and sold.

After the construction of the site's water treatment plant in 1974, sludge from the wastewater treatment process was also placed on the waste pile. In September 1977, Diversified Industries, Incorporated ceased the wire recycling operation and dumping of fluff also stopped. The dumping of sludge at this site continued until March 1983.

2.5 Permit and Regulatory Action History

In March 1974, Diversified Industries, Incorporated was issued, and agreed to, a PA DER Bureau of Water Quality Management Consent Order. This consent agreement led to the installation of a water treatment plant, diversion ditches, and a groundwater interceptor.

The treatment plant then applied for and was issued an NPDES permit (PA 0070327) and a Water Quality Management permit (5474203) to discharge into the tributary to the Little Schuylkill River. According to PA DER, the NPDES permit has occasionally been violated when the discharge limits for phenols were exceeded. These permits are presently held by Theodore Sall, Incorporated.

In 1983, the PA DER Bureau of Solid Waste Management issued a notice of violation concerning the disposal of water treatment plant sludge on the Eastern Diversified Metals site. This problem was resolved when Theodore Sall contracted a company to haul the sludge. The sludge is now being taken to the E. I. DuPont de Nemours and Company Chambers Works site in Deepwater, New Jersey.

2.6 Remedial Action To Date

In 1974, as per a consent agreement with PA DER, a water treatment plant was constructed. In addition, leachate diversion ditches, a groundwater interceptor, and a surface water diversion ditch were also installed. This work was performed by Todd Giddings and Associates from State College, Pennsylvania.

The surface water diversion ditch, which is located on the northern perimeter of the site, serves to direct all surface water around the site. This was necessary due to the fact that a small creek runs under the railroad tracks toward the waste pile. This water is diverted around the site and released into the unnamed tributary to the Little Schuylkill River.

The groundwater, which flows under the site, is collected by the groundwater interceptor and diverted to the water treatment plant.

Leachate is collected in the leachate diversion ditches located on the northern and southern perimeters of the waste pile, then diverted to the holding lagoon before entering the water treatment plant.

An emergency catch basin was installed north of the treatment plant. This catch basin is essentially an unlined depression area that passively collects runoff and diverts this runoff to the treatment plant.

An internal fire in 1977 led to the installation of heat sensors in the waste pile. There are 6 heat sensors located in the eastern section of the waste pile and 4 heat sensors situated in the western section of this site. Temperature readings are taken every Thursday.

SECTION 3

AR100166

3.0 ENVIRONMENTAL SETTING

3.1 Water Supply

According to David Price of the Tamaqua Borough Hall, the Still Creek Reservoir (2.7 billion gallons), located 2 to 3 miles north of the site, serves the village of Hometown. This water is supplied by the borough of Tamaqua. The water is treated at the reservoir and pumped to a tank in the Hometown area. This water is then gravity fed to service the residents of Hometown. In addition to the Still Creek Reservoir, the town of Tamaqua also receives water from the Owl Creek Reservoir located approximately 4 miles southeast of the subject site. According to Donald Matalavage, the Tamaqua Borough manager, all other residents within a 3-mile radius of the site are on home wells.

A population of 1,416 has been identified as being served by wells drawing from the aquifer of concern within a 3-mile radius.

The nearest home well is located approximately 300 feet north of the site.

3.2 Surface Waters

An intermittent tributary to the Little Schuylkill River is located approximately 10 feet to the south and drains to the west of the site. The effluent from the water treatment plant is discharged into this tributary. The tributary then flows into the Little Schuylkill River approximately 1,000 feet west of the site.

3.3 Geology and Soils

A MW log (MW no. 2) and descriptions of an on-site borrow pit in the Phase I Site Application Module (see appendix E) indicate that the site is underlain by up to 18 feet of light-brown to chocolate-brown silt and clay with sandstone boulders up to 1 foot in diameter. According to the Phase I Module, a channery loam soil profile was present on colluvium extending to a depth of 7 feet in the borrow pit, followed by 7 to 10 feet of weathered red shale and sandstone. From 10 to 12 feet, weathered gray to white sandstone is present. The MW no. 2, which was progressed to a depth of 72 feet, encountered 18 feet of overburden above 10 feet of red siltstone and shale, 30 feet of sandstone conglomerate, and 14 feet of red shale. Based on the Geologic Map of Northeastern Pennsylvania, from Groundwater in Northeastern Pennsylvania (Lohman, 1937), these bedrock lithologies are part of the Mississippian-aged Mauch Chunk shale. The thickness of the Mauch Chunk shale beneath the site cannot be determined with available data. A commercial well, listed in Lohman (1937) to be in the Hometown area (1 to 2 miles southeast of the site), is reportedly producing water from the Mauch Chunk at a depth of 205 feet. Both the commercial well and the subject site have accordant elevations. Lohman notes that the Mauch Chunk is up to 2,950 feet thick in Schuylkill County.

The rocks of Schuylkill County have been sharply folded into an intricate system of long, narrow ridges and basins. Due to intense folding of the bedrock in the area, the Pocono sandstones and younger Pottsville Formation are known to subcrop within a 3-mile radius of the site; however, due to the lack of deep well information, effects of structural features on groundwater cannot be determined.

3.4 Groundwaters

On-site groundwater information is limited to data available in the Phase I Module for the MW no. 2. The well is located in the southeast portion of the site and is reported on drill logs to be 20 feet 10 inches deep. The well is set 2 feet 10 inches into red siltstone and shale bedrock, classified in the Module as Mauch Chunk, and is screened in the lower 10 feet. The water level in the well after setting was approximately 11 feet below the ground surface. The well monitors groundwater under confined conditions. The Module reports a 10.15 feet depth to groundwater in another well located approximately 1,000 feet north of the site. No further details on the total depths or construction of this well are available.

As noted earlier, Mauch Chunk shales and sandstones reportedly underlie the overburden on site. The Mauch Chunk is noted in Lohman (1937) as perhaps the most important water-bearing formation in the county due to its areal extent and its fractured nature. Although wells within the region are reportedly set into this formation, the hydraulic characteristics of Mauch Chunk units underlying the site or groundwater flow direction cannot be determined with the limited data available. The interconnection of the Mauch Chunk with adjacent formations cannot be determined with available data. Similarly, information is not available to indicate that the Little Schuylkill River is a groundwater divide.

3.5 Climate and Meteorology

According to the United States Geological Survey Soil Conservation Service (U.S.G.S. SCS) study of Schuylkill County, Pennsylvania, winters in Schuylkill County are cold and snowy at high elevations, and summers are fairly warm on the mountain slopes. The average winter temperature is 28°F, and the average summer temperature is 69°F.

Rainfall in Schuylkill County is evenly distributed throughout the year with an annual precipitation of 47 inches. Of the total annual precipitation, 26 inches usually falls between April and September. The average seasonal snowfall is 32 inches.

3.6 Land Use

Three warehouses are located immediately adjacent to the site. These include warehouses operated by Johnny Morgan Knitting, the Eagle Shirt Company, and Siberline. A UPS building is located 1,000 feet east of the site. A cemetery lies 3,000 feet to the southeast.

The northern perimeter is bordered by the ConRail Panther Valley Railroad Line. A small residential area is located 1,000 feet south and the town of Hometown is located 1 mile to the southeast.

3.7 Population Distribution

The residents of Hometown account for most of the population within a 1-mile radius of the Eastern Diversified Metals site. The population is estimated at 1,620. The town of Tamaqua, located within 3 miles of the subject site, has an estimated population of 8,843. The total population within a 3-mile radius is estimated at 13,414.

3.8 Critical Environments

There are no federally listed endangered species known to exist in Schuylkill County.

SECTION 4

4.0 WASTE TYPES AND QUANTITIES

The Eastern Diversified Metals site contains approximately 157 million pounds of copper wire insulation material. This insulation material consists of polyethylene, polyvinyl chloride, a fibrous material, and metal fragments.

In addition, until 1983, the sludge from the on-site water treatment facility was also placed on the waste pile.

A visual inspection made on January 30, 1984 by FIT III of the waste pile formed during the digging of the lagoon indicated some type of prior dumping. The waste pile appeared to be filled with debris. John Laskosky, of PA DER, confirmed this during the site inspection of April 12, 1984. He stated that he recently found documentation suggesting that the area was once used as a landfill. There is no information available concerning waste types or quantities disposed during the alleged landfill operation.

SECTION 5

5.0 FIELD TRIP REPORT

5.1 Summary

On April 12, 1984, a site inspection of the Eastern Diversified Metals site was conducted by NUS personnel Marcia Irwin, Laura Boornazian, Christopher Dietz, Andrew Frebowitz, and Robert Howell. The FIT III members were accompanied by John Laskosky, of the PA DER Wilkes-Barre office, John Koin, the treatment plant caretaker, and Kerry Tyson, of Todd Giddings and Associates.

The weather at the time of the site visit was clear with a temperature of approximately 50°F.

5.2 Persons Contacted

5.2.1 Prior to Field Trip

John Laskosky
Solid Waste Management
PA DER
Bureau of Solid Waste Management
Wilkes-Barre, PA 18701
(717) 826-2516

John Koin
Treatment Plant Caretaker
(No business address)
(717) 645-5446

Benjamin Stonelake, Jr.
Blank, Rene, Conisky, and McCall
1200 Four Penn Center Plaza
Philadelphia, PA
(215) 569-5689

William McDonnell
Solid Waste Management
PA DER
Bureau of Solid Waste Management
Wilkes-Barre, PA 18701
(717) 826-2516

5.2.2 At The Site

John Laskosky
Solid Waste Management
PA DER
Bureau of Solid Waste Management
Wilkes-Barre, PA 18701
(717) 826-2516

Kerry Tyson
Environmental Engineer
Todd Giddings and Associates
140 West Fairmount Avenue
State College, PA 16801
(814) 238-5727

TDD Number F3-8402-05
EPA Number PA-989

5-3 SAMPLE LOG

Site Name Easter Diversified Metals

TRAFFIC REPORTS Organic	Inorganic	High Hazard	SAMPLING LOCATION	PHASE	SAMPLE DESCRIPTION	DATE	TIME	pH	COMMENTS/OBSERVATIONS	LABORATORY Org	Inorg
C-8104	MC-3111	—	Main leachate	Aqueous	Orange color - foam on top	4/12/84	1230	6.0		EAL	chemtech
C-8105	MC-3112	—	Main leachate sed.	Solid	Dark rust color	4/12/84	1245	—		Rockwell	chemtech
C-8106	MC-3113	—	Leachate	Aqueous	Light colored foam on top	4/12/84	1420	6.44		EAL	chemtech
C-8107	MC-3114	—	Leachate Sediment	Solid	Dark rust color	4/12/84	1420	—		Rockwell	chemtech
C-8122	MC-3129	—	Upstream of Overflow	Aqueous		4/12/84	1305	5.96		EAL	chemtech
C-8123	MC-3130	—	Upstream of Overflow Sed	Solid		4/12/84	1310	—		Rockwell	chemtech
C-8124	MC-3131	—	Midstream - down from overflow	Aqueous		4/12/84	1340	6.48		EAL	chemtech
C-8125	MC-3132	—	Midstream - down from overflow - sed	Solid		4/12/84	1340	—		Rockwell	chemtech
C-8126	MC-3133	—	Downstream	Aqueous		4/12/84	1445	6.78		EAL	chemtech
C-8127	MC-3134	—	Downstream Sediment	Solid		4/12/84	1445	—		Rockwell	chemtech
C-8108	MC-3115	—	Monitoring Well	Aqueous		4/12/84	1245	5.69		EAL	chemtech
C-8131	MC-3138	—	Lower leachate sed	Solid	Leachate and Sediment dark orange color	4/12/84	1525	—		Rockwell	chemtech
C-8129	MC-3136	—	Blank - Aq	Aqueous		4/12/84	1130	—		EAL	chemtech
C-8130	MC-3137	—	Blank - Sol.	Solid		4/12/84	1130	—		Rockwell	chemtech
C-8128	MC-3135	—	Stained Soil	Solid	Aqua blue color	4/12/84	1450	—		Rockwell	chemtech

5.4 Site Observations

- FIT III arrived on site at 10:30 AM. The team met with John Laskosky, John Koin, and Kerry Tyson.

- During the site reconnaissance, 2 leachate seeps were noted on the southern boundary of the pile of fluff. No HNU readings above background were noted.

- Stained soil was noted near the access road on the southern boundary of the waste pile.

- A spillway was noted on the south wall of the lagoon. The spillway was paved and led over the edge of the lagoon, down the bank, and across the access road where it was released directly into the intermittent stream. The spillway at the time of the site visit showed signs of recent overflow. This was verified by Kerry Tyson who accredited this to recent rains and snow thaws. According to Kerry Tyson, this spillway was part of the original permit. John Laskosky, however, disagreed.

- The origin of the intermittent stream at the time of the site inspection was approximately 1,500 feet west of the eastern boundary of the waste pile and followed the southern boundary of the property (see appendix B, figure 2).

- The upgradient home well sample could not be obtained since the residents were not at home.

The following samples were collected:

- Samples C8104 and MC3111 were aqueous samples of the main leachate seep. Leachate was flowing out of the side of the waste pile and collecting in a small pool. The leachate was orange in color with a foamy layer on top.

- Samples C8105 and MC3112 were sediment samples taken at the main leachate seep.

- ample C8106 and MC3113 were aqueous samples collected at a second leachate seep. A light-colored foam was observed on the surface of the liquid.

- Samples C8107 and MC3114 were sediment samples taken of the second leachate seep. Soil was a dark rust color.

- The upstream sample was collected at the origin of the intermittent stream. The sampling point was located upstream of the lagoon spillway. Aqueous samples C8122 and MC3129 were collected here.

- Samples C8123 and MC3130 were upstream sediment samples. Sediment appeared to have fine particles of various color in it.

- The midstream sample was collected immediately downstream of the lagoon spillway. Aqueous samples C8124 and MC3131 were taken at this location.

- Midstream sediment samples C8125 and MC3132 were collected immediately downstream of the lagoon spillway.

- Aqueous samples C8126 and MC3133 were collected downstream of the wastewater treatment plant.

- Downstream sediment samples C8127 and MC3134 were collected downstream of the wastewater treatment plant.

- Aqueous samples C8108 and MC3115 were taken from the downgradient on-site MW.

- Sediment samples C8131 and MC3138 were collected at a leachate seep located approximately 200 feet downstream of the wastewater treatment plant.

- Sediment samples C8128 and MC3135 were taken of stained soil located on the southern boundary of the waste pile. Soil was aqua blue in color and moist.

- Aqueous blank samples C8129 and MC3136 were prepared.

- Sediment blank samples C8130 and MC3137 were prepared.

Note: Splits of all samples (excluding blanks) were relinquished under chain-of-custody to Kerry Tyson, of Todd Giddings and Associates.

ORIGINAL
(Red)

5.5 PHOTOGRAPH LOG

Photo - 1
Sampling of main leachate seep.

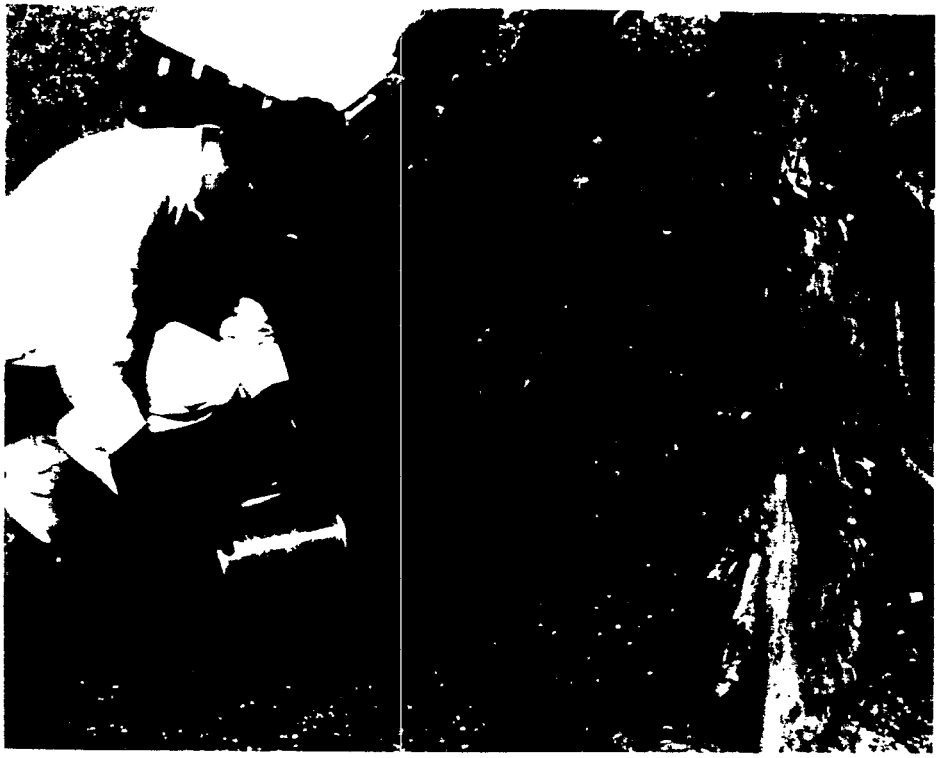

Photo - 2
Collection of main leachate sample.

Eastern Diversified Metals
F3-8402-08
April 12, 1984
Time: 1230

R1P1
Photo 1

Sampling of main leachate seep.

Marzia Irwin
for
Laura Boornazian

Eastern Diversified Metals
F3-8402-08
April 12, 1984
Time: 1232

R1P2
Photo 2

Collection of main leachate sample

Marzia Irwin
for
Laura Boornazian

AR100180

(Red)

Photo - 3
Pouring main leachate sample from stainless stell bucket through stainless steel funnel into the bottles for homogeneous splits.

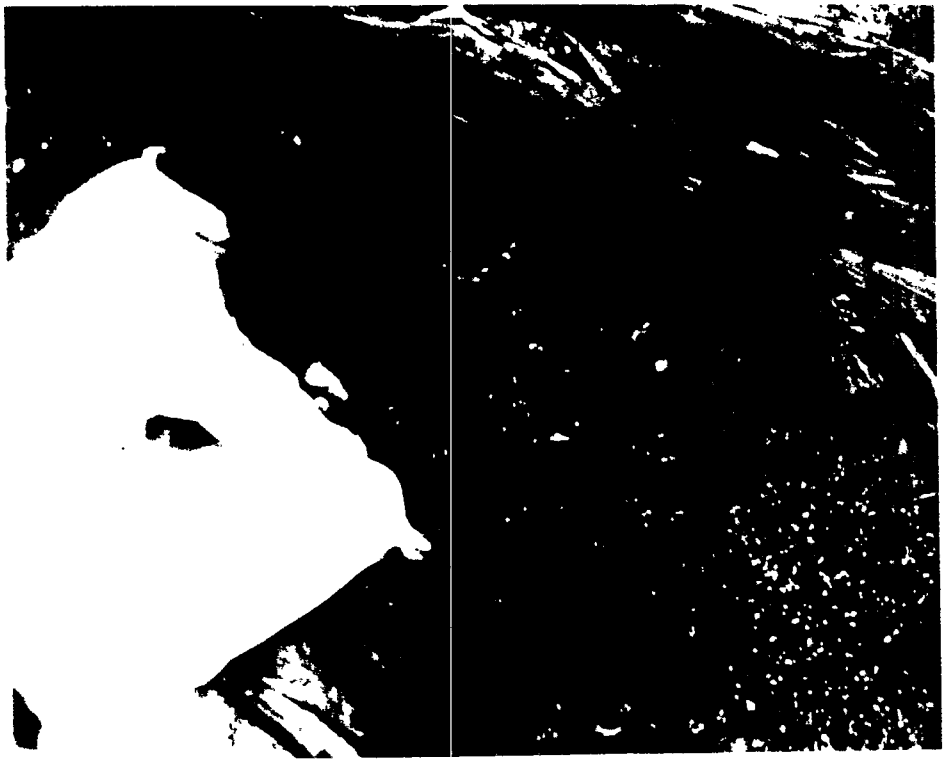

Photo - 4
Collection of VOA samples from main leachate seep.

AR100181

Eastern Diversified Metals
F3-8402-08
April 12, 1984
Time: 1235

R1P3
Photo 3

Pouring main leachate sample from stainless steel bucket through stainless steel funnel into the bottles for homogeneous splits

Marcia Irwin
for
Laura Boornazian

Eastern Diversified Metals
F3-8402-08
April 12, 1984
Time: 1240

R1P4
Photo 4

Collection of WA samples from main leachate seep

Andrew Freibowitz

ORIGINAL
(Red)

Photo - 5
Upstream sample collection

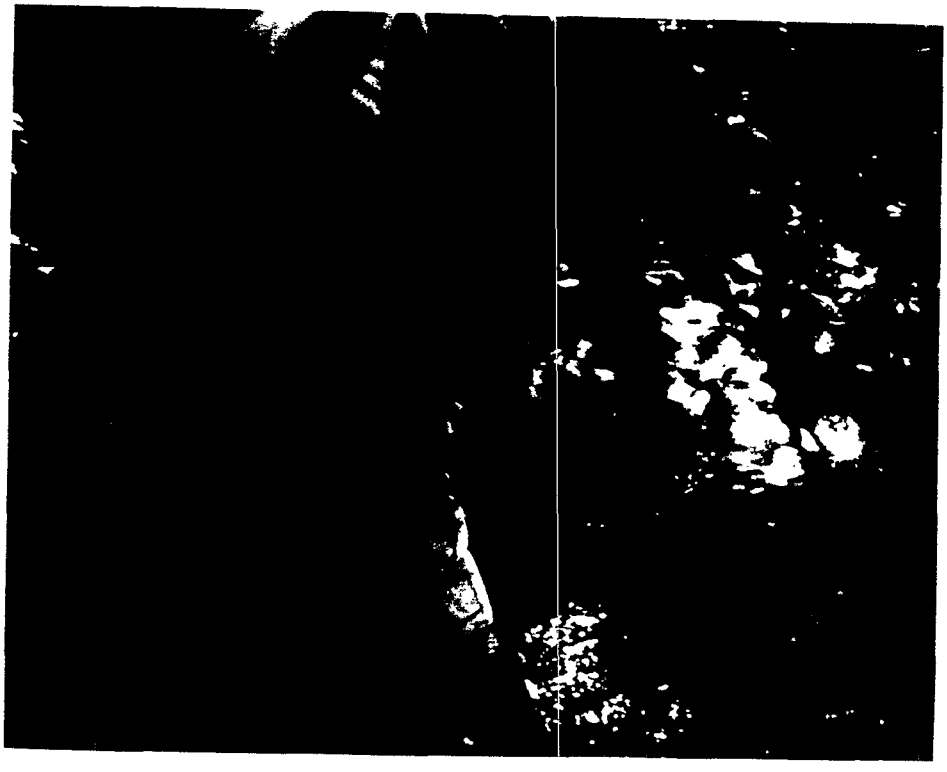

Photo - 6
Midstream sample collection

Eastern Diversified Metals
F3-8402-08
April 12, 1984
Time: 1310

RIP5
Photo 5

Upstream sample collection

Andrew Frebowitz

Eastern Diversified Metals
F3-8402-08
April 12, 1984
Time: 1340

RIP6
Photo 6

Midstream sample collection

Mossialiwin
for
Laura Boornazian

AR100184

ORIGINAL
(Red)

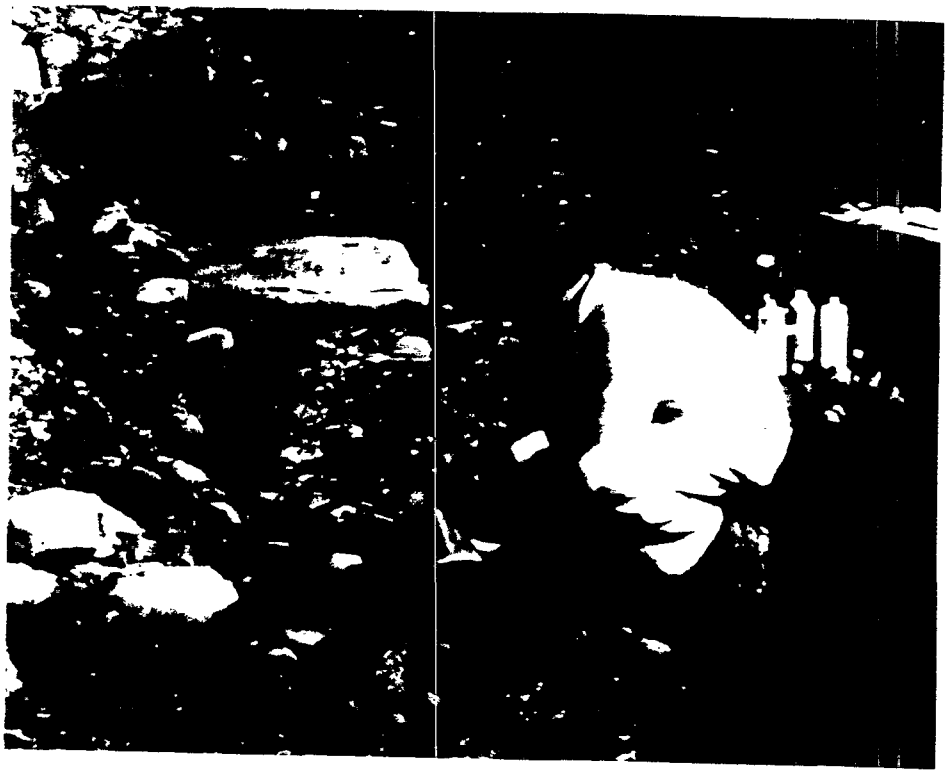

Photo - 7
Secondary leachate sample collection

Photo - 8
Collection of stained soil

Eastern Diversified Metals
F3-8403-08
April 12, 1984
Time: 1420

RIP7
Photo 7

Secondary leachate sample collection

Marcia Irwin
for
Laura Boornazian

Eastern Diversified Metals
F3-8403-08
April 12, 1984
Time: 1450

RIP8
Photo 8

Collection of stained soil

Marcia Irwin
for
Laura Boornazian
for
Keri Tyson

AR100186

ORIGINAL
(Red)

Photo - 9
Close-up of stained soil

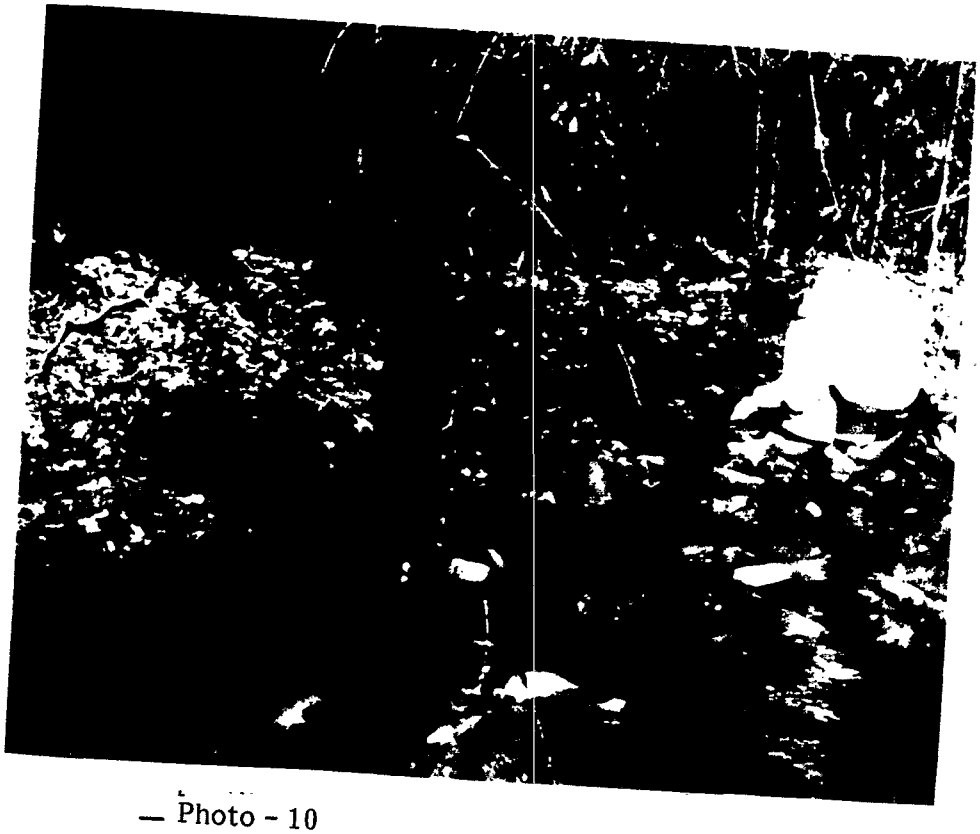

Photo - 10
Sampling of leachate seep approximately

Eastern Diversified Metals
F3-8402-08
April 12, 1984
Time: 1430

RIP9
Photo 9

Close-up of stained soil

Marcia Irwin
for
Laura Boornazian

Eastern Diversified Metals
F3-8402-08
April 12, 1984
Time: 1525

RIP10
Photo 10

Sampling of leachate seep approximately 200 feet downstream of water treatment plant

Marcia Lynn Irwin
Marcia Lynn Irwin

AR100188

F3-8402-08

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	989

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Eastern Diversified Metals	Off Lincoln Avenue (PO Box 311)

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG. DIST.
Hometown	PA	18252	Schuylkill		

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
40 49' 45"	75 59' 54"	☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
04 12 84 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1966 / 1977 (BEGINNING YEAR / ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☒ B. EPA CONTRACTOR NUS Corporation (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
Marcia Irwin	Regional Safety & Training	NUS Corp.	(215) 687-9510
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO**
Laura Boornazian	Air Pollution Specialist	NUS Corp.	(215) 687-9510
Andrew Frebowitz	Environmental Engineer	NUS Corp.	215 687-9510
Christopher Dietz	Environmental Technician	NUS Corp.	(215) 687-9510
Robert Howell	Environmental Technician	NUS Corp.	215 687-9510
John Laskosky	Solid Waste Specialist	PA DER	717 826-2516

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
John Koin	Caretaker	PO Box 311 Hometown, PA	(717) 645-5446
Kerry Tyson	Env. Engineer	Todd Giddings and Assoc. 140 West Fairmount Ave. State College, PA 16801	(814) 238-5927
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	1030	Clear sky, Temperature of approx. 50°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
William McDonnell	PA DER Wilkes Barre	(717) 826-2516

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Marcia Irwin	NUS Corp.	FIT III	215-687-9510	04 26 84 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

AR100189

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	989

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

TONS 75,000
CUBIC YARDS 3,333,600
NO OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

X A TOXIC
X B CORROSIVE
C RADIOACTIVE
X D PERSISTENT
E SOLUBLE
F INFECTIOUS
G FLAMMABLE
H IGNITABLE
X 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		
OLW	OILY WASTE			
SOL	SOLVENTS	Unknown		
PSD	PESTICIDES	Unknown		
OCC	OTHER ORGANIC CHEMICALS	Unknown		
IOC	INORGANIC CHEMICALS	Unknown		
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	Unknown		

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
PSD	PCB-1260	11097-69-1		55,897	ug/kg
PSD	PCB-1016	11097-69-1		26,462	ug/kg
MES	Mercury	7439-97-6		0.32	ug/l
OCC	Bis(2-ethylhexyl) phthalate	117-81-7		1,899,755	ug/kg
SOL	Chlorobenzene	108-90-7		299	ug/kg
SOL	Hexachlorobenzene	118-74-1		19,497	ug/kg
MES	Arsenic	7440-38-2		3.4	mg/kg
MES	Cyanide	57-12-5		0.25	mg/kg
MES	Lead	7439-92-1		2,690	ug/l

V. FEEDSTOCKS (See Appendix for CAS Numbers) N/A

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)

PA DER files
Sample analysis

EPA FORM 2070-13 (7-81)

AR100190

ORIGINAL
(Red)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☒ OBSERVED (DATE 4-12-84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 1,416 — 04 NARRATIVE DESCRIPTION

An on-site monitoring well sample revealed the presence of mercury (0.32 ug/l), manganese (9,590 ug/l), and 2,4-dimethylphenol (30 ug/l).

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☒ OBSERVED (DATE 4-12-84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Unknown — 04 NARRATIVE DESCRIPTION

Stream samples showed the presence of PCB-1260 (4,732 ug/kg), PCB-1016 (11,104 ug/kg), bis(2-ethylhexyl) phthalate (367,311 ug/kg), mercury (0.24 mg/kg), and arsenic (1.5 mg/kg).

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

None known

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☒ OBSERVED (DATE 1977) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Unknown — 04 NARRATIVE DESCRIPTION

An internal fire in 1977 led to the installation of heat sensors in the waste pile.

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED Unknown — 04 NARRATIVE DESCRIPTION

The site is not surrounded by a fence.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE 4-12-84) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: Unknown (Acres) — 04 NARRATIVE DESCRIPTION

Soil samples revealed the presence of PCB-1260 (33,750 ug/kg), hexachlorobenzene (19,497 ug/kg), bis(2-ethylhexyl) phthalate (1,487,012 ug/kg), and arsenic (0.9 mg/kg).

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 1,416 — 04 NARRATIVE DESCRIPTION

Home wells set into the Mauch Chunk Formation may potentially be affected by on-site contaminant migration.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: — 04 NARRATIVE DESCRIPTION

None known

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

None known

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION
01 STATE: PA
02 SITE NUMBER: 989

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

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

None known

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

None known

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

The intermittent tributary adjacent to the site flows directly into the Little Schuylkill River which is a state-approved trout stream and is used for fishing downstream of the site.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills Runoff Standing liquids Leaking drums) — 02 ☒ OBSERVED (DATE. 4-12-84) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: Unknown
04 NARRATIVE DESCRIPTION

The on-site lagoon has a spillway that releases to the adjacent tributary. A recent release had occurred prior to the site inspection of April 12, 1984.

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

None known

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

None known

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

None known

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

None known

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS

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

Sample analysis from NUS FIT III site inspection of April 12, 1984
State files
Interviews with John Koin caretaker of WWTP

EPA FORM 2070-13 (7-81)

ORIGINAL
(Red)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	989

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☒ A. NPDES	PA-0070327	3-11-81	3-11-86	occasionally exceeds discharg limits for phenols
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☒ G. STATE (Specify) Water Quality	5474203	3-20-75	N/A	NPDES permit supercedes
☐ H. LOCAL (Specify) Management				this WQM permit
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☒ A. SURFACE IMPOUNDMENT	Avg. 377,000	gallons
☒ B. PILES	~~157 million~~	~~lbs.~~
☐ 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)
- ☐ 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: one

06 AREA OF SITE: approx. 25 (Acres)

07 COMMENTS

Industrial waste storage/disposal facility for copper wire insulation material (fluff) and other debris. Untreated wastewater is held in the storage basin before it enters the wastewater treatment plant.

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.

A surface water diversion ditch is located along the northern boundary of the site and diverts surface to the west around the site. Leachate diversion ditches located on the northern and southern perimeters of the waste pile, in addition to a groundwater interceptor located on the southern perimeter, divert wastewater to the storage basin before it enters the wastewater treatment plant.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

The site is not fenced. On December 12, 1983 there was an episode of vandalism.

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

Potential Hazardous Waste Site Identification - EPA form 2070-8(5-80) date October 7, 1982
State files
PADER Water Pollution Control ER710.046.9 Module 9 Flow Equalization and Storage Basin
On-site interview with John Koin treatment plant operator (logbook 803)

EPA FORM 2070-13 (7-81)

AR100193

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	989

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

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

02 STATUS

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

03 DISTANCE TO SITE

A. 3 (mi)

B. 300 feet (MIX)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

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

02 POPULATION SERVED BY GROUND WATER 1,416

03 DISTANCE TO NEAREST DRINKING WATER WELL 300 feet (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
10.15 (ft)	southwest	Unknown (ft)	Unknown (gpd)	Unknown ☐ YES ☐ NO

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

On-site monitoring well

10 RECHARGE AREA		11 DISCHARGE AREA	
☒ YES ☐ NO	COMMENTS The area is riddled with springs.	☒ YES ☐ NO	COMMENTS The area is riddled with springs.

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
Still Creek Reservoir	☐	2 (mi)
Little Schuylkill River	☐	approx. 0.25 (mi)
Owl Creek Reservoir	☐	4 (mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 1,109 NO. OF PERSONS	B. 2,534 NO. OF PERSONS	C. 13,414 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 0.5 (mi)

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

04 DISTANCE TO NEAREST OFF-SITE BUILDING adjacent to site (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)

EPA FORM 2070-13 (7-81)

AR100194

ORIGINAL
(Red)

EPA

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

I. IDENTIFICATION
01 STATE: PA
02 SITE NUMBER: 989

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

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

Unknown

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)

Unknown

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
approx. 18 (ft)	Unknown (ft)	Unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
16 (in)	Unknown (in)	10 %	southwest	14.2 %

09 FLOOD POTENTIAL

SITE IS IN N/A YEAR FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE N/A , OTHER

A. _____ (mi) B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

N/A _____ (mi)

ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

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

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Waste pile (dimensions - 3,000 by 500 by 60 feet) is situated on land surface.

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

State files
Observations during NUS FIT III site inspection of April 12, 1984
Pennsylvania water well inventory
U.S.G.S. information

EPA FORM 2070-13 (7-81)

AR100195

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	989

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAIL.
GROUNDWATER	1	Organics: EAL Inorganic: Chemtech	
SURFACE WATER	3	Organics: EAL Inorganics: Chemtech	
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	4	Rockwell	
VEGETATION			
OTHER Leachate	2 - Aqueous 3 Solid	Organics: EAL Inorg.: Chemtech Rockwell	

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU	No readings above background
pH	Within normal range

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND ☐ AERIAL

02 IN CUSTODY OF NUS Corporation (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS NUS Corporation

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Sample	pH
Upstream	5.96
Midstream	6.48
Downstream	6.78
Monitoring Well	5.69
Leachate	6.44
Main leachate	6.0

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

Field trip, logbook, chain-of-custody form

EPA FORM 2070-13 (7-81)

ORIGINAL
(Red)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	989

II. CURRENT OWNER(S)			PARENT COMPANY (If applicable)		
01 NAME: Theodor Sall, Incorporated	02 D+B NUMBER		08 NAME: Diversified Industries	09 D+B NUMBER	
03 STREET ADDRESS (P.O. Box, RFD #, etc.): 2335 East Butler St.	04 SIC CODE		10 STREET ADDRESS (P.O. Box, RFD #, etc.): 1034 South Brentwood Blvd.	11 SIC CODE	
05 CITY: Philadelphia	06 STATE: PA	07 ZIP CODE: 19137	12 CITY: St. Louis	13 STATE: MO	14 ZIP CODE: 63117
01 NAME: N/A	02 D+B NUMBER		08 NAME: N/A	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: N/A	02 D+B NUMBER		08 NAME: N/A	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: N/A	02 D+B NUMBER		08 NAME: N/A	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)		
01 NAME: N/A	02 D+B NUMBER		01 NAME: N/A	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: N/A	02 D+B NUMBER		01 NAME: N/A	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: N/A	02 D+B NUMBER		01 NAME: N/A	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)

1. State files
2. John Koin - Treatment Plant Caretaker

EPA FORM 2070-13 (7-81)

AR100197

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	989

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Not Applicable	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER
N/A	

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

14 CITY	15 STATE	16 ZIP CODE

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

01 NAME	02 D+B NUMBER
N/A	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER
N/A	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER
N/A	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER
N/A	

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

14 CITY	15 STATE	16 ZIP CODE

10 NAME	11 D+B NUMBER
N/A	

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

14 CITY	15 STATE	16 ZIP CODE

10 NAME	11 D+B NUMBER
N/A	

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

14 CITY	15 STATE	16 ZIP CODE

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

EPA FORM 2070-13 (7-81)

ORIGINAL
(Red)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	989

II. ON-SITE GENERATOR

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

III. OFF-SITE GENERATOR(S)

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

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
N/A		N/A	
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
N/A		N/A	
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)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	989

II. PAST RESPONSE ACTIVITIES

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

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

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

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

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

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

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

01 ☐ H. ON SITE BURIAL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Sludge from WWTP is presently hauled off-site for disposal.

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

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

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Waste Water Treatment Plant installed as per consent agreement with PA-DER

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

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

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

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Surface Water Diversion Ditch diverts small tributary around the site. Emergency Catch Basin is located on-site

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

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

AR100200

ORIGINAL

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	989

II PAST RESPONSE ACTIVITIES (Continued)

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

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

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

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

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

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

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Heat Sensors installed in waste pile - Temperature readings taken every Thursday.

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

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

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

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

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

1. Leachate ditches collect leachate and divert it to Waste Water Treatment Plant.
2. Groundwater interceptor collects groundwater flowing under the site and diverts to Waste Water Treatment Plant.

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

1. PA-DER files
2. John Koin - WWTP Caretaker
3. Kerry Tyson - Todd Giddings and Associates

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	989

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☐ NO

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

A. In March of 1974, Diversified Industries, Inc. was issued and agreed to a Department of Environmental Resources Bureau of Water Quality Management Consent order. This consent agreement lead to the installation of the Water Treatment Plant, diversion ditches and the groundwater interceptor.

B. In 1983, the PA-DER Bureau of Solid Waste Management issued a notice of violation concerning the disposal of water treatment plant sludge on the Eastern Diversified Metals Site. This problem was resolved when Theodore Sail contracted a company to haul the sludge. The sludge is now being taken to the E. I. DuPont de Nemours and Co. Chambers Works site in Deepwater, N.J.

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

SECTION 6

6.0 LABORATORY DATA

6.1 Sample Data Summary

TDD Number F3-8402-08
EPA Number PA-989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Eastern Diversified Metals
Date of Sample 4/12/84

K-Approximate value: detected below quantitation limit.

Solid sample results reported as dry weight.

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	4-methyl-2-pentanone	vinyl acetate	total xylenes	dieldrin	4,4'-DDT	beta-endosulfan	endrin aldehyde	heptachlor	heptachlor-epoxide	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC	Remarks
C-8104	Main Leachate Seep	Aqu.	µg/l			<3		◇ 2.0	◇ 1.0	◇ 2.0	◇ 0.3	◇ 0.6			◇ 2.0	◇ 0.6	Orange Color - Foam on top
C-8105	Main Leachate Seep	Sed	µg/kg	99		78											Dark rust color
C-8106	Leachate	Aqu.	µg/l				◇ 0.4	◇ 1.0	◇ 0.6	◇ 1.4	◇ 0.3	◇ 0.2	◇ 0.4	◇ 0.4			Light color - foam on top
C-8107	Leachate	Sed	µg/kg	◇ 3													Dark rust color
C-8122	Upstream of Overflow	Aqu.	µg/l														
C-8123	Upstream of Overflow	Sed.	µg/kg														
C-8124	Midstream - Down from Overflow	Aqu.	µg/l														
C-8125	Midstream - Down from Overflow	Sed.	µg/kg														
C-8126	Downstream	Aqu.	µg/l														
C-8127	Downstream	Sed.	µg/kg														
C-8108	Monitoring Well	Aqu.	µg/l														
C-8131	Lower Leachate	Sed.	µg/kg														Dark Orange Color
C-8129	Blank	Aqu.	µg/l														
C-8130	Blank	Sed.	µg/kg		3K	2K											

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

ORIGINAL (Red)

TDD Number F3-8402-08
EPA Number PA-989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Eastern Diversified Metals
Date of Sample 4/12/84

K-Approximate value: detected below quantitation limit.

Solid sample results reported as dry weight.

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	benzene	chlorobenzene	1,1,1-trichloroethane	chloroform	trans-1,2-dichloroethene	ethylbenzene	methylene chloride	fluorotrichloromethane	tetrachloroethene	toluene	trichloroethene	acetone	2-hexanone	Remarks
C-8104	Main Leachate Seep	Aqu.	µg/l	15	19			14	14	<4 ◇			9				Orange Color - Foam on top
C-8105	Main Leachate Seep	Sed.	µg/kg	115	299			60	488	35 ◇		8	154	4	110 ◇	110	Dark rust color
C-8106	Leachate	Aqu.	µg/l							<3 ◇							Light color - foam on top
C-8107	Leachate	Sed.	µg/kg	5	3K ◇				3 ◇	9 ◇	25K		3 ◇		10 ◇	6K ◇	Dark rust color
C-8122	Upstream of Overflow	Aqu.	µg/l			<4				<4 ◇				11			
C-8123	Upstream of Overflow	Sed.	µg/kg	2K		3K				7K ◇			7	12	69 ◇		
C-8124	Midstream - Down from Overflow	Aqu.	µg/l							<3 ◇				7			
C-8125	Midstream - Down from Overflow	Sed.	µg/kg			3K				7K ◇			2K	4	20 ◇		
C-8126	Downstream	Aqu.	µg/l							<3 ◇							
C-8127	Downstream	Sed.	µg/kg							7K ◇							
C-8108	Monitoring Well	Aqu.	µg/l							<3 ◇							
C-8131	Lower Leachate	Sed.	µg/kg							7K ◇					86 ◇		Dark Orange Color
C-8129	Blank	Aqu.	µg/l							19							
C-8130	Blank	Sed.	µg/kg							10K			3K		8		

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

ORIGINAL (Red)

AR100710A

TDD Number F3-8402-08

EPA Number PA - 989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Eastern Diversified Metals

Date of Sample 4/12/84

K-Approximate value: detected below quantitation limit.

Solid sample results reported as dry weight.

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	benzene	chlorobenzene	1,1,1-trichloroethane	chloroform	trans-1,2-dichloroethene	ethylbenzene	methylene chloride	fluorotrichloromethane	tetrachloroethene	toluene	trichloroethene	acetone	2-hexanone	Remarks
C-8128	Stained Soil	Sed.	µg/Kg	2	4	19	2			21◇			341	12	24◇		Aqua blue color

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR100207

ORIGINAL (Red)

TDD Number F3-8402-08

EPA Number PA-989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Eastern Diversified Metals

Date of Sample 4/12/84

K-Approximate value: detected below quantitation limit.

Solid sample results reported as dry weight.

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	4-methyl-2-pentanone	vinyl acetate	total xylenes	dieldrin	4,4'-DDT	beta-endosulfan	endrin aldehyde	heptachlor	heptachlor-epoxide	alpha-BHC	beta-BHC	delta-BHC	gamma-BHC	Remarks
C-8128	Stained Soil	Sed.	µg/Kg	4		2											1 qua tube color

NOTE: For a[illegible]ew of this data and non-target, tentatively identified compounds, please s[illegible]e Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR100208

(Red)

TDD Number F3-8402-08

EPA Number PA-989

Solid sample results reported as dry weight.

K-Approximate value: detected below quantitation limit.

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Eastern Diversified Metals

Date of Sample 4/12/84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	PCB-1260	PCB-1016	4-methylphenol	2,4-dimethylphenol	phenol	benzoic acid	2-methylphenol	hexachlorobenzene	1,2-dichlorobenzene	1,4-dichlorobenzene	isophorone	nitrobenzene	bis(2-ethylhexyl) phthalate	Remarks
C-8104	Main leachate seep	Aqu.	µg/l			2450		900	91K	108		<13	<11			1,214	Orange Color - Foam on top
C-8105	Main leachate seep	Sed.	µg/kg	55,897	26,462											1,899,755	Dark rust color
C-8106	Leachate	Aqu.	µg/l				23		25K							223	Light color - foam on top
C-8107	Leachate	Sed.	µg/kg	5,128												239,618	Dark rust color
C-8122	Upstream of Overflow	Aqu.	µg/l													386	
C-8123	Upstream of Overflow	Sed.	µg/kg	2,136	5,252											22,980	
C-8124	Midstream - Down from Overflow	Aqu.	µg/l													590	
C-8125	Midstream - Down from Overflow	Sed.	µg/kg													174,868	
C-8126	Downstream	Aqu.	µg/l														
C-8127	Downstream	Sed.	µg/kg	4,732	11,104											367,311	
C-8108	Monitoring Well	Aqu.	µg/l				30										
C-8131	Lower leachate	Sed.	µg/kg	7,975	17,130											1,496,170	Dark Orange Color
C-8129	Blank	Aqu.	µg/l														
C-8130	Blank	Sed.	µg/g					94						64		1,848	

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR100209

TDD Number F3-5402-08

EPA Number PA-989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Eastern Diversified Metals

Date of Sample 4/12/84

K-Approximate value: detected below quantitation limit.

Solid sample results reported as dry weight.

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	PCB-1260	PCB-1016	4-methylphenol	2,4-dimethylphenol	phenol	benzoic acid	2-methylphenol	hexachlorobenzene	1,2-dichlorobenzene	1,4-dichlorobenzene	isophorone	nitrobenzene	bis (2-ethylhexyl) phthalate	Remarks
C-8128	Stained Soil	Sed.	ug/kg	33,750							19,497					1,487,012	Aqua blue color

ORIGINAL (Red)

AR100210

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-8402-08

EPA Number PA-989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Eastern Diversified Metals

Date of Sample 4/12/84

Solid sample results reported as dry weight.

K-Approximate value: detected below quantitation limit.

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	benzyl butyl phthalate	di-n-butyl phthalate	di-n-octyl phthalate	diethyl phthalate										Remarks
C-8104	Main Leachate Seep	Aqu.	µg/l			120	23										Orange Color - Foam on top
C-8105	Main Leachate Seep	Sed.	µg/kg		7,429 ◇	1,451,187											Dark rust color
C-8106	Leachate	Aqu.	µg/l			30											Light color - foam on top
C-8107	Leachate	Sed.	µg/kg			576,349											Dark rust color
C-8122	Upstream of Overflow	Aqu.	µg/l														
C-8123	Upstream of Overflow	Sed.	µg/kg			14,456											
C-8124	Midstream - Down from Overflow	Aqu.	µg/l														
C-8125	Midstream - Down from Overflow	Sed.	µg/kg		626 ◇	3,423 ◇											
C-8126	Downstream	Aqu.	µg/l														
C-8127	Downstream	Sed.	µg/kg		456 ◇	86,373											
C-8108	Monitoring Well	Aqu.	µg/l														
C-8131	Lower Leachate	Sed.	µg/kg	9,878	661 ◇	242,117											Dark Orange Color
C-8129	Blank	Aqu.	µg/l														
C-8130	Blank	Sed.	µg/			49											Values reported as µg/l

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-9402-08

EPA Number PA-989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Eastern Diversified Metal

Date of Sample 4/12/84

K-Approximate value: detected below quantitation limit.

Solid sample results reported as dry weight.

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	benzyl butyl phthalate	di-n-butyl phthalate	di-n-octyl phthalate	diethyl phthalate										Remarks
C-8128	Stained Soil	Sed.	µg/kg		◇ 3,765	48,116,020											Aqua blue color

NOTE: For review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

AR100212

ORIGINAL (Red)

TDD Number F3-8402-08
EPA Number PA-989

SA[illegible] TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Eastern Diversified Metals
Date of Sample 4/12/84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Chromium	Barium	Beryllium	Cobalt	Copper	Iron	Nickel	Manganese	Zinc	Vanadium	Silver	Remarks
MC-3111	Main Leachate Seep	Aqu.	ug/l	7,560	16◇	1,960			4,360	76,700	83	1,520	16,200			Orange Color - Foam on top
MC-3112	Main Leachate Seep	Sed.	mg/kg	36,800	15.0	72.0	0.35◇		4,000	16,650	10.3	66.5	2,140	11.6	0.90◇	Dark rust color
MC-3113	Leachate	Aqu.	ug/l	7,030		1,130			12,200	28,400	63	1,140	7,540			Light color - Foam on top
MC-3114	Leachate	Sed.	mg/kg	7,650	6.1	38.9	0.35◇	3.3	35,700	15,300	13.0	100	815		1.4	Dark rust color
MC-3129	Upstream of Overflow	Aqu.	ug/l	1,130					678◇	1,110		283	245			
MC-3130	Upstream of Overflow	Sed.	mg/kg	3,420	3.0	9.1		10.3	154	4,390	5.4	367	74			
MC-3131	Midstream - Down from Overflow	Aqu	ug/l	183					348◇	304◇		236	126			
MC-3132	Midstream - Down from Overflow	Sed.	mg/kg	3,050	3.2	16.6		9.8	100◇	4,200	5.5	390	75.0		2.9	
MC-3133	Downstream	Aqu.	ug/l			208			195◇	2,830		4,130	648		16◇	
MC-3134	Downstream	Sed.	mg/kg	4,720	4.0	13.6		5.7	232	4,010	5.2	322	76.5			
MC-3115	Monitoring Well	Aqu.	ug/l	1,001		167		76	712◇	9,590		21,100	60◇			
MC-3138	Lower Leachate	Sed.	mg/kg	9,100	2.3	16.5		14	4,260	4,010	4.7	690	49.7			Dark Orange Color
MC-3136	Blank	Aqu.	ug/l						582	62			15			
MC-3137	Blank	Sed.	mg/kg						22.4				0.6			

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

ORIGINAL (Red)

Tl umbe: F3-3702-08
EPA Number P4-989

S .E D UMM
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Eastern Diversified Metals
Date of Sample 4/12/84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Chromium	Barium	Beryllium	Cobalt	Copper	Iron	Nickel	Manganese	Zinc		Vanadium	Silver	Remarks
MC-3135	Stained Soil	Sed.	mg/Kg	11,900	7.6	69	◇ 0.25		21,500	3,290	8.7	70.0	520			1.8	Aqua blue color

AR100214

ORIGINAL (Red)

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based upon quality assurance review of data.

TDD Number F3-8402-08

EPA Number PA-989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Eastern Diversified Metals

Date of Sample 4/12/84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Arsenic	Antimony	Selenium	Thallium	Mercury	Tin	Cadmium	Lead		Cyanide				Remarks
MC-3111	Main Leachate Seep	Aqu	µg/l						◇ 82	14	1,010						Orange Color - Foam on top
MC-3112	Main Leachate Seep	Sed.	mg/kg	0.5				0.14	25.6	4.3	434						Dark Rust Color
MC-3113	Leachate	Aqu.	µg/l							57	2,690						Light color - Foam on top
MC-3114	Leachate	Sed.	mg/kg	3.4				0.14	13.9	4.5	613		0.25				Dark rust color
MC-3129	Upstream of Overflow	Aqu.	µg/l							1.6	◇ 33						
MC-3130	Upstream of Overflow	Sed.	mg/kg	1.6				*		0.22	27.5						* mercury detected in duplicate analysis see QA report.
MC-3131	Midstream - Down from Overflow	Aqu.	µg/l								◇ 10						
MC-3132	Midstream - Down from Overflow	Sed.	mg/kg	1.9						0.26	24						
MC-3133	Downstream	Aqu.	µg/l							1.2							
MC-3134	Downstream	Sed.	mg/kg	1.5				0.24	◇ 1.5	0.48	59.5						
MC-3115	Monitoring Well	Aqu.	µg/l					0.32			◇ 16						
MC-3138	Lower Leachate	Sed.	mg/kg	2.2					◇ 2.6	0.29	46.5						Dark Orange Color
MC-3136	Blank	Aqu.	µg/l														
MC-3137	Blank	Sed	mg/kg								0.45						

NOTE: For a review of this data and non-target, tentatively identified compounds, please see the Analytical Quality Assurance section of this report.

TDD Number F3-8402-08

EPA Number PA-989

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Eastern Diversified Metals

Date of Sample 4/12/84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Arsenic	Antimony	Selenium	Thallium	Mercury	Tin	Cadmium	Lead	Cyanide						Remarks
MC-3135	Stained Soil	Sed.	mg/Kg	0.9	7.0			0.1	◇ 4.3	6.5	3,860							Aqua blue Color

AR100216

ORIGINAL (Red)

NOTE: For a revi[illegible] this data and non-target, tentatively identified compounds, please see the [illegible]alytical Quality Assurance section of this report.

◇ Denotes results of questionable qualitative significance based [illegible]

6.2 Quality Assurance Review

6.2.1 Organic Data: Lab Case 2638

6.2.1.1 Introduction

The organic analyses of samples for this case were performed by 2 CLP laboratories. All aqueous samples were analyzed by 1 laboratory and the sediment samples were analyzed by another laboratory. The findings offered in this report are based upon a general review of all available data, blank analysis results, surrogate and matrix spike recoveries, duplicate analysis results, calibration data, GC confirmations, and target compound matching quality.

6.2.1.2 Qualifiers

It is recommended that this data package be utilized only with the following qualifier statements:

- All positive results for methylene chloride, acetone, di-n-butyl phthalate, and all single peak pesticides are questionable.
- The positive results for chlorobenzene, ethylbenzene, toluene, 2-hexanone, and 4-methyl-2-pentanone in sample C8107 are questionable.
- The positive result for di-n-octyl phthalate in sample C8215 is questionable.

The aforementioned results were designated questionable because there is evidence to doubt the presence of these compounds at concentrations less than or similar to the levels reported. However, it can be assumed that concentrations substantially greater than the levels reported cannot be present.

- Due to a laboratory reporting error, the positive result for nitrobenzene in sample C8127 is incorrect. This compound is actually not present. This result has been deleted from the sample data summary.

- The analysis laboratory neglected to report a confident identification of 4-methylphenol in sample C8104 at a concentration of 2,450 ug/l. This result has been incorporated into the sample data summary.

- For all aqueous samples, the reported detection limits for 2-hexanone, 4-methyl-2-pentanone, and benzidine are invalid. The actual detection limit for these compounds may be higher than reported. However, an estimate of these detection limits cannot be established. In addition, documentation strongly suggests, but does not confirm, the presence of 2-hexanone and 4-methyl-2-pentanone in sample C8104 at estimated concentrations of 30 ug/l and 10.5 ug/l, respectively.

- The actual concentration of 2,4-dimethylphenol and benzoic acid in sample C8106 may be lower than reported.

- The actual detection limits for 4-nitrophenol in samples C8124 and C8125 may be substantially higher than reported.

- The actual detection limits for some acid compounds in sample C8105 may be slightly higher than reported.

- The actual detection limits for pesticides may be slightly higher than reported for samples C8105 and C8107 and may be substantially higher than reported for sample C8128.

- The actual detection limits for all BNA compounds in sample C8127 may be substantially higher than reported. In addition, the actual concentrations of bis(2-ethylhexyl)phthalate and di-n-octyl phthalate in sample C8127 may be substantially higher than reported.

- Tentatively identified compounds were reported by the laboratory but are not included in this report.

6.2.1.3 Findings

- Field and/or laboratory blank analysis revealed the presence of methylene chloride, di-n-butyl phthalate, and di-n-octyl phthalate at levels sufficient to question the aforementioned sample results.

- The volatile contaminants reported in field blank C8130 were not used to question any sample results because this blank was run immediately after a high level calibration standard. As a result, these contaminants may be artifacts of instrument carry-over and should not be considered reliable blank information.

- All positive results for acetone were questioned since this solvent was used for decontamination of sampling equipment.

- The positive results for chlorobenzene, ethylbenzene, toluene, 2-hexanone, and 4-methyl-2-pentanone in sample C8107 were questioned because this sample was analyzed immediately after a sample with high concentrations of these compounds (C8105) and therefore may be the result of instrument carry-over. However, the results for benzene and fluorotrichloromethane in this sample should be considered reliable.

- The single peak pesticides reported in samples C8104 and C8106 are questionable since these identifications are based on a single peak response on dual GC columns and as such may be artifacts of random chromatographic interferences. In particular, examination of the pesticide chromatograms for these samples indicates the peaks these identifications are based on may actually be trace PCB 1260 carried by suspended solids, since comparison of the PCB 1260 standard revealed the characteristic multipeak pattern. However, the estimated concentration of PCB 1260 in these samples are well below the reported detection limits.

- Examination of the BNA quantitation list, target spectra, and tentatively identified compounds for sample C8127 revealed that nitrobenzene is actually not present in this sample.

- Examination of the BNA quantitation list, diagnostics, and spectra for sample C8104 revealed the confident presence of 4-methylphenol. Although this was not reported by the laboratory, this result has been incorporated into the sample data summary.

- Examination of the continuing calibration data for standards associated with all aqueous samples revealed virtually zero response factors for 2-hexanone and 4-methyl-2-pentanone. In particular, the possible presence of these compounds in sample C8104 was estimated using the 3-point initial calibration response factors which were approximately 1 month old. Unfortunately, a confident identification was not possible since the continuing calibration standard did not detect these compounds and retention times could not be established. Furthermore, these compounds do not have unique spectra which would enable a confident identification.

- Examination of the 3-point calibration standard and the continuing calibration standard for all aqueous samples, revealed that the SPCC compound benzidine was not detected in any standard run. Consequently, a reliable detection limit cannot be estimated.

- High recovery was reported for 1 acid surrogate compound in sample C8106.

- Zero recoveries were reported for the matrix spike compound 4-nitrophenol in samples C8124 and C8125.

- Low recovery was reported for 1 acid surrogate compound in sample C8105.

- Low recovery was reported for the pesticide surrogate compound in sample C8105 and C8107. In addition, zero recovery was reported for the pesticide surrogate compound in sample C8128.

- Zero or very low recoveries were reported for all 3 BN and all 3 acid surrogate compounds in sample C8127.

- Tentatively identified compounds were examined only for target compound identifications.

6.2.1.4 Summary

The attached Quality Assurance Review has identified the aforementioned areas of concern. The text of this report has been formatted to address only those problem areas which affect the application of the data to the subject investigation. Documentation of these problems and also documentation of any observed areas of contractual non-compliance are included in the attached Support Documentation appendix to this report.

Report prepared by Rock J. Vitale Rock J. Vitale Date: February 7, 1985

6.2.2 Inorganic Data: Lab Case 2638

6.2.2.1 Introduction

The findings offered in this report are based upon a review of all available sample data, blank results, matrix spike and duplicate analysis results, ICP interference QC, calibration data, and quality assurance documentation.

6.2.2.2 Qualifiers

It is recommended that this data package be utilized only with the following qualifier statements:

- The results which are qualitatively questionable are listed below:

Constituents	Samples With Questionable Results
chromium	MC3111
beryllium	MC3112, MC3114, and MC3135
copper	MC3129, MC3131, MC3132, MC3133, and MC3115
iron	MC3131
zinc	MC3115
silver	MC3112 and MC3133
tin	MC3111, MC3134, MC3138, and MC3135
lead	MC3129, MC3131, and MC3115

The aforementioned results were designated questionable since there is evidence to doubt the presence of these constituents at any concentration less than or equal to the levels reported. However, it can be assumed that concentrations substantially greater than the levels reported for these samples cannot be present.

- The laboratory neglected to report cyanide in sample MC3114 at a concentration of 0.25 mg/kg and antimony in sample MC3135 at a concentration of 7.0 mg/kg. These results have been incorporated into the sample data summary.

- Although not reported by the laboratory on the sample result sheets, the presence of mercury should be considered qualitatively confident in sample MC3130. However, the concentration can not be estimated due to sample inhomogeneity. (First analysis, 0.2 mg/kg - duplicate analysis, 0.32 mg/kg.)

- The reported concentration of aluminum in sample MC3115 may not reflect the average present.

6.2.2.3 Findings

- Field and/or laboratory preparation blanks revealed the presence of chromium, beryllium, copper, iron, zinc, silver, tin, and lead at levels sufficient to question the aforementioned results for these constituents.

- Examination of raw data revealed the presence of cyanide in sample MC3114 and antimony in sample MC3135. Conversations with the laboratory manager confirmed that these results should have been reported. The sample data summary has been modified to reflect these changes.

- Duplicate analysis of sample MC3130 revealed the presence of mercury above the contract required detection limit (CRDL). However, the primary analysis revealed a concentration of less than the CRDL. The laboratory reported the result of the primary analysis. Examination of all blanks revealed no contamination. As a result, the qualitative presence of mercury in sample MC3130 should be considered reliable.

- Duplicate analysis of sample MC3115 revealed poor precision for aluminum.

ORIGINAL
(Red)

Site Name: Eastern Diversified Mtls
TDD No.: F3-8402-08

6.2.2.4 Summary

This Quality Assurance Review has identified blank contamination, unreported constituents, and duplicate precision as the primary areas of concern. Please see the accompanying Support Documentation appendix for specifics on this Quality Assurance Review.

Report prepared by Rock J. Vitale Rock J. Vitale Date: February 7, 1985

AR100224

SECTION 7

7.0 TOXICOLOGICAL EVALUATION

7.1 Summary

The major concern posed by the identified contaminants are the degradation of the groundwater and the contamination of the tributary to the Little Schuylkill River. Some residents in the area use groundwater as a potable water supply. The river is used for recreational fishing.

Numerous organics and elevated levels of several inorganics were reported in samples of leachates and soil taken south of the waste pile. Recognized or suspect human and animal carcinogens, including polychlorinated biphenyls (PCBs), benzene, bis(2-ethylhexyl) phthalate, chlorinated aliphatics, and hexachlorobenzene were among the identified organic priority pollutants. Phthalates and PCBs were measured in the highest concentrations. Phthalates, in concentrations of up to approximately 48,100 mg/kg for individual compounds and 49,600 mg/kg total (approximately 5 percent by weight), and PCBs in concentrations of up to approximately 56 mg/kg for individual compounds, and 82 mg/kg total, were reported. Increased levels of lead, copper, manganese, and zinc were also measured in on-site samples.

2,4-Dimethylphenol and increased levels of iron and manganese were reported in a MW sample. The contamination of the groundwater may be site-related. The future contamination of the groundwater with these and other on-site pollutants is possible.

Phthalates and PCBs were also the major contaminants identified in samples from the tributary located along the southern border of the site. Low levels of a few volatile organics and increased concentrations of a few metals were also reported. The levels of phthalates and metals in some aqueous samples could adversely affect sensitive aquatic life. The PCBs, which tend to strongly bioaccumulate, might potentially pose a hazard to consumers of fish from local surface waters.

Part of the stream pollution may have been caused by leachates which were observed to drain directly into the tributary. Pollutants may also have reached the tributary via runoff from the site as well as via effluents from the treatment plant and the holding lagoon spillway. The future pollution of the tributary via these routes is possible.

7.2 Distribution of Contaminants

Elevated levels of several metals were measured in samples from the main and secondary leachate seeps, which emanated from the southern side of the on-site waste pile, and in a stained soil sample taken to the south of the pile. The results are summarized in the following table:

Compound	Phase	Main Leachate	Secondary Leachate	Stained Soil
barium	aqueous	1,960 ug/l	1,130 ug/l	
cadmium	aqueous sediment	14 ug/l 4.3 mg/kg	57 ug/l 4.5 mg/kg	
copper	aqueous sediment/soil	4,360 ug/l 4,000 mg/kg	12,200 ug/l 35,700 mg/kg	
iron	aqueous	76,700 ug/l	28,400 ug/l	
lead	aqueous sediment/soil	1,010 ug/l 434 mg/kg	2,690 ug/l 613 mg/kg	
manganese	aqueous	1,520 ug/l	1,140 ug/l	
nickel	aqueous	83 ug/l	63 ug/l	
zinc	aqueous sediment/soil	16,200 ug/l 2,140 mg/kg	7,540 ug/l 815 mg/kg	

The sediments from both leachate samples were described as being dark rust in color. The aqueous portion of the main leachate was orange. These colorations may be due to the presence of iron compounds. pH readings of the leachates were 6.0 and 6.4. The stained soil, reported to be composed of waste material, was aqua in color. The coloration may be attributable to copper compounds. The site was previously used to recycle copper wire.

Numerous organic pollutants were also identified in these samples. Phthalates (up to approximately 5 percent of total sample weight) and PCBs were reported in the highest concentrations. The results are summarized below. K indicates the compound was detected below the minimum quantifiable limit, which is given. E indicates an estimated value calculated below the minimum quantifiable limit.

Compound	Phase	Main Leachate	Secondary Leachate	Stained Soil
benzene	aqueous	15 ug/l		
	sediment/ soil	115 ug/kg	5 ug/kg	2 ug/kg
chlorobenzene	aqueous	19 ug/l		
	sediment/ soil	299 ug/lg		4 ug/kg
1,2-dichlorobenzene	aqueous	13 ug/l[k]		
1,4-dichlorobenzene	aqueous	11 ug/l[k]		
hexachlorobenzene	soil			19,497 ug/kg
ethylbenzene	aqueous	14 ug/l		
	sediment	488 ug/kg		
toluene	aqueous	9 ug/l		
	sediment/ soil	154 ug/kg		341 ug/kg
xylenes	aqueous	3 ug/l[k]		
	sediment/ soil	78 ug/kg		2 ug/kg
phenol	aqueous	900 ug/l		
2-methylphenol	aqueous	108 ug/l		
4-methylphenol	aqueous	2,450 ug/l		
2.4-dimethylphenol	aqueous		23 ug/l	
benzoic acid	aqueous	91 ug/l[E]	25 ug/l[E]	

ORIGINAL
(Red)

Site Name: Eastern Diversified Mtls
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Compound	Phase	Main Leachate	Secondary Leachate	Stained Soil
1,1,1-trichloroethane	soil			19 ug/kg
trichloroethene	sediment			
	soil	4 ug/kg		12 ug/kg
trans-1,2-dichloroethene	aqueous	14 ug/l		
	sediment	60 ug/kg		
tetrachloroethene	sediment	8 ug/kg		
chloroform				2 ug/kg
fluorotrichloromethane	sediment		25 ug/kg[E]	
2-hexanone	sediment	110 ug/kg		
4-methyl-2-pentanone	sediment	99 ug/kg		
PCB-1260	sediment/soil	55,897 ug/kg	5,128 ug/kg	33,750 ug/kg
PCB-1016	sediment	26,462 ug/kg		
bis (2-ethylhexyl) phthalate (DEHP)	aqueous	1,214 ug/l	223 ug/l	
	sediment/soil	1,899,755 ug/kg	239,618 ug/kg	1,487,012 ug/kg
diethyl phthalate	aqueous	23 ug/l		
di-n-octyl phthalate	aqueous	120 ug/l	30 ug/l	
	sediment/soil	1,451,187 ug/kg	576,349 ug/kg	48,116,020 ug/kg

Phenol-based materials were reportedly used in insulation that was disposed of in the waste pile. The insulation is the likely source of phenols in the leachate.

AR100229

Up-, mid-, and downstream samples were taken from an unnamed tributary of the Little Schuylkill River, located approximately 10 feet to the south of the waste pile. Because the streambed was dry immediately upstream of the site, a true upstream sample could not be taken. The "upstream" sample was taken where the stream flow began, upstream from where the holding lagoon overflow enters the tributary. Because of the location of the upstream samples, they may not be representative of background contaminant levels in the stream. The iron concentration (1,100 ug/l) was slightly elevated in the aqueous sample, copper (154 ug/kg) was slightly elevated in the sediment. Low levels of a few volatile organics were also measured. 1,1,1-Trichloroethane (12 ug/kg), benzene (2 ug/kg), and toluene (7 ug/kg) were measured in the sediment sample. Elevated levels of PCBs and phthalates were detected in the sediment sample as follows: PCB-1260 (2,136 ug/kg), PCB-1016 (5,252 ug/kg), DEHP (22,980 ug/kg), and di-n-octylphthalate (14,456 ug/kg). DEHP (386 ug/l) was also measured in the aqueous sample. All of the contaminants identified in the upstream samples were also identified on site. Contamination may be site-related.

Midstream samples were taken below the area where the holding lagoon overflow empties into the tributary. Observations by FIT III indicated evidence of a recent overflow. There were no unusual levels of inorganics reported in midstream samples. Low levels of a few volatile organics, similar to the levels reported in the upstream samples, were measured in midstream samples as follows: trichloroethane (3 ug/kg$^{E)}$, trichloroethene (4 ug/kg), and toluene (2 ug/kg^{E}) in the sediment sample, and trichloroethene (7 ug/l) in the aqueous sample. DEHP was the only phthalate detected midstream. The reported concentrations (174,868 ug/kg in sediment and 590 ug/l in aqueous) were higher than those measured in upstream samples.

The downstream samples were taken below the outlet from the water treatment plant. Iron (2,830 ug/l), manganese (4,130 ug/l), and zinc (648 ug/l) levels were elevated in the aqueous sample; copper (232 mg/kg) was slightly elevated in the sediment. The sediment concentrations of the phthalates, DEHP (367,311 ug/kg) and di-n-octyl phthalate (86,373 ug/kg), and of PCB-1260 (4,732 ug/kg) and PCB-1016 (11,104 ug/kg) were higher than those measured in the up- and midstream samples. Sampling results suggest that a source of the increased levels of some of the contaminants measured in downstream samples may be leachates which were observed to enter the tributary approximately 200 feet downstream of the water treatment plant. The sediment sample from 1 of these, the lower leachate, contained increased levels of copper (4,260 mg/kg), PCB-1260 (7,975 ug/kg), PCB-1016 (17,130 ug/kg), DEHP (1,496,170 ug/kg), di-n-octyl phthalate (242,117 ug/kg), and benzyl butyl phthalate (9,878 ug/kg). The leachate was orange in color. It should be noted that a surface water diversion ditch also entered the unnamed tributary above the location where the downstream samples were taken. A sample was not taken from this ditch. The possibility that this surface water may be making a contribution to the contamination of the tributary cannot be ruled out.

A sample from an on-site MW contained elevated levels of iron (9,590 ug/l) and manganese (21,000 ug/l), and a low level of 2,4-dimethylphenol (30 ug/l). The pH of the groundwater was slightly acidic (5.7). HNU readings taken on site did not exceed background levels.

7.3 Toxicological Considerations

The 2 major areas of concern regarding the identified contaminants are the contamination of the groundwater and the pollution of the unnamed tributary of the Little Schuylkill River. Local groundwater is used by residents within a 3-mile radius of the site (with the exception of Hometown) as a potable water source. The nearest home well is located 1,000 feet north of the site.

Information concerning the quality of the groundwater was limited to the results of samples taken from an on-site MW. Sampling results indicated the presence of elevated concentrations of iron and manganese, and a low level (30 ug/l) of 2,4-dimethylphenol. 2,4-Dimethylphenol and elevated levels of manganese and iron were identified in on-site leachate samples, suggesting that the groundwater contamination may be site-related. The level of 2,4-dimethylphenol is below the EPA criterion of 400 ug/l for public drinking water supplies. Due to insufficient data concerning possible adverse human health effects, the criterion was calculated to protect against unpleasant taste/odor properties only. There is limited evidence that 2,4-dimethylphenol may act as a cancer-promoting agent. According to EPA, "...data on mammalian health effects need to be developed as a more substantial basis for setting a criterion for the protection of human health."[1] Manganese has been considered as being "among the least toxic of the trace elements to mammals and birds," and no incidences of manganese toxicity as a result of dietary ingestion have been reported in this country.[2] However, an epidemic of manganese toxicity was reported in Japan where well water levels of manganese tetroxide were approximately 14 mg/l.[2] This corresponds to a manganese concentration of approximately 10.1 mg/l. The level of manganese in the MW sample (21 mg/l) might potentially be toxic, if the water were chronically ingested. The iron and manganese levels could also affect the palatability of the water. This water is not currently used as a potable water source. The manganese level might be injurious to sensitive plants if the water were used for irrigation.[3]

There is insufficient information to predict with certainty the location of this MW relative to the direction(s) of groundwater flow underlying the site. It is possible that other on-site contaminants may be present in the groundwater elsewhere beneath the site. A groundwater interceptor has been installed directly to the south of the waste pile. However, because of the fractured nature of the geology underlying the site and a lack of certainty regarding the direction of groundwater flow, the potential effectiveness of this interceptor is questionable. The presence of 2,4-dimethylphenol in the MW sample suggests that site-related groundwater degradation may be occurring.

The future contamination of the groundwater with on-site contaminants is possible. Based on their octanol/water partition coefficients,* it can be predicted that a number of the organics identified on site could potentially infiltrate the groundwater relatively easily.[4] These include 2,4-dimethylphenol (identified in the MW sample), benzene, chlorobenzene, 1,2-dichlorobenzene, 1,4-dichlorobenzene ethylbenzene, toluene, 1,1,1-trichloroethane, trichloroethene, 1,2-trans-dichloroethene, tetrachloroethene, chloroform, fluorotrichloromethane, and diethyl phthalate. Benzene is a recognized human carcinogen. Trichloroethene, tetrachloroethane, 1,1,1-trichloroethane, and chloroform have evidence of carcinogenicity in animals.[5,6] DEHP, hexachlorobenzene, and PCBs also have evidence of animal carcinogenicity, but are less likely to be mobile in groundwater.[7 to 9]

It is also possible that metals including copper, iron, zinc, and lead, all of which were present in elevated levels in on-site leachate samples, could infiltrate the groundwater. In particular, lead may potentially be of concern. Lead is a neurotoxin and can interfere with hemoglobin formation. The possible effects on behavior, learning ability, and intelligence of chronic exposure to low lead levels in utero or during early childhood is of considerable current concern.

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*ratio of substance's solubility in octanol to its solubility in water

It should be noted that total PCB concentrations of up to approximately 82 mg/kg (ppm) were reported in on-site soil/sediment samples. EPA regulations concerning PCBs consider any mixture with 50 ppm or greater PCBs as hazardous waste, the removal of which is subject to regulation.[10]

A number of on-site contaminants were reported in samples form the tributary. Of all the identified organics, phthalates and PCBs were measured in the highest concentrations in both on-site and tributary samples. Total phthalate concentrations progressively increased in up- (37,436 ug/kg), mid- (174,868 ug/kg), and downstream (453,694 ug/kg) sediment samples, respectively. Phthalates, when present in sediments, can enter into aquatic food chains through their ingestion by bottom-feeding organisms. Bioconcentration factors (BCFs) of up to approximately 108,000 in aquatic invertebrates and up to approximately 900 in fish, have been reported.[11] However, phthalates can be metabolized by fish and to an even greater extent by warm-blooded animals, and there is little evidence for their long-term biomagnification or bioaccumulation. The concentrations of DEHP measured in the up- (386 ug/l) and midstream (590 ug/l) samples be toxic to sensitive aquatic life. Chronic toxicity to freshwater organisms has been known to occur at concentrations as low as 3 ug/l.[12] DEHP was not detected within quantifiable limits in the downstream aqueous sample.

PCBs are less biodegradable and more persistent in the environment than phthalates. Heavier PCB mixtures such as 1260 are essentially non-biodegradable, while lighter mixtures such as 1016 may undergo measurable biodegradation.[13] With the possible exception of a small contribution by photolysis, there are no other processes known to transform PCB-1260 in the environment. PCB-1260 is more likely to be incorporated into the biota, while PCB-1016 is more likely to volatilize and subsequently be dispersed in the atmosphere.[13] Due to their tendency to bind to organic constituents in soils/sediments, and their low solubility in water, PCBs are not highly mobile in surface waters. However, the total PCB concentration was higher in the downstream sediment sample than in mid- and upstream samples, suggesting that some migration is taking place. Their further migration from the tributary to the Little Schuylkill River might potentially occur largely through the erosion of PCB-laden particulates. The Little Schuylkill River is a state-approved trout stream and is used for recreational fishing.

The future contamination of the Little Schuylkill River with PCBs could potentially be hazardous to fish and fish-consumers. Due to their high lipid solubility, PCBs tend to strongly partition in the biota, and since they are not readily metabolized or excreted, show substantial bioaccumulation. An average BCF of 31,200 has been determined for PCBs in freshwater fish and shellfish, although BCFs of up to 1 million have been reported.[9,13] PCBs can enter food chains from sediments by absorption through plants, or as a result of direct contact with, or ingestion by, bottom-feeding organisms. The slow release of PCBs from the sediment by resolubilization and/or resuspension can result in long-term pollution.[13] PCBs were not reported in aqueous tributary samples at or above the minimum quantifiable limit of 0.5 ug/l required by EPA contract. It is possible that PCBs were present in concentrations exceeding the ambient water criterion of 0.001 ug/l and might potentially pose a hazard to aquatic life and/or its consumers.[3]

PCBs have been known to adversely affect a variety of organs in mammals, including the liver, skin, adrenals, kidneys, heart, and thyroid. Immunosuppression and reproductive failure have also been reported. Dermal disorders and impaired liver function are the most common effects observed in humans exposed to PCBs in the workplace. There is animal evidence that PCBs may be carcinogenic, and that they could potentially affect the carcinogenicity of other compounds by inducing mixed-function oxidase enzymes in the liver. There is limited and inconclusive evidence that PCB exposure can increase cancer risk in humans.[13]

Low levels of a few volatile organics were reported in up- and midstream samples. These substances would not be expected to persist in shallow surface waters, and any effects on aquatic life would be expected to be minimal. They were not identified in downstream samples. Elevated levels of a few inorganics were measured in up- and downstream tributary samples. This contamination may also be site-related. The downstream aqueous concentrations of iron (2,830 ug/l), manganese (4,130 ug/l), and zinc (648 ug/l) could be injurious to aquatic life. Guidelines of 1,000 ug/l and 47 ug/l have been recommended for iron and zinc, respectively.[3,14] Manganese has been reported to cause toxicity to freshwater aquatic life in concentrations as low as 1,500 ug/l.[3] The upstream iron concentration (1,100 ug/l) only slightly exceeds the recommended level and might affect the most sensitie aquatic species. The levels of copper (195 to 648 ug/l) and lead (10 and 33 ug/l) reported in aqueous stream samples could not be confirmed due to laboratory blank contamination (see section 6.2.2). Copper and lead were measured in aqueous leachate samples in concentrations as high as 12.2 mg/l and 2,690 ug/l, respectively. Their presence in the stream in elevated concentrations cannot be ruled out. If the actual levels in the stream are similar to those reported, they would exceed proposed criteria for freshwater aquatic life protection, which can be as low as 5.8 ug/l for copper and 1 ug/l for lead, depending on water hardness.[15]

The pH readings of the stream became slightly more basic, and thus potentially less harmful to fish, in the more downstream samples (6.0 to 6.8). A pH of 6.5 to 9.0 is the range recommended for aquatic life.[3] A range of 6.0 to 6.5 is also unlikely to be harmful, unless an excess of free carbon dioxide is present.

The potential exists for the continued contamination of the tributary with on-site pollutants. Contaminants might enter the stream via the outfall from the holding lagoon, the discharge from the wastewater treatment plant, and/or leachates which were observed to drain into the tributary downstream of the treatment plant. Since contaminants were found in the tributary upstream of these discharge areas, it is possible that contaminants may also be reaching the stream via runoff. Although leachate diversion ditches have been installed, they were, according to the site leader, relatively shallow. These ditches may not be able to accommodate heavy runoff from the site, such as might occur following heavy precipitation.

With the possible exception of PCBs, phthalates, and hexachlorobenzene, dermal contact with contaminated leachates and soil would be expected to result in the absorption of only small amounts of pollutants, and the risk of any adverse health effects would be expected to be very low. Although there is insufficient data on which to base quantitative estimates, it might be expected that phthalates, PCBs, and hexachlorobenzene, because of their detection in samples in ppm concentrations and their lipophilicity, could potentially be absorbed in greater amounts. PCBs have evidence of carcinogenicity in animals. DEHP and diethyl phthalate have evidence of mutagenicity, and DEHP has recent evidence of carcinogenicity in rodents.[8,12] Hexachlorobenzene is a suspect human carcinogen.[7] In general, a safe or no-effect exposure level to mutagenic or carcinogenic substances cannot be assumed. There are no populations known who regularly come into contact with contaminants on site. Access to the site is not restricted, however.

Prepared by: Isabel Mandelbaum
Isabel Mandelbaum, Ph.D.
Toxicologist

Date: May 14, 1985

Reviewed by: Kenneth G. Symms
Kenneth Symms, Ph. D., Toxicologist

Date: June 5, 1985

ORIGINAL
(Red)

Site Name: Eastern Diversified Mtls
TDD No.: F3-8402-08

LIST OF SOURCES

1. U.S Environmental Protection Agency. 1980. Ambient Water Quality Criteria for 2,4-Dimethylphenol (Office of Water Regulations and Standards). EPA PB81-117558.

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3. U.S. Environmental Protection Agency. 1976. Quality Criteria for Water. U.S. Government Printing Office No. 055-001-01049-4.

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10. Federal Register. May 31, 1979. Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions. 44 (108):31514.

11. U.S. Environmental Protection Agency. 1979. Water-Related Fate of 129 Priority Pollutants, Vol. II. pp. 94-1 to 94-27. PB81-204381.

12. U.S. Environmental Protection Agency. 1980. Ambient Water Quality Criteria for Phthalate Esters (Office of Water Regulations and Standards). EPA PB81-117780.

13. U.S. Environmental Protection Agency. 1979. Water-Related Fate of 129 Priority Pollutants, Vol. I. pp. 36-1 to 36-17. PB80-204373.

14. U.S. Environmental Protection Agency. 1980. Ambient Water Quality Criteria for Zinc (Office of Water Regulations and Standards). EPA PB81-117897.

15. Federal Register. February 7, 1984. - Water Quality Criteria; Request for Comments. 49 (26):4551.

APPENDIX A

ORIGINAL
(Red)

1. COST CENTER:	REM/FIT ZONE CONTRACT TECHNICAL DIRECTIVE DOCUMENT (TDD)	2. NO.:
ACCOUNT NO.:		F3-8402-C8

3. PRIORITY:	4. ESTIMATE OF TECHNICAL HOURS:	5. EPA SITE ID:	6. COMPLETION DATE:	7. REFERENCE INFO.:
[X] HIGH [ ] MEDIUM [ ] LOW	180	PA-989		[X] YES [ ] NO [ ] ATTACHED [X] PICK UP Yner Soylemez
	4A. ESTIMATE OF SUBCONTRACT COST:	5A. EPA SITE NAME: Eastern Diversified Metals- Hometown Tamaque, PA	7/15/84	

8. GENERAL TASK DESCRIPTION: Perform SI, HRS and Toxicology Assessment for the subject site.

9. SPECIFIC ELEMENTS:	10. INTERIM DEADLINES:
1.) Review background information.	
2.) Submit sampling plan to EPA for approval.	
3.) Coordinate lab analysis.	
4.) Conduct on and off-site inspection and sampling.	April 1984
5.) Take and ship samples according to standard protocol.	
6.) Quality assurance of lab data according to standard protocol.	
7.) Toxicology Assessment.	
8.) Complete Hazard Ranking System.	
9.) Submission of report.	

11. DESIRED REPORT FORM: FORMAL REPORT [X] LETTER REPORT [ ] FORMAL BRIEFING [ ]

OTHER (SPECIFY): - Contact Yener before initiation of field activities.

12. COMMENTS:

13. AUTHORIZING RPO: Harold G Beyer (SIGNATURE) — 14. DATE: 3/15/84

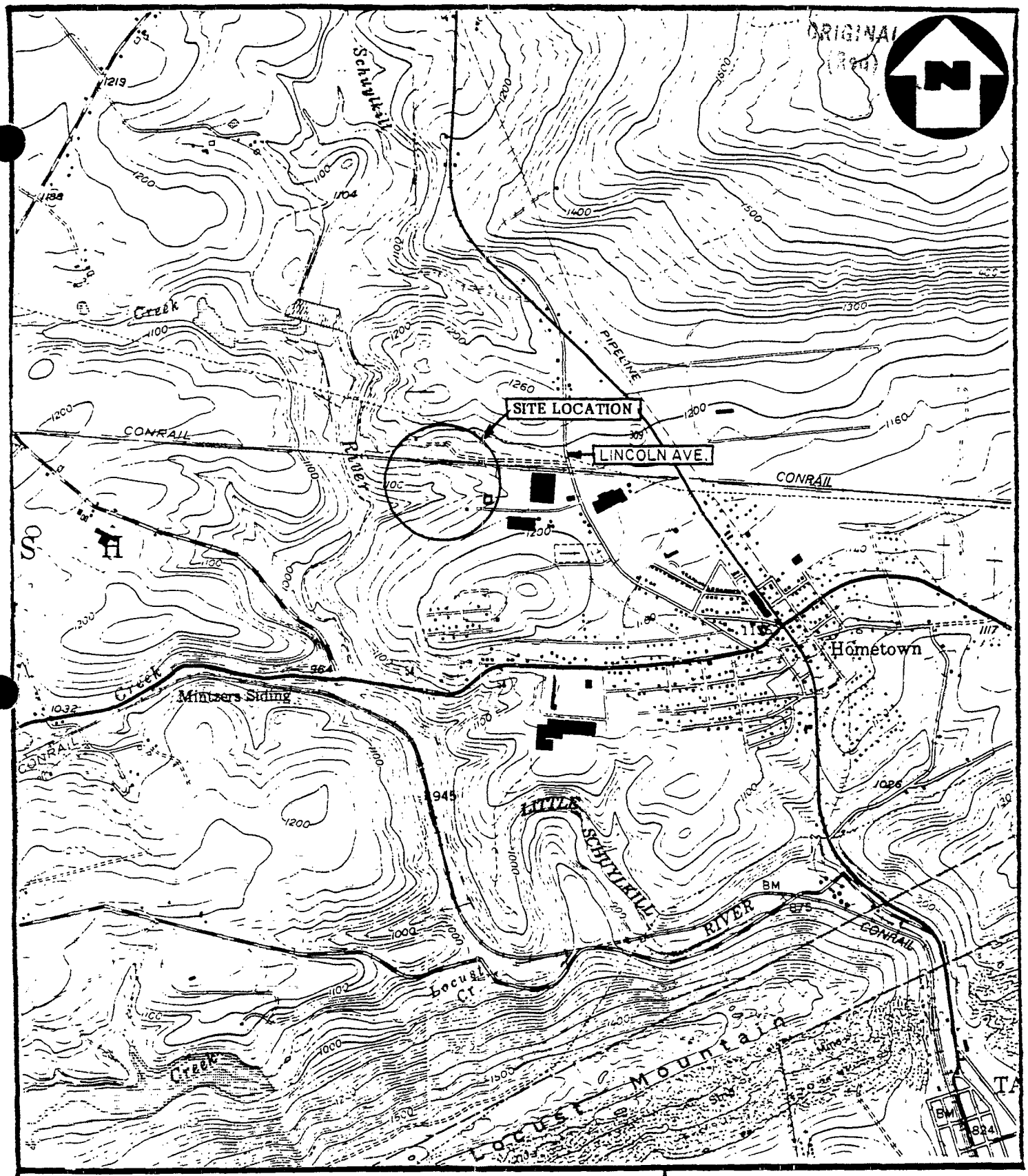
15. RECEIVED BY: [X] ACCEPTED [ ] ACCEPTED WITH EXCEPTIONS [ ] REJECTED — 16. DATE: 3/14/84

(CONTRACTOR RPM SIGNATURE)

Sheet 1 White – FITL Copy
Sheet 2 Canary – DPO Copy
Sheet 3 Pink – Contracting Officer's Copy (Washington, D. C.)
Sheet 4 Goldenrod – Project Officer's Copy (Washington, D. C.)

AR100241

APPENDIX B



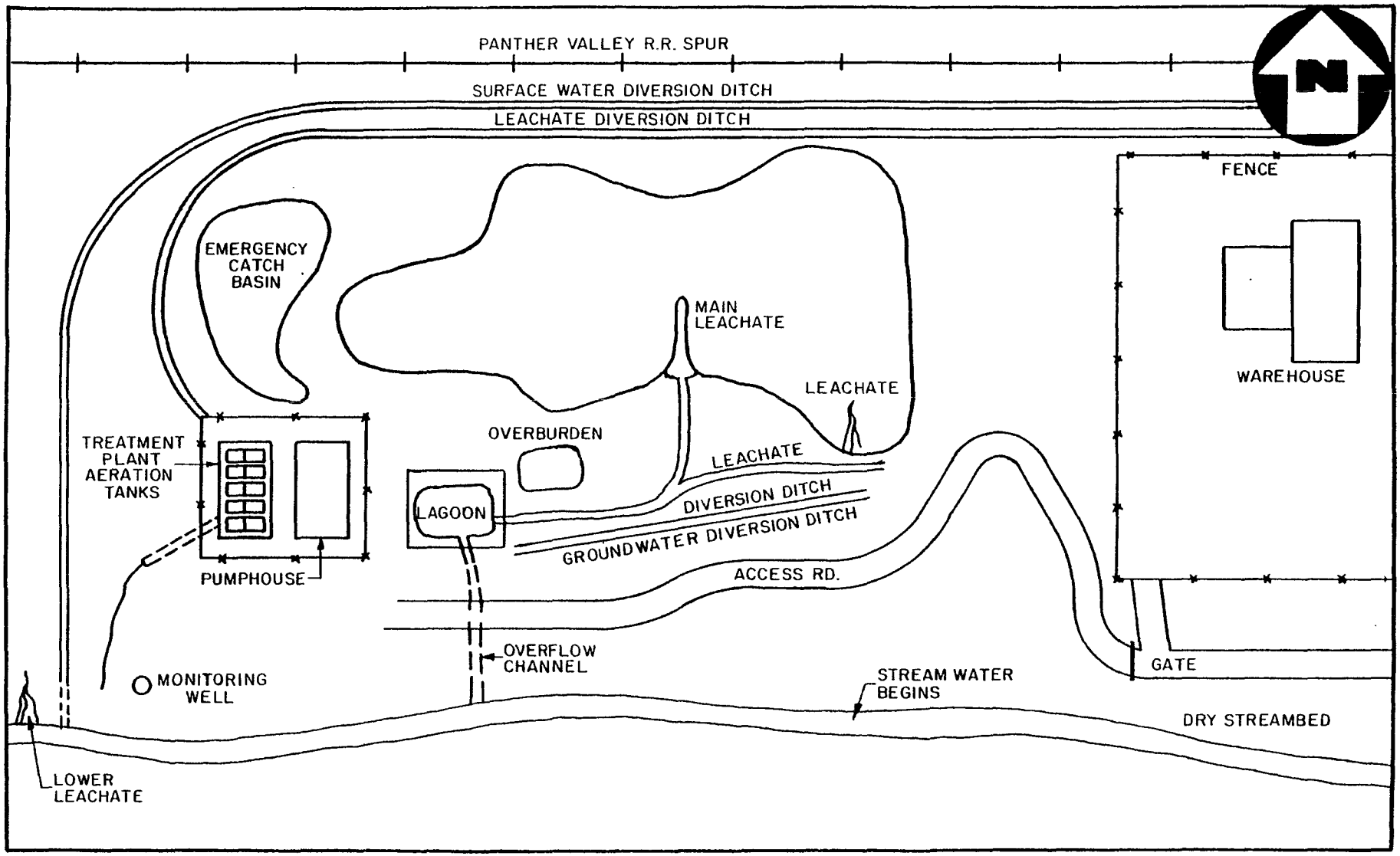
SOURCE: USGS TAMAQUA, PA. QUAD. (7.5 MINUTE SERIES)

EASTERN DIVERSIFIED METALS
Site Location Map
(no scale)

Figure # 1

NUS CORPORATION
A Halliburton Company

AR100243



SITE SKETCH

EASTERN DIVERSIFIED METALS, HOMETOWN, PA.

(NO SCALE)

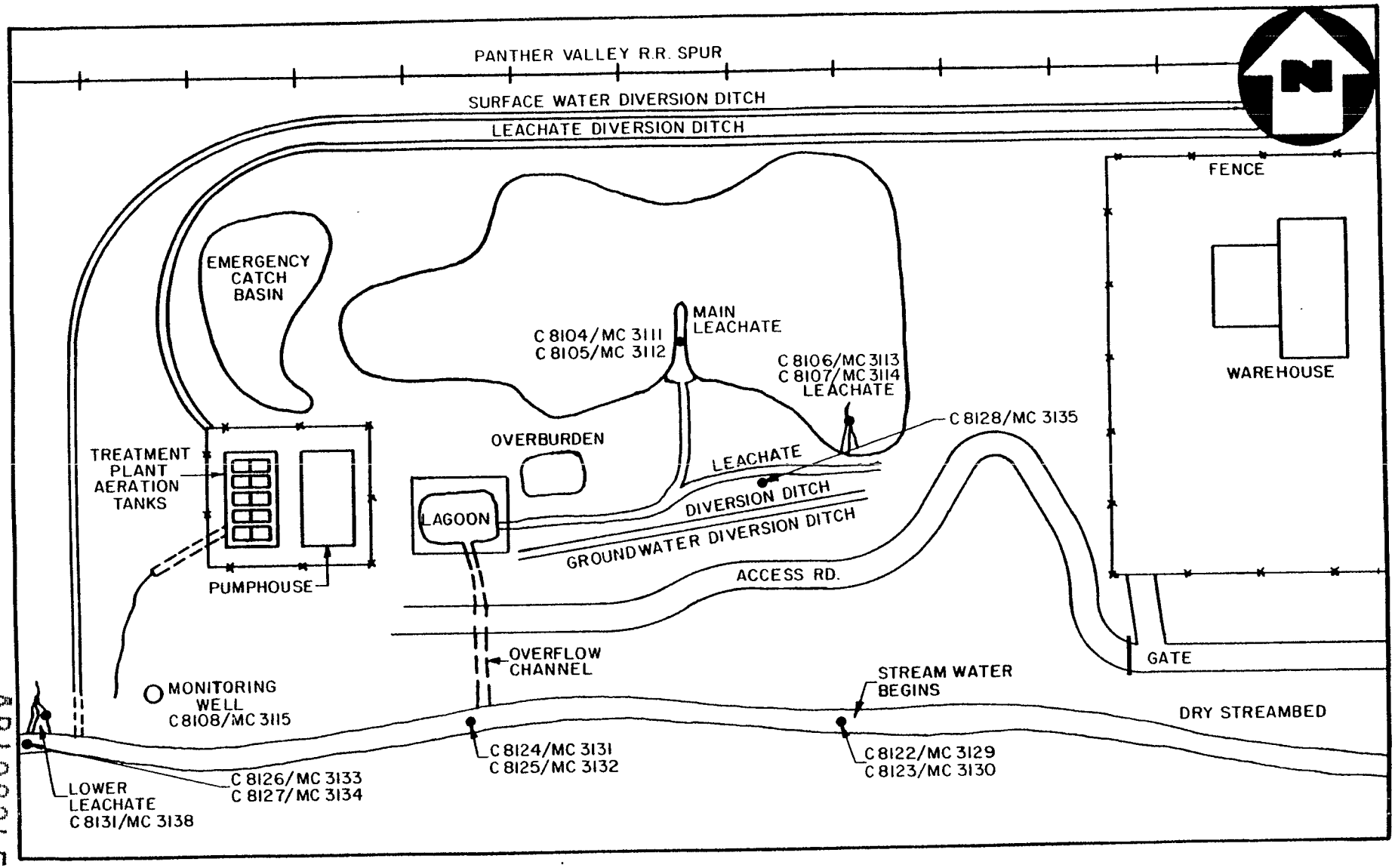
FIGURE 2

NUS CORPORATION

A Halliburton Company

(Red)

AR100244



AR100245

SAMPLE LOCATION MAP

EASTERN DIVERSIFIED METALS, HOMETOWN, PA.

(NO SCALE)

FIGURE 3

NUS CORPORATION

A Halliburton Company

ORIGINAL (Red)

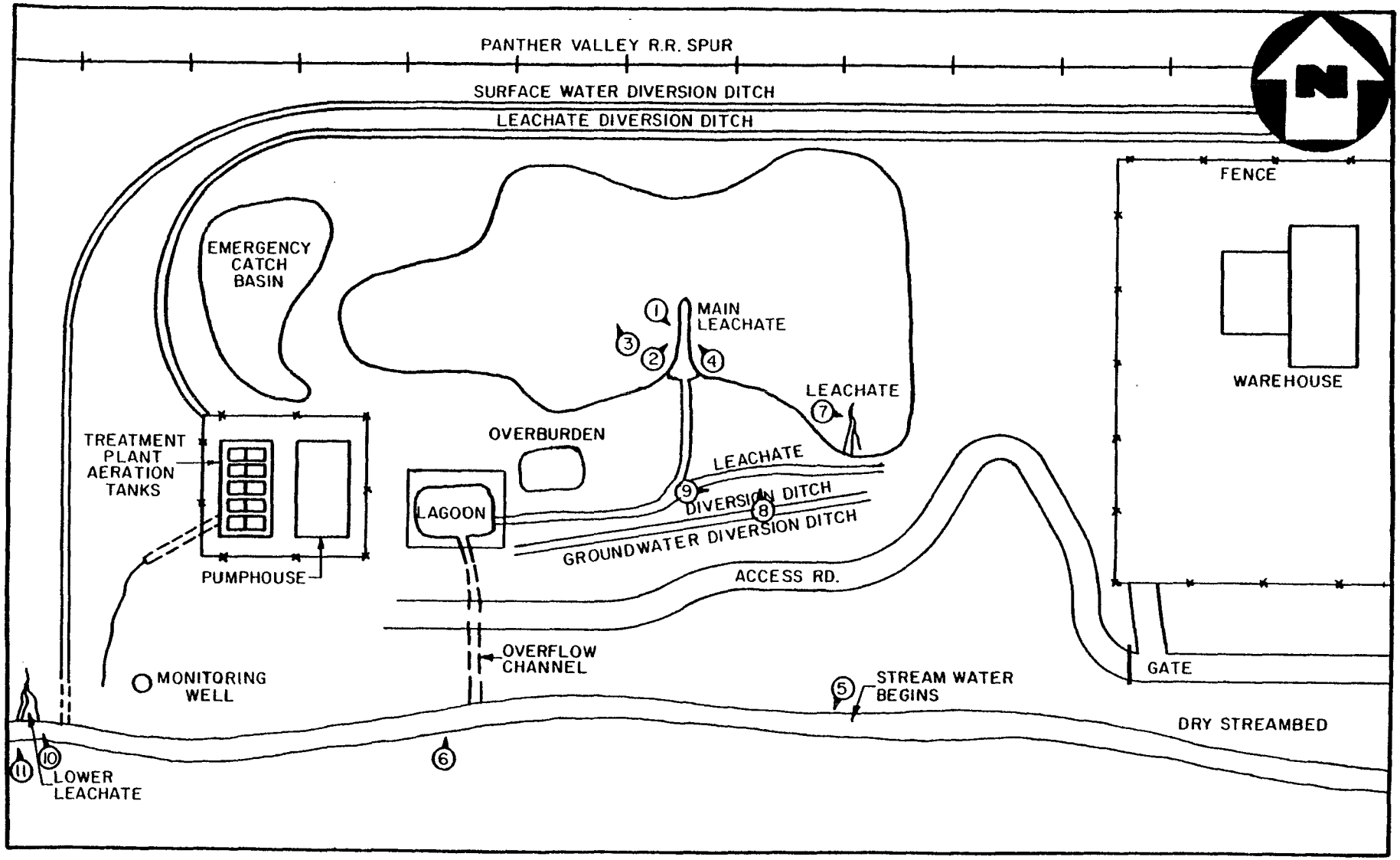


PHOTO LOCATION MAP

EASTERN DIVERSIFIED METALS, HOMETOWN, PA.

(NO SCALE)

FIGURE 4

NUS CORPORATION

A Halliburton Company

ORIGINAL (Red)

AR100246

APPENDIX C

AR100247

PROJECT NAME: Eastern Diversified Metals
TDD NO: F3-8402-08

EPA SITE NO.: PA 989
REGION: F, T III

QUALITY ASSURANCE REVIEW OF ORGANIC ANALYSIS LAB DATA PACKAGE

Case No.: 2638
Contract No.: 68-01-6783
Contract Laboratory: RT-EMSC
Applicable IFB No.: WA83-A094
Reviewer: Rock J. Vitale
Review Date: 1-21-85

Applicable Sample No's.: C8105, C8107, C8123, C8125, C8127, C8131, C8128, C8130

The organic analytical data for this case has been reviewed. The quality assurance evaluation is summarized in the following table:

Reviewer's Evaluation*	Fraction				
	VOLATILES	ACIDS	BASE/ NEUTRALS	PCB/ PEST.	TCDD
Acceptable					✓ ‡
Acceptable with exception(s)	✓ #1, #4	✓ #2, #3	✓ #1, #3	✓ #3	
Questionable					
Unacceptable					

* Definitions of the evaluation score categories are listed on next page.

This evaluation was based upon an analysis of the review items indicated below:

- ● DATA COMPLETENESS
- ● BLANK ANALYSIS RESULTS
- ● SURROGATE SPIKE RESULTS
- ● MATRIX SPIKE RESULTS
- ● DUPLICATE ANALYSIS RESULTS
- ● EVALUATION OF CONFIRMATIONS
- ● QUANTITATIVE CALCULATIONS
- ● TARGET COMPOUND MATCHING QUALITY
- ○ TENTATIVELY IDENTIFIED COMPOUNDS
- ‡ ● CHROMATOGRAPHIC SENSITIVITY CHECKS
- ‡ ● DFTPP AND BFB SPECTRUM TUNE RESULTS
- #6 ● STANDARDS
- #6 ● CALIBRATION CHECK STANDARDS
- ms ○ INTERNAL STANDARDS PERFORMANCE

Data review forms are attached for each of the review items indicated above.

‡ No errors noted, no form attached.

◒ Spot Check performed.

Comments: #1 Please see blank analysis documentation
#2 Please see matrix spike results
#3 Please see surrogate spike results.
#4 Possible instrument carryover observed.
#5 Dioxin analyses was performed, but the data report received until a later date. This data has been received no dioxin has been reported in any of these samples. acceptable analysis
#6 Some contract miscompliances with regard to min RF & max %D. However, none of these miscompliances effect the data as reported.

AR100248

ORIGINAL
(Red)

DATA EVALUATION SCORE CATEGORIES

ACCEPTABLE: Data is within established control limits, or the data which is outside established control limits does not affect the validity of the analytical results.

ACCEPTABLE WITH EXCEPTION(S): Data is not completely within established control limits. The deficiences are identified and specific data is still valid, given certain qualifications which are listed below.

QUESTIONABLE: Data is not within established control limits. The deficiences bring the validity of the entire data set into question. However, the data validity is neither proved nor disproved by the available information.

UNACCEPTABLE: Data is not within established control limits. The deficiences imply the results are not meaningful.

ORIGINAL (Red)

DATA COMPLETENESS	CONC./MATRIX	med/soil											
FRACTION	TRAFFIC REPORT # C81	U5	07	23	25	27	31	30	28	Prep			
	LAB I.D. #	00285	00286	00287	00288	00289	00292	00291	00290	B21C			
VOA :	RUN DATE/TIME	✓								✓			
	TARGET COMPOUND TAB.	✓								✓			
	TARGET COMPOUND D.L.	✓								✓			
	TENT. I.D. COMPOUND TAB.	✓								✓			
	SURROGATE RECOVERY	✓								✓			
	GC SCREEN TABULATION	✓								✓			
	GC/MS CHROMATOGRAMS	✓								✓			
	TARGET CMPD. QUAN. LIST	✓								✓			
	TARGET CMPD. SPECTRA	✓								✓			
	TENT. I.D. CMPD. Q.L.	✓								✓			
	TENT. CMPD. LIB. SRCH.	✓								✓			
	CHRO./SENS. CHECKS	✓								✓			
	BFB/DFTPP TUNE DATA	✓								✓			
	I.S AREAS CHARTS	MS								✓			
	I.S. REL. RESP. FORM	MS								✓			
	RF & AMTS.: CALIB. CHK.	✓								✓			
	RF & AMTS.; 3-PT CALIB.	✓								✓			
	Chromatograms: Calib. Chk.	✓								✓			
	Chromatograms: 3-Pt. Calib.	MS								✓			
	LINEARITY: 3-PT. CALIB	✓								✓			
	RF COMPARISON	✓								✓			
	SAMPLE/FIELD BLANK							✓					
	METHOD/INSTR. BLANK									✓			
	LAB DUPLICATE						✓						
	FIELD DUP/REP												
	MAT. SPK./M. STD.						✓						

COMMENTS :

ORIGINAL (Red)

DATA COMPLETENESS	CONC./MATRIX	Med/Soil										
TRACTION	TRAFFIC REPORT # C81	05	07	23	25	27	31	30	28	PreP		
	LAB I.D. #	00285	00286	00287	00288	00289	00292	00291	00290	BLK		
BNA :	RUN DATE/TIME	✓										
	TARGET COMPOUND TAB.	✓										
	TARGET COMPOUND D.L.	✓										
	TENT. I.D. COMPOUND TAB.	✓										
	SURROGATE RECOVERY	✓										
	GC SCREEN TABULATION	✓										
	GC/MS CHROMATOGRAMS	✓										
	TARGET CMPD. QUAN. LIST	✓										
	TARGET CMPD. SPECTRA	✓										
	TENT. I.D. CMPD. Q.L.	✓										
	TENT. CMPD. LIB. SRCH.	✓										
	CHRO./SENS. CHECKS	✓										
	BFB/DFTPP TUNE DATA	✓										
	I.S AREAS CHARTS	MS										
	I.S. REL. RESP. FORM	MS										
	RF & AMTS. : CALIB. CHK.	✓										
	RF & AMTS. : 3-PT CALIB.	✓										
	Chromatograms: Calib. Chk.	✓										
	Chromatograms: 3-Pt. Calib.	MS										
	LINEARITY : 3-PT. CALIB	✓										
	RF COMPARISON	✓										
	SAMPLE/FIELD BLANK							✓				
	METHOD/INSTR. BLANK									✓		
	LAB DUPLICATE				✓							
	FIELD DUP/REP											
	MAT. SPK./M. STD.				✓							
PEST. :	PESTICIDE TABULATION	✓										
	PEST. D.L. TABULATION	✓										
	PESTICIDE CHRO.	✓										
	PESTICIDE STD. CHRO.	✓										
	PESTICIDE STD. I.D.	✓										
	2nd COLUMN CONF.	✓										
	GC/MS CONFIRMATION	N/a										
	PESTICIDE DUPLICATE				✓							
	PESTICIDE SPIKE				✓							
	PESTICIDE BLANK							✓		✓		
TCDD	TCDD TABULATION											
	TCDD DETECTION LIMIT											
	TCDD CHRO./E.I.C.P.											
	TCDD BLANK											

AR100251

ORIGINAL
(Red)

KEY TO DATA COMPLETENESS FORM

Abbreviation Used on Form	Description of Checklist Item
Conc./Matrix	Concentration category submitted in analysis request (low, med, hi); and matrix (sol., aq.)
Fraction	Fill in acid, base/neutral, acid/base/neutral, or volatiles analysis
Run Date/Time	Instrument run date (to be used for correlating calibration)
Target Cmpd. Tab.	Tabulated results for target compounds
Target Cmpd. D.L.	Detection limits for target compounds (actual/level indicated by screen
Tent. I.D. Cmpd. Tab.	Tabulated results for tentatively identified compounds
Surr. Rec.	Surrogate recoveries results
GC Screen Tab.	Tabulated GC screen results indicating required level of followup
GC/MS Chromatograms	Chromatograms of GC/MS analysis runs
Target Cmpd. Quan. List	Target compounds quantitation list, showing areas, ret. times
Target Cmpd. Spectra	Enhanced and unenhanced spectra of target compound hits
Tent. I.D. Cmpd. Q.L.	Quantitation list for tentatively identified compounds
Tent. Cmpd. Lib. Srch.	Spectra and library match spectra of tentatively identified compounds
Chro./Sens. Checks	EICP's and R.R.F.'s for chromatographic sensitivity checks
BFB/DFTPP Tune Data	Spectra intensity lists, and criteria comparison forms for BFB, DFTPP
I.S. Areas Charts	Internal standards area control charts and description of remedial action
I.S. Rel. Resp. Form	Internal standards relative response listings for each sample run
RF and amts.: Calib. Chk.	Tabulated response factors and amount injected for all cmpds. in calibration check
RF and amts.: 3-Pt. Calib.	Tabulated response factors and amount injected for all cmpds. in 3-point calibration
Chromatograms: Calib. Chk.	Chromatograms for calibration check standard
Chromatograms: 3-Pt. Calib.	Chromatograms for 3-point multilevel calibration standards.
Linearity: 3-Pt. Calib.	Tabulated correlation coefficient or relative standard deviation for calibration
RF Comparison	Tabulated comparison of calibration Response Factor with check standard
Sample/Field Blank	Equipment rinse or reagent water blank shipped with samples from field
Method/Instr. Blank	Method or instrument blank which is prepared at lab
Lab Duplicate	Sample which was split by lab for duplicate analysis
Field Dup/Rep	Sample which was split or collected twice in the field
Mat. Spk./M. Std.	Matrix spike or method standard (blind, or done by lab)
Pest. Tab.	Tabulated results for pesticides
Pest. D.L. Tab.	Tabulated detection limits for pesticides
Pest. Chro.	Chromatograms for pesticide screening
2nd Col. Conf.	Confirmation of pesticide results by using a second GC column and temperature
GC/MS Conf.	Confirmation of pesticide results by GC/MS analysis
Pest. Dup., Spk. Blk.	Pesticide duplicate, spike, and blank
Pest. Std. Chro.	Chromatogram of pesticide standard
Pest. Std. I.D.	Pesticide standard identification form
TCDD	2,3,7,8-tetrachlorodibenzodioxin
TCDD Tab., D.L., EICP, Blk.	TCDD tabulated results, detection limits, extracted ion current profile, blank

KEY TO SYMBOLS USED IN DATA COMPLETENESS TABLE

Symbol	Meaning	Symbol	Meaning
✓	Data item present	I	Incomplete data item
NA	Data item not applicable or not required	NC	Data item not clearly explained (units of conc., etc)
P	Data item within established control limits		
F	Data item outside established control limits	* or [number]	See footnote
MS	Missing item	XX/XX/XX XX:XX	Date/Time of run (calibration, etc.)

RUN CHRONICLE

ORIGINAL

FRACTION: VCA			FRACTION: BNA			FRACTION: (Red)		
RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME
	C8104	4/17 [illegible]		C8104	5/25 [illegible]			
	C8107	4/17 15 [illegible]		C8107	[illegible]			
	C8123	[illegible]		C8123	[illegible]			
	C8125	[illegible]		C8125	[illegible]			
	C8127	[illegible] 7 52		C8127	[illegible]			
	C8128	4/17 [illegible]		C8128	5/25 22:39			
	C8130	4/18 20:43		C8130	5/25 23:35			
	C8131	4/17 [illegible]		C8131	5/25 [illegible]			
	STD [illegible]	4/17 [illegible]		STD [illegible]	5/25 [illegible]			
	STD [illegible]	4/17 14:55		STD [illegible]	5/25 [illegible]			
	BFB	4/17 11:07		STD 5L	[illegible]			
	[illegible]	[illegible]		DETPD	[illegible]			
	MBLK	4/17 13:40		DETPD	5/23 [illegible] 52			
	MS	[illegible]		DETPD	[illegible] 3:22			
	MSD	4/18 [illegible]		MBLK	[illegible]			
				MS	[illegible]			
				MSD	[illegible]			

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BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
VOA	field	low	soil	C8130 00291	NUS	Methylene Chloride (2.6 ug/L/5) #1
						1,1,1-TCE (0.88 ug/L/5) #2
						PCE (0.36 ug/L/5) #2
						Toluene (1.[illegible] ug/L/5) #1
						Chlorobenzene (0.21 ug/L/5) #2
						Ethylbenzene (0.77 ug/L/5) #2
						Acetone (7.[illegible] ug/L/5) #1
						[illegible] (2.1 ug/L/5) #2
						[illegible] (1.2 ug/L/5) #2
						Styrene (0.[illegible] ug/L/5) #2
						[illegible] (0.[illegible] ug/L/5) #2
						Vinyl acetate (2.[illegible] ug/L/5) #1
BNA	field	low	soil	C8130 00291	NUS	Phenol (94 ug/kg/[illegible]) #1
						Isophorone (64 ug/kg/[illegible]) #1
						Diethyl phthalate (15 ug/kg/2450) #1
						Dimethyl phthalate (1[illegible] ug/kg/2450) #1
						Butyl benzyl phthalate (20.[illegible] ug/kg/2450) #2
						Bis(2-ethylhexyl) phthalate (1,348 ug/kg/2450) #2
						Dimethyl phthalate (47.4 ug/kg/2450) #2
						Benzoic Acid (78.2 ug/kg/2450) #2
VOA	lab	low	soil	M.BLC 041884V03	RI-EMSC	$MeCl_2$ (3.[illegible] ug/L/5) #2
						Benzene (0.79 ug/L/5) #2
						PCE (0.20 ug/L/5) #1
						Toluene (0.2[illegible] ug/L/5) #1
						Chlorobenzene (0.21 ug/L/5) #1
						Ethylbenzene (0.19 ug/L/5) #1
						Acetone (8.2 ug/L/5) #1
						Vinyl acetate (0.10 ug/L/5) #1
						MIBK (0.68 ug/L/5) #1
						Styrene (0.[illegible] ug/L/5) #1
						Xylene (0.[illegible] ug/L/5) #1
BNA	lab	low	soil	M.BLC 041884V03	RI-EMSC	Phenol (12.2 ug/kg/[illegible]) #2
						Dimethyl phthalate (30.4 ug/kg/2450) #2
						Butylbenzyl phthalate (18.2 ug/kg/2450) #2
						Bis(2-ethylhexyl) phthalate (243 ug/kg/2450) #1
						Dimethyl phthalate (16.8 ug/kg/2450) #2

LABORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHIN THE SAMPLE ANALYTICAL DATA SUMMARY. TENTATIVELY IDENTIFIED COMPOUNDS IN BLANKS ARE LISTED ON A SEPARATE FOF

COMMENTS:

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM QUANTITATION LIST, DIAGNOSTICS, CHROMATOGRAM AND/OR SPECTRA.

* These blanks not used to question sample results since these values may be the result of instrument carryover.

AR100254

FORM

MATRIX SPIKE DUPLICATE/RECOVERY

CASE NO. 2638
LOW LEVEL
WATER
QC REPORT NO.

CONTRACTOR RI-EMSC
MED. LEVEL X
SOIL/SED. X

CONTRACT NO. 68-01-6783
HIGH LEVEL
OTHER (Specify)
UNITS (Circle) ug/kg ug/L

FRACTION	COMPOUND	SPIKE (µg) ADDED	(µg) MS	% REC.	(µg) MSD	% REC	RPD	QC %RECOVERY LIMITS* RPD	WATER	SOIL	COMMENTS
VOA SMO # C8131	1,1-Dichloroethylene	0.25	0.24	96	0.14	56	40*	<15%	61-145	59-177	
	Trichloroethylene	1.25	0.22	88	0.22	84	4	<15%	71-120	62-137	
	Chlorobenzene	0.25	0.17	68	0.17	68	0	<15%	75-130	60-133	
	Toluene	0.25	0.18	72	0.17	68	4	<15%	76-125	59-139	
	Benzene	0.25	0.22	88	0.22	88	0	<15%	76-127	66-142	
B/N SMO # C8125	1,2,4-Trichlorobenzene	49.5	55.5	112	24.6	50	62	<50%	39- 98	38-107	
	Acenaphthene	49.5	36.5	74	22.2	45	29	<50%	46-118	31-137	
	2,4-Dinitrotoluene	49.5	28.6	58	41.7	84	26	<50%	24- 96	28- 89	
	Di-N-Butylphthalate	49.5	59.2	120	29.9	60	60*	<50%	11-117	29-135	
	Pyrene	24.75	24.2	98	10.4	42	56*	<50%	26-127	35-142	
	N-Nitrosodi-N-Propylamine	49.5	48.7	98	24.7	50	48	<50%	41-116	41-126	
	1,4-Dichlorobenzene	49.5	33.2	67	19.1	39	28	<50%	36- 97	28-104	
ACID SMO # C8125	Pentachlorophenol	49.5	23.4	47	12.2	25	22	<40%	9-103	17-109	
	Phenol	49.5	35.6	72	19.5	39	33	<40%	12- 89	26- 90	
	2-Chlorophenol	49.5	37.6	76	20.7	42	34	<40%	27-123	25-102	
	P-Chlor-M-Cresol	49.5	22.3	43	15.7	32	11	<40%	23- 97	26-103	
	4-Nitrophenol	49.5	6.9	14	0.5	(1)	13	<40%	10- 80	11-114	[1]
PEST SMO #	Lindane	5.0	3.0	60	3.0	60	2	<40%	56-123	46-127	
	Heptachlor	5.0	3.4	67	3.5	69	2	<40%	40-131	35-130	
	Aldrin	5.0	3.4	68	3.5	70	2	<40%	40-120	34-132	
	Dieldrin	5.0	2.5	50	2.5	50	0	<40%	52-126	31-134	
	Endrin	5.0	3.3	66	3.3	66	0	<40%	56-121	42-139	
	p,p-DDT	5.0	3.4	68	3.5	70	2	<40%	38-127	23-134	

*Asterisked values are outside QC limits.

[1] [illegible] reported.

RPD:
VOAs 1 out of 5 ; outside QC limits
B/N 3 out of 7 ; outside QC limits
ACID 0 out of 5 ; outside QC limits
PEST 0 out of 6 ; outside QC limits

RECOVERY:
VOAs 1 out of 10 ; outside of QC limits
B/N 0 out of 14 ; outside of QC limits
ACID 1 out of 10 ; outside of QC limits
PEST 0 out of 12 ; outside of QC limits

*Advisory Limits
Revised 12/83

ORIGINAL

AR100255

02 00

SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 2638
LOW LEVEL X
QC REPORT NO. 2638

CONTRACTOR RI-EMSC
MED. LEVEL

CONTRACT NO. 68-01-6783
HIGH LEVEL
OTHER (Specify)

SMO Traffic Report No.	[Volatile] D 8 Toluene (69-127)	BFB (61-122)	D 4 1,2-Di-chloro-ethane (64-129)	[Semi-Volatile] D 5 Nitro-benzene (24-115)	2-Fluoro-biphenyl (37-120)	D 14 p-ter-phenyl (28-133)	D 5 Phenol (20-106)	2-Fluoro-phenol (24-111)	2,4,6-Tri-bromo-phenol (11-102)	Dibutyl-Chloren-date (0-205)**	[Pesticide] 1,2,3,4-TCDD (18-128)**	[Dioxin]	
C8105	74	62	102	40	75	85	.5*	70	35	.14	-		[2],[3]
C8107	76	73	79	40	60	90	40	65	25	.16	-		[2]
C8123	76	80	101	67	83	99	69	82	86	56	-		
C8125	71	71	106	61	82	115	62	69	81	67	-		
C8125 MS	-	-	-	37	80	93	65	75	94	51	-		
C8125 MSD	-	-	-	35	47	38	38	37	37	63	-		
C8127	69	74	95	0*	.2*	2*	-	0*	-	35	-		[1],[4]
C8128	79	69	98	40	75	70	35	60	25	-	-		
C8130	121	116	100	68	64	176*	80	99	183*	-	-		BLANK
C8131	70	74	101	78	93	72	81	80	90	56	-		
C8131 MS	82	76	103	-	-	-	-	-	-	-	-		
C8131 MSD	80	77	105	-	-	-	-	-	-	-	-		
Mthd Blank	104	98	99	51	98	110	63	82	19	33	-		

* Asterisked values are outside QC limit.
** Advisory limits

Comments:

[1] - [illegible] may possibly [illegible]. (Phthalates may be higher)
[2] [illegible] may be slightly higher than [illegible].
[3] [illegible] may be slightly higher than expected.
[illegible]

Volatiles: 0 out of 33 outside of QC limits
Semi-Volatiles: 7 out of 64 outside of QC limits
Pesticides: 0 out of 0 outside of QC limits
Dioxins: 0 out of 0 outside of QC limits

AR100256 02 001

ORIGINAL (Red)

INSTRUMENT TUNE AND PERFORMANCE SUMMARY

CASE NO. 2638 | CONTRACTOR RI-EMSC | CONTRACT NO. 68-01-6783
LOW LEVEL | MED. LEVEL X | HIGH LEVEL
WATER | SOIL/SED. X | OTHER (Specify)

DFTPP and BFB Performance Results:

X The DFTPP performance results were reviewed and found to be within the specified criteria.

X The BFB performance results were reviewed and found to be within the specified criteria.

DFTPP

Mass	Ion Abundance Criteria
51	30 - 60 percent of mass 198
68	less than 2 percent of mass 69
70	less than 2 percent of mass 69
127	40 - 60 percent of mass 198
197	less than 1 percent of mass 198
198	base peak, 100 percent
199	5 - 9 percent of mass 198
275	10 - 30 percent of mass 198
365	greater than 1 percent of mass 198
441	present but less mass than 443
442	greater than 40 percent of mass 198
443	17 - 23 percent of mass 442

BFB

Mass	Ion Abundance Criteria
50	15 - 40 percent of mass 95
75	30 - 60 percent of mass 95
95	base peak, 100 percent
96	5 - 9 percent of mass 95
173	less than 2 percent of mass 174
174	greater than 50 percent of mass 95
175	5 - 9 percent of mass 95
176	greater than 95 percent, but less than 101 percent of 174
177	5 - 9 percent of mass 176

Deviations: NONE

Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance

Comments:

FORM VII

Revision Date 1/83

AGE LAN 'MA

CASE NO. 2638
LOW LEVEL
WATER
QC REPORT NO.

CONTRACTOR RI-EMSC
MED. LEVEL X
SOIL/SED. X

CONTRACT NO. 68-01-6783
HIGH LEVEL
OTHER (Specify)
UNITS (Circle) ug/Kg ug/l

FRACTION	CAS NUMBER	COMPOUND	CONCENTRATION	CONTRACT DETECTION LIMITS	COMMENTS
VOLATILES:	67-64-1	Acetone	3	5	Methylene chloride concentration in above CRDL and is being watched for corrected action.
	75-09-2	Methylene chloride	9	5	
File I.D. 041784V03					
Instrument I.D. Finnigan 4000					
SEMI-VOLATILES:	117-81-7	Bis(2-ethylhexyl)phthalate	6	10	None of the HSL compounds detected above CRDL
File I.D. 052584C08					
Instrument I.D. Finnigan 4000					
PESTICIDES:					
File I.D. 052584C08					Pesticide blank data is presented in Section VI.
Instrument I.D. Finnigan 4000					

FORM IV

ORIGINAL (Red)

AR100258 02 002

5 of 7

EVALUATION OF CONFIRMATIONS OF GC ANALYSES

SAMPLE NO.	COMPOUND	GC COLUMN # 1				GC COLUMN # 2				GC/MS DATA							TYPE OF CONFIRMATION (2 COL / GC/MS)	REVIEWER CONFIDENT
		COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM COLUMN # 1: ☐ RET. OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM COLUMN # 2: ☐ RET OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM GC/MS RUN(S):			☐ SCAN NO. ☐ RET. OR ☐ REL RET TIMES IN:		RELATIVE PEAK AREA RATIOS			
		Sample	Standard	Sample	Standard	Sample	Standard	Sample	Standard	SPECTRUM MATCH (Y/N)	LEVEL HIGH ENOUGH For GC/MS	WHICH EXTRACT	Sample	Standard	Sample	Standard		
C8127	PCB 1016	1.596	1.617	1.4	5.8	0.528	0.582	[illegible]	6.8									
		2.193	2.104	15.8	[illegible]	0.771	0.649	2.30	3.9									
		2.347	2.344	6.4	5.8	1.294	1.319	26.3	2.2									
		2.841	2.713	13.7	14	1.691	1.781	13.2	1.7								2C	✓
		—	3.084	-	5.5	1.995	2.204	6.2	1.3									
		3.614	3.623	6.0	3.5	2.327	2.412	3.4	1.2									
		4.108	3.946	0.0	[illegible]	2.515	2.670	5.7	1.1									
		4.213	4.289	0.15	[illegible]	3.317	3.467	18.5	0.10									
	PCB 1260	6.497	6.241	21	4.4	[illegible]	5.372	[illegible]	0.65									
		7.913	7.850	13.7	[illegible]	[illegible]	[illegible]	10.7	0.61									
		8.844	8.777	21	6.0	[illegible]	8.069	11.6	0.41									
		9.525	9.444	34.9	8.1	10.301	10.016	22	0.66									
		11.428	11.360	44.6	13.9	12.741	12.158	79	0.13								2C	✓
		13.415	13.387	32.4	11.2	[illegible]	13.318		0.11									
		15.650	15.561	16.	6.6	16.5[illegible]	16.214	47	0.18									
		18.083	17.993	40.	[illegible]													
		22.135	21.142	[illegible]	[illegible]													
		26.517	26.217	22.7	[illegible]													

COMMENTS:

AR100259

(Red)

EVALUATION OF CONFIRMATIONS OF GC ANALYSES

SAMPLE NO	COMPOUND	GC COLUMN # 1 (COLUMN: OV-1; CONDITIONS: 3%; DETECTOR:; OTHER:; DATA FROM COLUMN # 1: ☐ RET. OR ☐ REL. RET. TIMES IN:)		RELATIVE PEAK AREA RATIOS		GC COLUMN # 2 (COLUMN: [illegible]; CONDITIONS: [illegible]; DETECTOR: phase; OTHER:; DATA FROM COLUMN # 2: ☐ RET. OR ☐ REL. RET. TIMES IN:)		RELATIVE PEAK AREA RATIOS		GC/MS DATA (COLUMN:; CONDITIONS:; DETECTOR:; OTHER:; DATA FROM GC/MS RUN(S): ☐ SCAN NO. ☐ RET. OR ☐ REL. RET. TIMES IN:)					RELATIVE PEAK AREA RATIOS		TYPE OF CONFIRMATION (2 COL / GC/MS)	REVIEWER CONFIDENT
		Sample	Standard	Sample	Standard	Sample	Standard	Sample	Standard	SPECTRUM MATCH (Y/N)	LEVEL HIGH ENOUGH FOR GC/MS	WHICH EXTRACT	Sample	Standard	Sample	Standard		
C8105	PCB 1016	1.784	1.617	51	5.8	[illegible]	[illegible]	12.5	6.8									
		2.180	2.104	0.39	37	0.728	0.649	1.0	3.1									
		2.305	2.344	1.9	5.8	1.280	1.319	[illegible]	2.2									
		2.856	2.793	0.76	14	1.810	1.181	[illegible]	1.7									
		—	2.980	ms	6.6	ms	2.201	—	1.3								2C	Y
		3.192	3.084	7	5.5	[illegible]	2.474	[illegible]	1.2									
		3.658	3.623	3	3.5	[illegible]	2.610	[illegible]	1.1									
		4.022	3.996	1.5	3.9	[illegible]	[illegible]	[illegible]	0.10									
		4.332	4.289	12	4.3													
	PCB 1260	6.392	6.291	8.5	4.4	5.197	[illegible]	—	0.65									
		7.886	7.850	12	2.1	[illegible]	[illegible]	[illegible]	[illegible]									
		8.803	8.797	6.4	6.0	8.014	8.009	[illegible]	0.41									
		9.491	9.444	9.3	8.1	10.410	10.011	[illegible]	0.66									
		11.396	11.360	14.1	13.9	[illegible]	12.158	[illegible]	[illegible]								1C	Y
		13.399	13.387	21.6	11.2	ms	13.513	—	[illegible]									
		—	14.693	ms	1.0													
		15.626	15.564	17.9	6.6	16.491	16.[illegible]	[illegible]	[illegible]									
		18.030	17.993	6.1	4.7													
		22.207	22.142	15.5	8.9													
		26.418	26.267	4.2	3.5													

COMMENTS:

AR100260

ORIGINAL (Red)

EVALUATION OF CONFIRMATIONS OF GC ANALYSES

SAMPLE NO	COMPOUND	GC COLUMN # 1				GC COLUMN # 2				GC/MS DATA							TYPE OF CONFIRMATION (2 COL / GC/MS)	REVIEWER CONFIDENT
		COLUMN: 3% CONDITIONS: DETECTOR: OV-1 OTHER: DATA FROM COLUMN # 1: ☐ RET. OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM COLUMN # 2: ☐ RET OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM GC/MS RUN(S):			☐ SCAN NO. ☐ RET. OR ☐ REL. RET TIMES IN:		RELATIVE PEAK AREA RATIOS			
		Sample	Standard	Sample	Standard	Sample	Standard	Sample	Standard	SPECTRUM MATCH (Y/N)	LEVEL HIGH ENOUGH For GC/MS	WHICH EXTRACT	Sample	Standard	Sample	Standard		
C8107	PCB1260	6.307	6.291	0.71	4.4	5.016	[illegible]	[illegible]	[illegible]									
		7.843	7.850	1.3	2.1	[illegible]	[illegible]	[illegible]	[illegible]									
		9.100	8.797	0.26	6.0	3.014	[illegible]	4.1	[illegible]									
		9.509	9.444	1.4	8.1	[illegible]	[illegible]	[illegible]	[illegible]								2C	Y
		11.087	11.260	0.47	13.9	10.31	10.016	4.2	[illegible]									
		13.193	13.387	0.47	11.2	[illegible]	[illegible]	4.1	[illegible]									
		MS	14.673	—	1.0	[illegible]	[illegible]	[illegible]	[illegible]									
		MS	15.069	—	6.6													
		17.996	17.993	0.16	4.7	16.116	[illegible]	0.13	[illegible]									
		22.130	22.142	1.6	8.9													
		26.540	26.167	0.43	3.5													
C8123	PCB 1016	1.614	1.617	1.5	5.8		0.~~[illegible]~~											
		2.107	2.104	14	0.37	0.546	0.532	7.2	6.8									
		2.349	2.344	12	5.8	0.665	0.649	5.0	3.9									
			2.793	—	14	1.271	1.519	2.8	2.2								1C	Y
		2.790	2.786	15	[illegible]	1.663	1.181	21.7	1.7									
		3.100	3.094	16.6	[illegible]	2.204	2.204	60.1	1.3									
		3.634	3.623	17.5	[illegible]	2.425	2.412	17	1.2									
		4.017	3.996	11.0	3.9	2.606	2.670	11.4	1.1									
		4.307	4.284	2.5	4.5	3.210	3.216	2.5	0.10									

COMMENTS:

AR100261

(Red)

EVALUATION OF CONFIRMATIONS OF GC ANALYSES

SAMPLE NO	COMPOUND	GC COLUMN # 1				GC COLUMN # 2				GC/MS DATA							TYPE OF CONFIRMATION (2 COL / GC/MS)	REVIEWER CONFIDENT
		COLUMN: CV-1 CONDITIONS: 3% DETECTOR: OTHER: DATA FROM COLUMN # 1: ☐ RET. OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		COLUMN: CONDITIONS: [illegible] DETECTOR: [illegible] OTHER: DATA FROM COLUMN # 2: ☐ RET OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		COLUMN: CONDITIONS: DETECTOR OTHER: DATA FROM GC/MS RUN(S): ☐ SCAN NO. ☐ RET. OR ☐ REL. RET TIMES IN:					RELATIVE PEAK AREA RATIOS			
		Sample	Standard	Sample	Standard	Sample	Standard	Sample	Standard	SPECTRUM MATCH (Y/N)	LEVEL HIGH ENOUGH FOR GC/MS	WHICH EXTRACT	Sample	Standard	Sample	Standard		
C8128	PCB1260	6.331	6.291	13.5	4.4	5.152	5.322	[illegible]	0.05									
		7.613	7.850	19	2.1	6.433	6.535	[illegible]	0.61									
		8.629	8.797	12.5	6.0	8.032	8.069	[illegible]	0.41									
		9.718	9.444	11.7	8.1	10.346	10.016	[illegible]	0.06									
		11.393	11.260	5.8	10.9	12.005	12.152	[illegible]	0.13								2C	Y
		13.093	13.387	4.4	11.2	ms	13.313	-	0.11									
		—	15.564		6.6													
		17.004	17.193	0.53	4.7	16.150	16.241	[illegible]	0.18									
		21.142	21.142	1.7	8.9													
		26.734	26.261	1.3	2.5													
C8131	PCB1016	1.592	1.617	5	5.3	[illegible]	0.532	18.1	6.8									
		2.011	2.104	5.6	0.31	[illegible]	0.649	10	3.9									
		2.005	2.344	4.7	5.3	[illegible]	1.349	[illegible]	2.2									
		1.141	1.793	12.6	14	[illegible]	1.781	[illegible]	1.1								2C	Y
		3.034	3.081	6.1	5.5	[illegible]	2.209	[illegible]	[illegible]									
		[illegible]	[illegible]	3.0	3.9	[illegible]	2.442	[illegible]	1.2									
		3.930	3.946	3.3	3.9	[illegible]	2.610	[illegible]	1.1									
		[illegible]	7.287	3.8	7.3	[illegible]	2.461	[illegible]	0.10									

COMMENTS:

AR300262

(Red)

5 of 5

EVALUATION OF CONFIRMATIONS OF GC ANALYSES

SAMPLE NO.	COMPOUND	GC COLUMN # 1				GC COLUMN # 2				GC/MS DATA							TYPE OF CONFIRMATION (2 COL / GC/MS)	REVIEWER CONFIDENT
		COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM COLUMN # 1: ☐ RET. OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM COLUMN # 2: ☐ RET. OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM GC/MS RUN(S):			☐ SCAN NO. ☐ RET. OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS			
		Sample	Standard	Sample	Standard	Sample	Standard	Sample	Standard	SPECTRUM MATCH (Y/N)	LEVEL HIGH ENOUGH For GC/MS	WHICH EXTRACT	Sample	Standard	Sample	Standard		
C8131	PCB1260	6.180	6.241	3.9	[illegible]	[illegible]	[illegible]	0.63	0.6[illegible]								2C	Y
		7.717	7.850	2.6	2.1	6.241	[illegible]	[illegible]	0.69									
		8.629	8.797	6.2	6.0	8.013	[illegible]	0.71	0.41									
		[illegible]	9.444	7.8	8.1	10.216	10.016	0.41	0.66									
		11.140	11.360	14.3	13.1	12.135	12.158	0.11	[illegible]									
		13.137	13.387	10.7	9.9	13.301	[illegible]	0.06	[illegible]									
		15.279	15.564	[illegible]	[illegible]	16.216	[illegible]	0.12	[illegible]									
		[illegible]	[illegible]	4.3	[illegible]													
		[illegible]	[illegible]	[illegible]	[illegible]													
		[illegible]	[illegible]	[illegible]	[illegible]													
C8123	PCB1260	6.351	6.241	1.6	[illegible]	5.13[illegible]	[illegible]	2.6	0.6[illegible]								2C	Y
		7.939	7.850	0.76	2.1	6.421	[illegible]	[illegible]	[illegible]									
		8.916	8.797	2.0	6.0	[illegible]	[illegible]	5.9	0.41									
		9.493	9.444	[illegible]	[illegible]	10.356	10.[illegible]16	[illegible]	0.66									
		11.456	11.360	4.9	13.1	12.[illegible]	12.158	2.0	0.1[illegible]									
		13.492	[illegible]	[illegible]	11.2	[illegible]	[illegible]		0.11									
		15.[illegible]	[illegible]	[illegible]	[illegible]	16.[illegible]	[illegible]	0.76	0.1[illegible]									
		[illegible]	[illegible]	2.6	[illegible]													
		[illegible]	[illegible]	[illegible]	8.9													

COMMENTS:

AR100263

(Red)

ORIGINAL (Red)

Instrument Carryover Effects

Possible Instances of Carryover Artifacts are Tabulated and Evaluated Below:

COMPOUND IN	Initial Run (High Level)		Second Run			Third Run			Footnote
QUESTION	Run I.D.	Instrument Level	Run I.D.	Instr. Level	Carryover Percent	Run I.D.	Instr. Level	Carryover Percent	Reference
Benzene	C8105	89.3	C8107	7.3	5.1				#2
Chlorobenzene		233.2		2.4	1.0				#1
Ethylbenzene		[illegible]		4.2	1.1				
Toluene		111.6		4.4	3.7				
[illegible]		[illegible]		[illegible]	6.6				
[illegible]		[illegible]		[illegible]	5.1				
Benzene	C[illegible]	42.[illegible]		11.7	27.3%				#2
Toluene	↓	[illegible]		12	[illegible]				#2
Trichloroethene	↓	[illegible]		11.4	41.2				#2

COMMENTS: (Results which are concluded to be possible artifacts, etc.)

#1 within range to be a possible result of instrument carryover

#2 % Carryover [illegible]

AR100264

INITIAL CALIBRATION DATA - VOLATILE HSL COMPOUNDS

Case No. 2638 Contractor RI-EMSC Contract No. 68-01-6783
Instrument Identifier Finnigan 4000 Calibration Date 19-MAR-[illegible]
Minimum RF for SPCC is 0.30

STANDARD FILE

COMPOUND	$\overline{RRT}$	RF 20	RF 100	RF 200	$\overline{RF}$	SPCC	COR
chloromethane	0.320	0.92	0.93	0.72	0.86	*	0.98
bromomethane	0.390	0.70	0.69	0.67	0.69		1.00
dichlorofluoromethane	0.360	4.40	1.33	1.12	2.28		0.91
vinyl chloride	0.430	1.02	1.02	0.96	1.00		0.99
chloroethane	0.510	0.55	0.43	0.59	0.52		0.99
methylene chloride	0.670	0.89	0.44	0.77	0.70		0.96
acetone	0.720	0.12	0.12	0.20	0.15		0.98
acrolein	0.720	0.06	0.18	0.17	0.14		0.99
trichlorofluoromethane	0.860	8.26	0.54	2.30	3.70		0.92
carbondisulfide	0.930	0.19	0.11	0.10	0.13		0.53
acrylonitrile	0.800	3.82	0.15	0.10	1.36		0.87
1,1-dichloroethylene	0.960	1.69	0.24	1.73	1.22		0.87
bromochloromethane	1.000	1.00	1.00	1.00	1.00		1.00
1,1-dichloroethane	1.140	2.81	2.62	2.10	2.51	*	0.99
trans-1,2-dichloroethylene	1.290	1.95	1.88	1.65	1.83		0.99
chloroform	1.380	3.26	2.93	2.38	2.86		0.99
1,2-dichloroethane	1.530	2.14	1.94	1.65	1.91		0.99
2-butanone	0.540	1.81	1.92	1.44	1.72		0.98
1,1,1-trichloroethane	1.850	2.64	2.51	2.14	2.43		0.[illegible]
carbon tetrachloride	1.870	2.36	2.31	2.04	2.24		0.99
vinyl acetate	-----	-----	-----	-----	-----		----
bromodichloromethane	0.750	1.10	1.02	0.85	0.99		0.99
1,2-dichloropropane	0.810	0.46	0.44	0.37	0.42		0.99
trans-1,3-dichloropropene	0.840	0.85	0.81	0.61	0.76		0.99
trichloroethylene	0.860	0.59	0.57	0.47	0.54		0.99
chlorodibromomethane	0.950	0.63	0.61	0.53	0.59		0.99
1,1,2-trichloroethane	0.940	0.53	0.46	0.38	0.46		0.99
benzene	0.860	1.73	1.48	1.22	1.48		0.99
cis-1,3-dichloropropene	0.920	0.78	0.75	0.64	0.72		0.99
4-methyl-2-pentanone	0.880	0.59	0.59	0.47	0.55		0.99
2-chloroethylvinyl ether [1]	0.980	0.18#	0.10#	0.07#	0.12	*	0.99
1-bromo-1-chloropropane	1.000	1.00	1.00	1.00	1.00		1.00
bromoform	1.120	0.43	0.45	0.41	0.43	*	0.99
2-hexanone	0.950	0.36	0.35	0.29	0.33		0.99
1,1,2,2-tetrachloroethane	0.100	0.47	0.49	0.41	0.46	*	0.99
tetrachloroethylene	1.200	0.73	0.66	0.54	0.64		0.98
1,4-dichlorobutane	1.000	1.00	1.00	1.00	1.00		----
toluene	0.980	1.71	1.86	1.45	1.67		0.98
chlorobenzene	1.060	1.22	1.38	1.11	1.24	*	0.99
ethylbenzene	1.130	0.56	0.64	0.51	0.57		0.99
styrene	1.250	1.13	1.24	0.99	1.12		0.99
o-xylene	1.270	1.51	1.70	1.35	1.52		0.99

[1] Contractual noncompliance [illegible] [illegible] reported

$\overline{RRT}$ - Average Relative Retention Time
RF - Response Factor (subscript is the amount in nanograms
$\overline{RF}$ - Average Response Factor
SPCC - System Performance Check Compounds (those compounds flagged with *)
COR - Correlation Coefficient
- Value below or above specified limits

INITIAL CALIBRATION DATA - SEMIVOLATILE HSL COMPOUNDS

Case No. 2638 Contractor RI-EMSC Contract No. 68-01-6783

Instrument Identifier Finnigan 4000 Calibration Date 25-SEP-83

Minimum $\overline{RRT}$ is 0.80 Maximum $\overline{RRT}$ is 1.20 Minimum RF for SPCC is 0.05

STANDARD FILE

COMPOUND	$\overline{RRT}$	RF 20	RF 50	RF 100	$\overline{RF}$	SPCC	COR
N-nitrosodimethylamine	0.571#	-----	-----	0.001	0.001		-----
phenol	0.954	1.367	1.555	1.672	1.531		1.000
aniline	1.000	2.500	1.000	0.500	1.333		0.000
bis(2-chloroethyl)ether	0.956	1.505	1.519	1.465	1.496		0.999
2-chlorophenol	0.952	1.140	1.243	1.339	1.241		0.999
1,3-dichlorobenzene	0.986	1.210	1.345	1.367	1.307		1.000
1,4-dichlorobenzene	0.986	1.210	1.345	1.367	1.307		1.000
benzyl alcohol	1.000	2.500	1.000	0.500	1.333		0.000
1,2-dichlorobenzene	1.057	-----	1.344	1.374	1.359		-----
2-methylphenol	1.127	1.053	1.108	1.155	1.105		1.000
bis (2-chloroisopropyl) ether	1.126	0.687	0.723	0.775	0.728		0.999
4-methylphenol	1.174	0.970	1.134	-----	1.052		-----
n-nitroso-di-n-propylamine	1.164	0.730	0.643	-----	0.687	*	-----
hexachloroethane	1.148	0.460	0.431	0.556	0.482		0.986
nitrobenzene	1.181	1.380	0.305	0.409	0.698		0.404
isophorone	0.904	0.590	0.575	0.014	0.393		0.254
-nitrophenol	0.921	0.157	0.190	0.213	0.187		0.999
2,4-dimethylphenol	0.957	0.287	0.316	0.322	0.308		1.000
1,1,2-trichloroethane	0.975	0.442	0.468	0.484	0.465		1.000
benzoic acid	1.004	0.093	0.097	0.049	0.080		0.640
2,4-dichlorophenol	0.983	-----	0.321	-----	0.321		-----
1,2,4-trichlorobenzene	0.996	0.340	0.344	0.343	0.342		1.000
naphthalene	1.005	1.050	1.027	-----	1.038		-----
4-chloroaniline	1.174	0.970	1.134	-----	1.052		-----
hexachlorobutadiene	1.058	0.198	0.183	0.179	0.187		1.000
4-chloro-3-methylphenol	1.177	1.035	0.985	0.924	0.981		0.999
2-methylnaphthalene	0.819	3.370	3.513	3.518	3.467		1.000
hexachlorocyclopentadiene	0.860	0.555	0.688	0.736	0.660	*	1.000
2,4,6-trichlorophenol	0.879	0.538	0.589	0.737	0.621		0.993
2,4,5-trichlorophenol	0.886	0.645	0.817	0.777	0.746		0.996
2-chloronaphthalene	0.900	2.450	2.470	2.486	2.469		1.000
2-nitroaniline	1.119	0.465	-----	-----	0.465		-----
dimethyl phthalate	0.981	2.517	2.569	2.543	2.543		1.000
acenaphthylene	0.972	3.330	3.298	3.173	3.267		1.000
2,6-dinitrotoluene	0.987	0.525	0.607	0.025	0.386		0.170
3-nitroaniline	1.010	0.512	0.621	-----	0.567		-----
acenaphthene	1.007	2.245	2.149	2.091	2.162		1.000

$\overline{RRT}$ - Average Relative Retention Time
RF - Response Factor (subscript is the amount in nanograms
$\overline{RF}$ - Average Response Factor
SPCC - System Performance Check Compounds (those compounds flagged with *)
R - Correlation Coefficient
- Value below or above specified limits

FORM IX Revised 12/83

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

Case No. 2638 Contractor RI-EMSC Contract No. 68-01-6783

Instrument Identifier Finnigan 4000 Calibration Date 25-SEP-83

Standard File 052584C07 Date 25-MAY-84 Time 1851

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.05

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
N-nitrosodimethylamine	-----	0.46	----		
phenol	1.43	2.00	-39#	*	
aniline	1.67	1.00	40		
bis(2-chloroethyl)ether	1.50	2.21	-46		
2-chlorophenol	1.24	1.51	-21		
1,3-dichlorobenzene	1.31	1.82	-38		
1,4-dichlorobenzene	1.31	1.88	-43#	*	
benzyl alcohol	0.70	1.00	-42		
1,2-dichlorobenzene	1.33	1.77	-32		
2-methylphenol	1.11	1.24	-11		
bis (2-chloroisopropyl) ether	0.73	0.47	36		
4-methylphenol	1.05	0.98	7		
n-nitroso-di-n-propylamine	0.68	0.70	-2		**
hexachloroethane	0.48	0.59	-21		
nitrobenzene	0.70	1.57	----		
isophorone	0.49	1.07	----		
2-nitrophenol	0.19	0.21	-9	*	
2,4-dimethylphenol	0.32	0.43	-35		
1,1,2-trichloroethane	0.47	0.73	-53		
benzoic acid	0.08	0.14	-73		
2,4-dichlorophenol	0.32	0.41	-27#	*	
1,2,4-trichlorobenzene	0.35	0.51	-46		
naphthalene	1.04	1.46	-39		
4-chloroaniline	0.31	0.98	----		
hexachlorobutadiene	0.19	0.23	-25	*	
4-chloro-3-methylphenol	0.98	0.49	50#	*	
2-methylnaphthalene	3.47	1.85	47		
hexachlorocyclopentadiene	0.67	0.25#	63		**
2,4,6-trichlorophenol	0.63	0.43	32#	*	
2,4,5-trichlorophenol	0.74	0.44	40		
2-chloronaphthalene	2.47	1.48	40		
2-nitroaniline	0.47	0.19	59		
dimethyl phthalate	2.55	1.65	35		
acenaphthylene	3.27	2.14	35		
2,6-dinitrotoluene	0.46	0.34	27		
3-nitroaniline	0.56	0.26	53		
acenaphthene	2.17	1.35	38#	*	

[illegible] contractual miscompliance for max [illegible] date.

$\overline{RF}$ - Average Response Factor from initial calibration (FORM IX)
RF - Response Factor from daily standard file
% D - Percent Difference
* - Calibration Check Compounds (those flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with **)

AR100268

FORM X Revised 12/83

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CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS (cont.)

Case No. 2638 Contractor RI-EMSC Contract No. 68-01-6783

Instrument Identifier Finnigan 4000 Calibration Date 25-SEP-83

Standard File 052584C07 Date 25-MAY-84 Time 1851

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.05

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
2,4-dinitrophenol	0.17	0.06#	67		**
4-nitrophenol	0.44	0.20#	54		**
dibenzofuran	3.27	2.12	35		
2,4-dinitrotoluene	0.75	0.41	46		
diethyl phthalate	1.62	1.59	1		
fluorene	2.51	1.62	35		
4-chlorophenyl phenyl ether	1.25	0.81	35		
4-nitroaniline	0.44	0.04	91		
4,6-dinitro-2-methylphenol	0.21	0.12	44		
N-nitrosodiphenylamine	0.29	-----	----	*	
1,2-diphenylhydrazine	-----	-----	----		
4-bromophenyl phenyl ether	0.15	0.19	-20		
hexachlorobenzene	0.21	0.30	-40		
pentachlorophenol	0.12	0.11	8	*	
phenanthrene	1.04	1.43	-37		
anthracene	0.94	1.07	-13		
di-n-butyl phthalate	1.46	1.31	10		
fluoranthene	1.05	1.41	-33#	*	
benzidine	0.35	0.04#	90		**
pyrene	1.50	1.47	2		
benzyl butyl phthalate	1.05	0.98	6		
3,3'-dichlorobenzidine	0.36	0.22	37		
benzo(a)anthracene	1.17	1.26	-6		
chrysene	1.29	1.21	7		
bis (2-ethylhexyl) phthalate	0.38	0.30	21		
di-n-octyl phthalate	1.78	1.73	3	*	
benzo(b)fluoranthene	-----	1.46	----		
benzo(k)fluoranthene	2.12	1.39	34		
benzo(a)pyrene	0.79	0.82	-2	*	
indeno(1,2,3-cd)pyrene	1.13	0.94	16		
dibenzo(a,h)anthracene	0.86	1.04	-20		
benzo(ghi)perylene	0.95	0.87	8		

See previous page

$\overline{RF}$ - Average Response Factor from initial calibration (FORM IX)
RF - Response Factor from daily standard file
% D - Percent Difference
CCC - Calibration Check Compounds (those flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with **)

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS (cont.)

Case No. 2638 Contractor RI-EMSC Contract No. 68-01-6783

Instrument Identifier Finnigan 4000 Calibration Date 25-SEP-83

Standard File 052584C02 Date 25-MAY-84 Time 1017

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.05

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
2,4-dinitrophenol	0.17	0.05#	69		**
4-nitrophenol	0.44	0.17#	62		**
dibenzofuran	3.27	2.13	35		
2,4-dinitrotoluene	0.75	0.43	42		
diethyl phthalate	1.62	1.68	-3		
fluorene	2.51	1.67	33		
4-chlorophenyl phenyl ether	1.25	0.78	37		
4-nitroaniline	0.44	0.40	9		
4,6-dinitro-2-methylphenol	0.21	0.12	44		
N-nitrosodiphenylamine	0.29	-----	----	*	
1,2-diphenylhydrazine	-----	-----	----		
4-bromophenyl phenyl ether	0.15	0.22	-42		
hexachlorobenzene	0.21	0.30	-41		
pentachlorophenol	0.12	0.12	0	*	
phenanthrene	1.04	1.34	-29		
anthracene	0.94	1.08	-14		
di-n-butyl phthalate	1.46	1.15	21		
fluoranthene	1.05	1.14	-8	*	
benzidine	0.35	0.02#	95		**
pyrene	1.50	2.28	-52		
butyl benzyl phthalate	1.05	1.15	-9		
3,3'-dichlorobenzidine	0.36	0.06	82		
benzo(a)anthracene	1.17	1.21	-3		
chrysene	1.29	1.23	5		
bis (2-ethylhexyl) phthalate	0.38	0.32	15		
di-n-octyl phthalate	1.78	2.06	-15	*	
benzo(b)fluoranthene	-----	1.43	----		
benzo(k)fluoranthene	2.12	1.65	22		
benzo(a)pyrene	0.79	0.78	2	*	
indeno(1,2,3-cd)pyrene	1.13	0.81	28		
dibenzo(a,h)anthracene	0.86	1.04	-20		
benzo(ghi)perylene	0.95	0.82	13		

$\overline{RF}$ - Average Response Factor from initial calibration (FORM IX)
RF - Response Factor from daily standard file
% D - Percent Difference
CCC - Calibration Check Compounds (those flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with **)

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

Case No. 2638 Contractor RI-EMSC Contract No. 68-01-6783

Instrument Identifier Finnigan 4000 Calibration Date 25-SEP-83

Standard File 052584C02 Date 25-MAY-84 Time 1017

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.05

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
N-nitrosodimethylamine	-----	0.55	----		
phenol	1.43	1.88	-30#	*	
aniline	1.67	1.00	40		
bis(2-chloroethyl)ether	1.50	1.69	-12		
2-chlorophenol	1.24	1.48	-19		
1,3-dichlorobenzene	1.31	1.87	-42		
1,4-dichlorobenzene	1.31	1.87	-41#	*	
benzyl alcohol	0.70	1.00	-42		
1,2-dichlorobenzene	1.33	1.72	-29		
2-methylphenol	1.11	1.21	-8		
bis (2-chloroisopropyl) ether	0.73	0.43	42		
4-methylphenol	1.05	0.83	21		
n-nitroso-di-n-propylamine	0.68	0.71	-5		**
hexachloroethane	0.48	0.56	-17		
nitrobenzene	0.70	1.00	-42		
isophorone	0.49	0.80	-60		
2-nitrophenol	0.19	0.14	28#	*	
2,4-dimethylphenol	0.32	0.32	-1		
1,1,2-trichloroethane	0.47	0.55	-16		
benzoic acid	0.08	0.12	-45		
2,4-dichlorophenol	0.32	0.30	7	*	
1,2,4-trichlorobenzene	0.35	0.30	14		
naphthalene	1.04	1.12	-7		
4-chloroaniline	0.31	0.83	----		
hexachlorobutadiene	0.19	0.19	1	*	
4-chloro-3-methylphenol	0.98	0.30	69#	*	
2-methylnaphthalene	3.47	1.78	49		
hexachlorocyclopentadiene	0.67	0.25#	63		**
2,4,6-trichlorophenol	0.63	0.35	44#	*	
2,4,5-trichlorophenol	0.74	0.44	41		
2-chloronaphthalene	2.47	1.36	45		
2-nitroaniline	0.47	0.16	65		
dimethyl phthalate	2.55	1.67	34		
acenaphthylene	3.27	2.04	38		
2,6-dinitrotoluene	0.46	0.35	25		
3-nitroaniline	0.56	0.26	54		
acenaphthene	2.17	1.28	41#	*	

Contractual Noncompliance to Max %D - however no effect on data

$\overline{RF}$ - Average Response Factor from initial calibration (FORM IX)
RF - Response Factor from daily standard file
% D - Percent Difference
CCC - Calibration Check Compounds (those flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with **)

CALIBRATION CHECK - VOLATILE HSL COMPOUNDS

Case No. 2638 Contractor RI-EMSC Contract No. 68-01-6783
Instrument Identifier Finnigan 4000 Calibration Date 18-APR-84
Maximum % D for CCC is 25 Minimum RF for SPCC is 0.30

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
chloromethane	0.86	1.07	-24		**
bromomethane	0.69	0.96	-39		
dichlorofluoromethane	2.28	1.16	49		
vinyl chloride	1.00	1.18	-17	*	
chloroethane	0.52	1.15	----		
methylene chloride	0.70	1.22	-73		
acetone	0.15	0.14	6		
acrolein	0.14	0.15	-11		
trichlorofluoromethane	3.70	-----	----		
carbondisulfide	0.13	3.02	----		
acrylonitrile	1.36	0.11	92		
1,1-dichloroethylene	1.22	2.05	-67#	*	
bromochloromethane	1.00	1.00	0		
1,1-dichloroethane	2.51	2.81	-11		**
trans-1,2-dichloroethylene	1.83	2.05	-11		
chloroform	2.86	2.43	15	*	
1,2-dichloroethane	1.91	1.46	23		
2-butanone	1.72	0.65	62		
1,1,1-trichloroethane	2.43	1.81	25		
carbon tetrachloride	2.24	1.48	34		
vinyl acetate	-----	11.09	----		
bromodichloromethane	0.99	0.72	27		
1,2-dichloropropane	0.42	0.50	-18	*	
trans-1,3-dichloropropene	0.76	0.72	5		
trichloroethylene	0.54	0.56	-2		
chlorodibromomethane	0.59	0.42	29		
1,1,2-trichloroethane	0.46	0.46	0		
benzene	1.48	1.70	-14		
cis-1,3-dichloropropene	0.72	0.57	22		
4-methyl-2-pentanone	0.55	0.54	2		
2-chloroethylvinyl ether	0.12	0.05#	55		**
2-bromo-1-chloropropane	1.00	1.00	0		
bromoform	0.43	0.30	30		**
2-hexanone	0.33	0.30	11		
1,1,2,2-tetrachloroethane	0.46	0.46	0		**
tetrachloroethylene	0.64	0.69	-7		
1,4-dichlorobutane	1.00	1.00	0		
toluene	1.67	1.90	-12	*	
chlorobenzene	1.24	1.23	1		**
ethylbenzene	0.57	0.60	-5		
styrene	1.12	1.15	-2		
o-xylene	1.52	1.53	0		

See previous page

$\overline{RF}$ - Average Response Factor from initial calibration (FORM IX)
RF - Response Factor from daily standard file
% D - Percent Difference
CCC - Calibration Check Compounds (those flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with **)
- Value below or above specified limits

CALIBRATION CHECK - VOLATILE HSL COMPOUNDS

Case No. 2638 Contractor RI-EMSC Contract No. 68-01-6783
Instrument Identifier Finnigan 4000 Calibration Date 17-APR-[illegible]
Maximum % D for CCC is 25 Minimum RF for SPCC is 0.30

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
chloromethane	0.86	1.39	-61		**
bromomethane	0.69	0.77	-12		
dichlorofluoromethane	2.28	0.62	73		
vinyl chloride [1]	1.00	0.41	(59#)	*	
chloroethane	0.52	0.57	-9		
methylene chloride	0.70	0.60	14		
acetone	0.15	1.15	----		
acrolein	0.14	0.16	-17		
trichlorofluoromethane	3.70	----	----		
carbondisulfide	0.13	1.47	----		
acrylonitrile	1.36	0.12	92		
1,1-dichloroethylene	1.22	1.18	3	*	
bromochloromethane	1.00	1.00	0		
1,1-dichloroethane	2.51	2.42	3		**
trans-1,2-dichloroethylene	1.83	1.88	-2		
chloroform	2.86	2.36	17	*	
1,2-dichloroethane	1.91	1.40	27		
2-butanone	1.72	0.48	72		
1,1,1-trichloroethane	2.43	1.05	57		
carbon tetrachloride	2.24	1.07	52		
vinyl acetate	----	12.34	----		
bromodichloromethane	0.99	0.85	15		
1,2-dichloropropane [1]	0.42	0.56	(-32#)	*	
trans-1,3-dichloropropene	0.76	0.56	27		
trichloroethylene	0.54	0.64	-17		
chlorodibromomethane	0.59	0.46	21		
1,1,2-trichloroethane	0.46	0.55	-18		
benzene	1.48	1.96	-32		
cis-1,3-dichloropropene	0.72	0.26	64		
4-methyl-2-pentanone	0.55	0.64	-15		
2-chloroethylvinyl ether	0.12	0.05#	55		**
2-bromo-1-chloropropane	1.00	1.00	0		
bromoform	0.43	0.32	26		**
2-hexanone	0.33	0.36	-8		
1,1,2,2-tetrachloroethane	0.46	0.50	-8		**
tetrachloroethylene	0.64	1.00	-55		
1,4-dichlorobutane	1.00	1.00	0		
toluene	1.67	2.06	-22	*	
chlorobenzene	1.24	1.31	-5		**
ethylbenzene	0.57	0.65	-12		
sturene	1.12	1.22	-8		
o-xylene	1.52	1.64	-7		

[1] See previous page.

$\overline{RF}$ - Average Response Factor from initial calibration (FORM IX)
RF - Response Factor from daily standard file
% D - Percent Difference
CCC - Calibration Check Compounds (those flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with **)
- Value below or above specified limits

ORIGINAL
(red)

PROJECT NAME: Eastern Diversified Metals
TDD NO: F3-8402-08

EPA SITE NO.: PA 989
REGION: FIT III

QUALITY ASSURANCE REVIEW OF ORGANIC ANALYSIS LAB DATA PACKAGE

Case No.: 2638
Contract No.: 68-01-6724
Contract Laboratory: EAL Corp.
Applicable IFB No.: WA82-A155
Reviewer: Rock J. Vitale
Review Date: 1-16-85

Applicable Sample No's.: C8104, C8106, C8122 C8124, C8126, C8108 C8129

The organic analytical data for this case has been reviewed. The quality assurance evaluation is summarized in the following table:

Reviewer's Evaluation*	Fraction				
	VOLATILES	ACIDS	BASE/ NEUTRALS	PCB/ PEST.	TCDD
Acceptable					✓
Acceptable with exception(s)	✓#1, #4	✓#2, #3, #5, #7	✓ #4, #5,	✓#6	
Questionable					
Unacceptable					

* Definitions of the evaluation score categories are listed on next page.

This evaluation was based upon an analysis of the review items indicated below:

- ● DATA COMPLETENESS
- ● BLANK ANALYSIS RESULTS
- ● SURROGATE SPIKE RESULTS
- ● MATRIX SPIKE RESULTS
- ● DUPLICATE ANALYSIS RESULTS
- ○ EVALUATION OF CONFIRMATIONS
- ● QUANTITATIVE CALCULATIONS
- ‡ ● TARGET COMPOUND MATCHING QUALITY
- ○ TENTATIVELY IDENTIFIED COMPOUNDS
- ● CHROMATOGRAPHIC SENSITIVITY CHECKS
- ● DFTPP AND BFB SPECTRUM TUNE RESULTS
- #4 ● STANDARDS
- #4, #5 ● CALIBRATION CHECK STANDARDS
- ‡ ● INTERNAL STANDARDS PERFORMANCE

Data review forms are attached for each of the review items indicated above.

‡ No errors noted, no form attached.

◒ Spot Check performed.

Comments: #1 Please see blank analyses documentation
#2 Please see matrix spike recoveries
#3 Please see surrogate spike recoveries
#4 Zero response was reported for benzidine, 2-hexanone and 4-methyl-2-pentanone on initial and continuing calibration
#5 Some contract miscompliances noted for minimum response factors and maximum % D - see calibration data - most do not effect data.
#6 Single peak pesticide identifications may be artifacts.
#7 The lab neglected to report confident 4-methylphenol in C8104

AR100274

ORIGINAL
(red)

DATA EVALUATION SCORE CATEGORIES

ACCEPTABLE: Data is within established control limits, or the data which is outside established control limits does not affect the validity of the analytical results.

ACCEPTABLE WITH EXCEPTION(S): Data is not completely within established control limits. The deficiences are identified and specific data is still valid, given certain qualifications which are listed below.

QUESTIONABLE: Data is not within established control limits. The deficiences bring the validity of the entire data set into question. However, the data validity is neither proved nor disproved by the available information.

UNACCEPTABLE: Data is not within established control limits. The deficiences imply the results are not meaningful.

ORIGINAL

DATA COMPLETENESS	CONC./MATRIX	LO/AQ								Prep	(Red)		
FRACTION	TRAFFIC REPORT # C81	04	06	22	24	26	08	29	Prep	Prep			
	LAB I.D. #												
VOA :	RUN DATE/TIME	✓								✓			
	TARGET COMPOUND TAB.	✓								✓			
	TARGET COMPOUND D.L.	✓											
	TENT. I.D. COMPOUND TAB.	✓								✓			
	SURROGATE RECOVERY	✓								✓			
	GC SCREEN TABULATION	NS											
	GC/MS CHROMATOGRAMS	✓								✓			
	TARGET CMPD. QUAN. LIST	✓								✓			
	TARGET CMPD. SPECTRA	✓								✓			
	TENT. I.D. CMPD. Q.L.	✓								✓			
	TENT. CMPD. LIB. SRCH.	✓								✓			
	CHRO./SENS. CHECKS	✓								✓			
	BFB/DFTPP TUNE DATA	✓								✓			
	I.S AREAS CHARTS	✓								✓			
	I.S. REL. RESP. FORM	✓								✓			
	RF & AMTS.: CALIB. CHK.	✓								✓			
	RF & AMTS.: 3-PT CALIB.	✓[1]											
	Chromatograms: Calib. Chk.	✓								✓			
	Chromatograms: 3-Pt. Calib.	NS[4]								✓			
	LINEARITY: 3-PT. CALIB	✓[2]								✓			
	RF COMPARISON	✓[2]								✓			
	SAMPLE/FIELD BLANK							✓					
	METHOD/INSTR. BLANK								✓	✓			
	LAB DUPLICATE					✓							
	FIELD DUP/REP												
	MAT. SPK./M. STD.					✓							

COMMENTS:

[1] The 3pt calibration supplied with data is over a month old - No chromatograms supplied, just 3pt initial calibration form.

[2] Linearity given for cal check on day of analyses, 2/5 CCC compounds were above 25% contractual requirement. Although no corrective action taken, no affect on data.

[3] Chromatography sensitivity compounds were in the BNA standard. However, benzidine was not detected in any of these standards. Actual D.L may be substantially higher.

[4] No form included for the BNA calibration check for the day samples were run.

AR100276

OMPLETENESS	CONC./MATRIX	LO/AQ								→ Prep			
RACTION	TRAFFIC REPORT # C81	04	06	22	24	26	08	29	Prep	Prep.			
	LAB I.D. #												
BNA :	RUN DATE/TIME	✓											
	TARGET COMPOUND TAB.	✓											
	TARGET COMPOUND D.L.	✓											
	TENT. I.D. COMPOUND TAB.	✓											
	SURROGATE RECOVERY	✓											
	GC SCREEN TABULATION												
	GC/MS CHROMATOGRAMS	✓											
	TARGET CMPD. QUAN. LIST	✓											
	TARGET CMPD. SPECTRA	✓											
	TENT. I.D. CMPD. Q.L.	✓											
	TENT. CMPD. LIB. SRCH.	✓											
	CHRO./SENS. CHECKS	✓ [3]											
	BFB/DFTPP TUNE DATA	✓											
	I.S AREAS CHARTS	✓											
	I.S. REL. RESP. FORM	✓											
	RF & AMTS.: CALIB. CHK.	MS [1]											
	RF & AMTS.: 3-PT CALIB.	✓ [1]											
	Chromatograms: Calib. Chk.	✓											
	Chromatograms: 3-Pt. Calib.	MS [1]											
	LINEARITY: 3-PT. CALIB	✓ [2]											
	RF COMPARISON	✓ [2]											
	SAMPLE/FIELD BLANK							✓					
	METHOD/INSTR. BLANK								✓	✓			
	LAB DUPLICATE				✓								
	FIELD DUP/REP												
	MAT. SPK./M. STD.				✓								
PEST. :	PESTICIDE TABULATION	✓											
	PEST. D.L. TABULATION	✓											
	PESTICIDE CHRO.	✓											
	PESTICIDE STD. CHRO.	✓											
	PESTICIDE STD. I.D.	✓											
	2nd COLUMN CONF.	✓											
	GC/MS CONFIRMATION	N/a											
	PESTICIDE DUPLICATE			✓									
	PESTICIDE SPIKE			✓									
	PESTICIDE BLANK							✓	✓	✓			
CDD	TCDD TABULATION	✓											
	TCDD DETECTION LIMIT	✓											
	TCDD CHRO./E.I.C.P.	✓											
	TCDD BLANK							✓	✓	✓			

ORIGINAL

AR100277

ORIGINAL

KEY TO DATA COMPLETENESS FORM

Abbreviation Used on Form	Description of Checklist Item
Conc./Matrix	Concentration category submitted in analysis request (low, med, hi); and matrix (sol., aq.)
Fraction	Fill in acid, base/neutral, acid/base/neutral, or volatiles analysis
Run Date/Time	Instrument run date (to be used for correlating calibration)
Target Cmpd. Tab.	Tabulated results for target compounds
Target Cmpd. D.L.	Detection limits for target compounds (actual/level indicated by screen
Tent. I.D. Cmpd. Tab.	Tabulated results for tentatively identified compounds
Surr. Rec.	Surrogate recoveries results
GC Screen Tab.	Tabulated GC screen results indicating required level of followup
GC/MS Chromatograms	Chromatograms of GC/MS analysis runs
Target Cmpd. Quan. List	Target compounds quantitation list, showing areas, ret. times
Target Cmpd. Spectra	Enhanced and unenhanced spectra of target compound hits
Tent. I.D. Cmpd. Q.L.	Quantitation list for tentatively identified compounds
Tent. Cmpd. Lib. Srch.	Spectra and library match spectra of tentatively identified compounds
Chro./Sens. Checks	EICP's and R.R.F.'s for chromatographic sensitivity checks
BFB/DFTPP Tune Data	Spectra intensity lists, and criteria comparison forms for BFB, DFTPP
I.S. Areas Charts	Internal standards area control charts and description of remedial action
I.S. Rel. Resp. Form	Internal standards relative response listings for each sample run
RF and amts.: Calib. Chk.	Tabulated response factors and amount injected for all cmpds. in calibration check
RF and amts.: 3-Pt. Calib.	Tabulated response factors and amount injected for all cmpds. in 3-point calibration
Chromatograms: Calib. Chk.	Chromatograms for calibration check standard
Chromatograms: 3-Pt. Calib.	Chromatograms for 3-point multilevel calibration standards.
Linearity: 3-Pt. Calib.	Tabulated correlation coefficient or relative standard deviation for calibration
RF Comparison	Tabulated comparison of calibration Response Factor with check standard
Sample/Field Blank	Equipment rinse or reagent water blank shipped with samples from field
Method/Instr. Blank	Method or instrument blank which is prepared at lab
Lab Duplicate	Sample which was split by lab for duplicate analysis
Field Dup/Rep	Sample which was split or collected twice in the field
Mat. Spk./M. Std.	Matrix spike or method standard (blind, or done by lab)
Pest. Tab.	Tabulated results for pesticides
Pest. D.L. Tab.	Tabulated detection limits for pesticides
Pest. Chro.	Chromatograms for pesticide screening
2nd Col. Conf.	Confirmation of pesticide results by using a second GC column and temperature
GC/MS Conf.	Confirmation of pesticide results by GC/MS analysis
Pest. Dup., Spk. Blk.	Pesticide duplicate, spike, and blank
Pest. Std. Chro.	Chromatogram of pesticide standard
Pest. Std. I.D.	Pesticide standard identification form
TCDD	2,3,7,8-tetrachlorodibenzodioxin
TCDD Tab., D.L., EICP, Blk.	TCDD tabulated results, detection limits, extracted ion current profile, blank

KEY TO SYMBOLS USED IN DATA COMPLETENESS TABLE

Symbol	Meaning	Symbol	Meaning
✓	Data item present	I	Incomplete data item
NA	Data item not applicable or not required	NC	Data item not clearly explained (units of conc., etc)
P	Data item within established control limits		
F	Data item outside established control limits	* or [number]	See footnote
MS	Missing item	XX/XX/XX XX:XX	Date/Time of run (calibration, etc.)

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
VOA	field	low	AQ	C8129	NUS	$meCl_2$ (19.1 ug/L / 5) #1 ORIGINAL Benzene (1.3 ug/L / 5) #2
BNA	field	low	AQ	C8129	NUS	N.D.
VOA	lab	low	AQ	EAL BLANK	EAL	$meCl_2$ (2.3 ug/L / 5) #1 Benzene (1.5 ug/L / 5) #2
BNA	lab	low	AQ	EAL BLK	EAL	N.D
Pest	field	low	AQ	C8129	EAL	N.D
Pest	lab	low	AQ	EAL BLK	EAL	N.D.

LABORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHIN THE SAMPLE ANALYTICAL DATA SUMMARY. TENTATIVELY IDENTIFIED COMPOUNDS IN BLANKS ARE LISTED ON A SEPARATE FOR

COMMENTS:

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM QUANTITATION LIST, DIAGNOSTICS, CHROMATOGRAM AND/OR SPECTRA.

REAGENT BLANK SUMMARY

CASE NO. 2638
LOW LEVEL x
WATER ✓
QC REPORT NO.

CONTRACTOR EAL CORPORATION
MED. LEVEL
SOIL/SED.

CONTRACT NO. 68-01-6724
HIGH LEVEL
OTHER (Specify)
UNITS (Circle) ug/Kg ug/l

FRACTION	CAS NUMBER	COMPOUND	CONCENTRATION	CONTRACT DETECTION LIMITS	COMMENTS
VOLATILES:					
File I.D. 2551-41-0	541-05-9	hexamethylcyclotrisiloxane	200	970	
Instrument I.D.					
SEMI-VOLATILES:	—	none found			
File I.D. 2551-41-0					
Instrument I.D.					
PESTICIDES:					
File I.D. 110-84-1	—	None Detected			
Instrument I.D.					

FORM IV

AR100280

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Exhibit B
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FORM II

WATER SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 2638
LOW LEVEL X
WATER X
QC REPORT NO.

CONTRACTOR EAL CORPORATION
MED. LEVEL

CONTRACT NO. 68-01-6724
HIGH LEVEL
OTHER (Specify)

[-------Volatile -------][----------Semi-Volatile----------][Pesticide]--[Dioxin]

SMO Traffic Report No.	D_8 Toluene (86-119) 35	BFB (85-121) 37	D_4-1,2-Dichloroethane (77-120) 36	D_5-Nitrobenzene (41-120) 70	2-Fluorobiphenyl (44-119) 68	D_{14}-p-Terphenyl (33-128) 23	D_5-Phenol (15-96) 2	2-Fluorophenol (23-107) 67	2,4,6-Tribromophenol (20-105) 74	Dibutyl-Chlorendate (67-114)**	1,2,3,4-TCDD (23-148)
C-8104	97	93	93	95	108	-0-	73	46	[4] 117*	106	560 *
C-8106	102	105	92	94	[4] 126*	-0-	[4] 97*	79	[3] 224*	114	330 *
C-8108	101	91	96	104	[4] 140*	-0-	62	28	92	92	113
C-8122	102	97	93	87	75	-0-	55	66	[4] 125*	105	98
C-8124	102	99	94	96	[4] 128*	-0-	[4] 116*	[4] 132*	99	90	88
C-8126	102	93	98	65	[4] 143*	-0-	64	[4] 19*	[4] 121*	103	112
C-8129	100	89	92	110	[2] 172*	-0-	[2] 134*	[2] 149*	82	87	87
C-8126 MS	110	103	101	62	92	-0-	[4] 105*	58	50		
C-8126 DMS	100	98	87	70	92	-0-	85	82	71		
EAL BLANK	101	97	94	75	107	-0-	[4] 100*	67	57	83	90
C8122 MS										109	
C8122DMS										83	
					5		5	3	4		

*Asterisked values are outside of QC limits.
**Advisory Limit

Comments:

D14 Terphenyl was not added
* High background peaks
[1]- High recoveries - No effect on data
[2]- Field blank - no effect on data
[3]- Actual concentration of acid compounds may be lower than reported.
[4]- Not significantly out of acceptable criteria

Volatiles: 0 out of 30; outside of QC limits
Semi-Volatiles: 17 out of 50; outside of QC limits
Pesticides: 0 out of 10; outside of QC limits
Dioxin: [illegible] out of [illegible]; outside of QC limits

Limits Revised 12/83

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FORM

MATRIX SPIKE DUPLICATE/RECOVERY

CASE NO. 2638
LOW LEVEL X
WATER X
QC REPORT NO.

CONTRACTOR EAL CORPORATION
MED. LEVEL
SOIL/SED.

CONTRACT NO. 68-01-6724
HIGH LEVEL
OTHER (Specify)
UNITS (Circle) ug/kg ug/L

FRACTION	COMPOUND	#	CONC. SPIKE ADDED	CONC. MS	% REC.	CONC. MSD	% REC	RPD	QC %RECOVERY LIMITS* RPD	WATER	SOIL	COMMENTS
VOA SMO # C-8126	1,1-Dichloroethylene	18	20	14.8	74	16.8	84	13	<15%	61-145	59-177	
	Trichloroethylene	22		15.6	78	14.6	73	7	<15%	71-120	62-137	
	Chlorobenzene	32		15.8	79	16.6	83	5	<15%	75-130	60-133	
	Toluene	31		16.6	83	17.0	85	2	<15%	76-125	59-139	
	Benzene	21		14.8	74*	14.4	72*	3	<15%	76-127	66-142	
B/N SMO # C-8124	1,2,4-Trichlorobenzene	21	200	144	72	156	78	8	<50%	39- 98	38-107	
	Acenaphthene	32		200	100	294	147*	38	<50%	46-118	31-137	
	2,4-Dinitrotoluene	35		119	60	155	78	27	<50%	24- 96	28- 89	
	Di-N-Butylphthalate	48		135	68	197	99	37	<50%	11-117	29-135	
	Pyrene	51		153	77	222	111	36	<50%	26-127	35-142	
	N-Nitrosodi-N-Propylamine	17		154	78	157	79	1	<50%	41-116	41-126	
	1,4-Dichlorobenzene	9		159	80	156	78	3	<50%	36- 97	28-104	
ACID SMO # C-8124	Pentachlorophenol	45		73	37	145	73	65*	<40%	9-103	17-109	
	Phenol	3		154	77	203	102*	28	<40%	12- 89	26- 90	
	2-Chlorophenol	4		181	91	224	112	21	<40%	27-123	25-102	
	P-Chlor-M-Cresol	29		73	37	96	48	26	<40%	23- 97	26-103	
	4-Nitrophenol	34	[1]	14	7*	-0-	-0*	200*	<40%	10- 80	11-114	
PEST SMO # C8122	Lindane		6.18	6.56	106	4.49	73	37	<40%	56-123	46-127	
	Heptachlor		5.86	5.83	99	7.16	122	21	<40%	40-131	35-130	
	Aldrin		5.93	4.86	82	6.43	108	27	<40%	40-120	34-132	
	Dieldrin		5.95	6.31	106	7.76	*130	20	<40%	52-126	31-134	
	Endrin		6.44	5.47	85	4.61	72	17	<40%	56-121	42-139	
	P,P-DDT		6.02	1.58	26*	7.03	116	127	<40%	38-127	23-134	

*Asterisked values are outside QC limits. [1] Actual Dil for 4-nitrophenol in C8124 substantially higher

RPD: VOAs 0 out of 5 ; outside QC limits
B/N 0 out of 7 ; outside QC limits
ACID 2 out of 5 ; outside QC limits
PEST 2 out of 12 ; outside QC limits

RECOVERY: VOAs 2 out of 10 ; outside of QC limits
B/N 1 out of 14 ; outside of QC limits
ACID 3 out of 10 ; outside of QC limits
PEST 1 out of 6 ; outside of QC limits

*Advisory Limits
Revised 12/83

ORIGINAL

FRACTION: VOA			FRACTION:			FRACTION:		
RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME
	C8104	4/16 10:05						
	C8106	4/16 10:52						
	C8108	4/16 11:40						
	C8122	4/16 12:47						
	C8124	4/16 13:45						
	C8126	4/16 14:47						
	C8129	4/16 15 27						

ARI00283

QUANTITATIVE CALCULATIONS

ORIGINAL (Red)

CALCULATION ERRORS AND CORRECTED RESULTS ARE LISTED BELOW:

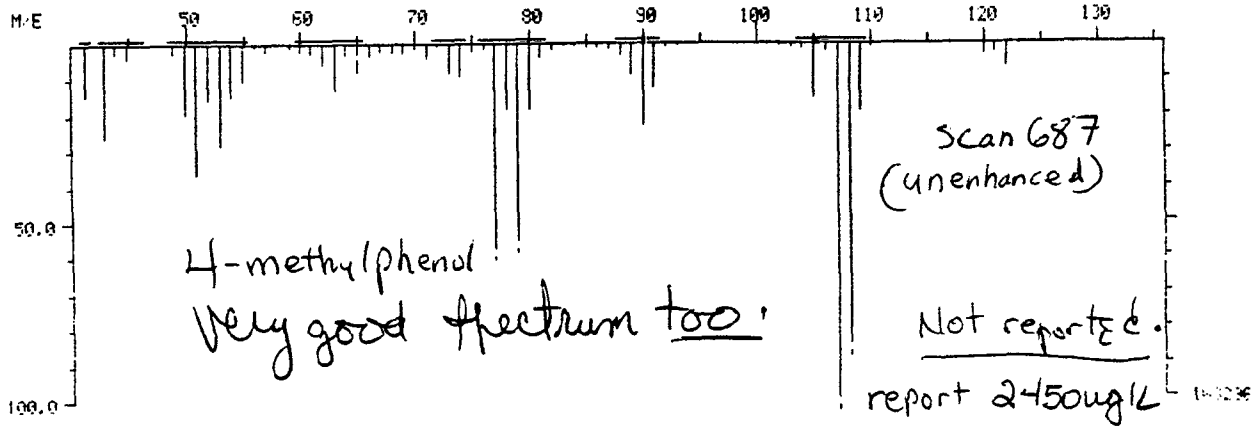
78	103	656	10:56	75	1.131	A BB	155709.	103.728 NG ✓	1.31
79	108	683	11:23	75	1.178	A BB	3320570.	2446.440 NG ?	[illegible]
80	136	781	13:01	80	1.000	A BV	416390.	100.000 NG	1.20
81	105	774	12:54	80	0.991	A VV	15230.	57.174 NG	0.69
82	127	814	13:34	80	1.042	A VB	-2114	-13.319 NG	0.15
83	142	903	15:03	80	1.156	A VB	4579	43.423 NG X	[illegible]
84	162	1049	17:29	84	1.000	A BV	[illegible]	100.000 NG	1.70

76 ANILINE
77 BENZYL ALCOHOL
78 2-METHYL PHENOL
79 4-METHYL PHENOL
80 D8-NAPHTHALENE ***INTERNAL STANDARD***

4-Methylphenol in C8104 not reported

				-656		-17	860	526	27.	
4	HS	2-ME	108	[illegible]	664	8	994	575	54	155708
5	HS	4-ME	109	683	685	2	971	659	39	3320570
				-683		-3	955	640	37.	
				-683		-7	946	647	75.	
6	HS	D8-N	136	781	779	-2	689	202	52.	416389 IS
7	HS	BENZ	105	774	773	-1	771	99	51	[illegible]
				-732		-9	802	151	37	
				-786		-13	770	103	24	
8	HS	4-CH	127	814	814	0	363	15	26.	[illegible]

Fit + Purity very good



Quantitation of MEK + MIBK in C8104 w/ 3pt RF Average
Can't absolutely verify the Qualitative presence since the spectra for these compounds are not very unique

2-Hex -> $\frac{41632}{67425} \times \frac{100}{.421} \times \frac{1}{5} = \sim 30$ ug/L

MIBK -> $\frac{33442}{67425} \times \frac{100}{.941} \times \frac{1}{5} \sim 10.5$ ug/L

AR100284

INSTRUMENT TUNE AND PERFORMANCE SUMMARY

CASE NO. 2638 CONTRACTOR EAL CORPORATION CONTRACT NO. 68-01-6724
LOW LEVEL X MED. LEVEL HIGH LEVEL
WATER X SOIL/SED. OTHER (Specify)

DFTPP and BFB Performance Results:

X The DFTPP performance results were reviewed and found to be within the specified criteria.

X The BFB performance results were reviewed and found to be within the specified criteria.

DFTPP

Mass	Ion Abundance Criteria
51	30 - 60 percent of mass 198
68	less than 2 percent of mass 69
70	less than 2 percent of mass 69
127	40 - 60 percent of mass 198
197	less than 1 percent of mass 198
198	base peak, 100 percent
199	5 - 9 percent of mass 198
275	10 - 30 percent of mass 198
365	greater than 1 percent of mass 198
441	present but less mass than 443
442	greater than 40 percent of mass 198
443	17 - 23 percent of mass 442

BFB

Mass	Ion Abundance Criteria
50	15 - 40 percent of mass 95
75	30 - 60 percent of mass 95
95	base peak, 100 percent
96	5 - 9 percent of mass 95
173	less than 2 percent of mass 174
174	greater than 50 percent of mass 9
175	5 - 9 percent of mass 95
176	greater than 95 percent, but less than 101 percent of 174
177	5 - 9 percent of mass 176

Deviations:

Date/Time/Instrument	File Number	Compound	m/z	Required Abundance	Observed Abundance

Comments:

FORM VII

Revision Date 1/83

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(2ed)

INITIAL CALIBRATION DATA - VOLATILE HSL COMPOUNDS

Case No. 2638 Contractor EAL CORPORATION Contract No 68-01-6724
Instrument Identifier _____ Calibration Date 8/1/84
Minimum RF for SPCC is 0.30

STANDARD FILE

	COMPOUND	$\overline{RRT}$	RF_{20}	RF_{100}	RF_{200}	$\overline{RF}$	SPCC	COR
2	chloromethane	0.139	1.522	1.481	3.264	2.069	*	
3	bromomethane	0.240	1.461	1.611	1.917	1.663		
	dichlorodifluoromethane							
4	vinyl chloride	0.310	2.062	2.311	2.916	2.430		
5	chloroethane	0.436	1.204	1.331	1.593	1.376		
6	methylene chloride	0.648	1.663	2.026	4.241	2.643		
37	acetone	1.052	0.033	0.011	-0-	0.022		
7	acrolein	1.003	0.061	-0-	-0-	0.061		
8	trichlorofluoromethane	0.854	1.841	2.027	2.830	2.233		
40	carbon disulfide	0.836	4.177	4.564	6.173	4.971		
9	acrylonitrile	1.010	0.171	0.159	-0-	0.165		
10	1,1-dichloroethene	0.944	1.412	1.583	2.120	1.705		
1	bromochloromethane	1.000	1.000	1.000	1.000	1.000		
11	1,1-dichloroethane	1.080	2.623	2.423	3.449	2.832	*	
12	trans-1,2-dichloroethane	1.143	1.523	1.643	2.209	1.792		
13	chloroform	1.181	2.375	2.537	3.857	2.923		
14	1,2-dichloroethane	1.293	0.180	0.182	0.045	0.136		
41	2-butanone	1.516	2.550	2.606	2.636	2.597		
15	1,1,1-trichloroethane	1.387	1.641	1.776	2.474	1.964		
16	carbontetrachloride	1.418	1.482	1.527	1.776	1.595		
47	vinyl acetate	0.652	1.262	1.397	1.374	1.344		
17	bromodichloromethane	1.460	1.286	1.321	1.853	1.487		
18	1,2-dichloropropane	1.638	2.344	2.555	3.677	2.859		
19	trans-1,3-dichloropropane	1.662	1.901	2.018	2.697	2.205		
22	trichloroethene	0.730	1.027	1.127	1.861	1.338		
26	chlorodibromomethane	0.751	0.550	0.589	0.790	0.643		
25	1,1,2-trichloroethane	0.765	0.619	0.697	1.226	0.847		
21	benzene	0.768	2.436	2.752	5.937	3.708		
23	cis-1,3-dichloropropene	0.769	0.552	0.527	0.658	0.579		
43	4-methyl-2-pentanone	0.937	0.638	0.780	1.404	0.941		
24	2-chloroethyl vinyl ether	0.705	1.133	1.244	2.015	1.464	*	
27	2-bromo-1-chloropropane	0.825	1.592	1.550	1.758	1.633		
28	bromoform	0.873	0.331	0.332	0.378	0.345	*	
44	2-hexanone	1.006	0.390	[1] -0-	0.452	0.421		
30	1,1,2,2-tetrochloroethane	0.973	0.359	0.410	0.661	0.477	*	
29	tetrachloroethene	0.976	0.690	0.762	1.221	0.891		
42	1,4-dichlorobutane	1.000	1.000	1.000	1.000	1.000		
31	toluene	1.052	1.125	1.240	2.075	1.480		
32	chlorobenzene	1.100	1.234	1.373	2.368	1.658	*	
33	ethylbenzene	1.186	0.529	0.580	1.195	0.768		
45	styrene	1.304	0.799	0.867	1.904	1.190		
46	o-xylene	1.328	1.322	1.472	4.720	2.505		

[1] - See next page

$\overline{RRT}$ - Average Relative Retention Time
RF - Response Factor (subscript is the amount of nanograms)
$\overline{RF}$ - Average Response Factor
SPCC - System Performance Check Compounds (those compounds flagged with *)
COR - Correlation Coefficient

CALIBRATION CHECK - VOLATILE HSL COMPOUNDS

Case No. 2638 Contractor EAL CORPORATION Contract No. 68-01-6724
Instrument Identifier _____ Calibration Date 4/16/84

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.30

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
chloromethane	2.069	3.044			**
bromomethane	1.663	1.839			
dichlorodifluoromethane					
vinyl chloride	2.430	2.842	17	*	
chloroethane	1.376	1.611			
methylene chloride	2.643	2.397			
acetone	0.022	-0-			
acrolein	0.061	-0-			
trichlorofluoromethane	2.233	3.281			
carbon disulfide	4.971	4.786			
acrylonitrile	0.165	-0-			
1,1-dichloroethene	1.705	2.059	[1] 71	*	
bromochloromethane	1.000	1.000			
1,1-dichloroethane	2.832	4.536			**
trans-1,2-dichloroethane	1.792	2.163			
chloroform	2.923	3.428	17	*	
1,2-dichloroethane	0.136	0.230			
2-butanone	2.597	4.751			
1,1,1-trichloroethane	1.964	2.431			
carbontetrachloride	1.595	2.414			
vinyl acetate	1.344	1.977			
bromodichloromethane	1.487	2.112			
1,2-dichloropropane	2.859	3.759	[2] 31	*	
trans-1,3-dichloropropane	2.205	2.375			
trichloroethene	1.338	1.324			
chlorodibromomethane	0.643	0.850			
1,1,2-trichloroethane	0.847	0.923			
benzene	3.708	2.783			
cis-1,3-dichloropropene	0.579	0.461			
4-methyl-2-pentanone	0.941	0.001 [1]			
2-chloroethyl vinyl ether	1.464	1.511			**
2-bromo-1-chloropropane	1.633	1.533			
bromoform	0.345	0.665			**
2-hexanone	0.421	-0- [1]			
1,1,2,2-tetrachloroethane	0.477	0.827			**
tetrachloroethene	0.891	1.072			
1,4-dichlorobutane	1.000	1.000			
toluene	1.480	1.422	4	*	
chlorobenzene	1.658	2.156			**
ethylbenzene	0.768	0.718			
styrene	1.190	1.125			
o-xylene	2.505	1.169			

$\overline{RF}$ - Average Response Factor from initial calibration (Form IX)
RF - Response Factor from daily standard file
% D - Percent Difference
CCC - Calibration Check Compounds (those compounds flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with **)

FORM X (cont-3) Revised 12/83

[1] D.L's for 2-Hexanone & MIBK are invalid.
[2] Contractual Miscompliance - no affect on data.

AR100287

INITIAL CALIBRATION DATA - SEMIVOLATILE HSL COMPOUNDS

Case No. 2638 Contractor EAL CORPORATION Contract No. 68-01-6724

Instrument Identifier _____ Calibration Date 3/17/84

Minimum $\overline{RRT}$ is 0.80 Maximum $\overline{RRT}$ is 1.20 Maximum RF for SPCC is 0.05

STANDARD FILE

	COMPOUND	$\overline{RRT}$	RF_{20}	RF_{100}	RF_{200}	$\overline{RF}$	SPCC	COR
6	N-nitrosodimethylamine	0.402	3.424	1.454	0.002	1.627		
3	phenol	1.000	0.722	0.879	0.941	0.847		
76	aniline	0.994	0.760	0.783	0.947	0.830		
7	bis(2-chloroethyl)ether	0.965	0.759	0.961	0.986	0.902		
4	2-chlorophenol	0.990	0.496	0.579	0.658	0.578		
8	1,3-dichlorobenzene	0.986	0.592	0.644	0.676	0.637		
9	1,4-dichlorobenzene	1.004	0.669	0.707	0.747	0.708		
77	benzyl alcohol	1.104	0.029	0.310	0.427	0.255		
10	1,2-dichlorobenzene	1.052	0.550	0.636	0.685	0.624		
78	2-methylphenol	1.158	0.265	0.466	0.585	0.439		
11	bis(2-chloroisopropyl)ether	1.111	1.020	1.079	1.230	1.110		
79	4-methylphenol	1.202	0.189	0.484	0.653	0.442		
14	N-nitroso-di-n-propylamine	0.852	0.121	0.216	0.035	0.124	* [1]	
12	hexachloroethane	1.130	0.210	0.252	0.283	0.248		
15	nitrobenzene	0.865	0.242	0.407	0.313	0.321		
16	isophorone	0.920	0.478	0.623	0.693	0.598		
17	2-nitrophenol	0.931	0.049	0.140	0.186	0.125		
18	2,4-dimethylphenol	0.964	0.090	0.253	0.308	0.217		
19	bis-2-chloroethoxymethane	0.980	0.255	0.383	0.418	0.352		
81	benzoic acid	1.032	0.042	0.205	0.197	0.148		
20	2,4-dichlorophenol	0.986	0.063	0.220	0.253	0.236		
21	1,2,4-trichlorobenzene	0.994	0.172	0.218	0.247	0.212		
22	naphthalene	1.013	0.826	0.882	0.955	0.888		
82	4-chloroaniline	1.049	-0-	0.230	0.234	0.232		
23	hexachlorobutadiene	1.049	0.081	0.107	0.115	0.101		
24	4-chloro-m-cresol	1.155	0.093	0.235	0.265	0.250		
83	2-methylnaphthalene	1.150	0.391	0.522	0.608	0.507		
25	hexachlorocyclopentadiene	1.202	0.036	0.088	0.103	0.076	* [1]	
26	2,4,6-trichlorophenol	1.226	0.038	0.047	0.127	0.087		
85	2,4,5-trichlorophenol	0.899	0.059	0.384	0.432	0.292		
27	2-chloronaphthalene	1.252	0.079	0.129	0.142	0.117		
86	2-nitroaniline	1.000	1.000	1.000	1.000	1.000		
28	dimethylphthalate	1.354	0.303	0.492	0.422	0.406		
51	acenaphthylene	0.974	1.300	1.918	2.221	1.813		
29	2,6-dinitrotoluene	1.446	0.030	0.132	0.110	0.091		
87	3-nitroaniline	0.944	-0-	0.413	0.500	0.457		
32	acenaphthene	1.005	0.883	1.265	1.340	1.163		

$\overline{RRT}$ - Average Relative Retention Time
RF - Response Factor (subscript is the amount in nanograms)
$\overline{RF}$ - Average Response Factor
SPCC - System Performance Check Compounds (those compounds flagged with *)
COR - Correlation Coefficient

[1] Contractual miscompliance, Since these compounds are not reported in any samples - no effect on data

INITIAL CALIBRATION DATA - SEMIVOLATILE HSL COMPOUNDS (cont.)

Case No. 2638 Contractor EAL CORPORATION Contract No. 68-01-6721

Instrument Identifier _____ Calibration Date 3/17/84

Minimum $\overline{RRT}$ is 0.80 Maximum $\overline{RRT}$ is 1.20 Minimum RF for SPCC is 0.05

STANDARD FILE

	COMPOUND	$\overline{RRT}$	RF_{20}	RF_{100}	RF_{200}	$\overline{RF}$	SPCC	COR
34	2,4-dinitrophenol	0.833	-0-	0.077	0.073	0.075	*	[1]
36	4-nitrophenol	0.858	-0-	0.106	0.101	0.104	*	[1]
37	dibenzofuran	1.112	0.044	0.037	0.135	0.072		
35	2,4-dinitrotoluene	0.854	0.049	0.210	0.210	0.156		
37	diethylphthalate	0.892	0.463	0.749	0.750	0.654		
39	fluorene	0.881	0.554	0.859	0.898	0.770		
38	4-chlorophenylphenylether	0.888	0.208	0.355	0.403	0.322		
39	4-nitroaniline	1.168	-0-	0.025	0.033	0.029		—
40	4,6-dinitro-o-cresol	0.904	-0-	0.112	0.103	0.108		
41	diphenylamine	0.907	0.012	0.083	0.152	0.082		
42	1,2-diphenylhydrazine as azobenzene	0.889	0.109	0.210	0.237	0.185		
43	4-bromophenylphenylether	0.949	0.095	0.189	0.201	0.162		
44	hexachlorobenzene	0.960	0.122	0.232	0.215	0.190		
46	pentachlorophenol	0.990	0.019	0.184	0.140	0.114		
46	phenanthrene	1.003	0.758	1.323	1.236	1.106		
47	anthracene	1.003	0.758	1.323	1.249	1.110		
48	dibutylphthalate	1.102	0.550	1.735	1.504	1.263		
50	fluoranthene	0.979	0.978	1.703	1.512	1.398		
53	benzidine	1.001	-0-	-0-	-0-	-0-	*	[2]
51	pyrene	1.002	1.158	1.831	1.515	1.501		
54	butyl benzyl phthalate	0.963	0.203	1.622	1.141	0.989		
57	3,3'-dichlorobenzidine	1.006	-0-	0.002	0.034	0.018		
55	benzo(a)anthracene	0.998	0.743	1.745	1.235	1.241		
56	chrysene	1.003	0.707	1.853	1.192	1.251		
58	bis(2-ethylhexyl)phthalate	1.029	0.154	1.119	0.848	0.707		
59	di-n-octylphthalate	1.117	0.124	1.582	0.964	0.890		
61	benzo(b)fluoranthene	1.136	0.538	0.771	0.324	0.544		
62	benzo(k)fluoranthene	1.142	0.404	0.536	0.536	0.492		
63	benzo(a)pyrene	1.191	0.158	0.250	0.468	0.292		
64	indeno(1,2,3-cd)pyrene	1.477	0.034	0.051	0.374	0.153		
65	dibenzo(a,h)anthracene	1.499	-0-	0.033	0.358	0.196		
66	benzo(ghi)perylene	1.557	-0-	0.026	0.005	0.016		

$\overline{RRT}$ - Average Relative Retention Time
RF - Response Factor (subscript is the amount in nanograms)
$\overline{RF}$ - Average Response Factor
SPCC - System Performance Check Compounds (those compounds flagged with *)
COR - Correlation Coefficient

[1] Contractual Miscompliance @ 20ug/L since D.L is 10ug/L and that RF is OK-
[2] Actual D.L for benzidine may be substantially higher than reported NO RECAL

ORIGINAL

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

Case No. 2638 Contractor EAL CORPORATION Contract No. 68-01-6724

Instrument Identifier _____ Calibration Date 3/12/84

Standard File AN03 Date 5/3/84 Time 8:46

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.05

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
N-nitrosodimethylamine	1.627	-0-			
phenol	0.847	1.008	19	*	
aniline	0.830	0.989			
bis(2-chloroethyl)ether	0.902	0.704			
2-chlorophenol	0.578	0.825			
1,3-dichlorobenzene	0.637	0.741			
1,4-dichlorobenzene	0.708	0.803	13	*	
benzyl alcohol	0.255	0.476			
1,2-dichlorobenzene	0.624	0.724			
2-methylphenol	0.439	0.628			
bis(2-chloroisopropyl)ether	1.110	0.761			
4-methylphenol	0.442	0.595			
N-nitroso-di-n-propylamine	0.124	0.215			**
hexachloroethane	0.248	0.242			
nitrobenzene	0.321	0.406			
isophorone	0.598	0.599			
nitrophenol	0.125	0.158	26 [1]	*	
2,4-dimethylphenol	0.217	0.263			
bis-2-chloroethoxymethane	0.352	0.447			
benzoic acid	0.148	0.064			
2,4-dichlorophenol	0.236	0.252	7	*	
1,2,4-trichlorobenzene	0.212	0.343			
naphthalene	0.888	0.930			
-chloroaniline	0.232	0.038			
hexachlorobutadiene	0.101	0.192	90 [1]	*	
-chloro-m-cresol	0.250	0.744	198 [1]	*	
-methylnaphthalene	0.507	0.026			
hexachlorocyclopentadiene	0.076	0.113			**
2,4,6-trichlorophenol	0.087	0.084	3	*	
2,4,5-trichlorophenol	0.092	0.181			
2-chloronaphthalene	0.117	0.205			
2-nitroaniline	1.000	1.000			
imethylphthalate	0.406	0.516			
acenaphthylene	1.813	1.446			
2,6-dinitrotoluene	0.091	0.097			
-nitroaniline	0.457	0.143			
acenaphthene	1.163	1.012	13	*	

$\overline{RF}$ - Average Response Factor from initial calibration (Form IX)
RF - Response Factor from daily standard file
% D - Percent Difference
* - Calibration Check Compounds (those compounds flagged with *)
** - System Performance Check Compounds (those compounds flagged with *)

FORM X Revised 12/83

AR100290

[1] Contractual Miscompliance - Since these compounds not reported in samples no affect on data → Contractually no corrective action taken

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS (cont.)

Case No. 2638 Contractor EAL CORPORATION Contract No. 68-01-6724
Instrument Identifier _____ Calibration Date 3/17/84
Standard File BN04 Date 5/4/84 Time 8:37

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.05

	COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
34	2,4-dinitrophenol	0.075	(0.009)	[1]		**
	4-nitrophenol	0.104	(0.004)	[1]		**
	dibenzofuran	0.072	0.017			
35	2,4-dinitrotoluene	0.156	0.176			
	diethylphthalate	0.654	1.068			
	fluorene	0.770	0.738			
38	4-chlorophenylphenylether	0.322	0.510			
	4-nitroaniline	0.029	0.037			
	4,6-dinitro-o-cresol	0.108	0.048			
41	diphenylamine	0.082	0.088	7	*	
42	1,2-diphenylhydrazine as asobenzene	0.185	0.282			
	4-bromophenylphenylether	0.162	0.205			
	hexachlorobenzene	0.190	0.274			
45	pentachlorophenol	0.114	0.164	(44) [1]	*	
	phenanthrene	1.106	0.992			
	anthracene	1.110	0.995			
48	dibutylphthalate	1.263	1.274			
	fluoranthene	1.398	1.153	18	*	
	benzidine	-0-	-0-	[2]		**
51	pyrene	1.501	1.178			
	butyl benzyl phthalate	0.989	1.440			
	3,3'-dichlorobenzidine	0.018	-0-			
55	benzo(a)anthracene	1.241	0.971			
56	chrysene	1.251	0.759			
	bis(2-ethylhexyl)phthalate	0.707	0.919			
	di-n-octylphthalate	0.890	1.106	24	*	
61	benzo(b)fluoranthene	0.544	0.393			
2	benzo(k)fluoranthene	0.492	0.342			
3	benzo(a)pyrene	0.292	0.241	17	*	
64	ideno(1,2,3-cd)pyrene	0.153	0.035			
5	dibenzo(a,h)anthracene	0.196	0.020			
6	benzo(ghi)perylene	0.016	0.013			

RF - Average Response Factor from initial calibration (Form IX)
RF - Response Factor from daily standard file
% D - Percent Difference
CCC - Calibration Check Compounds (those compounds flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with **)

ARI00291

[1]-Contractual miscompliance - no corrective action taken - But no affect on data.
[2] Actual D.L may be substantially higher.

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS

Case No. 2638 Contractor EAL CORPORATION Contract No. 68-01-6724

Instrument Identifier _____ Calibration Date 3/17/84

Standard File BN04 Date 5/4/84 Time 8:37

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.05

COMPOUND	$\overline{RF}$	RF	% D	CCC	SPCC
N-nitrosodimethylamine	1.627	-0-			
phenol	0.847	0.989	17	*	
aniline	0.830	0.918			
bis(2-chloroethyl)ether	0.902	0.735			
2-chlorophenol	0.578	0.767			
1,3-dichlorobenzene	0.637	0.724			
1,4-dichlorobenzene	0.708	0.795	12	*	
benzyl alcohol	0.255	0.351			
1,2-dichlorobenzene	0.624	0.687			
2-methylphenol	0.439	0.538			
bis(2-chloroisopropyl)ether	1.110	0.605			
4-methylphenol	0.442	0.161			
N-nitroso-di-n-propylamine	0.124	0.014	[1]		**
hexachloroethane	0.248	0.250			
nitrobenzene	0.321	0.373			
Isophorone	0.598	0.545			
nitrophenol	0.125	0.147	18	*	
2,4-dimethylphenol	0.217	0.234			
bis-2-chloroethoxymethane	0.352	0.395			
benzoic acid	0.148	0.066			
2,4-dichlorophenol	0.236	0.215	9	*	
1,2,4-trichlorobenzene	0.212	0.308			
naphthalene	0.888	0.908			
4-chloroaniline	0.232	-0-			
hexachlorobutadiene	0.101	0.172	[1] 70	*	
3-chloro-m-cresol	0.250	0.112	[1] 55	*	
2-methylnaphthalene	0.507	0.020			
hexachlorocyclopentadiene	0.076	0.122			**
2,4,6-trichlorophenol	0.087	0.100	15	*	
2,4,5-trichlorophenol	0.292	0.219			
2-chloronaphthalene	0.117	0.171			
2-nitroaniline	1.000	1.000			
dimethylphthalate	0.406	0.411			
acenaphthylene	1.813	1.272			
2,6-dinitrotoluene	0.091	0.351			
3-nitroaniline	0.457	0.071			
acenaphthene	1.163	1.024	12	*	

$\overline{RF}$ - Average Response Factor from initial calibration (Form IX)
RF - Response Factor from daily standard file
% D - Percent Difference
CCC - Calibration Check Compounds (those compounds flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with *)

AR100292

FORM X Revised 12/83

[1] Contractual Miscompliance - No corrective Action taken - But no effect on data as reported.

CALIBRATION CHECK - SEMIVOLATILE HSL COMPOUNDS (cont.)

Case No. 2638 Contractor EAL CORPORATION Contract No. 68-01-6724
Instrument Identifier _____ Calibration Date 3/17/84
Standard File BU03 Date 5/3/84 Time 8:46

Maximum % D for CCC is 25 Minimum RF for SPCC is 0.05

COMPOUND	RF	RF	% D	CCC	SPCC
2,4-dinitrophenol	0.075	-0-	[1]		**
-nitrophenol	0.104	0.003	[1]		**
ibenzofuran	0.072				
2,4-dinitrotoluene	0.156	0.195			
iethylphthalate	0.654	1.184			
luorene	0.770	0.801			
-chlorophenylphenylether	0.322	0.481			
-nitroaniline	0.027	0.036			
,6-dinitro-o-cresol	0.108	0.022			
lphenylamine	0.082	0.112	32 [1]	*	
,2-diphenylhydrazine as asobenzene	0.185	0.294			
-bromophenylphenylether	0.162	0.218			
xachlorobenzene	0.190	0.280			
ntachlorophenol	0.114	0.191	68 [1]	*	
henanthrene	1.106	1.033			
thracene	1.110	1.037			
butylphthalate	1.263	1.229			
uoranthene	1.398	1.203	14	*	
nzidine	-0-	-0-	[2]		**
rene	1.501	1.201			
tyl benzyl phthalate	0.989	1.494			
3'-dichlorobenzidine	0.018	-0-			
nzo(a)anthracene	1.241	1.076			
rysene	1.251	0.735			
s(2-ethylhexyl)phthalate	0.707	1.067			
-n-octylphthalate	0.890	1.374	[1] 54	*	
nzo(b)fluoranthene	0.544	0.337			
nzo(k)fluoranthene	0.492	0.282			
nzo(a)pyrene	0.292	0.220	[1] 25	*	
no(1,2,3-cd)pyrene	0.153	0.086			
enzo(a,h)anthracene	0.196	0.042			
nzo(ghi)perylene	0.016	0.053			

- Average Response Factor from initial calibration (Form IX)
RF - Response Factor from daily standard file
D - Percent Difference
* - Calibration Check Compounds (those compounds flagged with *)
SPCC - System Performance Check Compounds (those compounds flagged with *)

[1] - Contractual miscompliance - No corrective action taken but no affect on data
[2] Actual D.L for benzidine may be substantially higher than reported.

AR300293

ORIGINAL
(Red)

PROJECT NAME: Eastern Diversified Metals
TDD NO: F3-8402-08

EPA SITE NO.: PA 989
REGION: FT III

QUALITY ASSURANCE REVIEW OF INORGANIC ANALYTICAL DATA PACKAGE

Case No.: 2638
Contract No.: 68-01-6875
Contract Laboratory: Chemtech
Applicable IFB No.: WA83-A195
Reviewer: Rock J. Vitale
Review Date: 1-23-85

Applicable Sample No's.:
MC3111, MC3112, MC3114, MC3115, MC3129, MC3113, MC3130, MC3131, MC3132, MC3133, MC3134, MC3135, MC3136, MC3137, MC3138

The inorganic analytical data for this case has been reviewed. The quality assurance evaluation is summarized in the following table:

Reviewer's Evaluation*	Fraction			
	TASK I ICP or AA METALS	TASK II FURNACE AA METALS	TASK II COLD VAPOR AA MERCURY	TASK III CYANIDE
Acceptable				
Acceptable with exception(s)	✓ #1, #2	✓ #1, #3	✓ #2, #4	✓ #3
Questionable				
Unacceptable				

* Definitions of the evaluation score categories are listed on next page.

This evaluation was based upon an analysis of the review items indicated below:

- ● DATA COMPLETENESS
- ● BLANK ANALYSIS RESULTS
- ● MATRIX SPIKE RESULTS
- ● DUPLICATE ANALYSIS RESULTS
- ○ STANDARD ADDITIONS RESULTS
- ● QUANTITATIVE CALCULATIONS
- ● INITIAL CALIBRATION VERIFICATION
- ● CONTINUING CALIBRATION VERIFICATION
- ● INTERFERENCE QC RESULTS
- ● DETECTION LIMITS RESULTS
- ● INSTRUMENT SENSITIVITY REPORTS

Data review forms are attached for each of the review items indicated above.

‡ No errors noted, no form attached.

◒ Spot Check performed.

Comments: #1 Please see blank analysis documentation
#2 Please see duplicate analysis results
#3 The lab neglected to report results above CRDL.
#4 Mercury qualitatively confident in MC3130 because duplicate analysis revealed quantities above CRDL. However, a reliable estimation of quantity cannot be made

ORIGINAL
(Red)

DATA EVALUATION SCORE CATEGORIES

ACCEPTABLE: Data is within established control limits, or the data which is outside established control limits does not affect the validity of the analytical results.

ACCEPTABLE WITH EXCEPTION(S): Data is not completely within established control limits. The deficiences are identified and specific data is still valid, given certain qualifications which are listed below.

QUESTIONABLE: Data is not within established control limits. The deficiences bring the validity of the entire data set into question. However, the data validity is neither proved nor disproved by the available information.

UNACCEPTABLE: Data is not within established control limits. The deficiences imply the results are not meaningful.

DATA COMPLETENESS	CONC./ MATRIX	LO/AQ	LO/SOL	LO/SOL	LO/AQ	LO/AQ	LO/AQ	LO/SOL	LO/AQ	LO/SOL	LO/AQ	LO/SOL	LO/SOL	LO/AQ	LO/SOL	LO/SOL
	TRAFFIC REPORT # MC	3111	3112	3114	3115	3129	3113	3130	3131	3132	3133	3134	3135	3136	3137	3138
	LAB I.D. #G-2-2A	01	02	04	05	06	03	07	08	09	10	11	12	13	14	15
FIELD QC	BLANK													✓	✓	
	DUPLICATE				✓		✓	✓								
	SPIKE				✓		✓	✓								
TASK I: ICAP OR AA: METALS	RAW DATA	✓														✓
	TAB. RESULTS	✓														✓
	TAB. D.L.'s	✓														✓
	QA FORM	✓														✓
	ICAP INTER. QC	✓														✓
	INSTR. SENS.	✓														✓
TASK II: FURNACE AA: METALS	RAW DATA	✓														✓
	TAB. RESULTS	✓														✓
	TAB. D.L.'s	✓														✓
	QA FORM	✓														✓
	INSTR. SENS.	✓														✓
TASK II: COLD VAPOR AA: MERCURY	RAW DATA	✓														✓
	TAB. RESULTS	✓														✓
	TAB. D.L.'s	✓														✓
	QA FORM	✓														✓
	INSTR. SENS.	✓														✓
TASK III: CYANIDE	RAW DATA	✓														✓
	TAB. RESULTS	✓														✓
	TAB. D.L.'s	✓														✓
	QA FORM.	✓														✓
	INSTR. SENS.	✓														✓
OTHER (SPECIFY):	RAW DATA															
	TAB. RESULTS															
	TAB. D.L.'s															
	QA FORM															
	INSTR. SENS.															
OTHER (SPECIFY):	RAW DATA															
	TAB. RUSULTS															
	TAB. D.L.'s															
	QA FORM															
	INSTR. SENS.															

COMMENTS:

BLANK ANALYSIS RESULTS

ORIGINAL (Red)

TASK	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT		
All	lab	low	AQ	R.BLK	Chemtech	Be (3.2ug/L / 5)#2		
						Cu (10.2ug/L / 50)#2		
						Cr (5.1ug/L / 10)#2		
						Fe (39.6ug/L / 50)#2		
						Mn (8.2ug/L / 15)#2	41	2.1
						Zn (9.2ug/L / 10)#2		
All	lab	low		R.BLK	Chemtech	Be (2.9ug/L / 5)#2		
						Cr (6.1ug/L / 10)#2		
						Fe (54.1ug / 50)#2		
All	field	low	AQ	MC3136 G-2-217-13	NUS	Ag (5.5ug/L / 10)#2	27.5	1.[illegible]
						Cr (7.6ug/L / 10)#2	38.	1.9
						Cu (581ug/L / 50)#1	2905	145
						Fe (66.5ug/L / 50)#2	333	16.6
						Zn (16.5 / 10)#1	82.5	4.1
						Pb (4.3ug/L / 5)#2		
						Sn (19.8ug/L / 20)#2	99	5.0
All	field	low	sol*	MC3137 G2-217-14	NUS	Be (7.1ug/L / 5)#2	35.5	1.8
						Cr (6.1ug/L / 10)#2		
						Cu (447.9ug/L / 50)#2		
						Zn (13.5ug/L / 10)#2		
						Pb (9ug/L / 5)#1	45	2.25
						Sn (19ug/L / 20)#2		

LABORATORY REPORTED FIELD BLANK DATA IS COMPARED WITH THE SAMPLE DATA IN A TABULATION FORM WITHI SAMPLE ANALYTICAL DATA SUMMARY.

COMMENTS:

(1) RESULT REPORTED BY LABORATORY AND CONFIRMED BY REVIEWER.

(2) RESULT INFERRED FROM RAW DATA

*Tabulated in aqueous units for simplicity

ORIGINAL
(Red)

MATRIX SPIKE RECOVERIES

Sample No.	MC3115	MC3130	MC3113			
Field Spike						
Lab Spike	✓	✓	✓			
Matrix	AQUEOUS	SOLID	AQ			
Conc. Level	LOW	LOW	LOW			
Method Std.	✓	✓	✓			
Fraction	All except CN-	All	CN-			

All matrix spike recoveries were within the established control ranges specified in; IFB WA82-A072, Exhibit E, Table 2. ✓ Yes ___ No

Exception(s):

Parameter	Accepted Range (%)	Actual % Rec.	Sample Number	Org. Result	Spike Added	Spike Result	Units

Comments: All matrix spikes within accep table criteria.

AR100298

ORIGINAL
(Red)

Duplicate Analysis Results

The applicable duplicate pairs are:

sample no.	MC3115	MC3130	MC3113			
Field duplicate						
Lab duplicate	✓	✓	✓			
sample level	Low →					
sample matrix	AQ	SOL	AQ			
Fraction	All but CN^-	All	CN^-			

The relative percent difference (RPD) for each parameter group was evaluated. The duplicate analysis RPD acceptance criteria should be:

Fraction	maximum acceptable Percent Difference
	20% Aqueous 40% Solid.

The RPD's exceeding the maximum acceptable percent difference were:

Fraction	Compound		Actual RPD	Sample	Comparison conc.	Comparison conc.
Task I	Aluminum	[1]	74.2	MC3115	1000	459
Task I	Copper	[4]	31.5	MC3115	712	518
Task I	Zinc	[2]	47.6	MC3130	1480	711
Task II	Mercury	[3]	200	MC3130	<.2	0.32

Comments: [1] Average may be a better estimate of actual conc
[2] Not significantly out of acceptable criteria
[3] The presence of mercury is reliable, however the actual concentrat can not be estimated.
[4] Not commented on since both are questioned due to blk contamina

AR100299

ORIGINAL
(Red)

Initial Calibration Verification and Continuing Calibration Verification

Documentation indicates calibrations were performed and checked ~~every ten~~ samples: Yes ✓ No_

Exceptions: _____

Calibrations and verifications were all within the control limits specified in WA83-A195 : Yes ✓ No_

Outliers are listed below:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments
Thallium	85-115%	Continuing	117%	No positive results - no effect on data

Interference QC Results

Documentation indicates interference QC samples were run before and after ~~every ten~~ samples: Yes ✓ No

Exceptions: _____

Interference QC results were all within the control limits specified in WA83-A195 : Yes ✓ No_

Exceptions:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments
				See next page for actual recoveries.

AR100300

ORIGINAL
(Red)

NUS CORPORATION
SUPERFUND DIVISION

QA PROJECT NOTES

INTERFERENCE STANDARDS (ICP)

CASE NUMBER 2638

	I.D. Before			ID After			ID			
METALS	FOUND	TRUE	% Rec	FOUND	TRUE	% Rec	FOUND	TRUE	% Rec	
Aluminum	218,000	250,000	87%	233,400	250,000	93.4				
Boron	NOT analyzed.									
Barium	450	500	90%	479	500	96				
Beryllium	504	500	100.8	505	500	101				
Calcium	193,000	200,000	96.5	202,300	200,000	102				
Chromium	451	500	90.2	470	500	94				
Cobalt	440	500	88	474	500	95				
Copper	582	500	116	563	500	113	-[1]			
Iron	196,300	200,000	98.1	210,900	200,000	105				
Magnesium	206,300	200,000	103	221,700	200,000	110				
Manganese	421	500	84.2	451	500	90.2				
Nickel	453	500	90.6	472	500	95				
Silver	435	500	87	471	500	94.2				
Sodium	132,100	130,000	101.6	156,600	130,000	120.4	-[2]			
Vanadium	439	500	88	470	500	94				
Zinc	600	500	120	546	500	109	-[1]			

85-115% Acceptable Criteria

COMMENTS: [1] Not substantially out of acceptable Criteria
[2] Not required for analysis

NUS 443A 58 1182

AR100301

QUANTITATIVE CALCULATIONS

ORIGINAL (Red)

CALCULATION ERRORS AND CORRECTED RESULTS ARE LISTED BELOW:

CYANIDE: DISTILLATION + COLORIMETRIC ANALYSIS

CALIBRATION STANDARDS

[CN] mg/L	ABS units
BLANK	0.000
0.01	0.012
0.1	0.132
0.2	0.272

CN in MC 3114

See g a/p 12-27-85

Sample I.D.	DISTILL VOL (ml)	COLOR VOL (ml)	COLOR DILUTION	ABS UNITS	[CN] in DISTILLATION	x D.L. factor	[CN] mg/L	Comment
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	25	<0.[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	<0.01	25	<0.01	[illegible]

MC 3114 0.01 x 250 ÷ 10gm = 0.25 mg/Kg → reported <0.25.

* SAMPLE BLANK

CHEMTECH

Metal SD

INSTRUMENT HEALTH

MODE FURNACE

	DESCRIPTION		µg/L after DILUTION	COMMENTS	µg/L in SAMPLE
1	200 µg/l	337	344 338	USED TO DRAW GRAPH	
2	150 µg/l	262	263 261		
3	75 µg/l	146	150 141		
4	20 µg/l	46	42 43		
5	12	233			148
6	13	14			<20
7	14	0			<20
8	15	19			<20
9	218-01	5			<20

MC 3135

0.14 x 100 ÷ 2 = 7 mg/Kg

reported <1

AR100302

ORIGINAL
(Red)

Detection Limits Results

Detection limits were reported for all samples analyzed: Yes ✓ No ___

Exceptions: All detection limits reported.

Detection limits were less than or equal to the required detection limits specified in WA83-A195. Yes ✓ No ___

Exceptions: All CRDL's achieved by available instrumentation.

Instrument Sensitivity Reports

Instrument sensitivity reports were documented for all parameters:

Yes ✓ No ___

Comments: Absorbances/Intensities can be construed as an indication of sensitivities

Other Remarks Concerning this Case:

[1] Sb & CN not reported in 2 samples.
[2] Hg - Qualitatively confident in MC3130.

AR100303

APPENDIX D

ORGANICS ANALYSIS DATA SHEET

C-8104
ORIGINAL
(Red)

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551- 41-1
Sample Matrix: WATER
Data Release Authorized By: BJT

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/16/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	15 ~~5U~~ BJT
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	19 ~~5U~~ BJT
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	14 ~~5U~~ BJT
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	14 ~~5U~~ BJT
(44V)	75-09-2	methylene chloride	4LT ~~5U~~ BJT
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(86V)	127-18-4	tetrachloroethene	5U
(87V)	108-88-3	toluene	9 ~~5U~~ BJT
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	3LT ~~5U~~ BJT

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

ORIG. (Red)

Sample Number
C-8104

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Sample ID No: 2551-41-1
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/3/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #			ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol		20U
(22A)	59-50-7	p-chloro-m-cresol		40U
(24A)	95-57-8	2- chlorophenol		20U
(31A)	120-83-2	2,4-dichlorophenol		20U
34A)	105-67-9	2,4-dimethylphenol		20U
57A)	88-75-5	2- nitrophenol		40U
(58A)	100-02-7	4-nitrophenol		100U
59A)	51-28-5	2,4-dinitrophenol		100U
[illegible])	534-52-1	4,6-dinitro-2-methylphenol		40U
(64A)	87-86-5	pentachlorophenol		40U
65A)	108-95-2	phenol	900	~~200U~~ BJT
	65-85-0	benzoic acid	91K	~~200U~~ BJT
	95-48-7	2-methylphenol	108	~~200U~~ BJT
	108-39-4	4-methylphenol		20U
	95-95-4	2,4,5-trichlorophenol		200U
(1B)	83-32-9	acenaphthene		20U
B)	92-87-5	benzidine		80U
(8B)	120-82-1	1,2,4-trichlorobenzene		20U
(9B)	118-74-1	hexachlorobenzene		20U
2B)	67-72-1	hexachloroethane		20U
(18B)	111-44-4	bis(2-chloroethyl)ether		20U
20B)	91-58-7	2-chloronaphthalene		20U
5B)	95-50-1	1,2-dichlorobenzene	13LT	~~20U~~ BJT
(26B)	541-73-1	1,3-dichlorobenzene		20U
27B)	106-46-7	1,4-dichlorobenzene	11LT	~~20U~~ BJT
3B)	91-94-1	3,3'-dichlorobenzidine		40U
(35B)	121-14-2	2,4-dinitrotoluene		40U
(36B)	606-20-2	2,6-dinitrotoluene		40U
(7B)	122-66-7	1,2-diphenylhydrazine		40U
(39B)	206-44-0	fluoranthene		20U
([illegible])	7005-72-3	4-chlorophenyl phenyl ether		20U
(B)	101-55-3	4-bromophenyl phenyl ether		20U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether		40U
(B)	111-91-1	bis (2-chloroethoxy) methane		40U

PP #	CAS #			ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene		20U
(53B)	77-47-4	hexachlorocyclopentadiene		20U
(54B)	78-59-1	isophorone		20U
(55B)	91-20-3	naphthalene		20U
(56B)	98-95-3	nitrobenzene		20U
(61B)	62-75-9	N-nitrosodimethylamine		20U
(62B)	86-30-6	N-nitrosodiphenylamine		20U
(63B)	621-64-7	N-nitrosodipropylamine		40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	1214	~~20U~~ BJ
(67B)	85-68-7	benzyl butyl phthalate		20U
(68B)	84-74-2	di-n-butyl phthalate		20U
(69B)	117-84-0	di-n-octyl phthalate	120	~~20U~~ BJ
(70B)	84-66-2	diethyl phthalate	23	~~20U~~ BJ
(71B)	131-11-3	dimethyl phthalate		20U
(72B)	56-55-3	benzo(a)anthracene		20U
(73B)	50-32-8	benzo(a)pyrene		40U
(74B)	205-99-2	benzo(b)fluoranthene		40U
(75B)	207-08-9	benzo(k)fluoranthene		40U
(76B)	218-01-9	chrysene		20U
(77B)	208-96-8	acenaphthylene		20U
(78B)	120-12-7	anthracene		20U
(79B)	191-24-2	benzo(ghi)perylene		40U
(80B)	86-73-7	fluorene		20U
(81B)	85-01-8	phenanthrene		20U
(82B)	53-70-3	dibenzo(a,h)anthracene		40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene		40U
(84B)	129-00-0	pyrene		20U
	62-53-3	aniline		20U
	100-51-6	benzyl alcohol		40U
	106-47-8	4-chloroaniline		100U
	132-64-9	dibenzofuran		20U
	91-57-6	2-methylnaphthalene		40U
	88-74-4	2-nitroaniline		200U
	99-09-2	3-nitroaniline		200U
	100-01-6	4-nitroaniline		200U

AR100306

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P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2090

ORIGINAL (Red)

Sample Number: C8104

LOW WATER

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-4-1
Sample Matrix: Water
Data Release Authorized By:

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ug/l
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	591-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

PP #	CAS #			ug/l
(89P)	309-00-2	aldrin		0.1U
(90P)	60-57-1	dieldrin		0.1U
(91P)	57-74-9	chlordane		0.1U
(92P)	50-29-3	4,4'-DDT	2.0	~~0.1U~~
(93P)	72-55-9	4,4'-DDE		0.1U
(94P)	72-54-8	4,4'-DDD		0.1U
(95P)	115-29-7	α-endosulfan		0.1U
(96P)	115-29-7	β-endosulfan	1.0	~~0.1U~~
(97P)	1031-07-8	endosulfan sulfate		0.1U
(98P)	72-20-8	endrin		0.1U
(99P)	7421-93-4	endrin aldehyde	2.0	~~0.1~~
(100P)	76-44-8	heptachlor	0.3	~~0.1U~~
(101P)	1024-57-3	heptachlor epoxide	0.6	~~0.1U~~
(102P)	319-84-6	α-BHC		0.1U
(103P)	319-85-7	β-BHC		0.1U
(104P)	319-86-8	δ-BHC	2.0	~~0.1U~~
(105P)	58-89-9	γ-BHC (lindane)	0.6	~~0.1U~~
(106P)	53469-21-9	PCB-1242		0.1U
(107P)	11097-69-1	PCB-1254		0.1U
(108P)	11104-28-2	PCB-1221		0.1U
(109P)	11141-16-5	PCB-1232		0.1U
(110P)	12672-29-6	PCB-1248		0.1U
(111P)	11096-82-5	PCB-1260		0.1U
(112P)	12674-11-2	PCB-1016		0.1U
(113P)	8001-35-2	toxaphene		0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

PP #	CAS #		ug/l
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	~~0.1U~~ 10.0U

AR100307

ORGANICS ANALYSIS DATA SHEET - Page 4

Sample Number C-8104

Laboratory Name: EAL CORPORATION Case No: 2638

QC Report No:

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: fit)	Estimated Concentration (ug/L or ug/kg)
1.	541-05-9	hexamethylcyclotri-	VOA	856	954	200
2.		siloxane				
3.		unknown	"	365	625	
4.		"	"	659	917	
5.		"	"	700	796	
6.		"	"	757	803	
7.		"	"	764	831	
8.		"	"	815	954	
9.		unknown	ABN	1807	870	
10.		unknown	ABN	687	894	
11.	90-00-6	2-ethylphenol	"	742	976	3
12.		unknown phthalate	"	2256	893	
13.		unknown	"	693	889	
14.	576-26-1	2,6-dimethylphenol	"	758	986	50
15.		unknown	"	842	848	
16.		"	"	983	818	
17.		"	"	988	785	
18.		"	"	992	870	
19.		"	"	1000	908	
20.		"	"	1004	913	
21.	501-52-0	benzene propionic acid	"	1007	952	610
22.		unknown	"	1081	922	
23.		"	"	1092	950	
24.		"	"	1136	918	
25.		"	"	1203	855	
26.	57-10-3	hexadecanoic acid	"	1380	965	31
27.		unknown	"	1499	921	
28.		4,4'-(1-methylethyl-				
29.	80-05-7	idene) bis phenol	ABN	1521	953	171
30.		unknown	"	1101	911	

Form I (continued)

(Red)

Sample Number
C-8106

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-2
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/16/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	3LT ~~5U~~ BJT
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(52V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100309

ORIGINAL
(Red)

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C-8106

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-2
Sample Matrix: WATER
Data Release Authorized By: BJT

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/3/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
(24A)	95-57-8	2- chlorophenol	20U
(31A)	120-83-2	2,4-dichlorophenol	20U
(34A)	105-67-9	2,4-dimethylphenol	23 ~~20U~~ BJT
(57A)	88-75-5	2- nitrophenol	40U
(58A)	100-02-7	4-nitrophenol	100U
[illegible]A)	51-28-5	2,4-dinitrophenol	100U
([illegible]A)	534-52-1	4,6-dinitro-2-methylphenol	40U
(64A)	87-86-5	pentachlorophenol	40U
(65A)	108-95-2	phenol	20U
	65-85-0	benzoic acid	25K ~~200U~~ BJT
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
(B)	83-32-9	acenaphthene	20U
(B)	92-87-5	benzidine	80U
(8B)	120-82-1	1,2,4-trichlorobenzene	20U
(B)	118-74-1	hexachlorobenzene	20U
(2B)	67-72-1	hexachloroethane	20U
(18B)	111-44-4	bis(2-chloroethyl)ether	20U
(B)	91-58-7	2-chloronaphthalene	20U
(5B)	95-50-1	1,2-dichlorobenzene	20U
(26B)	541-73-1	1,3-dichlorobenzene	20U
(B)	106-46-7	1,4-dichlorobenzene	20U
(B)	91-94-1	3,3'-dichlorobenzidine	40U
(35B)	121-14-2	2,4-dinitrotoluene	40U
(B)	606-20-2	2,6-dinitrotoluene	40U
(B)	122-66-7	1,2-diphenylhydrazine	40U
([illegible])	206-44-0	fluoranthene	20U
([illegible])	7005-72-3	4-chlorophenyl phenyl ether	20U
(41B)	101-55-3	4-bromophenyl phenyl ether	20U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
([illegible]B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	223 ~~200U~~ BJT
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	30 ~~200U~~ BJT
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U
	100-01-6	4-nitroaniline	200U

ORIGINAL (Red) C8106

ORGANICS ANALYSIS DATA SHEET

LOW WATER

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-2
Sample Matrix: Water
Data Release Authorized By:

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(34V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	591-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

ug/l

PP #	CAS #			
(89P)	309-00-2	aldrin		0.1U
(90P)	60-57-1	dieldrin	0.4	~~0.1U~~
(91P)	57-74-9	chlordane		0.1U
(92P)	50-29-3	4,4'-DDT	1.0	~~0.1U~~
(93P)	72-55-9	4,4'-DDE		0.1U
(94P)	72-54-8	4,4'-DDD		0.1U
(95P)	115-29-7	α-endosulfan		0.1U
(96P)	115-29-7	β-endosulfan	0.6	~~0.1U~~
(97P)	1031-07-8	endosulfan sulfate		0.1U
(98P)	72-20-8	endrin		0.1U
(99P)	7421-93-4	endrin aldehyde	1.4	~~0.1U~~
(100P)	76-44-8	heptachlor	0.3	~~0.1U~~
(101P)	1024-57-3	heptachlor epoxide	0.2	~~0.1U~~
(102P)	319-84-6	α-BHC	0.4	~~0.1U~~
(103P)	319-85-7	β-BHC	0.4	~~0.1U~~
(104P)	319-86-8	δ-BHC		0.1U
(105P)	58-89-9	γ-BHC (lindane)		0.1U
(106P)	53469-21-9	PCB-1242		0.1U
(107P)	11097-69-1	PCB-1254		0.1U
(108P)	11104-28-2	PCB-1221		0.1U
(109P)	11141-16-5	PCB-1232		0.1U
(110P)	12672-29-6	PCB-1248		0.1U
(111P)	11096-82-5	PCB-1260		0.1U
(112P)	12674-11-2	PCB-1016		0.1U
(113P)	8001-35-2	toxaphene		0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	10.0U ~~0.1U~~

AR100311

ORGANICS ANALYSIS DATA SHEET - Page 6

Sample Number: C-8106

Laboratory Name: EAL CORPORATION Case No: 2638

QC Report No:

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: first)	Estimated Concentration (ug/L or ug/kg)
1.	541-05-9	hexamethylcyclotri-	VOA	856	971	200
2.		siloxane				
3.						
4.		unknown	ABN	630	924	
5.		"	"	710	874	
6.		"	"	822	914	
7.		"	"	862	824	
8.		"	"	914	911	
9.		"	"	667	920	
10.		"	"	722	879	
11.	95-65-8	3,4-dimethylphenol	"	707	922	46
12.		unknown	"	572	937	
13.		"	"	207	904	
14.		"	"	871	900	
15.		"	"	710	891	
16.		"	"	1004	859	
17.		"	"	1011	711	
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

8H100

6/82

Form I (continued)

ORIGINAL (Red)

Sample Number C-8108

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-3
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/16/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		(ug/l) or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	3LT ~~5U~~ BJT
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100313

P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2090

ORIGINAL (Red)

Sample Number C8108

LOW WATER

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION

Lab Sample ID No: 2551-41-3

Sample Matrix: Water

Data Release Authorized By:

Case No: 1638

QC Report No:

Contract No.: 68-01-6724

Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED:

DATE ANALYZED:

PERCENT MOISTURE:

ug/l

PP #	CAS #		
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
[illegible]	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(64V)	75-09-2	methylene chloride	5U
(65V)	74-87-3	chloromethane	5U
(66V)	74-83-9	bromomethane	5U
(67V)	75-25-2	bromoform	5U
(68V)	75-27-4	bromodichloromethane	5U
(69V)	75-69-4	fluorotrichloromethane	5U
(70V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED: 4-18-84

DATE ANALYZED: 5-8-84

PERCENT MOISTURE:

ug/l

PP #	CAS #		
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED: 4-18-84

DATE ANALYZED: 5-8-84

PERCENT MOISTURE:

ug/l

PP #	CAS #		
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100314

ORIGINAL
(Red)

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C-8108

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-3
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/3/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
(24A)	95-57-8	2- chlorophenol	20U
(31A)	120-83-2	2,4-dichlorophenol	20U
(34A)	105-67-9	2,4-dimethylphenol 30	~~20U~~ BJT
(57A)	88-75-5	2- nitrophenol	40U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-28-5	2,4-dinitrophenol	100U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	40U
(64A)	87-86-5	pentachlorophenol	40U
(65A)	108-95-2	phenol	20U
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
1B)	83-32-9	acenaphthene	20U
(5B)	92-87-5	benzidine	80U
8B)	120-82-1	1,2,4-trichlorobenzene	20U
9B)	118-74-1	hexachlorobenzene	20U
(12B)	67-72-1	hexachloroethane	20U
18B)	111-44-4	bis(2-chloroethyl)ether	20U
.20B)	91-58-7	2-chloronaphthalene	20U
(25B)	95-50-1	1,2-dichlorobenzene	20U
26B)	541-73-1	1,3-dichlorobenzene	20U
,27B)	106-46-7	1,4-dichlorobenzene	20U
(28B)	91-94-1	3,3'-dichlorobenzidine	40U
35B)	121-14-2	2,4-dinitrotoluene	40U
,36B)	606-20-2	2,6-dinitrotoluene	40U
(37B)	122-66-7	1,2-diphenylhydrazine	40U
39B)	206-44-0	fluoranthene	20U
,40B)	7005-72-3	4-chlorophenyl phenyl ether	20U
(41B)	101-55-3	4-bromophenyl phenyl ether	20U
42B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
,43B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	20U
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U
	100-01-6	4-nitroaniline	200U

AR100315

ORGANICS ANALYSIS DATA SHEET - Page 4

Sample Number: C-8108

Laboratory Name: EAL CORPORATION Case No: 2638

QC Report No:

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: fit)	Estimated Concentration (ug/L or ug/kg)
1.	541-05-9	hexamethylcyclotri-	VOA	855	970	200
2.		siloxane				
3.						
4.	98-82-8	1-methylethylbenzene	ABN	488	997	32
5.	617-94-7	α-α-dimethylbenzene				
6.		methanol	ABN	080	718	20
7.		unknown	"	091	801	
8.		"	"	104	918	
9.	88-69-7	2-(1-methylethyl)	"	191	707	16
10.		phenol				
11.		unknown	"	875	519	
12.		"	"	888	528	
13.		"	"	1008	728	
14.						
15.						
16.						
17.						
18.						
19.						
20.						
21.						
22.						
23.						
24.						
25.						
26.						
27.						
28.						
29.						
30.						

C_9H_{12}

$C_9H_{12}O$

$C_9H_{12}O$

6/82

Form I (continued)

ORIGINAL (Red)

Sample Number C-8122

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-4
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/16/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	4 LT ~~5U~~ BJT
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	4 LT ~~5U~~ BJT
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	11 ~~5U~~ BJT
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

ORIGINAL

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C-8122

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-4
Sample Matrix: WATER
Data Release Authorized By: BJT

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/3/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
(24A)	95-57-8	2- chlorophenol	20U
(31A)	120-83-2	2,4-dichlorophenol	20U
(34A)	105-67-9	2,4-dimethylphenol	20U
(57A)	88-75-5	2- nitrophenol	40U
[illegible]	100-02-7	4-nitrophenol	100U
(59A)	51-28-5	2,4-dinitrophenol	100U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	40U
(64A)	87-86-5	pentachlorophenol	40U
(65A)	108-95-2	phenol	20U
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
(1B)	83-32-9	acenaphthene	20U
(5B)	92-87-5	benzidine	80U
(6B)	120-82-1	1,2,4-trichlorobenzene	20U
(7B)	118-74-1	hexachlorobenzene	20U
(12B)	67-72-1	hexachloroethane	20U
(8B)	111-44-4	bis(2-chloroethyl)ether	20U
(10B)	91-58-7	2-chloronaphthalene	20U
(25B)	95-50-1	1,2-dichlorobenzene	20U
(26B)	541-73-1	1,3-dichlorobenzene	20U
(27B)	106-46-7	1,4-dichlorobenzene	20U
(28B)	91-94-1	3,3'-dichlorobenzidine	40U
(35B)	121-14-2	2,4-dinitrotoluene	40U
(36B)	606-20-2	2,6-dinitrotoluene	40U
(37B)	122-66-7	1,2-diphenylhydrazine	40U
[illegible]	206-44-0	fluoranthene	20U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	20U
(41B)	101-55-3	4-bromophenyl phenyl ether	20U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
(43B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	386 ~~20U~~
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U
	100-01-6	4-nitroaniline	200U

AR 000509

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

ORIGINAL

Sample Number
C8122

LOW WATER

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-4
Sample Matrix: Water
Data Release Authorized By:

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	591-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100319

ORGANICS ANALYSIS DATA SHEET - Page 8

Sample Number
C-8122

Laboratory Name: EAL CORPORATION Case No: 2638

QC Report No:

B. Tentatively Identified Compounds

CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: fit)	Estimated Concentration (ug/L or ug/kg)
1. 541-05-9	hexamethylcyclotri-	VOA	855	971	200
2.	siloxane				
3.					
4.	none found	AGN			
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.					

6/82

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

ORIGINAL (Red)

Sample Number C-8124

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-5
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/16/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	3LT ~~5U~~ BJT
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	7 ~~5U~~ BJT
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100321

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

ORIGINAL (Red)

Sample Number
C-8124

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-5
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/3/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
21A)	88-06-2	2,4,6- trichlorophenol	20U
22A)	59-50-7	p-chloro-m-cresol	40U
(24A)	95-57-8	2- chlorophenol	20U
31A)	120-83-2	2,4-dichlorophenol	20U
34A)	105-67-9	2,4-dimethylphenol	20U
(57A)	88-75-5	2- nitrophenol	40U
8A)	100-02-7	4-nitrophenol	100U
[illegible]	51-28-5	2,4-dinitrophenol	100U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	40U
4A)	87-86-5	pentachlorophenol	40U
(65A)	108-95-2	phenol	20U
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
(3)	83-32-9	acenaphthene	20U
(5B)	92-87-5	benzidine	80U
(8B)	120-82-1	1,2,4-trichlorobenzene	20U
( )	118-74-1	hexachlorobenzene	20U
(12B)	67-72-1	hexachloroethane	20U
(B)	111-44-4	bis(2-chloroethyl)ether	20U
(B)	91-58-7	2-chloronaphthalene	20U
(25B)	95-50-1	1,2-dichlorobenzene	20U
(3)	541-73-1	1,3-dichlorobenzene	20U
(3)	106-46-7	1,4-dichlorobenzene	20U
(28B)	91-94-1	3,3'-dichlorobenzidine	40U
(3)	121-14-2	2,4-dinitrotoluene	40U
(3)	606-20-2	2,6-dinitrotoluene	40U
(37B)	122-66-7	1,2-diphenylhydrazine	40U
(3 [illegible]	206-44-0	fluoranthene	20U
(4)	7005-72-3	4-chlorophenyl phenyl ether	20U
(41B)	101-55-3	4-bromophenyl phenyl ether	20U
(4)	39638-32-9	bis (2-chloroisopropyl) ether	40U
(4)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	590 ~~20U~~ BJ
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U

AB-001222

ORIGINAL

Sample Number
C8124

ORGANICS ANALYSIS DATA SHEET

LOW WATER

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-5
Sample Matrix: Water
Data Release Authorized By:

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ug/l
(2V)	107-02-8	acrolein	
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	100U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	10U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(69V)	75-69-4	fluorotrichloromethane	5U
(70V)	75-71-8	dichlorodifluoromethane	5U
(71V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	591-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

PP #	CAS #		ug/l
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

PP #	CAS #		ug/l
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100323

ORGANICS ANALYSIS DATA SHEET - Page 6

Sample Number: C-8124

Laboratory Name: EAL CORPORATION Case No: 2638

QC Report No:

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: fit)	Estimated Concentration (ug/L or ug/kg)
1.	541-05-9	hexamethylcyclotri-	VOA	855	968	200
2.		siloxane				
3.						
4.		unknown phthalate	ABN	1946	582	
5.						
6.						
7.						
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29.						
30.						

6/82

Form I (continued)

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

ORIGINAL (Red)

Sample Number C-8126

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2683
Lab Sample ID No: 2551-41-6
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/16/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		(ug/l) or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	3LT ~~5U~~ BJT
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100325

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

ORIGINAL

Sample Number
C-8126

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-6
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/4/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
(24A)	95-57-8	2- chlorophenol	20U
(31A)	120-83-2	2,4-dichlorophenol	20U
(34A)	105-67-9	2,4-dimethylphenol	20U
(57A)	88-75-5	2- nitrophenol	40U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-28-5	2,4-dinitrophenol	100U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	40U
(64A)	87-86-5	pentachlorophenol	40U
(65A)	108-95-2	phenol	20U
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
(1B)	83-32-9	acenaphthene	20U
(5B)	92-87-5	benzidine	80U
(8B)	120-82-1	1,2,4-trichlorobenzene	20U
(9B)	118-74-1	hexachlorobenzene	20U
(12B)	67-72-1	hexachloroethane	20U
(18B)	111-44-4	bis(2-chloroethyl)ether	20U
(20B)	91-58-7	2-chloronaphthalene	20U
(25B)	95-50-1	1,2-dichlorobenzene	20U
(26B)	541-73-1	1,3-dichlorobenzene	20U
(27B)	106-46-7	1,4-dichlorobenzene	20U
(28B)	91-94-1	3,3'-dichlorobenzidine	40U
(35B)	121-14-2	2,4-dinitrotoluene	40U
(36B)	606-20-2	2,6-dinitrotoluene	40U
(37B)	122-66-7	1,2-diphenylhydrazine	40U
(39B)	206-44-0	fluoranthene	20U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	20U
(41B)	101-55-3	4-bromophenyl phenyl ether	20U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
(43B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	20U
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U

AR-100326

ORIGINAL

C8126

LOW WATER

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION

Lab Sample ID No: 2551-41-6

Sample Matrix: Water

Data Release Authorized By:

Case No: 2638

QC Report No:

Contract No.: 68-01-6724

Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED:

DATE ANALYZED:

PERCENT MOISTURE:

PP #	CAS #		ug/l
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(6V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	591-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED: 4-18-84

DATE ANALYZED: 5-8-84

PERCENT MOISTURE:

PP #	CAS #		ug/l
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED: 4-18-84

DATE ANALYZED: 5-8-84

PERCENT MOISTURE:

PP #	CAS #		ug/l
(129D)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

July 191

AR100327

ORIGINAL

ORGANICS ANALYSIS DATA SHEET - Page 8

Sample Number
C-8126

Laboratory Name: EAL CORPORATION Case No: 2683

QC Report No:

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: fit)	Estimated Concentration (ug/L or ug/kg)
1.	541-05-9	hexamethylcyclotri-	VOA	856	970	200
2.		siloxane				
3.						
4.						
5.		none found	ABN			
6.						
7.						
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29.						
30.						

6/82

Form I (continued)

ORIGINAL (Red)

Sample Number C-8129
EPA BLANK

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-7
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/16/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	19 ~~5U~~ BJT
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100329

ORIGINAL

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
C-8129
EPA BLANK

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-7
Sample Matrix: WATER
Data Release Authorized By: BJT

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/4/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
(24A)	95-57-8	2- chlorophenol	20U
(31A)	120-83-2	2,4-dichlorophenol	20U
34A)	105-67-9	2,4-dimethylphenol	20U
(57A)	88-75-5	2- nitrophenol	40U
(58A)	100-02-7	4-nitrophenol	100U
[illegible]A)	51-28-5	2,4-dinitrophenol	100U
[illegible]A)	534-52-1	4,6-dinitro-2-methylphenol	40U
(64A)	87-86-5	pentachlorophenol	40U
65A)	108-95-2	phenol	20U
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
B)	83-32-9	acenaphthene	20U
B)	92-87-5	benzidine	80U
(8B)	120-82-1	1,2,4-trichlorobenzene	20U
B)	118-74-1	hexachlorobenzene	20U
2B)	67-72-1	hexachloroethane	20U
(18B)	111-44-4	bis(2-chloroethyl)ether	20U
0B)	91-58-7	2-chloronaphthalene	20U
5B)	95-50-1	1,2-dichlorobenzene	20U
(26B)	541-73-1	1,3-dichlorobenzene	20U
(B)	106-46-7	1,4-dichlorobenzene	20U
(JB)	91-94-1	3,3'-dichlorobenzidine	40U
(35B)	121-14-2	2,4-dinitrotoluene	40U
(B)	606-20-2	2,6-dinitrotoluene	40U
(B)	122-66-7	1,2-diphenylhydrazine	40U
(39B)	206-44-0	fluoranthene	20U
(	7005-72-3	4-chlorophenyl phenyl ether	20U
(B)	101-55-3	4-bromophenyl phenyl ether	20U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
(B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	20U
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U
	100-01-6	4-nitroaniline	200U

AR 111230

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

ORIGINAL

Sample Number
C8129

LOW WATER
EPA Water Blank

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-7
Sample Matrix: Water
Data Release Authorized By:

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100331

ORGANIC ANALYSIS DATA SHEET - Page 4

Sample Number
C-8129

Laboratory Name: EAL CORPORATION Case No: 2638

QC Report No:

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: fit)	Estimated Concentration (ug/L or ug/kg)
1.	541-05-9	hexamethylcyclotri-	VOA	856	967	200
2.		siloxane				
3.						
4.		none found	ABN			
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.						

6/8:

ORIGINAL (Red)

Sample Number: BLANK

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-0
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/17/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	2LT ~~5U~~ BJT
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

Sample Number
EAL BLANK

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-0
Sample Matrix: WATER
Data Release Authorized By: BJT

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/4/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	40U
(24A)	95-57-8	2- chlorophenol	20U
(31A)	120-83-2	2,4-dichlorophenol	20U
(34A)	105-67-9	2,4-dimethylphenol	20U
(57A)	88-75-5	2- nitrophenol	40U
(58A)	100-02-7	4-nitrophenol	100U
[illegible]A)	51-28-5	2,4-dinitrophenol	100U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	40U
(64A)	87-86-5	pentachlorophenol	40U
(65A)	108-95-2	phenol	20U
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
[illegible]B)	83-32-9	acenaphthene	20U
[illegible]B)	92-87-5	benzidine	80U
(8B)	120-82-1	1,2,4-trichlorobenzene	20U
[illegible]B)	118-74-1	hexachlorobenzene	20U
[illegible]2B)	67-72-1	hexachloroethane	20U
(18B)	111-44-4	bis(2-chloroethyl)ether	20U
[illegible]0B)	91-58-7	2-chloronaphthalene	20U
[illegible]5B)	95-50-1	1,2-dichlorobenzene	20U
(26B)	541-73-1	1,3-dichlorobenzene	20U
[illegible]7B)	106-46-7	1,4-dichlorobenzene	20U
[illegible]8B)	91-94-1	3,3'-dichlorobenzidine	40U
(35B)	121-14-2	2,4-dinitrotoluene	40U
[illegible]6B)	606-20-2	2,6-dinitrotoluene	40U
[illegible]7B)	122-66-7	1,2-diphenylhydrazine	40U
([illegible])	206-44-0	fluoranthene	20U
([illegible]B)	7005-72-3	4-chlorophenyl phenyl ether	20U
(41B)	101-55-3	4-bromophenyl phenyl ether	20U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
([illegible]B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	40U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	20U
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	20U
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	20U
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U
	100-01-6	4-nitroaniline	200U

AR 166334

P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2090

ORIGINAL (Data)

Sample Number

ORGANICS ANALYSIS DATA SHEET

LOW WATER
Reagent Blank

Laboratory Name: RAL CORPORATION
Lab Sample ID No: [redacted] 110-84-1
Sample Matrix: Dichloromethane
Data Release Authorized By:

Case No: 1638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ug/l
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	591-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

PP #	CAS #		ug/l
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.[illegible]
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-9-84
PERCENT MOISTURE:

PP #	CAS #		
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100335

ORGANICS ANALYSIS DATA SHEET - Page 4

Sample Number
BLANK
2551-41-0

Laboratory Name: EAL CORPORATION Case No: 2638
QC Report No:

B. Tentatively Identified Compounds

	CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine: (Specify: fit)	Estimated Concentration (ug/L or ug/kg)
1.	541-05-9	hexamethylcyclotri-	VOA	856	970	200
2.		siloxane				
3.						
4.		none found	ABN			
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
13.						
14.						
15.						
16.						
17.						
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19.						
20.						
21.						
22.						
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25.						
26.						
27.						
28.						
29.						
30.						

6/82

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

ORIGINAL (Red)

Sample Number C-8126MS L

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Case No: 2638
Lab Sample ID No: 2551-41-6MS
QC Report No:
Sample Matrix: WATER
Contract No.: 68-01-6724
Data Release Authorized By: BJT
Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 4/17/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	14.8 ~~5U~~ BJT
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	15.8 ~~5U~~ BJT
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	14.8 ~~5U~~ BJT
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	16.6 ~~5U~~ BJT
(87V)	79-01-6	trichloroethene	15.6 ~~5U~~ BJT
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(1298)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100337

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

ORIGINAL

Sample Number
C-8124 MS

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Sample ID No: 2551- 41-5 MS
Sample Matrix: WATER
Data Release Authorized By: BJT

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4/18/84
DATE ANALYZED: 5/3/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #			ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol		20U
(22A)	59-50-7	p-chloro-m-cresol	73	~~40U~~ BJT
(24A)	95-57-8	2- chlorophenol	181	~~20U~~ BJT
(31A)	120-83-2	2,4-dichlorophenol		20U
(34A)	105-67-9	2,4-dimethylphenol		20U
(57A)	88-75-5	2- nitrophenol		40U
(58A)	100-02-7	4-nitrophenol		100U
[illegible]	51-28-5	2,4-dinitrophenol		100U
(60A)	534-52-1	4,6-dinitro-2-methylphenol		40U
(64A)	87-86-5	pentachlorophenol	73	~~40U~~ BJT
(65A)	108-95-2	phenol	154	~~20U~~ BJT
	65-85-0	benzoic acid		200U
	95-48-7	2-methylphenol		20U
	108-39-4	4-methylphenol		20U
	95-95-4	2,4,5-trichlorophenol		200U
(1B)	83-32-9	acenaphthene	200	~~20U~~ BJT
(5B)	92-87-5	benzidine		80U
(8B)	120-82-1	1,2,4-trichlorobenzene	144	~~20U~~ BJT
(9B)	118-74-1	hexachlorobenzene		20U
(12B)	67-72-1	hexachloroethane		20U
(18B)	111-44-4	bis(2-chloroethyl)ether		20U
(20B)	91-58-7	2-chloronaphthalene		20U
(25B)	95-50-1	1,2-dichlorobenzene		20U
(26B)	541-73-1	1,3-dichlorobenzene		20U
(27B)	106-46-7	1,4-dichlorobenzene	159	~~20U~~ BJT
(34B)	91-94-1	3,3'-dichlorobenzidine		40U
(35B)	121-14-2	2,4-dinitrotoluene	119	~~40U~~ BJT
(36B)	606-20-2	2,6-dinitrotoluene		40U
(37B)	122-66-7	1,2-diphenylhydrazine		40U
(38B)	206-44-0	fluoranthene		20U
(39B)	7005-72-3	4-chlorophenyl phenyl ether		20U
(40B)	101-55-3	4-bromophenyl phenyl ether		20U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether		40U
(43B)	111-91-1	bis (2-chloroethoxy) methane		40U

PP #	CAS #			ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene		20U
(53B)	77-47-4	hexachlorocyclopentadiene		20U
(54B)	78-59-1	isophorone		20U
(55B)	91-20-3	naphthalene		20U
(56B)	98-95-3	nitrobenzene		20U
(61B)	62-75-9	N-nitrosodimethylamine		20U
(62B)	86-30-6	N-nitrosodiphenylamine		20U
(63B)	621-64-7	N-nitrosodipropylamine	154	~~40U~~ BJT
(66B)	117-81-7	bis (2-ethylhexyl) phthalate		20U
(67B)	85-68-7	benzyl butyl phthalate		20U
(68B)	84-74-2	di-n-butyl phthalate	135	~~20U~~ BJT
(69B)	117-84-0	di-n-octyl phthalate		20U
(70B)	84-66-2	diethyl phthalate		20U
(71B)	131-11-3	dimethyl phthalate		20U
(72B)	56-55-3	benzo(a)anthracene		20U
(73B)	50-32-8	benzo(a)pyrene		40U
(74B)	205-99-2	benzo(b)fluoranthene		40U
(75B)	207-08-9	benzo(k)fluoranthene		40U
(76B)	218-01-9	chrysene		20U
(77B)	208-96-8	acenaphthylene		20U
(78B)	120-12-7	anthracene		20U
(79B)	191-24-2	benzo(ghi)perylene		40U
(80B)	86-73-7	fluorene		20U
(81B)	85-01-8	phenanthrene		20U
(82B)	53-70-3	dibenzo(a,h)anthracene		40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene		40U
(84B)	129-00-0	pyrene	153	~~20U~~ BJT
	62-53-3	aniline		20U
	100-51-6	benzyl alcohol		40U
	106-47-8	4-chloroaniline		100U
	132-64-9	dibenzofuran		20U
	91-57-6	2-methylnaphthalene		40U
	88-74-4	2-nitroaniline		200U
	99-09-2	3-nitroaniline		200U
	100-01-6	4-nitroaniline		200U

AR300338

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

ORIGINAL

Sample Number
C8122

LOW WATER
Matrix Spike

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-4A
Sample Matrix: Water
Data Release Authorized By:

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(5V)	56-23-5	carbon tetrachloride	5U
(6V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	trichlorofluoromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	591-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	xylene (total)	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

ug/l

PP #	CAS #			
(89P)	309-00-2	aldrin	4.86	~~0.1U~~
(90P)	60-57-1	dieldrin	6.31	~~0.1U~~
(91P)	57-74-9	chlordane		0.1U
(92P)	50-29-3	4,4'-DDT	1.58	~~0.1U~~
(93P)	72-55-9	4,4'-DDE		0.1U
(94P)	72-54-8	4,4'-DDD		0.1U
(95P)	115-29-7	α-endosulfan		0.1U
(96P)	115-29-7	β-endosulfan		0.1U
(97P)	1031-07-8	endosulfan sulfate		0.1U
(98P)	72-20-8	endrin	5.47	~~0.1U~~
(99P)	7421-93-4	endrin aldehyde		0.1U
(100P)	76-44-8	heptachlor	5.83	~~0.1U~~
(101P)	1024-57-3	heptachlor epoxide		0.1U
(102P)	319-84-6	α-BHC		0.1U
(103P)	319-85-7	β-BHC		0.1U
(104P)	319-86-8	δ-BHC		0.1U
(105P)	58-89-9	γ-BHC (lindane)	6.56	~~0.1U~~
(106P)	53469-21-9	PCB-1242		0.1U
(107P)	11097-69-1	PCB-1254		0.1U
(108P)	11104-28-2	PCB-1221		0.1U
(109P)	11141-16-5	PCB-1232		0.1U
(110P)	12672-29-6	PCB-1248		0.1U
(111P)	11096-82-5	PCB-1260		0.1U
(112P)	12674-11-2	PCB-1016		0.1U
(113P)	8001-35-2	toxaphene		0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

ug/l

PP #	CAS #		
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

HR00339

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

ORIGINAL (Red)

Sample Number C-8126 DMS

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION

Case No: 2638

Lab Sample ID No: 2551-41-6 DMS

QC Report No:

Sample Matrix: WATER

Contract No.: 68-01-6724

Data Release Authorized By: BJT

Date Sample Received: 4/13/84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED:

DATE ANALYZED: 4/17/84

PERCENT MOISTURE:

CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	14.4 ~~5U~~ BJT
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	16.6 ~~5U~~ BJT
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	16.8 ~~5U~~ BJT
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	17 ~~5U~~ BJT
(87V)	79-01-6	trichloroethene	14.6 ~~5U~~ BJT
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED:

DATE ANALYZED:

PERCENT MOISTURE:

CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	α-endosulfan	0.1U
(96P)	115-29-7	β-endosulfan	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-93-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	α-BHC	0.1U
(103P)	319-85-7	β-BHC	0.1U
(104P)	319-86-8	δ-BHC	0.1U
(105P)	58-89-9	γ-BHC (lindane)	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-1	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)

DATE EXTRACTED/PREPARED:

DATE ANALYZED:

PERCENT MOISTURE:

CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(119D)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100340

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

ORIGINAL

Sample Number
C-8124DMS

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-5 DMS
Sample Matrix: WATER
Data Release Authorized By: BJT

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 5/13/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5/18/84
DATE ANALYZED: 5/4/84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	20U
(22A)	59-50-7	p-chloro-m-cresol	96 ~~40U~~ BJT
(24A)	95-57-8	2- chlorophenol	224 ~~20U~~ BJT
(31A)	120-83-2	2,4-dichlorophenol	20U
(34A)	105-67-9	2,4-dimethylphenol	20U
(57A)	88-75-5	2- nitrophenol	40U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-28-5	2,4-dinitrophenol	100U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	40U
(64A)	87-86-5	pentachlorophenol	145 ~~40U~~ BJT
(65A)	108-95-2	phenol	203 ~~20U~~ BJT
	65-85-0	benzoic acid	200U
	95-48-7	2-methylphenol	20U
	108-39-4	4-methylphenol	20U
	95-95-4	2,4,5-trichlorophenol	200U
(B)	83-32-9	acenaphthene	294 ~~20U~~ BJT
(B)	92-87-5	benzidine	80U
(8B)	120-82-1	1,2,4-trichlorobenzene	156 ~~20U~~ BJT
(B)	118-74-1	hexachlorobenzene	20U
(12B)	67-72-1	hexachloroethane	20U
(18B)	111-44-4	bis(2-chloroethyl)ether	20U
(B)	91-58-7	2-chloronaphthalene	20U
(25B)	95-50-1	1,2-dichlorobenzene	20U
(26B)	541-73-1	1,3-dichlorobenzene	20U
(B)	106-46-7	1,4-dichlorobenzene	156 ~~20U~~ BJT
(28B)	91-94-1	3,3'-dichlorobenzidine	40U
(B)	121-14-2	2,4-dinitrotoluene	155 ~~40U~~ BJT
(B)	606-20-2	2,6-dinitrotoluene	40U
(37B)	122-66-7	1,2-diphenylhydrazine	40U
(B)	206-44-0	fluoranthene	20U
(B)	7005-72-3	4-chlorophenyl phenyl ether	20U
(41B)	101-55-3	4-bromophenyl phenyl ether	20U
(B)	39638-32-9	bis (2-chloroisopropyl) ether	40U
(B)	111-91-1	bis (2-chloroethoxy) methane	40U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	20U
(53B)	77-47-4	hexachlorocyclopentadiene	20U
(54B)	78-59-1	isophorone	20U
(55B)	91-20-3	naphthalene	20U
(56B)	98-95-3	nitrobenzene	20U
(61B)	62-75-9	N-nitrosodimethylamine	20U
(62B)	86-30-6	N-nitrosodiphenylamine	20U
(63B)	621-64-7	N-nitrosodipropylamine	157 ~~40U~~ BJ
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	20U
(67B)	85-68-7	benzyl butyl phthalate	20U
(68B)	84-74-2	di-n-butyl phthalate	197 ~~20U~~ BJ
(69B)	117-84-0	di-n-octyl phthalate	20U
(70B)	84-66-2	diethyl phthalate	20U
(71B)	131-11-3	dimethyl phthalate	20U
(72B)	56-55-3	benzo(a)anthracene	20U
(73B)	50-32-8	benzo(a)pyrene	40U
(74B)	205-99-2	benzo(b)fluoranthene	40U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	20U
(77B)	208-96-8	acenaphthylene	20U
(78B)	120-12-7	anthracene	20U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	20U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	40U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	40U
(84B)	129-00-0	pyrene	222 ~~20U~~ BJ
	62-53-3	aniline	20U
	100-51-6	benzyl alcohol	40U
	106-47-8	4-chloroaniline	100U
	132-64-9	dibenzofuran	20U
	91-57-6	2-methylnaphthalene	40U
	88-74-4	2-nitroaniline	200U
	99-09-2	3-nitroaniline	200U
	100-01-6	4-nitroaniline	200U

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
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ORIGINAL

Sample Number
C8122

ORGANICS ANALYSIS DATA SHEET

LOW WATER
Duplicate Matrix Spit

Laboratory Name: EAL CORPORATION
Lab Sample ID No: 2551-41-4B
Sample Matrix: Water
Data Release Authorized By:

Case No: 2638
QC Report No:
Contract No.: 68-01-6724
Date Sample Received: 4-13-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

ug/l

CLP #	CAS #		
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(5V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(17V)	110-75-8	2-chloroethylvinyl ether	5U
(18V)	67-66-3	chloroform	5U
(19V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	trans-1,2-dichloroethene	5U
(22V)	78-87-5	1,2-dichloropropane	5U
(23V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis-1,3-dichloropropene	10U
(28V)	100-41-4	ethylbenzene	5U
(4V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(50V)	75-71-8	dichlorodifluoromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(35V)	127-18-4	tetrachloroethene	5U
(36V)	108-88-3	toluene	5U
(37V)	79-01-6	trichloroethene	5U
(38V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	5U
	78-93-3	2-butanone	5U
	75-15-0	carbondisulfide	5U
	591-78-6	2-hexanone	5U
	108-10-1	4-methyl-2-pentanone	5U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	5U
	1330-20-7	total xylenes	5U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 4-18-84
DATE ANALYZED: 5-8-84
PERCENT MOISTURE:

ug/l

CLP #	CAS #			
(89P)	309-00-2	aldrin	6.43	~~0.1U~~
(90P)	60-57-1	dieldrin	7.76	~~0.1U~~
(91P)	57-74-9	chlordane		0.1U
(92P)	50-29-3	4,4'-DDT	7.03	~~0.1U~~
(93P)	72-55-9	4,4'-DDE		0.1U
(94P)	72-54-8	4,4'-DDD		0.1U
(95P)	115-29-7	α-endosulfan		0.1U
(96P)	115-29-7	β-endosulfan		0.1U
(97P)	1031-07-8	endosulfan sulfate		0.1U
(98P)	72-20-8	endrin	4.61	~~0.1U~~
(99P)	7421-93-4	endrin aldehyde		0.1U
(100P)	76-44-8	heptachlor	7.16	~~0.1U~~
(101P)	1024-57-3	heptachlor epoxide		0.1U
(102P)	319-84-6	α-BHC		0.1U
(103P)	319-85-7	β-BHC		0.1U
(104P)	319-86-8	δ-BHC		0.1U
(105P)	58-89-9	γ-BHC (lindane)	4.49	~~0.1U~~
(106P)	53469-21-9	PCB-1242		0.1U
(107P)	11097-69-1	PCB-1254		0.1U
(108P)	11104-28-2	PCB-1221		0.1U
(109P)	11141-16-5	PCB-1232		0.1U
(110P)	12672-29-6	PCB-1248		0.1U
(111P)	11096-82-5	PCB-1260		0.1U
(112P)	12674-11-2	PCB-1016		0.1U
(113P)	8001-35-2	toxaphene		0.1U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

ug/l

CLP #	CAS #		
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

AR100342

ORIGINAL

03 377

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
C8127

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Lab Sample ID No: 00289 (041784V08)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 17-APR-84
PERCENT MOISTURE: 22.6

PP #	CAS #		ug/l or (ug/kg) (circle one)
2V)	107-02-8	acrolein	70
(3V)	107-13-1	acrylonitrile	10
4V)	71-43-2	benzene	20
)	56-23-5	carbon tetrachloride	20
(7V)	108-90-7	chlorobenzene	30
(10V)	107-06-2	1,2-dichloroethane	20
11V)	71-55-6	1,1,1-trichloroethane	30
13V)	75-34-3	1,1-dichloroethane	20
(14V)	79-00-5	1,1,2-trichloroethane	20
15V)	79-34-5	1,1,2,2-tetrachloroethane	30
16V)	75-00-3	chloroethane	50
(19V)	110-75-8	2-chloroethylvinyl ether	20
(23V)	67-66-3	chloroform	20
29V)	75-35-4	1,1-dichloroethene	70
(30V)	156-60-5	trans-1,2-dichloroethene	30
(32V)	78-87-5	1,2-dichloropropane	30
33V)	10061-02-6	trans-1,3-dichloropropene	20
	10061-01-5	cis-1,3-dichloropropene	20
(38V)	100-41-4	ethylbenzene	10
44V)	75-09-2	methylene chloride	7K
5V)	74-87-3	chloromethane	70
(46V)	74-83-9	bromomethane	90
(47V)	75-25-2	bromoform	10
8V)	75-27-4	bromodichloromethane	20
9V)	75-69-4	fluorotrichloromethane	250
(50V)	75-71-8	dichlorofluoromethane	190
1V)	124-48-1	chlorodibromomethane	30
5V)	127-18-4	tetrachloroethene	20
(86V)	108-88-3	toluene	20
(87V)	79-01-6	trichloroethene	30
8V)	75-01-4	vinyl chloride	30
	67-64-1	acetone	20
	78-93-3	2-butanone	10
	75-15-0	carbondisulfide	40
	519-78-6	2-hexanone	60
	108-10-1	4-methyl-2-pentanone	10
	100-42-5	styrene	10
	108-05-4	vinyl acetate	20
	1330-20-7	total xylenes	10

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE: 22.6

PP #	CAS #		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	500
(90P)	60-57-1	dieldrin	500
(91P)	57-74-9	chlordane	5000
(92P)	50-29-3	4,4'-DDT	500
(93P)	72-55-9	4,4'-DDE	500
(94P)	72-54-8	4,4'-DDD	500
(95P)	115-29-7	alpha-endosulfan	500
(96P)	115-29-7	beta-endosulfan	500
(97P)	1031-07-8	endosulfan sulfate	500
(98P)	72-20-8	endrin	500
(99P)	7421-93-4	endrin aldehyde	500
(100P)	76-44-8	heptachlor	500
(101P)	1024-57-3	heptachlor epoxide	500
(102P)	319-84-6	alpha-BHC	500
(103P)	319-85-7	beta-BHC	500
(104P)	319-86-8	delta-BHC	500
(105P)	58-89-9	gamma-BHC (lindane)	500
(106P)	53469-21-9	PCB-1242	5000
(107P)	11097-69-1	PCB-1254	5000
(108P)	11104-28-2	PCB-1221	5000
(109P)	11141-16-5	PCB-1232	5000
(110P)	12672-29-6	PCB-1248	5000
(111P)	11096-82-5	PCB-1260	4732
(112P)	12674-11-2	PCB-1016	11104
(82B)	8001-35-2	toxaphene	5000

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE: 22.6

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

AR 100342

December 19

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08127

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Case No: 2638
Lab Sample ID No: 00289 (052584005)
QC Report No: 2638
Sample Matrix: Soil
Contract No.: 68-01-6783
Data Release Authorized By: G. Colovos
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: LOW (MEDIUM) HIGH (circle one)
DATE ERTRACTED/PREPARED: 18-APR-84
DATE ANALYZED: 25-MAY-84
PERCENT MOISTURE: 22.6
CONC./DILUTION FACTOR: 1.0

PP #	CAS #		ug/l or (ug/kg) (circle one)
(21A)	22-06-2	2,4,6-trichlorophenol	980U
(22A)	59-50-7	p-chloro-m-cresol	1960U
(24A)	95-57-8	2-chlorophenol	1470U
(31A)	120-83-2	2,4-dichlorophenol	980U
(34A)	105-67-9	2,4-dimethylphenol	980U
(57A)	88-75-5	2-nitrophenol	1960U
[illegible]A)	100-02-7	4-nitrophenol	19113U
(59A)	51-28-5	2,4-dinitrophenol	16173U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	11762U
(64A)	87-86-5	pentachlorophenol	4901U
(65A)	108-95-2	phenol	1470U
	65-85-0	benzoic acid	4901U
	95-48-7	2-methylphenol	1470U
	108-39-4	4-methylphenol	7351U
	95-95-4	2,4,5-trichlorophenol	980U
(1B)	83-32-9	acenaphthene	2450U
(5B)	92-87-5	benzidine	7351U
(8B)	120-82-1	1,2,4-trichlorobenzene	2450U
(9B)	118-74-1	hexachlorobenzene	1960U
(12B)	67-72-1	hexachloroethane	1960U
(18B)	111-44-4	bis(2-chloroethyl)ether	2941U
(20B)	91-58-7	2-chloronaphthalene	1960U
(25B)	95-50-1	1,2-dichlorobenzene	1470U
(26B)	541-73-1	1,3-dichlorobenzene	1470U
(27B)	106-46-7	1,4-dichlorobenzene	1470U
(28B)	91-94-1	3,3'-dichlorobenzidine	4901U
(35B)	121-14-2	2,4-dinitrotoluene	5881U
(36B)	606-20-2	2,6-dinitrotoluene	4901U
(37B)	122-66-7	1,2-diphenylhydrazine	
(39B)	206-44-0	fluoranthene	2450U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	980U
(41B)	101-55-3	4-bromophenyl phenyl ether	3431U
[illegible])	39638-32-9	bis (2-chloroisopropyl) ether	1470U
(43B)	111-91-1	bis (2-chloroethoxy) methane	3431U

PP #	CAS #		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	2941U
(53B)	77-47-4	hexachlorocyclopentadiene	7351U
(54B)	78-59-1	isophorone	2941U
(55B)	91-20-3	naphthalene	2450U
(56B)	98-95-3	nitrobenzene	78
(61B)	62-75-9	N-nitrosodimethylamine	12252U
(62B)	86-30-6	N-nitrosodiphenylamine	4411U
(63B)	621-64-7	N-nitrosopropylamine	5881U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	367311
(67B)	85-68-7	benzyl butyl phthalate	2941U
(68B)	84-74-2	di-n-butyl phthalate	456
(69B)	117-84-0	di-n-octyl phthalate	86373
(70B)	84-66-2	diethyl phthalate	2450U
(71B)	131-11-3	dimethyl phthalate	1960U
(72B)	56-55-3	benzo(a)anthracene	1470U
(73B)	50-32-8	benzo(a)pyrene	1470U
(74B)	205-99-2	benzo(b)fluoranthene	5391U
(75B)	207-08-9	benzo(k)fluoranthene	1960U
(76B)	218-01-9	chrysene	1470U
(77B)	208-96-3	acenaphthylene	980U
(78B)	120-12-7	anthracene	1470U
(79B)	191-24-2	benzo(ghi)perylene	1960U
(80B)	86-73-7	fluorene	1470U
(81B)	83-01-8	phenanthrene	980U
(82B)	53-70-3	dibenzo(a,h)anthracene	1470U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	1470U
(84B)	129-00-0	pyrene	5881U
	62-53-3	aniline	2941U
	100-51-6	benzyl alcohol	4411U
	106-47-8	4-chloroaniline	11762U
	132-64-9	dibenzofuran	1960U
	91-57-6	2-methylnaphthalene	980U
	88-74-4	2-nitroaniline	9312U
	99-09-2	3-nitroaniline	9312U
	100-01-6	4-nitroaniline	7351U

ORIGINAL

03 654

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08131

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Lab Sample ID No: 00292 (041884V07)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 18-APR-84
PERCENT MOISTURE: 30.7

P #	CAS #		ug/l or (ug/kg) (circle one)
(2V)	107-02-8	acrolein	70
(3V)	107-13-1	acrylonitrile	70
4V)	71-43-2	benzene	20
5V)	56-23-5	carbon tetrachloride	20
(7V)	108-90-7	chlorobenzene	30
10V)	107-06-2	1,2-dichloroethane	20
11V)	71-55-6	1,1,1-trichloroethane	30
(13V)	75-34-3	1,1-dichloroethane	20
14V)	79-00-5	1,1,2-trichloroethane	20
15V)	79-34-5	1,1,2,2-tetrachloroethane	30
(16V)	75-00-3	chloroethane	50
(19V)	110-75-8	2-chloroethylvinyl ether	20
23V)	67-66-3	chloroform	20
29V)	75-35-4	1,1-dichloroethene	70
(30V)	156-60-5	trans-1,2-dichloroethene	30
32V)	78-87-5	1,2-dichloropropane	30
33V)	10061-02-6	trans-1,3-dichloropropene	20
	10061-01-5	cis-1,3-dichloropropene	20
(38V)	100-41-4	ethylbenzene	10
44V)	75-09-2	methylene chloride	7K
45V)	74-87-3	chloromethane	70
(46V)	74-83-9	bromomethane	90
47V)	75-25-2	bromoform	10
48V)	75-27-4	bromodichloromethane	20
(49V)	75-69-4	fluorotrichloromethane	250
50V)	75-71-8	dichlorofluoromethane	190
51V)	124-48-1	chlorodibromomethane	30
(85V)	127-18-4	tetrachloroethene	20
(86V)	108-88-3	toluene	20
87V)	79-01-6	trichloroethene	30
88V)	75-01-4	vinyl chloride	30
	67-64-1	acetone	86
	78-93-3	2-butanone	10
	75-15-0	carbondisulfide	40
	519-78-6	2-hexanone	60
	108-10-1	4-methyl-2-pentanone	10
	100-42-5	styrene	10
	108-05-4	vinyl acetate	20
	1330-20-7	total xylenes	10

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE: 30.7

PP #	CAS #		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	500
(90P)	60-57-1	dieldrin	500
(91P)	57-74-9	chlordane	5000
(92P)	50-29-3	4,4'-DDT	500
(93P)	72-55-9	4,4'-DDE	500
(94P)	72-54-8	4,4'-DDD	500
(95P)	115-29-7	alpha-endosulfan	500
(96P)	115-29-7	beta-endosulfan	500
(97P)	1031-07-8	endosulfan sulfate	500
(98P)	72-20-8	endrin	500
(99P)	7421-93-4	endrin aldehyde	500
(100P)	76-44-8	heptachlor	500
(101P)	1024-57-3	heptachlor epoxide	500
(102P)	319-84-6	alpha-BHC	500
(103P)	319-85-7	beta-BHC	500
(104P)	319-86-8	delta-BHC	500
(105P)	58-89-9	gamma-BHC (lindane)	500
(106P)	53469-21-9	PCB-1242	5000
(107P)	11097-69-1	PCB-1254	5000
(108P)	11104-28-2	PCB-1221	5000
(109P)	11141-16-5	PCB-1232	5000
(110P)	12672-29-6	PCB-1248	5000
(111P)	11096-82-5	PCB-1260	7975
(112P)	12674-11-2	PCB-1016	17130
(82B)	8001-35-2	toxaphene	5000

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE: 30.7

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

AR100345

ORIGINAL (Red)

03 655

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
C8131

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RT-EMSC
Lab Sample ID No: 00292 (052584004)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: LOW (MEDIUM) HIGH (circle one)
DATE ERTRACTED/PREPARED: 18-APR-84
DATE ANALYZED: 25-MAY-84
PERCENT MOISTURE: 30.7
CONC./DILUTION FACTOR: 1.0

PP #	CAS #		ug/l or (ug/kg) (circle one)
(21A)	22-06-2	2,4,6-trichlorophenol	980U
(22A)	59-50-7	p-chloro-m-cresol	1960U
(24A)	95-57-8	2-chlorophenol	1470U
(31A)	120-83-2	2,4-dichlorophenol	980U
(34A)	105-67-9	2,4-dimethylphenol	980U
[illegible]	88-75-5	2-nitrophenol	1960U
(58A)	100-02-7	4-nitrophenol	19113U
(59A)	51-28-5	2,4-dinitrophenol	16173U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	11762U
(64A)	87-86-5	pentachlorophenol	4901U
(65A)	108-95-2	phenol	1470U
	65-85-0	benzoic acid	4901U
	95-48-7	2-methylphenol	1470U
	108-39-4	4-methylphenol	7351U
	95-95-4	2,4,5-trichlorophenol	980U
(1B)	83-32-9	acenaphthene	2450U
(5B)	92-87-5	benzidine	7351U
(8B)	120-82-1	1,2,4-trichlorobenzene	2450U
(9B)	118-74-1	hexachlorobenzene	1960U
(12B)	67-72-1	hexachloroethane	1960U
(18B)	111-44-4	bis(2-chloroethyl)ether	2941U
(20B)	91-58-7	2-chloronaphthalene	1960U
(25B)	95-50-1	1,2-dichlorobenzene	1470U
(26B)	541-73-1	1,3-dichlorobenzene	1470U
(27B)	106-46-7	1,4-dichlorobenzene	1470U
(28B)	91-94-1	3,3'-dichlorobenzidine	4901U
(35B)	121-14-2	2,4-dinitrotoluene	5881U
(36B)	606-20-2	2,6-dinitrotoluene	4901U
(37B)	122-66-7	1,2-diphenylhydrazine	
(39B)	206-44-0	fluoranthene	2450U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	980U
[illegible]	101-55-3	4-bromophenyl phenyl ether	3431U
[illegible]2B)	39638-32-9	bis (2-chloroisopropyl) ether	1470U
(43B)	111-91-1	bis (2-chloroethoxy) methane	3431U

PP #	CAS #		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	2941U
(53B)	77-47-4	hexachlorocyclopentadiene	7351U
(54B)	78-59-1	isophorone	2941U
(55B)	91-20-3	naphthalene	2450U
(56B)	98-95-3	nitrobenzene	5881U
(61B)	62-75-9	N-nitrosodimethylamine	12252U
(62B)	86-30-6	N-nitrosodiphenylamine	4411U
(63B)	621-64-7	N-nitrosopropylamine	5881U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	496170
(67B)	85-68-7	benzyl butyl phthalate	9878
(68B)	84-74-2	di-n-butyl phthalate	661
(69B)	117-84-0	di-n-octyl phthalate	242117
(70B)	84-66-2	diethyl phthalate	2450U
(71B)	131-11-3	dimethyl phthalate	1960U
(72B)	56-55-3	benzo(a)anthracene	1470U
(73B)	50-32-8	benzo(a)pyrene	1470U
(74B)	205-99-2	benzo(b)fluoranthene	5391U
(75B)	207-08-9	benzo(k)fluoranthene	1960U
(76B)	218-01-9	chrysene	1470U
(77B)	208-96-3	acenaphthylene	980U
(78B)	120-12-7	anthracene	1470U
(79B)	191-24-2	benzo(ghi)perylene	1960U
(80B)	86-73-7	fluorene	1470U
(81B)	83-01-8	phenanthrene	980U
(82B)	53-70-3	dibenzo(a,h)anthracene	1470U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	1470U
(84B)	129-00-0	pyrene	5881U
	62-53-3	aniline	2941U
	100-51-6	benzyl alcohol	4411U
	106-47-8	4-chloroaniline	11762U
	132-64-9	dibenzofuran	1960U
	91-57-6	2-methylnaphthalene	980U
	88-74-4	2-nitroaniline	9312U
	99-09-2	3-nitroaniline	9312U
	100-01-6	4-nitroaniline	7351U

ORIGINAL
Red

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08123

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RT-EMSC
Lab Sample ID No: 00287 (052484C11)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: LOW (MEDIUM) HIGH (circle one)
DATE ERTRACTED/PREPARED: 18-APR-84
DATE ANALYZED: 24-MAY-84
PERCENT MOISTURE: 18.2
CONC./DILUTION FACTOR: 1.0

PP #	CAS #		ug/l or (ug/kg) (circle one)
(21A)	22-06-2	2,4,6-trichlorophenol	980U
(22A)	59-50-7	p-chloro-m-cresol	1960U
(24A)	95-57-8	2-chlorophenol	1470U
(31A)	120-83-2	2,4-dichlorophenol	980U
(34A)	105-67-9	2,4-dimethylphenol	980U
(57A)	88-75-5	2-nitrophenol	1960U
(58A)	100-02-7	4-nitrophenol	19113U
(59A)	51-28-5	2,4-dinitrophenol	16173U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	11762U
(64A)	87-86-5	pentachlorophenol	4901U
(65A)	108-95-2	phenol	1470U
	65-85-0	benzoic acid	4901U
	95-48-7	2-methylphenol	1470U
	108-39-4	4-methylphenol	7351U
	95-95-4	2,4,5-trichlorophenol	980U
(1B)	83-32-9	acenaphthene	2450U
(5B)	92-87-5	benzidine	7351U
(8B)	120-82-1	1,2,4-trichlorobenzene	2450U
9B)	118-74-1	hexachlorobenzene	1960U
12B)	67-72-1	hexachloroethane	1960U
(18B)	111-44-4	bis(2-chloroethyl)ether	2941U
20B)	91-58-7	2-chloronaphthalene	1960U
25B)	95-50-1	1,2-dichlorobenzene	1470U
(26B)	541-73-1	1,3-dichlorobenzene	1470U
(27B)	106-46-7	1,4-dichlorobenzene	1470U
28B)	91-94-1	3,3'-dichlorobenzidine	4901U
35B)	121-14-2	2,4-dinitrotoluene	5881U
(36B)	606-20-2	2,6-dinitrotoluene	4901U
37B)	122-66-7	1,2-diphenylhydrazine	
39B)	206-44-0	fluoranthene	2450U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	980U
(41B)	101-55-3	4-bromophenyl phenyl ether	3431U
42B)	39638-32-9	bis (2-chloroisopropyl) ether	1470U
(43B)	111-91-1	bis (2-chloroethoxy) methane	3431U

PP #	CAS #		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	2941U
(53B)	77-47-4	hexachlorocyclopentadiene	7351U
(54B)	78-59-1	isophorone	2941U
(55B)	91-20-3	naphthalene	2450U
(56B)	98-95-3	nitrobenzene	5881U
(61B)	62-75-9	N-nitrosodimethylamine	12252U
(62B)	86-30-6	N-nitrosodiphenylamine	4411U
(63B)	621-64-7	N-nitrosopropylamine	5881U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	22980
(67B)	85-68-7	benzyl butyl phthalate	2941U
(68B)	84-74-2	di-n-butyl phthalate	9802U
(69B)	117-84-0	di-n-octyl phthalate	14456
(70B)	84-66-2	diethyl phthalate	2450U
(71B)	131-11-3	dimethyl phthalate	1960U
(72B)	56-55-3	benzo(a)anthracene	1470U
(73B)	50-32-8	benzo(a)pyrene	1470U
(74B)	205-99-2	benzo(b)fluoranthene	5391U
(75B)	207-08-9	benzo(k)fluoranthene	1960U
(76B)	218-01-9	chrysene	1470U
(77B)	208-96-3	acenaphthylene	980U
(78B)	120-12-7	anthracene	1470U
(79B)	191-24-2	benzo(ghi)perylene	1960U
(80B)	86-73-7	fluorene	1470U
(81B)	83-01-8	phenanthrene	980U
(82B)	53-70-3	dibenzo(a,h)anthracene	1470U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	1470U
(84B)	129-00-0	pyrene	5881U
	62-53-3	aniline	2941U
	100-51-6	benzyl alcohol	4411U
	106-47-8	4-chloroaniline	11762U
	132-64-9	dibenzofuran	1960U
	91-57-6	2-methylnaphthalene	980U
	88-74-4	2-nitroaniline	9312U
	99-09-2	3-nitroaniline	9312U
	100-01-6	4-nitroaniline	7351U

ecember 1983

AR100347

ORIGINAL (Red) 03 216

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P. O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08123

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RT-RMSC
Lab Sample ID No: 00287 (041984X01)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 19-APR-84
PERCENT MOISTURE: 18.2

P #	CAS #		ug/l or (ug/kg) (circle one)
(2V)	107-02-8	acrolein	7U
(3V)	107-13-1	acrylonitrile	1U
(4V)	71-43-2	benzene	2K
(6V)	56-23-5	carbon tetrachloride	2U
(7V)	108-90-7	chlorobenzene	3U
(10V)	107-06-2	1,2-dichloroethane	2U
[illegible]	71-55-6	1,1,1-trichloroethane	3K
(13V)	75-34-3	1,1-dichloroethane	2U
(14V)	79-00-5	1,1,2-trichloroethane	2U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	3U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	2U
(23V)	67-66-3	chloroform	2U
(29V)	75-35-4	1,1-dichloroethene	7U
(30V)	156-60-5	trans-1,2-dichloroethene	3U
(32V)	78-87-5	1,2-dichloropropane	3U
(33V)	10061-02-6	trans-1,3-dichloropropene	2U
	10061-01-5	cis-1,3-dichloropropene	2U
(38V)	100-41-4	ethylbenzene	1U
(44V)	75-09-2	methylene chloride	7K
(45V)	74-87-3	chloromethane	7U
(46V)	74-83-9	bromomethane	9U
(47V)	75-25-2	bromoform	1U
(48V)	75-27-4	bromodichloromethane	2U
(49V)	75-69-4	fluorotrichloromethane	25U
(50V)	75-71-8	dichlorofluoromethane	19U
(51V)	124-48-1	chlorodibromomethane	3U
(85V)	127-18-4	tetrachloroethene	2U
(86V)	108-88-3	toluene	7
(87V)	79-01-6	trichloroethene	12
(88V)	75-01-4	vinyl chloride	3U
[illegible]	67-64-1	acetone	69
[illegible]	78-93-3	2-butanone	1U
	75-15-0	carbondisulfide	4U
	519-78-6	2-hexanone	6U
	108-10-1	4-methyl-2-pentanone	1U
	100-42-5	styrene	1U
	108-05-4	vinyl acetate	2U
	1330-20-7	total xylenes	1U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE: 18.2

PP #	CAS #		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	50U
(90P)	60-57-1	dieldrin	50U
(91P)	57-74-9	chlordane	500U
(92P)	50-29-3	4,4'-DDT	50U
(93P)	72-55-9	4,4'-DDE	50U
(94P)	72-54-8	4,4'-DDD	50U
(95P)	115-29-7	alpha-endosulfan	50U
(96P)	115-29-7	beta-endosulfan	50U
(97P)	1031-07-8	endosulfan sulfate	50U
(98P)	72-20-8	endrin	50U
(99P)	7421-93-4	endrin aldehyde	50U
(100P)	76-44-8	heptachlor	50U
(101P)	1024-57-3	heptachlor epoxide	50U
(102P)	319-84-6	alpha-BHC	50U
(103P)	319-85-7	beta-BHC	50U
(104P)	319-86-8	delta-BHC	50U
(105P)	58-89-9	gamma-BHC (lindane)	50U
(106P)	53469-21-9	PCB-1242	500U
(107P)	11097-69-1	PCB-1254	500U
(108P)	11104-28-2	PCB-1221	500U
(109P)	11141-16-5	PCB-1232	500U
(110P)	12672-29-6	PCB-1248	500U
(111P)	11096-82-5	PCB-1260	2136
(112P)	12674-11-2	PCB-1016	5252
(82B)	8001-35-2	toxaphene	500U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE: 18.2

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

AR100348

December 19

ORIGINAL (Red) 03 113

.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
r.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
C8107

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RT-EMSC
ab Sample ID No: 00286 (052584C10)
ample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: LOW (MEDIUM) HIGH (circle one)
DATE ERTRACTED/PREPARED: 18-APR-84
DATE ANALYZED: 25-MAY-84
PERCENT MOISTURE: 29.4
CONC./DILUTION FACTOR: 5.0

#	CAS #		ug/l or (ug/kg) (circle one)
(21A)	22-06-2	2,4,6-trichlorophenol	980U
2A)	59-50-7	p-chloro-m-cresol	1960U
4A)	95-57-8	2-chlorophenol	1470U
(31A)	120-83-2	2,4-dichlorophenol	980U
(34A)	105-67-9	2,4-dimethylphenol	980U
7A)	88-75-5	2-nitrophenol	1960U
8A)	100-02-7	4-nitrophenol	19113U
(59A)	51-28-5	2,4-dinitrophenol	16173U
0A)	534-52-1	4,6-dinitro-2-methylphenol	11762U
4A)	87-86-5	pentachlorophenol	4901U
(65A)	108-95-2	phenol	1470U
	65-85-0	benzoic acid	4901U
	95-48-7	2-methylphenol	1470U
	108-39-4	4-methylphenol	7351U
	95-95-4	2,4,5-trichlorophenol	980U
8)	83-32-9	acenaphthene	2450U
3)	92-87-5	benzidine	7351U
(8B)	120-82-1	1,2,4-trichlorobenzene	2450U
9)	118-74-1	hexachlorobenzene	1960U
2B)	67-72-1	hexachloroethane	1960U
(18B)	111-44-4	bis(2-chloroethyl)ether	2941U
(20B)	91-58-7	2-chloronaphthalene	1960U
5B)	95-50-1	1,2-dichlorobenzene	1470U
6B)	541-73-1	1,3-dichlorobenzene	1470U
(27B)	106-46-7	1,4-dichlorobenzene	1470U
3B)	91-94-1	3,3'-dichlorobenzidine	4901U
5B)	121-14-2	2,4-dinitrotoluene	5881U
(36B)	606-20-2	2,6-dinitrotoluene	4901U
(37B)	122-66-7	1,2-diphenylhydrazine	
9B)	206-44-0	fluoranthene	2450U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	980U
(41B)	101-55-3	4-bromophenyl phenyl ether	3431U
2B)	39638-32-9	bis (2-chloroisopropyl) ether	1470U
3B)	111-91-1	bis (2-chloroethoxy) methane	3431U

PP #	CAS #		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	2941U
(53B)	77-47-4	hexachlorocyclopentadiene	7351U
(54B)	78-59-1	isophorone	2941U
(55B)	91-20-3	naphthalene	2450U
(56B)	98-95-3	nitrobenzene	5881U
(61B)	62-75-9	N-nitrosodimethylamine	12252U
(62B)	86-30-6	N-nitrosodiphenylamine	4411U
(63B)	621-64-7	N-nitrosopropylamine	5881U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	239618
(67B)	85-68-7	benzyl butyl phthalate	2941U
(68B)	84-74-2	di-n-butyl phthalate	9802U
(69B)	117-84-0	di-n-octyl phthalate	576349
(70B)	84-66-2	diethyl phthalate	2450U
(71B)	131-11-3	dimethyl phthalate	1960U
72B)	56-55-3	benzo(a)anthracene	1470U
(73B)	50-32-8	benzo(a)pyrene	1470U
(74B)	205-99-2	benzo(b)fluoranthene	5391U
(75B)	207-08-9	benzo(k)fluoranthene	1960U
(76B)	218-01-9	chrysene	1470U
(77B)	208-96-3	acenaphthylene	980U
(78B)	120-12-7	anthracene	1470U
(79B)	191-24-2	benzo(ghi)perylene	1960U
(80B)	86-73-7	fluorene	1470U
(81B)	83-01-8	phenanthrene	980U
(82B)	53-70-3	dibenzo(a,h)anthracene	1470U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	1470U
(84B)	129-00-0	pyrene	5881U
	62-53-3	aniline	2941U
	100-51-6	benzyl alcohol	4411U
	106-47-8	4-chloroaniline	11762U
	132-64-9	dibenzofuran	1960U
	91-57-6	2-methylnaphthalene	980U
	88-74-4	2-nitroaniline	9312U
	99-09-2	3-nitroaniline	9312U
	100-01-6	4-nitroaniline	7351U

ORIGINAL 03 112

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
C8107

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Lab Sample ID No: 00286 (041784V05)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 17-APR-84
PERCENT MOISTURE: 29.4

VP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	70U
(3V)	107-13-1	acrylonitrile	10U
(5V)	71-43-2	benzene	5
(6V)	56-23-5	carbon tetrachloride	20U
(7V)	108-90-7	chlorobenzene	3K
(9V)	107-06-2	1,2-dichloroethane	20U
[illegible]	71-55-6	1,1,1-trichloroethane	30U
(13V)	75-34-3	1,1-dichloroethane	20U
(14V)	79-00-5	1,1,2-trichloroethane	20U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	30U
(16V)	75-00-3	chloroethane	50U
(19V)	110-75-8	2-chloroethylvinyl ether	20U
(23V)	67-66-3	chloroform	20U
(29V)	75-35-4	1,1-dichloroethene	70U
(30V)	156-60-5	trans-1,2-dichloroethene	30U
(32V)	78-87-5	1,2-dichloropropane	30U
(33V)	10061-02-6	trans-1,3-dichloropropene	20U
	10061-01-5	cis-1,3-dichloropropene	20U
(38V)	100-41-4	ethylbenzene	3
(44V)	75-09-2	methylene chloride	9
(45V)	74-87-3	chloromethane	70U
(46V)	74-83-9	bromomethane	90U
(47V)	75-25-2	bromoform	10U
(48V)	75-27-4	bromodichloromethane	20U
(49V)	75-69-4	fluorotrichloromethane	25K
(50V)	75-71-8	dichlorofluoromethane	190U
(51V)	124-48-1	chlorodibromomethane	30U
(85V)	127-18-4	tetrachloroethene	20U
(86V)	108-88-3	toluene	3
(87V)	79-01-6	trichloroethene	30U
(88V)	75-01-4	vinyl chloride	30U
	67-64-1	acetone	10U
	78-93-3	2-butanone	10U
	75-15-0	carbondisulfide	40U
	519-78-6	2-hexanone	6K
	108-10-1	4-methyl-2-pentanone	3
	100-42-5	styrene	10U
	108-05-4	vinyl acetate	20U
	1330-20-7	total xylenes	10U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE: 29.4

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	50U
(90P)	60-57-1	dieldrin	50U
(91P)	57-74-9	chlordane	500U
(92P)	50-29-3	4,4'-DDT	50U
(93P)	72-55-9	4,4'-DDE	50U
(94P)	72-54-8	4,4'-DDD	50U
(95P)	115-29-7	alpha-endosulfan	50U
(96P)	115-29-7	beta-endosulfan	50U
(97P)	1031-07-8	endosulfan sulfate	50U
(98P)	72-20-8	endrin	50U
(99P)	7421-93-4	endrin aldehyde	50U
(100P)	76-44-8	heptachlor	50U
(101P)	1024-57-3	heptachlor epoxide	50U
(102P)	319-84-6	alpha-BHC	50U
(103P)	319-85-7	beta-BHC	50U
(104P)	319-86-8	delta-BHC	50U
(105P)	58-89-9	gamma-BHC (lindane)	50U
(106P)	53469-21-9	PCB-1242	500U
(107P)	11097-69-1	PCB-1254	500U
(108P)	11104-28-2	PCB-1221	500U
(109P)	11141-16-5	PCB-1232	500U
(110P)	12672-29-6	PCB-1248	500U
(111P)	11096-82-5	PCB-1260	5128
(112P)	12674-11-2	PCB-1016	500U
(82B)	8001-35-2	toxaphene	500U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE: 29.4

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

AR100350

ORIGINAL

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P. O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
C8105

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Lab Sample ID No: 00285 (052584009)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: LOW (MEDIUM) HIGH (circle one)
DATE ERTRACTED/PREPARED: 18-APR-84
DATE ANALYZED: 25-MAY-84
PERCENT MOISTURE: 61.7
CONC./DILUTION FACTOR: 5.0

PP #	CAS #		ug/l or (ug/kg) (circle one)
1A)	22-06-2	2,4,6-trichlorophenol	980U
(22A)	59-50-7	p-chloro-m-cresol	1960U
(24A)	95-57-8	2-chlorophenol	1470U
1A)	120-83-2	2,4-dichlorophenol	980U
4A)	105-67-9	2,4-dimethylphenol	980U
(57A)	88-75-5	2-nitrophenol	1960U
8A)	100-02-7	4-nitrophenol	19113U
9A)	51-28-5	2,4-dinitrophenol	16173U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	11762U
(64A)	87-86-5	pentachlorophenol	4901U
5A)	108-95-2	phenol	1470U
	65-85-0	benzoic acid	4901U
	95-48-7	2-methylphenol	1470U
	108-39-4	4-methylphenol	7351U
	95-95-4	2,4,5-trichlorophenol	980U
(1B)	83-32-9	acenaphthene	2450U
5B)	92-87-5	benzidine	7351U
8)	120-82-1	1,2,4-trichlorobenzene	2450U
9B)	118-74-1	hexachlorobenzene	1960U
(12B)	67-72-1	hexachloroethane	1960U
18B)	111-44-4	bis(2-chloroethyl)ether	2941U
20B)	91-58-7	2-chloronaphthalene	1960U
(25B)	95-50-1	1,2-dichlorobenzene	1470U
26B)	541-73-1	1,3-dichlorobenzene	1470U
27B)	106-46-7	1,4-dichlorobenzene	1470U
(28B)	91-94-1	3,3'-dichlorobenzidine	4901U
(35B)	121-14-2	2,4-dinitrotoluene	5881U
36B)	606-20-2	2,6-dinitrotoluene	4901U
37B)	122-66-7	1,2-diphenylhydrazine	
(39B)	206-44-0	fluoranthene	2450U
40B)	7005-72-3	4-chlorophenyl phenyl ether	980U
41B)	101-55-3	4-bromophenyl phenyl ether	3431U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	1470U
43B)	111-91-1	bis (2-chloroethoxy) methane	3431U

PP #	CAS #		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	2941U
(53B)	77-47-4	hexachlorocyclopentadiene	7351U
(54B)	78-59-1	isophorone	2941U
(55B)	91-20-3	naphthalene	2450U
(56B)	98-95-3	nitrobenzene	5881U
(61B)	62-75-9	N-nitrosodimethylamine	12252U
(62B)	86-30-6	N-nitrosodiphenylamine	4411U
(63B)	621-64-7	N-nitrosopropylamine	5881U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	8899755
(67B)	85-68-7	benzyl butyl phthalate	2941U
(68B)	84-74-2	di-n-butyl phthalate	7429
(69B)	117-84-0	di-n-octyl phthalate	1451187
(70B)	84-66-2	diethyl phthalate	2450U
(71B)	131-11-3	dimethyl phthalate	1960U
(72B)	56-55-3	benzo(a)anthracene	1470U
(73B)	50-32-8	benzo(a)pyrene	1470U
(74B)	205-99-2	benzo(b)fluoranthene	5391U
(75B)	207-08-9	benzo(k)fluoranthene	1960U
(76B)	218-01-9	chrysene	1470U
(77B)	208-96-3	acenaphthylene	980U
(78B)	120-12-7	anthracene	1470U
(79B)	191-24-2	benzo(ghi)perylene	1960U
(80B)	86-73-7	fluorene	1470U
(81B)	83-01-8	phenanthrene	980U
(82B)	53-70-3	dibenzo(a,h)anthracene	1470U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	1470U
(84B)	129-00-0	pyrene	5881U
	62-53-3	aniline	2941U
	100-51-6	benzyl alcohol	4411U
	106-47-8	4-chloroaniline	11762U
	132-64-9	dibenzofuran	1960U
	91-57-6	2-methylnaphthalene	980U
	88-74-4	2-nitroaniline	9312U
	99-09-2	3-nitroaniline	9312U
	100-01-6	4-nitroaniline	7351U

AR100351

03 002

ORIGINAL 03 001

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P[illegible] Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
C8105

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Lab Sample ID No: 00285 (041784V04)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 17-APR-84
PERCENT MOISTURE: 61.7

#	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	70
(3V)	107-13-1	acrylonitrile	10
(4V)	71-43-2	benzene	115
(5V)	56-23-5	carbon tetrachloride	20
(7V)	108-90-7	chlorobenzene	299
(8V)	107-06-2	1,2-dichloroethane	20
[illegible]	71-55-6	1,1,1-trichloroethane	30
(13V)	75-34-3	1,1-dichloroethane	20
(14V)	79-00-5	1,1,2-trichloroethane	20
(15V)	79-34-5	1,1,2,2-tetrachloroethane	30
(16V)	75-00-3	chloroethane	50
(19V)	110-75-8	2-chloroethylvinyl ether	20
(23V)	67-66-3	chloroform	20
(29V)	75-35-4	1,1-dichloroethene	70
(30V)	156-60-5	trans-1,2-dichloroethene	60
(32V)	78-87-5	1,2-dichloropropane	30
(33V)	10061-02-6	trans-1,3-dichloropropene	20
	10061-01-5	cis-1,3-dichloropropene	20
(38V)	100-41-4	ethylbenzene	488
(44V)	75-09-2	methylene chloride	35
(45V)	74-87-3	chloromethane	70
(46V)	74-83-9	bromomethane	90
(47V)	75-25-2	bromoform	10
(48V)	75-27-4	bromodichloromethane	20
(49V)	75-69-4	fluorotrichloromethane	250
(50V)	75-71-8	dichlorofluoromethane	190
(51V)	124-48-1	chlorodibromomethane	30
(85V)	127-18-4	tetrachloroethene	8
(86V)	108-88-3	toluene	154
(87V)	79-01-6	trichloroethene	4
(88V)	75-01-4	vinyl chloride	30
[illegible]	67-64-1	acetone	110
[illegible]	78-93-3	2-butanone	10
	75-15-0	carbondisulfide	40
	519-78-6	2-hexanone	110
	108-10-1	4-methyl-2-pentanone	99
	100-42-5	styrene	10
	108-05-4	vinyl acetate	20
	1330-20-7	total xylenes	78

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE: 61.7

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	500
(90P)	60-57-1	dieldrin	500
(91P)	57-74-9	chlordane	5000
(92P)	50-29-3	4,4'-DDT	500
(93P)	72-55-9	4,4'-DDE	500
(94P)	72-54-8	4,4'-DDD	500
(95P)	115-29-7	alpha-endosulfan	500
(96P)	115-29-7	beta-endosulfan	500
(97P)	1031-07-8	endosulfan sulfate	500
(98P)	72-20-8	endrin	500
(99P)	7421-93-4	endrin aldehyde	500
(100P)	76-44-8	heptachlor	500
(101P)	1024-57-3	heptachlor epoxide	500
(102P)	319-84-6	alpha-BHC	500
(103P)	319-85-7	beta-BHC	500
(104P)	319-86-8	delta-BHC	500
(105P)	58-89-9	gamma-BHC (lindane)	500
(106P)	53469-21-9	PCB-1242	5000
(107P)	11097-69-1	PCB-1254	5000
(108P)	11104-28-2	PCB-1221	5000
(109P)	11141-16-5	PCB-1232	5000
(110P)	12672-29-6	PCB-1248	5000
(111P)	11096-82-5	PCB-1260	55897
(112P)	12674-11-2	PCB-1016	26462
(82B)	8001-35-2	toxaphene	5000

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE: 61.7

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

AR100352

ORIGINAL 03 457

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08128

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Lab Sample ID No: 00290 (041784V09)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 17-APR-84
PERCENT MOISTURE: 48.1

VP #	CAS #		ug/l or (ug/kg) (circle one)
(2V)	107-02-8	acrolein	70
(3V)	107-13-1	acrylonitrile	10
(6V)	71-43-2	benzene	2
(8V)	56-23-5	carbon tetrachloride	20
(7V)	108-90-7	chlorobenzene	4
(10V)	107-06-2	1,2-dichloroethane	20
(11V)	71-55-6	1,1,1-trichloroethane	19
(13V)	75-34-3	1,1-dichloroethane	20
(14V)	79-00-5	1,1,2-trichloroethane	20
(15V)	79-34-5	1,1,2,2-tetrachloroethane	30
(16V)	75-00-3	chloroethane	50
(19V)	110-75-8	2-chloroethylvinyl ether	20
(23V)	67-66-3	chloroform	2
(29V)	75-35-4	1,1-dichloroethene	70
(30V)	156-60-5	trans-1,2-dichloroethene	30
(32V)	78-87-5	1,2-dichloropropane	30
(33V)	10061-02-6	trans-1,3-dichloropropene	20
	10061-01-5	cis-1,3-dichloropropene	20
(38V)	100-41-4	ethylbenzene	10
(44V)	75-09-2	methylene chloride	21
(45V)	74-87-3	chloromethane	70
(46V)	74-83-9	bromomethane	90
(47V)	75-25-2	bromoform	10
(48V)	75-27-4	bromodichloromethane	20
(49V)	75-69-4	fluorotrichloromethane	250
(50V)	75-71-8	dichlorofluoromethane	190
(51V)	124-48-1	chlorodibromomethane	30
(85V)	127-18-4	tetrachloroethene	20
(86V)	108-88-3	toluene	341
(87V)	79-01-6	trichloroethene	12
(88V)	75-01-4	vinyl chloride	30
	67-64-1	acetone	24
	78-93-3	2-butanone	10
	75-15-0	carbondisulfide	40
	519-78-6	2-hexanone	60
	108-10-1	4-methyl-2-pentanone	4
	100-42-5	styrene	10
	108-05-4	vinyl acetate	20
	1330-20-7	total xylenes	2

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE: 48.1

PP #	CAS #		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	500
(90P)	60-57-1	dieldrin	500
(91P)	57-74-9	chlordane	5000
(92P)	50-29-3	4,4'-DDT	500
(93P)	72-55-9	4,4'-DDE	500
(94P)	72-54-8	4,4'-DDD	500
(95P)	115-29-7	alpha-endosulfan	500
(96P)	115-29-7	beta-endosulfan	500
(97P)	1031-07-8	endosulfan sulfate	500
(98P)	72-20-8	endrin	500
(99P)	7421-93-4	endrin aldehyde	500
(100P)	76-44-8	heptachlor	500
(101P)	1024-57-3	heptachlor epoxide	500
(102P)	319-84-6	alpha-BHC	500
(103P)	319-85-7	beta-BHC	500
(104P)	319-86-8	delta-BHC	500
(105P)	58-89-9	gamma-BHC (lindane)	500
(106P)	53469-21-9	PCB-1242	5000
(107P)	11097-69-1	PCB-1254	5000
(108P)	11104-28-2	PCB-1221	5000
(109P)	11141-16-5	PCB-1232	5000
(110P)	12672-29-6	PCB-1248	5000
(111P)	11096-82-5	PCB-1260	33750
(112P)	12674-11-2	PCB-1016	5000
(82B)	8001-35-2	toxaphene	5000

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE: 48.1

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

ARI 00252

December 198

ORIGINAL

ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08128

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Sample ID No: 00290 (052584C11)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: LOW (MEDIUM) HIGH (circle one)
DATE ERTRACTED/PREPARED: 18-APR-84
DATE ANALYZED: 25-MAY-84
PERCENT MOISTURE: 48.1
CONC./DILUTION FACTOR: 5.0

I #	CAS #		ug/l or (ug/kg) (circle one)
(21A)	22-06-2	2,4,6-trichlorophenol	9800
2A)	59-50-7	p-chloro-m-cresol	19600
4A)	95-57-8	2-chlorophenol	14700
(31A)	120-83-2	2,4-dichlorophenol	9800
4A)	105-67-9	2,4-dimethylphenol	9800
)	88-75-5	2-nitrophenol	19600
(5A)	100-02-7	4-nitrophenol	191130
(59A)	51-28-5	2,4-dinitrophenol	161730
50A)	534-52-1	4,6-dinitro-2-methylphenol	117620
.54A)	87-86-5	pentachlorophenol	49010
(65A)	108-95-2	phenol	14700
	65-85-0	benzoic acid	49010
	95-48-7	2-methylphenol	14700
	108-39-4	4-methylphenol	73510
	95-95-4	2,4,5-trichlorophenol	9800
1B)	83-32-9	acenaphthene	24500
(5B)	92-87-5	benzidine	73510
(8B)	120-82-1	1,2,4-trichlorobenzene	24500
(9B)	118-74-1	hexachlorobenzene	19497
(12B)	67-72-1	hexachloroethane	19600
(18B)	111-44-4	bis(2-chloroethyl)ether	29410
(20B)	91-58-7	2-chloronaphthalene	19600
(25B)	95-50-1	1,2-dichlorobenzene	14700
(26B)	541-73-1	1,3-dichlorobenzene	14700
(27B)	106-46-7	1,4-dichlorobenzene	14700
(28B)	91-94-1	3,3'-dichlorobenzidine	49010
(35B)	121-14-2	2,4-dinitrotoluene	58810
(36B)	606-20-2	2,6-dinitrotoluene	49010
(37B)	122-66-7	1,2-diphenylhydrazine	
(39B)	206-44-0	fluoranthene	24500
(40B)	7005-72-3	4-chlorophenyl phenyl ether	9800
1B)	101-55-3	4-bromophenyl phenyl ether	34310
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	14700
(43B)	111-91-1	bis (2-chloroethoxy) methane	34310

PP #	CAS #		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	29410
(53B)	77-47-4	hexachlorocyclopentadiene	73510
(54B)	78-59-1	isophorone	29410
(55B)	91-20-3	naphthalene	24500
(56B)	98-95-3	nitrobenzene	58810
(61B)	62-75-9	N-nitrosodimethylamine	122520
(62B)	86-30-6	N-nitrosodiphenylamine	44110
(63B)	621-64-7	N-nitrosopropylamine	58810
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	487012
(67B)	85-68-7	benzyl butyl phthalate	29410
(68B)	84-74-2	di-n-butyl phthalate	3765
(69B)	117-84-0	di-n-octyl phthalate	48116020
(70B)	84-66-2	diethyl phthalate	24500
(71B)	131-11-3	dimethyl phthalate	19600
(72B)	56-55-3	benzo(a)anthracene	14700
(73B)	50-32-8	benzo(a)pyrene	14700
(74B)	205-99-2	benzo(b)fluoranthene	53910
(75B)	207-08-9	benzo(k)fluoranthene	19600
(76B)	218-01-9	chrysene	14700
(77B)	208-96-3	acenaphthylene	9800
(78B)	120-12-7	anthracene	14700
(79B)	191-24-2	benzo(ghi)perylene	19600
(80B)	86-73-7	fluorene	14700
(81B)	85-01-8	phenanthrene	9800
(82B)	53-70-3	dibenzo(a,h)anthracene	14700
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	14700
(84B)	129-00-0	pyrene	58810
	62-53-3	aniline	29410
	100-51-6	benzyl alcohol	44110
	106-47-8	4-chloroaniline	117620
	132-64-9	dibenzofuran	19600
	91-57-6	2-methylnaphthalene	9800
	88-74-4	2-nitroaniline	93120
	99-09-2	3-nitroaniline	93120
	100-01-6	4-nitroaniline	73510

December 1983

ORIGINAL 03 298

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08125

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Lab Sample ID No: 00288 (052484C12)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE ERTRACTED/PREPARED: 18-APR-84
DATE ANALYZED: 24-MAY-84
PERCENT MOISTURE: 20.7
CONC./DILUTION FACTOR: 1.0

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	22-06-2	2,4,6-trichlorophenol	980U
(22A)	59-50-7	p-chloro-m-cresol	1960U
(A)	95-57-8	2-chlorophenol	1470U
(A)	120-83-2	2,4-dichlorophenol	980U
(34A)	105-67-9	2,4-dimethylphenol	980U
(57A)	88-75-5	2-nitrophenol	1960U
(A)	100-02-7	4-nitrophenol	19113U
(59A)	51-28-5	2,4-dinitrophenol	16173U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	11762U
(A)	87-86-5	pentachlorophenol	4901U
(A)	108-95-2	phenol	1470U
	65-85-0	benzoic acid	4901U
	95-48-7	2-methylphenol	1470U
	108-39-4	4-methylphenol	7351U
	95-95-4	2,4,5-trichlorophenol	980U
1B)	83-32-9	acenaphthene	2450U
5	92-87-5	benzidine	7351U
8	120-82-1	1,2,4-trichlorobenzene	2450U
9B)	118-74-1	hexachlorobenzene	1960U
1)	67-72-1	hexachloroethane	1960U
1)	111-44-4	bis(2-chloroethyl)ether	2941U
20B)	91-58-7	2-chloronaphthalene	1960U
25	95-50-1	1,2-dichlorobenzene	1470U
26	541-73-1	1,3-dichlorobenzene	1470U
27B)	106-46-7	1,4-dichlorobenzene	1470U
28B)	91-94-1	3,3'-dichlorobenzidine	4901U
5	121-14-2	2,4-dinitrotoluene	5881U
6	606-20-2	2,6-dinitrotoluene	4901U
7B)	122-66-7	1,2-diphenylhydrazine	
9	206-44-0	fluoranthene	2450U
0	7005-72-3	4-chlorophenyl phenyl ether	980U
1B)	101-55-3	4-bromophenyl phenyl ether	3431U
2B)	39638-32-9	bis (2-chloroisopropyl) ether	1470U
3	111-91-1	bis (2-chloroethoxy) methane	3431U

PP #	CAS #		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	2941U
(53B)	77-47-4	hexachlorocyclopentadiene	7351U
(54B)	78-59-1	isophorone	2941U
(55B)	91-20-3	naphthalene	2450U
(56B)	98-95-3	nitrobenzene	5881U
(61B)	62-75-9	N-nitrosodimethylamine	12252U
(62B)	86-30-6	N-nitrosodiphenylamine	4411U
(63B)	621-64-7	N-nitrosopropylamine	5881U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	174868
(67B)	85-68-7	benzyl butyl phthalate	2941U
(68B)	84-74-2	di-n-butyl phthalate	626
(69B)	117-84-0	di-n-octyl phthalate	3423
(70B)	84-66-2	diethyl phthalate	2450U
(71B)	131-11-3	dimethyl phthalate	1960U
(72B)	56-55-3	benzo(a)anthracene	1470U
(73B)	50-32-8	benzo(a)pyrene	1470U
(74B)	205-99-2	benzo(b)fluoranthene	5391U
(75B)	207-08-9	benzo(k)fluoranthene	1960U
(76B)	218-01-9	chrysene	1470U
(77B)	208-96-3	acenaphthylene	980U
(78B)	120-12-7	anthracene	1470U
(79B)	191-24-2	benzo(ghi)perylene	1960U
(80B)	86-73-7	fluorene	1470U
(81B)	83-01-8	phenanthrene	980U
(82B)	53-70-3	dibenzo(a,h)anthracene	1470U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	1470U
(84B)	129-00-0	pyrene	5881U
	62-53-3	aniline	2941U
	100-51-6	benzyl alcohol	4411U
	106-47-8	4-chloroaniline	11762U
	132-64-9	dibenzofuran	1960U
	91-57-6	2-methylnaphthalene	980U
	88-74-4	2-nitroaniline	9312U
	99-09-2	3-nitroaniline	9312U
	100-01-6	4-nitroaniline	7351U

ORIGINAL (Red) 03 297

U. S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P. O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08125

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RT-EMSC
Lab Sample ID No: 00288 (041984V02)
Sample Matrix: Soil
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 19-APR-84
PERCENT MOISTURE: 20.7

PP #	CAS #		ug/l or (ug/kg) (circle one)
(2)	107-02-8	acrolein	7U
(3)	107-13-1	acrylonitrile	1U
(4V)	71-43-2	benzene	2U
5V	56-23-5	carbon tetrachloride	2U
7	108-90-7	chlorobenzene	3U
10V)	107-06-2	1,2-dichloroethane	2U
11V)	71-55-6	1,1,1-trichloroethane	3K
1	75-34-3	1,1-dichloroethane	2U
1	79-00-5	1,1,2-trichloroethane	2U
15V)	79-34-5	1,1,2,2-tetrachloroethane	3U
1)	75-00-3	chloroethane	5U
1)	110-75-8	2-chloroethylvinyl ether	2U
23V)	67-66-3	chloroform	2U
2)	75-35-4	1,1-dichloroethene	7U
3)	156-60-5	trans-1,2-dichloroethene	3U
32V)	78-87-5	1,2-dichloropropane	3U
33V)	10061-02-6	trans-1,3-dichloropropene	2U
	10061-01-5	cis-1,3-dichloropropene	2U
38	100-41-4	ethylbenzene	1U
44V)	75-09-2	methylene chloride	7K
45	74-87-3	chloromethane	7U
46	74-83-9	bromomethane	9U
47V)	75-25-2	bromoform	1U
48V)	75-27-4	bromodichloromethane	2U
49	75-69-4	fluorotrichloromethane	25U
50	75-71-8	dichlorofluoromethane	19U
51V)	124-48-1	chlorodibromomethane	3U
85	127-18-4	tetrachloroethene	2U
86	108-88-3	toluene	2K
87V)	79-01-6	trichloroethene	4
88V	75-01-4	vinyl chloride	3U
	67-64-1	acetone	20
	78-93-3	2-butanone	1U
	75-15-0	carbondisulfide	4U
	519-78-6	2-hexanone	6U
	108-10-1	4-methyl-2-pentanone	1U
	100-42-5	styrene	1U
	108-05-4	vinyl acetate	2U
	1330-20-7	total xylenes	1U

PESTICIDES

CONCENTRATION: LOW (MEDIUM) HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE: 20.7

PP #	CAS #		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	50U
(90P)	60-57-1	dieldrin	50U
(91P)	57-74-9	chlordane	500U
(92P)	50-29-3	4,4'-DDT	50U
(93P)	72-55-9	4,4'-DDE	50U
(94P)	72-54-8	4,4'-DDD	50U
(95P)	115-29-7	alpha-endosulfan	50U
(96P)	115-29-7	beta-endosulfan	50U
(97P)	1031-07-8	endosulfan sulfate	50U
(98P)	72-20-8	endrin	50U
(99P)	7421-93-4	endrin aldehyde	50U
(100P)	76-44-8	heptachlor	50U
(101P)	1024-57-3	heptachlor epoxide	50U
(102P)	319-84-6	alpha-BHC	50U
(103P)	319-85-7	beta-BHC	50U
(104P)	319-86-8	delta-BHC	50U
(105P)	58-89-9	gamma-BHC (lindane)	50U
(106P)	53469-21-9	PCB-1242	500U
(107P)	11097-69-1	PCB-1254	500U
(108P)	11104-28-2	PCB-1221	500U
(109P)	11141-16-5	PCB-1232	500U
(110P)	12672-29-6	PCB-1248	500U
(111P)	11096-82-5	PCB-1260	500U
(112P)	12674-11-2	PCB-1016	500U
(82B)	8001-35-2	toxaphene	500U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE: 20.7

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

AR100336

.. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
C8130

ORGANICS ANALYSIS DATA SHEET

ɜ'oratory Name: RI-EMSC
ɜ Sample ID No: 00291 (0C2584C12)
ɜmple Matrix: Water
ɜta Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE ERTRACTED/PREPARED: 18-APR-84
DATE ANALYZED: 25-MAY-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR: 1.0

P	CAS #		ug/l or ug/kg (circle one)	PP #	CAS #		ug/l or ug/kg (circle one)
2'A)	22-06-2	2,4,6-trichlorophenol	980U	(52B)	87-68-3	hexachlorobutadiene	2941U
2)	59-50-7	p-chloro-m-cresol	1960U	(53B)	77-47-4	hexachlorocyclopentadiene	7351U
24A)	95-57-8	2-chlorophenol	1470U	(54B)	78-59-1	isophorone	64
31A)	120-83-2	2,4-dichlorophenol	980U	(55B)	91-20-3	naphthalene	2450U
5)	105-67-9	2,4-dimethylphenol	980U	(56B)	98-95-3	nitrobenzene	5881U
5)	88-75-5	2-nitrophenol	1960U	(61B)	62-75-9	N-nitrosodimethylamine	12252U
58A)	100-02-7	4-nitrophenol	19113U	(62B)	86-30-6	N-nitrosodiphenylamine	4411U
5)	51-28-5	2,4-dinitrophenol	16173U	(63B)	621-64-7	N-nitrosopropylamine	5881U
5)	534-52-1	4,6-dinitro-2-methylphenol	11762U	(66B)	117-81-7	bis (2-ethylhexyl) phthalate	1848
54A)	87-86-5	pentachlorophenol	4901U	(67B)	85-68-7	benzyl butyl phthalate	2941U
55A)	108-95-2	phenol	94	(68B)	84-74-2	di-n-butyl phthalate	9802U
	65-85-0	benzoic acid	4901U	(69B)	117-84-0	di-n-octyl phthalate	49
	95-48-7	2-methylphenol	1470U	(70B)	84-66-2	diethyl phthalate	2450U
	108-39-4	4-methylphenol	7351U	(71B)	131-11-3	dimethyl phthalate	1960U
	95-95-4	2,4,5-trichlorophenol	980U	(72B)	56-55-3	benzo(a)anthracene	1470U
1E	83-32-9	acenaphthene	2450U	(73B)	50-32-8	benzo(a)pyrene	1470U
5B)	92-87-5	benzidine	7351U	(74B)	205-99-2	benzo(b)fluoranthene	5391U
3B)	120-82-1	1,2,4-trichlorobenzene	2450U	(75B)	207-08-9	benzo(k)fluoranthene	1960U
9E	118-74-1	hexachlorobenzene	1960U	(76B)	218-01-9	chrysene	1470U
12B)	67-72-1	hexachloroethane	1960U	(77B)	208-96-3	acenaphthylene	980U
18B)	111-44-4	bis(2-chloroethyl)ether	2941U	(78B)	120-12-7	anthracene	1470U
2( )	91-58-7	2-chloronaphthalene	1960U	(79B)	191-24-2	benzo(ghi)perylene	1960U
2)	95-50-1	1,2-dichlorobenzene	1470U	(80B)	86-73-7	fluorene	1470U
26B)	541-73-1	1,3-dichlorobenzene	1470U	(81B)	83-01-8	phenanthrene	980U
27)	106-46-7	1,4-dichlorobenzene	1470U	(82B)	53-70-3	dibenzo(a,h)anthracene	1470U
28)	91-94-1	3,3'-dichlorobenzidine	4901U	(83B)	193-39-5	indeno(1,2,3-cd)pyrene	1470U
35B)	121-14-2	2,4-dinitrotoluene	5881U	(84B)	129-00-0	pyrene	5881U
36B)	606-20-2	2,6-dinitrotoluene	4901U		62-53-3	aniline	2941U
3)	122-66-7	1,2-diphenylhydrazine			100-51-6	benzyl alcohol	4411U
39)	206-44-0	fluoranthene	2450U		106-47-8	4-chloroaniline	11762U
40B)	7005-72-3	4-chlorophenyl phenyl ether	980U		132-64-9	dibenzofuran	1960U
4)	101-55-3	4-bromophenyl phenyl ether	3431U		91-57-6	2-methylnaphthalene	980U
4)	39638-32-9	bis (2-chloroisopropyl) ether	1470U		88-74-4	2-nitroaniline	9312U
43B)	111-91-1	bis (2-chloroethoxy) methane	3431U		99-09-2	3-nitroaniline	9312U
					100-01-6	4-nitroaniline	7351U

03 568

ORIGINAL

3. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
). Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
08130

ORGANICS ANALYSIS DATA SHEET

atory Name: RI-EMSC
Sample ID No: 00291 (041884W06)
mple Matrix: Water
t. Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

VOLATILES

NC NTRATION: (LOW) MEDIUM HIGH (circle one)
TE ERTRACTED/PREPARED:
TF NALYZED: 18-APR-84
RC NT MOISTURE:

#	CAS #		ug/l or (ug/kg) (circle one)
V)	107-02-8	acrolein	100U
V)	107-13-1	acrylonitrile	20U
V)	71-43-2	benzene	30U
)	56-23-5	carbon tetrachloride	30U
V)	108-90-7	chlorobenzene	40U
OV.	107-06-2	1,2-dichloroethane	30U
1V)	71-55-6	1,1,1-trichloroethane	40U
3V	75-34-3	1,1-dichloroethane	30U
4V	79-00-5	1,1,2-trichloroethane	30U
5V)	79-34-5	1,1,2,2-tetrachloroethane	40U
6V)	75-00-3	chloroethane	80U
9V	110-75-8	2-chloroethylvinyl ether	30U
3V)	67-66-3	chloroform	30U
9V)	75-35-4	1,1-dichloroethene	100U
0V	156-60-5	trans-1,2-dichloroethene	40U
2V	78-87-5	1,2-dichloropropane	40U
3V)	10061-02-6	trans-1,3-dichloropropene	30U
	10061-01-5	cis-1,3-dichloropropene	30U
8V	100-41-4	ethylbenzene	20U
4V)	75-09-2	methylene chloride	10K
5V)	74-87-3	chloromethane	100U
6V	74-83-9	bromomethane	130U
7V.	75-25-2	bromoform	20U
8V)	75-27-4	bromodichloromethane	30U
9V	75-69-4	fluorotrichloromethane	380U
0V	75-71-8	dichlorofluoromethane	280U
51V)	124-48-1	chlorodibromomethane	40U
35V	127-18-4	tetrachloroethene	30U
36V	108-88-3	toluene	3K
37V.	79-01-6	trichloroethene	40U
38V)	75-01-4	vinyl chloride	50U
	67-64-1	acetone	8
	78-93-3	2-butanone	10U
	75-15-0	carbondisulfide	60U
	519-78-6	2-hexanone	90U
	108-10-1	4-methyl-2-pentanone	20U
	100-42-5	styrene	20U
	108-05-4	vinyl acetate	3K
	1330-20-7	total xylenes	2K

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE:

PP #	CAS #		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	50U
(90P)	60-57-1	dieldrin	50U
(91P)	57-74-9	chlordane	500U
(92P)	50-29-3	4,4'-DDT	50U
(93P)	72-55-9	4,4'-DDE	50U
(94P)	72-54-8	4,4'-DDD	50U
(95P)	115-29-7	alpha-endosulfan	50U
(96P)	115-29-7	beta-endosulfan	50U
(97P)	1031-07-8	endosulfan sulfate	50U
(98P)	72-20-8	endrin	50U
(99P)	7421-93-4	endrin aldehyde	50U
(100P)	76-44-8	heptachlor	50U
(101P)	1024-57-3	heptachlor epoxide	50U
(102P)	319-84-6	alpha-BHC	50U
(103P)	319-85-7	beta-BHC	50U
(104P)	319-86-8	delta-BHC	50U
(105P)	58-89-9	gamma-BHC (lindane)	50U
(106P)	53469-21-9	PCB-1242	500U
(107P)	11097-69-1	PCB-1254	500U
(108P)	11104-28-2	PCB-1221	500U
(109P)	11141-16-5	PCB-1232	500U
(110P)	12672-29-6	PCB-1248	500U
(111P)	11096-82-5	PCB-1260	500U
(112P)	12674-11-2	PCB-1016	500U
(82B)	8001-35-2	toxaphene	500U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

AR100330

ORIGINAL

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
Method Blank

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RI-EMSC
Lab Sample ID No: (041884W03)
Sample Matrix: Water
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received:

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: 18-APR-84
PERCENT MOISTURE:

F #	CAS #		ug/l or (ug/kg) (circle one)
(2V)	107-02-8	acrolein	10U
(3V)	107-13-1	acrylonitrile	20U
(5V)	71-43-2	benzene	3U
(6V)	56-23-5	carbon tetrachloride	3U
(7V)	108-90-7	chlorobenzene	4U
(8V)	107-06-2	1,2-dichloroethane	3U
(9V)	71-55-6	1,1,1-trichloroethane	4U
(13V)	75-34-3	1,1-dichloroethane	3U
(14V)	79-00-5	1,1,2-trichloroethane	3U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	4U
(16V)	75-00-3	chloroethane	8U
(19V)	110-75-8	2-chloroethylvinyl ether	3U
(20V)	67-66-3	chloroform	3U
(25V)	75-35-4	1,1-dichloroethene	10U
(30V)	156-60-5	trans-1,2-dichloroethene	4U
(31V)	78-87-5	1,2-dichloropropane	4U
(32V)	10061-02-6	trans-1,3-dichloropropene	3U
	10061-01-5	cis-1,3-dichloropropene	3U
(35V)	100-41-4	ethylbenzene	2U
(40V)	75-09-2	methylene chloride	10K
(45V)	74-87-3	chloromethane	10U
(46V)	74-83-9	bromomethane	13U
(47V)	75-25-2	bromoform	2U
(48V)	75-27-4	bromodichloromethane	3U
(49V)	75-69-4	fluorotrichloromethane	38U
(50V)	75-71-8	dichlorofluoromethane	28U
(51V)	124-48-1	chlorodibromomethane	4U
(85V)	127-18-4	tetrachloroethene	3K
(86V)	108-88-3	toluene	3U
(87V)	79-01-6	trichloroethene	4U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	16
	78-93-3	2-butanone	10
	75-15-0	carbondisulfide	6U
	519-78-6	2-hexanone	9U
	108-10-1	4-methyl-2-pentanone	2U
	100-42-5	styrene	2U
	108-05-4	vinyl acetate	3U
	1330-20-7	total xylenes	2U

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 25-JUN-84
DATE ANALYZED: 25-JUN-84
PERCENT MOISTURE:

PP #	CAS #		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	50U
(90P)	60-57-1	dieldrin	50U
(91P)	57-74-9	chlordane	500U
(92P)	50-29-3	4,4'-DDT	50U
(93P)	72-55-9	4,4'-DDE	50U
(94P)	72-54-8	4,4'-DDD	50U
(95P)	115-29-7	alpha-endosulfan	50U
(96P)	115-29-7	beta-endosulfan	50U
(97P)	1031-07-8	endosulfan sulfate	50U
(98P)	72-20-8	endrin	50U
(99P)	7421-93-4	endrin aldehyde	50U
(100P)	76-44-8	heptachlor	50U
(101P)	1024-57-3	heptachlor epoxide	50U
(102P)	319-84-6	alpha-BHC	50U
(103P)	319-85-7	beta-BHC	50U
(104P)	319-86-8	delta-BHC	50U
(105P)	58-89-9	gamma-BHC (lindane)	50U
(106P)	53469-21-9	PCB-1242	500U
(107P)	11097-69-1	PCB-1254	500U
(108P)	11104-28-2	PCB-1221	500U
(109P)	11141-16-5	PCB-1232	500U
(110P)	12672-29-6	PCB-1248	500U
(111P)	11096-82-5	PCB-1260	500U
(112P)	12674-11-2	PCB-1016	500U
(82B)	8001-35-2	toxaphene	500U

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED:
DATE ANALYZED:
PERCENT MOISTURE:

PP #	CAS #		ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachloro-dibenzo-p-dioxin	

ORIGINAL

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2490

EPA Sample Number
Method Blank

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: RT-EMSC
Lab Sample ID No: (052584008)
Sample Matrix: Water
Data Release Authorized By: G. Colovos

Case No: 2638
QC Report No: 2638
Contract No.: 68-01-6783
Date Sample Received: 13-APR-84

SEMIVOLATILE COMPUNDS

CONCENTRATION: LOW (MEDIUM) HIGH (circle one)
DATE ERTRACTED/PREPARED: 4-APR-84
DATE ANALYZED: 25-MAY-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR: 1.0

P #	CAS #		ug/l or (ug/kg) (circle one)
21)	22-06-2	2,4,6-trichlorophenol	20U
22)	59-50-7	p-chloro-m-cresol	40U
24A)	95-57-8	2-chlorophenol	30U
1A)	120-83-2	2,4-dichlorophenol	20U
4	105-67-9	2,4-dimethylphenol	20U
7A)	88-75-5	2-nitrophenol	40U
8A)	100-02-7	4-nitrophenol	390U
9A	51-28-5	2,4-dinitrophenol	330U
)A	534-52-1	4,6-dinitro-2-methylphenol	240U
A)	87-86-5	pentachlorophenol	100U
A	108-95-2	phenol	30U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	30U
	108-39-4	4-methylphenol	150U
	95-95-4	2,4,5-trichlorophenol	20U
)	83-32-9	acenaphthene	50U
)	92-87-5	benzidine	150U
)	120-82-1	1,2,4-trichlorobenzene	50U
	118-74-1	hexachlorobenzene	40U
)	67-72-1	hexachloroethane	40U
)	111-44-4	bis(2-chloroethyl)ether	60U
)	91-58-7	2-chloronaphthalene	40U
)	95-50-1	1,2-dichlorobenzene	30U
)	541-73-1	1,3-dichlorobenzene	30U
)	106-46-7	1,4-dichlorobenzene	30U
)	91-94-1	3,3'-dichlorobenzidine	100U
	121-14-2	2,4-dinitrotoluene	120U
	606-20-2	2,6-dinitrotoluene	100U
	122-66-7	1,2-diphenylhydrazine	
	206-44-0	fluoranthene	50U
	7005-72-3	4-chlorophenyl phenyl ether	20U
	101-55-3	4-bromophenyl phenyl ether	70U
	538-32-9	bis (2-chloroisopropyl) ether	30U
	91-1	bis (2-chloroethoxy) methane	70U

PP #	CAS #		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	60U
(53B)	77-47-4	hexachlorocyclopentadiene	150U
(54B)	78-59-1	isophorone	60U
(55B)	91-20-3	naphthalene	50U
(56B)	98-95-3	nitrobenzene	120U
(61B)	62-75-9	N-nitrosodimethylamine	250U
(62B)	86-30-6	N-nitrosodiphenylamine	90U
(63B)	621-64-7	N-nitrosopropylamine	120U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	6
(67B)	85-68-7	benzyl butyl phthalate	60U
(68B)	84-74-2	di-n-butyl phthalate	200U
(69B)	117-84-0	di-n-octyl phthalate	30U
(70B)	84-66-2	diethyl phthalate	50U
(71B)	131-11-3	dimethyl phthalate	40U
(72B)	56-55-3	benzo(a)anthracene	30U
(73B)	50-32-8	benzo(a)pyrene	30U
(74B)	205-99-2	benzo(b)fluoranthene	110U
(75B)	207-08-9	benzo(k)fluoranthene	40U
(76B)	218-01-9	chrysene	30U
(77B)	208-96-3	acenaphthylene	20U
(78B)	120-12-7	anthracene	30U
(79B)	191-24-2	benzo(ghi)perylene	40U
(80B)	86-73-7	fluorene	30U
(81B)	85-01-8	phenanthrene	20U
(82B)	53-70-3	dibenzo(a,h)anthracene	30U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	30U
(84B)	129-00-0	pyrene	120U
	62-53-3	aniline	60U
	100-51-6	benzyl alcohol	90U
	106-47-8	4-chloroaniline	240U
	132-64-9	dibenzofuran	40U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	190U
	99-09-2	3-nitroaniline	190U
	100-01-6	4-nitroaniline	150U

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AR100360

8402-08

Eastern Diversified Metals

ORIGINAL

US ENVIRONMENTAL PROTECTION AGENCY
HWI Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2[illegible] FTS 8-557-2[illegible]

Sample No. MC 3111

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2[illegible]38

LAB SAMPLE ID. NO. G2-217-01 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	7560	10.	Zinc	16200
2.	Chromium	16	11.	[illegible]	
3.	[illegible]	1960	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	4360			
7.	Iron	76700			
8.	Nickel	83			
9.	Manganese	1520			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	82.
3.	Selenium	<2	7.	Cadmium	14.
4.	Thallium	<10	8.	Lead	1010.

TASK 3 (Elements to be Identified and Measured) ug/L

1.	CN	<10

COMMENTS:

D. Hessem
6/4/84

AR100861

Form 1

ORIGINAL

US ENVIRONMENTAL PROTECTION AGENCY
Hazardous Waste Management Division
P.O. Box 9 — Alexandria, Virginia 22313
703/557-[illegible] FTS 8 557-3990

Sample No.
MC 3112

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638
LABORATORY SAMPLE ID. NO. 02-217-02 QC REPORT NO. 017

TASK 1 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

			ug/l or mg/kg (circle one)
1. Aluminum	36800	10. Zinc	2140
2. Chromium	15.0	11. Boron	
3. Barium	72.0	12. Vanadium	11.6
4. Beryllium	0.35	13. Silver	0.90
5. Cobalt	<2.5		
6. Copper	4000		
7. Iron	16650		
8. Nickel	10.3		
9. Manganese	66.5		

TASK 2 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

			ug/l or mg/kg (circle one)
1. Arsenic	0.5	5. Mercury	0.14
2. Antimony	<1	6. Tin	25.6
3. Selenium	<0.1	7. Cadmium	4.3
4. Thallium	<0.5	8. Lead	434.

TASK 3 (Elements to be Identified and Measured) mg/kg

CN <0.25

COMMENTS:

D. Hessen
6/4/84

Form I AR100362

ORIGINAL
(Red)

U.S. ENVIRONMENTAL PROTECTION AGENCY
HW Sample Management Office
P.O. Box [illegible] — Alexandria, Virginia 22313
7[illegible] FTS 8-557-2490

Sample No. MC 3114

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. G2-217-04 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	7650	10.	Zinc	815
2.	Chromium	6.1	11.	Boron	
3.	Barium	38.9	12.	Vanadium	<10
4.	Beryllium	0.35	13.	Silver	1.4
5.	Cobalt	3.3			
6.	Copper	35700			
7.	Iron	15300			
8.	Nickel	13.0			
9.	Manganese	100			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	3.4	5.	Mercury	0.14
2.	Antimony	<1	6.	Tin	13.9
3.	Selenium	<0.1	7.	Cadmium	4.5
4.	Thallium	<0.5	8.	Lead	613. ~~554.~~

TASK 3 (Elements to be Identified and Measured) mg/kg

1.	CN	<0.25

COMMENTS:

D. Hessemer
6/4/84

Form I

AR100363

L

US ENVIRONMENTAL PROTECTION AGENCY
HQ Sample Management Office
P.O. Box [illegible] Alexandria, Virginia 22313
[illegible] FTS 8-5[illegible]-24[illegible]

ORIGINAL

Sample No. MC 3115

INORGANICS ANALYSIS DATA SHEET

LAB NAME CH TECH CASE NO. 2638
LAB SAMPLE ID. NO. G2-217-05 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	1601	10.	Zinc	60
2.	Chromium	<10	11.	Boron	
3.	Barium	147	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	76			
6.	Copper	712			
7.	Iron	9590			
8.	Nickel	<40			
9.	Manganese	21100			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	0.32
2.	Antimony	<20	6.	Tin	<10
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	16.

TASK 3 (Elements to be Identified and Measured) ug/L

1. CN <10

COMMENTS:

D. Hensen
6/4/84

Form I AR100364

ORIGINAL

US ENVIRONMENTAL PROTECTION AGENCY
HWI Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 557-2490

Sample No.
MC 3129

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. G2-217-06 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

1.	Aluminum	1130
2.	Chromium	<10
3.	Barium	<100
4.	Beryllium	<5
5.	Calcium	<50
6.	Copper	678
7.	Iron	1110
8.	Nickel	<40
9.	Magnesium	283
10.	Zinc	245
11.	Boron	
12.	Vanadium	<200
13.	Silica	<10

TASK 2 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

1.	Arsenic	<10
2.	Antimony	<20
3.	Selenium	<2
4.	Thallium	<10
5.	Mercury	<0.2
6.	Tin	<20
7.	Cadmium	1.6
8.	Lead	33.

TASK 3 (Elements to be Identified and Measured) ug/L

1.	CN	<10

COMMENTS:

D. Hessemer
6/4/84

AR100365

Form I

ORIGINAL

US ENVIRONMENTAL PROTECTION AGENCY
Hazard Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No. MC 3113

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638

LAB SAMPLE ID NO. 62-211-03 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	7030	10.	Zinc	7540
2.	Chromium	<10	11.	Boron	
3.	Barium	1130	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	12200			
7.	Iron	28400			
8.	Nickel	63			
9.	Manganese	1140			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	57. ~~42.~~ ~~59.~~ AP
4.	Thallium	<10	8.	Lead	2690. ~~134~~ AS

TASK 3 (Elements to be Identified and Measured) ug/L

1. CN <10

COMMENTS:

D. Hessen
6/4/84

Form I AR100366

ORIGINAL

U.S. ENVIRONMENTAL PROTECTION AGENCY
Mobile Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
MC 3130

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. GD-217-01 CONTRACT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/l (circle one)			ug/l or mg/l (circle one)
1.	Aluminum	3420	10.	Zinc	74
2.	Chromium	3.0	11.	Boron	
3.	Barium	9.1	12.	Vanadium	<10
4.	Beryllium	<0.25	13.	Silver	<0.5
5.	Cobalt	10.3			
6.	Copper	15.1			
7.	Iron	4390			
8.	Nickel	5.4			
9.	Manganese	367			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/l (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	16	5.	Mercury	<0.1 ~~<0.2~~ Hg
2.	Antimony	<1 ~~<20~~ Sb	6.	Tin	<1
3.	Selenium	<0.1 ~~<2~~ Se	7.	Cadmium	0.22
4.	Thallium	<0.5 ~~<10~~ Tl	8.	Lead	27.5

TASK 3 (Elements to be Identified and Measured) mg/kg

1. CN <0.25

COMMENTS:

D. Hessemer
6/4/84

Form 1 AR100367

ORIGINAL

U.S. ENVIRONMENTAL PROTECTION AGENCY
Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
MC 3131

INORGANIC ANALYSIS DATA SHEET

LAB NAME: CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. G2-211-08 QC REPORT NO. 212

TASK 1 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

	Aluminum	183
2.	Chromium	<10
	Barium	<10
4.	Beryllium	<5
5.	Cobalt	<50
6.	Copper	DUP 348
7.	Iron	304
	Nickel	<40
9.	Manganese	236
10.	Zinc	126
11.	Boron	
12.	Vanadium	<200
13.	Silver	<10

ug/l or mg/kg (circle one)

TASK 2 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

1.	Arsenic	<10
2.	Antimony	<20
3.	Selenium	<2
4.	Thallium	<10
5.	Mercury	<0.2
6.	Tin	<10
7.	Cadmium	<1
8.	Lead	10.

ug/l or mg/kg (circle one)

TASK 3 (Elements to be Identified and Measured) ug/L

1.	CN	<10

COMMENTS:

D. Hessemer
6/4/84

Form I AR100368

ORIGINAL
(Red)

US ENVIRONMENTAL PROTECTION AGENCY
HSWL Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
MC 3132

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. G2-217-09 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	3050	10.	Zinc	75.0
2.	Chromium	3.2	11.	Boron	
3.	Barium	116	12.	Vanadium	<10
4.	Beryllium	<0.25	13.	Silver	~~<0.5~~ 2.9
5.	Cobalt	9.8			
6.	Copper	10.0			
7.	Iron	4200			
8.	Nickel	5.5			
9.	Manganese	390			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	1.9	5.	Mercury	<0.1
	Antimony	<1 ~~<20~~ AS	6.	Tin	<1
3.	Selenium	<0.1 ~~<2~~ AS	7.	Cadmium	0.26
4.	Thallium	<0.5 ~~<10~~ AS	8.	Lead	24.

TASK 3 (Elements to be Identified and Measured) mg/kg

1. CN <0.25

COMMENTS:

D. Hessen
6/4/84

Form I

ORIGINAL

US ENVIRONMENTAL PROTECTION AGENCY
[illegible] Management Office
[illegible] Alexandria, Virginia 22313
703/557-2490 FTS 3-557-2490

Sample No. MC 3133

INORGANICS ANALYSIS DATA SHEET

LAB NAME: CHEMTECH
CASE NO. 2638
LAB SAMPLE ID NO. G2-217-10
QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	<100	10.	Zinc	648
2.	Chromium	<10	11.	Boron	
3.	Barium	208	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	16
5.	Cobalt	<50			
6.	Copper	195			
7.	Iron	2830			
8.	Nickel	<40			
9.	Manganese	4130			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	1.2
4.	Thallium	<10	8.	Lead	<5

TASK 3 (Elements to be Identified and Measured) ug/L

1. CN <10

COMMENTS:

D. Hessemer
6/4/84

Form I AR100370

ORIGINAL

US ENVIRONMENTAL PROTECTION AGENCY
Hazardous Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-[illegible] FTS 8-5[illegible]

Sample No.
MC 3134

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. G2-217-11 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/l (circle one)			ug/l or mg/l (circle one)
1.	Aluminum	4720	10.	Zinc	70.5
2.	Chromium	4.0	11.	Iron	
3.	Barium	13.6	12.	Vanadium	<10
4.	Beryllium	<0.25	13.	Silver	<0.5
5.	Cobalt	5.7			
6.	Copper	232			
7.	Iron	4010			
8.	Nickel	5.2			
9.	Manganese	322			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/l (circle one)			ug/l or mg/l (circle one)
1.	Arsenic	1.5	5.	Mercury	0.24
2.	Antimony	<1	6.	Tin	1.5
3.	Selenium	<0.1	7.	Cadmium	0.48
4.	Thallium	<0.5	8.	Lead	59.5

TASK 3 (Elements to be Identified and Measured) mg/kg

1. CN <0.25

COMMENTS:

D. Hessem
6/4/84

AR100371

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US ENVIRONMENTAL PROTECTION AGENCY
HWI Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
MC 3135

INORGANICS ANALYSIS DATA SHEET

LABORATORY CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. G2-217 1x QC REPORT NO 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	1190	10.	Zinc	520
2.	Chromium	1.1	11.	Boron	
3.	Barium	69.0	12.	Vanadium	<10
4.	Beryllium	0.25	13.	Silver	1.8
5.	Calcium	<0.5			
6.	Copper	21560			
7.	Iron	3290			
	Nickel	8.7			
9.	Manganese	70.0			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	0.9	5.	Mercury	0.1
2.	Antimony	<1	6.	Tin	4.3
3.	Selenium	<0.1	7.	Cadmium	6.5
4.	Thallium	<0.5	8.	Lead	3860.

TASK 3 (Elements to be Identified and Measured) mg/kg

1. CN <0.25

.25

COMMENTS:

D. Hessen
6/4/84

AR100372

Form I

U[illegible]TAL PROTECTION AGENCY
H[illegible] Management Office
P[illegible] Alexandria, Virginia 22313
7[illegible] FTS 2-5[illegible]

Sample No. MC 3136

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638

LAB SAMPLE ID. NO. G2-217-13 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	<100	10.	Zinc	15
2.	Chromium	<10	11.	Boron	
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	582			
7.	Iron	62			
8.	Nickel	<40			
9.	Manganese	<10			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	<5

TASK 3 (Elements to be Identified and Measured) ug/L

1. CN <10

COMMENTS:

D. Hessemer
6/4/84

Form I AR100373

ORIGINAL

US ENVIRONMENTAL PROTECTION AGENCY
HQTS Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
MC 3137

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. GO-217-14 QC REPORT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	<5	10.	Zinc	0.6
2.	Chromium	<0.5	11.	Boron	
3.	Barium	<5	12.	Vanadium	<10
4.	Beryllium	<0.25	13.	Silver	<0.5
5.	Cobalt	<2.5			
6.	Copper	22.4			
7.	Iron	<2.5			
8.	Nickel	<2.0			
9.	Manganese	<0.5			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<0.5	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	<0.05
4.	Thallium	<0.5	8.	Lead	0.45

TASK 3 (Elements to be Identified and Measured) mg/kg

1. CN <0.25

COMMENTS:

D. Hessemer
6/4/84

Form I

ORIGINAL
(Red)

U. ENVIRONMENTAL PROTECTION AGENCY
Sample Management Office
P. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
MC 3138

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2638
LAB SAMPLE ID. NO. G2-217-15 CONTRACT NO. 217

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	9100	10.	Zinc	49.7
2.	Chromium	2.3	11.	Boron	
3.	Barium	16.5	12.	Vanadium	<10
4.	Beryllium	<0.25	13.	Silver	<0.5
5.	Cobalt	14.0			
6.	Copper	42.0			
7.	Iron	4000			
8.	Nickel	4.7			
9.	Manganese	690			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	2.2	5.	Mercury	<0.2
2.	Antimony	<1	6.	Tin	2.6
3.	Selenium	<0.1	7.	Cadmium	0.29
4.	Thallium	<0.5	8.	Lead	46.5

TASK 3 (Elements to be Identified and Measured) mg/kg

1. CN <0.25

COMMENTS:

D. Hessemer
6/4/84

Form I AR100375

APPENDIX E

L 21 004 11/69

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
HOUSING AND ENVIRONMENTAL CONTROL

PERMIT NUMBER

I.D. # 300365

APR 7 1971

APPLICATION FOR PERMIT FOR SOLID WASTE DISPOSAL OR FOR PROCESSING FACILITIES

SEE INSTRUCTIONS ON REVERSE.

1. APPLICANT (Name and Address)
Eastern Diversified Metals Corp.
P.O. Box 311 (Hometown)
Tamaqua, Penna. 18252
Schuylkill County
TELEPHONE NUMBER 717-668-3991

2. AUTHORIZED AGENT (Name and Address)
John T. Hays, Asst. Plant Mgr.
Eastern Diversified Metals Corp.
P. O. Box 311 (Hometown)
Tamaqua, Penna. 18252
Schuylkill Co. TELEPHONE NUMBER 717-668-3991

3. PROPERTY OWNER (Name and Mailing Address)
Eastern Diversified Metals Corp.
P. O. Box 311 (Hometown)
Tamaqua, Penna. 18252

4. TYPE OF OPERATION
Industrial Landfill

5. NAME OF SITE
Eastern Diversified Metals Corp. Landfill

6. LOCATION OF SITE

MEASURED FROM SOUTHEAST CORNER			
NORTH		WEST	
INCHES	FRAC. IN	INCHES	FRAC. IN.
11.4		17.0	

MAP NUMBER	LATITUDE	LONGITUDE
5-65	40° 49' 45"	75° 59' 54"

CITY – BOROUGH – TOWNSHIP
Rush Township

COUNTY
Schuylkill County

NUMBER OF ACRES
25

MAP IDENTIFICATION
Tamaqua, 7½ min., 1969 P. R.

7. SOIL TESTS CONDUCTED BY
Frank A. Kopas, Soil Scientist
Soil Conservation Service
Schuylkill Haven, Penna.
[X] Yes [ ] No [ ] N/A
DATE MO 3 – DA 23 – YR 71

8. ENGINEERING PLANS PREPARED BY
[ ] Yes [X] No [ ] N/A
DATE MO – DA – YR

9. SOLID WASTE MANAGEMENT PLAN
[ ] Yes [X] No
Not part of county plan.

10. APPLICANT/AUTHORIZED AGENT (Signature)
[signature]
MO 3 – DA 25 – YR 71

BONDING COMPANY (Name and Address)

AGENT

LICENSE NUMBER

BOND VALUE

FOR DEPARTMENT OF HEALTH USE ONLY

DATE RECEIVED MO – DA – YR

DATE OF SITE SURVEY MO – DA – YR

[ ] SUITABLE [ ] UNSUITABLE

TOPO MAP	[ ] COMPLETE	[ ] INCOMPLETE
SITE PLAN	[ ] COMPLETE	[ ] INCOMPLETE
DESIGN PLAN	[ ] COMPLETE	[ ] INCOMPLETE

LIMITATIONS AND RESTRICTIONS

REVIEWING OFFICER (Signature)

TITLE

AR100377

DATE APPROVED MO – DA – YR

H712.122 6-70

DATE PREPARED
4-1-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
COMMUNITY AND ENVIRONMENTAL SERVICES

SOLID WASTE DISPOSAL AND/OR PROCESSING
SITE APPLICATION MODULE
PHASE I

For Department of Health Use Only

PREPARED BY (Name & Address)
Todd Giddings, 623 West Foster Ave., State College, Penna. 16801

PART I – LAND DISPOSAL FACILITY

A. SITE IDENTIFICATION

1. NAME OF SITE Eastern Diversified Metals Corp. Landfill

2. ADDRESS OF SITE R. D. 2
Tamaqua, Penna. 18252

3. SITE ACQUISITION (Check Appropriate Block)

[X] PRESENTLY OWNED
[ ] WILL PURCHASE
[ ] WILL LEASE FOR _____ YEARS
[ ] WILL RENT

4. OWNER OF RECORD (Name & Address) Eastern Diversified Metals Corp.
P. O. Box 311 (Hometown)
Tamaqua, Penna. 18252

B. FACILITY INFORMATION

1. IS THIS AN EXISTING FACILITY? [X] Yes [ ] No

2. IS THIS A PROPOSED FACILITY? [ ] Yes [X] No

PART II – GOVERNMENTAL APPROVAL

A. SITE APPROVAL FROM COUNTY AND MUNICIPALITY

1. IF THE SITE WILL BE IN A MINE, HAS THE PROPOSED SITE BEEN APPROVED BY THE COUNTY IN WHICH THE SITE IS LOCATED? [ ] Yes [ ] No

2. HAS THE PROPOSED SITE BEEN APPROVED BY THE MUNICIPALITY IN WHICH IT WILL BE LOCATED? [X] Yes [ ] No

B. REQUIREMENTS

1. ARE THERE ANY CERTIFICATES, PERMITS, OPERATION REQUIREMENTS, OR LICENSES REQUIRED BY ANY OF THE FOLLOWING:

A. MUNICIPALITY? (If Yes, Describe) _____ [ ] Yes [X] No

B. PLANNING COMMISSION? (If Yes, Describe) _____ [ ] Yes [X] No

AR100378

APR 7 1971

712 122 6-70

DATE PREPARED
4-1-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
COMMUNITY AND ENVIRONMENTAL SERVICES

SOLID WASTE DISPOSAL AND/OR PROCESSING
SITE APPLICATION MODULE
PHASE I

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B. REQUIREMENTS – CONTINUED

C. COUNTY? (If Yes, Describe) _____ ☐ Yes ☒ No

D. STATE DEPARTMENT OF MINES AND MINERALS? (If Yes, Describe) _____ ☐ Yes ☒ No

E. OTHER? (If Yes, Describe) _____ ☐ Yes ☒ No

C. ZONING

1. CLASSIFICATION OF SITE Not Zoned
2. ENFORCEMENT AGENCY None
3. WILL ZONING OF SITE PERMIT SANITARY LANDFILL? ☐ Yes ☐ No
4. RESTRICTIONS (If Any) None
5. ADJACENT PROPERTIES WITHIN A QUARTER-MILE (Check Appropriate Blocks Which Indicate The Use Of Adjacent Properties Surrounding The Site)

	North	East	South	West
A. RESIDENTIAL	X		X	
B. COMMERCIAL				
C. LIGHT INDUSTRIAL		X		
D. HEAVY INDUSTRIAL				
E. AGRICULTURAL				
F. MIXED				
G. NONE				X

PART III – SOIL AND GEOLOGICAL CHARACTERISTICS

A. LOCATION – A COPY OF THE USGS TOPOGRAPHIC MAP MUST BE ATTACHED TO EACH COPY OF THE APPLICATION; USE 7.5 MINUTE QUADRANGLE MAP, IF PUBLISHED.

1. SITE LOCATION (Include The Name Of The USGS Topographic Map, Indication Of 7.5 Or 15.0 Minute Quadrangles, Year of Publication, Inches North And West Of Southeast Corner, And Latitude And Longitude).

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4-1-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
COMMUNITY AND ENVIRONMENTAL SERVICES

SOLID WASTE DISPOSAL AND/OR PROCESSING
SITE APPLICATION MODULE
PHASE I

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A. LOCATION – CONTINUED

A. 14.4 INCHES NORTH, 17.0 INCHES WEST OF SOUTHEAST CORNER OF [X] 7.5' [ ] 15.0' QUADRANGLE MAP, (Date) Tamaqua, 1969 P. R., also Delano, 1954

B. 40 DEG, 49 MIN, 45 SEC N LATITUDE

C. 75 DEG, 59 MIN, 54 SEC W LONGITUDE

2. TOPOGRAPHIC SETTING (Hillside, Flood Plain, Strip Mine, Quarry, Field, Etc.) Hillside

3. PLOT ON TOPOGRAPHIC MAP THE FOLLOWING:

A. LOCATION AND EXTENT OF PROPOSED LANDFILL red line

B. LOCATION OF: (Place the following information on the Topographic Map if it is within the site or within a quarter-mile of the outer perimeter of the site. Check each item placed on map with an (*) or appropriate symbol below.)

(1)	WELLS	labelled
(2)	SPRINGS	spring symbol
(3)	SWAMPS	none
(4)	STREAMS	stream symbol
(5)	PUBLIC WATER SUPPLIES	none
(6)	OTHER BODIES OF WATER	none
(7)	UNDERGROUND AND SURFACE MINES	none
(8)	MINING SPOIL PILES	none
(9)	MINE POOL DISCHARGE POINTS (Even if a discharge point is farther than a quarter-mile from the site)	none
(10)	ELEVATION OF MINE POOLS	none
(11)	GAS AND OIL WELLS	none
(12)	AREAL EXTENT OF MINE POOLS	none

B. SOILS

1. LIST ALL SOIL SERIES AND PHASES WITHIN THE SITE:

A. 69B2, Meckesville channery loam, 3 to 8% slopes, Moderately eroded

B. _____

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4-1-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
COMMUNITY AND ENVIRONMENTAL SERVICES

SOLID WASTE DISPOSAL AND/OR PROCESSING
SITE APPLICATION MODULE
PHASE I

For Department of Health Use Only

B. SOILS – CONTINUED

C. _____

D. _____

E. _____

F. _____

G. _____

H. _____

I. _____

J. _____

K. _____

2. LIST ALL SOIL SERIES AND PHASES TO BE USED AS COVER MATERIAL:

A. 69B2, Meckesville channery loam, 3 to 8% slopes,

B. moderately eroded.

C. Colluvium underlying the Meckesville channery loam.

D. _____

E. _____

F. _____

G. _____

H. _____

I. _____

J. _____

K. Soil maps for this area are not yet published.

3. A COPY OF SOIL MAP OR REFERENCES TO SITE LOCATION ON PUBLISHED SOIL SURVEY MUST BE INCLUDED.

C. GROUND WATER GEOLOGY

1. GLACIAL GEOLOGY

A. TYPE OF DEPOSIT(S) not present

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DATE PREPARED

4-1-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
COMMUNITY AND ENVIRONMENTAL SERVICES

SOLID WASTE DISPOSAL AND/OR PROCESSING
SITE APPLICATION MODULE
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C. GROUND WATER GEOLOGY – CONTINUED

B. TEXTURE OF DEPOSIT(S) Not present

C. THICKNESS OF DEPOSIT(S) Not present

2. BEDROCK

A. TYPE(S) Interbedded shales, siltstones, and sandstones

B. DEPTH TO weathered bedrock: 4 to 7 feet

C. EXTENT OF WEATHERING Deeply weathered

D. NAME AND AGE OF FORMATION(S) Mauch Chunk formation, Mississippian

3. STRUCTURE

A. BASIC DESCRIPTION OF STRUCTURE south limb of the Broad Mountain Anticline

B. STRIKE AND DIP OF BEDS N56°, 7°SW

C. DIRECTION OF PLUNGE west-southwest

D. FRACTURES (Strike and Dip, Type, Spacing)

	Strike And Dip	Type	Spacing (State Inches or Feet)	Indicate If Open or Closed
(1) JOINTS	N84°E, 84°NW	irregular	2 to 4 feet	closed
(2) CLEAVAGE				
(3) FAULTS				

E. FOLDS (MINOR FOLDING)

(1) TYPE: ANTICLINE Broad Mtn. Anticline SYNCLINE

(2) STRIKE AND PLUNGE OF FOLD AXIS strike ENE-WSW, plunge WSW

4. GROUND WATER

A. DEPTH TO GROUND WATER 10.15 feet on 3-25-71 (drilled well)

(1) HOW DETERMINED measured in drilled well adjacent to site

(2) SEASONAL VARIATION estimated to be 15 feet

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DATE PREPARED

4-1-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF HEALTH
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SOLID WASTE DISPOSAL AND/OR PROCESSING
SITE APPLICATION MODULE
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C. GROUND WATER GEOLOGY – CONTINUED

(3) IF DEPTH TO GROUND WATER CANNOT BE DETERMINED, IT IS RECOMMENDED THAT ONE BORING OR WELL NEAR THE HIGHEST ELEVATION OF THE PROPOSED SITE BE DRILLED TO A DEPTH OF 10 FEET INTO THE GROUND WATER OR 10 FEET INTO BEDROCK, WHICHEVER IS DEEPEST (Maximum Depth – 150 Feet).

(A) LOCATE THE WELL OR BORING ON ACCOMPANYING TOPOGRAPHIC MAP. _____

(B) PROVIDE A COMPLETE LOG (Description of Well) _____

(C) INDICATE THE METHOD OF DRILLING _____

B. DIRECTION(S) OF GROUND WATER MOVEMENT south, southwest, and west
(If more than one direction of ground water flow, indicate those directions also.)

C. DISCHARGE OF GROUND WATER (Must be indicated on USGS Topographic Map). springs labelled

(1) DISTANCE AND DIRECTION TO DISCHARGE POINT(S) springs are at south edge of site

(2) NAME(S) OF DISCHARGE POINT(S) (Springs, Streams, Etc.) unnamed springs and stream tributary to the Little Schuylkill River

(3) AREA TRIBUTARY TO DISCHARGE POINT(S) hillside underlying site

D. HOW WAS INFORMATION DETERMINED? field study of site area and springs on the site and adjacent to it. Also a water table level was measured in a well 300 feet north of the site.

5. SURFACE WATER

A. FLOODING HAZARD FREQUENCY IS 0 TIMES IN 100 YEARS.

B. WILL THERE BE A DISCHARGE OF LEACHATE TO SURFACE WATERS? ☐ Yes ☒ No

C. WILL LEACHATE COLLECTION AND TREATMENT FACILITIES BE CONSTRUCTED? ☐ Yes ☒ No

(1) IF YES, HAVE YOU APPLIED FOR A SANITARY WATER BOARD PERMIT FOR COLLECTION, TREATMENT, AND DISCHARGE OF THE LEACHATE? ☐ Yes ☐ No

6. SUBSURFACE INFORMATION (Detailed information is needed on subsurface conditions for a proper analysis of the site. This information on soils, geology and ground water may be determined from deep cuts, borings, and wells; backhoe pits and natural outcrops; or artificial cuts.)

A. ARE THERE NATURAL OUTCROPS OR ARTIFICIAL CUTS IN THE VICINITY OF THE SITE? (Road cuts, railroad cuts, strip mines, quarries, etc.) ☒ Yes ☐ No

(1) DEPTH OF CUT OR THICKNESS OF OUTCROP outcrop is 8 feet high

(2) LOCATION OF CUT OR OUTCROP (Show on Topographic Map) labelled; bedrock outcrop

AR100383

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4-1-71

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DEPARTMENT OF HEALTH
COMMUNITY AND ENVIRONMENTAL SERVICES

SOLID WASTE DISPOSAL AND/OR PROCESSING
SITE APPLICATION MODULE
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C. GROUND WATER GEOLOGY – CONTINUED

(3) REASON FOR OPENING CUT bedrock exposed in the wall of a borrow pit

(4) DETAILED DESCRIPTION OF CUT OR OUTCROP The bedrock outcrop is exposed in the wall of a borrow pit north of the site. The sandstone and shale is deeply weathered and the joints are filled with clay and sand.

A 12 foot deep trench was excavated at the site and is labelled "Borrow area." Here a channery loam soil profile was present on colluvium extending to a depth of 7 feet. Sandstone boulders in this colluvium are up to 1 foot in diameter. From 7 to 10 feet weathered red shale sandstone is exposed. From 10 to 12 feet weathered grey to white sandstone is present. This bedrock is well weathered and thus is easily excavated. Below 12 feet less weathered bedrock is present.

B. COMPLETE WHERE INSUFFICIENT INFORMATION IS AVAILABLE TO COMPLETE 6A ABOVE.

HAVE BORINGS OR CUTS BEEN MADE FOR SITE EVALUATION? [X] Yes [ ] No
(An adequate number of borings or cuts should be made to a depth of 5 feet into the ground water or to bedrock or to 20 feet below the proposed or existing base of the landfill.)

(1) LOCATE THE CUT(S) OR BORING(S) ON THE ACCOMPANYING TOPOGRAPHIC MAP. labelled: borrow area

(2) PROVIDE THE COMPLETE LOG(S) (DESCRIPTION) OF THE CUT(S) OR BORING(S). see C-4 above

(3) INDICATE THE METHOD OF DRILLING OR MAKING CUTS trench cut by a ½ yard capacity power shovel

Note: The houses located north of the plant have domestic wells. Other houses and buildings have municipal water.

The soil material thickness at the site varies due to the variation in the thickness of the colluvium overlying the weathered bedrock. Scattered sandstone boulders are present on the ground surface and throughout the colluvium.

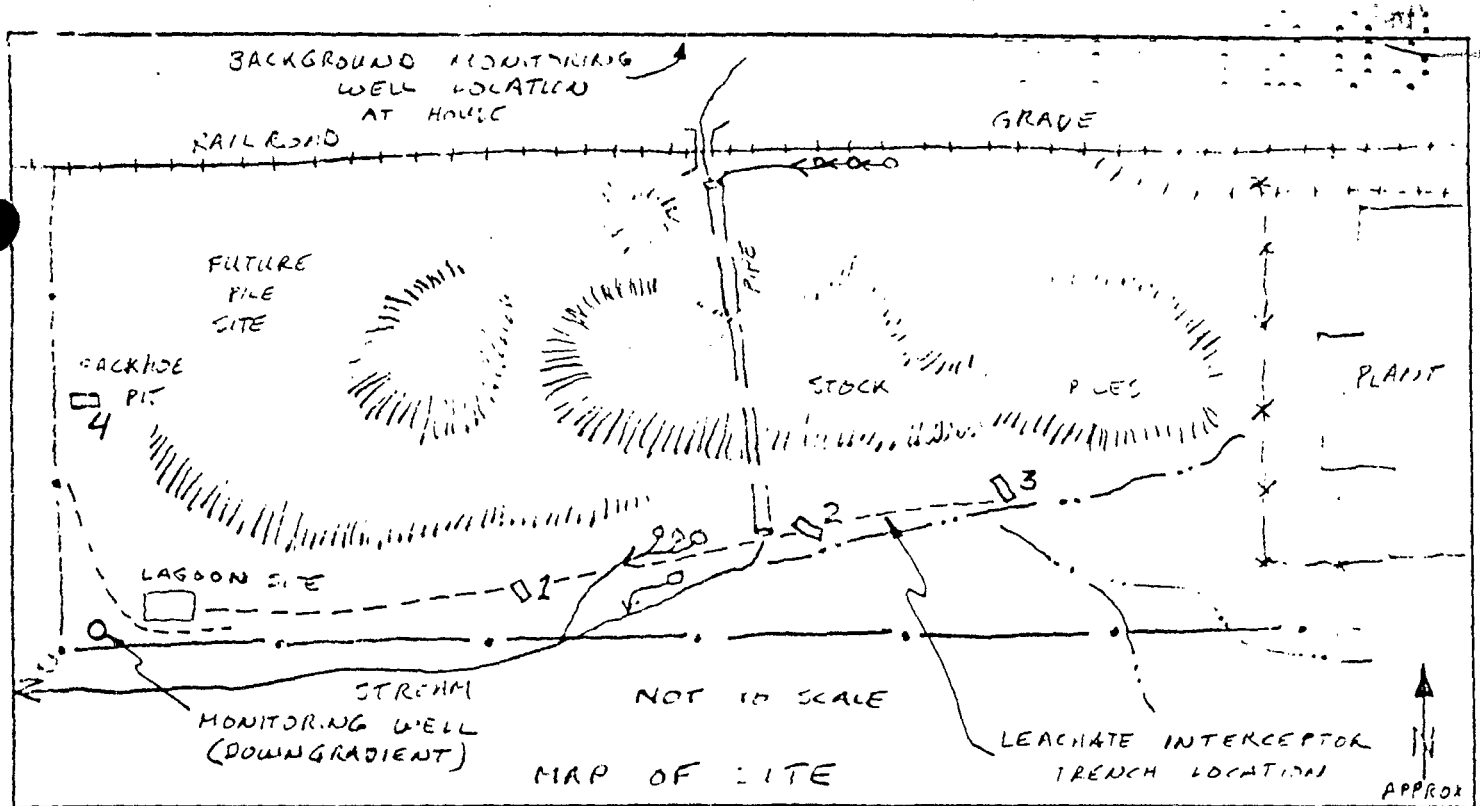
The depth to the water table under the site ranges from 1 foot at the springs to 15 feet and more under thick colluvium.

Several seeps of leachate are present at the toes of the industrial waste piles.

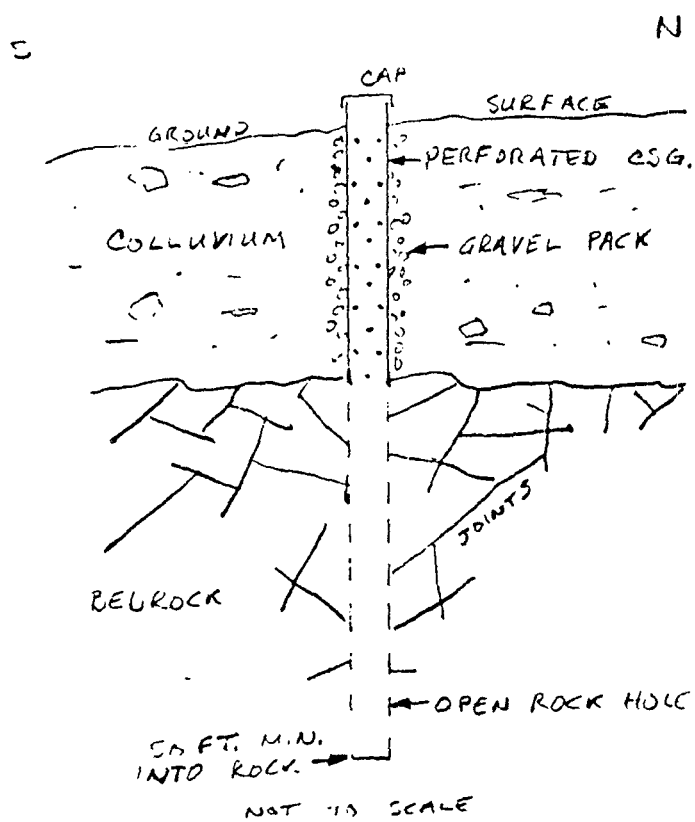
AR100384

APPENDIX F

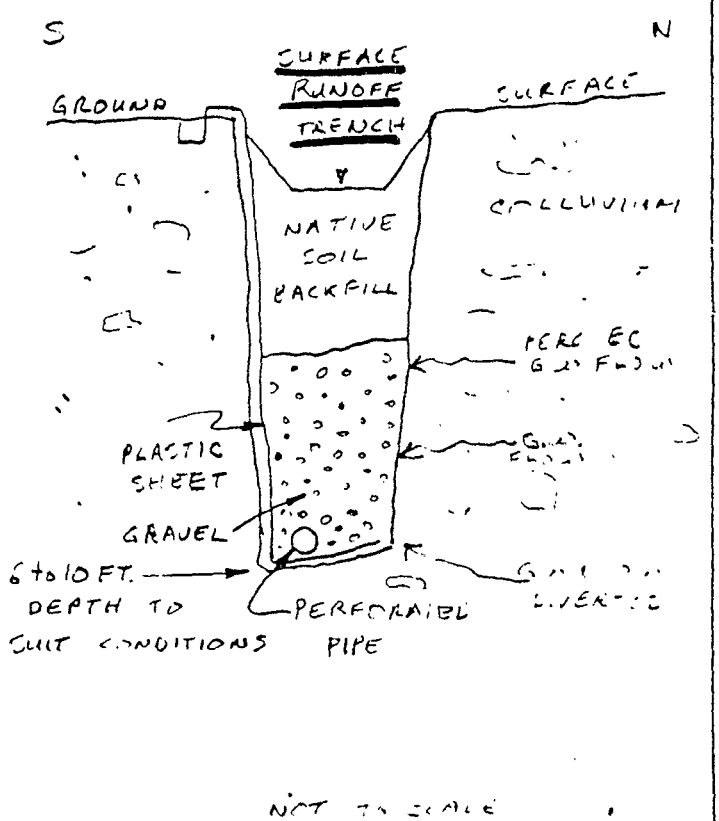
ORIGINAL



MAP OF SITE



PROFILE OF WELL



PROFILE OF [illegible]

EASTERN DIVERSIFIED METALS CORP.
INDUSTRIAL WASTE APPLICATION
NO. 5474203
REVISED DESIGN DATA

T. GIDDINGS 1-20-75

TODD GIDDINGS and ASSOCIATES
CONSULTING HYDROGEOLOGISTS
140 West Fairmount Ave., State College, Pa. 16801

AR100386

APPENDIX G

OPTIONAL FORM NO 10
MAY 1962 EDITION
GSA GEN REG NO 27

5010-106

UNITED STATES GOVERNMENT

Memorandum

TO : Eastern Diversified Metals
R. D. # 2 Tamaqua, Penna.

DATE: March 24, 1971

FROM : Frank A. Kopas, Soil Scientist
SCS Sch. Haven Penna.

SUBJECT: Soils Information

Enclosed is the soil information you requested.

Thank You

Frank A. Kopas
Soil Scientist

MECKESVILLE SERIES

Meckesville are deep, well drained soils formed in material weathered from red shale and sandstone on the uplands. These soils have a moderately slow permeable fragipan. Most use problems are related to permeability, the erosion hazard, or stoniness.

Major layers of a typical soil:

0-9 inches	Reddish brown, channery loam with granular structure.
9-24 inches	Reddish brown, channery silt loam or silty clay loam with blocky structure.
24-42 inches	Reddish brown, channery loam with prismatic and platy structure.

Mapping units:

69- B-2	Meckesville channery loam 3 to 8 percent slopes, moderately eroded.

AR100388

APPENDIX H

AR100389

ER710 046 9

DATE PREPARED	
DATE REVISED	

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
WATER QUALITY MANAGEMENT

WATER POLLUTION CONTROL
MODULE 9 – FLOW EQUALIZATION AND STORAGE BASINS

For Department Use Only

TABLE I			UNIT 1 ☐ EXISTING ☐ PROPOSED	UNIT ☐ EXISTING ☐ PROPOSED	UNIT ☐ EXISTING ☐ PROPOSED
IDENTIFY BY FUNCTION AT RIGHT AND ANSWER ALL APPLICABLE INFORMATION LISTED BELOW			Storage of: ☒ Untreated Waste Water ☐ Treated Waste Water	Storage of: ☐ Untreated Waste Water ☐ Treated Waste Water	Storage of: ☐ Untreated Waste Water ☐ Treated Waste Water
WASTE ENTERS THIS UNIT FROM: (Indicate Unit)			PVC Storage	Area	
1. MATERIALS AND CHARACTERISTICS	A. CONCRETE				
	B. WOOD				
	C. STEEL				
	D. EARTHEN (Excavation, Diked)		Diked		
	EARTHEN BASINS ONLY	(1) INSIDE SLOPE (Vert.: Horiz.)	1: 3	1:	1:
		(2) OUTSIDE SLOPE (Vert.: Horiz.)	1: 3	1:	1:
		(3) BERM WIDTH (Ft.)	6		
2. AVERAGE DIMENSIONS	A. LENGTH (Ft.)		120		
	B. WIDTH (Ft.)		70		
	C. OR DIAMETER (Ft.)				
	D. DEPTH	(1) NORMAL OPERATING DEPTH (Ft.)	6		
		(2) MAXIMUM AVAILABLE DEPTH (Ft.)	9 (Incl. freeboard)		
	E. FREEBOARD (Ft.)		3		
3. DESIGN DATA	A. CAPACITY	(1) NORMAL OPERATING CAPACITY (Gal.)	377,000		
		(2) TOTAL	COMPUTE THE TOTAL FOR ALL UNITS HERE		377,000
		(3) MAXIMUM AVAILABLE CAPACITY (Gal.)	688,000		
	B. DETENTION	(1) AVERAGE (Hrs.)	209		
		(2) MAXIMUM (Hrs.)	382 (base on design avg. flow)		
	C. DISCHARGE TO UNIT	(1) FLOW (MGD)	.0432		
		(2) DURATION (Hrs./Day)	24		
	D. DISCHARGE FROM UNIT	(1) FLOW (MGD)	.0432		
		(2) DURATION (Hrs./Day)	24		

A. GENERAL INFORMATION

1. DESCRIBE OUTLET AND METHOD OF WATER LEVEL CONTROL. None - basin is designed to hold a 2" rainfall from the 7 acre area of the storage pile.

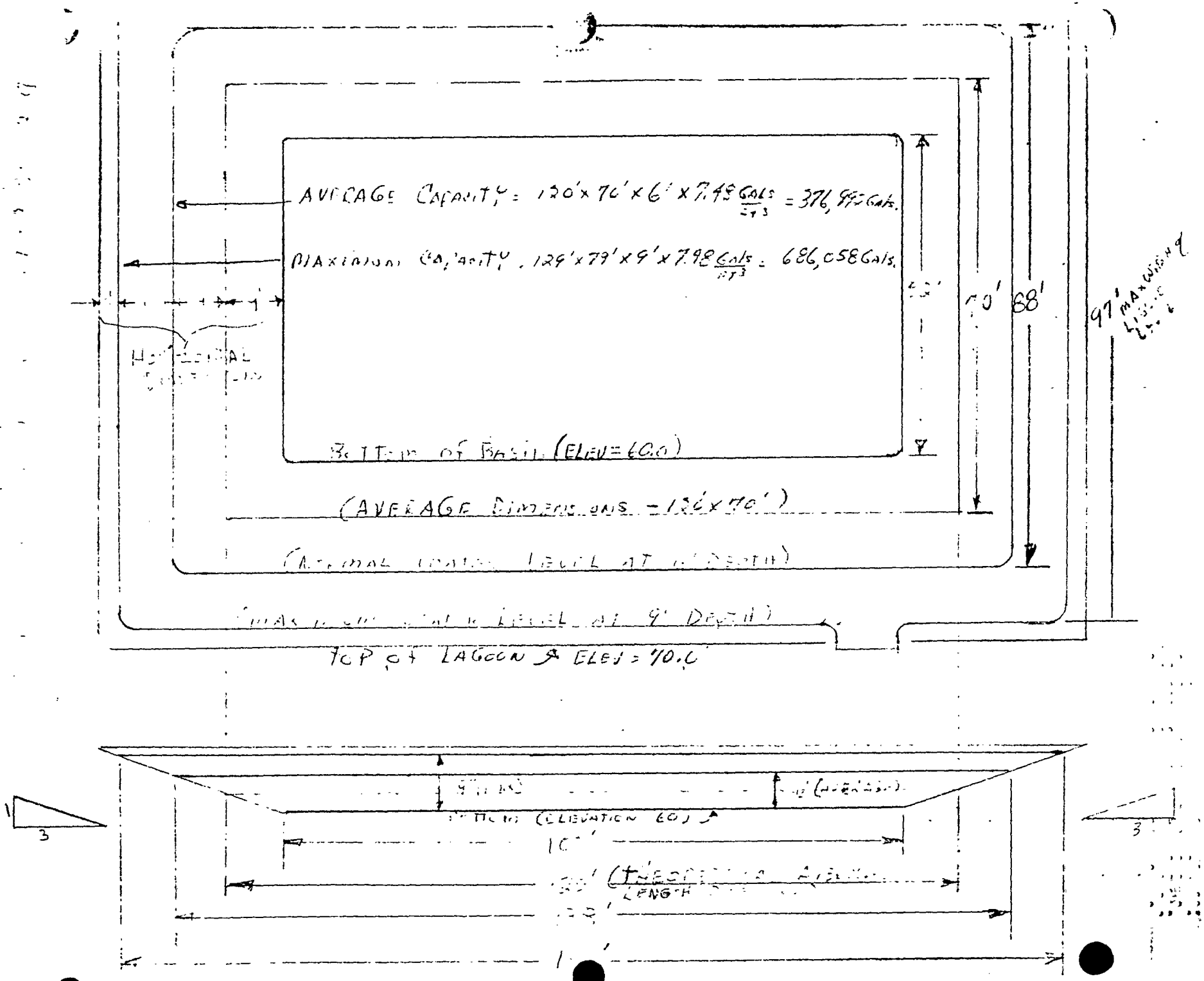
2. HOW WILL SEDIMENT ACCUMULATION IN THE UNIT BE MINIMIZED? Sediment will have to be removed mechanically (it will be primarily ferric oxides)

3. WILL SURFACE WATER BE DIVERTED FROM THE BASIN? ☐ Yes ☒ No
Surface water within catchment area will be stored & treated. All other upstream runoff will be diverted around the site

NOTE: COMPLETE APPROPRIATE PORTIONS OF MODULE 5 IF AN EARTHEN BASIN IS USED.

N/A Basin to be lined

AR100390


AVERAGE CAPACITY = 120'x70'x6'x7.48 GALS/FT3 = 376,992 Gals.
MAXIMUM CAPACITY = 129'x79'x9'x7.98 GALS/FT3 = 686,058 Gals.
BOTTOM OF BASIN (ELEV=60.0)
(AVERAGE DIMENSIONS = 120'x70')
TOP OF LAGOON ELEV = 70.0
70'
68'
97' MAXWIDTH
BOTTOM (ELEVATION 60)
1
3
3

AR100391

ORIGINAL
(Red)

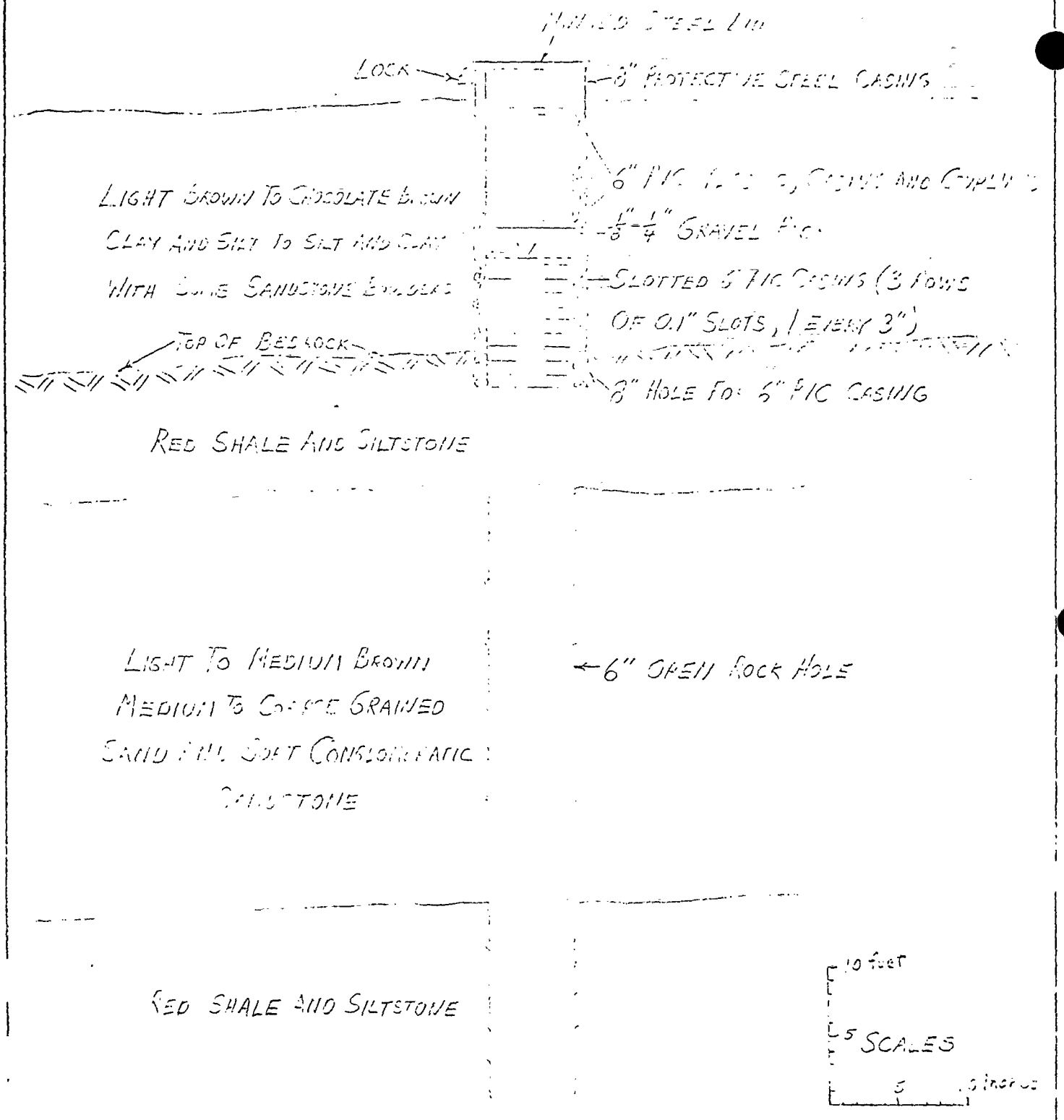
EASTERN DIVERSIFIED METALS CORPORATION

M-2 Monitoring Well Log

Depth	Description
0-18'	Light brown to chocolate brown silt and clay to clay and silt; with sandstone boulders; some water, less than 1 gpm.
18-28	Bedrock - red siltstone and shale.
28-58	Light brown to medium brown medium to coarse sand; with fragments of coarser grains (conglomerate) dry.
58-72	Red shale; 17.5 gpm
	Set 23'6" of plastic casing to 20'10" depth. Water level 13.62' from top of plastic casing.

NOTE: Depths are in feet below ground level.
Well drilled 19 November 75

ORIGINAL



EASTERN DIVERSIFIED METALS CORPORATION
[illegible]
CONSTRUCTION DETAIL

TODD GIDDINGS and ASSOCIATES
CONSULTING HYDROGEOLOGISTS
140 West Fairmount Ave., State College, Pa. 16801

AR100393

APPENDIX I

721 009 1-71

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
COMMUNITY ENVIRONMENTAL SERVICES

ORIGINAL (Red)

LAND DISPOSAL INSPECTION REPORT

Disposal Facility	Facility Address
Eastern Diversified Metals Corp.	P. O. Box 311, Tamaqua, Pa. (Hometown)
County: Schuylkill	Municipality: Rush Township. Village of Hometown
Proprietor's Name: John T. Hays, Plant Manager	Proprietor's Address: P. O. Box 311, Tamaqua, Pa. (Hometown)

cc: Chief, Div. of S. W. Mgmt, Hbg.
Planning Analyst, Hbg.
Env. Prot. Spec. Snyder
Specialists (3) Wasacavage
Facilities Engr, Water Qual.
Env. Prot. Spec. Cook
File

					CC
Type Record	6				1
Identification Number	3 0 0 3 6 5				2-7
	MO	DA	YR		
Inspection Date	0 1	3 1	7 3		8-13
Reinspection Date	0 2	2 8	7 3		14-19

	CMPL 1	N-CMPL 2	N/A 3	
ALL WEATHER ACCESS ROADS TO THE SITE FOR TWO-WAY TRAFFIC OR SEPARATE ROADS FOR ONE-WAY TRAFFIC NEGOTIABLE BY LOADED COLLECTION VEHICLES.	1			20
TELEPHONE OR RADIO COMMUNICATIONS ACCESSIBLE TO THE SITE.	1			21
3. ADEQUATE EQUIPMENT FOR MINIMIZING FIRE HAZARDS AVAILABLE.	1			22
ALL BUILDINGS AND EQUIPMENT PROVIDED WITH FUNCTIONAL FIRE EXTINGUISHERS.	1			23
ACCESS LIMITED TO THOSE TIMES WHEN AN ATTENDANT IS ON DUTY.	1			24
A. HOURS OF OPERATION PROMINENTLY POSTED.	1			25
B. SUITABLE BARRIER AND FENCING BLOCKS ACCESS TO THE SITE WHEN AN ATTENDANT IS NOT ON DUTY.	1			26
6 APPROVED OPERATIONAL SAFETY PROGRAM FOLLOWED AT SITE.		2		27
7. ADEQUATE SANITARY FACILITIES PROVIDED FOR THE EMPLOYEES.	1			28
8 MAINTENANCE OF DAILY OPERATIONAL RECORDS.		2		29
9 FOLLOWING OPERATIONAL PLAN ITEMS FOLLOWED AT SITE:				
A AREA TO BE FILLED		2		30
B. SCHEDULE OF FILLING		2		31
C SITE PREPARATION		2		32
D SOURCE AND TYPES OF COVER MATERIAL		2		33
E SOURCE AND TYPES OF SUB-BASE		2		34

AR100395

		CMPL 1	N-CMPL 2	N/A 3	CC
10.	EQUIPMENT PROVIDED FOR OPERATION OF THE SITE ADEQUATE IN SIZE AND PERFORMANCE CAPABILITY.	1			35
11.	PROVISIONS AVAILABLE TO WEIGH AND/OR MEASURE ALL SOLID WASTE DELIVERED TO THE SITE.	1			36
12.	UNLOADING AREAS CLEARLY INDICATED AND RESTRICTED TO WITHIN THIRTY FEET OF THE WORKING FACE.	1			37
1.	SIZE OF THE WORKING FACE CONFINED TO AN AREA WHICH CAN EASILY BE COMPACTED AND COVERED DAILY.		2		38
1.	BLOWING LITTER CONTROLLED.	1			39
15.	SOLID WASTE SPREAD AND COMPACTED IN LAYERS NOT EXCEEDING A DEPTH OF TWO FEET.		2		40
3	INDIVIDUAL CELLS EIGHT FEET THICK OR LESS.		2		41
7.	UNIFORM LAYER OF COVER MATERIAL, COMPACTED TO A MINIMUM OF SIX INCHES, PLACED ON ALL EXPOSED SOLID WASTE AT THE END OF EACH WORKING DAY.		2		42
3.	AN INTERMEDIATE LAYER OF COVER MATERIAL, COMPACTED TO A MINIMUM UNIFORM DEPTH OF ONE FOOT, PLACED ON COMPLETED LIFTS IN AREAS WHERE THERE IS CLEAR INTENTION TO PLACE ANOTHER LIFT WITHIN ONE YEAR.			3	43
1.	A FINAL LAYER OF COVER MATERIAL, COMPACTED TO A MINIMUM UNIFORM DEPTH OF TWO FEET PLACED OVER THE ENTIRE SURFACE OF EACH PORTION OF THE FINAL LIFT.			3	44
1.	SUITABLE STANDBY EQUIPMENT AVAILABLE TO THE SITE.	1			45
.	DISPOSAL OF SEWAGE SOLIDS, LIQUIDS AND HAZARDOUS WASTE HANDLED WITH THE APPROVAL OF THE DEPARTMENT OF ENVIRONMENTAL RESOURCES.			3	46
.	BULKY WASTES PROPERLY DISPOSED.		2		47
3.	REGULATION BAN ON OPEN BURNING ADHERED TO AT THE SITE.	1			48
.	DUST CONTROLLED AT SITE.	1			49
5.	REGULATION BAN ON SCAVENGING ADHERED TO AT THE SITE.	1			50
.	SALVAGING AT SITE OCCURS IN ACCORDANCE WITH REGULATIONS.			3	51
2	SURFACE WATER IS SATISFACTORILY MANAGED AT THE SITE.		2		52
9.	FINAL SLOPES AT LEAST ONE PERCENT BUT NOT GREATER THAN FIFTEEN PERCENT OR AS APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL RESOURCES.			3	53
9.	SATISFACTORY VEGETATIVE GROWTH ESTABLISHED TO PREVENT EROSION OF THE FINAL SOIL COVER (Weather Permitting).			3	54
0.	REGULATION BAN ON UNTREATED LEACHATE DISCHARGE TO SURFACE ADHERED TO AT SITE.		2		55
.	LEACHATE TREATMENT FACILITIES OPERATED SATISFACTORILY AT SITE.			3	56
2.	AN EFFECTIVE VECTOR CONTROL PROGRAM UTILIZED AT SITE (Where Needed).			3	57

	YES 1	NO 2	CC
33. ARE HAZARDOUS WASTES RECEIVED AT THE SITE? (If Yes, List Types on Next Page.)	☐	☒	

CORRECTIVE PRIORITY PROGRAM:

Eastern Diversified Metals Corp. has been engaged in the recovery of copper from scrap and reject wire at its Nometown plant since about 1968. Approximately 100 ton per day of wire is processed with about 22%, or 75 ton, going to waste in the form of plastic shreddings. Other waste material consists of cardboard, paper, wooden pallets and reels, steel wire and general plant waste.

Eastern Diversified Metals Corp. operates a disposal site consisting of approximately 25 acres which is located adjacent to and west of the plant for all of its solid waste. The site is located in a ravine having approximate 35% slopes at the western portion and numerous springs in the north central portion draining into a small tributary flowing through the site in a westerly direction to confluence with the Schuylkill River. This spring water drains over and through shredded insulation waste and upon discharge to the tributary (25 ft.) is of questionable chemical quality and possesses a strong chemical odor. Trees felled during clearing operations appear to be obstructing the flow of a portion of the tributary. Cover material is removed from the south side of the ravine by means of a power shovel. Plant officials estimate that the site has a remaining life expectancy of three (3) years.

Solid waste is disposed at two (2) separate but adjacent areas on the site. Mixed waste is disposed at the extreme western portion of the site where the terrain slopes approximately 35% to the tributary. The exposed face of this area measured approximately 100 ft. in length and tapered from ground level to about 12 ft. in height. The face showed no evidence of compaction and covering as required. Direction of the fill is in a southwesterly direction toward the tributary.

Shredded insulation material (plastic) is dumped "over the bank" in an area of the north central portion of the site. Approximate dimensions of this waste pile is 300' L x 190' x 40' H. The angle of repose is about 100%. There is no visible evidence of any attempt to compact and cover the face of this pile or to reduce the slope to 3½ or 3 to 1. Thickness of cells and amount of earth separating cells is unknown but probably is less than 1' in thickness. Spring water emanating in the vicinity of this disposal area, as previously stated, flows over and through waste material to discharge into the tributary.

Scrap metal and steel drums are stockpiled on the site for possible sale while a pile of shredded insulating material (plastic) approximately 300' L x 190' W x 35' H in size allegedly contains salvageable copper and is being reprocessed periodically.

Corrective Action:

1. Develop alternate methods of disposal, or
2. Develop another site to conform to department requirements, or
3. Obtain industrial waste material services for proper disposal, or
4. Develop existing site to conform to department requirements as stated in the regulations.

G. W. Wascavage

G. W. Wascavage

SANITARIAN (Signature)

Smith C.M. # 687766

OPERATOR (Signature)

AR100397

Card Code A

ORIGINAL (Red)

CC 1

Identification Number 3 0 0 3 0 5 (2-7)

Inspection Date 0 1 3 1 7 3 (8-13)

1_PER DAY
2_PER WEEK
3_PER MO.
4_PER YEAR

TYPES OF SOLID WASTE RECEIVED	YES 1	NO 2	TONS		
A. AGRICULTURAL WASTE		2			14-21
B. COMMERCIAL WASTE		2			22-29
C. CONSTRUCTION AND DEMOLITION WASTE		2			30-37
D. DOMESTIC AND HOUSEHOLD WASTE		2			38-45
E. INDUSTRIAL WASTE	1		7500	1	46-53
F. PARK AND BEACH WASTE		2			54-61
Card Code B					1
G. PATIENT CARE INSTITUTION WASTE		2			14-21
H. SEPTIC TANK WASTE		2			22-29
I. SEWAGE TREATMENT PLANT AND PUMPING STATION WASTE		2			30-37
J. STREET AND ALLEY WASTE		2			38-45
K. TREE AND LANDSCAPING WASTE	1		25	1	46-53
L. OTHER		2			54-61
STATE QUANTITIES OF SOLID WASTE RECEIVED PER DAY			7525		62-70
Card Code C					1

LIST TYPES OF HAZARDOUS WASTE

	CODE	TONS		
				14-24
				25-35
				36-46
				47-57
				58-68
Card Code D				1
	CODE	TONS		
				14-24
				25-35
				36-46
				47-57
				58-68

AR100398

APPENDIX J

1. Pennsylvania Department of Health, Community and Environmental Services. Phase I site application module for solid waste disposal and/or processing. Prepared for Eastern Diversified Metals Corporation Landfill by Todd Gidding, April 1, 1971 (appendix E).

2. Lohman, Stanley W. Groundwater in Northeastern Pennsylvania. Pennsylvania Topographic and Geologic Survey. Bulletin W 4, 1937.

L