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R-585-7-3-19

PRELIMINARY ASSESSMENT AND SITE INSPECTION OF FIRST PIEDMONT ROCK QUARRY PREPARED UNDER

TDD NO. F3-8305-45
EPA NO. VA-164
CONTRACT NO. 68-01-6699

FOR THE

HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

SEPTEMBER 27, 1984

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY	REVIEWED BY	APPROVED BY
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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. F3-8305-45 for the First Piedmont Rock Quarry located in Pittsylvania County, Virginia.

1.2 Scope of Work

NUS FIT III was tasked to conduct a site inspection of First Piedmont's Rock Quarry located near the Beaver Park residential development in Pittsylvania County, Virginia.

1.3 Summary

First Piedmont Corporation leased the rock quarry site in 1970 and operated disposal activities there for approximately 2 years. In June 1981, a Hazardous Waste Site Notification, Form 8900-01, was submitted by First Piedmont Corporation to EPA Region III. The majority of the waste disposed of at the quarry was from the Goodyear Tire and Rubber Company located in Danville, Virginia. The alleged wastes consisted of cardboard, glass, paper, pallets, tires, rubber elastomer compounds, small quantities of putrescible waste and various silicate compounds generated during the manufacturing of glass.

FIT Region III conducted a preliminary assessment at the site on January 4, 1983 and a site inspection on July 27, 1983. The samples taken during the site inspection detected a number of organic and inorganic contaminants. A summary of the analysis of these samples is included in section 6.1 of this report.

A Toxicological Evaluation of the sample results was conducted by NUS FIT III and the documented results of this evaluation can be found in section 7.0 of this report.

SECTION 2

2.0 THE SITE

2.1 Location

The First Piedmont Rock Quarry site is located off Route 719, adjacent to the Beaver Park residential development in Pittsylvania County, Virginia (see appendix B, figure 1.1).

2.2 Site Layout

The First Piedmont Rock Quarry occupies approximately 4 acres and is presently inactive. The floor of the quarry is approximately 65 feet from the land surface at the eastern edge. The west and east sides of the quarry are granite walls, while the southern and northern sides consist of slumped soils, mine debris, and/or deposited wastes.

Near the base of the granite walls are channels of ponded water. The lip of the quarry is bounded on all 4 sides by scrub vegetation and trees. The quarry has been filled with waste and cover material which elevated the northern edge of the quarry equal to the surrounding topography. A leachate seep was located near the northwest edge of the quarry.

2.3 Ownership History

The site property is owned by Mr. and Mrs. Richard Lacey Compton of Blaire, Virginia. First Piedmont Corporation, located in Chatham, Virginia, leased the rock quarry site from Mr. and Mrs. Compton in March, 1970.

2.4 Site Use History

First Piedmont utilized the site between April 1970 and July 1972. The disposal operation was conducted under the approval of local officials from the Pittsylvania County Health Department. The majority of the waste disposed of during the period of operation was generated at the Goodyear Tire and Rubber Company located in Danville, Virginia. The waste was transported to the site by First Piedmont Corporation.

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2.5 Permit and Regulatory Action History

During the operating years, 1970-1972, the Pittsylvania County Health Department supervised the landfill. In 1972, a fire erupted at the site. First Piedmont Corporation suspects the fire was ignited by spontaneous combustion of wood, tires, and other solid materials. The fire was extinguished after several hours. After the fire First Piedmont Corporation transferred disposal operations to another location. The First Piedmont Rock Quarry site was then inspected by the Virginia State Health Department and a closure order was issued.

In June of 1981, Goodyear Tire and Rubber Company notified First Piedmont Corporation that some of the waste removed from their plant and deposited in the rock quarry contained small quantities of hazardous materials. As a result, First Piedmont Corporation filed a Notification of Potential Hazardous Waste form with the EPA on June 5, 1981. First Piedmont then inspected the site and obtained 3 water samples and tested them for inorganic contamination. The results of this sampling are not available.

2.6 Remedial Action To Date

Disposal operations were terminated in July of 1972. The site was subsequently covered with 1 to 2 feet of clayey soils.

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SECTION 3

3.0 ENVIRONMENTAL SETTING

3.1 Surface Waters

The First Piedmont Rock Quarry site lies approximately 1,400 feet east of Lawless Creek. From the western edge of the site a small drainage basin can be observed. Lawless Creek flows southwesterly and discharges into Fall Creek which is the main drainage basin for the area. Eventually Fall Creek drains into the Dan River which is approximately 12 miles southeast of the site.

3.2 Geology and Soils

Based upon the Pittsylvania County Soil Survey, the First Piedmont Rock Quarry site is situated in the uplands of the Piedmont Province. The site is underlain by the Shelton Formation which primarily consists of granite gneiss, quartz schist, and quartzite. Geology and Groundwater Resources of Pittsylvania and Halifax Counties by Harry E. Legrand, 1960, indicates the fractured granite gneiss extend to depths of 200 to 300 feet. The same reference refers to a saprolitic layer that may (based upon casing depths in the granite gneiss formation) extend up to 60 feet in depth. The depth to bedrock in the area is variable with rock outcrops existing throughout the area. The disposal site itself was a granite quarry.

Soils in the area surrounding the First Piedmont Rock Quarry site are of the Cecil Series. These soils consist of well-drained, gently sloping to moderately steep soils that have a dominantly clayey subsoil. These soils are characteristically acidic in nature and are formed from weathered felsic bedrock and granite. The pH of these soils ranges from 4 to 5 and has moderate corrosivity for uncoated steel.

3.3 Groundwaters

Legrand also infers that groundwater occurs in the lower soils and saprolitic area and the upper region of the granite gneiss bedrocks. The bedrock occurrence is controlled by fractures, most of which "occurs at a depth of less than 150 feet, much of it in the upper 30 feet of the bedrock." (pg. 18).

The shallow flow of the aquifer is presumably northwest towards Lawless Creek. According to the Soil Survey, the seasonal high water table is greater than 5 feet below the land surface.

Groundwater is used as a potable water source for local residents along State Route 719 in the Beaver Park community south and southeast of the site. These wells are reported to have an average depth of 40 feet.

3.4 Climate and Meteorology

The climate in the vicinity of the quarry consists of generally mild winters and warm, humid summers. The average annual precipitation of Pittsylvania County is approximately 43 inches.

3.5 Land Use

First Piedmont Corporation has no development plans for the former Rock Quarry site. The surrounding areas are wooded, and a small number of homes are located along State Route 719.

3.6 Population Distribution

The First Piedmont Rock Quarry site is adjacent to the Beaver Park residential development. The approximate population of the development is 260 people. Excluding this residential area, the vicinity consists mostly of rural wooded areas.

3.7 Water Supply

The Beaver Park residential area draws water exclusively from home wells. There are no known intakes on either Lawless or Fall Creeks. The nearest home well is approximately 300 feet south of the fill area.

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3.8 Critical Environments

According to the Virginia Game and Inland Fish Commission, Lawless and Fall Creeks are classified as warm water streams and are the home of a variety of fish which include sunfish bluegills, catfish, and possibly white suckers. These streams are not state-stocked trout streams. Appendix C, lists the endangered and threatened floral and fauna species of southeastern Virginia.

AR100012

SECTION 4

4.0 WASTE TYPES AND QUANTITIES

The wastes generated at the Goodyear Tire and Rubber Company in Danville, Virginia, reportedly consisted of an unknown amount of cardboard, glass, paper, pallets, tires, rubber elastomer compounds, small quantities of putrescible wastes, and various silicate compounds generated during glass manufacturing.

Personnel from the First Piedmont Corporation estimated that, during the period of operation of the landfill, approximately 130 gallons per week (approximately 250 barrels) of mixed solvents, water, carbon black, and detergent were disposed of. Approximately 7,000 gallons is the estimated total quantity of liquids disposed of at the site by Goodyear. According to Goodyear, the majority of this liquid waste was generated in floor cleaning and solvent cleaning operations. Goodyear's RCRA classification defined the solvent fraction of the waste as hazardous. Because of the DOO1 ignitable classification, some of Goodyear's waste products had a 140°F flash point.

Due to uncontrolled dumping at the site, other wastes disposed of there include white goods and household wastes. Some scrap tobacco leaves from nearby tobacco farms may have been disposed of at the First Piedmont Rock Quarry site.

AR100014

SECTION 5

5.0 FIELD TRIP REPORT

5.1 Summary

A site inspection of the First Piedmont Rock Quarry site was conducted on July 27, 1983, by Michael Nalipinski, Martin Howe, Jeffrey Case, and Michael Cramer. The weather was warm with temperatures of approximately 80°F and winds 5-10 miles per hour.

Prior to sampling, a visual inspection of the quarry used for waste disposal and the surrounding area was made. On-site samples were taken from surface ponding, leachate, and stained soils. Off-site samples included home wells and upstream and downstream samples of Lawless Creek. Corresponding samples were taken for First Piedmont Corporation at several on-site sampling points. Photographs were taken of the on-site sampling.

Mr. Ben Davenport, President of First Piedmont Corporation, granted access to the site via a telecon with Michael Nalipinski on July 19, 1983. Mr. Davenport also stated that no information given to the sampling team was proprietary or confidential.

5.2 Persons Contacted

5.2.1 Prior to Field Trip

Robin Aitken
U.S. EPA Region III
Sixth and Walnut Sts.
Philadelphia, PA 19106
215-597-9328

Ben J. Davenport, President
First Piedmont Corp.
P.O. Drawer 1069
Chatham, VA 24531
804-432-0211

Jim Saunders
Bureau of Solid and Hazardous Waste
906 Madison Building
109 Governor Street
Richmond, VA 23219
804-786-7073

5.2.2 At The Site

Ben J. Davenport, President
First Piedmont Corp.
P.O. Drawer 1069
Chatham, VA 24531
804-432-0211

Edward E. Clay, Vice President
First Piedmont Corp.
P.O. Drawer 1069
Chatham, VA 24531
804-432-0211

AR100016

TDD Number 8305-45
EPA Number VA 164

5.3 SAMPLE LOG

Site Name First Piedmont

TRAFFIC REPORTS Organic	Inorganic	High Hazard	SAMPLING LOCATION	PHASE	SAMPLE DESCRIPTION	DATE	TIME	pH	COMMENTS/OBSERVATIONS	LABORATORY
C 3747	MC 1005		Lewis Well	Aq	—	7-27-83	0940			Lancks/chemtech
C 3748	MC 1006		Windbush Well	Aq	—	7-27-83	0950			Lancks/chemtech
C 3749	MC 1007		N. Edge Soil #1	Solid	soil was black	7-27-83	0955			ETC/chemtech
C 3750	MC 1008		Ponded N. Edge	Aq	reddish orange w/sheen	7-27-83	1000			Lancks/chemtech
C 3751	MC 1009		Motley Well	Aq	—	7-27-83	1000			Lancks/chemtech
C 3752	MC 1010		Leachate W. Side	Solid	focal odor no HNU read.	7-27-83	1005			ETC/chemtech
C 3753	MC 1011		N. Edge Sed. Pond	Aq	greyish brown color	7-27-83	1020			Lancks/chemtech
C 3754	MC 1012		Ponded H_2O S. Edge	Aq	green tint, sheen, frogs	7-27-83	1025			Lancks/chemtech
C 3755	MC 1013		Ponded H_2O S Edge	Solid	brown & sandy	7-27-83	1030			ETC/chemtech
C 3273	MC 1014		Drum E. White	Solid	white, grey powdery	7-27-83	1035			ETC/chemtech
C 3274	MC 1015		Downstream	Aq	—	7-27-83	1040			Lancks/chemtech
C 3275	MC 1016		Downstream	Solid	—	7-27-83	1045			ETC/chemtech
C 3760	MC 1017		Upstream	Aq	—	7-27-83	1045			Lancks/chemtech
C 3759	MC 1018		Upstream	Solid	—	7-27-83	1055			ETC/chemtech
C 3758	MC 1019		Carter Well	Aq	near spring	7-27-83	1100			Lancks/chemtech
C 3276	MC 1020		Drum Black	Solid	Black crusty top gooey resin on bottom	7-27-83	1015			ETC/chemtech
—	MC 1021		Blank	Solid	—	7-27-83	1310			ETC/chemtech
—	MC 1022		Blank	Aq	—	7-27-83	1315			ETC/chemtech
C 3757	—		Blank	Solid	—	7-27-83	1300			ETC/chemtech
C 3756	—		Blank	Aq	—	7-27-83	1305			Lancks/chemtech

AR100017

5.4 Site Observations

- No radiation or HNU readings were recorded above background in the breathing zone throughout the site.

- The site is not secure, and there is no means to control access.

- Frogs were observed living in the ponded water on the southwestern edge of the site.

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5.5 PHOTOGRAPH LOG

Photos 1-5 - Panoramic view of site.

F3-8305-45
27 July 1983
1115 hrs
Panorama #1
Michael Nalepinski
Michael Nalepinski

F3-8305-45
27 July 1983
1115 hrs
Panorama #2
Michael Nalepinski
Michael Nalepinski

Panorama #3
Michael Nalepinski
Michael Nalepinski

1115 hrs
Panorama #4
Michael Nalepinski
Michael Nalepinski

Panorama #5
Michael Nalepinski
Michael Nalepinski

AR100020

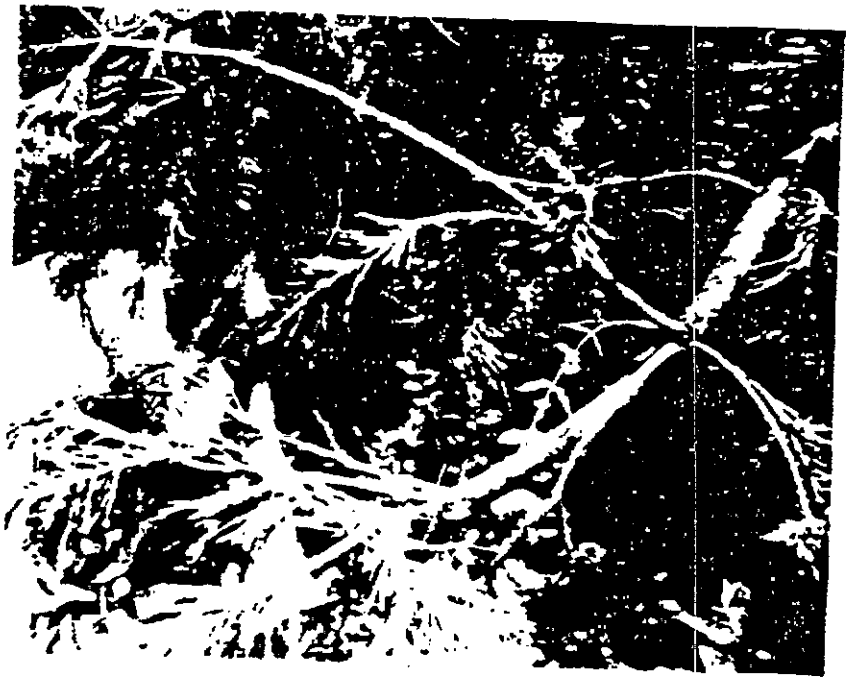

Photo 6 - North edge soil #1. Black soil.

Photo 7 - Ponded water on north edge.

F3-8305-45
27 July 1983
0956
North edge soil #1 Blank soil

Michael J Nalipinski

Michael J. Nalipinski

F3 8305-45
27 July 1983
Ponded water North edge
1001 hrs

Michael J Nalipinski

Michael J. Nalipinski

AR100022

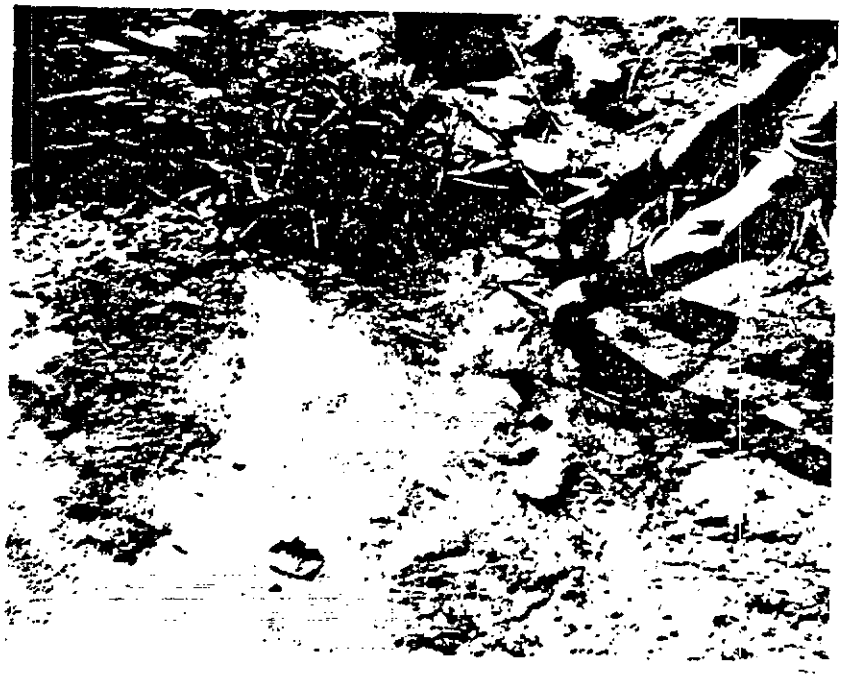

Photo 8 - Leachate on west side.

Photo 9 - Sediment on north edge.

F3 8305-45
27 July 1983
1006 hrs
Leckate v. Side
Michael J. Nalipinski
Michael Nalipinski

F3-8305-45
27 July 1983
1021 hrs
Sed N. Edge Standing H_2O
Michael Nalipinski
MCHAEL NALIPINSKI

AR100024

Photo 10 - Ponded water south edge.

Photo 11 - Drums - east edge of site.

F3-8305-45
27 July 1983
1031 hrs
Ponded H_2O ~~S. Sed~~ MTN S. Edge Ag & Sed.

Michael Nalepinski

Michael Nalepinski

F3-8305-45
27 July 1983
1036 hrs
Dam East Edge white

Michael Nalepinski

Michael Nalepinski

AR100026

TDD No. F3-8305-45

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VA	164

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
First Piedmont Rock Quarry	approx. 1/4 mile west of intersection 719 and Lawless Creek on the north edge of the road				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG. DIST.
south of Chatham	VA	24531	Pittsylvania		

09 COORDINATES: LATITUDE 79° 21' 05" | LONGITUDE 36° 39' 55"

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

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 07 / 27 / 83 (MONTH DAY YEAR)

02 SITE STATUS: ☐ ACTIVE ☒ INACTIVE

03 YEARS OF OPERATION: 1970 (BEGINNING YEAR) / 1972 (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
Michael Nalipinski	Environmental Scientist	NUS Corp.	(215) 687-9510

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO
Martin R. Howe	Geologsit/Hydrogeologist	NUS Corp.	(215) 687-9510
Jeffrey Case	Chemical Engineer	NUS Corp.	(215) 687-9510
Michael Cramer	Geologist	NUS Corp.	(215) 687-9510
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Ben Davenport	President First Piedmont		(804) 432-0211
Edward Clay	Vice President First Piedmont		(804) 432-0211
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	0930 hours	approximately 80°F. with winds at 10 mph and sunny

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
Darius Ostrauskas	EPA Region III	(215) 597-3435

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Michael Nalipinski	FIT III	NUS Corporation	(215) 687-9510	08 / 15 / 84 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

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EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VA	164

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: 7/27/83) — ☐ POTENTIAL — ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: app. 260
04 NARRATIVE DESCRIPTION

Approximately 260 people within a 1-mile radius are supplied by well water. FIT III sampling has shown low levels of chromium in home wells.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 7/27/83) — ☐ POTENTIAL — ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: unknown
04 NARRATIVE DESCRIPTION

FIT III sampling of 7/27/83 has shown potential off-site migration of lead.

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

No HNU readings were observed during the FIT inspection.

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

No

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE: 7/27/83) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: app. 260
04 NARRATIVE DESCRIPTION

FIT III did not observe any site security measures during the inspection.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE: 7/27/83) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: app. 5 (Acres)
04 NARRATIVE DESCRIPTION

Soil contamination results.

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 7/27/83) — ☐ POTENTIAL — ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: app. 260
04 NARRATIVE DESCRIPTION

The homes sampled during the FIT III inspection showed low levels of chromium.

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

N/A

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

unknown

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
VA	164

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
☐ A. NPDES				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify) County	unknown	1970	1972	closure order in 1972
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

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

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☒ H. OTHER None (Specify)

05 OTHER

☐ A. BUILDINGS ON SITE

No

06 AREA OF SITE

approx. 5 (Acres)

07 COMMENTS

Approximately 130 gal./wk. of liquid were disposed of at the First Piedmont site for a 54 week period. Also, micellaneous solid material was disposed of at the site.

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.

The only attempt to secure the landfill is an alleged 1 to 2 feet of clay cap installed in 1972. During the FIT III inspection, material was observed protruding above the cap.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☒ YES ☐ NO

02 COMMENTS

Waste was observed protruding above the cover material during the FIT III Inspection.

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

FIT III site inspection of July 27, 1983.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VA	164

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

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

02 PERMEABILITY OF BEDROCK (Check one)

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

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
est. 15 (ft)	>15 (ft)	4 to 5

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
44 (in)	4.1 (in)	app. 8 %	northwest	x 8 %

09 FLOOD POTENTIAL	10
SITE IS IN N/A YEAR FLOODPLAIN	No ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)		12 DISTANCE TO CRITICAL HABITAT (of endangered species)
ESTUARINE	OTHER	(mi)
A. N/A (mi)	B. (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. app. 5 (mi)	B. <1/4 (mi)	C. >1 (mi)	D. app. 1 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Prior to 1970, the site was a granite quarry located in a rural wooded area in south central Virginia. From 1970 to 1972 the site was a dump operated by the First Piedmont Corporation. The site is located on a wooded hill that slopes towards Lawless Creek.

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

FIT III site inspection on July 27, 1983

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VA	164

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
Mr. & Mrs. Richard Lacey Crompton		N/A	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**10 STREET ADDRESS** (P.O. Box, RFD #, etc.)	**11 SIC CODE**
Road No. I			
05 CITY / **06 STATE**	**07 ZIP CODE**	**12 CITY** / **13 STATE**	**14 ZIP CODE**
Blair / VA	24437		
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE
01 NAME	02 D+B NUMBER	08 NAME	09 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE
05 CITY / 06 STATE	07 ZIP CODE	12 CITY / 13 STATE	14 ZIP CODE

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

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

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

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

FIT III Interview with Ben Davenport of First Piedmont Corp. on July 27, 1983.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VA	164

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
Goodyear Tire & Rubber Co.			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
(closed plant late 1970s)			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Danville	VA				

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

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

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

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
First Piedmont Corporation			

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
P.O. Drawer 1069			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Chatham	VA	24531			

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

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

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

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

FIT III Interview with Ben Davenport of First Piedmont Corp., on July 27, 1983.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
VA	164

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☒ S. CAPPING/COVERING — 02 DATE 1970 — 03 AGENCY VA SWCB
04 DESCRIPTION
Approximately 1 to 2 feet of clay cap was installed.

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
No

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

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

FIT III Interview with Ben Davenport of First Piedmont Corp. on July 27, 1983.

EPA FORM 2070-13 (7-81)

TDD No. F3-8305-45

POTENTIAL HAZARDOUS WASTE SITE
IDENTIFICATION AND PRELIMINARY ASSESSMENT

REGION	SITE NUMBER (to be assigned by Hq)
III	VA-164

NOTE: This form is completed for each potential hazardous waste site to help set priorities for site inspection. The information submitted on this form is based on available records and may be updated on subsequent forms as a result of additional inquiries and on-site inspections.

GENERAL INSTRUCTIONS: Complete Sections I and III through X as completely as possible before Section II *(Preliminary Assessment)*. File this form in the Regional Hazardous Waste Log File and submit a copy to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force *(EN-335)*; 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: First Piedmont Rock Quarry

B. STREET *(or other identifier)*: P.O. Drawer 1069

C. CITY: Chatham

D. STATE: VA

E. ZIP CODE: 24531

F. COUNTY NAME: Pittsylvania

G. OWNER/OPERATOR *(if known)*

1. NAME: First Piedmont Corporation (operator)

2. TELEPHONE NUMBER: (804) 432-0211

H. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE ☐ 6. UNKNOWN

I. SITE DESCRIPTION

The site is an abandoned rock quarry that received domestic and industrial waste from 1970 to 1972.

J. HOW IDENTIFIED *(i.e., citizen's complaints, OSHA citations, etc.)*: Notification of Hazardous Waste Site EPA form 89001

K. DATE IDENTIFIED *(mo., day, & yr.)*: June 5, 1981

L. PRINCIPAL STATE CONTACT

1. NAME: James Saunders

2. TELEPHONE NUMBER: (804) 786-7073

II. PRELIMINARY ASSESSMENT *(complete this section last)*

A. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☒ 3. LOW ☐ 4. NONE ☐ 5. UNKNOWN

B. RECOMMENDATION

☐ 1. NO ACTION NEEDED *(no hazard)*

☐ 2. IMMEDIATE SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☐ 3. SITE INSPECTION NEEDED
a. TENTATIVELY SCHEDULED FOR:
b. WILL BE PERFORMED BY:

☒ 4. SITE INSPECTION NEEDED *(low priority)*

C. PREPARER INFORMATION

1. NAME: Eugene Dennis, Geologist

2. TELEPHONE NUMBER: (215) 687-9510

3. DATE *(mo., day, & yr.)*: 2/11/83

III. SITE INFORMATION

A. SITE STATUS

☐ 1. ACTIVE *(Those industrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)*

☒ 2. INACTIVE *(Those sites which no longer receive wastes.)*

☐ 3. OTHER *(specify)*: *(Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)*

B. IS GENERATOR ON SITE?

☒ 1. NO ☐ 2. YES *(specify generator's four-digit SIC Code)*:

C. AREA OF SITE *(in acres)*: approximately 4 acres

D. IF APPARENT SERIOUSNESS OF SITE IS HIGH, SPECIFY COORDINATES

1. LATITUDE *(deg.—min.—sec.)*: 79° 21' 5"

2. LONGITUDE *(deg.—min.—sec.)*: 36° 39' 55"

E. ARE THERE BUILDINGS ON THE SITE?

☒ 1. NO ☐ 2. YES *(specify)*: N/A

T2070-2 (10-79)

Continue On Reverse

Continued From Page 2

V. WASTE RELATED INFORMATION *(continued)*

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH MAY BE ON THE SITE *(place in descending order of hazard)*.

Non-specified solvents mixed with water, carbon black, and detergent.

4. ADDITIONAL COMMENTS OR NARRATIVE DESCRIPTION OF SITUATION KNOWN OR REPORTED TO EXIST AT THE SITE.

N/A

VI. HAZARD DESCRIPTION

A. TYPE OF HAZARD	B. POTENTIAL HAZARD *(mark 'X')*	C. ALLEGED INCIDENT *(mark 'X')*	D. DATE OF INCIDENT *(mo., day, yr.)*	E. REMARKS
1. NO HAZARD				
2. HUMAN HEALTH				
3. NON-WORKER INJURY/EXPOSURE				
4. WORKER INJURY				
5. CONTAMINATION OF WATER SUPPLY				
6. CONTAMINATION OF FOOD CHAIN				Disposal of unknown number of drums containing a mixture of solvents, water, carbon black, and detergent occurred over 10 years ago. The possibility of drums rupturing exists. Surface water drains into Lawless Creek.
7. CONTAMINATION OF GROUND WATER	X			
8. CONTAMINATION OF SURFACE WATER	X			
9. DAMAGE TO FLORA/FAUNA				
10. FISH KILL				
11. CONTAMINATION OF AIR				
12. NOTICEABLE ODORS				
13. CONTAMINATION OF SOIL				
14. PROPERTY DAMAGE				
15. FIRE OR EXPLOSION		X	1972	First Piedmont Corp. suspects the fire was ignited by spontaneous combustion and consisted of wood, tires, and other solid material. The fire reportedly burned for several hours.
16. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUIDS				
17. SEWER, STORM DRAIN PROBLEMS				
18. EROSION PROBLEMS				
19. INADEQUATE SECURITY				
20. INCOMPATIBLE WASTES				
21. MIDNIGHT DUMPING				
22. OTHER *(specify)*:				

AR100035

LANDFILLS SITE INSPECTION REPORT
(Supplemental Report)

INSTRUCTION
Answer and Explain as Necessary.

1. EVIDENCE OF SITE INSTABILITY (Erosion, Settling, Sink Holes, etc)
☐ YES ☐ NO Unknown

2. EVIDENCE OF IMPROPER DISPOSAL OF BULK LIQUIDS, SEMI-SOLIDS AND SLUDGES INTO THE LANDFILL
☒ YES ☐ NO Some drum protruding through cover material

3. CHECK RECORDS OF CELL LOCATION AND CONTENTS AND BENCHMARK
☐ YES ☐ NO
N/A

4. WASTES SURROUNDED BY SORBENT MATERIAL
☐ YES ☒ NO

5. DIVERSION STRUCTURES ARE EFFECTIVELY CONSTRUCTED AND PROPERLY MAINTAINED
☐ YES ☒ NO

6. EVIDENCE OF PONDING OF WATER ON SITE
☒ YES ☐ NO
Ponding on edges of quarry walls

7. EVIDENCE OF IMPROPER/INADEQUATE DRAINING
☒ YES ☐ NO Ponding on edges of quarry walls

8. ADEQUATE LEACHATE COLLECTION SYSTEM (If "Yes", specify Type)
☐ YES ☒ NO

8a. SURFACE LEACHATE SPRING
☒ YES ☐ NO Near north edge of the site

9. RECORDS OF LEACHATE ANALYSIS
☐ YES ☒ NO

10. GAS MONITORING
☐ YES ☒ NO

11. GROUNDWATER MONITORING WELLS
☐ YES ☒ NO

12. ARTIFICIAL MEMBRANE LINER INSTALLED
☐ YES ☒ NO

13. SPECIFIC CONTAINMENT MEASURES (Clay Bottom, Sides, etc)
☐ YES ☒ NO

14. FIXATION (Stabilization) OF WASTE
☐ YES ☒ NO

15. ADEQUATE CLOSURE OF INACTIVE PORTION OF FACILITY
☒ YES ☐ NO Some surface erosion, no vegetation, surface runoff leaving the site, ponding

16. COVER (Type)

Clayey soils from a borrow area

16a. THICKNESS

1 to 2 feet

16b. PERMEABILITY

Unknown

16c. DAILY APPLICATION
☐ YES ☒ NO

The site is closed

AR100036

SECTION 6

6.0 LABORATORY DATA

6.1 Sample Data Summary

AR100038

TDD Number F3-8305-45

EPA Number VA 164

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name First Piedmont

Date of Sample July 27, 1983

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Acenaphthene	N-nitrosodiphenylamine	bis (2-ethylhexyl) phthalate	benzyl butyl phthalate	di-n-butyl phthalate	di-n-octyl phthalate	Benzene	1,1,1 trichloroethane	Chloroform	Methylene chloride	Fluorotrichloromethane	Tetrachloroethene	Toluene	Remarks
c3747	Lewis Well	Aq	µg/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
c3748	Windbush Well	Aq	µg/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
c3749	N. Edge Soil #1	sed	µg/kg	—	—	—	—	—	—	—	<4.5	—	16.5 ◇	12.4	—	—	
c3750	Ponded N. Edge	Aq	µg/l	—	—	—	—	—	—	<7.2 ◇	—	—	114 ◇	—	—	—	
c3751	Motly Well	Aq	µg/l	—	—	—	—	—	—	—	—	—	20 ◇	—	—	—	
c3752	Leachate W. Side	sed	µg/kg	—	<400	—	—	<400 ◇	—	—	—	—	4.5 ◇	—	—	—	
c3753	N. Edge Sed Pond	Sed	µg/kg	<400	—	<400 ◇	<400 ◇	<400 ◇	—	—	—	—	126 ◇	—	<4.5	—	
c3754	Ponded H_2O S. Edge	Aq	µg/l	—	—	40	<10 ◇	<10 ◇	<10 ◇	—	—	—	—	—	—	—	
c3755	Ponded H_2O S. Edge	sed	µg/kg	—	—	—	—	—	—	—	—	—	—	—	—	—	
c3273	Drum E. White	sed	µg/kg	—	—	—	—	<20,000 ◇	—	—	<4.5	—	9.1 ◇	<4.5	—	—	
c3274	Downstream	Aq	µg/l	—	—	—	—	—	—	—	—	—	4.5 ◇	—	—	—	
c3275	Downstream	sed	µg/kg	—	—	—	—	—	—	—	—	—	7.0 ◇	—	—	—	
c3760	Upstream	Aq	µg/l	—	—	—	—	—	—	—	—	—	10 ◇	—	—	—	
c3759	Upstream	sed	µg/kg	—	—	—	—	—	—	—	—	—	4.5 ◇	—	—	—	

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.

AR100039

TDD Number F3-8305-45
EPA Number VA 164

SAMPLE ANALYSIS SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name First Piedmont
Date of Sample July 27, 1983

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	α Endosulfan	β Endosulfan	heptachlor	α BHC	Benzoic Acid	Aniline	Acetone	2-butanone	methyl chloride	4-methyl-2-pentanone				Remarks
c3747	Lewis Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—			
c3748	Windbush Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—			
c3749	N. Edge Sed #1	sed	ug/kg	—	—	—	—	<800	—	5.8 ◇	—	—	—	—			
c3750	Ponded N. Edge	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—			
c3751	Motly Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—			
c3752	Leachate W. Side	sed	ug/kg	—	—	—	—	—	—	15.5 ◇	—	—	—	—			
c3753	N. Edge Sed Pond	Aq	ug/l	—	—	—	—	—	—	59.0 ◇	—	—	—	—			
c3754	Ponded H_2O S. Edge	Aq	ug/l	0.005 ◇	<0.0004 ◇	0.016 ◇	0.036 ◇	—	—	—	—	—	—	—			
	Ponded H_2O S. Edge	sed	ug/kg	—	—	—	—	—	—	—	—	—	—	—			
	Drum E. White	sed	ug/kg	—	—	—	—	—	—	41.6 ◇	<4.5 ◇	—	—	—			
	Downstream	Aq	ug/l	—	—	—	—	—	—	20.7 ◇	—	—	—	—			
c3275	Downstream	sed	ug/kg	—	—	—	—	—	—	4.7 ◇	4.5 ◇	—	16.4	—			
c3760	Upstream	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—			
c3759	Upstream	sed	ug/kg	—	—	—	—	—	—	4.5 ◇	4.5 ◇	—	—	—			

AR100040

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

◇ De[illegible] results of questionable qualitative significance based upon quality assura[illegible]eview of data.

TDD Number F3-8305-45

EPA Number VA 164

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name First Piedmont

Date of Sample July 27, 1983

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	ACENAPHENE	N-nitrosodiphenyl-AMINE	bis (2-ethylhexyl) phthalate	benzyl butyl phthalate	di-N-butyl phthalate	di-N-octyl phthalate	BENZENE	1,1,1 trichloro ETHANE	chloroform	methylene chloride	fluoro trichloro methane	tetrachloro ETHENE	toluene	Remarks
c3758	Carter Well	Aq	ug/l	—	—	—	—	—	—	—	—	—	—	—	—	—	
c3276	Drum Black	sed	ug/kg	—	—	—	—	—	—	—	7.4	—	—	26.2	—	<4.5	
c3757	Blank	sed	ug/kg	—	—	—	—	—	—	—	—	—	—	—	—	—	
c3756	Blank	Aq	ug/l	—	—	—	—	—	—	—	—	<4.5	—	—	—	—	

AR100041

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 F3-8305-45
EPA Number VA 164

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name First Piedmont
Date of Sample July 27, 1983

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	α Endosulfan	β Endosulfan	heptaclor	α BHC	Benzoic Acid	Aniline	Acetone	2-butanone	Methylchloride	4-methyl-2-pentanone				Remarks
c3758	Carter Well	Aq	ug/l	—	—	—	—	—	—	—	—	396 ◇	—	—			
c3276	Drum Black	sed	ug/kg	—	—	—	—	—	<100,000	17.1 ◇	<4.5 ◇	67.3 ◇	75.6	—			
c3757	Blank	sed	ug/kg	—	—	—	—	—	—	15.7	<4.5	696	—	—			
c3756	Blank	Aq	ug/l	—	—	—	—	—	—	12	—	360	—	—			

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

◇ Den[illegible]esults of questionable qualitative significance based upon quality assuran[illegible]eview of data.

AR100042

TDD Number 8305-45
EPA Number VA 164

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name First Piedmont
Date of Sample 7-27-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Chromium	Barium	Beryllium	Cobalt	Copper	Iron	Nickel	Manganese	Zinc	Boron	Vanadium	Silver	Remarks
MC1005	Lewis Well	Aq	ug/l	—	—	—	—	—	88◇	108◇	—	40◇	203◇	—	—	—	
MC1006	Windbush Well	Aq	ug/l	—	15	—	—	—	—	—	—	—	386	—	—	—	
MC1007	N. Edge Soil Mg	Solid	mg/kg	20,900	16.7	47.8	1.7	3.3	9.9	12,500	7.3	177	38.2	—	16.7	—	
MC1008	Ponded N. Edge	Aq	ug/l	678,000	58	7460	13◇	—	134◇	433000	59	6570	4670	46700	—	—	
MC1009	Motley Well	Aq	ug/l	—	64	—	—	50	—	173◇	—	—	11◇	—	—	—	
MC1010	Leachate W. Side	Solid	mg/kg	4750	5.7	37.8	0.6◇	—	9.1	6550	2.2	152	106	78.5	10	—	
MC1011	N. Edge Seep and	Solid	mg/kg	9800	3.8	39.1	1.0◇	—	6.0◇	6850	3.3	91	28.7	15.7	—	—	
MC1012	Ponded H_2O S. Edge	Aq	ug/l	1020	—	—	—	—	—	2640	—	2910	48◇	176	—	—	
MC1013	Ponded H_2O S. Edge	Solid	mg/kg	18200	—	20.8	0.7◇	29.9	8◇	6900	5.7	62	15.9	—	20.4	—	
MC1014	Dam E. side	Solid	mg/kg	17600	10.9	23.2	—	—	30.1	3610	5.7	15.5	223	5.5	21.4	—	
MC1015	Downstream	Aq	ug/l	1580	—	—	—	—	—	1880	—	150	29◇	—	—	—	
MC1016	Downstream	Solid	mg/kg	3490	13.5	15.4	—	2.7	7.9◇	6100	3.8	140	19.3	—	15.9	—	
MC1017	Upstream	Aq	ug/l	1270	—	—	—	—	—	1390	—	71	24◇	—	—	—	
MC1018	Upstream	Solid	mg/kg	4610	20.9	16.9	0.4◇	2.6	2.6◇	7150	3.2	159	10.7◇	—	15.3	—	

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.

AR100045

TDD Number 8305-45
EPA Number VA 164

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name First Piedmont
Date of Sample 7-27-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Aluminum	Chromium	Barium	Beryllium	Cobalt	Copper	Iron	Nickel	Manganese	Zinc	Boron	Vanadium	Silver	Remarks
mc1019	Crater Well	Aq	ug/l	127 ◇	52	—	—	—	—	137 ◇	—	11 ◇	82 ◇	—	—	—	
mc 1020	Drum Black	Solid	mg/kg	1530	60	40.7	0.4 ◇	9.6	550	13400	17.1	60	1240	—	23.1	—	
mc 1021	Blank	Solid	mg/kg	—	—	—	—	—	—	4.2	—	0.5	—	—	—	—	
mc 1022	Blank	Aq	ug/l	—	—	—	—	—	—	—	—	—	39	—	—	—	

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

AR100044

TDD Number 8335-45
EPA Number VA 164

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name First Piedmont
Date of Sample 7-27-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Arsenic	Antimony	Selenium	Thallium	Mercury	Tin	Cadmium	Lead	Cyanide					Remarks
MC 1005	Lewis Well	Aq	ug/l	—	—	—	—	0.3◇	—	—	38.5	—					
MC 1006	Windbush Well	Aq	ug/l	—	—	—	—	0.3◇	—	—	13◇	—					
MC 1007	N. Edge Soil #1	Solid	mg/kg	0.95	—	—	—	—	—	0.08◇	19.8	—					
MC 1008	Ponded N. Edge	Aq	ug/l	80	—	—	—	0.3◇	45◇	—	900	—					
MC 1009	Motley Well	Aq	ug/l	—	—	—	—	0.3◇	100	—	—	—					
MC 1010	Leachate W. Side	Solid	mg/kg	2.2	—	—	—	0.5◇	1.4◇	0.23	63.5	—					
MC 1011	N. Edge Sed. Pond	Solid	mg/kg	0.8◇	—	—	—	—	—	—	12.9	—					
MC 1012	Ponded Water S. Edge	Aq	ug/l	—	—	—	—	—	—	—	—	—					
MC 1013	Ponded Water S. Edge	Solid	mg/kg	1.3	—	—	—	0.1◇	—	—	13	—					
MC 1014	Drum E. White	Solid	mg/kg	1.0	—	0.5◇	—	—	—	—	54	—					
MC 1015	Downstream	Aq	ug/l	—	—	—	—	0.2◇	—	—	26.5	—					
MC 1016	Downstream	Solid	mg/kg	—	—	—	—	—	—	—	8	—					
MC 1017	Upstream	Aq	ug/l	—	—	—	—	0.2◇	—	—	—	—					
MC 1018	Upstream	Solid	mg/kg	0.5◇	—	—	—	—	—	—	7.4	—					

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.

AR100045

TDD Number 8305-45
EPA Number VA 164

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name First Piedmont
Date of Sample 7-27-83

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Arsenic	Antimony	Selenium	Thallium	Mercury	Tin	Cadmium	Lead	Cyanide					Remarks
MC1014	Carter Well	Aq	ug/l	—	—	—	—	—	38[D]	—	—	—					
MC1020	Drum Blank	Solid	mg/kg	1.0	—	0.2[D]	—	—	—	0.2	208	—					
MC1021	Blank	Solid	mg/kg	—	—	—	—	0.1	—	—	—	—					
MC1022	Blank	Aq	ug/l	—	—	—	—	0.2	—	—	—	—					

NOTE: [illegible] a review of this data and non-target, tentatively identified compounds, ple[illegible]ee the Analytical Quality Assurance section of this report.

AR100046

6.2 Quality Assurance Review

6.2.1 Organic Data: Lab Case 1915

6.2.1.1 Introduction

The findings offered in this report are based upon a general review of organic analytical data for 18 samples; 9 aqueous samples were sent to Lauck's Laboratories and 9 sediment samples were sent to ETC Laboratories. In particular, blank analysis results, surrogate spike results, matrix spike results, duplicate analysis results, evaluation of GC confirmations, and target compound matching quality were examined in detail.

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, 2-butanone, benzene, benzylbutyl phthalate, di-n-butyl phthalate, di-n-octyl phthalate, alpha-endosulfan, beta-endosulfan, heptachlor, and alpha-BHC may be questionable.

- The positive result for bis(2-ethylhexyl) phthalate in sample C-3753 may be 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 significantly greater than the levels report cannot be present.

- The actual detection limits for 2,4-dinitrotoluene, pentachlorophenol, and 4-nitrophenol in sample C-3753 may be significantly higher than reported.

- The actual detection limit for all BNA compounds in sample C-3749 may be slightly higher than reported.

- The actual detection limit of some acid compounds in sample C-3759 may be significantly higher than reported.

- The concentrations of qualitatively confident VOA compounds in sample C-3276 may be slightly different than reported.

- The following compounds may be present as reported but cannot be verified until additional information has been received:

Sample	Compound
C-3749	1,1,1-trichloroethane
	Benzoic acid
C-3753	Acenaphthene
	Tetrachloroethene
C-3273	1,1,1-trichloroethane
C-3276	Toluene
	Aniline

- Per EPA request, tentatively identified compounds which were reported by the laboratory are not included in this report.

6.2.1.3 Findings

- Blank analysis revealed the presence of methylene chloride, acetone, 2-butanone, and benzene at sufficient levels to question the aforementioned sample results.

- Although not found in any blanks, bis(2-ethylhexyl) phthalate, benzylbutyl phthalate, di-n-butyl phthalate, and di-n-octyl phthalate results were questioned because these compounds are common laboratory contaminants and were detected in samples at less than detection limits.

- Alpha-endosulfan, beta-endosulfan, heptachlor, and alpha-BHC may be artifacts of random chromatographic interferences since these compounds were identified from the retention times of their single peak responses on dual GC columns.

- Zero matrix spike recoveries were reported for 2,4-dinitrotoluene, pentachlorophenol, and 4-nitrophenol in sample C-3753.

- Low spike recoveries were reported for all BNA surrogate compounds in sample C-3749.

- Zero recovery was reported for 1 acid fraction surrogate compound in sample C-3759.

- A 1/3 decrease in response was reported for all 3 VOA internal standard response areas in sample C-3276. Since these internal standards were used to quantitate sample values, the actual concentrations may be slightly different than reported.

- The laboratory did not provide any spectra for positive results for 1,1,1-trichloroethane and benzoic acid in sample C-3749, acenaphthene and tetrachloroethene in sample C-3753, 1,1,1-trichloroethane in sample C-3273, and toluene and aniline in sample C-3276. At the time of submission of the data package, the laboratory misinterpreted the contractual requirement for inclusion of these spectra, since the reported values were all less than detection limits.

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

6.2.1.4 Summary

The attached Quality Assurance Review has identified the aforementioned areas of concern. The analysis laboratory has been requested to supply the missing spectra, but these results have not yet been received. Please see the accompanying Support Documentation Appendix for specifics of this Quality Assurance Review.

Report prepared by R. Joseph Vitale R. Joseph Vitale Date: May 15, 1984

6.2.2 Inorganic Data: Lab Case 1915

6.2.2.1 Introduction

The findings offered in this report are based on a general review of all available inorganic laboratory data, blank analysis results, matrix spike and duplicate results, calibration data, and ICP interference data.

6.2.2.2 Qualifiers

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

- The results which may be qualitatively questionable are listed below:

Constituent	Samples with Questionable Results
Aluminum	MC-1019
Beryllium	All positive results except MC-1007
Copper	MC-1005, MC-1008, MC-1011, MC-1013, MC-1016 and MC-1018
Iron	MC-1005, MC1009 and MC-1019
Manganese	MC-1005 and MC-1019
Zinc	MC-1005, MC-1009, MC-1012, MC-1015, MC-1017, MC-1018 and MC-1019
Arsenic	MC-1011 and MC-1018
Selenium	MC-1020 and MC-1014
Mercury	All positive results
Tin	MC-1008, MC-1010 and MC-1019
Cadmium	MC-1007
Lead	MC-1006

- 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 significantly greater than the levels report cannot be present.

- The actual detection limit for selenium may be approximately twice the reported level.

6.2.2.3 Findings

- Analysis of field and/or laboratory preparation blanks revealed the presence of aluminum, beryllium, copper, iron, manganese, zinc, arsenic, selenium, mercury, tin, cadmium and lead at sufficient levels to question the results for the aforementioned samples.

- Examination of raw data revealed the laboratory could not adequately detect concentrations of selenium at reported detection limits.

6.2.2.3 Summary

The attached Quality Assurance Review has identified severe blank contamination and inadequate detection limits as the primary areas of concern. In particular, the source of blank contamination appears to be laboratory related since most of the contaminants found in the field blanks were also detected at similar levels in laboratory preparation blanks. Please see the accompanying Support Documentation Appendix for specifics on this Quality Assurance Review.

Report prepared by R. Joseph Vitale R. Joseph Vitale Date: May 15, 1984

SECTION 7

7.0 TOXICOLOGICAL EVALUATION

7.1 Summary

Domestic well samples revealed concentrations of chromium in the Carter and Motley wells of 52 and 64 ug/l, respectively, in excess of Primary MCLs. Ponded water on site also revealed the presence of 58 ug/l chromium. Available information suggests that these levels of chromium pose minimal short term risks to members of the Carter and Motley households; however, periodic resampling of these wells may be indicated to insure that contaminant levels do not approach those of more imminent concern.

The Lewis well sample revealed lead within MCLs; notable lead concentrations were also reported in samples of ponded water, leachate seep, and downstream Lawless Creek. These sample results may suggest off-site release of lead.

Remaining sample results revealed little to warrant concern. No HNU readings above background were recorded on the First Piedmont site.

7.2 Support Data

Samples from 4 domestic wells, located south of the First Piedmont site, revealed 52 and 64 ug/l of total chromium in the Carter and Motley wells, respectively. These reported concentrations exceed the Primary Maximum Contaminant Levels (MCL) of 50 ug/l set for chromium in public water supplies. An aqueous sample from an area of ponded water on site revealed 58 ug/l chromium. Any relationship between chromium reported in ponded water samples and domestic wells is not readily apparent from current data.

The nature of chromium in these well samples (chromium III or VI) cannot be ascertained from current data. Although hexavalent chromium has long been recognized as a toxic substance, trivalent chromium is considered by most investigators to be relatively innocuous and even essential to human health in microgram amounts. It has even been suggested tha the average American diet may be potentially deficient in chromium (daily intake averages 60 to 65 ug/day).

Hexavalent chromium is a human carcinogen and increased risk of lung cancer among those occupationally exposed to airborne chromium VI has been established. There is no conclusive evidence, however, to indicate that ingestion of low levels of chromium is carcinogenic to humans. Chromium is also poorly absorbed from the gastrointestinal tract. A family of 4 individuals is known to have drunk water containing as much as 450 ug Cr per liter for a period of 3 years without known effects on health, as determined by a single medical examination (Davids and Lieber, 1951).

The weight of evidence from animal studies also suggests no carcinogenic response from ingested chromium. Limited studies indicate that toxic hexavalent chromium was tolerated in low concentrations, especially when ingested in food or drinking water, in which the limited absorption is a factor. Rats have tolerated hexavalent chromium in drinking water at 25,000 ug/l for one year and dogs showed no ill effects following exposure to 450 to 11,200 ug potassium chromate (Cr VI) per liter for 4 years (NAS, 1974). A study done by Schroeder and Mitchner (1971) has, however, indicated a slightly higher incidence of malignant tumors in mice dosed with 5,000 ug/l chromium VI in drinking water over a lifetime.

The extent to which ingested chromium VI may induce cancer is, therefore, not clear since it has not been well tested via the oral route, and since there is also some evidence that chromium VI is reduced to chromium III in the stomach. As a result of these uncertainties, no quantitative risk estimates of oral carcinogenicity can be determined for consumers of water from the Carter and Motley wells. Available studies do suggest that any potential risk (if it exists) would be low.

Available evidence also suggests that no acute non-carcinogenic effects would be expected to occur following consumption of water containing the concentrations of chormium reported in these wells. However, considering the unknown nature of chromium in the Carter and Motley wells, periodic resampling or sampling specific for chromium VI may be indicated to insure contaminant levels do not approach those of more imminent concern.

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The Lewis well sample revealed a low level of the toxic metal lead (38.5 ug/l). This concentration is below the MCL for lead of 50 ug/l, and should not pose an imminent health threat. Periodic resampling to insure that contaminant concentrations stay within a safe range may also be indicated in this case.

Lead concentrations reported in a number of samples taken on the First Piedmont site and in nearby surface waters are also worthy of note. An aqueous sample from an area of ponded water on site revealed 900 ug/l lead. A nearby leachate seep sediment sample revealed 63.5 mg/kg of this toxic metal. The origin of this ponded water cannot be determined from current information; however, it apparently drains into nearby Lawless Creek which supports a variety of aquatic species. An aqueous sample of Lawless Creek taken downstream of the drainage outfall revealed 26.5 ug/l lead, exceeding the recommended Ambient Water Quality Criterion (AWQC) for lead of 0.75 ug/l in soft water (50 mg/l as $CaCO_3$). An aqueous sample from Lawless Creek taken upstream of the drainage outfall revealed no lead above analytical detection limits of 5 ug/l. Concentrations of lead reported in up and downstream creek sediment samples were 7.4 to 8.0 mg/kg, below average values generally reported in non-polluted soils (15 mg/kg). Current sample results may suggest off-site release of lead, with potentially deleterious effects on some resident aquatic species.

Up and downstream aqueous creek samples revealed 1390 and 1880 ug/l iron, respectively, exceeding the recommended AWQC for the protection of freshwater aquatic life of 1,000 ug/l. Elevated concentrations of iron were reported in both ponded water samples, including 423,000 ug/l in the northernmost ponded water sample, which is believed to drain into Lawless Creek. It is not clear from currently available sample data whether the slightly higher iron concentration reported in the downstream sample represents off-site release of this contaminant or is indicative of a range of iron concentrations that may be characteristic of surface waters in the area.

Trace levels of the highly bioaccumulative metal mercury were reported in several aqueous and solid samples, but were reported at comparable levels in both aqueous and solid blanks. The reported presence of mercury in these samples may, therefore, be questionable.

AR100055

Remaining sample results from domestic wells, the First Piedmont site, and Lawless Creek revealed little to warrant concern. Low levels of organic parameters such as 1,1,1-trichloroethane, fluorotrichloroethane, tetrachloroethene, and bis(2-ethylhexyl) phthalate were reported in various soil and sediment samples; however, they should pose little threat to human health or the environment via expected exposure routes.

Samples from two deteriorating drums on site revealed few contaminants of note. Trace or low levels (all 100 mg/kg or less) of the low to moderately toxic halogenated hydrocarbons 1,1,1-trichloroethane and fluorotrichloromethane, and aniline were reported. A higher concentration of the toxic metal lead (208 mg/kg) was reported in one drum sample. Potential hazards to human health and the environment posed by toxic contaminants such as aniline and lead are limited in this case by the small quantities reported.

No ambient air HNU readings above background levels were obtained on the First Piedmont site.

Elizabeth A. Quinn, Toxicologist

AR100056

APPENDIX A

1. COST CENTER:	REM/FIT ZONE CONTRACT TECHNICAL DIRECTIVE DOCUMENT (TDD)	2. NO.:
ACCOUNT NO.:		F3-8305-45

3. PRIORITY:	4. ESTIMATE OF TECHNICAL HOURS:	5. EPA SITE ID:	6. COMPLETION DATE:	7. REFERENCE INFO.:
☐ HIGH ☒ MEDIUM ☐ LOW	120 w/o HRS 140 with HRS	VA-164	2months after site visit not to exceed 9/30/83	☐ YES ☒ NO ☐ ATTACHED ☐ PICK UP
	4A. ESTIMATE OF SUBCONTRACT COST:	5A. EPA SITE NAME: First Piedmont		

8. GENERAL TASK DESCRIPTION:

Conduct a site inspection and HRS as necessary.

9. SPECIFIC ELEMENTS:

1. Review P.A. prepared by NUS FIT III.
2. Prepare a sampling plan and submit to EPA for approval.
3. Coordinate site activities with state.
4. Conduct on-site sampling and inspection and off-site sampling as appropriate.
5. Coordinate lab needs thru VIAR.
6. Follow chain of custody.
7. Submit formal report.

10. INTERIM DEADLINES:

11. DESIRED REPORT FORM: FORMAL REPORT ☒ LETTER REPORT ☐ FORMAL BRIEFING ☐

OTHER (SPECIFY):

12. COMMENTS: If no HRS - 120 hours.

13. AUTHORIZING RPO: Linda Y. Boonazian (SIGNATURE)

14. DATE: 3/17/83

15. RECEIVED BY: ☒ ACCEPTED ☐ ACCEPTED WITH EXCEPTIONS ☐ REJECTED

Donald Smith (CONTRACTOR RPM SIGNATURE)

AR100058

16. DATE: 6/13/83

APPENDIX B

APPENDIX C

FEDERALLY LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES IN VIRGINIA (Cont'd)

Common Name	Scientific Name	Status	Distribution
MOLLUSKS:			
Snail, Virginia fringed mountain	Polygyriscus virginianus	E	Pulaski County, near Radford
Mussel, birdwing pearly	Conradilla caelata	E	Powell and Clinch Rivers - Lee, Russell, Scott and Wise Counties
Mussel, dromedary pearly	Dromus dromas	E	Powell River - Lee County
Mussel, green blossom pearly	Epioblasma (=Dysnomia) torulosa gubernaculum	E	Clinch River - Scott County
Mussel, tan riffle	Epioblasma walkeri	E	Middle Fork Holston River above South Holston impoundment; Smyth and Washington Counties
Mussel, fine-rayed	Fusconaia cuneolus	E	Clinch River - Tazewell, Russell, Scott, and Wise Counties
Mussel, shiny pigtoe	Fusconaia edgariana	E	Powell, Clinch and Holston Rivers - Tazewell, Russell, Scott, Wise, Lee, Washington and Smyth Counties
Mussel, Cumberland monkey-face pearly	Quadrula intermedia	E	Powell River - Lee County
Mussel, Appalachian monkey-face pearly	Quadrula sparsa	E	Powell River - Lee County
ARTHROPODS:			
Isopod, Madison Cave	Antrolana lira	PT	Augusta County
PLANTS:			
Birch, Ashe's	Betula uber	E	Cressy Creek - Smyth Co.
Pogonia, small whorled	Isotria medeoloides	PE	Buckingham, Gloucester, James City and New Kent Counties

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service.

E = endangered, T = threatened, PE = proposed endangered, PT = proposed threatened.

DAO - 8/3/81 - 3 pp.

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FEDERALLY LISTED AND PROPOSED ENDANGERED AND THEATENED SPECIES IN VIRGINIA (Cont'd)

Common Name	Scientific Name	Status	Distribution
Turtle, loggerhead*	Caretta caretta	T	Oceanic summer resident coastal waters; rarely nests: Virginia Beach, Northhampton and Accomack Counties
Turtle, Atlantic ridley*	Lepidochelys kempii	E	Oceanic summer resident coastal waters, including Chesapeake Bay
BIRDS:			
Eagle, bald	Haliaeetus leucocephalus	E	Entire state - breeds in eastern counties
Falcon, American peregrine	Falco peregrinus anatum	E	Entire state - re-establishment of breeding population to coastal sites
Falcon, Arctic peregrine	Falco peregrinus tundrius	E	Entire state-migratory; concentration areas along coast
Pelican, brown	Pelecanus occidentalis	E	Occasional summer visitor coastal counties
Warbler, Bachman's	Vermivora bachmanii	E	Extremely rare - no recorded nesting
Warbler, Kirtland's	Dendroica kirtlandii	E	Entire state - occasional migrant
Woodpecker, red-cockaded	Picoides borealis	E	Brunswick, Isle of Wight, Prince George, Southampton, Suffolk, Surry, Sussex, and Virginia Beach Counties
MAMMALS:			
Bat, gray	Myotis grisescens	E	Lee and Scott Counties
Bat, Indiana	Myotis sodalis	E	Nine western counties
Bat, Virginia big-eared	Plecotus townsendii	E	Bath, Highland, Rockingham and Tazewell Counties
Cougar, eastern	Felis concolor cougar	E	Entire state - continued existence unconfirmed
Squirrel, Delmarva Peninsula fox	Sciurus niger cinereus	E	Accomack County
Whale, blue*	Balaenoptera musculus	E	Oceanic
Whale, finback*	Balaenoptera physalus	E	Oceanic
Whale, humpback*	Megaptera novaeangliae	E	Oceanic
Whale, right*	Eubalaena spp. (all species)	E	Oceanic
Whale, sei*	Balaenoptera borealis	E	Oceanic
Whale, sperm*	Physeter catodon	E	Oceanic

AR100062

FEDERALLY LISTED AND PROPOSED ENDANGERED AND THREATENED SPECIES
IN VIRGINIA

Common Name	Scientific Name	Status	Distribution
FISHES:			
Chub, slender	Hybopsis cahni	T	Powell and Clinch Rivers - Lee and Scott Counties; critical habitat: Powell River, main channel from the Tennessee-Virginia State line upstream through Lee County; Clinch River, TN-VA State line upstream through Scott County.
Chub, spotfin	Hybopsis monacha	T	North Fork Holston River - Scott and Washington Counties; critical habitat: North Fork Holston River main channel from the Virginia-Tennessee State line upstream through Scott and Washington Counties.
Madtom, yellowfin	Noturus flavipinnis	T	Powell River, Copper Creek - Lee, Scott, and Russell Counties; critical habitat: Powell River, main channel from the Virginia-Tennessee State line upstream through Lee County. Copper Creek main channel from its junction with Clinch River upstream through Scott County and upstream in Russell County to Dickensonvill
Sturgeon, shortnose*	Acipenser brevirostrum	E	Atlantic coastal rivers
REPTILES:			
Turtle, green*	Chelonia mydas	T	Oceanic summer visitor coastal waters, including Chesapeake Bay
Turtle, hawksbill*	Eretmochelys imbricata	E	Oceanic summer visitor coastal waters, including Chesapeake Bay
Turtle, leatherback*	Dermochelys coriacea	E	Oceanic summer visitor coastal, waters, including Chesapeake Bay

APPENDIX D

PROJECT NAME: First Piedmont
TDD NO: F3-8305-45

EPA SITE NO.: VA 164
REGION: E, T III

QUALITY ASSURANCE REVIEW OF ORGANIC ANALYSIS LAB DATA PACKAGE

Case No.: 1915
Contract No.: 68-01-6766
Contract Laboratory: ETC
Applicable IFB No.: WA 83-A063
Reviewer: Rock J Vitale
Review Date: 5/8/84

Applicable Sample No's.: C3749, C3752, C3753, C3755, C3273, C3275, C3759, C3276, C3757

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)	✓ #1,4,5	✓ 2,3	✓ 2,3,5,6,		
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 (NOT SUPPLIED WITH BNA method blank.)
- ● SURROGATE SPIKE RESULTS
- ● MATRIX SPIKE RESULTS
- ● DUPLICATE ANALYSIS RESULTS
- ○ EVALUATION OF CONFIRMATIONS
- ‡ ● QUANTITATIVE CALCULATIONS
- ◐ TARGET COMPOUND MATCHING QUALITY (Laboratory has not provided spectra for less than values)
- ○ TENTATIVELY IDENTIFIED COMPOUNDS
- ◒ CHROMATOGRAPHIC SENSITIVITY CHECKS
- ◒ DFTPP AND BFB SPECTRUM TUNE RESULTS
- ◒ STANDARDS
- ◒ 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 analysis documentation
#2 Please see matrix spike recovery documentation
#3 Please see surrogate spike recovery documentation
#4 Chromatographic sensitive observed
#5 All reported values with "less than" notation were not supplied with spectra.
#6 Phthalates reported at "less than" values are questioned since these are common lab contaminants

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/SOIL	LO/SOIL	LO/SOIL	LO/SOIL	LO/SOIL	LO/SOIL	LO/SOIL	LO/SOIL	LO/SOIL			
FRACTION	TRAFFIC REPORT #	C3749	C3752	C3753	C3755	C3273	C3275	C3759	C3276	C3757			
	LAB I.D. #	C8353	C8354	C8355	C8356	C8357	C8358	C8359	C8360	C8361			
BNA :	RUN DATE/TIME (FRN)	✓	—	—	—	—	—	—	—	—			
	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	MS	✓	MS	✓	MS	✓	✓	MS	✓			
	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.	✓	—	—	—	—	—	—	—	—			
	Chromatograms: Calib. Chk.	✓	—	—	—	—	—	—	—	—			
	Chromatograms: 3-Pt. Calib.	MS	—	—	—	—	—	—	—	—			
	LINEARITY: 3-PT. CALIB	✓	—	—	—	—	—	—	—	—			
	RF COMPARISON	✓	—	—	—	—	—	—	—	—			
	SAMPLE/FIELD BLANK									✓			
	METHOD/INSTR. BLANK	—	MISSING	—	—	—	—	—	—	—			
	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.	N/A	—	—	—	—	—	—	—	—			
	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									✓			

DATA COMPLETENESS	CONC./MATRIX	w/soil	w/soil	w/soil	w/soil	w/soil	w/soil	w/soil	w/soil	w/soil	BLK
FRACTION	TRAFFIC REPORT #	C3149	C3152	C3153	C3155	C3273	C3275	C3279	C3276	C3757	
	LAB I.D. #	C8353	C8354	C8355	C8356	C8357	C8358	C8359	C8360	C8361	↓
VOA :	RUN DATE/TIME FRN	✓									
	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	MS	✓	MS	✓	MS	✓	✓	MS		
	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.	✓									
	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:

→ No BNA instrument or reagent blank analysis was run or supplied

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	* or [number]	See footnote
F	Data item outside established control limits	XX/XX/XX XX:XX	Date/Time of run (calibration, etc.)
MS	Missing item		

RUN CHRONICLE

FRACTION: VOA			FRACTION: BNA			FRACTION:		
RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME
(1)	FRN-11032-BFB	11032		DFTPP	6524			
	BFB	11052		DFTPP	6607			
(2)	BLK	11033		DFTPP	6627			
(E)	SPIKE All compounds	11063		SPIKE All compounds	6537			
(F)	SPIKE All compounds	11064		SPIKE All compounds	6538			
(3)	STD	11034		STD	6609			
(7)	C3273	11040		STD	6628			
(C)	C3275	11061		STD	6536			
(B)	C3276	11060		C3773	6619			
(6)	C3749	11039		C3275	6540			
(4)	C3752	11037		C3276	6620			
(8)	C3753	11041		C3749	6546			
(5)	C3755	11038		C3752	6544			
(A)	C3757	11059		C3753	6543			
(D)	C3759	11062		C3755	6541			
				C3757	6539			
				C3759	6542			

AR100070

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
VOA	lab	low	AQ	QC955	ETC	Methylene Chloride (56.9 ug/50 ug) #1 2-Propanone (66.8 ug/-80 ug) #1 2-Butanone (12.9 ug/50 ug) #1
VOA	field	low	Sol	C3757	NUS	Methylene Chloride (6.55.2 ug/kg/4.5 ug/kg) #1 2-Propanone (47.5 ug/kg/4.5 ug/kg) #1 2-Butanone (11.9 ug/kg/4.5 ug/kg) #1
BNA	field	low	Sol	C3757	NUS	N.D.

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

COMMENTS:

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

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

SOIL SURROGATE PERCENT RECOVERY SUMMARY

CASE NO. 1915
LOW LEVEL ✓
WATER
QC REPORT NO. QC955V, QC959V

CONTRACTOR ETC Corp
MED. LEVEL
SOIL/SED. ✓

CONTRACT NO. 68-01-6766
HIGH LEVEL
OTHER (Specify)

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

SMO Traffic No.	D_8 Toluene (81-120)	BFB (NE)	D_4-1,2 Dichloro Ethane (NE)	D_5 Nitro Benzene (19-120)	2-Fluoro Biphenyl (17-120)	D_{14} p-Ter Phenyl (NE)	2-Fluoro-Naphthalene	D_5 Phenol (10-100)	2-Fluoro Phenol (26-120)	~~2,4,6-Tribromo Phenol (NE)~~ Pentafluoro Phenol	Dibutyl Chlor-endate (NE)	*** 1,2,3,4 TCDD (11-130)
C3273	96	75	75 **	0*	25		28	0*	0*	0	1.2	99
C3275	118	113	100	57	80		84	64	62	31	100	485*
C3276	133*	89	108	28	60		60	0*	0*	0	50	178*
C3749	121*	104	107**	8*	13*		13	8*	8*	9	82	42
C3752	110	111	111**	8*	61		72	57	56	58	104	172*
C3753	108	105	113**	35	80		56	46	46	7	115	113
C3755	113	115	117**	80	63		73	13	14*	0	104	202*
C3757	97	95	95	80	72		64	76	84	0	84	217*
C3759	104	98	103	68	65		77	41	41	0	114	255*
REPEATS:												
C3755				92	95		92	41	44	23		
C3752				31	58		34	26	28	0*		

lab claims not conc enough - ok ev
No effect on D.L's

FORM III (continued)

C3749 BNA D.L's slightly higher than reported

*Asterisked values are outside of QC limits.
NE - Not established.

→ C3753, Some Acid D.L slightly higher than reported (already obvious)
→ [redacted], C3759 Some Acid D.L's significantly higher than reported.

Comments: ** Recoveries based on surrogate compound D10 Ethylbenzene
B/N/A Samples C3273 + C3276 had a final volume of 5ml causing low recovery problem since final concentration would be below the detection limit.
B/N/A Sample C3749 - low surrogate recoveries due to sample matrix interference.
B/N/A Samples C3752 + C3755 - repeat analysis shows some low surrogate recoveries; insufficient sample for further [illegible]
*** C3276, C3752 + C3755 had matrix interference problems; high baseline. See narrative section.

Volatiles: 2 out of 27; outside of QC limi[illegible]
Semi-Volatiles: 11 out of [illegible]

AR100072

MATRIX SPIKE DUPLICATE/RECOVERY

CASE NO. 1915
LOW LEVEL ✓
WATER
QC REPORT NO.

CONTRACTOR ETC Corp
MED. LEVEL
SOIL/SED. ✓

CONTRACT NO. 68-01-6766
HIGH LEVEL
OTHER (Specify)
UNITS (Circle) ug/Kg ug/l

FRACTION	COMPOUND	CONC. SPIKE ADDED	CONC. MS	% REC.	CONC. MSD	% REC.	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY	COMMENTS
VOA	1,1-Dichloroethylene	18	18.3	102	20.6	114	11.8	<15%	51-150	
SMO #	Trichloroethylene	18	17.3	96	18.4	102	6.2	<15%	74-130	
C3759	Chlorobenzene	18	19.7	109	21.9	122	10.6	<15%	67-130	
	Toluene	18	19.5	108	21.4	119	9.3	<15%	58-130	
	Benzene	18	19.1	106	17.4	97	9.5	<15%	56-130	
B/N	1,2,4-Trichlorobenzene	50	20	40*	51.6	103	36	<50%	38-110	
SMO #	Acenaphthene	50	47	94	35.8	72	27	<50%	57-120	2,4 Dinitrotoluene
C3753	2,4-Dinitrotoluene	50	0	0	0	0	0*	<50%	43-110	
	Di-N-Butylphthalate	50	31	62	39.8	80	25	<50%	13-110	
	Pyrene	50	43.6	87	40.8	82	6	<50%	25-140	
	N-Nitrosodi-N-Propylamine	50	42.2	84	38.54	77	44	<50%	34-110	
	1,4-Dichlorobenzene	50	41	82	17.8	36	78*	<50%	33-110	
ACID	Pentachlorophenol	50	0	0	0	0	0*	<40%	19-120	Pentachlorophenol
SMO #	Phenol	50	27.4	55	27.4	55	0	<40%	23-80	
C3753	2-Chlorophenol	50	23.5	46	24.2	48	4	<40%	33-110	
	P-Chloro-M-Cresol	50	18.2	36	22.4	45	21	<40%	32-110	
	4-Nitrophenol	50	0	0	0	0	—	<40%	15-90	4-Nitrophenol
PEST	Lindane	100000	88000	88	121000	121*	31	<40%	87-110	
SMO #	Heptachlor	100000	67300	67	93000	93	33	<40%	43-120	
C3276	Aldrin	100000	91000	91	148000	148*	48*	<40%	45-110	
	Dieldrin	100000	108000	108	155000	155*	36	<40%	56-120	
	Endrin	100000	156000	156*	220000	220*	34	<40%	89-110	
	P,P-DDT	100000	126000	126*	179000	179*	35	<40%	82-100	

*Asterisked values are outside QC limits.

RPD: VOAs 0 out of 5 ; outside QC limits
B/N 2 out of 7 ; outside QC limits
ACID 2 out of 5 ; outside QC limits
PEST 1 out of 6 ; outside QC limits

RECOVERY: VOAs 0 out of 10 ; outside QC limits
B/N 3 out of 14 ; outside QC limits
ACID 4 out of 10 ; outside QC limits
PEST 7 out of 12 ; outside QC limits

*Date Limits Set 12/82
Revision Due 6/83

FORM V

AR100073

NUS CORPORATION

INTERNAL CORRESPONDENCE
C-585-5-4-32

TO: Diane Foster, Program Manager, ETC

DATE: May 15, 1984

FROM: Russell J. Sloboda RS

COPIES: Joan Fisk
William Coakley

SUBJECT: Missing Deliverables for Case 1915, ETC Data

Per agreement with EPA, ETC has agreed to supply target compound spectra for reported identifications which are flagged as less than detection limits. Enclosed you will find the data package for Case 1915. The following spectra are requested:

Traffic Report No.	ETC Lab No.	Compounds
C3749	C8353	1,1,1-trichloroethane benzoic acid
C3753	C8355	acenaphthene tetrachloroethene
C3273	C8357	1,1,1-trichloroethane
C3276	C8360	toluene, aniline

NUS 664 REVISED 8181

AR100074

PROJECT NAME: First Piedmont
TDD NO: F3 8305-45

EPA SITE NO.: VA 164
REGION: FITIII

QUALITY ASSURANCE REVIEW OF ORGANIC ANALYSIS LAB DATA PACKAGE

Case No.: 1915
Contract No.: 68-01-6607
Contract Laboratory: Laucks
Applicable IFB No.: WA 82-A069
Reviewer: Rock J Vitale
Review Date: 5/7/84

Applicable Sample No's.: C3274, C3747, C3748, C3750, C3751, C3754, C3756, C3757, C3758, C3760

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		✓ #2	✓ #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
- ◒ STANDARDS
- ◒ 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 analysis documentation.
#2 Some phthalates were reported at "less than" values, these are considered questionable since they are common lab contaminants
#3 Single peak pesticide identifications are questioned since they may be artifacts of random chromatographic interferences.

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/WO	LO/WO	LO/WO	LO/WO	LO/WO	LO/WO	LO/WO	LO/WO	LO/WO	LO/WO		
FRACTION	TRAFFIC REPORT #	3274	C3747	C3748	C3750	C3751	C3754	C3756	C3757	C3758	C3760	BLK	
	LAB I.D. # 79617-	132	133	134	135	136	137	138	139	140	141		
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	✓											
	I.S. REL. RESP. FORM	✓											
	RF & AMTS.: CALIB. CHK.	✓											
	RF & AMTS.: 3-PT CALIB.	✓											
	Chromatograms: Calib. Chk.	MS											
	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 :

DATA COMPLETENESS	CONC./MATRIX	LO/AQ	LO/AQ	LO/AQ	LO/AQ	LO/AQ	LO/AQ	LO/AQ	LO/AQ	LO/AQ	LO/AQ	
FRACTION	TRAFFIC REPORT #	C3274	C3747	C3748	C3750	C3751	C3754	C3756	C3757	C3758	C3760	BKG
	LAB I.D. # 79617-	132	133	134	135	136	137	138	139	140	141	
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	✓										
	I.S. REL. RESP. FORM	✓										
	RF & AMTS.: CALIB. CHK.	✓										
	RF & AMTS.: 3-PT CALIB.	✓										
	Chromatograms: Calib. Chk.	MS										
	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/C										
	PESTICIDE DUPLICATE						✓					
	PESTICIDE SPIKE						✓					
	PESTICIDE BLANK							✓			✓	
TCDD	TCDD TABULATION	✓										
	TCDD DETECTION LIMIT	✓										
	TCDD CHRO./E.I.C.P.	✓										
	TCDD BLANK							✓			✓	

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

FRACTION: VOA			FRACTION: BNA			FRACTION:		
RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID/ DESCRIPTION	DATE / TIME
	50NG STD	8/5 16:32		BNA STD	8/19 12:55			
	50NG STD	8/5 8:47		BNA STD	8/22 10:05			
	BLK	8/5 9:43		BNA STD	8/23 10:24			
	C3274	8/5 10:45		C3274	8/19 14:31			
	C3747	8/5 11:50		C3747	8/19 16:02			
	C3748	8/5 12:41		C3748	8/22 11:45			
	C3750	8/5 15:26		C3750	8/23 12:50			
	C3751	8/5 17:25		C3751	8/22 13:23			
	C3754	8/5 18:15		C3754	8/23 14:50			
	C3756	8/5 21:01		C3756	8/22 14:38			
	C3758	8/5 21:53		C3758	8/22 15:45			
	C3760	8/5 22:57		C3760	8/19 20:17			

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
VOA	lab	low	AQ	617MBW	Laucks	Methylene Chloride 17.3 ug/l / 5ug/l) #1 Acetone (18.3 ug/l / 5ug/l) #1
BNA	lab	low	AQ	617MBW	Laucks	N.D.
VOA	Field	low	AQ	C3756	NUS	Methylene Chloride (3.67 ug/l / 5ug/l) #1 Acetone (3 ug/l / 5ug/l) #1 Chloroform (3.6 ug/l / 5ug/l) #1 Benzene (~1 ug/l / 5ug/l) #3
BNA	lab	low	AQ	C3756	NUS	N.D.

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

COMMENTS:

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

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

#3 Inferred from chromatogram at benzene RT.

WATER SURROGATE PERCENT RECOVERY SUMMARY

CASE NO 1915 CONTRACTOR Laucks Testing Laboratories CONTRACT NO WA 82-A049

LOW LEVEL low MEDIUM LEVEL

		Volatile			Semi-volatile								Pesticide	Dioxin
SMO Traffic No	LTL Sample No	d4-1,2-Dichloroethane	d8-Toluene (84-114)**	BFB (63-127)**	2-Fluoro-Phenol (25-115)**	d5-Phenol (15-98)**	d3-2,4-Dimethyl Phenol	2,4,6 Tribromo-Phenol (47-123)**	2-Fluoro-Aniline (11-141)**	d5-Nitro-Benzene (42-131)	2-Fluoro-Biphenyl (54-118)**	d14-p-Ter-Phenyl (54-118)**	Dibutyl-Chlor-Endate (67-114)**	1,2,3,4 TCDD (26-104)
C3274	132	93.0	122.4*	123.1	52.3	30.6		60.9	99.3	90.9	38.5		67.8	88.4
C3747	133	95.8	95.9	115.2	46.9	23.9		91.0	104.3	75.2	104.3		104	88.3
C3748	134	98.4	81.7	109.1	47.7	25.9		61.6	90.4	71.4	94.9		96.9	96.7
C3750	135	97.7	86.5	108.3	52.0	50.6		47.4	78.6	83.1	79.1		71.5	101
C3751	136	100.6	88.3	104.8	45.3	27.9		64.7	85.2	79.3	87.4		124*	86.7
C3754	137	101.9	90.6	107.9	39.1	31.2		53.1	105.2	121.8	97.8		112	90.0
C3756	138	103.1	88.2	108.4	50.0	23.0		69.6	84.2	97.6	114.6		106	91.7
C3758	140	102.5	90.5	109.4	46.3	23.1		83.1	50.3	41.4*	70.9		81.9	91.3
C3760	141	102.0	84.9	110.3	51.2	24.1		111.9	61.5	54.1	121.0*		98.2	86.7
	BNA	90.6	110.3	109.2	36.7	24.4		104.4	62.7	71.5	110.9		92.0	95.7
	MS I	101.9	90.3	110.0	43.9	27.9		130.7*	105.0	68.9	72.0		96.6	395*
	MS II	101.4	89.9	108.5	43.1	29.9		138.6*	61.8	69.2	138.7*		99.4	334*

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

Volatiles: 1 out of 36 ; outside of QC limits

Semi-volatiles: 5 out of 72 ; outside of QC limits

Pesticides: 1 out of 12 ; outside of QC limits

Dioxin: 2 out of 12 ; outside of QC limits

Comments MS I UOA=C3754, BNA=C3760, P/Dx=C3274

FORM III

AR100082

MATRIX SPIKE DUPLICATE/RECOVERY

CASE NO 1915 CONTRACTOR Lauck's Testing Labs CONTRACT NO WA 82-A069

QC REPORT NO _____ SAMPLE TYPE Waters LEVEL Low

UNITS (Circle) ug/Kg (ug/l)

FRACTION	COMPOUND	CONC SPIKE ADDED	CONC MS	% REC	CONC MSD	% REC	RPD	QC LIMITS RPD	QC LIMITS RECOVERY	COMMENTS
VOA	1,1-Dichloroethylene	25.0	20.95	83.8	23.13	92.5	-9.9	<15%	51-151	
617-137	Trichloroethylene	25.0	26.29	105.2	27.40	117.6	-11.2	<15%	74-128	
SMO#	Chlorobenzene	25.0	18.74	75.0	20.62	82.5	-9.6	<15%	67-131	
C3754	Toluene	25.0	23.45	93.8	24.84	99.4	-5.8	<15%	58-132	
	Benzene	25.0	22.89	91.6	25.41	101.6	-10.4	<15%	56-132	
B/N	1,2,4-Trichlorobenzene	50.0	46.48	93.0	53.02	106.0	-13.1	<50%	38-108	
	Acenaphthene	"	39.34	78.7	31.04	62.1	23.6	<50%	57-115	all
	2,4-Dinitrotoluene	"	27.10	54.2	26.52	53.0	2.2	<50%	43-113	
SMO#	Di-N-Butylphthalate	"	26.26	52.5	23.54	47.1	10.9	<50%	13-113	
	Pyrene	"	42.84	85.7	39.04	78.1	9.3	<50%	25-137	
	N-Nitrosodi-N-Propylamine	"	26.66	53.3	25.88	51.8	5.0	<50%	34-114	
	1,4-Dichlorobenzene	"	32.32	64.6	30.40	60.8	6.1	<50%	33-103	
ACID	Pentachlorophenol	"	37.30	74.6	41.72	83.4	-11.2	<40%	19-123	
	Phenol	"	13.48	27.0	12.04	24.1	11.3	<40%	23--81	
	2-Chlorophenol	"	28.88	57.8	30.28	60.6	-4.7	<40%	33-107	
SMO#	P-Chloro-m-cresol	"	26.09	52.2	31.38	62.8	-18.4	<40%	32-108	
	4-Nitrophenol	250.0	57.24	22.9	53.22	21.3	7.3	<40%	15--93	
PEST	Lindane	6.67	6.78	102	6.02	90.3	12.2	<40%	87-107	
	Heptachlor	"	6.80	102	6.04	95.9	6.2	<40%	43-125	
SMO#	Aldrin	"	7.08	106	6.77	101	4.8	<40%	45-109	
	Dieldrin	"	8.36	125*	8.71	123*	1.6	<40%	56-122	
	Endrin	"	9.04	136*	8.93	139*	2.2	<40%	89-101	
	p,p'-DDT	"	8.89	133*	8.67	130*	2.3	<40%	82-102	

*Asterisked values are outside QC limits

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

RECOVERY: VOAs 0 out of 10 ; outside QC limits
B/N 0 out of 14 ; outside QC limits
ACIDS 0 out of 10 ; outsdie QC limits
PEST 6 out of 12 ; outside QC limits

FORM V

Reviewed

AR100083

EVALUATION OF CONFIRMATIONS OF GC ANALYSES

SAMPLE NO.	COMPOUND	GC COLUMN # 1 COLUMN: CONDITIONS: DETECTOR: OTHER: DATA FROM COLUMN # 1: ☐ RET. OR ☐ REL. RET. TIMES IN:		RELATIVE PEAK AREA RATIOS		GC COLUMN # 2 COLUMN: CONDITIONS: DETECTOR: 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	
C3754	α-Endosulfan β-Endosulfan Heptachlor α-BHC	See single peak pesticide identifications are considered questionable since they can be easily duplicated by chromatographic interferences.															2C N

COMMENTS: _____

AR100084

PROJECT NAME: First Piedmont
TDD NO: F3-8305-45

EPA SITE NO.: VA 164
REGION: Ft III

QUALITY ASSURANCE REVIEW OF INORGANIC ANALYTICAL DATA PACKAGE

Case No.: 1915
Contract No.: 68-01-6829
Contract Laboratory: Chemtech
Applicable IFB No.: WA 83-A196
Reviewer: Rock J Vitale
Review Date: 5/9/84

Applicable Sample No's.:
MC1005, ... - (thru & including)
MC1022

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 III COLD VAPOR AA MERCURY	TASK III CYANIDE
Acceptable				✓
Acceptable with exception(s)	✓ ①	✓ ① ②	✓ ①	
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 Selenium data showed inability to achieve reported detection limit

AR100085

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/AQ	LO/SOL	LO/AQ	LO/AQ	LO/SOL	LO/SOL	LO/AQ	LO/SOL	LO/SOL	LO/AQ	LO/SOL	LO/AQ	LO/SOL	LO/AQ
	TRAFFIC REPORT # MC	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019
	LAB I.D. #62-79-	01	02	03	04	05	06	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.	MS														
TASK II: FURNACE AA: METALS	RAW DATA	✓														
	TAB. RESULTS	✓														
	TAB. D.L.'s	✓														
	QA FORM	✓														
	INSTR. SENS.	MS														
TASK II: COLD VAPOR AA: MERCURY	RAW DATA	✓														
	TAB. RESULTS	✓														
	TAB. D.L.'s	✓														
	QA FORM	✓														
	INSTR. SENS.	MS														
TASK III: CYANIDE	RAW DATA	✓														
	TAB. RESULTS	✓														
	TAB. D.L.'s	✓														
	QA FORM.	✓														
	INSTR. SENS.	MS														
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:

DATA COMPLETENESS	CONC./ MATRIX	4/Soil	4/Soil	4/AQ	Prep Blk
	TRAFFIC REPORT # MC	1020	1021	1022	
	LAB I.D. #62-79	16	17	18	
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.	MS	→	→	→
TASK II: FURNACE AA: METALS	RAW DATA	✓	→	→	→
	TAB. RESULTS	✓	→	→	→
	TAB. D.L.'s	✓	→	→	→
	QA FORM	✓	→	→	→
	INSTR. SENS.	MS	→	→	→
TASK II: COLD VAPOR AA: MERCURY	RAW DATA	✓	→	→	→
	TAB. RESULTS	✓	→	→	→
	TAB. D.L.'s	✓	→	→	→
	QA FORM	✓	→	→	→
	INSTR. SENS.	MS	→	→	→
TASK III: CYANIDE	RAW DATA	✓	→	→	→
	TAB. RESULTS	✓	→	→	→
	TAB. D.L.'s	✓	→	→	→
	QA FORM.	✓	→	→	→
	INSTR. SENS.	MS	→	→	→
OTHER (SPECIFY):	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.				

COMMENTS:

BLANK ANALYSIS RESULTS

TASK	TYPE / CONC / MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT	Cut off Approx	
All	Field / low / Sol	MC1021	NUS	Arsenic (0.15 mg/kg / 0.50 mg/kg) #2	.75	15
				Tin (0.30 mg/kg / 1 mg/kg) #2	1.5	6
				Lead (0.21 mg/kg / 5 mg/kg) #2	1.1	21
				Copper (1.6 mg/kg / <2.5 mg/kg) #2	8	32
				Iron (4.3 mg/kg / 5 mg/kg) #1	21.5	430
				Zinc (0.52 mg/kg / 0.5 mg/kg) #2	2.6	10.4
				Manganese (0.50 mg/kg / 0.5 mg/kg) #1	2.5	50
				Mercury (0.10 mg/kg / 0.2 mg/kg) #1	0.5	2
All	Field / low / AQ	MC1022	NUS	Tin (11.9 ug/L / 20 ug/L)	3.0	59.5
				Selenium (2 ug/L / 2 ug/L) #2	0.5	10
				Lead (4.1 ug/L / 5 ug/L) #2	1.03	20.5
				Cadmium (0.29 ug/L / 4 ug/L) #2	0.08	1.5
				Mercury (0.20 ug/L / 0.2 ug/L) #1	0.01	1.0
				Aluminum (60.1 ug/L / 200 ug/L) #2	0.15	300
				Beryllium (2.9 ug/L / 5 ug/L) #2	0.93	14.5
				Copper (29.7 ug/L / 50 ug/L) #2	7.5	149
				Iron (56.4 ug/L / 200 ug/L) #2	14.1	282
				Manganese (5.5 ug/L / 10 ug/L) #2	1.4	27.5
				Zinc (46.8 ug/L / 10 ug/L) #2	11.7	234
All	Reagent Blank / LO / AQ	R BLK	Chemtech	Arsenic (3 ug/l / 10 ug/L) #2	0.75	15
				Tin (6.4 ug/L / 20 ug/L) #2	1.6	32
				Selenium (2 ug/l / 2 ug/L) #2	0.50	10
				lead (4.6 ug/L / 5 ug/L) #2	1.2	23
				Cadmium (0.46 ug/L / 1 ug/L) #2	0.12	2.3
				Mercury 0.5 ug/L / 0.2 ug/L) #2	1.3	2.5
				Beryllium (4.9 ug/L / 5 ug/L) #2	1.2	24.5

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

COMMENTS:

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

(2) RESULT INFERRED FROM RAW DATA

→ Source of severe blank contamination appears to be laboratory related since most of the contaminants also appear in laboratory preparation blanks.

MATRIX SPIKE RECOVERIES

Sample No.	MC1005	MC1016	MC1007			
Field Spike						
Lab Spike	✓	✓	✓			
Matrix	AQUEOUS	Solid	Solid			
Conc. Level	Low	Low	Low			
Method Std.						
Fraction	All	All	Pb + Cd			

All matrix spike recoveries were within the established control ranges specified in; IFB WA83-A196, Exhibit E, Table 2. ✓ Yes ___ No

Exception(s):

Parameter	Accepted Range (%)	Actual % Rec.	Sample Number	Org. Result	Spike Added	Spike Result	Units
Thallium	75-120	54.7	MC1007	<10	75	41	mg/kg

Comments: Standard Additions performed on outlier.

STANDARD ADDITION RESULTS

Documentation indicates a standard addition correction was performed on all spiked samples for parameters having recoveries outside of control limits: Yes ✓ No____

For the parameters having poor recoveries in the spiked sample(s), standard additions were also performed on all other samples where the following conditions were met:

(1) The sample matrix was similar to the matrix of the sample which was spiked; and

(2) The parameters in question were detected with postive results.

Yes ✓ No____

The parameters with poor spike recoveries are listed below, along with the type of standard addition performed(none, 1, 2, or 3 point). The results for these parameters in other samples which have a similar matrix are also listed below:

sample	description of matrix	parameter	recovery	type of std. add.
MC1007	Soil	Tl	*	*

Comments: * Standard Addition was performed in sample to verify absence of thallium in the sample

AR100091

Duplicate Analysis Results

The applicable duplicate pairs are:

sample no.	MC1005	MC1007				
Field duplicate						
Lab duplicate	✓	✓				
sample level	low	low				
sample matrix	Aqueous	Solid				
Fraction	All	All				

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

Fraction	maximum acceptable Percent Difference

The RPD's exceeding the maximum acceptable percent difference were: 20% - Aqueous 40% - Solids

Fraction	Compound	Actual RPD	Sample	Comparison conc.	conc.
TASK I	Aluminum	56.6	MC1005	71	127
	Iron	75.5	MC1005	108	239
	Copper	22.8	MC1005	88	70
	Lead	131.9	MC1005	39	8
V	Mercury	28.6	MC1005	0.3	0.4

Comments: Aluminum not reported, All other values are very questionable due blank contamination

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

68-01-6829 - WA83-A196 Yes ✓ No__

Outliers are listed below:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments
				All acceptable

Interference QC Results

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

Exceptions: All acceptable

Interference QC results were all within the control limits specified in

68-01-6829 WA83-A196 Yes ✓ No__

Exceptions:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments
				All acceptable

INTERFERENCE STANDARDS (ICP)

CASE NUMBER 1915

	I.D. Chemtech Mix			ID			ID		
METALS	FOUND	TRUE	% REC	FOUND	TRUE	% REC	FOUND	TRUE	% REC
Aluminum	436.8	500	87.4						
Boron	454	500	90.8						
Barium	421	500	84.2%						
Beryllium	388	500	77.6						
Calcium	384	500	77						
Chromium	419	500	83.8%						
Cobalt	373	500	74.6						
Copper	517	500	103						
Iron	359	500	72%						
Magnesium	354	500	71%						
Manganese	398	500	79.6						
Nickel	385	500	77						
Silver	457	500	91.4						
Sodium	352	500	71%						
Vanadium	428	500	85.6						
Zinc	420	500	84						

COMMENTS:

In general, recoveries were O.K - no real effect on data

NUS 443A SS 1182

Detection Limits Results

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

Exceptions: all d.l.'s reported

Detection limits were less than or equal to the required detection limits specified in 68-01 6829 - WA83-A196. Yes ✓ No ___

Exceptions: Selenium detection is actually higher since lab has failed to demonstrate it can detect the required detection limit. (Lowest standard was at 2.5 times the reported D.L.)

Instrument Sensitivity Reports

Instrument sensitivity reports were documented for all parameters:

Yes ___ No ✓

Comments: No instrument sensitivities reports were reported

Other Remarks Concerning this Case:

There are currently no established control ranges for ICP interference check standards. However, although not a contractual requirement, 85% - 115% is used here as a tentative guideline for evaluation. Outliers of this tentative control range, if any, are tabulated on the bottom of the preceeding page.

APPENDIX E

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

Sample Number C3747

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Laucks Testing Labs
Case No: 1915
Lab Sample ID No: 79617-133
QC Report No: 79617
Sample Matrix: Water
Contract No.: WA-82-A069
Data Release Authorized By: [signature]
Date Sample Received: 7/28/83

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/3/83
DATE ANALYZED: 8/19/83
PERCENT MOISTURE: _____

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

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

C3747

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lancha Testing Lab
Case No: 1915
Lab Sample ID No: 79617-133
QC Report No: 79617
Sample Matrix: water
Contract No.: WA-82-A069
Date Release Authorized By: [illegible]
Date Sample Received: 8/28/83

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/5/83
DATE ANALYZED: 8/5/83
PERCENT MOISTURE:

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

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830819
PERCENT MOISTURE: N/A

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

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830604
DATE ANALYZED: 830821-22
PERCENT MOISTURE: N/A

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

July

AR100098

ORGANICS ANALYSIS DATA SHEET - page 3

Sample Number C3747

Laboratory Name: Laucks Testing Laboratories, Inc. Case No 1915

B. Tentatively Identified Compounds

CAS #	COMPOUND NAME	Fraction	Scan No	%Max Score on Mass Matching Routine(FIT)	Estimated Concentration (ug/L or ug/kg)
286-20-4	7-Oxabicyclo\4.1.0\heptane	BAN	456	955	10 J
344-04-7	Bromopentafluorobenzene	BAN	464	947	6 J

FORM II (continued)

AR100099

C3748

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lauchs Testing Labs
Lab Sample ID No: 79617134
Sample Matrix: Water
Data Release Authorized By: Mike Tulson

Case No: 1915
QC Report No: 79617
Contract No.: WA-82-A069
Date Sample Received: 7/28/83

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/5/83
DATE ANALYZED: 8/5
PERCENT MOISTURE:

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

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830819
PERCENT MOISTURE: N/A

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

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830821-22
PERCENT MOISTURE: N/A

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

July 1

AR100100

P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2690

Sample Number
C3748

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lauchli Testing Labs
Case No: 1915
Lab Sample ID No: 79617-134
QC Report No: 79617
Sample Matrix: Water
Contract No.: WA-82-A069
Data Release Authorized By: Mike Nelson
Date Sample Received: 7/28/83

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/3/83
DATE ANALYZED: 8/22/83
PERCENT MOISTURE: _____

FP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	
(22A)	59-50-7	p-chloro-m-cresol	
(29A)	95-57-8	2- chlorophenol	
(31A)	120-83-2	2,4-dichlorophenol	
(34A)	105-67-9	2,4-dimethylphenol	
(57A)	88-75-5	2- nitrophenol	
(58A)	100-02-7	4-nitrophenol	
(59A)	51-28-5	2,4-dinitrophenol	
(60A)	534-52-1	4,6-dinitro-2-methylphenol	
(64A)	87-86-5	pentachlorophenol	
(65A)	108-95-2	phenol	
	65-85-0	benzoic acid	
	95-48-7	2-methylphenol	
	108-39-4	4-methylphenol	
	95-95-4	2,4,5-trichlorophenol	
(1B)	83-32-9	acenaphthene	
(5B)	92-87-5	benzidine	
(8B)	120-82-1	1,2,4-trichlorobenzene	
(9B)	118-74-1	hexachlorobenzene	
(12B)	67-72-1	hexachloroethane	
(18B)	111-44-4	bis(2-chloroethyl)ether	
(20B)	91-58-7	2-chloronaphthalene	
(25B)	95-50-1	1,2-dichlorobenzene	
(26B)	541-73-1	1,3-dichlorobenzene	
(27B)	106-46-7	1,4-dichlorobenzene	
(28B)	91-94-1	3,3'-dichlorobenzidine	
(35B)	121-14-2	2,4-dinitrotoluene	
(36B)	606-20-2	2,6-dinitrotoluene	
(37B)	122-66-7	1,2-diphenylhydrazine	
(39B)	206-44-0	fluoranthene	
(40B)	7005-72-3	4-chlorophenyl phenyl ether	
(41B)	101-55-3	4-bromophenyl phenyl ether	
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	
(43B)	111-91-1	bis (2-chloroethoxy) methane	

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

ORGANICS ANALYSIS DATA SHEET - page 3

Sample Number C3748

Laboratory Name: Laucks Testing Laboratories, Inc. Case No 1915

B. Tentatively Identified Compounds

CAS #	COMPOUND NAME	Fraction	Scan No	XMax Score on Mass Matching Routine(FIT)	Estimated Concentration (ug/L or ug/kg)
286-20-4	7-Oxabicyclo[4.1.0]heptane	BAN	466	922	7 J
344-04-7	Bromopentafluorobenzene	BAN	475	893	5 J

FORM II (continued)

U.S. ENVIRONMENTAL PROTECTION AGENCY • CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 • 703/557-2090

David M. Speck

Sample Number C3749

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: ETC Corp Case No: 1915
Lab Sample I.D. No: C8353 QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	800U
(22A)	59-50-7	p-chloro-m-cresol	800U
(26A)	95-57-8	2-chlorophenol	800U
(31A)	120-83-2	2,4-dichlorophenol	800U
(36A)	105-67-9	2,4-dimethylphenol	800U
(57A)	88-75-5	2-nitrophenol	800U
(58A)	100-02-7	4-nitrophenol	800U
(59A)	51-28-5	2,4-dinitrophenol	800U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	800U
(64A)	87-86-5	pentachlorophenol	800U
(65A)	108-95-2	phenol	800U

BASE/NEUTRAL COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(1B)	83-32-9	acenaphthene	400U
(5B)	92-87-5	benzidine	400U
(8B)	120-82-1	1,2,4-trichlorobenzene	400U
(9B)	118-74-1	hexachlorobenzene	400U
(12B)	67-72-1	hexachloroethane	400U
(13B)	111-44-4	bis(2-chloroethyl)ether	400U
(20B)	91-58-7	2-chloronaphthalene	400U
(25B)	95-50-1	1,2-dichlorobenzene	400U
(26B)	541-73-1	1,3-dichlorobenzene	400U
(27B)	106-46-7	1,4-dichlorobenzene	400U
(28B)	91-94-1	3,3'-dichlorobenzidine	400U
(33B)	121-14-2	2,4-dinitrotoluene	400U
(34B)	606-20-2	2,6-dinitrotoluene	400U
(37B)	122-66-7	1,2-diphenylhydrazine	400U
(39B)	206-44-0	fluoranthene	400U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	400U
(41B)	101-55-3	4-bromophenyl phenyl ether	400U
(42B)	39638-32-9	bis(2-chloroisopropyl) ether	400U
(43B)	111-91-1	bis(2-chloroethoxy) methane	400U
(52B)	87-68-3	hexachlorobutadiene	400U
(53B)	77-47-4	hexachlorocyclopentadiene	400U
(54B)	78-59-1	isophorone	400U
(55B)	91-20-3	naphthalene	400U
(56B)	98-95-3	nitrobenzene	400U
(62B)	86-30-6	N-nitrosodiphenylamine	400U
(63B)	621-64-7	N-nitrosodipropylamine	400U
(66B)	117-81-7	bis(2-ethylhexyl) phthalate	400U
(67B)	85-68-7	butyl benzyl phthalate	400U
(68B)	84-74-2	di-n-butyl phthalate	400U
(69B)	117-84-0	di-n-octyl phthalate	400U
(70B)	84-66-2	diethyl phthalate	400U
(71B)	131-11-3	dimethyl phthalate	400U
(72B)	56-55-3	benzo(a)anthracene	400U
(73B)	50-32-8	benzo(a)pyrene	400U
(74B)	205-99-2	benzo(b)fluoranthene	400U
(75B)	207-08-9	benzo(k)fluoranthene	400U
(76B)	218-01-9	chrysene	400U
(77B)	208-96-8	acenaphthylene	400U
(78B)	120-12-7	anthracene	400U
(79B)	191-24-2	benzo(ghi)perylene	400U
(80B)	86-73-7	fluorene	400U
(81B)	85-01-8	phenanthrene	400U
(82B)	53-70-3	dibenzo(a,h)anthracene	400U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	400U
(84B)	129-00-0	pyrene	400U

BASE/NEUTRAL COMPOUNDS

(1B)	83-32-9	acenaphthene	400U
(5B)	92-87-5	benzidine	400U
(8B)	120-82-1	1,2,4-trichlorobenzene	400U
(9B)	118-74-1	hexachlorobenzene	400U
(12B)	67-72-1	hexachloroethane	400U
(13B)	111-44-4	bis(2-chloroethyl)ether	400U
(20B)	91-58-7	2-chloronaphthalene	400U
(25B)	95-50-1	1,2-dichlorobenzene	400U
(26B)	541-73-1	1,3-dichlorobenzene	400U
(27B)	106-46-7	1,4-dichlorobenzene	400U
(28B)	91-94-1	3,3'-dichlorobenzidine	400U
(33B)	121-14-2	2,4-dinitrotoluene	400U
(34B)	606-20-2	2,6-dinitrotoluene	400U
(37B)	122-66-7	1,2-diphenylhydrazine	400U
(39B)	206-44-0	fluoranthene	400U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	400U
(41B)	101-55-3	4-bromophenyl phenyl ether	400U
(42B)	39638-32-9	bis(2-chloroisopropyl) ether	400U
(43B)	111-91-1	bis(2-chloroethoxy) methane	400U
(52B)	87-68-3	hexachlorobutadiene	400U
(53B)	77-47-4	hexachlorocyclopentadiene	400U
(54B)	78-59-1	isophorone	400U
(55B)	91-20-3	naphthalene	400U
(56B)	98-95-3	nitrobenzene	400U
(62B)	86-30-6	N-nitrosodiphenylamine	400U
(63B)	621-64-7	N-nitrosodipropylamine	400U
(66B)	117-81-7	bis(2-ethylhexyl) phthalate	400U
(67B)	85-68-7	butyl benzyl phthalate	400U
(68B)	84-74-2	di-n-butyl phthalate	400U
(69B)	117-84-0	di-n-octyl phthalate	400U
(70B)	84-66-2	diethyl phthalate	400U
(71B)	131-11-3	dimethyl phthalate	400U
(72B)	56-55-3	benzo(a)anthracene	400U

VOLATILES

(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	4.5U
(6V)	56-23-5	carbon tetrachloride	4.5U
(7V)	108-90-7	chlorobenzene	4.5U
(10V)	107-06-2	1,2-dichloroethane	4.5U
(11V)	71-55-6	1,1,1-trichloroethane	4.5K
(13V)	75-34-3	1,1-dichloroethane	4.5U
(14V)	79-00-5	1,1,2-trichloroethane	4.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	4.5U
(16V)	75-00-3	chloroethane	4.5U
(19V)	110-75-8	2-chloroethylvinyl ether	4.5U
(23V)	67-66-3	chloroform	4.5U
(29V)	75-35-4	1,1-dichloroethene	4.5U
(30V)	156-60-5	trans-1,2-dichloroethene	4.5U
(32V)	78-87-5	1,2-dichloropropane	4.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	4.5U
	10061-01-05	cis-1,3-dichloropropene	4.5U
(38V)	100-41-4	ethylbenzene	4.5U
(44V)	75-09-2	methylene chloride	16.5C
(45V)	74-87-3	chloromethane	4.5U
(46V)	74-83-9	bromomethane	4.5U
(47V)	75-25-2	bromoform	4.5U
(48V)	75-27-4	bromodichloromethane	4.5U
(49V)	75-69-4	fluorotrichloromethane	12.4
(50V)	75-71-8	dichlorodifluoromethane	4.5U
(51V)	124-48-1	chlorodibromomethane	4.5U
(85V)	127-18-4	tetrachloroethene	4.5U
(86V)	108-88-3	toluene	4.5U
(87V)	79-01-6	trichloroethene	4.5U
(88V)	75-01-4	vinyl chloride	4.5U

FORM II

ORGANICS ANALYSIS DATA SHEET - Page 2 David M. Speir

Sample Number C3749

Case No: 1915

QC Report No:

Industry Name: ETC Corp

Sample I.D. No: C8353

Multiply Detection Limits by 1 ☒ or 10 ☐ (Check Box for Appropriate Factor)

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
[illegible]	309-00-2	aldrin	400 u
[illegible]	60-57-1	dieldrin	400 u
[illegible]	57-74-9	chlordane	20000 u
[illegible]	50-29-3	4,4'-DDT	400 u
[illegible]	72-55-9	4,4'-DDE	400 u
[illegible]	72-54-8	4,4'-DDD	400 u
[illegible]	115-29-7	α-endosulfan	400 u
[illegible]	115-29-7	β-endosulfan	400 u
[illegible]	1031-07-8	endosulfan sulfate	400 u
[illegible]	72-20-8	endrin	400 u
[illegible]	7421-93-4	endrin aldehyde	400 u
(100P)	76-44-8	heptachlor	400 u
(101P)	1024-57-3	heptachlor epoxide	400 u
(102P)	319-84-6	α-BHC	400 u

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	400 u
(104P)	319-86-8	δ-BHC	400 u
(105P)	58-89-9	γ-BHC (lindane)	400 u
(106P)	53469-21-9	PCB-1242	20000 u
(107P)	11097-69-1	PCB-1254	20000 u
(108P)	11104-28-2	PCB-1221	20000 u
(109P)	11141-16-5	PCB-1232	20000 u
(110P)	12672-29-6	PCB-1248	20000 u
(111P)	11096-82-5	PCB-1260	20000 u
(112P)	12674-11-2	PCB-1016	20000 u
(113P)	8001-35-2	toxaphene	20000 u

DIOXINS

(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	1200 U

Non-Priority Pollutant Hazardous Substances List Compounds

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	800K
95-48-7	2-methylphenol	800U
108-39-4	4-methylphenol	800U
95-95-4	2,4,5-trichlorophenol	800U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	400U
100-51-6	benzyl alcohol	400U
106-47-8	4-chloroaniline	400U
132-64-9	dibenzofuran	400U
91-57-6	2-methylnaphthalene	400U
88-74-4	2-nitroaniline	400U
99-09-2	3-nitroaniline	400U
100-01-6	4-nitroaniline	400U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	5.8C
78-93-3	2-butanone	4.5U
75-15-0	carbondisulfide	4.5U
519-78-6	2-hexanone	4.5U
108-10-1	4-methyl-2-pentanone	4.5U
100-42-5	styrene	4.5U
108-05-4	vinyl acetate	4.5U
95-47-6	o-xylene	4.5U

FORM II (continued)

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

Sample Number C3750

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Laucks Testing Labs
Case No: 1915
Lab Sample ID No: 79617-135
QC Report No: 79617
Sample Matrix: Water
Contract No.: WA-82-A069
Data Release Authorized By: Mike Tedlow
Date Sample Received: 7/28/83

VOLATILES

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

PP #	CAS #		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	
(3V)	107-13-1	acrylonitrile	
(4V)	71-43-2	benzene	K
(6V)	56-23-5	carbon tetrachloride	
(7V)	108-90-7	chlorobenzene	
(10V)	107-06-2	1,2-dichloroethane	
(11V)	71-55-6	1,1,1-trichloroethane	
(13V)	75-34-3	1,1-dichloroethane	
(14V)	79-00-5	1,1,2-trichloroethane	
(15V)	79-34-5	1,1,2,2-tetrachloroethane	
(16V)	75-00-3	chloroethane	
(19V)	110-75-8	2-chloroethylvinyl ether	
(23V)	67-66-3	chloroform	
(29V)	75-35-4	1,1-dichloroethene	
(30V)	156-60-5	trans-1,2-dichloroethene	
(32V)	78-87-5	1,2-dichloropropane	
(33V)	10061-02-6	trans-1,3-dichloropropene	
	10061-01-05	cis-1,3-dichloropropene	
(38V)	100-41-4	ethylbenzene	
(44V)	75-09-2	methylene chloride	114 B
(45V)	74-87-3	chloromethane	
(46V)	74-83-9	bromomethane	
(47V)	75-25-2	bromoform	
(48V)	75-27-4	bromodichloromethane	
(49V)	75-69-4	fluorotrichloromethane	
(50V)	75-71-8	dichlorodifluoromethane	
(51V)	124-48-1	chlorodibromomethane	
(85V)	127-18-4	tetrachloroethene	
(86V)	108-88-3	toluene	
(87V)	79-01-6	trichloroethene	
(88V)	75-01-4	vinyl chloride	
	67-64-1	acetone	ND-B
	78-93-3	2-butanone	
	75-15-0	carbondisulfide	
	519-78-6	2-hexanone	
	108-10-1	4-methyl-2-pentanone	
	100-42-5	styrene	
	108-05-4	vinyl acetate	

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830819
PERCENT MOISTURE:

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

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830821-22
PERCENT MOISTURE:

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

July 1

AR100105

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2090

Sample Number
C3750

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lauchs Testing Labs
Case No: 1915
Lab Sample ID No: 79618-135
QC Report No: 79617
Sample Matrix: Water
Contract No.: WA-82-A069
Data Release Authorized By: Mike Lee
Date Sample Received: 7/28/83

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/3/83
DATE ANALYZED: 8/23/83
PERCENT MOISTURE: _____

PP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6- trichlorophenol	
(22A)	59-50-7	p-chloro-m-cresol	
(29A)	95-57-8	2- chlorophenol	
(31A)	120-83-2	2,4-dichlorophenol	
(34A)	105-67-9	2,4-dimethylphenol	
(57A)	88-75-5	2- nitrophenol	
(58A)	100-02-7	4-nitrophenol	
(59A)	51-28-5	2,4-dinitrophenol	
(60A)	534-52-1	4,6-dinitro-2-methylphenol	
(64A)	87-86-5	pentachlorophenol	
(65A)	108-95-2	phenol	
	65-85-0	benzoic acid	
	95-48-7	2-methylphenol	
	108-39-4	4-methylphenol	
	95-95-4	2,4,5-trichlorophenol	
(1B)	83-32-9	acenaphthene	
(5B)	92-87-5	benzidine	
(8B)	120-82-1	1,2,4-trichlorobenzene	
(9B)	118-74-1	hexachlorobenzene	
(12B)	67-72-1	hexachloroethane	
(18B)	111-44-4	bis(2-chloroethyl)ether	
(20B)	91-58-7	2-chloronaphthalene	
(25B)	95-50-1	1,2-dichlorobenzene	
(26B)	541-73-1	1,3-dichlorobenzene	
(27B)	106-46-7	1,4-dichlorobenzene	
(28B)	91-94-1	3,3'-dichlorobenzidine	
(35B)	121-14-2	2,4-dinitrotoluene	
(36B)	606-20-2	2,6-dinitrotoluene	
(37B)	122-66-7	1,2-diphenylhydrazine	
(39B)	206-44-0	fluoranthene	
(40B)	7005-72-3	4-chlorophenyl phenyl ether	
(41B)	101-55-3	4-bromophenyl phenyl ether	
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	
(43B)	111-91-1	bis (2-chloroethoxy) methane	

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

ORGANICS ANALYSIS DATA SHEET - page 3

Sample Number C3750

Laboratory Name: Laucks Testing Laboratories, Inc. Case No 1915

B. Tentatively Identified Compounds

CAS #	COMPOUND NAME	Fraction	Scan No	%Max Score on Mass Matching Routine(~~861~~)	Estimated Concentration (ug/l or ug/kg)
286-20-4	7-Oxabicyclo(4.1.0)heptane	BAN	453	866	33 J
719-22-2	2,6-Bis(1,1-Dimethylethyl)-2,5-cyclohexadiene-1,4-dione	"	1188	978	4 J
10544-50-0	Sulfur	"	1219	621	21 J
122-39-4	N-Phenylbenzenamine	"	1331	854	12 J
2634-33-5	1,2-Benzisothiazol(3(2H))-one	"	1416	879	518 J
334-48-5	Decanoic Acid	"	1602	964	12 J
10544-50-0	Sulfur	"	1666	981	69 J
2216-77-5	1,3-Dibutoxy-2-propanol	"	1739	915	42 J
26248-42-0	Tridecanol	"	2107	976	34 J
26248-42-0	Tridecanol	"	2162	982	46 J
26248-42-0	Tridecanol	"	2225	980	145 J
57289-26-6	2-Methyl-(S)-1-dodecanol	"	2297	979	98 J
54004-41-0	4-Methyl-2-propyl-1-pentanol	"	2384	952	136 J
2136-70-1	2-(Tetradecyloxy)-ethanol	"	2489	976	73 J

Reviewed

FORM II (continued)

AR100107

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

Sample Number
C3751

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Laucks Testing Labs
Lab Sample ID No: 79617-136
Sample Matrix: water
Data Release Authorized By: Mike Kehn

Case No: 1915
QC Report No: 79617
Contract No.: WA-82-A069
Date Sample Received: 7/28/83

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/3/83
DATE ANALYZED: 8/2-2
PERCENT MOISTURE: _____

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

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

P.O. Box [illegible], [illegible] Virginia [illegible] • [illegible]

C3751

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lauchs Testing Labs
Case No: 1915
Lab Sample ID No: 79617-136
QC Report No: 79617
Sample Matrix: Water
Contract No.: WA-82-A069
Data Release Authorized By: Mike Uelen
Date Sample Received: 7/28/83

VOLATILES

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

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

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830819
PERCENT MOISTURE: N/A

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

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830821-22
PERCENT MOISTURE: N/A

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

July 1

ORGANICS ANALYSIS DATA SHEET - page 3

Sample Number C3751

Laboratory Name: Laucks Testing Laboratories, Inc. Case No 1915

B. Tentatively Identified Compounds

CAS #	COMPOUND NAME	Fraction	Scan No	%Max Score on Mass Matching Routine(FIT)	Estimated Concentration (ug/L or ug/kg)
286-20-4	7-Oxabicyclo[4.1.0]heptane	BAN	460	888	7 J
344-04-7	Bromopentafluorobenzene	BAN	468	898	5 J

FORM II (continued)

AR100110

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

David M. Speck

Sample Number: C3752

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: ETC Corp Case No: 1915

Lab Sample I.D. No: CR354 QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

FF #	CAS #		ug/l (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	800U
(22A)	59-50-7	p-chloro-m-cresol	800U
(29A)	95-57-8	2-chlorophenol	800U
(31A)	120-83-2	2,4-dichlorophenol	800U
(36A)	105-67-9	2,4-dimethylphenol	800U
(37A)	88-75-5	2-nitrophenol	800U
(38A)	100-02-7	4-nitrophenol	800U
(39A)	51-28-5	2,4-dinitrophenol	800U
(40A)	534-52-1	4,6-dinitro-2-methylphenol	800U
(46A)	87-86-5	pentachlorophenol	800U
(65A)	108-95-2	phenol	800U

BASE/NEUTRAL COMPOUNDS

FF #	CAS #		ug/l (circle one)
(73B)	50-32-8	benzo(a)pyrene	400U
(74B)	205-99-2	benzo(b)fluoranthene	400U
(75B)	207-08-9	benzo(k)fluoranthene	400U
(76B)	218-01-9	chrysene	400U
(77B)	208-96-8	acenaphthylene	400U
(78B)	120-12-7	anthracene	400U
(79B)	191-24-2	benzo(ghi)perylene	400U
(80B)	86-73-7	fluorene	400U
(81B)	85-01-8	phenanthrene	400U
(82B)	53-70-3	dibenzo(a,h)anthracene	400U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	400U
(84B)	129-00-0	pyrene	400U

BASE/NEUTRAL COMPOUNDS

(1B)	83-32-9	acenaphthene	400U
(5B)	92-87-5	benzidine	400U
(8B)	120-82-1	1,2,4-trichlorobenzene	400U
(9B)	118-74-1	hexachlorobenzene	400U
(12B)	67-72-1	hexachloroethane	400U
(15B)	111-44-4	bis(2-chloroethyl)ether	400U
(20B)	91-58-7	2-chloronaphthalene	400U
(25B)	95-50-1	1,2-dichlorobenzene	400U
(26B)	541-73-1	1,3-dichlorobenzene	400U
(27B)	106-46-7	1,4-dichlorobenzene	400U
(28B)	91-94-1	3,3'-dichlorobenzidine	400U
(33B)	121-14-2	2,4-dinitrotoluene	400U
(34B)	606-20-2	2,6-dinitrotoluene	400U
(37B)	122-66-7	1,2-diphenylhydrazine	400U
(39B)	206-44-0	fluoranthene	400U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	400U
(41B)	101-55-3	4-bromophenyl phenyl ether	400U
(42B)	39638-32-9	bis(2-chloroisopropyl) ether	400U
(43B)	111-91-1	bis(2-chloroethoxy) methane	400U
(52B)	87-68-3	hexachlorobutadiene	400U
(53B)	77-47-4	hexachlorocyclopentadiene	400U
(54B)	78-59-1	isophorone	400U
(55B)	91-20-3	naphthalene	400U
(56B)	98-95-3	nitrobenzene	400U
(62B)	86-30-6	N-nitrosodiphenylamine	400K
(63B)	621-64-7	N-nitrosodipropylamine	400U
(66B)	117-81-7	bis(2-ethylhexyl) phthalate	400U
(67B)	85-68-7	butyl benzyl phthalate	400U
(68B)	84-74-2	di-n-butyl phthalate	400K
(69B)	117-84-0	di-n-octyl phthalate	400U
(70B)	84-66-2	diethyl phthalate	400U
(71B)	131-11-3	dimethyl phthalate	400U
(72B)	56-55-3	benzo(a)anthracene	400U

VOLATILES

(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	4.5U
(5V)	56-23-5	carbon tetrachloride	4.5U
(7V)	108-90-7	chlorobenzene	4.5U
(10V)	107-06-2	1,2-dichloroethane	4.5U
(11V)	71-55-6	1,1,1-trichloroethane	4.5U
(13V)	75-34-3	1,1-dichloroethane	4.5U
(14V)	79-00-5	1,1,2-trichloroethane	4.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	4.5U
(16V)	75-00-3	chloroethane	4.5U
(19V)	110-75-8	2-chloroethylvinyl ether	4.5U
(23V)	67-66-3	chloroform	4.5U
(29V)	75-35-4	1,1-dichloroethene	4.5U
(30V)	156-60-5	trans-1,2-dichloroethene	4.5U
(32V)	78-87-5	1,2-dichloropropane	4.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	4.5U
	10061-01-05	cis-1,3-dichloropropene	4.5U
(35V)	100-41-4	ethylbenzene	4.5U
(44V)	75-09-2	methylene chloride	4.5KC
(45V)	74-87-3	chloromethane	4.5U
(46V)	74-83-9	bromomethane	4.5U
(47V)	75-25-2	bromoform	4.5U
(48V)	75-27-4	bromodichloromethane	4.5U
(49V)	75-69-4	trichlorofluoromethane	4.5U
(50V)	75-71-8	dichlorodifluoromethane	4.5U
(51V)	124-48-1	chlorodibromomethane	4.5U
(85V)	127-18-4	tetrachloroethene	4.5U
(86V)	108-88-3	toluene	4.5U
(87V)	79-01-6	trichloroethene	4.5U
(88V)	75-01-4	vinyl chloride	4.5U

FORM II

AR100111

ORGANICS ANALYSIS DATA SHEET - Page 2

David M. Speed

Sample Number
C3752

Laboratory Name: ETC Corp

Case No: 1915

Sample I.D. No: C8354

QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

PESTICIDES

FP #	CAS #		ug/l or ug/kg (circle one)
[illegible]	309-00-2	aldrin	200U
[illegible]	60-57-1	dieldrin	200U
[illegible]	57-74-9	chlordane	10000U
[illegible]	50-29-3	4,4'-DDT	200U
[illegible]	72-55-9	4,4'-DDE	200U
[illegible]	72-54-8	4,4'-DDD	200U
[illegible]	115-29-7	α-endosulfan	200U
[illegible]	115-29-7	β-endosulfan	200U
[illegible]	1031-07-8	endosulfan sulfate	200U
[illegible]	72-20-8	endrin	200U
[illegible]	7421-93-4	endrin aldehyde	200U
(100P)	76-44-8	heptachlor	200U
(101P)	1024-57-3	heptachlor epoxide	200U
(102P)	319-84-6	α-BHC	200U

PESTICIDES

FP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	200U
(104P)	319-86-8	δ-BHC	200U
(105P)	58-89-9	γ-BHC (lindane)	200U
(106P)	53469-21-9	PCB-1242	10000U
(107P)	11097-69-1	PCB-1254	10000U
(108P)	11104-28-2	PCB-1221	10000U
(109P)	11141-16-5	PCB-1232	10000U
(110P)	12672-29-6	PCB-1248	10000U
(111P)	11096-82-5	PCB-1260	10000U
(112P)	12674-11-2	PCB-1016	10000U
(113P)	8001-35-2	toxaphene	10000U

DIOXINS

(79B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	1200U

Non-Priority Pollutant Hazardous Substances List Compounds

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	800U
95-48-7	2-methylphenol	800U
108-39-4	4-methylphenol	800U
95-95-4	2,4,5-trichlorophenol	800U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	400U
100-51-6	benzyl alcohol	400U
106-47-8	4-chloroaniline	400U
132-64-9	dibenzofuran	400U
91-57-6	2-methylnaphthalene	400U
88-74-4	2-nitroaniline	400U
99-09-2	3-nitroaniline	400U
100-01-6	4-nitroaniline	400U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	15.5C
78-93-3	2-butanone	4.5U
75-15-0	carbondisulfide	4.5U
519-78-6	2-hexanone	4.5U
108-10-1	4-methyl-2-pentanone	4.5U
100-42-5	styrene	4.5U
108-05-4	vinyl acetate	4.5U
95-47-6	o-xylene	4.5U

FORM II (continued)

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

David M. Spais

Sample Number: C3762

B/N/A Repeat

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: ETC Corp Case No: 1915

Lab Sample I.D. No: C8354 QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	800 U
(22A)	59-50-7	p-chloro-m-cresol	800 U
(26A)	95-57-8	2-chlorophenol	800 U
(31A)	120-83-2	2,4-dichlorophenol	800 U
(36A)	105-67-9	2,4-dimethylphenol	800 U
(57A)	88-75-5	2-nitrophenol	800 U
(58A)	100-02-7	4-nitrophenol	800 U
(59A)	51-28-5	2,4-dinitrophenol	800 U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	800 U
(64A)	87-86-5	pentachlorophenol	800 U
(65A)	108-95-2	phenol	800 U

BASE/NEUTRAL COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(1B)	83-32-9	acenaphthene	400 U
(5B)	92-87-5	benzidine	400 U
(8B)	120-82-1	1,2,4-trichlorobenzene	400 U
(9B)	118-74-1	hexachlorobenzene	400 U
(12B)	67-72-1	hexachloroethane	400 U
(18B)	111-44-4	bis(2-chloroethyl)ether	400 U
(20B)	91-58-7	2-chloronaphthalene	400 U
(23B)	95-50-1	1,2-dichlorobenzene	400 U
(24B)	541-73-1	1,3-dichlorobenzene	400 U
(27B)	106-46-7	1,4-dichlorobenzene	400 U
(28B)	91-94-1	3,3'-dichlorobenzidine	400 U
(33B)	121-14-2	2,4-dinitrotoluene	400 U
(34B)	606-20-2	2,6-dinitrotoluene	400 U
(37B)	122-66-7	1,2-diphenylhydrazine	400 U
(39B)	206-44-0	fluoranthene	400 U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	400 U
(41B)	101-55-3	4-bromophenyl phenyl ether	400 U
(42B)	39638-32-9	bis(2-chloroisopropyl) ether	400 U
(43B)	111-91-1	bis(2-chloroethoxy) methane	400 U
(52B)	87-68-3	hexachlorobutadiene	400 U
(53B)	77-47-4	hexachlorocyclopentadiene	400 U
(54B)	78-59-1	isophorone	400 U
(55B)	91-20-3	naphthalene	400 U
(56B)	98-95-3	nitrobenzene	400 U
(62B)	86-30-6	N-nitrosodiphenylamine	400 U
(63B)	621-64-7	N-nitrosodipropylamine	400 U
(66B)	117-81-7	bis(2-ethylhexyl) phthalate	400 U
(67B)	85-68-7	butyl benzyl phthalate	400 U
(68B)	84-74-2	di-n-butyl phthalate	400 U
(69B)	117-84-0	di-n-octyl phthalate	400 U
(70B)	84-66-2	diethyl phthalate	400 U
(71B)	131-11-3	dimethyl phthalate	400 U
(72B)	56-55-3	benzo(a)anthracene	400 U
(73B)	50-32-8	benzo(a)pyrene	400 U
(74B)	205-99-2	benzo(b)fluoranthene	400 U
(75B)	207-08-9	benzo(k)fluoranthene	400 U
(76B)	218-01-9	chrysene	400 U
(77B)	208-96-8	acenaphthylene	400 U
(78B)	120-12-7	anthracene	400 U
(79B)	191-24-2	benzo(ghi)perylene	400 U
(80B)	86-73-7	fluorene	400 U
(81B)	85-01-8	phenanthrene	400 U
(82B)	53-70-3	dibenz(a,h)anthracene	400 U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	400 U
(84B)	129-00-0	pyrene	400 U

BASE/NEUTRAL COMPOUNDS

(1B)	83-32-9	acenaphthene	400 U
(5B)	92-87-5	benzidine	400 U
(8B)	120-82-1	1,2,4-trichlorobenzene	400 U
(9B)	118-74-1	hexachlorobenzene	400 U
(12B)	67-72-1	hexachloroethane	400 U
(18B)	111-44-4	bis(2-chloroethyl)ether	400 U
(20B)	91-58-7	2-chloronaphthalene	400 U
(23B)	95-50-1	1,2-dichlorobenzene	400 U
(24B)	541-73-1	1,3-dichlorobenzene	400 U
(27B)	106-46-7	1,4-dichlorobenzene	400 U
(28B)	91-94-1	3,3'-dichlorobenzidine	400 U
(33B)	121-14-2	2,4-dinitrotoluene	400 U
(34B)	606-20-2	2,6-dinitrotoluene	400 U
(37B)	122-66-7	1,2-diphenylhydrazine	400 U
(39B)	206-44-0	fluoranthene	400 U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	400 U
(41B)	101-55-3	4-bromophenyl phenyl ether	400 U
(42B)	39638-32-9	bis(2-chloroisopropyl) ether	400 U
(43B)	111-91-1	bis(2-chloroethoxy) methane	400 U
(52B)	87-68-3	hexachlorobutadiene	400 U
(53B)	77-47-4	hexachlorocyclopentadiene	400 U
(54B)	78-59-1	isophorone	400 U
(55B)	91-20-3	naphthalene	400 U
(56B)	98-95-3	nitrobenzene	400 U
(62B)	86-30-6	N-nitrosodiphenylamine	400 U
(63B)	621-64-7	N-nitrosodipropylamine	400 U
(66B)	117-81-7	bis(2-ethylhexyl) phthalate	400 U
(67B)	85-68-7	butyl benzyl phthalate	400 U
(68B)	84-74-2	di-n-butyl phthalate	400 U
(69B)	117-84-0	di-n-octyl phthalate	400 U
(70B)	84-66-2	diethyl phthalate	400 U
(71B)	131-11-3	dimethyl phthalate	400 U
(72B)	56-55-3	benzo(a)anthracene	400 U

VOLATILES

(2V)	107-02-8	acrolein	
(3V)	107-13-1	acrylonitrile	
(4V)	71-43-2	benzene	
(6V)	56-23-5	carbon tetrachloride	
(7V)	108-90-7	chlorobenzene	
(10V)	107-06-2	1,2-dichloroethane	
(11V)	71-55-6	1,1,1-trichloroethane	
(13V)	75-34-3	1,1-dichloroethane	
(14V)	79-00-5	1,1,2-trichloroethane	
(15V)	79-34-5	1,1,2,2-tetrachloroethane	
(16V)	75-00-3	chloroethane	
(19V)	110-75-8	2-chloroethylvinyl ether	
(23V)	67-66-3	chloroform	
(29V)	75-35-4	1,1-dichloroethene	
(30V)	156-60-5	trans-1,2-dichloroethene	
(32V)	78-87-5	1,2-dichloropropane	
(33V)	10061-02-6	trans-1,3-dichloropropene	
	10061-01-05	cis-1,3-dichloropropene	
(38V)	100-41-4	ethylbenzene	
(44V)	75-09-2	methylene chloride	
(45V)	74-87-3	chloromethane	
(46V)	74-83-9	bromomethane	
(47V)	75-25-2	bromoform	
(48V)	75-27-4	bromodichloromethane	
(49V)	75-69-4	trichlorofluoromethane	
(50V)	75-71-8	dichlorodifluoromethane	
(51V)	124-48-1	chlorodibromomethane	
(53V)	127-18-4	tetrachloroethene	
(86V)	108-88-3	toluene	
(87V)	79-01-6	trichloroethene	
(88V)	75-01-4	vinyl chloride	

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FORM II

ORGANICS ANALYSIS DATA SHEET - Page 2

David M. Speid

Sample Number: C3752

Laboratory Name: ETC Corp.

Lab Sample I.D. No.: C8354

Case No.: 1915 B/N/A Repeat

QC Report No.:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	
(90P)	60-57-1	dieldrin	
(91P)	57-74-9	chlordane	
(92P)	50-29-3	4,4'-DDT	
(93P)	72-55-9	4,4'-DDE	
(94P)	72-54-8	4,4'-DDD	
(95P)	115-29-7	α-endosulfan	
(96P)	115-29-7	β-endosulfan	
(97P)	1031-07-8	endosulfan sulfate	
(98P)	72-20-8	endrin	
(99P)	7421-93-4	endrin aldehyde	
(100P)	76-44-8	heptachlor	
(101P)	1024-57-3	heptachlor epoxide	
(102P)	319-84-6	α-BHC	

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	
(104P)	319-86-8	δ-BHC	
(105P)	58-89-9	γ-BHC (lindane)	
(106P)	53469-21-9	PCB-1242	
(107P)	11097-69-1	PCB-1254	
(108P)	11104-28-2	PCB-1221	
(109P)	11141-16-5	PCB-1232	
(110P)	12672-29-6	PCB-1248	
(111P)	11096-82-5	PCB-1260	
(112P)	12674-11-2	PCB-1016	
(113P)	8001-35-2	toxaphene	

DIOXINS

(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	

Non-Priority Pollutant Hazardous Substances List Compounds

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	800U
95-48-7	2-methylphenol	800U
108-39-4	4-methylphenol	800U
95-95-4	2,4,5-trichlorophenol	800U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	400U
100-51-6	benzyl alcohol	400U
106-47-8	4-chloroaniline	400U
132-64-9	dibenzofuran	400U
91-57-6	2-methylnaphthalene	400U
88-74-4	2-nitroaniline	400U
99-09-2	3-nitroaniline	400U
100-01-6	4-nitroaniline	400U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	
78-93-3	2-butanone	
75-15-0	carbondisulfide	
519-78-6	2-hexanone	
108-10-1	4-methyl-2-pentanone	
100-42-5	styrene	
108-05-4	vinyl acetate	
95-47-6	o-xylene	

FORM II (continued)

AR100114

0017

ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
Box 818, Alexandria, Virginia 22313 - 703/557-2490

David M. Dopil

Sample Number: C37F3

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: ETC Corp
Case No: 1915
Sample I.D. No: C8355
QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

FF #	CAS #		ug/l or ug/kg (circle one)
(01A)	88-06-2	2,4,6-trichlorophenol	800U
(02A)	59-50-7	p-chloro-m-cresol	800U
(04A)	95-57-8	2-chlorophenol	800U
(05A)	120-83-2	2,4-dichlorophenol	800U
(06A)	105-67-9	2,4-dimethylphenol	800U
(07A)	88-75-5	2-nitrophenol	800U
(08A)	100-02-7	4-nitrophenol	800U
(09A)	51-28-5	2,4-dinitrophenol	800U
(10A)	534-52-1	4,6-dinitro-2-methylphenol	800U
(11A)	87-86-5	pentachlorophenol	800U
(12A)	108-95-2	phenol	800U

BASE/NEUTRAL COMPOUNDS

FF #	CAS #		ug/l or ug/kg (circle one)
(73B)	50-32-8	benzo(a)pyrene	400U
(74B)	205-99-2	benzo(b)fluoranthene	400U
(75B)	207-08-9	benzo(k)fluoranthene	400U
(76B)	218-01-9	chrysene	400U
(77B)	208-96-8	acenaphthylene	400U
(78B)	120-12-7	anthracene	400U
(79B)	191-24-2	benzo(ghi)perylene	400U
(80B)	86-73-7	fluorene	400U
(81B)	85-01-8	phenanthrene	400U
(82B)	53-70-3	dibenzo(a,h)anthracene	400U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	400U
(84B)	129-00-0	pyrene	400U

BASE/NEUTRAL COMPOUNDS

(1B)	83-32-9	acenaphthene	400K	400U
(2B)	92-87-5	benzidine		400U
(3B)	120-82-1	1,2,4-trichlorobenzene		400U
(4B)	118-74-1	hexachlorobenzene		400U
(5B)	67-72-1	hexachloroethane		400U
(6B)	111-44-4	bis(2-chloroethyl)ether		400U
(7B)	91-58-7	2-chloronaphthalene		400U
(8B)	95-50-1	1,2-dichlorobenzene		400U
(9B)	541-73-1	1,3-dichlorobenzene		400U
(10B)	106-46-7	1,4-dichlorobenzene		400U
(11B)	91-94-1	3,3'-dichlorobenzidine		400U
(12B)	121-14-2	2,4-dinitrotoluene		400U
(13B)	606-20-2	2,6-dinitrotoluene		400U
(14B)	122-66-7	1,2-diphenylhydrazine		400U
(15B)	206-44-0	fluoranthene		400U
(16B)	7005-72-3	4-chlorophenyl phenyl ether		400U
(17B)	101-55-3	4-bromophenyl phenyl ether		400U
(18B)	39638-32-9	bis(2-chloroisopropyl) ether		400U
(19B)	111-91-1	bis(2-chloroethoxy) methane		400U
(20B)	87-68-3	hexachlorobutadiene		400U
(21B)	77-47-4	hexachlorocyclopentadiene		400U
(22B)	78-59-1	isophorone		400U
(23B)	91-20-3	naphthalene		400U
(24B)	98-95-3	nitrobenzene		400U
(25B)	88-74-4	n-nitrosodiphenylamine		400U
(26B)	621-64-7	n-nitrosodipropylamine		400U
(27B)	[illegible]	bis(2-ethylhexyl) phthalate		400K
(28B)	85-68-7	butyl benzyl phthalate		400K
(29B)	84-74-2	di-n-butyl phthalate		400K
(30B)	[illegible]	di-n-octyl phthalate		400U
(31B)	84-66-2	diethyl phthalate		400U
(32B)	131-11-3	dimethyl phthalate		400U
(33B)	56-55-3	benzo(a)anthracene		400U

VOLATILES

(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(5V)	71-43-2	benzene	4.5U
(6V)	56-23-5	carbon tetrachloride	4.5U
(7V)	108-90-7	chlorobenzene	4.5U
(10V)	107-06-2	1,2-dichloroethane	4.5U
(11V)	71-55-6	1,1,1-trichloroethane	4.5U
(13V)	75-34-3	1,1-dichloroethane	4.5U
(14V)	79-00-5	1,1,2-trichloroethane	4.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	4.5U
(16V)	75-00-3	chloroethane	4.5U
(19V)	110-75-8	2-chloroethylvinyl ether	4.5U
(20V)	67-66-3	chloroform	4.5U
(29V)	75-35-4	1,1-dichloroethene	4.5U
(30V)	156-60-5	trans-1,2-dichloroethene	4.5U
(32V)	78-87-5	1,2-dichloropropane	4.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	4.5U
	10061-01-05	cis-1,3-dichloropropene	4.5U
(35V)	100-41-4	ethylbenzene	4.5U
(44V)	75-09-2	methylene chloride	12.5C
(45V)	74-87-3	chloromethane	4.5U
(46V)	74-83-9	bromomethane	4.5U
(47V)	75-25-2	bromoform	4.5U
(48V)	75-27-4	bromodichloromethane	4.5U
(49V)	75-69-4	trichlorofluoromethane	4.5U
(50V)	75-71-8	dichlorodifluoromethane	4.5U
(51V)	124-48-1	chlorodibromomethane	4.5U
(53V)	127-18-4	tetrachloroethene	4.5K
(54V)	108-88-3	toluene	4.5U
(57V)	79-01-6	trichloroethene	4.5U
(58V)	75-01-4	vinyl chloride	4.5U

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FORM II

ORGANICS ANALYSIS DATA SHEET - Page 2 - David W. Speil 1915

Sample Number: C3753

Laboratory Name: ETC Corp

Sample I.D. No.: C8355

Case No.:

QC Report No.:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
[illegible]	309-00-2	aldrin	20U
[illegible]	60-57-1	dieldrin	20U
[illegible]	57-74-9	chlordane	1000U
[illegible]	50-29-3	4,4'-DDT	20U
[illegible]	72-55-9	4,4'-DDE	20U
[illegible]	72-54-8	4,4'-DDD	20U
[illegible]	115-29-7	α-endosulfan	20U
[illegible]	115-29-7	β-endosulfan	20U
[illegible]	1031-07-8	endosulfan sulfate	20U
[illegible]	72-20-8	endrin	20U
[illegible]	7421-93-4	endrin aldehyde	20U
[illegible]	76-44-8	heptachlor	20U
[illegible]	1024-57-3	heptachlor epoxide	20U
[illegible]	319-84-6	α-BHC	20U

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	20U
(104P)	319-86-8	δ-BHC	20U
(105P)	58-89-9	γ-BHC (lindane)	20U
(106P)	53469-21-9	PCB-1242	1000U
(107P)	11097-69-1	PCB-1254	1000U
(108P)	11104-28-2	PCB-1221	1000U
(109P)	11141-16-5	PCB-1232	1000U
(110P)	12672-29-6	PCB-1248	1000U
(111P)	11096-82-5	PCB-1260	1000U
(112P)	12674-11-2	PCB-1016	1000U
(113P)	8001-35-2	toxaphene	1000U

DIOXINS

(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-diox.	1200U

Non-Priority Pollutant Hazardous Substances List Compounds

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	800U
95-48-7	2-methylphenol	800U
108-39-4	4-methylphenol	800U
95-95-4	2,4,5-trichlorophenol	800U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	400U
100-51-6	benzyl alcohol	400U
106-47-8	4-chloroaniline	400U
132-64-9	dibenzofuran	400U
91-57-6	2-methylnaphthalene	400U
88-74-4	2-nitroaniline	400U
99-09-2	3-nitroaniline	400U
100-01-6	4-nitroaniline	400U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	59.0C
78-93-3	2-butanone	4.5U
75-15-0	carbondisulfide	4.5U
519-78-6	2-hexanone	4.5U
108-10-1	4-methyl-2-pentanone	4.5U
100-42-5	styrene	4.5U
108-05-4	vinyl acetate	4.5U
95-47-6	o-xylene	4.5U

FORM II (continued)

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

Sample Number
C3754

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lancha Testing Lab
Case No: 1915
Lab Sample ID No: 79617-137
QC Report No: 79617
Sample Matrix: Water
Contract No.: WA-82-A069
Data Release Authorized By: [signature]
Date Sample Received: 7/28/83

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/3
DATE ANALYZED: 8/23/83
PERCENT MOISTURE: _____

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

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

AR100117

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

Sample Number
C3754

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lauchs Testing Labs
Lab Sample ID No: 79617-137
Sample Matrix: Water
Data Release Authorized By: Mike Nelson

Case No: 1915
QC Report No: 79617
Contract No.: WA-82-A069
Date Sample Received: 7/28/83

VOLATILES

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

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

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8-4-83
DATE ANALYZED: 8-19-83
PERCENT MOISTURE:

PP #	CAS #		µg/l or µg/kg (circle one)
(89P)	309-00-2	aldrin	
(90P)	60-57-1	dieldrin	
(91P)	57-74-9	chlordane	
(92P)	50-29-3	4,4'-DDT	
(93P)	72-55-9	4,4'-DDE	
(94P)	72-54-8	4,4'-DDD	
(95P)	115-29-7	α-endosulfan	0.005
(96P)	115-29-7	β-endosulfan	K
(97P)	1031-07-8	endosulfan sulfate	
(98P)	72-20-8	endrin	
(99P)	7421-93-4	endrin aldehyde	
(100P)	76-44-8	heptachlor	0.[illegible]
(101P)	1024-57-3	heptachlor epoxide	
(102P)	319-84-6	α-BHC	0.036
(103P)	319-85-7	β-BHC	
(104P)	319-86-8	δ-BHC	
(105P)	58-89-9	γ-BHC (lindane)	
(106P)	53469-21-9	PCB-1242	
(107P)	11097-69-1	PCB-1254	
(108P)	11104-28-2	PCB-1221	
(109P)	11141-16-5	PCB-1232	
(110P)	12672-29-6	PCB-1248	
(111P)	11096-82-5	PCB-1260	
(112P)	12674-11-2	PCB-1016	
(113P)	8001-35-2	toxaphene	

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8-4-83
DATE ANALYZED: 8-21-83
PERCENT MOISTURE:

PP #	CAS #		µg/l (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	

AR100118

ORGANICS ANALYSIS DATA SHEET - page 3

Sample Number C3754

Laboratory Name: Laucks Testing Laboratories, Inc. Case No 1915

B. Tentatively Identified Compounds

CAS #	COMPOUND NAME	Fraction	Scan No	%Max Score on Mass Matching Routine(FT)	Estimated Concentration (ug/L or ug/kg)
108-88-3	Toluene	BAN	309	994	66 J
286-20-4	7-Oxabicyclo[4.1.0]heptane	BAN	449	988	16 J
344-04-7	Bromopentafluorobenzene	BAN	458	965	5 J
	(1,1-Dimethylethoxy)methyl-benzene	BAN	1867	917	21 J

Reviewed

AR100119

FORM II (continued)

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2090

David M. Lynch

Sample Number: C3755

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: ETC Corp Case No: 1915

All Sample I.D. Nos: C8359 QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(1A)	88-06-2	2,4,6-trichlorophenol	800U
(2A)	59-50-7	p-chloro-m-cresol	800U
(3A)	95-57-8	2-chlorophenol	800U
(4A)	120-83-2	2,4-dichlorophenol	800U
(5A)	105-67-9	2,4-dimethylphenol	800U
(6A)	88-75-5	2-nitrophenol	800U
(7A)	100-02-7	4-nitrophenol	800U
(8A)	51-28-5	2,4-dinitrophenol	800U
(9A)	534-52-1	4,6-dinitro-2-methylphenol	800U
(10A)	87-86-5	pentachlorophenol	800U
(11A)	108-95-2	phenol	800U

BASE/NEUTRAL COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(1B)	83-32-9	acenaphthene	400U
(2B)	92-87-5	benzidine	400U
(3B)	120-82-1	1,2,4-trichlorobenzene	400U
(4B)	118-74-1	hexachlorobenzene	400U
(5B)	67-72-1	hexachloroethane	400U
(6B)	111-44-4	bis(2-chloroethyl)ether	400U
(7B)	91-58-7	2-chloronaphthalene	400U
(8B)	95-50-1	1,2-dichlorobenzene	400U
(9B)	541-73-1	1,3-dichlorobenzene	400U
(10B)	106-46-7	1,4-dichlorobenzene	400U
(11B)	91-94-1	3,3'-dichlorobenzidine	400U
(12B)	121-14-2	2,4-dinitrotoluene	400U
(13B)	606-20-2	2,6-dinitrotoluene	400U
(14B)	122-66-7	1,2-diphenylhydrazine	400U
(15B)	206-44-0	fluoranthene	400U
(16B)	7005-72-3	4-chlorophenyl phenyl ether	400U
(17B)	101-55-3	4-bromophenyl phenyl ether	400U
(18B)	39638-32-9	bis(2-chloroisopropyl) ether	400U
(19B)	111-91-1	bis(2-chloroethoxy) methane	400U
(20B)	87-68-3	hexachlorobutadiene	400U
(21B)	77-47-4	hexachlorocyclopentadiene	400U
(22B)	78-59-1	isophorone	400U
(23B)	91-20-3	naphthalene	400U
(24B)	98-95-3	nitrobenzene	400U
(25B)	86-30-6	N-nitrosodiphenylamine	400U
(26B)	621-64-7	N-nitrosodipropylamine	400U
(27B)	117-81-7	bis(2-ethylhexyl) phthalate	400U
(28B)	85-68-7	butyl benzyl phthalate	400U
(29B)	84-74-2	di-n-butyl phthalate	400U
(30B)	131-11-3	dimethyl phthalate	400U
(31B)	84-66-2	diethyl phthalate	400U
(32B)	131-11-3	dimethyl phthalate	400U
(33B)	56-55-3	benzo(a)anthracene	400U
(34B)	50-32-8	benzo(a)pyrene	400U
(35B)	205-99-2	benzo(b)fluoranthene	400U
(36B)	207-08-9	benzo(k)fluoranthene	400U
(37B)	218-01-9	chrysene	400U
(38B)	208-96-8	acenaphthylene	400U
(39B)	120-12-7	anthracene	400U
(40B)	191-24-2	benzo(ghi)perylene	400U
(41B)	86-73-7	fluorene	400U
(42B)	85-01-8	phenanthrene	400U
(43B)	53-70-3	dibenzo(a,h)anthracene	400U
(44B)	193-39-5	indeno(1,2,3-cd)pyrene	400U
(45B)	129-00-0	pyrene	400U

BASE/NEUTRAL COMPOUNDS

(1B)	83-32-9	acenaphthene	400U
(2B)	92-87-5	benzidine	400U
(3B)	120-82-1	1,2,4-trichlorobenzene	400U
(4B)	118-74-1	hexachlorobenzene	400U
(5B)	67-72-1	hexachloroethane	400U
(6B)	111-44-4	bis(2-chloroethyl)ether	400U
(7B)	91-58-7	2-chloronaphthalene	400U
(8B)	95-50-1	1,2-dichlorobenzene	400U
(9B)	541-73-1	1,3-dichlorobenzene	400U
(10B)	106-46-7	1,4-dichlorobenzene	400U
(11B)	91-94-1	3,3'-dichlorobenzidine	400U
(12B)	121-14-2	2,4-dinitrotoluene	400U
(13B)	606-20-2	2,6-dinitrotoluene	400U
(14B)	122-66-7	1,2-diphenylhydrazine	400U
(15B)	206-44-0	fluoranthene	400U
(16B)	7005-72-3	4-chlorophenyl phenyl ether	400U
(17B)	101-55-3	4-bromophenyl phenyl ether	400U
(18B)	39638-32-9	bis(2-chloroisopropyl) ether	400U
(19B)	111-91-1	bis(2-chloroethoxy) methane	400U
(20B)	87-68-3	hexachlorobutadiene	400U
(21B)	77-47-4	hexachlorocyclopentadiene	400U
(22B)	78-59-1	isophorone	400U
(23B)	91-20-3	naphthalene	400U
(24B)	98-95-3	nitrobenzene	400U
(25B)	86-30-6	N-nitrosodiphenylamine	400U
(26B)	621-64-7	N-nitrosodipropylamine	400U
(27B)	117-81-7	bis(2-ethylhexyl) phthalate	400U
(28B)	85-68-7	butyl benzyl phthalate	400U
(29B)	84-74-2	di-n-butyl phthalate	400U
(30B)	131-11-3	dimethyl phthalate	400U
(31B)	84-66-2	diethyl phthalate	400U
(32B)	131-11-3	dimethyl phthalate	400U
(33B)	56-55-3	benzo(a)anthracene	400U
(34B)	50-32-8	benzo(a)pyrene	400U
(35B)	205-99-2	benzo(b)fluoranthene	400U
(36B)	207-08-9	benzo(k)fluoranthene	400U
(37B)	218-01-9	chrysene	400U
(38B)	208-96-8	acenaphthylene	400U
(39B)	120-12-7	anthracene	400U
(40B)	191-24-2	benzo(ghi)perylene	400U
(41B)	86-73-7	fluorene	400U
(42B)	85-01-8	phenanthrene	400U
(43B)	53-70-3	dibenzo(a,h)anthracene	400U
(44B)	193-39-5	indeno(1,2,3-cd)pyrene	400U
(45B)	129-00-0	pyrene	400U

VOLATILES

(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	4.5U
(5V)	56-23-5	carbon tetrachloride	4.5U
(7V)	108-90-7	chlorobenzene	4.5U
(10V)	107-06-2	1,2-dichloroethane	4.5U
(11V)	71-55-6	1,1,1-trichloroethane	4.5U
(13V)	75-34-3	1,1-dichloroethane	4.5U
(14V)	79-00-5	1,1,2-trichloroethane	4.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	4.5U
(16V)	75-00-3	chloroethane	4.5U
(19V)	110-75-8	2-chloroethyl vinyl ether	4.5U
(23V)	67-66-3	chloroform	4.5U
(29V)	75-35-4	1,1-dichloroethene	4.5U
(30V)	156-60-5	trans-1,2-dichloroethene	4.5U
(32V)	78-87-5	1,2-dichloropropane	4.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	4.5U
	10061-01-05	cis-1,3-dichloropropene	4.5U
(38V)	100-41-4	ethylbenzene	4.5U
(44V)	75-09-2	methylene chloride	4.5KC
(45V)	74-87-3	chloromethane	4.5U
(46V)	74-83-9	bromomethane	4.5U
(47V)	75-25-2	bromoform	4.5U
(48V)	75-27-4	bromodichloromethane	4.5U
(49V)	75-69-4	trichlorofluoromethane	4.5U
(50V)	75-71-8	dichlorodifluoromethane	4.5U
(51V)	124-48-1	chlorodibromomethane	4.5U
(85V)	127-18-4	tetrachloroethene	4.5U
(86V)	108-88-3	toluene	4.5U
(87V)	79-01-6	trichloroethene	4.5U
(88V)	75-01-4	vinyl chloride	4.5U

ORGANICS ANALYSIS DATA SHEET — Page 2

David M. Speil

Sample Number: C3755

Laboratory Name: ETC Corp

Sample I.D. No.: C8359

Case No.:

QC Report No.:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

PESTICIDES

#	CAS #		ug/l or ug/kg (circle one)
	309-00-2	aldrin	20U
	60-57-1	dieldrin	20U
	57-74-9	chlordane	1000U
	50-29-3	4,4'-DDT	20U
	72-55-9	4,4'-DDE	20U
	72-54-8	4,4'-DDD	20U
	115-29-7	α-endosulfan	20U
	115-29-7	β-endosulfan	20U
	1031-07-8	endosulfan sulfate	20U
	72-20-8	endrin	20U
	7421-93-4	endrin aldehyde	20U
	76-44-8	heptachlor	20U
	1024-57-3	heptachlor epoxide	20U
	319-84-6	α-BHC	20U

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	20U
(104P)	319-86-8	δ-BHC	20U
(105P)	58-89-9	γ-BHC (lindane)	20U
(106P)	53469-21-9	PCB-1242	1000U
(107P)	11097-69-1	PCB-1254	1000U
(108P)	11104-28-2	PCB-1221	1000U
(109P)	11141-16-5	PCB-1232	1000U
(110P)	12672-29-6	PCB-1248	1000U
(111P)	11096-82-5	PCB-1260	1000U
(112P)	12674-11-2	PCB-1016	1000U
(113P)	8001-35-2	toxaphene	1000U

DIOXINS

(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	1200U

Non-Priority Pollutant Hazardous Substances List Compounds

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	800U
95-48-7	2-methylphenol	800U
108-39-4	4-methylphenol	800U
95-95-4	2,4,5-trichlorophenol	800U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	400U
100-51-6	benzyl alcohol	400U
106-47-8	4-chloroaniline	400U
132-64-9	dibenzofuran	400U
91-57-6	2-methylnaphthalene	400U
88-74-4	2-nitroaniline	400U
99-09-2	3-nitroaniline	400U
100-01-6	4-nitroaniline	400U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	20.7C
78-93-3	2-butanone	4.5U
75-15-0	carbondisulfide	4.5U
519-78-6	2-hexanone	4.5U
108-10-1	4-methyl-2-pentanone	4.5U
100-42-5	styrene	4.5U
108-05-4	vinyl acetate	4.5U
95-47-6	o-xylene	4.5U

FORM II (continued)

VIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
e 312, Alexandria, Virginia 22313 - 703/557-2490

David M. Speis

Sample Number C3755

B/N/A Repeat

ORGANICS ANALYSIS DATA SHEET

ory Name: ETC Corp

Case No: 1915

ple I.D. No: C8359

QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
[illegible]	2,4,6-trichlorophenol	800U
[illegible]	[illegible]	800U
[illegible]	2-chlorophenol	800U
[illegible]	2,4-dichlorophenol	800U
[illegible]	2,4-dimethylphenol	800U
[illegible]	2-nitrophenol	800U
[illegible]	4-nitrophenol	800U
[illegible]	2,4-dinitrophenol	800U
[illegible]	4,6-dinitro-2-methylphenol	800U
[illegible]	pentachlorophenol	800U
[illegible]	phenol	800U

BASE/NEUTRAL COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
[illegible]	acenaphthene	400U
[illegible]	benzidine	400U
[illegible]	1,2,4-trichlorobenzene	400U
[illegible]	hexachlorobenzene	400U
[illegible]	hexachloroethane	400U
[illegible]	bis(2-chloroethyl)ether	400U
[illegible]	2-chloronaphthalene	400U
[illegible]	1,2-dichlorobenzene	400U
[illegible]	1,3-dichlorobenzene	400U
[illegible]	1,4-dichlorobenzene	400U
[illegible]	3,3'-dichlorobenzidine	400U
[illegible]	2,4-dinitrotoluene	400U
[illegible]	2,6-dinitrotoluene	400U
[illegible]	1,2-diphenylhydrazine	400U
[illegible]	fluoranthene	400U
[illegible]	4-chlorophenyl phenyl ether	400U
[illegible]	4-bromophenyl phenyl ether	400U
[illegible]	bis(2-chloroisopropyl) ether	400U
[illegible]	bis(2-chloroethoxy) methane	400U
[illegible]	hexachlorobutadiene	400U
[illegible]	hexachlorocyclopentadiene	400U
[illegible]	isophorone	400U
[illegible]	naphthalene	400U
[illegible]	nitrobenzene	400U
[illegible]	N-nitrosodiphenylamine	400U
[illegible]	N-nitrosodipropylamine	400U
[illegible]	bis(2-ethylhexyl) phthalate	400U
[illegible]	butyl benzyl phthalate	400U
[illegible]	di-n-butyl phthalate	400U
[illegible]	di-n-octyl phthalate	400U
[illegible]	diethyl phthalate	400U
[illegible]	dimethyl phthalate	400U
[illegible]	benzo(a)anthracene	400U

BASE/NEUTRAL COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(73B)	50-32-8	benzo(a)pyrene	400U
(74B)	205-99-2	benzo(b)fluoranthene	400U
(75B)	207-08-9	benzo(k)fluoranthene	400U
(76B)	218-01-9	chrysene	400U
(77B)	208-96-8	acenaphthylene	400U
(78B)	120-12-7	anthracene	400U
(79B)	191-24-2	benzo(ghi)perylene	400U
(80B)	86-73-7	fluorene	400U
(81B)	85-01-8	phenanthrene	400U
(82B)	53-70-3	dibenzo(a,h)anthracene	400U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	400U
(84B)	129-00-0	pyrene	400U

VOLATILES

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

FORM II

AR100122

0022

ORGANICS ANALYSIS DATA SHEET (Page 2)

David N. Spall

Sample Number C3755

Case No: 1915 B/N/A Repeat

QC Report No:

Laboratory Name: ETC Corp

Sample I.D. No: C8359

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

PESTICIDES

CAS #		ug/l or ug/kg (circle one)
309-00-2	aldrin	
60-57-1	dieldrin	
57-74-9	chlordane	
50-29-3	4,4'-DDT	
72-55-9	4,4'-DDE	
72-54-8	4,4'-DDD	
115-29-7	α-endosulfan	
115-29-7	β-endosulfan	
1031-07-8	endosulfan sulfate	
72-20-8	endrin	
7421-93-4	endrin aldehyde	
76-44-8	heptachlor	
(PP) 1024-57-3	heptachlor epoxide	
(PP) 319-84-6	α-BHC	

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	
(104P)	319-86-8	δ-BHC	
(105P)	58-89-9	γ-BHC (lindane)	
(106P)	53469-21-9	PCB-1242	
(107P)	11097-69-1	PCB-1254	
(108P)	11104-28-2	PCB-1221	
(109P)	11141-16-5	PCB-1232	
(110P)	12672-29-6	PCB-1248	
(111P)	11096-82-5	PCB-1260	
(112P)	12674-11-2	PCB-1016	
(113P)	8001-35-2	toxaphene	

DIOXINS

(129P)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin

Non-Priority Pollutant Hazardous Substances List Components

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	800U
95-48-7	2-methylphenol	800U
108-39-4	4-methylphenol	800U
95-95-4	2,4,5-trichlorophenol	800U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	400U
100-51-6	benzyl alcohol	400U
106-47-8	4-chloroaniline	400U
132-64-9	dibenzofuran	400U
91-57-6	2-methylnaphthalene	400U
88-74-4	2-nitroaniline	400U
99-09-2	3-nitroaniline	400U
100-01-6	4-nitroaniline	400U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	
78-93-3	2-butanone	
75-15-0	carbondisulfide	
591-78-6	2-hexanone	
108-10-1	4-methyl-2-pentanone	
100-42-5	styrene	
108-05-4	vinyl acetate	
95-47-6	o-xylene	

FORM II (continued)

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

Sample Number C3273

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: ETC Corp
Lab Sample I.D. No: C8357
Case No: 1915
QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	400000U
(22A)	59-50-7	p-chloro-m-cresol	400000U
(29A)	95-57-8	2-chlorophenol	400000U
(31A)	120-83-2	2,4-dichlorophenol	400000U
(36A)	105-67-9	2,4-dimethylphenol	400000U
(37A)	88-75-5	2-nitrophenol	400000U
(38A)	100-02-7	4-nitrophenol	400000U
(39A)	51-28-5	2,4-dinitrophenol	400000U
(40A)	534-52-1	4,6-dinitro-2-methylphenol	400000U
(44A)	87-86-5	pentachlorophenol	400000U
(65A)	108-95-2	phenol	400000U

BASE/NEUTRAL COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(73B)	50-32-8	benzo(a)pyrene	200000U
(74B)	205-99-2	benzo(b)fluoranthene	200000U
(75B)	207-08-9	benzo(k)fluoranthene	200000U
(76B)	218-01-9	chrysene	200000U
(77B)	208-96-8	acenaphthylene	200000U
(78B)	120-12-7	anthracene	200000U
(79B)	191-24-2	benzo(ghi)perylene	200000U
(80B)	86-73-7	fluorene	200000U
(81B)	85-01-8	phenanthrene	200000U
(82B)	53-70-3	dibenzo(a,h)anthracene	200000U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	200000U
(84B)	129-00-0	pyrene	200000U

BASE/NEUTRAL COMPOUNDS

(1B)	83-32-9	acenaphthene	200000U
(3B)	92-87-5	benzidine	200000U
(8B)	120-82-1	1,2,4-trichlorobenzene	200000U
(9B)	118-74-1	hexachlorobenzene	200000U
(12B)	67-72-1	hexachloroethane	200000U
(13B)	111-44-4	bis(2-chloroethyl)ether	200000U
(20B)	91-58-7	2-chloronaphthalene	200000U
(25B)	95-50-1	1,2-dichlorobenzene	200000U
(26B)	541-73-1	1,3-dichlorobenzene	200000U
(27B)	106-46-7	1,4-dichlorobenzene	200000U
(28B)	91-94-1	3,3'-dichlorobenzidine	380000U
(33B)	121-14-2	2,4-dinitrotoluene	200000U
(34B)	606-20-2	2,6-dinitrotoluene	200000U
(35B)	122-66-7	1,2-diphenylhydrazine	200000U
(39B)	206-44-0	fluoranthene	200000U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	200000U
(41B)	101-55-3	4-bromophenyl phenyl ether	200000U
(42B)	39638-32-9	bis(2-chloroisopropyl) ether	200000U
(43B)	111-91-1	bis(2-chloroethoxy) methane	200000U
(52B)	87-68-3	hexachlorobutadiene	200000U
(53B)	77-47-4	hexachlorocyclopentadiene	200000U
(54B)	78-59-1	isophorone	200000U
(55B)	91-20-3	naphthalene	200000U
(56B)	98-95-3	nitrobenzene	200000U
(62B)	86-30-6	N-nitrosodiphenylamine	200000U
(63B)	621-64-7	N-nitrosodipropylamine	200000U
(66B)	117-81-7	bis(2-ethylhexyl) phthalate	200000U
(67B)	85-68-7	butyl benzyl phthalate	200000U
(68B)	84-74-2	di-n-butyl phthalate	20000 K
(69B)	117-84-0	di-n-octyl phthalate	200000U
(70B)	84-66-2	diethyl phthalate	200000U
(71B)	131-11-3	dimethyl phthalate	200000U
(72B)	56-55-3	benzo(a)anthracene	200000U

VOLATILES

(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	4.5U
(5V)	56-23-5	carbon tetrachloride	4.5U
(7V)	108-90-7	chlorobenzene	4.5U
(10V)	107-06-2	1,2-dichloroethane	4.5U
(11V)	71-55-6	1,1,1-trichloroethane	4.5K
(13V)	75-34-3	1,1-dichloroethane	4.5U
(14V)	79-00-5	1,1,2-trichloroethane	4.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	4.5U
(16V)	75-00-3	chloroethane	4.5U
(19V)	110-75-8	2-chloroethylvinyl ether	4.5U
(23V)	67-66-3	chloroform	4.5U
(29V)	75-35-4	1,1-dichloroethene	4.5U
(30V)	156-60-5	trans-1,2-dichloroethene	4.5U
(32V)	78-87-5	1,2-dichloropropane	4.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	4.5U
	10061-01-05	cis-1,3-dichloropropene	4.5U
(38V)	100-41-4	ethylbenzene	4.5U
(44V)	75-09-2	methylene chloride	9.2U
(45V)	74-87-3	chloromethane	4.5U
(46V)	74-83-9	bromomethane	4.5U
(47V)	75-25-2	bromoform	4.5U
(48V)	75-27-4	bromodichloromethane	4.5U
(49V)	75-69-4	trichlorofluoromethane	4.5K
(50V)	75-71-8	dichlorodifluoromethane	4.5U
(51V)	124-48-1	chlorodibromomethane	4.5U
(85V)	127-18-4	tetrachloroethene	4.5U
(86V)	108-88-3	toluene	4.5U
(87V)	79-01-6	trichloroethene	4.5U
(88V)	75-01-4	vinyl chloride	4.5U

FORM II

0006 AR100124

ORGANICS ANALYSIS DATA SHEET - Page 2

David M. Speck

Sample Number C3273

Laboratory Name: ETC Corp

Case No: 1915

Sample I.D. No: C8357

QC Report No:

Multiply Detection Limits by 1 [X] or 10 [ ] (Check Box for Appropriate Factor)

PESTICIDES

FP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	1000 U
(90P)	60-57-1	dieldrin	1000 U
(91P)	57-74-9	chlordane	50000 U
(92P)	50-29-3	4,4'-DDT	1000 U
(93P)	72-55-9	4,4'-DDE	1000 U
(94P)	72-54-8	4,4'-DDD	1000 U
(95P)	115-29-7	α-endosulfan	1000 U
(96P)	115-29-7	β-endosulfan	1000 U
(97P)	1031-07-8	endosulfan sulfate	1000 U
(98P)	72-20-8	endrin	1000 U
(99P)	7421-93-4	endrin aldehyde	1000 U
(100P)	76-44-8	heptachlor	1000 U
(101P)	1024-57-3	heptachlor epoxide	1000 U
(102P)	319-84-6	α-BHC	1000 U

PESTICIDES

FP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	1000 U
(104P)	319-86-8	δ-BHC	1000 U
(105P)	58-89-9	γ-BHC (lindane)	1000 U
(106P)	53469-21-9	PCB-1242	50000 U
(107P)	11097-69-1	PCB-1254	50000 U
(108P)	11104-28-2	PCB-1221	50000 U
(109P)	11141-16-5	PCB-1232	50000 U
(110P)	12672-29-6	PCB-1248	50000 U
(111P)	11096-82-5	PCB-1260	50000 U
(112P)	12674-11-2	PCB-1016	50000 U
(113P)	8001-35-2	toxaphene	50000 U

DIOXINS

(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	60000 EU

Non-Priority Pollutant Hazardous Substances List Compounds

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	80000 U
95-48-7	2-methylphenol	80000 U
108-39-4	4-methylphenol	80000 U
95-95-4	2,4,5-trichlorophenol	80000 U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	40000 U
100-51-6	benzyl alcohol	40000 U
106-47-8	4-chloroaniline	40000 U
132-64-9	dibenzofuran	40000 U
91-57-6	2-methylnaphthalene	40000 U
88-74-4	2-nitroaniline	40000 U
99-09-2	3-nitroaniline	40000 U
100-01-6	4-nitroaniline	40000 U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	41.6 C
78-93-3	2-butanone	4.5 K
75-15-0	carbondisulfide	4.5 U
591-78-6	2-hexanone	4.5 U
108-10-1	4-methyl-2-pentanone	4.5 U
100-42-5	styrene	4.5 U
108-05-4	vinyl acetate	4.5 U
95-47-6	o-xylene	4.5 U

FORM II (continued)

David M. Speir

ORGANICS ANALYSIS DATA SHEET - Page 3

Sample Number C3273

Lab Name: ETC Corp Case No: 1915

Lab No: QC955

B. Tentatively Identified Compounds

CAS #	Compound Name	Fraction	Scan No. or Retention Time	% Maximum Score Attained Mass Matching Routine (Specify: PBM)	Estimated Concentration (ug/L or ug/kg)
76131	Ethane, 1,2-trichloro-1,2,2-trifluoro	VOA	310	23	7.8 J
—	UNKNOWN	B/N/A	145	76	551 J

FORM II (continued)

P.O. Box 812, Alexandria, Virginia 22313 - 703/557-2890

Sample Number: C3274

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lowchr Testing Labs
Case No: 1915
Lab Sample ID No: 79617-132
QC Report No: 79617
Sample Matrix: water
Contract No.: WA-82-A069
Data Release Authorized By: [illegible]
Date Sample Received: 7/28/83

VOLATILES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/5/83
DATE ANALYZED: 8/5/83
PERCENT MOISTURE:

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

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8-4-83
DATE ANALYZED: 8-19-83
PERCENT MOISTURE:

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

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8-4-83
DATE ANALYZED: 8-21-83
PERCENT MOISTURE:

FP #	CAS #		ug/l or ug/ (circle
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	

July 1'

AR100127

ORGANICS ANALYSIS DATA SHEET - page 3

Sample Number C3274

Laboratory Name: Laucks Testing Laboratories, Inc. Case No 1915

B. Tentatively Identified Compounds

CAS #	COMPOUND NAME	Fraction	Scan No	XMax Score on Mass Matching Routine(FIT)	Estimated Concentration (ug/L or ug/kg)
286-20-4	7-Oxabicyclo\4.1.0\hepta	BN	458	961	12 J
344-04-7	Bromopentafluorobenzene	BN	466	964	9 J

FORM II (continued)

AR100128

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

Sample Number C3274

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Laucks Testing Labs
Lab Sample ID No: 79617-1323
Sample Matrix: Water
Data Release Authorized By: Milo Hele

Case No: 1915
QC Report No: 79617
Contract No.: WA-82-A069
Date Sample Received: 7/28/83

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/3/83
DATE ANALYZED: 8/19/83
PERCENT MOISTURE: _____

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

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

AR100129

U.S. ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
P.O. Box 818, Alexandria, Virginia 22313 - 703/557-2090

David M. Speck

Sample Number: C3275

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: ETC Corp
Lab Sample I.D. No: C8360
Case No: 1915
QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	800U
(22A)	59-50-7	p-chloro-m-cresol	800U
(29A)	95-57-8	2-chlorophenol	800U
(31A)	120-83-2	2,4-dichlorophenol	800U
(36A)	105-67-9	2,4-dimethylphenol	800U
(37A)	88-75-5	2-nitrophenol	800U
(38A)	100-02-7	4-nitrophenol	800U
(39A)	51-28-5	2,4-dinitrophenol	800U
(40A)	534-52-1	4,6-dinitro-2-methylphenol	800U
(44A)	87-86-5	pentachlorophenol	800U
(65A)	108-95-2	phenol	800U

BASE/NEUTRAL COMPOUNDS

FP #	CAS #		ug/l or ug/kg (circle one)
(73B)	50-32-8	benzo(a)pyrene	400U
(74B)	205-99-2	benzo(b)fluoranthene	400U
(75B)	207-08-9	benzo(k)fluoranthene	400U
(76B)	218-01-9	chrysene	400U
(77B)	208-96-8	acenaphthylene	400U
(78B)	120-12-7	anthracene	400U
(79B)	191-24-2	benzo(ghi)perylene	400U
(80B)	86-73-7	fluorene	400U
(81B)	85-01-8	phenanthrene	400U
(82B)	53-70-3	dibenz(a,h)anthracene	400U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	400U
(84B)	129-00-0	pyrene	400U

BASE/NEUTRAL COMPOUNDS

(1B)	83-32-9	acenaphthene	400U
(5B)	92-87-5	benzidine	400U
(8B)	120-82-1	1,2,4-trichlorobenzene	400U
(9B)	118-74-1	hexachlorobenzene	400U
(12B)	67-72-1	hexachloroethane	400U
(13B)	111-44-4	bis(2-chloroethyl)ether	400U
(20B)	91-58-7	2-chloronaphthalene	400U
(21B)	95-50-1	1,2-dichlorobenzene	400U
(26B)	541-73-1	1,3-dichlorobenzene	400U
(27B)	106-46-7	1,4-dichlorobenzene	400U
(28B)	91-94-1	3,3'-dichlorobenzidine	400U
(33B)	121-14-2	2,4-dinitrotoluene	400U
(34B)	606-20-2	2,6-dinitrotoluene	400U
(37B)	122-66-7	1,2-diphenylhydrazine	400U
(39B)	206-44-0	fluoranthene	400U
(40B)	7005-72-3	4-chlorophenyl phenyl ether	400U
(41B)	101-55-3	4-bromophenyl phenyl ether	400U
(42B)	39638-32-9	bis (2-chloroisopropyl) ether	400U
(43B)	111-91-1	bis (2-chloroethoxy) methane	400U
(52B)	87-68-3	hexachlorobutadiene	400U
(53B)	77-47-4	hexachlorocyclopentadiene	400U
(56B)	78-59-1	isophorone	400U
(57B)	91-20-3	naphthalene	400U
(58B)	98-95-3	nitrobenzene	400U
(62B)	86-30-6	N-nitrosodiphenylamine	400U
(63B)	621-64-7	N-nitrosodipropylamine	400U
(66B)	117-81-7	bis (2-ethylhexyl) phthalate	400U
(67B)	85-68-7	butyl benzyl phthalate	400U
(68B)	84-74-2	di-n-butyl phthalate	400U
(69B)	117-84-0	di-n-octyl phthalate	400U
(70B)	84-66-2	diethyl phthalate	400U
(71B)	131-11-3	dimethyl phthalate	400U
(72B)	56-55-3	benzo(a)anthracene	400U

VOLATILES

(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(5V)	71-43-2	benzene	4.5U
(6V)	56-23-5	carbon tetrachloride	4.5U
(7V)	108-90-7	chlorobenzene	4.5U
(10V)	107-06-2	1,2-dichloroethane	4.5U
(11V)	71-55-6	1,1,1-trichloroethane	4.5U
(13V)	75-34-3	1,1-dichloroethane	4.5U
(14V)	79-00-5	1,1,2-trichloroethane	4.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	4.5U
(16V)	75-00-3	chloroethane	4.5U
(19V)	110-75-8	2-chloroethylvinyl ether	4.5U
(20V)	67-66-3	chloroform	4.5U
(29V)	75-35-4	1,1-dichloroethene	4.5U
(30V)	156-60-5	trans-1,2-dichloroethene	4.5U
(32V)	78-87-5	1,2-dichloropropane	4.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	4.5U
	10061-01-05	cis-1,3-dichloropropene	4.5U
(35V)	100-41-4	ethylbenzene	4.5U
(44V)	75-09-2	methylene chloride	7.0C
(45V)	74-87-3	chloromethane	4.5U
(46V)	74-83-9	bromomethane	4.5U
(47V)	75-25-2	bromoform	4.5U
(48V)	75-27-4	bromodichloromethane	4.5U
(49V)	75-69-4	trichlorofluoromethane	4.5U
(50V)	75-71-8	dichlorodifluoromethane	4.5U
(51V)	124-48-1	chlorodibromomethane	4.5U
(85V)	127-18-4	tetrachloroethene	4.5U
(86V)	108-88-3	toluene	4.5U
(87V)	79-01-6	trichloroethene	4.5U
(88V)	75-01-4	vinyl chloride	4.5U

FORM II

0008

AR100130

ORGANICS ANALYSIS DATA SHEET - Page 2

David U. Spell

Sample Number: C3275

Laboratory Name: ETC Corp

Case No: 1915

Lab Sample I.D. No: C8360

QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	20U
(90P)	60-57-1	dieldrin	20U
(91P)	57-74-9	chlordane	1000U
(92P)	50-29-3	4,4'-DDT	20U
(93P)	72-55-9	4,4'-DDE	20U
(94P)	72-54-8	4,4'-DDD	20U
(95P)	115-29-7	α-endosulfan	20U
(96P)	115-29-7	β-endosulfan	20U
(97P)	1031-07-8	endosulfan sulfate	20U
(98P)	72-20-8	endrin	20U
(99P)	7421-93-4	endrin aldehyde	20U
(100P)	76-44-8	heptachlor	20U
(101P)	1024-57-3	heptachlor epoxide	20U
(102P)	319-84-6	α-BHC	20U

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	20U
(104P)	319-86-8	δ-BHC	20U
(105P)	58-89-9	γ-BHC (lindane)	20U
(106P)	53469-21-9	PCB-1242	1000U
(107P)	11097-69-1	PCB-1254	1000U
(108P)	11104-28-2	PCB-1221	1000U
(109P)	11141-16-5	PCB-1232	1000U
(110P)	12672-29-6	PCB-1248	1000U
(111P)	11096-82-5	PCB-1260	1000U
(112P)	12674-11-2	PCB-1016	1000U
(113P)	8001-35-2	toxaphene	1000U

DIOXINS

(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	1200U

Non-Priority Pollutant Hazardous Substances List Compounds

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	800U
95-48-7	2-methylphenol	800U
108-39-4	4-methylphenol	800U
95-95-4	2,4,5-trichlorophenol	800U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	400U
100-31-6	benzyl alcohol	400U
106-47-8	4-chloroaniline	400U
132-64-9	dibenzofuran	400U
91-57-6	2-methylnaphthalene	400U
88-74-4	2-nitroaniline	400U
99-09-2	3-nitroaniline	400U
100-01-6	4-nitroaniline	400U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	4.7C
78-93-3	2-butanone	4.5KC
75-15-0	carbondisulfide	4.5U
519-78-6	2-hexanone	4.5U
108-10-1	4-methyl-2-pentanone	16.4
100-42-5	styrene	4.5U
108-05-4	vinyl acetate	4.5U
95-47-6	o-xylene	4.5U

FORM II (continued)

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

Sample Number C3760

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lauchs Testing Labs
Case No: 1915
Lab Sample ID No: 79617-141
QC Report No: 79617
Sample Matrix: Water
Contract No.: WA-80-A069
Data Release Authorized By: Mike Nelson
Date Sample Received: 7/28/83

SEMIVOLATILE COMPOUNDS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 8/3/83
DATE ANALYZED: 8/22/83
PERCENT MOISTURE: _____

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

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

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

Sample Number: C37160

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Lawrence Testing Labs
Case No: 1915
Lab Sample ID No: 79617-141
QC Report No: 79617
Sample Matrix: Water
Contract No.: WA-82-A069
Data Release Authorized By: Mitch Helm
Date Sample Received: 7/28/83

VOLATILES

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

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

PESTICIDES

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830819
PERCENT MOISTURE: N/A

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

DIOXINS

CONCENTRATION: LOW MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 830804
DATE ANALYZED: 830821-22
PERCENT MOISTURE: N/A

FP #	CAS #		ug/l or ug/ (circle
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	

ORGANICS ANALYSIS DATA SHEET - page 3

Sample Number C3760

Laboratory Name: Laucks Testing Laboratories, Inc. Case No 1915

B. Tentatively Identified Compounds

CAS #	COMPOUND NAME	Fraction	Scan No	%Max Score on Mass Matching Routine( )	Estimated Concentration (ug/L or ug/kg)

NOTE: No tentatively identified compounds at peak height of 25% of internal standard

FORM II (continued) AR100134

ENVIRONMENTAL PROTECTION AGENCY - CLP Sample Management Office
Box 818, Alexandria, Virginia 22313 - 703/557-2090

David U. Spell

Sample Number: C3759

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: ETC Corp Case No: 1915

Sample I.D. No: C8356 QC Report No:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

ACID COMPOUNDS

FP #	CAS #		ug/L (ug/kg) (ug/g)
(1A)	88-06-2	2,4,6-trichlorophenol	800U
(2A)	59-50-7	p-chloro-m-cresol	800U
(3A)	95-57-8	2-chlorophenol	800U
(4A)	120-83-2	2,4-dichlorophenol	800U
(5A)	105-67-9	2,4-dimethylphenol	800U
(6A)	88-75-5	2-nitrophenol	800U
(7A)	100-02-7	4-nitrophenol	800U
(8A)	51-28-5	2,4-dinitrophenol	800U
(9A)	534-52-1	4,6-dinitro-2-methylphenol	800U
(10A)	87-86-5	pentachlorophenol	800U
(11A)	108-95-2	phenol	800U

BASE/NEUTRAL COMPOUNDS

FP #	CAS #		ug/L (ug/kg) (ug/g)
(1B)	83-32-9	acenaphthene	400U
(2B)	92-87-5	benzidine	400U
(3B)	120-82-1	1,2,4-trichlorobenzene	400U
(4B)	118-74-1	hexachlorobenzene	400U
(5B)	67-72-1	hexachloroethane	400U
(6B)	111-44-4	bis(2-chloroethyl)ether	400U
(7B)	91-58-7	2-chloronaphthalene	400U
(8B)	95-50-1	1,2-dichlorobenzene	400U
(9B)	541-73-1	1,3-dichlorobenzene	400U
(10B)	106-46-7	1,4-dichlorobenzene	400U
(11B)	91-94-1	3,3'-dichlorobenzidine	400U
(12B)	121-14-2	2,4-dinitrotoluene	400U
(13B)	606-20-2	2,6-dinitrotoluene	400U
(14B)	122-66-7	1,2-diphenylhydrazine	400U
(15B)	206-44-0	fluoranthene	400U
(16B)	7005-72-3	4-chlorophenyl phenyl ether	400U
(17B)	101-55-3	4-bromophenyl phenyl ether	400U
(18B)	39638-32-9	bis (2-chloroisopropyl) ether	400U
(19B)	111-91-1	bis (2-chloroethoxy) methane	400U
(20B)	87-68-3	hexachlorobutadiene	400U
(21B)	77-47-4	hexachlorocyclopentadiene	400U
(22B)	78-59-1	isophorone	400U
(23B)	91-20-3	naphthalene	400U
(24B)	98-95-3	nitrobenzene	400U
(25B)	86-30-6	N-nitrosodiphenylamine	400U
(26B)	621-64-7	N-nitrosodipropylamine	400U
(27B)	117-81-7	bis (2-ethylhexyl) phthalate	400U
(28B)	85-68-7	benzyl butyl phthalate	400U
(29B)	84-74-2	dibutyl phthalate	400U
(30B)	117-84-0	di-n-octyl phthalate	400U
(31B)	84-66-2	diethyl phthalate	400U
(32B)	131-11-3	dimethyl phthalate	400U
(33B)	56-55-3	benzo(a)anthracene	400U
(34B)	50-32-8	benzo(a)pyrene	400U
(35B)	205-99-2	benzo(b)fluoranthene	400U
(36B)	207-08-9	benzo(k)fluoranthene	400U
(37B)	218-01-9	chrysene	400U
(38B)	208-96-8	acenaphthylene	400U
(39B)	120-12-7	anthracene	400U
(40B)	191-24-2	benzo(ghi)perylene	400U
(41B)	86-73-7	fluorene	400U
(42B)	85-01-8	phenanthrene	400U
(43B)	53-70-3	dibenzo(a,h)anthracene	400U
(44B)	193-39-5	indeno(1,2,3-cd)pyrene	400U
(45B)	129-00-0	pyrene	400U

VOLATILES

			ug/L
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	4.5U
(5V)	56-23-5	carbon tetrachloride	4.5U
(6V)	108-90-7	chlorobenzene	4.5U
(10V)	107-06-2	1,2-dichloroethane	4.5U
(11V)	71-55-6	1,1,1-trichloroethane	4.5U
(13V)	75-34-3	1,1-dichloroethane	4.5U
(14V)	79-00-5	1,1,2-trichloroethane	4.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	4.5U
(16V)	75-00-3	chloroethane	4.5U
(19V)	110-75-8	2-chloroethylvinyl ether	4.5U
(23V)	67-66-3	chloroform	4.5U
(29V)	75-35-4	1,1-dichloroethene	4.5U
(30V)	156-60-5	trans-1,2-dichloroethene	4.5U
(32V)	78-87-5	1,2-dichloropropane	4.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	4.5U
	10061-01-05	cis-1,3-dichloropropene	4.5U
(38V)	100-41-4	ethylbenzene	4.5U
(44V)	75-09-2	methylene chloride	4.5KC
(45V)	74-87-3	chloromethane	4.5U
(46V)	74-83-9	bromomethane	4.5U
(47V)	75-25-2	bromoform	4.5U
(48V)	75-27-4	bromodichloromethane	4.5U
(49V)	75-69-4	trichlorofluoromethane	4.5U
(50V)	75-71-8	dichlorodifluoromethane	4.5U
(51V)	124-48-1	chlorodibromomethane	4.5U
(85V)	127-18-4	tetrachloroethene	4.5U
(86V)	108-88-3	toluene	4.5U
(87V)	79-01-6	trichloroethene	4.5U
(88V)	75-01-4	vinyl chloride	4.5U

FORM II

0026

AR100135

ORGANICS ANALYSIS DATA SHEET - Page 2

David M. Speck

Sample Number: C3759

Laboratory Name: ETC Corp

Sample I.D. No.: C8356

Case No.: 1915

QC Report No.:

Multiply Detection Limits by 1 ☑ or 10 ☐ (Check Box for Appropriate Factor)

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
	309-00-2	aldrin	20U
	60-57-1	dieldrin	20U
	57-74-9	chlordane	1000U
	50-29-3	4,4'-DDT	20U
	72-55-9	4,4'-DDE	20U
	72-54-8	4,4'-DDD	20U
	115-29-7	α-endosulfan	20U
	115-29-7	β-endosulfan	20U
	1031-07-8	endosulfan sulfate	20U
	72-20-8	endrin	20U
	7421-93-4	endrin aldehyde	20U
	76-44-8	heptachlor	20U
	1024-57-3	heptachlor epoxide	20U
	319-84-6	α-BHC	20U

PESTICIDES

PP #	CAS #		ug/l or ug/kg (circle one)
(103P)	319-85-7	β-BHC	20U
(104P)	319-86-8	δ-BHC	20U
(105P)	58-89-9	γ-BHC (lindane)	20U
(106P)	53469-21-9	PCB-1242	1000U
(107P)	11097-69-1	PCB-1254	1000U
(108P)	11104-28-2	PCB-1221	1000U
(109P)	11141-16-5	PCB-1232	1000U
(110P)	12672-29-6	PCB-1248	1000U
(111P)	11096-82-5	PCB-1260	1000U
(112P)	12674-11-2	PCB-1016	1000U
(113P)	8001-35-2	toxaphene	1000U

DIOXINS

(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	1200U

Non-Priority Pollutant Hazardous Substances List Compounds

ACID COMPOUNDS

CAS #		ug/l or ug/kg (circle one)
65-85-0	benzoic acid	800U
95-48-7	2-methylphenol	800U
108-39-4	4-methylphenol	800U
95-95-4	2,4,5-trichlorophenol	800U

BASE/NEUTRAL COMPOUNDS

62-53-3	aniline	400U
100-51-6	benzyl alcohol	400U
106-47-8	4-chloroaniline	400U
132-64-9	dibenzofuran	400U
91-57-6	2-methylnaphthalene	400U
88-74-4	2-nitroaniline	400U
99-09-2	3-nitroaniline	400U
100-01-6	4-nitroaniline	400U

VOLATILES

CAS #		ug/l or ug/kg (circle one)
67-64-1	acetone	4.5KC
78-93-3	2-butanone	4.5KC
75-15-0	carbondisulfide	4.5U
519-78-6	2-hexanone	4.5U
108-10-1	4-methyl-2-pentanone	4.5U
100-42-5	styrene	4.5U
108-05-4	vinyl acetate	4.5U
95-47-6	o-xylene	4.5U

FORM II (continued)

US ENVIRONMENTAL PROTECTION AGENCY
HWI Sample Management Office
P.O. Box 818 — Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

First Piedmont 8305-45

Sample No.
MC1005

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915
LAB SAMPLE ID. NO. 62-79-01 QC REPORT NO. 079

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	203
2.	Chromium	< 10	11.	Boron	< 100
3.	Barium	< 100	12.	Vanadium	< 200
4.	Beryllium	< 5	13.	Silver	< 10
5.	Cobalt	< 50			
6.	Copper	88			
7.	Iron	108			
8.	Nickel	< 40			
9.	Manganese	70			

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	0.3
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	38.5

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	FB ~~<0.01~~ <10
3.	Sulfide	

COMMENTS:

Ted Bryant
8/15/83

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AR100137

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Sample No. MC 1006

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915

LAB SAMPLE ID. NO. 62-79-02 QC REPORT NO. 079

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	386
2.	Chromium	15	11.	Boron	<100
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	79			
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	0.3
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	FB ~~0.65~~ 13

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	FB ~~<0.01~~ <10
3.	Sulfide	

COMMENTS:

Fred Buzzynski
8/15/83

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Sample No.
MC-1007

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915
LAB SAMPLE ID. NO. G2-79-03 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	20900	10.	Zinc	38.2
2.	Chromium	16.7	11.	Boron	<5
3.	Barium	47.8	12.	Vanadium	16.7
4.	Beryllium	1.7	13.	Silver	<0.5
5.	Cobalt	3.3			
6.	Copper	9.9			
7.	Iron	12500			
8.	Nickel	7.3			
9.	Manganese	177			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	0.95	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	0.08
4.	Thallium	<0.5	8.	Lead	19.8

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<0.25
3.	Sulfide	

COMMENTS:

Fred Buczynski
8/15/83

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Sample No.
MC 1002

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915

LAB SAMPLE ID. NO. 62-79-04 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	678000	10.	Zinc	4670
2.	Chromium	58	11.	Boron	46700
3.	Barium	7460	12.	Vanadium	<200
4.	Beryllium	13	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	134			
7.	Iron	423000			
8.	Nickel	54			
9.	Manganese	6570			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	80	5.	Mercury	0.3
2.	Antimony	<20	6.	Tin	45
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	900

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	~~[illegible]~~ <10
3.	Sulfide	

COMMENTS:

Frank Bruzzese
8/15/83

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Sample No.
MC 1009

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915-
LAB SAMPLE ID. NO. 62-79-05 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

1.	Aluminum	<100
2.	Chromium	64
3.	Barium	<100
4.	Beryllium	<5
5.	Cobalt	<50
6.	Copper	50
7.	Iron	173
8.	Nickel	<40
9.	Manganese	<10
10.	Zinc	11
11.	Boron	<100
12.	Vanadium	<200
13.	Silver	<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	0.3
6.	Tin	100
7.	Cadmium	<1
8.	Lead	FB ~~<0.25~~ <5

TASK 3 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

1.	Ammonia	
2.	Cyanide	FB ~~<0.01~~ <10
3.	Sulfide	

COMMENTS:

Frank Buzzynski
8/15/83

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Sample No. MC-1[illegible]

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915
LAB SAMPLE ID. NO. G2-79-06 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	4750	10.	Zinc	106
2.	Chromium	5.7	11.	Boron	75.5
3.	Barium	37.8	12.	Vanadium	10
4.	Beryllium	0.6	13.	Silver	<0.5
5.	Cobalt	<2.5			
6.	Copper	9.1			
7.	Iron	6550			
8.	Nickel	2.2			
9.	Manganese	152			

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	0.5
2.	Antimony	<1	6.	Tin	1.4
3.	Selenium	<0.1	7.	Cadmium	0.23
4.	Thallium	<0.5	8.	Lead	63.5

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<0.25
3.	Sulfide	

COMMENTS:

Erik Bruggeche
8/15/83

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Sample No.
MC-1011

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915-
LAB SAMPLE ID. NO. G2-79-07 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

1.	Aluminum	980
2.	Chromium	3.8
3.	Barium	39.1
4.	Beryllium	1.0
5.	Cobalt	<2.5
6.	Copper	6.0
7.	Iron	6850
8.	Nickel	3.3
9.	Manganese	91
10.	Zinc	28.7
11.	Boron	15.7
12.	Vanadium	<10
13.	Silver	<0.5

TASK 2 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

1.	Arsenic	0.8
2.	Antimony	<1
3.	Selenium	<0.1
4.	Thallium	<0.5
5.	Mercury	<0.1
6.	Tin	<1
7.	Cadmium	<0.05
8.	Lead	FB ~~258~~ 12.9

TASK 3 (Elements to be Identified and Measured)

ug/l or mg/kg (circle one)

1.	Ammonia	
2.	Cyanide	<0.25
3.	Sulfide	

COMMENTS:

Frank Buczynski
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MC 10 12

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915

LAB SAMPLE ID. NO. 62-79-08 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	1020	10.	Zinc	48
2.	Chromium	<10	11.	Boron	176
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	2640			
8.	Nickel	<40			
9.	Manganese	2910			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	FB ~~<0.5~~ <10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1
4.	Thallium	<10	8.	Lead	FB ~~<0.25~~ <5

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	FB ~~<0.01~~ <10
3.	Sulfide	

COMMENTS:

Frank Buzzynski
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Sample No.
MC-1013

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915
LAB SAMPLE ID. NO. G2-79-09 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	18200	10.	Zinc	15.9
2.	Chromium	<0.5	11.	Boron	<5
3.	Barium	20.8	12.	Vanadium	20.4
4.	Beryllium	0.7	13.	Silver	<0.5
5.	Cobalt	9.9			
6.	Copper	8			
7.	Iron	6900			
8.	Nickel	5.7			
9.	Manganese	62			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	1.3	5.	Mercury	0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	<0.05
4.	Thallium	<0.5	8.	Lead	13

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<0.25
3.	Sulfide	

COMMENTS:

Ed Buczynski
8/15/83

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Sample No.
MC-10

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech
CASE NO. 1915-
LAB SAMPLE ID. NO. G2-79-10
QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	17600	10.	Zinc	223
2.	Chromium	10.9	11.	Boron	5.5
3.	Barium	23.2	12.	Vanadium	21.4
4.	Beryllium	<0.25	13.	Silver	<0.5
5.	Cobalt	<2.5			
6.	Copper	30.1			
7.	Iron	3610 ~~<2.5~~ FB			
8.	Nickel	5.7			
9.	Manganese	15.5			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	1.0	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	0.5	7.	Cadmium	<0.05
4.	Thallium	<0.5	8.	Lead	54

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<0.25
3.	Sulfide	

COMMENTS:

Frank Bergquist
8/15/89

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Sample No.
MC 1015

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915
LAB SAMPLE ID. NO. G2-79-11 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	1580	10.	Zinc	29
2.	Chromium	<4	11.	Boron	<100
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	1880			
8.	Nickel	<40			
9.	Manganese	150			

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	26.5

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	~~<0.04~~ FB <10
3.	Sulfide	

COMMENTS:

8/15/83

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Sample No.
MC-10

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915
LAB SAMPLE ID. NO. G2-79-12 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	3490	10.	Zinc	14.3
2.	Chromium	13.5	11.	Boron	<5
3.	Barium	15.4	12.	Vanadium	15.4
4.	Beryllium	<0.25	13.	Silver	<0.5
5.	Cobalt	2.7			
6.	Copper	7.9			
7.	Iron	6100 ~~<2.5~~ FB			
8.	Nickel	3.8			
9.	Manganese	190			

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	FB ~~<20~~ <1
3.	Selenium	<0.1	7.	Cadmium	<0.05
4.	Thallium	<0.5	8.	Lead	8

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<0.28
3.	Sulfide	

COMMENTS:

Frank Bergquist
8/15/83

AR100148

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Sample No. MC 1017

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915

LAB SAMPLE ID. NO. G2-79-13 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	1270	10.	Zinc	24
2.	Chromium	<10	11.	Boron	<100
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	1390			
8.	Nickel	<40			
9.	Manganese	71			

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	FB ~~<0.25~~ <5

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<10
3.	Sulfide	

COMMENTS:

[signature]
8/15/83

AR100149

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Sample No.
MC-10

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech
CASE NO. 1915
LAB SAMPLE ID. NO. G2-79-14
QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	4610	10.	Zinc	10.7
2.	Chromium	20.9	11.	Boron	<5
3.	Barium	16.9	12.	Vanadium	15.3
4.	Beryllium	0.4	13.	Silver	<0.5
5.	Cobalt	2.6			
6.	Copper	2.6			
7.	Iron	7150			
8.	Nickel	3.2			
9.	Manganese	159			

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	FB ~~0.2~~ 0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	<0.05
4.	Thallium	<0.5	8.	Lead	7.9

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<0.25
3.	Sulfide	

COMMENTS:

Fred Bergmann
8/15/83

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AR100150

US ENVIRONMENTAL PROTECTION AGENCY
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Sample No.
MC 1019

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915
LAB SAMPLE ID. NO. G2-79-15 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	127	10.	Zinc	82
2.	Chromium	52	11.	Boron	<100
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	137			
8.	Nickel	<40			
9.	Manganese	11			

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	38
3.	Selenium	<2	7.	Cadmium	<0.
4.	Thallium	<10	8.	Lead	FB ~~<0.25~~ <5

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	FB ~~<0.01~~ <10
3.	Sulfide	

COMMENTS:

Frank Bruzzese
8/15/83

AR100151

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US ENVIRONMENTAL PROTECTION AGENCY
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703/557-2490 FTS 8-557-2490

Sample No.
MC-1020

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915
LAB SAMPLE ID. NO. G2-79-16 QC REPORT NO. 079

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	1530	10.	Zinc	1240
2.	Chromium	60	11.	Boron	<5
3.	Barium	40.7	12.	Vanadium	23.1
4.	Beryllium	0.4	13.	Silver	<0.5
5.	Cobalt	9.6			
6.	Copper	550			
7.	Iron	13400			
8.	Nickel	17.1			
9.	Manganese	60			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	1.0	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	0.2	7.	Cadmium	0.2
4.	Thallium	<0.5	8.	Lead	FB ~~<0.1~~ 208 *

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<0.25
3.	Sulfide	

COMMENTS: * - Pb RESULT TAKEN FROM ICAP DATA

Frank Buczynski
8/15/83

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703/557-2490 FTS 8-557-2490

Sample No. MC-1021

INORGANICS ANALYSIS DATA SHEET

LAB NAME Chemtech CASE NO. 1915-
LAB SAMPLE ID. NO. G2-79-17 QC REPORT NO. 079

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	< 0.5
2.	Chromium	< 0.5	11.	Boron	< 5
3.	Barium	< 5	12.	Vanadium	< 10
4.	Beryllium	< 0.25	13.	Silver	< 0.5
5.	Cobalt	< 2.5			
6.	Copper	< 2.5			
7.	Iron	4.2			
8.	Nickel	< 2			
9.	Manganese	0.3			

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	FB ~~<0.25~~ <5

TASK 3 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)
1.	Ammonia	
2.	Cyanide	<0.25
3.	Sulfide	

COMMENTS:

8/15/83
[signature]

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Form I