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R-585-9-4-2

SITE INSPECTION OF HUNTERSTOWN ROAD SITE

PREPARED UNDER

TDD NO. F3-8404-07
EPA NO. PA-1018
CONTRACT NO. 68-01-6699

FOR THE

HAZARDOUS SITE CONTROL DIVISION
U.S. ENVIRONMENTAL PROTECTION AGENCY

MARCH 26, 1985

NUS CORPORATION
SUPERFUND DIVISION

SUBMITTED BY	REVIEWED BY	APPROVED BY
RICHARD GORRELL	WILLIAM WENTWORTH	GARTH GLENN
ENVIRON. ENGINEER	ASSISTANT MANAGER	MANAGER, FIT III

TABLE OF CONTENTS

SECTION		PAGE
1.0	INTRODUCTION	1-1
1.1	AUTHORIZATION	1-1
1.2	SCOPE OF WORK	1-1
1.3	SUMMARY	1-1
2.0	THE SITE	2-1
2.1	LOCATION	2-1
2.2	SITE LAYOUT	2-1
2.3	OWNERSHIP HISTORY	2-1
2.4	SITE USE HISTORY	2-1
2.5	PERMIT AND REGULATORY ACTION HISTORY	2-2
2.6	REMEDIAL ACTION TO DATE	2-2
3.0	ENVIRONMENTAL SETTING	3-1
3.1	SURFACE WATERS	3-1
3.2	GEOLOGY AND SOILS	3-1
3.3	GROUNDWATERS	3-2
3.4	CLIMATE AND METEOROLOGY	3-2
3.5	LAND USE	3-3
3.6	POPULATION DISTRIBUTION	3-3
3.7	WATER SUPPLY	3-3
3.8	CRITICAL ENVIRONMENTS	3-3
4.0	WASTE TYPES AND QUANTITIES	4-1
5.0	FIELD TRIP REPORT	5-1
5.1	SUMMARY	5-1
5.2	PERSONS CONTACTED	5-1
5.2.1	PRIOR TO FIELD TRIP	5-1
5.2.2	AT THE SITE	5-1
5.3	SAMPLE LOG	5-2
5.4	SITE OBSERVATIONS	5-3
5.5	PHOTOGRAPH LOG	
5.6	EPA SITE INSPECTION FORM	
6.0	LABORATORY DATA	6-1
6.1	SAMPLE DATA SUMMARY	6-1
6.2	QUALITY ASSURANCE REVIEW	6-2
6.2.1	ORGANIC	6-2
6.2.2	INORGANIC	6-5
7.0	TOXICOLOGICAL EVALUATION	7-1
7.1	SUMMARY	7-1
7.2	SCOPE OF CONTAMINATION	7-2
7.3	TOXICOLOGICAL CONSIDERATIONS	7-4
7.3.1	ACUTE HAZARDS	7-4
7.3.2	LONG-TERM HAZARDS	7-7

APPENDICES

A	1.0 COPY OF TDD	A-1
B	1.0 MAPS AND SKETCHES 1.1 SITE LOCATION MAP 1.2 CONTAMINATED WELLS IN THE VICINITY OF THE HUNTERSTOWN ROAD SITE 1.3 SAMPLE LOCATION MAP 1.4 PHOTOGRAPH LOCATION MAP	B-1
C	1.0 QUALITY ASSURANCE SUPPORT DOCUMENTATION	C-1
D	1.0 LABORATORY DATA SHEETS	D-1

ORIGINAL
(Red)

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. F3-8404-07 for the Hunterstown Road Site located in Adams County, Pennsylvania.

1.2 Scope of Work

NUS FIT III was tasked to perform a site inspection of the Hunterstown Road Site that included the collection of representative soil, surface drainage, and leachate samples from on- and off-site locations. The sampling effort was initiated in an attempt to provide supplemental data to existing Pennsylvania Department of Environmental Protection (PA DER) data in support of existing HRS documentation.

1.3 Summary

The Hunterstown Road Site consists of 2 waste disposal areas located on either side of Hunterstown Road, approximately 1-1/2 miles north of Gettysburg, Pennsylvania. Both areas are within the property bounds of the Edgar Shealer estate. The western disposal area consists of a small area utilized for drum storage and burial. The eastern disposal area consists of a lagoon where materials were dumped.

Industrial waste solvents, paint sludges, and other inert materials were hauled to these areas by Fred Shealer over a period of about 10 years. Approximately 600 drums were reportedly buried and/or emptied at the site. Approximately 590 cubic yards of paint sludge was also dumped.

Complaints by local residents prompted investigations and sampling efforts by the PA DER. High levels of organic and inorganic contaminants were discovered in homes wells that are within close proximity of the site. The EPA subsequently dispatched TAT teams for emergency sampling and eventually issued an order to the responsible party requiring emergency remedial activities at the site. In accordance with this order, Westinghouse Electric Company assumed responsibility for remedial actions and proceded to remove contaminated materials and soil from the lagoon area. Drums were also reportedly removed. Residents with contaminated water were advised by the PA DER not to utilize the water; bottled supplies were provided.

On May 9 and 10, 1984, FIT III personnel conducted a site inspection of the area. A gradiometry survey was conducted in an attempt to identify areas of buried drums. Representative soil sampes from known disposal areas were gathered, along with upstream and downstream samples from receiving streams. Background soil samples were obtained, along with miscellaneous standing water samples and leachate samples.

The gradiometery survey revealed no significant indication of additional unidentified buried drum areas. Samples analysis results from soils gathered from within the lagoon area exhibited confirmed high levels of numerous organic and inorganic contaminants. Analysis of soil samples from the known buried drum area showed similar high levels of several different organic contaminants. Downstream samples from receiving streams showed levels of contaminants which were not found at all in upstream samples.

A significant factor associated with the site is the presence of groundwater as the only source of drinking water for numerous homes within a 3-mile radius of the site.

From a toxicological view point, the sampling effort initiated by FIT III provided enough data to conclude that materials disposed of in the lagoon area have created a significant level of hazard related to direct contact and inhalation. (It should be noted that the toxicological review contained in this report is applicable only for the sample data obtained by the FIT III site inspection. This data has been obtained based on EPA directives and is to be included as supplemental data for the previously compiled HRS of the Hunterstown Road Site.)

ORIGINAL (Red)

SECTION 2

2.0 THE SITE

2.1 Location

The Hunterstown Road Site is located along Hunterstown Road, approximately 1 1/2 miles northeast of Gettysburg, Pennsylvania. The site can be lcoated on the Gettysburg, Pennsylvania, U.S.G.S 7.5 Minute Topographic Quadrangle Map at latitude 39° 51' 6" and longitude 77° 12' 18".

2.2 Site Layout

The site is situated along the east and west side of Hunterstown Road. The western-most disposal area consists of several small areas of buried drums. The east area consist of a waste lagoon, containing liquids and sludge, and a junk/rubble pile of miscellaneous, unspecificed materials.

2.3 Ownership History

Waste disposal areas are located within the confines of a 22-acre parcel known as the Edgar Shealer estate. Although Edgar Shealer is deceased, the property is currently being settled/divided between the Shealer family. The western disposal area is situated behind Fred Shealer's home, and the eastern area lies behind James Shealer's home.

2.4 Site Use History

Fred Shealer began waste disposal activities in this area in 1970 and continued these activities until 1979 or early 1980. Prior to the use of these areas for waste disposal, these areas were used for agriculatural related activities.

2.5 Permit and Regulatory Action History

Waste disposal activities at the site were conducted without the knowledge or approval of the appropriate local, state, or federal agencies. Responding to complaints from local residents, the PA DER initiated an investigation into the Westinghouse waste disposal sites. Among these sites was the area described in this report, Hunterstown Road, and 2 other sites within close proximity. The PA DER's investigation included several sampling efforts of homes wells and related soil and surface drainages. Based on the results of the investigation and sampling, EPA issued a specific order (Document No. III-84-10-DC) requiring remedial activities. Weshinghouse Electric Company assumed the responsibility of carrying out the order.

2.6 Remedial Action To Date

In accordance with the previously described order, Westinghouse Electric Company assumed responsibility for the removal of drums from the site, along with the removal of contaminated soil and sludge. In addition, an access-control fence was constructed around the lagoon area. Bottled drinking water was provided for those residents whose wells proved to be contaminated.

SECTION 3

3.0 ENVIRONMENTAL SETTING

3.1 Water Supply

Residential areas immediately adjacent to the Shealer properties utilize private wells for all water needs. Although the Gettysburg Municipal Water Authority service area extends to withinn 1 mile of the western portion of the site, there are approximately 400 homes within a 3-mile radius that utilize private wells as their only source of domestic water.

Additionally, there are 2 Gettysburg Municipal Water Authority wells within a 3-mile radius of the site. One of these wells was taken out of service due to tetrachloroethylene and chlorodane contamination. No connection between contaminants at this well and the Hunterstown Road Site has been confirmed. The second well is 420 feet deep and was brought on line in April 1984.

In addition to the above described well, the Gettysburg Municipal Water Authority also draws surface water from Marsh Creek, at a point outside the 3-mile radius of the Hunterstown Road Site. Additionally, the Marsh Creek water shed does not collect surface drainage from the Hunterstown Road area. Water from all of the Authority's sources is mixed prior to distribution. This system reportedly provides water to approximately 8,000 people.

3.2 Surface Waters

According to the 1973, photo revised, U.S.G.S. topographic maps and recent aerial photographs of the Hunterstown Road Site location, the disposal areas are drained by the headwaters of an unnamed tributary to Rock Creek. Rock Creek drains into the Monacacy River in Maryland. Additionally, there are several small farm ponds scattered widely within a 3-mile radius of the site. Available information indicates that Rock Creek is not utilized for any major recreational, commerical, or private interest. However, Rock Creek is classified, under Chapter 93 of the Pennsylvania Clean Streams Law, as a warm-water fishery.

3.3 Geology and Soils

Soils within the vicnity of the Hunterstown Road Site area of the Penn-Readington-Croton Association. Soils of this association are generally shallow to moderately deep, with moderately well drained to poorly drained characteristics.

Available information indicates that the site is located over triassic igneous and sedimentary rocks of the Gettysburg Formation. The thickness of the Gettysburg Formation is approximately 15,000 feet. The formation's rock makeup consists of red, reddish-brown, and gray sandstone, red shale and limestone, and quartz pebble conglomerate.

At the time of preparation of this report, site-specific lithologies were unknown due to a lack of well log or core boring data. It is significant to note that a detailed hydrogeological study of the general area is currently being prepared by R.E. Wright Associates.

3.4 Groundwaters

The Gettysburg Formation is reported at the principle hydrologic unit associated with the Hunterstown Road Site. The Gettysburg Formation has also been reported to have properties which make it a single hydraulic unit.

Shallow groundwater flow is controlled by physiographic features, while deep groundwater flows are controlled regionally by fractures. Specifically, the Gettysburg Formation is made up of alternating layers of sedimentary rocks with varying degrees of permeability. The formation itself supposedly has little primary porosity. Water flowing through the system is stored and transmitted through interconnected fractures consisting mostly of high angle joints and bedding plane separations.

As previously noted, a more detailed hydrogeological study, applicable to the disposal area, is currently being prepared by R.E. Wright Associates.

3.5 Climate and Meteorology

The mean annual precipitation for the Gettysburg area ranges from 32 to 48 inches. The mean annual evaporation is 32 inches. Net precipitation, therefore, ranges from 0 and 16 inches per year. Average temperatures for the area range from 35 to 45°F during the winter months and 55 to 70°F during summer months.

3.6 Land Use

The areas immediately adjacent to the Hunterstown Road Site can be classed as rural residential with scattered private dwellings and farmlands. The city of Gettysburg is located approximately 1-1/2 south of the site.

3.7 Population Distribution

The population distribution within a 3-mile radius of the site can best be described as scattered. Estimates based on home counts, as shown on current U.S.G.S. topographic maps, place the total population within 3 miles of the site at 11,000 persons.

3.8 Critical Environments

There are no known critical habitats of endangered species in the general area of the site. The Gettysburg National Military Park lies approximately 2-1/2 miles southwest of the site.

SECTION 4

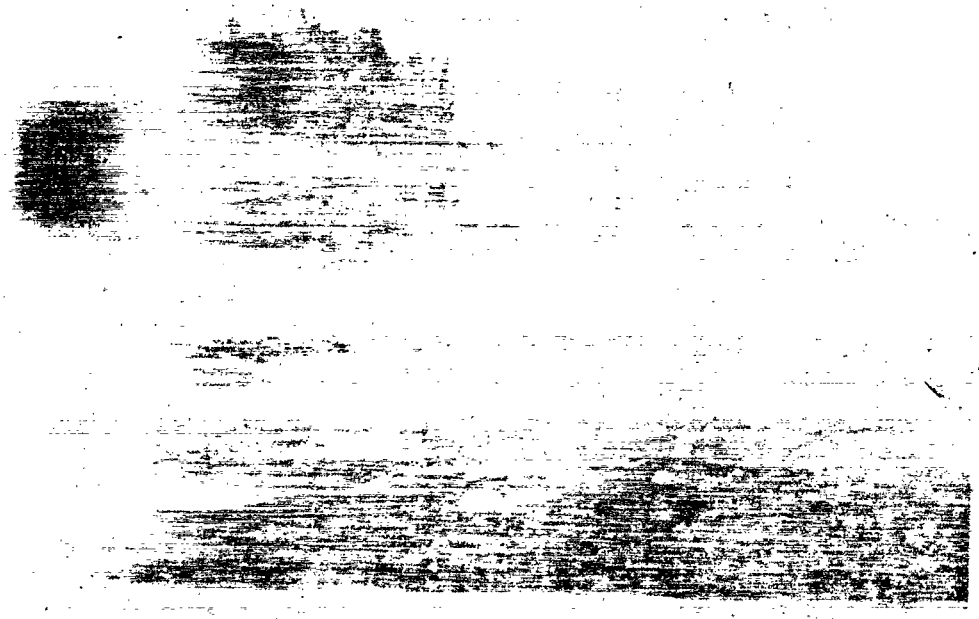
4.0 WASTE TYPES AND QUANTITIES

According to Fred Shealer, waste types disposed of at the previously described areas included scrap lumber, dry wall/sheet rock, paint sludge, and drums of varied contents. Mr. Shealer estimated that he hauled approximately ten 55-gallon drums per month, for a period of about 10 years, to the Hunterstown Road disposal areas. He also estimated that half of the drums hauled to this site were dumped and disposed of in the lagoon area east of Hunterstown Road, while the other half was buried behind his home on the west side of Hunterstown Road.

Based on this description, a total of approximately 600 drums were disposed of within both areas of the site. Additionally, the lagoon contains an estimated 590 cubic yards of paint sludge.

Laboratory analysis of aqueous and solid samples from the lagoon area revealed high leels of both organic and inorganic pollutants. Specifically, napthalene, 1,1,1-trichloroethane, trichloroethene, lead, and chromium were identified. Downgradient surface drainage samples from the buried drum area to the west have shown high levels of 1,1,1-trichloroethane and lead.

SECTION 5



5.0 FIELD TRIP REPORT

5.1 Summary

NUS FIT III personnel Laura Boornazian and Eugene Dennis visited the Hunterstown Road Site on May 9, 1984, to conduct a gradiometer survey of the site. On May 10, 1984, Laura Booranzian and additional NUS FIT III personnel, including Michael Cramer, Loren Lasky, Robert Howell, and Charles Meyer returned to the site to conduct a site investigation/sampling effort. Twenty combined solid and aqueous sample were taken from representative locations at both disposal areas. The weather on May 10, 1984, was breezy and partly cloudy, with temperatures in the low 60s.

5.2 Persons Contacted

5.2.1 Prior to Field Trip

Fred Shealer
510 Hunterstown Road
Gettysburg, PA 17325
(717) 334-3565

Joel Stiegman
Pennsylvania Department of
Environmental Protection
(717) 878-9697

Neil R. Swanson
U.S. EPA
Ninth and Chestnut Streets
Philadelphia, PA 19106
(215) 597-3437

Francis Alberts
Gettysburg Water Authority
Gettysburg, PA 17325
(717) 334-6738

5.2.2 At The Site

Fred Shealer
510 Hunterstown Road
Gettysburg, PA 17325
(717) 334-3565

Joel Stiegman
Pennsylvania Department of
Environmental Protection
(717) 878-9697

TDD Number F3-8404-07
EPA Number PA-1018

5.3 SAMPLE LOG

Site Name Hunterstown Road Site

TRAFFIC REPORTS Organic	Inorganic	High Hazard	SAMPLING LOCATION	PHASE	SAMPLE DESCRIPTION	DATE	TIME	pH	COMMENTS/OBSERVATIONS	LABORATORY
C8407	MC1814		Ponded water on lagoon	aqueous	Multicolored; sheen	5/10/84	0855			Mead/Chemtech
C8408	MC1815		Stained soil on lagoon	solid	Sheen, discoloration		0900			
C8418	MC1825		Stained soil -DUPLICATE	solid	Sheen, discoloration		0900			
C8414	MC1821		Drainage from junk pile	aqueous			0940			
C8415	MC1822		Drainage from pile - sed.	solid			0940			
C8410	MC1817	•	Upstream East Branch	aqueous			1000	6.40		
C8411	MC1818	•	Upstr. East Branch - sed.	solid			1000			
C8416	MC1823	•	Upstr. Small Tributary	aqueous			0930	6.24		
C8417	MC1824	•	Upstr. Sm. Trib - sediment	solid			0930			
C8412	MC1819	•	Downstream East Branch	aqueous	Some sheen noted		0940	7.03	Taken ~300 yds from lagoon	
C8413	MC1820	•	Downstr. East Br. -sed.	solid			0940			
C8409	MC1816		Field Auger	solid	Orange gritty material mixed with dark gray mud		0900			
C8421	MC1828		Leachate soil	solid			1140		Taken near pond	
C8422	MC1829		Filled hole	aqueous			1140	6.77	on Shealer property	
C8405	MC1713		Ponded water - drum area	aqueous						
C8406	MC1811		Soil in drum area	solid						
C8309	MC1830	•	Upstream West Branch	aqueous			1200	7.27		
C8404	MC1831	•	Upstr. West Br. -sed.	solid			1200			
C8419	MC1826	•	Downstr. West Branch	aqueous	Oil sheen droplets noted		1135	6.68	Taken below where spring seeps into stream	
C8420	MC1827	•	Downstr. West Br - sed.	solid	Slightly gray sediment	↓	1135			↓

TDD Number F3-8404-07
EPA Number PA-1018

SAMPLE LOG

Site Name Hunterstown Road Site

TRAFFIC REPORTS Organic	TRAFFIC REPORTS Inorganic	TRAFFIC REPORTS High Hazard	SAMPLING LOCATION	PHASE	SAMPLE DESCRIPTION	DATE	TIME	pH	COMMENTS/OBSERVATIONS	LABORATORY
C4424	MC 1812		Blank	aqueous		5/10/84	0830			Mead/Chemtech
C4425	MC 1813		Blank	solid		"	0830			"

AR100020

5.4 Site Observations

May 9, 1984 Gradiometer Survey

- A gradiometer survey was set up with a standard grid system of 200 feet by 160 feet with 20 foot spacing intervals for instrument reading and level recording purposes. The grid was established over a known area of drum burial. Spot readings were also taken at miscellaneous locations within the area in an attempt to locate additional unknown areas of buried drums.

- The readings obtained indicated no significant levels above normal background.

- The site owner reported that there were numerous metalic objects buried within the confines of his property.

May 10, 1984 Sampling Investigation

- The soil ponded water on the surface of the area described as the lagoon area appeared to be multicolored with an oily sheen.

- The soil from auger samples at shallow depths (0 to 1 foot) had an orange coloration with a gritty texture (from the lagoon area).

- The soil from auger samples at greater depths (1 to 2 feet) had a dark gray coloration (from the lagoon area).

- The water flowing in the downstream sample location on the West Branch tributary appeared to have an oily sheen.

- The sediments in the downstream location on the West Branch tributary were gray in coloration as compared to orange/yellow coloration of the soil adjacent to the stream.

- A pile of empty, rusty drums was discovered in the woods upstream from the Shealer property.

5.5 PHOTOGRAPH LOG

Photographs are numbered as taken in the field; therefore, the photos may not be seen in sequential order.

Photo 2 -
Drilling hole in field using power auger.

Photo 3 -
View of lagoon facing east branch of tributary.

F3-8404-07
5/10/84
0842

Photo 2

Drilling hole in field using power auger.

Laura A. Boornazian
Laura A. Boornazian

F3-8404-07
5/10/84
0915

Photo # 3

View of lagoon facing east branch of tributary.

Laura A. Boornazian
Laura A. Boornazian

Photo 4 -
Collection of ponded water on lagc
surface.

Photo 5 -
B. Howell collecting ponded water from
lagoon surface.

F3-8404-07
5/10/84
0855

Photo # 4

Collection of ponded water on lagoon surface.

Laura A. Boornazian
Laura A. Boornazian

F3-8404-07
5/10/84
0858

Photo # 5

B. Howell collecting ponded water from lagoon surface.

Laura A. Boornazian for
Loren Lasky

Photo 6 -
Loren Lasky collecting composite soil sample from lagoon surface.

Photo 7 -
Close-up of ponded water on lagoon surface.

F3-8404-07
5/10/84
0900

Photo 6

Loren Lasky collecting composite soil sample from lagoon surface.

Robert L. Howell
Robert Howell

F3-8404-07
5/10/84
0920

Photo # 7

Close-up of ponded water on lagoon surface.

Laura A. Boornazian
Laura A. Boornazian

Photo 8 -
Lagoon surface where soil sample was collected.

Photo 11 -
Collection of drainage from junk pile.
Note junk pile in background and proximity of residences.

F3-8404-07
5/10/84
0920

Photo 8

Lagoon surface where soil sample was collected.

Laura A. Boornazian
Laura A. Boornazian

F3-8404-07
5/10/84
0940

Photo 11

Collection of drainage from junk pile.
Note junk pile in background and proximity of residences.

Laura A. Boornazian
Laura A. Boornazian

Photo 13 -
Upstream east branch sampling location.

Photo 16 -
Downstream west branch sampling location.

F3-8404-07
5|10|84
1000

Photo 13

Upstream east branch sampling location.

Michael P. Cramer

F3-8404-07
5|10|84
1135

Photo

Downstream west branch sampling location.

Charles Meyer

Photo 19 and 20 -
Panoramic view of Fred Shealer property at 510 Hunterstown Road. Shows grass-covered drum burial area and pond in background.

F3-8404-07
5/10/84

Photo 20

Panoramic view of Fred Shealer property at 510 Hunterstown Road. Shows grass-covere drum burial area and pond in background.

Laura A. Boornazian
Laura A. Boornazian

F3-8404-07
5/10/84

Photo 19

Panoramic view of Fred Shealer property at 510 Hunterstown Road. Shows grass-covered drum burial area and pond in background.

Laura A. Boornazian
Laura A. Boornazian

Photo 21 -
Ponded water in drum area.

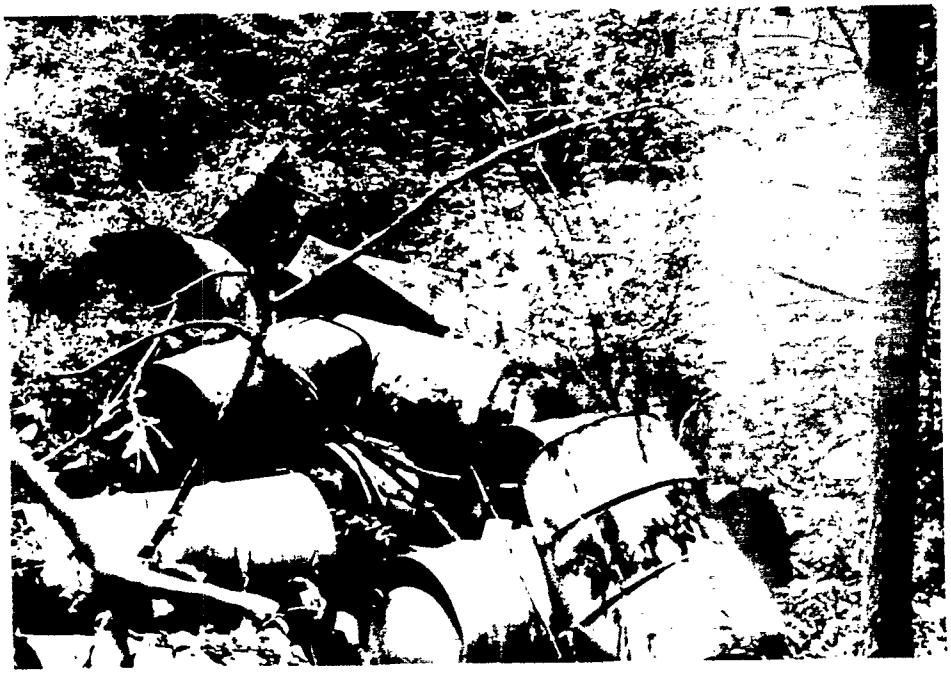


Photo 22 -
Drums along west branch tributary.

F3-8404-07
5/10/84

Photo 21

Ponded water in drum area.

Robert Howell
Robert Howell

F3-8404-07
5/10/84

Photo 22

Drums along west branch tributary.

Robert Howell
Robert Howell

F3-8403-15A

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	1018

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Hunterstown Road Site	510 Hunterstown Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Gettysburg	PA	17325	Adams		

09 COORDINATES		10 TYPE OF OWNERSHIP (Check one)
39° 51' 6" LATITUDE	77° 12' 18" LONGITUDE	☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
5 / 10 / 84 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1969 (BEGINNING YEAR) 1980 (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
Laura Boornazian	Air Pollution Specialist	NUS Corp.	(215) 687-9510
09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO
Michael Cramer	Geologist	" "	( ) " " "
Loren Lasky	Geologist	" "	( ) " " "
Robert Howell	Environmental Technician	" "	( ) " " "
Charles Meyer	Environmental Technician	" "	( ) " " "
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Fred Shealer	Property Owner	510 Hunterstown Road	(717) 334-3565
			( )
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	0820	Partly cloudy, mid-60s

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
Joel Steigman	PA DER	717) 787-9697

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Richard Gorrell	NUS FIT II	NUS Corp.	(215) 687-9510	9 / 18 / 84 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

AR100036

ORIGINAL
(Red)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	1018

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

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

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

- TONS
- CUBIC YARDS: 1252
- NO. OF DRUMS

03 WASTE CHARACTERISTICS (Check all that apply)

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

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	592	cubic yds	paint pigments
OLW	OILY WASTE			
SOL	SOLVENTS	132,000	gallons	paint solvents, chlorinated solvents
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

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

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	1,4-dichlorobenzene	106-46-7	dumped on surface	91.0	ppm
	di-n-butylphthalate	84-74-2	dumped on surface	32.0	ppm
PSD	4,4-DDT	50-29-3	unknown	34.0	ppm
IOC	cyanide	57-12-5	unknown	5.5	ppm
OOC	phenol		unknown	48	ppm
IOC	arsenic	7440-38-2	unknown	9.1	ppm
SOL	TCE	79-01-6	dumped on surface	66	ppb
SOL	1,1,1 - TCE	71-55-6	dumped on surface	82	ppb
SOL	1,1-dichloroethylene	75-35-4	dumped on surface	26	ppb
SOL	1,2-dichloroethylene		dumped on surface	9.7	ppb
IOC	lead	7439-92-1	unknown	12,600	ppm
IOC	copper	7440-50-8	unknown	1630	ppm
IOC	chromium	7440-47-3	unknown	348	ppm
IOC	zinc	7440-60-6	unknown	531,000	ppm
IOC	selenium	7782-49-2	unknown	4.4	ppm
IOC	antimony	7440-36-10	unknown	23.2	ppm

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS	N/A		FDS		
FDS			FDS		
FDS			FDS		

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

EPA order, Docket Number III-84-10-DC, which contained sample analysis, Potential Hazardous Waste Site Identification and Preliminary Assessment, Fred Shealer site, and FIT III Site Inspections on 5-8-84 and 5-10-84.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE: PA	02 SITE NUMBER: 1018

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 9,520
02 [X] OBSERVED (DATE: 12/14,23/83) ☐ POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION
Wells in the vicinity of 510 Hunterstown Road. Sampled and analyzed to contain organic compounds. TCE, 1,1,1-TCE, 1,1-dichloroethylene. Shealer property at 510 Hunterstown Road is the only known source of these compounds.

01 [X] B. SURFACE WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: _____
02 [X] OBSERVED (DATE: 1/12,13/84) ☐ POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION
Sediment from stream below sludge pile sampled and tested. Compounds found included arsenic, barium, cadium, chromium, lead, mercury, selenium, silver endrine, linidane, methoxyclor, taxaphere, 2,4-0,2,4,5-TP(silver) and PCB.

01 ☐ C. CONTAMINATION OF AIR
03 POPULATION POTENTIALLY AFFECTED: _____
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
No air sampling performed at this site.

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

01 [X] E. DIRECT CONTACT
03 POPULATION POTENTIALLY AFFECTED: 9,520
02 [X] OBSERVED (DATE: 5/10/84) [X] POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
The waste was not originally contained in any way and was easily accessible.

01 [X] F. CONTAMINATION OF SOIL
03 AREA POTENTIALLY AFFECTED: 3 (Acres)
02 [X] OBSERVED (DATE: 5/10/84) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Waste was allegedly dumped on the surface of the site and would indicate a contamination of the soil.

01 [X] G. DRINKING WATER CONTAMINATION
03 POPULATION POTENTIALLY AFFECTED: 9,520
02 [X] OBSERVED (DATE: 12/13,14/84) ☐ POTENTIAL [X] ALLEGED
04 NARRATIVE DESCRIPTION
Wells in the vicinity of 510 Hunterstown Road. Sampled and analyzed to contain organic compounds. TCE, 1,1,1-TCE, 1,1-dichloroethylene. Shealer property at 510 Hunterstown Road is the only known source of these compounds.

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

01 ☐ I. POPULATION EXPOSURE/INJURY
03 POPULATION POTENTIALLY AFFECTED: N/A
02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
PA DER has sampled home wells within the vicinity of the site and lab analysis results have prompted DER to advise residents against drinking, bathing, or washing clothing with contaminated water.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION
01 STATE: PA | 02 SITE NUMBER: 1018

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J. DAMAGE TO FLORA — 02 [X] OBSERVED (DATE: 1/31/84) — ☐ POTENTIAL — [X] ALLEGED
04 NARRATIVE DESCRIPTION

Dead trees were observed in the area below the leachate and impoundments.

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

N/A

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

N/A

01 [X] M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) — [X] POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Waste materials were either dumped onto the ground surface or stored in drums above or below ground surface.

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

N/A

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

N/A

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

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

Observed soil contamination on site disposal area on 5/10/84. Observed surface water contamination, downstream surface drainages on 5/10/84. Observed groundwater contamination, numerous private wells. Sampled and analysed by PA DER.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 9,520 people within 3 miles utilize groundwater for all domestic sources.

IV. COMMENTS

Laboratory analysis of samples (aqueous and solid) collected from disposal ares revealed extremely high concentrations of both organic and inorganic pollutants.

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

EPA Order, Docket Number III-84-10-DC, which contained sample analysis, Potential Hazardous Waste Site Identification and Preliminary Assessment, Fred Shealer Site, and FIT III site inspections on 5/8/84 and 5/10/84.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	1018

II. PERMIT INFORMATION N/A Illegal dumping practices

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

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
X ☐ A. SURFACE IMPOUNDMENT	unknown	
X ☐ B. PILES	592	cubic yds
☐ C. DRUMS, ABOVE GROUND		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
X ☐ I. OTHER (Specify) Drums, buried and above ground.	Approx. 600	

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

05 OTHER
- X ☐ A. BUILDINGS ON SITE — Fred Shealer home

06 AREA OF SITE
3 (Acres)

07 COMMENTS
The Hunterstown Road site is an umpermitted waste disposal area. Fred Shealer, the property owner, hauled an estimated 600 drums and other materials to the area over a ten-year period. Waste materials were either dumped directly onto the ground surface, buried in drums, or stored in drums above ground. The site itself consists of two separate disposal areas on the east and west side of Hunterstown Road. The west area consists of buried drums; the east area consists of a pile/lagoon.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

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

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.
The drums that were transported to this site were either emptied and sold, buried, or left on the surface. There is no liner on this site or barriers to prevent the spreading of this waste.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: X ☐ YES ☐ NO

02 COMMENTS
The waste has been dumped in an open field with no type of security or fences to prevent access.

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

Information obtained from: Transcripts of meeting between PA DER and Fred Shealer. EPA Oder, Docket Number II-84-10-DC, which contained sample analysis, Potential Hazardous Waste Site Identification and Preliminary Assessment, Fred Shealer Site, FIT III site inspections performed on 5/8/84 and 5/10/84.

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: PA | 02 SITE NUMBER: 1018

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)	SURFACE	WELL	02 STATUS: ENDANGERED	AFFECTED	MONITORED	03 DISTANCE TO SITE
COMMUNITY	A. ☐	B. ☒	A. ☐	B. ☒	C. ☒	A. <3 (mi)
NON-COMMUNITY	C. ☐	D. ☒	D. ☐	E. ☒	F. ☒	B. .5 (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☒ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

(For those residents outside the service area of the Gettysburg Water Authority) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other sources available)

02 POPULATION SERVED BY GROUND WATER	03 DISTANCE TO NEAREST DRINKING WATER WELL
9,520	1,000 ft. (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
18 (ft)	southwest	18 (ft)	unknown (gpd)	☒ YES ☐ NO

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

There are an estimated 400 homes within a 3-mile radius of the site that utilize wells for all domestic needs. The Gettysburg Municipal Authority has two source wells within 3miles of the site. One of these wells has been taken out of service. The other, put on line in April 1974, is 420 feet deep and provides an estimated 30% of the authority's total water.

10 RECHARGE AREA	COMMENTS	11 DISCHARGE AREA	COMMENTS
☒ YES ☐ NO	Elevation of the site is greater than the area to the west.	☐ YES ☒ NO	

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
The disposal area drains into the headwaters of an unnamed tributary to Rock Creek.	☒	.5 (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE	02 DISTANCE TO NEAREST POPULATION
A. 400 NO. OF PERSONS	B. 7,500 NO. OF PERSONS	C. 11,000 NO. OF PERSONS	<.5 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE	04 DISTANCE TO NEAREST OFF-SITE BUILDING
1,900	<.5 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

Rural, single family homes. Approximately 50 people.

EPA FORM 2070-13 (7-81)

AR100041

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	1018

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	
150 (ft)	unknown (ft)	unknown	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
32-48 in/yr (in)	2.5 (in)	3 to 8 %	southwest	6 %

09 FLOOD POTENTIAL

SITE IS IN no ~~YEAR~~ FLOODPLAIN

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

11 DISTANCE TO WETLANDS (5 acre minimum)

N/A ESTUARINE OTHER

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

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

N/A _____ (mi)

ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AG LAND
A. 2 (mi)	B. 2 (mi)	C. _____ (mi)	D. 2 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The two disposal areas which make up this site conform with surrounding topography. The eastern area, located behind James Shealer's home, consists of sludge and solid materials which were dumped onto the ground surface or into a "lagoon." The western area, located behind Fred Shealer's home, consists of several small areas where drums were buried.

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

EPA Order, Docket Number III-84-10-DC, which contained sample analysis, Potential Hazardous Waste Site Identification and Preliminary Assessment, Fred Shealer site.
Soil Survey: Adams County, Pennsylvania
Water Resource Report 2: Groundwater in Southeastern Pennsylvania

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	1018

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER X	unknown	PA DER has sampled private wells within the vicinity of the site.	Available upon request
SURFACE WATER X	9	Samples were gathered by FIT III team on 5/10/84. Results have been forwarded by labs.	Available upon request.
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL X	11	See above, under Surface Water	Available upon request.
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Gradiometer Survey on 5/10/84	A gradiometer survey was conducted at the buried drum area west of of Hunterstown Rd. Refer to Section 5.0, in the report.
Sample collection on 5/10/84	Representative surface water and soil samples were gathered from both disposal areas.

IV. PHOTOGRAPHS AND MAPS

01 TYPE X GROUND ☐ AERIAL

02 IN CUSTODY OF Refer to corresponding report.
(Name of organization or individual)

03 MAPS X ☒ YES ☐ NO

04 LOCATION OF MAPS Refer to corresponding report.

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Summary of Field Data Collected from 5/8/84 and 5/10/84 Site Inspections:

- Representative solid and aqueous soil/surface water samples
- Gradiometer survey
- Photographs documenting site inspections
- Log book of Field observations

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

FIT III 5/8/84 and 5/10/84 site inspections.

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
PA	1018

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Fred Shealer		510 Hunterstown Road	N/A	Gettysburg	PA	17325
James Shealer		Across Street from Fred Shealer	N/A	Gettysburg	PA	17325

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE
N/A						

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

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Edgar Shealer		Hunterstown Road		Gettysburg	PA	17325

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

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

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

FIT III 5/10/84 Site Inspection

EPA FORM 2070-13 (7-81)

AR100044

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	1018

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Fred Shealer	

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

05 CITY	06 STATE	07 ZIP CODE
Gettysburg	PA	17325

08 YEARS OF OPERATION	09 NAME OF OWNER

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER
N/A	

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

14 CITY	15 STATE	16 ZIP CODE

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

01 NAME	02 D+B NUMBER
N/A	

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER
N/A	

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

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

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

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

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

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

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

14 CITY	15 STATE	16 ZIP CODE

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

FIT III site inspection on 5/10/84.

EPA FORM 2070-13 (7-81)

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
PA	1018

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
Westinghouse III Elevator Plant		Dal Tile	
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**04 SIC CODE**
		North 4th Street	

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Gettysburg	PA	17325	Gettysburg	PA	17325

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Spectra-Kote 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. Box 369			

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
Gettysburg	PA	17325			

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**04 SIC CODE**

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

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	**04 SIC CODE**	**03 STREET ADDRESS (P.O. Box, RFD #, etc.)**	**04 SIC CODE**

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

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

Meeting transcript 12.27.83 between Fred Shealer and PA DER

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	1018

II. PAST RESPONSE ACTIVITIES

01 ☒ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY PA DER
04 DESCRIPTION
Residents who were found to have contaminated wells were advised notto use.

01 ☒ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Drinking water (bottled) is being provided by Westinghouse Corporation.

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

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE 1983 — 03 AGENCY _____
04 DESCRIPTION Westinghouse removed contaminated materials from lagoon area and drums from the Western disposal area.

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE 1983 — 03 AGENCY _____
04 DESCRIPTION
See above

01 ☐ F. WASTE REPACKAGED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Westinghouse assumed responsibility for remedial actions at the site.

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
See above

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

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

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

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

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

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

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

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

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

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

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

I. IDENTIFICATION
01 STATE: PA | 02 SITE NUMBER: 1018

II PAST RESPONSE ACTIVITIES *(Continued)*

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

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

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

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

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

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

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

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

01 ☒ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Contaminated materials in lagoon area were excavated and removed from site.

01 ☒ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
Access restriction fence was constructed around lagoon area.

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

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

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

PA DER Files on Westinghouse (Fred Shealer) site.

EPA FORM 2070-13 (7-81)

AR100048

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
PA	1018

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☒ YES ☐ NO

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

Waste disposal activities were conducted at the site without the knowledge or prior approval of appropriate local, state, or federal agencies. Complaints from local residents resulted in the initiation of an investigation of Westinghouse Electric Corporation's Waste disposal sites by PA DER. This investigation included a sampling of the home wells within the area. Based on the results of the investigation and sampling effort, EPA subsequently issued an order (Document Number III-84-10-DC) requiring emergency remedial actions. Westinghouse Electric assumed the responsibility of carrying out the order.

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

SECTION 6

6.0 LABORATORY DATA

6.1 Sample Data Summary

TDD Number [redacted]3-8404-07
EPA Number DA-1018

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name [redacted] Road Site
Date of Sample 5/10/84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	Phenol	benzoic acid	4-methylphenol	1,4-dichlorobenzene	naphthalene	bis (2-ethylhexyl) phthalate	di-n-butyl phthalate	di-n-octyl phthalate	aniline	4-chloroaniline	1,1,1-trichloroethane	1,1-dichloroethane	1,1,2-trichloroethane	2-methyl NAPTHALENE	
C8407	Ponded water on lagoon	aqueous	µg/l					240						<25,000 ◇				
C8408	Stained soil on lagoon	solid	µg/Kg	3000	29,000	1400	1200	2800	850 ◇	920 ◇		2300	<4000	2.8×10^7	$<4.4\times10^4$			
C8418	Stained soil on lagoon - DUPLICATE	solid	µg/Kg					290,000		29,000 ◇				3.2×10^7			$<5.3\times10^4$	
C8414	Drainage from junk pile	aqueous	µg/l											12,000	2500			
C8415	Drainage from junk pile - Sediment	solid	µg/Kg											120	27	<3.6		
C8410	Upstream - East Branch	aqueous	µg/l															
C8411	Upstream East Branch, Sediment	solid	µg/Kg															
C8416	Upstream Small Tributary	aqueous	µg/l						<20 ◇									
C8417	Upstream Small Tributary - Sed.	solid	µg/Kg															
C8412	Downstream East Branch	aqueous	µg/l							<20 ◇				25				
C8413	Downstream East Branch, sediment	solid	µg/Kg															
C8409	Field Auger	solid	µg/Kg															
C8421	Leachate soil	solid	µg/Kg															
C8422	Filled hole	aqueous	µg/l							<20 ◇								

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 F3-8404-07
EPA Number PA-1018

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Hunterstown Road Site
Date of Sample 5/10/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: 1,1-dichloroethene	1,2-trans-dichloroethene	ethyl benzene	methylene chloride	toluene	trichloroethene	vinyl chloride	carbon disulfide	o-xylene	benzo(a) anthracene	benzo(a) pyrene	benzo(b) fluoranthene	benzo(k) fluoranthene	Chrysene	Pyrene
C8407	Ponded water on lagoon	aqueous	µg/l			380,000		33,000				1.9×10^6						
C8408	Stained soil on lagoon	solid	µg/Kg		9.3×10^7	8.4×10^6	6.1×10^7 ◇	2.9×10^7	2.4×10^8			2.0×10^7						
C8418	Stained soil on lagoon - DUPLICATE	solid	µg/Kg		1.1×10^8	1.3×10^7	$< 1.0 \times 10^7$ ◇	3.8×10^7	2.8×10^8			3.0×10^7						
C8414	Drainage from junk pile	aqueous	µg/l				790 ◇	< 250 ◇										
C8415	Drainage from junk pile - Sediment	solid	µg/Kg				32 ◇											
C8410	Upstream - East Branch	aqueous	µg/l															
C8411	Upstream East Branch, sediment	solid	µg/Kg				5.1 ◇											
C8416	Upstream Small Tributary	aqueous	µg/l															
C8417	Upstream Small Tributary - Sed.	solid	µg/Kg				6.1 ◇											
C8412	Downstream East Branch	aqueous	µg/l		35				330									
C8413	Downstream East Branch, sediment	solid	µg/Kg															
C8409	Field Auger	solid	µg/Kg				5.0 ◇											
C8421	Leachate soil	solid	µg/Kg				< 6.0 ◇	6.4 ◇										
C8432	Filled hole	aqueous	µg/l															

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

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

TDD Number F3-8404-07
EPA Number PA-1018

SAMPLE SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Hunterstown Road Site
Date of Sample 5/10/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: phenol	benzoic acid	4-methylphenol	1,4-dichlorobenzene	naphthalene	bis (2-ethylhexyl)-phthalate	di-n-butyl phthalate	di-n-octyl phthalate	aniline	4-chloroaniline	1,1,1-trichloroethane	1,1-dichloroethane	1,1,2-trichloroethane	2-methyl NAPTHALENE
C8405	Ponded water in drum area	aqueous	µg/l										21	<5			
C8406	Soil in drum area	solid	µg/kg							<703 ◇							
C8309	Upstream West Branch	aqueous	µg/l														
C8404	Upstream West Branch, sediment	solid	µg/kg														
C8419	Downstream West Branch	aqueous	µg/l										430	80			
C8420	Downstream West Branch, sediment	solid	µg/kg										13	<3.55			
C4424	Blank	aqueous	µg/l														
C4425	Blank	solid	µg/kg														

ARI00054

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 F3-8404-07
EPA Number PA-1018

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☒ Organic ☐ Inorganic

Site Name Hunterstown Road Site
Date of Sample 5/10/84

II - Indistinguishable Isomers

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: 1,1-dichloroethene	1,2-trans-dichloroethene	ethyl benzene	methylene chloride	toluene	trichloroethene	vinyl chloride	carbon disulfide	o-xylene	benzo (a)-anthracene	benzo (a)-pyrene	benzo (b)-fluoranthene	benzo (k)-fluoranthene	chrysene	pyrene
C8405	Ponded water in drum area	aqueous	µg/l		220			6.6 ◇	39		<10	5.1 ◇							
C8406	Soil in drum area	solid	µg/Kg		35	<4.2 ◇	6.2 ◇						840	<1406	<1406 II	<1406 II	1100	<703	
C8309	Upstream West Branch	aqueous	µg/l																
C8404	Upstream West Branch, sediment	solid	µg/Kg				<3.5 ◇												
C8419	Downstream West Branch	aqueous	µg/l	6.0	240		15 ◇		25	<5									
C8420	Downstream West Branch, sediment	solid	µg/Kg		10		10 ◇												
C4424	Blank	aqueous	µg/l				<5												
C4425	Blank	solid	µg/Kg				14	<2.5											

ARI0055

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

◇ Denotes results of question[redacted] significance based u[redacted]

TDD Number F3-8404-07
EPA Number PA-1018

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Hunterstown Road Site
Date of Sample 5/10/84

Compounds Detected

Sample Number	Sample Description and Location	Phase	Units	aluminum	chromium	barium	beryllium	cobalt	copper	iron	nickel	manganese	zinc	vanadium	silver	arsenic	Remarks
MC1814	Ponded water on lagoon	aqueous	µg/l	21,780	2150	658			6640	62,460		6240	3340				
MC1815	Stained soil on lagoon	solid	mg/Kg	5600	1450	311	1.4	5.6	2140	11,800	5.6	451	590	24.5		2.4	
MC1825	Stained soil on lagoon - DUPLICATE	solid	mg/Kg	5850	1160	376	1.1	8.5	2250	12,550	4.8	1080	711	22		2.8	
MC1821	Drainage from junk pile	aqueous	µg/l							16,420		1620	63.2◇		11.9		
MC1822	Drainage from junk pile - sediment	solid	mg/Kg	5140	9.4	600	2.6	38.7	5.3◇	60,000	10.6	3920	34	56		5.5	
MC1817	Upstream - East Branch	aqueous	µg/l	169						307◇		20.3					
MC1818	Upstream East Branch, sediment	solid	mg/Kg	5370	6.9	41.9	0.51◇	4.3	6.0◇	5280	4.3	341	23.7	13.1		0.80	
MC1823	Upstream Small Tributary	aqueous	µg/l							213◇		30.3	15.4◇				
MC1824	Upstream Small Tributary - Sed.	solid	mg/Kg	7180	7.8	106	1.3	15.6	8.7◇	12,400	5.6	1655	34.4	18.7		3.4	
MC1819	Downstream East Branch	aqueous	µg/l	271					57.8◇	666◇		230	129				
MC1820	Downstream East Branch, sediment	solid	mg/Kg	7510	258	139	2.1	25.1	380	30,100	14.5	4000	540	49		4.8	
MC1816	Field Auger	solid	mg/Kg	7750	9.8	51.9	0.6◇	6.6	17.4	8950	6.7	397	49.2	17.2		1.7	
MC1828	Leachate soil	solid	mg/Kg	8250	9.4	58.5		4.5	10.9◇	7280	5.9	328	36.3	17.5		1.6	
MC1829	Filled hole	aqueous	µg/l	70,800	70.6	929	10.1◇	59.8	164◇	58,940	42.4	7940	490			10	

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

◇ [illegible] significance based [illegible] quality assurance [illegible] data

TDD Number F3-8404-07
EPA Number PA-1018

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Hunterstown Road Site
Date of Sample 5/10/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: antimony	selenium	mercury	tin	cadmium	lead	cyanide								Remarks
mc 1814	Ponded water on lagoon	aqueous	µg/l				27 ◇	3.0	14,800	10								
mc 1815	Stained soil on lagoon	solid	mg/kg	1.15		0.18	3.5	0.35	7200	1.2								
mc 1825	Stained soil on lagoon - DUPLICATE	solid	mg/kg	1.2		0.75	3.6	0.53	6150	0.575								
mc 1821	Drainage from junk pile	aqueous	µg/l					1.4	18 ◇									
mc 1822	Drainage from junk pile - sediment	solid	mg/kg					0.18	24.5	0.275								
mc 1817	Upstream - East Branch	aqueous	µg/l															
mc 1818	Upstream East Branch, sediment	solid	mg/kg		0.15			0.11	13									
mc 1823	Upstream Small Tributary	aqueous	µg/l						10 ◇									
mc 1824	Upstream Small Tributary - Sed.	solid	mg/kg			0.1		0.13	19.5									
mc 1819	Downstream East Branch	aqueous	µg/l						48 ◇									
mc 1820	Downstream East Branch, sediment	solid	mg/kg					0.83	1690	0.30								
mc 1826	Field Auger	solid	mg/kg			0.12		0.10	19.9									
mc 1828	Leachate soil	solid	mg/kg			0.16		0.15	22.7									
mc 1829	Filled hole	aqueous	µg/l					1.1 ◇	[illegible]									

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

◇ Denotes results of questi[illegible] significance based upo[illegible]

TDD Number F3-8404-07
EPA Number AA-1018

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Hunterstown Road Site
Date of Sample 5/10/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: aluminum	chromium	barium	beryllium	cobalt	copper	iron	nickel	manganese	zinc	vanadium	silver	arsenic	Remarks
MC 1713	Ponded water in drum area	aqueous	µg/l	936					42.9◇	7840		507	27.1◇				
MC 1811	Soil in drum area	solid	mg/Kg	9500	20.2	133	2.2	18.9	10.1◇	31,000	16.6	1160	60.5	44.5		8.4	
MC 1830	Upstream West Branch	aqueous	µg/l	415						549◇		31.1	19.6◇				
MC 1831	Upstream West Branch, sediment	solid	mg/Kg	9850	15.8	58	0.52◇	24.7	8.2◇	25,800	10.1	700	46.3	36.1		2.5	
MC 1826	Downstream West Branch	aqueous	µg/l	145			7◇			2370		371	15.8◇		19.7		
MC 1827	Downstream West Branch, sediment	solid	mg/Kg	11,900	17	51.5	0.9	6.9	13.7◇	15,500	9.8	229	28.9	33.9		3.2	
MC 1812	Blank	aqueous	µg/l						58.2	141			16.4				
MC 1813	Blank	solid	mg/Kg							2.9							

AR 300058

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 quest[illegible]ance basis

TDD Number F3-8404-07
EPA Number PA-1018

SAMPLE DATA SUMMARY
TARGET COMPOUNDS

☐ Organic ☒ Inorganic

Site Name Hunterstown Road Site
Date of Sample 5/10/84

Sample Number	Sample Description and Location	Phase	Units	Compounds Detected: antimony	selenium	mercury	tin	cadmium	lead	cyanide								Remarks
mc1713	Ponded water in drum area	aqueous	µg/l						32 ◇									
mc1811	Soil in drum area	solid			0.1			0.14	6.5									
mc1830	Upstream West Branch	aqueous							57 ◇									
mc1831	Upstream West Branch, sediment	solid				0.16		0.06 ◇	22.2									
mc1826	Downstream West Branch	aqueous							6 ◇									
mc1827	Downstream West Branch, sediment	solid							15									
mc1812	Blank	aqueous							20									
mc1813	Blank	solid																

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 ...

6.2 Quality Assurance Review

6.2.1 Organic Data: Lab Case 2742

6.2.1.1 Introduction

The findings offered in this report are based upon a general review of all available organic laboratory data. The data package was examined for blank analysis results, surrogate and matrix spike recoveries, duplicate analysis results, and target compound matching quality.

6.2.1.2 Qualifiers

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

- All positive results for bis(2-ethylhexyl) phthalate, di-n-butyl phthalate, di-n-octyl phthalate, and methylene chloride may be questionable.
- The result for 1,1,1-trichloroethane in sample C-8407 may be questionable.
- The results for toluene in samples C-8405, C-8414, and C-8421 may be questionable.
- The result for o-xylene in sample C-8405 may be questionable.
- The result for ethyl benzene in sample C-8406 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 reported cannot be present.

- Most acid compound detection limits in sample C-8422 and some acid compound detection limits in samples C-8408, C-8411, and C-8413 may be significantly higher than those reported. This is particularly true for phenol, although other compounds may be similarly affected. Additionally, the actual concentration for phenol in sample C-8408 may be significantly higher than that reported.

- Some pesticide compound detection limits in sample C-8413 may be slightly higher than those reported.

- The reported results for BNA compounds in field duplicate samples C-8408 and C-8418 may not reflect the average concentrations of the constituents that are actually present.

- The reported results for benzo(b)fluoranthene and benzo(k)fluoranthene in sample C-8406 may actually represent the presence of either or both of these compounds at a total concentration approximately of that reported.

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

6.2.1.3 Findings

- Bis(2-ethylhexyl) phthalate, di-n-butyl phthalate, di-n-octyl phthalate, methylene chloride, 1,1,1-trichloroethane, toluene, and o-xylene were detected in field and/or laboratory blanks at levels sufficient to question the aforementioned sample results.

  It should be noted that the questioned results for methylene chloride in samples C-8408 and C-8418 and for 1,1,1-trichloroethane in sample C-8407 were questioned because the samples were analyzed as dilutions and instrument levels of these constituents were within range to be questioned by blank contamination. Similarly, phthalate compounds in samples C-8408 and C-8418 were also questioned by instrument levels comparable to those found in the blanks.

- The result for ethyl benzene in sample C-8406 appears to be an artifact of chromatographic ghosting from an immediately preceding standard run.

- D_5-phenol, a surrogate spike compound, exhibited very low recoveries (less than 3 percent) in samples C-8408, C-8411, and C-8413. Additionally, in sample C-8422, all surrogate compounds exhibited zero recoveries.

- The pesticide surrogate compound in sample C-8413 exhibited a very low recovery.

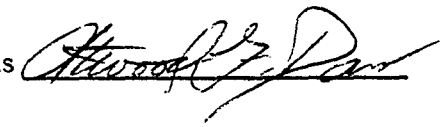
- The field duplicate samples C-8408 and C-8418 exhibited an excessive variability for indigenous BNA compounds. No reasons other than possible sample inhomogeneity were found to account for this variation.

- Examination of the raw data revealed that benzo(b)fluoranthene and benzo(k)fluoranthene results were actually calculated from the same scan retention time. This is because these two compounds have nearly identical spectra and retention times.

- 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. Please see the attached Support Documentation Appendix for specifics on this Quality Assurance Review.

Report prepared by Atwood F. Davis  Date: September 7, 198

6.2.2 Inorganic Data: Lab Case 2742

6.2.2.1 Introduction

The findings offered in this report are based upon a general review of all available inorganic laboratory data. Blank analysis results, matrix spike recoveries, duplicate analysis results, and quality assurance documentation were examined in detail.

6.2.2.2 Qualifiers

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

- The results for beryllium in samples MC-1816, MC-1818, MC-1826, MC-1829, and MC-1831 may be questionable.
- The results for copper in samples MC-1713, MC-1811, MC-1818, MC-1819, MC-1822, MC-1824, MC-1827, MC-1828, MC-1829, and MC-1831 may be questionable.
- The results for iron in samples MC-1817, MC-1819, MC-1823, and MC-1830 may be questionable.
- The results for zinc in samples MC-1713, MC-1821, MC-1823, MC-1826, and MC-1830 may be questionable.
- The result for tin in sample MC-1814 may be questionable.
- The results for cadmium in samples MC-1829 and MC-1831 may be questionable.
- The results for lead in samples MC-1713, MC-1819, MC-1821, MC-1823, MC-1826, and MC-1830 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 reported cannot be present.

- The results for manganese, mercury, and cyanide reported in the field duplicate samples MC-1815 and MC-1825 may not reflect the average concentrations of these constituents due to solid sample inhomogeniety.

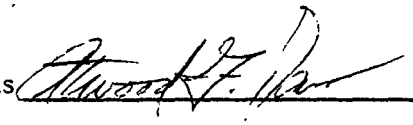
6.2.2.3 Findings

- Beryllium, copper, iron, zinc, tin, cadmium, and lead were detected in field and/or laboratory blanks at levels sufficient to question the aforementioned sample results.

- Manganese, mercury, and cyanide exhibited excessive variability in the solid field duplicate samples.

6.2.2.4 Summary

The attached Quality Assurance Review has identified blank contamination and poor duplicate results as the major areas of concern. Please see the attached Support Documentation Appendix for specifics on this Quality Assurance Review.

Report prepared by Atwood F. Davis  Date: September 6, 198

ORIGINAL (Red)

SECTION 7

7.0 TOXICOLOGICAL EVALUATION

7.1 Summary

Surface samples collected from this site were found to contain high concentrations of carcinogenic chlorinated ethanes and ethenes, substituted benzene solvents, and toxic metals. For example, a stained soil sample taken from an on-site lagoon revealed TCE at a level of up to 28 percent by weight with high levels of 1,1,1-trichloroethane, 1,2-trans-dichloroethylene, 1,1-dichloroethane, ethylbenzene, xylene, toluene, and lesser amounts of other organic priority pollutants. Total solvent concentration in this sample exceeded 50 percent by weight. The extent of contamination is not indicated by the limited sampling survey.

A comparison of results of samples taken from the east and west site-bordering branches of Rock Creek, collected downstream and upstream of the disposal areas, indicate site-related release of organic and inorganic contaminants via surface water flows. High concentrations of lead, chromium, copper, iron, and other metals were reported in on- and off-site samples.

Hazards posed by chloro-alkyl solvents at this site may be both acute for individuals coming in close proximity to soils containing as much as 50 percent organic solvents, and long-term for area residents. The high volatiles of these compounds could result in the generation of sufficient vapor levels (1 to 2 percent) to result in narcosis, liver damage, and possibly life-threatening cardiac arrhythmias in persons who come in close contact or proximity to areas containing high concentrations of these organic solvents. Inhalation exposure represents the major exposure pathway in such a circumstance, although dermal exposure by way of direct contact could result in skin irritation and some systemic absorption. Access should be restricted.

The possibility of chronic exposures by area residents via inhalation of low ambient air levels of these suspect carcinogens (e.g., TCE and related compounds) and ingestion of contaminated drinking water are important considerations in attempting to assess potential hazards associated with this site. The scope of surface contamination, however, is not known. There is also a lack of information regarding the quality of ambient air to evaluate the inhalation route of long-term exposure. Data concerning the status of groundwater and private domestic wells in the vicinity of this site are available at EPA Region III. The possibility of groundwater contamination by chlorinated ethanes/ethenes, other organic solvents (alkylbenzene), and toxic metals is, accordingly, only briefly considered here.

7.2 Scope of Contamination

A stained soil sample taken from the lagoon was found to contain very high concentrations of chlorinated alkane/alkene compounds that are potentially carcinogenic in humans. Trichloroethylene (TCE) was detected at 280,000,000 ug/kg or 28 percent by weight in this sample. Substantial levels of other chloroaliphatic solvent compounds including 1,1,1-trichloroethane (32,000,000 or 3.2 percent by weight), 1,2-trans-dichloroethylene (11 percent by weight), and 1,1-dichloroethane (less than 4,400,000 ug/kg) were also reported. In addition, other solvent compounds noted in this sample include ethylbenzene (up to 1.3 percent), toluene (3.8 percent), o-xylene (3.0 percent), naphthalene (290 mg/kg), 2-methylnaphthalene (less than 53 mg/kg), and lesser amounts of phenols, chlorinated benzene, and aniline. Among the inorganic parameters examined, high concentrations of the toxic pigmenting metals chromium at 1,450 mg/kg, lead at 7,200 mg/kg, and copper at 2,250 mg/kg were reported in this lagoon soil sample. Results of a duplicate sample indicates some inhomogeneity with respect to some of the organic priority pollutants detected (see Sample Data Summary, samples C-8408 and C-8419).

An aqueous sample taken from ponded water in the lagoon did not reveal chloroalkane/alkenes (e.g., no TCE within minimum quantifiable limits, and less than quantifiable limits of 25,000 ug/l for 1,1,1-trichloroethane), but substantial concentrations of the substituted benzene solvents ethylbenzene (380,000 ug/l), o-xylene (1,900,000 ug/l), and toluene (33,000 ug/l) were reported. The aqueous lagoon pond water sample also revealed high concentrations of chromium (2,150 ug/l), lead (14,800 ug/l), iron (62,960 ug/l), copper (6,690 ug/l), aluminum (21,780 ug/l), and other metals.

The detection of chloro ethane/ethene solvent compounds in samples taken from the drainage in the junk pile area and from site-adjacent stream tributaries downstream of the disposal areas indicate off-site release of contaminants via surface water flows. Field auger and leachate soil samples, on the other hand, revealed no organic priority pollutants and unremarkable concentrations of inorganic parameters.

Aqueous and sediment samples collected from both branches of Rock Creek and an unnamed tributary upstream of the disposal areas of this site revealed no measurable concentrations of chlorinated hydrocarbons or other organic pollutants detected in the lagoon samples. Concentrations of inorganics reported in these upstream samples, moreover, are typical of unpolluted surface waters and stream sediments. Thus, the detection of 1,1,1-trichloroethane at 25 ug/l, 1,1-trans-dichloroethylene at 35 ug/l, and TCE at 333 ug/l in the downstream aqueous sample of the East Branch of Rock Creek, for example, strongly suggest site-related release of these suspect carcinogens. The downstream aqueous sample taken from the West Branch revealed 1,1-trans-dichloroethylene at 240 mg/l, TCE at 25 ug/l, 1,1-dichloroethylene at 6 ug/l, and the known human carcinogen vinyl chloride at less than the minimum quantifiable limit of 5 ug/l. Low concentrations of some of these solvents were identified in downstream sediment samples as well.

Elevated concentrations of the toxic metals chromium (258 mg/kg in the sediment) and lead (1,690 ug/l in the aqueous) were reported in the downstream samples of the East Branch of Rock Creek. Typical soils contain about 33 mg/kg chromium; no chromium was detected in the corresponding aqueous sample.[1] The downstream West Branch aqueous sample did not reveal high levels of dissolved lead, (see section 6.2.2.). However, elevated concentrations of iron (2,370 ug/l), silver (19.7 ug/l), and possibly beryllium (7 ug/l and 0.9 mg/kg in sediment) were reported in this sample, but not in upstream samples.

A filled hole aqueous sample also was found to contain high concentrations of iron (58,990 ug/l), chromium (70.6 ug/l), and lead (235 ug/l).

7.3 Toxicological Considerations

7.3.1 Acute Hazards

Data regarding groundwater contamination and possible degradation of potable domestic well supplies in the area is in the possession of EPA. This report, therefore, will not deal in depth with this important aspect of potential hazard evaluation, other than to point out that the considerable amounts of potentially carcinogenic chloro ethane/ethene and other toxic pollutants detected in on-site samples can be relatively very mobile in groundwater regimens and, thus, a risk to groundwater pollution is indicated by these limited sample data.

7.3.1.1 Acute Effects of Inhalation

Duplicate soil samples collected from an area of stained soil within the lagoon, described as having a sheen and discoloration, were found to contain as much as 43 percent by weight of chlorinated ethane/ethene solvent compounds, mostly TCE. An additional 8 percent or more by weight of alkylbenzenes was also reported in this sample. TCE (280,000,000 ug/kg in this sample) and the other chloro-alkyl compounds identified may be present in sufficient amounts to pose an acute inhalation hazard.

No HNU photoionizer readings were available to determine if acutely toxic ambient air levels may have been present in this accessible area of solvent waste disposal. However, vapor pressures for TCE, trichloroethane, dichloroethane, and dichloroethylenes are sufficiently high that concentrations depend on air movement, temperature, and a host of other climate and physical variables. Saturation of air occurs at 16.7 percent for 1,1,1-trichloroethene, 10.2 percent for TCE, and 30.8 percent for 1,1,-dichloroethane at 25°C, and 27 percent for dichloroethylene at 20°C.[4] TCE and trichloroethylene will not sustain combustion, but 1,1-dichloroethane and 1,1-trans-DCE are flammable and have explosive limits well below their air saturation levels. Phosgene gases can be formed by combustion.

The principal and first response from acute exposure to excessive doses of these volatile compounds is depression of the central nervous system, leading to narcosis and ultimately death from respiratory or cardiac arrest. Human fatalities due to anesthesia (and/or cardiac arrhythmia) have occurred in confined spaces when exposures to very high concentrations have not been promptly terminated. Air concentrations of 14,000 to 15,000 ppm of these solvents can result in death.[2] Sniffing abuse of chloro-alkyl solvents has resulted in fatalities and the recent advent of the clinical terminology "sudden sniffing death." High concentrations (15,000 ppm or higher) can induce irregular and possibly life-threatening disturbances in heart rhythms or conduction by sensitizing the myocardium to circulating adrenalin, noradrenalin, or other sympathomimetic drugs.[3,4,5]

Lower concentrations result in dose dependent intoxication. Onset of central nervous system (CNS) depression is characterized by symptoms of fatigue, visual disturbances, metal confusions, mioordination, facial numbness, and sometimes nausea and vomiting. The CNS effects are not as striking with these compounds as they are with chloroform or carbon tetrachloride, nor are toxic effects on the liver and kidneys. Generally, hepatotoxicity from acute exposure to TCE, trichloroethane, and 1,1,-dichloroethane is observed only at doses that are marked by severe anesthesia.[4] Some liver function alterations have been noted with 1,2-trans-dichloroethylene at subnarcotic doses.[6] A 5-minute exposure to 5,000 ppm methylchloroform (1,1,-trichloroethane) can be expected to produce marked incoordination and anesthesia. Exposure to concentrations in excess of 1,000 ppm for 15 minutes, or 2,000 ppm for 5 minutes, will produce a disturbance in equilibrium in a majority of adults.

In a few test, subjects beginning anesthetic effects occur at concentrations approaching 500 ppm for methylchloroform and these effects have been noted on short-term exposures to lower concentrations (about 300 ppm) of TCE.[7,8] 1,1-Dichloroethane and 1,2-dichloroethylenes exhibit a similar degree and pattern of toxicity. The Threshold Limit Values (TLV) for these compounds have been established to prevent mild anesthetic effects in industrially exposed workers: the TLVs are 50 ppm (270 mg/m^3) for TCE, 350 ppm (1,900 mg/m^3) for 1,1,1-trichloroethane, and 200 ppm (790 mg/m^3) for 1,1-dichloroethylene for an 8-hour day.[9] Adverse effects on CNS function and liver function are augmented if even moderate amounts of alcohol are consumed shortly before or after acute exposure to these agents. Degreaser's flush, in which the skin of the face and arms becomes extremely red (erythematous), occurs occasionally with concomitant exposure to alcohol.

In reviewing a recent toxicity study of TCE exposure in male volunteers (4-hour exposure to 95 ppm), the National Academy of Sciences concluded: "The results of this study lend further support to the conclusions that trichloroethylene is not toxic in humans at exposure levels less than 100 ppm (535 mg/m)."[10] An air concentration of 100 ppm TCE is reportedly the odor threshold, TCE being barely perceptible to unacclimated individuals; 200 ppm TCE is readily apparent, producing transient and mild eye irritations.[4] For trichloroethane, the odor threshold is the same (i.e., 100 ppm), the odor at 500 or even 1,000 ppm being possibly insufficiently noxious to discourage exposure. Insufficient data is available on the odor thresholds and warning properties of dichloroethane and dichloroethylenes.[4]

7.3.1.2 Acute Hazards of Direct Contact

Because chloro-alkyl compounds are lipid soluble they can penetrate the intact skin and become systemically absorbed. However, exposure via dermal absorption from direct contact with the pure solvent or solvent-saturated soil is probably insignificant relative to inhalation exposure. According to EPA: "It seems reasonable to conclude that dermal absorption could make little additional contribution to that obtained through either inhalation or ingestion.[11]

These chlorinated hydrocarbons solvents can, however, exert a de-fatting action on the skin resulting in irritation, vesication, and dermatitis. Paralysis of the fingers immersed in liquid TCE and related solvents have been reported.[9] Splashing into the eyes has caused severe corneal burning and conjunctivitis, but not permanent damage.[12] In addition, dermal exposure to chromium can result in allergic eczema in sensitized individuals.

Any close physical contact or even close proximity to disposal areas containing 50 percent (by weight) organic solvents in soils at this site should be discouraged.

7.3.2 Long-Term Hazards

7.3.2.1 Organic Contaminants

As already pointed out, information concerning the status of groundwater and private residential wells in the area is in the possession of EPA, and will not be discussed in detail at this time. The chlorinated hydrocarbon solvents, it may be noted, represent the most commonly encountered organic pollutants detected in groundwaters in this country. For example, TCE was reported above a minimal quantifiable nominal concentration of 0.2 ug/l in 6.4 percent of 466 randomly selected groundwater supplies surveyed in the nation. Trichloroethylene and related alkyl halides are rather mobile and fairly persistent in groundwater. Concern over these common drinking water contaminants arises from studies which indicate limited carcinogenic evidence in animals; accordingly, many of these compounds have been classified as suspect human carcinogens.

Among the chlorinated alkane/alkene compounds identified in surface samples collected from this site, there is at this time: sufficient animal and human evidence of carcinogenicity for vinyl chloride; limited animal evidence of carcinogenicity* for trichloroethylene, 1,1-dichloroethane, 1,1,2-trichloroethane, and 1,1-dichloroethylene; and insufficient information to derive criteria for 1,1,-dichloroethane and 1,2,-trans-dichloroethylene. In view of the structural similarities of the last 2 compounds with demonstrated carcinogens (e.g., the similarity of 1,2-trans dichloroethylene with vinyl chloride), these compounds should be regarded as potentially carcinogenic. 1,1,1-Trichloroethane is not currently considered a suspect carcinogen, and a Recommended Maximum Contaminant Level (RMCL) of 200 ug/l has been, accordingly, proposed for public water systems.[14] A recent repeat bioassay test of 1,1,1-trichloroethane, however, has demonstrated a significant increase in hepatocellular tumors in mice (National Toxicology Program, 1983), and an on-going review of this data may change the current classification for this priority pollutant.[15]

* Limited evidence of carcinogenicity indicates that the data suggest a carcinogenic effect in 1 test animal species, but lack confirmation in others. With the exception of vinyl chloride, there is inadequate evidence of human carcinogenicity for all compounds considered here.

It is not possible to assess the potential hazards associated with long-term inhalation exposure to residents in the vicinity of the disposal areas. The extent of contamination is not indicated by this limited sampling survey, and no information regarding ambient air concentrations of volatile chlorinated ethane/ethene compounds is available, nor can be estimated. The significance of this pathway of exposure, however, can be illustrated by epidemiological studies and extrapolation estimates conducted of residents living near vinyl chloride polymerization (PVC) and fabrication plants. EPA has evaluated the risk to populations living within a 5-mile radius of such plants; the total population was estimated at 4.6 million, and the average exposure of a person chosen at random living within the 5-mile radius was calculated to be 17 ppb vinyl chloride.[16] Based on a linear model, it was estimated that 11 additional cases of cancer (all cancers) and 5.5 cases of liver angiosarcoma per year can be expected in the exposed population.[17] Whether comparable ambient air levels of TCE and other suspect carcinogenic chloroaliphatic compounds detected at this site pose a community hazard is problematical.*

7.3.2.2 Inorganic Contaminants

In addition to the organic pollutants discussed, high concentrations of toxic metals detected in surface samples at this site may also pose potential hazards. The lagoon soil sample, for example, revealed chromium, lead, and copper at 1,450 mg Cr/kg, 7,200 mg/ Pb/kg, and 2,250 mg Cu/kg. Typical, unpolluted soils contain 200 mg/kg chromium, 10 mg/kg lead, and 20 mg/kg copper.[18] These metals can be mobile in groundwater and surface waters under certain conditions. A potential for contamination of potable well supplies in the area, therefore, should be considered, as well as possible environmental effects of these metals in surface waters.

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* Brodzinski & Singh have calculated a median urban/suburban air level of TCE of 0.81 ug/m^3 based on air monitoring data.[30] This would result in absorption of about 7 ug TCE per day for a 70-kg adult. Ambient air levels of TCE are likely to be higher in the area of this site.

7.3.2.2.1 Toxicity of Ingested Metals

Chromium is considered potentially carcinogenic. On the other hand, chromium is an essential nutritional element. Chromium does not exist in nature in its elemental form; it exhibits a valence state of 2+, 3+, and 6+ in its compounds. The trivalent form (Cr III) is the most prevalent in nature. The physiological response to Cr and its compounds are wide and varied, because associated with each of the 3 valence states are different toxicological potentials. Glucose intolerance is a common problem in this country, and one of its many possible causes is chromium deficiency which also is common in this country. Cr (III) may also play a role in lipid metabolism. Chromium supplementation improves or normalizes glucose metabolism in diabetics (and may be involved in pancreatic function), older people, and malnourished children.[19] It has been suggested that Cr (III) deficiency may be a basic factor in athlerosclerotic heart disease.[20] Hexavalent chromium, in contrast, is corrosive and much more toxic.

Except in very acidic waters, trivalent chromium is readily chelated in aqueous solution, tends to precipitate as $Cr(OH)_3$, and adsorbs to soil elements. Hexavalent chromium, on the other hand, is very soluble in neutral waters and highly mobile in groundwaters; in fact, Cr(VI) has even been used in tracer form to monitor groundwater flows. The chromium that does migrate, then, is likely to be the most toxic form.

Hexavalent chromium is highly corrosive and irritating to mucous membranes and skin. High doses of chromates given subcutaneously to rabbits and guinea pigs have been shown to cause damage to the kidneys. One fatal case of nephritis in man with anuria and extensive tubular lesions has been reported due to percutaneous absorption of crystals of chromium trioxide (chromic acid) which is hexavalent ($Cr\ 0_3$). Of major concern with chromates is the potential for these acidic compounds to induce cancer of the lung from inhalation of mists and fumes. Epidemiological studies have revealed a 29-fold increase in broncogenic carcinoma in workers in the U.S. chromate industry, over that of workers in other chemical manipulating processes. In addition, due to the corrosive properties of hexavalent chromium salts, dermatitis, severe dermal ulcerations, and perforation of the nasal septa have been important consequences because of its skin sensitizing effect. Chromium is among the most common sensitizers in allergic eczema and noneczematous dermatitis.

Symptoms of excessive dietary intake of chromium in man are unknown. Concentrations of 5,000 ug Cr(VI)/l in drinking water may result in acute episodes of nausea. A Long Island, New York family has been reported to have drunk water for several years from a well contaminated with 450 ug/l chromate without discernable adverse effects.[21] Studies with dogs demonstrated that ingestion of 100 ug/kg body weight of potassium dichromate increases intestinal motility and secretion.[4]

The MCL and Ambient Water Quality Criteria (AWQC) for protection of human health for chromium and drinking water have been established at 50 ug/l, largely on the basis that lifetime tolerable levels of chromate ion are not known for human health. The criterion of 50 ug/l is based on animal toxicity studies, and does not include any consideration of the carcinogenicity of Cr(VI). No dose data for Cr(VI) exist on which to base a quantitative risk estimate of oral carcinogenicity.

The corrosive nature and capacity of chromate to combine with DNA may be related to the potential of these compounds to induce lung cancer when inhaled by certain industrially exposed workers. Latency periods are long (30 years or more) and carcinogenic potency is thought to be weak from inhalation exposure.

In epidemiological studies relating cancer mortality in major U.S. water basins with carcinogenic metals in water supplies, no significant correlations were found for chromium.[22] On the other hand, incorporation of hexavalent chromium into the drinking water of mice at 5,000 ug/l over their lifetime reduced their growth in the first 6 months and produced a slightly higher incidence of malignant tumors over that of controls, although the differences were not remarkable.[23] The positive mutagenicity of Cr(VI) and the observed increased incidence of gastric and intestinal cancers seen in industrially exposed populations, leave many uncertainties with regard to the oral carcinogenicity of hexavalent chromium in humans.

Lead has no known biologically beneficial effects. This toxic metal also tends to accumulate in the body. At sufficient dosage, chronic lead exposure can adversely affect may organs and systems, most notably, the central and peripheral nervous systems, the kidneys, and the hematopoietic system. The induction of renal tumors with lead has been demonstrated in rats but not other species. There is at present no evidence that lead is carcinogenic or teratogenic in humans.

Acute lead intoxication is rare today, but subchronic and chronic poisoning is common, especially among children in urban areas. Lead encephalopathy occurs as a result of chronic or subchronic exposure to high doses of inorganic lead. A major concern today, however, is subtle behavioral effects particularly in the fetus, infants, and young children, at levels of exposure below those causing clinical encephalopathy.[4,19,24]

Epidemiologic studies suggest that only moderately elevated lead exposure in young children, yielding a blood lead level (PbB) of 40 to 80 micrograms per deciliter (ug Pb/100 ml blood), may cause neurobehavioral effects, hyperactivity, and deficits reflected in psychometric performance tests. The minimal level of lead exposure, the duration of exposure required, and the period of greatest sensitivity cannot be specified with any degree of certainty. At present, there is insufficient evidence to characterize the dose-effect relationship between lead intake or lead concentrations in tissue with nervous system impairment. It is currently believed that the effects of ingested lead on hemesynthesis are detectable at exposure levels below those affecting other organs or systems.

For the general adult population, the lead content of foods is the major source of exposure. Based on "market basket" data, an average adult dietary intake of 233 ug Pb/day has been estimated.[25] Thus, at an average drinking-water-lead concentration of 13 ug Pb/l, lead intake from drinking water constitutes about 1/10 that obtained from an ordinary diet.

Infants and young children absorb ingested lead much more readily than adults (40 to 50 percent absorption in 2 to 3 year olds versus 5 to 10 percent in the adult).[19] Young children also have a less developed blood-brain barrier, a 2 to 3 times greater water requirement based on body weight, and a much higher rate of brain growth and maturation. Mahfaffey recommended that the total lead intake for children less than 5 months of age should not exceed 100 ug/day, and for children between 6 and 24 months of age, it should be no more than 150 ug/day.[26] Thus, the current standard of 50 ug Pb/l would permit a child to ingest 1/3 to 1/2 of this recommended maximum daily intake of lead by consuming 1 liter of water per day.

There is considerable disagreement among studies which have attempted to relate concentrations of lead in tap water and those in blood. The relationship appears to be curvilinear, and increasing the concentration of lead in water from the current standard of 50 ug Pb/l to 100 ug Pb/l would reportedly elevate blood-lead by only 11 percent.[27] Others have suggested that drinking water with a lead content in excess of 100 ug Pb/l may be sufficient to raise and sustain blood-lead concentrations at or above 25 ug/dl whole blood.[28] This is the blood level that has been reported to be the apparent threshold for increased free erythrocyte porphyrin.[3]

Animal data suggest that individuals with iron deficiency anemia, chronic renal insufficiency, metabolic disturbances in bone homeostasis, and possibly those with zinc deficiency may be at increased risk.[29]

Copper and iron were also found at elevated concentrations in soil and/or surface water samples at this site. These bioessential metals, however, are considerably less toxic than lead or hexavalent chromium. The current secondary interim standards of 1,000 ug Cu/l and 300 ug Fe/l for public water supplies are based on considerations of taste, rather than toxicity. The hazards to the general population from ingested copper up to 5 mg or iron up to several milligrams appears to be small. A few individuals with Wilson's disease, a genetic (autosomal recessive) disorder of copper metabolism that leads to liver cirrhosis and necrosis and sclerosis of the corpus striatum, are adversely affected by even normal amounts of copper in the diet. The disease is rare, and proper management would involve careful monitoring of diet and beverage along with chelation therapy. In the event of groundwater contamination at this site by iron and/or copper, therefore, the potential for deterioration of aesthetic quality of the aquifer represents the major potential adverse impact. On the other hand, these metals can seriously threaten viability of sensitive aquatic life at high concentrations in surface waters.

7.3.2.2.2 Aquatic Toxicology of Inorganic Pollutants

The detections of elevated levels of chromium, lead, iron, and copper in on-site lagoon and soil samples were also reflected in off-site stream samples. Aqueous and/or sediment samples from east and west branches of site-adjacent Rock Creek revealed lead at 1,690 mg/kg, chromium at 258 mg/kg, zinc at 540 mg/kg, and copper at 380 mg/kg in the East Branch downstream sediment; zinc at 129 ug/l in the East Branch aqueous sample; and iron and silver at 2,370 ug Fe/l and 19.7 ug Ag/l in the downstream West Branch aqueous sample. Samples taken at points upstream of the site revealed unremarkable concentrations of these and other metals. Typical river sediment concentrations for metals of interest in this case are reported as: 130 mg Cr/kg, 20 mg Pb/kg, 80 mg Zn/kg, 57 Cu/kg, 5 mg Be/kg.[18]

Rock Creek is classified as a warm-water fishery. The iron, zinc and silver concentrations in aqueous samples collected downstream of the site exceed AWQC recommended for the protection of aquatic life. Chronic AWQC guideline values are as follows: iron 1,000 ug/l, zinc 47 ug/l, and silver 0.12 ug/l. Although aqueous concentrations of copper, lead, and chromium were below minimum quantifiable limits (or were rendered questionable by quality assurance review, as in the case of lead), sediment levels were atypically high suggesting prior site release and precipitation and/or adsorption. It may be noted in this context that, following unusually heavy runoff, high levels of these metals could possibly be dissolved and released into Rock Creek causing transient, adverse impacts on sensitive species of aquatic life. This is particularly likely where very high levels of ferrous salts are present - high concentrations of iron were reported in site surface samples - which rapidly acidify the water, exhaust dissolved oxygen, and facilitate dissolution of highly toxic metals.

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ORIGINAL (Red)

APPENDIX A

L.3

1. COST CENTER:	REM/FIT ZONE CONTRACT TECHNICAL DIRECTIVE DOCUMENT (TDD)	2. NO.:
ACCOUNT NO.:		F3-8404-07

3. PRIORITY:	4. ESTIMATE OF TECHNICAL HOURS:	5. EPA SITE ID:	6. COMPLETION DATE:	7. REFERENCE INFO.:
☒ HIGH ☐ MEDIUM ☐ LOW	150			☒ YES ☐ NO ☐ ATTACHED ☒ PICK UP
	4A. ESTIMATE OF SUBCONTRACT COST:	5A. EPA SITE NAME: Westinghouse (F. Shealer Prop) Gettysburg, PA	3 wks after QA	

8. GENERAL TASK DESCRIPTION: Perform site inspection of subject site.

9. SPECIFIC ELEMENTS:

1.) Contact Neil Swanson to arrange meeting.
2.) Review background information.
3.) Submit sampling plan to EPA for approval.
4.) Coordinate lab analysis.
5.) Conduct on and off site inspection.
6.) Take and ship samples according to standard protocol.
7.) Perform quality assurance review of lab data.
8.) Prepare and submit site inspection report.

10. INTERIM DEADLINES:

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

OTHER (SPECIFY):

12. COMMENTS:

13. AUTHORIZING RPO: _____ (SIGNATURE)

14. DATE:

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

_____ (CONTRACTOR RPM SIGNATURE)

16. DATE:

Sheet 1 White – FITL Copy Sheet 3 Pink – Contracting Officer's Copy (Washington, D. C.)

L.B

1. COST CENTER: / ACCOUNT NO.:	REM/FIT ZONE CONTRACT TECHNICAL DIRECTIVE DOCUMENT (TDD)	2. NO.: F3-8404-06

3. PRIORITY:	4. ESTIMATE OF TECHNICAL HOURS:	5. EPA SITE ID:	6. COMPLETION DATE:	7. REFERENCE INFO.:
[X] HIGH [ ] MEDIUM [ ] LOW	150		3 wks after QA	[X] YES [ ] NO [ ] ATTACHED [X] PICK UP
	4A. ESTIMATE OF SUBCONTRACT COST:	5A. EPA SITE NAME: Westinghouse (Tom Shealer Prop) Gettysburg, PA		

8. GENERAL TASK DESCRIPTION: Perform Site Inspection of subject site.

9. SPECIFIC ELEMENTS:

1.) Contact Neil Swanson to arrange meeting.
2.) Review background information.
3.) Submit sampling plan to EPA for approval.
4.) Coordinate lab analysis.
5.) Conduct on and off site inspection.
6.) Take and ship samples according to standard protocol.
7.) Perform quality assurance review of lab data.
8.) Prepare and submit site inspection report.

10. INTERIM DEADLINES:

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

OTHER (SPECIFY):

12. COMMENTS:

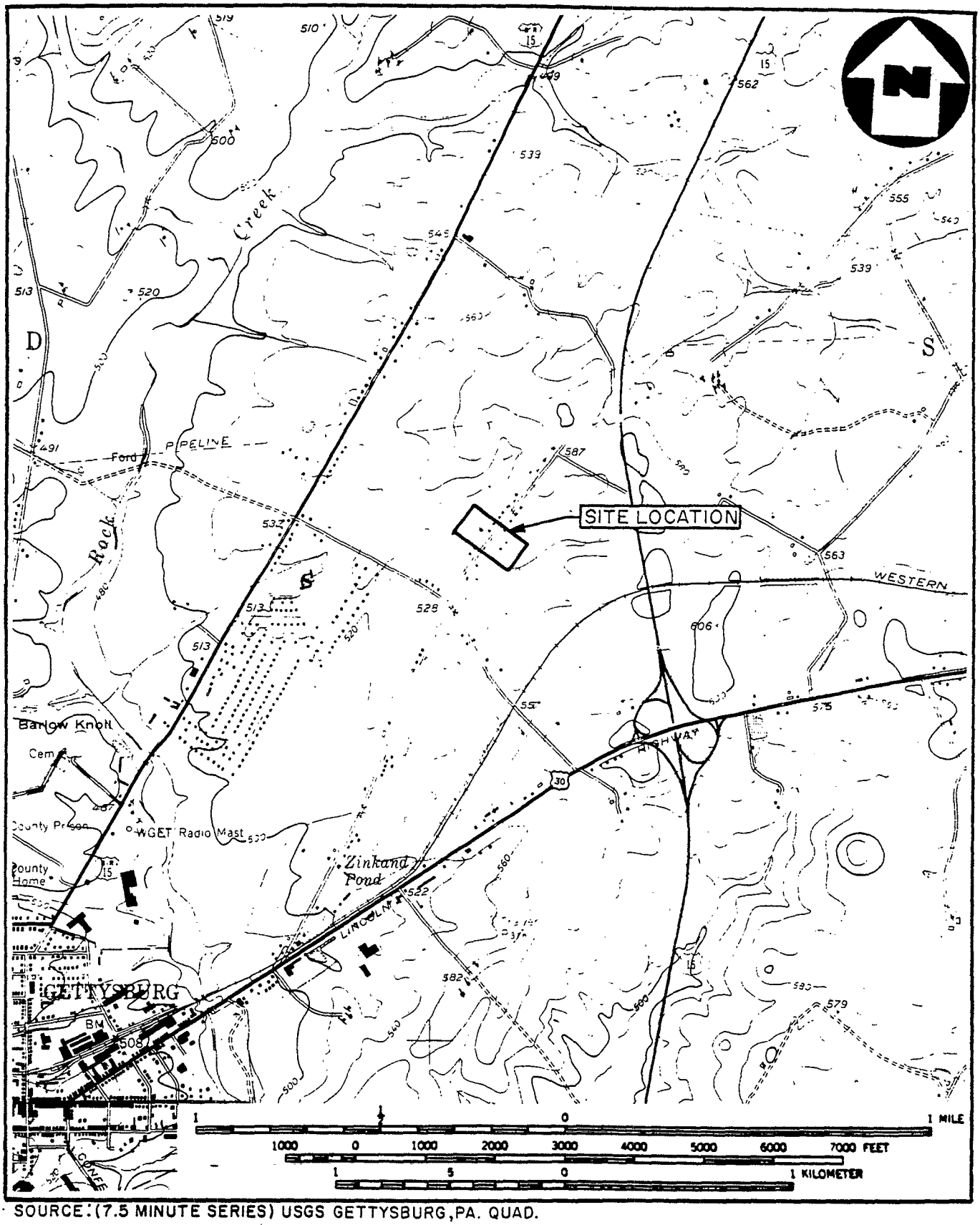
13. AUTHORIZING RPO: _____ (SIGNATURE) 14. DATE:

15. RECEIVED BY: [ ] ACCEPTED [ ] ACCEPTED WITH EXCEPTIONS [ ] REJECTED _____ (CONTRACTOR RPM SIGNATURE) 16. DATE:

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

AR100086

APPENDIX B



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

SITE LOCATION MAP

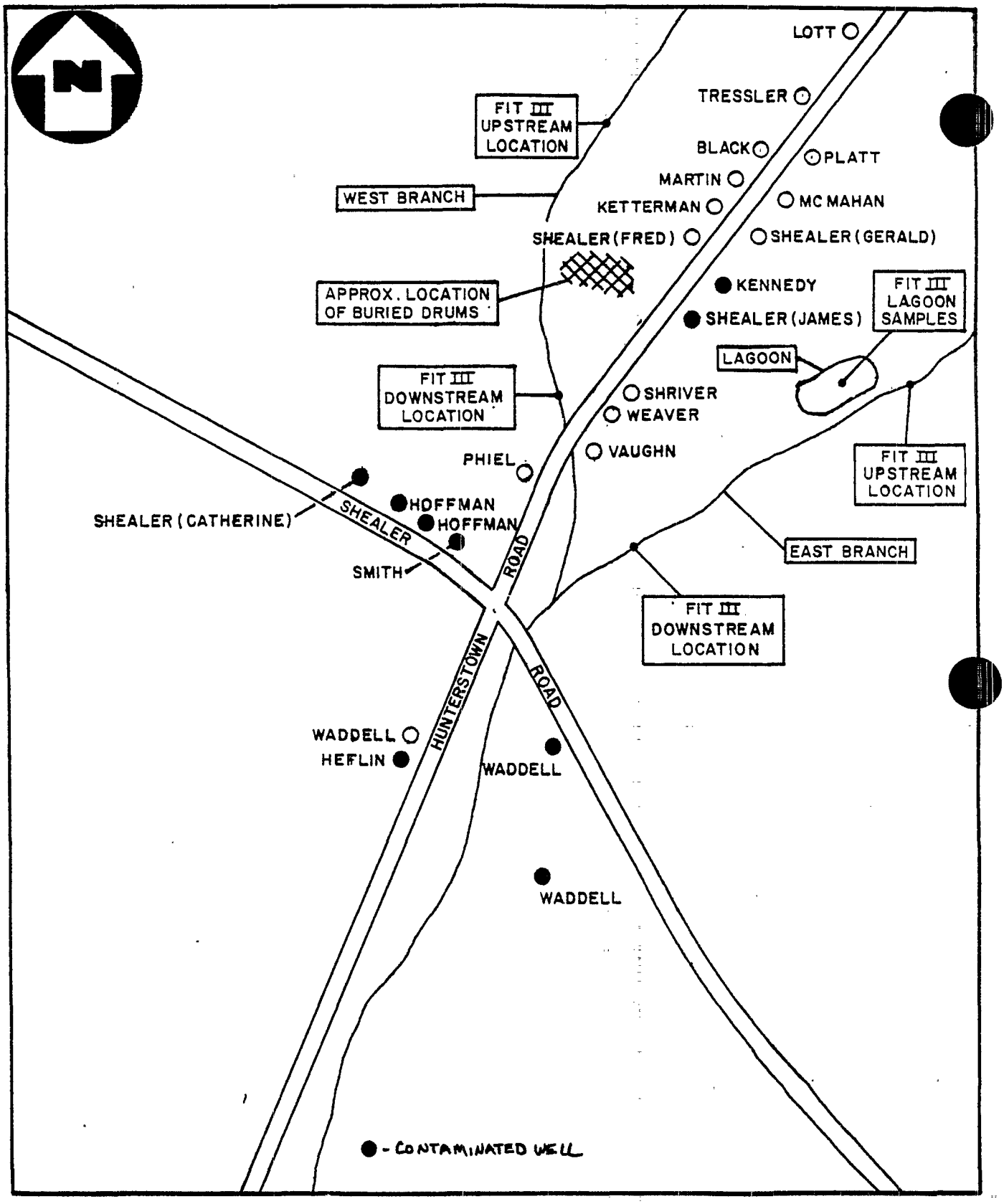
HUNTERSTOWN ROAD SITE, GETTYSBURG, PA.

SCALE 1:24000

FIGURE 1

NUS CORPORATION

A Halliburton Company

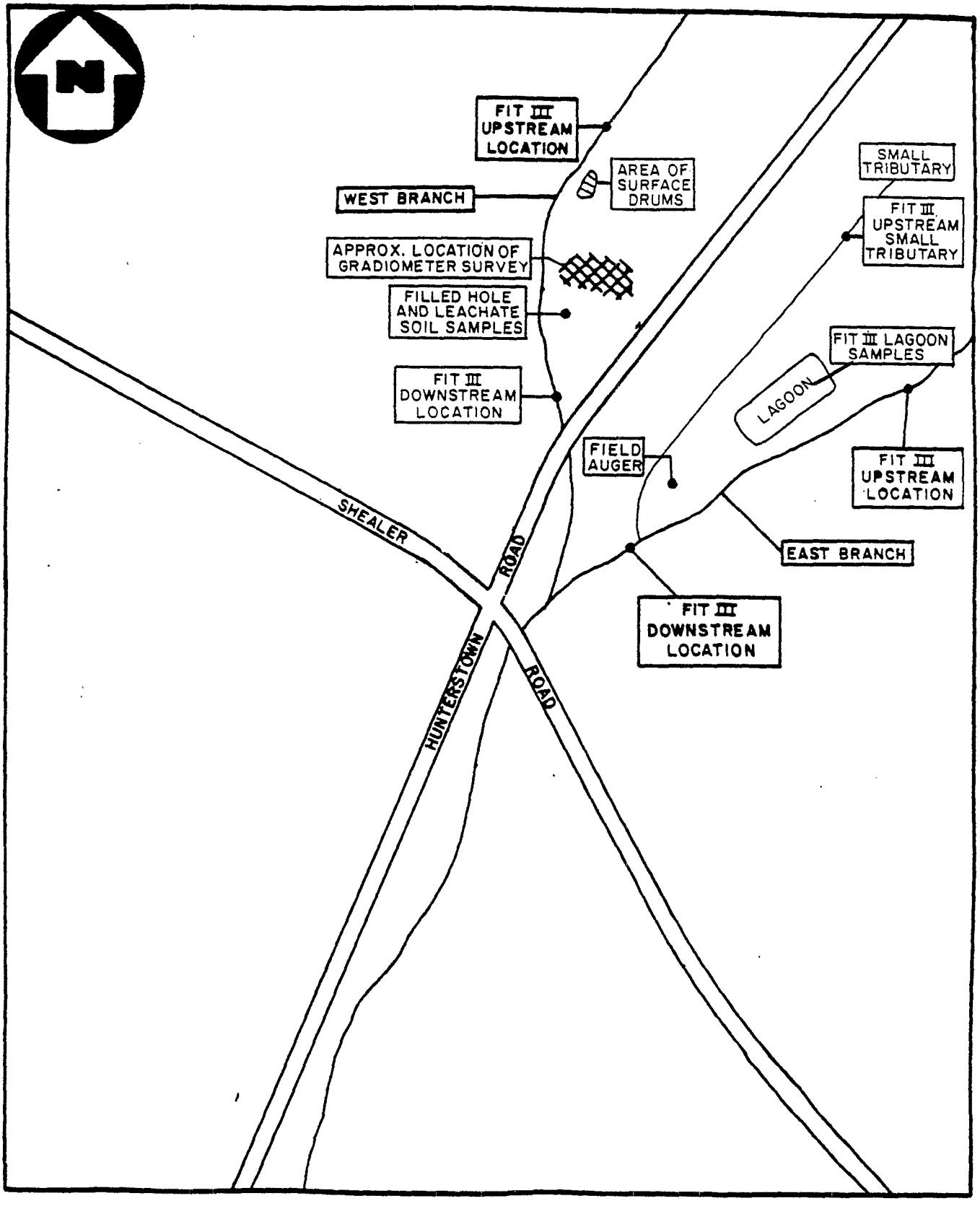


CONTAMINATED WELLS IN VICINITY OF HUNTERSTOWN RD.
HUNTERSTOWN ROAD SITE, GETTYSBURG, PA.
(NO SCALE)

FIGURE 2

NUS CORPORATION
A Halliburton Company

AR100089



FIT III SAMPLE LOCATIONS

HUNTERSTOWN ROAD SITE, GETTYSBURG, PA.

(NO SCALE)

FIGURE 3

NUS CORPORATION

A Halliburton Company

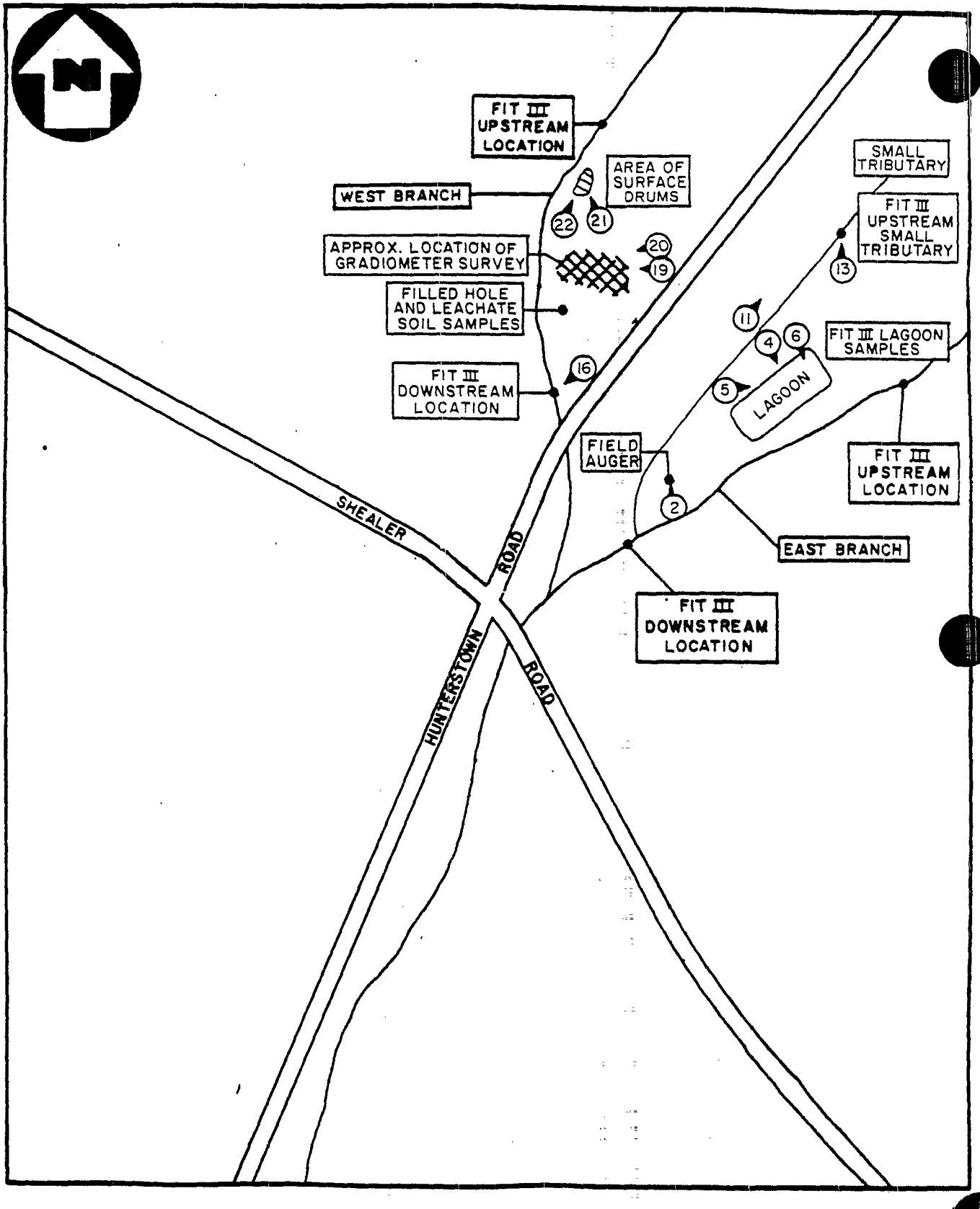


PHOTO LOCATIONS

HUNTERSTOWN ROAD SITE, GETTYSBURG, PA.

(NO SCALE)

FIGURE 4

NUS CORPORATION

A Halliburton Company

APPENDIX C

PROJECT NAME: Huntstown Road Site
TDD NO: F3-8404-07

EPA SITE NO.:
REGION: III

QUALITY ASSURANCE REVIEW OF ORGANIC ANALYSIS LAB DATA PACKAGE

Case No.: 2742
Contract No.: 68-01-6866
Contract Laboratory: CompuChem
Applicable IFB No.: WA83-A198
Reviewer: Atwood F. Davis
Review Date: 8-29-84

Applicable Sample No's.: C-8404 through and including C-8422, C-4424, C-4425, and C-8309

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	✓(1,3,4	✓(4	✓(3)	
Questionable					
Unacceptable					

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

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

- ● DATA COMPLETENESS
- ● BLANK ANALYSIS RESULTS
- ● SURROGATE SPIKE RESULTS
- ● MATRIX SPIKE RESULTS
- ● DUPLICATE ANALYSIS RESULTS
- (5) ○ EVALUATION OF CONFIRMATIONS
- ‡ ◒ QUANTITATIVE CALCULATIONS
  - ● Run Chronicle
  - ● Instrument Carry Over Effects
- ‡ ● TARGET COMPOUND MATCHING QUALITY
- (6) ● 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) See blank analysis results
(2) See Run chronicle & Instrument Carry Over Effects
(3) See Surrogate Spike Recoveries
(4) See Duplicate Analysis Results
(5) Not Applicable
(6) Examined only for possible target compound hits.

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	L/S	L/A	L/S	L/A	M/S	L/S	L/A	L/S	L/A	L/S	M/A	L/S
FRACTION	TRAFFIC REPORT # C	8404	8405	8406	8407	8408	8409	8410	8411	8412	8413	8414	8415
	LAB I.D. # 270 -	22	13	29	14	30	31	15	32	16	33	17	34
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.	✓											
	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												
	PESTICIDE DUPLICATE												
	PESTICIDE SPIKE												
	PESTICIDE BLANK												
TCDD	TCDD TABULATION	✓											
	TCDD DETECTION LIMIT	✓											
	TCDD CHRO./E.I.C.P.	✓											
	TCDD BLANK												

DATA COMPLETENESS	CONC./MATRIX	L/A	L/S	M/S	L/A	L/S	L/S	L/A	L/A	L/S	L/A		
FRACTION	TRAFFIC REPORT # C	8416	8417	8418	8419	8420	8421	8422	4424	4425	8309		
	LAB I.D. # 270-	18	35	36	19	37	38	20	21	39	27006		
[illegible]NA :	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.	✓											
	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												
	PESTICIDE DUPLICATE												
	PESTICIDE SPIKE												
	PESTICIDE BLANK								✓	✓			
[illegible]D	TCDD TABULATION	✓											
	TCDD DETECTION LIMIT	✓											
	TCDD CHRO./E.I.C.P.	✓											
	TCDD BLANK								✓	✓		AR	00096

DATA COMPLETENESS	CONC./MATRIX	L/S	L/A	L/S	M/A	M/S	L/S	L/A	L/S	M/A	L/S	M/A	L/S
FRACTION	TRAFFIC REPORT # C	8404	8405	8406	8407	8408	8409	8410	8411	8412	8413	8414	8415
	LAB I.D. # 270-	22	13	29	14	30	31	15	32	16	33	17	[redacted]
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.	✓											
	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	L/A	L/S	M/S	L/A	L/B	L/S	L/A	L/A	L/S	L/A		
FRACTION	TRAFFIC REPORT # C	8416	8417	8418	8419	8420	8421	8422	4424	4425	8309		
	LAB I.D. # 270 -	18	35	36	19	37	38	20	21	39	06		
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.	✓											
	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:

KEY TO DATA COMPLETENESS FORM

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

KEY TO SYMBOLS USED IN DATA COMPLETENESS TABLE

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

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
BNA	Method Blk Lo/Sol			29456 cont.	MEAD	Chrysene (.8 Ng /) 2 4-chloroaniline (1 Ng /) 2 Benzo(a)anthracene (.85 Ng /) 2 Benzo(a)pyrene (1.3 Ng /) 2 Benzo(b)fluoranthene (1.2 Ng /) 2 Benzo(k)fluoranthene (1.2 Ng /) 2 Pyrene (.49 Ng /) 2
BNA	METHOD BLK Lo/Sol			GH029999 A07	MEAD	Phenol (.55 Ng /) 1,4-dichlorobenzene (.33 Ng /) 2 Benzoic Acid (.86 Ng /) 2 Diethylphthalate (.97 Ng /) 2 N-NITROSODIPHENYLAMINE (2.7 Ng /) 2 Di-n-butyl phthalate (8.5 Ng /) 2 Fluoranthene (1.3 Ng /) 2 Phenanthrene (1.3 Ng /) 2 Pyrene (1.4 Ng /) 2 Butylbenzylphthalate (1.1 Ng /) 2 Benzo(a)anthracene (1.5 Ng /) 2 Bis(2-ethylhexyl)phthalate (.95 Ng /) 2 Chrysene (1.7 Ng /) 2 Di-n-octylphthalate (1.4 Ng /) 2 Benzo(k)fluoranthene (2.8 Ng /) 2 Benzo(a)pyrene (1.3 Ng /) 2
BNA	Method Blk Lo/Sol			GH030256 C16	MEAD	Phenol (.56 Ng /) 2 Di-n-butylphthalate (.53 Ng /) 2 Bis(2-ethylhexyl)phthalate (.4 Ng /) 2 Di-n-octylphthalate (.38 Ng /) 2
BNA	Method Blk Lo/Sol			GH029465 B21	MEAD	Di-n-butylphthalate (.72 Ng /) 2
BNA	Method Blk Lo/Sol			GH027180 B14	MEAD	Di-n-butylphthalate (.55 Ng /) 2 Bis(2-ethylhexyl)phthalate (.55 Ng /) 2 Di-n-octylphthalate (1.4 Ng /) 2
BNA	Method Blk Lo/Sol			GH027181 B16	MEAD	Di-n-butylphthalate (2 Ng /) 2 Pyrene (2 Ng /) 2 Bis(2-ethylhexyl)phthalate (2.3 Ng /) 2 Di-n-octylphthalate (.2 Ng /) 2

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

COMMENTS:

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

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

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
PEST	Method	LO	SOL	6 29327	MEAD	NONE FOUND
PEST	METHOD	LO	SOL	27180	MEAD	NONE FOUND
PEST	METHOD	LO	SOL	27181	MEAD	NONE FOUND
PEST	METHOD	LO	SOL	28560	MEAD	NONE FOUND
TCDD	METHOD	LO	SOL	30222 29673 27181 27180	MEAD	NONE FOUND
VOA	INST BLK	LO	AQ	CB840517 B13	MEAD	Methylene Chloride (.8 ug/L / 5)2 Acetone (2.1 ug/L / 180)2 2-butanone (9.2 ug/L / 280)2 1,1,1-trichloroethane (.36 ug/L / 5)2 Tetrachloroethene (.74 ug/L / 5)2
VOA	INST. BLK	LO	AQ	CB840517 A19	MEAD	Methylene Chloride (1.1 ug/L / 5)2 2-butanone (3.8 ug/L / 280)2 Tetrachloroethene (.43 ug/L / 5)2
VOA	INST. BLK	LO	AQ	CC840916 B13	MEAD	Methylene Chloride (1 ug/L / 5)2 Acetone (5.9 ug/L / 180)2 2-butanone (9.to ug/L / 280)2 1,1,1-trichloroethane (.26 ug/L / 5)2 tetrachloroethene (1.1 ug/L / 5)2 toluene (.43 ug/L / 5)2 Chlorobenzene (.6 ug/L / 5)2 Ethylbenzene (.67 ug/L / 5)2 Styrene (.52 ug/L / 5)2 o-xylene (.32 ug/L / 5)2
VOA	INST. BLK	LO	AQ	CB840517 A13	MEAD	Methylene Chloride (.76 ug/L / 5)2 Acetone (25.0 ug/L / 100)2 Acrolein (3.8 ug/L / 100)2 ethylbenzene (.5 ug/L / 5) Acrylonitrile (7.4 ug/L / 100) 2 styrene (.36 ug/L / 5) 2-butanone (23.8 ug/L / 200) 2 o-xylene (.57 ug/L/ 1,1,1-trichloroethane (.27 ug/L / 5)2 trichloroethylene (.1 ug/L / 5)2 4-methyl-2-pentanone (3.9 ug/L / 100) 2 2-hexanone (4.0 ug/L / 100) 2 tetrachloroethene (1 ug/L / 5) 2 toluene (.35 ug/L / 5) 2 chlorobenzene (.53 ug/L / 5) 2

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

COMMENTS:

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

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

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
ALL	FIELD LO/AQ			C-4424	NUS	Methylene Chloride (2.4 ug/L / 5)1 2-butanone (5.9 ug/L /)2 Tetrachloroethene (.69 ug/L /)2 Di-N-butylphthalate (.83 ug/L /)2
ALL	FIELD LO/SOL			C-4425	NUS	Methylene Chloride (14.5 ug/kg / 2.5) 1 2-butanone (1.6 ug/kg / 2.5) 2 Toluene (2.4 ug/kg / 2.5) 2 Phenol (1.5 Ng / 10)2 Di-N-butylphthalate (1.3 Ng / 10)2 Fluoranthene (1.3 Ng / 10)2 Pyrene (2.1 Ng / 10)2 Benzo(a)anthracene (2.0 Ng / 10)2 Bis(2-ethylhexyl)phthalate (1.5 Ng / 10)2 Chrysene (3.9 Ng /)2 Benzo(b)fluoranthene (2.5 Ng /)2 Benzo(k)fluoranthene (5.0 Ng /)2 Benzo(a)pyrene (3.5 Ng / 10)2
VOA	INST. BLK LO/SOL			GC840518 C19	MEAD	Methylene Chloride (1.1 ug/kg / 2.5)2 Acetone (1.6 ug/kg / 2.5) 2 2-Butanone (4 ug/kg / 2.5) 2
VOA	INST. BLK LO/SOL			GB840518 C18	MEAD	Methylene Chloride (1.1 ug/kg / 2.5) 2 Acetone (1.8 ug/kg / 2.5) 2 2-Butanone (5.1 ug/kg / 2.5) 2
VOA	INST BLK LO/SOL			CB840518 C13	MEAD	Methylene Chloride (.7 ug/kg / 2.5) 2 Acetone (3.8 ug/kg / 2.5) 2 2-Butanone (9.4 ug/kg /)2 Toluene (.62 ug/kg /)2
VOA	INST. BLK LO/SOL			GB840517 B18	MEAD	2-Hexanone (.94 ug/kg /)2
VOA	INST. BLK LO/SOL			CB840518B13	MEAD	Tetrachloroethene (2.2 ug/kg /)2
VOA	METHOD BLK LO/SOL			GH027176 C18	MEAD	Methylene Chloride (.9 ug/kg /)2 2-Butanone (4.4 ug/kg /)2
BNA	METHOD BLK LO/SOL			GJ029456 C21	MEAD	Di-N-butylphthalate (1.6 Ng /)2 Butylbenzylphthalate (.45 Ng /)2 Bis(2-ethylhexyl)phthalate (1.2 Ng /)2 Di-N-octylphthalate (.49 Ng /)2

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

COMMENTS:

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

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

BLANK ANALYSIS RESULTS FOR TARGET COMPOUNDS

FRACTION	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT)
BNA	Method	Lo	AQ	27245J C15	MEAD	Dimethylphthalate (.45 ug/L / 10) 2 Diethylphthalate (1.3 ug/L / 10) 2 N-nitrosodiphenylamine (2.0 ug/L / 10) 2 Di-n-butylphthalate (.98 ug/L / 10) 2 Benzo(a)anthracene (.26 ug/L / 10) 2 Bis(2-ethylhexyl)phthalate (.76 ug/L / 10) 2 Chrysene (.30 ug/L / 10) 2 Di-n-octylphthalate (.3 ug/L / 10) 2 Benzo(b)fluoranthene (.36 ug/L / 20) 2 Benzo(k)fluoranthene (.73 ug/L / 20) 2 Benzo(a)pyrene (.6 ug/L / 20) 2
BNA	Method	Lo	AQ	GH0271241 B15	MEAD	N-nitrosodiphenylamine (.77 ug/L / 10) 2 Di-n-butylphthalate (1.1 ug/L / 10) 2 Bis(2-ethylhexyl)phthalate (1.7 ug/L / 10) 2 Di-n-octylphthalate (1.7 ug/L / 10) 2
BNA	Method	Lo	AQ	GJ028468 A15	MEAD	Di-n-butylphthalate (.7 ug/L / 10) 2 Bis(2-ethylhexyl)phthalate (.77 ug/L / 10) 2 Di-n-octylphthalate (.82 ug/L / 10) 2
PEST	Method	Lo	AQ	27162	MEAD	NONE FOUND

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

COMMENTS:

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

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

SURROGATE SPIKE RECOVERIES

* Asterisked values are outside of QC limits

Surrogate compound name:		D_8-Toluene	BFB	D_4-1,2-Dichloroethane	D_5-Nitrobenzene	2-Fluorobiphenyl	D_{10}-Pyrene	D_{14}-p-terphenyl	D_5-Phenol	2-Fluorophenol	2,4,6-Tribromophenol	Dibutyl Chlorendate	1,2,3,4-TCDD
Analytical Fraction:		VOA	VOA	VOA	BN	BN	BN	BN	A	A	A	P	Dioxin
QC LIMITS:	water:	84-114	63-127	90-130	42-131	50-134	40-120	54-118	15-90	25-115	47-123	67-114	26-104
	soil:	81-120	57-137	50-150	19-115	17-125	40-120	34-126	10-104	26-116	32-124	41-121	11-128
	source:	Ref. 1	Ref. 1	Ref. 1	Ref. 1	Ref. 1	Ref. 2	Ref. 1	Ref. 1	Ref. 1	Ref. 1	Ref. 1	Ref. 1
Matrix	Sample no.												
SOL	C-8401	105	154*	74	63	77	85	74	11	26	40	70	109
	C-8406	109	127	76	75	98	109	149*	64	86	66	57	39
	C-8408 (1)	SCREENED MED			30	36	45	30	2*	98	61	110	31
	C-8409	114	142*	84	77	99	114	85	10	77	38	52	100
	C-8411	92	129	68	30	33	47	41	33*	26	34	42	101
	C-8413 (1)(2)	84	108	78	28	48	69	59	1.8*	14*	37	12*	39
	C-8415	117	152*	73	23	28	49	34	17	46	34	34*	31
	C-8417	99	124	78	44	47	76	65	20	56	47	48	111
	C-8418	SCREENED	MED		BDL ~~DILUTION~~							33*	119
	C-8420	116	180*	71	86	72	121*	99	48	91	74	48	87
	C-8421	105	138*	82	46	65	92	105	10	110	100	36*	98
	C-8425	115	161*	72	64	57	96	82	65	49	83	40*	84
	C-8408 R(1)	—	—	—	23	76	71	74	3*	34	—	—	—
	C-8411 R(1)	—	—	—	48	49	82	52	3.1*	83	56	—	—
	C-8413R(1)	—	—	—	60	72	75	91	0.9*	9*	23	—	—
	C-8408 MED	90	88	77									
	C-8418 MED	45*	48*	38*									
AQ	C-8404	93	112	69*	65	88	110	98	19	39	69	77	
	C-8405	99	113	82*	76	98	122*	106	22	49	92	59*	
	C-8407	92	114	72*	BDL DILUTION							73	
	C-8410	101	98	91	56	72	88	84	16	28	49	72	
	C-8412	100	119	77*	50	80	87	91	29	43	146*	77	
	C-8414	101	122	81*	41*	79	102	80	21	48	29*	71	
	C-8416	95	109	78*	64	98	134*	116	15	53	68	85	
	C-8419	98	107	81*	79	88	91	81	29	44	79	76	
	C-8422 (3)	102	118	82*	46	74	64	70	0*	0*	0*	56*	
	C-4424	96	109	77*	87	98	110	110	17	26	64	78	
(3)	C-8422 R	—	—	—	32*	78	98	86	0*	0*	0*	—	

Source of QC Limits: Ref. 1: IFB WA-83-A198, Am.
Ref. 2: Instructional Guide for Reviewing GC/MS Data, version (11/5/82).

COMMENTS: (1) Some acid d.L's in C-8408, C-8411, and C-8413 may be signif. higher than those reported, in particular for phenol although other compounds may be sim. affected. Also phenol hit in C-8408 may be signif. higher than that reported.
(2) Some pest. d.L's in C-8413 may be slightly higher than those reported.
(3) Most acid compound d.L's in C-8422 may be significantly higher than those repor
ASTERISKED values NOT COMMENTED UPON NOT SIGNIFICANTLY OUT OF RANGE TO QUESTION SAMPLE RESULTS.

MATRIX SPIKE DUPLICATE ... COVER

CASE NO. 2742 — CONTRACTOR MEAD COMPUCHEM — CONTRACT NO. 68-01-6762

LOW LEVEL XX — MED. LEVEL ____ — HIGH LEVEL ____

WATER XX — SOIL/SED. ____ — OTHER (Specify) ____

QC REPORT NO. ____ — UNITS (Circle) ug/Kg (ug/l)

FRACTION	COMPOUND	SMO # CONC	CONC. SPIKE ADDED	CONC. MS	% REC.	CONC. MSD	% REC.	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY	COMMENTS
VOA 27018 SMO # C8416	1,1-Dichloroethylene	ND	25	32	128	31	124	3	<15%	51-150	27006 27013-21
	Trichloroethylene	ND	25	23	92	23	92	0	<15%	74-130	
	Chlorobenzene	ND	25	33	132*	32	128	3	<15%	67-130	
MS # C8416 MSD # C8416	Toluene	ND	25	33	139*	31	124	6	<15%	60-130	
	Benzene	ND	25	33	132*	32	128	3	<15%	66-130	
B/N 27013 SMO # C8405	1,2,4-Trichlorobenzene	ND	236	210	89	190	81	9	<50%	38-110	27006 27013-21
	Acenaphthene	ND	236	230	98	210	89	10	<50%	57-120	
	2,4-Dinitrotoluene	ND	236	160	68	150	64	6	<50%	43-110	
MS # C8405	Di-N-Butylphthalate	ND	236	91	39	100	42	7	<50%	13-110	
MSD # C8405	Pyrene	ND	236	280	119	240	102	15	<50%	25-140	
	N-Nitrosodi-N-Propylamine	ND	944	840	89	750	80	11	<50%	34-110	
	1,4-Dichlorobenzene	ND	236	200	85	180	76	11	<50%	33-110	
ACID 27013 SMO # C8405	Pentachlorophenol	ND	236	100	42	99	42	0	<40%	19-120	27006 27013-21
	Phenol	ND	236	100	42	110	47	11	<40%	23-80	
	2-Chlorophenol	ND	236	160	68	170	72	6	<40%	33-110	
MS # C8405 MSD # C8405	P-Chloro-M-Cresol	ND	236	120	51	120	51	0	<40%	32-110	
	4-Nitrophenol	ND	1417	620	44	350 (LT)	25	55*	<40%	15-90	
PEST 27108 SMO # C8416	Lindane	ND	8	8	100	8	100	0	<40%	87-110	27006 27013-21
	Heptachlor	ND	8	7	88	8	100	13	<40%	43-120	
	Aldrin	ND	8	7	82	8	100	13	<40%	45-110	
MS # C8416	Dieldrin	ND	8	8	100	8	100	0	<40%	56-120	
MSD # C8416	Endrin	ND	8	8	100	9	113*	12	<40%	89-110	
	p,p-DDT	ND	8	8	100	9	113*	12	<40%	82-100	

*Asterisked values are outside QC limits.

RPD: VOAs ___ out of 5; outside QC limits
B/N 0 out of [illegible]; outside QC limits
ACID 1 out of [illegible]; outside QC limits
PEST 0 out of 5; outside QC limits

RECOVERY: VOAs 3 out of 10; outside QC limits
B/N 0 out of 14; outside QC limits
ACID 0 out of 10; outside QC limits
[illegible] out of 10; outside QC limits

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

CASE NO. 2742 CONTRACTOR MEAD COMPUCHEM CONTRACT NO. 68-01-6762
LOW LEVEL ____ MED. LEVEL XX HIGH LEVEL ____
WATER XX SOIL/SED. ____ OTHER (Specify) ____
QC REPORT NO. ____ UNITS (Circle) ug/kg (ug/l)

FRACTION	COMPOUND	SMO # CONC	CONC. SPIKE ADDED	CONC. MS	% REC	CONC. MSD	% REC.	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY	COMMENTS
VOA	1,1-Dichloroethylene	ND	25	26	104	30	120	13	<15%	51-150	27014-17
27017 SMO #	Trichloroethylene	ND	25	19	76	22	88	15	<15%	74-130	
C8A14	Chlorobenzene	ND	25	25	100	27	108	8	<15%	67-130	
MS # C8A19	Toluene	2.7J	25	27	108	29	116	7	<15%	58-130	
MSD # C8A14	Benzene	ND	25	27	108	31	124	14	<15%	56-130	
B/N	1,2,4-Trichlorobenzene								<50%	38-110	
SMO #	Acenaphthene								<50%	57-120	
	2,4-Dinitrotoluene								<50%	43-110	
	Di-N-Butylphthalate								<50%	13-110	
MS # ____	Pyrene								<50%	25-140	
MSD # ____	N-Nitrosodi-N-Propylamine								<50%	34-110	
	1,4-Dichlorobenzene								<50%	33-110	
ACID	Pentachlorophenol								<40%	19-120	
SMO #	Phenol								<40%	23-80	
	2-Chlorophenol								<40%	33-110	
MS # ____	P-Chloro-M-Cresol								<40%	32-110	
MSD # ____	4-Nitrophenol								<40%	15-90	
PEST	Lindane								<40%	87-110	
SMO #	Heptachlor								<40%	43-120	
	Aldrin								<40%	45-110	
MS # ____	Dieldrin								<40%	56-120	
MSD # ____	Endrin								<40%	89-110	
	p,p-DDT								<40%	82-100	

*Asterisked values are outside QC limits.

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

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

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

AR100106

MATRIX SPIKE DUPLICATE/RECOVERY

CASE NO. 2742 | CONTRACTOR MEAD COMPUCHEM | CONTRACT NO. 68-01-6866
LOW LEVEL XX | MED. LEVEL | HIGH LEVEL
WATER | SOIL/SED. XX | OTHER (Specify)
QC REPORT NO. | | UNITS (Circle) (ug/kg) ug/l

FRACTION	COMPOUND	SMO # CONC	CONC. SPIKE ADDED	CONC. MS	% REC.	CONC. MSD	% REC.	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY	COMMENTS
VOA 27029 SMO # C8406 MS # MSD #	1,1-Dichloroethylene	ND	12.5	17	136	16	128	6	<15%	51-150	27022 27029-39
	Trichloroethylene		12.5	15	120	15	120	0	<15%	74-130	
	Chlorobenzene		12.5	16	128	15	120	7	<15%	67-130	
	Toluene		12.5	16	128	17	136*	6	<15%	58-130	
	Benzene		12.5	18	144*	16	128	12	<15%	56-130	
B/N 27022 SMO # C8404 MS # C8404 MSD # C8404	1,2,4-Trichlorobenzene	ND	2000	1500	75	1600	80	6	<50%	38-110	27022 27029-39
	Acenaphthene		2000	1400	70	1500	75	7	<50%	57-120	
	2,4-Dinitrotoluene		2000	LT(470)	24*	LT(520)	26*	8	<50%	43-110	
	Di-N-Butylphthalate		2000	1700	85	1800	90	6	<50%	13-110	
	Pyrene		2000	2200	110	2500	125	13	<50%	25-140	
	N-Nitrosodi-N-Propylamine		8000	6800	85	6100	76	11	<50%	34-110	
	1,4-Dichlorobenzene		2000	1600	80	1400	70	13	<50%	33-110	
ACID 27022 SMO # C8404 MS # C8404 MSD # C8404	Pentachlorophenol		2000	LT(580)	29	810	41	34	<40%	19-120	27022 27029-39
	Phenol		2000	LT(230)	12*	1300	65	138*	<40%	23-80	
	2-Chlorophenol		2000	620	31*	1100	55	56*	<40%	33-110	
	P-Chloro-M-Cresol		2000	LT(700)	35	1000	50	35	<40%	32-110	
	4-Nitrophenol	ND	12000	LT(2100)	18	4200	35	64*	<40%	15-90	
PEST 27022 SMO # C8404 MS # C8404 MSD # C8404	Lindane	ND	389 ~~80~~	340	87	320	82	6	<40%	87-110	27022 27029-39
	Heptachlor		389 ~~80~~	320	82	320	82	0	<40%	43-120	
	Aldrin		389 ~~80~~	340	87	330	85	2	<40%	45-110	
	Dieldrin		389 ~~80~~	370	95	330	85	11	<40%	56-120	
	Endrin		389 80	390	100	340	87	14	<40%	89-110	
	p,p-DDT		389 80	370	95	350	90	5	<40%	82-100	

*Asterisked values are outside QC limits.

RPD: VOAs ___ out of ___; outside QC limits
B/N 0 out of 7; outside QC limits
ACID 2 out of 8; outside QC limits
PEST ___ out of ___; outside QC limits

RECOVERY: VOAs ___ out of ___; outside QC limits
B/N 2 out of 74; outside QC limits
ACID 2 out of 76; outside QC limits
PEST ___ out of ___; outside QC limits

*Date Limits Set [illegible]
Revision Due [illegible]

AR100107

MATRIX SPIKE DUPLICATE/RECOVERY

CASE NO. 2742
LOW LEVEL
WATER
QC REPORT NO.

CONTRACTOR MEAD COMPUCHEM
MED. LEVEL XX
SOIL/SED. XX

CONTRACT NO. 68-01- ~~6702~~ 6866
HIGH LEVEL
OTHER (Specify)
UNITS (Circle) ug/g ug/l

FRACTION	COMPOUND	SMO # CONC	CONC. SPIKE ADDED	CONC. MS	% REC.	CONC. MSD	% REC.	RPD	QC LIMITS* RPD	QC LIMITS* RECOVERY	COMMENTS
VOA 27036 SMO # C8418 MS # C8418 MSD # ~~C8418~~	1,1-Dichloroethylene	ND	25	28	112	27	108	4	<15%	51-150	27036 27030 (1)
	Trichloroethylene	140	25	191	204*	161	84	83*	<15%	74-130	
	Chlorobenzene	ND	25	28	112	26	104	7	<15%	67-130	
	Toluene	19	25	47	112	43	96	15	<15%	58-130	
	Benzene	ND	25	30	120	29	116	3	<15%	56-130	
B/N SMO # MS # ___ MSD # ___	1,2,4-Trichlorobenzene								<50%	38-110	
	Acenaphthene								<50%	57-120	
	2,4-Dinitrotoluene								<50%	43-110	
	Di-N-Butylphthalate								<50%	13-110	
	Pyrene								<50%	25-140	
	N-Nitrosodi-N-Propylamine								<50%	34-110	
	1,4-Dichlorobenzene								<50%	33-110	
ACID SMO # MS # ___ MSD # ___	Pentachlorophenol								<40%	19-120	
	Phenol								<40%	23-80	
	2-Chlorophenol								<40%	33-110	
	P-Chloro-M-Cresol								<40%	32-110	
	4-Nitrophenol								<40%	15-90	
PEST SMO # MS # ___ MSD # ___	Lindane								<40%	87-110	
	Heptachlor								<40%	43-120	
	Aldrin								<40%	45-110	
	Dieldrin								<40%	56-120	
	Endrin								<40%	89-110	
	P,P-DDT								<40%	82-100	

*Asterisked values are outside QC limits.

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

RECOVERY: VOAs 2 out of 10; outside QC limits
B/N ___ out of ___; outside QC limits
ACID ___ out of ___; outside QC limits
PEST ___ out of ___; outside QC limits

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

Asterisked values NOT commented upon not significantly out of RANGE to question SAMPLE results.

No aqueous results sufficiently out of range

(1) The reported result for tce in C8418 may not reflect the average concentration present in this sample, however this sample is a field duplicate of C-8408 and the reported result in C-8418 duplicate sample very closely agrees with that in C-8408 therefore there appears to be no reason to question sample results for trichloroethene.

Duplicate/Triplicate Analysis of Non-Matrix Spiked (Indigeneous) Compounds

Outliers are tabulated below for three types of multiple analyses:

(1) Field duplicates

(2) Un-spiked laboratory duplicates

(3) Matrix spike duplicate plus corresponding unspiked sample evaluated for non-matrix spiked (indigeneous) compounds. (Spike recoveries are evaluated on a separate form.)

Analytical Fraction	Outlier Criteria (for tabulation purposes only)			
	Relative standard deviation		Equivalent Relative Percent Difference	
	solid	aqueous	solid	aqueous
VOA	35.4%	23.3%	50%	33%
BNA	42.4%	28.3%	60%	40%
PEST	42.4%	28.3%	60%	40%

NF : NOT FOUND

	CONCENTRATIONS ug/kg									
	Analysis No. 1		Analysis No. 2		Analysis No. 3		[redacted]			
COMPOUND	SAMPLE I.D.	CONC.	SAMPLE I.D.	CONC.	SAMPLE I.D.	CONC.	relative percent difference			footnotes
Phenol	C-8408	3000	C-8408R	*480	C-8418	* NF	144	200	200	2
Benzoic Acid		29,000		*132		*2900	198	183	164	2
4-methylphenol		1400		* NF		* NF	200	—	200	2
1,4-dichlorobenzene		1200		*650		*11,700	59	179	163	1
Aniline		* NF		2300		* NF	200	200	—	1
4-chloroaniline		*650		*2200		* NF	109	200	200	1
2-methylnapthalene		*307		230*		37,800	29	197	197	1
NAPTHALENE		2800		3100*		290,000	10	196	196	1
							1/2	2/3	1/3	← RPD AN#/AN
1,1-dichloroethane		<4.4x10^6				0	200			3a
1,1-dichloroethane		2.6x10^6 *				* 3.0x10^6	14			3

COMMENTS: * Actual values calculated below LAB'S QUANTITATION LIMIT from GC/MS QUANT. LISTS SUPPLIED IN RAW DATA

(1) C-8408 vs C-8418 BN [redacted] cmpd. replicates poor because C-8418 larger final volume/higher d. also Tgt. Hits for C-8418 large dil. factor makes <DL values appear larger

(2) Poor acid replication probably due to poor recovery/variability (D5-phenol 2%

(3) Actual calculated values show this result NOT OUTLIER as reported in (3a) but rather is due to different DILUTIONS causing diff. DL's & lab Reporting quantitation limits.

(4) MOST LIKELY cause of variability in C-8408, 8408R & 8418 is sample inhomogeneity :. reported results

RUN CHRONICLE

FRACTION: VOA SOLIDS			FRACTION: VOA CONT.			FRACTION: VOA		
*Possible ghosts			SOLIDS / LIQ.			LIQ		
RUN ORDER	RUN ID / DESCRIPTION (INIT)	DATE / TIME	RUN ORDER	RUN ID / DESCRIPTION	DATE / TIME	RUN ORDER	RUN ID / DESCRIPTION	DATE / TIME
	BFB (13)	5-17 B	*	CR027036 B13 C8418	B		CN027008 SS-DUP	5[illegible] B
	LBLK			BFB (C19)	6-7 C		CR027007 SS-RERUN	CONT
	STD GS840517 B18			LBLK			CN027216 SS	
	GT840517 STD	5/17 19:11		STD GS840607			CN027717 SS-DUP	
*	GH027029 C-8406	5/17 20:05		(2) SAMPLES CASE 2779			CX027007 SS-RERUN	
*NO VOA's	C-8411 NO GHOST	5/17 21:05		(2) SPIKES CASE 2779		*NO GHOST	CX027015 C-8410	NO VOA's REPORTED
	C-8415			SPIKE CASE 2797			BFB (13)	5/16 B
	C-8420			SAMPLE CASE 2779			L-BLK	
	C-4425			SPIKE CASE 2710			CC840516 STD L-BLK II	
	BFB (19)	5-17 B	*NOT REPORTED	GR027024 A19 C-840 SPIKE			CS840516 Std. 100ppb	5/16 22:3
	L BLK			BFB (C13)	5-18 C	*INITIAL CAL	CN027006 C8309	NOT USED
	GS840517 B19 STD 1			LBLK		*NO GHOST FOUND	CN027013 C13 C8405	5-17 0:21
	GT " " Std. 2			CS840518 Std.			CN027018 C-8416	
	GU " " Std 3		*	CR025397 SAMPLE other case			CN027019 C-8419	
	GV " " Std 4		*NO GHOSTS NOTED	CN027030 C13 C-8408			CN027020 C8422	
*NO GHOST	GH027031 B19 C-8409	NO VOA's Reported		E424L			CN027021 C-4424 FBLK	
*NO GHOSTS	GH027033 C-8413			C8418 FDUP of 8408			BFB (13)	5-17 A
	C-8417			BFB (18)	5-17 C		L-BLK	
	C-8421			LBLK			CS840517 Std	
	BFB	5-18		GS840517 C18 Std		*	CN27017 C-8414 50:1	NOT USED
	LBLK			GT Std.		*	CN27016 C-8412 100:1	NOT USED
	Std			GH027080 other case C8344 2743			CR27006 C-8309 Reruns	5-17 13:5
	Std.			6 SAMPLES other case			VR27017 C-8414 50:1	
	4 SAMPLES CASE 2743			GH027022 A18 C-8404			CR027016 C-8412 40:1	
RESULTS NOT REPORTED	GH027023 C19 SPIKE			LIQUIDS			CN027015 C-8410 500:1	
RESULTS NOT REPORTED	GH027024 C19 SPIKE			3 SAMPLES other case				
	BFB (13)	5-18 B		CN027014 (19) C8407	5/17 A			
	LBLK			BFB (13)	5/17 B			
	CS840518 B13 Std			L-BLK				
	CT840518 B13 Std			CS840517 B13 Std				
	(2) CN027212 27213 SPIKES			CN027007 SS				

AR100111

Instrument Carryover Effects

Possible Instances of Carryover Artifacts are Tabulated and Evaluated Below:

COMPOUND IN QUESTION	Initial Run (High Level) Run I.D.	Instrument Level	Second Run Run I.D.	Instr. Level	Carryover Percent	Third Run Run I.D.	Instr. Level	Carryover Percent	Footnote Reference
Ethylbenzene	GT840517 Std	62.3 ug/kg	C-8406	1.2 ug/kg	2%	C-8411		0	(1)

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

(1) 2% Ghost ethylbenzene after immediately preceeding ~~sampl~~ std. run

AR100112

PROJECT NAME: Hunterstown Road Site
TDD NO: F3-8404-07

EPA SITE NO.:
REGION: III

QUALITY ASSURANCE REVIEW OF INORGANIC ANALYTICAL DATA PACKAGE

Case No.: 2742
Contract No.: 68-01-6829
Contract Laboratory: Chemtech
Applicable IFB No.: WA83-A196
Reviewer: Atwood F. Davis
Review Date: 9-5-84

Applicable Sample No's.:
MC-1713, MC-1811 through and including MC-1831

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

Reviewer's Evaluation*	Fraction			
	TASK I ICP or AA METALS	TASK II FURNACE AA METALS	TASK II COLD VAPOR AA MERCURY	TASK III CYANIDE
Acceptable				
Acceptable with exception(s)	✓(1,2)	✓(1)	✓(2)	✓(2)
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
- (3) ○ 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) See Blank Analysis Results
(2) See Duplicate Analysis Results
(3) Not Applicable

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	L/A	L/S	L/A	L/S	L/A	L/S	L/S	L/A	L/S	L/A	L/S	L/A	L/S	L/A	L/
	TRAFFIC REPORT # MC	1713	1811	1812	1813	1814	1815	1816	1817	1818	1819	1820	1821	1822	1823	18
	LAB I.D. #62-23	01	11	02	12	03	13	14	04	15	05	16	06	17	[redacted]	[redacted]
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	✓													[redacted]	
	QA FORM	✓														
	INSTR. SENS.	MS														
TASK III: CYANIDE	RAW DATA	✓														
	TAB. RESULTS	✓														
	TAB. D.L.'s	MS														
	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.														[redacted]	

COMMENTS:

DATA COMPLETENESS	CONC./ MATRIX	L/S	L/A	L/S	L/S	L/A	L/A	L/S								
	TRAFFIC REPORT # MC	1825	1826	1827	1828	1829	1830	1831								
	LAB I.D. # 62-236	19	08	20	21	09	10	22								
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	MS	—	—	—	—	—	—								
	QA FORM.	✓	—	—	—	—	—	—								
	INSTR. SENS.	✓	—	—	—	—	—	—								
OTHER (SPECIFY):	RAW DATA															
	TAB. RESULTS															
	TAB. D.L.'s															
	QA FORM															
	INSTR. SENS.															
OTHER (SPECIFY):	RAW DATA															
	TAB. RUSULTS															
	TAB. D.L.'s															
	QA FORM															
	INSTR. SENS.															

COMMENTS: _____

AR100116

BLANK ANALYSIS RESULTS

TASK	TYPE	CONC	MATRIX	SAMPLE #	SOURCE OF H_2O	CONTAMINANTS (CONCENTRATION / DETECTION LIMIT		
I	R.BLK	LAB	LO/AQ	R.BLK 1&2*	CHEMTECH	Fe (28 ug/L / 50) 2		
						Be (2 ug/L / 5) 2*		
						Zn (6 ug/L / 10) 2*		
I	D.BLK	LAB	LO/AQ	D.BLK 1	CHEMTECH			
I	D.BLK	LAB	LO/AQ	D. BLK 2	CHEMTECH	Sn (5.2 ug/L / 20)		
I II	FIELD		LO/AQ	MC-1812 G2-236-02	NUS	Be (3.00 ug/L / 5) 2	Cd (.2 ug/L / 1)	
						Cu (58 ug/L / 50) 1	Pb (20 ug/L / 5)	
						Fe (141 ug/L / 50) 1		
						Zn (16 ug/L / 10) 1		
I								
I	FIELD		LO/SOL	MC-1813 G2-236-12		Cu (27 ug/L / 50) 2	1.4	
						Fe (58 ug/L / 50) 1	2.9	
						Zn (7 ug/L / 10) 2	.4	
						Pb (2.3 ug/L / 5)	.1	

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

MATRIX SPIKE RECOVERIES

Sample No.	MC-1823	MC-1827				
Field Spike						
Lab Spike	✓	✓				
Matrix	AQ	SOL				
Conc. Level	LO	LO				
Method Std.						
Fraction	ALL	ALL				

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

Exception(s):

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

Comments: _____

Duplicate Analysis Results

The applicable duplicate pairs are:

sample no.	MC-1823	MC-1827	MC-1815 MC-1825			
Field duplicate			✓			
Lab duplicate	✓	✓				
sample level	LO	LO	LO			
sample matrix	AQ	SOL	SOL			
Fraction	ALL	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
ALL AQUEOUS	20 %
ALL SOLID	40 %

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

Fraction	Compound	Actual RPD	Sample	Comparison conc.	conc.
I	IRON	54.3	MC-1823	213	122 ug/L
I	Cobalt	41	MC-1815 1825	8.5	5.6 mg/kg
I	MANGANESE	82	MC-1815 1825	451	1080 "
II	Mercury	123	MC-1815 1825	.18	.75 "
II	CADMIUM	40.9	MC-1815 1825	.35	.53 "
III	Cyanide	70	MC-1815 1825	1:2	.575 "

Comments: VALUES OUT OF RANGE BUT NOT COMMENTED UPON NOT SIGNIFICANT TO QUESTION SAMPLE RESULTS.
MN, Hg, CN in field duplicates MC-1815, MC-1825 ~~mg/kg~~ represent the average value of these constituents

Initial Calibration Verification and Continuing Calibration Verification

Documentation indicates calibrations were performed and checked every ten samples: Yes ✓ No ___

Exceptions: _____

Calibrations and verifications were all within the control limits specified in WA83-A196 : Yes ✓ No ___

Outliers are listed below:

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

Interference QC Results

Documentation indicates interference QC samples were run before and after every ten samples: Yes NA No ___

Exceptions: Beginning & end of run minimum 2 per shift.

Interference QC results were all within the control limits specified in adopted for review purposes ± 85-115% : Yes ___ No ___

Exceptions:

Parameter	Acceptable Range (%)	Calibration Identifier	% of True Value	Comments
Cu	85-115	ICSB INITIAL	127.6	NOT SUFFICIENTLY OUT OF RANGE
Cu	85-115	ICSB FINAL	125.6	to question sample results.

AR100120

Detection Limits Results

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

Exceptions: Cyanide d.L. reported in RAW data, not tabulated with others

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

Exceptions: ___

Instrument Sensitivity Reports

Instrument sensitivity reports were documented for all parameters:

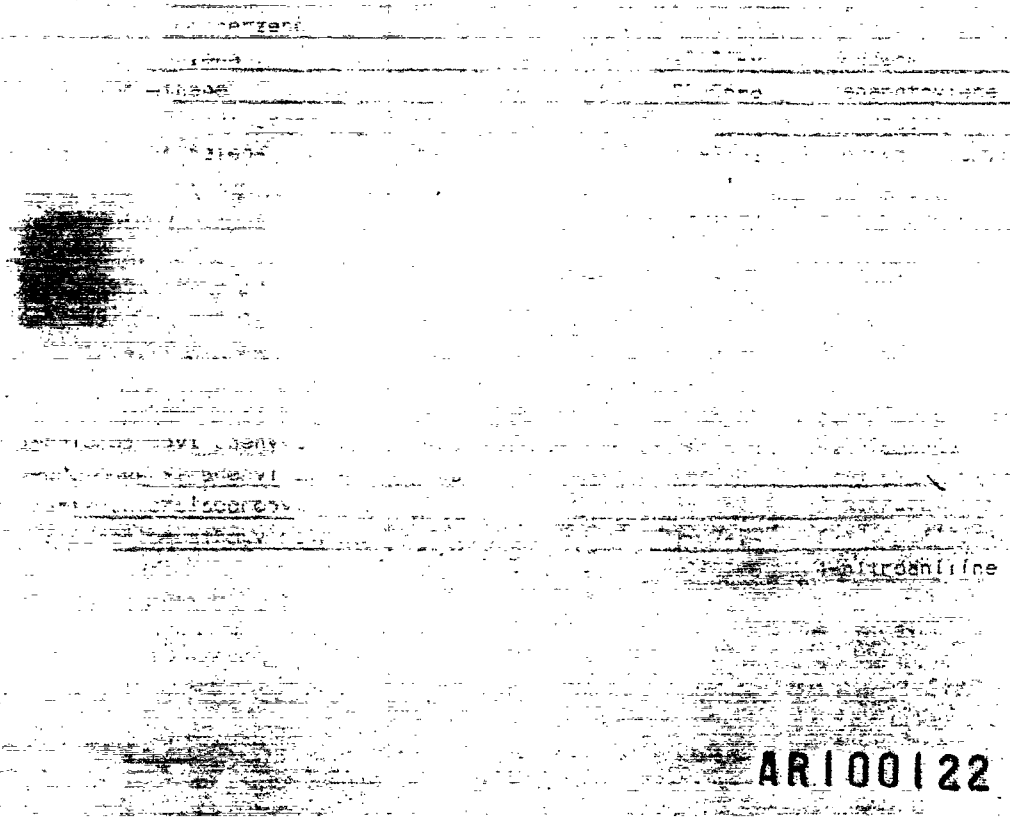
Yes ___ No ✓

Comments: ___

Other Remarks Concerning this Case:

ORIGINAL (Red)

APPENDIX D



C8309

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27006
Sample Matrix: Liquid
Data Release Authorized By: [redacted]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-20-84
PERCENT MOISTURE: [redacted]%
CONC./DILUTION FACTOR: 2.2

PP#	CAS#		(ug/l or ug/kg (circle one))
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l or ug/k (circle o
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	[redacted]U
(67B)	85-68-7	butyl benzyl phthalate	[redacted]U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	[redacted]

...MENTAL PROTECTION AGENCY - CLP Sample Management Office
...x 818, Alexandria, Virginia 22313 - 703/557-2490

SAMPLE NUMBER
C8309

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27006
Sample Matrix: Liquid
Data Release Authorized By: [signature]

Case Number 2742
QC Report No.
Contract No.: 68 01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1

PP#	CAS#		(ug/l) or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-16-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1

PP#	CAS#		(ug/l) or ug/kg (circle on
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	endosulfan I	0.1U
(96P)	115-29-7	endosulfan II	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	78-20-8	endrin	0.1U
(99P)	7421-43-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	BHC-Alpha	0.1U
(103P)	319-85-7	BHC-Beta	0.1U
(104P)	319-86-8	BHC-Delta	0.1U
(105P)	58-89-9	BHC-Gamma	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-7	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: Not Requested
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

			(ug/l) or ug/kg (circle or
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.004L

...ls, Alexandria, VA 22313 - 703/557-2490

Sample Number
C8404

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27022
Sample Matrix: Solid
Data Release Authorized By:

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6566
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-14-84
PERCENT MOISTURE: 1.446 factor = 32%
CONC./DILUTION FACTOR: 61.7

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	2[illegible]
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10J
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
C8404

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27022
Sample Matrix: Solid
Data Release Authorized By:

Case Number 2742
QC Report No.
Contract No.: 68-01 6866
Date Sample Received: 5 11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: 1.46 factor = 32%
CONC./DILUTION FACTOR: 1.40

PP#	CAS#		ug/l or ~~ug/kg~~ (circle one)
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	2.5U
(6V)	56-23-5	carbon tetrachloride	2.5U
(7V)	108-90-7	chlorobenzene	2.5U
(10V)	107-06-2	1,2-dichloroethane	2.5U
(11V)	71-55-6	1,1,1-trichloroethane	2.5U
(13V)	75-34-3	1,1-dichloroethane	2.5U
(14V)	79-00-5	1,1,2-trichloroethane	2.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	2.5U
(16V)	75-00-3	chloroethane	2.5U
(19V)	110-75-8	2-chloroethylvinyl ether	2.5U
(23V)	67-66-3	chloroform	2.5U
(29V)	75-35-4	1,1-dichloroethene	2.5U
(30V)	156-60-5	1,2-trans-dichloroethene	2.5U
(32V)	78-87-5	1,2-dichloropropane	2.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	2.5U
	10061-01-05	cis,1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	2.5U
(44V)	75-09-2	methylene chloride	2.5U
(45V)	74-87-3	chloromethane	2.5U
(46V)	74-83-9	bromomethane	2.5U
(47V)	75-25-2	bromoform	2.5U
(48V)	75-27-4	bromodichloromethane	2.5U
(49V)	75-69-4	fluorotrichloromethane	2.5U
(51V)	124-48-1	chlorodibromomethane	2.5U
(85V)	127-18-4	tetrachloroethene	2.5U
(86V)	108-88-3	toluene	2.5U
(87V)	79-01-6	trichloroethene	2.5U
(88V)	75-01-4	vinyl chloride	2.5U
	67-64-1	acetone	50U
	78-93-3	2-butanone	100U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	50U
	108-10-1	4-methyl-2-pentanone	50U
	100-42-5	styrene	2.5U
	108-05-4	vinyl acetate	5U
	95-47-6	o-xylene	2.5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-1-84
PERCENT MOISTURE: 1.46 factor = 32%
CONC./DILUTION FACTOR: 1.5

PP#	CAS#		ug/l or ~~ug/kg~~ (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-16-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: 1.46 factor = 32%
CONC./DILUTION FACTOR: 1.5

			ug/g or ~~ug/kg~~ (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.16U

10870

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27013
Sample Matrix: Liquid
Data Release Authorized By:

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-21-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 2

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle on
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	10U

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

SAMPLE NUMBER
FC8405

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27013
Sample Matrix: Liquid
Data Release Authorized By: Paul Mistag

Case Number 2742
QC Report No.
Contract No.: 68 016866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1.00

PP#	CAS#		ug/l or ug/kg (circle one)	
(2V)	107-02-8	acrolein	100U	
(3V)	107-13-1	acrylonitrile	100U	
(4V)	71-43-2	benzene	5U	
(6V)	56-23-5	carbon tetrachloride	5U	
(7V)	108-90-7	chlorobenzene	5U	
(10V)	107-06-2	1,2-dichloroethane	5U	
(11V)	71-55-6	1,1,1-trichloroethane	27 ~~5U~~	amo
(13V)	75-34-3	1,1-dichloroethane	LT ~~5U~~	amo
(14V)	79-00-5	1,1,2-trichloroethane	5U	
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U	
(16V)	75-00-3	chloroethane	5U	
(19V)	110-75-8	2-chloroethylvinyl ether	5U	
(23V)	67-66-3	chloroform	5U	
(29V)	75-35-4	1,1-dichloroethene	5U	
(30V)	156-60-5	1,2-trans-dichloroethene	220 ~~5U~~	amo
(32V)	78-87-5	1,2-dichloropropane	5U	
(33V)	10061-02-6	trans-1,3-dichloropropene	5U	
	10061-01-05	cis,1,3-dichloropropene	10U	
(38V)	100-41-4	ethylbenzene	5U	
(44V)	75-09-2	methylene chloride	5U	
(45V)	74-87-3	chloromethane	5U	
(46V)	74-83-9	bromomethane	5U	
(47V)	75-25-2	bromoform	5U	
(48V)	75-27-4	bromodichloromethane	5U	
(49V)	75-69-4	fluorotrichloromethane	5U	
(51V)	124-48-1	chlorodibromomethane	5U	
(85V)	127-18-4	tetrachloroethene	5U	
(86V)	108-88-3	toluene	6.6 ~~5U~~	amo
(87V)	79-01-6	trichloroethene	39 ~~5U~~	amo
(88V)	75-01-4	vinyl chloride	5U	
	67-64-1	acetone	100U	
	78-93-3	2-butanone	200U	
	75-15-0	carbondisulfide	LT ~~10U~~	amo
	519-78-6	2-hexanone	100U	
	108-10-1	4-methyl-2-pentanone	100U	
	100-42-5	styrene	5U	
	108-05-4	vinyl acetate	10U	
	95-47-6	o-xylene	5.1 ~~5U~~	amo

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-16-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1

PP#	CAS#		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	endosulfan I	0.1U
(96P)	115-29-7	endosulfan II	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	78-20-8	endrin	0.1U
(99P)	7421-43-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	BHC-Alpha	0.1U
(103P)	319-85-7	BHC-Beta	0.1U
(104P)	319-86-8	BHC-Delta	0.1U
(105P)	58-89-9	BHC-Gamma	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-7	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: Not Requested
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

			ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.004U

ON AGENCY-CLP Sample Management Office
ia, VA 22313 - 703/557-2490

Sample Number
C8406

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27029
Sample Matrix: Solid
Data Release Authorized By: Pultinen

Case Number: 2742
QC Report No.:
Contract No.: 68 01 6866
Date Sample Received: 5-11 84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-19-84
PERCENT MOISTURE: 1.98 factor = 48%
CONC./DILUTION FACTOR: 10.3

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10
(62B)	86-30-6	N-nitrosodiphenylamine	1
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	LT ~~10~~ same
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	240 ~~10~~ same
(73B)	50-33-8	benzo(a)pyrene	LT ~~20~~ same
(74B)	205-99-2	benzo(b)fluoranthene	LT ~~20U~~ same
(75B)	207-08-9	benzo(k)fluoranthene	LT 20U same
(76B)	318-01-9	chrysene	1160 ~~10U~~ same
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	LT ~~10~~ same
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

SAMPLE NUMBER
C8406

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27029
Sample Matrix: Solid
Data Release Authorized By: [signature]

Case Number 2742
QC Report No.
Contract No.: 68-01 6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/~~PREPARED~~: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: 1.78 factor = 4890
CONC./DILUTION FACTOR: 1.68

PP#	CAS#		ug/l or (ug/kg) (circle one)
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	2.5U
(6V)	56-23-5	carbon tetrachloride	2.5U
(7V)	108-90-7	chlorobenzene	2.5U
(10V)	107-06-2	1,2-dichloroethane	2.5U
(11V)	71-55-6	1,1,1-trichloroethane	2.5U
(13V)	75-34-3	1,1-dichloroethane	2.5U
(14V)	79-00-5	1,1,2-trichloroethane	2.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	2.5U
(16V)	75-00-3	chloroethane	2.5U
(19V)	110-75-8	2-chloroethylvinyl ether	2.5U
(23V)	67-66-3	chloroform	2.5U
(29V)	75-35-4	1,1-dichloroethene	2.5U
(30V)	156-60-5	1,2-trans-dichloroethene	35 ~~2.5U~~
(32V)	78-87-5	1,2-dichloropropane	2.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	~~35~~ ~~2.5U~~
	10061-01-05	cis,1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	LT ~~2.5U~~
(44V)	75-09-2	methylene chloride	6.12 ~~2.5U~~
(45V)	74-87-3	chloromethane	2.5U
(46V)	74-83-9	bromomethane	2.5U
(47V)	75-25-2	bromoform	2.5U
(48V)	75-27-4	bromodichloromethane	2.5U
(49V)	75-69-4	fluorotrichloromethane	2.5U
(51V)	124-48-1	chlorodibromomethane	2.5U
(85V)	127-18-4	tetrachloroethene	2.5U
(86V)	108-88-3	toluene	2.5U
(87V)	79-01-6	trichloroethene	2.5U
(88V)	75-01-4	vinyl chloride	2.5U
	67-64-1	acetone	50U
	78-93-3	2-butanone	100U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	50U
	108-10-1	4-methyl-2-pentanone	50U
	100-42-5	styrene	2.5U
	108-05-4	vinyl acetate	5U
	95-47-6	o-xylene	2.5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/~~PREPARED~~: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: 1.78 factor = 4290
CONC./DILUTION FACTOR: 1.8

PP#	CAS#		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

original extraction 5/15/84

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/~~PREPARED~~: 6-14-84
DATE ANALYZED: 6-19-84
PERCENT MOISTURE: 1.78 factor = 4890
CONC./DILUTION FACTOR: 1.78

			ug/g or (ug/kg) (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.16U

December, 1983

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27014
Sample Matrix: Liquid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6806
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-21-84
PERCENT MOISTURE: 1 NA
CONC./DILUTION FACTOR: 20

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene 240 ~~10U~~ a	
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
C8407

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27014
Sample Matrix: Liquid
Data Release Authorized By: [redacted]

Case Number 2742
QC Report No.
Contract No.: 68-01-6666
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: LOW (MEDIUM) HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 5000

PP#	CAS#		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U amo
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	350000 5U amo
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	33000 5U amo
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	1,900000 5U amo

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-16-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1

PP#	CAS#		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.
(90P)	60-57-1	dieldrin	0.
(91P)	57-74-9	chlordane	0.
(92P)	50-29-3	4,4'-DDT	0.
(93P)	72-55-9	4,4'-DDE	0.
(94P)	72-54-8	4,4'-DDD	0.
(95P)	115-29-7	endosulfan I	0.
(96P)	115-29-7	endosulfan II	0.
(97P)	1031-07-8	endosulfan sulfate	0.
(98P)	78-20-8	endrin	0.
(99P)	7421-43-4	endrin aldehyde	0.
(100P)	76-44-8	heptachlor	0.
(101P)	1024-57-3	heptachlor epoxide	0.
(102P)	319-84-6	BHC-Alpha	0.
(103P)	319-85-7	BHC-Beta	0.
(104P)	319-86-8	BHC-Delta	0.
(105P)	58-89-9	BHC-Gamma	0.
(106P)	53469-21-9	PCB-1242	0
(107P)	11097-69-7	PCB-1254	0
(108P)	11104-28-2	PCB-1221	0
(109P)	11141-16-5	PCB-1232	0
(110P)	12672-29-6	PCB-1248	0
(111P)	11096-82-5	PCB-1260	0
(112P)	12674-11-2	PCB-1016	0
(113P)	8001-35-2	toxaphene	0

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: Not Requested
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

			u or (circ
(129B)	1746-01-6	2,3,7,8-tetrachlorodibe p-dioxin	0

December

AR100132

Alexandria, VA 22313 - 703/557-2490

Sample Number C8408

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Sample ID No.: 270305
Sample Matrix: Solid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6566
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-2-84
PERCENT MOISTURE: 175 factor = 4390
CONC./DILUTION FACTOR: 73.7

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol 3000	~~10U~~ same
	65-85-0	benzoic acid 29000	~~100U~~ same
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol 1400	~~10U~~ same
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene 120	~~10U~~ same
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene 2800	~~10U~~ same
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate 850	~~10U~~ same
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate 540	~~10U~~ same
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

Alexandria, VA 22313 - 703/557-2490

Sample Number
C8468

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27030KK
Sample Matrix: Solid
Data Release Authorized By: [illegible]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6566
Date Sample Received: 5/14/84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 6-13-84
DATE ANALYZED: 6-15-84
PERCENT MOISTURE: 1.75 factor = 43%
CONC./DILUTION FACTOR: 80.0

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene LT ~~10U~~ 5U	
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene 31U ~~10U~~ 5U	
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	2U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate LT ~~10U~~ 5U	
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate 92J ~~10U~~ 5U	
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline 23U ~~10U~~ 5U	
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline LT ~~50U~~ 5U	
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

PROTECTION AGENCY
Alexandria, Virginia 22313 - 703/557-2490

C8408

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27630
Sample Matrix: Solid
Data Release Authorized By: [signature]

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: LOW (MEDIUM) HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-18-84
PERCENT MOISTURE: 1.75 FACTOR = 43%
CONC./DILUTION FACTOR: 893

PP#	CAS#		ug/l, ug/g or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	28000 5U (and)
(13V)	75-34-3	1,1-dichloroethane	4 5U (and)
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	93000 5U (and)
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	8400 5U (and)
(44V)	75-09-2	methylene chloride	6100 5U (and)
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	29000 5U (and)
(87V)	79-01-6	trichloroethene	24000 5U (and)
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	20000 5U (and)

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: 1.75 FACTOR = 45%
CONC./DILUTION FACTOR: 1.75

PP#	CAS#		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-16-84
DATE ANALYZED: 5-21-84
PERCENT MOISTURE: 1.75 FACTOR = 43%
CONC./DILUTION FACTOR: 1.0

		ug/g or ug/k (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin 0.16U

December, 198

...ENTA-
...18, Alexandria, VA 22313 - 703/557-2490

Sample Number
C8469

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27031
Sample Matrix: Solid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01 6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-4-84
PERCENT MOISTURE: 1.36 factor • 26%
CONC./DILUTION FACTOR: 53.7

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
C8409

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27031
Sample Matrix: Solid
Data Release Authorized By: Wilkey

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: 1.36 FACTOR = 26%
CONC./DILUTION FACTOR: 1.35

PP#	CAS#		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	2.5U
(6V)	56-23-5	carbon tetrachloride	2.5U
(7V)	108-90-7	chlorobenzene	2.5U
(10V)	107-06-2	1,2-dichloroethane	2.5U
(11V)	71-55-6	1,1,1-trichloroethane	2.5U
(13V)	75-34-3	1,1-dichloroethane	2.5U
(14V)	79-00-5	1,1,2-trichloroethane	2.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	2.5U
(16V)	75-00-3	chloroethane	2.5U
(19V)	110-75-8	2-chloroethylvinyl ether	2.5U
(23V)	67-66-3	chloroform	2.5U
(29V)	75-35-4	1,1-dichloroethene	2.5U
(30V)	156-60-5	1,2-trans-dichloroethene	2.5U
(32V)	78-87-5	1,2-dichloropropane	2.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	2.5U
	10061-01-05	cis,1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	2.5U
(44V)	75-09-2	methylene chloride	5.0 ~~2.5U~~
(45V)	74-87-3	chloromethane	2.5U
(46V)	74-83-9	bromomethane	2.5U
(47V)	75-25-2	bromoform	2.5U
(48V)	75-27-4	bromodichloromethane	2.5U
(49V)	75-69-4	fluorotrichloromethane	2.5U
(51V)	124-48-1	chlorodibromomethane	2.5U
(85V)	127-18-4	tetrachloroethene	2.5U
(86V)	108-88-3	toluene	2.5U
(87V)	79-01-6	trichloroethene	2.5U
(88V)	75-01-4	vinyl chloride	2.5U
	67-64-1	acetone	50U
	78-93-3	2-butanone	100U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	50U
	108-10-1	4-methyl-2-pentanone	50U
	100-42-5	styrene	2.5U
	108-05-4	vinyl acetate	5U
	95-47-6	o-xylene	2.5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 6-8-84
DATE ANALYZED: 6-13-84
PERCENT MOISTURE: 1.36 FACTOR = 26%
CONC./DILUTION FACTOR: ~~2.5~~ 2.5

PP#	CAS#		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-16-84
DATE ANALYZED: 5-21-84
PERCENT MOISTURE: 1.36 FACTOR = 26%
CONC./DILUTION FACTOR: 1.26

			ug/g or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.16U

C8410

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27015
Sample Matrix: Liquid
Data Release Authorized By: Preliminary

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6566
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-19-84
PERCENT MOISTURE: 1 %
CONC./DILUTION FACTOR: 2

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	[redacted]U
(67B)	85-68-7	butyl benzyl phthalate	[redacted]U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	[redacted]U
	100-01-6	4-nitroaniline	[redacted]

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SAMPLE NUMBER
C8410

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27015
Sample Matrix: Liquid
Data Release Authorized By: Paul Mitty

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-18-84
PERCENT MOISTURE: N*
CONC./DILUTION FACTOR: 1.00

PP#	CAS#		(ug/l) or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-16-84
PERCENT MOISTURE: N*
CONC./DILUTION FACTOR: 1

PP#	CAS#		(ug/l or ug/k (circle c
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	endosulfan I	0.1U
(96P)	115-29-7	endosulfan II	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	78-20-8	endrin	0.1U
(99P)	7421-43-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	BHC-Alpha	0.1U
(103P)	319-85-7	BHC-Beta	0.1U
(104P)	319-86-8	BHC-Delta	0.1U
(105P)	58-89-9	BHC-Gamma	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-7	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: Not Requested
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

			(ug/l or ug/k (circle c
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.004

xándria, VA 22313 - 703/557-2490

Sample Number
C8411

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27032
Sample Matrix: Solid
Data Release Authorized By: [illegible]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-4-84
PERCENT MOISTURE: 1.36 FACTOR = 26%
CONC./DILUTION FACTOR: 1.6

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	[illegible]
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	[illegible]
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100
	99-09-2	3-nitroaniline	100
	100-01-6	4-nitroaniline	100U

PROTECTION AGENCY-CLP Sample Management Office
Alexandria, VA 22313 - 703/557-2490

Sample Number
C8411

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27032R
Sample Matrix: Solid
Data Release Authorized By: [illegible]

Case Number: 2742
QC Report No.:
Contract No.: 68 01 6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 6-6-84
DATE ANALYZED: 6-20-84
PERCENT MOISTURE: 1.36 fraction = 2690
CONC./DILUTION FACTOR: 67

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
[illegible]A)	100-02-7	4-nitrophenol	100U
[illegible]A)	51-88-5	2,4-dinitrophenol	50U
[illegible]A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
[illegible]	39638-32-9	bis-(2-chloroisopropyl)ether	20U
[illegible])	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

C84/02

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27016
Sample Matrix: Liquid
Data Release Authorized By: Paul Lucas

Case Number: 2742
QC Report No.:
Contract No.: 68-01 6866
Date Sample Received: 5-7-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-29-84
DATE ANALYZED: 6-2-84
PERCENT MOISTURE: N
CONC./DILUTION FACTOR: 2.00

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate LT	100U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	191-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
C8412

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27816
Sample Matrix: Liquid
Data Release Authorized By: [signature]

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: LOW (MEDIUM) HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: NR
CONC./DILUTION FACTOR: 5

PP#	CAS#		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	25 5U (amo)
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	93 5U (amo)
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	530 5U (amo)
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-16-84
PERCENT MOISTURE: NR
CONC./DILUTION FACTOR: 1

PP#	CAS#		ug/l or ug/k (circle o
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	endosulfan I	0.1U
(96P)	115-29-7	endosulfan II	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	72-20-8	endrin	0.1U
(99P)	7421-43-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	BHC-Alpha	0.1U
(103P)	319-85-7	BHC-Beta	0.1U
(104P)	319-86-8	BHC-Delta	0.1U
(105P)	58-89-9	BHC-Gamma	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-7	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: not Requested
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

		ug/l or ug/ (circle
(129B) 1746-01-6	2,3,7,8-tetrachlorodibenzo p-dioxin	0.0

December,

AR100143

...oxandria, VA 22313 - 703/557-2490

Sample Number
C8413

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27033
Sample Matrix: Solid
Data Release Authorized By:

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-4-84
PERCENT MOISTURE: 1.80 factor = 3390
CONC./DILUTION FACTOR: 60

PP#	CAS#		ug/l or (ug/kg) (circle one)	PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U	(52B)	87-68-3	hexachlorobutadiene	10U
22A)	59-50-7	p-chloro-m-cresol	20U	(53B)	77-47-4	hexachlorocyclopentadiene	10U
24A)	95-57-8	2-chlorophenol	10U	(54B)	78-59-1	isophorone	10U
(31A)	122-83-2	2,4-dichlorophenol	10U	(55B)	91-20-3	naphthalene	10U
34A)	105-67-9	2,4-dimethylphenol	10U	(56B)	98-95-3	nitrobenzene	10U
37A)	88-75-5	2-nitrophenol	20U	(61B)	62-75-9	N-nitrosodimethylamine	10U
(58A)	100-02-7	4-nitrophenol	100U	(62B)	86-30-6	N-nitrosodiphenylamine	10U
(59A)	51-88-5	2,4-dinitrophenol	50U	(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
60A)	534-52-1	4,6-dinitro-2-methylphenol	20U	(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(64A)	87-36-5	pentachlorophenol	20U	(67B)	85-68-7	butyl benzyl phthalate	10U
(65A)	108-95-2	phenol	10U	(68B)	84-74-2	di-n-butyl phthalate	10U
	65-85-0	benzoic acid	100U	(69B)	117-84-0	di-n-octyl phthalate	10U
	95-48-7	2-methylphenol	10U	(70B)	84-66-2	diethyl phthalate	10U
	108-39-4	4-methylphenol	10U	(71B)	131-11-3	dimethyl phthalate	10U
	95-95-4	2,4,5-trichlorophenol	100U	(72B)	56-55-3	benzo(a)anthracene	10U
1B)	83-32-9	acenaphthene	10U	(73B)	50-33-8	benzo(a)pyrene	20U
5B)	92-87-5	benzidine	40U	(74B)	205-99-2	benzo(b)fluoranthene	20U
8B)	120-82-1	1,2,4-trichlorobenzene	10U	(75B)	207-08-9	benzo(k)fluoranthene	20U
9B)	118-74-1	hexachlorobenzene	10U	(76B)	318-01-9	chrysene	10U
(12B)	67-72-1	hexachloroethane	10U	(77B)	208-96-8	acenaphthylene	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U	(78B)	120-12-7	anthracene	10U
0B)	91-58-7	2-chloronaphthalene	10U	(79B)	181-24-2	benzo(ghi)perylene	20U
5B)	95-50-1	1,2-dichlorobenzene	10U	(80B)	86-73-7	fluorene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U	(81B)	85-01-8	phenanthrene	10U
7B)	106-46-7	1,4-dichlorobenzene	10U	(82B)	53-70-3	dibenzo(a,h)anthracene	20U
8B)	91-94-1	3,3'-dichlorobenzidine	20U	(83B)	183-39-5	Indeno(1,2,3-cd)pyrene	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U	(84B)	129-00-0	pyrene	10U
(36B)	606-20-2	2,6-dinitrotoluene	20U		62-53-3	aniline	10U
7B)	122-66-7	1,2-diphenylhydrazine	20U		100-51-6	benzyl alcohol	20U
09B)	206-44-0	fluoranthene	10U		106-47-8	4-chloroaniline	50U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U		132-64-9	dibenzofuran	10U
1B)	101-55-3	4-bromophenyl phenyl ether	10U		91-57-6	2-methylnaphthalene	20U
2B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U		88-74-4	2-nitroaniline	100U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U		99-09-2	3-nitroaniline	100U
					100-01-6	4-nitroaniline	100U

...ENTAL PROTECTION AGENCY-CLP Sample Management Office
...15, Alexandria, VA 22313 - 703/557-2490

Sample Number
C8413

ORGANICS ANALYSIS DATA SHEET

...ory Name: Mead CompuChem
...mple ID No.: 27033R
...ample Matrix: Solid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68 01 6866
Date Sample Received: 5 11 84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 6-12-84
DATE ANALYZED: 6-18-84
PERCENT MOISTURE: 1.50 factor = 33%
CONC./DILUTION FACTOR: 59.9

PP#	CAS#		ug/l or (ug/kg) (circle one)
...21A)	88-06-2	2,4,6-trichlorophenol	10U
...22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
...31A)	122-83-2	2,4-dichlorophenol	10U
...34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(5...)	100-02-7	4-nitrophenol	100U
	51-28-5	2,4-dinitrophenol	50U
...60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-86-5	pentachlorophenol	20U
...65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
...8B)	120-82-1	1,2,4-trichlorobenzene	10U
...9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
...8B)	111-44-4	bis(2-chloroethyl)ether	10U
...0B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
...6B)	541-73-1	1,3-dichlorobenzene	10U
...7B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
...6B)	606-20-2	2,6-dinitrotoluene	20U
...37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
...0B)	7005-72-3	4-chlorophenyl phenylether	10U
...	101-55-3	4-bromophenyl phenyl ether	10U
(	...9638-32-9	bis-(2-chloroisopropyl)ether	20U
	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-32-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	218-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	191-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
C8414

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27017
Sample Matrix: Liquid
Data Release Authorized By: Paul Vicory

Case Number 2742
QC Report No.
Contract No.: 68-01-6666
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR: 50.0

PP#	CAS#		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	12,000 5U same
(13V)	75-34-3	1,1-dichloroethane	2520 5U same
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	790 5U same
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	LT 5U same
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-16-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR: 1

PP#	CAS#		ug/l or ug/ (circle
(89P)	309-00-2	aldrin	0.1
(90P)	60-57-1	dieldrin	0.1
(91P)	57-74-9	chlordane	0.1
(92P)	50-29-3	4,4'-DDT	0.1
(93P)	72-55-9	4,4'-DDE	0.1
(94P)	72-54-8	4,4'-DDD	0.1
(95P)	115-29-7	endosulfan I	0.1
(96P)	115-29-7	endosulfan II	0.1
(97P)	1031-07-8	endosulfan sulfate	0.1
(98P)	78-20-8	endrin	0.1
(99P)	7421-43-4	endrin aldehyde	0.1
(100P)	76-44-8	heptachlor	0.1
(101P)	1024-57-3	heptachlor epoxide	0.1
(102P)	319-84-6	BHC-Alpha	0.1
(103P)	319-85-7	BHC-Beta	0.1
(104P)	319-86-8	BHC-Delta	0.1
(105P)	58-89-9	BHC-Gamma	0.1
(106P)	53469-21-9	PCB-1242	0.1
(107P)	11097-69-7	PCB-1254	0.1
(108P)	11104-28-2	PCB-1221	0.1
(109P)	11141-16-5	PCB-1232	0.1
(110P)	12672-29-6	PCB-1248	0.1
(111P)	11096-82-5	PCB-1260	0.1
(112P)	12674-11-2	PCB-1016	0.1
(113P)	8001-35-2	toxaphene	0.1

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: not Requested
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

		ug/l or ug/ (circle
(129B) 1746-01-6	2,3,7,8-tetrachlorodibenzo p-dioxin	0.00

ox 818, Alexandria, VA 22313 - 703/557-2490

Sample Number
C8415

ORGANICS ANALYSIS DATA SHEET

[redacted]tory Name: Mead CompuChem
[redacted]ample ID No.: 27034
Sample Matrix: Solid
Data Release Authorized By:

Case Number: 2742
QC Report No.:
Contract No.: 68-01 6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-4-84
PERCENT MOISTURE: 32%
CONC./DILUTION FACTOR: 58.8

PP#	CAS#		ug/l or (ug/kg) (circle one)
21A)	88-06-2	2,4,6-trichlorophenol	10U
22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
[redacted]	100-02-7	4-nitrophenol	100U
[redacted]	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
[redacted]	101-55-3	4-bromophenyl phenyl ether	10U
[redacted]	39638-32-9	bis-(2-chloroisopropyl)ether	20U
[redacted]	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

ENTAL PROTECTION AGENCY - CLP Sample Management Office
9:8, Alexandria, Virginia 22313 - 703/557-2490

SAMPLE NUMBER
C8415

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27034
Sample Matrix: Solid
Data Release Authorized By: Quinn

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-11-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: 1.41 FACTOR = 329
CONC./DILUTION FACTOR: 1.44

PP#	CAS#		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	2.5U
(6V)	56-23-5	carbon tetrachloride	2.5U
(7V)	108-90-7	chlorobenzene	2.5U
(10V)	107-06-2	1,2-dichloroethane	2.5U
(11V)	71-55-6	1,1,1-trichloroethane	120 ~~2.5U~~
(13V)	75-34-3	1,1-dichloroethane	27 ~~2.5U~~
(14V)	79-00-5	1,1,2-trichloroethane	1.1 ~~2.5U~~
(15V)	79-34-5	1,1,2,2-tetrachloroethane	2.5U
(16V)	75-00-3	chloroethane	2.5U
(19V)	110-75-8	2-chloroethylvinyl ether	2.5U
(23V)	67-66-3	chloroform	2.5U
(29V)	75-35-4	1,1-dichloroethene	2.5U
(30V)	156-60-5	1,2-trans-dichloroethene	2.5U
(32V)	78-87-5	1,2-dichloropropane	2.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	2.5U
	10061-01-05	cis,1,3-dichloropropene.	5U
(38V)	100-41-4	ethylbenzene	2.5U
(44V)	75-09-2	methylene chloride	3.2 ~~2.5U~~
(45V)	74-87-3	chloromethane	2.5U
(46V)	74-83-9	bromomethane	2.5U
(47V)	75-25-2	bromoform	2.5U
(48V)	75-27-4	bromodichloromethane	2.5U
(49V)	75-69-4	fluorotrichloromethane	2.5U
(51V)	124-48-1	chlorodibromomethane	2.5U
(85V)	127-18-4	tetrachloroethene	2.5U
(86V)	108-88-3	toluene	2.5U
(87V)	79-01-6	trichloroethene	2.5U
(88V)	75-01-4	vinyl chloride	2.5U
	67-64-1	acetone	50U
	78-93-3	2-butanone	100U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	50U
	108-10-1	4-methyl-2-pentanone	50U
	100-42-5	styrene	2.5U
	108-05-4	vinyl acetate	5U
	95-47-6	o-xylene	2.5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: 1.47 FACTOR = 329
CONC./DILUTION FACTOR: 1.5

PP#	CAS#		ug/l or ug/kg (circle on
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	[illegible]
(99P)	7421-43-4	endrin aldehyde	[illegible]
(100P)	76-44-8	heptachlor	[illegible]
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 6-14-84
DATE ANALYZED: ~~6-14-84~~ 6-19-84
PERCENT MOISTURE: 1.41 FACTOR = 329
CONC./DILUTION FACTOR: 1.47

			ug/g or ug/k (circle o
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.16

Decem[illegible]

AR100148

P.O. Box 818, Alexandria, VA 22313 (703)557-2490

Sample Number
C8416

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Sample ID No.: 27018R
Sample Matrix: Liquid
Data Release Authorized By: Paul [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-29-84
DATE ANALYZED: 6-1-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 2.00

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-28-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-86-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	LT ~~10U~~
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

December, 1983

AR100149

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

SAMPLE NUMBER
C8416

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27018
Sample Matrix: Liquid
Data Release Authorized By: [signature]

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1.00

PP#	CAS#		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	5U
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-16-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1

PP#	CAS#		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	endosulfan I	0.1U
(96P)	115-29-7	endosulfan II	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	78-20-8	endrin	0.1U
(99P)	7421-43-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	BHC-Alpha	0.1U
(103P)	319-85-7	BHC-Beta	0.1U
(104P)	319-86-8	BHC-Delta	0.1U
(105P)	58-89-9	BHC-Gamma	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-7	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: not requested
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

			ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.004U

ENTAL PROTECTION AGENCY-CLP Sample Management Office
IB, Alexandria, VA 22313 - 703/557-2490

Sample Number
C8417

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27035
Sample Matrix: Solid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-4-84
PERCENT MOISTURE: 41
CONC./DILUTION FACTOR: 68-8

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
[illegible]A)	100-02-7	4-nitrophenol	100U
[illegible]A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
[illegible]B)	101-55-3	4-bromophenyl phenyl ether	10U
	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(45B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
C8417

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27035
Sample Matrix: Solid
Data Release Authorized By: [signature]

Case Number 2742
QC Report No.
Contract No.: 68-01 6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-11-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: 41
CONC./DILUTION FACTOR: 1.69

PP#	CAS#		ug/l or ~~ug/kg~~ (circle one)
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	2.5U
(6V)	56-23-5	carbon tetrachloride	2.5U
(7V)	108-90-7	chlorobenzene	2.5U
(10V)	107-06-2	1,2-dichloroethane	2.5U
(11V)	71-55-6	1,1,1-trichloroethane	2.5U
(13V)	75-34-3	1,1-dichloroethane	2.5U
(14V)	79-00-5	1,1,2-trichloroethane	2.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	2.5U
(16V)	75-00-3	chloroethane	2.5U
(19V)	110-75-8	2-chloroethylvinyl ether	2.5U
(23V)	67-66-3	chloroform	2.5U
(29V)	75-35-4	1,1-dichloroethene	2.5U
(30V)	156-60-5	1,2-trans-dichloroethene	2.5U
(32V)	78-87-5	1,2-dichloropropane	2.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	2.5U
	10061-01-05	cis,1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	2.5U
(44V)	75-09-2	methylene chloride	6.1 ~~2.5U~~
(45V)	74-87-3	chloromethane	2.5U
(46V)	74-83-9	bromomethane	2.5U
(47V)	75-25-2	bromoform	2.5U
(48V)	75-27-4	bromodichloromethane	2.5U
(49V)	75-69-4	fluorotrichloromethane	2.5U
(51V)	124-48-1	chlorodibromomethane	2.5U
(85V)	127-18-4	tetrachloroethene	2.5U
(86V)	108-88-3	toluene	2.5U
(87V)	79-01-6	trichloroethene	2.5U
(88V)	75-01-4	vinyl chloride	2.5U
	67-64-1	acetone	50U
	78-93-3	2-butanone	100U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	50U
	108-10-1	4-methyl-2-pentanone	50U
	100-42-5	styrene	2.5U
	108-05-4	vinyl acetate	5U
	95-47-6	o-xylene	2.5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR: 1.7

PP#	CAS#		ug/l or ~~ug/kg~~ (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-21-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

		ug/g or ~~ug/kg~~ (circle one)
(129B) 1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	~~0.15U~~

Alexandria, VA 22313 - 703/557-2490

Sample Number
C8418

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Sample ID No.: 27036
Sample Matrix: Solid
Data Release Authorized By: Pauline

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6566
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 6-22-84 Original Extracted 5/15/84
DATE ANALYZED: 6-23-84
PERCENT MOISTURE: 1.90 Filter 1% 4190
CONC./DILUTION FACTOR: 2480 B / 10 A

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
[illegible]A)	51-88-5	2,4-dinitrophenol	50U
[illegible]A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
[illegible]B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
[illegible]B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	29000 ~~100~~ SP
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	7600 ~~10~~ SP
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene LT	~~20~~ SP
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

...A PROTECTION AGENCY - CLP Sample Management Office
..., Alexandria, Virginia 22313 - 703/557-2490

SAMPLE NUMBER

C8418

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27036
Sample Matrix: Solid
Data Release Autorized By: [illegible]

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received:

VOLATILES

CONCENTRATION: LOW (MEDIUM) HIGH (circle)
DATE EXTRACTED/PREPARED: 5-11-84
DATE ANALYZED: 5-18-84
PERCENT MOISTURE: 1.70 FACTOR = 4170
CONC./DILUTION FACTOR: 2000

PP#	CAS#		ug/l, ~~ug/g~~ or ~~ug/kg~~ (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	32000 5U same
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	5U
(16V)	75-00-3	chloroethane	5U
(19V)	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	110 000 5U same
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	13000 5U same
(44V)	75-09-2	methylene chloride	LT 5U same
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-1	chlorodibromomethane	5U
(85V)	127-18-4	tetrachloroethene	5U
(86V)	108-88-3	toluene	38,000 5U same
(87V)	79-01-6	trichloroethene	280 000 5U same
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	30000 5U same

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: 1.70 FACTOR = 4170
CONC./DILUTION FACTOR: 1.70

PP#	CAS#		ug/l or ~~ug/kg~~ (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	0U
(100P)	76-44-8	heptachlor	U
(101P)	1024-57-3	heptachlor epoxide	0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: 1.70 FACTOR = 4170
CONC./DILUTION FACTOR:

			ug/g or ~~ug/kg~~ (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.27 - 0.16U

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27017 R
Sample Matrix: Liquid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6666
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-29-84
DATE ANALYZED: 6-1-84
PERCENT MOISTURE:
CONC./DILUTION FACTOR: 2

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/k (circle o
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20
(74B)	205-99-2	benzo(b)fluoranthene	20
(75B)	207-08-9	benzo(k)fluoranthene	20
(76B)	318-01-9	chrysene	10
(77B)	208-96-8	acenaphthylene	10
(78B)	120-12-7	anthracene	10
(79B)	181-24-2	benzo(ghi)perylene	20
(80B)	86-73-7	fluorene	10
(81B)	85-01-8	phenanthrene	10
(82B)	53-70-3	dibenzo(a,h)anthracene	20
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20
(84B)	129-00-0	pyrene	10
	62-53-3	aniline	10
	100-51-6	benzyl alcohol	20
	106-47-8	4-chloroaniline	50
	132-64-9	dibenzofuran	10
	91-57-6	2-methylnaphthalene	20
	88-74-4	2-nitroaniline	100
	99-09-2	3-nitroaniline	100
	100-01-6	4-nitroaniline	100

18) Alexandria, VA 22313 · 703/557-2490

Sample Number
C8419

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27019
Sample Matrix: Liquid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6166
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-23-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 2.0

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
FC8419

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27019
Sample Matrix: Liquid
Data Release Authorized By: Paul Hill

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1.00

PP#	CAS#		ug/l or ug/kg (circle one)	
(2V)	107-02-8	acrolein	100U	
(3V)	107-13-1	acrylonitrile	100U	
(4V)	71-43-2	benzene	5U	
(6V)	56-23-5	carbon tetrachloride	5U	
(7V)	108-90-7	chlorobenzene	5U	
(10V)	107-06-2	1,2-dichloroethane	5U	
(11V)	71-55-6	1,1,1-trichloroethane Q	430	5U [illegible]
(13V)	75-34-3	1,1-dichloroethane	80	5U [illegible]
( )	79-00-5	1,1,2-trichloroethane		5U
( )	79-34-5	1,1,2,2-tetrachloroethane		5U
(16V)	75-00-3	chloroethane		5U
(19V)	110-75-8	2-chloroethylvinyl ether		5U
(23V)	67-66-3	chloroform		5U
(29V)	75-35-4	1,1-dichloroethene	6.0	5U [illegible]
(30V)	156-60-5	1,2-trans-dichloroethene	240	5U [illegible]
(32V)	78-87-5	1,2-dichloropropane		5U
(33V)	10061-02-6	trans-1,3-dichloropropene		5U
	10061-01-05	cis,1,3-dichloropropene		10U
(38V)	100-41-4	ethylbenzene		5U
(44V)	75-09-2	methylene chloride	15	5U [illegible]
(45V)	74-87-3	chloromethane		5U
(46V)	74-83-9	bromomethane		5U
(47V)	75-25-2	bromoform		5U
(48V)	75-27-4	bromodichloromethane		5U
(49V)	75-69-4	fluorotrichloromethane		5U
(51V)	124-48-1	chlorodibromomethane		5U
(85V)	127-18-4	tetrachloroethene		5U
(86V)	108-88-3	toluene		5U
(87V)	79-01-6	trichloroethene	25	5U [illegible]
(88V)	75-01-4	vinyl chloride	LT	5U [illegible]
	67-64-1	acetone		100U
	78-93-3	2-butanone		200U
	75-15-0	carbondisulfide		10U
	519-78-6	2-hexanone		100U
	108-10-1	4-methyl-2-pentanone		100U
	100-42-5	styrene		5U
	108-05-4	vinyl acetate		10U
	95-47-6	o-xylene		5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-15-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1

PP#	CAS#		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	endosulfan I	0.1U
(96P)	115-29-7	endosulfan II	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	78-20-8	endrin	0.1U
(99P)	7421-43-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	BHC-Alpha	0.1U
(103P)	319-85-7	BHC-Beta	0.1U
(104P)	319-86-8	BHC-Delta	0.1U
(105P)	58-89-9	BHC-Gamma	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-7	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: Not Requested
PERCENT MOISTURE: 0 NA
CONC./DILUTION FACTOR:

		ug/l or ug/kg (circle one)
(129B) 1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.004U

December, 1983

AR100157

Alexandria, VA 22313 - 703/557-2490

Sample Number
C8420

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27037
Sample Matrix: Solid
Data Release Authorized By:

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-5-84
PERCENT MOISTURE: 1.51 FACTER=34%
CONC./DILUTION FACTOR: 60.4

PP#	CAS#		ug/l or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	10U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	10U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

...NMENTAL PROTECTION AGENCY - CLP Sample Management Office
...519, Alexandria, Virginia 22313 - 703/557-2490

SAMPLE NUMBER
C8420

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27037
Sample Matrix: Solid
Data Release Authorized By:

Case Number 2742
QC Report No.
Contract No.: 68-01 6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-11-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: 1.51 factor = 34%
CONC./DILUTION FACTOR: 1.42

PP#	CAS#		ug/l or (ug/kg) (circle one)
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	2.5U
(6V)	56-23-5	carbon tetrachloride	2.5U
(7V)	108-90-7	chlorobenzene	2.5U
(10V)	107-06-2	1,2-dichloroethane	2.5U
(11V)	71-55-6	1,1,1-trichloroethane	13 ~~2.5U~~ same
(13V)	75-34-3	1,1-dichloroethane	LT ~~2.5U~~ same
(14V)	79-00-5	1,1,2-trichloroethane	2.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	2.5U
(16V)	75-00-3	chloroethane	2.5U
(19V)	110-75-8	2-chloroethylvinyl ether	2.5U
(23V)	67-66-3	chloroform	2.5U
(29V)	75-35-4	1,1-dichloroethene	2.5U
(30V)	156-60-5	1,2-trans-dichloroethene	10 ~~2.5U~~ same
(32V)	78-87-5	1,2-dichloropropane	2.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	2.5U
	10061-01-05	cis,1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	2.5U
(44V)	75-09-2	methylene chloride	10 ~~2.5U~~ same
(45V)	74-87-3	chloromethane	2.5U
(46V)	74-83-9	bromomethane	2.5U
(47V)	75-25-2	bromoform	2.5U
(48V)	75-27-4	bromodichloromethane	2.5U
(49V)	75-69-4	fluorotrichloromethane	2.5U
(51V)	124-48-1	chlorodibromomethane	2.5U
(85V)	127-18-4	tetrachloroethene	2.5U
(86V)	108-88-3	toluene	2.5U
(87V)	79-01-6	trichloroethene	2.5U
(88V)	75-01-4	vinyl chloride	2.5U
	67-64-1	acetone	50U
	78-93-3	2-butanone	100U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	50U
	108-10-1	4-methyl-2-pentanone	50U
	100-42-5	styrene	2.5U
	108-05-4	vinyl acetate	5U
	95-47-6	o-xylene	2.5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-29-84
DATE ANALYZED: 6-1-84
PERCENT MOISTURE: 1.51 factor = 34%
CONC./DILUTION FACTOR: 1.5

PP#	CAS#		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/~~PREPARED~~: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: 1.51 factor = 34%
CONC./DILUTION FACTOR:

			ug/g or (ug/kg) (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.16U

PROTECTION AGENCY-CLP Sample Management Office
Alexandria, VA 22313 - 703/557-2490

Sample Number
CS421

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27038
Sample Matrix: Solid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6066
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: ~~LOW~~ MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-5-84
PERCENT MOISTURE: 51%
CONC./DILUTION FACTOR: 96.3

PP#	CAS#		ug/l or ~~ug/kg~~ (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or ~~ug/kg~~ (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	10U
(65B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	10U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
C5421

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27038
Sample Matrix: Solid
Data Release Authorized By: [illegible]

Case Number 2742J
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-11-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: 2.41 factor = 59%
CONC./DILUTION FACTOR: 2.41

PP#	CAS#		ug/l or (ug/kg) (circle one)
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	2.5U
(6V)	56-23-5	carbon tetrachloride	2.5U
(7V)	108-90-7	chlorobenzene	2.5U
(10V)	107-06-2	1,2-dichloroethane	2.5U
(11V)	71-55-6	1,1,1-trichloroethane	2.5U
(13V)	75-34-3	1,1-dichloroethane	2.5U
(14V)	79-00-5	1,1,2-trichloroethane	2.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	2.5U
(16V)	75-00-3	chloroethane	2.5U
(19V)	110-75-8	2-chloroethylvinyl ether	2.5U
(23V)	67-66-3	chloroform	2.5U
(29V)	75-35-4	1,1-dichloroethene	2.5U
(30V)	156-60-5	1,2-trans-dichloroethene	2.5U
(32V)	78-87-5	1,2-dichloropropane	2.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	2.5U
	10061-01-05	cis,1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	2.5U
(44V)	75-09-2	methylene chloride	6.7 ~~2.5U~~ amo
(45V)	74-87-3	chloromethane	2.5U
(46V)	74-83-9	bromomethane	2.5U
(47V)	75-25-2	bromoform	2.5U
(48V)	75-27-4	bromodichloromethane	2.5U
(49V)	75-69-4	fluorotrichloromethane	2.5U
(51V)	124-48-1	chlorodibromomethane	2.5U
(85V)	127-18-4	tetrachloroethene	2.5U
(86V)	108-88-3	toluene	6.4 ~~2.5U~~ amo
(87V)	79-01-6	trichloroethene	2.5U
(88V)	75-01-4	vinyl chloride	2.5U
	67-64-1	acetone	50U
	78-93-3	2-butanone	100U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	50U
	108-10-1	4-methyl-2-pentanone	50U
	100-42-5	styrene	2.5U
	108-05-4	vinyl acetate	5U
	95-47-6	o-xylene	2.5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: 2.41 factor = 59%
CONC./DILUTION FACTOR: 2.4

PP#	CAS#		ug/l or (ug/kg) (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	72-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-21-84
PERCENT MOISTURE: 2.41 factor = 59%
CONC./DILUTION FACTOR:

			ug/g or (ug/kg) (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.16U

December, 1983

AR100161

C8422

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27020
Sample Matrix: Liquid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-19-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1 2.1

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	218-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	191-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	193-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

Sample Number
C8422

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27020R
Sample Matrix: Liquid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-29-84
DATE ANALYZED: 6-1-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 2x00

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
[illegible]A)	534-52-1	4,6-dinitro-2-methylphenol	20U
[illegible]A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
[illegible]B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate LT ~~10U~~	
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

Sample Number
C4424

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27021
Sample Matrix: Liquid
Data Release Authorized By:

Case Number: 2742
QC Report No.:
Contract No.: 68-01 6866
Date Sample Received: 5-11 84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-18-84
PERCENT MOISTURE: 1 M
CONC./DILUTION FACTOR: 2

PP#	CAS#		(ug/l) or ug/kg (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-36-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	10U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	10U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		(ug/l) or ug/kg (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	1
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	1
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	1
	99-09-2	3-nitroaniline	1
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
CH424

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27021
Sample Matrix: Liquid
Data Release Authorized By:

Case Number 2742
QC Report No.
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED: 5-12-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1.00

PP#	CAS#		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	100U
(3V)	107-13-1	acrylonitrile	100U
(4V)	71-43-2	benzene	5U
(6V)	56-23-5	carbon tetrachloride	5U
(7V)	108-90-7	chlorobenzene	5U
(10V)	107-06-2	1,2-dichloroethane	5U
(11V)	71-55-6	1,1,1-trichloroethane	5U
(13V)	75-34-3	1,1-dichloroethane	5U
(14V)	79-00-5	1,1,2-trichloroethane	5U
(V)	79-34-5	1,1,2,2-tetrachloroethane	5U
( )	75-00-3	chloroethane	5U
( )	110-75-8	2-chloroethylvinyl ether	5U
(23V)	67-66-3	chloroform	5U
(29V)	75-35-4	1,1-dichloroethene	5U
(30V)	156-60-5	1,2-trans-dichloroethene	5U
(32V)	78-87-5	1,2-dichloropropane	5U
(33V)	10061-02-6	trans-1,3-dichloropropene	5U
	10061-01-05	cis,1,3-dichloropropene	10U
(38V)	100-41-4	ethylbenzene	5U
(44V)	75-09-2	methylene chloride	LT 5U same
(45V)	74-87-3	chloromethane	5U
(46V)	74-83-9	bromomethane	5U
(47V)	75-25-2	bromoform	5U
(48V)	75-27-4	bromodichloromethane	5U
(49V)	75-69-4	fluorotrichloromethane	5U
(51V)	124-48-	chlorodibromomethane	5U
(85V)	127-18-	tetrachloroethene	5U
(86V)	108-88-3	toluene	5U
(87V)	79-01-6	trichloroethene	5U
(88V)	75-01-4	vinyl chloride	5U
	67-64-1	acetone	100U
	78-93-3	2-butanone	200U
	75-15-0	carbondisulfide	10U
	519-78-6	2-hexanone	100U
	108-10-1	4-methyl-2-pentanone	100U
	100-42-5	styrene	5U
	108-05-4	vinyl acetate	10U
	95-47-6	o-xylene	5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-15-84
PERCENT MOISTURE: NA
CONC./DILUTION FACTOR: 1

PP#	CAS#		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	0.1U
(90P)	60-57-1	dieldrin	0.1U
(91P)	57-74-9	chlordane	0.1U
(92P)	50-29-3	4,4'-DDT	0.1U
(93P)	72-55-9	4,4'-DDE	0.1U
(94P)	72-54-8	4,4'-DDD	0.1U
(95P)	115-29-7	endosulfan I	0.1U
(96P)	115-29-7	endosulfan II	0.1U
(97P)	1031-07-8	endosulfan sulfate	0.1U
(98P)	78-20-8	endrin	0.1U
(99P)	7421-43-4	endrin aldehyde	0.1U
(100P)	76-44-8	heptachlor	0.1U
(101P)	1024-57-3	heptachlor epoxide	0.1U
(102P)	319-84-6	BHC-Alpha	0.1U
(103P)	319-85-7	BHC-Beta	0.1U
(104P)	319-86-8	BHC-Delta	0.1U
(105P)	58-89-9	BHC-Gamma	0.1U
(106P)	53469-21-9	PCB-1242	0.1U
(107P)	11097-69-7	PCB-1254	0.1U
(108P)	11104-28-2	PCB-1221	0.1U
(109P)	11141-16-5	PCB-1232	0.1U
(110P)	12672-29-6	PCB-1248	0.1U
(111P)	11096-82-5	PCB-1260	0.1U
(112P)	12674-11-2	PCB-1016	0.1U
(113P)	8001-35-2	toxaphene	0.1U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/PREPARED:
DATE ANALYZED: Not Requested
PERCENT MOISTURE:
CONC./DILUTION FACTOR:

			ug/l or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.004U

December, 1983

AR100165

ENTAL PROTECTION AGENCY-CLP Sample Management Office
te, Alexandria, VA 22313 - 703/557-2490

Sample Number
C4425

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: Mead CompuChem
Lab Sample ID No.: 27039
Sample Matrix: Solid
Data Release Authorized By: [signature]

Case Number: 2742
QC Report No.:
Contract No.: 68-01-6866
Date Sample Received: 5-11-84

SEMIVOLATILE COMPOUNDS

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 6-5-84
PERCENT MOISTURE: NR
CONC./DILUTION FACTOR: 40.0

PP#	CAS#		ug/l or (ug/kg) (circle one)
(21A)	88-06-2	2,4,6-trichlorophenol	10U
(22A)	59-50-7	p-chloro-m-cresol	20U
(24A)	95-57-8	2-chlorophenol	10U
(31A)	122-83-2	2,4-dichlorophenol	10U
(34A)	105-67-9	2,4-dimethylphenol	10U
(57A)	88-75-5	2-nitrophenol	20U
(58A)	100-02-7	4-nitrophenol	100U
(59A)	51-88-5	2,4-dinitrophenol	50U
(60A)	534-52-1	4,6-dinitro-2-methylphenol	20U
(64A)	87-35-5	pentachlorophenol	20U
(65A)	108-95-2	phenol	10U
	65-85-0	benzoic acid	100U
	95-48-7	2-methylphenol	10U
	108-39-4	4-methylphenol	10U
	95-95-4	2,4,5-trichlorophenol	100U
(1B)	83-32-9	acenaphthene	10U
(5B)	92-87-5	benzidine	40U
(8B)	120-82-1	1,2,4-trichlorobenzene	10U
(9B)	118-74-1	hexachlorobenzene	10U
(12B)	67-72-1	hexachloroethane	10U
(18B)	111-44-4	bis(2-chloroethyl)ether	10U
(20B)	91-58-7	2-chloronaphthalene	10U
(25B)	95-50-1	1,2-dichlorobenzene	10U
(26B)	541-73-1	1,3-dichlorobenzene	10U
(27B)	106-46-7	1,4-dichlorobenzene	10U
(28B)	91-94-1	3,3'-dichlorobenzidine	20U
(35B)	121-14-2	2,4-dinitrotoluene	20U
(36B)	606-20-2	2,6-dinitrotoluene	20U
(37B)	122-66-7	1,2-diphenylhydrazine	20U
(39B)	206-44-0	fluoranthene	10U
(40B)	7005-72-3	4-chlorophenyl phenylether	10U
(41B)	101-55-3	4-bromophenyl phenyl ether	10U
(42B)	39638-32-9	bis-(2-chloroisopropyl)ether	20U
(43B)	111-91-1	bis-(2-chloroethoxy)methane	20U

PP#	CAS#		ug/l or (ug/kg) (circle one)
(52B)	87-68-3	hexachlorobutadiene	10U
(53B)	77-47-4	hexachlorocyclopentadiene	10U
(54B)	78-59-1	isophorone	10U
(55B)	91-20-3	naphthalene	10U
(56B)	98-95-3	nitrobenzene	10U
(61B)	62-75-9	N-nitrosodimethylamine	10U
(62B)	86-30-6	N-nitrosodiphenylamine	10U
(63B)	621-64-7	N-nitrosodi-n-propylamine	20U
(66B)	117-81-7	bis(2-ethylhexyl)phthalate	10U
(67B)	85-68-7	butyl benzyl phthalate	10U
(68B)	84-74-2	di-n-butyl phthalate	10U
(69B)	117-84-0	di-n-octyl phthalate	10U
(70B)	84-66-2	diethyl phthalate	10U
(71B)	131-11-3	dimethyl phthalate	10U
(72B)	56-55-3	benzo(a)anthracene	10U
(73B)	50-33-8	benzo(a)pyrene	20U
(74B)	205-99-2	benzo(b)fluoranthene	20U
(75B)	207-08-9	benzo(k)fluoranthene	20U
(76B)	318-01-9	chrysene	10U
(77B)	208-96-8	acenaphthylene	10U
(78B)	120-12-7	anthracene	10U
(79B)	181-24-2	benzo(ghi)perylene	20U
(80B)	86-73-7	fluorene	10U
(81B)	85-01-8	phenanthrene	10U
(82B)	53-70-3	dibenzo(a,h)anthracene	20U
(83B)	183-39-5	indeno(1,2,3-cd)pyrene	20U
(84B)	129-00-0	pyrene	10U
	62-53-3	aniline	10U
	100-51-6	benzyl alcohol	20U
	106-47-8	4-chloroaniline	50U
	132-64-9	dibenzofuran	10U
	91-57-6	2-methylnaphthalene	20U
	88-74-4	2-nitroaniline	100U
	99-09-2	3-nitroaniline	100U
	100-01-6	4-nitroaniline	100U

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

SAMPLE NUMBER
C4425-

ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CompuChem
Lab Sample ID No: 27039
Sample Matrix: Solid
Data Release Authorized By:

Case Number 2742
QC Report No.
Contract No.: 68-01 6866
Date Sample Received: 5/1/84

VOLATILES

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/~~PREPARED~~: 5-11-84
DATE ANALYZED: 5-17-84
PERCENT MOISTURE: Nr
CONC./DILUTION FACTOR: 1.00

PP#	CAS#		ug/l or ug/kg (circle one)
(2V)	107-02-8	acrolein	50U
(3V)	107-13-1	acrylonitrile	50U
(4V)	71-43-2	benzene	2.5U
(6V)	56-23-5	carbon tetrachloride	2.5U
(7V)	108-90-7	chlorobenzene	2.5U
(10V)	107-06-2	1,2-dichloroethane	2.5U
(11V)	71-55-6	1,1,1-trichloroethane	2.5U
(13V)	75-34-3	1,1-dichloroethane	2.5U
(14V)	79-00-5	1,1,2-trichloroethane	2.5U
(15V)	79-34-5	1,1,2,2-tetrachloroethane	2.5U
(16V)	75-00-3	chloroethane	2.5U
(19V)	110-75-8	2-chloroethylvinyl ether	2.5U
(23V)	67-66-3	chloroform	2.5U
(29V)	75-35-4	1,1-dichloroethene	2.5U
(30V)	156-60-5	1,2-trans-dichloroethene	2.5U
(32V)	78-87-5	1,2-dichloropropane	2.5U
(33V)	10061-02-6	trans-1,3-dichloropropene	2.5U
	10061-01-05	cis,1,3-dichloropropene	5U
(38V)	100-41-4	ethylbenzene	2.5U
(44V)	75-09-2	methylene chloride 14	~~2.5U~~ 5U
(45V)	74-87-3	chloromethane	2.5U
(46V)	74-83-9	bromomethane	2.5U
(47V)	75-25-2	bromoform	2.5U
(48V)	75-27-4	bromodichloromethane	2.5U
(49V)	75-69-4	fluorotrichloromethane	2.5U
(51V)	124-48-1	chlorodibromomethane	2.5U
(85V)	127-18-4	tetrachloroethene	2.5U
(86V)	108-88-3	toluene 4	~~2.5U~~ 5U
(87V)	79-01-6	trichloroethene	2.5U
(88V)	75-01-4	vinyl chloride	2.5U
	67-64-1	acetone	50U
	78-93-3	2-butanone	100U
	75-15-0	carbondisulfide	5U
	519-78-6	2-hexanone	50U
	108-10-1	4-methyl-2-pentanone	50U
	100-42-5	styrene	2.5U
	108-05-4	vinyl acetate	5U
	95-47-6	o-xylene	2.5U

PESTICIDES

CONCENTRATION: (LOW) MEDIUM HIGH (circle one)
DATE EXTRACTED/PREPARED: 5-15-84
DATE ANALYZED: 5-24-84
PERCENT MOISTURE: Nr
CONC./DILUTION FACTOR: 1

PP#	CAS#		ug/l or ug/kg (circle one)
(89P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	76-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

CONCENTRATION: (LOW) MEDIUM HIGH (circle)
DATE EXTRACTED/~~PREPARED~~: 5-15-84
DATE ANALYZED: 5-21-84
PERCENT MOISTURE: Nr
CONC./DILUTION FACTOR: 1

			ug/g or ug/kg (circle one)
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.16U

[illegible] / RC
8404-07

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

Sample No. MC 1713

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH **CASE NO.** 2742
LAB SAMPLE ID. NO. G2-236-01 **QC REPORT NO.** 236

TASK 1 (Elements to be Identified and Measured)

(ug/l) or mg/kg (circle one) — ug/l circled

	Element	Result
1.	Aluminum	936
2.	Chromium	<10
3.	Barium	<100
4.	Beryllium	<5
5.	Cobalt	<50
6.	Copper	42.9
7.	Iron	7840
8.	Nickel	<40
9.	Manganese	507
10.	Zinc	27.1
11.	Boron	
12.	Vanadium	<200
13.	Silver	<10

TASK 2 (Elements to be Identified and Measured)

(ug/l) or mg/kg (circle one) — ug/l circled

	Element	Result
1.	Arsenic	<10
2.	Antimony	<20
3.	Selenium	<2
4.	Thallium	<10
5.	Mercury	<0.2
6.	Tin	<20
7.	Cadmium	<1.0
8.	Lead	32

TASK 3 (Elements to be Identified and Measured)

1. CN <0.01 mg/l

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984
NUS CORPORATION
REGION III

COMMENTS:

D. Hessemer
6/27/84

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

Sample No.
MC 1811

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-11 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Aluminum	9500	10.	Zinc	60.5
2.	Chromium	20.2	11.	Boron	
3.	Barium	133	12.	Vanadium	44.5
4.	Beryllium	2.2	13.	Silver	<0.5
5.	Cobalt	18.9			
6.	Copper	10.1			
7.	Iron	31,000			
8.	Nickel	16.6			
9.	Manganese	1160			

TASK 2 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Arsenic	8.4	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	~~<20~~ DH <1
3.	Selenium	0.1	7.	Cadmium	0.14
4.	Thallium	<0.5	8.	Lead	5.5

TASK 3 (Elements to be Identified and Measured)

1. CN <0.25 mg/kg

COMMENTS:

D. Hessemer
6/27/84

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HWI Sample Management Office
P.O. Box 818 – Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
MC 1812

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-02 BLANK QC REPORT NO. 236

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	16.4
2.	Chromium	<10	11.	Boron	
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	58.2			
7.	Iron	141			
8.	Nickel	<40			
9.	Manganese	<10			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1.0
4.	Thallium	<10	8.	Lead	20

TASK 3 (Elements to be Identified and Measured)

1. C_N < 0.01 mg/l

COMMENTS:

D. Hessemer
6/27/84

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HWI Sample Management Office
P.O. Box 818 – Alexandria, Virginia 22313
703/557-2490 FTS 8-557-2490

Sample No.
MC 1813

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-12 QC REPORT NO. 236

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	
3.	Barium	<5	12.	Vanadium	<10
4.	Beryllium	<0.25	13.	Silver	<0.5
5.	Cobalt	<2.5			
6.	Copper	<2.5			
7.	Iron	2.9			
8.	Nickel	<2			
9.	Manganese	<0.5			

TASK 2 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Arsenic	<0.5	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	<0.05
4.	Thallium	<0.5	8.	Lead	<0.25

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.25 mg/kg

COMMENTS:

D. Hessemer
6/27/84

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

Sample No.
MC 1814

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742
LAB SAMPLE ID. NO. G2-236-03 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	21780	10.	Zinc	3340
2.	Chromium	2150	11.	Boron	
3.	Barium	658	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	6640			
7.	Iron	62460			
8.	Nickel	<40			
9.	Manganese	6240			

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	27
3.	Selenium	<2	7.	Cadmium	3.0
4.	Thallium	<10	8.	Lead	14800 ICP

TASK 3 (Elements to be Identified and Measured)

1. C_N 0.01 mg/l

COMMENTS:

D. Hessemer
6/27/84

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

Sample No.
MC 1815

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-13 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Aluminum	5600	10.	Zinc	590
2.	Chromium	1450	11.	Boron	
3.	Barium	311	12.	Vanadium	24.5
4.	Beryllium	1.4	13.	Silver	<0.5
5.	Cobalt	5.6			
6.	Copper	2140			
7.	Iron	11800			
	Nickel	5.6			
	Manganese	451			

TASK 2 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Arsenic	2.4	5.	Mercury	0.18
2.	Antimony	1.15	6.	Tin	3.5
3.	Selenium	<0.1	7.	Cadmium	0.35
4.	Thallium	<0.5	8.	Lead	7200 ICP

TASK 3 (Elements to be Identified and Measured)

1. C_N 1.2 mg/kg

COMMENTS:

D. Hessemer
6/27/84

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

Sample No.
MC 1816

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742
LAB SAMPLE ID. NO. G2-236-14 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Aluminum	7750	10.	Zinc	49.2
2.	Chromium	9.8	11.	Boron	
3.	Barium	51.9	12.	Vanadium	17.2
4.	Beryllium	0.6	13.	Silver	<0.5
5.	Cobalt	6.6			
6.	Copper	17.4			
7.	Iron	8950			
8.	Nickel	6.7			
9.	Manganese	397			

TASK 2 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Arsenic	1.7	5.	Mercury	0.12
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	0.10
4.	Thallium	<0.5	8.	Lead	19.9

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.25 mg/kg

COMMENTS:

E. Hessemer
6/27/84

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

Sample No.
MC 1817

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-04 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	169	10.	Zinc	<10
2.	Chromium	<10	11.	Boron	
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	307			
8.	Nickel	<40			
9.	Manganese	20.3			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1.0
4.	Thallium	<10	8.	Lead	<5

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.01 mg/l

COMMENTS:

D. Hessemer
6/27/84

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

Sample No.
MC 181

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-15 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	5370	10.	Zinc	23.7
2.	Chromium	6.9	11.	Boron	
3.	Barium	41.9	12.	Vanadium	13.1
4.	Beryllium	0.51	13.	Silver	<0.5
5.	Cobalt	4.3			
6.	Copper	6.0			
7.	Iron	6280			
8.	Nickel	4.3			
9.	Manganese	341			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	0.80	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	0.15	7.	Cadmium	0.11
4.	Thallium	<0.5	8.	Lead	13

TASK 3 (Elements to be Identified and Measured)

1. CN <0.25 mg/kg

COMMENTS:

D. Hessen
6/27/84

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ORIGINAL

Sample No.
MC 1819

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-05 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	271	10.	Zinc	129
2.	Chromium	<10	11.	Boron	
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	57.8			
7.	Iron	666			
8.	Nickel	<40			
9.	Manganese	230			

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	<1.0
4.	Thallium	<10	8.	Lead	48

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.01 mg/l

COMMENTS:

D. Hessemer
6/27/84

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Sample No.
MC 182

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-16 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	7510	10.	Zinc	540
2.	Chromium	258	11.	Boron	
3.	Barium	139	12.	Vanadium	49
4.	Beryllium	2.1	13.	Silver	<0.5
5.	Cobalt	25.1			
6.	Copper	380			
7.	Iron	30,100			
8.	Nickel	14.5			
9.	Manganese	4000			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	4.8	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	0.83
4.	Thallium	<0.5	8.	Lead	1690 ICP

TASK 3 (Elements to be Identified and Measured)

1. C_N 0.30 mg/kg

COMMENTS:

D. Hessemer
6/27/84

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Sample No.
MC 1821

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742
LAB SAMPLE ID. NO. G2-236-06 QC REPORT NO. 236

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	63.2
2.	Chromium	<10	11.	Boron	
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	11.9
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	16420			
8.	Nickel	<40			
9.	Manganese	1620			

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
4.	Thallium	<10	8.	Lead	18

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.01 mg/l

COMMENTS:

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Sample No.
MC 1822

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-17 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	5140	10.	Zinc	34
2.	Chromium	9.4	11.	Boron	
3.	Barium	600	12.	Vanadium	56
4.	Beryllium	2.6	13.	Silver	<0.5
5.	Cobalt	38.7			
6.	Copper	5.3			
7.	Iron	60,000			
8.	Nickel	10.6			
9.	Manganese	3920			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	5.5	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	0.18
4.	Thallium	<0.5	8.	Lead	24.5

TASK 3 (Elements to be Identified and Measured)

1. C_N 0.275 mg/kg

COMMENTS:

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Sample No.
MC 1823

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-07 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	<100	10.	Zinc	15.4
2.	Chromium	<10	11.	Boron	
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	213			
8.	Nickel	<40			
9.	Manganese	30.3			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	<10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	<1.0
4.	Thallium	<10	8.	Lead	10

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.01 mg/l

COMMENTS:

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Sample No.
MC 1824

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742
LAB SAMPLE ID. NO. G2-236-18 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Aluminum	7180	10.	Zinc	34.4
2.	Chromium	7.8	11.	Boron	N.A.
3.	Barium	106	12.	Vanadium	18.7
4.	Beryllium	1.3	13.	Silver	<0.5
5.	Cobalt	15.6			
6.	Copper	8.7			
7.	Iron	12400			
8.	Nickel	5.6			
9.	Manganese	1655			

TASK 2 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Arsenic	3.4	5.	Mercury	0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	0.13
4.	Thallium	<0.5	8.	Lead	19.5

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.25 mg/kg

COMMENTS:

D. Hessen
6/27/84

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Sample No.
MC 1825

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-19 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Aluminum	5850	10.	Zinc	711
2.	Chromium	1160	11.	Boron	
3.	Barium	376	12.	Vanadium	22
4.	Beryllium	1.1	13.	Silver	<0.5
5.	Cobalt	8.5			
6.	Copper	2250			
7.	Iron	12550			
8.	Nickel	4.8			
9.	Manganese	1080			

TASK 2 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Arsenic	2.8	5.	Mercury	~~1.5~~ DH 0.75
2.	Antimony	1.2	6.	Tin	3.6
3.	Selenium	<0.1	7.	Cadmium	0.53
4.	Thallium	<0.5	8.	Lead	6150 ICP

TASK 3 (Elements to be Identified and Measured)

1. C_N 0.575 mg/kg

COMMENTS:

D. Hansen
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Sample No.
MC 182

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742
LAB SAMPLE ID. NO. G2-236-08 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	145	10.	Zinc	15.8
2.	Chromium	<10	11.	Boron	
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	DH 6.6 7	13.	Silver	19.7
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	2370			
8.	Nickel	<40			
9.	Manganese	371			

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	<1.0
4.	Thallium	<10	8.	Lead	6

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.01 mg/l

COMMENTS:

D. Hessemer
6/27/84

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Sample No.
MC 1827

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-20 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	11900	10.	Zinc	28.9
2.	Chromium	17	11.	Boron	
3.	Barium	51.5	12.	Vanadium	33.9
4.	Beryllium	0.9	13.	Silver	<0.5
5.	Cobalt	6.9			
6.	Copper	13.7			
7.	Iron	15,500			
8.	Nickel	9.8			
9.	Manganese	229			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	3.2	5.	Mercury	<0.1
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	<0.05
4.	Thallium	<0.5	8.	Lead	15

TASK 3 (Elements to be Identified and Measured)

1. CN <0.25 mg/kg

COMMENTS:

D. Hessemer
6/27/84

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Sample No.
MC 182

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742
LAB SAMPLE ID. NO. G2-236-21 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	8250	10.	Zinc	36.3
2.	Chromium	9.4	11.	Boron	
3.	Barium	58.5	12.	Vanadium	17.5
4.	Beryllium	<0.25	13.	Silver	<0.5
5.	Cobalt	4.5			
6.	Copper	10.9			
7.	Iron	7280			
8.	Nickel	<.9			
9.	Manganese	328			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	1.6	5.	Mercury	0.16
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	0.15
4.	Thallium	<0.5	8.	Lead	22.7

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.25 mg/kg

COMMENTS:

D. Hessemer
6/27/84

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Sample No.
MC 1829

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-09 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	70 800	10.	Zinc	490
2.	Chromium	70.6	11.	Boron	
3.	Barium	929	12.	Vanadium	<200
4.	Beryllium	10.1	13.	Silver	<10
5.	Cobalt	59.8			
6.	Copper	164			
7.	Iron	58940			
8.	Nickel	42.4			
9.	Manganese	7940			

TASK 2 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Arsenic	~~<40 04~~ 10	5.	Mercury	<0.2
2.	Antimony	<20	6.	Tin	<20
3.	Selenium	<2	7.	Cadmium	1.1
4.	Thallium	<10	8.	Lead	235

TASK 3 (Elements to be Identified and Measured)

1. C_N <0.01 mg/l

COMMENTS:

D. Hesseman
6/27/84

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Sample No.
MC 18[redacted]

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-10 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or mg/kg (circle one)			ug/l or mg/kg (circle one)
1.	Aluminum	415	10.	Zinc	19.6
2.	Chromium	<10	11.	Boron	
3.	Barium	<100	12.	Vanadium	<200
4.	Beryllium	<5	13.	Silver	<10
5.	Cobalt	<50			
6.	Copper	<50			
7.	Iron	549			
8.	Nickel	<40			
9.	Manganese	31.1			

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	3-7

TASK 3 (Elements to be Identified and Measured)

1. CN <0.01 mg/l

COMMENTS:

D. Hessemer
6/27/84

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Sample No.
MC 1831

INORGANICS ANALYSIS DATA SHEET

LAB NAME CHEMTECH CASE NO. 2742

LAB SAMPLE ID. NO. G2-236-22 QC REPORT NO. 236

TASK 1 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Aluminum	9850	10.	Zinc	46.3
2.	Chromium	15.8	11.	Boron	
3.	Barium	58	12.	Vanadium	36.1
4.	Beryllium	0.52	13.	Silver	<0.5
5.	Cobalt	24.7			
6.	Copper	8.2			
7.	Iron	25,800			
8.	Nickel	10.1			
9.	Manganese	700			

TASK 2 (Elements to be Identified and Measured)

		ug/l or (mg/kg) (circle one)			ug/l or (mg/kg) (circle one)
1.	Arsenic	2.5	5.	Mercury	0.16
2.	Antimony	<1	6.	Tin	<1
3.	Selenium	<0.1	7.	Cadmium	0.06
4.	Thallium	<0.5	8.	Lead	22.2

TASK 3 (Elements to be Identified and Measured)

1. CN <0.25 mg/kg

COMMENTS:

D. Hessem
6/27/84