

**Report on the Ecological Assessment of
Streams in the Vicinity of
General Electric/Shepherd Farm Superfund Site**

March 1994

**U.S. EPA, Region IV
Environmental Services Division
Ecological Support Branch
Athens, GA 30605**

Introduction

This document reports the findings of an ecological study conducted on Bat Fork Creek and an unnamed tributary to Bat Fork Creek in the vicinity of the General Electric (GE)/Shepherd Farm Superfund Site (hereafter referred to as the GE Site), East Flat Rock, Henderson County, North Carolina. Previous studies reported by the North Carolina Department of Health and Natural Resources (NCDEH&NR 1990) and the USEPA (1994) indicated that potentially toxic compounds discharged by the GE plant may have entered Bat Fork Creek. Studies (USEPA 1994) also indicated that a number of old GE waste disposal and waste treatment sites located on three non-contiguous subsites (GE, Shepherd Farm, and Seldon Clark) may be sources of toxic materials (USEPA 1994). Surface waters associated with each subsite are as follows:

- Shepherd Farm Subsite - An unnamed stream (tributary to Bat Fork Creek) flows adjacent to a 3 acre GE waste disposal area on the Shepherd Farm property.
- Seldon Clark Subsite - A ditch draining this 1 acre subsite (containing GE wastes) carries water to Bat Fork Creek.
- GE Subsite - Bat Fork Creek drains this subsite. Numerous GE waste disposal and waste treatment areas are located within the boundaries of this subsite.

The purpose of this study was to evaluate the impacts of site-related contaminants on stream biota in the vicinity of the GE subsites. The contaminants of concern (COC's) are polychlorinated biphenyls (PCB's), heavy metals (primarily zinc and copper), acids, a commercial biocide, and volatile organic compounds.

Methods

On November 7 - 9, 1994 members of the Environmental Protection Agency Region IV, Environmental Services Division visited the GE site. Based on a ground truth survey and reconnaissance of the area conducted several weeks earlier, a total of 10 sampling locations were selected for the current study - seven on Bat Fork Creek (stations 103, 104, 105, 106, 107, 108, and 109), two on the unnamed tributary (stations 101 and 102), and one on a ditch draining the Seldon Clark subsite (station 110) (see map Fig. 1). Station 101 served as a background station for the unnamed tributary. Stations 103 (upstream of confluence with the unnamed tributary) and 105 (just upstream of the GE subsite) were chosen as background stations on Bat Fork Creek. Surface water hydrology, land/water use, and wildlife resources are discussed in the GE/Shepherd Farm RI/FS Workplan (USEPA 1994) and will not be duplicated in this document. Photographs of sample stations are included in Appendix A.

At each sampling station, in-situ water chemistry was measured, water and sediment samples were collected, and a Rapid Bioassessment Procedure (RBP) Protocol I (screening method for detecting biological impairment) was conducted. Each RBP included a habitat assessment, physico-chemical characterization, and a benthic macroinvertebrate survey. An attempt was also made to collect fish at each station for tissue analysis.

At the time of collection, water and sediment samples were divided and portions of each sample were labeled and packaged for transport to the appropriate laboratories for analysis. Chain-of-custody was maintained throughout sampling, shipping and testing.

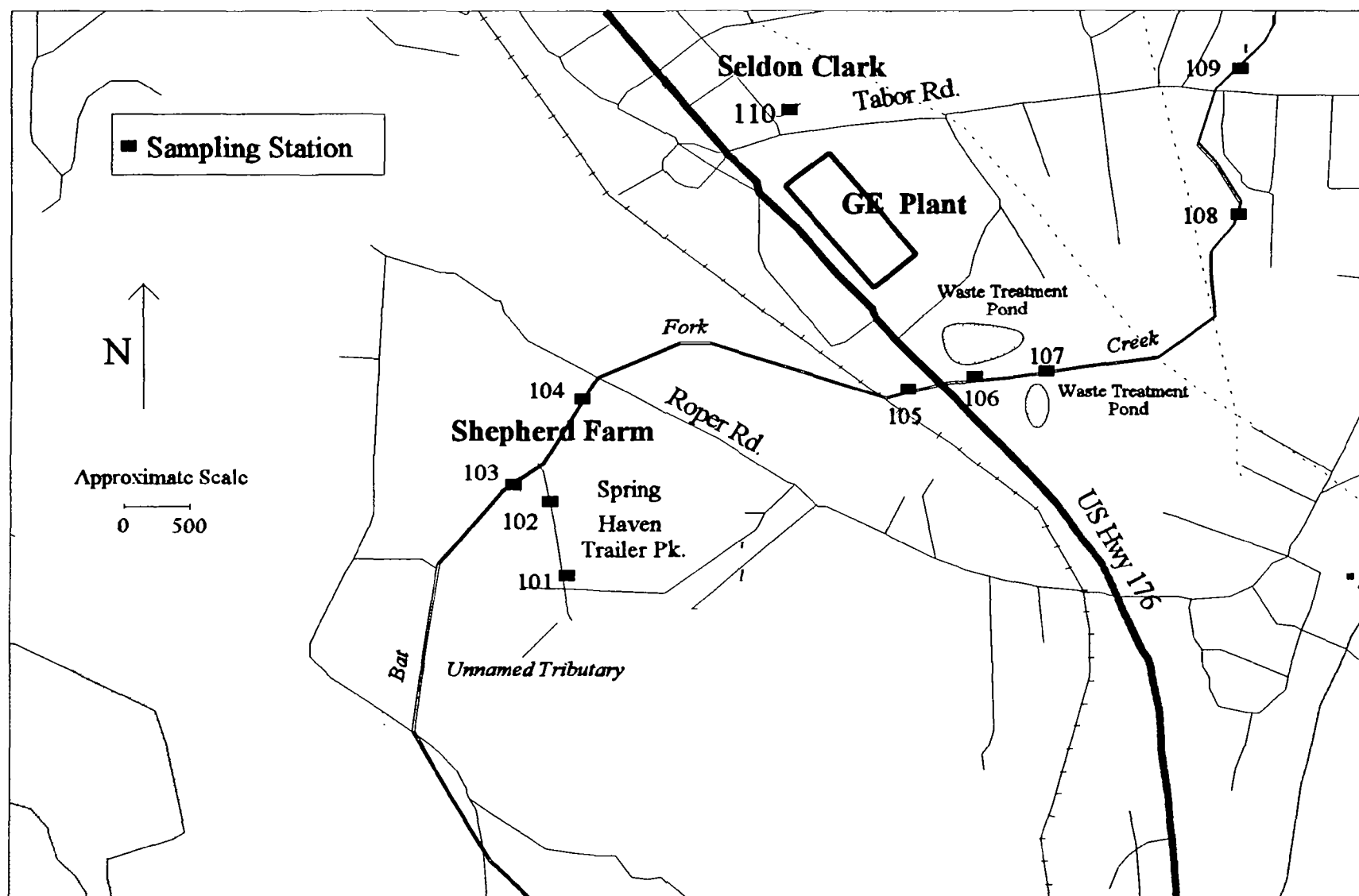


Figure 1. Sampling stations along streams in the vicinity of General Electric/Shepherd Farm Superfund Site, East Flat Rock, North Carolina. November 1994.

Water Chemistry Measurements - In-situ Dissolved Oxygen (DO), pH, temperature, and conductivity were measured using a calibrated Hydrolab® H₂O Multiprobe. Alkalinity, hardness, and turbidity were determined later (within 72 hrs.) in the laboratory using EPA approved methods (APHA 1992).

Water and Sediment Sampling - was conducted according to EPA standard operating procedures (USEPA 1991). At the time of collection, each sample was split as follows:

Water

- 2 - 40 ml glass vials (for volatile organics)
- 1 - 1 liter polyethylene bottle (for metals)
- 1 - 500 ml polyethylene bottle (for TOC-total organic carbon)
- 1 - 500 ml polyethylene bottle (for turbidity)
- 1 - 4 liter amber glass jar (for pesticides/extractable organics)
- 1 - 4 liter cubitainer (for toxicity testing)

Sediment

- 1 - 2 oz. glass jar (for volatile organics)
- 1 - 8 oz. glass jar (for metals)
- 1 - 8 oz. glass jar (for pesticides and extractable organics)
- 1 - 8 oz. glass jar (for TOC)
- 1 - 1 liter glass jar (for toxicity testing)
- 1 - whirl pack (for sediment sizing)

Immediately after collection, samples were stored on wet ice. Because chemical data is often essential for interpretation of toxicity test results, samples were collected for a full scan of chemical analyses as well as for toxicity testing. However, just prior to this ecological study, US EPA Environmental Compliance Branch collected sediment and water from these streams for chemical analyses as part of the Remedial Investigation/Feasability Study. To

prevent excessive cost to the laboratories and duplication of effort, samples collected during this ecological investigation were held pending results of toxicity tests. A clear toxic response by toxicity test organisms would merit chemical analysis of sediment and water samples.

Toxicity Tests - were conducted according to EPA Region IV Ecological Support Branch standard operating procedures (USEPA 1993). Samples were kept at 4° C until toxicity tests were initiated. Tests on water samples were initiated within 72 hours of sample collection. Tests on sediment samples were initiated within 6 weeks of sample collection. The following tests were performed on water and sediment samples:

Water samples

Ceriodaphnia 7-day Survival/Reproduction Test (SOP XV)
Selenastrum capricornutum 96 hr Growth Test (SOP XX)
Microtox® Basic Test

Sediment samples

Ceriodaphnia 7-day Whole Sediment Test (SOP XV A)
Lettuce Seed (*Lactuca sativa*) Germination Test (SOP XVIII)
Microtox Basic Test (performed on sediment pore water)

Toxicity tests were conducted in the EPA Region IV toxicity laboratory in Athens, Georgia.

Rapid Bioassessments - were conducted according to EPA Rapid Bioassessment Protocols for Use in Streams and Rivers (USEPA 1989). A representative sample of benthic organisms from each sampling station was preserved in alcohol future reference.

Fish Collections - were made using a Smith-Root Type VII backpack electroshocking unit.

Stunned fish were collected in a decontaminated fish net, handled with latex gloves, placed in a clean plastic bag, and placed on wet ice. Within 48 hrs of collection, the species composition of each sample was noted and recorded and the fish were frozen.

Subsequently, frozen fish from each sampling station were ground to a powder, subdivided into two portions (one portion wrapped in plastic, the other in aluminum foil), and then transported frozen to the appropriate laboratory for chemical analysis.

Results

Water Chemistry - The results of in-situ water measurements (supplemented by laboratory determinations of water alkalinity, hardness, and turbidity), are summarized in Table 1.

Toxicity Tests - The results of toxicity tests conducted on water and sediment samples are summarized in Tables 2 and 3 respectively. Copies of laboratory bench sheets for each test are included in Appendix B.

Cladoceran (*Ceriodaphnia dubia*) 7-day Survival/Reproduction Test

None of the surface water samples collected on Bat Fork Creek and its unnamed tributary were toxic to *Ceriodaphnia*. Adult survival and reproduction in all test samples was not significantly different from survival and reproduction in laboratory control water. None of the on-site sediment samples were toxic to *Ceriodaphnia*.

Table 1. Water quality measurements for streams in the vicinity of General Electric East Flat Rock, North Carolina. November 1994.

Sampling Stations	Station Description	Stream Water Quality data						
		In-situ measurements				Laboratory determinations		
		Temperature (C°)	Dissolved O ₂ (mg/l)	pH	Conductivity (μmhos/cm ²)	Turb. (NTU)	Alk.	Hardness (mg/l CaCO ₃)
GE-101-SW	Background for Unnamed Tributary	12.7	8.52	6.47	35.2	3.8	12	12
GE-102-SW	Unnamed Tributary	11.0	8.74	6.41	42.5	2.4	12	16
GE-103-SW	Bat Fork Creek Spring Haven Trailer Park	9.9	7.69	6.25	24.9	6.2	7	8
GE-104-SW	Bat Fork Creek Shepherd Farm	9.3	8.49	6.29	28.1	9.1	7	9
GE-105-SW	Bat Fork Creek Background for GE Site	10.1	8.81	6.16	43.2	3.4	9	14
GE-106-SW	Bat Fork Creek Inside GE Site	11.0	9.53	6.57	61.2	5.0	9	18
GE-107-SW	Bat Fork Creek Below GE Discharge	9.2	13.72	7.19	442	14.8	18	20
GE-108-SW	Bat Fork Creek Downstream of Sta. 107	10.9	11.67	6.61	349	13.3	20	18
GE-109-SW	Bat Fork Creek Downstream of GE Site	11.0	9.82	6.56	70.8	5.9	12	18
GE-110-SW	Ditch on Seldon Clark Site	13.9	2.31	6.50	404	21.7	187	226

Table 2. Summary of results of toxicity tests on surface water samples collected from streams near General Electric, East Flat Rock, NC. November 1994.

Sample ID #	Sampling Location	Ceriodaphnia 7 day Chronic		Algae Growth (mean cell density in fluorometer units)	Microtox LC50 ¹ (% sample)
		Adult Survival	Average # Young		
GE-101-SW	Background for Unnamed Tributary	10	23.4	3.21	> 100
GE-102-SW	Unnamed Tributary	10	24.6	2.99	> 100
GE-103-SW	Bat Fork Creek - Spring Haven Trailer Park	10	37.2	4.08	> 100
GE-104-SW	Bat Fork Creek - Shepherd Farm	9	37.7	4.01	> 100
GE-105-SW	Bat Fork Creek - Background for GE Site	10	31.2	3.33	> 100
GE-106-SW	Bat Fork Creek - Inside GE Site	9	31.2	4.06	> 100
GE-107-SW	Bat Fork Creek - Downstream of GE Discharge	10	35.5	0.63	> 100
GE-108-SW	Bat Fork Creek - Downstream of Station 107	9	34.1	0.78	> 100
GE-109-SW	Bat Fork Creek - Downstream of GE Site	10	32.6	2.68	> 100
GE-110-SW	Ditch on Seldon Clark Subsite	10	33.7	3.00	> 100
CONTROL	DMW	10	24.6 ² /31.3 ³	3.39	> 100

1 - LC50 values calculated from 5 minute readings.

2 - Control for samples 101 through 105.

3 - Control for samples 106 through 110.

Table 3. Summary of results of toxicity tests on sediment samples collected from streams near General Electric, East Flat Rock, NC. November 1994.

Sample ID #	Sampling Location	Ceriodaphnia 7 day Chronic		Lettuce Seed Germination (% germination)	Microtox LC50 ² (%Sample)
		Adult Survival	Average # Young		
GE-101-SD	Background for Unnamed Tributary	8	22.2	26	> 100
GE-102-SD	Unnamed Tributary	10	28.6	86	> 100
GE-103-SD	Bat Fork Creek - Spring Haven Trailer Park	10	16.7	88	> 100
GE-104-SD	Bat Fork Creek - Shepherd Farm	10	22.5	63	83.3
GE-105-SD	Bat Fork Creek - Background for GE Site	8	22.6	65	> 100
GE-106-SD	Bat fork Creek - Inside GE Site	10	37.9	86	> 100
GE-107-SD	Bat Fork Creek - Downstream of GE Discharge	9	33.6	73	> 100
GE-108-SD	Bat Fork Creek - Downstream of Station 107	10	30.1	90	> 100
GE-109-SD	Bat Fork Creek - Downstream of GE Site	10	26.6	83	> 100
GE-110-SD	Ditch on Seldon Clark Subsite	9	29.0	49	> 100
CONTROL	DMW	10	24.5 ² /32.3 ³	80	> 100

1 - LC50 values calculated from 5 minute readings.

2 - Control for samples 101 through 105.

3 - Control for samples 106 through 110.

One off-site sediment (station 103) caused a significant reduction in the number of young produced when compared to control sediment.

Freshwater Algae (*Selenastrum capricornutum*) 96 hr Growth Test

Not all algal test data could be analyzed statistically. At the termination of the test, several flasks containing growing algae were found to have caps sealed to the mouth of the flask by a film of condensed moisture, thereby cutting off gaseous CO₂ exchange to the atmosphere and severely limiting algal growth in those specific flasks. If these "outliers" were ignored and mean growth in the remaining flasks examined (Table 2, Appendix B), there appeared to be an inhibition of algal growth in samples from stations immediately downstream of the point where the GE waste treatment pond discharges into Bat Fork Creek (stations 107 and 108). Statistically this observation could not be confirmed. However, test data from three other sampling stations, 105, 106 and 109, could be statistically analyzed. Station 105 is the background station for the GE plant site, station 106 is on-site but above the discharge point for the treatment ponds, and station 109 is immediately downstream of the plant site. Statistical analysis showed that the toxicity of surface water entering and leaving the GE site was not statistically different and that no toxicity was detected.

Lettuce Seed (*Lactuca sativa*) Germination Test

Seed germination was significantly reduced in sediment from stations 101 and 110.

Station 101 was at the headwaters of the unnamed tributary (above the Shepherd Farm

dump site); station 110 was taken from the ditch draining the Seldon Clark subsite.

None of the on-site samples (stations 106, 107, and 108) or remaining samples from Bat Fork Creek and the unnamed tributary inhibited seed germination.

Microtox® (*Photobacterium phosphoreum*) Basic Test

Microtox tests did not detect toxicity in any of the surface water samples collected on Bat Fork Creek and its unnamed tributary. Pore water from only one sediment sample showed a slight toxic effect. This sample was taken from station 104 on Bat Fork Creek (Shepherd Farm).

Rapid Bioassessments - The results of RBI's conducted on Bat Fork Creek and its unnamed tributary are summarized in Tables 4 and 5. Table 4 summarizes the results of the Benthic Macroinvertebrate Surveys conducted at each sampling location; Table 5 summarizes and compares scores for the Habitat Assessments conducted at each sampling station. Habitat scores for all stations were generally high except for station 110. This station received a lower score because of channelization and a general lack of suitable habitat. Station 110 is a drainage ditch. Copies of field data sheets are included in Appendix C.

Fish Tissue Analysis - The results of fish tissue analyses are shown in Table 6. Shaded areas indicate levels of PCB's in whole body fish considered harmful based on information reported by Eisler (1986). A list of fish species collected at each sampling station is included Appendix C.

Table 4. Macrobenthos qualitative sample list for 10 stream sampling stations in the vicinity of General Electric/Shepherd Farm Superfund site, East Flat Rock, North Carolina. November 7-8, 1994.

Relative Abundance: R = rare (< 3) C = Common (3 -9) A = Abundant (>10) D = Dominant (> 50)

TAXON	station 101	station 102	station 103	station 104	station 105	station 106	station 107	station 108	station 109	station 110
Porifera										
Hydrozoa										
Platyhelminthes										
Tubellaria										
Hirudinea					R		R			
Oligochaeta			C	R	C		C	C	C	C
Isopoda	C		R	C	R	R				
Amphipoda						C				
Decapoda	C	C			C	C	C		C	
Gastropoda			C	R		R	C			
Bivalvia										
Anisoptera	R	C	R		R	C	C	C	R	
Zygoptera	C			A	C	A	A	C	C	
Hemiptera		R				R				
Coleoptera	R	R	C	R	C	C				A
Lepidoptera										
Sialidae										
Corydalidae					R					
Tipulidae	C	C	R	R	C	R	R	R	R	
Empididae										
Simuliidae	C	C	A	A	R					
Tabanidae										
Culicidae			R	R	R			R	R	R
Chironimidae	C	C	A	A	C	R	C	A	A	D
Plecoptera	A	C	C	C	A	C				
Ephemeroptera	A	A		C	C	R	R		R	
Tricoptera	A	A	C	D	A	C	R		R	

Table 5. Comparison of habitat quality for sampling stations on Bat Fork Creek and an unnamed tributary in the vicinity of General Electric/Shepherd Farm Superfund Site, East Flat Rock, North Carolina: November 1994.

SAMPLING STATIONS		Habitat Assessment			
Station #	Station Description	Score	Habitat Condition	% Compatibility to Background	Compatibility Assessment
101	Background for Unnamed Tributary	99	Good	100	-
102	Unnamed Tributary	114	Excellent	115	Comparable
103	Bat Fork Creek (Spring Haven Trailer Park)	119	Excellent	-	-
104	Bat Fork Creek Shepherd Farm	115	Excellent	-	-
105	Bat Fork Creek Background for GE Site	125	Excellent	100	-
106	Bat Fork Creek Inside GE Site	94	Good	75	Supporting
107	Bat Fork Creek Downstream of GE Discharge	111	Excellent	88	Supporting
108	Bat Fork Creek Downstream of Sta.107	120	Excellent	96	Comparable
109	Bat Fork Creek Downstream of GE Site	117	Excellent	94	Comparable
110	Ditch on Seldon Clark Subsite	31	Poor	-	-

Table 6. Results of fish tissue analyses, GE/Shepherd Farm Superfund Site, East Flat Rock, North Carolina.

Sampling Station	Pesticides (mg/kg)			Metals (mg/kg)	
	DDE	PCB-1248	PCB-1016	Copper	Zinc
102	0.050U	0.32J	0.030	1.7	34
103	0.050U	0.49	0.45U	0.88	39
104	0.051U	0.49	0.45U	0.91	39
105	0.18	1.6	1.5U	0.95	39
106	0.12	1.4C	1.0U	1.2	42
107	0.061	1.4C	1.0U	1.0U	26
108	0.093	1.9C	1.5U	0.86	44
109	0.19	2.8C	2.5U	0.95	31

U-Material was analyzed for but not detected. The number is the minimum quantitation limit.
C-Confirmed by GC/MS.

shaded values - Exceed levels of concern for total PCB residues (0.4 mg/kg fresh weight) in whole body fish (Eisler 1986).

Discussion/Conclusion

GE subsite

With one exception, there was no clear indication of toxicity in water and sediment collected from the three sampling stations (stations 106, 107, and 108) located on the GE plant site. The single exception was the apparent inhibition of algae growth in surface water collected from stations 107 and 108 (see results section above). Water entering (station 105) and leaving (station 109) the GE site was not toxic to any test organism. The apparent on-site toxicity to algae may be a result of elevated copper and zinc levels reported (NCDEH&NR 1990) in the effluent discharged into Bat Fork Creek from the treatment ponds (see map Fig 1). The effluent enters Bat Fork Creek just above station 107. The conductivity of stream water at stations 107 and 108 was a magnitude higher than for water at station 106 immediately upstream of the discharge point, indicating some kind of ionic input at the point of discharge. Chemical analyses, when available, should be able to confirm or dismiss the presence of inhibitory levels of copper and zinc in water from station 107 and 108.

Another possible explanation for the apparent inhibition of test algae in water from station 107 and 108 may not be related to chemical toxicity. During sampling, the effluent entering Bat Fork Creek from the treatment ponds was observed to be bright

green in color. When mixed with water from Bat Fork Creek, the creek water in turn became green. Microscopic examination of the water samples from stations 107 and 108 revealed that the green color was caused by native algae - predominately *Scenedesmus* sp. A high density of ciliated protozoa was also observed in these samples. The protozoa were not observed in upstream samples 106 and 105. It is possible that the lack of test algae growth in surface water from stations 107 and 108 was the result of either biological inhibition mediated by allelopathic chemicals produced by the dominant *Scenedesmus* or a result of consumption by the ciliated protozoa. To test this hypothesis, a second set of algae tests were conducted in which surface water from stations 107 and 108 was filtered through glass wool before test algae were introduced (see Appendix B). Microscopic examination of filtered samples revealed that filtering effectively removed nearly all ciliated protozoa and also some of the native algae. Filtered and unfiltered samples were run side by side with filtered and unfiltered controls. The same technical problem was experienced with these tests as was encountered in the original set of tests (see p. 10). However, disregarding "outlier" data points, mean cell density showed clear-cut trends. Filtering control water resulted in a slightly lower cell density, indicating that perhaps filtering removed some nutrients or, less likely, that some toxic material was washed from the glass wool during filtration. In contrast, mean cell density in filtered samples of water from stations 107 and 108 was higher than in

unfiltered samples, indicating that some filterable component was responsible for the inhibition of algae growth in the unfiltered samples. In this case the filterable component appeared to be biological. Therefore, biological factors could have contributed to the lack of test algae growth observed in water samples from on-site stations 107 and 108. However, growth of test algae in filtered samples 107 and 108 was still noticeably less than growth in control water, suggesting the presence of another algae-inhibiting component. In this case, that component could be the allelopathic substance or a site-derived chemical.

Rapid Bioassessments conducted on Bat Fork Creek confirm that the creek is being impacted at on-site stations 107 and 108. Although the quality of the habitat at 108, for example, was comparable to that of the background (station 105), there was a conspicuous lack of sensitive stream organisms, namely Ephemeroptera (mayflies), Plecoptera (stoneflies), and Trichoptera (caddis flies), or EPT's. The habitat at station 107 was slightly less comparable, being rated as "supportive". Comparing it with station 106, also rated as "supportive," we see fewer EPTs. Again the impact may not be totally due to toxicity. The "greening" of the creek water at stations 107 and 108 suggests an enrichment or eutrophication. The water quality at these stations is more reminiscent of a pond than a stream environment. EPT's are often scarce or absent in ponds.

At the time this study was conducted, impacts to Bat Fork Creek resulting from effluent discharged by the GE site appeared to be minimal. The stream was recovering by the time the water flowed off-site past station 109. At this station the higher conductivity seen at stations 107 and 108 had dropped to a level near that of station 106 located above the discharge point, water or sediment samples from station 109 were not toxic to any of the test animals, algal growth was not inhibited, and EPT's were returning to the stream.

Shepherd Farm and Seldon Clarke subsites

Outside the GE plant site, no surface water samples prompted a toxic response from any of the toxicity test organisms. However, four sediment samples appeared to adversely affect at least one test organism. Reduced production of young was observed in *Ceriodaphnia* exposed to sediment from station 103, lettuce seed germination was significantly reduced in sediment from station 101 and 110, and the Microtox test gave a slight toxic response to sediment pore water from station 104. With the exception of station 110, none of these sporadic toxic responses (outside of the GE subsite boundaries) can be directly attributed to current or former activities by GE. Station 101 lies on the unnamed tributary upstream of the Shepherd Farm dump site. Chemical analysis of sediment from this location revealed measurable amounts of toluene and some indication of petroleum products (see Appendix D). The presence of these chemicals suggests that paint

thinners, gasoline, used motor oil, or some other form of petroleum products may have been dumped near the stream at the end of the cul-de-sac in the trailer park. Station 103 is located on the upper reaches of Bat Fork Creek at the downhill boundary of Spring Haven trailer park. It does not receive direct drainage from the Shepherd Farm dump site. The source of toxicity at this station again may be the result of local dumping. Similarly, the slight toxicity exhibited by sediment from station 104, which is located in the pasture of the current Shepherd Farm property, may reflect the presence of residual material derived from farm operations (herbicides, hydraulic fluids etc.). Sediment from station 105, which is downstream of 104 and just above the GE plant site, was not toxic to any of the toxicity test organisms. The remaining sediment that exhibited toxicity is from station 110 on the Seldon Clark subsite. The suspected toxicity to lettuce seeds exhibited by this sample may be site derived. The sediment was collected from a ditch draining a buried dump site on the Seldon Clark property. However, a large iron grate at the head of the ditch and next to the road again raises the possibility that the toxicity may be derived from road runoff or periodic dumping of materials into the ditch by local residents. Chemical data, when available, should help identify the source of toxicity at this location as well as at the other locations mentioned above.

Fish Tissue

Chemical analyses of fish tissue revealed detectable levels of DDE (Dichlorodiphenyldichloroethylene) and PCB's (Polychlorinated Biphenyls) in whole body (forage) fish collected from stream sample stations near the GE Subsite (Table 6).

DDE, a metabolite of the organochlorine insecticide DDT (Dichlorodiphenyltrichloroethane), was present in fish collected at stations 105 through 109. DDT, widely used throughout the world from 1940 until 1973, was banned by the US EPA and declared an environmental hazard due to its chemical stability (persistence) and its solubility in fatty tissue. Due to widespread use, DDT and DDE (as a breakdown product of DDT) have over the years been slowly released into the environment. Although present in fish tissue collected near the GE Subsite, DDE is not considered a contaminant of concern for the GE/Shepherd Farm Superfund Site.

PCB's, a group of synthetic halogenated aromatic hydrocarbons, were used extensively in the electricity generating industry until 1979 when legislation prohibited their manufacture and use in the United States (Eisler 1986). PCB's are toxic compounds that are highly persistent and fat soluble, properties that lead to accumulation in the environment and biomagnification in the food chain. Eisler (1986) indicated that among sensitive species, total PCB residues in excess of 0.4 mg/kg in whole body

fish were demonstrably harmful and should be considered evidence of significant PCB contamination.

PCB's are a contaminant of concern for the GE/Shepherd Farm Superfund Site. As shown in Table 6, PCB-1248 was present at all stations where fish were collected, but concentrations were highest in the vicinity of the GE subsite. Whole body fish concentrations reported nationwide for PCB 1248 averaged 0.15, 0.14, and 0.8 mg/kg during 1976-1977, 1978-1979, and 1980-1981, respectively (Eisler 1986). Concentrations of PCB 1248 near the GE subsite ranged from 1.4 to 2.8 mg/kg, while the background concentration (station 103) was 0.49 mg/kg. Station 103 was considered a more suitable background than station 105 (toxicity background) for comparison of fish data. Station 105 was less suitable because of the short distance between stations 105 and 106 and the unimpeded movement of fish between those stations.

Fish tissue data collected during this study has confirmed the presence of PCB's as an environmental concern in streams near the GE Subsite, but this data does not target the specific source of contaminants. Sediment and water chemical data, when available, should help delineate the source(s) of PCB's and other contaminants.

REFERENCES

- APHA. 1992. Standard Methods for the Examination of Water and Wastewater, 18th Edition. Greenberg, A.E., L.S. Clesceri, and A. D, Eaton, eds. American Public Health Association, American Water Works Association, and Water Pollution Control Federation. 1015 Fifteenth Street, N.W., Washington, D.C. 20005.
- Eisler, R. 1986. Polychlorinated biphenyl hazards to fish, wildlife, and invertebrates: a synoptic review. U.S. Fish Wildl. Serv. Biol. Rep. 85(1.7). 72 pp.
- NCDEH&NR. 1990. General Electric-Hendersonville Toxicity Examination, NPDES # NC0000507, Basin 040302. North Carolina Department of Environment, Health, and Natural Resources; Water Quality Section. January 1990.
- USEPA. 1994. General Electric/Shepherd Farm Superfund Site, RI/FS Workplan. August 1994. U. S. Environmental Protection Agency, Region IV, Athens, GA.
- USEPA. 1993. Region IV Ecological Support Branch Standard Operating Procedures for Hazardous Waste Site Investigations. Prepared for U. S. Environmental Protection Agency, Region IV Environmental Services Division, Athens, GA, and prepared by ManTech Environmental Technology, Inc., Environmental Services Assistance Team, Athens, GA.
- USEPA. 1991. Environmental Compliance Branch Standard Operating Procedures and Quality Assurance Manual. U. S. Environmental Protection Agency, Region IV, Environmental Services Division, College Station Road, Athens, GA 30613.
- USEPA. 1989. Rapid Bioassessment Protocols for Use in Streams and Rivers. U.S. Environmental Protection Agency, Assessment and Watershed Protection Division. 401 M Street, S.W., Washington, D.C. 20005.

APPENDIX A

Photographs of Stream Sampling Stations

Photo 1. Station 101, Unnamed Stream (background), upstream of Shepherd Farm waste disposal subsite. Photo taken facing upstream.

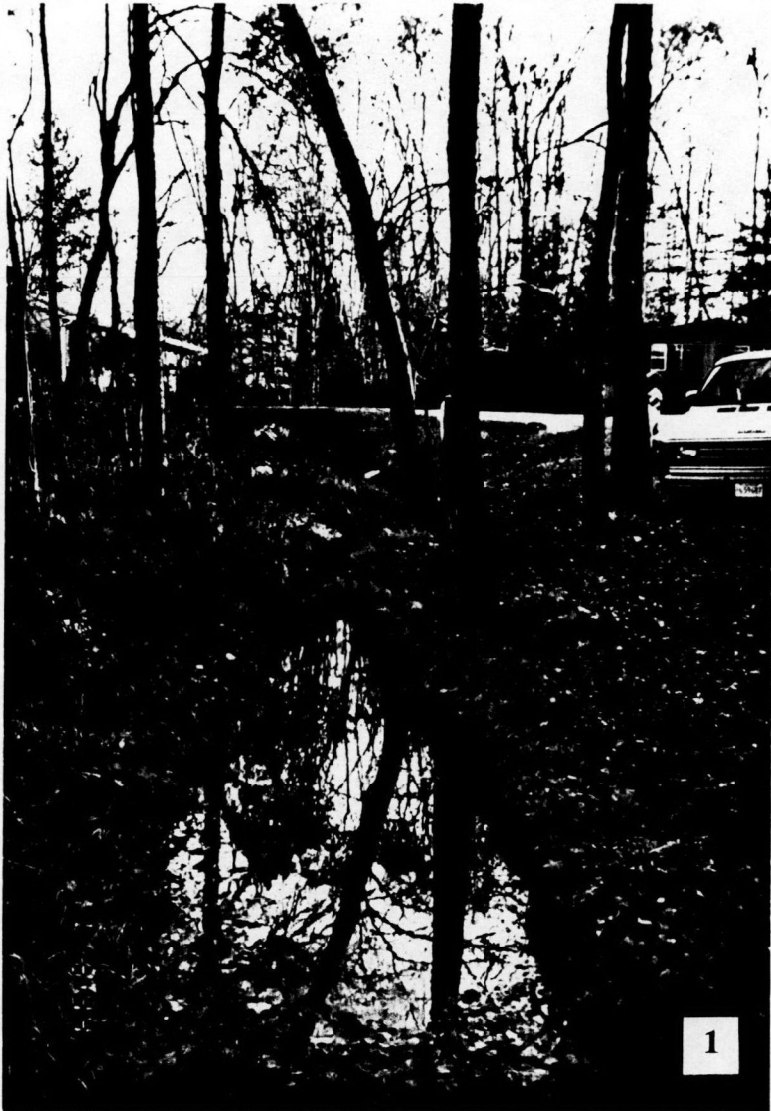


Photo 2. Station 102, Unnamed Stream downstream of Shepherd Farm waste disposal subsite. Photo taken facing upstream.





Photo 3. Station 103, Bat Fork Creek. Photo taken facing upstream.



Photo 4. Station 104, Bat Fork Creek, downstream of confluence with Unnamed Tributary. Photo taken facing upstream.



5

Photo 5. Station 105, Bat Fork Creek, upstream of the General Electric subsite. Photo taken facing downstream.



6

Photo 6. Station 106, Bat Fork Creek. Photo taken facing downstream.



Photo 7. Station 107, Bat Fork Creek, downstream of General Electric effluent discharge. Photo taken facing upstream.



Photo 8. Station 108, Bat Fork Creek. Photo taken facing upstream.



Photo 9. Station 109, Bat Fork Creek, north of Tabor Road. Photo taken facing downstream.

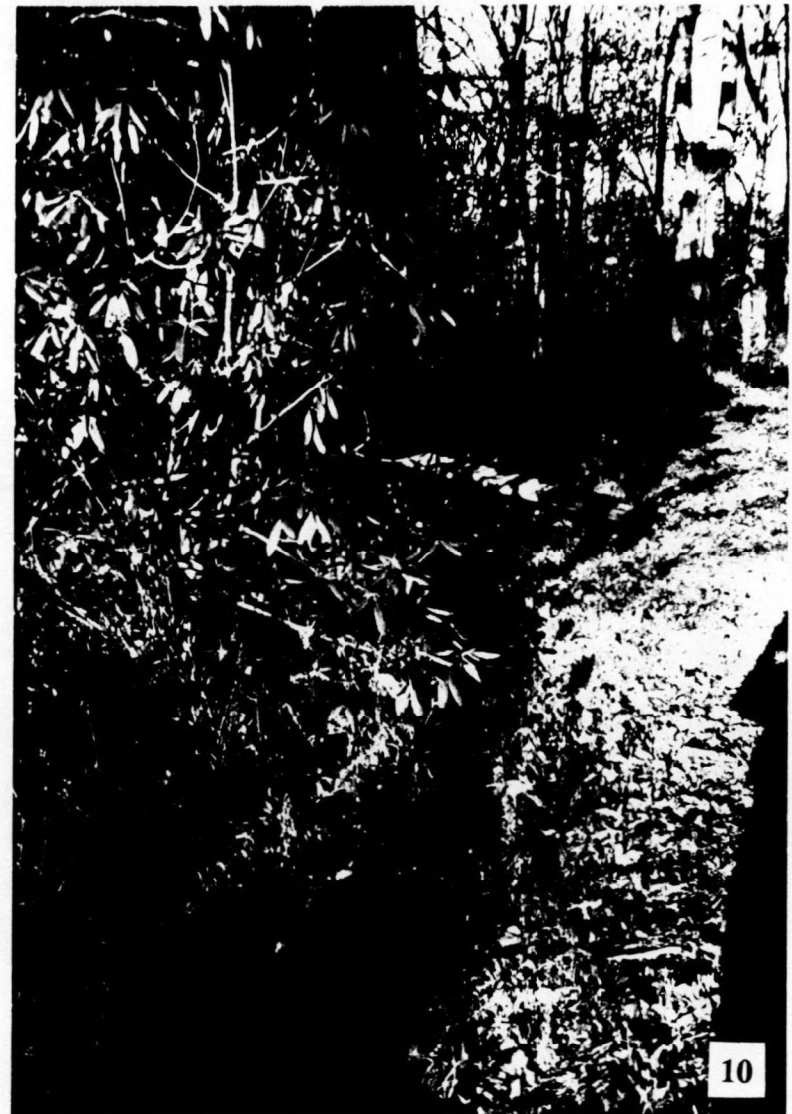


Photo 10. Station 110, ditch draining the Seldon Clark subsite. Photo taken facing downstream.

APPENDIX B

Toxicity Test Bench Sheets

SUMMARY DATA

Industry/Study: GE

Date: 11/9/94

1230

Location: _____

Analyst: MW

Water Samples

Sample # and/or Concentration	Day	Replicate										Number of Young	Number of Surviving Adults	Young per Adult
		1	2	3	4	5	6	7	8	9	10			
Control DMW	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	-	-
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	6	6	6	5	6	4	5	✓	5	✓	43		
	4	✓	✓	6	10	5	✓	✓	3	✓	1	28		
	5	9	8	✓	✓	✓	7	6	8	8	8	54		
	6	13	12	13	7	4	11	10	10	10	11	108		
	7	✓	✓	✓	2	11	✓	✓	✓	✓	✓	13		
Total		28	26	25	26	34	22	21	21	23	20	246	10	24.6
GE 101WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	5	6	5	4	5	5	6	4	6	1	47		
	4	✓	6	2	✓	7	✓	7	✓	✓	✓	30		
	5	7	✓	5	7	✓	8	✓	✓	✓	9	36		
	6	12	13	✓	12	✓	10	17	12	✓	10	86		
	7	✓	3	✓	14	2	2	11	✓	3	✓	35		
Total		24	28	12	37	14	25	41	24	9	20	234	10	23.4
GE 102WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	6	5	7	6	6	6	6	6	5	5	58		
	4	✓	✓	6	✓	8	✓	✓	6	✓	✓	20		
	5	7	5	✓	7	1	5	9	✓	9	8	57		
	6	13	11	12	11	9	12	✓	11	11	✓	90		
	7	✓	17	1	3	✓	✓	✓	✓	✓	✓	21		
Total		26	41	26	27	24	26	15	23	25	13	246	10	24.6
GE 103WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	5	7	4	✓	6	6	5	5	6	6	50		
	4	9	10	7	✓	✓	✓	✓	✓	1	✓	27		
	5	✓	✓	✓	8	10	10	9	11	11	9	68		
	6	15	16	13	9	12	12	10	11	11	9	118		
	7	12	14	9	✓	12	17	11	13	9	12	109		
Total		41	47	33	17	40	45	35	40	38	36	372	10	37.2
GE 104WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	6	6	6	5	5	6	6	6	7	✓	53		
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	6	6		
	5	10	9	8	10	9	11	11	12	12	19	101		
	6	13	12	11	12	11	14	14	14	14	1	115		
	7	✓	14	11	13	16	8	✓	15	✓	✓	80		
Total		29	41	36	40	41	39	31	50	33	1	340	9	37.7
GE 105WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	3	5	5	3	4	3	1	4	5	6	39		
	4	✓	✓	✓	✓	✓	✓	5	2	✓	✓	7		
	5	10	8	9	5	8	10	9	9	11	9	88		
	6	14	12	11	5	10	12	14	5	14	9	109		
	7	✓	16	11	9	12	1	✓	✓	12	9	70		
Total		27	41	36	22	34	25	29	23	42	33	312	10	31.2

✓ = Test organism alive

X = Test organism dead

= Number of live young

= Number of dead young

M = Lost or missing

♂ = Male

Figure XV.4 Short-Term Chronic Toxicity Test -- Cladoceran Summary Data

SUMMARY DATA

Industry/Study: GEDate: 11/9/94 1245

Location: _____

Analyst: MW

Water Samples

Sample # and/or Concentration	Day	Replicates										Number of Young	Number of Surviving Adults	Young per Adult
		1	2	3	4	5	6	7	8	9	10			
Control DMW	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	-	-
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	✓	4	4	✓	6	4	7	5	5	6	41		
	4	5	✓	7	✓	✓	✓	9	✓	✓	✓	21		
	5	9	7	✓	10	10	8	✓	7	8	4	63		
	6	8	1	12	13	10	12	14	6	13	11	100		
	7	✓	1	11	16	17	✓	13	14	16	✓	88		
	Total	22	13	34	39	43	24	43	32	42	21	313	10	31.3
GE 106 WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	✓	5	3	4	5	5	4	5	5	5	36		
	4	8	✓	6	✓	X	✓	✓	5	10	✓	26		
	5	9	9	✓	9	1	9	9	✓	✓	9	54		
	6	12	12	10	9	1	12	✓	13	9	12	89		
	7	✓	12	11	3	1	12	11	12	15	✓	76		
	Total	26	38	30	25	1	38	24	35	39	26	281	9	31.2
GE 107 WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	✓	6	8	7	5	5	5	5	4	5	50		
	4	3	✓	✓	✓	8	✓	7	10	✓	✓	28		
	5	8	10	12	10	✓	11	✓	✓	9	10	70		
	6	7	14	13	13	10	15	13	12	11	11	119		
	7	✓	13	12	14	7	✓	13	14	15	✓	88		
	Total	18	43	45	44	30	31	33	41	39	26	355	10	35.5
GE 108 WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	5	6	7	6	7	5	4	6	5	1	45		
	4	✓	✓	7	8	9	✓	✓	✓	1	✓	18		
	5	10	9	✓	✓	✓	12	6	5	9	8	59		
	6	15	14	X	14	13	14	3	10	10	10	103		
	7	✓	13	1	X 13	13	12	3	13	14	1	82		
	Total	30	42	1	41	42	43	16	34	39	20	307	9	34.1
GE 109 WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	5	6	5	5	4	5	5	6	3	3	47		
	4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	5	10	11	11	10	11	10	6	7	8	8	92		
	6	11	8	16	14	9	8	14	16	14	7	117		
	7	✓	10	13	12	8	3	9	4	11	✓	70		
	Total	26	35	45	41	32	26	34	33	36	18	326	10	32.6
GE 110 WS	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	✓	5	5	6	5	5	4	5	5	1	41		
	4	4	✓	✓	✓	✓	✓	✓	1	✓	2	7		
	5	9	11	9	8	10	10	10	10	7	8	92		
	6	1	1	15	13	15	14	14	13	11	10	107		
	7	✓	16	9	13	15	12	12	13	✓	✓	90		
	Total	14	33	38	40	45	41	40	42	23	21	337	10	33.7

✓ = Test organism alive

X = Test organism dead

= Number of live young

= Number of dead young

M = Lost or missing

♂ = Male

Figure XV.4 Short-Term Chronic Toxicity Test -- Cladoceran Summary Data

SUMMARY DATA

Industry/Study: GEDate: 11/10/94

Location: _____

Analyst: R. LewisSediment

Sample # and/or Concentration	Day	Replicate										Number of Young	Number of Surviving Adults	Young per Adult
		1	2	3	4	5	6	7	8	9	10			
Control DMW	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	-	-
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	✓	3	5	✓	6	6	✓	✓	✓	✓	20		
	4	4	✓	✓	✓	✓	✓	1	4	5	6	20		
	5	10	7	7	10	10	8	10	8	9	9	88		
	6	9	✓	✓	✓	✓	7	6	✓	11	2	35		
	7	✓	14	9	10	13	12	12	✓	✓	12	82		
	Total	23	24	21	20	29	33	29	12	25	29	245	10	24.5
GE 101SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	3	3	✓	M	4	2	✓	1	✓	✓	13		
	4	✓	✓	3	M	✓	✓	3	1	M	5	12		
	5	5	7	4	10	7	4	6	6	1	7	46		
	6	11	8	2	1	9	7	7	5	1	8	57		
	7	7	6	9	1	12	6	1	9	1	✓	50		
	Total	26	24	18	-	32	19	17	22	-	20	178	8	22.2
GE 102SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	5	4	3	2	✓	✓	4	5	4	4	31		
	4	✓	✓	1	✓	4	3	✓	✓	✓	✓	7		
	5	7	8	7	6	1	6	8	8	8	8	67		
	6	11	12	9	8	✓	6	6	9	6	11	78		
	7	12	9	13	7	4	3	14	17	13	11	103		
	Total	35	33	32	23	9	18	32	39	31	34	286	10	28.6
GE 103SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	5	✓	✓	2	✓	4	2	✓	✓	✓	13		
	4	7	✓	1	✓	✓	✓	✓	3	✓	✓	11		
	5	✓	2	2	3	4	3	4	4	1	5	28		
	6	11	6	3	4	6	6	9	6	4	6	61		
	7	13	9	1	✓	1	10	11	2	7	✓	54		
	Total	36	17	7	9	11	23	26	15	12	11	167	10	16.7
GE 104SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	✓	4	3	✓	3	5	4	4	3	4	30		
	4	3	1	✓	2	✓	✓	✓	✓	✓	✓	7		
	5	6	9	8	6	6	7	6	9	7	9	73		
	6	9	8	6	1	6	9	6	11	9	10	75		
	7	12	12	8	2	1	✓	5	✓	✓	✓	40		
	Total	30	34	25	11	16	21	21	24	19	24	225	10	22.5
GE 105SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	4	3	✓	✓	3	✓	✓	✓	3	✓	13		
	4	5	✓	M	M	✓	1	5	6	✓	5	22		
	5	3	7	1	1	5	4	9	10	7	7	52		
	6	7	11	1	1	8	6	10	9	10	1	62		
	7	10	9	1	1	1	1	1	2	✓	8	32		
	Total	29	30	-	-	17	12	25	27	20	21	181	10	18.1

✓ = Test organism alive

X = Test organism dead

= Number of live young

= Number of dead young

M = Lost or missing

♂ = Male

Figure XV.4 Short-Term Chronic Toxicity Test -- Cladoceran Summary Data

SUMMARY DATA

Industry/Study: GEDate: 11/10/94

Location: _____

Analyst: R. Lewis

Sediment

Sample # and/or Concentration	Day	Replicate										Number of Young	Number of Surviving Adults	Young per Adult
		1	2	3	4	5	6	7	8	9	10			
Control DMW	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0	-	-
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	4	4	5	3	3	6	5	3	3	4	40		
	4	8	10	8	5	✓	8	9	8	1	1	58		
	5	✓	✓	5	10	10	12	1	2	7	6	53		
	6	13	✓	3	1	✓	2	12	11	10	9	61		
	7	13	1	13	12	17	16	15	11	8	5	111		
	Total	38	15	34	31	30	44	42	35	29	25	323	10	32.3
GE 106SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	5	3	5	3	4	5	4	4	4	4	41		
	4	9	7	9	5	7	8	9	9	8	✓	71		
	5	9	✓	6	10	10	8	1	1	1	10	56		
	6	3	8	3	4	3	4	12	12	13	12	14		
	7	15	11	14	12	14	15	12	14	14	16	137		
	Total	41	29	37	34	38	40	38	40	40	42	379	10	37.9
GE 107SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	✓	4	4	6	5	6	4	4	6	4	43		
	4	✓	7	8	7	6	9	7	4	8	12	68		
	5	✓	1	10	1	3	✓	1	✓	✓	1	17		
	6	✓	8	1	7	9	12	12	8	8	13	78		
	7	✓	10	11	11	7	12	8	11	16	10	96		
	Total	-	30	34	32	30	39	32	27	38	40	302	9	33.6
GE 108SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	1	5	2	5	4	5	6	3	5	4	40		
	4	✓	6	7	7	9	8	7	7	7	✓	58		
	5	✓	2	✓	1	✓	✓	1	✓	1	8	13		
	6	7	11	1	10	11	12	8	11	8	7	86		
	7	7	10	8	10	11	11	12	11	14	10	104		
	Total	15	34	18	33	35	36	34	32	35	29	301	10	30.1
GE 109SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	4	5	2	✓	6	4	5	2	5	✓	33		
	4	9	8	5	3	6	8	9	4	8	✓	60		
	5	✓	9	2	6	1	1	✓	✓	✓	4	23		
	6	9	2	✓	✓	8	10	11	4	12	8	64		
	7	10	12	11	1	10	10	11	2	10	9	86		
	Total	32	36	20	10	31	33	36	12	35	21	266	10	26.6
GE 110SD	1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	0		
	3	5	3	4	5	5	(3)x	2	5	5	5	39		
	4	8	7	7	7	7	X	2	6	2	✓	46		
	5	✓	✓	5	2	✓	1	1	2	7	7	24		
	6	8	3	2	8	8	1	6	9	11	10	65		
	7	11	6	9	11	12	1	8	9	11	10	87		
	Total	32	19	27	33	32	-	19	31	26	32	261	10	26.1

✓ = Test organism alive

X = Test organism dead

= Number of live young

- = Number of dead young

M = Lost or missing

♂ = Male

Figure XV.4

Short-Term Chronic Toxicity Test -- Cladoceran Summary Data

ALGAL TOXICITY TEST

EPA, ESD, TES
AUG. 1990

INDUSTRY/STUDY: GE INITIAL INNOCULUM: 210,000 cells/ml
 LOCATION: E-Flat Rock N.C ORGANISM: Selenastrum capricornutum
 DATE COLLECTED: 11/2 - 11/8/94 ANALYST: J. Mandley
 DATE TEST STARTED: 11/9/94
 coproporphyrin std 11/9/94 1.39 fluorometer units 11/13/94 1.37 fluorometer units

SAMPLE ID #	INITIAL BLANK	INITIAL READING OF REP #1	96 HR BLANK	96 HR REP #1 READING	96 HR REP #2 READING	96 HR REP #3 READING	COMMENTS
20% AAM (control)	0.000	0.020	0.000	0.700	3.30	3.52	
GE-101-SW	0.002	0.023	0.002	3.46	1.17	3.01	
GE-102-SW	0.003	0.024	0.003	2.50	1.30	3.53	
GE-103-SW	0.005	0.026	0.009	4.11	1.71	1.984	
GE-104-SW	0.025	0.046	0.012	3.86	1.10	4.23	
GE-105-SW	0.004	0.024	0.010	3.68	2.25	4.14	
GE-106-SW	0.004	0.025	0.007	4.56	3.82	3.89	
GE-107-SW	0.812	0.916	0.513	1.26	0.750	0.670	
GE-108-SW	0.667	0.671	1.20	1.43	1.26	1.98	
GE-109-SW	0.054	0.073	0.471	2.75	3.43	3.74	
GE-110-SW	0.008	0.028	0.007	2.56	3.42	3.11	

STUDY: 6E
 LOCATION: East Flat Rock, N-C
 STARTING DATE/TIME 11/9/94
 ENDING DATE/TIME 11/13/94
 ANALYST J. Mandley

RELATIVE ALGAL GROWTH = T - B - IN

WHERE:

B = MEAN CELL DENSITY FOR 96 HOUR BLANK FLASK.

T = MEAN CELL DENSITY FOR TEST FLASK AFTER 96 H.

IN = MEAN INITIAL CELL DENSITY AT START OF TEST

INITIAL CELL DENSITY (IN) = (INITIAL READING REP #1) - (INITIAL BLANK)

SAMPLE ID #	INITIAL BLANK	INITIAL READING REP #1	96 HR BLANK	96 HR REP #1 READING	96 HR REP #2 READING	96 HR REP #3 READING	INITIAL CELL DENSITY	MEAN CELL DENSITY (C or T)	RELATIVE GROWTH REP #1	RELATIVE GROWTH REP #2	RELATIVE GROWTH REP #3
CONTROL	0.000	0.020	0.000	0.700	3.300	3.520	0.020	2.487	0.680	3.280	3.500
GE101sw	0.002	0.023	0.002	3.460	1.170	3.010	0.021	2.524	3.437	1.147	2.987
GE102sw	0.003	0.024	0.003	2.500	1.300	3.530	0.021	2.419	2.476	1.276	3.506
GE103sw	0.005	0.026	0.009	4.110	1.710	0.984	0.021	2.238	4.080	1.680	0.954
GE104sw	0.025	0.046	0.012	3.860	1.100	4.230	0.021	3.030	3.827	1.067	4.197
GE105sw	0.004	0.024	0.010	3.680	2.250	4.140	0.020	3.327	3.650	2.220	4.110
GE106sw	0.004	0.025	0.007	4.560	3.820	3.890	0.021	4.062	4.532	3.792	3.862
GE107sw	0.812	0.916	0.513	1.260	0.750	0.670	0.104	0.276	0.643	0.133	0.053
GE108sw	0.667	0.671	1.200	1.430	1.260	1.980	0.004	0.353	0.226	0.056	0.776
GE109sw	0.054	0.073	0.471	2.750	3.430	3.340	0.019	2.683	2.260	2.940	2.850
GE110sw	0.008	0.028	0.007	2.560	3.420	3.110	0.020	3.003	2.533	3.393	3.083

mean cell density w/o "outliers"

3.39
 3.21
 2.99
 4.08
 4.01
 3.33
 4.06
 0.63
 0.78
 2.68
 out. for 3.00

CELL DENSITY ESTIMATED BY: a.) DIRECT COUNT IN cells/ml
 (CIRCLE ONE) b.) FLUOROMETRICALLY

○ = impaired growth, cap fit too tightly to flask, poor gaseous exchange

EPA, ESD, TES
AUG. 1990

Coproporphyrin std 11/16/94 = 1.30

[illegible]

- * filled through glass wool
- ** lid sealed - poor gaseous exchange

STUDY: GE FILTERED SAMPLES
 LOCATION: East Flat Rock, N.C.
 STARTING DATE/TIME 11/16/94
 ENDING DATE/TIME 11/20/94
 ANALYST J. Mandusky

RELATIVE ALGAL GROWTH = $T - B - IN$

WHERE:

B = MEAN CELL DENSITY FOR 96 HOUR BLANK FLASK.

T = MEAN CELL DENSITY FOR TEST FLASK AFTER 96 H.

IN = MEAN INITIAL CELL DENSITY AT START OF TEST

INITIAL CELL DENSITY (IN) = (INITIAL READING REP #1) - (INITIAL BLANK)

SAMPLE ID #	INITIAL BLANK	INITIAL READING REP #1	96 HR BLANK	96 HR REP #1 READING	96 HR REP #2 READING	96 HR REP #3 READING	INITIAL CELL DENSITY	MEAN CELL DENSITY (C or T)	RELATIVE GROWTH REP #1	RELATIVE GROWTH REP #2	RELATIVE GROWTH REP #3
CONTRO	0.000	0.022	0.000	1.330	5.300	4.970	0.022	3.845	1.308	5.278	4.948
Cntrl filt'd	0.000	0.021	0.000	4.690	1.160	4.330	0.021	3.372	4.669	1.139	4.309
107	1.140	1.160	4.640	5.580	6.590	5.870	0.020	1.353	0.920	1.930	1.210
107 filt'd	0.297	0.330	2.260	3.980	4.400	4.760	0.033	2.087	1.687	2.107	2.467
108	0.840	0.911	4.200	3.560	6.110	4.560	0.071	0.472	-0.711	1.839	0.289
108 filt'd	0.322	0.341	3.810	3.380	6.830	4.580	0.019	1.101	0.449	3.001	0.751

mean cell density
 5.11
 4.49
~~2.52~~ 1.57
 2.09
 1.84
 3.00

"outliers"

CELL DENSITY ESTIMATED BY: a.) DIRECT COUNT IN cells/ml
 (CIRCLE ONE) b.) FLUOROMETRICALLY

1042

SEED GERMINATION DATA

Industry/Study: General Electric
Location: Hendersonville N.C.
Species: Lettuce Seed

Analyst: R. Lewis, M. Weirich
Start (Date-Time): 11-10-94 5:00pm
Stop (Date-Time): _____

Sample ID # or Concentration	Rep. #	# Seeds Planted	# Seeds Germinated	Proportion Germinated	Remarks
Control Sand	1	15	11	.73	.80 = average
	2	15	11	.73	
	3	15	14	.93	
	4	15	12	.80	
GE 10150	1	15	5	.33	.26
	2	15	4	.27	
	3	15	5	.33	
	4	15	2	.13	
GE 10250	1	15	14	.93	.86
	2	15	14	.93	
	3	15	13	.87	
	4	15	11	.73	
GE 10350	1	15	11	.73	.88
	2	15	14	.93	
	3	15	13	.87	
	4	15	15	1.00	
GE 10450	1	15	9*	.60	.63
	2	15	9*	.60	
	3	15	12	.80	
	4	15	8	.53	
GE 10550	1	15	10	.67	.65
	2	15	9	.60	
	3	15	8	.53	
	4	15	12	.80	

Figure XVIII.1

* cover sand excessively wet

2082

SEED GERMINATION DATA

Industry/Study: General Electric
Location: Hendersonville NC
Species: Lettuce Seed

Analyst: R. Lewis, M. Weirich
Start (Date-Time): 11-10-94 5:00pm
Stop (Date-Time): _____

Sample ID # or Concentration	Rep. #	# Seeds Planted	# Seeds Germinated	Proportion Germinated	Remarks
GE 106 SD	1	15	12	.80	average = .86
	2	15	14	.93	
	3	15	13	.86	
	4	15	13	.86	
GE 107 SD	1	15	10	.66	.73
	2	15	15	1.00	
	3	15	11	.73	
	4	15	8	.53	
GE 108 SD	1	15	13	.86	.90
	2	15	14	.93	
	3	15	13	.86	
	4	15	14	.93	
GE 109 SD	1	15	12	.80	.83
	2	15	12	.80	
	3	15	13	.86	
	4	15	13	.86	
GE 110 SD	1	15	9	.60	.49
	2	15	7	.47	
	3	15	6	.40	
	4	15	7	.47	
	1				
	2				
	3				
	4				

Figure XVIII.1

1082

Microtox Data Sheet

Study: GEDate: 11-10-94Location: Hendersonville, NCAnalyst: J. Maudsley

Sample	Reading Time	Cuvette Number				
		1	2	3	4	5
GE phenol	Initial	94	101	93	85	93
	5 minute	76	61	44	29	20
	15 minute	65	57	42	27	20
DMW Control	Initial	87	85	87	86	86
	5 minute	70	70	72	77	76
	15 minute	62	61	65	68	66
* GE 101SW	Initial	85	85	* 87	88	92
	5 minute	69	70	* 72	72	78
	15 minute	61	62	63	65	71
GE 102SW	Initial	93	84	104	93	97
	5 minute	74	69	81	74	81
	15 minute	71	65	75	68	75
GE 103SW	Initial	97	103	94	102	95
	5 minute	74	79	73	81	79
	15 minute	69	75	68	75	76
GE 104SW	Initial	103	96	99	101	96
	5 minute	81	75	78	81	79
	15 minute	77	70	73	77	77
	Initial					
	5 minute					
	15 minute					

2082

Microtox Data Sheet

Study: GEDate: 11-10-94Location: Hendersonville NCAnalyst: J. Maudsley

Sample	Reading Time	Cuvette Number				
		1	2	3	4	5
GE 105 SW	Initial	94	97	93	89	83
	5 minute	73	76	73	72	70
	15 minute	69	73	70	69	67
GE 106 SW	Initial	89	88	(59)	85	(51)
	5 minute	71	71	(42)	70	(43)
	15 minute	66	68	(40)	66	(41)
GE 107 SW	Initial	83	82	88	82	80
	5 minute	67	72	73	68	70
	15 minute	64	69	69	67	69
GE 108 SW	Initial	94	86	85	87	84
	5 minute	76	70	70	73	70
	15 minute	73	67	68	72	69
GE 109 SW	Initial	85	84	84	81	83
	5 minute	72	70	71	69	73
	15 minute	67	68	70	68	74
GE 110 SW	Initial	88	86	87	83	83
	5 minute	72	75	74	75	76
	15 minute	72	74	74	75	76
	Initial					
	5 minute					
	15 minute					

Microtox Data Sheet

Study: GE sediment (pore water) Date: 11/29/94Location: East Flat Rock N.C. Analyst: S. Mandley

Sample	Reading Time	Cuvette Number				
		1	2	3	4	5
phenol std	Initial	91	89	94	93	82
	5 minute	78	56	47	29	21
	15 minute	70	54	46	28	21
DI control	Initial	81	82	79	80	86
	5 minute	70	69	62	64	68
	15 minute	58	58	58	58	58
GE 101 SD pore water	Initial	80	79	80	74	82
	5 minute	68	65	63	59	57
	15 minute	59	55	53	49	47
GE 102 SD pore water	Initial	85	90	85	98	88
	5 minute	71	74	73	79	74
	15 minute	63	65	61	72	67
GE 103 SD pore water	Initial	75	87	91	92	90
	5 minute	61	68	74	77	75
	15 minute	54	63	68	70	69
GE 104 SD pore water	Initial	94	89	91	89	102
	5 minute	78	71	69	63	56
	15 minute	68	65	64	61	56
GE 105 SD pore water	Initial	87	90	96	92	93
	5 minute	75	78	82	83	83
	15 minute	68	71	75	76	78

Microtox Data Sheet

Study: GE sediment (pure water)Date: 11/29/94Location: East Flat Rock, N.C.Analyst: J. Maudsley

Sample	Reading Time	Cuvette Number				
		1	2	3	4	5
GE 106 SD pure water	Initial	78	100	96	97	97
	5 minute	70	79	76	74	80
	15 minute	67	74	69	69	75
GE 107 SD pure water	Initial	93	87	83	69	87
	5 minute	76	73	70	62	72
	15 minute	64	64	65	61	63
GE 108 SD pure water	Initial	86	86	90	91	86
	5 minute	71	70	72	69	58
	15 minute	64 ⁶⁶	64 ⁶²	65 ⁶⁴	65 ⁶⁰	63 ⁵³
GE 109 SD pure water	Initial	76	91	88	86	85
	5 minute	63	76	74	76	69
	15 minute	60	66	66	66	59
GE 110 SD pure water	Initial	93	93	94	89	79
	5 minute	76	80	81	78	69
	15 minute	77	81	81	78	70
Rerun * GE 108 SD	Initial	101	99	92	98	80
	5 minute	87	85	78	80	55
	15 minute	85	84	75	79	53
phenol std *	Initial	88	92	99	91	97
	5 minute	73	64	53	35	25
	15 minute	74	66	55	36	26

filename re do GE 08

filename phen 2 GE

APPENDIX C

Rapid Bioassessment Field Data Sheets

Summary of Fish Collections

11/8/94

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:

Forest Field/Pasture Agricultural - Residential Commercial Industrial Other Local Watershed Erosion: None Moderate Heavy Local Watershed NPS Pollution: No evidence Some Potential Sources Obvious Sources Estimated Stream Width 1 m Estimated Stream Depth: Shallow Deep Pool mHigh Water Mark 0.3 m Velocity Dam Present: Yes No Channelized: Yes No Canopy Cover: Open Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic None Other Sediment Oils: Absent Slight Moderate Profuse Sediment Deposits: Sludge Sawdust Paper Fiber Sand Relict Shells Other sand siltAre the undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	
Cobble	64-256-mm (2.5-10 in.)	
Gravel	1-64-mm (0.1-2.5 in.)	05
Sand	0.06-2.00-mm (gritty)	75
Silt	.006-.06-mm	20
Clay	<.006-mm (clay)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Weed, Coarse Plant Materials (CPOM)	10
Muck-Mud	Black, Very Fine Organic (FPOM)	90
Marl	Gray, Shell Fragments	

WATER QUALITY

Temperature 12.72 °C Dissolved Oxygen 8.52 mg/L pH 6.47 Conductivity 25.2 Other Instrument(s) Used Hydrolab S-cetStream Type: Coldwater Warmwater Water Odors: Normal Sewage Petroleum Chemical None Other Water Surface Oils: Slick Sheen Globes Flecks NoneTurbidity: Clear Slightly Turbid Turbid Opaque Water Color

WEATHER CONDITIONS

sunny, clear 70°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body Bat Fork Creek Station # 101

Date 11/8/94 Investigator Meyer/Maudsley

Comments _____

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>50% rubble, gravel, submerged logs, undercut banks, or other stable habitat 18-20	30-50% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 10 8-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 18-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 8-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS	Cold; > 2 cfs Warm; > 6 cfs 10-20	1-2 cfs 2-6 cfs 11-15	0.5-1 cfs 1-2 cfs 6-10	0.5 cfs 1 cfs 0-5
OR >5 CFS	Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitats all present 18-20	3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 11-15	2 of 4 habitats present. (Missing riffles/runs get lower score.) 10 8-10	Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 15 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/ silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 12 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 8-11	30-50% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFPLE RATIO**	5-7. Variety of habitat. Deep riffles and pools. 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 8-11	15-25. Occasional riffle or bend. Bottom provide some habitat 7 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 10 9-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 8-8	Moderately unstable. Moderate erosion and side slopes to 60%. High erosion during high flow. 3-5	Unstable. Many eroded areas. Side slopes >60%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 10 9-10	50-79% covered by vegetation, gravel or larger material. 8-8	25-49% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 8-10	Dominant vegetation is of tree form. 7 8-8	Dominant vegetation is grass or forbes. 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	65	7	27	

SCORE 99

GE 101

11/8/94

Rapid Bioassessment Protocol I

Biosurvey Field Data Sheet

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton	0	(1)	2	3	4	Slimes	(0)	1	2	3	4
Filamentous Algae	(0)	1	2	3	4	Macroinvertebrates	0	1	2	3	(4)
Macrophytes	(0)	1	2	3	4	Fish	0	(1)	2	3	4 ?

0 = Absent/Not Observed

1 = Rare

2 = Common

3 = Abundant

4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	1	Chironomidae	C
Hydrozoa	Zygoptera	C	Plecoptera	A
Platyhelminthes	Hemiptera		Ephemeroptera	A
Turbellaria	Coleoptera	R	Trichoptera	A
Hirudinea	Lepidoptera		Other	
Oligochaeta	Stalidae			
Isopoda	Corydalidae			
Amphipoda	Tipulidae	C		
Decapoda	Empididae			
Gastropoda	Simuliidae	C		
Bivalvia	Tabanidae			
	Culicidae			

Rare < 3

Common 3-9

Abundant > 10

Dominant > 50 (Estimate)

Observations

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:

Forest ☒ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industrial ☐ Other ☐Local Watershed Erosion: None ☐ Moderate ☒ Heavy ☐Local Watershed NPS Pollution: No evidence ☐ None Potential Sources ☒ Obvious Sources ☐ old farm site w/ barns & storage shedEstimated Stream Width 1 m Estimated Stream Depth: Riffle 0.1 m Run 0.15 m Pool 0.2 mHigh Water Mark 0.5 m Velocity ☐ Dam Present: Yes ☐ No ☒ Channelized: Yes ☐ No ☒Canopy Cover: Open ☐ Partly Open ☐ Partly Shaded ☐ Shaded ☒

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ None ☒ Other ☐Sediment Oils: Absent ☒ Slight ☐ Moderate ☐ Profuse ☐Sediment Deposits: Sludge ☐ Sawdust ☐ Paper Fiber ☐ Sand ☒ Shell & Shells ☐ Other ☐Are the undersides of stones which are not deeply embedded black? Yes ☒ No ☐

Inorganic Substrate Components

Organic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	40
Cobble	64-256-mm (2.5-10 in.)	30
Gravel	2-64-mm (0.1-2.5 in.)	20
Sand	0.06-2.00-mm (gritty)	10
Silt	.004-.06-mm	
Clay	<.004-mm (silty)	

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	20
Muck-Mud	Black, Very Fine Organic (FPOM)	80
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature ☐ C Dissolved Oxygen ☐ pH ☐ Conductivity ☐ Other ☐Instrument(s) Used ☐Stream Type: Coldwater ☒ Warmwater ☐Water Odors: Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ None ☒ Other ☐Water Surface Oils: Slick ☐ Sheen ☐ Globes ☐ Flecks ☐ None ☒Turbidity: Clear ☒ Slightly Turbid ☐ Turbid ☐ Opaque ☐ Water Color ☐

WEATHER CONDITIONS

Sunny warm 65°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body BAT FORT CREEK Station # 102

Date 11/8/94 Investigator Meyer / Mandley

Comments _____

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>50% rubble, gravel, submerged logs, undercut banks, or other stable habitat 20 18-20	30-50% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 6-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 20 18-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 6-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS	Cold: > 2 cfs Warm: > 6 cfs 10-20	1-2 cfs 2-6 cfs 11-15	0.5-1 cfs 1-2 cfs 6-10	0.5 cfs 1 cfs 0-5
OR > 5 CFS	Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.3m); fast (>0.3m/s) deep; fast, shallow habitats all present 18-20	3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 11-15	2 of 4 habitats present. (Missing riffles/runs get lower score.) 10 8-10	Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 13 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 15 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 8-11	30-50% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFFLLE RATIO**	5-7. Variety of habitat. Deep riffles and pools. 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 11 8-11	15-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 9 9-10	Moderately stable. Infrequent erosion mostly healed over. Side slopes to 40%. 8 8-8	Moderately unstable. Moderate erosion and side slopes to 80%. High erosion during high flow. 3-5	Unstable. Many eroded areas. Side slopes >80%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 9 9-10	50-79% covered by vegetation, gravel or larger material. 8-8	25-49% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 8 8-8	Dominant vegetation is grass or forbes. 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	77	27	10	
SCORE	114			

Rapid Bioassessment Protocol I

GE 102

Biosurvey Field Data Sheet

GE 102

11/8/94

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton	0	1	2	3	4
Filamentous Algae	0	1	2	3	4
Macrophytes	0	1	2	3	4

Slimes	0	1	2	3	4
Macroinvertebrates	0	1	2	3	4
Fish	0	1	2	3	4

0 = Absent/Not Observed

1 = Rare

2 = Common

3 = Abundant

4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	C	Chironomidae	C
Hydrozoa	Zygoptera		Plecoptera	C
Platyhelminthes	Hemiptera	R	Ephemeroptera	A
Turbellaria	Coleoptera	R	Trichoptera	A
Hirudinea	Lepidoptera		Other	
Oligochaeta	Stelidae			
Isopoda	Corydalidae			
Amphipoda	Tipulidae	C		
Decapoda	Empididae			
Gastropoda	Simuliidae	C		
Blivalvia	Tabanidae			
	Culicidae			

Rare < 3

Common 3-9

Abundant > 10

Dominant > 50 (Estimate)

Observations

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Uses:

Forest Field/Pasture Agriculture Commercial Industrial OtherLocal Watershed Erosion: None Moderate HeavyLocal Watershed NPS Pollution: No evidence Some Potential Sources Obvious SourcesEstimated Stream Width 2 m Estimated Stream Depth: Riffle 0.1 m Run 0.2 m Pool 0.3 mHigh Water Mark 2 m Velocity Dam Present: Yes No ☒ Channelized: Yes No ☒Canopy Cover: Open Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odor: Normal Sewage Petroleum Chemical Anaerobic None Other Sediment Oils: Absent Slight Moderate ProfuseSediment Deposits: Sludge Sawdust Paper Fiber Sand Shell Shells Other Are the undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	10
Cobble	64-256-mm (2.5-10 in.)	30
Gravel	2-64-mm (0.1-2.5 in.)	20
Sand	0.06-2.00-mm (gritty)	40
Silt	.004-.06-mm	
Clay	<.004-mm (slick)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	20
Muck-Mud	Black, Very Fine Organic (FPOM)	80
Marl	Gray, Shell Fragments	

WATER QUALITY

Temperature 9.9 °C Dissolved Oxygen 7.69 pH 6.21 Conductivity 24.9 Other Instrument(s) Used Hydrolab ScoutStream Type: Coldwater WarmwaterWater Odors: Normal Sewage Petroleum Chemical None Other Water Surface Oils: Slick Sheen Globe Flecks NoneTurbidity: Clear Slightly Turbid Turbid Opaque Water Color WEATHER CONDITIONS Sunny warm 65°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body BAT Fork Creek Station # 103
 Date 11/8/94 Investigator Mayer / Mandley
 Comments woodland stream

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>50% rubble, gravel, submerged logs, undercut banks, or other stable habitat 20 16-20	30-50% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 8-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 20 16-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 8-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS OR >5 CFS	Cold; > 2 cfs Warm; > 5 cfs 10-20 Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitats all present 16-20	1-2 cfs 2-5 cfs 11-15 3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 15 11-15	0.5-1 cfs 1-2 cfs 6-10 2 of 4 habitats present. (Missing riffles/runs get lower score.) 8-10	0.5 cfs 1 cfs 0-5 Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 14 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 14 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 8-11	30-50% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFPLE RATIO**	6-7. Variety of habitat. Deep riffles and pools. 15 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 8-11	16-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 9-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 6-8	Moderately unstable. Moderate erosion and side slopes to 80%. High erosion during high flow. 5 3-5	Unstable. Many eroded areas. Side slopes >80%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 9-10	50-79% covered by vegetation, gravel or larger material. 8 6-8	25-49% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 8 6-8	Dominant vegetation is grass or forbes. 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	33	31	5	
SCORE	119			

Rapid Bioassessment Protocol I

Biosurvey Field Data Sheet

GE 103

11/8/94

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton	0	1	2	3	4	Slimes	0	1	2	3	4
Filamentous Algae	0	1	2	3	4	Macroinvertebrates	0	1	2	3	4
Macrophytes	0	1	2	3	4	Fish	0	1	2	3	4

0 = Absent/Not Observed

1 = Rare

2 = Common

3 = Abundant

4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	R	Chironomidae	A
Hydrozoa	Zygoptera		Plecoptera	C
Platyhelminthes	Hemiptera		Ephemeroptera	
Turbellaria	Coleoptera	C	Trichoptera	C
Hirudinea	Lepidoptera		Other	salamanders C
Oligochaeta	Stalidae			
Isopoda	Corydalidae			
Amphipoda	Tipulidae	R		
Decapoda	Empididae			
Gastropoda	Simuliidae	A		
Bivalvia	Tetanulidae			
	Culicidae	R		

Rare < 3

Common 3-9

Abundant > 10

Dominant > 50 (Estimate)

Observations

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

6E station 04
11/8/94

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURE

Predominant Surrounding Land Use:

Forest - Field/Pasture Agricultural Residential Commercial Industrial Other cattle presentLocal Watershed Erosion: None Moderate HeavyLocal Watershed NPS Pollution: No evidence Some Potential Sources Obvious Sources enrichment from cattleEstimated Stream Width 1 m Estimated Stream Depth: Riffle 0.1 m Run 0.2 m Pool 0.3 mHigh Water Mark 1 m Velocity _____ Dam Present: Yes _____ No ☒ Channelised: Yes _____ No ☒Canopy Cover: Open Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic None Other _____Sediment Oils: Absent Slight Moderate ProfuseSediment Deposits: Sludge Sawdust Paper Fiber Sand Shell Shells Other _____Are the undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	
Cobble	64-256-mm (2.5-10 in.)	30
Gravel	2-64-mm (0.1-2.5 in.)	30
Sand	0.06-2.00-mm (gritty)	40
Silt	.004-.06-mm	
Clay	<.006-mm (silty)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	> 80
Muck-Mud	Black, Very Fine Organic (FPOM)	20
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature 9.30 °C Dissolved Oxygen 8.47 pH 6.29 Conductivity 28.1 Other _____

Instrument(s) Used _____

Stream Type: Coldwater WarmwaterWater Odors: Normal Sewage Petroleum Chemical None Other _____Water Surface Oils: Slick Sheen Globe Flecks NoneTurbidity: Clear Slightly Turbid Turbid Opaque Water Color _____

WEATHER CONDITIONS

sunny cool 45°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body BAT Fork Creek Station # 104
 Date 11/8/94 Investigator Meyer / Mandley
 Comments Cow pasture

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>80% rubble, gravel, submerged logs, undercut banks, or other stable habitat 19 18-20	30-80% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 6-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 20 18-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 6-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS OR >5 CFS	Cold: > 2 cfs Warm: > 6 cfs 10-20 Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitats all present 18-20	1-2 cfs 2-6 cfs 11-15 3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 15 11-15	0.6-1 cfs 1-2 cfs 6-10 2 of 4 habitats present. (Missing riffles/runs get lower score.) 6-10	0.5 cfs 1 cfs 0-5 Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 14 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 14 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools 8-11	30-80% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFFL RATIO**	5-7. Variety of habitat. Deep riffles and pools. 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 11 8-11	15-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Fla water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 9-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 8 6-8	Moderately unstable. Moderate erosion and side slopes to 60%. High erosion during high flow. 3-5	Unstable. Many erode areas. Side slopes >60%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 9 9-10	50-70% covered by vegetation, gravel or larger material. 6-8	25-40% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 5 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, mine tailings. 0-2
COLUMN TOTALS	76	34	5	
SCORE	115			

GE 104
11/8/94

Rapid Bioassessment Protocol I

Biosurvey Field Data Sheet

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton 0 1 2 3 4
Filamentous Algae 0 1 2 3 4
Macrophytes 0 1 2 3 4

Slimes 0 1 2 3 4
Macroinvertebrates 0 1 2 3 4
Fish 0 1 2 3 4

0 = Absent/Not Observed

1 = Rare

2 = Common

3 = Abundant

4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	Chironomidae <u>A</u>
Hydrozoa	Zygoptera <u>A</u>	Plecoptera <u>C</u>
Platyhelminthes	Hemiptera	Ephemeroptera <u>C</u>
Turbellaria	Coleoptera <u>R</u>	Trichoptera <u>D</u>
Hirudinea	Lepidoptera	Other
Oligochaeta <u>R</u>	Stellidae	
Isopoda <u>C</u>	Corydalidae	
Amphipoda	Tipulidae <u>R</u>	
Decapoda	Empididae	
Gastropoda <u>R</u>	Simuliidae <u>A</u>	
Bivalvia	Tabanidae	
	Culicidae <u>R</u>	

Rare < 3

Common 3-9

Abundant > 10

Dominant > 50 (Estimate)

Observations

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

65 Station 10-100
11/5/94

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:

Forest - Field/Pasture Agricultural - Residential Commercial Industrial Other _____Local Watershed Erosion: None Moderate HeavyLocal Watershed NPS Pollution: No evidence Some Potential Sources Obvious SourcesEstimated Stream Width 0.9 m Estimated Stream Depth: Riffle 0.1 m Run 2.2 m Pool 0.3 mHigh Water Mark 0.5 m Velocity _____ Dam Present: Yes _____ No ☒ Channelized: Yes _____ No ☒Canopy Cover: Open Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic None Other _____Sediment Oils: Absent Slight Moderate PetroleumSediment Deposits: Sludge Sawdust Paper Fiber Sand Shell Shells Other _____Are the undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	
Cobble	64-256-mm (2.5-10 in.)	10
Gravel	2-64-mm (0.1-2.5 in.)	70
Sand	0.06-2.00-mm (gritty)	20
Silt	.004-.06-mm	
Clay	<.004-mm (slick)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, _____	10
	Coarse Plant _____	90
Muck-Mud	Materials (FROM) _____	
	Black, Very Fine _____	
	Organic (FROM) _____	
Marl	Grey, Shell _____	
	Fragments _____	

WATER QUALITY

Temperature 10.1 °C Dissolved Oxygen 8.81 pH 6.31 Conductivity 43.2 Other _____

Instrument(s) Used _____

Stream Type: Coldwater WarmwaterWater Odors: Normal Sewage Petroleum Chemical None Other _____Water Surface Oils: Slick Sheen Globes Flecks None sheen in one small spot along bankTurbidity: Clear Slightly Turbid Turbid Opaque Water Color _____

WEATHER CONDITIONS

Sunny cold 35°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body BAT FURK Creek Station # 105
 Date 4/8/94 Investigator W. J. J. / Maudley
 Comments _____

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>80% rubble, gravel, submerged logs, undercut banks, or other stable habitat 20 16-20	30-80% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 8-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 16-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 8-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS OR >5 CFS	Cold: > 2 cfs Warm: > 5 cfs 10-20 Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitats all present 16-20	1-2 cfs 2-5 cfs 11-15 3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 11-15	0.8-1 cfs 1-2 cfs 6-10 2 of 4 habitats present. (Missing riffles/runs get lower score.) 8-10	0.5 cfs 1 cfs 0-5 Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 14 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 15 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 8-11	30-80% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFPLE RATIO**	8-7. Variety of habitat. Deep riffles and pools. 15 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 8-11	16-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 9-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 8	Moderately unstable. Moderate erosion and side slopes to 60%. High erosion during high flow. 3-5	Unstable. Many erode areas. Side slopes >60%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 10 9-10	50-79% covered by vegetation, gravel or larger material. 8-8	25-49% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 9 9-10	Dominant vegetation is of tree form. 8-8	Dominant vegetation is grass or forbes. 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	102	23		
SCORE	125			

Biosurvey Field Data Sheet

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton	0	①	2	3	4	Slimes	0	①	2	3	4
Filamentous Algae	①	1	2	3	4	Macroinvertebrates	0	1	2	③	4
Macrophytes	①	1	2	3	4	Fish	0	1	②	3	4

0 = Absent/Not Observed

1 = Rare

2 = Common

3 = Abundant

4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	R	Chironomidae	C
Hydrozoa	Zygoptera	C	Plecoptera	A
Platyhelminthes	Hemiptera		Ephemeroptera	C
Turbellaria	Coleoptera	C	Trichoptera	A
Hirudinea	Lepidoptera		Other	
Oligochaeta	Slutidae			
Isopoda	Corydalidae	R		
Amphipoda	Tipulidae	C		
Decapoda	Empididae			
Gastropoda	Simuliidae	R		
Bivalvia	Tabanidae			
	Culicidae	R		

Rare < 3

Common 3-9

Abundant > 10

Dominant > 50 (Estimate)

Observations

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

11/7/94

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:

Forest ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industrial ☒ Other ☐Local Watershed Erosion: None ☐ Moderate ☒ Heavy ☐Local Watershed NPS Pollution: No evidence ☐ Some Potential Sources ☒ Obvious Sources ☐Estimated Stream Width 2 m Estimated Stream Depth: Riffle 0 m Run 1 m Pool 1 mHigh Water Mark 1 m Velocity Dam Present: Yes ☐ No ☒ Channelized: Yes ☐ No ☐Canopy Cover: Open ☐ Partly Open ☒ Partly Shaded ☐ Shaded ☐

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal ☒ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ None ☐ Other ☐Sediment Oils: Absent ☒ Slight ☐ Moderate ☐ Profuse ☐Sediment Deposits: Sludge ☐ Sawdust ☐ Paper Fiber ☐ Sand ☒ Shell & Shells ☐ Other ☐Are the undersides of stones which are not deeply embedded black? Yes ☐ No ☒

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	
Cobble	64-256-mm (2.5-10 in.)	10
Gravel	16-64-mm (0.1-2.5 in.)	50
Sand	0.06-2.00-mm (gritty)	40
Silt	.004-.06-mm	
Clay	<.004-mm (clay)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	40
Rich-Mud	Black, Very Fine Organic (FPOM)	60
Marl	Gray, Shell Fragments	

WATER QUALITY

Temperature 11.2°C Dissolved Oxygen 9.53 pH 6.57 Conductivity 61.2 Other ☐Instrument(s) Used ☐Stream Type: Coldwater ☐ Warmwater ☐Water Odors: Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ None ☒ Other ☐Water Surface Oils: Slick ☐ Sheen ☐ Globes ☐ Flecks ☐ None ☒Turbidity: Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐ Water Color ☐

WEATHER CONDITIONS

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body Bad Fork Creek Station # 106
 Date 11/7/94 Investigator Meyer / Handley
 Comments _____

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>50% rubble, gravel, submerged logs, undercut banks, or other stable habitat 16-20	30-50% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 10 8-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 16-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 15 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 8-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS OR >5 CFS	Cold: > 2 cfs Warm: > 5 cfs 10-20	1-2 cfs 2-5 cfs 11-15	0.5-1 cfs 1-2 cfs 6-10	0.5 cfs 1 cfs 0-5
	Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitats all present 18 16-20	3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 11-15	2 of 4 habitats present. (Missing riffles/runs get lower score.) 6-10	Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 11 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 8-11	30-50% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 7 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFPLE RATIO**	5-7. Variety of habitat. Deep riffles and pools. 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 10 8-11	15-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 9 8-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 8-8	Moderately unstable. Moderate erosion and side slopes to 60%. High erosion during high flow. 5 3-5	Unstable. Many eroded areas. Side slopes >60%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobble. 9 8-10	50-79% covered by vegetation, gravel or larger material. 8-8	25-49% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 9 8-10	Dominant vegetation is of tree form. 8-8	Dominant vegetation is grass or forbes. 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	94	36	36	22
SCORE	94			

Rapid Bioassessment Protocol I

Biosurvey Field Data Sheet

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton	0	1	2	3	4	Slimes	0	1	2	3	4
Filamentous Algae	0	1	2	3	4	Macroinvertebrates	0	1	2	3	4
Macrophytes	0	1	2	3	4	Fish	0	1	2	3	4

0 = Absent/Not Observed 1 = Rare 2 = Common 3 = Abundant 4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	C	Chironomidae	R
Hydrozoa	Zygoptera	A	Plecoptera	C
Platyhelminthes	Hemiptera	R	Ephemeroptera	R
Turbellaria	Coleoptera	R	Trichoptera	C
Hirudinea	Lepidoptera		Other	
Oligochaeta	Stolidae			
Isopoda	Corydalidae			
Amphipoda	Tipulidae	R		
Decapoda	Empididae			
Gastropoda	Simuliidae			
Bivalvia	Tabanidae			
	Culicidae			
Rare < 3	Common 3-9	Abundant > 10	Dominant > 50 (Estimate)	

Observations

Didn't preserve all biotopes observed

Figure G.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Uses:

Forest ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industrial ☒ Other ☐Local Watershed Erosion: None ☒ Moderate ☐ Heavy ☐Local Watershed WFS Pollution: No evidence ☐ Some Potential Sources ☒ Obvious Sources ☐Estimated Stream Width 2 m Estimated Stream Depth: Riffle 0.1 m Run 0.2 m Pool 0.3 mHigh Water Mark 1 m Velocity ☐ Den Present: Yes ☐ No ☒ Channelized: Yes ☐ No ☒Canopy Cover: Open ☐ Partly Open ☒ Partly Shaded ☐ Shaded ☐

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☐ Anaerobic ☐ None ☐ Other ☐Sediment Oils: Absent ☒ Slight ☐ Moderate ☐ Profuse ☐Sediment Deposits: Sludge ☐ Sawdust ☐ Paper Fiber ☐ Sand ☒ Shell & Shells ☐ Other ☐Are the undersides of stones which are not deeply embedded black? Yes ☐ No ☐

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	5
Cobble	64-256-mm (2.5-10 in.)	5
Gravel	2-64-mm (0.1-2.5 in.)	80
Sand	0.06-2.00-mm (gritty)	10
Silt	.004-.06-mm	
Clay	<.004-mm (slick)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	30
Muck-Mud	Black, Very Fine Organic (FPOM)	70
Marl	Gray, Shell Fragments	

WATER QUALITY

Temperature 9.17 °C Dissolved Oxygen 13.72 mg/L pH 7.19 Conductivity 442 µmhos/cm Other ☐Instrument(s) Used Hydrolab ScoutStream Type: Coldwater ☒ Warmwater ☐Water Odors: Normal ☒ Sewage ☐ Petroleum ☐ Chemical ☐ None ☐ Other ☐Water Surface Oils: Slick ☒ Sheen ☐ Globes ☐ Flecks ☐ None ☒Turbidity: Clear ☐ Slightly Turbid ☒ Turbid ☐ Opaque ☐ Water Color slightly greenishWEATHER CONDITIONS sunny warm 70°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body Bird Fork Creek Station # 107
 Date 11/7/74 Investigator Meyer/Mundley
 Comments greenish tinge due to algae

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>50% rubble, gravel, submerged logs, undercut banks, or other stable habitat 18 18-20	30-50% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 6-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 17 18-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 6-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS	Cold; > 2 cfs Warm; > 6 cfs 10-20	1-2 cfs 2-6 cfs 11-15	0.5-1 cfs 1-2 cfs 6-10	0.5 cfs 1 cfs 0-5
OR >5 CFS	Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitat all present 18-20	3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 14 11-15	2 of 4 habitats present. (Missing riffles/runs get lower score.) 6-10	Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 11 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 11 8-11	30-50% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFFLE RATIO**	5-7. Variety of habitat. Deep riffles and pools. 14 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 8-11	15-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 9-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 8 8-8	Moderately unstable. Moderate erosion and side slopes to 60%. High erosion during high flow. 3-5	Unstable. Many eroded areas. Side slopes >60%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 9 9-10	50-79% covered by vegetation, gravel or larger material. 8-8	25-49% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 9 9-10	Dominant vegetation is of tree form. 8-8	Dominant vegetation is grass or forbes. 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	9 67	44		
SCORE	111			

Rapid Bioassessment Protocol I

GE 107

11/7/94

Biosurvey Field Data Sheet

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton	0	1	2	3	4
Filamentous Algae	0	1	2	3	4
Macrophytes	0	1	2	3	4

Slimes	0	1	2	3	4
Macroinvertebrates	0	1	2	3	4
Fish	0	1	2	3	4

0 = Absent/Not Observed

1 = Rare

2 = Common

3 = Abundant

4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	C	Chironomidae	C
Hydrozoa	Zygoptera	A	Plecoptera	
Platyhelminthes	Hemiptera		Ephemeroptera	R
Turbellaria	Coleoptera		Trichoptera	R
Hirudinea	Lepidoptera		Other	
Oligochaeta	Stalidae			
Isopoda	Corydalidae			
Amphipoda	Tipulidae	R		
Decapoda	Embiidae			
Gastropoda	Simuliidae			
Bivalvia	Tabanidae			
	Culicidae			

Rare < 3

Common 3-9

Abundant > 10

Dominant > 50 (Estimate)

Observations

Water green. Source is discharge from pipe
 ~ 50 feet upstream of sampling station. Discharge
 derived from treatment pond on GE site

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use

Forest - Field/Pasture Agricultural Residential Commercial Industrial Other _____Local Watershed Erosion: None Moderate HeavyLocal Watershed NPS Pollution: No evidence Some Potential Sources Obvious SourcesEstimated Stream Width 2.1 m Estimated Stream Depth: Riffle 0.1 m Run 0.2 m Pool 0.3 mHigh Water Mark 1 m Velocity _____ Dam Present: Yes _____ No ✓ Channelized: Yes _____ No ✓Canopy Cover: Open Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic None Other _____Sediment Oils: Absent Slight Moderate ProfuseSediment Deposits: Sludge Sawdust Paper Fiber Sand Shell Shells Other _____Are the undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	
Cobble	64-256-mm (2.5-10 in.)	80%
Gravel	2-64-mm (0.1-2.5 in.)	10
Sand	0.06-2.00-mm (gritty)	10
Silt	.004-.06-mm	
Clay	<.004-mm (slick)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	20%
Muck-Mud	Black, Very Fine Organic (FPOM)	80%
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature 10.95°C Dissolved Oxygen 11.67 pH 6.61 Conductivity 349 Other _____Instrument(s) Used Hydrolab[®] Senter

Stream Type: Coldwater Warmwater

Water Odors: Normal Sewage Petroleum Chemical None Other _____Water Surface Oils: Slick Sheen Globes Flecks NoneTurbidity: Clear Slightly Turbid Turbid Opaque Water Color slightly greenishWEATHER CONDITIONS Sunny warm, 70°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body Bat Fork Creek Station # 108

Date 11/2/94 Investigator Meyer/Maudslayi

Comments _____

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>50% rubble, gravel, submerged logs, undercut banks, or other stable habitat 17 18-20	30-50% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 6-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 18 18-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 6-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS	Cold; > 2 cfs Warm; > 5 cfs 10-20	1-2 cfs 2-6 cfs 11-15	0.5-1 cfs 1-2 cfs 6-10	0.5 cfs 1 cfs 0-5
OR > 5 CFS	Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitats all present 18-20	3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 15 11-15	2 of 4 habitats present. (Missing riffles/runs get lower score.) 6-10	Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 13 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 15 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 8-11	30-50% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFPLE RATIO**	5-7. Variety of habitat. Deep riffles and pools. 15 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 8-11	15-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 10 9-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 8-8	Moderately unstable. Moderate erosion and side slopes to 60%. High erosion during high flow. 3-5	Unstable. Many eroded areas. Side slopes >60%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 10 9-10	50-79% covered by vegetation, gravel or larger material. 8-8	25-49% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 9 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	120	97	23	
SCORE	120			

6E 108
11/7/94

Rapid Bioassessment Protocol I

Biosurvey Field Data Sheet

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton	0	①	2	3	4	Slimes	①	1	2	3	4
Filamentous Algae	①	1	2	3	4	Macroinvertebrates	0	1	2	3	4
Macrophytes	①	1	2	3	4	Fish	0	1	2	③	4

0 = Absent/Not Observed 1 = Rare 2 = Common 3 = Abundant 4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	C	Chironomidae	A
Hydrozoa	Zygoptera	C	Plecoptera	
Platyhelminthes	Hemiptera		Ephemeroptera	
Turbellaria	Coleoptera		Trichoptera	
Hirudinea	Lepidoptera		Other	
Oligochaeta	Stellidae			
Isopoda	Corydalidae			
Amphipoda	Tipulidae	R		
Decapoda	Empididae			
Gastropoda	Simuliidae			
Bivalvia	Tabanidae			
	Culicidae	R		

Rare < 3 Common 3-9 Abundant > 10 Dominant > 50 (Estimate)

Observations

Water greenish and slightly turbid

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

GE Station 108

11/7/94

IMPAIRMENT ASSESSMENT SHEET

1. Detection of impairment (Impairment detected) No impairment detected
(Complete items 2-6) (Stop here)

2. Biological impairment indicator.

Benthic macroinvertebrates	Other aquatic communities
☒ absence of EPT taxa	☐ Periphyton
☐ dominance of tolerant groups	☐ filamentous
☐ low benthic abundance	☐ other
☐ low taxa richness	☐ Macrophytes
☐ other	☐ Slimes
	☐ Fish

3. Brief description of problem: prime habitat EPT taxa missing
Year and date of previous surveys: _____
Survey date available is: _____

4. Cause(s) (indicate major cause) organic enrichment toxicants flow
habitat limitations other _____

5. Estimated areal extent of problem (m^2) and length of stream reach affected (m), where applicable: _____

6. Suspected source(s) of problem:

☒ point source discharge (name, type of facility, location)
☐ construction site runoff
☐ combined sewer outfall
☐ silviculture runoff
☐ animal feedlot
☐ agricultural runoff
☐ urban runoff
☐ ground water
☐ other
☐ unknown

Briefly explain:

Habitat received an excellent score of 120. Of all 10 sampling stations only the background station (station 105) received a higher score (score 125). Yet station 108 lacked sensitive taxa (all EPT). Heavy algal growth (water is green) indicates enrichment.

Figure 6.1-2. Impairment Assessment Sheet for use with macroinvertebrate Rapid Bioassessment Protocols.

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:

Forest - Field/Pasture Agricultural - Residential Commercial Industrial Other _____Local Watershed Erosion: None Moderate HeavyLocal Watershed NPS Pollution: No evidence Some Potential Sources Obvious SourcesEstimated Stream Width 3.5 m Estimated Stream Depth: Riffle _____ m Run _____ m Pool _____ mHigh Water Mark 1 m Velocity _____ Dam Present: Yes _____ No _____ Channelized: Yes _____ No _____Canopy Cover: Open Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odors: Normal Sewage Petroleum Chemical Anaerobic None Other _____Sediment Oils: Absent Slight Moderate ProfuseSediment Deposits: Sludge Sawdust Paper Fiber Sand Shell Shells Other _____Are the undersides of stones which are not deeply embedded black? Yes No

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		10%
Boulder	>256-mm (10 in.)	10
Cobble	64-256-mm (2.5-10 in.)	60
Gravel	2-64-mm (0.1-2.5 in.)	10
Sand	0.06-2.00-mm (gritty)	10
Silt	.006-.06-mm	
Clay	<.006-mm (clay)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	50
Muck-Mud	Black, Very Fine Organic (FPOM)	50
Marl	Grey, Shell Fragments	

WATER QUALITY

Temperature _____ C Dissolved Oxygen _____ pH _____ Conductivity _____ Other _____

Instrument(s) Used Hydrolab ScoutStream Type: Coldwater WarmwaterWater Odors: Normal Sewage Petroleum Chemical None Other _____Water Surface Oils: Slick Sheen Globes Flecks NoneTurbidity: Clear Slightly Turbid Turbid Opaque Water Color _____

WEATHER CONDITIONS

sunny warm 65°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body Bat Fark Creek Station # 109
 Date 11/4/94 Investigator J Mandley
 Comments _____

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>50% rubble, gravel, submerged logs, undercut banks, or other stable habitat 16-20	30-50% rubble, gravel or other stable habitat. Adequate habitat. 14 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 6-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 18 16-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 6-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS OR >5 CFS	Cold; > 2 cfs Warm; > 6 cfs 10-20 Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitats all present 16-20	1-2 cfs 2-6 cfs 11-15 3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 15 11-15	0.5-1 cfs 1-2 cfs 6-10 2 of 4 habitats present. (Missing riffles/runs get lower score.) 8-10	0.5 cfs 1 cfs 0-5 Dominated by one velocity/depth category (usually pool). 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 14 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 14 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 8-11	30-50% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFPLE RATIOS**	6-7. Variety of habitat. Deep riffles and pools. 13 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 8-11	15-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 9 9-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 8-8	Moderately unstable. Moderate erosion and side slopes to 60%. High erosion during high flow. 3-5	Unstable. Many eroded areas. Side slopes >60%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 9-10	50-79% covered by vegetation, gravel or larger material. 8-8	25-49% covered by vegetation, gravel or larger material. 3-5	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 10 9-10	Dominant vegetation is of tree form. 8-8	Dominant vegetation is grass or forbes. 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	88	24		
SCORE	117			

109
11/7/94

Rapid Bioassessment Protocol I

Biosurvey Field Data Sheet

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton	0	1	2	3	4
Filamentous Algae	0	1	2	3	4
Macrophytes	0	1	2	3	4

Slimes	0	1	2	3	4
Macroinvertebrates	0	1	2	3	4
Fish	0	1	2	3	4

0 = Absent/Not Observed

1 = Rare

2 = Common

3 = Abundant

4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	R	Chironomidae	A
Hydrozoa	Zygoptera	C	Plecoptera	
Platyhelminthes	Hemiptera		Ephemeroptera	R
Turbellaria	Coleoptera		Trichoptera	R
Hirudines	Lepidoptera		Other	
Oligochaeta	Stalidae			
Isopoda	Corydalidae			
Amphipoda	Tipulidae	R		
Decapoda	Empididae			
Gastropoda	Simuliidae			
Bivalvia	Tetanidae			
	Culicidae	R		

Rare < 3

Common 3-9

Abundant > 10

Dominant > 50 (Estimate)

Observations

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

PHYSICAL CHARACTERIZATION

RIPARIAN ZONE/INSTREAM FEATURES

Predominant Surrounding Land Use:

Percent Field/Pasture Agricultural Residential Commercial Industrial Other _____Local Watershed Erosion: None Moderate HeavyLocal Watershed NPS Pollution: No evidence Some Potential Sources Obvious Sources drains old dumpEstimated Stream Width 0.5 m Estimated Stream Depth: Riffle NA Run NA Pool 0.2 mHigh Water Mark 0.5 m Velocity _____ Don Present: Yes _____ No ✓ Channelized: Yes ✓ No _____Canopy Cover: Open Partly Open Partly Shaded Shaded

SEDIMENT/SUBSTRATE:

Sediment Odor: Normal Sewage Petroleum Chemical Anaerobic None Other _____Sediment Oils: Absent Slight Moderate ProfuseSediment Deposits: Sludge Sawdust Paper Fiber Sand Shell Shells Other _____Are the undersides of stones which are not deeply embedded black? Yes No NA

Inorganic Substrate Components

Substrate Type	Diameter	Percent Composition in Sampling Area
Bedrock		
Boulder	>256-mm (10 in.)	
Cobble	64-256-mm (2.5-10 in.)	
Gravel	2-64-mm (0.1-2.5 in.)	<u>100%</u>
Sand	0.06-2.00-mm (gritty)	
Silt	.004-.06-mm	
Clay	<.004-mm (slick)	

Organic Substrate Components

Substrate Type	Characteristic	Percent Composition in Sampling Area
Detritus	Sticks, Wood, Coarse Plant Materials (CPOM)	<u>50</u>
Muck-Mud	Black, Very Fine Organic (FPOM)	<u>50</u>
Marl	Grey, Shell Fragments	

decaying algae
and bacterial
scum

WATER QUALITY

Temperature 13.99 °C Dissolved Oxygen 2.31 pH 6.5 Conductivity 404 Other _____Instrument(s) Used Hydrolab ScoutStream Type: Coldwater WarmwaterWater Odors: Normal Sewage Petroleum Chemical None Other _____Water Surface Oils: Slick Sheen Globes Flecks NoneTurbidity Clear Slightly Turbid Turbid Opaque Water Color _____

WEATHER CONDITIONS

Sunny 70°F

PHOTOGRAPH NUMBER

HABITAT ASSESSMENT FIELD DATA SHEET

Name of Water Body Saldam-Clarke sub-site
Drainage ditch adj to GE Station # 110
 Date 11/8/94 Investigator Meyer/Handley
 Comments Not a stream Drainage ditch
receiving ground water and runoff from an old
GE Land fill

HABITAT PARAMETER	CATEGORIES			
	EXCELLENT	GOOD	FAIR	POOR
1. BOTTOM SUBSTRATE/ AVAILABLE COVER	>50% rubble, gravel, submerged logs, undercut banks, or other stable habitat 16-20	30-60% rubble, gravel or other stable habitat. Adequate habitat. 11-15	10-30% rubble, gravel or other stable habitat. Habitat availability < desirable. 6-10	<10% rubble, gravel or other stable habitat. Lack of habitat is obvious. 5 0-5
2. EMBEDDED- NESS	Gravel, cobble, and boulder are <25% surrounded by fine sediment. 16-20	Gravel, cobble, and boulder are 25-50% surrounded by fine sediment. 11-15	Gravel, cobble, and boulder are 50-75% surrounded by fine sediment. 6-10	Gravel, cobble, and boulder are >75% surrounded by fine sediment. 0-5
3. <= 5 CFS	Cold: > 2 cfs Warm: > 6 cfs 10-20	1-2 cfs 2-6 cfs 11-16	0.5-1 cfs 1-2 cfs 6-10	0.5 cfs 1 cfs 0-5
OR >5 CFS	Slow (<0.3 m/s), deep (>0.5m); slow, shallow (<0.5m); fast (>0.3m/s) deep; fast, shallow habitats all present 16-20	3 of 4 habitats present. (Missing riffles or runs get lower score than missing pools). 11-15	2 of 4 habitats present. (Missing riffles/runs get lower score.) 6-10	Dominated by one velocity/depth category (usually pool). 5 0-5
4. CHANNEL ALTERATION	Little / no enlarge- ment of islands or point bars, and/or no channelization 12-15	Some new increase in bar formation, mostly from coarse gravel; and/or some channel- ization present. 8-11	Moderate deposition of new gravel, coarse sand on old and new bars; pools partially filled w/silt; and/or embankments on both banks. 4-7	Heavy deposits of fine material, bar development increase Most pools filled w/ silt; and/or extensive channelization. 0-3
5. BOTTOM SCOURING AND DEPOSITION	<5% of bottom affected. 12-15	5-30% affected. Scour at constrictions and steep grades. Some deposition in pools. 8-11	30-50% affected. Deposit and scour at obstructions, bends, and constrictions. Some filling of pools 4-7	>50% bottom changing nearly year long. Pools absent due to deposition. Only large rocks exposed. 0-3
6. RUN/BEND, POOL/RIFPLE RATIO**	5-7. Variety of habitat. Deep riffles and pools. 12-15	7-15. Adequate depth in pools and riffles Bends provide habitat 8-11	15-25. Occasional riffle or bend. Bottom provide some habitat 4-7	>25. Essentially a straight stream. Flat water or shallow Poor habitat. 3 0-3
7. BANK STABILITY	Stable. No erosion or bank failure. Side slopes <30%. 9-10	Moderately stable Infrequent erosion mostly healed over. Side slopes to 40%. 8 8-8	Moderately unstable. Moderate erosion and side slopes to 60%. High erosion during high flow. 3-6	Unstable. Many eroded areas. Side slopes >60%. "Raw" areas frequent on straight and bends. 0-2
8. BANK VEGETATIVE STABILITY	>80% of streambank covered by vegetation or boulders and cobbles. 10 9-10	50-79% covered by vegetation, gravel or larger material. 6-8	25-49% covered by vegetation, gravel or larger material. 3-6	<25% covered by vegetation, gravel or larger material. 0-2
9. STREAMSIDE COVER	Dominant vegetation is shrub 9-10	Dominant vegetation is of tree form. 6-8	Dominant vegetation is grass or forbes. 5 3-5	>50% no vegetation Dominant material is soil, rock, bridge materials, culverts, or mine tailings. 0-2
COLUMN TOTALS	10	4	3	8
SCORE	31			

NA

NA

Rapid Bioassessment Protocol I

6C

1410

Biosurvey Field Data Sheet

RELATIVE ABUNDANCE OF AQUATIC BIOTA

Periphyton 0 1 2 3 4
 Filamentous Algae 0 1 2 3 4
 Macrophytes 0 1 2 3 4

Slimes 0 1 2 3 4
 Macroinvertebrates 0 1 2 3 4
 Fish 0 1 2 3 4

0 = Absent/Not Observed

1 = Rare

2 = Common

3 = Abundant

4 = Dominant

MACROBENTHOS QUALITATIVE SAMPLE LIST (Indicate Relative Abundance R = Rare, C = Common, A = Abundant, D = Dominant)

Porifera	Anisoptera	Chironomidae D
Hydrozoa	Zygoptera	Plecoptera
Platyhelminthes	Hemiptera	Ephemeroptera
Turbellaria	Coleoptera A	Trichoptera
Hirudinea	Lepidoptera	Other
Oligochaeta C	Stelidae	
Isopoda	Corydalidae	
Amphipoda	Tipulidae	
Decapoda	Empididae	
Gastropoda	Simuliidae	
Bivalvia	Tabanidae	
	Culicidae R	

Rare < 3

Common 3-9

Abundant > 10

Dominant > 50 (Estimate)

Observations

Figure 6.1-1. Biosurvey Field Data Sheet for use with Rapid Bioassessment Protocol I.

**Number and type of fish collected in streams in the vicinity of GE/Shepherd Farm
Superfund Site, East Flat Rock, North Carolina, November 1994.**

Fish Species	GE Sampling Stations								
	101	102	103	104	105	106	107	108	109
Creek Chub <i>Semotilus atromaculatus</i>	5	26	50	46	32	20	4	15	23
Dace <i>Rhinichthys atratulus</i>			36	51	40	26	1	10	
Bluehead Chub <i>Nocomis leptcephalus</i>									
Sucker <i>Catostomus commersoni</i>							2	3	8
Bluegill <i>Lepomis macrochirus</i>			1				2		
Redbreast Sunfish <i>Lepomis auritus</i>							6		
Sunfish species Centrarchidae									7
Darter <i>Etheostoma sp.</i>									1
Total Collected	5	26	87	97	72	46	15	28	39
Total Gram Weight	38	109	168	273	186	121	418	112	585

APPENDIX D

Chain-of-Custody Forms and Results of Chemical Analysis



REGION 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL SERVICES DIVISION
COLLEGE STATION ROAD
ATHENS, GEORGIA 30613-7799

PROJECT NO. 95-0048		PROJECT LEADER Bobbi Berrang		REMARKS	
PROJECT NAME/LOCATION GE/Shepherd Farm Superfund Site East Flat Rock North Carolina		ESD SAMPLE TYPES		SAMPLERS (SIGN) S. L. Berrang	
1. SURFACE WATER 2. GROUND WATER 3. POTABLE WATER 4. WASTEWATER 5. LEACHATE 6. SOIL/SEDIMENT 7. SLUDGE 8. WASTE 9. AIR 10. FISH 11. OTHER				CIRCLE/ADD parameters desired. List no. of containers submitted.	
				ANALYSES COD, TOC, NUTRIENTS BOD, SOLIDS METALS EXT ORG/PEST/PCBS VOA CYANIDE	
STATION NO.		SAMPLE TYPE	DATE	TIME	COMP GRAB
STATION LOCATION/DESCRIPTION		TOTAL CONTAINERS		LAB USE ONLY	
				4A TAG NO./REMARKS	
91384	101	10	11-8	1615	✓
	Unnamed Stream Background		1		45574
85	102	10	11-8	1630	✓
	Unnamed Stream D.S.		1		45575
86	102	10	11-8	1630	✓
	Unnamed Stream D.S.		1		45576
8689	103	10	11-8	1645	✓
	Bat Fork Cr. U.S. Confluence		1		45577
88	103	10	11-8	1645	✓
	Bat Fork Cr. U.S. Confluence		1		45578
8789	104	10	11-8	1710	✓
	Bat Fork Cr. U.S. Roper		1		45579
87	104	10	11-8	1710	✓
	Bat Fork Cr. U.S. Roper		1		45580
8894	105	10	11-9	0730	✓
	Bat Fork Cr. U.S. R.R.		1		45581
	105	10	11-9	0730	✓
	Bat Fork Cr. U.S. R.R.		1		45582
89	106	10	11-9	0755	✓
	Bat Fork Cr. at WTP		1		45583
	106	10	11-9	0755	✓
	Bat Fork Cr. at WTP		1		45584
90	107	10	11-9	0850	✓
	Bat Fork Cr. D.S. G.E		1		45585
	107	10	11-9	0850	✓
	Bat Fork Cr. D.S. G.E		1		45586
91	108	10	11-9	0925	✓
	Bat Fork Cr. at Spring		1		45587
	108	10	11-9	0925	✓
	Bat Fork Cr. at Spring		1		45588
92	109	10	11-7	1223	✓
	Bat Fork Cr. D.S. Tabor		1		45589
RELINQUISHED BY: (PRINT) Bobbi L. Berrang		DATE/TIME 11-18-94	RECEIVED BY: (PRINT) D. Colquhoun		DATE/TIME 1430
(SIGN) S. L. Berrang			(SIGN) D. Colquhoun		
RELINQUISHED BY: (PRINT)		DATE/TIME	RELINQUISHED BY: (PRINT)		DATE/TIME
(SIGN)			(SIGN)		

DISTRIBUTION: White and Pink copies accompany sample shipment to laboratory; Pink copy retained by laboratory; White copy is returned to samplers; Yellow copy retained by samplers

U.S. GPO: 1989-132-186



U.S. ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL SERVICES DIVISION
COLLEGE STATION ROAD
ATHENS, GEORGIA 30613-7799

PROJECT NO. 812 0090 95-0042		PROJECT LEADER Bobbi Berrang		REMARKS											
PROJECT NAME/LOCATION GE/Shepherd Farm Superfund Site East Flat Rock North Carolina															
ESD SAMPLE TYPES		SAMPLERS (SIGN)													
1. SURFACE WATER 2. GROUND WATER 3. POTABLE WATER 4. WASTEWATER 5. LEACHATE 11. OTHER Dry Ice		8. SOIL/SEDIMENT 7. SLUDGE 6. WASTE 9. AIR 10. FISH B.L. Berrang													
STATION NO.	SAMPLE TYPE	DATE	TIME	COMP	GRAB	STATION LOCATION/DESCRIPTION	TOTAL CONTAINERS	CIRCLE/ADD parameters desired. List no. of containers submitted	ANALYSES				LAB USE ONLY		
									COD. TOC. NUTRIENTS	BOD. SOLIDS	METALS	EXT ORG/PEST/PCBS	VOA	CYANIDE	
109	10	11-7	1223	✓		Bot Fork Cr. D.S. Tabor	1	✓							4A TAG NO./REMARKS
200	3	11-15	1340	✓		Organic Free ^{System} Blank	1	✓							45590
200	3	11-15	1340	✓		Organic Free ^{System} Blank	1	✓							45591
250	11	11-15	1130	✓		Blender #15 Dry Ice Blank	1	✓							45592
250	11	11-15	1130	✓		Blender #15 Dry Ice Blank	1	✓							45593
260	11	11-16	1200	✓		Blender #11 Dry Ice Blank	1	✓							45594
260	11	11-16	1200	✓		Blender #11 Dry Ice Blank	1	✓							45595
270	11	11-14	1430	✓		Dry Ice Blank	1	✓							45596
270	11	11-14	1430	✓		Dry Ice Blank	1	✓							45597
															45598
RELINQUISHED BY: (PRINT) Bobbi Berrang		DATE/TIME 11-18-94		RECEIVED BY: (PRINT) D. Calquitt		RELINQUISHED BY: (PRINT)		DATE/TIME		RECEIVED BY: (PRINT)					
(SIGN) B.L. Berrang		1430		(SIGN) Debbie Calquitt		(SIGN)				(SIGN)					
RELINQUISHED BY: (PRINT)		DATE/TIME		RECEIVED BY: (PRINT)		RELINQUISHED BY: (PRINT)		DATE/TIME		RECEIVED BY: (PRINT)					
(SIGN)				(SIGN)		(SIGN)				(SIGN)					

DISTRIBUTION: White and Pink copies accompany sample shipment to laboratory. Pink copy retained by laboratory; White copy is returned to samplers; Yellow copy retained by samplers

*U.S. GPO 1989-732-186

4- 20600^(10/89)

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA, ESD, REGION IV, ATHENS, GA
SAMPLE DATA LOG

SAMPLE NO. 95C91384 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 101
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/08/94 1615 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91385 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 102
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/08/94 1630 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91386 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 103
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/08/94 1645 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91387 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 104
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/08/94 1710 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91388 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 105
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/09/94 0730 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA, ESD, REGION IV, ATHENS, GA
SAMPLE DATA LOG

SAMPLE NO. 95C91389 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 106
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/09/94 0755 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91390 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 107
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/09/94 0850 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91391 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 108
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/09/94 0925 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91392 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE FISH COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 109
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/07/94 1223 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91393 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE BLKWA COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 200
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/17/94 1340 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA, ESD, REGION IV, ATHENS, GA
SAMPLE DATA LOG

SAMPLE NO. 95C91394 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE DRYICEBLK COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 250
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/15/94 1130 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91395 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE DRYICEBLK COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 260
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/16/94 1200 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

SAMPLE NO. 95C91396 PROJECT NO. 95-0090 PROGRAM ELEMENT. SSF SAMPLE TYPE DRYICEBLK COLLECTED BY B BERRANG
SOURCE GE/SHEPHERD FARM STATION 270
CITY E FLATROCK STATE NC STORET STATION NO CONFIDENTIAL
SAMPLE COLLECTION: START DATE/TIME 11/14/94 1430 SAMPLE COLLECTION: STOP DATE/TIME 00/00/00
RECEIVED FROM B BERRANG SAMPLE REC'D: DATE/TIME 11/18/94/1430 REC'D BY D COLQUITT SEALED YES
LAB CONTRACT CASE NO. 0 INORG SAMPLE NO ORGANIC SAMPLE NO SAS NO.
ORGANIC CONTRACTOR: INORGANIC CONTRACTOR:
REMARKS
TESTS: METALS SCAN PESTICIDES SCAN ORGANIC SCAN

PROJ. LEADER: B. BERRANG COMPANY: GE
ACTIVITY: _____ SPILL ID: _____
PROJECT ID: 95-0048
SITE NAME: GENERAL ELECTRIC
CITY, STATE: EAST FLAT ROCK/, NC

CHAIN-OF-CUSTODY RECORD



United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

SAMPLERS (Signature)

DATE SHIPPED: / / CARRIER: _____
AIRBILL: _____
SHIPPED TO: US-EPA, REGION IV LABORATORY
ENVIRONMENTAL SERVICES DIV
COLLEGE STATION ROAD
ATHENS, GA 30613-0801
ATTN: Debbie Colquitt
PHONE: 404/546-3111

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

LAB SAMPLE ID	STATION	DESCRIPTION	MATRIX	DATE/TIME	SAMPLER
GE-101-SD	(1) 4A-	45513	Sediment	11-08/1345	B. BERRANG
TOXICITY(1)					
GE-102-SD	(1) 4A-	45518	Sediment	11-08/1110	B. BERRANG
TOXICITY(1)					
GE-103-SD	(1) 4A-	45523	Sediment	11-08/1030	B. BERRANG
TOXICITY(1)					
GE-104-SD	(1) 4A-	45528	Sediment	11-08/0900	B. BERRANG
TOXICITY(1)					
GE-105-SD	(1) 4A-	45533	Sediment	11-08/0740	B. BERRANG
TOXICITY(1)					
GE-106-SD	(1) 4A-	45538	Sediment	11-07/1650	B. BERRANG
TOXICITY(1)					
GE-107-SD	(1) 4A-	45543	Sediment	11-07/1550	B. BERRANG
TOXICITY(1)					
GE-108-SD	(1) 4A-	45548	Sediment	11-07/1425	B. BERRANG
TOXICITY(1)					
GE-109-SD	(1) 4A-	45553	Sediment	11-07/1128	B. BERRANG
TOXICITY(1)					
GE-110-SD	(1) 4A-	45558	Sediment	11-08/1505	B. BERRANG
TOXICITY(1)					

NO.

1162

PROJ. LEADER: B. BERRANG COMPANY: GE
ACTIVITY: _____ SPILL ID: _____
PROJECT ID: 95-0048
SITE NAME: GENERAL ELECTRIC
CITY, STATE: EAST FLAT ROCK/, NC

CHAIN-OF-CUSTODY RECORD



United States Environmental Protection Agency
Contract Laboratory Program Sample Management Office
PO Box 818 Alexandria, VA 22313
703-557-2490 FTS 557-2490

SAMPLERS (Signature)

DATE SHIPPED: / / CARRIER: _____
AIRBILL: _____
SHIPPED TO: US-EPA, REGION IV LABORATORY
ENVIRONMENTAL SERVICES DIV
COLLEGE STATION ROAD
ATHENS, GA 30613-0801
ATTN: Debbie Colquitt
PHONE: 404/546-3111

RELINQUISHED BY:	DATE/TIME	RECEIVED BY:
RELINQUISHED BY:	DATE/TIME	RECEIVED BY:

SAMPLE ID	STATION	DESCRIPTION	MATRIX	DATE/TIME	SAMPLER
GE-101-SW	(1) 4A-	45455	Surface Water	11-08/1345	B. BERRANG
TOXICITY(1)					
GE-102-SW	(1) 4A-	45461	Surface Water	11-08/1110	B. BERRANG
TOXICITY(1)					
GE-103-SW	(1) 4A-	45467	Surface Water	11-08/1030	B. BERRANG
TOXICITY(1)					
GE-104-SW	(1) 4A-	45473	Surface Water	11-08/0900	B. BERRANG
TOXICITY(1)					
GE-105-SW	(1) 4A-	45479	Surface Water	11-08/0740	B. BERRANG
TOXICITY(1)					
GE-106-SW	(1) 4A-	45485	Surface Water	11-07/1650	B. BERRANG
TOXICITY(1)					
GE-107-SW	(1) 4A-	45491	Surface Water	11-07/1550	B. BERRANG
TOXICITY(1)					
GE-108-SW	(1) 4A-	45497	Surface Water	11-07/1425	P. MEYER
TOXICITY(1)					
GE-109-SW	(1) 4A-	45503	Surface Water	11-07/1128	B. BERRANG
TOXICITY(1)					
GE-110-SW	(1) 4A-	45509	Surface Water	11-08/1505	B. BERRANG
TOXICITY(1)					
GE-205-SW	Duplicate sample of station 105		Surface Water	11-08/0740	B. BERRANG
TOXICITY(1)	(1) 4A-	45565			

NO.

1164

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91385 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 102 COLLECTION START: 11/08/94 1630 STOP: 00/00/00 **

MG/KG ANALYTICAL RESULTS		MG/KG ANALYTICAL RESULTS	
0.60U	SILVER	8000	CALCIUM
2.5U	ARSENIC	330	MAGNESIUM
NA	BORON	33	IRON
6.5	BARIUM	830	SODIUM
0.30U	BERYLLIUM	2900	POTASSIUM
0.30U	CADMIUM		
0.60U	COBALT		
0.60U	CHROMIUM		
1.7	COPPER		
0.60U	MOLYBDENUM		
1.2U	NICKEL		
0.10U	LEAD		
1.8U	ANTIMONY		
2.4U	SELENIUM		
1.5U	TIN		
18	STRONTIUM		
3.0U	TELLURIUM		
1.1	TITANIUM		
6.0U	THALLIUM		
0.60U	VANADIUM		
0.60U	YTTRIUM		
34	ZINC		
NA	ZIRCONIUM		
0.12	MERCURY		
30	ALUMINUM		
11	MANGANESE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

*** **
** PROJECT NO. 95-0090 SAMPLE NO. 91386 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 103 COLLECTION START: 11/08/94 1645 STOP: 00/00/00 **
*** **

MG/KG ANALYTICAL RESULTS

0.60U SILVER
2.5U ARSENIC
NA BORON
7.2 BARIUM
0.30U BERYLLIUM
0.30U CADMIUM
0.60U COBALT
0.60U CHROMIUM
0.88 COPPER
0.60U MOLYBDENUM
1.2U NICKEL
0.10U LEAD
1.8U ANTIMONY
2.4U SELENIUM
1.5U TIN
17 STRONTIUM
3.0U TELLURIUM
1.9 TITANIUM
6.0U THALLIUM
0.60U VANADIUM
0.60U YTTRIUM
39 ZINC
NA ZIRCONIUM
0.22 MERCURY
46 ALUMINUM
9.9 MANGANESE

MG/KG ANALYTICAL RESULTS

7700 CALCIUM
320 MAGNESIUM
41 IRON
750 SODIUM
2800 POTASSIUM

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91387 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 104 COLLECTION START: 11/08/94 1710 STOP: 00/00/00 **
**

MG/KG ANALYTICAL RESULTS MG/KG ANALYTICAL RESULTS
0.60U SILVER 7700 CALCIUM
2.5U ARSENIC 320 MAGNESIUM
NA BORON 56 IRON
7.8 BARIUM 790 SODIUM
0.30U BERYLLIUM 2700 POTASSIUM
0.30U CADMIUM
0.60U COBALT
0.60U CHROMIUM
0.91 COPPER
0.60U MOLYBDENUM
1.2U NICKEL
0.10U LEAD
1.8U ANTIMONY
2.4U SELENIUM
1.5U TIN
16 STRONTIUM
3.0U TELLURIUM
2.5 TITANIUM
6.0U THALLIUM
0.60U VANADIUM
0.60U YTTRIUM
39 ZINC
NA ZIRCONIUM
0.20 MERCURY
66 ALUMINUM
9.1 MANGANESE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91388 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: C FLATROCK ST: NC **
** STATION ID: 105 COLLECTION START: 11/09/94 0730 STOP: 00/00/00 **
**

MG/KG ANALYTICAL RESULTS MG/KG ANALYTICAL RESULTS
0.60U SILVER 7900 CALCIUM
3.0U ARSENIC 320 MAGNESIUM
NA BORON 41 IRON
9.0 BARIUM 820 SODIUM
0.30U BERYLLIUM 2700 POTASSIUM
0.30U CADMIUM
0.60U COBALT
0.60U CHROMIUM
0.95 COPPER
0.60U MOLYBDENUM
1.2U NICKEL
0.10U LEAD
1.8U ANTIMONY
2.4U SELENIUM
1.5U TIN
18 STRONTIUM
3.0U TELLURIUM
1.5 TITANIUM
6.0U THALLIUM
0.60U VANADIUM
0.60U YTTRIUM
39 ZINC
NA ZIRCONIUM
0.13 MERCURY
41 ALUMINUM
5.8 MANGANESE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91389 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 106 COLLECTION START: 11/09/94 0755 STOP: 00/00/00 **
**

MG/KG ANALYTICAL RESULTS

0.60U SILVER
1.8U ARSENIC
NA BORON
8.3 BARIUM
0.30U BERYLLIUM
0.30U CADMIUM
0.60U COBALT
0.60U CHROMIUM
1.2 COPPER
0.60U MOLYBDENUM
1.2U NICKEL
0.10U LEAD
1.8U ANTIMONY
2.4U SELENIUM
1.5U TIN
17 STRONTIUM
3.0U TELLURIUM
1.2 TITANIUM
6.0U THALLIUM
0.60U VANADIUM
0.60U YTTRIUM
42 ZINC
NA ZIRCONIUM
0.09 MERCURY
36 ALUMINUM
5.3 MANGANESE

MG/KG ANALYTICAL RESULTS

8300 CALCIUM
330 MAGNESIUM
33 IRON
810 SODIUM
2700 POTASSIUM

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91390 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 107 COLLECTION START: 11/09/94 0850 STOP: 00/00/00 **
**

MG/KG ANALYTICAL RESULTS MG/KG ANALYTICAL RESULTS
1.0U SILVER 12000 CALCIUM
3.0U ARSENIC 400 MAGNESIUM
NA BORON 36 IRON
3.5 BARIUM 1000 SODIUM
0.50U BERYLLIUM 2900 POTASSIUM
0.50U CADMIUM
1.0U COBALT
1.0U CHROMIUM
1.0U COPPER
1.0U MOLYBDENUM
2.0U NICKEL
0.10U LEAD
3.0U ANTIMONY
4.0U SELENIUM
2.5U TIN
19 STRONTIUM
5.0U TELLURIUM
1.3 TITANIUM
10U THALLIUM
1.0U VANADIUM
1.0U YTTRIUM
26 ZINC
NA ZIRCONIUM
0.06 MERCURY
63 ALUMINUM
6.5 MANGANESE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91391 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 108 COLLECTION START: 11/09/94 0925 STOP: 00/00/00 **

MG/KG ANALYTICAL RESULTS

0.80U SILVER
2.4U ARSENIC
NA BORON
8.6 BARIUM
0.40U BERYLLIUM
0.40U CADMIUM
0.80U COBALT
0.80U CHROMIUM
0.86 COPPER
0.80U MOLYBDENUM
1.6U NICKEL
0.10U LEAD
2.4U ANTIMONY
3.2U SELENIUM
2.0U TIN
18 STRONTIUM
4.0U TELLURIUM
4.4 TITANIUM
8.0U THALLIUM
0.80U VANADIUM
0.80U YTTRIUM
44 ZINC
NA ZIRCONIUM
0.05 MERCURY
160 ALUMINUM
14 MANGANESE

MG/KG ANALYTICAL RESULTS

9300 CALCIUM
360 MAGNESIUM
110 IRON
960 SODIUM
2800 POTASSIUM

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91392 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 109 COLLECTION START: 11/07/94 1223 STOP: 00/00/00 **
**

MG/KG ANALYTICAL RESULTS MG/KG ANALYTICAL RESULTS
0.60U SILVER 8700 CALCIUM
3.0U ARSENIC 340 MAGNESIUM
NA BORON 110 IRON
6.6 BARIUM 930 SODIUM
0.30U BERYLLIUM 2800 POTASSIUM
0.30U CADMIUM
0.60U COBALT
0.60U CHROMIUM
0.95 COPPER
0.60U MOLYBDENUM
1.2U NICKEL
0.10U LEAD
1.8U ANTIMONY
2.4U SELENIUM
1.5U TIN
15 STRONTIUM
3.0U TELLURIUM
4.1 TITANIUM
6.0U THALLIUM
0.60U VANADIUM
0.60U YTTRIUM
31 ZINC
NA ZIRCONIUM
0.07 MERCURY
200 ALUMINUM
16 MANGANESE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91385 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 102 COLLECTION START: 11/08/94 1630 STOP: 00/00/00 **

MG/KG ANALYTICAL RESULTS

0.050U ALDRIN
0.050U HEPTACHLOR
0.050U HEPTACHLOR EPOXIDE
0.050U ALPHA-BHC
0.050U BETA-BHC
0.050U GAMMA-BHC (LINDANE)
0.050U DELTA-BHC
0.050U ENDOSULFAN I (ALPHA)
0.050U DIELDRIN
0.050U 4,4'-DDT (P,P'-DDT)
0.050U 4,4'-DDE (P,P'-DDE)
0.050U 4,4'-DDD (P,P'-DDD)
0.050U ENDRIN
0.050U ENDOSULFAN II (BETA)
0.050U ENDOSULFAN SULFATE
0.20U CHLORDANE (TECH. MIXTURE) /1
0.30U PCB-1242 (AROCLOR 1242)
0.30U PCB-1254 (AROCLOR 1254)
0.30U PCB-1221 (AROCLOR 1221)

MG/KG ANALYTICAL RESULTS

0.30U PCB-1232 (AROCLOR 1232)
0.32J PCB-1248 (AROCLOR 1248)
0.30U PCB-1260 (AROCLOR 1260)
0.030 PCB-1016 (AROCLOR 1016)
3.0U TOXAPHENE
-- CHLORDENE /2
-- ALPHA-CHLORDENE /2
-- BETA-CHLORDENE /2
-- GAMMA-CHLORDENE /2
-- GAMMA-CHLORDANE /2
-- TRANS-NONACHLOR /2
-- ALPHA-CHLORDANE /2
-- CIS-NONACHLOR /2
-- OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.068U METHOXYCHLOR
0.050U ENDRIN KETONE

REMARKS

AR1248 INDISTINGUISHABLE FROM 1254-CALCULATED AS AR1248.

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

```

***
** PROJECT NO. 95-0090  SAMPLE NO. 91386  SAMPLE TYPE: FISH  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLATROCK  ST: NC  **
** STATION ID: 103  COLLECTION START: 11/08/94  1645  STOP: 00/00/00  **
**

```

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
0.050U	ALDRIN	0.45U	PCB-1232 (AROCOR 1232)
0.050U	HEPTACHLOR	0.49	PCB-1248 (AROCOR 1248)
0.050U	HEPTACHLOR EPOXIDE	0.45U	PCB-1260 (AROCOR 1260)
0.050U	ALPHA-BHC	0.45U	PCB-1016 (AROCOR 1016)
0.050U	BETA-BHC	3.0U	TOXAPHENE
0.050U	GAMMA-BHC (LINDANE)	--	CHLORDENE /2
0.050U	DELTA-BHC	--	ALPHA-CHLORDENE /2
0.050U	ENDOSULFAN I (ALPHA)	--	BETA CHLORDENE /2
0.050U	DIELDRIN	--	GAMMA-CHLORDENE /2
0.050U	4,4'-DDT (P,P'-DDT)	--	GAMMA-CHLORDANE /2
0.050U	4,4'-DDE (P,P'-DDE)	--	TRANS-NONACHLOR /2
0.050U	4,4'-DDD (P,P'-DDD)	--	ALPHA-CHLORDANE /2
0.050U	ENDRIN	--	CIS-NONACHLOR /2
0.050U	ENDOSULFAN II (BETA)	--	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.050U	ENDOSULFAN SULFATE	0.062U	METHOXYCHLOR
0.20U	CHLORDANE (TECH. MIXTURE) /1	0.050U	ENDRIN KETONE
0.45U	PCB-1242 (AROCOR 1242)		
0.45U	PCB-1254 (AROCOR 1254)		
0.45U	PCB-1221 (AROCOR 1221)		

REMARKS

AR1248 INDISTINGUISHABLE FROM 1254-CALCULATED AS AR1248.

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91387 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 104 COLLECTION START: 11/08/94 1710 STOP: 00/00/00 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
0.050U	ALDRIN	0.45U	PCB-1232 (AROCLOR 1232)
0.050U	HEPTACHLOR	0.49	PCB-1248 (AROCLOR 1248)
0.050U	HEPTACHLOR EPOXIDE	0.45U	PCB-1260 (AROCLOR 1260)
0.050U	ALPHA-BHC	0.45U	PCB-1016 (AROCLOR 1016)
0.050U	BETA-BHC	3.0U	TOXAPHENE
0.050U	GAMMA-BHC (LINDANE)	--	CHLORDENE /2
0.050U	DELTA-BHC	--	ALPHA-CHLORDENE /2
0.050U	ENDOSULFAN I (ALPHA)	--	BETA CHLORDENE /2
0.050U	DIELDRIN	--	GAMMA-CHLORDENE /2
0.050U	4,4'-DDT (P,P'-DDT)	--	GAMMA-CHLORDANE /2
0.051U	4,4'-DDE (P,P'-DDE)	--	TRANS-NONACHLOR /2
0.050U	4,4'-DDD (P,P'-DDD)	--	ALPHA-CHLORDANE /2
0.050U	ENDRIN	--	CIS-NONACHLOR /2
0.050U	ENDOSULFAN II (BETA)	--	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.050U	ENDOSULFAN SULFATE	0.058U	METHOXYCHLOR
0.20U	CHLORDANE (TECH. MIXTURE) /1	0.050U	ENDRIN KETONE
0.45U	PCB-1242 (AROCLOR 1242)		
0.45U	PCB-1254 (AROCLOR 1254)		
0.45U	PCB-1221 (AROCLOR 1221)		

REMARKS
AR1248 INDISTINGUISHABLE FROM 1254-CALCULATED AS AR1248.

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91388 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 105 COLLECTION START: 11/09/94 0730 STOP: 00/00/00 **
** ** ** ** ** ** ** ** ** ** ** ** ** ** ** **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
0.084U	ALDRIN	1.5U	PCB-1232 (AROCOR 1232)
0.050U	HEPTACHLOR	1.6	PCB-1248 (AROCOR 1248)
0.099U	HEPTACHLOR EPOXIDE	1.5U	PCB-1260 (AROCOR 1260)
0.050U	ALPHA-BHC	1.5U	PCB-1016 (AROCOR 1016)
0.050U	BETA-BHC	3.0U	TOXAPHENE
0.050U	GAMMA-BHC (LINDANE)	--	CHLORDENE /2
0.050U	DELTA-BHC	--	ALPHA-CHLORDENE /2
0.050U	ENDOSULFAN I (ALPHA)	--	BETA CHLORDENE /2
0.050U	DIELDRIN	--	GAMMA-CHLORDENE /2
0.061U	4,4'-DDT (P,P'-DDT)	--	GAMMA-CHLORDANE /2
0.18	4,4'-DDE (P,P'-DDE)	--	TRANS-NONACHLOR /2
0.050U	4,4'-DDD (P,P'-DDD)	--	ALPHA-CHLORDANE /2
0.050U	ENDRIN	--	CIS-NONACHLOR /2
0.073U	ENDOSULFAN II (BETA)	--	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.060U	ENDOSULFAN SULFATE	0.21U	METHOXYCHLOR
0.20U	CHLORDANE (TECH. MIXTURE) /1	0.061U	ENDRIN KETONE
1.5U	PCB-1242 (AROCOR 1242)		
1.5U	PCB-1254 (AROCOR 1254)		
1.5U	PCB-1221 (AROCOR 1221)		

REMARKS

AR1248 INDISTINGUISHABLE FROM 1254-CALCULATED AS AR1248.

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91389 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 106 COLLECTION START: 11/09/94 0755 STOP: 00/00/00 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
0.090U	ALDRIN	1.0U	PCB-1232 (AROCOR 1232)
0.050U	HEPTACHLOR	1.4C	PCB-1248 (AROCOR 1248)
0.090U	HEPTACHLOR EPOXIDE	1.0U	PCB-1260 (AROCOR 1260)
0.050U	ALPHA-BHC	1.0U	PCB-1016 (AROCOR 1016)
0.050U	BETA-BHC	3.0U	TOXAPHENE
0.050U	GAMMA-BHC (LINDANE)	--	CHLORDENE /2
0.050U	DELTA-BHC	--	ALPHA-CHLORDENE /2
0.050U	ENDOSULFAN I (ALPHA)	--	BETA CHLORDENE /2
0.050U	DIELDRIN	--	GAMMA-CHLORDENE /2
0.064U	4,4'-DDT (P,P'-DDT)	--	GAMMA-CHLORDANE /2
0.12	4,4'-DDE (P,P'-DDE)	--	TRANS-NONACHLOR /2
0.051U	4,4'-DDD (P,P'-DDD)	--	ALPHA-CHLORDANE /2
0.051U	ENDRIN	--	CIS-NONACHLOR /2
0.051U	ENDOSULFAN II (BETA)	--	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.064U	ENDOSULFAN SULFATE	0.20U	METHOXYCHLOR
0.20U	CHLORDANE (TECH. MIXTURE) /1	0.064U	ENDRIN KETONE
1.0U	PCB-1242 (AROCOR 1242)		
1.0U	PCB-1254 (AROCOR 1254)		
1.0U	PCB-1221 (AROCOR 1221)		

REMARKS
AR1248 INDISTINGUISHABLE FROM 1254-CALCULATED AS AR1248.

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

01/13/95

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91390 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 107 COLLECTION START: 11/09/94 0850 STOP: 00/00/00 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
0.082U	ALDRIN	1.0U	PCB-1232 (AROCOR 1232)
0.050U	HEPTACHLOR	1.4C	PCB-1248 (AROCOR 1248)
0.076U	HEPTACHLOR EPOXIDE	1.0U	PCB-1260 (AROCOR 1260)
0.050U	ALPHA-BHC	1.0U	PCB-1016 (AROCOR 1016)
0.050U	BETA-BHC	3.0U	TOXAPHENE
0.050U	GAMMA-BHC (LINDANE)	--	CHLORDENE /2
0.050U	DELTA-BHC	--	ALPHA-CHLORDENE /2
0.050U	ENDOSULFAN I (ALPHA)	--	BETA CHLORDENE /2
0.050U	DIELDRIN	--	GAMMA-CHLORDENE /2
0.072U	4,4'-DDT (P,P'-DDT)	--	GAMMA-CHLORDANE /2
0.061	4,4'-DDE (P,P'-DDE)	--	TRANS-NONACHLOR /2
0.058U	4,4'-DDD (P,P'-DDD)	--	ALPHA-CHLORDANE /2
0.058U	ENDRIN	--	CIS-NONACHLOR /2
0.058U	ENDOSULFAN II (BETA)	--	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.072U	ENDOSULFAN SULFATE	0.20U	METHOXYCHLOR
0.20U	CHLORDANE (TECH. MIXTURE) /1	0.072U	ENDRIN KETONE
1.0U	PCB-1242 (AROCOR 1242)		
1.0U	PCB-1254 (AROCOR 1254)		
1.0U	PCB-1221 (AROCOR 1221)		

REMARKS
AR1248 INDISTINGUISHABLE FROM 1254-CALCULATED AS AR1248.

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91391 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 108 COLLECTION START: 11/09/94 0925 STOP: 00/00/00 **

MG/KG ANALYTICAL RESULTS

0.11U ALDRIN
0.050U HEPTACHLOR
0.088U HEPTACHLOR EPOXIDE
0.050U ALPHA-BHC
0.050U BETA-BHC
0.050U GAMMA-BHC (LINDANE)
0.050U DELTA-BHC
0.050U ENDOSULFAN I (ALPHA)
0.050U DIELDRIN
0.072U 4,4'-DDT (P,P'-DDT)
0.093 4,4'-DDE (P,P'-DDE)
0.057U 4,4'-DDD (P,P'-DDD)
0.057U ENDRIN
0.057U ENDOSULFAN II (BETA)
0.072U ENDOSULFAN SULFATE
0.20U CHLORDANE (TECH. MIXTURE) /1
1.5U PCB-1242 (AROCLOR 1242)
1.5U PCB-1254 (AROCLOR 1254)
1.5U PCB-1221 (AROCLOR 1221)

MG/KG ANALYTICAL RESULTS

1.5U PCB-1232 (AROCLOR 1232)
1.9C PCB-1248 (AROCLOR 1248)
1.5U PCB-1260 (AROCLOR 1260)
1.5U PCB-1016 (AROCLOR 1016)
3.0U TOXAPHENE
-- CHLORDENE /2
-- ALPHA-CHLORDENE /2
-- BETA-CHLORDENE /2
-- GAMMA-CHLORDENE /2
-- GAMMA-CHLORDANE /2
-- TRANS-NONACHLOR /2
-- ALPHA-CHLORDANE /2
-- CIS-NONACHLOR /2
-- OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.20U METHOXYCHLOR
0.072U ENDRIN KETONE

REMARKS
AR1248 INDISTINGUISHABLE FROM 1254-CALCULATED AS AR1248.

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

```

***
** PROJECT NO. 95-0090  SAMPLE NO. 91392  SAMPLE TYPE: FISH  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLATROCK  ST: NC  **
** STATION ID: 109  COLLECTION START: 11/07/94  1223  STOP: 00/00/00  **
**

```

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
0.15U	ALDRIN	2.5U	PCB-1232 (AROCLOR 1232)
0.050U	HEPTACHLOR	2.8C	PCB-1248 (AROCLOR 1248)
0.12U	HEPTACHLOR EPOXIDE	2.5U	PCB-1260 (AROCLOR 1260)
0.050U	ALPHA-BHC	2.5U	PCB-1016 (AROCLOR 1016)
0.050U	BETA-BHC	3.1U	TOXAPHENE
0.050U	GAMMA-BHC (LINDANE)	--	CHLORDENE /2
0.050U	DELTA-BHC	--	ALPHA-CHLORDENE /2
0.050U	ENDOSULFAN I (ALPHA)	--	BETA-CHLORDENE /2
0.050U	DIELDRIN	--	GAMMA-CHLORDENE /2
0.076U	4,4'-DDT (P,P'-DDT)	--	GAMMA-CHLORDANE /2
0.19	4,4'-DDE (P,P'-DDE)	--	TRANS-NONACHLOR /2
0.061U	4,4'-DDD (P,P'-DDD)	--	ALPHA-CHLORDANE /2
0.061U	ENDRIN	--	CIS-NONACHLOR /2
0.061U	ENDOSULFAN II (BETA)	--	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.076U	ENDOSULFAN SULFATE	0.21U	METHOXYCHLOR
0.20U	CHLORDANE (TECH. MIXTURE) /1	0.076U	ENDRIN KETONE
2.5U	PCB-1242 (AROCLOR 1242)		
2.5U	PCB-1254 (AROCLOR 1254)		
2.5U	PCB-1221 (AROCLOR 1221)		

REMARKS

AR1248 INDISTINGUISHABLE FROM 1254-CALCULATED AS AR1248.

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/12/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91384 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 101 COLLECTION START: 11/08/94 1615 STOP: 00/00/00 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
2.2U	(3-AND/OR 4-)METHYLPHENOL	2.2U	BENZO(GH)PERYLENE 0.000933
2.2U	1,2,4-TRICHLOROBENZENE	2.2U	BENZO-A-PYRENE 0.000933
2.2U	2,2'-CHLORISOPROPYLETHYER	2.2U	BENZYL BUTYL PHTHALATE 0.000933
2.2U	2,3,4,6-TETRACHLOROPHENOL	2.2U	BIS(2-CHLOROETHOXY) METHANE
2.2U	2,4,5-TRICHLOROPHENOL	2.2U	BIS(2-CHLOROETHYL) ETHER
2.2U	2,4,6-TRICHLOROPHENOL	2.2U	BIS(2-ETHYLHEXYL) PHTHALATE
2.2U	2,4-DICHLOROPHENOL	2.2U	CARBAZOLE
2.2U	2,4-DIMETHYLPHENOL	2.2U	CHRYSENE
4.4U	2,4-DINITROPHENOL 0.000933	2.2U	DI-N-BUTYLPHTHALATE
2.2U	2,4-DINITROTOLUENE	2.2U	DI-N-OCTYLPHTHALATE
2.2U	2,6-DINITROTOLUENE	2.2U	DIBENZO(A,H)ANTHRACENE
2.2U	2-CHLORONAPHTHALENE	2.2U	DIBENZOFURAN
2.2U	2-CHLOROPHENOL	2.2U	DIETHYL PHTHALATE
4.4U	2-METHYL-4,6-DINITROPHENOL	2.2U	DIMETHYL PHTHALATE
2.2U	2-METHYLNAPHTHALENE	2.2U	FLUORANTHENE
2.2U	2-METHYLPHENOL	2.2U	FLUORENE
2.2U	2-NITROANILINE	2.2U	HEXACHLOROBENZENE (HCB)
2.2U	2-NITROPHENOL	2.2U	HEXACHLOROBUTADIENE
2.2U	3,3'-DICHLOROBENZIDINE	2.2U	HEXACHLOROCYCLOPENTADIENE (HCCP)
2.2U	3-NITROANILINE	2.2U	HEXACHLOROETHANE
2.2U	4-BROMOPHENYL PHENYL ETHER	2.2U	INDENO (1,2,3-CD) PYRENE
2.2U	4-CHLORO-3-METHYLPHENOL	2.2U	ISOPHORONE
2.2U	4-CHLOROANILINE	2.2U	N-NITROSODI-N-PROPYLAMINE
2.2U	4-CHLOROPHENYL PHENYL ETHER	2.2U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
2.2U	4-NITROANILINE	2.2U	NAPHTHALENE
4.4U	4-NITROPHENOL	2.2U	NITROBENZENE
2.2U	ACENAPHTHENE 0.000933	4.4U	PENTACHLOROPHENOL
2.2U	ACENAPHTHYLENE 0.000933	2.2U	PHENANTHRENE
2.2U	ANTHRACENE 0.000933	2.2U	PHENOL 0.000933
2.2U	BENZO(A)ANTHRACENE 0.000933	2.2U	PYRENE
2.2U	BENZO(B AND/OR K)FLUORANTHENE 0.000933		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/12/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91384 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 101 COLLECTION START: 11/08/94 1615 STOP: 00/00/00 **
**

ANALYTICAL RESULTS MG/KG

9JN TETRADECANOIC ACID
30JN PENTADECANOIC ACID (2 ISOMERS)
200JN HEXADECENOIC ACID (2 ISOMERS)
200JN HEXADECANOIC ACID
40JN HEPTADECANOIC ACID (2 ISOMERS)
60JN OCTADECANOIC ACID
100JN EICOSATETRAENOIC ACID, METHYL ESTER
30JN EICOSATRIENOIC ACID
30JN EICOSADIENOIC ACID, METHYL ESTER
--- HEXADECANOIC ACID, HYDROXY(HYDROXYMETHYL)-
20JN ETHYL ESTER
80J 5 UNIDENTIFIED COMPOUNDS
N PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

TOTO2\$DISK:[EPADZC]PRODHEXT.LST;1

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91385 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 102 COLLECTION START: 11/08/94 1630 STOP: 00/00/00 **
**

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1.4U	(3-AND/OR 4-)METHYLPHENOL	1.4U	BENZO(GHI)PERYLENE
1.4U	1,2,4-TRICHLOROBENZENE	1.4U	BENZO-A-PYRENE
1.4U	2,2'-CHLOROISOPROPYLETHYR	1.4U	BENZYL BUTYL PHTHALATE
1.4U	2,3,4,6-TETRACHLOROPHENOL	1.4U	BIS(2-CHLOROETHOXY) METHANE
1.4U	2,4,5-TRICHLOROPHENOL	1.4U	BIS(2-CHLOROETHYL) ETHER
1.4U	2,4,6-TRICHLOROPHENOL	1.4U	BIS(2-ETHYLHEXYL) PHTHALATE
1.4U	2,4-DICHLOROPHENOL	1.4U	CARBAZOLE
1.4U	2,4-DIMETHYLPHENOL	1.4U	CHRYSENE
2.7U	2,4-DINITROPHENOL	1.4U	DI-N-BUTYLPHTHALATE
1.4U	2,4-DINITROTOLUENE	1.4U	DI-N-OCTYLPHTHALATE
1.4U	2,6-DINITROTOLUENE	1.4U	DIBENZO(A,H)ANTHRACENE
1.4U	2-CHLORONAPHTHALENE	1.4U	DIBENZOFURAN
1.4U	2-CHLOROPHENOL	1.4U	DIETHYL PHTHALATE
2.7U	2-METHYL-4,6-DINITROPHENOL	1.4U	DIMETHYL PHTHALATE
1.4U	2-METHYLNAPHTHALENE	1.4U	FLUORANTHENE
1.4U	2-METHYLPHENOL	1.4U	FLUORENE
1.4U	2-NITROANILINE	1.4U	HEXACHLOROBENZENE (HCB)
1.4U	2-NITROPHENOL	1.4U	HEXACHLOROBUTADIENE
1.4U	3,3'-DICHLOROBENZIDINE	1.4U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1.4U	3-NITROANILINE	1.4U	HEXACHLOROETHANE
1.4U	4-BROMOPHENYL PHENYL ETHER	1.4U	INDENO (1,2,3-CD) PYRENE
1.4U	4-CHLORO-3-METHYLPHENOL	1.4U	ISOPHORONE
1.4U	4-CHLOROANILINE	1.4U	N-NITROSODI-N-PROPYLAMINE
1.4U	4-CHLOROPHENYL PHENYL ETHER	1.4U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1.4U	4-NITROANILINE	1.4U	NAPHTHALENE
2.7U	4-NITROPHENOL	1.4U	NITROBENZENE
1.4U	ACENAPHTHENE	2.7U	PENTACHLOROPHENOL
1.4U	ACENAPHTHYLENE	1.4U	PHENANTHRENE
1.4U	ANTHRACENE	1.4U	PHENOL
1.4U	BENZO(A)ANTHRACENE	1.4U	PYRENE
1.4U	BENZO(B AND/OR K)FLUORANTHENE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91385 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 102 COLLECTION START: 11/08/94 1630 STOP: 00/00/00 **

ANALYTICAL RESULTS MG/KG

4JN DODECANOIC ACID
10JN TETRADECANOIC ACID
7JN PENTADECANOIC ACID (2 ISOMERS)
90JN HEXADECENOIC ACID
200JN HEXADECANOIC ACID
7JN HEPTADECENOIC ACID
10JN HEPATADECANOIC ACID (2 ISOMERS)
50JN OCTADECANOIC ACID
2JN EICOSATRIENOIC ACID
---- HEXADECANOIC ACID, HYDROXY(HYDROXYMETHYL)
6JN ETHYL ESTER
N PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91386 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 103 COLLECTION START: 11/08/94 1645 STOP: 00/00/00 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1.2U	(3-AND/OR 4-)METHYLPHENOL	1.2U	BENZO(GH1)PERYLENE
1.2U	1,2,4-TRICHLOROBENZENE	1.2U	BENZO-A-PYRENE
1.2U	2,2'-CHLOROISOPROPYLETHYR	1.2U	BENZYL BUTYL PHTHALATE
1.2U	2,3,4,6-TETRACHLOROPHENOL	1.2U	BIS(2-CHLOROETHOXY) METHANE
1.2U	2,4,5-TRICHLOROPHENOL	1.2U	BIS(2-CHLOROETHYL) ETHER
1.2U	2,4,6-TRICHLOROPHENOL	1.2U	BIS(2-ETHYLHEXYL) PHTHALATE
1.2U	2,4-DICHLOROPHENOL	1.2U	CARBAZOLE
1.2U	2,4-DIMETHYLPHENOL	1.2U	CHRYSENE
2.5U	2,4-DINITROPHENOL	1.2U	DI-N-BUTYLPHTHALATE
1.2U	2,4-DINITROTOLUENE	1.2U	DI-N-OCTYLPHTHALATE
1.2U	2,6-DINITROTOLUENE	1.2U	DIBENZO(A,H)ANTHRACENE
1.2U	2-CHLORONAPHTHALENE	1.2U	DIBENZOFURAN
1.2U	2-CHLOROPHENOL	1.2U	DIETHYL PHTHALATE
2.5U	2-METHYL-4,6-DINITROPHENOL	1.2U	DIMETHYL PHTHALATE
1.2U	2-METHYLNAPHTHALENE	1.2U	FLUORANTHENE
1.2U	2-METHYLPHENOL	1.2U	FLUORENE
1.2U	2-NITROANILINE	1.2U	HEXACHLOROBENZENE (HCB)
1.2U	2-NITROPHENOL	1.2U	HEXACHLOROBUTADIENE
1.2U	3,3'-DICHLOROBENZIDINE	1.2U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1.2U	3-NITROANILINE	1.2U	HEXACHLOROETHANE
1.2U	4-BROMOPHENYL PHENYL ETHER	1.2U	INDENO (1,2,3-CD) PYRENE
1.2U	4-CHLORO-3-METHYLPHENOL	1.2U	ISOPHORONE
1.2U	4-CHLOROANILINE	1.2U	N-NITROSODI-N-PROPYLAMINE
1.2U	4-CHLOROPHENYL PHENYL ETHER	1.2U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1.2U	4-NITROANILINE	1.2U	NAPHTHALENE
2.5U	4-NITROPHENOL	1.2U	NITROBENZENE
1.2U	ACENAPHTHENE	2.5U	PENTACHLOROPHENOL
1.2U	ACENAPHTHYLENE	1.2U	PHENANTHRENE
1.2U	ANTHRACENE	1.2U	PHENOL
1.2U	BENZO(A)ANTHRACENE	1.2U	PYRENE
1.2U	BENZO(B AND/OR K)FLUORANTHENE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91386 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 103 COLLECTION START: 11/08/94 1645 STOP: 00/00/00 **

ANALYTICAL RESULTS MG/KG

3JN PYRIDINECARBOXAMIDE
7JN DODECANOIC ACID
20JN TETRADECANOIC ACID
60JN PENTADECANOIC ACID (2 ISOMERS)
100JN HEXADECENOIC ACID
200JN HEXADECANOIC ACID
5JN HEPTADECENOIC ACID
9JN HEPTADECANOIC ACID (2 ISOMERS)
400JN OCTADECENOIC ACID, HEXYL ESTER
40JN OCTADECANOIC ACID
3JN EICOSATRIENOIC ACID
--- HEXADECANOIC ACID, HYDROXY(HYDROXYMETHYL)
30JN ETHYL ESTER
20JN OCTADECANOIC ACID, DIHYDROXYPROPYL ESTER
N PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

EXTRACTABLE ORGANICS DATA REPORT

```

***
** PROJECT NO. 95-0090  SAMPLE NO. 91387  SAMPLE TYPE: FISH  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLATROCK  ST: NC  **
** STATION ID: 104  COLLECTION START: 11/08/94  1710  STOP: 00/00/00  **
**
***
  
```

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1.1U	(3-AND/OR 4-)METHYLPHENOL	1.1U	BENZO(GH)PERYLENE
1.1U	1,2,4-TRICHLOROBENZENE	1.1U	BENZO-A-PYRENE
1.1U	2,2'-CHLOROISOPROPYLETHYR	1.1U	BENZYL BUTYL PHTHALATE
1.1U	2,3,4,6-TETRACHLOROPHENOL	1.1U	BIS(2-CHLOROETHOXY) METHANE
1.1U	2,4,5-TRICHLOROPHENOL	1.1U	BIS(2-CHLOROETHYL) ETHER
1.1U	2,4,6-TRICHLOROPHENOL	1.1U	BIS(2-ETHYLHEXYL) PHTHALATE
1.1U	2,4-DICHLOROPHENOL	1.1U	CARBAZOLE
1.1U	2,4-DIMETHYLPHENOL	1.1U	CHRYSENE
2.3U	2,4-DINITROPHENOL	1.1U	DI-N-BUTYLPHTHALATE
1.1U	2,4-DINITROTOLUENE	1.1U	DI-N-OCTYLPHTHALATE
1.1U	2,6-DINITROTOLUENE	1.1U	DIBENZO(A,H)ANTHRACENE
1.1U	2-CHLORONAPHTHALENE	1.1U	DIBENZOFURAN
1.1U	2-CHLOROPHENOL	1.1U	DIETHYL PHTHALATE
2.3U	2-METHYL-4,6-DINITROPHENOL	1.1U	DIMETHYL PHTHALATE
1.1U	2-METHYLNAPHTHALENE	1.1U	FLUORANTHENE
1.1U	2-METHYLPHENOL	1.1U	FLUORENE
1.1U	2-NITROANILINE	1.1U	HEXACHLOROBENZENE (HCB)
1.1U	2-NITROPHENOL	1.1U	HEXACHLOROBUTADIENE
1.1U	3,3'-DICHLOROBENZIDINE	1.1U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1.1U	3-NITROANILINE	1.1U	HEXACHLOROETHANE
1.1U	4-BROMOPHENYL PHENYL ETHER	1.1U	INDENO (1,2,3-CD) PYRENE
1.1U	4-CHLORO-3-METHYLPHENOL	1.1U	ISOPHORONE
1.1U	4-CHLOROANILINE	1.1U	N-NITROSODI-N-PROPYLAMINE
1.1U	4-CHLOROPHENYL PHENYL ETHER	1.1U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1.1U	4-NITROANILINE	1.1U	NAPHTHALENE
2.3U	4-NITROPHENOL	1.1U	NITROBENZENE
1.1U	ACENAPHTHENE	2.3U	PENTACHLOROPHENOL
1.1U	ACENAPHTHYLENE	1.1U	PHENANTHRENE
1.1U	ANTHRACENE	1.1U	PHENOL
1.1U	BENZO(A)ANTHRACENE	1.1U	PYRENE
1.1U	BENZO(B AND/OR K)FLUORANTHENE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91387 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 104 COLLECTION START: 11/08/94 1710 STOP: 00/00/00 **

ANALYTICAL RESULTS MG/KG

2JN PYRIDINECARBOXAMIDE
10JN DODECANOIC ACID
30JN TETRADECANOIC ACID
10JN PENTADECANOIC ACID (2 ISOMERS)
100JN HEXADECENOIC ACID
200JN HEXADECANOIC ACID
10JN HEPTADECENOIC ACID
20JN HEPTADECANOIC ACID (2 ISOMERS)
600JN OCTADECENOIC ACID, HEXYL ESTER
80JN OCTADECANOIC ACID
9JN EICOSATRIENOIC ACID
---- HEXADECANOIC ACID, HYDROXY(HYDROXYMETHYL)
20JN ETHYL ESTER
10JN EICOSADIENOIC ACID, METHYL ESTER
50JN OCTADECANOIC ACID, DIHYDROXYPROPYL ESTER
N PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91388 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 105 COLLECTION START: 11/09/94 0730 STOP: 00/00/00 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1.2U	(3-AND/OR 4-)METHYLPHENOL	1.2U	BENZO(GH)PERYLENE
1.2U	1,2,4-TRICHLOROBENZENE	1.2U	BENZO-A-PYRENE
1.2U	2,2'-CHLOROISOPROPYLETHYR	1.2U	BENZYL BUTYL PHTHALATE
1.2U	2,3,4,6-TETRACHLOROPHENOL	1.2U	BIS(2-CHLOROETHOXY) METHANE
1.2U	2,4,5-TRICHLOROPHENOL	1.2U	BIS(2-CHLOROETHYL) ETHER
1.2U	2,4,6-TRICHLOROPHENOL	1.2U	BIS(2-ETHYLHEXYL) PHTHALATE
1.2U	2,4-DICHLOROPHENOL	1.2U	CARBAZOLE
1.2U	2,4-DIMETHYLPHENOL	1.2U	CHRYSENE
2.4U	2,4-DINITROPHENOL	1.2U	DI-N-BUTYLPHTHALATE
1.2U	2,4-DINITROTOLUENE	1.2U	DI-N-OCTYLPHTHALATE
1.2U	2,6-DINITROTOLUENE	1.2U	DIBENZO(A,H)ANTHRACENE
1.2U	2-CHLORONAPHTHALENE	1.2U	DIBENZOFURAN
1.2U	2-CHLOROPHENOL	1.2U	DIETHYL PHTHALATE
2.4U	2-METHYL-4,6-DINITROPHENOL	1.2U	DIMETHYL PHTHALATE
1.2U	2-METHYLNAPHTHALENE	1.2U	FLUORANTHENE
1.2U	2-METHYLPHENOL	1.2U	FLUORENE
1.2U	2-NITROANILINE	1.2U	HEXACHLOROBENZENE (HCB)
1.2U	2-NITROPHENOL	1.2U	HEXACHLOROBUTADIENE
1.2U	3,3'-DICHLOROBENZIDINE	1.2U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1.2U	3-NITROANILINE	1.2U	HEXACHLOROETHANE
1.2U	4-BROMOPHENYL PHENYL ETHER	1.2U	INDENO (1,2,3-CD) PYRENE
1.2U	4-CHLORO-3-METHYLPHENOL	1.2U	ISOPHORONE
1.2U	4-CHLOROANILINE	1.2U	N-NITROSODI-N-PROPYLAMINE
1.2U	4-CHLOROPHENYL PHENYL ETHER	1.2U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1.2U	4-NITROANILINE	1.2U	NAPHTHALENE
2.4U	4-NITROPHENOL	1.2U	NITROBENZENE
1.2U	ACENAPHTHENE	2.4U	PENTACHLOROPHENOL
1.2U	ACENAPHTHYLENE	1.2U	PHENANTHRENE
1.2U	ANTHRACENE	1.2U	PHENOL
1.2U	BENZO(A)ANTHRACENE	1.2U	PYRENE
1.2U	BENZO(B AND/OR K)FLUORANTHENE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91388 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 105 COLLECTION START: 11/09/94 0730 STOP: 00/00/00 **

ANALYTICAL RESULTS MG/KG

4JN PYRIDINECARBOXAMIDE
7JN DODECANOIC ACID
20JN TETRADECANOIC ACID
10JN PENTADECANOIC ACID (2 ISOMERS)
100JN HEXADECENOIC ACID
200JN HEXADECANOIC ACID
8JN HEPTADECENOIC ACID
9JN HEPTADECANOIC ACID (2 ISOMERS)
400JN OCTADECENOIC ACID, HEXYL ESTER
40JN OCTADECANOIC ACID
---- HEXADECANOIC ACID, HYDROXY(HYDROXYPROPYL)
20JN ETHYL ESTER
20JN OCTADECANOIC ACID, DIHYDROXYPROPYL ESTER
N PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/14/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91389 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 106 COLLECTION START: 11/09/94 0755 STOP: 00/00/00 **
**

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1.3U	(3-AND/OR 4-)METHYLPHENOL	1.3U	BENZO(GHI)PERYLENE
1.3U	1,2,4-TRICHLOROBENZENE	1.3U	BENZO-A-PYRENE
1.3U	2,2'-CHLOROISOPROPYLETHAR	1.3UJ	BENZYL BUTYL PHTHALATE
1.3U	2,3,4,6-TETRACHLOROPHENOL	1.3U	BIS(2-CHLOROETHOXY) METHANE
1.3U	2,4,5-TRICHLOROPHENOL	1.3U	BIS(2-CHLOROETHYL) ETHER
1.3U	2,4,6-TRICHLOROPHENOL	1.3UJ	BIS(2-ETHYLHEXYL) PHTHALATE
1.3U	2,4-DICHLOROPHENOL	1.3U	CARBAZOLE
1.3U	2,4-DIMETHYLPHENOL	1.3UJ	CHRYSENE
2.5U	2,4-DINITROPHENOL	1.3U	DI-N-BUTYLPHTHALATE
1.3U	2,4-DINITROTOLUENE	1.3UJ	DI-N-OCTYLPHTHALATE
1.3U	2,6-DINITROTOLUENE	1.3U	DIBENZO(A,H)ANTHRACENE
1.3U	2-CHLORONAPHTHALENE	1.3U	DIBENZOFURAN
1.3U	2-CHLOROPHENOL	1.3U	DIETHYL PHTHALATE
2.5U	2-METHYL-4,6-DINITROPHENOL	1.3U	DIMETHYL PHTHALATE
1.3U	2-METHYLNAPHTHALENE	1.3UJ	FLUORANTHENE
1.3U	2-METHYLPHENOL	1.3U	FLUORENE
1.3U	2-NITROANILINE	1.3U	HEXACHLOROBENZENE (HCB)
1.3U	2-NITROPHENOL	1.3U	HEXACHLOROBUTADIENE
1.3UJ	3,3'-DICHLOROBENZIDINE	1.3U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1.3U	3-NITROANILINE	1.3U	HEXACHLOROETHANE
1.3U	4-BROMOPHENYL PHENYL ETHER	1.3U	INDENO (1,2,3-CD) PYRENE
1.3U	4-CHLORO-3-METHYLPHENOL	1.3U	ISOPHORONE
1.3U	4-CHLOROANILINE	1.3U	N-NITROSODI-N-PROPYLAMINE
1.3U	4-CHLOROPHENYL PHENYL ETHER	1.3U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1.3U	4-NITROANILINE	1.3U	NAPHTHALENE
2.5U	4-NITROPHENOL	1.3U	NITROBENZENE
1.3U	ACENAPHTHENE	2.5U	PENTACHLOROPHENOL
1.3U	ACENAPHTHYLENE	1.3U	PHENANTHRENE
1.3U	ANTHRACENE	1.3U	PHENOL
1.3UJ	BENZO(A)ANTHRACENE	1.3UJ	PYRENE
1.3U	BENZO(B AND/OR K)FLUORANTHENE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/14/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91389 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 106 COLLECTION START: 11/09/94 0755 STOP: 00/00/00 **

ANALYTICAL RESULTS MG/KG

2JN DODECANOIC ACID
10JN TETRADECANOIC ACID
5JN PENTADECANOIC ACID (2 ISOMERS)
40JN HEXADECANOIC ACID
80JN HEXADECANOIC ACID
5JN HEPTADECENOIC ACID
5JN HEPTADECANOIC ACID (2 ISOMERS)
100JN OCTADECENOIC ACID, HEXYL ESTER
20JN OCTADECANOIC ACID
---- HEXADECANOIC ACID, HYDROXY(HYDROXYPROPYL)
5JN ETHYL ESTER
5JN OCTADECANOIC ACID, DIHYDROXYPROPYL ESTER
N PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91390 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 107 COLLECTION START: 11/09/94 0850 STOP: 00/00/00 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1.4U	(3-AND/OR 4-)METHYLPHENOL	1.4U	BENZO(GHI)PERYLENE
1.4U	1,2,4-TRICHLOROBENZENE	1.4U	BENZO-A-PYRENE
1.4U	2,2'-CHLOROISOPROPYLETHYR	1.4UJ	BENZYL BUTYL PHTHALATE
1.4U	2,3,4,6-TETRACHLOROPHENOL	1.4U	BIS(2-CHLOROETHOXY) METHANE
1.4U	2,4,5-TRICHLOROPHENOL	1.4U	BIS(2-CHLOROETHYL) ETHER
1.4U	2,4,6-TRICHLOROPHENOL	1.4UJ	BIS(2-ETHYLHEXYL) PHTHALATE
1.4U	2,4-DICHLOROPHENOL	1.4U	CARBAZOLE
1.4U	2,4-DIMETHYLPHENOL	1.4UJ	CHRYSENE
2.9U	2,4-DINITROPHENOL	1.4U	DI-N-BUTYLPHTHALATE
1.4U	2,4-DINITROTOLUENE	1.4UJ	DI-N-OCTYLPHTHALATE
1.4U	2,6-DINITROTOLUENE	1.4U	DIBENZO(A,H)ANTHRACENE
1.4U	2-CHLORONAPHTHALENE	1.4U	DIBENZOFURAN
1.4U	2-CHLOROPHENOL	1.4U	DIETHYL PHTHALATE
2.9U	2-METHYL-4,6-DINITROPHENOL	1.4U	DIMETHYL PHTHALATE
1.4U	2-METHYLNAPHTHALENE	1.4UJ	FLUORANTHENE
1.4U	2-METHYLPHENOL	1.4U	FLUORENE
1.4U	2-NITROANILINE	1.4U	HEXACHLOROBENZENE (HCB)
1.4U	2-NITROPHENOL	1.4U	HEXACHLOROBUTADIENE
1.4UJ	3,3'-DICHLOROBENZIDINE	1.4U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1.4U	3-NITROANILINE	1.4U	HEXACHLOROETHANE
1.4U	4-BROMOPHENYL PHENYL ETHER	1.4U	INDENO (1,2,3-CD) PYRENE
1.4U	4-CHLORO-3-METHYLPHENOL	1.4U	ISOPHORONE
1.4U	4-CHLOROANILINE	1.4U	N-NITROSODI-N-PROPYLAMINE
1.4U	4-CHLOROPHENYL PHENYL ETHER	1.4U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1.4U	4-NITROANILINE	1.4U	NAPHTHALENE
2.9U	4-NITROPHENOL	1.4U	NITROBENZENE
1.4U	ACENAPHTHENE	2.9U	PENTACHLOROPHENOL
1.4U	ACENAPHTHYLENE	1.4U	PHENANTHRENE
1.4U	ANTHRACENE	1.4U	PHENOL
1.4UJ	BENZO(A)ANTHRACENE	1.4UJ	PYRENE
1.4U	BENZO(B AND/OR K)FLUORANTHENE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91390 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 107 COLLECTION START: 11/09/94 0850 STOP: 00/00/00 **

ANALYTICAL RESULTS MG/KG

2JN PYRIDINECARBOXAMIDE
3JN DODECANOIC ACID
10JN TETRADECANOIC ACID
8JN PENTADECANOIC ACID (2 ISOMERS)
50JN HEXADECENOIC ACID
90JN HEXADECANOIC ACID
6JN HEPTADECENOIC ACID
5JN HEPTADECANOIC ACID (2 ISOMERS)
200JN OCTADECENOIC ACID, HEXYL ESTER
20JN OCTADECANOIC ACID
---- HEXADECANOIC ACID, HYDROXY(HYDROXYMETHYL)
20JN ETHYL ESTER
7JN OCTADECANOIC ACID, DIHYDROXYPROPYL ESTER
N PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91391 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 108 COLLECTION START: 11/09/94 0925 STOP: 00/00/00 **

MG/KG	ANALYTICAL RESULTS	MG/KG	ANALYTICAL RESULTS
1.4U	(3-AND/OR 4-)METHYLPHENOL	1.4U	BENZO(GHI)PERYLENE
1.4U	1,2,4-TRICHLOROBENZENE	1.4U	BENZO-A-PYRENE
1.4U	2,2'-CHLOROISOPROPYLETH	1.4UJ	BENZYL BUTYL PHTHALATE
1.4U	2,3,4,6-TETRACHLOROPHENOL	1.4U	BIS(2-CHLOROETHOXY) METHANE
1.4U	2,4,5-TRICHLOROPHENOL	1.4U	BIS(2-CHLOROETHYL) ETHER
1.4U	2,4,6-TRICHLOROPHENOL	1.4UJ	BIS(2-ETHYLHEXYL) PHTHALATE
1.4U	2,4-DICHLOROPHENOL	1.4U	CARBAZOLE
1.4U	2,4-DIMETHYLPHENOL	1.4UJ	CHRYSENE
2.9U	2,4-DINITROPHENOL	1.4U	DI-N-BUTYLPHTHALATE
1.4U	2,4-DINITROTOLUENE	1.4UJ	DI-N-OCTYLPHTHALATE
1.4U	2,6-DINITROTOLUENE	1.4U	DIBENZO(A,H)ANTHRACENE
1.4U	2-CHLORONAPHTHALENE	1.4U	DIBENZOFURAN
1.4U	2-CHLOROPHENOL	1.4U	DIETHYL PHTHALATE
2.9U	2-METHYL-4,6-DINITROPHENOL	1.4U	DIMETHYL PHTHALATE
1.4U	2-METHYLNAPHTHALENE	1.4UJ	FLUORANTHENE
1.4U	2-METHYLPHENOL	1.4U	FLUORENE
1.4U	2-NITROANILINE	1.4U	HEXACHLOROBENZENE (HCB)
1.4U	2-NITROPHENOL	1.4U	HEXACHLOROBUTADIENE
1.4UJ	3,3'-DICHLOROBENZIDINE	1.4U	HEXACHLOROCYCLOPENTADIENE (HCCP)
1.4U	3-NITROANILINE	1.4U	HEXACHLOROETHANE
1.4U	4-BROMOPHENYL PHENYL ETHER	1.4U	INDENO (1,2,3-CD) PYRENE
1.4U	4-CHLORO-3-METHYLPHENOL	1.4U	ISOPHORONE
1.4U	4-CHLOROANILINE	1.4U	N-NITROSODI-N-PROPYLAMINE
1.4U	4-CHLOROPHENYL PHENYL ETHER	1.4U	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1.4U	4-NITROANILINE	1.4U	NAPHTHALENE
2.9U	4-NITROPHENOL	1.4U	NITROBENZENE
1.4U	ACENAPHTHENE	2.9U	PENTACHLOROPHENOL
1.4U	ACENAPHTHYLENE	1.4U	PHENANTHRENE
1.4U	ANTHRACENE	1.4U	PHENOL
1.4UJ	BENZO(A)ANTHRACENE	1.4UJ	PYRENE
1.4U	BENZO(B AND/OR K)FLUORANTHENE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91391 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 108 COLLECTION START: 11/09/94 0925 STOP: 00/00/00 **

ANALYTICAL RESULTS MG/KG

2JN	PYRIDINECARBOXAMIDE
3JN	DODECANOIC ACID
20JN	TETRADECANOIC ACID
7JN	PENTADECANOIC ACID (2 ISOMERS)
200JN	HEXADECENOIC ACID
100JN	HEXADECANOIC ACID
10JN	HEPTADECENOIC ACID
7JN	HETPADECANOIC ACID (2 ISOMERS)
200JN	OCTADECENOIC ACID, HEXYL ESTER
40JN	OCTADECANOIC ACID
----	HEXADECANOIC ACID, HYDROXY(HYDROXYPROPYL)
20JN	ETHYL ESTER
30JN	OCTADECANOIC ACID, DIHYDROXYPROPYL ESTER
N	PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91392 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 109 COLLECTION START: 11/07/94 1223 STOP: 00/00/00 **

MG/KG ANALYTICAL RESULTS

1.5U (3-AND/OR 4-)METHYLPHENOL
1.5U 1,2,4-TRICHLOROBENZENE
1.5U 2,2'-CHLOROISOPROPYLETHYR
1.5U 2,3,4,6-TETRACHLOROPHENOL
1.5U 2,4,5-TRICHLOROPHENOL
1.5U 2,4,6-TRICHLOROPHENOL
1.5U 2,4-DICHLOROPHENOL
1.5U 2,4-DIMETHYLPHENOL
3.1U 2,4-DINITROPHENOL
1.5U 2,4-DINITROTOLUENE
1.5U 2,6-DINITROTOLUENE
1.5U 2-CHLORONAPHTHALENE
1.5U 2-CHLOROPHENOL
3.1UJ 2-METHYL-4,6-DINITROPHENOL
1.5U 2-METHYLNAPHTHALENE
1.5U 2-METHYLPHENOL
1.5U 2-NITROANILINE
1.5U 2-NITROPHENOL
1.5UJ 3,3'-DICHLOROBENZIDINE
1.5U 3-NITROANILINE
1.5UJ 4-BROMOPHENYL PHENYL ETHER
1.5U 4-CHLORO-3-METHYLPHENOL
1.5U 4-CHLOROANILINE
1.5U 4-CHLOROPHENYL PHENYL ETHER
1.5U 4-NITROANILINE
3.1U 4-NITROPHENOL
1.5U ACENAPHTHENE
1.5U ACENAPHTHYLENE
1.5UJ ANTHRACENE
1.5UJ BENZO(A)ANTHRACENE
1.5U BENZO(B AND/OR K)FLUORANTHENE

MG/KG ANALYTICAL RESULTS

1.5U BENZO(GHI)PERYLENE
1.5U BENZO-A-PYRENE
1.5UJ BENZYL BUTYL PHTHALATE
1.5U BIS(2-CHLOROETHOXY) METHANE
1.5U BIS(2-CHLOROETHYL) ETHER
1.5UJ BIS(2-ETHYLHEXYL) PHTHALATE
1.5UJ CARBAZOLE
1.5UJ CHRYSENE
1.5UJ DI-N-BUTYLPHTHALATE
1.5UJ DI-N-OCTYLPHTHALATE
1.5U DIBENZO(A,H)ANTHRACENE
1.5U DIBENZOFURAN
1.5U DIETHYL PHTHALATE
1.5U DIMETHYL PHTHALATE
1.5UJ FLUORANTHENE
1.5U FLUORENE
1.5UJ HEXACHLOROBENZENE (HCB)
1.5U HEXACHLOROBUTADIENE
1.5U HEXACHLOROCYCLOPENTADIENE (HCCP)
1.5U HEXACHLOROETHANE
1.5U INDENO (1,2,3-CD) PYRENE
1.5U ISOPHORONE
1.5U N-NITROSODI-N-PROPYLAMINE
1.5UJ N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
1.5U NAPHTHALENE
1.5U NITROBENZENE
3.1UJ PENTACHLOROPHENOL
1.5UJ PHENANTHRENE
1.5U PHENOL
1.5UJ PYRENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

TOTO2\$DISK:[EPADZC]PRODHMET.LST;1

TOTO2\$DISK:[EPADZC]PRODHPCB.LST;1

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/13/94

MISCELLANEOUS EXTRACTABLE COMPOUNDS - DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91392 SAMPLE TYPE: FISH PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 109 COLLECTION START: 11/07/94 1223 STOP: 00/00/00 **
**

ANALYTICAL RESULTS MG/KG

2JN PYRIDINECARBOXAMIDE
4JN DODECANOIC ACID
20JN TETRADECANOIC ACID
8JN PENTADECANOIC ACID (2 ISOMERS)
200JN HEXADECENOIC ACID
100JN HEXADECANOIC ACID
6JN HEPTADECENOIC ACID
10JN HEPTADECANOIC ACID (2 ISOMERS)
200JN OCTADECENOIC ACID, HEXYL ESTER
30JN OCTADECANOIC ACID
---- HEXADECANOIC ACID, HYDROXY(HYDROXYMETHYL)
40JN ETHYL ESTER
4JN OCTADECANOIC ACID, DIHYDROXYPROPYL ESTER
N PETROLEUM PRODUCT

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.
*R-QC INDICATES THAT DATA UNUSABLE. COMPOUND MAY OR MAY NOT BE PRESENT. RESAMPLING AND REANALYSIS IS NECESSARY FOR VERIFICATION.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91270 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 101-SW COLLECTION START: 11/08/94 1345 STOP: 00/00/00 **
**
*** **

RESULTS UNITS PARAMETER
1.00 MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

*** * * * *
** PROJECT NO. 95-0048 SAMPLE NO. 91271 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 102-SW COLLECTION START: 11/08/94 1110 STOP: 00/00/00 **
** * * * * *

RESULTS UNITS PARAMETER
1.00 MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 95-0048 SAMPLE NO. 91272 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 103-SW COLLECTION START: 11/08/94 1030 STOP: 00/00/00 **

RESULTS UNITS PARAMETER
1.8 MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 95-0048 SAMPLE NO. 91273 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 104-SW COLLECTION START: 11/08/94 0900 STOP: 00/00/00 **
**

RESULTS UNITS PARAMETER
3.1 MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 95-0048 SAMPLE NO. 91274 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 105-SW COLLECTION START: 11/08/94 0740 STOP: 00/00/00 **
**

RESULTS UNITS PARAMETER
1.0U MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 95-0048 SAMPLE NO. 91275 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 106-SW COLLECTION START: 11/07/94 1650 STOP: 00/00/00 **

RESULTS UNITS PARAMETER
1.0U MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

*** * * * *
** PROJECT NO. 95-0048 SAMPLE NO. 91276 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 107-SW COLLECTION START: 11/07/94 1550 STOP: 00/00/00 **
** * * * * *

RESULTS UNITS PARAMETER
10A MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

*** ** ** ** ** ** ** ** **
** PROJECT NO. 95-0048 SAMPLE NO. 91277 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 108-SW COLLECTION START: 11/07/94 1425 STOP: 00/00/00 **
** ** ** ** **
*** ** ** ** **

RESULTS UNITS PARAMETER
8.8 MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 95-0048 SAMPLE NO. 91278 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 109-SW COLLECTION START: 11/07/94 1128 STOP: 00/00/00 **
**

RESULTS UNITS PARAMETER
2.8 MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

** PROJECT NO. 95-0048 SAMPLE NO. 91279 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 110-SW COLLECTION START: 11/08/94 1505 STOP: 00/00/00 **
**

RESULTS UNITS PARAMETER
3.9 MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/30/94

SPECIFIED ANALYSIS DATA REPORT

*** * * * *
** PROJECT NO. 95-0048 SAMPLE NO. 91281 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 205-SW COLLECTION START: 11/08/94 0740 STOP: 00/00/00 **
** * * * * *

RESULTS UNITS PARAMETER
1.0U MG/L TOTAL ORGANIC CARBON

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/21/94

PURGEABLE ORGANICS DATA REPORT

```

***
** PROJECT NO. 95-0048  SAMPLE NO. 91270  SAMPLE TYPE: SURFACEWA  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLAT ROC  ST: NC  **
** STATION ID: 101-SW  COLLECTION START: 11/08/94  1345  STOP: 00/00/00  **
**

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5.0U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/21/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91271 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 102-SW COLLECTION START: 11/08/94 1110 STOP: 00/00/00 **
**

```

UG/L ANALYTICAL RESULTS		UG/L ANALYTICAL RESULTS	
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	2.7J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/21/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91272 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 103-SW COLLECTION START: 11/08/94 1030 STOP: 00/00/00 **
**

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5.0U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/23/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91273 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 104-SW COLLECTION START: 11/08/94 0900 STOP: 00/00/00 **
** **

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5.0U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/21/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048  SAMPLE NO. 91274  SAMPLE TYPE: SURFACEWA  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLAT ROC  ST: NC  **
** STATION ID: 105-SW  COLLECTION START: 11/08/94  0740  STOP: 00/00/00  **
**

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	0.70J	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	0.93J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/21/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91275 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 106-SW COLLECTION START: 11/07/94 1650 STOP: 00/00/00 **
** **
*** **

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	3.4J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

```

*A-AVERAGE VALUE      *NA-NOT ANALYZED      *NAI-INTERFERENCES  *J-ESTIMATED VALUE  *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

```

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/21/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91276 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 107-SW COLLECTION START: 11/07/94 1550 STOP: 00/00/00 **
** **

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	1.8J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/21/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91277 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 108-SW COLLECTION START: 11/07/94 1425 STOP: 00/00/00 **
** **

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	1.0J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/21/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048  SAMPLE NO. 91278  SAMPLE TYPE: SURFACEWA  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLAT ROC  ST: NC  **
** STATION ID: 109-SW  COLLECTION START: 11/07/94  1128  STOP: 00/00/00  **
** **

```

UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE
5.0U	VINYL CHLORIDE
5.0U	BROMOMETHANE
5.0U	CHLOROETHANE
5.0U	TRICHLOROFLUOROMETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
50U	ACETONE
12U	CARBON DISULFIDE
5.0U	METHYLENE CHLORIDE
5.0U	TRANS-1,2-DICHLOROETHENE
5.0U	1,1-DICHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE
5.0U	2,2-DICHLOROPROPANE
50U	METHYL ETHYL KETONE
5.0U	BROMOCHLOROMETHANE
5.0U	CHLOROFORM
5.0U	1,1,1-TRICHLOROETHANE
5.0U	1,1-DICHLOROPROPENE
5.0U	CARBON TETRACHLORIDE
5.0U	1,2-DICHLOROETHANE
5.0U	BENZENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)
5.0U	1,2-DICHLOROPROPANE
5.0U	DIBROMOMETHANE
5.0U	BROMODICHLOROMETHANE

UG/L	ANALYTICAL RESULTS
5.0U	CIS-1,3-DICHLOROPROPENE
12U	METHYL ISOBUTYL KETONE
5.0U	TOLUENE
5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	1,1,2-TRICHLOROETHANE
1.7J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
5.0U	1,3-DICHLOROPROPANE
12U	METHYL BUTYL KETONE
5.0U	DIBROMOCHLOROMETHANE
5.0U	CHLOROBENZENE
5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	ETHYL BENZENE
5.0U	(M- AND/OR P-)XYLENE
5.0U	O-XYLENE
5.0U	STYRENE
5.0U	BROMOFORM
5.0U	BROMOBENZENE
5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	1,2,3-TRICHLOROPROPANE
5.0U	O-CHLOROTOLUENE
5.0U	P-CHLOROTOLUENE
5.0U	1,3-DICHLOROBENZENE
5.0U	1,4-DICHLOROBENZENE
5.0U	1,2-DICHLOROBENZENE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/22/94

PURGEABLE ORGANICS DATA REPORT

```

***
** PROJECT NO. 95-0048   SAMPLE NO. 91279   SAMPLE TYPE: SURFACEWA   PROG ELEM: SSF   COLLECTED BY: B BERRANG   **
** SOURCE: GE/SHEPHERD FARM   CITY: E FLAT ROC   ST: NC   **
** STATION ID: 110-SW   COLLECTION START: 11/08/94   1505   STOP: 00/00/00   **
**

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5.0U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/22/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91280 SAMPLE TYPE: SURFACEWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 111-SW COLLECTION START: 11/08/94 1700 STOP: 00/00/00 **
**

```

UG/L ANALYTICAL RESULTS		UG/L ANALYTICAL RESULTS	
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	5.0U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

11/22/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048  SAMPLE NO. 91281  SAMPLE TYPE: SURFACEWA  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLAT ROC  ST: NC  **
** STATION ID: 205-SW  COLLECTION START: 11/08/94  0740  STOP: 00/00/00  **
** **

```

UG/L	ANALYTICAL RESULTS	UG/L	ANALYTICAL RESULTS
10U	CHLOROMETHANE	5.0U	CIS-1,3-DICHLOROPROPENE
5.0U	VINYL CHLORIDE	12U	METHYL ISOBUTYL KETONE
5.0U	BROMOMETHANE	5.0U	TOLUENE
5.0U	CHLOROETHANE	5.0U	TRANS-1,3-DICHLOROPROPENE
5.0U	TRICHLOROFLUOROMETHANE	5.0U	1,1,2-TRICHLOROETHANE
5.0U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	0.96J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	ACETONE	5.0U	1,3-DICHLOROPROPANE
12U	CARBON DISULFIDE	12U	METHYL BUTYL KETONE
5.0U	METHYLENE CHLORIDE	5.0U	DIBROMOCHLOROMETHANE
5.0U	TRANS-1,2-DICHLOROETHENE	5.0U	CHLOROBENZENE
5.0U	1,1-DICHLOROETHANE	5.0U	1,1,1,2-TETRACHLOROETHANE
5.0U	CIS-1,2-DICHLOROETHENE	5.0U	ETHYL BENZENE
5.0U	2,2-DICHLOROPROPANE	5.0U	(M- AND/OR P-)XYLENE
50U	METHYL ETHYL KETONE	5.0U	O-XYLENE
5.0U	BROMOCHLOROMETHANE	5.0U	STYRENE
5.0U	CHLOROFORM	5.0U	BROMOFORM
5.0U	1,1,1-TRICHLOROETHANE	5.0U	BROMOBENZENE
5.0U	1,1-DICHLOROPROPENE	5.0U	1,1,2,2-TETRACHLOROETHANE
5.0U	CARBON TETRACHLORIDE	5.0U	1,2,3-TRICHLOROPROPANE
5.0U	1,2-DICHLOROETHANE	5.0U	O-CHLOROTOLUENE
5.0U	BENZENE	5.0U	P-CHLOROTOLUENE
5.0U	TRICHLOROETHENE(TRICHLOROETHYLENE)	5.0U	1,3-DICHLOROBENZENE
5.0U	1,2-DICHLOROPROPANE	5.0U	1,4-DICHLOROBENZENE
5.0U	DIBROMOMETHANE	5.0U	1,2-DICHLOROBENZENE
5.0U	BROMODICHLOROMETHANE		

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91282 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 101-SD COLLECTION START: 11/08/94 1345 STOP: 00/00/00 **
** **

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
62U	CHLOROMETHANE	62U	CIS-1,3-DICHLOROPROPENE
62U	VINYL CHLORIDE	160U	METHYL ISOBUTYL KETONE
62U	BROMOMETHANE	100	TOLUENE
62U	CHLOROETHANE	62U	TRANS-1,3-DICHLOROPROPENE
62U	TRICHLOROFLUOROMETHANE	62U	1,1,2-TRICHLOROETHANE
62U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	62U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
620U	ACETONE	62U	1,3-DICHLOROPROPANE
160U	CARBON DISULFIDE	160U	METHYL BUTYL KETONE
62U	METHYLENE CHLORIDE	62U	DIBROMOCHLOROMETHANE
62U	TRANS-1,2-DICHLOROETHENE	62U	CHLOROBENZENE
62U	1,1-DICHLOROETHANE	62U	1,1,1,2-TETRACHLOROETHANE
62U	CIS-1,2-DICHLOROETHENE	62U	ETHYL BENZENE
62U	2,2-DICHLOROPROPANE	62U	(M- AND/OR P-)XYLENE
620U	METHYL ETHYL KETONE	62U	O-XYLENE
62U	BROMOCHLOROMETHANE	62U	STYRENE
62U	CHLOROFORM	62U	BROMOFORM
62U	1,1,1-TRICHLOROETHANE	62U	BROMOBENZENE
62U	1,1-DICHLOROPROPENE	62U	1,1,2,2-TETRACHLOROETHANE
62U	CARBON TETRACHLORIDE	62U	1,2,3-TRICHLOROPROPANE
62U	1,2-DICHLOROETHANE	62U	O-CHLOROTOLUENE
62U	BENZENE	62U	P-CHLOROTOLUENE
62U	TRICHLOROETHENE(TRICHLOROETHYLENE)	62U	1,3-DICHLOROBENZENE
62U	1,2-DICHLOROPROPANE	62U	1,4-DICHLOROBENZENE
62U	DIBROMOMETHANE	62U	1,2-DICHLOROBENZENE
62U	BROMODICHLOROMETHANE		PERCENT MOISTURE

REMARKS

DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91283 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 102-SD COLLECTION START: 11/08/94 1110 STOP: 00/00/00 **
**

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
42U	CHLOROMETHANE	42U	CIS-1,3-DICHLOROPROPENE
42U	VINYL CHLORIDE	100U	METHYL ISOBUTYL KETONE
42U	BROMOMETHANE	42U	TOLUENE
42U	CHLOROETHANE	42U	TRANS-1,3-DICHLOROPROPENE
42U	TRICHLOROFLUOROMETHANE	42U	1,1,2-TRICHLOROETHANE
42U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	42U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
420U	ACETONE	42U	1,3-DICHLOROPROPANE
100U	CARBON DISULFIDE	100U	METHYL BUTYL KETONE
42U	METHYLENE CHLORIDE	42U	DIBROMOCHLOROMETHANE
42U	TRANS-1,2-DICHLOROETHENE	42U	CHLOROBENZENE
42U	1,1-DICHLOROETHANE	42U	1,1,1,2-TETRACHLOROETHANE
42U	CIS-1,2-DICHLOROETHENE	42U	ETHYL BENZENE
42U	2,2-DICHLOROPROPANE	42U	(M- AND/OR P-)XYLENE
420U	METHYL ETHYL KETONE	42U	O-XYLENE
42U	BROMOCHLOROMETHANE	42U	STYRENE
42U	CHLOROFORM	42U	BROMOFORM
42U	1,1,1-TRICHLOROETHANE	42U	BROMOBENZENE
42U	1,1-DICHLOROPROPENE	42U	1,1,2,2-TETRACHLOROETHANE
42U	CARBON TETRACHLORIDE	42U	1,2,3-TRICHLOROPROPANE
42U	1,2-DICHLOROETHANE	42U	O-CHLOROTOLUENE
42U	BENZENE	42U	P-CHLOROTOLUENE
42U	TRICHLOROETHENE(TRICHLOROETHYLENE)	42U	1,3-DICHLOROBENZENE
42U	1,2-DICHLOROPROPANE	42U	1,4-DICHLOROBENZENE
42U	DIBROMOMETHANE	42U	1,2-DICHLOROBENZENE
42U	BROMODICHLOROMETHANE		PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91284 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 103-SD COLLECTION START: 11/08/94 1030 STOP: 00/00/00 **
** **
*** **

```

UG/KG	ANALYTICAL RESULTS
50U	CHLOROMETHANE
50U	VINYL CHLORIDE
50U	BROMOMETHANE
50U	CHLOROETHANE
50U	TRICHLOROFLUOROMETHANE
50U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
500U	ACETONE
120U	CARBON DISULFIDE
50U	METHYLENE CHLORIDE
50U	TRANS-1,2-DICHLOROETHENE
50U	1,1-DICHLOROETHANE
50U	CIS-1,2-DICHLOROETHENE
50U	2,2-DICHLOROPROPANE
500U	METHYL ETHYL KETONE
50U	BROMOCHLOROMETHANE
50U	CHLOROFORM
50U	1,1,1-TRICHLOROETHANE
50U	1,1-DICHLOROPROPENE
50U	CARBON TETRACHLORIDE
50U	1,2-DICHLOROETHANE
50U	BENZENE
50U	TRICHLOROETHENE(TRICHLOROETHYLENE)
50U	1,2-DICHLOROPROPANE
50U	DIBROMOMETHANE
50U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
50U	CIS-1,3-DICHLOROPROPENE
120U	METHYL ISOBUTYL KETONE
50U	TOLUENE
50U	TRANS-1,3-DICHLOROPROPENE
50U	1,1,2-TRICHLOROETHANE
50U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
50U	1,3-DICHLOROPROPANE
120U	METHYL BUTYL KETONE
50U	DIBROMOCHLOROMETHANE
50U	CHLOROBENZENE
50U	1,1,1,2-TETRACHLOROETHANE
50U	ETHYL BENZENE
50U	(M- AND/OR P-)XYLENE
50U	O-XYLENE
50U	STYRENE
50U	BROMOFORM
50U	BROMOBENZENE
50U	1,1,2,2-TETRACHLOROETHANE
50U	1,2,3-TRICHLOROPROPANE
50U	O-CHLOROTOLUENE
50U	P-CHLOROTOLUENE
50U	1,3-DICHLOROBENZENE
50U	1,4-DICHLOROBENZENE
50U	1,2-DICHLOROBENZENE
	PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91285 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 104-SD COLLECTION START: 11/08/94 0900 STOP: 00/00/00 **
**

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
46U	CHLOROMETHANE	46U	CIS-1,3-DICHLOROPROPENE
46U	VINYL CHLORIDE	110U	METHYL ISOBUTYL KETONE
46U	BROMOMETHANE	46U	TOLUENE
46U	CHLOROETHANE	46U	TRANS-1,3-DICHLOROPROPENE
46U	TRICHLOROFLUOROMETHANE	46U	1,1,2-TRICHLOROETHANE
46U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	46U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
460U	ACETONE	46U	1,3-DICHLOROPROPANE
110U	CARBON DISULFIDE	110U	METHYL BUTYL KETONE
46U	METHYLENE CHLORIDE	46U	DIBROMOCHLOROMETHANE
46U	TRANS-1,2-DICHLOROETHENE	46U	CHLOROBENZENE
46U	1,1-DICHLOROETHANE	46U	1,1,1,2-TETRACHLOROETHANE
46U	CIS-1,2-DICHLOROETHENE	46U	ETHYL BENZENE
46U	2,2-DICHLOROPROPANE	46U	(M- AND/OR P-)XYLENE
460U	METHYL ETHYL KETONE	46U	O-XYLENE
46U	BROMOCHLOROMETHANE	46U	STYRENE
46U	CHLOROFORM	46U	BROMOFORM
46U	1,1,1-TRICHLOROETHANE	46U	BROMOBENZENE
46U	1,1-DICHLOROPROPENE	46U	1,1,2,2-TETRACHLOROETHANE
46U	CARBON TETRACHLORIDE	46U	1,2,3-TRICHLOROPROPANE
46U	1,2-DICHLOROETHANE	46U	O-CHLOROTOLUENE
46U	BENZENE	46U	P-CHLOROTOLUENE
46U	TRICHLOROETHENE(TRICHLOROETHYLENE)	46U	1,3-DICHLOROBENZENE
46U	1,2-DICHLOROPROPANE	46U	1,4-DICHLOROBENZENE
46U	DIBROMOMETHANE	46U	1,2-DICHLOROBENZENE
46U	BROMODICHLOROMETHANE		PERCENT MOISTURE

REMARKS

DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91286 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 105-SD COLLECTION START: 11/08/94 0740 STOP: 00/00/00 **
**

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
42U	CHLOROMETHANE	42U	CIS-1,3-DICHLOROPROPENE
42U	VINYL CHLORIDE	100U	METHYL ISOBUTYL KETONE
42U	BROMOMETHANE	42U	TOLUENE
42U	CHLOROETHANE	42U	TRANS-1,3-DICHLOROPROPENE
42U	TRICHLOROFLUOROMETHANE	42U	1,1,2-TRICHLOROETHANE
42U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	42U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
420U	ACETONE	42U	1,3-DICHLOROPROPANE
100U	CARBON DISULFIDE	100U	METHYL BUTYL KETONE
42U	METHYLENE CHLORIDE	42U	DIBROMOCHLOROMETHANE
42U	TRANS-1,2-DICHLOROETHENE	42U	CHLOROBENZENE
42U	1,1-DICHLOROETHANE	42U	1,1,1,2-TETRACHLOROETHANE
42U	CIS-1,2-DICHLOROETHENE	42U	ETHYL BENZENE
42U	2,2-DICHLOROPROPANE	42U	(M- AND/OR P-)XYLENE
420U	METHYL ETHYL KETONE	42U	O-XYLENE
42U	BROMOCHLOROMETHANE	42U	STYRENE
42U	CHLOROFORM	42U	BROMOFORM
42U	1,1,1-TRICHLOROETHANE	42U	BROMOBENZENE
42U	1,1-DICHLOROPROPENE	42U	1,1,2,2-TETRACHLOROETHANE
42U	CARBON TETRACHLORIDE	42U	1,2,3-TRICHLOROPROPANE
42U	1,2-DICHLOROETHANE	42U	O-CHLOROTOLUENE
42U	BENZENE	42U	P-CHLOROTOLUENE
42U	TRICHLOROETHENE(TRICHLOROETHYLENE)	42U	1,3-DICHLOROBENZENE
42U	1,2-DICHLOROPROPANE	42U	1,4-DICHLOROBENZENE
42U	DIBROMOMETHANE	42U	1,2-DICHLOROBENZENE
42U	BROMODICHLOROMETHANE		PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91287 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 106-SD COLLECTION START: 11/07/94 1650 STOP: 00/00/00 **
**
*** **

```

UG/KG	ANALYTICAL RESULTS
46U	CHLOROMETHANE
46U	VINYL CHLORIDE
46U	BROMOMETHANE
46U	CHLOROETHANE
46U	TRICHLOROFLUOROMETHANE
46U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
460U	ACETONE
110U	CARBON DISULFIDE
46U	METHYLENE CHLORIDE
46U	TRANS-1,2-DICHLOROETHENE
46U	1,1-DICHLOROETHANE
46U	CIS-1,2-DICHLOROETHENE
46U	2,2-DICHLOROPROPANE
460U	METHYL ETHYL KETONE
46U	BROMOCHLOROMETHANE
46U	CHLOROFORM
46U	1,1,1-TRICHLOROETHANE
46U	1,1-DICHLOROPROPENE
46U	CARBON TETRACHLORIDE
46U	1,2-DICHLOROETHANE
46U	BENZENE
46U	TRICHLOROETHENE(TRICHLOROETHYLENE)
46U	1,2-DICHLOROPROPANE
46U	DIBROMOMETHANE
46U	BROMODICHLOROMETHANE

UG/KG	ANALYTICAL RESULTS
46U	CIS-1,3-DICHLOROPROPENE
110U	METHYL ISOBUTYL KETONE
46U	TOLUENE
46U	TRANS-1,3-DICHLOROPROPENE
46U	1,1,2-TRICHLOROETHANE
15J	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
46U	1,3-DICHLOROPROPANE
110U	METHYL BUTYL KETONE
46U	DIBROMOCHLOROMETHANE
46U	CHLOROBENZENE
46U	1,1,1,2-TETRACHLOROETHANE
46U	ETHYL BENZENE
46U	(M- AND/OR P-)XYLENE
46U	O-XYLENE
46U	STYRENE
46U	BROMOFORM
46U	BROMOBENZENE
46U	1,1,2,2-TETRACHLOROETHANE
46U	1,2,3-TRICHLOROPROPANE
46U	O-CHLOROTOLUENE
46U	P-CHLOROTOLUENE
46U	1,3-DICHLOROBENZENE
46U	1,4-DICHLOROBENZENE
46U	1,2-DICHLOROBENZENE
	PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048  SAMPLE NO. 91288  SAMPLE TYPE: SEDIM  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLAT ROC  ST: NC  **
** STATION ID: 107-SO  COLLECTION START: 11/07/94  1550  STOP: 00/00/00  **
**

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
36U	CHLOROMETHANE	36U	CIS-1,3-DICHLOROPROPENE
36U	VINYL CHLORIDE	89U	METHYL ISOBUTYL KETONE
36U	BROMOMETHANE	36U	TOLUENE
36U	CHLOROETHANE	36U	TRANS-1,3-DICHLOROPROPENE
36U	TRICHLOROFLUOROMETHANE	36U	1,1,2-TRICHLOROETHANE
36U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	36U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
360U	ACETONE	36U	1,3-DICHLOROPROPANE
89U	CARBON DISULFIDE	89U	METHYL BUTYL KETONE
36U	METHYLENE CHLORIDE	36U	DIBROMOCHLOROMETHANE
36U	TRANS-1,2-DICHLOROETHENE	36U	CHLOROBENZENE
36U	1,1-DICHLOROETHANE	36U	1,1,1,2-TETRACHLOROETHANE
36U	CIS-1,2-DICHLOROETHENE	36U	ETHYL BENZENE
36U	2,2-DICHLOROPROPANE	36U	(M- AND/OR P-)XYLENE
360U	METHYL ETHYL KETONE	36U	O-XYLENE
36U	BROMOCHLOROMETHANE	36U	STYRENE
36U	CHLOROFORM	36U	BROMOFORM
36U	1,1,1-TRICHLOROETHANE	36U	BROMOBENZENE
36U	1,1-DICHLOROPROPENE	36U	1,1,2,2-TETRACHLOROETHANE
36U	CARBON TETRACHLORIDE	36U	1,2,3-TRICHLOROPROPANE
36U	1,2-DICHLOROETHANE	36U	O-CHLOROTOLUENE
36U	BENZENE	36U	P-CHLOROTOLUENE
36U	TRICHLOROETHENE(TRICHLOROETHYLENE)	36U	1,3-DICHLOROBENZENE
36U	1,2-DICHLOROPROPANE	36U	1,4-DICHLOROBENZENE
36U	DIBROMOMETHANE	36U	1,2-DICHLOROBENZENE
36U	BROMODICHLOROMETHANE		PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES

```

*A-AVERAGE VALUE      *NA-NOT ANALYZED      *NAI-INTERFERENCES  *J-ESTIMATED VALUE  *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN  *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED  THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

```

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048   SAMPLE NO. 91289   SAMPLE TYPE: SEDIM   PROG ELEM: SSF   COLLECTED BY: B BERRANG   **
** SOURCE: GE/SHEPHERD FARM   CITY: E FLAT ROC   ST: NC   **
** STATION ID: 108-SD   COLLECTION START: 11/07/94 1425   STOP: 00/00/00   **
**

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
38U	CHLOROMETHANE	38U	CIS-1,3-DICHLOROPROPENE
38U	VINYL CHLORIDE	96U	METHYL ISOBUTYL KETONE
38U	BROMOMETHANE	38U	TOLUENE
38U	CHLOROETHANE	38U	TRANS-1,3-DICHLOROPROPENE
38U	TRICHLOROFLUOROMETHANE	38U	1,1,2-TRICHLOROETHANE
38U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	38U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
380U	ACETONE	38U	1,3-DICHLOROPROPANE
96U	CARBON DISULFIDE	96U	METHYL BUTYL KETONE
38U	METHYLENE CHLORIDE	38U	DIBROMOCHLOROMETHANE
38U	TRANS-1,2-DICHLOROETHENE	38U	CHLOROBENZENE
38U	1,1-DICHLOROETHANE	38U	1,1,1,2-TETRACHLOROETHANE
4.4J	CIS-1,2-DICHLOROETHENE	38U	ETHYL BENZENE
38U	2,2-DICHLOROPROPANE	38U	(M- AND/OR P-)XYLENE
380U	METHYL ETHYL KETONE	38U	O-XYLENE
38U	BROMOCHLOROMETHANE	38U	STYRENE
38U	CHLOROFORM	38U	BROMOFORM
38U	1,1,1-TRICHLOROETHANE	38U	BROMOBENZENE
38U	1,1-DICHLOROPROPENE	38U	1,1,2,2-TETRACHLOROETHANE
38U	CARBON TETRACHLORIDE	38U	1,2,3-TRICHLOROPROPANE
38U	1,2-DICHLOROETHANE	38U	O-CHLOROTOLUENE
38U	BENZENE	38U	P-CHLOROTOLUENE
38U	TRICHLOROETHENE(TRICHLOROETHYLENE)	38U	1,3-DICHLOROBENZENE
38U	1,2-DICHLOROPROPANE	38U	1,4-DICHLOROBENZENE
38U	DIBROMOMETHANE	38U	1,2-DICHLOROBENZENE
38U	BROMODICHLOROMETHANE		PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048  SAMPLE NO. 91290  SAMPLE TYPE: SEDIM  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLAT ROC  ST: NC  **
** STATION ID: 109-SD  COLLECTION START: 11/07/94  1128  STOP: 00/00/00  **
** **

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
38U	CHLOROMETHANE	38U	CIS-1,3-DICHLOROPROPENE
38U	VINYL CHLORIDE	96U	METHYL ISOBUTYL KETONE
38U	BROMOMETHANE	38U	TOLUENE
38U	CHLOROETHANE	38U	TRANS-1,3-DICHLOROPROPENE
38U	TRICHLOROFLUOROMETHANE	38U	1,1,2-TRICHLOROETHANE
38U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	38U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
380U	ACETONE	38U	1,3-DICHLOROPROPANE
96U	CARBON DISULFIDE	96U	METHYL BUTYL KETONE
38U	METHYLENE CHLORIDE	38U	DIBROMOCHLOROMETHANE
38U	TRANS-1,2-DICHLOROETHENE	38U	CHLOROBENZENE
38U	1,1-DICHLOROETHANE	38U	1,1,1,2-TETRACHLOROETHANE
38U	CIS-1,2-DICHLOROETHENE	38U	ETHYL BENZENE
38U	2,2-DICHLOROPROPANE	38U	(M- AND/OR P-)XYLENE
380U	METHYL ETHYL KETONE	38U	O-XYLENE
38U	BROMOCHLOROMETHANE	38U	STYRENE
38U	CHLOROFORM	38U	BROMOFORM
38U	1,1,1-TRICHLOROETHANE	38U	BROMOBENZENE
38U	1,1-DICHLOROPROPENE	38U	1,1,2,2-TETRACHLOROETHANE
38U	CARBON TETRACHLORIDE	38U	1,2,3-TRICHLOROPROPANE
38U	1,2-DICHLOROETHANE	38U	O-CHLOROTOLUENE
38U	BENZENE	38U	P-CHLOROTOLUENE
38U	TRICHLOROETHENE(TRICHLOROETHYLENE)	38U	1,3-DICHLOROBENZENE
38U	1,2-DICHLOROPROPANE	38U	1,4-DICHLOROBENZENE
38U	DIBROMOMETHANE	38U	1,2-DICHLOROBENZENE
38U	BROMODICHLOROMETHANE		PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES
 *A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0048 SAMPLE NO. 91291 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 110-SD COLLECTION START: 11/08/94 1505 STOP: 00/00/00 **

UG/KG ANALYTICAL RESULTS

46U CHLOROMETHANE
46U VINYL CHLORIDE
46U BROMOMETHANE
46U CHLOROETHANE
46U TRICHLOROFLUOROMETHANE
46U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
46U ACETONE
110U CARBON DISULFIDE
46U METHYLENE CHLORIDE
46U TRANS-1,2-DICHLOROETHENE
46U 1,1-DICHLOROETHANE
46U CIS-1,2-DICHLOROETHENE
46U 2,2-DICHLOROPROPANE
46U METHYL ETHYL KETONE
46U BROMOCHLOROMETHANE
46U CHLOROFORM
46U 1,1,1-TRICHLOROETHANE
46U 1,1-DICHLOROPROPENE
46U CARBON TETRACHLORIDE
46U 1,2-DICHLOROETHANE
46U BENZENE
46U TRICHLOROETHENE(TRICHLOROETHYLENE)
46U 1,2-DICHLOROPROPANE
46U DIBROMOMETHANE
46U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

46U CIS-1,3-DICHLOROPROPENE
110U METHYL ISOBUTYL KETONE
46U TOLUENE
46U TRANS-1,3-DICHLOROPROPENE
46U 1,1,2-TRICHLOROETHANE
46U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
46U 1,3-DICHLOROPROPANE
110U METHYL BUTYL KETONE
46U DIBROMOCHLOROMETHANE
46U CHLOROBENZENE
46U 1,1,1,2-TETRACHLOROETHANE
46U ETHYL BENZENE
46U (M- AND/OR P-)XYLENE
46U O-XYLENE
46U STYRENE
46U BROMOFORM
46U BROMOBENZENE
46U 1,1,2,2-TETRACHLOROETHANE
46U 1,2,3-TRICHLOROPROPANE
46U O-CHLOROTOLUENE
46U P-CHLOROTOLUENE
46U 1,3-DICHLOROBENZENE
46U 1,4-DICHLOROBENZENE
46U 1,2-DICHLOROBENZENE
PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES
*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

PURGEABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0048 SAMPLE NO. 91293 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 205-SD COLLECTION START: 11/08/94 0740 STOP: 00/00/00 **
** **

```

UG/KG	ANALYTICAL RESULTS	UG/KG	ANALYTICAL RESULTS
25U	CHLOROMETHANE	25U	CIS-1,3-DICHLOROPROPENE
25U	VINYL CHLORIDE	62U	METHYL ISOBUTYL KETONE
25U	BROMOMETHANE	25U	TOLUENE
25U	CHLOROETHANE	25U	TRANS-1,3-DICHLOROPROPENE
25U	TRICHLOROFLUOROMETHANE	25U	1,1,2-TRICHLOROETHANE
25U	1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)	25U	TETRACHLOROETHENE(TETRACHLOROETHYLENE)
250U	ACETONE	25U	1,3-DICHLOROPROPANE
62U	CARBON DISULFIDE	62U	METHYL BUTYL KETONE
75U	METHYLENE CHLORIDE	25U	DIBROMOCHLOROMETHANE
25U	TRANS-1,2-DICHLOROETHENE	25U	CHLOROBENZENE
25U	1,1-DICHLOROETHANE	25U	1,1,1,2-TETRACHLOROETHANE
25U	CIS-1,2-DICHLOROETHENE	25U	ETHYL BENZENE
25U	2,2-DICHLOROPROPANE	25U	(M- AND/OR P-)XYLENE
250U	METHYL ETHYL KETONE	25U	O-XYLENE
25U	BROMOCHLOROMETHANE	25U	STYRENE
25U	CHLOROFORM	25U	BROMOFORM
25U	1,1,1-TRICHLOROETHANE	25U	BROMOBENZENE
25U	1,1-DICHLOROPROPENE	25U	1,1,2,2-TETRACHLOROETHANE
25U	CARBON TETRACHLORIDE	25U	1,2,3-TRICHLOROPROPANE
25U	1,2-DICHLOROETHANE	25U	O-CHLOROTOLUENE
25U	BENZENE	25U	P-CHLOROTOLUENE
25U	TRICHLOROETHENE(TRICHLOROETHYLENE)	25U	1,3-DICHLOROBENZENE
25U	1,2-DICHLOROPROPANE	25U	1,4-DICHLOROBENZENE
25U	DIBROMOMETHANE	25U	1,2-DICHLOROBENZENE
25U	BROMODICHLOROMETHANE		PERCENT MOISTURE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/08/94

PURGEABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0048 SAMPLE NO. 91292 SAMPLE TYPE: SEDIM PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLAT ROC ST: NC **
** STATION ID: 111-SD COLLECTION START: 11/08/94 1700 STOP: 00/00/00 **

UG/KG ANALYTICAL RESULTS

46U CHLOROMETHANE
46U VINYL CHLORIDE
46U BROMOMETHANE
46U CHLOROETHANE
46U TRICHLOROFLUOROMETHANE
46U 1,1-DICHLOROETHENE(1,1-DICHLOROETHYLENE)
46U ACETONE
110U CARBON DISULFIDE
46U METHYLENE CHLORIDE
46U TRANS-1,2-DICHLOROETHENE
46U 1,1-DICHLOROETHANE
46U CIS-1,2-DICHLOROETHENE
46U 2,2-DICHLOROPROPANE
46U METHYL ETHYL KETONE
46U BROMOCHLOROMETHANE
46U CHLOROFORM
46U 1,1,1-TRICHLOROETHANE
46U 1,1-DICHLOROPROPENE
46U CARBON TETRACHLORIDE
46U 1,2-DICHLOROETHANE
46U BENZENE
46U TRICHLOROETHENE(TRICHLOROETHYLENE)
46U 1,2-DICHLOROPROPANE
46U DIBROMOMETHANE
46U BROMODICHLOROMETHANE

UG/KG ANALYTICAL RESULTS

46U CIS-1,3-DICHLOROPROPENE
110U METHYL ISOBUTYL KETONE
46U TOLUENE
46U TRANS-1,3-DICHLOROPROPENE
46U 1,1,2-TRICHLOROETHANE
46U TETRACHLOROETHENE(TETRACHLOROETHYLENE)
46U 1,3-DICHLOROPROPANE
110U METHYL BUTYL KETONE
46U DIBROMOCHLOROMETHANE
46U CHLOROBENZENE
46U 1,1,1,2-TETRACHLOROETHANE
46U ETHYL BENZENE
46U (M- AND/OR P-)XYLENE
46U O-XYLENE
46U STYRENE
46U BROMOFORM
46U BROMOBENZENE
46U 1,1,2,2-TETRACHLOROETHANE
46U 1,2,3-TRICHLOROPROPANE
46U O-CHLOROTOLUENE
46U P-CHLOROTOLUENE
46U 1,3-DICHLOROBENZENE
46U 1,4-DICHLOROBENZENE
46U 1,2-DICHLOROBENZENE
PERCENT MOISTURE

REMARKS
DATA REPORTED ON WET WEIGHT BASIS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91394 SAMPLE TYPE: DRYICEBLK PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 250 COLLECTION START: 11/15/94 1130 STOP: 00/00/00 **

UG/BO	ANALYTICAL RESULTS	UG/BO	ANALYTICAL RESULTS
0.20U	SILVER	10U	CALCIUM
0.60U	ARSENIC	2.0U	MAGNESIUM
NA	BORON	1.0U	IRON
0.20U	BARIUM	40U	SODIUM
0.10U	BERYLLIUM	40U	POTASSIUM
0.10U	CADMIUM		
0.20U	COBALT		
0.20U	CHROMIUM		
1.0	COPPER		
0.20U	MOLYBDENUM		
0.40U	NICKEL		
0.80U	LEAD		
0.60U	ANTIMONY		
0.80U	SELENIUM		
0.50U	TIN		
0.20U	STRONTIUM		
1.0U	TELLURIUM		
0.20U	TITANIUM		
2.0U	THALLIUM		
0.20U	VANADIUM		
0.20U	YTTRIUM		
0.72	ZINC		
NA	ZIRCONIUM		
NA	MERCURY		
4.0U	ALUMINUM		
0.20U	MANGANESE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91395 SAMPLE TYPE: DRYICEBLK PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 260 COLLECTION START: 11/16/94 1200 STOP: 00/00/00 **
**

UG/BO ANALYTICAL RESULTS UG/BO ANALYTICAL RESULTS
0.20U SILVER 10U CALCIUM
0.60U ARSENIC 2.0U MAGNESIUM
NA BORON 1.0U IRON
0.20U BARIUM 4.0U SODIUM
0.10U BERYLLIUM 4.0U POTASSIUM
0.10U CADMIUM
0.20U COBALT
0.20U CHROMIUM
1.6 COPPER
0.20U MOLYBDENUM
0.40U NICKEL
0.80U LEAD
0.60U ANTIMONY
0.80U SELENIUM
0.50U TIN
0.20U STRONTIUM
1.0U TELLURIUM
0.20U TITANIUM
2.0U THALLIUM
0.20U VANADIUM
0.20U YTTRIUM
1.2 ZINC
NA ZIRCONIUM
NA MERCURY
4.0U ALUMINUM
0.20U MANGANESE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91396 SAMPLE TYPE: DRYICEBLK PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 270 COLLECTION START: 11/14/94 1430 STOP: 00/00/00 **
**

UG/BO ANALYTICAL RESULTS UG/BO ANALYTICAL RESULTS
0.20U SILVER 10U CALCIUM
0.60U ARSENIC 2.0U MAGNESIUM
NA BORON 1.3 IRON
0.20U BARIUM 40U SODIUM
0.10U BERYLLIUM 40U POTASSIUM
0.10U CADMIUM
0.20U COBALT
0.20U CHROMIUM
1.6 COPPER
0.20U MOLYBDENUM
0.40U NICKEL
0.80U LEAD
0.60U ANTIMONY
0.80U SELENIUM
0.50U TIN
0.20U STRONTIUM
1.0U TELLURIUM
0.20U TITANIUM
2.0U THALLIUM
0.20U VANADIUM
0.20U YTTRIUM
1.8 ZINC
NA ZIRCONIUM
NA MERCURY
4.0U ALUMINUM
0.20U MANGANESE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

REPRINTED ON01/04/95

METALS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91393 SAMPLE TYPE: BLKWA PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 200 COLLECTION START: 11/17/94 1340 STOP: 00/00/00 **
**

UG/L	ANALYTICAL RESULTS	MG/L	ANALYTICAL RESULTS
2.0U	SILVER	0.10U	CALCIUM
6.0U	ARSENIC	0.020U	MAGNESIUM
NA	BORON	0.010U	IRON
2.0U	BARIUM	0.40U	SODIUM
1.0U	BERYLLIUM	0.40U	POTASSIUM
1.0U	CADMIUM		
2.0U	COBALT		
2.0U	CHROMIUM		
2.0U	COPPER		
2.0U	MOLYBDENUM		
4.0U	NICKEL		
8.0U	LEAD		
6.0U	ANTIMONY		
8.0U	SELENIUM		
5.0U	TIN		
2.0U	STRONTIUM		
10U	TELLURIUM		
2.0U	TITANIUM		
20U	THALLIUM		
2.0U	VANADIUM		
2.0U	YTRIUM		
3.0U	ZINC		
NA	ZIRCONIUM		
0.2U	MERCURY		
40U	ALUMINUM		
2.0U	MANGANESE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

*** **

** PROJECT NO. 95-0090	SAMPLE NO. 91394	SAMPLE TYPE: DRYICEBLK	PROG ELEM: SSF	COLLECTED BY: B BERRANG	**
** SOURCE: GE/SHEPHERD FARM			CITY: E FLATROCK	ST: NC	**
** STATION ID: 250			COLLECTION START: 11/15/94	1130 STOP: 00/00/00	**
**					**

*** **

UG/BO ANALYTICAL RESULTS

0.20U ALDRIN
0.20U HEPTACHLOR
0.20U HEPTACHLOR EPOXIDE
0.20U ALPHA-BHC
0.20U BETA-BHC
0.20U GAMMA-BHC (LINDANE)
0.20U DELTA-BHC
0.20U ENDOSULFAN I (ALPHA)
0.20U DIELDRIN
0.20U 4,4'-DDT (P,P'-DDT)
0.20U 4,4'-DDE (P,P'-DDE)
0.20U 4,4'-DDD (P,P'-DDD)
0.20U ENDRIN
0.20U ENDOSULFAN II (BETA)
0.20U ENDOSULFAN SULFATE
0.50U CHLORDANE (TECH. MIXTURE) /1
1.0U PCB-1242 (AROCOR 1242)
1.0U PCB-1254 (AROCOR 1254)
1.0U PCB-1221 (AROCOR 1221)

UG/BO ANALYTICAL RESULTS

1.0U PCB-1232 (AROCOR 1232)
1.0U PCB-1248 (AROCOR 1248)
1.0U PCB-1260 (AROCOR 1260)
1.0U PCB-1016 (AROCOR 1016)
8.0U TOXAPHENE
-- CHLORDENE /2
-- ALPHA-CHLORDENE /2
-- BETA-CHLORDENE /2
-- GAMMA-CHLORDENE /2
-- GAMMA-CHLORDANE /2
-- TRANS-NONACHLOR /2
-- ALPHA-CHLORDANE /2
-- CIS-NONACHLOR /2
-- OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.40U METHOXYCHLOR
0.20U ENDRIN KETONE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/13/95

PESTICIDES/PCB'S DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91395 SAMPLE TYPE: DRYICEBLK PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 260 COLLECTION START: 11/16/94 1200 STOP: 00/00/00 **

UG/BO ANALYTICAL RESULTS

0.20U ALDRIN
0.20U HEPTACHLOR
0.20U HEPTACHLOR EPOXIDE
0.20U ALPHA-BHC
0.20U BETA-BHC
0.20U GAMMA-BHC (LINDANE)
0.20U DELTA-BHC
0.20U ENDOSULFAN I (ALPHA)
0.20U DIELDRIN
0.20U 4,4'-DDT (P,P'-DDT)
0.20U 4,4'-DDE (P,P'-DDE)
0.20U 4,4'-DDD (P,P'-DDD)
0.20U ENDRIN
0.20U ENDOSULFAN II (BETA)
0.20U ENDOSULFAN SULFATE
0.50U CHLORDANE (TECH. MIXTURE) /1
1.0U PCB-1242 (AROCOR 1242)
1.0U PCB-1254 (AROCOR 1254)
1.0U PCB-1221 (AROCOR 1221)

UG/BO ANALYTICAL RESULTS

1.0U PCB-1232 (AROCOR 1232)
1.0U PCB-1248 (AROCOR 1248)
1.0U PCB-1260 (AROCOR 1260)
1.0U PCB-1016 (AROCOR 1016)
8.0U TOXAPHENE
-- CHLORDENE /2
-- ALPHA-CHLORDENE /2
-- BETA CHLORDENE /2
-- GAMMA-CHLORDENE /2
-- GAMMA-CHLORDANE /2
-- TRANS-NONACHLOR /2
-- ALPHA-CHLORDANE /2
-- CIS-NONACHLOR /2
-- OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.40U METHOXYCHLOR
0.20U ENDRIN KETONE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

TOTO2\$DISK:[EPADZC]PRODHVOA.LST;1

TOTO2\$DISK:[EPADZC]PRODPCBMISC.LST;1

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

01/24/95

PESTICIDES/PCB'S DATA REPORT

```

***
** PROJECT NO. 95-0090  SAMPLE NO. 91396  SAMPLE TYPE: DRYICEBLK  PROG ELEM: SSF  COLLECTED BY: B BERRANG  **
** SOURCE: GE/SHEPHERD FARM  CITY: E FLATROCK  ST: NC  **
** STATION ID: 270  COLLECTION START: 11/14/94  1430  STOP: 00/00/00  **
**

```

UG/BO	ANALYTICAL RESULTS	UG/BO	ANALYTICAL RESULTS
0.10U	ALDRIN	0.50U	PCB-1232 (AROCLOR 1232)
0.10U	HEPTACHLOR	0.50U	PCB-1248 (AROCLOR 1248)
0.10U	HEPTACHLOR EPOXIDE	0.50U	PCB-1260 (AROCLOR 1260)
0.10U	ALPHA-BHC	0.50U	PCB-1016 (AROCLOR 1016)
0.10U	BETA-BHC	5.0U	TOXAPHENE
0.10U	GAMMA-BHC (LINDANE)	---	CHLORDENE /2
0.10U	DELTA-BHC	---	ALPHA-CHLORDENE /2
0.10U	ENDOSULFAN I (ALPHA)	---	BETA CHLORDENE /2
0.10U	DIELDRIN	---	GAMMA-CHLORDENE /2
0.10U	4,4'-DDT (P,P'-DDT)	---	GAMMA-CHLORDANE /2
0.10U	4,4'-DDE (P,P'-DDE)	---	TRANS-NONACHLOR /2
0.10U	4,4'-DDD (P,P'-DDD)	---	ALPHA-CHLORDANE /2
0.10U	ENDRIN	---	CIS-NONACHLOR /2
0.10U	ENDOSULFAN II (BETA)	---	OXYCHLORDANE (OCTACHLOREPOXIDE) /2
0.10U	ENDOSULFAN SULFATE	0.25U	METHOXYCHLOR
0.25U	CHLORDANE (TECH. MIXTURE) /1	0.10U	ENDRIN KETONE
0.50U	PCB-1242 (AROCLOR 1242)		
0.50U	PCB-1254 (AROCLOR 1254)		
0.50U	PCB-1221 (AROCLOR 1221)		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT. C-CONFIRMED BY GC/MS
 1. WHEN NO VALUE IS REPORTED, SEE CHLORDANE CONSTITUENTS. 2. CONSTITUENTS OR METABOLITES OF TECHNICAL CHLORDANE.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/06/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91394 SAMPLE TYPE: DRYICEBLK PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 250 COLLECTION START: 11/15/94 1130 STOP: 00/00/00 **

UG/BO ANALYTICAL RESULTS

40U (3-AND/OR 4-)METHYLPHENOL
40U 1,2,4-TRICHLOROBENZENE
40U 2,2'-CHLOROISOPROPYLETHYER
40U 2,3,4,6-TETRACHLOROPHENOL
40U 2,4,5-TRICHLOROPHENOL
40U 2,4,6-TRICHLOROPHENOL
40U 2,4-DICHLOROPHENOL
40U 2,4-DIMETHYLPHENOL
80U 2,4-DINITROPHENOL
40U 2,4-DINITROTOLUENE
40U 2,6-DINITROTOLUENE
40U 2-CHLORONAPHTHALENE
40U 2-CHLOROPHENOL
80U 2-METHYL-4,6-DINITROPHENOL
40U 2-METHYLNAPHTHALENE
40U 2-METHYLPHENOL
40U 2-NITROANILINE
40U 2-NITROPHENOL
40U 3,3'-DICHLOROBENZIDINE
40U 3-NITROANILINE
40U 4-BROMOPHENYL PHENYL ETHER
40U 4-CHLORO-3-METHYLPHENOL
40U 4-CHLOROANILINE
40U 4-CHLOROPHENYL PHENYL ETHER
40U 4-NITROANILINE
80U 4-NITROPHENOL
40U ACENAPHTHENE
40U ACENAPHTHYLENE
40U ANTHRACENE
40U BENZO(A)ANTHRACENE
40U BENZO(B AND/OR K)FLUORANTHENE

UG/BO ANALYTICAL RESULTS

40U BENZO(GHI)PERYLENE
40U BENZO-A-PYRENE
40U BENZYL BUTYL PHTHALATE
40U BIS(2-CHLOROETHOXY) METHANE
40U BIS(2-CHLOROETHYL) ETHER
40U BIS(2-ETHYLHEXYL) PHTHALATE
40U CARBAZOLE
40U CHRYSENE
40U DI-N-BUTYLPHTHALATE
40U DI-N-OCTYLPHTHALATE
40U DIBENZO(A,H)ANTHRACENE
40U DIBENZOFURAN
40U DIETHYL PHTHALATE
40U DIMETHYL PHTHALATE
40U FLUORANTHENE
40U FLUORENE
40U HEXACHLOROBENZENE (HCB)
40U HEXACHLOROBUTADIENE
40U HEXACHLOROCYCLOPENTADIENE (HCCP)
40U HEXACHLOROETHANE
40U INDENO (1,2,3-CD) PYRENE
40U ISOPHORONE
40U N-NITROSODI-N-PROPYLAMINE
40U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
40U NAPHTHALENE
40U NITROBENZENE
80U PENTACHLOROPHENOL
40U PHENANTHRENE
40U PHENOL
40U PYRENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/06/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91395 SAMPLE TYPE: DRYICEBLK PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 260 COLLECTION START: 11/16/94 1200 STOP: 00/00/00 **

UG/BO ANALYTICAL RESULTS

40U (3-AND/OR 4-)METHYLPHENOL
40U 1,2,4-TRICHLOROBENZENE
40U 2,2'-CHLOROISOPROPYLETHYER
40U 2,3,4,6-TETRACHLOROPHENOL
40U 2,4,5-TRICHLOROPHENOL
40U 2,4,6-TRICHLOROPHENOL
40U 2,4-DICHLOROPHENOL
40U 2,4-DIMETHYLPHENOL
80U 2,4-DINITROPHENOL
40U 2,4-DINITROTOLUENE
40U 2,6-DINITROTOLUENE
40U 2-CHLORONAPHTHALENE
40U 2-CHLOROPHENOL
80U 2-METHYL-4,6-DINITROPHENOL
40U 2-METHYLNAPHTHALENE
40U 2-METHYLPHENOL
40U 2-NITROANILINE
40U 2-NITROPHENOL
40U 3,3'-DICHLOROBENZIDINE
40U 3-NITROANILINE
40U 4-BROMOPHENYL PHENYL ETHER
40U 4-CHLORO-3-METHYLPHENOL
40U 4-CHLOROANILINE
40U 4-CHLOROPHENYL PHENYL ETHER
40U 4-NITROANILINE
80U 4-NITROPHENOL
40U ACENAPHTHENE
40U ACENAPHTHYLENE
40U ANTHRACENE
40U BENZO(A)ANTHRACENE
40U BENZO(B AND/OR K)FLUORANTHENE

UG/BO ANALYTICAL RESULTS

40U BENZO(GHI)PERYLENE
40U BENZO-A-PYRENE
40U BENZYL BUTYL PHTHALATE
40U BIS(2-CHLOROETHOXY) METHANE
40U BIS(2-CHLOROETHYL) ETHER
40U BIS(2-ETHYLHEXYL) PHTHALATE
40U CARBAZOLE
40U CHRYSENE
40U DI-N-BUTYLPHTHALATE
40U DI-N-OCTYLPHTHALATE
40U DIBENZO(A,H)ANTHRACENE
40U DIBENZOFURAN
40U DIETHYL PHTHALATE
40U DIMETHYL PHTHALATE
40U FLUORANTHENE
40U FLUORENE
40U HEXACHLOROBENZENE (HCB)
40U HEXACHLOROBUTADIENE
40U HEXACHLOROCYCLOPENTADIENE (HCCP)
40U HEXACHLOROETHANE
40U INDENO (1,2,3-CD) PYRENE
40U ISOPHORONE
40U N-NITROSODI-N-PROPYLAMINE
40U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
40U NAPHTHALENE
40U NITROBENZENE
80U PENTACHLOROPHENOL
40U PHENANTHRENE
40U PHENOL
40U PYRENE

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/12/94

EXTRACTABLE ORGANICS DATA REPORT

** PROJECT NO. 95-0090 SAMPLE NO. 91396 SAMPLE TYPE: DRYICEBLK PROG ELEM: SSF COLLECTED BY: B BERRANG **
** SOURCE: GE/SHEPHERD FARM CITY: E FLATROCK ST: NC **
** STATION ID: 270 COLLECTION START: 11/14/94 1430 STOP: 00/00/00 **

UG/BO	ANALYTICAL RESULTS	UG/BO	ANALYTICAL RESULTS
20.UJ	(3-AND/OR 4-)METHYLPHENOL	20.UJ	BENZO(GHI)PERYLENE
20.UJ	1,2,4-TRICHLOROBENZENE	20.UJ	BENZO-A-PYRENE
20.UJ	2,2'-CHLOROISOPROPYLETHYR	20.UJ	BENZYL BUTYL PHTHALATE
20.UJ	2,3,4,6-TETRACHLOROPHENOL	20.UJ	BIS(2-CHLOROETHOXY) METHANE
20.UJ	2,4,5-TRICHLOROPHENOL	20.UJ	BIS(2-CHLOROETHYL) ETHER
20.UJ	2,4,6-TRICHLOROPHENOL	20.UJ	BIS(2-ETHYLHEXYL) PHTHALATE
20.UJ	2,4-DICHLOROPHENOL	20.UJ	CARBAZOLE
20.UJ	2,4-DIMETHYLPHENOL	20.UJ	CHRYSENE
40.UJ	2,4-DINITROPHENOL	20.UJ	DI-N-BUTYLPHTHALATE
20.UJ	2,4-DINITROTOLUENE	20.UJ	DI-N-OCTYLPHTHALATE
20.UJ	2,6-DINITROTOLUENE	20.UJ	DIBENZO(A,H)ANTHRACENE
20.UJ	2-CHLORONAPHTHALENE	20.UJ	DIBENZOFURAN
20.UJ	2-CHLOROPHENOL	20.UJ	DIETHYL PHTHALATE
40.UJ	2-METHYL-4,6-DINITROPHENOL	20.UJ	DIMETHYL PHTHALATE
20.UJ	2-METHYLNAPHTHALENE	20.UJ	FLUORANTHENE
20.UJ	2-METHYLPHENOL	20.UJ	FLUORENE
20.UJ	2-NITROANILINE	20.UJ	HEXACHLOROBENZENE (HCB)
20.UJ	2-NITROPHENOL	20.UJ	HEXACHLOROBUTADIENE
20.UJ	3,3'-DICHLOROBENZIDINE	20.UJ	HEXACHLOROCYCLOPENTADIENE (HCCP)
20.UJ	3-NITROANILINE	20.UJ	HEXACHLOROETHANE
20.UJ	4-BROMOPHENYL PHENYL ETHER	20.UJ	INDENO (1,2,3-CD) PYRENE
20.UJ	4-CHLORO-3-METHYLPHENOL	20.UJ	ISOPHORONE
20.UJ	4-CHLOROANILINE	20.UJ	N-NITROSODI-N-PROPYLAMINE
20.UJ	4-CHLOROPHENYL PHENYL ETHER	20.UJ	N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
20.UJ	4-NITROANILINE	20.UJ	NAPHTHALENE
40.UJ	4-NITROPHENOL	20.UJ	NITROBENZENE
20.UJ	ACENAPHTHENE	40.UJ	PENTACHLOROPHENOL
20.UJ	ACENAPHTHYLENE	20.UJ	PHENANTHRENE
20.UJ	ANTHRACENE	20.UJ	PHENOL
20.UJ	BENZO(A)ANTHRACENE	20.UJ	PYRENE
20.UJ	BENZO(B AND/OR K)FLUORANTHENE		

REMARKS

REMARKS

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
*K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
*U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED. THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.

SAMPLE AND ANALYSIS MANAGEMENT SYSTEM
EPA-REGION IV ESD, ATHENS, GA.

12/01/94

EXTRACTABLE ORGANICS DATA REPORT

```

*** **
** PROJECT NO. 95-0090 SAMPLE NO. 91393 SAMPLE TYPE: BLKWA   PROG ELEM: SSF   COLLECTED BY: B BERRANG   **
** SOURCE: GE/SHEPHERD FARM                                CITY: E FLATROCK   ST: NC   **
** STATION ID: 200                                         COLLECTION START: 11/17/94 1340 STOP: 00/00/00   **
** **
*** **
  
```

UG/L ANALYTICAL RESULTS

20U (3-AND/OR 4-)METHYLPHENOL
 20U 1,2,4-TRICHLOROBENZENE
 20U 2,2'-CHLOROISOPROPYLETHYR
 20U 2,3,4,6-TETRACHLOROPHENOL
 20U 2,4,5-TRICHLOROPHENOL
 20U 2,4,6-TRICHLOROPHENOL
 20U 2,4-DICHLOROPHENOL
 20U 2,4-DIMETHYLPHENOL
 40U 2,4-DINITROPHENOL
 20U 2,4-DINITROTOLUENE
 20U 2,6-DINITROTOLUENE
 20U 2-CHLORONAPHTHALENE
 20U 2-CHLOROPHENOL
 40U 2-METHYL-4,6-DINITROPHENOL
 20U 2-METHYLNAPHTHALENE
 20U 2-METHYLPHENOL
 20U 2-NITROANILINE
 20U 2-NITROPHENOL
 20U 3,3'-DICHLOROBENZIDINE
 20U 3-NITROANILINE
 20U 4-BROMOPHENYL PHENYL ETHER
 20U 4-CHLORO-3-METHYLPHENOL
 20U 4-CHLOROANILINE
 20U 4-CHLOROPHENYL PHENYL ETHER
 20U 4-NITROANILINE
 40U 4-NITROPHENOL
 20U ACENAPHTHENE
 20U ACENAPHTHYL FNE
 20U ANTHRACENE
 20U BENZO(A)ANTHRACENE
 20U BENZO(B AND/OR K)FLUORANTHENE

UG/L ANALYTICAL RESULTS

20U BENZO(GH)PERYLENE
 20U BENZO-A-PYRENE
 20U BENZYL BUTYL PHTHALATE
 20U BIS(2-CHLOROETHOXY) METHANE
 20U BIS(2-CHLOROETHYL) ETHER
 20U BIS(2-ETHYLHEXYL) PHTHALATE
 20U CARBAZOLE
 20U CHRYSENE
 20U DI-N-BUTYLPHTHALATE
 20U DI-N-OCTYLPHTHALATE
 20U DIBENZO(A,H)ANTHRACENE
 20U DIBENZOFURAN
 20U DIETHYL PHTHALATE
 20U DIMETHYL PHTHALATE
 20U FLUORANTHENE
 20U FLUORENE
 20U HEXACHLOROBENZENE (HCB)
 20U HEXACHLOROBUTADIENE
 20U HEXACHLOROCYCLOPENTADIENE (HCCP)
 20U HEXACHLOROETHANE
 20U INDENO (1,2,3-CD) PYRENE
 20U ISOPHORONE
 20U N-NITROSODI-N-PROPYLAMINE
 20U N-NITROSODIPHENYLAMINE/DIPHENYLAMINE
 20U NAPHTHALENE
 20U NITROBENZENE
 40U PENTACHLOROPHENOL
 20U PHENANTHRENE
 20U PHENOL
 20U PYRENE

FOOTNOTES

*A-AVERAGE VALUE *NA-NOT ANALYZED *NAI-INTERFERENCES *J-ESTIMATED VALUE *N-PRESUMPTIVE EVIDENCE OF PRESENCE OF MATERIAL
 *K-ACTUAL VALUE IS KNOWN TO BE LESS THAN VALUE GIVEN *L-ACTUAL VALUE IS KNOWN TO BE GREATER THAN VALUE GIVEN
 *U-MATERIAL WAS ANALYZED FOR BUT NOT DETECTED THE NUMBER IS THE MINIMUM QUANTITATION LIMIT.