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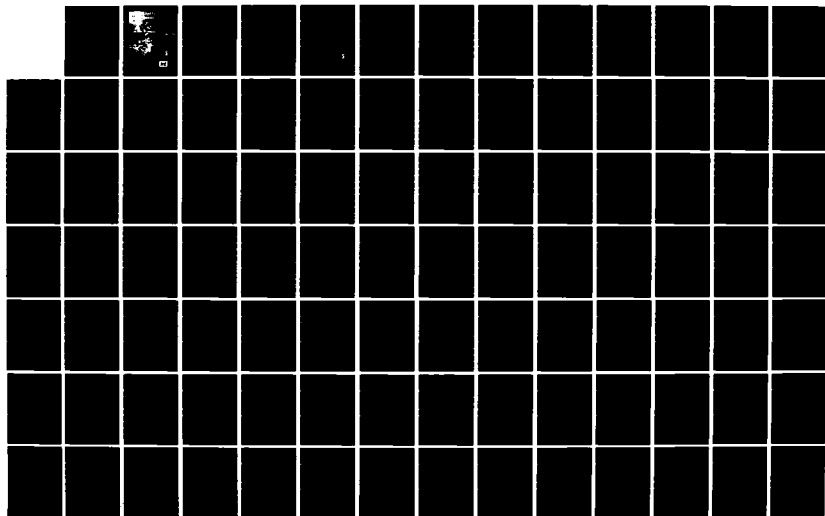
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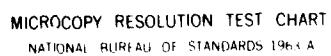
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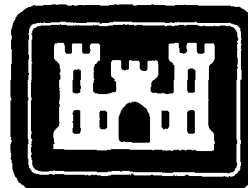
ALABAMA RIVER

BY BUBB WOODRUFF AND "BILL" DANNELLY
AND CLAIRBORNE LAKES

AUGUST - DECEMBER 1977

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Water, sediment, and biological samples were collected at 3-week intervals from 46 stations on the Alabama and Coosa Rivers between August 8 and December 8, 1977. Seventeen stations were located in Jones Bluff Reservoir (river miles 0.5 to 4.4 on the Coosa River and river miles 302.0 to 236.4 on the Alabama River); 17 were situated in William "Bill" Dannelly Reservoir (river miles 236.4 to 132.8); 9 were located in Claiborne Reservoir (river miles 132.8 to 72.7); and 3 were located below Claiborne Reservoir (river miles 72.7 to 58.9). The samples were transported to the laboratory where they were analyzed according to		

accepted EPA procedures. The water samples were analyzed for 39 water quality parameters, including nutrients, physical characteristics, heavy metals, bacterial populations and chlorophylls a, b, and c. Sediments were tested for the presence of heavy metals and pesticides. Mechanical analysis was also performed on the sediment samples. Biological sampling included plankton, benthic macroinvertebrate, and macrophyte communities. The resulting data were tabulated and selected parameters plotted according to concentration, or organism number per unit area, versus distance, with significant discharges noted. Measured parameters were placed on the U. S. EPA STORET computer system.

WATER QUALITY MANAGEMENT STUDIES
ALABAMA RIVER
R. E. "BOB" WOODRUFF, WILLIAM "BILL" DANNELLY AND
CLAIBORNE LAKES
August-December 1977

Prepared under Contract No. DACW01-77-C-0140

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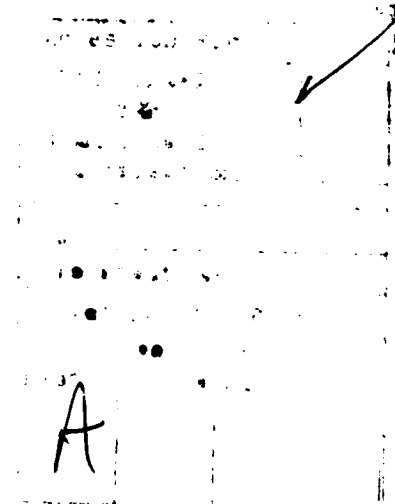
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EXPLANATORY NOTE

Throughout this report R. E. "Bob" Woodruff Lake is referred to as Jones Bluff Reservoir. Additionally, in late 1982, the name of Jones Bluff Lock and Dam was changed to Robert F. Henry Lock and Dam.



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ABSTRACT

Water, sediment, and biological samples were collected at 3-week intervals from 46 stations on the Alabama and Coosa Rivers between August 8 and December 8, 1977. Seventeen stations were located in Jones Bluff Reservoir (river miles 0.5 to 4.4 on the Coosa River and river miles 302.0 to 236.4 on the Alabama River); 17 were situated in William "Bill" Dannelly Reservoir (river miles 236.4 to 132.8); 9 were located in Claiborne Reservoir (river miles 132.8 to 72.7); and 3 were located below Claiborne Reservoir (river miles 72.7 to 58.9). The samples were transported to the laboratory where they were analyzed according to accepted EPA procedures. The water samples were analyzed for 39 water-quality parameters, including nutrients, physical characteristics, heavy metals, bacterial populations, and chlorophylls *a*, *b* and *c*. Sediments were tested for the presence of heavy metals and pesticides. Mechanical analysis was also performed on the sediment samples. Biological sampling included plankton, benthic macroinvertebrate, and macrophyte communities. The resulting data were tabulated and selected parameters plotted according to concentration, or organism number per unit area, versus distance, with significant discharges noted. Measured parameters were placed on the U.S. EPA STORET computer system.

I. INTRODUCTION

Performance of a water-quality management study of reservoirs on the Alabama River for the U.S. Army Corps of Engineers began in July 1977. Water-quality, sediment and biological data were collected at 46 sampling sites on the Coosa and Alabama River systems from river mile 11.2 on the Coosa River at Wetumpka, Alabama, 263 river miles southwesterly to approximately 16 river miles below Claiborne Lock and Dam, Claiborne, Alabama.

The Coosa River originates at Rome, Georgia, in northwest Georgia at the junction of the Oostanauli and Etowah Rivers, which have their sources in southeastern Tennessee and northern Georgia (fig. 1). From Rome, the Coosa River flows 286 miles southwesterly through Georgia and into east-central Alabama where it unites with the Tallapoosa River 18 miles above Montgomery, Alabama, to form the Alabama River. The Alabama River flows 318 miles southwesterly to the northeastern corner of Mobile County where it joins the lower Tombigbee River. The total drainage area of the Alabama River in Alabama, Georgia and Tennessee is 22,500 square miles (U.S. Army Corps of Engineers, 1976a).

The three reservoirs included in this study area are Jones Bluff, William "Bill" Dannelly (Millers Ferry Lock and Dam), and Claiborne (figs. 2, 3, and 4, respectively).

The Jones Bluff Lock and Dam, located at navigation mile 236.13, consists of earthen dikes and a power plant on the west (right) bank. The 88-mile-long reservoir has a surface area of 12,300 acres at normal pool elevation of 125.0 feet and a total capacity of 234,200 acre-feet. The estimated average flow of the river for the period 1929-70 was 25,100 cubic feet per second (cfs), and the estimated 7-day low flow was 5,330 cfs. The maximum monthly flow in the period of record was 149,000 cfs (U.S. Geological Survey, 1977); the minimum daily flow was 3,340 cfs (U.S. Geological Survey, 1977).

The Millers Ferry Lock and Dam, located at river mile 132.98, forms the 103-mile-long William "Bill" Dannelly Reservoir, which has a surface area of 17,200 acres at normal pool elevation of 80.0 feet and a total capacity of 331,800 acre-feet. This lock and dam is a multiple-purpose structure (for navigation, flood control, and power generation). The maximum monthly flow for the period 1937-66 was 155,200 cfs (U.S. Army Corps of Engineers, 1976b); the minimum daily flow in the period was 3,700 cfs.

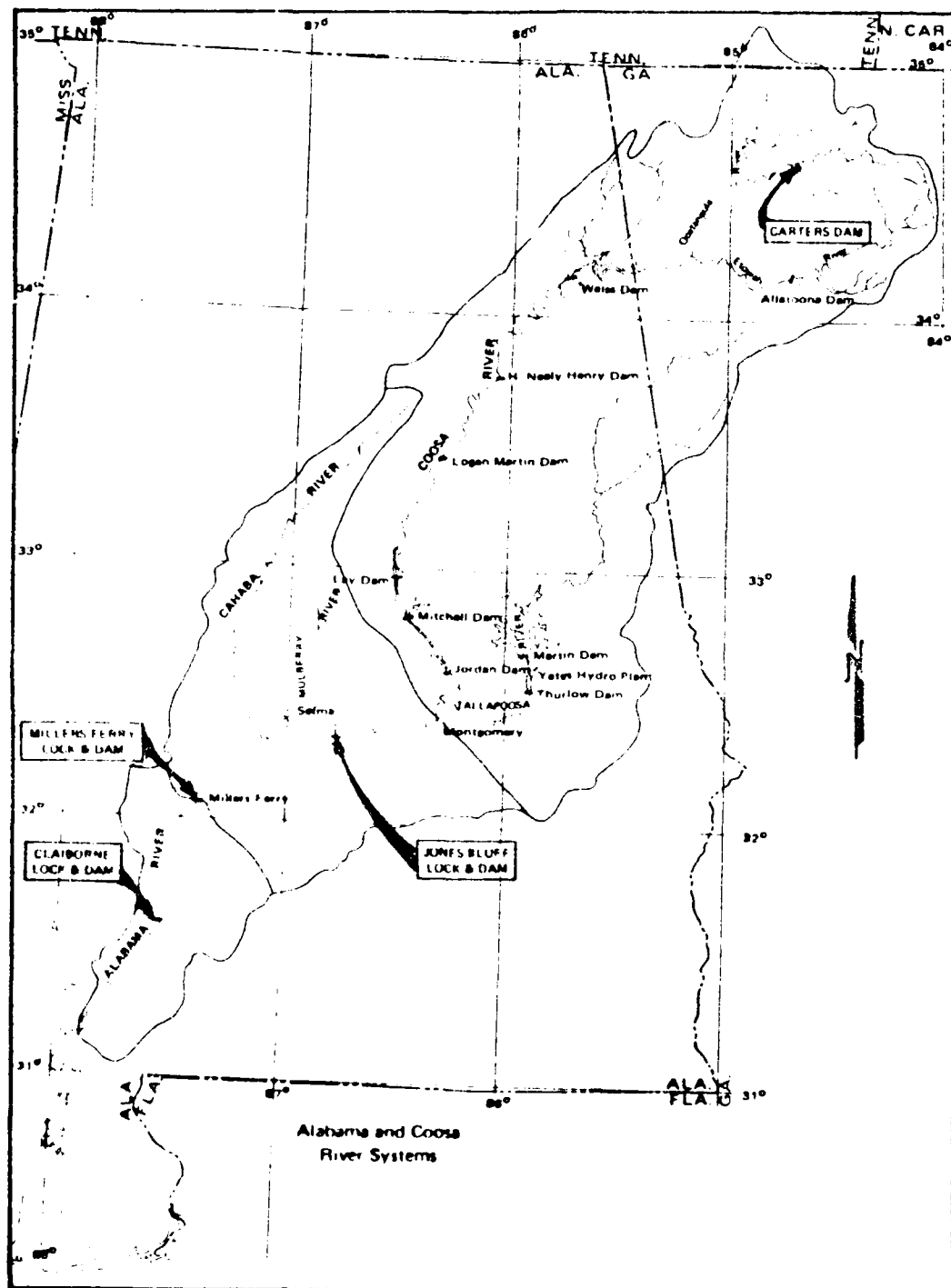
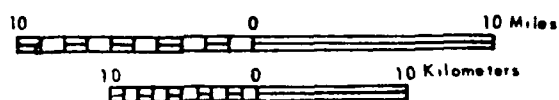
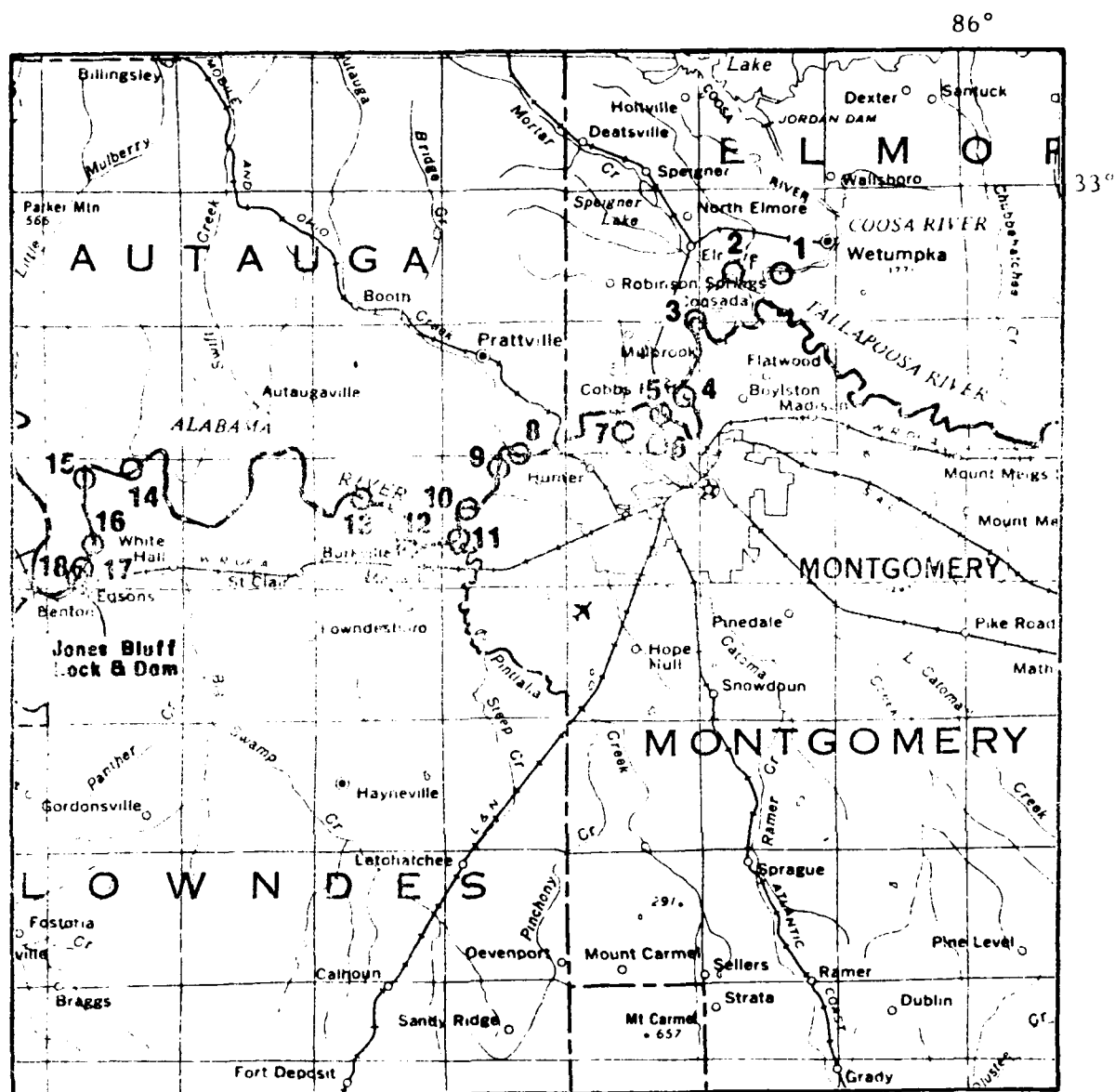


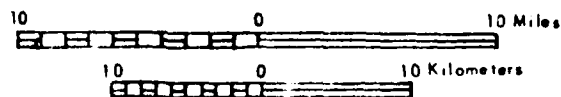
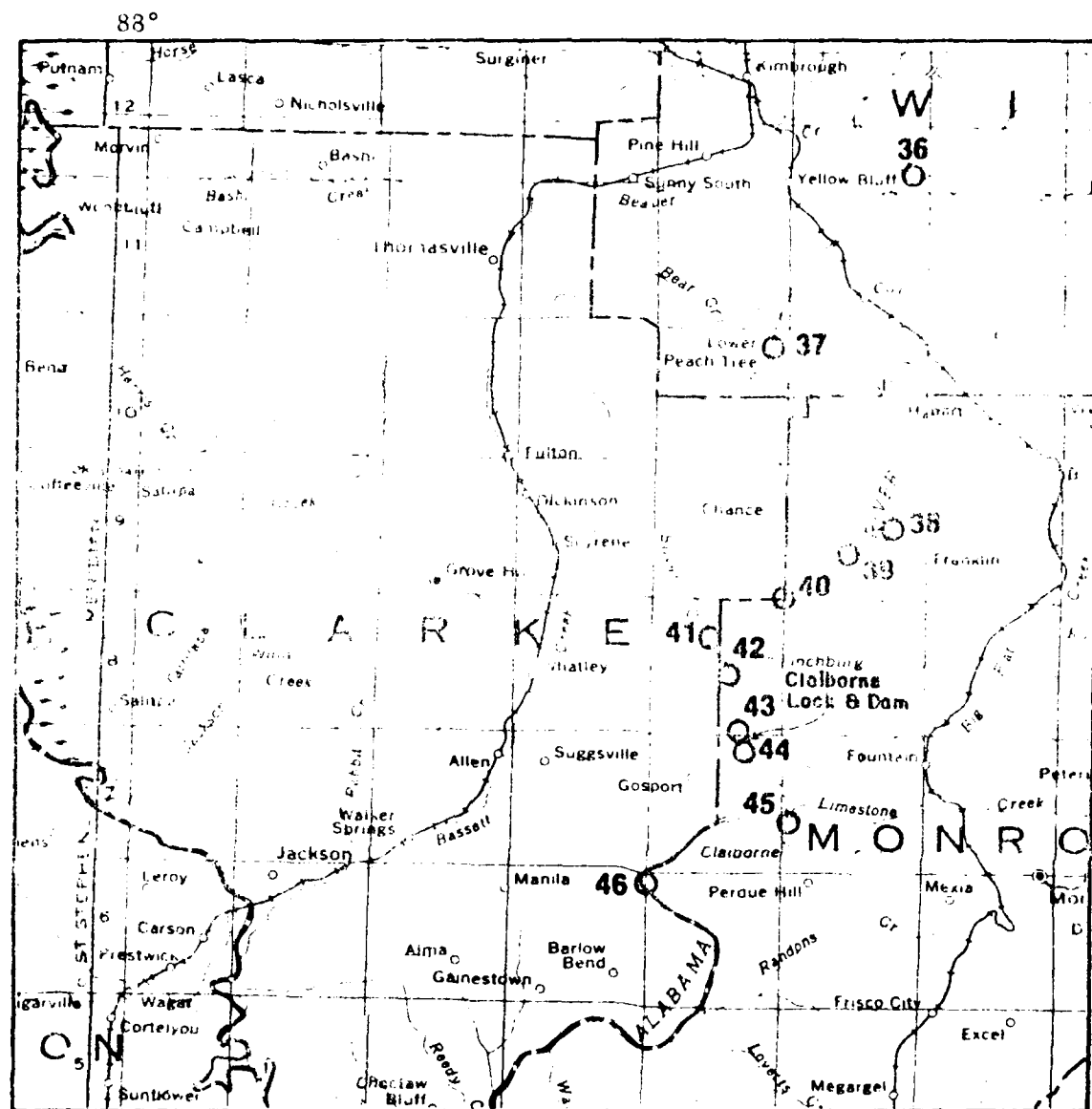
Figure 1.--Map of Alabama and Coosa River systems.



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Station number ----- (1-18)
 Station location ----- ○

Figure 2.--Sampling stations above and below Jones Bluff Lock and Dam on the Alabama and Coosa Rivers.



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Station number ---- (1-18)

Station location ---- ○

Figure 4.--Sampling stations above and below Claiborne Lock and Dam on the Alabama River.

Claiborne Lock and Dam is located 72.5 navigation miles above the mouth of the Alabama River near the small town of Claiborne and forms Claiborne Lake. The 60-mile-long reservoir has a surface area of 3,850 acres at normal pool elevation of 35 feet and a volume of 93,360 acre-feet. The Claiborne Lock and Dam is primarily a navigation structure. The maximum monthly flow at the dam for the period 1931-69 was 165,100 cfs (U.S. Army Corps of Engineers, 1976b); the minimum daily flow was 4,840 cfs (U.S. Geological Survey, 1978).

II. OBJECTIVES

The objectives of the study as stated in the U.S. Army Corps of Engineers contract with the Alabama Geological Survey were as follows:

- A. Establish base-line conditions and monitor subsequent changes;
- B. Identify water quality-environmental problems;
- C. Provide continuing guidance to reservoir regulation elements for effective control of reservoirs and discharge water quality-environmental conditions;
- D. Study special problems or develop criteria for such solutions as structural modification or modification of reservoir regulation procedures aimed at controlling or enhancing environmental conditions and meeting water quality objectives; and,
- E. Provide an adequate data base and understanding of project conditions to facilitate coordination with state agencies in regard to implementing watershed pollution control.

III. MATERIALS AND METHODS

A. General

Water, sediment, and biological samples were collected at 3-week intervals from 46 Alabama-Coosa River stations between August 9 and December 8, 1977. A list of station numbers, U.S. Environmental Protection Agency (EPA) STORET station numbers and locality data for each station are given in table 1. The collection schedule and parameter list for the study period are shown in table 2.

Water, sediment, and biological samples were analyzed by the Geochemical-Water Quality Research Division of the Geological Survey of Alabama. Methods and techniques of analysis used during the course of this study are presented in this section.

B. Chemical

1. Sampling Methods

Water samples were collected with a 2-gallon glass bottle supported by a metal cage during run 1 (August 9-25, 1977) and a Kemmerer 1.2-liter (1) plastic sampler during runs 2 through 6 (August 29 through December 8, 1977) and were preserved according to approved U.S. P.A. procedures (table 3). All water samples except those for chlorophylls *a*, *b* and *c*, five-day biochemical oxygen demand (BOD₅), pesticides, carotenoids, bacteria, algal growth potential (AGP), and total organic carbon (TOC) were collected with the 1.2-l Kemmerer sampler at midstream approximately 5 feet below the water's surface or at mid-depth where the depth was less than 10 feet. Water samples for chlorophylls *a*, *b* and *c*, BOD₅, pesticides, carotenoids, and TOC were collected with the aforementioned 2-gallon glass bottle. All samples were immediately chilled except those for chlorophylls *a*, *b* and *c*, which were filtered (500 milliliters) with a .45-micron Millipore membrane paper. This paper and the filtrate were placed in a petri dish, chilled, and transported (within an 8-hour period) to the laboratory where the residue was frozen until analysis.

Bacteriological samples were collected 1 foot below the water's surface in sterile BOD bottles.

Table 1.--Identification of sampling stations
on the Alabama and Coosa Rivers

Station number	STORET identification number	Location	River mile
1	02411605	Coosa River near Montgomery, Alabama	6.4
2	02419965	Coosa River below Mortar Creek near Elmore, Alabama	4.4
3	02419980	Alabama River at Coosada Ferry near Montgomery, Alabama	302.0
4	02419983	Alabama River near Chisolm, Alabama	268.1
5	02419986	Alabama River at L&N Railroad near Millbrook, Alabama	291.2
6	02419987	Alabama River at Alabama highway 143 near Montgomery, Alabama	288.0
7	02419989	Alabama River near Maxwell Air Force Base near Montgomery, Alabama	262.9
8	02420045	Alabama River near Prattville, Alabama	277.6
9	02420600	Alabama River below Autauga Creek, Prattville, Alabama	274.2
10	02421060	Alabama River below Catoma Creek near Prattville, Alabama	271.7
11	02421090	Alabama River above Pintlalla Creek near Prattville, Alabama	269.8
12	02421195	Alabama River near Burkville, Alabama	267.1
13	02421210	Alabama River below Rocky Branch near Lowndesboro, Alabama	260.3
14	02421290	Alabama River below Beaver Creek near Autaugaville, Alabama	244.7
15	02421315	Alabama River below Ivy Creek near Mulberry, Alabama	240.7
16	02421325	Alabama River at Days Bend near Ben- ton Alabama	238.7
17	02421349	Jones Bluff Reservoir (Alabama River) near Benton, Alabama	236.4
18	02421355	Alabama River near Benton, Alabama	236.0
19	02422170	Alabama River near Statesville, Alabama	223.8
20	02422625	Alabama River below Mulberry Creek near Burnsville, Alabama	220.0
21	02422650	Alabama River near Manila, Alabama	215.5
22	02422765	Alabama River near Craig Air Force Base near Selma, Alabama	211.7
23	02423000	Alabama River at Selma, Alabama	207.4

Table 1.--Continued

<u>Station number</u>	<u>STORET identification number</u>	<u>Location</u>	<u>River mile</u>
24	02423050	Alabama River near Selma, Alabama	200.5
25	02423090	Alabama River above Cahaba River near Cahaba, Alabama	189.5
26	02425115	Alabama River near Cahaba, Alabama	185.4
27	02425250	Alabama River above Cedar Creek near Belknap, Alabama	173.2
28	02425700	Alabama River near Elm Bluff, Alabama	171.1
29	02425800	Alabama River above Bogue Chitto Creek	162.2
30	02427400	Alabama River near Camden, Alabama	146.5
31	02427470	Alabama River near Catherine, Alabama	136.7
32	02427500	Alabama River near Millers Ferry, Alabama	133.9
33	02427504	William "Bill" Dannelly Reservoir (Ala- bama River) near Camden, Alabama	133.2
34	02427507	Alabama River above Powerhouse at Millers Ferry Lock and Dam	132.8
35	02427511	Alabama River near Midway, Alabama	132.3
36	02427745	Alabama River near Yellow Bluff, Alabama	118.4
37	02428200	Alabama River at Lower Peachtree, Alabama	98.8
38	02428335	Alabama River above McLeod Creek near Franklin, Alabama	86.5
39	02428345	Alabama River at Davis Ferry near Franklin, Alabama	84.6
40	02428380	Alabama River below Cane Creek near Chance, Alabama	80.5
41	02428395	Silver Creek near Finchburg, Alabama	76.2
42	02428396	Alabama River below Silver Creek near Finchburg, Alabama	75.0
43	02428399	Claiborne Reservoir (Alabama River) near Claiborne, Alabama	72.7
44	02428405	Alabama River 0.4 mile below Claiborne Lock and Dam	72.4
45	02429500	Alabama River at Claiborne, Alabama	66.9
46	02429506	Alabama River at Cedar Creek near Gosport, Alabama	58.9

Table 2.--Collection periods for the six sampling runs on the Alabama-Coosa Rivers from August 9 through December 8, 1977

Parameter	Collection Periods					
	8/9- 8/25	8/29- 9/14	9/19- 10/4	10/11- 10/25	10/31- 11/17	11/21- 12/8
Water Quality						
Hydrogen ion (pH)	x	x	x	x	x	x
Temperature	x	x	x	x	x	x
Conductivity	x	x	x	x	x	x
Oxidation reduction potential (ORP)	x	x	x	x	x	x
Color (apparent)	x	x	x	x	x	x
Hardness	x	x	x	x	x	x
Chloride	x	x	x	x	x	x
Alkalinity as CaCO ₃	x	x	x	x	x	x
Calcium, total	x	x	x	x	x	x
Dissolved silica	x	x	x	x	x	x
Total iron (Fe)	x	x	x	x	x	x
Dissolved Fe	x	x	x	x	x	x
Total organic carbon (TOC)	x	x	x	x	x	x
Total Kjeldahl nitrogen (TKN)	x	x	x	x	x	x
Nitrite (NO ₂) + Nitrate (NO ₃) as Nitrogen (N)	x	x	x	x	x	x
Ammonia (NH ₃) as N	x	x	x	x	x	x
Total phosphate (PO ₄) as P	x	x	x	x	x	x
Ortho PO ₄ , dissolved, as P	x	x	x	x	x	x
Sulphate, dissolved	x	x	x	x	x	x
Total coliform	x	x	x	x	x	x
Fecal coliform	x	x	x	x	x	x
Fecal streptococci	x	x	x	x	x	x
Dissolved oxygen	x	x	x	x	x	x
Biochemical oxygen demand--5 day (BOD ₅)	x	x	x	x	x	x
Chemical oxygen demand (COD)	x				x	
Solids, residue filterable (dissolved)	x	x	x	x	x	x
Solids, residue non-filterable (suspended)	x	x	x	x	x	x
Turbidity	x	x	x	x	x	x
Chlorophyll <i>a</i> , uncorrected	x	x	x	x	x	x
Chlorophyll <i>b</i>	x	x	x	x	x	x
Chlorophyll <i>c</i>	x	x	x	x	x	x
Dissolved manganese	x	x	x	x	x	x

Table 2.--Continued

Parameter	Collection Periods					
	8/9- 8/25	8/29- 9/14	9/19- 10/4	10/11- 10/25	10/31- 11/17	11/21- 12/8
Water Quality						
Total carotenoids	x	x	x	x	x	x
Secchi disc				x	x	x
Algal growth potential		x				
Polychlorinated bi- phenyls (PCB) (AR 1242)		x				
PCB (AR 1254)		x				
PCB (AR 1260)		x				
Manganese, total	x	x	x	x	x	x
Sediment						
Volatile solids		x				
TOC		x				
COD		x				
Oil and grease		x				
Total PO ₄		x				
Phosphorus soluble		x				
NH ₃ as N		x				
NO ₂ + NO ₃ as N		x				
Copper, total		x				
Iron, total		x				
Lead, total		x				
Manganese, total		x				
Magnesium, total		x				
Mercury, total		x				
Zinc, total		x				
Cadmium, total		x				
Arsenic, total		x				
Chromium, total		x				
Nickel, total		x				
Hexachlorocyclohexane (BHC)		x				
Lindane		x				
Heptachlor		x				
Aldrin		x				
Endosulfan		x				
1,1-Dichloro-2,2-bis (p-chlorophenyl) ethylene (DDE)		x				
Dieldrin		x				

Table 2.--Continued

Parameter	Collection Periods					
	8/9- 8/25	8/29- 9/14	9/19- 10/4	10/11- 10/25	10/31- 11/17	11/21- 12/8
Sediment						
Endrin		x				
2,2-bis (chlorophenyl)- 1,1-dichloroethane compound (DDD)		x				
Dichloro diphenyl tri- chloroethane (DDE)		x				
Mirex		x				
Methyl vector		x				
2,2-bis (chlorovinyl) di- methyl phosphor- thioate (DHP)		x				
Phenol		x				
Phenol		x				
Aluminum		x				
Bisphenol A		x				
Methyl parathion		x				
Renel		x				
Malathion		x				
Parathion		x				
S,S,S-tributyl ester thiophosphoric acid (TEP)		x				
Ethion		x				
Chlordane		x				
Toxophene		x				
Guthion		x				
PCB (AR 1242)		x				
PCB (AR 1254)		x				
PCB (AR 1260)		x				
Mechanical analyses		x				
Biological						
Benthos						
Hester-Dendy	x		x			
Ponar	x		x		x	
Plankton	x		x		x	
Macro vegetation			x			

Table 3.--Preservatives, holding times, and sampling containers for the water-quality parameters

<u>Measurement</u>	<u>Container</u>	<u>Preservative</u>	<u>Holding time</u>
Alkalinity	¹ Plastic	²	24 hours
BOD ₅	Glass, sterile	Cool, 4°C	6 hours
COD	Plastic	H ₂ SO ₄ to pH 2	7 days
Chloride	Plastic	None required	7 days
Color (apparent)	Plastic	²	24 hours
Dissolved oxygen ²	--	--	No holding
Hardness	Plastic	Cool, 4°C	7 days
Metals, dissolved (Mn, Fe)	Plastic	Filtered on site, HNO ₃ to pH 2	6 months
Metals, total (Mn, Fe)	Plastic	HNO ₃ to pH 2	6 months
Ammonia	Plastic	Cool, 4°C, H ₂ SO ₄ to pH 2	24 hours
Kjeldahl, nitrogen	Plastic	Cool, 4°C, H ₂ SO ₄ to pH 2	24 hours
Nitrate + nitrite	Plastic	Cool, 4°C, H ₂ SO ₄ to pH 2	24 hours
Organic carbon	Plastic	Cool, 4°C, H ₂ SO ₄ to pH 2	24 hours
pH ²	--	--	No holding
Ortho-phosphate, dissolved	Plastic	Filtered on site, Cool, 4°C	24 hours
Total phosphorus	Plastic	Cool, 4°C	24 hours
Residue, filterable	Plastic	Cool, 4°C	7 days
Residue, nonfilterable	Plastic	Cool, 4°C	7 days
Specific conductance ²	--	--	No holding
Sulfate	Plastic	Cool, 4°C	7 days
Turbidity	Plastic	Cool, 4°C	7 days
Oxidation-reduction potential ²	--	--	No holding
Silica, dissolved	Plastic	Filtered on site, Cool, 4°C	7 days
Total coliform	Glass, sterile	Cool, 4°C	8 hours
Fecal coliform	Glass, sterile	Cool, 4°C	8 hours
Streptococci	Glass, sterile	Cool, 4°C	8 hours
Chlorophylls a, b, c	Glass	Cool, 4°C	24 hours
Carotenoids	Glass	Cool, 4°C	24 hours
Algal growth potential	Glass	Cool, 4°C	3 days
PCB (AR 1242)	Glass, with Teflon-lined lid	Cool, 4°C	6 months
PCB (AR 1254)	Glass, with Teflon-lined lid	Cool, 4°C	6 months
PCB (AR 1260)	Glass, with Teflon-lined lid	Cool, 4°C	6 months

¹Polyethylene plastic container

²Determined in situ

Midstream bottom-sediment samples for heavy metals, pesticides, and mechanical analyses were collected utilizing a 9-inch by 9-inch epoxy-coated Ponar dredge sampler. Each sample was placed in a 1-quart glass Mason jar with a teflon-lined cap and chilled to 4 degrees Celsius (°C). These samples were transported to the laboratory daily and kept under refrigeration until analysis.

2. Analytical Methods

Water-quality and sediment parameters tested, associated EPA STORET codes, and test procedures used throughout the project are given in table 4.

3. Quality Control

The Water-Quality Research Division of the Geological Survey of Alabama (GSA) coordinated the quality control in this study with the U.S. Army Corps of Engineers' South Atlantic Division (SAD) Laboratory at Marietta, Georgia, and also with the office of the Mobile District Corps of Engineers. Field meters for detection of dissolved oxygen, conductance, pH, and oxidation reduction potential were calibrated at each sampling station with standard solutions in accordance with EPA calibration procedures. A laboratory quality assurance plan was sent to both offices and approved prior to field collection of samples. In addition to this quality control plan, another program was coordinated with the U.S. Geological Survey (USGS), Water Resources Division in Denver, Colorado. In this standard reference program, an unknown sample was received and analyzed in October 1977. A total of 39 parameters (including trace metals, nutrients, and physical-chemical constituents) was determined as part of participation in this program. In this study, there were no rejected values and none of the GSA laboratory sample results exceeded one standard deviation from the mean concentration of results from 50 participating private, state, and federal laboratories.

C. Biological

1. Plankton

Plankton samples (phytoplankton and zooplankton) were collected with a Wisconsin-style plankton net having a 5-inch-diameter mouth, a Nitex net throat with 80-micron apertures, and a brass bucket containing 9 square inches of filter net. Owing to the rapid flow of the Alabama River, a strictly vertical tow could not be made at any of the stations. Therefore, net samples were taken with an arbitrary tow of 40 feet. The beginning tow depth using this method varied from 20 to 35 feet.

Table 4.--Water-quality and sediment parameters, standard units of measurement, U.S. EPA STORET numbers, and methods of analysis employed during the Alabama-Coosa River study in 1977

<u>Parameter</u>	<u>Method</u>	<u>STORET number</u>	<u>Reference</u>
<u>Water quality</u>			
Alkalinity as CaCO ₃ , mg/l	Titration electrometric	00410	EPA, ¹ 1974 (precision data), p. 3
BOD 5-day, mg/l	Probe method	00310	APHA, ² 1975, p. 489
Oxygen dissolved, mg/l	Membrane electrode	00299	EPA, 1974, p. 51
Chemical oxygen demand (COD), mg/l	Dichromate reflux		APHA, 1975, p. 495
Total solids, mg/l	Gravimetric 103-105°C		APHA, 1975, p. 535
Temperature (°C)	Thermistor probe	00010	APHA, 1975, p. 125
Total dissolved (filterable) solids, mg/l	Glass fiber filtration 180°C	70300	EPA, 1974, p. 266
pH, units	Potentiometric	00400	EPA, 1974, p. 239
Total suspended (non-filterable), solids, mg/l	Glass fiber filtration 103-105°C	70299	APHA, 1975, p. 537
Total volatile solids, mg/l	Gravimetric 550°C		APHA, 1975, p. 536
Oxidation reduction potential (mv)	Electrometric	00090	
Ammonia (as N), total, mg/l (NH ₃ + NH ₄ - N)	Distillation-nesslerization or titration automated phenolate		EPA, 1974, p. 134
Kjeldahl nitrogen (as N), mg/l	Digestion + distillation - nesslerization	00610	APHA, 1975, p. 469; EPA, 1974, p. 149
Nitrate-nitrite (as N), total, mg/l	Cadmium or hydrazine reduction	00625	
Total phosphorus (as P), mg/l	Persulfate digestion and automated single reagent	00630	EPA, 1974, p. 207
Ortho-phosphorus, mg/l	Phosphomolybdate	00665	APHA, p. 526; ASTM, ³ 1977, p. 42; EPA, 1974, p. 246 and 259
		00671	EPA, 1974, p. 256

¹U.S. Environmental Protection Agency

²American Public Health Association

³American Society for Testing and Materials

Table 4.--Continued

<u>Parameter</u>	<u>Method</u>	<u>STORET number</u>	<u>Reference</u>
<u>Water quality (cont'd)</u>			
Total organic carbon (TOC), mg/l	Combustion-infrared	00680	EPA, 1974, p. 221
Hardness, total, CaCO ₃ , mg/l	Calculation	00900	EPA, 1974, p. 78
Calcium, dissolved, mg/l	EDTA titration; or atomic absorption	00915	EPA, 1974, p. 102
Iron, total, µg/l	Atomic absorption	01045	EPA, 1974, p. 108
Iron, dissolved, µg/l	Atomic absorption	01046	EPA, 1974, p. 108
Magnesium, total, mg/l	Atomic absorption	00925	EPA, 1974, p. 112
Manganese, dissolved, µg/l	Atomic absorption (chelation extraction)	01056	EPA, 1974, p. 114
Manganese, total, µg/l	Atomic absorption	01055	EPA, 1974, p. 114
Silica, mg/l	Atomic absorption, direct	00955	EPA, 1974, p. 274
Sulfate (as SO ₄), mg/l	Thorin	00946	EPA, 1974, p. 286 and p. 288
Chloride, mg/l	Mercuric nitrate	00940	EPA, 1974, p. 29
Color, platinum-cobalt units	Colorimetric	00080	EPA, 1974, p. 39
Specific conductance, µmho/cm at 25°C	Wheatstone bridge	00095	EPA, 1974, p. 284
Turbidity, NTU	Turbidimeter Nephelometric determination	00076	APHA, 1975, p. 350 and p. 689
Fecal streptococci, bacteria number per 100 ml	Membrane filter, plate count, MF-KF, Agar	31673	APHA, 1975, p. 690
Coliform bacteria (fecal), number per 100 ml	MFV, FC Broth; membrane filter	31616	Greeson, 1977, p. 45
Coliform bacteria (total), number per 100 ml	MFIMENDO; membrane filter	31501	Greeson, 1977, p. 35
Chlorophyll a, µg/l	Trichromatic	32210	APHA, 1975, p. 1030
Chlorophyll b, µg/l	Trichromatic	32212	APHA, 1975, p. 1030
Chlorophyll c, µg/l	Trichromatic	32214	APHA, 1975, p. 1030

Table 4.--Continued

Parameter	Method	STORET number	Reference
<u>Water quality (cont'd)</u>			
Total carotenoids, µg/l	Xanthophyll-Trichromatic	--	Strickland & Parsons, 1972
Transparency, meters (Secchi)	Secchi disc	00078	Welch, 1948
Algal growth potential (AGP), mg/l	Electronic particle counter with <i>Chlorella</i> algae standards	--	Greeson, 1977
Pesticides, µg/l, PCB's 1242, 1254, and 1260	Gas chromatography	39496 39504 39508	EPA, 1973
<u>Bottom sediment (dry weight)</u>			
Volatile solids, mg/kg	Gravimetric 550°C	00496	COE, ⁴ 1976a; EPA, 1974
Total organic carbon, g/kg	Catalytic combustion--infrared	00687	COE, 1976a; EPA, 1974
COD, mg/kg	Oxidation by potassium dichromate	00339	COE, 1976a; EPA, 1974
Total Kjeldahl nitrogen, mg/kg	Distillation and nesslerization	00627	COE, 1976a; EPA, 1974
Total iron, mg/kg	Digestion and atomic absorption	01170	COE, 1976a; EPA, 1974
Total copper, mg/kg	Digestion and atomic absorption	01043	COE, 1976a; EPA, 1974
Total phosphorus (P), mg/kg	Persulfate digestion	00668	COE, 1976a; EPA, 1974
Oil and grease, mg/kg	Extraction (Hexane); gravimetric	00553	COE, 1976a; EPA, 1974
Total lead, mg/kg	Digestion and atomic absorption	01052	COE, 1976a; EPA, 1974
Total manganese, mg/kg	Digestion and atomic absorption	01053	COE, 1976a; EPA, 1974

⁴U.S. Army Corps of Engineers

Table 4.--Continued

<u>Parameter</u>	<u>Method</u>	<u>STORED number</u>	<u>Reference</u>
<u>Bottom sediment (dry weight)</u> (cont'd)			
Total mercury, mg/kg	Digestion and atomic absorption by cold vapor	71921	COE, 1976a; EPA, 1974
Total zinc, mg/kg	Digestion and atomic absorption	01093	COE, 1976a; EPA, 1974
Total cadmium, mg/kg	Digestion and atomic absorption	01028	COE, 1976a; EPA, 1974
Total arsenic, mg/kg	Digestion and atomic absorption	01003	COE, 1976a; EPA, 1974
Total chromium, mg/kg	Digestion and atomic absorption	01029	COE, 1976a; EPA, 1974
Total nickel, mg/kg	Digestion and atomic absorption	01068	COE, 1976a; EPA, 1974
Pesticides, -g/kg	Gas chromatograph	--	DHEW-FDA, ⁵ 1977
Grain-size analyses	Particle-size analysis	--	ASTM, 1977, method D-422-63

⁵Department of Health, Education and Welfare--Food and Drug Administration.

In an attempt to obtain better plankton data, particularly on zooplankton, a larger Wisconsin-style sampler was employed during part of the second biological run. This net had an 13-inch-diameter mouth, a 48-inch-long conical throat composed of 80-micron aperture mesh net, and a PVC collection bucket equipped with 80-micron aperture mesh filter net. However, this sampler was used only a few times with limited success. The larger mouth diameter and the increased surface area of the throat substantially increased the drag of the net; consequently, it rarely sank lower than 8 feet in the water column. This sampler also required considerable effort by two men just to retrieve it to the boat during each tow. Its use, therefore, was discontinued in favor of the smaller net.

Once collected, each plankton sample (50 to 100 ml) was placed in a glass jar, preserved with a suitable volume (12 to 20 ml) of merthiolated iodine, sealed, and stored until the end of the day when all samples were transported to the laboratory. The length of each plankton tow (in feet) was recorded, later multiplied by .3048 to convert to meters, and then multiplied by a net constant (18.24) to give the estimated volume of water sampled with the net.

In the laboratory, plankton were concentrated by filtering each sample through a funnel (20-mm diameter x 35 mm) fitted with an 80-micron filter net. The planktonic organisms were collected in jars by backwashing the filter with 10 to 25 ml of aqueous merthiolated iodine. The merthiolated iodine solution was prepared by dissolving the following substances in 1 liter of distilled water:

- . 36 mg of merthiolate (sodium ethyl mercury thio-salicylate)
- . 1 ml of aqueous iodine-potassium iodide (1 g of iodine and 2 g potassium iodide in 300 ml of distilled water)
- . 54 mg of sodium borate.

Approximately one-third of the samples contained high amounts of inorganic particles which greatly hindered identification and enumeration of plankton. Hence, it was necessary to remove these particles prior to concentrating. Each sample was agitated and allowed to settle briefly, after which the suspended plankton were decanted. Merthiolated iodine solution was added to the sedimented fraction and the process was repeated until the sediment fraction appeared to contain no plankton. The combined plankton suspension was then concentrated by filtration as described above. The volume of each concentrated sample was measured, and this value was used to calculate a concentration index for each liter of river water sampled which passed through the plankton net.

Ten to 25 percent of each concentrated sample was examined using a compound microscope at either 100x, 430x, 440x, or 1000x magnification and Sedgewick-Rafter counting cells. Counting cells were filled with an appropriate volume of concentrated sample using a disposable pipette. With the exception of diatoms, all phytoplankters and zooplankters within 2 or 3 counting cells were identified, counted, and tabulated. These data were used to calculate the estimated number of organisms (by taxon) per liter (n/l) of river water which passed through the plankton net.

The processing of diatoms for microscopic examination was done in accordance with EPA procedures (Weber, 1973). From each concentrated sample, a 1-ml plankton suspension was incinerated on a hotplate at a temperature of 1000°F. Diatom frustules remained intact and were mounted in Nyrax. The permanent slides obtained from this process were examined under a compound microscope at either 100x, 430x, 440x, or 1000x magnification. All of the diatoms on a slide were identified and counted. Counts of 4 to 10 percent of the diatoms removed from a column of river water were used to calculate the estimated number of diatoms per liter of river water sampled.

Identification of all planktonic organisms was carried to the generic level when practical. When encountered, eggs and nauplii were identified to phylum and enumerated. References used in the identification process included Edmondson (1959), Pennak (1953), Goodry (1963), Fritsch (1971), Smith (1950), Prescott (1970), Patrick and Reiser (1966; 1975) and Webber (1971). Multicellular and colonial organisms (coenobia, filaments, and non-coenobitic colonies) were counted as individuals. Instead of enumerating the cells of colonies and filaments, each entire colony or filament was counted as an individual within a taxon. However, cells having a solitary bit--for example, cladocera eggs and unicellular algae--were counted individually. Selected planktonic data (table 5) were punched on computer cards and subsequently entered on the E.P.A. STORET system for future retrieval.

2. Benthic Macroinvertebrates--Ponar

Initially, macroinvertebrate samples were collected with a 6- by 6-inch epoxy-coated Ekman bottom dredge. Because of the velocity of the Alabama River and the light weight of the Ekman dredge, a 9- by 9-inch epoxy-coated Ponar sampler was substituted for the Ekman dredge beginning with the second sampling run. At each station, one sample was taken near each bank (littoral zone) and one was collected in midstream (profundal zone) for a total of three samples per station. Each sample was immediately washed through a U.S. Standard No. 30 sieve and the remaining materials were preserved in 70-percent ethanol with rose bengal stain added. The samples were numbered and the date of collection recorded.

Table 5.--Biological STORET parameters, densities, and numbers used during the Alabama-Coosa River study

<u>Parameter</u>	<u>Density</u>	<u>STORET number</u>
Benthic biomass	Grams per square meter (g/m^2)	00571
Other zooplankton	Number per liter (n/l)	60990
Total Protozoa	Number per liter (n/l)	71261
Cladocera	Number per liter (n/l)	71291
Copepods	Number per liter (n/l)	71297
Chlorophyceae, Order		
Ulotrichales	Number per liter (n/l)	71311
Chlorophyceae, Order		
Cladophorales	Number per liter (n/l)	71320
Chlorophyceae, Order		
Chlorococcales	Number per liter (n/l)	71322
Euglenophyceae, Order		
Euglenales	Number per liter (n/l)	71379
Dinophyceae, Order		
Dinokontae	Number per liter (n/l)	71383
Chrysophyceae, Order		
Chryomonadales	Number per liter (n/l)	71395
Bacillariophyceae, Order		
Centrales	Number per liter (n/l)	71401
Bacillariophyceae, Order		
Pennales	Number per liter (n/l)	71408
Caddis	Number per square meter (n/m^2)	75009
Trichoptera	Number per square meter (n/m^2)	75018
Chironomids	Number per square meter (n/m^2)	75021
Diptera	Number per square meter (n/m^2)	75024
Siphonura	Number per square meter (n/m^2)	75027

Samples were transported to the laboratory where the benthic organisms contained in each were separated from the preserved substrate and detritus. Specimens were initially assigned a phylum status; later identified to the class, order, family, and, when practical, genus; and finally tabulated. References used in the identification of various genera included Burch (1975a and b), Edmondson (1959), Edmunds and others (1976), Needham and Westfall (1954), Parrish (1975), Pennak (1953), and Usinger (1956). Several publications of the E.P.A. (Brown, 1976; Cressey, 1976; Ferris and others, 1976; Foster, 1976; Holsinger, 1976; Kenk, 1976; and Williams, 1976) were also consulted. Once all of the organisms were identified and tabulated, the number of individuals per taxon per square meter (a/m^2) of river bottom at each station was calculated and placed in tabular form. Data on the number of individuals per genera were used to calculate a Shannon-Weaver diversity index (H') for each site using the formula

$$H' = -\sum P_i \log_2 P_i$$

where P_i is the proportion of the i th (generic) taxon at each site.

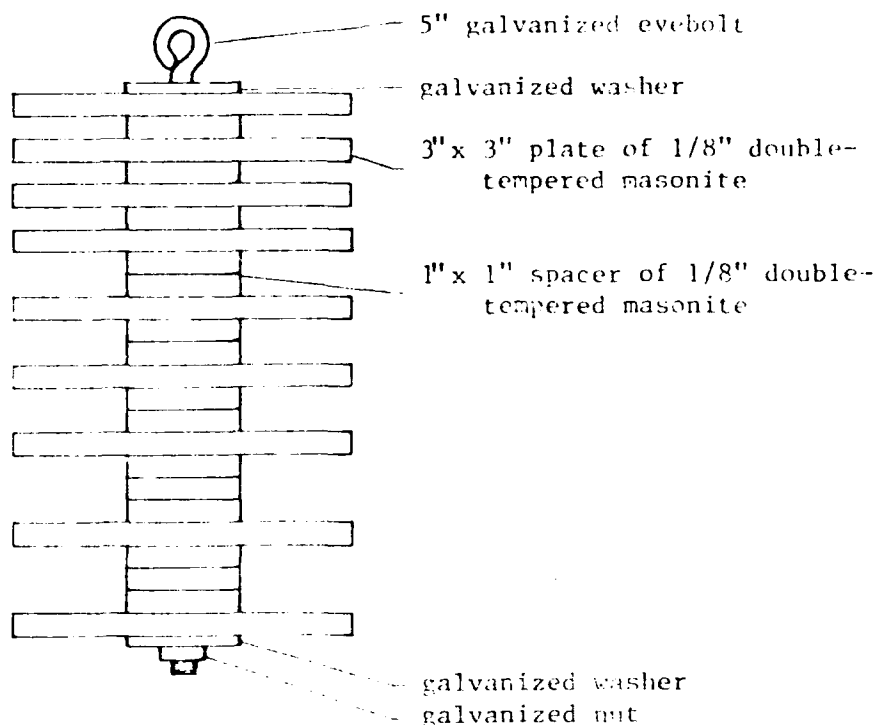
Organisms contained in each of the three samples from each station were air dried and weighed to the nearest tenth of a gram. These weights were averaged and used to calculate benthic biomass in grams per square meter (g/m^2). Benthic biomass data and the densities of selected benthic groups (table 5) were placed in the EPA STORET system for later retrieval.

3. Benthic Macroinvertebrates—multiplate sampler

Multiplate samplers were deployed twice at 34 of the 46 stations. Stations at which samples were collected included 1, 3 through 11, 13 through 17, 19, 21, 23, 24, 26, 28, 30 through 34, 36, 38, and 41 through 46. At each site, a sampler was attached with wire or cable to a buoy or bridge abutment at a depth of approximately 4 feet. All samplers remained in place for approximately six weeks. When the first set of samplers was collected, the second set was deployed.

The samplers employed during the study were Dendy multiplate samplers (Hester and Dendy, 1962) with one modification. Instead of having one consistent spacer width between each plate of double tempered masonite, three different widths were used. Four of the square plates were spaced at intervals of $1/8$ inch, three were spaced at intervals of $1/4$ inch, and the remaining two were spaced at intervals of $3/8$ inch (see diagram). The total surface area of a sampler was approximately $1\frac{1}{2}$ square feet.

Modified Dendy Multiplate Sampler



At the end of a sampling period, the entire sampler was pulled from the water by its attachment cable and immediately placed in a plastic quart container filled with 70-percent aqueous ethanol to which rose bengal stain was added. To our knowledge, no organisms were lost during the retrieval of the multiplate samplers. To test this procedure, several of the samplers were retrieved in a large galvanized bucket that was placed under the sampler before it was pulled from the water. After the sampler was placed in preservative, the water in the bucket was sieved and found to contain no benthic organisms.

In the laboratory, each sampler was dismantled and the plates were cleaned with a camel-hair brush to remove the organisms. Most samplers were left in alcohol six to twelve weeks before processing. During processing, certain amounts of glue and wood fiber were also removed from the plates, which necessitated washing the samples several times through a U.S. Standard No. 30 sieve prior to identification. The removed organisms were sorted and identified to the family level and tabulated as to presence or absence. The dominant family was determined on the basis of the relative numbers of organisms. References used in identification of the organisms found on the multiplate samplers are listed above in the section on Ponar samples.

4. Aquatic Macrophytes

Four trips, each lasting several days, were made to the study area. The river was floated in a 14-foot aluminum boat, during which time observations were made of the aquatic vegetation along each shore. When a population of plants was sighted, the location was recorded and a list of plants present was made. Species were identified using the keys and descriptions found in Beal (1977) and classified as emergent (E), freefloating (F1), floating-leaved (F1-lv), or submersed (S). Voucher specimens of most species were taken and are on deposit at the University of Alabama Herbarium (UNA).

IV. RESULTS

A. Chemical

1. Water-quality Parameters

Water samples collected at each of the 46 sites were analyzed for 39 water-quality parameters, which included chemical, physical, bacteriological, and biological components. Results of the analyses (table A-1) indicated that, generally, the water quality of the Alabama River was within acceptable water-quality limits as defined by the EPA (table 6). A range of concentration for each of the 39 parameters identified in the study is presented in this section; violations of Federal or State water criteria are noted. A more complete section of results may be found for the Jones Bluff, William "Bill" Dannelly, and Claiborne Reservoirs on the Alabama River in the three reports based on the 1978 sampling period, which followed the period covered by this report.

Ammonia as nitrogen ranged from 0 to 1.6 milligrams per liter (mg/l) and averaged 0.1 mg/l throughout the study (figs. 5 through 10). The fish and wildlife criteria for ammonia as nitrogen (.02 mg/l) were exceeded at all stations during at least three of the six sampling runs. At some stations, the criteria were exceeded during every run (table A-1).

The temperature of the water ranged from a high value of 31.0°C during August 1977 to a low value of 5.0°C in December. The average water temperature during the study was 19.0°C.

The specific conductance ranged from 81 to 203 micromhos per centimeter (umhos/cm) during the August through December 1977 study period. The average specific conductance was 128 umhos/cm during the study (figs. 11 through 16).

The apparent color, reported in platinum-cobalt (Pt-Co) units, ranged from 10 to 195 during the August through December 1977 study period. The mean for apparent color throughout the study was 102 Pt-Co units.

The total coliform bacteria concentration ranged from 35 to 210,000 colonies per 100 milliliters (CT/100 ml). Fecal streptococci bacteria concentrations ranged from 8 to 25,000 CT/100 ml.

Table 6.--Acceptable water-quality criteria

(Modified from U.S. EPA, 1976)

<u>Parameter</u>	<u>Fish and wildlife criteria</u>
pH	6-8.5
Dissolved oxygen	5 mg/l
Ammonia as N	.02 mg/l
Fecal coliform	2000 colonies/100 ml
Chloride	*
Color	*
Fluoride	*
Iron	300 µg/l
Manganese	100 µg/l
Nitrate as N	*
Nitrite as N	*
Sulfate	*
Total dissolved solids (filterable residue at 180°C)	*
Turbidity	50 Jackson turbidity units (JTU)

*No specific value appointed.

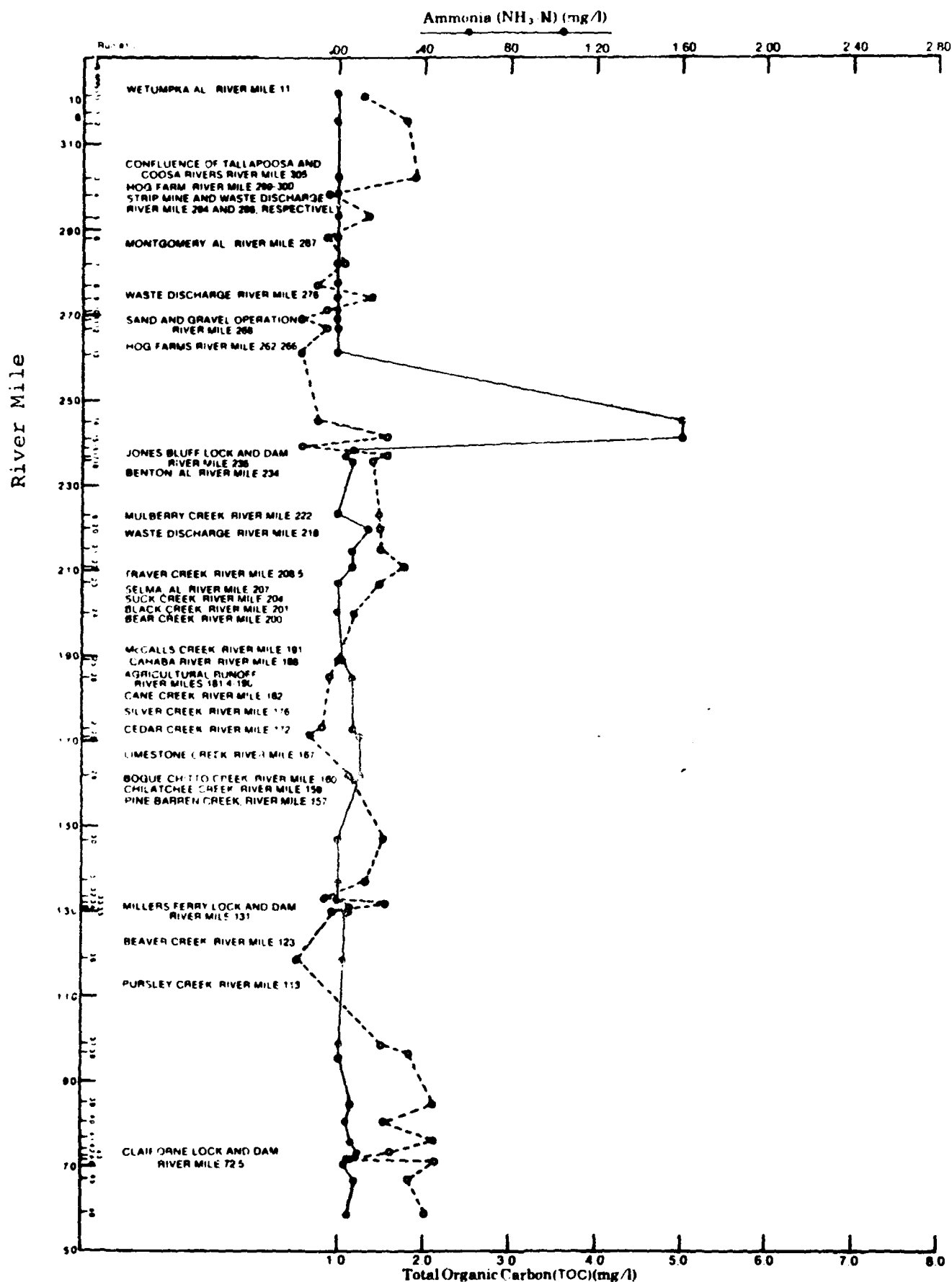


Figure 5.--Ammonia and total organic carbon concentrations versus distance at 46 Alabama-Coosa River system stations during the period August 9-25, 1977.

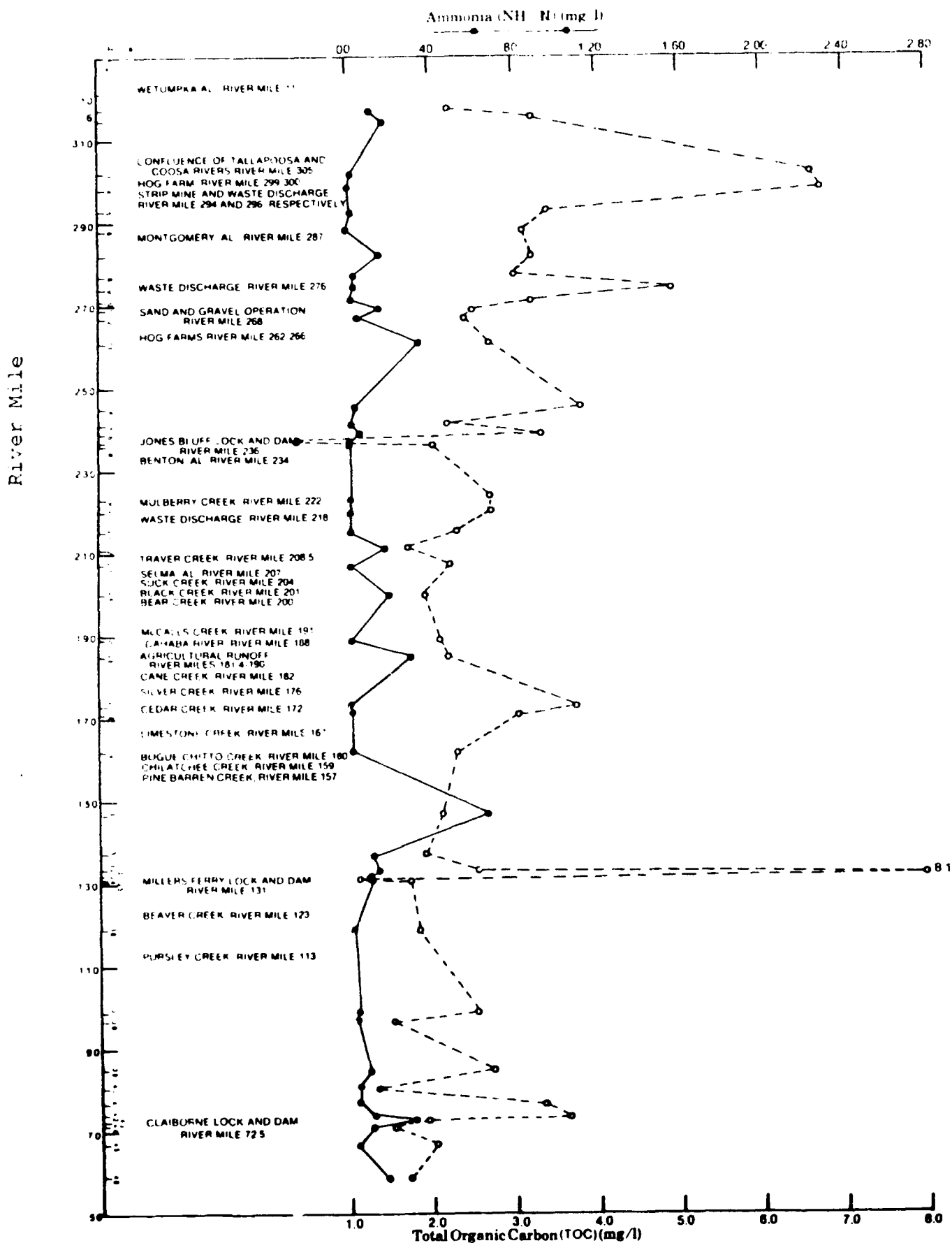


Figure 7.--Ammonia and total organic carbon concentrations versus distance at 46 Alabama-Coosa River system stations during the period September 19 through October 4, 1977. 30

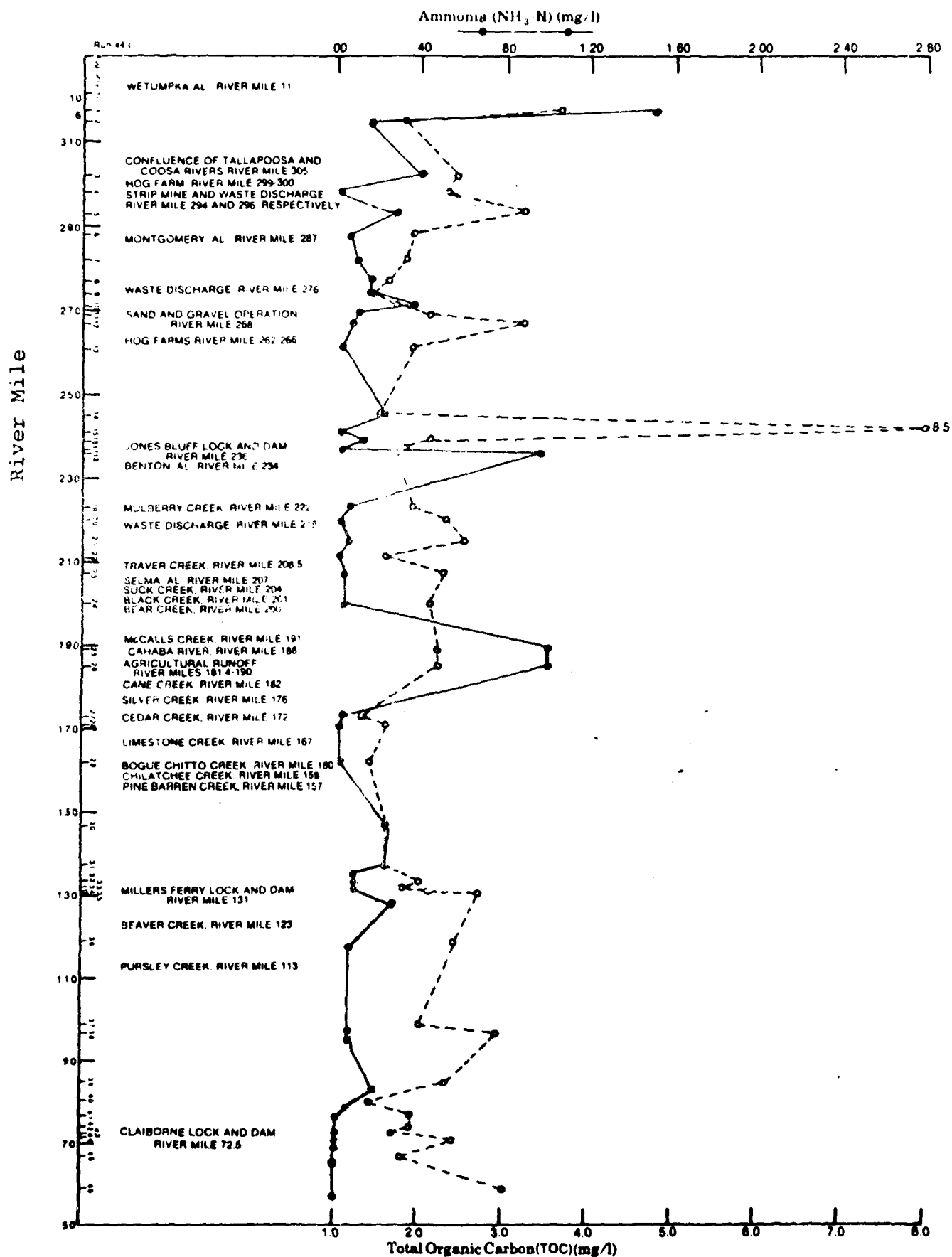


Figure 8.--Ammonia and total organic carbon concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 11-25, 1977.

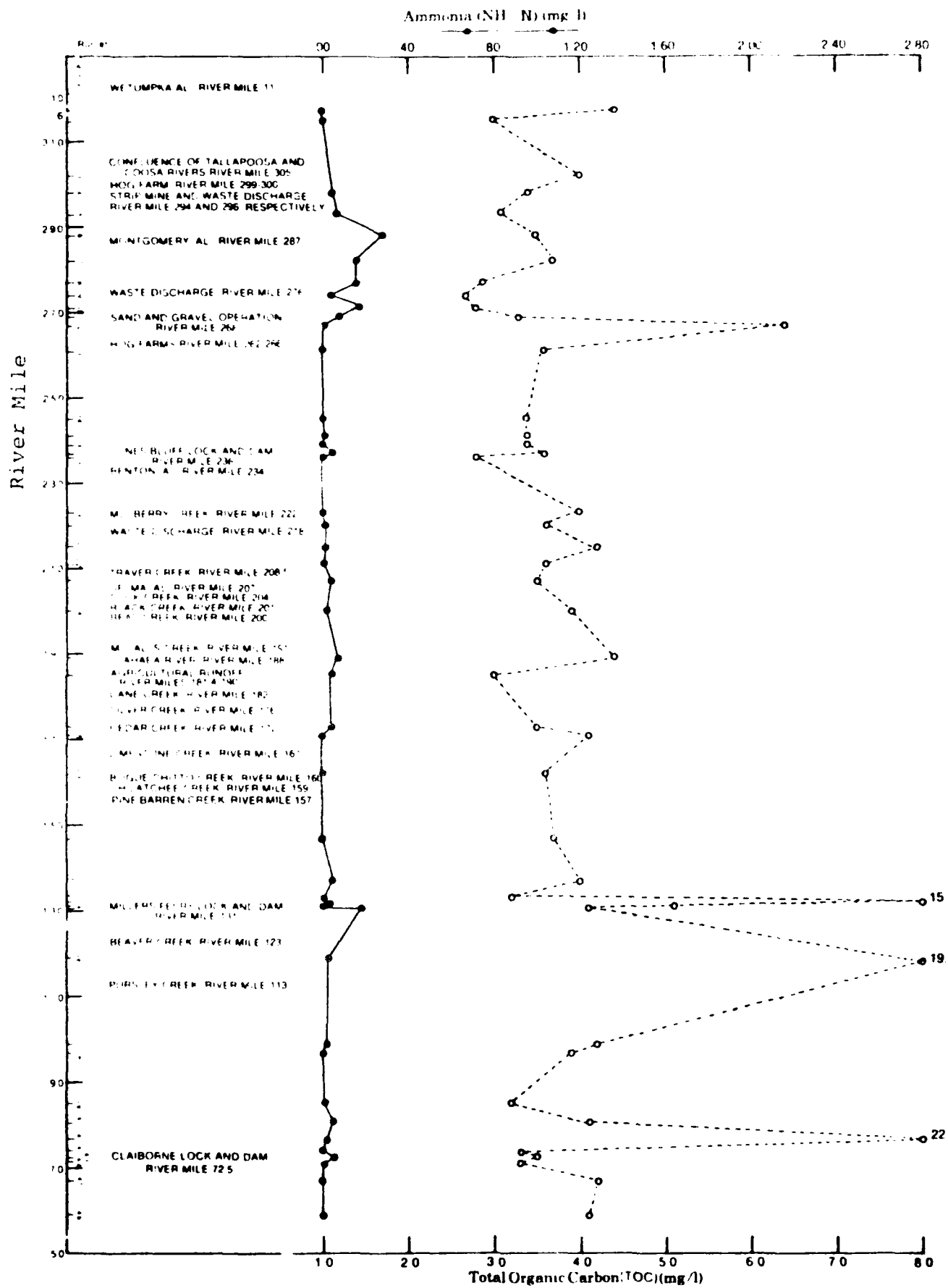


Figure 9.--Ammonia and total organic carbon concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 31 through November 17, 1977.

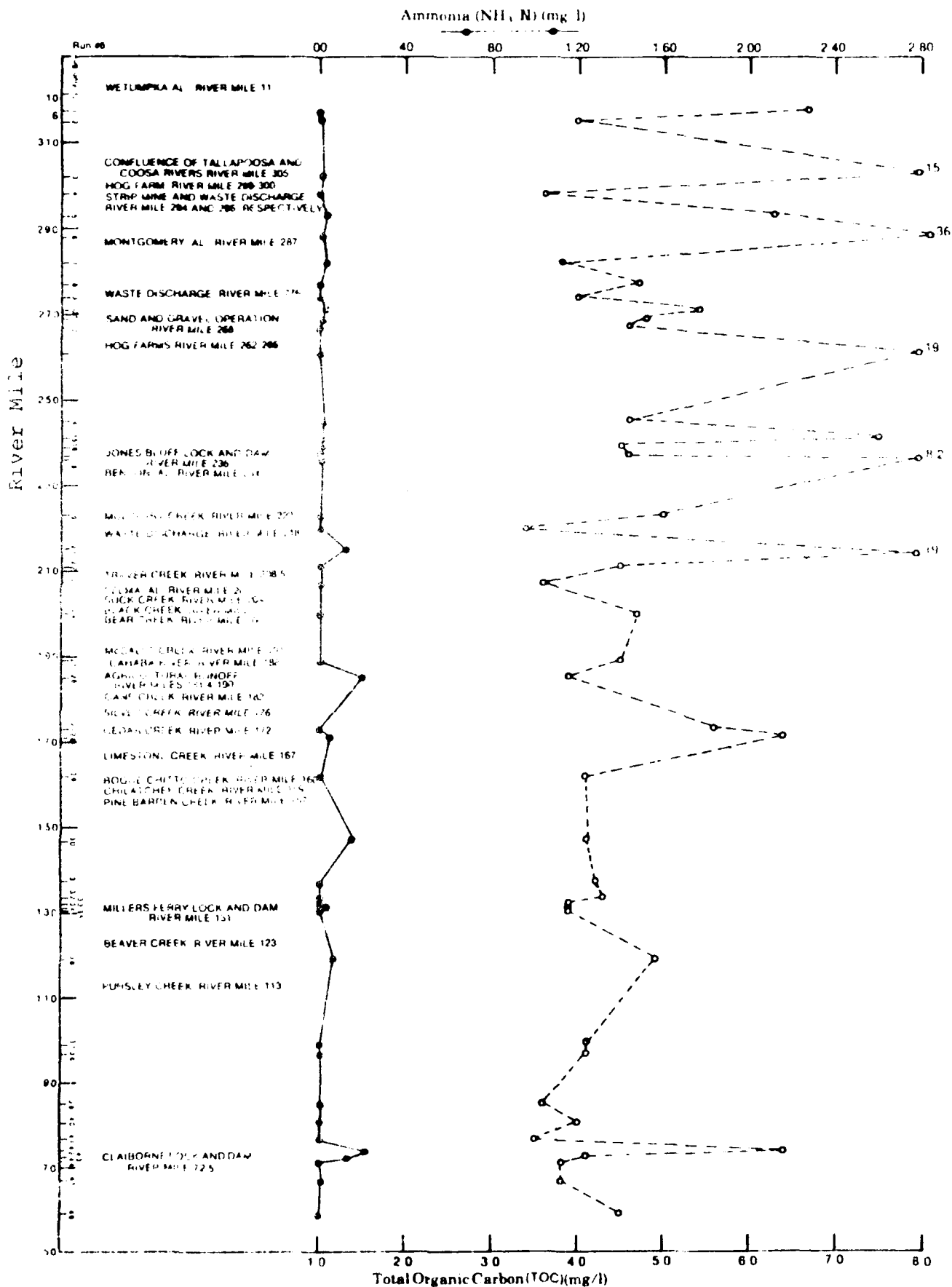


Figure 10.--Ammonia and total organic carbon concentrations versus distance at 46 Alabama-Coosa River system stations during the period November 21 through December 8, 1977.

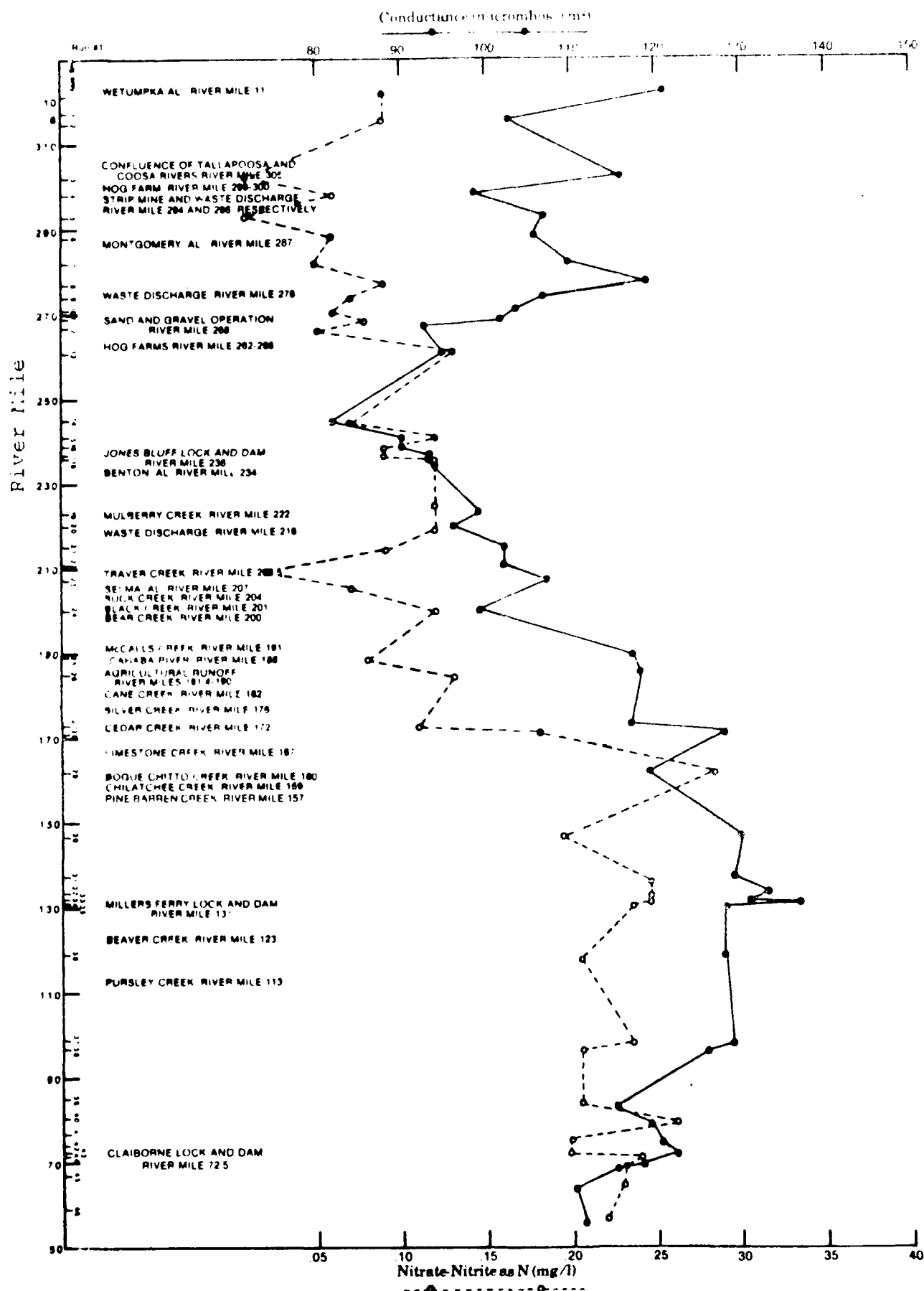


Figure 11.--Conductance and nitrate-nitrite as N concentrations versus distance at 46 Alabama-Coosa River system stations during the period August 9-25, 1977.

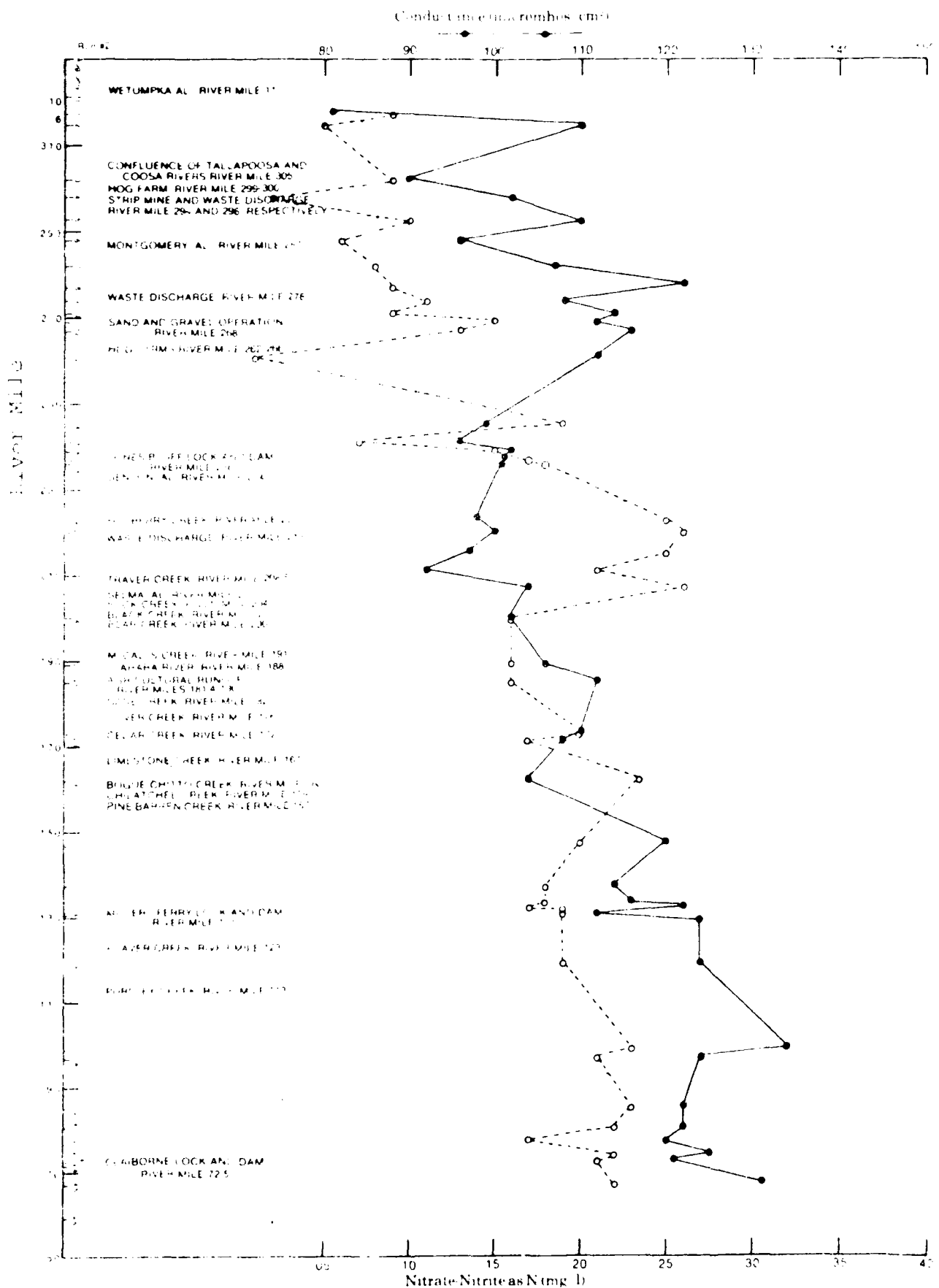


Figure 12.--Conductance and nitrate-nitrite as N concentrations versus distance at 46 Alabama-Coosa River system stations during the period August 29 through September 14, 1977. 35

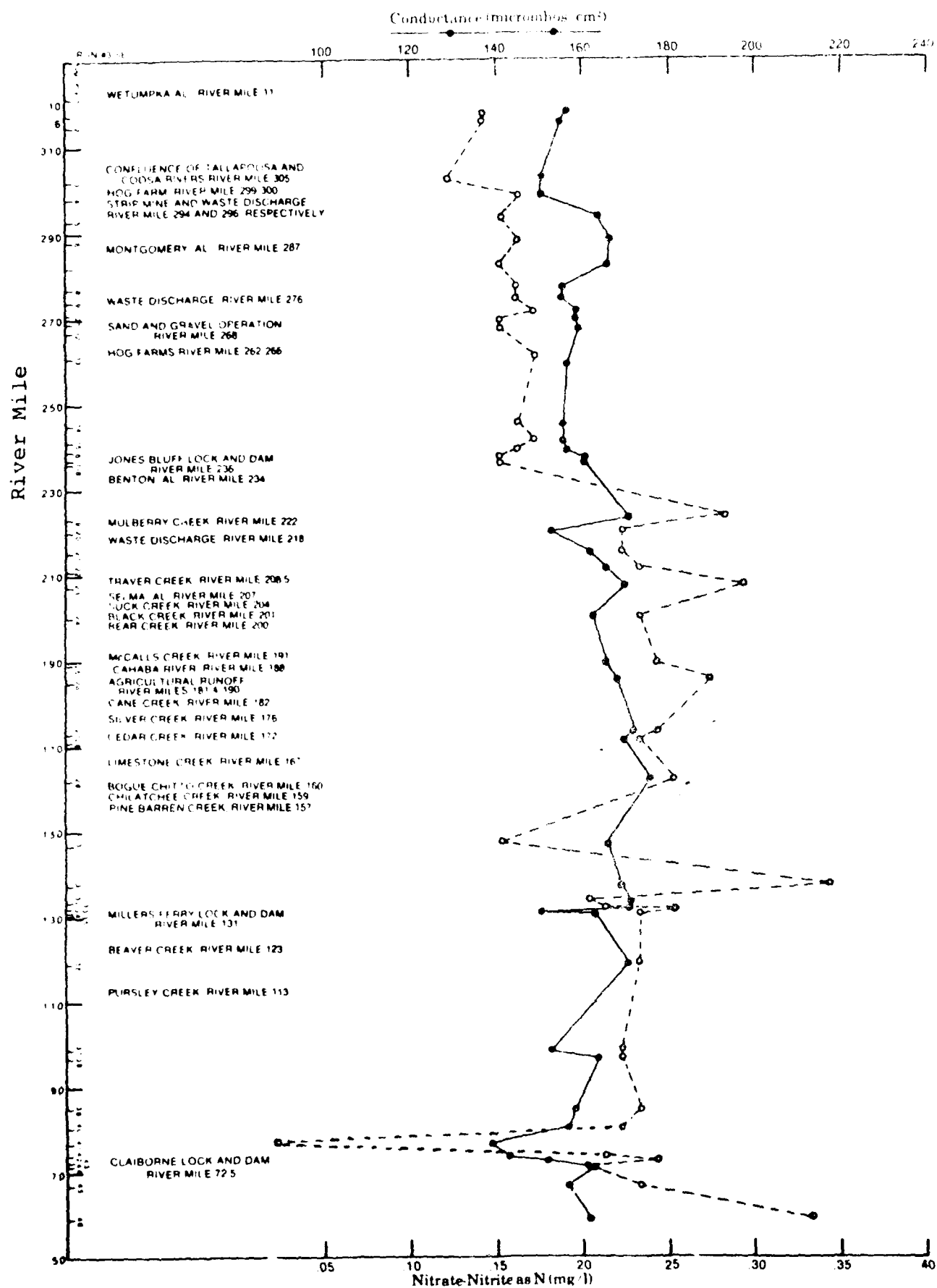


Figure 13.--Conductance and nitrate-nitrite as N concentrations versus distance at 46 Alabama-Coosa River system stations during the period September 19 through October 4, 1977. 36

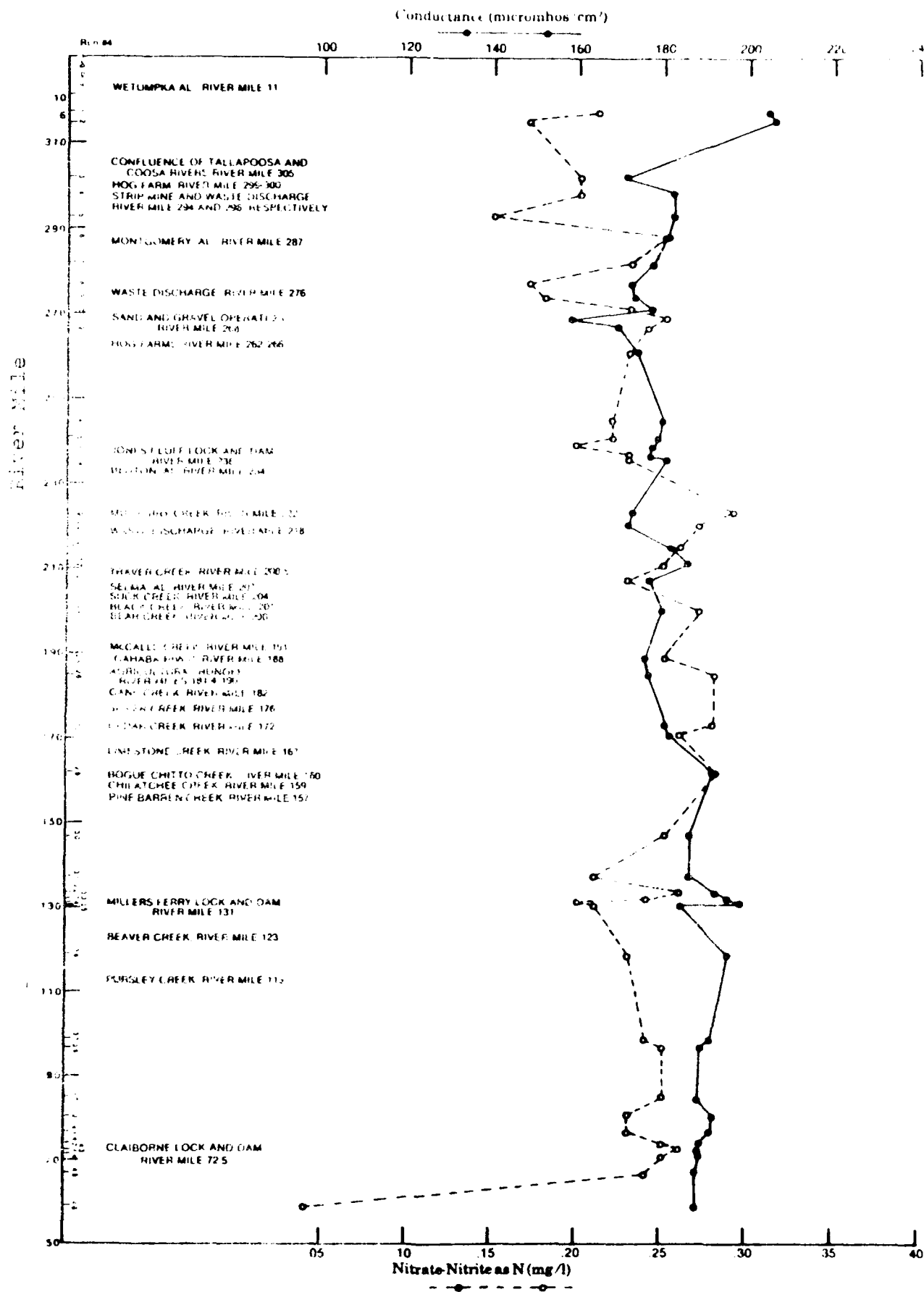


Figure 14.--Conductance and nitrate-nitrite as N concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 11-25, 1977.

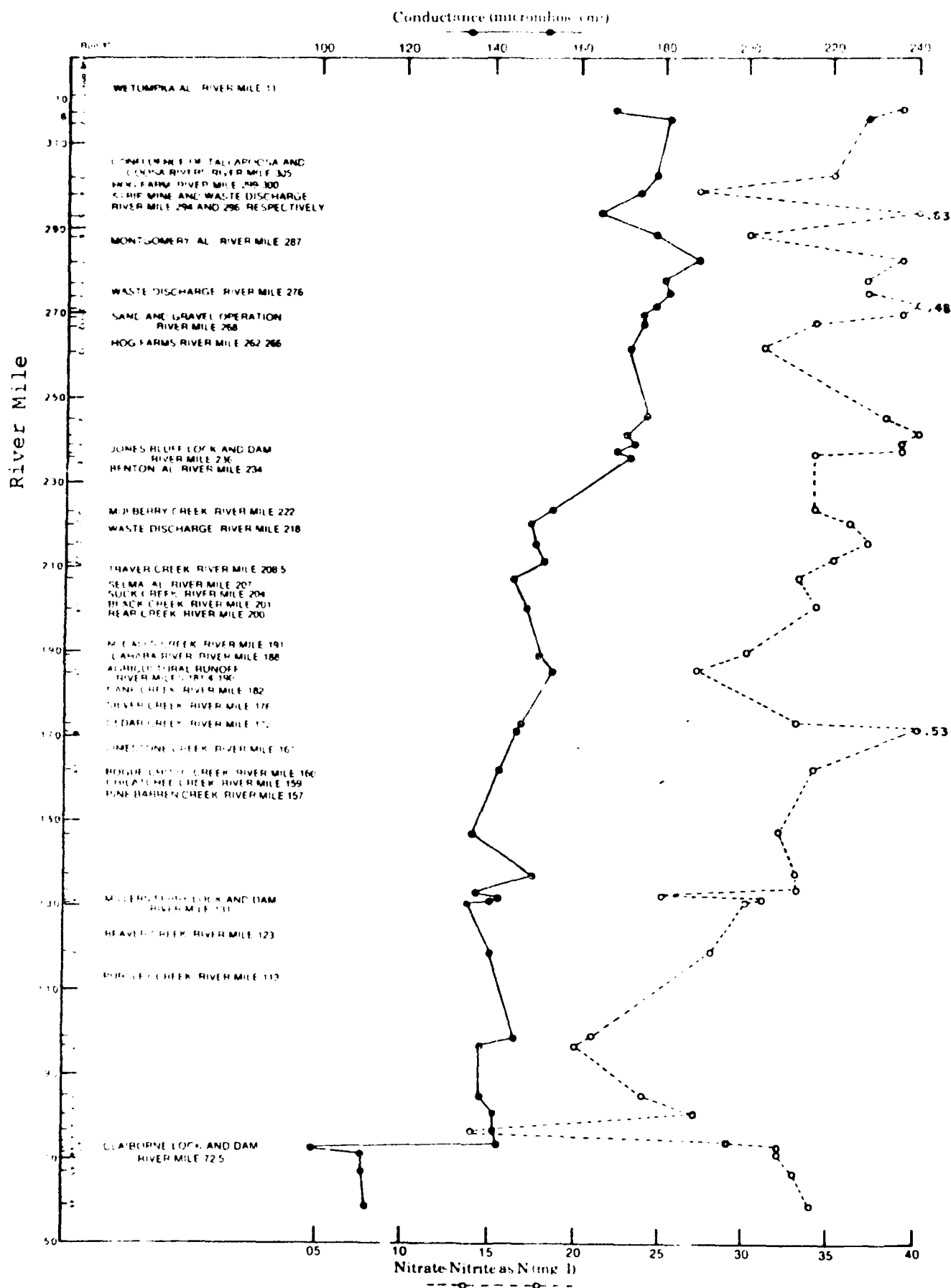


Figure 15.--Conductance and nitrate-nitrite as N concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 31 through November 17, 1977. 38

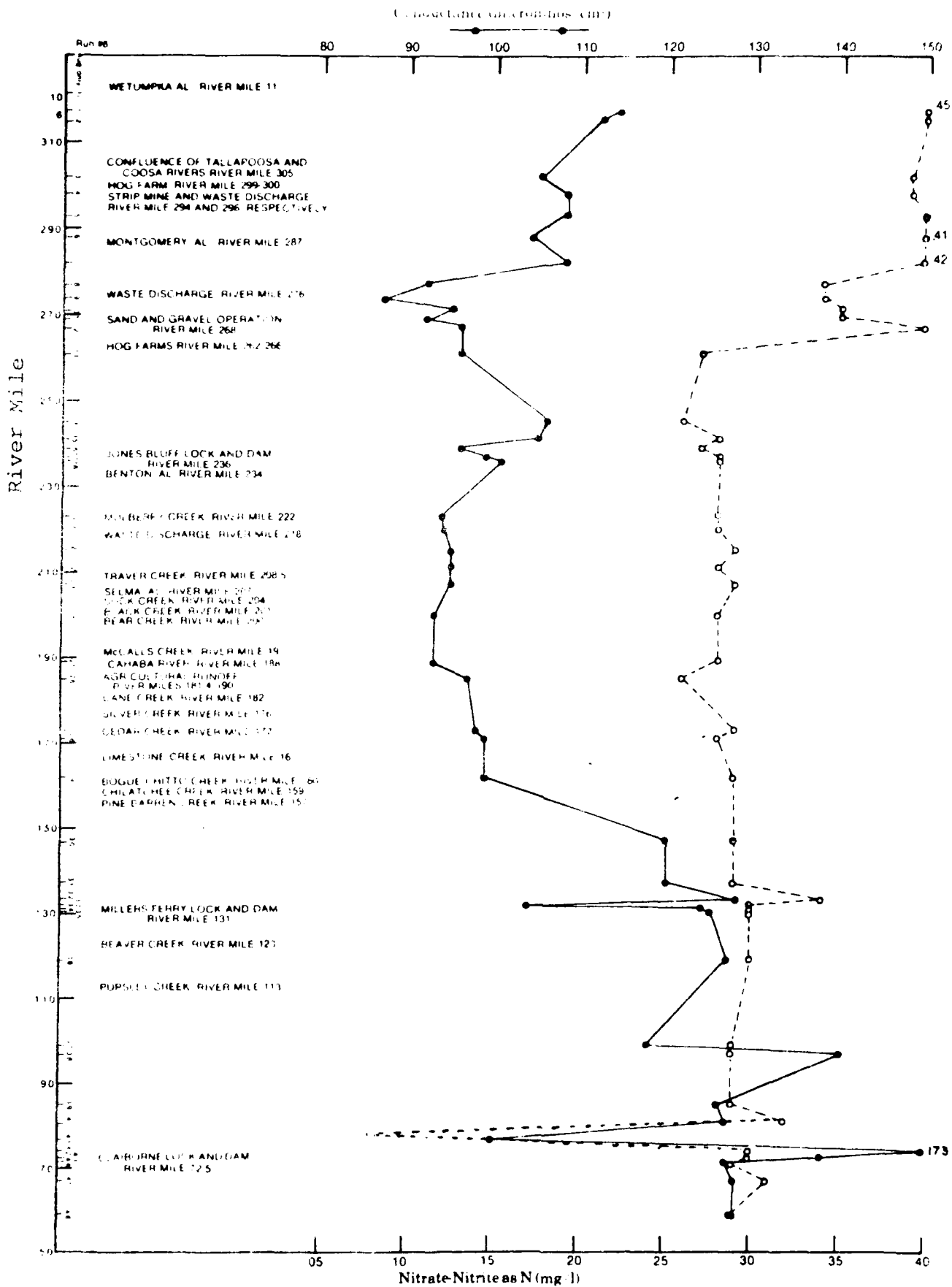


Figure 16.--Conductance and nitrate-nitrite as N concentrations versus distance at 46 Alabama-Coosa River system stations during the period November 21 through December 8, 1977.

During the study, fecal coliform values were above 2000 CT/100 ml at stations 6 (2600 CT/100 ml) and 7 (2900 CT/100). The values for this parameter ranged from 0 to 2900 CT/100 ml for the entire 1977 study period.

The nutrient concentrations on the Coosa-Alabama River for the period August 9 through December 8, 1977, ranged from 0 to .28 mg/l for nitrate-nitrite as nitrogen (figs. 11 through 16) and from .04 to .33 mg/l for total phosphorus (figs. 17 through 22). The ortho-phosphorus as P concentration ranged from 0.0 to 0.18 mg/l for all sites throughout the study period. The total Kjeldahl nitrogen (TKN) concentration ranged from 0.0 to 19 mg/l throughout the six sampling runs for all 46 sampling sites. None of the above nutrient concentrations exceeded the fish and wildlife water-quality criteria.

The oxygen-related parameters sampled and analyzed during the study included dissolved oxygen (DO), total organic carbon (TOC), chemical oxygen demand (COD), and five-day biochemical oxygen demand (BOD₅). Dissolved oxygen concentrations (figs. 23 through 28) ranged from a low of 5.2 mg/l to a high of 13.8 mg/l. Total organic carbon (figs. 5 through 10) ranged from 0.3 to 36 mg/l and averaged 3.5 mg/l. The COD concentration ranged from a low of 2.0 mg/l to a high of 24 mg/l. Five-day biochemical oxygen demand ranged from 0 to 2.8 mg/l (table A-3).

Dissolved oxygen, temperature, conductivity and pH were sampled at specified depths across the width of the reservoir at stations 8, 16, 21, 32, 37, and 43 during August (table A-3) and at stations 17, 33, 34, and 43 during November and December (table A-4) to define the mixing and stratification within the reservoir. Additionally, oxidation-reduction potential (ORP) was sampled as stated above for stations 17, 33, 34 and 43 to further define potential stratification problems (table A-4). Graphical representations of the above data are found in figures A-1 through A-9 for August and figures A-10 through A-13 for November and December.

Dissolved chloride values ranged from 0 to 17 mg/l. The average chloride concentration was 7 mg/l for the entire study period.

Sulfate (SO₄) ranged from 1.2 to 16 mg/l with the average concentration being 6.7 mg/l for the entire study period.

Secchi disk readings varied from a maximum of 1.15 to a low of 0.50 meters (m); the average reading for the entire period was 0.87 m.

Oxidation reduction potential (ORP) values ranged from +50 to +250 millivolt (mv); the average ORP was +190 for the entire study period.

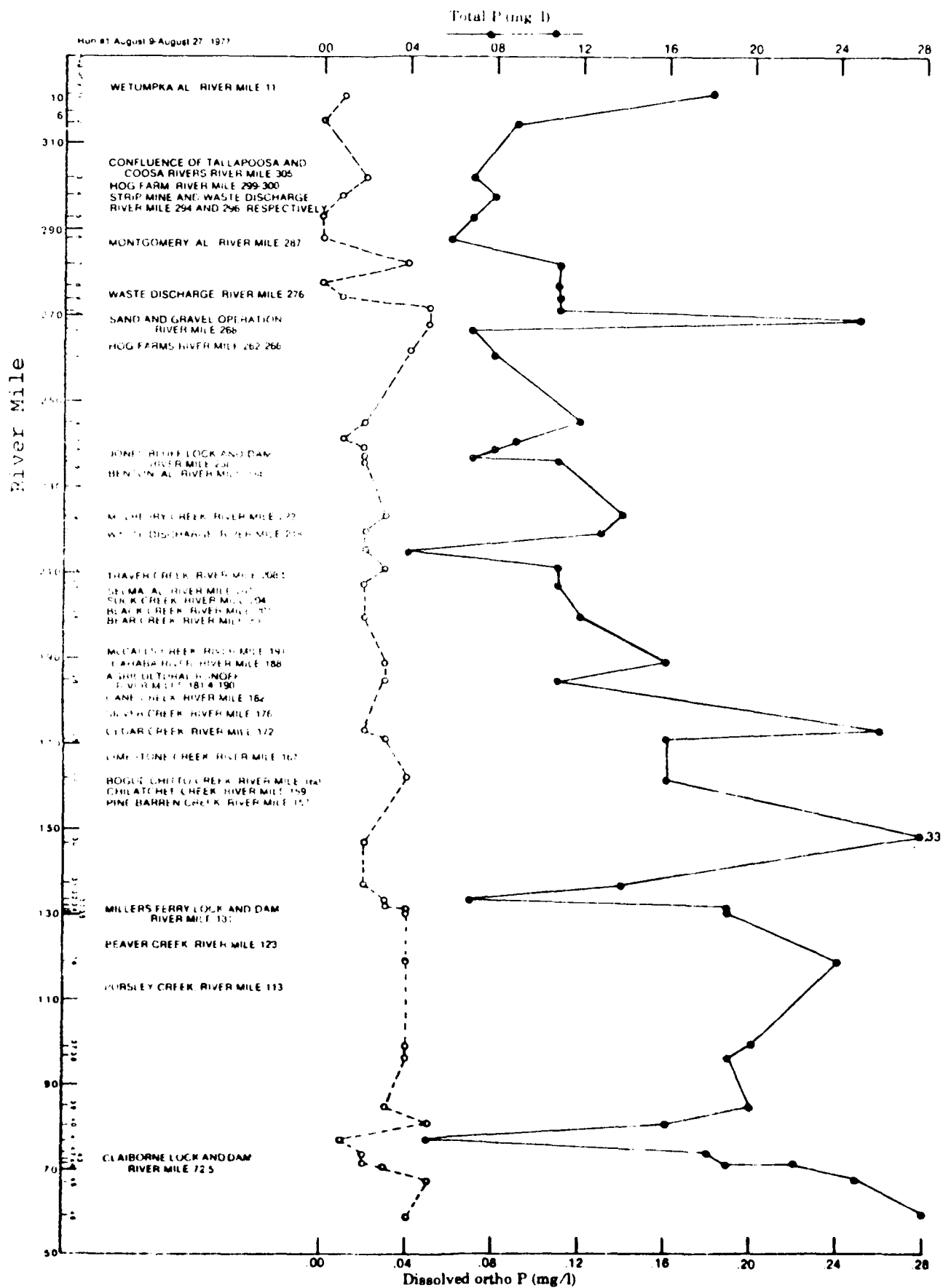


Figure 17.--Total P and dissolved ortho P concentrations versus distance at 46 Alabama-Coosa River system stations during the period August 9-25, 1977.

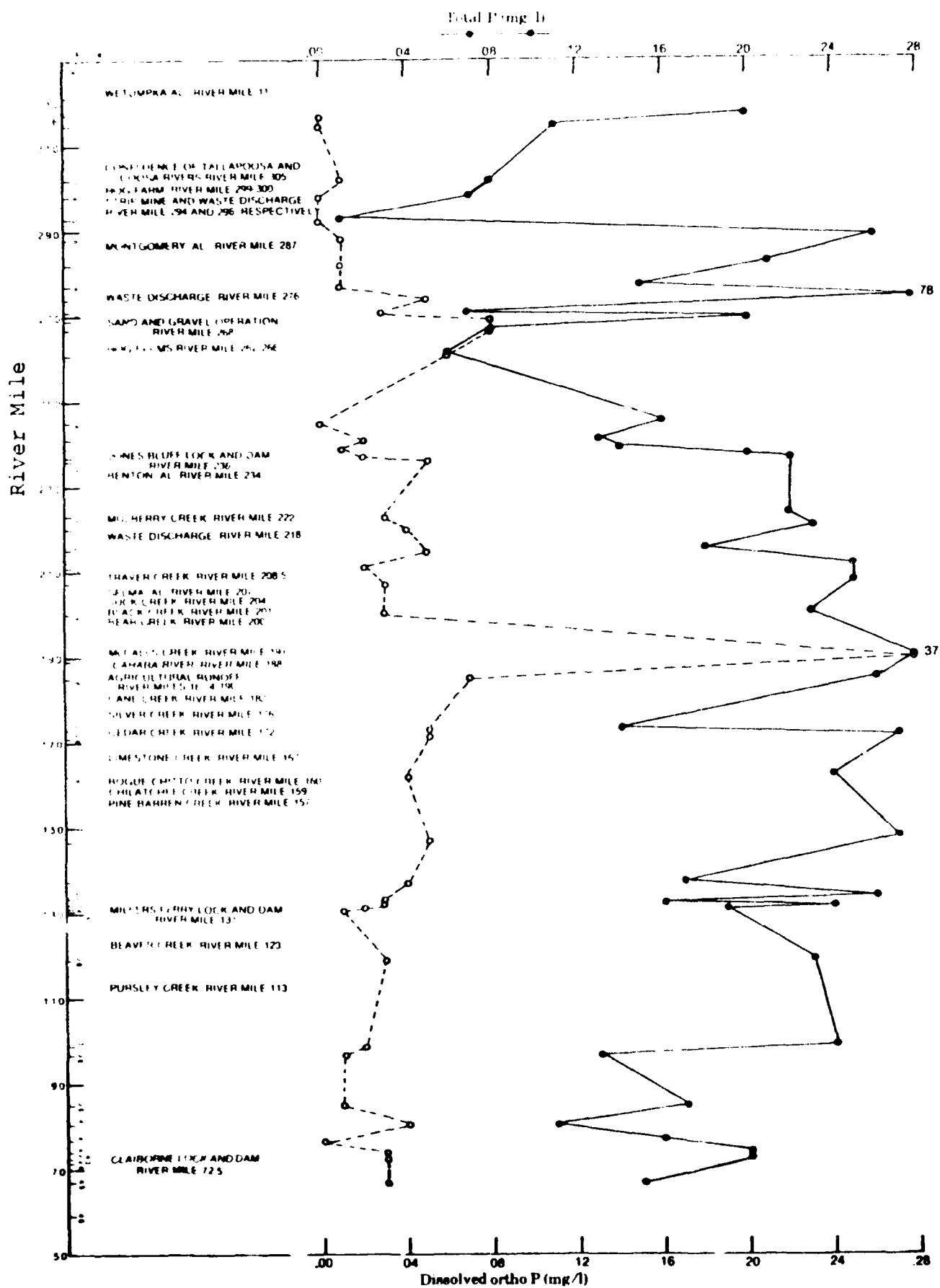


Figure 18.--Total P and dissolved ortho P concentrations versus distance at 46 Alabama-Coosa River system stations during the period August 29 through September 14, 1977.

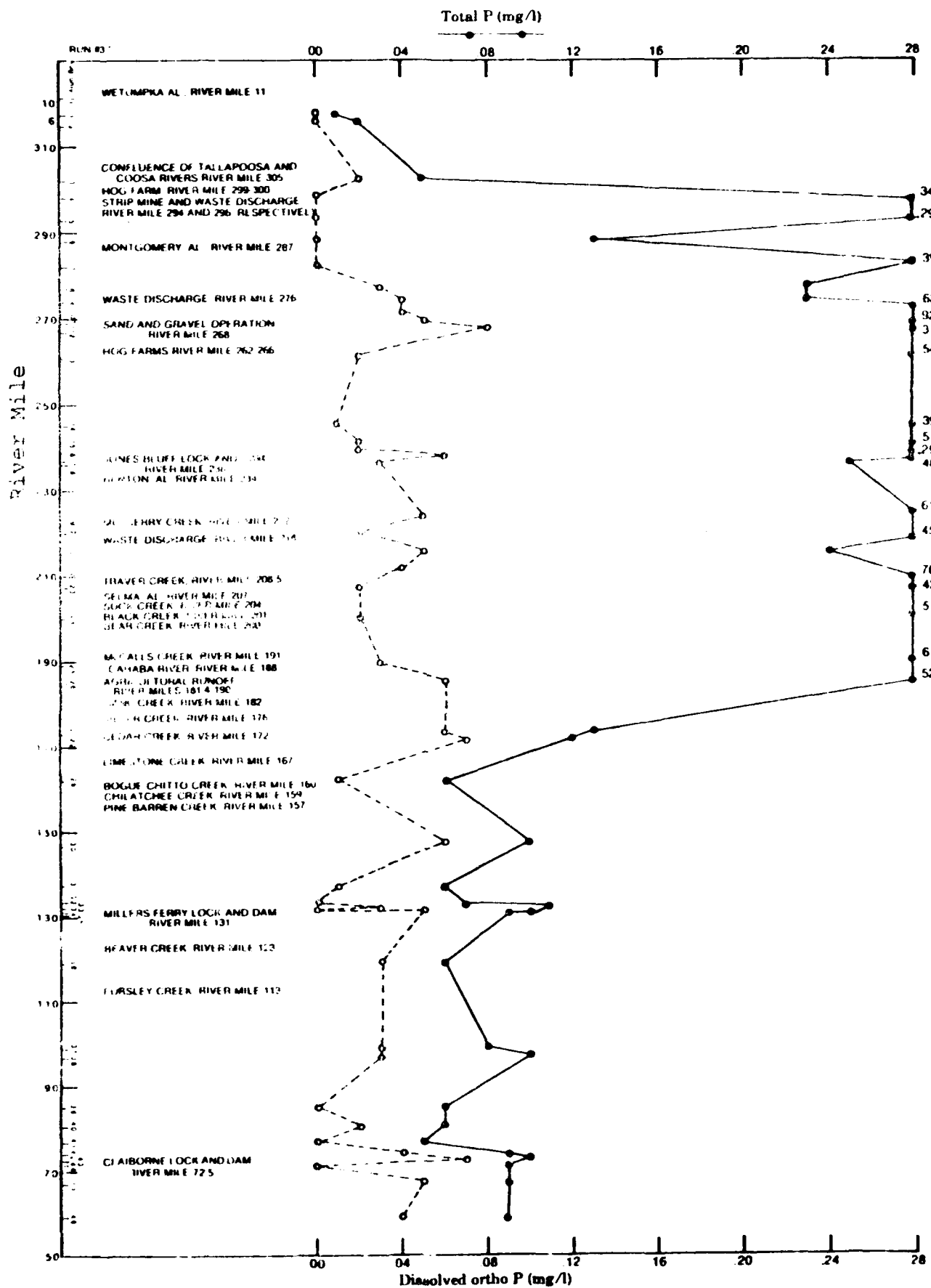


Figure 19.--Total P and dissolved ortho P concentrations versus distance at 46 Alabama-Coosa River system stations during the period September 19 through October 4, 1977. 43

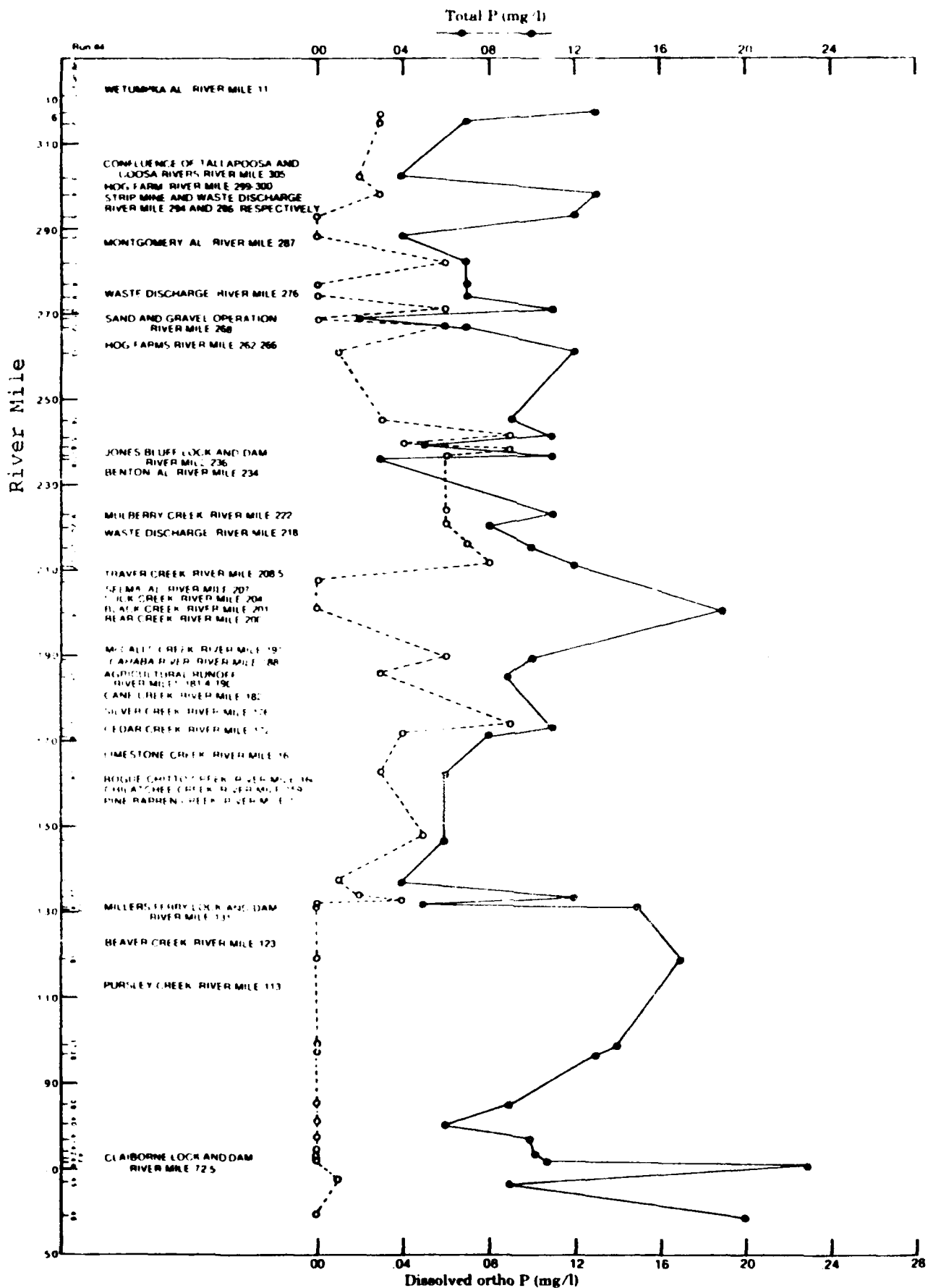


Figure 20.--Total P and dissolved ortho P concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 11-25, 1977.

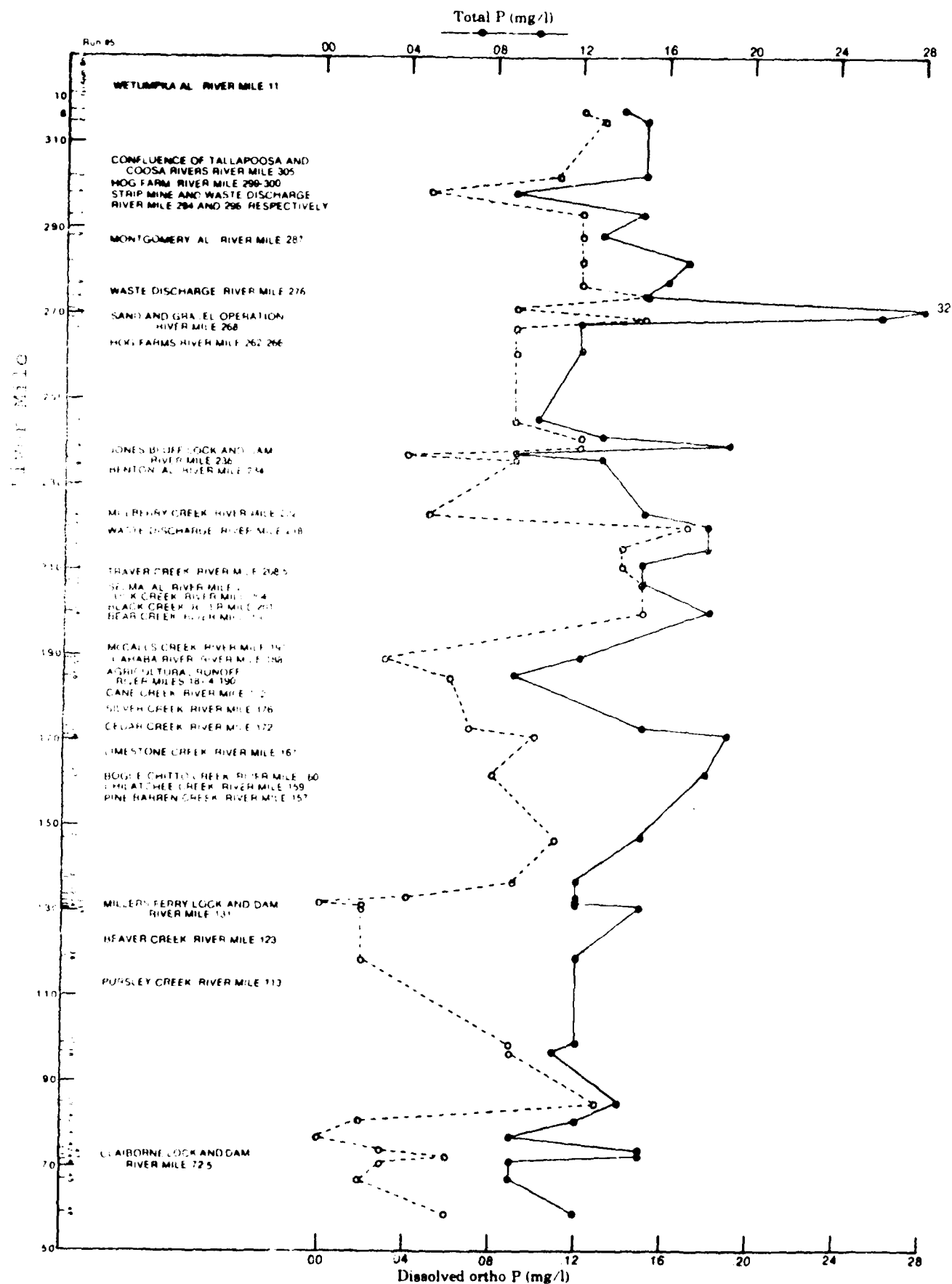


Figure 21.--Total P and dissolved ortho P concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 31 through November 17, 1977. 45

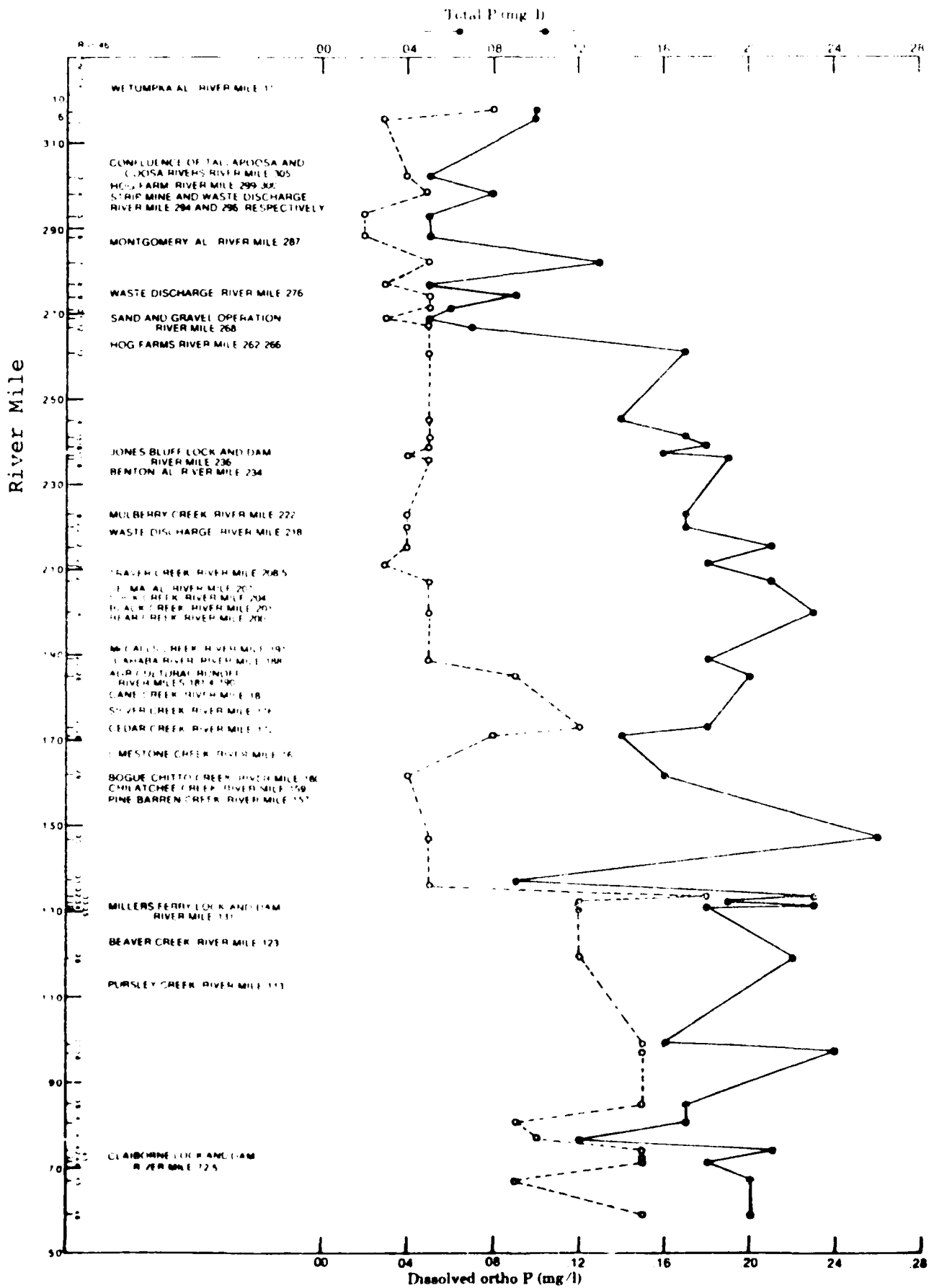


Figure 22.--Total P and dissolved ortho P concentrations versus distance at 46 Alabama-Coosa River system stations during the period November 21 through December 8, 1977.

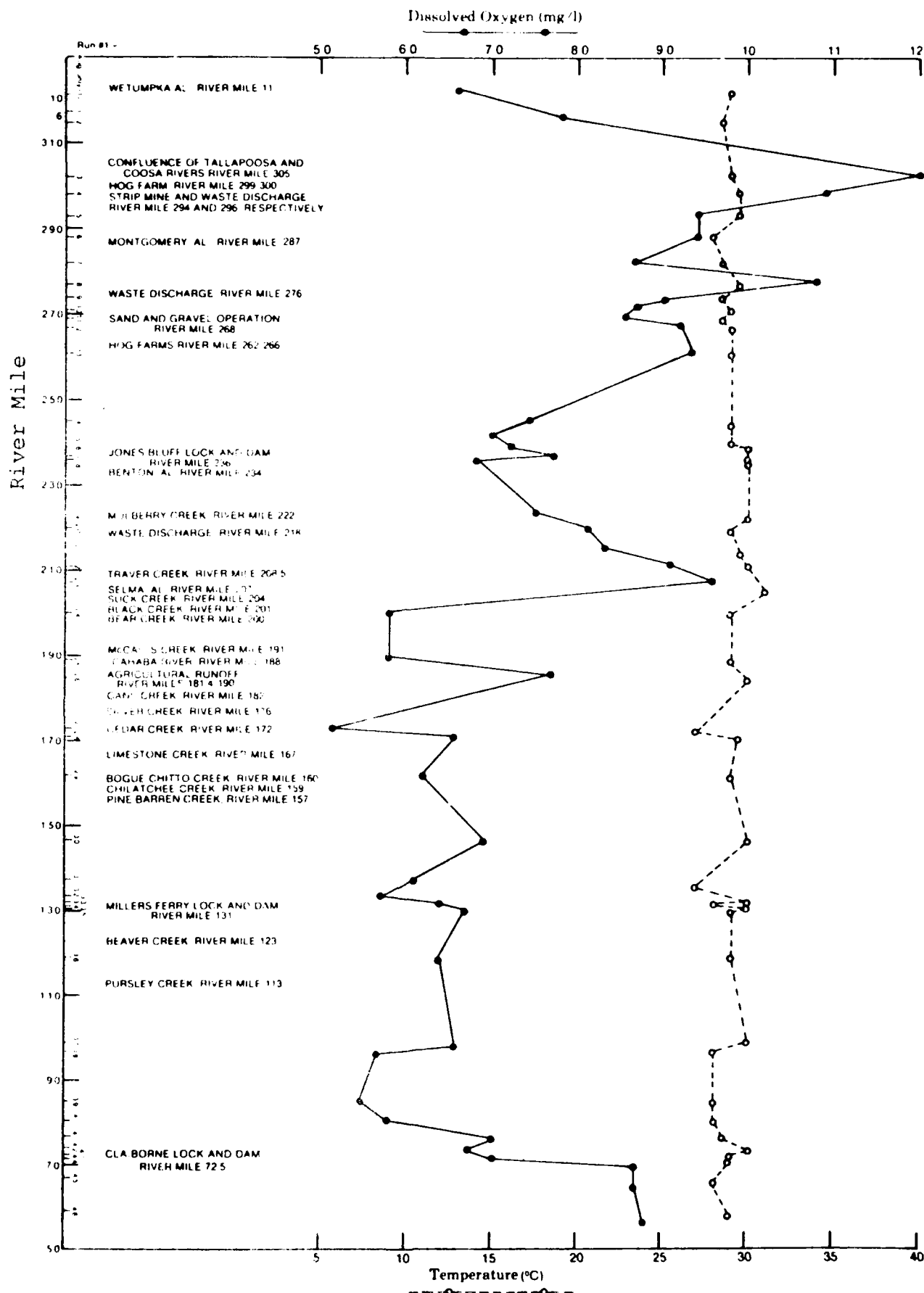


Figure 23.--Dissolved oxygen and temperature values versus distance at 46 Alabama-Coosa River system stations during the period August 9-25, 1977.

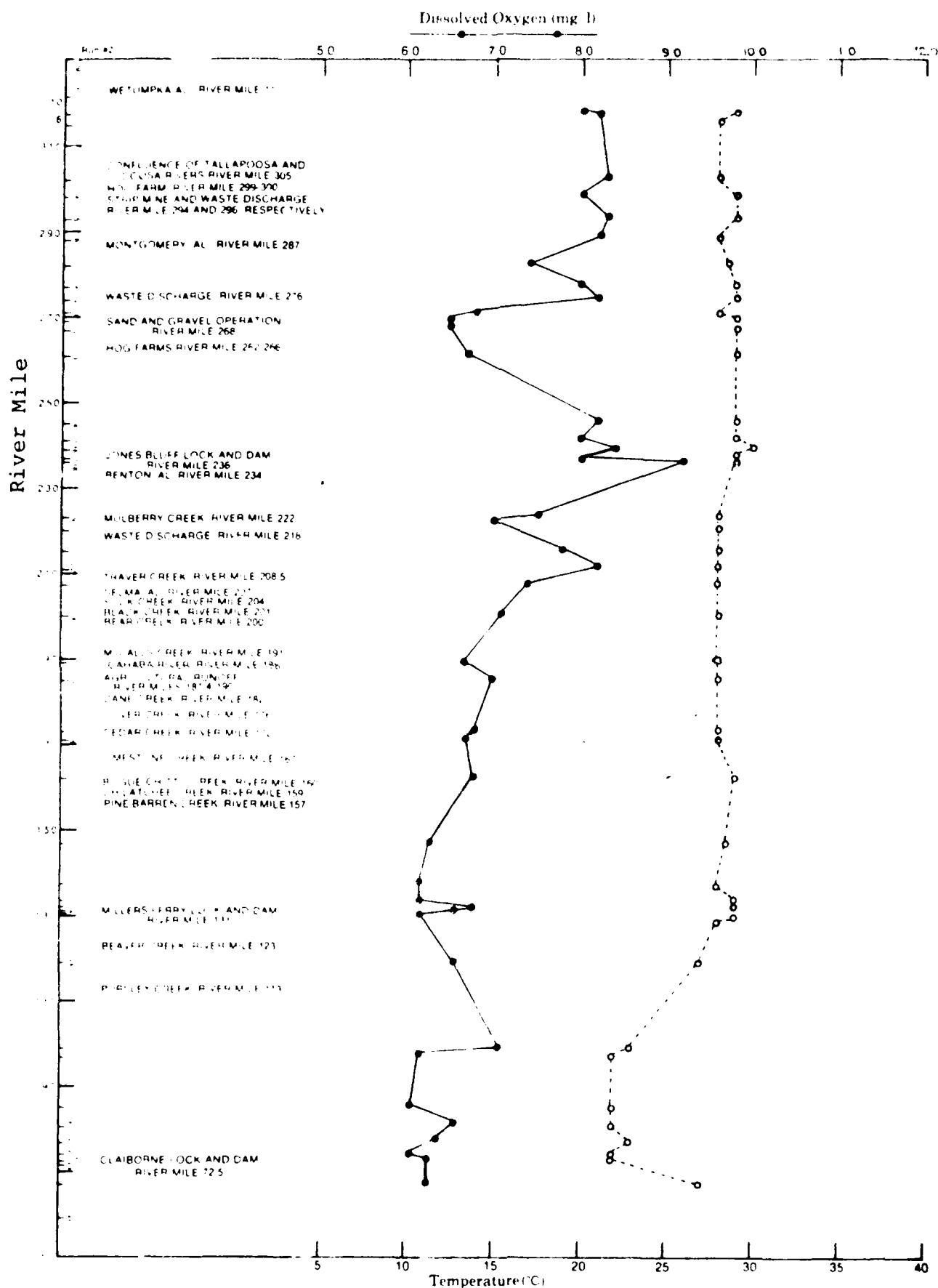


Figure 24.--Dissolved oxygen and temperature values versus distance at 46 Alabama-Coosa River system stations during the period August 29 through September 14, 1977.

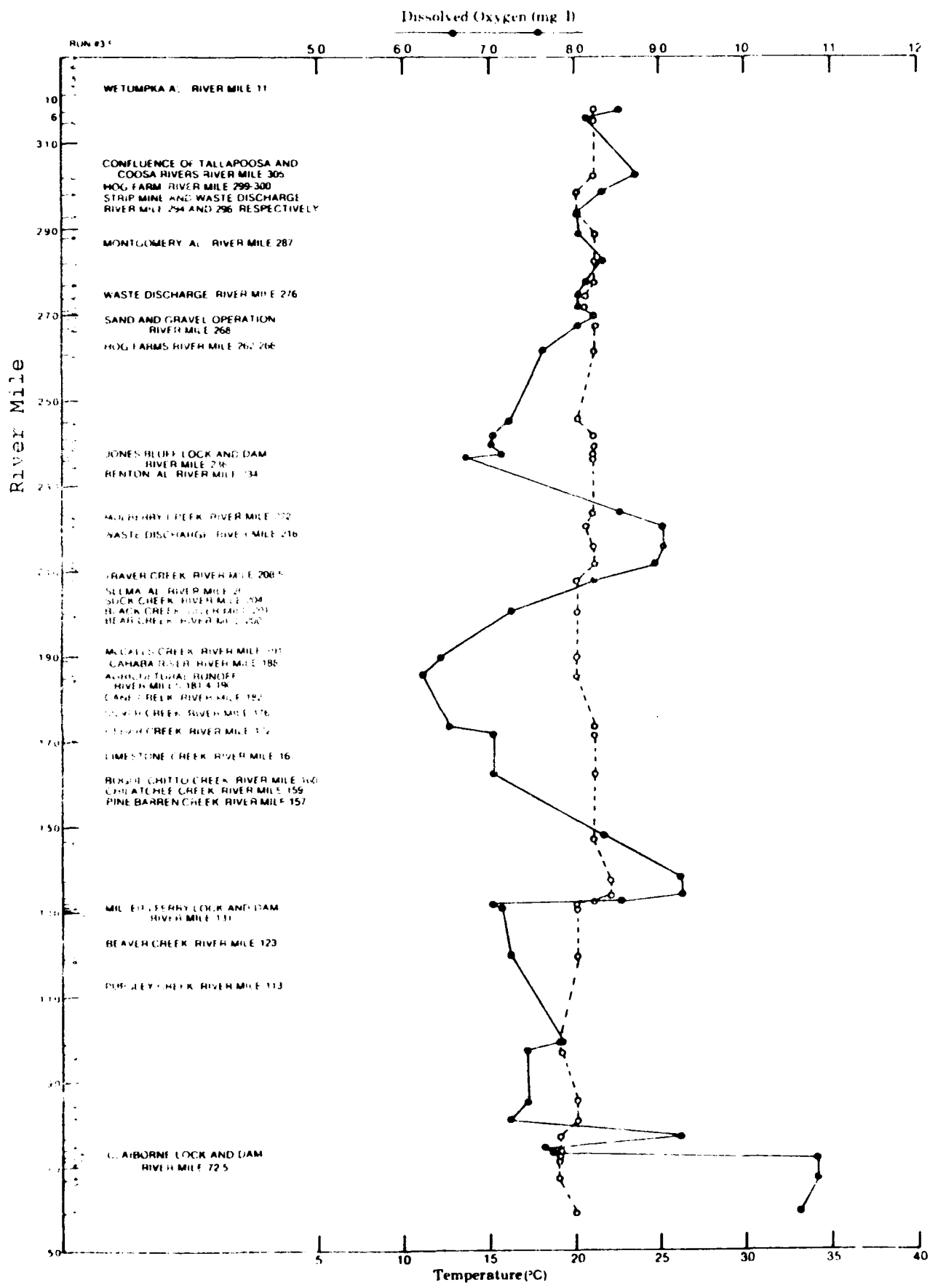


Figure 25.--Dissolved oxygen and temperature values versus distance at 46 Alabama-Coosa River system stations during the period September 19 through October 4, 1977.

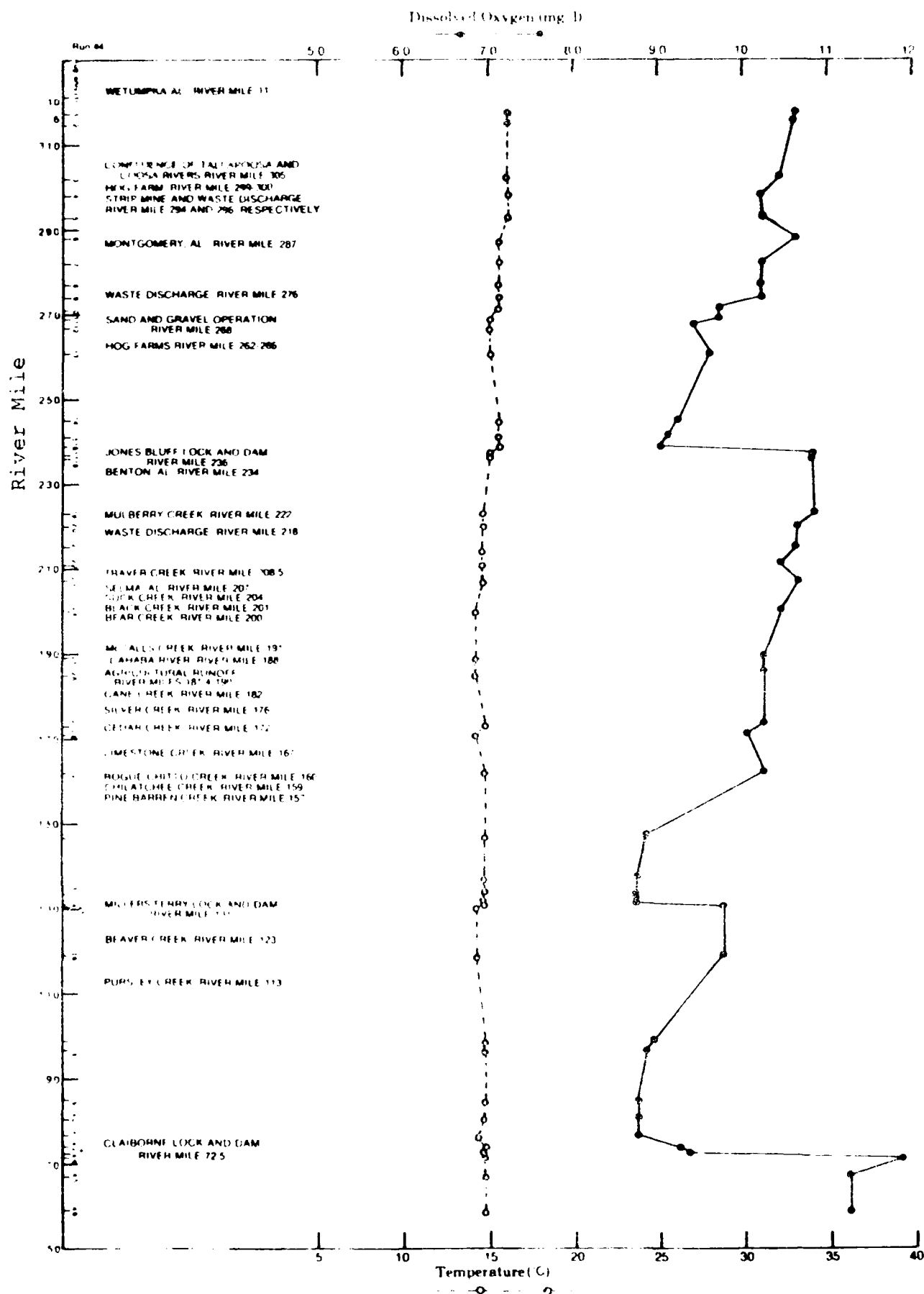
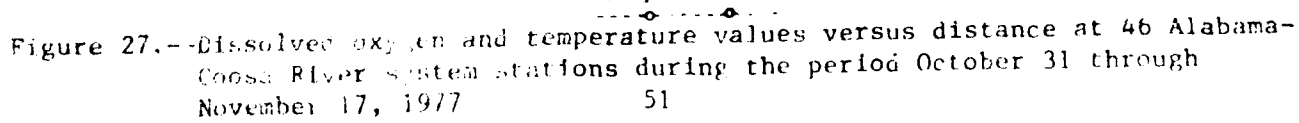


Figure 26.--Dissolved oxygen and temperature values versus distance at 46 Alabama-Coosa River system stations during the period October 11-25, 1977.



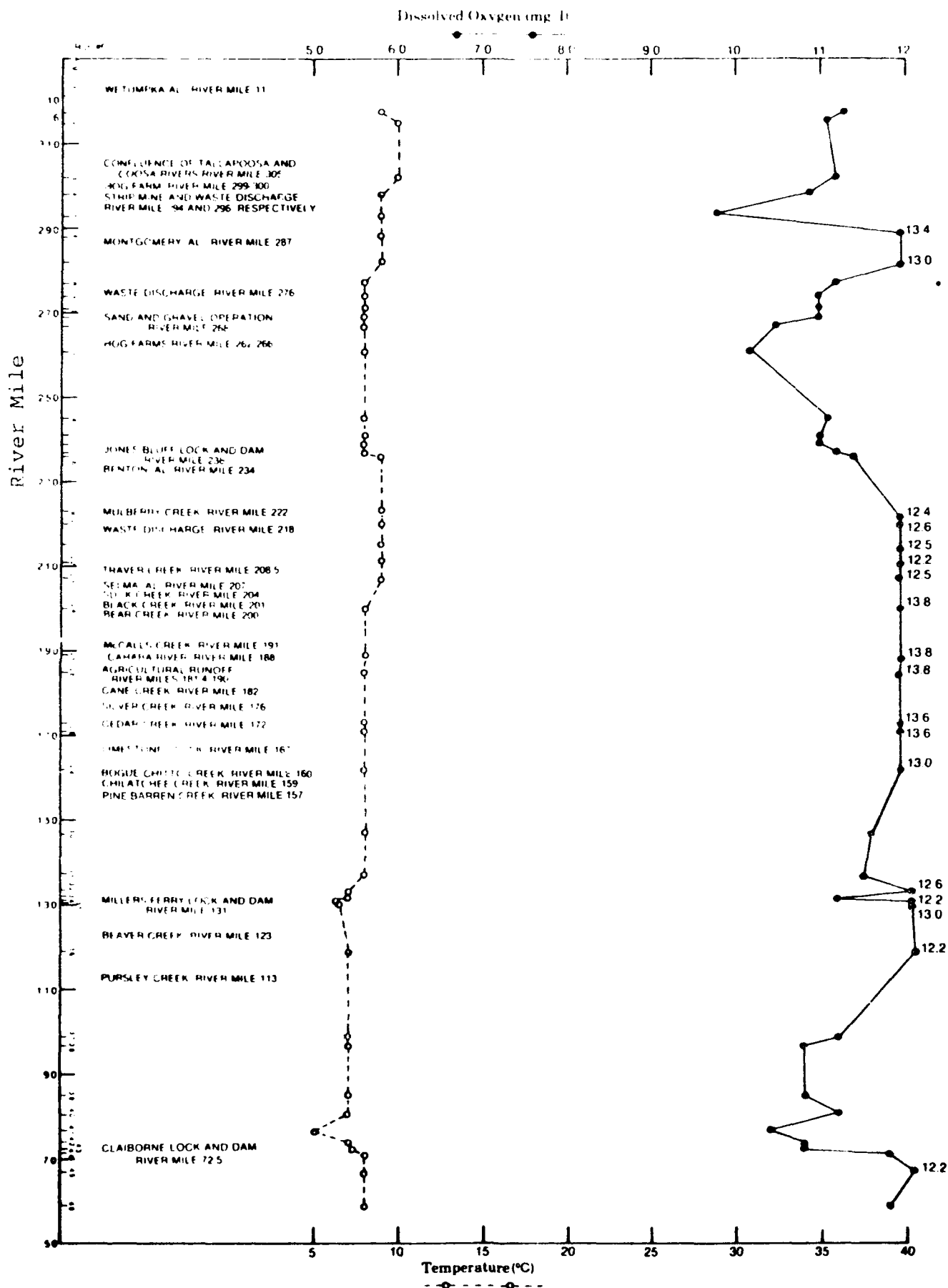


Figure 28.--Dissolved oxygen and temperature values versus distance at 46 Alabama-Coosa River system stations during the period November 21 through December 8, 1977.

Selected heavy-metal concentrations in water samples ranged from 5 to 15,000 micrograms per liter ($\mu\text{g/l}$) for total iron (figs. 29 through 34) during the August 9 through December 8, 1977, sampling period. Dissolved iron values exceeded the fish and wildlife criteria limits ($300 \mu\text{g/l}$) at stations 24 (November 8, 1977), 27 (November 9, 1977), 28 (September 27, 1977), 29 (November 9, 1977), 30 (November 10, 1977), 39 (December 8, 1977), 40 (August 24, 1977), and 45 (November 17, 1977). The dissolved iron ranged from 0 to $570 \mu\text{g/l}$ (figs. 29 through 34). The mean value was $94 \mu\text{g/l}$.

Selected heavy-metal concentrations in water samples ranged from 3 to $320 \mu\text{g/l}$ for total manganese during the August 9 through December 8, 1977, sampling period. Dissolved manganese values exceeded the fish and wildlife criteria limits ($.05 \text{ mg/l}$) at stations 15 (November 3, 1977), 23 (September 6, 1977), 40 and 41 (August 24, 1977). The mean concentration of manganese during the study was $16 \mu\text{g/l}$ and ranged from 0 to $80 \mu\text{g/l}$.

The concentration of alkalinity as CaCO_3 ranged from a low of 3.3 mg/l on the Tallapoosa River to a high of 120 mg/l on the Alabama-Coosa River system. Total hardness concentration ranged from 40 mg/l on the Tallapoosa River to a high of 71 mg/l on the Alabama-Coosa River system. The concentration of total calcium ranged from 5.4 to 24 mg/l .

Analyses specifically for polychlorinated biphenyls (PCB's) were run on water samples collected at each of the 46 stations during the period August 29 to September 14, 1977. Aroclor 1242, Aroclor 1254, and Aroclor 1260 were the PCB residues specifically tested. These forms are used in the manufacture of electrical transformers, synthetic resins, vacuum pumps, and electrical capacitors. No traces of PCB residues were found in the water samples (table A-2).

The pH values at the 46 Alabama-Coosa River stations (figs. 35 through 40) ranged from 5.6 to 7.9 units throughout the study. Criteria limits (6-8 units) for pH were exceeded only at station 19 (October 17, 1977) which recorded a pH of 5.6 units. The pH ranged from a low of 5.6 at station 19 to 8.0 at station 46 (December 8, 1977).

The total suspended-solids concentrations at the 46 water-sampling sites (figs. 41 through 46) ranged from 2 to 90 mg/l (table A-1). Turbidity values ranged from 10 to 75 Nephelometric turbidity units (NTU). The silica concentrations of the water samples ranged from 1.9 to 6.1 mg/l . The total filterable solids residue (total dissolved solids) at the 46 water-sampling stations ranged from 27 to 160 mg/l . All of these concentration ranges occurred during the August 9 through December 8, 1977, sampling period.

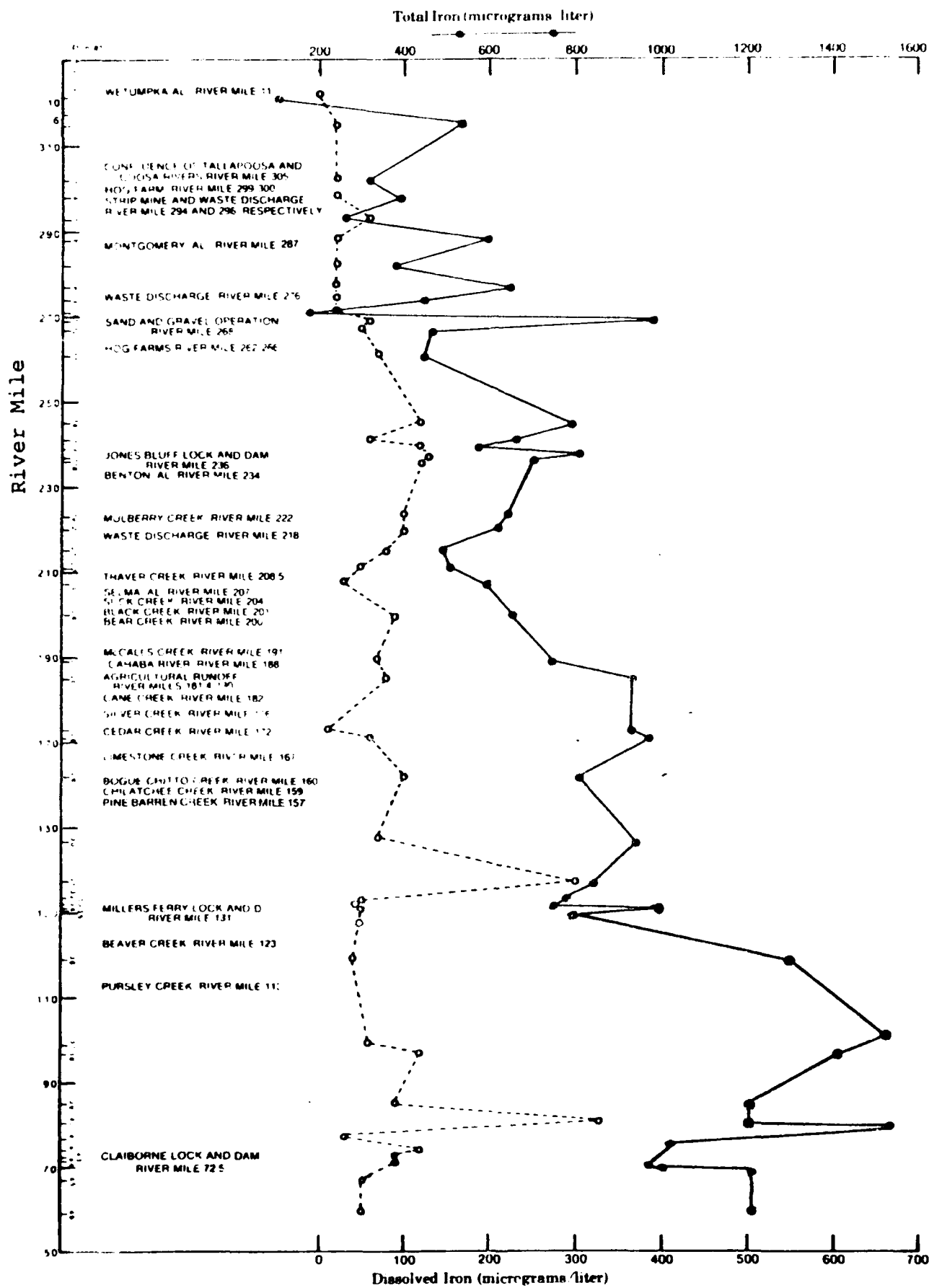


Figure 29.--Total iron and dissolved iron concentrations versus distance at 46 Alabama-Coosa River system stations during the period August 9-25, 1977.

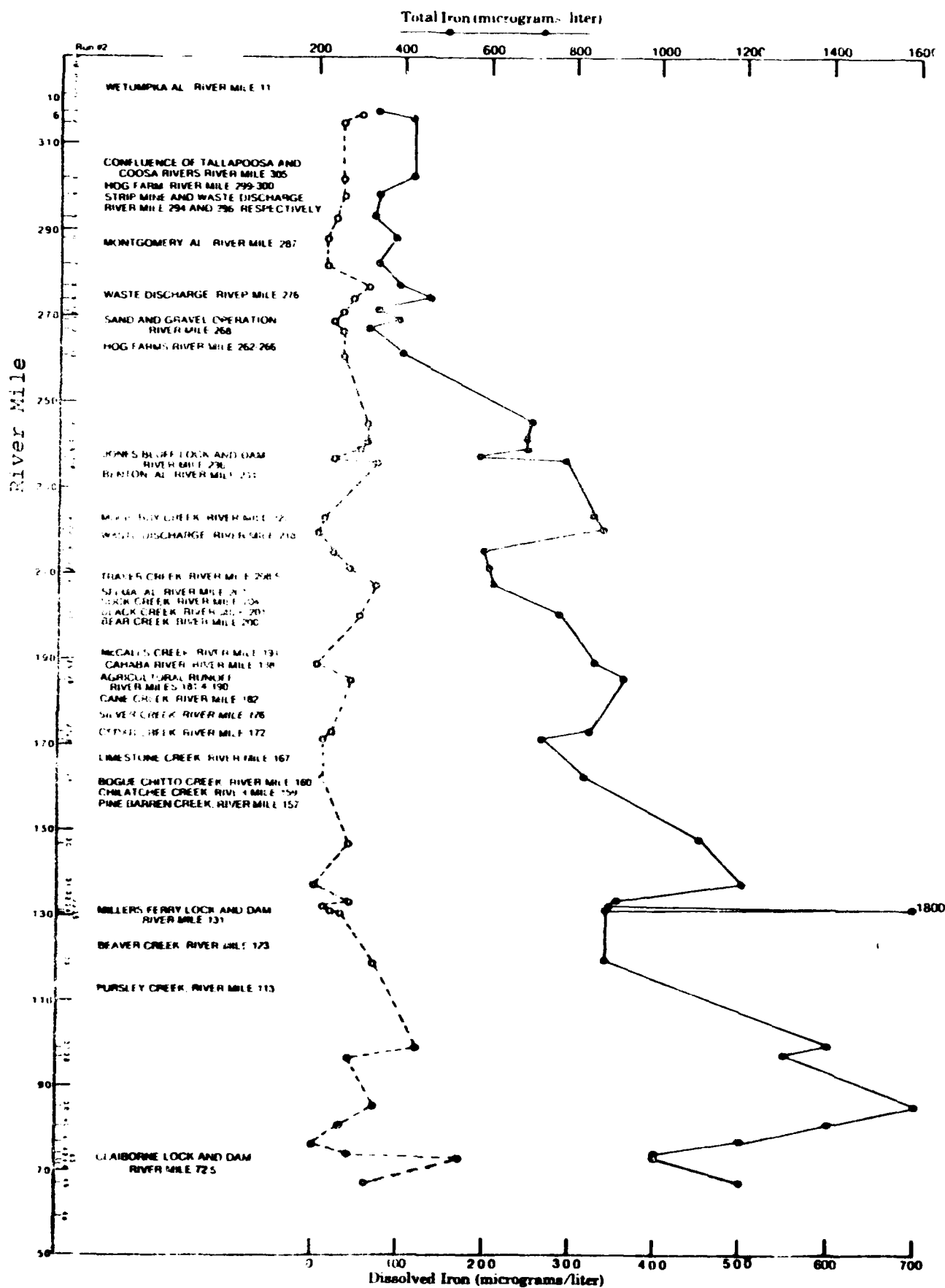


Figure 30.--Total iron and dissolved iron concentrations versus distance at 46 Alabama-Coosa River system stations during the period August 29 through September 14, 1977.

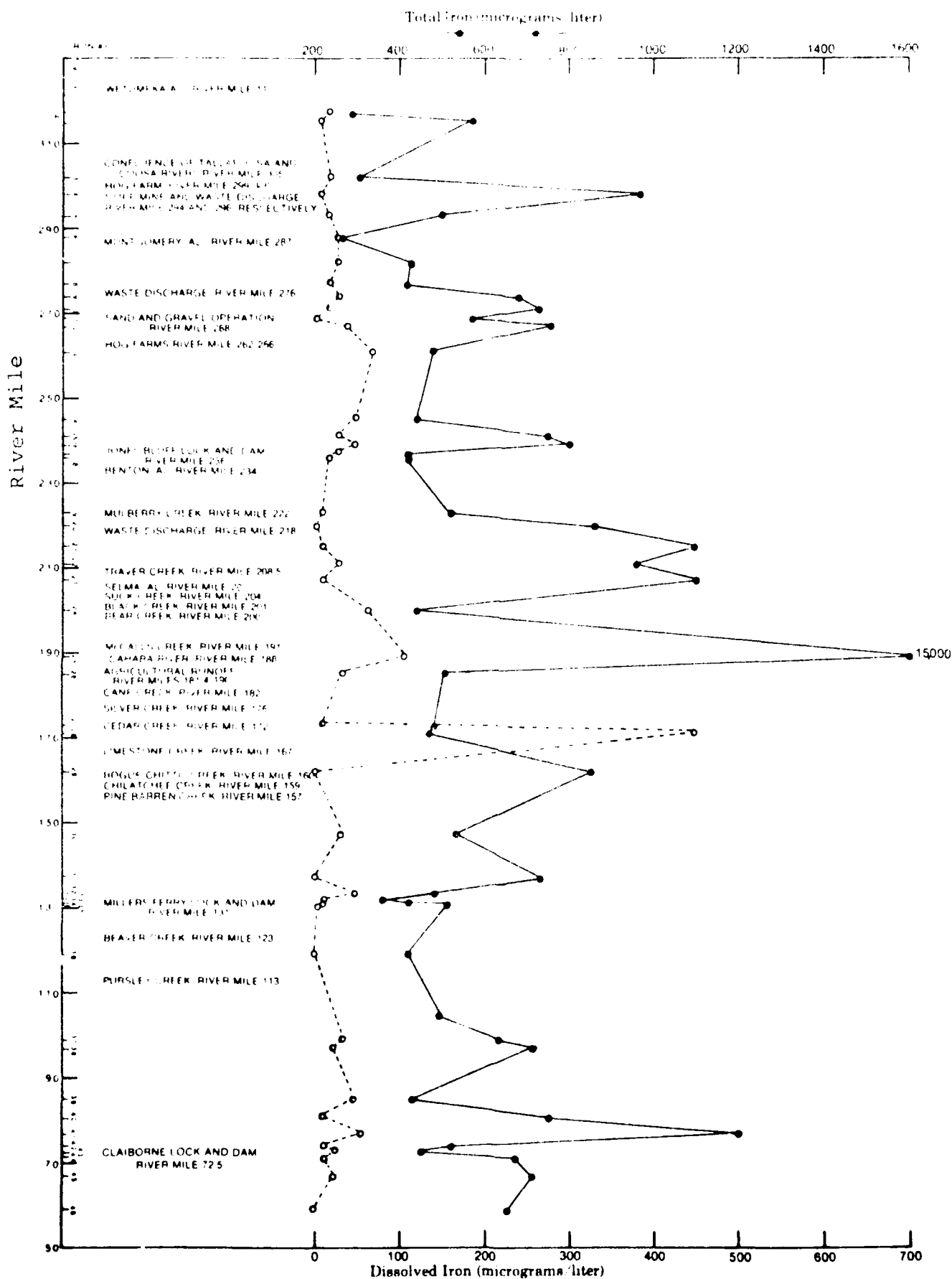


Figure 31.--Total iron and dissolved iron concentrations versus distance at 46 Alabama-Coosa River system stations during the period September 19 through October 4, 1977. 56

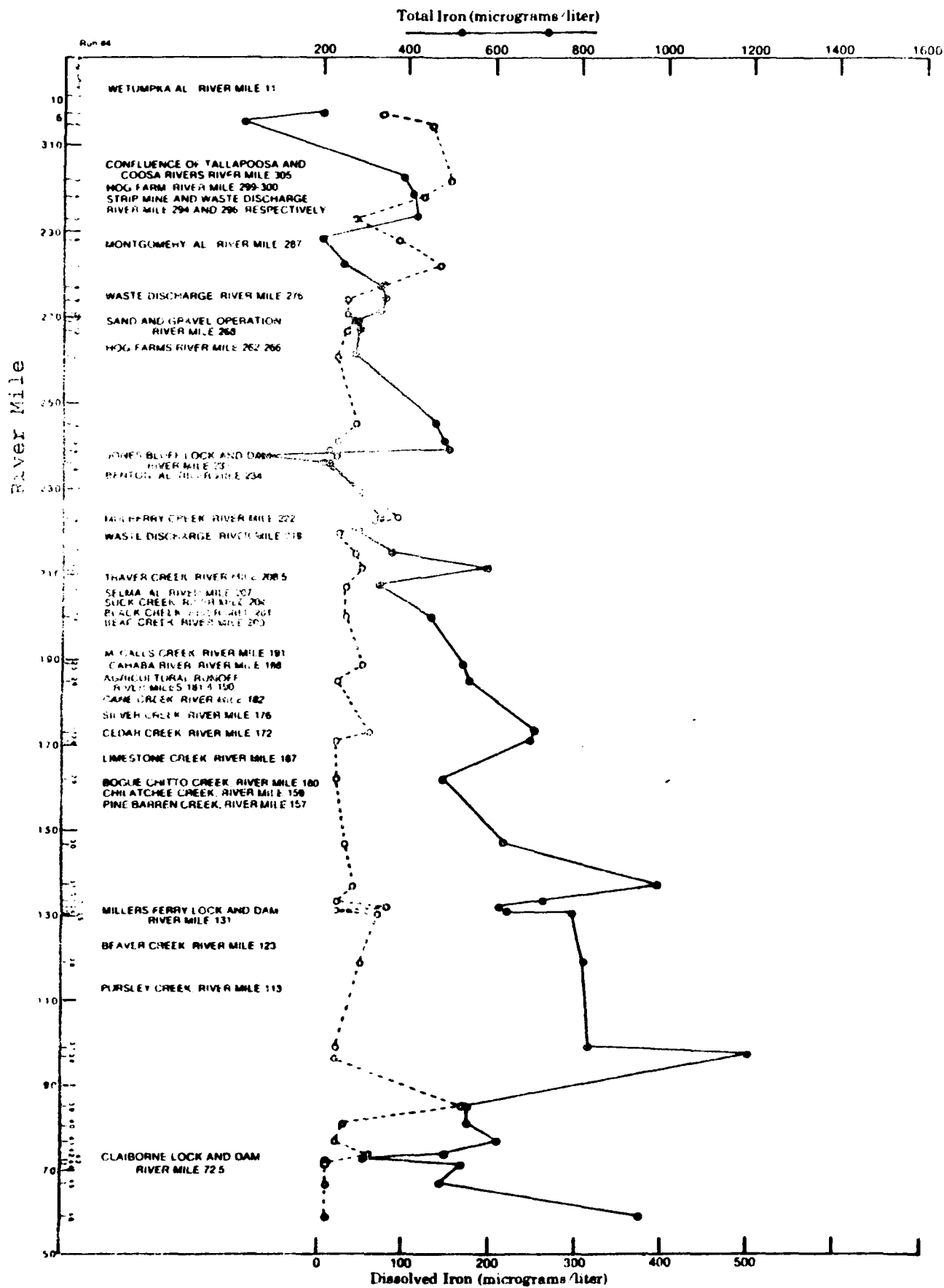


Figure 32.--Total iron and dissolved iron concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 11-25, 1977.

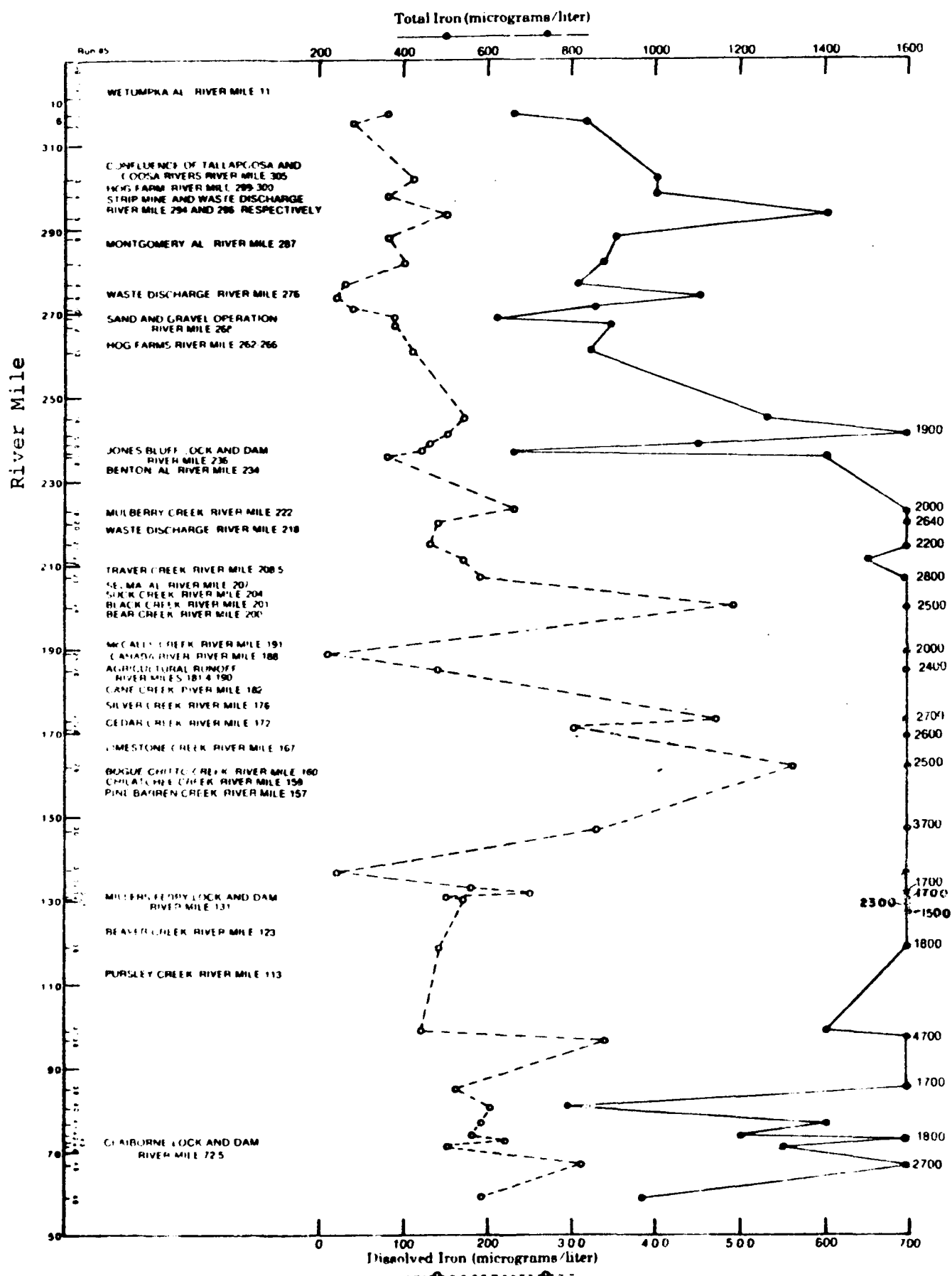


Figure 33.--Total iron and dissolved iron concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 31 through November 17, 1977. 58

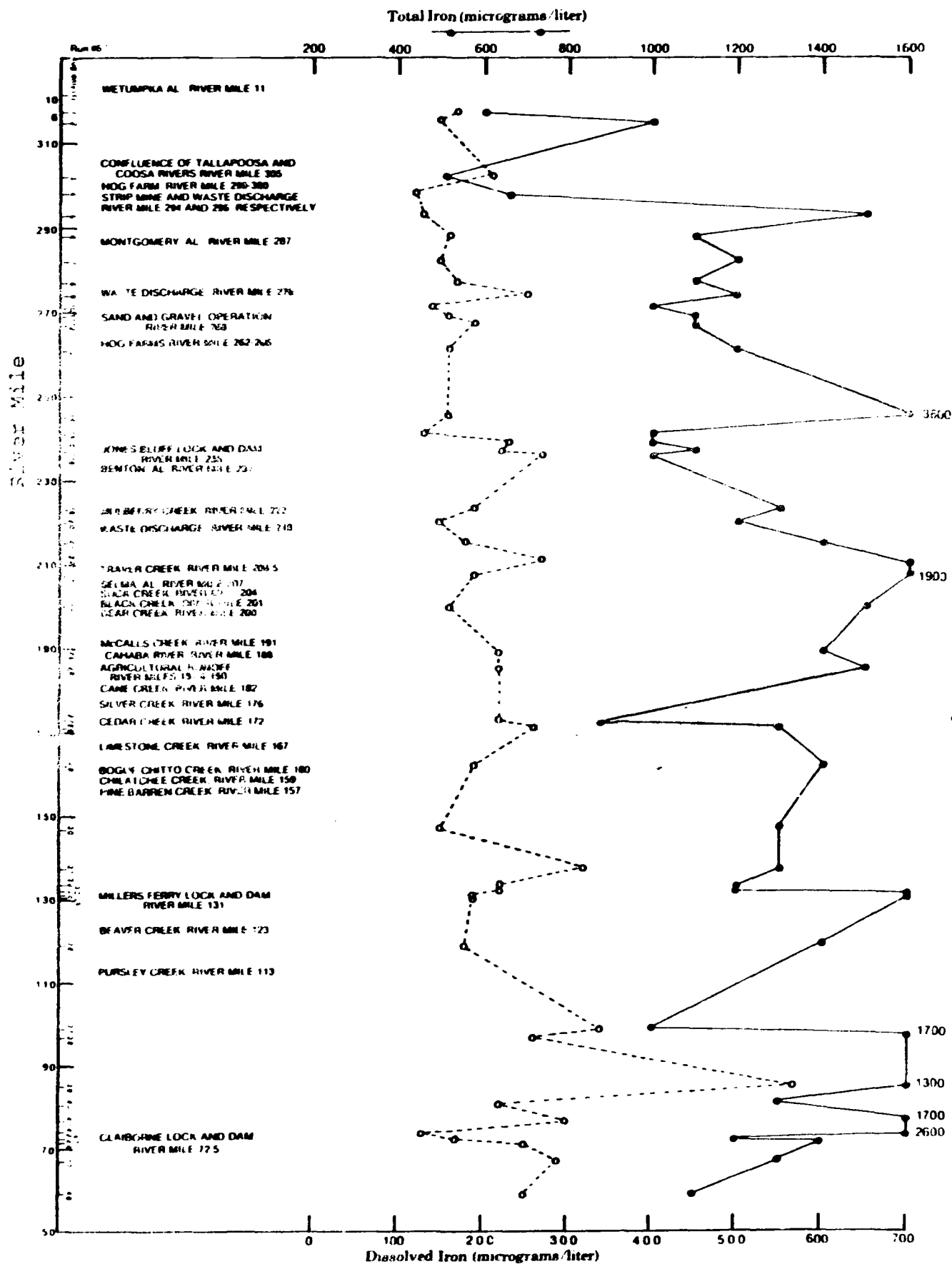


Figure 34.--Total iron and dissolved iron concentrations versus distance at 46 Alabama-Coosa River system stations during the period November 21 through December 8, 1977. 59

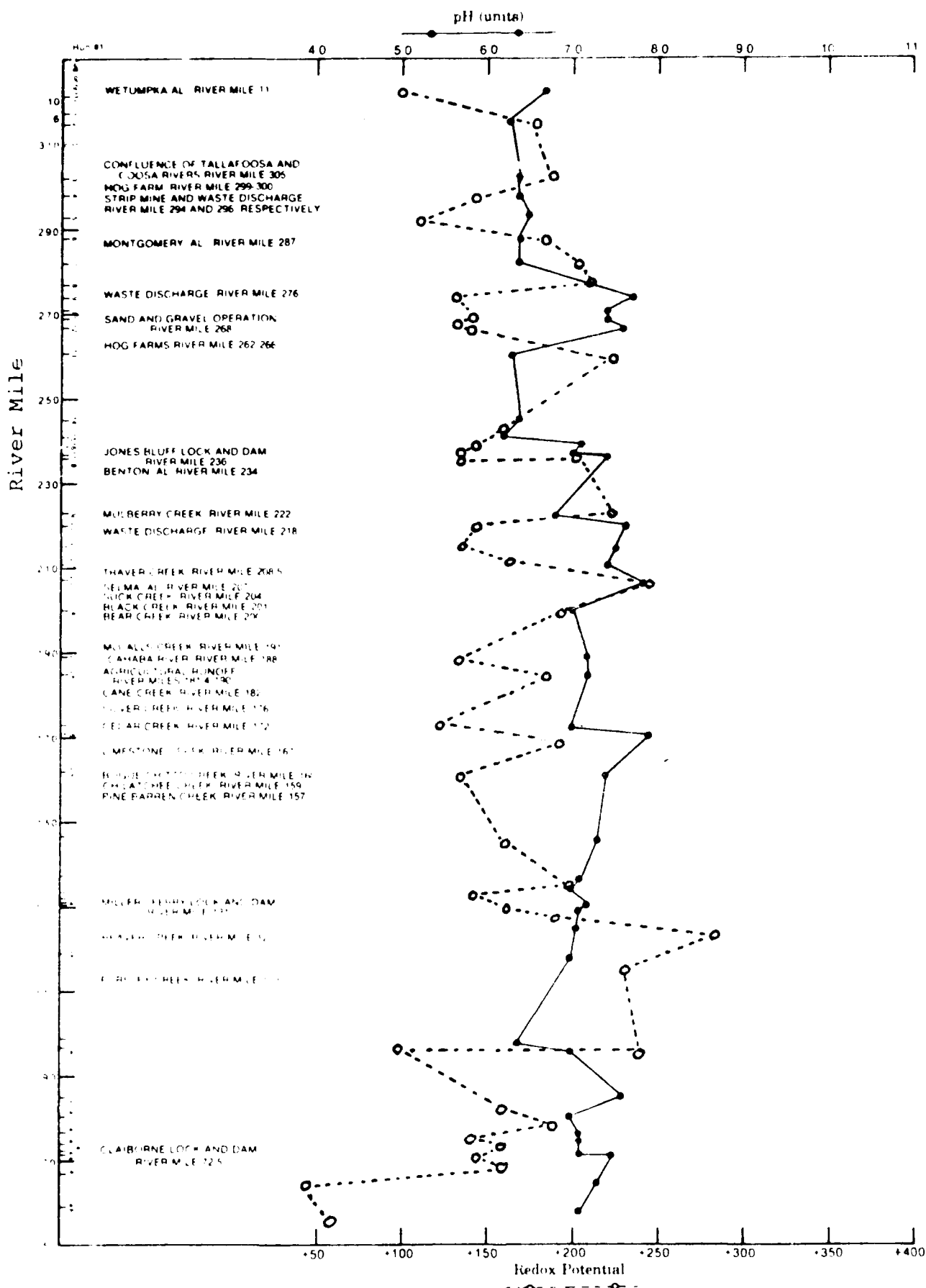


Figure 35.--Redox potential and pH values versus distance at 46 Alabama-Coosa River system stations during the period August 9-25, 1977.

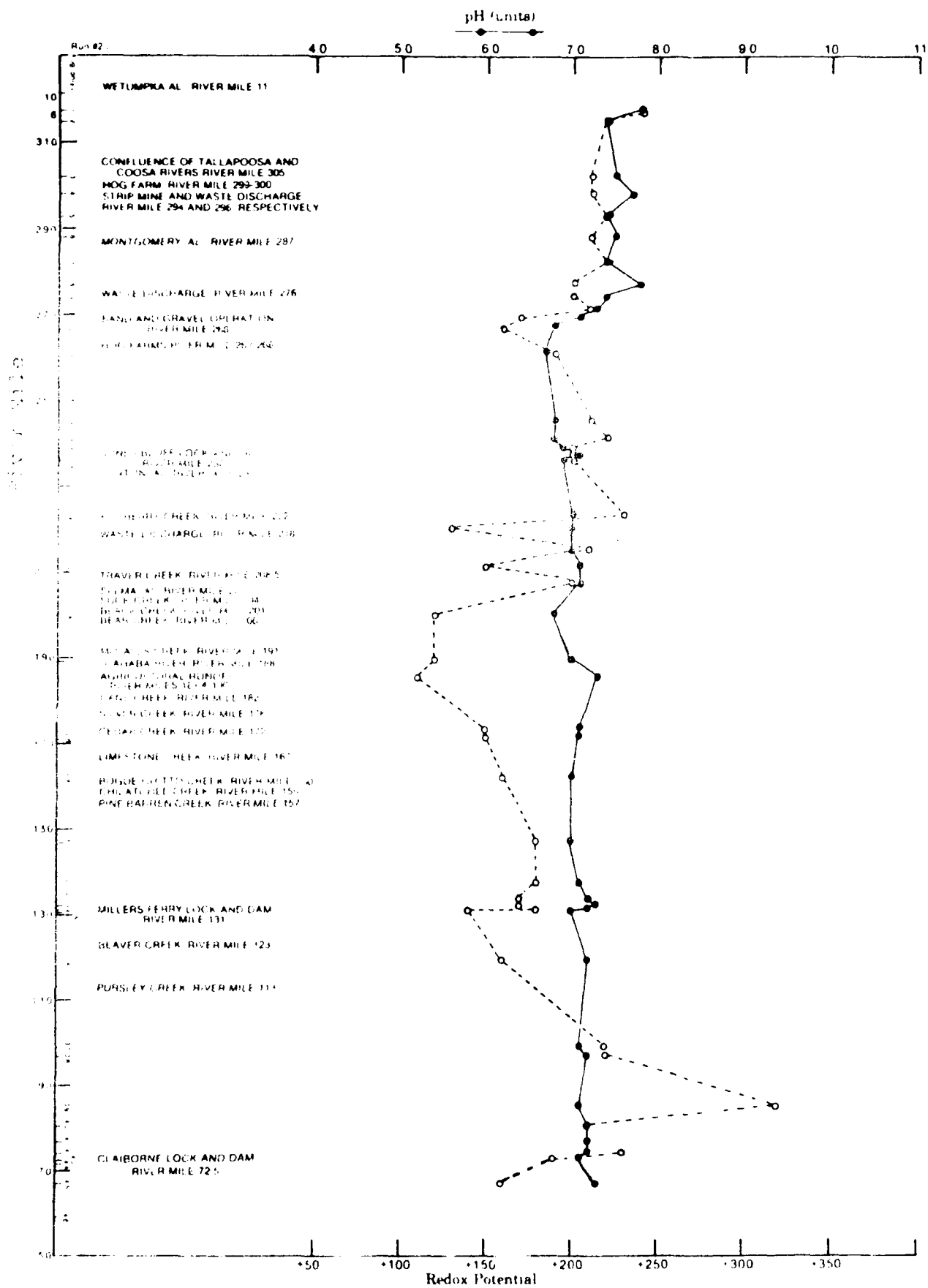


Figure 36.--Redox potential and pH values versus distance at 46 Alabama-Coosa River system stations during the period August 29 through September 14, 1977.

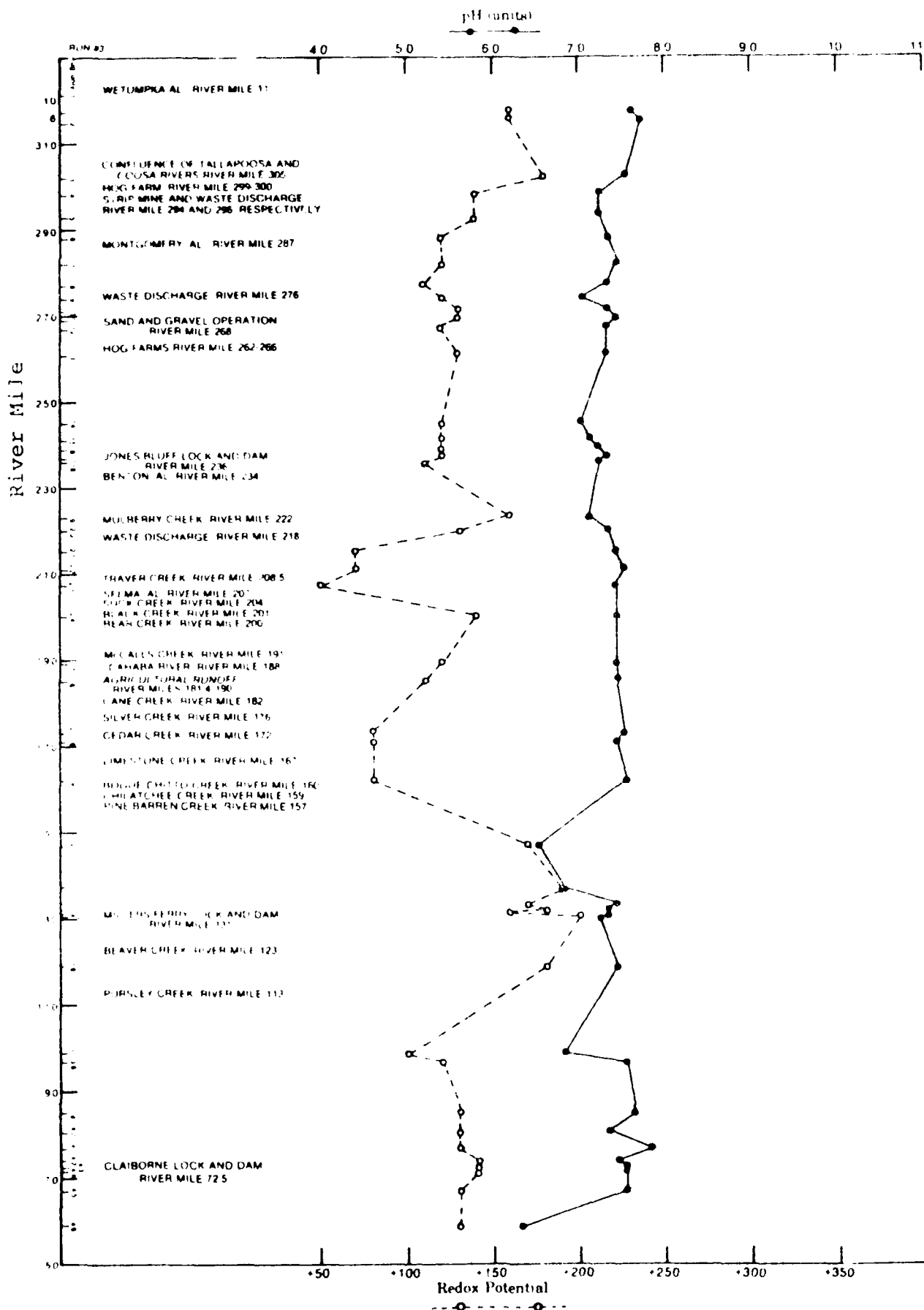


Figure 37.--Redox potential and pH values versus distance at 46 Alabama-Coosa River system stations during the period September 19 through October 4, 1977.

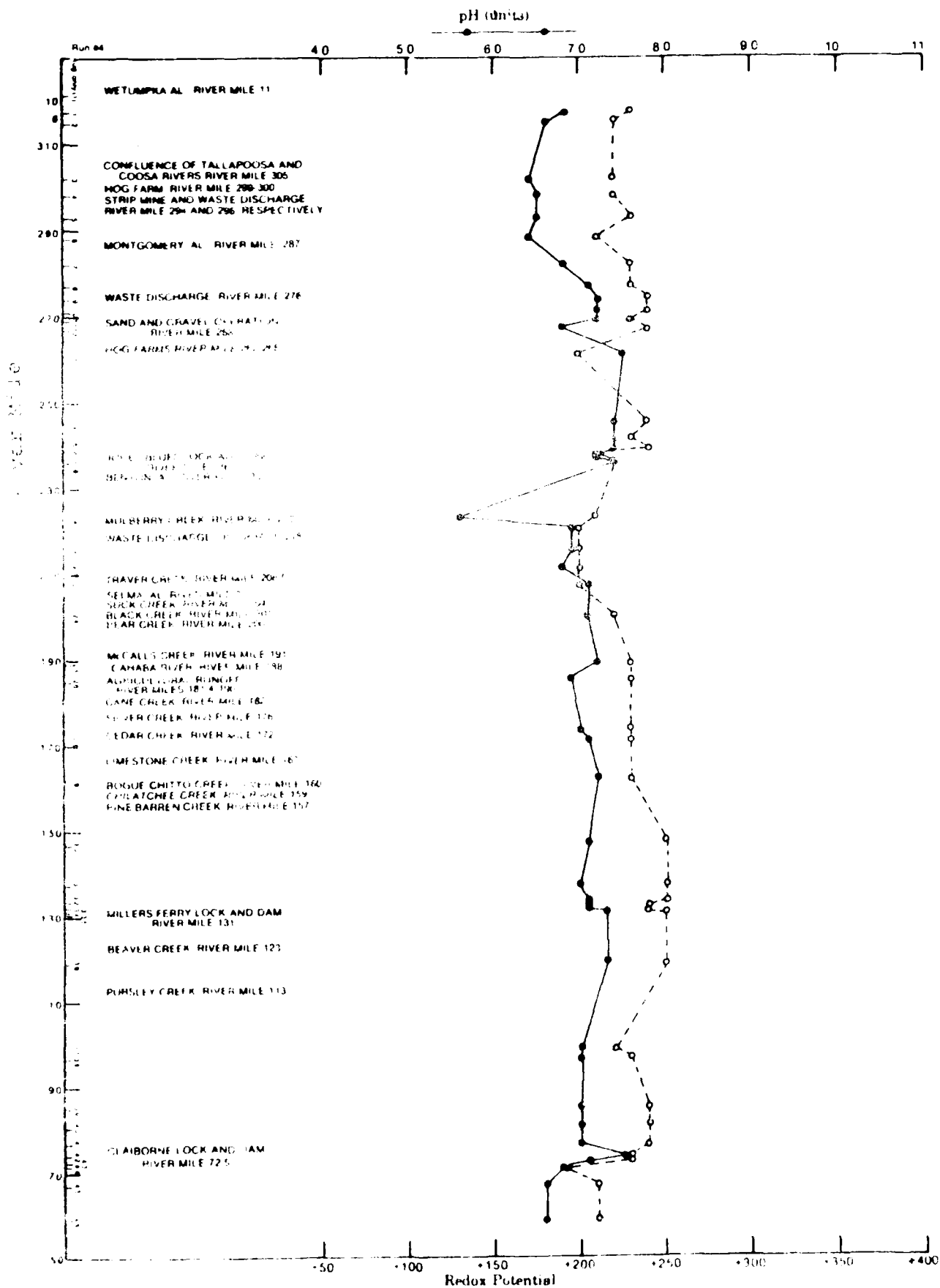


Figure 3d. Redox potential and pH values versus distance at 46 Alabama-Coosa River system stations during the period October 11-25, 1977.

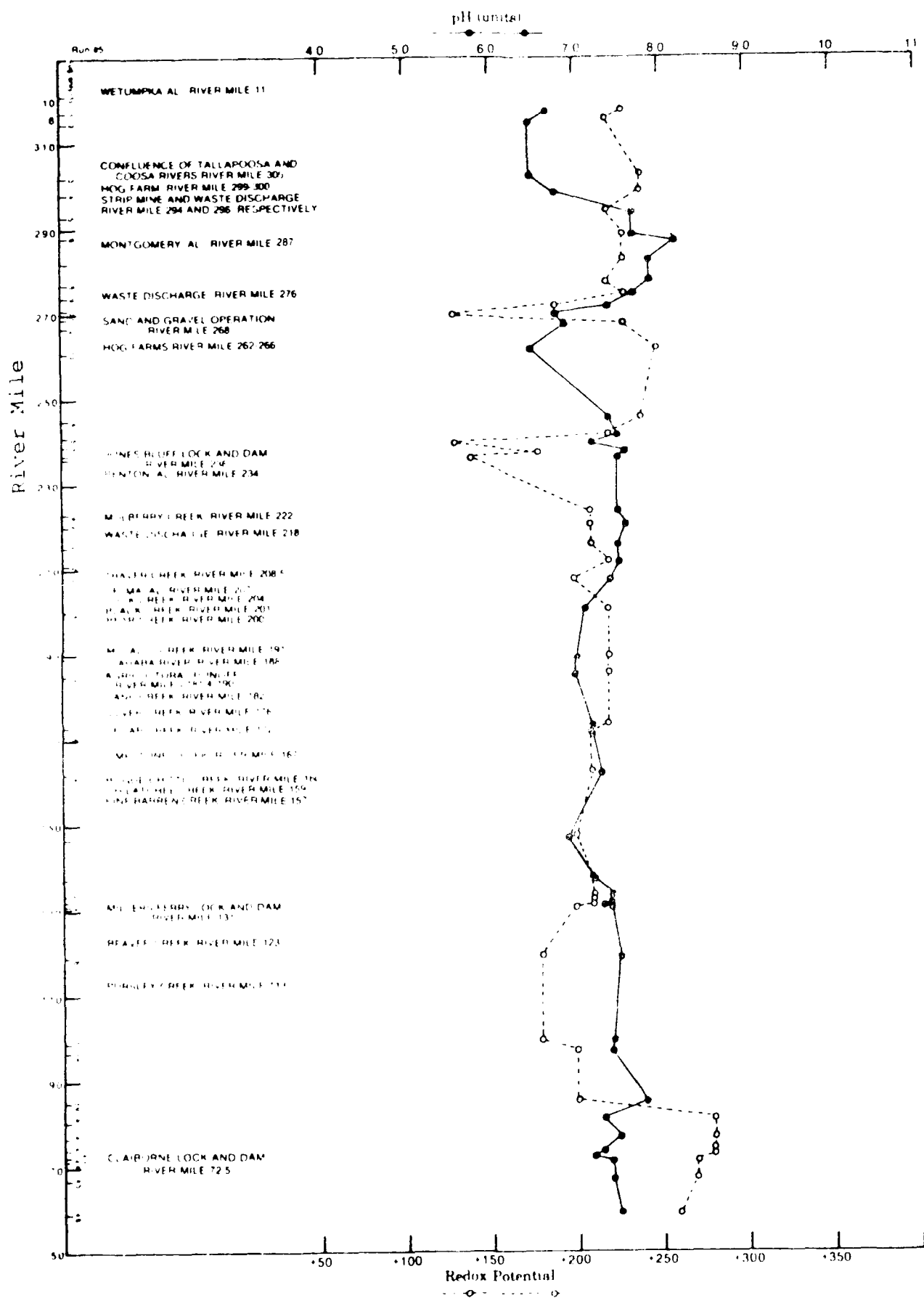
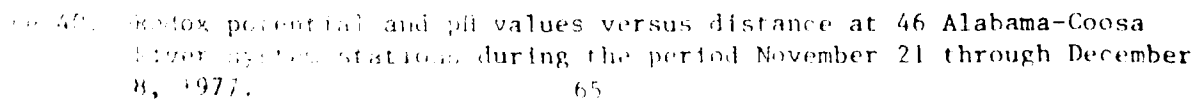


Figure 39.--Redox potential and pH values versus distance at 46 Alabama-Coosa River system stations during the period October 31 through November 17, 1977.



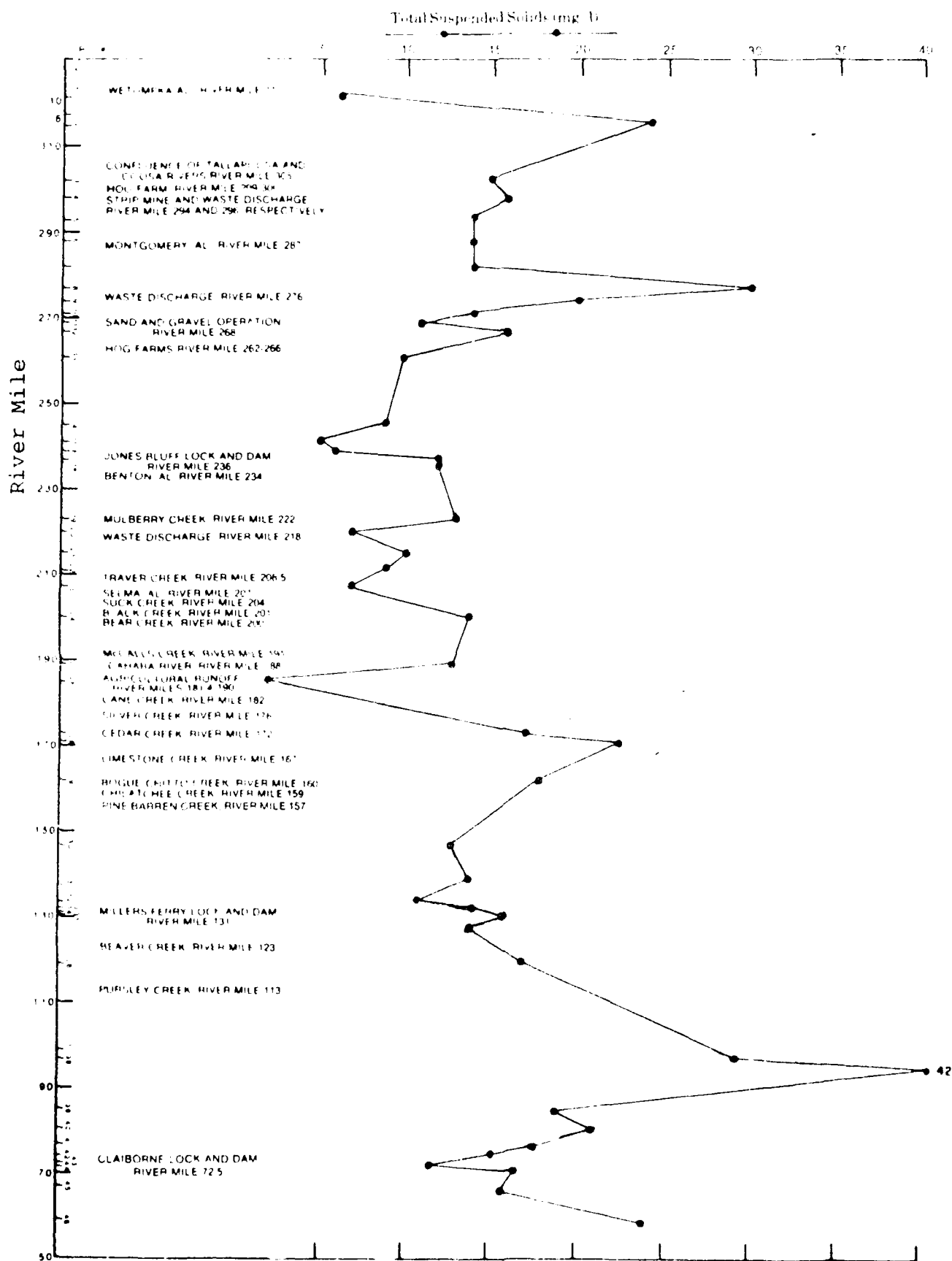


Figure 41.--Total suspended solids concentrations versus distance at 46 Alabama-Coosa River system stations during the period August 9-25, 1977.

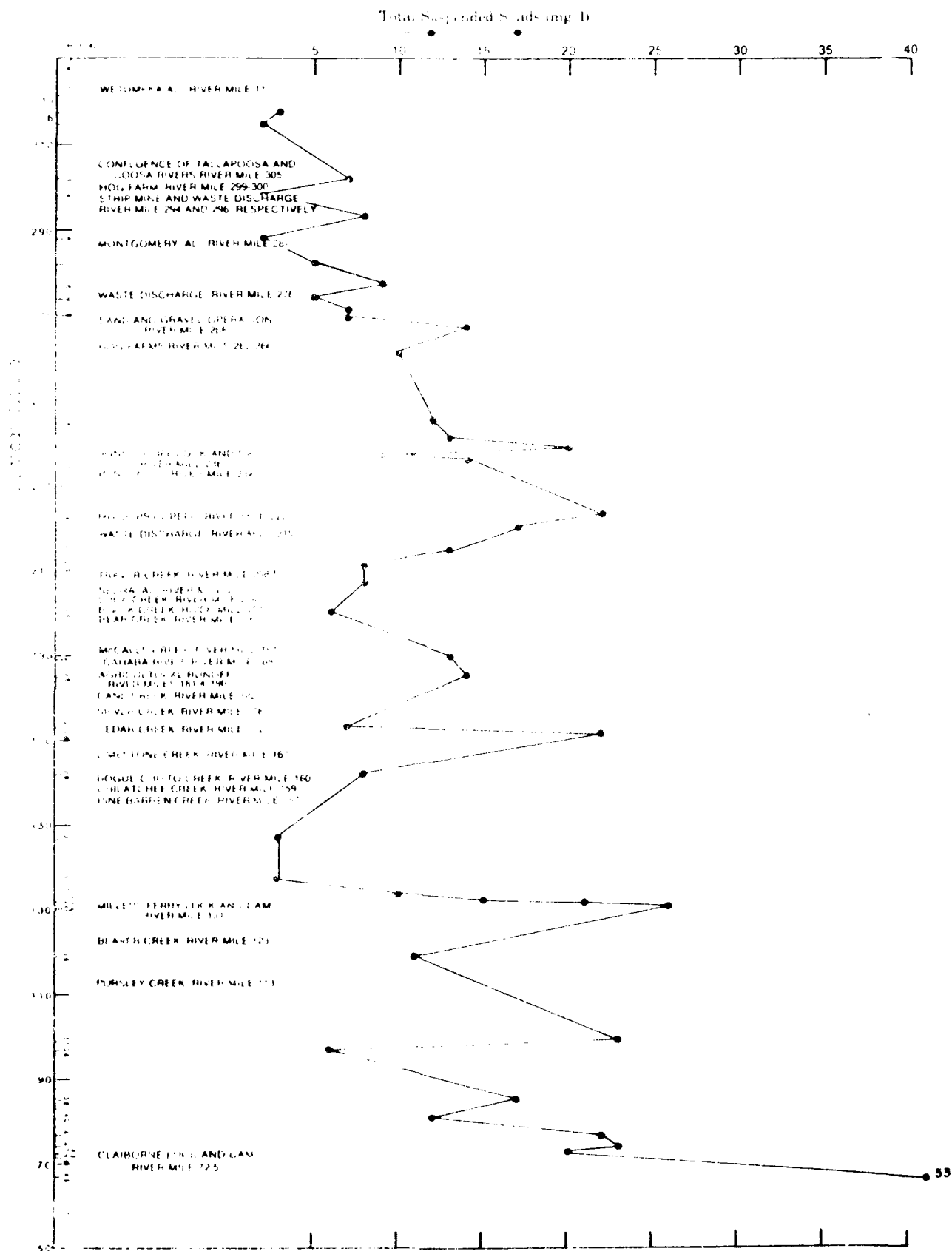


Figure 42. --Total suspended solids concentrations versus distance at 46 Alabama-Tallapoosa River system stations during the period August 29 through September 14, 1977.

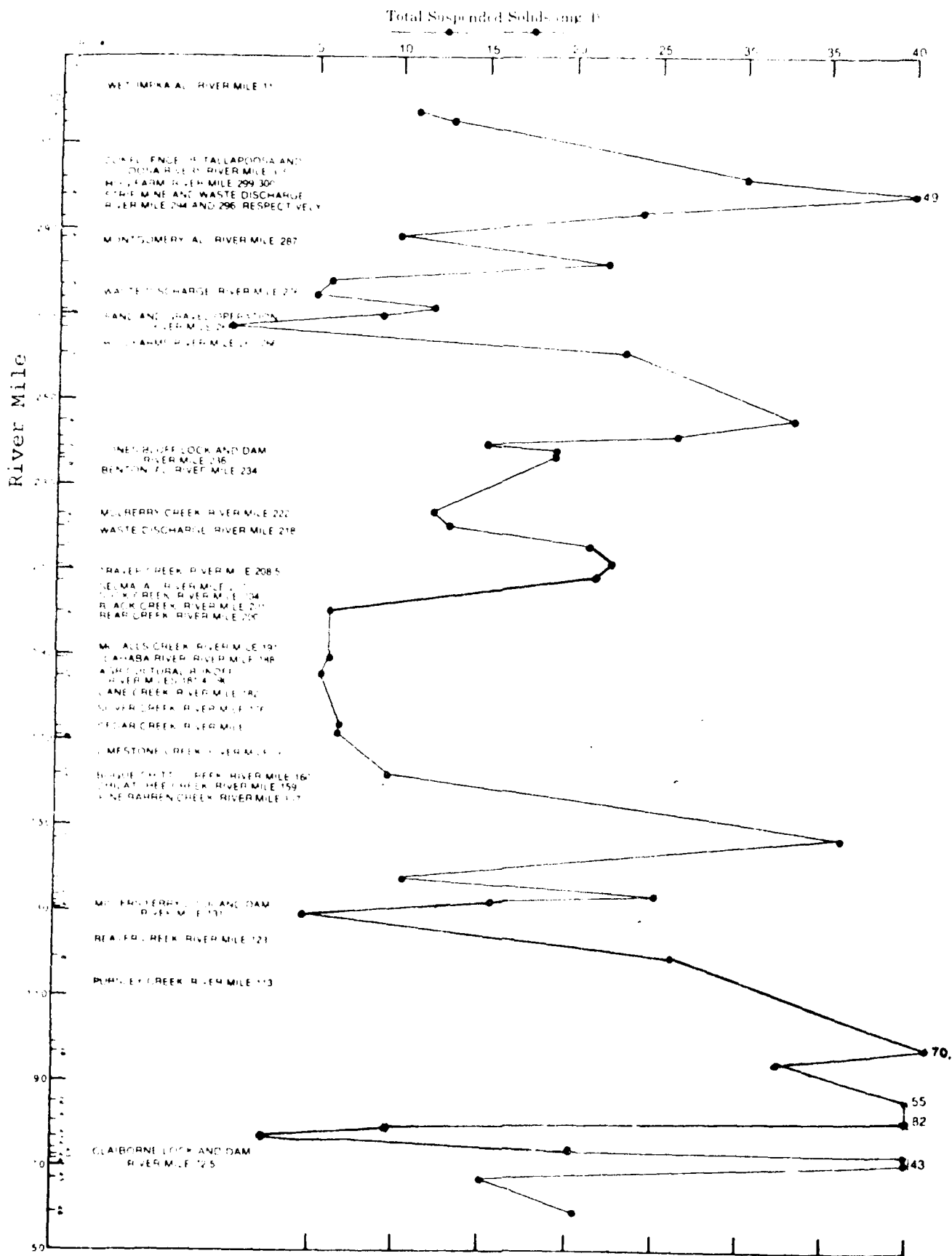


Figure 43.--Total suspended solids concentrations versus distance at 46 Alabama-Coosa River stations during the period September 19 through October 4, 1977.

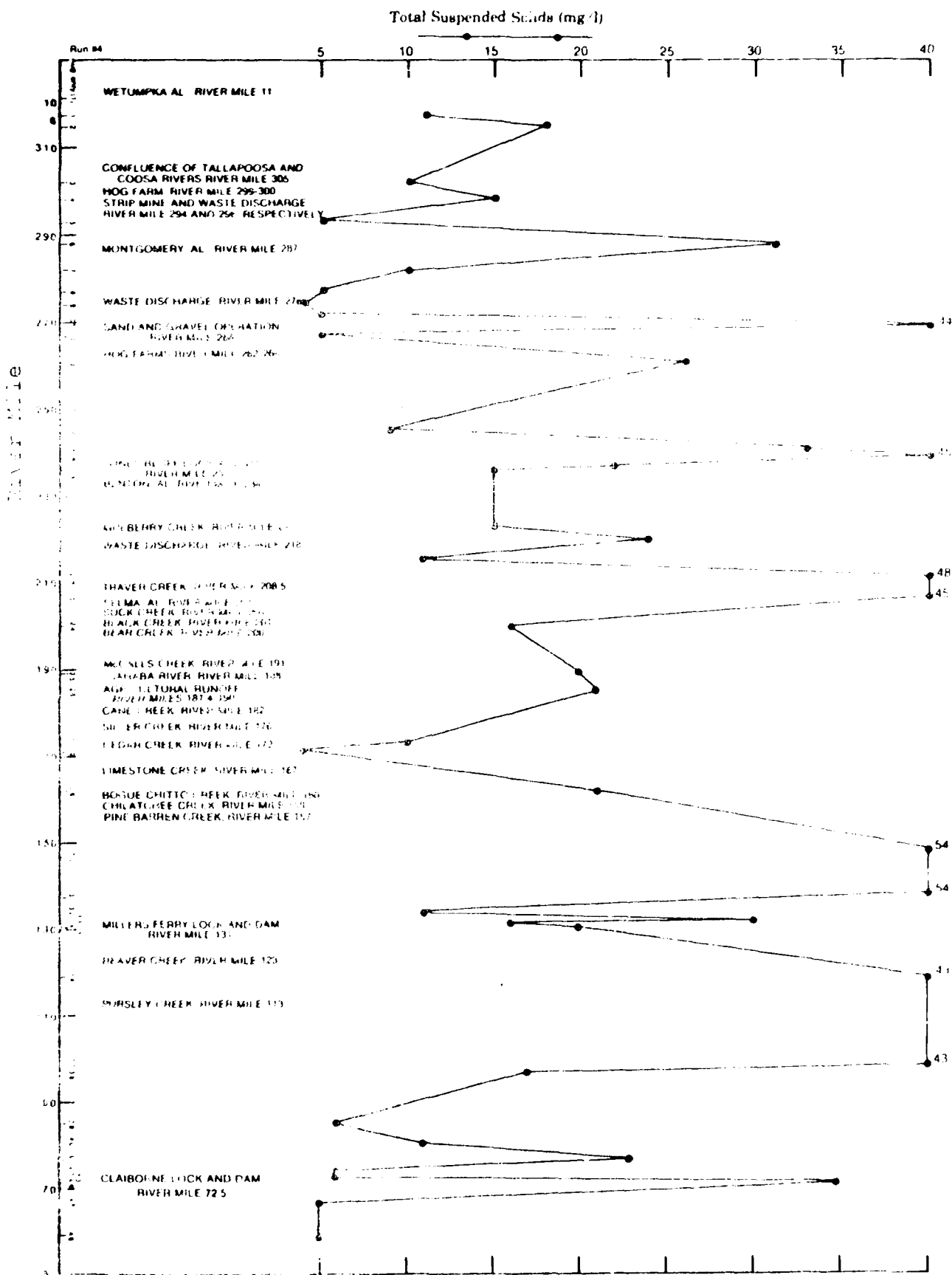


Figure 44 --Total suspended solids concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 11-25, 1977.

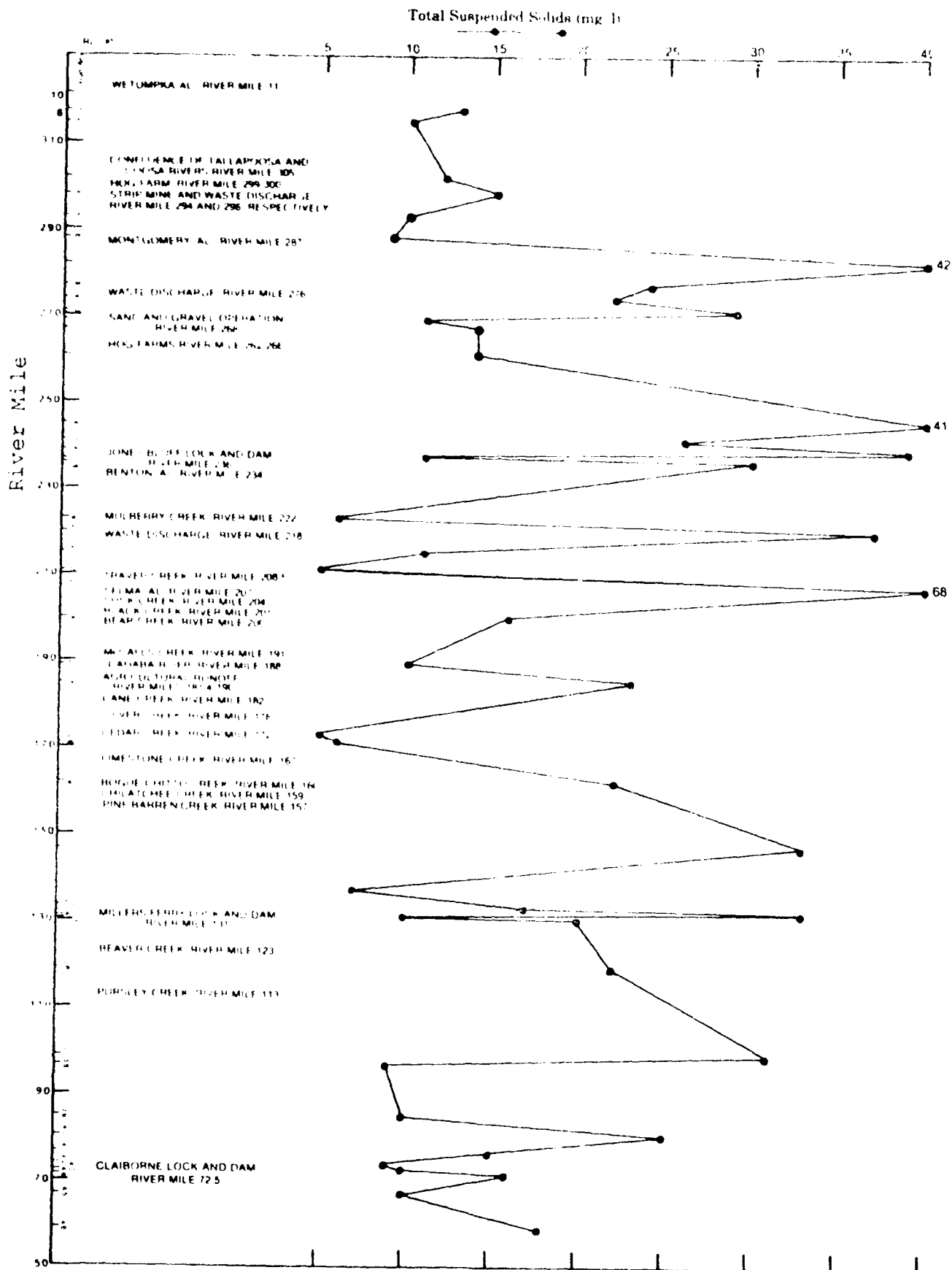


Figure 45.--Total suspended solids concentrations versus distance at 46 Alabama-Coosa River system stations during the period October 31 through November 17, 1977.

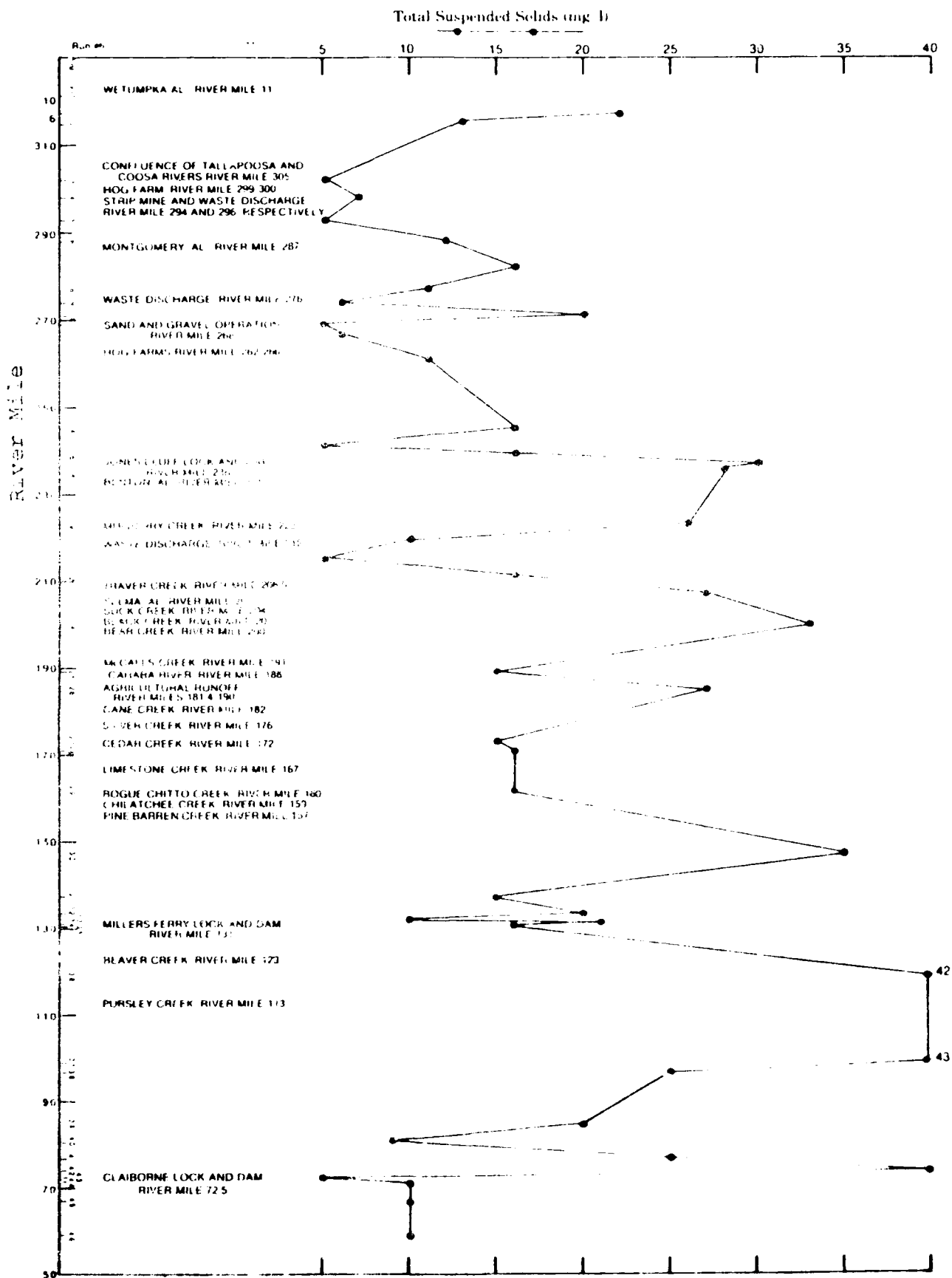


Figure 46.—Total suspended solids concentrations versus distance at 46 Alabama-Coosa River system stations during the period November 21 through December 8, 1977.

2. Sediment Parameters

Sediment samples were collected at all 46 stations during the second run with heavy metals and selected nutrient analysis entered into the EPA STORET system (table 4). At stations 7, 17, 19, 31, 36, 42, and 43, mechanical analyses of these samples were performed (table 7).

The heavy metals analyzed from the extracted sediments during the study included arsenic, cadmium, chromium, copper, iron, lead, magnesium, manganese, mercury, nickel, and zinc. These metals are reported in micrograms per gram ($\mu\text{g/g}$). The heavy-metals concentration data indicated areas of high total magnesium (2000 $\mu\text{g/g}$), high total iron (32,000 $\mu\text{g/g}$), and high total manganese (2300 $\mu\text{g/g}$), as shown in table 8. Sediments were analyzed only once; therefore, no ranges are given. The concentrations of the remaining metal parameters fell within normal background limits.

Analyses for 29 pesticide species (table 8) were performed on sediment samples; only 11 species were detected. Of those residues detected, Aldrin, DDT, and two PCB's (Aroclor 1254 and 1260) occurred in the highest concentrations. Aldrin concentrations reached a high (814 $\mu\text{g/kg}$) at station 17, which is immediately above Jones Bluff Lock and Dam. Polychlorinated biphenyls (Aroclor 1260 and Aroclor 1254) were detected at a number of sediment stations and reached their highest concentrations at stations 13 (82.19 $\mu\text{g/kg}$) and 17 (32.38 $\mu\text{g/kg}$). Sediment values for DDT for all sites ranged from 0.17 to 6.59 $\mu\text{g/kg}$.

3. Other Parameters

Chlorophylls *a*, *b*, and *c* samples were collected and analyzed over a 5-month period (table A-1). The ranges of concentration for chlorophylls *a*, *b*, and *c*, respectively, were 2.0 to 36 $\mu\text{g/l}$, .0 to 36 $\mu\text{g/l}$ and .0 to 120 $\mu\text{g/l}$ (table A-1). These are the only baseline data for chlorophyll available for the Alabama-Coosa Rivers for the study area. Therefore, conclusions cannot be drawn at this time as to the natural levels in these rivers. The highest chlorophyll *a* value (36 $\mu\text{g/l}$) occurred at station 32 (September 28, 1977). The highest chlorophyll *b* value (36 $\mu\text{g/l}$) and the highest chlorophyll *c* value (120 $\mu\text{g/l}$) occurred at station 16 (August 16, 1977).

Total carotenoid pigments were analyzed in samples collected during each sampling run and ranged from .1 to 64 $\mu\text{g/l}$ (table 9).

Algal growth potential tests were performed on water samples taken from each station. Data obtained from these tests are contained in table 10. The highest algal dry weight occurred in samples collected at stations 28 (10.74 mg/l) and 29 (12.80 mg/l). The transparency values for the river samples ranged from 0.5 to 1.15 meters for all 46 sampling stations (table A-1).

Table 7.--Mechanical analyses of sediment samples from the Alabama-Coosa Rivers, August 29 through September 14, 1977

(Percent material retained on indicated sieve size)

U.S. Standard Sieve Sizes	Station numbers						
	7	17	19	31	36	42	46
5	5.20	.00	.70	.30	.00	32.50	.40
7	2.10	.00	.30	.10	.00	8.40	.06
10	1.40	.00	.20	1.10	.00	8.50	.00
18	3.70	.20	13.00	4.50	.10	22.50	6.20
25	2.40	.10	31.80	6.70	.09	13.50	9.98
35	1.56	.25	43.60	18.80	.10	11.10	17.97
45	10.30	.20	8.90	28.90	.75	2.10	20.72
60	26.90	.70	.60	26.40	1.20	.60	18.65
80	15.00	2.50	.20	10.70	7.80	.01	22.17
120	5.10	3.90	.00	1.60	20.20	.01	2.14
170	3.10	4.40	.06	.20	17.60	.01	.30
230	3.40	9.70	.02	.10	24.30	.01	.09
PAN	16.80	77.85	.03	.40	27.85	.02	.03
Totals	100.00	99.90	100.07	99.80	99.99	99.27	99.88

Table 2.--Heavy-metal and pestilicide concentrations in sediment samples from the Alabama-Coosa River system from August 19 through September 14, 1977

Station number	Date	Time	Metal concentrations in ppm										Organic material	
			As	Cd	Cu	Pb	Hg	Mn	Ni	Fe	Mo	Se	Organic Demand	Total Nitrogen
1	8/29	11:30	10	10	10	10	10	10	10	10	10	10	10	10
2	8/29	11:30	10	10	10	10	10	10	10	10	10	10	10	10
3	8/29	11:30	10	10	10	10	10	10	10	10	10	10	10	10
4	8/29	11:30	10	10	10	10	10	10	10	10	10	10	10	10
5	8/29	11:30	10	10	10	10	10	10	10	10	10	10	10	10
6	8/30	11:30	10	10	10	10	10	10	10	10	10	10	10	10
7	8/30	11:30	10	10	10	10	10	10	10	10	10	10	10	10
8	8/30	11:30	10	10	10	10	10	10	10	10	10	10	10	10
9	8/30	11:30	10	10	10	10	10	10	10	10	10	10	10	10
10	8/30	11:30	10	10	10	10	10	10	10	10	10	10	10	10
11	8/31	11:30	10	10	10	10	10	10	10	10	10	10	10	10
12	8/31	11:30	10	10	10	10	10	10	10	10	10	10	10	10
13	8/31	11:30	10	10	10	10	10	10	10	10	10	10	10	10
14	8/31	11:30	10	10	10	10	10	10	10	10	10	10	10	10
15	9/01	11:30	10	10	10	10	10	10	10	10	10	10	10	10
16	9/01	11:30	10	10	10	10	10	10	10	10	10	10	10	10
17	9/01	11:30	10	10	10	10	10	10	10	10	10	10	10	10
18	9/01	11:30	10	10	10	10	10	10	10	10	10	10	10	10
19	9/06	11:30	10	10	10	10	10	10	10	10	10	10	10	10
20	9/06	11:30	10	10	10	10	10	10	10	10	10	10	10	10
21	9/06	11:30	10	10	10	10	10	10	10	10	10	10	10	10
22	9/06	11:30	10	10	10	10	10	10	10	10	10	10	10	10
23	9/06	11:30	10	10	10	10	10	10	10	10	10	10	10	10
24	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
25	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
26	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
27	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
28	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
29	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
30	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
31	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
32	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
33	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
34	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
35	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
36	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
37	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
38	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
39	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
40	9/07	11:30	10	10	10	10	10	10	10	10	10	10	10	10
41	9/12	11:30	10	10	10	10	10	10	10	10	10	10	10	10
42	9/12	11:30	10	10	10	10	10	10	10	10	10	10	10	10
43	9/12	11:30	10	10	10	10	10	10	10	10	10	10	10	10
44	9/12	11:30	10	10	10	10	10	10	10	10	10	10	10	10
45	9/12	11:30	10	10	10	10	10	10	10	10	10	10	10	10
46	9/12	11:30	10	10	10	10	10	10	10	10	10	10	10	10

Table 8.-Continued

Station number	Date	Measurements (mm)										Method	DDYP	Protein
		BMC	Longitude	Hydrochloric	Alum.	Endosulfan	DDX	Density	Engine	DDC	DDT	M/100		
1	8-29-77	ND	1.50	ND	ND	ND	0.15	0.00 ^b	ND	ND	0.01	ND	ND	ND
2	8-29-77	ND	0.25	ND	ND	ND	ND	0.57	ND	ND	0.01	ND	ND	ND
3	8-29-77	ND	0.31	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4	8-29-77	ND	0.50	0.23	ND	ND	ND	ND	ND	ND	0.04	ND	ND	ND
5	8-29-77	ND	0.35	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6	8-30-77	ND	1.63	ND	ND	ND	0.30	0.00 ^b	ND	ND	0.02	ND	ND	ND
7	8-30-77	ND	0.29	0.08	5.71	ND	ND	1.03	ND	ND	0.59	ND	ND	ND
8	8-30-77	ND	0.19	ND	14.14	ND	ND	ND	ND	ND	ND	ND	ND	ND
9	8-30-77	ND	1.16	1.77	45.50	ND	ND	2.46	0.57	0.11	ND	ND	ND	ND
10	8-31-77	ND	0.60	1.7	138.71	ND	ND	4.08	ND	ND	0.05	ND	ND	ND
11	8-31-77	ND	1.34	0.70	34.31	ND	ND	0.87	2.75	ND	ND	ND	ND	ND
12	8-31-77	ND	0.29	0.84	12.35	ND	ND	ND	ND	ND	ND	ND	ND	ND
13	8-31-77	ND	2.44	ND	ND	ND	0.08	0.57	0.46	4.83	0.08	ND	ND	ND
14	9-01-77	ND	0.11	ND	94.03	ND	ND	ND	ND	2.83	ND	ND	ND	ND
15	9-01-77	ND	0.18	ND	ND	ND	ND	ND	ND	0.61	ND	ND	ND	ND
16	9-01-77	ND	2.04	ND	ND	ND	0.26	0.00 ^b	0.26	0.18	0.00 ^b	ND	ND	ND
17	9-01-77	ND	0.76	ND	814.13	ND	ND	0.70	0.86	0.56	0.02	ND	ND	ND
18	9-01-77	ND	1.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19	9-06-77	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
20	9-06-77	ND	0.47	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
21	9-06-77	ND	0.12	ND	2.78	ND	ND	ND	0.21	ND	ND	ND	ND	ND
22	9-06-77	ND	0.20	ND	7.80	ND	ND	ND	ND	1.29	ND	ND	ND	ND
23	9-06-77	ND	0.19	0.43	85.60	ND	ND	ND	ND	0.78	0.18	ND	ND	ND
24	9-07-77	ND	2.35	ND	ND	ND	0.00 ^b	0.00 ^b	0.00 ^b	0.00 ^b	0.22	ND	ND	ND
25	9-07-77	ND	0.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
26	9-07-77	ND	0.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
27	9-07-77	ND	0.20	ND	0.30	ND	ND	ND	ND	ND	ND	ND	ND	ND
28	9-07-77	ND	0.16	ND	ND	ND	ND	0.56	1.95	4.13	0.69	ND	ND	ND
29	9-07-77	ND	0.20	ND	44.75	ND	ND	ND	0.46	0.01	ND	ND	ND	ND
30	9-08-77	ND	0.26	ND	121.64	ND	ND	ND	ND	1.16	ND	ND	ND	ND
31	9-08-77	ND	1.12	ND	ND	ND	0.66	0.00 ^b	0.00 ^b	0.80	0.34	ND	ND	ND
32	9-08-77	ND	0.53	ND	ND	ND	ND	0.35	ND	4.82	0.65	ND	ND	ND
33	9-08-77	ND	0.20	ND	3.82	ND	ND	ND	1.27	ND	ND	ND	ND	ND
34	9-08-77	ND	0.27	ND	99.87	ND	ND	ND	1.18	0.52	ND	ND	ND	ND
35	9-09-77	ND	2.42	ND	ND	ND	0.15	0.00 ^b	0.48	0.00 ^b	0.00 ^b	ND	ND	ND
36	9-09-77	ND	5.16	ND	ND	ND	ND	ND	1.44	ND	0.20	ND	ND	ND
37	9-12-77	ND	0.29	ND	31.08	ND	ND	ND	ND	0.61	ND	ND	ND	ND
38	9-12-77	ND	0.13	ND	56.80	ND	ND	ND	ND	ND	2.82	ND	ND	ND
39	9-12-77	ND	ND	ND	81.21	ND	ND	ND	0.57	ND	ND	ND	ND	ND
40	9-12-77	ND	ND	ND	0.25	ND	ND	ND	ND	ND	0.45	ND	ND	ND
41	9-12-77	ND	0.75	ND	ND	ND	ND	0.51	0.36	2.58	ND	ND	ND	ND
42	9-13-77	ND	0.20	ND	15.00	ND	ND	0.19	ND	ND	0.94	ND	ND	ND
43	9-13-77	ND	4.06	ND	ND	ND	ND	0.15	0.00 ^b	0.00 ^b	0.00 ^b	ND	ND	ND
44	11-12-77*	ND	ND	ND	1.20	ND	ND	ND	0.37	ND	ND	ND	ND	ND
45	11-12-77	ND	0.57	ND	ND	ND	ND	ND	0.05	ND	ND	ND	ND	ND
46	11-12-77*	ND	ND	ND	0.45	ND	ND	ND	ND	ND	ND	ND	ND	ND

Table 8.--Continued

Station number	Date	Phosphate	Dissolved	Disturbance	Mercury concentration	DFA	Pin Point	Chlorophyll	Toxicity	Cyanobacteria	Pond	P.B.		P.C.B.	
												IAP	IAP	1254	1256
1	8-29-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00 ^b	ND
2	8-29-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
3	8-29-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4	8-29-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
5	8-29-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
6	8-30-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00 ^b	ND
7	8-30-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
8	8-30-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
9	8-30-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
10	8-31-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11	8-31-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
12	8-31-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
13	8-31-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
14	9-01-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
15	9-01-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
16	9-01-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00 ^b	ND
17	9-01-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
18	9-01-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
19	9-06-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
20	9-06-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
21	9-06-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
22	9-06-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
23	9-06-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
24	9-07-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
25	9-07-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
26	9-07-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
27	9-07-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
28	9-07-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
29	9-07-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
30	9-08-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
31	9-08-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
32	9-08-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
33	9-08-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
34	9-08-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
35	9-08-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
36	9-08-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
37	9-12-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
38	9-12-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
39	9-12-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
40	9-12-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
41	9-12-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
42	9-13-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
43	9-13-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
44	11-17-77 ^a	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
45	9-14-77	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
46	11-17-77 ^a	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

^a Due to heavy rain, only 2 samples were collected for this date.
^b Due to heavy rain, no samples were collected for this date.
 ND Not Detected

Table 9.--Total carotenoid pigment concentration ($\mu\text{g/l}$) on the Alabama-Coosa Rivers from August 9 through December 8, 1977 (Carotenes and xanthophylls)

Station number	Collection period					
	8/9- 9/25	8/29- 9/14	9/19- 10/4	10/11- 10/25	10/31- 11/17	11/21- 12/8
1	5.5	6.2	7.0	1.4	9.4	6.7
2	4.1	5.3	6.1	16.0	16.0	12.0
3	10.0	6.2	4.9	11.0	24.0	19.0
4	5.2	5.1	7.0	5.4	7.9	23.0
5	6.2	6.3	5.4	3.3	13.0	44.0
6	10.0	4.8	4.2	9.4	16.0	8.7
7	2.0	4.6	8.0	30.0	10.0	8.7
8	5.0	4.8	10.0	6.2	24.0	5.5
9	10.0	4.6	7.0	11.0	17.0	12.0
10	5.0	4.7	5.0	11.0	9.8	12.0
11	20.0	7.4	5.1	5.1	16.0	15.0
12	4.2	3.6	5.0	5.3	14.0	11.0
13	8.4	4.8	7.4	9.5	12.0	10.0
14	5.4	13.0	6.1	28.0	20.0	9.4
15	19.0	7.4	4.4	27.0	5.7	9.0
16	40.0	6.1	5.4	3.3	11.0	9.5
17	10.0	9.8	5.0	7.0	26.0	4.9
18	10.0	6.3	5.0	14.0	15.0	4.5
19	3.9	5.1	7.4	2.4	13.0	3.7
20	5.6	9.4	5.4	8.6	7.0	4.8
21	3.7	5.6	6.9	7.4	10.0	4.9
22	2.6	7.4	5.0	7.2	7.4	6.6
23	6.9	14.0	8.2	13.0	5.4	7.8
24	5.4	8.5	6.6	1.5	1.4	9.5
25	9.4	7.9	6.7	6.5	6.9	3.6
26	12.0	7.1	7.9	7.2	3.3	3.1
27	6.9	7.5	9.2	6.9	6.1	22.0
28	4.0	7.0	7.5	4.2	9.4	9.2
29	7.1	12.0	7.1	9.7	8.7	8.2
30	5.6	12.0	9.6	9.0	9.9	11.0

Table 9.--Continued

Station number	Collection period					
	8/9- 8/25	8/29- 9/14	9/19- 10/4	10/11- 10/25	10/31- 11/17	11/21- 12/8
31	5.0	6.3	15.0	18.0	1.7	16.0
32	9.2	13.0	18.0	19.0	9.7	19.0
33	7.2	12.0	10.0	9.2	3.8	8.2
34	12.0	14.0	9.7	9.2	6.6	12.0
35	5.8	11.0	7.9	4.6	10.0	7.5
36	6.7	16.0	14.0	8.6	8.7	23.0
37	9.1	3.9	6.4	8.2	8.7	8.2
38	5.5	12.0	9.0	3.1	5.9	6.2
39	7.4	14.0	11.0	3.3	6.6	11.0
40	3.9	7.2	7.4	8.6	4.8	7.0
41	9.8	8.7	7.7	11.0	5.8	8.1
42	10.0	6.3	7.8	2.2	5.5	9.3
43	5.4	11.0	5.4	10.0	6.2	9.5
44	10.0	--	13.0	2.6	6.8	5.8
45	1.2	8.4	13.0	16.0	8.8	5.7
46	5.7	--	8.9	6.7	9.7	6.9

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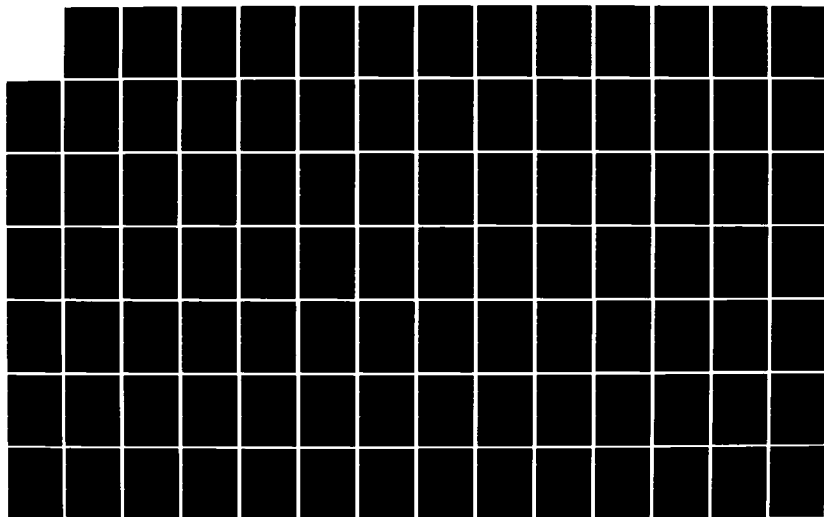
WATER QUALITY MANAGEMENT STUDIES ALABAMA RIVER R E
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ALABAMA UNIVERSITY MAR 83 DACW01-77-C-0140

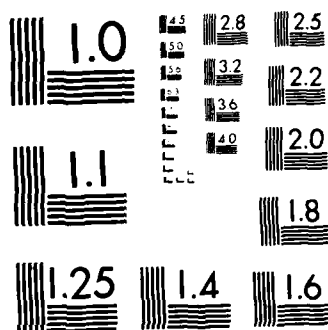
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Table 10.--Maximum dry weight yields (mg/l) of
Selenastrum capricornutum (Greeson, 1977) at
46 Alabama-Coosa River stations from
August 29 through September 14, 1977

<u>Station number</u>	<u>Date of collection</u>	<u>Algal biomass</u>
1	8/29/77	1.85
2	8/29/77	1.00
3	8/29/77	0.20
4	8/29/77	0.50
5	8/29/77	1.15
6	8/30/77	1.02
7	8/30/77	0.80
8	8/30/77	1.24
9	8/30/77	1.76
10	8/31/77	1.01
11	8/31/77	0.68
12	8/31/77	1.30
13	8/31/77	1.85
14	9/01/77	2.36
15	9/01/77	4.47
16	9/01/77	5.31
17	9/01/77	5.70
18	9/01/77	2.98
19	9/06/77	1.05
20	9/06/77	1.04
21	9/06/77	1.07
22	9/06/77	2.40
23	9/06/77	4.64
24	9/07/77	6.20
25	9/07/77	9.49
26	9/07/77	9.58
27	9/07/77	8.25
28	9/07/77	10.74
29	9/07/77	12.80
30	9/08/77	8.76
31	9/08/77	0.68
32	9/08/77	0.66
33	9/08/77	0.55
34	9/08/77	0.62
35	9/09/77	0.77

Table 10.--Continued

<u>Station number</u>	<u>Date of collection</u>	<u>Algal biomass</u>
36	9/09/77	0.98
37	9/12/77	3.39
38	9/12/77	2.24
39	9/12/77	0.51
40	9/12/77	0.54
41	9/12/77	0.68
42	9/13/77	1.07
43	9/13/77	3.47
44	9/14/77	*
45	9/14/77	3.45
46	9/14/77	*

*No sample collected because of repairs on
Claiborne Lock and Dam.

B. Biological

1. Plankton

Plankton samples collected from the Alabama River were found to include 54 taxa (principally genera) of zooplankton and 65 taxa (principally genera) of phytoplankton. Plankton identification and enumeration (number of organisms per liter of river water) are tabulated in tables B-1 through B-8. Selected STORET data for planktonic studies are located in table A-4.

Zooplankters most commonly encountered in all samples were crustaceans (table B-1), rotifers (table B-2), and protozoans (table B-3). Minor contributors (table B-4) included insects, nematodes and polycypods. The class Rotifera contained the greatest number of zooplankton taxa (25).

The phytoplankton community was found to be composed principally of green algae (table B-5), diatoms (table B-6) and blue-green algae (table B-7). Diatoms were only enumerated during the sampling period of October 31 through November 17, 1977. Minor phytoplankton contributors found periodically during the study are included in table B-8. The division Chlorophyta, represented by 29 genera, contained the greatest diversity of all plankton groups analyzed.

2. Benthic Macroinvertebrates--Ponar

Ponar samples were found to contain a cumulative total of 134 taxa of benthic macroinvertebrates (tables C-1 through C-4). Most of the organisms for the first two sampling periods were identified to the generic level; however, owing to time and manpower constraints, identification of the specimens contained for the third sampling period was taken only to the family level. A few taxa (Bryozoa, Turbellaria, Nematoda, Araneae, Acarina and Nematomorpha) could be identified only to the phylum, class, or order level due to the lack of published keys. Identified genera contained in each order (tables C-1 through C-4) are listed first, followed by unidentified genera which are listed by family.

The insects were the most diverse and frequently encountered benthic group in the samples, as indicated by the 77 taxa identified and enumerated in table C-1. Chironomidae of the class Insecta was the dominant family of benthic animals collected throughout the entire study. Other phyla represented by large numbers included the Annelida (table C-2) and the Mollusca (table C-3). Table C-4 lists 23 miscellaneous taxa that were collected periodically during the study. Data on several taxa enumerated in the above tables were placed on the EPA STORET retrieval system (table A-4).

A Shannon-Weaver diversity index was calculated for each station, and the results are tabulated in table C-5. Benthic biomass data for each station are located in table C-6.

3. Benthic Macroinvertebrates--multiplate sampler

Of the 68 samplers deployed in the Alabama River, only 35 were retrieved. The other 33 samplers were lost to vandalism. The multiplate samplers recovered contained representatives of 14 taxa (table C-7).

4. Aquatic Macrophytes

The macrophytes of the Alabama River were studied at 276 sites (attachment 1 and table D-1) between the confluence of the Coosa and Tallapoosa Rivers and Claiborne Lock and Dam. A total of 76 plant species comprising 43 families were encountered. The species and stations at which they were found are compiled into an annotated list of species (table D-2), which is arranged phylogenetically by family. Noxious species present in large numbers, which could infringe on the recreational and/or navigational uses of the river, are also noted.

V. DISCUSSION

A. Chemical

When compared to water-quality criteria established by the U.S. Environmental Protection Agency (1976), the results of the analyses in this study indicated that the water quality of the Alabama River is generally good. Parameters that periodically exceeded the recommended limits and therefore deserve additional discussion included ammonia as nitrogen, manganese, dissolved iron, total iron, fecal coliform, and pH. The other 33 parameters were all within acceptable limits and, with the exception of BOD₅, DO, COD, temperature, TKN, total P, ortho P, NO₂ + NO₃, fecal streptococci, total coliform, hardness, color, TOC, sulphate, chloride, and specific conductance, are not discussed any further.

1. Water-quality Parameters

Vertical profiles for DO, temperature, conductivity, and pH suggest that no significant stratification of water occurred during the study period (figs. A-1 through A-13). Allowing for slight differences in water-quality parameters at the surface and 5 feet below the surface, values for all tested parameters appeared within a 5-percent deviation of the mean throughout the water column. Slightly elevated DO values and water temperatures in the upper foot of the water column may be attributed to the influence of air temperature and surface aeration. The BOD₅ test is a valuable tool for estimating the bio-oxidizable fraction of surface waters or waste-waters discharged to them. The low BOD₅ values obtained for all three reservoirs speak highly of relatively clean surface waters in the study area. The COD determination is a measure of the oxidizable material in the water. It also represents an approximation of the minimum amount of organic and reducing material present. The three reservoirs showed very low levels of COD indicating the relatively good state of the surface water as far as organic or sewage treatment breakdown throughout the reservoirs is concerned.

The pH values measured during the study were within the acceptable criteria range at all but one station. The acidic pH at station 19 possibly could be a result of the reworking of eroded river banks and upgrading of the U.S. Army Corps of Engineers' recreation area at Steele's Landing. Newly sodded grass in the area showed signs of a recent application of fertilizer at the time of sampling, and this possibly could be the reason for the low pH

value. Another possible cause of this low pH could be the effect of decaying leaves in the river; but if this were the cause, more than one station in this area should have exhibited a low pH.

The highest values for specific conductance occurred simultaneously with the lowest values for pH. The time of collection of these samples was October 17, 1977. Occurrence of such values in the fall supports the theory that leaf decay influences pH and conductivity. The color (apparent) value was also recorded at its highest level (140 Pt-Co units) during this time, which could also be attributed to an increased organic load. Total organic carbon concentrations, although not given a specific water-quality criteria limit, may be used to indicate possible organic contamination within a reservoir or other water system.

Levels of TOC in the rivers of the study area are generally within the same range as those determined by a 10-year USGS-NASQAN (National Stream Quality Assessment Network) study. The stations, corresponding values, and dates of collection exceeding the 10-year USGS-NASQAN Study average of 10 mg/l TOC were sites 3 (15 mg/l on November 21, 1977), 6 (36 mg/l on November 22, 1977), 12 (14 mg/l on August 31, 1977), and 13 (19 mg/l on November 28, 1977). This data is significant in that the NASQAN sites are near station 8 in the Jones Bluff Reservoir and station 45 in the Claiborne Reservoir; stations in these two areas did not have high TOC during this study period or the USGS 10-year effort. The USGS could relocate their stations upstream or downstream in the high organic carbon areas.

Sulfate and chloride were fairly low in all three reservoirs as compared to other major rivers in Alabama. Neither parameter exceeded one-tenth of the 250 mg/l criteria limit as set by EPA.

The nutrient concentrations, which include nitrate + nitrite, ammonia, TKN, total phosphorus and orthophosphorus, were all within criteria limits except those of the ammonia species. Ammonia concentrations fluctuated widely with different sampling times and sites along the 252.5 river miles studied. Violations of fish and wildlife criteria for ammonia as N occurred at stations 14 through 18, 20 through 22, 25 through 29, 33 through 36, and 39 through 46 during run 1; stations 1 through 39 and 41 through 45 during run 2; stations 1 through 3, 5, 7 through 14, 16, 19, 22, 24, 26, and 30 through 46 during run 3; stations 1 through 3, 5 through 14, 16 through 19, 21, 23, 24, 27, 30, 31, 34, 35, 39, and 41 during run 4; stations 3 through 6, 11, 17, 23, 24 through 27, 31, 33, 35 through 37, 40, 41, and 43 during run 5; and stations 5, 7, 10, 21, 26, 28, 30, 34, 36, 42, and 43 during run 6. Production of ammonia generally results from the decomposition of nitrogenous organic matter. Concentrations in excess of the EPA standard (0.2 mg/l) in surface water usually indicate organic pollution. These high

levels usually suggest specific pollution from sewage or industrial contaminants. The Alabama Water Improvement Commission's (AWIC) revised list of permitted waste dischargers shows 5 municipal dischargers, 11 industrial dischargers, 23 semi-private and private dischargers, and 9 mining dischargers to the Alabama River or its tributaries in the study area (table A-3). Two waste discharge points, a sand and gravel operation and a hog farm, were identified between river miles 270 and 260. Ammonia concentrations along this segment and as far south as river mile 240 were elevated at the time of sampling.

Dissolved manganese values exceeded the EPA water-quality criteria at nine sampling stations (10, 12, 15, 22, 23, 24, 26, 28 and 41) throughout the study period. Elevated manganese concentrations may affect the taste of drinking water, stain plumbing fixtures and laundry, and foster the growth of microorganisms in reservoirs and other water systems. Until more complete data on acute and sublethal effects of manganese on aquatic organisms are available, the U.S. Environmental Protection Agency (1976) advises that dissolved manganese concentrations greater than 100 $\mu\text{g/l}$ may constitute a health hazard.

During the study, concentrations of dissolved and total iron at eight stations exceeded the permissible water-quality criteria (30 mg/l) during five of the six sampling intervals. Because of its widespread use by man for his many industrial activities, iron is a common contaminant in the aquatic environment.

The waters of the Alabama and Coosa Rivers would have to be classified as soft (0-60 mg/l as CaCO_3) to moderately hard (61-120 mg/l) based on the data collected over the six sampling runs (table A-1). Hardness (which reflects calcium and magnesium cations) in conjunction with other chemical properties, such as acidity and other polyvalent cations, is an indication of the soap-consuming power of the water. Hard water is not generally believed to have harmful effects on man, although the relation to urinary concretions is controversial. Hard water decreases the sensitivity of fish to toxic metals (McKee and Wolf, 1963). Total manganese values, which were significantly elevated over the dissolved manganese values, as was expected, showed highest concentrations from stations 40 and 41 during run 1 and from stations 1 through 14 during runs 2 through 6. The highest levels occurred in the Jones Bluff Reservoir, which is underlain by geologic materials primarily from the Piedmont.

Fecal coliform bacteria exceeded the water-quality criteria (2000 CT/100 ml) twice during the study at stations 6 (2600 CT/100 ml) and 7 (2900 CT/100 ml). Station 6 is immediately above the city of Montgomery, whereas station 7 is adjacent to the downtown area. The high densities of these organisms, therefore, are indicative of relatively recent organic pollution from the Montgomery

area. The specific area in which this high fecal coliform occurred leads one to suspect raw sewage contamination of the river by either animal or human wastes. Total coliform bacteria, which is a composite of all coliform groups, showed highest levels during the warmest sampling months, which occurred during run 1 (August 9-25, 1977). Significant changes occurred in total coliform counts, which diminished as the cooler fall and winter months approached. This is typical of this bacteria group because maximum growth levels occur at 35°C (98.6°F). Total coliform counts for the Jones Bluff Reservoir exceeded those for all three reservoirs in the study area; Claiborne Reservoir had the lowest levels for all six sampling runs. Fecal streptococcal bacteria, which are similar to the fecal coliform group, exhibited their highest levels in the Jones Bluff Reservoir during the warm August sampling run. All fecal streptococci levels were below the Alabama criteria of 2000 CF/100 ml.

2. Sediment Parameters

The mechanical analyses of the sediment samples indicated slight differences in the bottom material of the river at stations 7, 17, 19, 31, 36, 42, and 46 (table 7). The differences in the texture of the sediment samples from stations 7 and 31 (medium sand) and 17 and 19 (silty sand) could possibly be attributed to the differences in areal geology and soil weathering, stream deposition, and/or other reasons.

The high concentrations of total magnesium, total iron, and total manganese all occurred within the same segment of the Alabama River at stations 9 and 10 (table 8). These stations lie below Catoma Creek near Montgomery, Alabama, and the surrounding land is used predominantly for agriculture. The river at these stations also receives drainage from a local U.S. Air Force Base and the Catoma Creek sewage treatment plant.

The levels of pesticide residue for selected sediment samples showed high concentrations of Aldrin, PCB's (Aroclor 1260 and Aroclor 1254), and DDT (table 8). Compared to U.S. Department of Agriculture (USDA) data for the southeastern United States (Edwards, 1970), these residues appeared very high at stations 9, 10, 13, 17, 30, 32, 34, 38, 39 and 41. The DDT concentration of the sediment of the Alabama-Coosa Rivers averaged 620 nannograms per kilogram (ng/kg) with a maximum value of 6590 ng/kg at station 7. Aldrin concentrations reported by Edwards (1970) for soils in the southeastern United States showed a maximum value of 18,000 ng/kg and a mean of 20,000 ng/kg. Aldrin averaged 37,110 ng/kg in the Alabama-Coosa River sediments and reached a maximum of 814,130 ng/kg at station 17 (located at the pool side of Jones Bluff Lock

and DDT). Some pesticides (i.e., DDT including DDD and DDE, Aldrin, Dieldrin, and PCB's) are considered especially hazardous because of their persistence and accumulation in aquatic organisms. With further in-depth studies, the possible origin of these residues may be determined. These compounds, including some of their metabolites, are directly toxic to various aquatic species at concentrations of less than 1 µg/l. Their accumulation in aquatic systems presents a hazard, both real and potential, to animals in the higher trophic levels, including man. Present knowledge is not sufficient to predict or estimate safe concentrations of these compounds in aquatic systems. However, residue concentrations in aquatic organisms and sediment provide a measure of environmental contamination.

Total cadmium, chromium, lead, and nickel concentrations in the sediment samples were specifically analyzed for by standard methods but were found to be present just below their reporting limits (American Public Health Association, 1975). Total arsenic, mercury, copper, and zinc were present in low levels also as compared to values obtained for the two USGS-NASQAN stations on the Alabama River (USGS, 1978). These two NASQAN stations are located at the U.S. Highway 82 bridge near Montgomery and U.S. Highway 84 bridge at Claiborne, Alabama.

3. Other Parameters

Chlorophylls *a*, *b* and *c* were consistently higher at stations 13 through 24 as compared to any other segment of the river during this study. Chlorophylls *b* and *c* were highest during the warmest month (August) of the study, probably as a result of increased plant growth. However, chlorophyll *a* was highest during the third sampling run (September 19 through October 4, 1977) when the water's temperature had dropped an average of 9 degrees below that of sampling run 1 (August 9-25, 1977). Because the chlorophyll parameters were not sampled throughout the four seasons of the year, no further conclusions can be drawn until more extensive data are available.

Results of the algal growth potential experiments indicate areas of high nutrient concentrations and subsequent increased plant growth on the river. This is true especially in the stream segment near stations 28 and 29 where the dry weight of algae exceeded 10 mg/l. High ammonia values also occurred in this area. Under elevated pH conditions, this situation could cause increases in nitrogen components, such as nitrate, nitrite or organic nitrogen, which in turn would provide necessary nitrogen along with available phosphorus to stimulate an increase in plant growth.

B. Biological

1. Plankton

Both the phytoplankton and the zooplankton were investigated during the study. The phytoplankters, collectively known as "producers," form the base of the aquatic food chain because they have the ability to synthesize energy-containing organic compounds through a process which incorporates solar radiation and inorganic nutrients. The zooplankters, collectively called "consumers," lack this synthesizing capability and, for this reason, must feed upon the phytoplankton to satisfy their nutritional requirements. In nature, therefore, zooplankton diversity is dependent upon phytoplankton diversity, which is ultimately dependent upon a variety of water-quality and environmental conditions. Conversely, any drastic environmental change that may degrade water quality or increase nutrient availability may also affect phytoplankton and zooplankton diversity.

Two of the most numerous phytoplanktonic groups (green algae and diatoms) and two of the most numerous zooplanktonic groups (cladocerans and rotifers) encountered during the study were arbitrarily selected to illustrate fluctuations in population densities (organisms/liter). Green algae from the first and second sampling periods and the green algae and diatoms from the third sampling period were plotted by river miles and station numbers in figures 47 through 49, respectively. Densities of cladocerans and rotifers collected during each of the three runs were plotted in figures 50 through 52.

Very little can be concluded about the data presented in figures 47 through 52 because of the relatively short time span during which the samples were collected. It is not unreasonable, however, to assume that the population decreases between the second and third sampling periods for both the phytoplankton and zooplankton are probably associated with seasonal climatic change. One interesting finding was the relatively high numbers of rotifers found at Station 41 during all three sampling periods compared to their density along the remainder of the river. The reasons for these consistently high values are unknown at this time; however, this area may warrant additional, in-depth investigations pending the results of the FY78 studies on the river.

Some problems concerning the collection and identification of plankton were encountered during this study, any of which could have biased the data; therefore, these should be mentioned. The first problem involved the use of the 80-micron mesh net that was required by the scope of work for plankton collection. While this mesh size was adequate for the collection of moderate to large

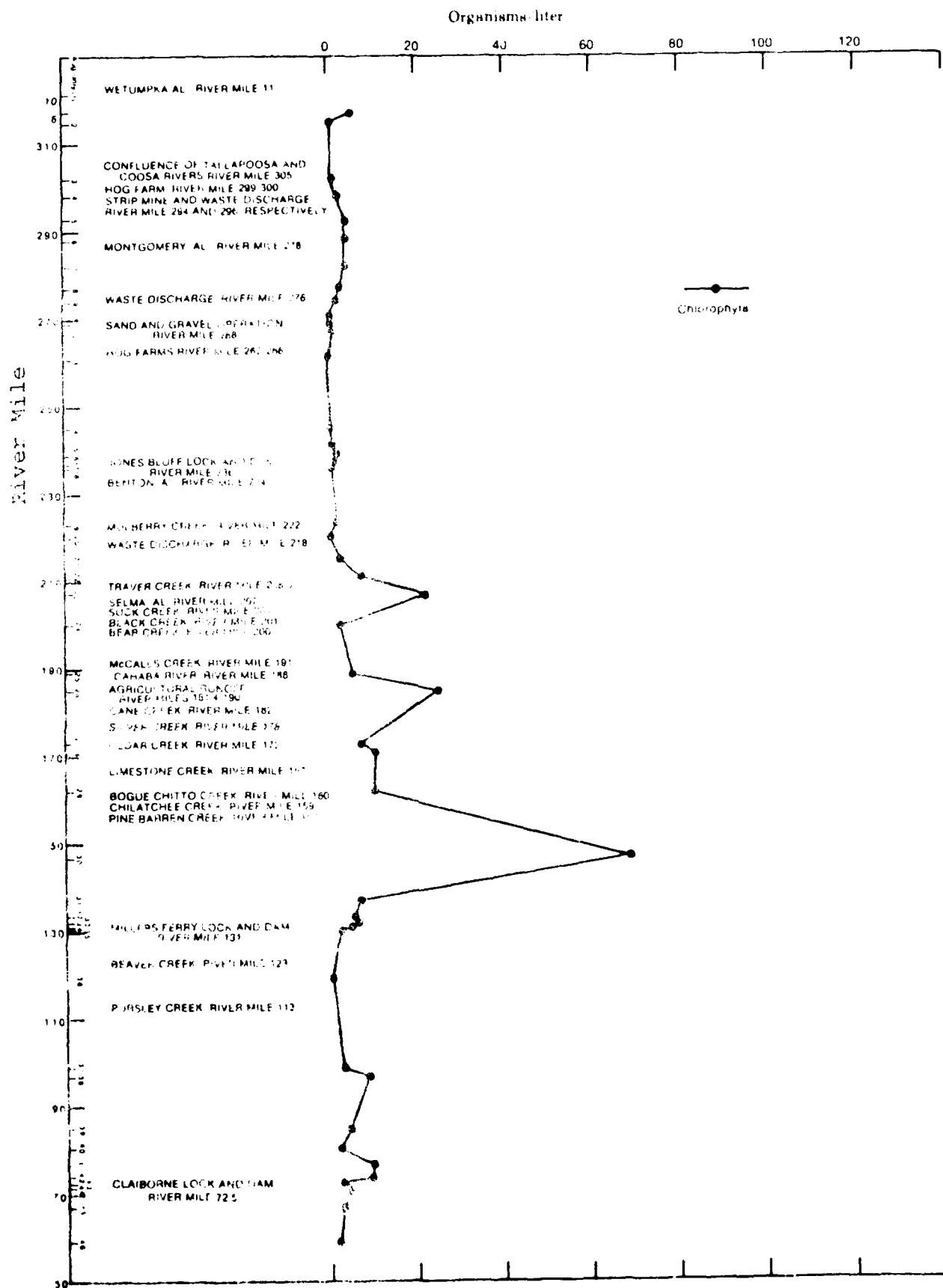


Figure 47.--Phytoplankton density at 46 Alabama-Coosa River system stations during the period August 9-25, 1977. Each dot represents one sample.

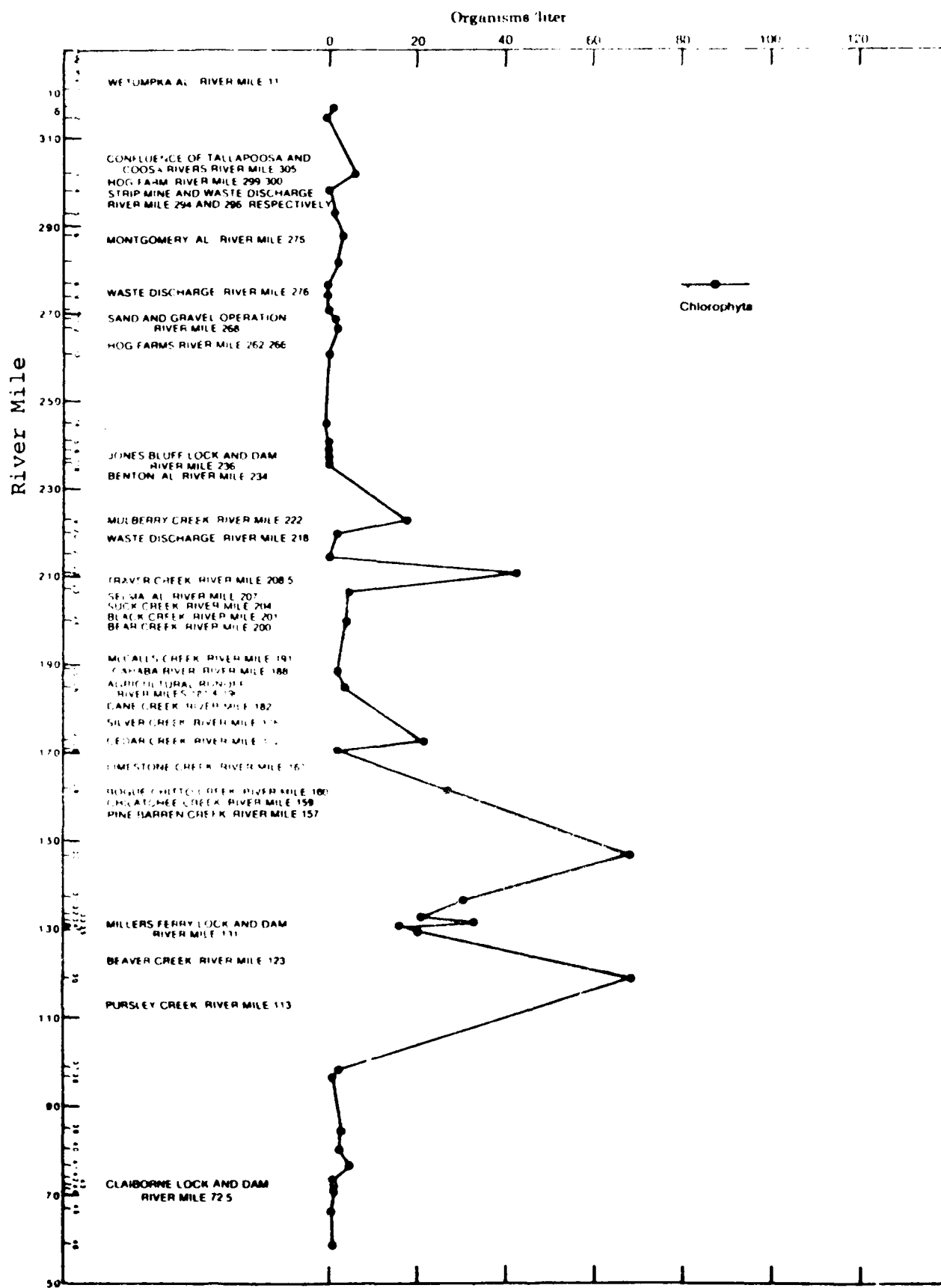


Figure 48.--Phytoplankton density at 46 Alabama-Coosa River system stations during the period September 19 through October 4, 1977. Each dot represents one sample.

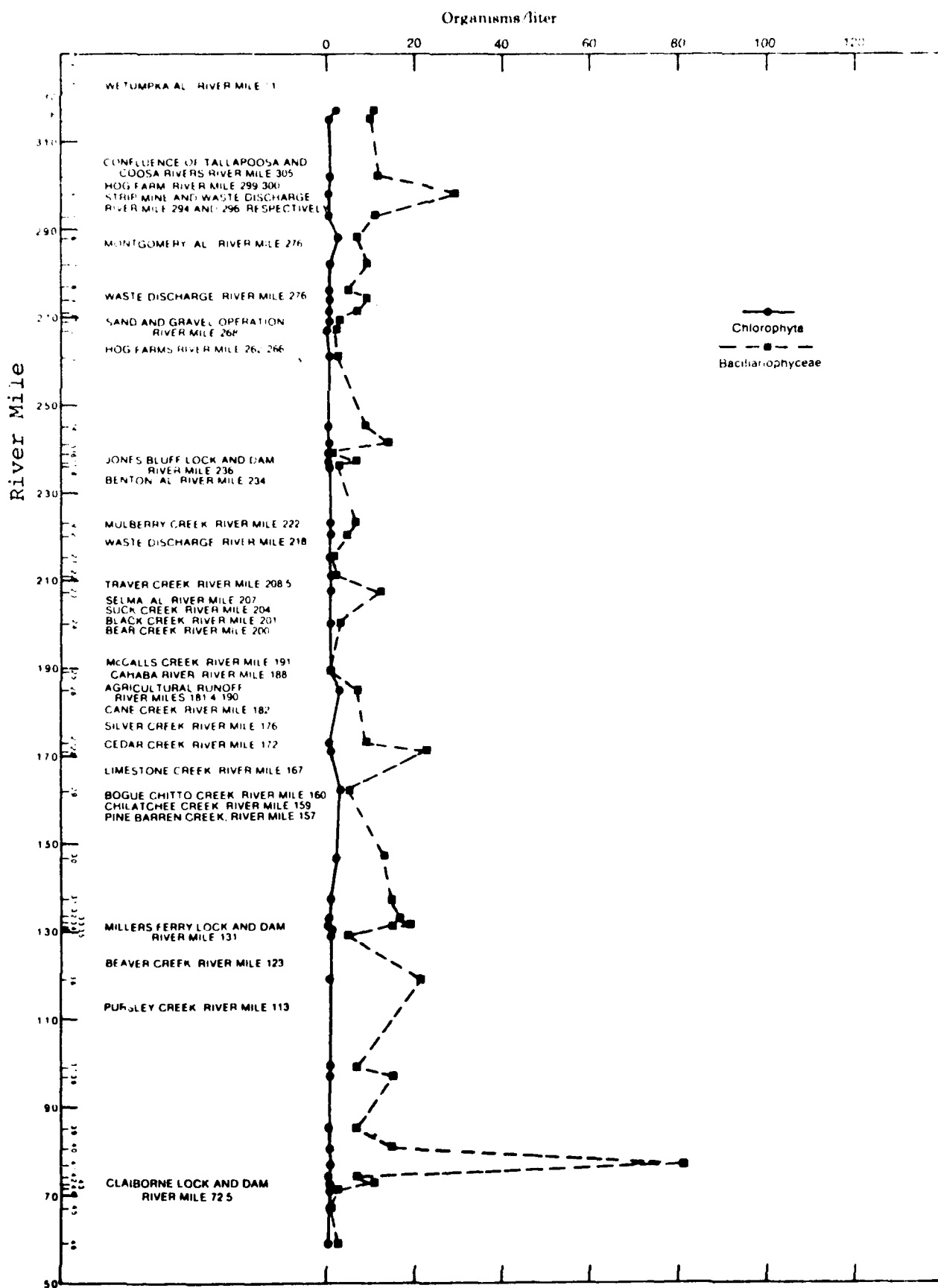


Figure 49.--Phytoplankton density at 46 Alabama-Coosa River system stations during the period October 31 through November 11, 1977. Each dot represents one sample.

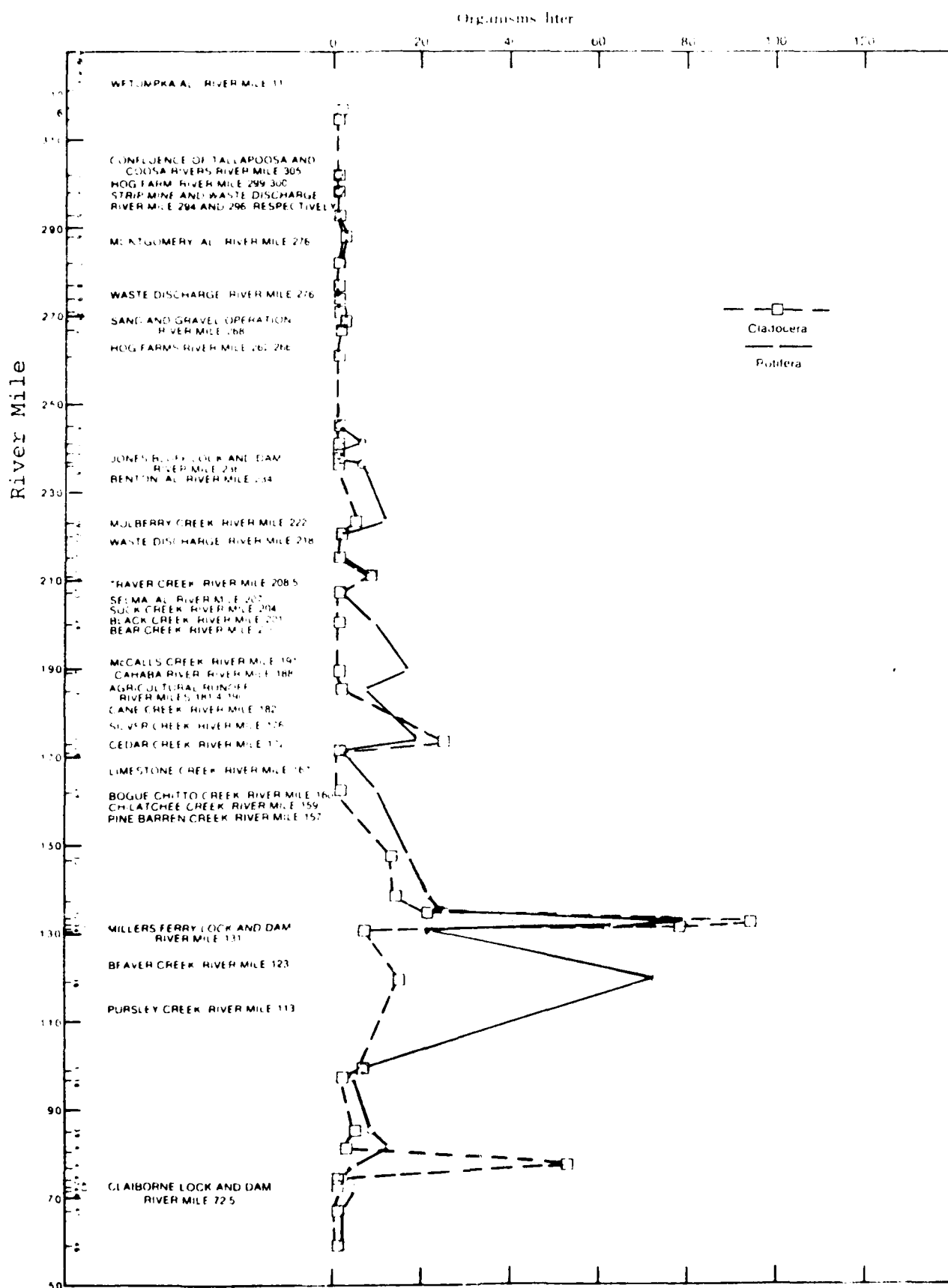


Figure 51.--Zooplankton density at 46 Alabama-Coosa River system stations during the period September 19 through October 4, 1977. Each dot represents one sample.

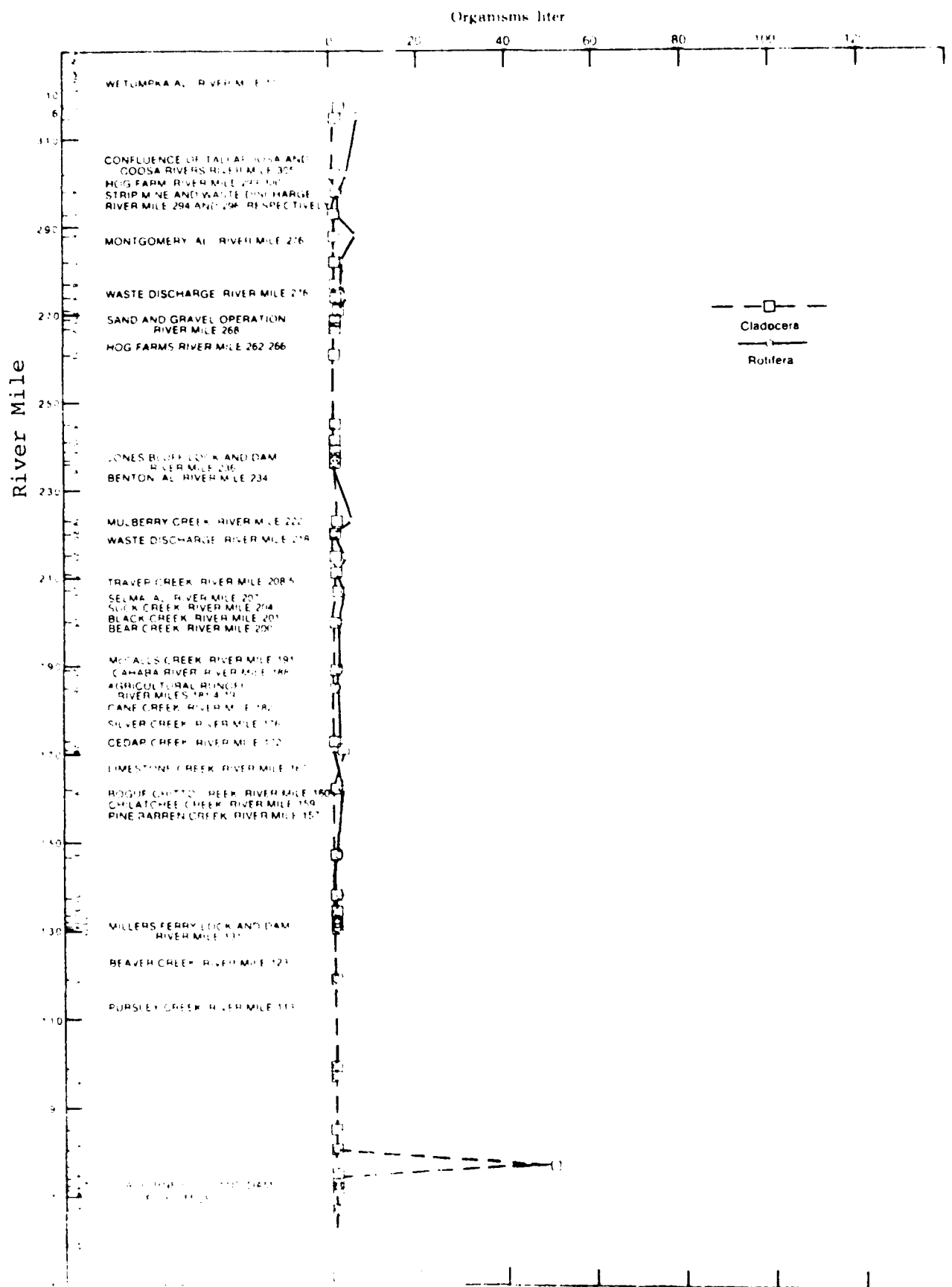


Figure 1

Concentration of Cladocera and Rotifera in the Alabama-Coosa River system stations 11 through November 11, 1977. Each dot represents a sample.

Alabama-Coosa River system stations 11 through November 11, 1977. Each

planktonic organisms, most of the smaller protozoans and unicellular algae passed through the net and were not collected. The numbers of organisms reported for these two groups, therefore, may be conservative and should be considered as net plankton.

The unexpected abundance of fragmented colonial and filamentous phytoplankton samples made the counting a formidable problem. Although many of these taxa could be identified, an accurate enumeration of the different forms was impossible. Only entire colonies and the larger filamentous forms were enumerated. Single or small numbers of cells resulting from possible fragmentation were not included in the counts. An alternative counting method would have been to count the individual cells; however, time and manpower restrictions prevented the accomplishment of this task during the project period.

It is possible that the actual densities of certain plankton in the samples may have been altered during the sediment removal process (see Section III.C.1.). Some of the colonial and/or filamentous forms could have become fragmented, and a few unicellular forms may have remained buried in the sediment. Because of the extreme care employed in washing the samples, it is doubtful that many organisms were lost. This modification would not have been employed had it not been necessary to obtain both qualitative and quantitative analyses.

Several zooplankton samples taken during the September 19-October 4, 1977, run contained large concentrations of bacteria and protozoans which were not completely killed by the preservative at the time the samples were collected. As a result, some decomposition of the organisms may have occurred between the time that the sample was collected, returned to the laboratory, and examined (two to three days). When subsequently added to the samples, the preservative was, in effect, "diluted out" by the unexpectedly high organic content in these samples. Partially decomposed organisms could not be accurately counted and were therefore omitted from the tabulations.

A final problem involved the calculation of the number of planktonic organisms per liter of river water sampled. The Alabama River throughout the study area is a lotic environment. Flow at each of the 46 stations was rapid and variably dependent upon a number of specific factors, including rainfall, location of site on slip bank or cut bank, river depth and width, bottom profile, and time of collection relative to electric generating periods. To determine the exact number of river water liters that passed through the plankton net, a velocity measurement was needed for each station at the exact time that each sample was collected. Unfortunately, the measurements were not requested by the scope

of work and flow data provided by the U.S. Army Corps of Engineers (tables 11 and 12) were not sufficient to make the necessary calculations. For this reason, the number of organisms had to be estimated as outlined in the discussion on methods (section B-1) with the results showing organism counts substantially lower than expected. Therefore, the results should be used only as a guide for showing what organisms are in the system.

2. Benthic Macroinvertebrates--Ponar

Five macroinvertebrate taxa frequently encountered during the study were selected to illustrate changes in population structure. Four taxa, the Chironomidae and *Hexagenia* (fig. 53), *Corbicula* (fig. 54) and *Chaoborus* (fig. 55), are known to be pollution tolerant (Cairns and Dickson, 1971). The remaining taxon, the Trichoptera or caddisflies (fig. 54), is pollution intolerant (Cairns and Dickson, 1971).

Very few conclusions can be drawn about the benthic fauna of the study area; however, several interesting observations, listed below, are worthy of recognition.

1. While the actual numbers of Chironomidae and *Hexagenia* found at most stations differed, there was a similarity in their density variation throughout the run (fig. 53).
2. Generally speaking, the densities of the pollution-tolerant species were greater than those of pollution-intolerant species. This is particularly true in the case of the Trichoptera and *Corbicula* (fig. 54).
3. There was a difference in the relative densities of *Chaoborus* between the first and third runs (fig. 55). This was probably due to seasonal variation. A similar response was noted for the phytoplankton and zooplankton (figs. 47 through 52).
4. Many of the taxa collected during the study exhibited a drop in density between stations 18 and 24 (river miles 230 to 200); the reason for this drop is unknown at this time. If this trend is again observed during the 1978 study, this area may deserve additional study.

Figure 56 is a plot of the Shannon-Weaver diversities calculated for the first and second biological runs. The third set of diversity values were family diversities and are not comparable to generic diversities. Therefore, they were omitted from the figure. It is significant to note that there was no real drop in the diversity from river mile 230 to 200. This tends to indicate that there are many taxa in this area but none are really abundant.

Table 11.--Flow data (cubic feet per second) from Jones Bluff
Lock and Dam for the period August 9 through
December 8, 1977

(U.S. Army Corps of Engineers, Mobile District,
1978, Personal Communication)

<u>Station number</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
1		7,926	22,012	22,492	31,401
2		7,027	13,075	22,565	28,432
3		3,657	14,363	22,833	31,582
4		1,484	14,067	18,498	36,322
5		4,427	14,325	53,084	22,808
6		3,532	15,794	64,517	16,421
7		6,139	14,492	61,596	21,707
8	11,254	6,128	12,408	62,368	27,107
9	10,179	7,832	26,597	62,312	
10	9,316	4,399	37,952	55,043	
11	7,392	11,449	36,080	48,292	
12	9,502	11,058	34,275	47,202	
13	5,542	11,749	28,629	39,684	
14	4,682	14,975	23,321	33,661	
15	9,313	15,546	22,363	33,695	
16	6,615	18,025	20,602	33,448	
17	5,708	19,263	19,031	32,440	
18	5,579	20,942	17,183	35,832	
19	6,987	16,347	11,513	31,735	
20	6,057	21,196	11,933	24,907	
21	1,760	21,176	9,543	22,599	
22	4,629	16,133	5,967	28,277	
23	9,771	14,508	3,570	31,328	
24	10,875	9,683	5,932	33,218	
25	10,346	6,191	16,886	30,770	
26	8,963	6,435	23,939	30,177	
27	7,043	9,054	48,025	29,958	
28	3,462	9,017	39,780	27,405	
29	5,203	10,246	39,360	28,321	
30	6,013	16,662	29,636	38,078	
31	7,025		23,047		

Table 12.--Flow data (cubic feet per second) from Millers Ferry
Lock and Dam for the period August 9 through
December 8, 1977

(U.S. Army Corps of Engineers, Mobile District,
1978, Personal Communication)

<u>Station number</u>	<u>August</u>	<u>September</u>	<u>October</u>	<u>November</u>	<u>December</u>
1		6,703	21,479	28,315	47,388
2		6,580	25,318	26,942	36,517
3		6,592	17,829	26,521	36,482
4		6,638	17,940	28,270	29,641
5		6,646	17,960	31,440	27,046
6		6,579	18,013	67,156	23,285
7		6,738	17,933	73,632	27,708
8	13,073	6,646	14,983	73,210	
9	10,842	12,255	23,479	72,504	
10	10,904	9,887	30,033	57,786	
11	9,742	12,817	47,027	54,640	
12	9,775	16,204	48,260	52,675	
13	8,677	13,217	35,284	48,428	
14	8,746	15,063	32,649	44,072	
15	9,829	16,457	30,529	37,255	
16	8,796	18,433	21,208	36,609	
17	6,767	21,425	20,959	36,547	
18	6,558	28,809	23,408	39,024	
19	6,617	22,529	15,025	43,005	
20	6,603	17,546	11,060	33,917	
21	6,508	24,344	9,846	29,921	
22	6,571	26,139	7,617	29,605	
23	6,396	20,013	7,750	29,602	
24	9,575	14,370	16,152	30,660	
25	13,154	9,136	28,354	39,845	
26	12,115	7,273	33,757	39,363	
27	8,800	10,006	57,221	32,541	
28	7,652	9,973	56,946	34,694	
29	6,601	10,574	41,941	32,710	
30	8,663	13,492	27,604	40,438	
31	6,613				

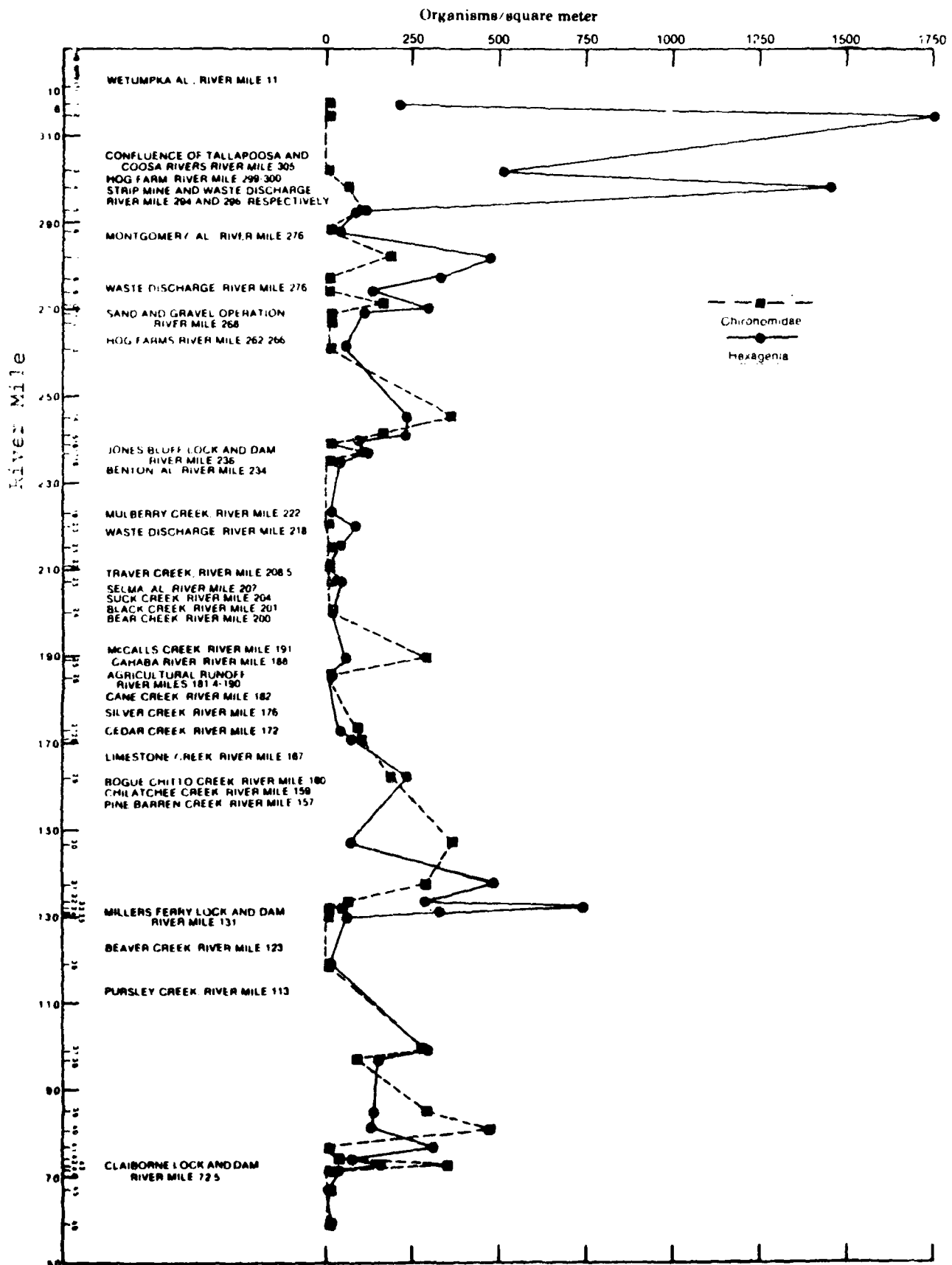


Figure 53.--Larval chironomid and nymphal *Hexagenia* densities at 46 Alabama-Coosa River system stations during the period October 31 through November 11, 1977. Each value is the average number of organisms contained in three samples taken at a station.

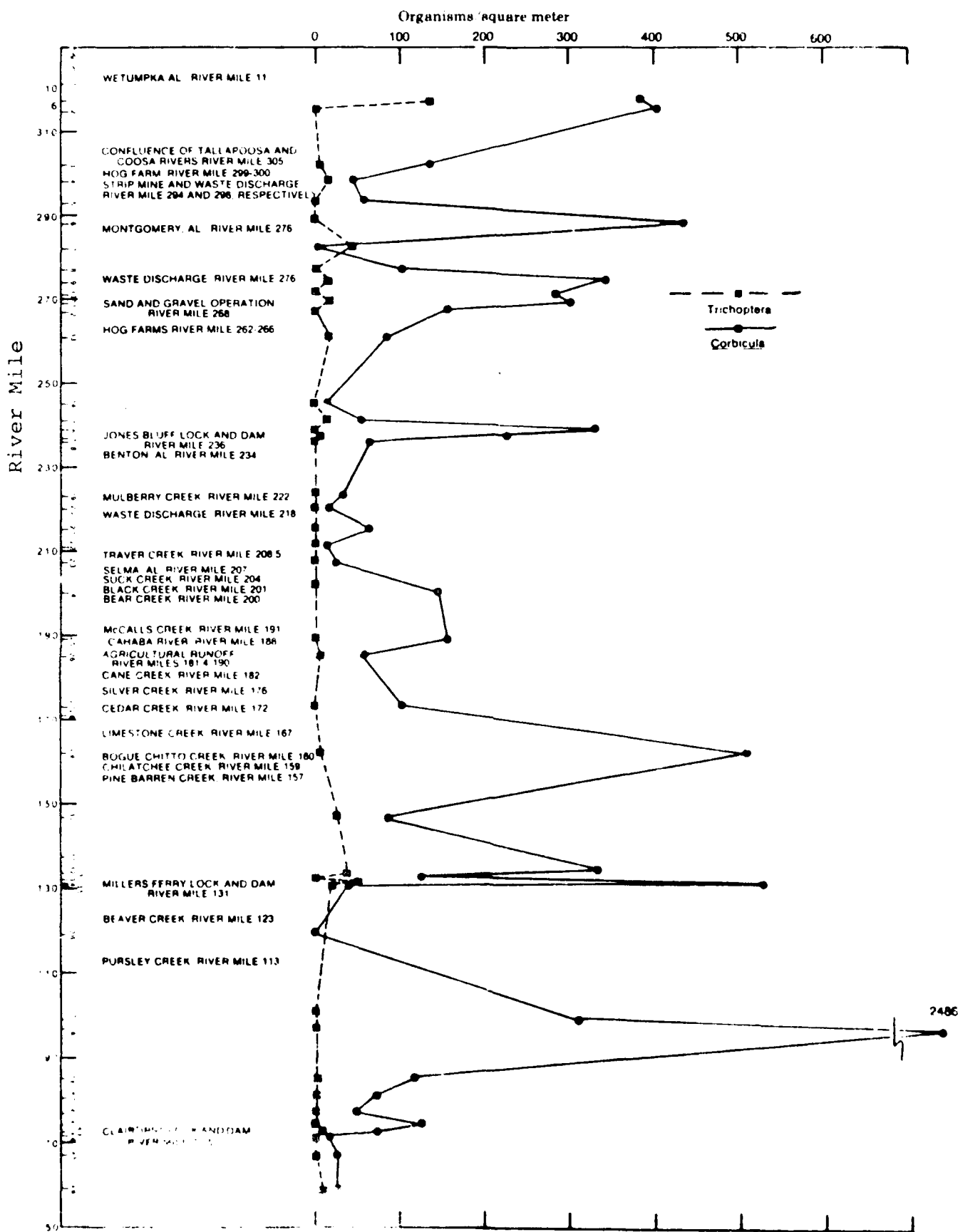


Figure 1. Trichoptera and Corbicula densities at 46 Alabama-Coosa River system stations during the period October 31 through November 11, 1977. Each value is the average number of organisms contained in three samples taken at a station.

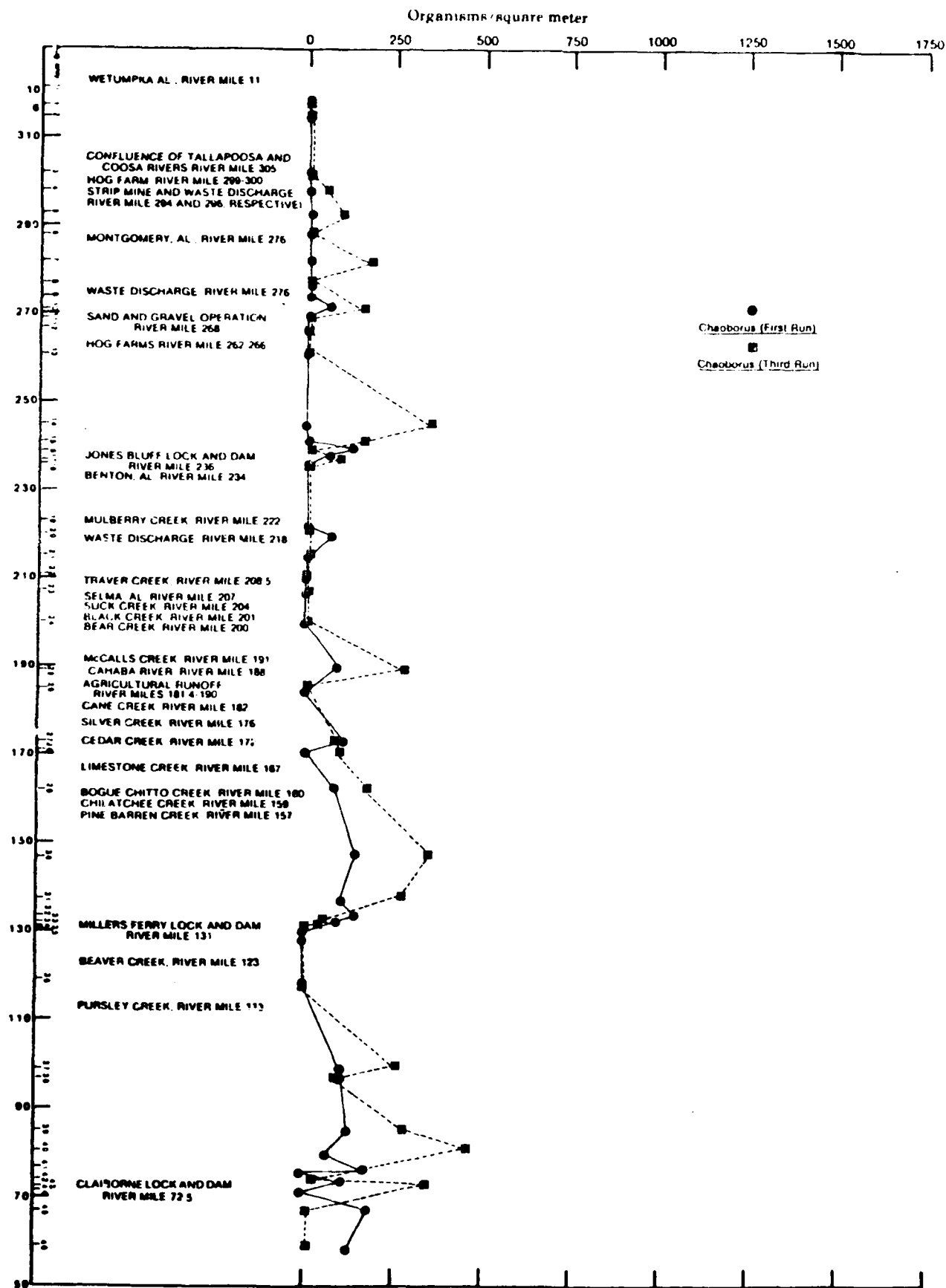


Figure 55.--*Chaoborus* density at 46 Alabama-Coosa River system stations during the periods August 9-25 and October 31 through November 11, 1977. Each value is the average number of organisms contained in three samples taken at a station.

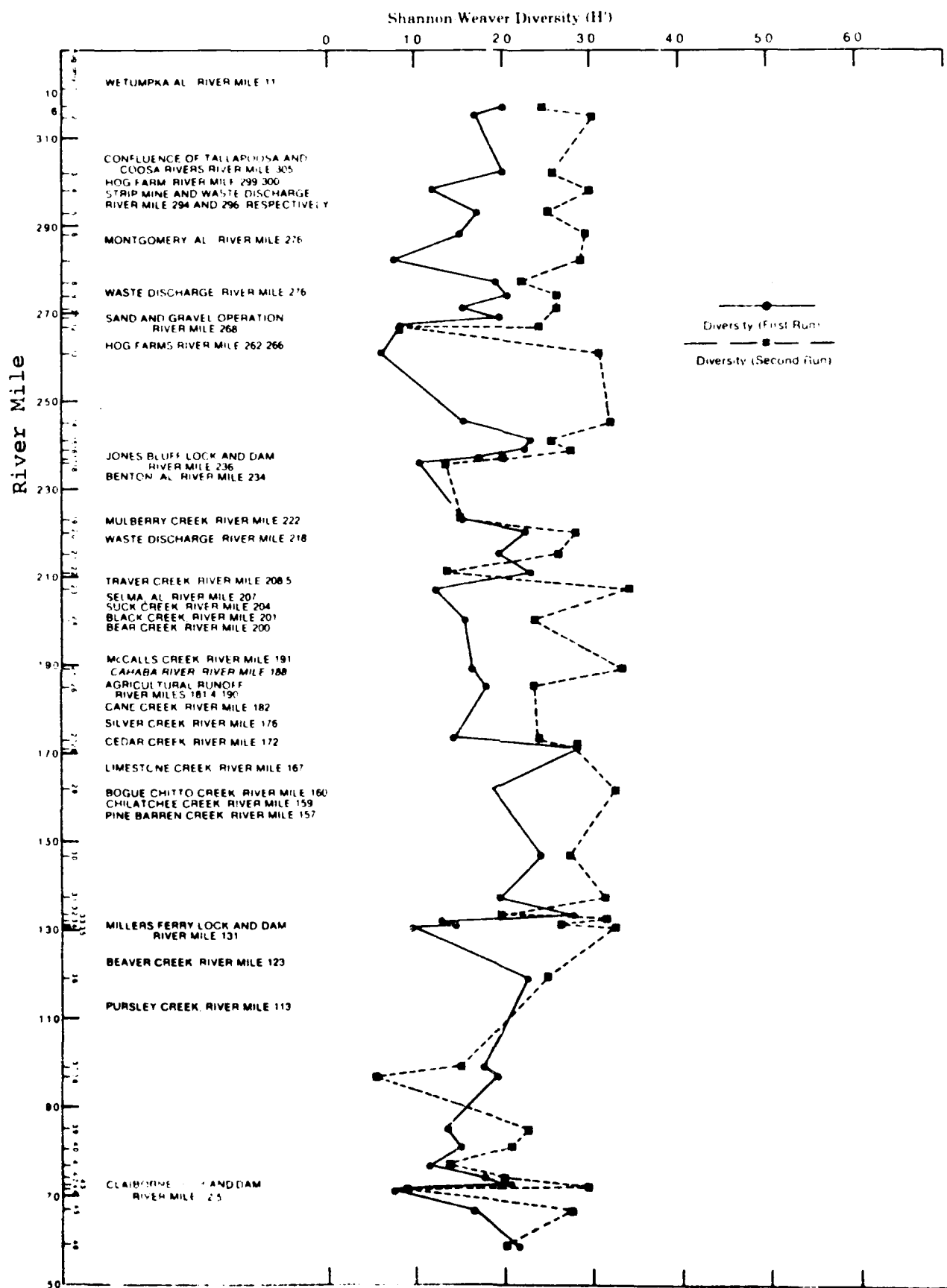


Figure 20. Shannon-Weaver H' values for macroinvertebrate samples collected with a Ponar dredge at Alabama-Coosa River system stations during the periods August 9-25 and September 19 through October 4, 1977.

3. Benthic Macroinvertebrates--multiplate sampler

The studies of the multiplate samplers indicated that the Chironomidae was the dominant benthic family in the area. This confirms and supports the findings of the Ponar dredge samples.

4. Aquatic Macrophytes

The vegetation bordering the Alabama River is mostly deciduous forest, and *Quercus*, *Flanera*, *Carya*, and *Taxus* are the dominant genera. In general, the river proper is not infested with aquatic macrophytes. However, two areas, from Miller's Ferry Lock and Dam to mile 143 and from Jones Bluff Lock and Dam to mile 249, do have large concentrations of macrophytes. Dominant species include *Alternanthera philoxeroides*, *Ficthornia crassipes*, *Sagittaria arifoliana*, *Elodea pectinoides*, and *Myriophyllum spicatum*. All of these occur in extensive colonies which could detrimentally affect recreation in the future. In the Alabama River, there probably is no need for concern that these plants will affect navigation since the river is deep and all except *Ficthornia crassipes* are rooted. The rooted species cannot survive in deep turbid waters similar to those of the river. The free-floating *Ficthornia* possibly can cause problems to navigation in areas just above dams where the species might get trapped and large colonies develop. No such colonies, however, were observed.

Alternanthera philoxeroides is a species which roots in shallow waters along the edges of the Alabama River. The decumbent stems float outward from shore forming floating mats, which often cover very large areas in protected bays and backwaters. This species is a major component in the two areas cited as having large infestations of aquatic plants. *A. philoxeroides* has been known to completely clog canals in Florida and Louisiana (Sculthorpe, 1967). This clogging of canals is possible because the canals are relatively narrow and the decumbent stems growing from each side can come into contact in the middle of the canal; therefore, they form a floating mat over the entire canal. This, however, probably will not occur on the Alabama River due to the width of the river. Thus, navigation probably will not be affected by this species. The species can, however, affect recreation in the river, as it now forms massive colonies in the bays and, as a result, can make fishing more difficult.

Ficthornia crassipes is a species whose stems float on the surface of the water but do not penetrate into the substrate. The petioles are greatly inflated with large development of aerenchyma. The species is a major component of only the community near Millers

Ferry Lock and Dam. *Elodea peltata* is notorious in Florida and Louisiana, covering lakes, canals, and rivers (Sculthorpe, 1967). Since the species is free-floating, it is moved by the wind and current. Large colonies were observed trapped in bays on the Alabama River. The species could possibly be trapped above a dam and cause problems with navigation.

Justicia maritima is a species which roots in shallow waters along the edges of the Alabama River. The decumbent stems float outward from shore forming floating mats, which often cover very large areas in protected bays and backwaters. The species is a major component in the two areas cited as having large infestations of aquatic vascular plants. *Justicia* has not been considered to directly affect navigation or recreation. However, Penfound (1940) indicates that large populations of the species can serve as breeding grounds for noxious insects and, therefore, indirectly affect recreation.

Isachne peplodes (also often called *Jussiaea repens*) is a species which roots in shallow waters along the edges of the Alabama River. The decumbent stems float outward from shore forming floating mats, which often cover very large areas in protected bays and backwaters. This species is a major component in the two areas cited as having large infestations of aquatic vascular plants. *Isachne* has been known to completely clog canals in various parts of the world (Chomchalow and Pongpangan, 1976). This clogging of canals is possible because the canals are relatively narrow and the decumbent stems growing from each side can come into contact in the middle of the canal; therefore, they form a floating mat over the entire canal. This, however, probably will not occur on the Alabama River due to the width of the river. Thus, navigation probably will not be affected by this species. The species, however, can affect recreation because it now forms massive colonies in the bays and, as a result, can make fishing more difficult.

Myriophyllum spicatum is a submersed species with whorled, deeply divided, pinnately compound leaves. The species forms relatively large colonies in shallow (to 2 feet in depth) water. The species is a major component of only the community near Millers Ferry Lock and Dam. *M. spicatum* is becoming very abundant in the northeastern and north-central United States where it is causing considerable recreation problems (Coffey and McNabb, 1974). Since the species is submersed and the Alabama River is too deep and turbid for plant growth at depths greater than 2 or 3 feet, the species poses no problem to navigation. The species can, however, affect recreation because it now forms massive colonies in the bays and, as a result, can make fishing more difficult.

It should be emphasized that the annotated list of aquatic plants (table D-2) includes only the locality at which a species was observed and no attempt was made at quantification. Some species, for example *Annamia coccinea*, are known from many localities, but there are few individuals per locality; whereas others, for example *Eichhornia crassipes*, occur in relatively few places but have thousands of plants per locality. These latter, potentially noxious, species are probably of more importance in reservoir management, but the data do not so indicate because quantitative data were not required by the study.

VI. SUMMARY

Water quality, biological and sediment samples were collected at 46 Alabama River stations on a continuous 3-week schedule between August 8 and December 8, 1977. The samples were returned to the laboratory, analyzed, and the data tabulated. Selected data were submitted to the U.S. Environmental Protection Agency for inclusion into their STORET retrieval system. Other data were vertically profiled or graphically depicted by river mile and station number.

The chemical quality of the water tested, with few exceptions, varied slightly from station to station. Based on isopleth data compiled above each dam on the Alabama River, there was no stratification observed during this study period. The Alabama River appears to be a fast-moving lotic-type water that is well-mixed in regards to chemical and temperature characteristics. The water was found to be predominantly of the calcium-magnesium carbonate type. The nutrient ion ammonia as nitrogen was above established standards at almost every station along the river and needs further investigation. Pesticides in the sediment also need closer monitoring. Overall, the chemical quality of the water is good.

Sediment quality data (which included 11 metals and 29 pesticide species) was collected once during the study period from all 46 sampling stations. The sediment data indicated areas of high total magnesium, iron, and manganese levels. Also, residues of certain pesticides indicated areas that were fairly high, especially at stations 13 and 17. Of those residues detected, Aldrin, DDT, and two PCB's (Arochlor 1254 and 1260) occurred in the highest concentration. The pesticide DDT was detected in 20 of the 46 sediment stations samples. The concentrations of arsenic, cadmium, chromium, copper, lead, mercury, nickel and zinc fell within normal background limits as compared to 10 years of USGS water quality and sediment data.

Biological organisms identified during the study included 119 plankton taxa, 134 benthic macroinvertebrate taxa and 76 macrophyte species. Phytoplankters most commonly encountered, in order of decreasing abundance, were green algae, diatoms, and blue-green algae. Zooplankters most commonly encountered, in order of decreasing abundance, were crustaceans, rotifers, and protozoans. The division Chlorophyta contained the highest diversity (29 genera) of any plankton

group encountered. Phytoplankton organism counts during the study may have been exceptionally low because of the required use of a Wisconsin plankton net with an 80-micron aperture mesh as a collection device as opposed to collecting whole water samples. Another probable result of using the Wisconsin net was the fragmentation of colonial and filamentous forms which made quantification difficult. Perhaps the most serious problem encountered during the plankton study involved the lack of accurate flow data for each station, which made accurate tabulation of organisms per liter of water sampled impossible.

The chironomids (class Insecta) were the dominant group of benthic macroinvertebrates found in both the Ponar and multiplate samples. Next in abundance were the annelids and the mollusks. By weight, *Corbicula* clams were the dominant organism in the Ponar samples. Throughout the study, pollution tolerant taxa were encountered more frequently than pollution intolerant taxa. One particular area (river miles 200 to 230) exhibited a drop in the density of several benthic taxa but no drop in the Shannon-Weaver diversity values. This seems to indicate that a reasonable number of taxa were present but in low numbers of individuals for each taxa. The reasons for this condition are unknown at this time.

Field investigations conducted at 276 sites between the confluence of the Coosa and Tallapoosa Rivers and Claiborne Lock and Dam revealed the presence of 76 species of aquatic plants comprising 43 families. Dominant species included *Alternanthera philoxeroides*, *Eichhornia crassipes*, *Justicia americana*, *Ludwigia peploides*, and *Myriophyllum spicatum*. Two areas were investigated that contained particularly large concentrations of macrophytes: Millers Ferry Lock and Dam to river mile 143 and Jones Bluff Lock and Dam to river mile 249.

VII. RECOMMENDATIONS

Based upon our experiences on the Alabama and Coosa Rivers in 1977, we submit the following recommendations for future studies:

1. Plankton are a very important biological constituent in the Alabama River; however, populations of these organisms are subject to a number of short-term fluctuations depending upon time of collection during the day, the time of the year, seasonal variation, rainfall and associated flooding, and water quality. One additional factor which significantly affected the outcome of our analyses was the rapid flow of the Alabama River. For these reasons and due to some duplication of data obtained at consecutive stations, the total number of stations for plankton studies could be reduced by 20 percent.
2. Flow data should be obtained at each site when samples are collected. Velocity at the point of collection should be an important part of the record and would provide good baseline information.
3. The fish fauna of any reservoir is an important biological component and needs to be investigated in future studies. Fishes feed upon both plankton and benthic macroinvertebrates; therefore, drastic long-term fluctuations in the supply of these food sources should be reflected in the diversity of the ichthyofauna. Fishes may also indicate the quality of water in a stream.
4. Pesticide residues showed up more significantly in the sediment samples as opposed to the water samples. More emphasis needs to be placed on selected pesticides based on usage in the area and long-term lives of metabolites. We recommend that cross-sectional benthic bed-material samples be collected and composited throughout the study area with special emphasis on tributaries draining from agricultural, industrial, and urban areas.
5. We recommend that tributary sites on the Alabama River be incorporated into the Phase II work scheduled. Field parameters such as dissolved oxygen, temperature, conductivity, and pH should be performed at mid-depth at the sites.

6. *Corbicula* (clam) tissue, which is present at most stations on the river, needs to be examined for heavy metals and pesticide residues during Phase II operations.
7. Special studies of diurnal and diel parameters such as dissolved oxygen and temperature should be carried out at least once during the Phase II study to determine any possible nocturnal effects.
8. Special nutrient studies of tributaries and sites above and below urbanized areas might also be considered for future post-impoundment projects.

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APPENDIX A

Water-quality and Biological STORET Data
and Isopleth Graphs

Table A-1.--Water-quality data from the Alabama-Coushatta Diversion System
for the period August 9 through December 8, 1977

Station Number 1		STATION - 02411605 COOSA R NR MONTGOMERY ALABAMA RIVER BASIN													
DATE	TIME	WATER TEMP		TURB		TRANSP		COLOR		REDUX		CONDUCTIV		DO	
		CENT	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
770809	0830	29.0	10.0	1.8	15	100	121	6.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3
770829	1000	29.0	21.0	1.4	40	240	81	8.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5
770919	1245	21.0	25.0	0.8	60	160	156	8.5	0.9	0.9	0.9	0.9	0.9	0.9	0.9
771011	1250	17.0	15.0	0.9	60	230	203	10.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5
771031	1215	12.5	35.0	0.9	80	220	168	9.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0
771121	1430	9.0	55.0	0.1	140	240	114	11.3	0.5	0.5	0.5	0.5	0.5	0.5	0.5
DATE	TIME	PH		T ALK		NH3-NH4		TOT KJEL		NO2&NO3		PHOS-TOT		PHOS-DIS	
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
770809	0830	6.7	48.4	0.00	0.10	0.00	0.09	0.09	0.18	0.01	0.01	0.01	0.01	0.01	0.01
770829	1000	7.8	27.9	0.04	0.17	0.04	0.09	0.09	0.20	0.00	0.00	0.00	0.00	0.00	0.00
770919	1245	7.6	57.4	0.12	0.72	0.12	0.14	0.14	0.01	0.00	0.00	0.00	0.00	0.00	0.00
771011	1250	6.8	60.7	1.50	0.22	1.50	0.13	0.13	0.13	0.03	0.03	0.03	0.03	0.03	0.03
771031	1215	6.7	45.9	0.00	0.23	0.00	0.24	0.24	0.14	0.12	0.12	0.12	0.12	0.12	0.12
771121	1430	7.3	36.9	0.00	0.10	0.00	0.05	0.05	0.10	0.08	0.08	0.08	0.08	0.08	0.08
DATE	TIME	CALCIUM		MAGNESIUM		CHLORIDE		SULFATE		IRON		MANGANESE		MANGANESE	
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
770809	0830	11.0	3.8	6.4	6.0	6.0	6.0	6.0	6.0	0	0	55	55	55	55
770829	1000	7.4	2.7	5.0	5.0	5.0	5.0	5.0	5.0	50	50	67	67	67	67
770919	1245	15.0	5.8	8.2	6.0	6.0	6.0	6.0	6.0	20	20	160	160	160	160
771011	1250	15.0	6.1	8.0	9.0	9.0	9.0	9.0	9.0	30	30	130	130	130	130
771031	1215	14.0	4.8	7.6	9.0	9.0	9.0	9.0	9.0	80	80	70	70	70	70
771121	1430	11.0	0.0	5.6	8.4	8.4	8.4	8.4	8.4	70	70	58K	58K	58K	58K
DATE	TIME	TOT COLI		FEC COLI		FEC STREP		CHLORPHYL		CHLORPHYL		CHLORPHYL		CHLORPHYL	
		MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L
770809	0830	4000	6	40	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8
770829	1000	4100	37	14	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
770919	1245	3600	50	260	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0	8.0
771011	1250	530	38	78	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
771031	1215	1200	24	51	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8	5.8
771121	1430	5400	43	110	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8

Station Number 2

Table A-1.--Continued

STATION - 02419965											COOSA R BELOW MONTAUCK NR ELMORE ALABAMA RIVER BASIN										
		00010		00076		00078		00080		00090		00094		00299		00310		00315			
WATER		TEMP		TURB		TRANSP		COLOR		REDUX		CONDUCTIV		DO		MOD		COD			
CENT		FTU		METERS		SECCHI		PT-CO		URP		FIELD		PROBE		5 DAY		LOWLEVEL			
		MACH						UNITS		MV		MICROMHO		MG/L		MG/L		MG/L			
DATE	TIME	28.5	40.0	1.1	100	190	103	7.8	0.7	9.0											
770809	0910	28.0	29.0	1.0	62	220	110	8.2	0.5												
770829	1100	21.0	25.0	0.8	75	160	154	6.1	1.0												
770919	1530	17.0	20.0	0.9	85	220	205	10.6	0.5	62.0											
771011	1315	13.0	42.0	0.1	90	220	181	9.2	0.0												
771031	1400	10.0	45.0	0.6	150	240	112	11.1	0.2												
771121	1450																				
		00400		00418		00610		00625		00630		00665		00671		00680		00900			
PH		T ALK		NH3+NH4-		TOT KJEL		NO2&NO3		PHOS-TOT		PHOS-DIS		T ORG C		CACO3		TOT HARD			
		CACO3		N TOTAL		N		N-TOTAL		MG/L P		MG/L P		MG/L		MG/L		MG/L			
DATE	TIME	6.3	36.1	0.00	0.18	0.09	0.09	0.11	0.00	1.8											
770809	0910	7.4	36.9	0.14	0.29	0.05	0.14	0.02	0.00	1.5											
770829	1100	7.7	59.0	0.18	0.83	0.17	0.07	0.03	0.00	3.2											
770919	1530	6.6	54.9	0.17	0.17	0.37	0.15	0.13	0.03	1.8											
771011	1315	6.5	49.2	0.00	0.12	0.40	0.10	0.03	0.03	4.0											
771031	1400	7.3	36.9	0.01	0.14																
771121	1450																				
		00915		00925		00940		00946		00959		01045		01046		01055		01056			
CALCIUM		MAGNESIUM		CHLORIDE		SULFATE		SILICA		IRON		MANGNESE		MANGNESE		MN-DISS		UG/L			
CA-DISS		MG-DISS		CL		SO4-DISS		D-SOLVEL		FERRIC		FE-DISS		MN		UG/L		UG/L			
DATE	TIME	8.0	3.0	5.0	4.4	6.2	140	30 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>													
770809	0910	9.4	3.3	5.2	2.8	8.1	400	30													
770829	1100	15.0	6.0	9.0	5.0	4.3	870	10													
770919	1530	16.0	6.0	8.4	9.0	4.5	130	130													
771011	1315	13.0	4.6	6.8	8.0	7.2	100	40													
771031	1400	11.0	3.0	5.0	9.0	6.4	100	150													
771121	1450																				
		31501		31616		31673		32210		32212		32214		30299		30300					
TOT COLI		FEC COLI		FECSTREP		CHLMPHYL		CHLMPHYL		CHLMPHYL		MES-SUSP		MES-TOUE		DISS-180					
MFIMENDO		MFM-FCHR		MFKFAGAR		A		B		C		JT 100 C		MG/L		MG/L					
DATE	TIME	84000	34	36	4.2	1.2 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>															
770809	0910	3400 <td>33</td> <td>12</td> <td>14.0</td> <td>3.0</td> <td>4.0</td> <td>0</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	33	12	14.0	3.0	4.0	0													
770829	1100	16000 <td>30</td> <td>280</td> <td>7.4</td> <td>3.0</td> <td>7.2</td> <td>13</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	30	280	7.4	3.0	7.2	13													
770919	1530	5200 <td>65</td> <td>73</td> <td>7.5</td> <td>1.0</td> <td>6.0</td> <td>18</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	65	73	7.5	1.0	6.0	18													
771011	1315	3300 <td>24</td> <td>69</td> <td>8.3</td> <td>11.0</td> <td>30.0</td> <td>10</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	24	69	8.3	11.0	30.0	10													
771031	1400	3100 <td>33</td> <td>54</td> <td>6.7</td> <td>7.1</td> <td>22.0</td> <td>13</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	33	54	6.7	7.1	22.0	13													
771121	1450																				

Table A-1.--Continued

STATION - 02419900											ALA R AT CROSADE FERRY NR MONT. ALABAMA RIVER BASIN										
DATE	TIME	00010	00070	00078	00080	00090	00094	00299	00310	00335											
		WATER	TURB	TRASP	COLOR	REDOX	CONDUCTIV	DO	HOL	COG											
DATE	TIME	TEMP	THBIDMTR	SECCHI	PT-CO	ORP	FIELD	PROBE	5 DAY	LOWLEVEL											
		CENT	HACH FTU	METERS	UNITS	MV	MICROMHO	MG/L	MG/L	MG/L											
770809	1030	29.0	20.0	1.0	120	190	116	12.0	1.1	6.0											
770829	1300	28.0	30.0	0.8	69	210	90	8.3	0.7												
770919	1645	21.0	35.0	0.8	140	180	150	8.7	1.1												
771011	1430	17.0	10.0	0.9	30	220	170	10.4	0.4												
771031	1515	13.0	25.0	0.8	100	240	178	9.0	0.0	82.0											
771121	1510	10.0	30.0	0.6	150	230	105	11.2	0.2												
DATE	TIME	00400	00410	00610	00625	00630	00665	00671	00680	00900											
		PH	T ALK	NH3+NH4-	TOT KJEL	NO2&NO3	PHOS-TOT	PHOS-DIS	T ORG C	TOT HARD											
DATE	TIME	SU	CAC03	N TOTAL	N	MG/L	MG/L P	MG/L P	C	CAC03											
			MG/L	MG/L	MG/L				MG/L	MG/L											
770809	1030	6.4	41.0	0.00	0.10	0.01	0.07	0.02	1.9	37											
770829	1300	7.5	30.3	0.10	0.16	0.09	0.08	0.01	1.7	31											
770919	1645	7.5	45.9	0.02	0.57	0.12	0.05	0.02	6.6	51											
771011	1430	6.4	45.1	0.33	0.11	0.20	0.04	0.02	2.4	55											
771031	1515	6.5	45.9	0.03	0.16	0.35	0.15	0.11	4.0	52											
771121	1510	7.3	36.1	0.01	0.08	0.39	0.05	0.04	15.0	40											
DATE	TIME	00915	00925	00940	00946	00955	01045	01046	01055	01056											
		CALCIUM	MGNSIUM	CHLORIDE	SULFATE	SILICA	IRON	FE+TOT	MANGNESE	MANGNESE											
DATE	TIME	CA+DISS	MG+DISS	CL	SO4+DISS	DISSOLVED	FE+TOT	FE+DISS	MN	MN+DISS											
		MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	UG/L	UG/L	UG/L											
770809	1030	9.2	3.3	5.2	5.6	6.4	320	30	53	7.0											
770829	1300	7.6	2.8	4.8	5.0	6.4	420	30	82	0.00											
770919	1645	13.0	5.2	7.6	5.0	4.5	310	20	110	25.0											
771011	1430	13.0	5.4	7.6	5.2	4.9	390	150	130	11.0											
771031	1515	13.0	4.6	6.0	10.4	8.2	1000	110	85	8.0											
771121	1510	11.0	2.9	5.6	6.0	5.8	51	210	68	21.0											
DATE	TIME	31501	31616	31673	32210	32212	32214	70299	70300												
		TOT COLI	FEC COLI	FECSTREP	CHLRPHYL	CHLRPHYL	CHLRPHYL	RES+SUSP	RESIDUE												
DATE	TIME	MFIMERDO	MFH-FCSH	MFH-FAGAR	A	B	C	AT 180 C	DIC5-180												
		/100ML	/100ML	/100ML	UG/L	UG/L	UG/L	MG/L	C	MG/L											
770809	1030	4900	21	29	9.7	5.6	22.0	15	86												
770829	1300	1150	38	61	15.0	2.4	4.2	3	64												
770919	1645	545	20	600	8.2	2.6	4.9	30	11												
771011	1430	673	140	180	8.4	6.2	23.0	10	11												
771031	1515	243	13	61	11.0	10.6	54.0	12	13												
771121	1510	370	27	25	9.5	12.	48.0	1	6												

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STATION - 02419983 ALA R NR CHISOLM ALABAMA RIVER BASIN												
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRBDIMTR HACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CHLOROPHYL FIELD MICROMHO	00099 DO PROBE MG/L	00310 5 DAY BOD MG/L	00335 LOWLEVEL MG/L		
770809	1145	29.5	40.0	0.8	70	140	99	10.9	1.6	6.5		
770829	1430	29.0	18.0	0.9	65	0	102	4.0	0.7			
770920	1030	20.0	30.0	0.8	110	140	150	3.3	0.7			
771011	1500	17.0	15.0	0.8	40	220	181	10.2	0.6			
771031	1550	13.0	30.0	0.8	90	240	174	9.2	0.0	116.0		
771121	1530	9.0	50.0	0.6	80	240	108	10.9	0.4			

00400		00410	00610	00625	00630	00655	00671	00680	00900			
PH	T ALK CACO3	NR3-NH4- N TOTAL	TOT KJEL N	NO2&NO3 N-TOTAL	PHOS-TOT MG/L P	PHOS-DIS OPTHO	T ORG C C	TOT HARD CACO3				
DATE	TIME	SU	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L			
770809	1145	6.4	39.4	0.00	0.15	0.05	0.04	0.01	0.9	33		
770829	1430	7.7	36.1	0.09	0.17	0.02	0.07	0.00	1.9	35		
770920	1030	7.2	46.7	0.01	0.48	0.16	0.34	0.00	6.7	47		
771011	1500	6.5	45.1	0.01K	0.20	0.00	0.13	0.03	2.3	61		
771031	1550	5.8	45.1	0.04	0.24	0.27	0.09	0.05	3.4	49		
771121	1530	7.3	34.4	0.00	0.05	0.39	0.03	0.05	3.6	40		

00915		00925	00940	00945	00955	00965	00975	01055	01056			
CALCIUM CAL-DISS	MGNSIUM MG-DISS	CHLORIDE CL	SULFATE SO4-DISS	SILICA DISSOLVED	IRON MG/L	FE-DISS UG/L	MANGNESE MG/L	MANGNESE MG/L	MANGNESE MG/L			
DATE	TIME	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L			
770809	1145	8.1	3.0	4.2	2.6	6.0	3.0	69	0.00			
770829	1430	8.6	3.2	5.2	14.0	5.8	3.0	79	0.00			
770920	1030	12.0	4.9	8.4	5.0	2.8	1.0	470	28.0			
771011	1500	15.0	5.7	7.2	10.4	5.5	1.0	170	15.0			
771031	1550	12.0	4.6	6.4	11.0	7.5	1.0	91	14.0			
771121	1530	11.0	2.9	4.5	6.2	5.6	1.0	78	31.0			

01501		01516	01573	02210	02212	02214	02216	02218	02220			
TOT SOLI MFG-DO	FE-COL MFG-FCBR	FEC-REP MFG-FCBR	CHL-APHL A	CHL-APHL B	CHL-APHL C	CHL-APHL D	CHL-APHL E	CHL-APHL F	CHL-APHL G			
DATE	TIME	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L			
770809	1145	14000	40	23	13.0	1.0	1.7	15	12			
770829	1430	19.0	12	17	17.0	0.0	0.3	0	13			
770920	1030	28.0	0	1700	0.2	0.0	0.0	0.0	110			
771011	1500	10000	140	140	0.3	0.0	0.0	0.0	114			
771031	1550	4800	24	54	5.0	0.0	0.0	0.0	140			
771121	1530	2800	32	13	5.9	0.0	0.0	0.0	153			

DATE	TIME	WATER TEMP CENT	TURBIDITY HAZARD FTU	SECCHI METERS	PH-CO UNITS	REDOX MV	CHLOROPHYL FIELD	PHOS-P MG/L	PHOS-DIS MG/L	TOTAL C	5 DAY BOD MG/L	LOWLEVEL MG/L
770809	1400	29.5	30.0	1.0	70	110	107	9.4	9.4	1.3	1.3	7.0
770829	1700	29.0	18.0	1.1	65	220	110	8.3	8.3	0.3	0.3	
770920	1130	20.0	25.0	0.8	95	140	163	8.3	8.3	0.5	0.5	
771011	1600	17.0	45.0	1.0	40	230	181	10.2	10.2	0.2	0.2	78.0
771101	0955	12.0	35.0	0.8	95	230	165	10.7	10.7	0.0	0.0	
771121	1550	9.0	40.0	0.6	90	240	108	10.8	10.8	0.5	0.5	
00+00		PH	TALK CACO3	NH3-N N TOTAL	IOT KJEL N	NO2&NO3 N-TOTAL	PHUS-TOT MG/L P	PHOS-DIS MG/L P	TOTAL C	TOTAL CACO3		
770809	1400	6.5	42.6	0.00	0.18	0.01	0.07	0.00	0.00	1.4	33	
770829	1700	7.4	36.9	0.09	0.19	0.10	0.01	0.00	0.00	2.0	38	
770920	1130	7.2	50.0	0.02	0.95	0.15	0.29	0.00	0.00	3.4	50	
771011	1600	6.5	45.0	0.24	0.14	0.15	0.12	0.00	0.00	3.2	30	
771101	0955	7.7	45.1	0.07	0.22	0.63	0.15	0.12	0.12	3.1	36	
771121	1550	7.3	34.4	0.03	0.10	0.40	0.05	0.02	0.02	6.3	37	
00915		CALCIUM CA+DISS	MAGNESIUM MG+DISS	CHLORIDE CL	SULFATE SO4+DISS	SILICA DISSOLVED	IRON FE+TOT	IRON FE+DISS	MANGANESE MN	MANGANESE MN+DISS		
770809	1400	8.1	3.0	5.2	5.0	7.9	270	60	53	0.00	0.00	
770829	1700	9.8	3.3	6.4	3.4	5.8	330	20	78	0.00	0.00	
770920	1130	12.0	5.4	6.4	7.0	5.2	500	20	100	5.00	5.00	
771011	1600	12.0	4.9	7.6	8.0	3.8	420	40	150	19.0	19.0	
771101	0955	9.4	4.2	3.6	18.0	8.2	1400	150	89	13.0	13.0	
771121	1550	10.0	2.9	5.2	8.0	6.0	1500	130	87	5.00	5.00	
31501		TOT COLI MPN/100ML	FEC COLI MPN/100ML	FECSTREP MPN/100ML	CHLPHYL A	CHLPHYL B	CHLPHYL C	RES-SUSP AT 180 C	RESIDUE DISS-180 C			
770809	1400	63000	34	30	17.0	2.2	2.9	14	63			
770829	1700	1000	8	22	15.0	2.7	3.3	8	77			
770920	1130	10000	240	2000	7.0	3.4	8.7	27	122			
771011	1600	760	160	170	5.4	1.2	3.2	5	122			
771101	0955	10000	26	80	6.4	6.1	25.0	19	121			
771121	1550	4200	42	32	6.5	0.1	29.0	5	87			

Table A-1.--Continued

STATION - 02419987											ALA R AT HWY 143 NR MONTGOMERY											ALABAMA RIVER BASIN										
		00010		00076		00078		00080		00090		00094		00299		00310		00335														
		WATER		TURB		TRANSP		COLOR		REDUX		CONDUCTIV		DO		BOD		COD														
		TEMP		TRBDIMTR		SECC1		PT-CO		OMP		FIELD		PROBE		5 DAY		LOWLEVEL														
		CENT		HACH FTU		METERS		UNITS		MV		MICROMHO		MG/L		MG/L		MG/L														
DATE		TIME																														
770811		0905		30.0		0.8		110		180		105		9.4		0.3		11.0														
770830		0900		19.0		1.1		50		210		96		8.2		0.0																
770920		1545		40.0		0.8		90		120		166		8.0		0.4																
771012		0950		20.0		0.9		85		210		179		10.6		0.1																
771101		1050		35.0		0.8		100		230		178		10.8		0.0		118.0														
771122		1010		60.0		0.6		130		230		104		13.4		0.0																

00400		PH		00410		00610		00625		00630		00665		00671		00680		00900														
		T ALK		NH3+NH4-		TOT KJEL		NO2+NO3		PHOS-TOT		PHOS-DIS		T ORG C		TOT HARD		CACO3														
		CACO3		N TOTAL		N		N-TOTAL		MG/L P		MG/L P		C		CACO3		MG/L														
DATE		TIME																														
770811		0905		39.4		0.00		0.22		0.06		0.06		0.00		0.9		36														
770830		0900		35.3		0.14		0.31		0.06		0.26		0.01		1.9		32														
770920		1545		49.2		0.000		0.35		0.16		0.13		0.00		3.1		49														
771012		0950		50.8		0.02		0.18		0.25		0.04		0.00		1.9		54														
771101		1050		56.6		0.28		0.11		0.30		0.13		0.12		3.5		49														
771122		1010		37.7		0.01		0.08		0.41		0.05		0.02		36.0		40														

00915		CALCIUM		00925		MAGNESIUM		00940		SULFATE		00955		01045		01055		01056														
		CA-DISS		MG-DISS		MG-DISS		CHLORIDE		SO4-DISS		DISSOLVED		FE-TOT		MANGNESE		MANGNESE														
		MG/L		MG/L		MG/L		MG/L		MG/L		MG/L		UG/L		UG/L		UG/L														
DATE		TIME																														
770811		0905		9.0		3.2		5.0		4.8		1.0		60.0		53		0.00														
770830		0900		8.0		2.9		5.4		4.0		4.9		35.0		24		0.00														
770920		1545		12.0		5.2		8.6		5.6		4.3		21.0		110		5.0K														
771012		0950		14.0		4.6		7.4		8.0		4.2		20.0		130		6.0														
771101		1050		12.0		4.6		7.6		11.0		6.0		90.0		92		17.0														
771122		1010		11.0		2.9		4.4		7.0		5.6		110.0		76		24.0														

31501		TOT COLI		31616		FEC COLI		31673		32210		32212		32214		70300																
		MFIMENDO		MFM-FCBR		MFKFAGAR		CHLPHYL		CHLPHYL		CHLPHYL		RES-MOSP		RES-SIDE																
		/100ML		/100ML		/100ML		/100ML		A		B		C		AT 180 C		AT 180 C														
DATE		TIME																														
770811		0905		15		19		17.0		17.0		2.1		25.0		14		66														
770830		0900		6		20		12.0		12.0		2.3		2.9		0		67														
770920		1545		2600		1200		7.4		7.4		3.5		10.0		10		90														
771012		0950		150		160		7.1		7.1		3.1		19.0		31		97														
771101		1050		24		82		8.8		8.8		11.0		35.0		9		118														
771122		1010		130		50		5.2		5.2		5.0		17.0		12		0														

Table A-1.--Continued

Station Number 7

STATION - 02419989											ALA R NR MATWELL AFB NR MONT. ALABAMA RIVER BASIN										
DATE		TIME	00010 WATER TEMP CENT	00076 TURB TRSDMTR MACH RTU	00078 TRANSP SECHI METERS	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 DOU 5 DAY MG/L	00335 LOWLEVEL MG/L										
770811	1030		28.5	30.0	0.9	70	200	110	8.7	1.1	8.0										
770830	1030		28.5	20.0	1.1	42	220	107	7.4	0.4											
770920	1045		21.0	45.0	0.8	100	120	165	8.3	0.5											
771012	1025		16.0	20.0	1.0	85	230	176	10.2	0.5	120.0										
771101	1300		13.0	25.0	0.8	90	230	188	10.6	0.0											
771122	1040		9.0	40.0	0.6	150	230	108	13.0	0.0											
DATE		TIME	00400 PH	00410 T ALK CACO3 MG/L	00510 NH3-NH4- N TOTAL MG/L	00525 TOT N-CEL N MG/L	00630 NO2+NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00671 PHOS-UIS ORTHO MG/L P	00680 T ORP C C MG/L	00900 TOT HARD CACO3 MG/L										
770811	1030		6.4	39.4	0.00	0.14	0.05	0.11	0.04	1.1	37										
770830	1030		7.4	37.7	0.11	0.19	0.08	0.21	0.01	1.2	35										
770920	1045		7.4	48.4	0.15	0.30	0.15	0.39	0.00	3.2	45										
771012	1025		6.8	51.7	0.03	0.17	0.23	0.07	0.06	1.8	50										
771101	1300		7.9	48.4	0.00	0.16	0.39	0.17	0.12	3.7	44										
771122	1040		7.3	35.3	0.03	0.20	0.42	0.13	0.05	3.8	39										
DATE		TIME	00915 CALCIUM CA-OISS MG/L	00925 MAGNESIUM MG-OISS MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-OISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE-TOT UG/L	01046 IRON FE-OISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-OISS UG/L										
770811	1030		9.4	3.2	5.8	4.8	7.1	380	20	61	0.00										
770830	1030		8.8	3.2	6.6	3.4	4.9	340	10	75	0.00										
770920	1045		11.0	5.0	9.8	8.4	3.3	430	30	150	32.0										
771012	1025		12.0	4.8	7.4	8.4	4.4	250	140	170	12.0										
771101	1300		9.8	4.5	8.0	9.0	7.8	870	100	83	14.0										
771122	1040		11.0	2.8	5.2	3.0	5.9	1200	150	72	36.0										
DATE		TIME	31501 TOT COLI MFIME400 /100ML	31515 FEC COLI MFME400 /100ML	31673 FECSTRAP MFKAFAAR /100ML	32210 CHLRPHYL A UG/L	32212 CHLRPHYL B UG/L	32214 CHLRPHYL C UG/L	70249 MES-SUSP AT 180 C MG/L	70300 RESIDUE DISS-180 C MG/L											
770811	1030		1800	100	450	17.0	19.0	65.0	14	65											
770830	1030		18000	370	3500	11.0	3.2	3.1	5	69											
770920	1045		17000	2900	900	4.7	4.8	12.0	22	92											
771012	1025		5200	150	240	18.0	20.0	66.0	10	99											
771101	1300		23000	360	1000	6.4	5.9	19.0	42	23											
771122	1040		17000	540	1500	5.4	4.9	18.0	16	70											

Table A-1.--Continued

STATION - 02420045												ALA R NR PRATTVILLE ALABAMA RIVER BASIN											
00010		00076		00078		00080		00090		00094		00299		00310		00335							
WATER TEMP		TURB		TRANSP		COLOR		REDOX		CONDUCTIV		DO		BOD		COD							
CENT		MACH FTU		SECCHI		PT-CO		ORP		FIELD		PROBE		5 DAY		LOWLEVEL							
DATE TIME		METERS		UNITS		MV		MICROMHO		MG/L		MG/L		MG/L		MG/L							
770811	1700	29.5	25.0	0.8	80	210	119	10.8	1.5	6.0													
770830	1255	29.0	15.0	0.0	45	200	122	8.0	0.0														
770920	1800	21.0	50.0	0.8	110	110	155	8.1	1.1														
771012	1100	16.0	40.0	0.9	50	230	171	10.2	0.5	166.0													
771101	1340	12.5	55.0	0.8	85	220	180	9.9	0.0														
771128	1130	8.0	30.0	0.8	100	110	92	11.2	0.8														

00400 PH		00410 TALK CAC03 MG/L		00610 NH3-NH4-N TOTAL MG/L		00625 TOT KJEL N MG/L		00630 NO2+NO3 N-TOTAL MG/L		00655 PHUS-TOT MG/L P		00671 PHOS-DIS ORTHO MG/L P		00680 T ORG C MG/L		00900 TOT HARD CAC03 MG/L							
770811	1700	7.2	41.0	0.00	0.23	0.09	0.11	0.09	0.11	0.00	0.8	49											
770830	1255	7.5	41.0	0.11	0.20	0.09	0.15	0.01	0.17	0.01	1.7	39											
770920	1800	7.3	48.4	0.03	0.32	0.16	0.23	0.03	0.23	0.03	3.0	47											
771012	1100	7.1	49.2	0.16	0.18	0.17	0.07	0.00	0.16	0.00	1.6	57											
771101	1340	7.9	50.0	0.37	0.16	0.37	0.16	0.12	0.12	0.12	2.9	44											
771128	1130	7.0	27.9	0.00	0.04	0.34	0.05	0.03	0.03	0.03	4.7	30											

00915 CALCIUM CARBONATE MG/L		00925 MGNESIUM MG-DISS MG/L		00940 CHLORIDE CL MG/L		00944 SULFATE SO4-DISS MG/L		00955 SILICA DISSOLVED MG/L		01045 IRON FE-TOT MG/L		01046 IRON FE-DISS MG/L		01055 MANGNESE MN MG/L		01056 MANGNESE MN-DISS MG/L							
770811	1700	14.0	3.3	4.0	5.4	3.6	30	87	6.0														
770830	1255	9.7	3.6	6.6	3.5	3.2	60	63	6.0														
770920	1800	12.0	4.8	8.6	4.0	4.2	20	160	12.0														
771012	1100	15.0	4.6	8.0	7.2	3.4	70	170	18.0														
771101	1340	10.0	4.5	6.0	11.2	4.8	30	98	18.0														
771128	1130	8.2	2.2	3.6	6.0	10.0	110	82	26.0														

31501 TOT CULI MFHENDO /100ML		31616 FEC COLI MFM-FCBR /100ML		31673 FECSTREP MFRFACAR /100ML		32210 CHLORPHYL A MG/L		32212 CHLORPHYL B MG/L		32214 CHLORPHYL C MG/L		70300 RESIDUE DISS-180 C MG/L											
770811	1700	74000	340	150	7.8	1.8	4.1	30	76														
770830	1255	27000	16	76	8.1	1.5	2.1	9	78														
770920	1800	22000	0	1300	11.0	6.3	18.0	6	87														
771012	1100	3400	190	190	4.7	3.8	9.0	5	49														
771101	1340	120008	540	20008	12.0	15.0	51.0	24	101														
771128	1130	3600	75	320	3.7	2.9	10.0	11	57														

Table A-1.--Continued

Station Number 9

STATION - 02420600										
ALA R BELOW AUTAUGA CN NW PHATVL ALABAMA RIVER BASIN										
DATE	TIME	00010 WATER TEMP CENT	00076 TUBB TRBIDMT HACH F10	00078 TRANSP SECCMI METERS	00080 COLUM PT-CO UNITS	00090 HEDOX OHP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 HOD 5 DAY MG/L	00335 COD LO-LEVEL MG/L
770812	0740	28.5	10.0	1.0	30	130	107	9.0	0.0	6.5
770830	1550	29.0	52.0	1.1	45	200	108	8.2	1.0	
770921	0900	20.5	40.0	1.0	90	120	155	8.0	1.3	
771012	1330	16.0	40.0	0.9	65	240	172	10.2	0.6	
771101	1355	12.5	35.0	0.8	90	230	181	10.2	0.0	148.0
771128	1205	8.0	50.0	0.8	140	80	87	11.0	0.1	
DATE	TIME	00400 PH	00410 T ALK CAC03 MG/L	00410 NH3-NH4- N TOTAL MG/L	00425 TOT N-JEL N MG/L	00630 NO2+NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00671 PHOS-DIS ORTMO MG/L P	00670 T ORG C C MG/L	00900 TOT HARD CAC03 MG/L
770812	0740	7.7	98.4	0.00	0.09	0.07	0.11	0.01	1.4	36
770830	1550	7.4	34.4	0.09	0.22	0.11	0.72	0.05	1.3	34
770921	0900	7.0	46.7	0.03	0.96	0.16	0.23	0.04	4.9	48
771012	1330	7.2	54.1	0.16	0.21	0.18	0.07	0.00	1.4	54
771101	1355	7.7	47.6	0.18	0.04	0.37	0.15	0.15	2.7	52
771128	1205	7.3	27.9	0.00	0.08	0.34	0.09	0.05	4.0	29
DATE	TIME	00915 CALCIUM CA-DISS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00946 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE-TOT UG/L	01046 IRON FE-DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L
770812	0740	9.2	3.2	6.0	3.8	6.6	450	30	52	0.00
770830	1550	8.5	3.1	6.4	4.4	5.0	460	40	61	0.00
770921	0900	12.0	5.0	7.6	7.4	3.6	680	30	81	10.0
771012	1330	14.0	4.6	7.8	8.0	4.3	350	30	140	5.0K
771101	1355	13.0	4.6	8.0	8.4	5.5	1100	20	97	22.0
771128	1205	8.1	2.2	4.0	4.0	9.1	1200	250	85	27.0
DATE	TIME	31501 TOT CULI MFIMENDO /100ML	31616 FEL COLI MFIM-FCBR /100ML	31673 FECSTREP MFKFAGAR /100ML	32210 CHLRPHYL A UG/L	32212 CHLRPHYL B UG/L	32214 CHLRPHYL C UG/L	70299 MES-SUSP AT 180 C MG/L	70300 RESIDUE DISS-180 C MG/L	
770812	0740	40000	110	57	8.1	8.2	27.0	20	70	
770830	1550	5300	170	69	7.3	2.3	5.1	5	65	
770921	0900	8000	650	410	6.4	4.5	12.0	5	59	
771012	1330	8200	720	420	7.8	7.3	26.0	4	96	
771101	1355	27000B	1100	25000B	8.3	11.0	36.0	0	113	
771128	1205	4100	180	130	5.8	7.2	27.0	6	57	

Table A-1.--Continued

STATION - 02421060											ALA R BELOW CATOMA CH NR PRATVL ALABAMA RIVER BASIN										
		00010	00076	00078	00080	00090	00094	00299	00310	00335											
WATER		TEMP	TURB	TRANSP	COLOR	REDOX	CONDUCTIV	DO	BOD	COD											
CENT		TRBIDMTR	SECCHI	PT-CO	ORP	MV	FIELD	PROBE	5 DAY	LOWLEVEL											
DATE		TIME	MACH FTU	METERS	UNITS		MICROMHO	MG/L	MG/L	MG/L											
770812	0905	29.0	50.0	1.0	50	140	104	8.7	1.5	11.0											
770831	0815	28.0	15.0	0.0	70	210	114	6.8	0.5												
770921	0945	20.5	40.0	0.6	100	130	158	8.0	0.5												
771012	1350	16.0	20.0	0.9	55	240	176	9.7	0.6												
771101	1530	13.0	15.0	0.8	75	190	178	9.3	0.0	106.0											
771128	1215	8.0	40.0	0.8	120	90	95	11.0	0.7												
		00400	00410	00610	00625	00630	00665	00671	00680	00900											
PH		T ALK	NH3-NH4-N	TOT KJEL	NO2&NO3	PHOS-TOT	PHOS-DIS	T ORG C	TOT HARD												
		CAC03	N TOTAL	N	N-TOTAL	MG/L P	ORTH0	C	CAC03												
DATE		TIME	MG/L	MG/L	MG/L	MG/L P	MG/L P	MG/L	MG/L												
770812	0905	7.4	32.8	0.00	0.11	0.06	0.10	0.05	0.9	35											
770831	0815	7.3	37.7	0.10	0.20	0.09	0.07	0.03	1.4	38											
770921	0945	7.3	48.4	0.02	0.63	0.17	0.63	0.04	3.2	50											
771012	1350	7.2	50.0	0.37	0.33	0.23	0.10	0.06	1.7	0											
771101	1530	7.4	47.6	0.00	0.18	0.48	0.32	0.09	2.8	46											
771128	1215	7.2	30.3	0.02	0.04	0.35	0.06	0.05	5.4	32											
		00915	00925	00940	00945	00955	01045	01046	01055	01056											
CALCIUM		MG+DISS	MGNSIUM	CHLORIDE	SULFATE	SILICA	IRON	IRON	MANGNESE	MANGNESE											
		CA+DISS	MG+DISS	CL	SO4-DISS	DISSOLVED	FE+TOT	FE+DISS	MN	MN+DISS											
DATE		TIME	MG/L	MG/L	MG/L	MG/L	UG/L	UG/L	UG/L	UG/L											
770812	0905	8.9	3.1	5.2	4.8	5.3	150	30	3	3.0											
770831	0815	9.6	3.3	6.8	5.4	5.8	340	30	58	18.0											
770921	0945	13.0	5.0	8.2	6.6	5.1	230	20	110	26.0											
771012	1350	14.0	4.8	0.1	0.1	3.4	340	30	150	5.0K											
771101	1530	11.0	4.5	5.8	12.4	5.9	850	40	65	24.0											
771128	1215	9.1	2.3	4.8	3.0	8.7	1000	140	78	17.0											
		31501	31616	31673	32210	32212	32218	70299	70300												
TOT COLI		MPF+ENDO	FEC COLI	FEC+STREP	CHLRPHYL	CHLRPHYL	CHLRPHYL	RES-SUSP	RESIDUE												
		/100ML	/100ML	MFKFAGAR	A	B	C	AT 180 C	DISS-180												
DATE		TIME	/100ML	/100ML	UG/L	UG/L	UG/L	MG/L	C												
770812	0905	54000	70	43	5.9	3.4	7.3	14	64												
770831	0815	1800	110	180	4.7	2.1	6.3	7	71												
770921	0945	8200	760	450	6.2	2.6	7.8	12	103												
771012	1350	7800	800	860	7.4	7.3	22.0	5	97												
771101	1530	1200	130	1200	5.6	5.8	18.0	29	97												
771128	1215	4300	15	230	6.9	7.3	24.0	20	66												

Table A-1.--Continued

STATION - 02421090																		
ALA N AB PINTILLA CM NR PRATTIVIL ALABAMA RIVER BASIN																		
DATE	TIME	WATER TEMP CENT	00010	TURB IDIOMTR MACH FTU	00076	TRANSP SECCHI METERS	00078	COLOR PT-CO UNITS	00080	REDOX OHP MV	00090	CNDUCTVY FIELD MICROMHO	00094	DO PROBE MG/L	00310	BOD 5 DAY MG/L	00335	COD LOWLEVEL MG/L
770812	0955	28.5	15.0	1.0	1.0	1.0	1.0	40	130	130	102	102	8.6	0.9	0.9	10.0		
770831	0920	29.0	27.0	1.0	1.0	1.0	1.0	55	170	170	112	112	6.5	1.1	1.1			
770921	1030	21.0	30.0	0.8	0.8	0.8	0.8	100	130	130	158	158	8.2	0.4	0.4			
771013	0800	15.0	35.0	1.1	1.1	1.1	1.1	40	230	230	157	157	9.7	0.4	0.4			
771102	0922	12.5	45.0	0.9	0.9	0.9	0.9	80	130	130	175	175	11.2	0.2	0.2		56.0	
771128	1230	8.0	65.0	0.8	0.8	0.8	0.8	130	90	90	92	92	11.0	0.5	0.5			
DATE	TIME	PH	00400	T ALK CAC03 MG/L	00410	NH3-NH4-N TOTAL MG/L	00610	TOT KJEL N MG/L	00625	N02&N03 N-TOTAL MG/L	00630	PHOS-TOT MG/L P	00665	PHOS-DIS ORTHO MG/L P	00680	TOT HARD CAC03 MG/L		
770812	0955	7.7	34.4	0.00	0.12	0.08	0.08	0.15	0.15	0.15	0.25	0.25	0.09	0.08	0.6	32		
770831	0920	7.1	40.2	0.13	0.18	0.15	0.15	0.42	0.15	0.15	0.20	0.20	0.08	0.08	1.6	35		
770921	1030	7.4	49.2	0.15	0.42	0.15	0.15	0.17	0.25	0.25	0.02	0.02	0.00	0.00	2.1	50		
771013	0800	7.2	52.5	0.10	0.17	0.08	0.08	0.21	0.39	0.39	0.26	0.26	0.15	0.15	3.3	36		
771102	0922	6.8	47.6	0.08	0.08	0.01	0.08	0.08	0.35	0.35	0.05	0.05	0.03	0.03	4.8	31		
771128	1230	7.2	29.5	0.01	0.08	0.01	0.08	0.08	0.35	0.35	0.05	0.05	0.03	0.03	4.8	31		
DATE	TIME	CALCIUM CA-DISS MG/L	00915	MGNISIUM MG-DISS MG/L	00925	CHLORIDE CL MG/L	00940	SULFATE SO4-DISS MG/L	00946	SILICA DISOLVED MG/L	00955	IRON FE-TOT UG/L	01045	IRON FE-DISS UG/L	01055	MANGNESE MN-DISS UG/L		
770812	0955	8.0	2.9	3.1	5.4	5.4	5.4	6.0	6.2	6.2	6.2	930	930	60	67	27.0		
770831	0920	8.8	3.1	3.1	6.8	6.8	6.8	8.0	8.7	8.7	8.7	390	390	20	90	50.0		
770921	1030	11.0	5.0	4.7	8.2	8.2	8.0	6.0	5.2	5.2	5.2	570	570	5K	110	16.0		
771013	0800	12.0	4.7	4.7	8.8	8.8	6.0	6.0	6.0	6.0	6.0	290	290	40	140	10.0		
771102	0922	6.9	4.6	4.6	7.2	7.2	9.2	6.9	6.9	6.9	6.9	620	620	90	75	24.0		
771128	1230	8.4	2.3	2.3	4.4	4.4	7.0	7.1	7.1	7.1	7.1	1100	1100	160	72	24.0		
DATE	TIME	TOT COLI MFIMENDO /100ML	31501	FEC COLI MFIM-FCBR /100ML	71616	FECSTREP MFKFAGAR /100ML	31673	CHLRPHYL A UG/L	32210	CHLRPHYL B UG/L	32212	CHLRPHYL C UG/L	70299	RES-SUSP AT 180 C MG/L	70300	RESIDUE DISS-180 C MG/L		
770812	0955	50000	68	72	120	120	120	8.8	8.8	17.0	17.0	58.0	11	57				
770831	0920	2900	400	280	280	280	280	5.5	5.5	3.6	3.6	9.6	7	81				
770921	1030	8000	300	250	250	250	250	3.0	3.0	2.4	2.4	8.5	9	87				
771013	0800	7500	360	2000H	2000H	2000H	2000H	8.4	8.4	10.0	10.0	34.0	44	96				
771102	0922	21000	150	250	250	250	250	5.7	5.7	9.6	9.6	31.0	11	96				
771128	1230	6300											5	61				

Table A-1.--Continued

STATION - 02421195											
ALA R NR BUCKVILLE ALABAMA RIVER PA IN											
00010	00076	00078	00080	00090	00094	00099	00310	00335			
WATER	TURB	TRANSP	COLOR	WATER	WATER	WATER	WATER	WATER			
TEMP	TRIDIMTR	SECCHI	PT-CO	TEMP	TEMP	TEMP	TEMP	TEMP			
CENT	HACH FTU	METERS	UNITS	MP	MP	MP	MP	MP			
770812 1100	20.0	1.0	100	140	14	14	14	14			
770831 1030	15.0	0.9	70	160	16	16	16	16			
770921 1130	40.0	0.8	100	120	12	12	12	12			
771013 0900	20.0	1.1	80	240	24	24	24	24			
771102 1010	25.0	0.9	80	230	23	23	23	23			
771128 1245	40.0	0.8	110	40	4	4	4	4			
00400	00410	00610	00625	00630	00630	00630	00680	00900			
PH	T ALK	NH3-NH4-	TOT FUEL	MG/L	MG/L	MG/L	MG/L	MG/L			
	CACO3	N TOTAL	N	MG/L	MG/L	MG/L	MG/L	MG/L			
770812 1100	31.2	0.00	0.27	0.05	0.05	0.05	0.05	0.05			
770831 1030	39.4	0.13	0.14	0.13	0.13	0.13	14.0	35			
770921 1130	46.7	0.05	0.44	0.05	0.05	0.05	2.4	47			
771013 0900	50.8	0.06	0.16	0.06	0.06	0.06	3.2	40			
771102 1010	50.8	0.01	0.21	0.01	0.01	0.01	6.4	47			
771128 1245	24.6	0.00	0.15	0.00	0.00	0.00	4.6	32			
00915	00925	00940	00945	00945	00945	00945	01055	01056			
CALCIUM	MAGNESIUM	CHLORIDE	SULFATE	SILICA	IRON	IRON	MANGANESE	MANGANESE			
CA-DISS	MG-DISS	CL	SO4-DISS	DISSOLVED	IRON	IRON	MN	MN-DISS			
MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L	US/L	US/L			
770812 1100	2.5	5.2	5.0	6.7	4.0	4.0	40	8.0			
770831 1030	3.0	7.0	2.8	5.1	2.0	2.0	77	41.0			
770921 1130	4.8	6.6	7.0	4.4	2.0	2.0	73	220.0			
771013 0900	4.8	7.8	7.2	4.4	2.0	2.0	120	5.0K			
771102 1010	4.6	7.6	10.0	5.4	2.0	2.0	76	38.0			
771128 1245	2.4	4.4	6.2	5.7	2.0	2.0	76	44.0			
31501	31616	31673	32210	32212	32214	32299	33300				
TOT COLI	FEC COLI	FEC STREP	CHLOROPHYL	CHLOROPHYL	CHLOROPHYL	AT 100 C	AT 100 C				
MF/100ML	MF/100ML	MF/100ML	A	B	C	MG/L	MG/L				
770812 1100	23000	78	7.3	1.8	6.3	16	63				
770831 1030	650	44	4.5	1.3	3.7	14	81				
770921 1130	7200	320	4.2	2.4	9.4	0	88				
771013 0900	5600	320	3.2	3.7	10.0	5	100				
771102 1010	8700	2400	7.4	9.0	31.0	14	107				
771128 1245	3600	170	4.8	6.4	22.0	6	61				

Table A-1.--Continued

STATION - 02421220 ALABAMA RIVER BASIN										
DATE	TIME	WATER TEMP CENT	TURBIDITY MACH FTU	TRANSP SECMH METERS	COLOR PT-CO UNITS	REDUX ORP MV	CONDUCTIVITY FIELD MICROMHO	PHOS-P MG/L	5 DAY BOD MG/L	LOW LEVEL CDD MG/L
770812	1430	29.0	20.0	0.0	120	220	95	9.3	2.4	11.0
770831	1350	29.0	30.0	0.9	50	190	112	6.7	1.5	
770921	1245	21.0	40.0	0.8	130	130	156	7.6	0.8	
771013	1000	15.0	25.0	1.0	80	200	173	9.6	0.6	90.0
771102	1118	12.5	25.0	1.0	80	250	172	11.7	0.0	
771128	1320	8.0	40.0	0.8	120	100	96	10.2	0.5	
DATE	TIME	PH	T ALK CAC03 MG/L	NH3-NMG/L	TOT KJEL N MG/L	NO2&NO3 N-TOTAL MG/L	PHOS-TOT MG/L P	PHOS-015 ORTHO MG/L P	T OT-015 C MG/L	TOT HARD CAC03 MG/L
770912	1430	6.3	29.5	0.00	0.21	0.13	0.08	0.04	0.6	29
770831	1350	6.7	36.9	0.13	0.30	0.01	0.15	0.06	1.8	35
770921	1245	7.3	44.3	0.34	0.76	0.17	0.54	0.02	2.7	46
771013	1000	7.5	52.5	0.02	0.09	0.23	0.12	0.01	1.9	33
771102	1118	6.5	50.8	0.00	0.23	0.31	0.12	0.09	3.6	40
771128	1320	6.1	20.5	0.00	0.03	0.27	0.17	0.05	19.0	32
DATE	TIME	CALCIUM CA-DISS MG/L	MAGNESIUM MG-DISS MG/L	CHLORIDE CL MG/L	SULFATE SO4-DISS MG/L	SILICA DISSOLVED MG/L	IRON FE-TOT UG/L	IRON FE-DISS UG/L	MANGNESE MN UG/L	MANGNESE MN-DISS UG/L
770812	1430	7.4	2.5	4.6	4.6	6.6	460	70	58	19.0
770831	1350	8.9	3.1	6.6	5.2	11.0	400	300	66	22.0
770921	1245	12.0	4.6	7.0	6.0	4.8	480	70	77	11.0
771013	1000	5.4	4.6	7.6	9.0	5.1	280	20	110	13.0
771102	1118	8.4	4.6	7.6	10.0	4.3	840	110	62	25.0
771128	1320	8.8	2.3	4.8	5.4	6.4	1200	160	110	29.0
DATE	TIME	TOT CULI MFIMENDO /100ML	FEC COLI MFIM-FCBR /100ML	FECSTREP MFKFAGAR /100ML	CHLRPHYL A UG/L	CHLRPHYL B UG/L	CHLRPHYL C UG/L	RES-SUSP AT 180 C MG/L	RESIDUE DISS-180 C MG/L	
770812	1430	31501	31616	31673	32210	32212	32214	70299	70300	
770831	1350	3200	0	26	4.8	4.8	14.0	10	56	
770921	1245	7000	1100	320	4.6	2.7	7.7	10	73	
771013	1000	9600	960	160	5.8	5.8	19.0	23	76	
771102	1118	10000	400	3100	6.0	7.6	26.0	26	103	
771128	1320	5800	100	150	3.4	4.7	21.0	14	95	

Table A-1.--Continued

STATION - 02421290 ALA R BELOW BEAVER CR NR AULAUGA ALABAMA RIVER BASIN									
DATE	TIME	WATER TEMP CENT	THRIDMTR HACH FTU	TURB 00076	TRANSP 00078	COLOR 00080	REDOX 00090	CONDUCTV 00094	DO 00299
					SECCMI METERS	PT-CO UNITS	ORP MV	FIELD MILLIOMHO	PROBE MG/L
00010									
770816	0745	29.0	20.0	0.9	0.9	60	160	82	7.4
770901	0920	29.0	21.0	0.9	0.9	80	210	99	8.2
770922	1010	20.0	30.0	0.8	0.8	110	120	155	7.2
771013	1200	16.0	30.0	0.8	0.8	65	240	179	9.2
771103	1015	12.0	30.0	0.8	0.8	125	240	175	12.6
771129	0900	8.0	30.0	0.8	0.8	110	150	106	11.1
00400									
PM									
00410									
770816	0745	6.4	31.2	1.60	0.41	0.07	0.07	0.12	0.02
770901	0930	6.8	29.5	0.10	0.19	0.19	0.16	0.16	0.00
770922	1010	7.0	46.7	0.03	0.43	0.16	0.36	0.01	0.01
771013	1200	7.4	52.5	0.25	0.12	0.12	0.29	0.03	0.03
771103	1015	7.4	51.7	0.00	0.13	0.38	0.10	0.09	0.10
771129	0900	7.3	30.3	0.01	0.15	0.25	0.14	0.05	0.05
00915									
CALCIUM 00915									
CA-DISS 00915									
DATE	TIME	00915	00925	00940	00945	00955	00955	01045	01055
		PC/L	MG/L	MG/L	SULFATE 00945	SILICA 00955	IRON 01045	MANGNESE 01055	MANGNESE 01056
					5000000	DIS/100	FE-DISS 01045	MN 01055	MN-DISS 01056
770816	0745	6.1	2.2	5.4	5.0	1.0	120	62	6.00
770901	0930	7.6	2.6	6.2	5.4	1.0	50	83	10.0
770922	1010	11.0	4.6	7.4	5.0	1.0	5K	79	22.0
771013	1200	11.0	5.0	6.0	5.0	1.0	40	320	16.0
771103	1015	7.9	4.4	6.0	10.0	1.5	170	110	22.0
771129	0900	8.1	2.2	4.8	7.0	1.5	10	100	20.0
01501									
TOT CULI 01501									
MFIMENDO 01501									
DATE	TIME	01501	01501	01501	01501	01501	01501	01501	01501
770816	0745	560.0	0	87	5.1	5.0	10.9	5	51
770901	0930	680.0	0	28	7.4	1.9	12.9	12	70
770922	1010	1000	410	60	11.7	1.1	19.0	33	80
771013	1200	1400	0	440	11.0	1.0	19.0	9	103
771103	1015	800	16	67	11.1	1.0	23.0	0	102
771129	0900	2500	98	87	11.3	1.4	1.9	10	71

Table A-1.--Continued

STATION - 02421315											ALA R BELOW IVY CR NW MULBERRY ALABAMA RIVER BASIN										
DATE		TIME	00010 WATER TEMP CENT	00078 TURB TRIMETER HAUM FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIVITY FIELD MICROMHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L										
770816	0930		29.0	35.0	0.7	40	140	90	7.0	1.2	9.0										
770901	1045		29.0	28.0	0.8	80	220	96	8.0	1.3											
770922	1050		21.0	33.0	0.8	120	155	155	7.0	0.2											
771013	1300		16.0	42.0	0.8	100	230	178	9.1	0.5											
771103	1050		12.0	30.0	1.0	85	220	171	12.8	1.2	52.0										
771129	0925		8.0	33.0	0.8	120	150	105	11.0	1.4											
DATE		TIME	00400 PH	00410 TALK CACOD MG/L	00410 NH3-NH4 N TOTAL MG/L	00425 TOT KJEL N MG/L	00430 NO2&NO3 N-TOTAL MG/L	00465 PHOS-TOT MG/L P	00471 PHOS-GIS ORTHOP MG/L P	00480 T ORG C C MG/L	00490 TOT HARD CACOD MG/L										
770816	0930		7.2	37.7	1.60	0.32	0.12	0.09	0.01	1.6	28										
770901	1045		6.8	34.4	0.09	0.25	0.07	0.13	0.02	3.2	31										
770922	1050		7.1	45.7	0.01	0.56	0.17	0.57	0.02	2.0	46										
771013	1300		7.4	50.8	0.01	0.17	0.22	0.11	0.09	8.5	37										
771103	1050		7.5	50.0	0.01	0.17	0.40	0.13	0.12	3.4	39										
771129	0925		7.4	30.3	0.01	0.06	0.28	0.17	0.05	7.5	31										
DATE		TIME	00915 CALCIUM CA-DISS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00946 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE-TOT UG/L	01046 IRON FE-DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L										
770816	0930		7.0	2.4	5.0	3.8	7.4	670	60	62	8.0										
770901	1045		8.2	2.6	5.6	5.2	11.0	690	60	78	14.0										
770922	1050		12.0	4.6	7.6	5.2	4.5	750	30	78	28.0										
771013	1300		7.1	7.9	8.5	7.0	5.3	490	20	180	5.0K										
771103	1050		8.2	4.4	6.4	10.0	6.6	1900	150	90	58.0										
771129	0925		8.7	2.3	4.8	7.0	8.0	1000	130	75	11.0										
DATE		TIME	31501 TOT SULF MF-HENDO /100ML	31515 FEC COLI MF-HENDO /100ML	31673 FECSTREP MF-KASAR /100ML	32210 CHLRPHYL A UG/L	32212 CHLRPHYL B UG/L	32214 CHLRPHYL C UG/L	70299 RES-SUSP AT 180 C MG/L	70300 RESIDUE DISS-180 C MG/L											
770816	0930		70000	0	28	21.0	14.0	35.0	5	55											
770901	1045		3700	6	10	5.0	4.9	14.0	1	69											
770922	1050		2000	140	160	4.4	2.2	6.4	26	71											
771013	1300		5200	370	170	12.0	18.0	62.0	33	110											
771103	1050		2000	45	92	3.9	3.0	14.0	26	90											
771129	0925		1800	82	66	4.5	5.0	27.0	5	60											

Station Number 16

Table A-1.--Continued

STATION - 02421325									
ALA R AT DAYS BEND NW BENTON ALEXANDER RIVER BASIN									
DATE	TIME	WATER TEMP C	00010	00076 TUBS	00078 TRANS	00080 COLOR	00090 REDOX	00094 CONDUCTIV FIELD	00299 DO PROBE
DATE	TIME	TEMP C	00010	TRBTRNTR MACH FTU	SECCHI METERS	PT-CO UNITS	ORP MV	00094 MICROMHO	00299 DO PROBE
770816	1100	30.0	15.0	0.8	0.8	90	130	30	7.2
770901	1135	30.0	45.0	0.9	0.9	85	200	102	8.4
770922	1145	21.0	20.0	0.7	0.7	110	120	156	7.0
771013	1400	16.0	35.0	0.9	0.9	98	240	177	9.0
771103	1100	12.0	29.0	1.0	1.0	70	130	173	12.8
771129	0920	8.0	35.0	0.8	0.8	110	150	88	11.0
00400									
DATE	TIME	PH	00400	00410 T ALK	00610 NH3-NH4- N TOTAL	00625 TOT N-JEL N	00630 NO2-NO3 N-TOTAL	00665 PHOS-TOT	00671 PHOS-DIS ORTHO
DATE	TIME	SV	00400	T ALK CACOS	00610 N TOTAL	00625 TOT N-JEL N	00630 NO2-NO3 N-TOTAL	00665 PHOS-TOT	00671 PHOS-DIS ORTHO
770816	1100	7.1	42.6	0.07	0.12	0.09	0.09	0.08	0.02
770901	1135	6.9	64.8	0.11	0.23	0.15	0.15	0.14	0.01
770922	1145	7.2	47.6	0.06	0.01	0.06	0.06	0.05	0.02
771013	1400	7.4	53.3	0.14	0.24	0.09	0.09	0.08	0.04
771103	1100	7.2	47.6	0.00	0.10	0.09	0.09	0.10	0.12
771129	0920	7.4	30.3	0.01	0.07	0.27	0.27	0.18	0.05
00915									
DATE	TIME	00915	00925	00940	00945	00950	00955	00960	00965
DATE	TIME	CALCIUM MG/L	MAGNESIUM MG/L	CHLORIDE CL MG/L	SULFATE SO4- MG/L	SILICA DISSOLVED MG/L	FERRIC FERTOT MG/L	IRON FEDISS MG/L	MANGANESE MANGANESE MG/L
770816	1100	7.2	2.5	5.0	5.2	5.4	5.4	5.4	5.4
770901	1135	7.9	2.7	6.2	5.6	5.9	5.9	5.9	5.9
770922	1145	12.0	4.6	7.8	5.8	6.0	6.0	6.0	6.0
771013	1400	15.0	5.2	8.2	9.0	6.9	6.9	6.9	6.9
771103	1100	7.1	4.6	5.0	10.4	3.0	3.0	3.0	3.0
771129	0920	6.9	2.4	4.0	7.4	3.2	3.2	3.2	3.2
31501									
DATE	TIME	31501	31616	31673	31710	31712	31714	31716	31718
DATE	TIME	TOT COLI MPN/100ML	FEC COLI MPN/100ML	FECETHEP MPN/100ML	CHLORIDE CL MG/L	CHLORIDE CL MG/L	CHLORIDE CL MG/L	CHLORIDE CL MG/L	CHLORIDE CL MG/L
770816	1100	71000	0	12	20.0	20.0	20.0	20.0	20.0
770901	1135	1800	0	24	5.6	5.6	5.6	5.6	5.6
770922	1145	3000	60	60	5.8	5.8	5.8	5.8	5.8
771013	1400	5000	130	130	9.0	9.0	9.0	9.0	9.0
771103	1100	4200	34	160	5.0	5.0	5.0	5.0	5.0
771129	0920	3000	85	170	4.5	4.5	4.5	4.5	4.5

Table A-1.--Continued

STATION - 02421349											ALABAMA RIVER BASIN										
DATE		TIME		WATER TEMP CENT	TURBIDITY NAPHTH MACH STD	TRANSP SECCHI METERS	COLOR PT-CO UNITS	00040 MEDOX OPP	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE	00310 BOD 5 DAY	00335 COD LOWLEVEL									
DATE		TIME		WATER TEMP CENT	TURBIDITY NAPHTH MACH STD	TRANSP SECCHI METERS	COLOR PT-CO UNITS	00040 MEDOX OPP	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE	00310 BOD 5 DAY	00335 COD LOWLEVEL									
770816	1435	30.0	25.0	0.0	30	130	93	7.7	1.0	11.0											
770921	1340	29.0	11.0	0.9	70	200	101	8.0	1.4												
770921	1645	21.0	20.0	0.8	120	120	176	7.1	1.1												
771014	0800	15.0	40.0	1.0	34	210	176	10.8	0.0												
771103	1340	13.0	70	0.9	180	169	169	12.8	0.4												
771129	0950	8.0	110	0.8	150	99	99	11.2	0.3												
DATE		TIME		PH	TOTAL CALCD	N-TOTAL MG/L	TOT KCEL N	00030 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHO MG/L P	00680 T GAS C MG/L	00900 TOT HARD CACO3 MG/L									
770816	1435	7.0	29.5	0.04	0.39	0.09	0.07	0.02	1.6	29											
770921	1340	7.1	32.0	0.04	0.24	0.17	0.20	0.02	3.7	31											
770921	1645	7.3	48.7	0.01	0.42	0.15	0.40	0.06	0.3	43											
771014	0800	7.1	59.9	0.02	0.28	0.23	0.11	0.09	1.8	44											
771103	1340	7.6	50.8	0.03	0.04	0.39	0.09	0.04	3.6	47											
771129	0950	7.5	31.2	0.00	0.04	0.23	0.16	0.04	4.6	34											
DATE		TIME		CALCIUM CA-DISS MG/L	MAGNESIUM MG-DISS MG/L	CHLORIDE CL MG/L	SULFATE SO4-DISS MG/L	SILICA DISOLVED MG/L	IRON FE-TOT UG/L	IRON FE-DISS UG/L	MANGNESE MN UG/L	MANGNESE MN-DISS UG/L									
770816	1435	7.4	2.5	5.4	4.6	7.3	810	130	59	1.0											
770921	1340	7.9	2.7	6.4	5.2	5.9	580	20	63	2.0											
770921	1645	11.0	4.5	7.8	6.2	4.2	420	30	55	5.0M											
771014	0800	9.2	5.0	7.6	7.0	7.0	160	20	66	5.0M											
771103	1340	11.0	4.6	6.4	10.4	6.3	660	120	600	9.0											
771129	0950	9.3	2.5	4.4	7.4	7.0	1100	210	70	17.0											
DATE		TIME		TOT COLI MPN/100ML	FEC COLI MPN/100ML	RECISTERS MPN/100ML	CHLORPHYL A UG/L	CHLORPHYL B UG/L	CHLORPHYL C UG/L	RES-SUSP AT 180 C MG/L	RESIDUE DISS-180 C MG/L										
770816	1435	7000	0	12	7.3	7.3	23.0	12	59												
770921	1340	1000	12	8	7.7	6.6	19.0	4	68												
770921	1645	400	0	50	4.8	2.7	7.7	19	61												
771014	0800	600	400	110	4.4	6.1	14.0	22	54												
771103	1340	2700	40	110	12.0	18.0	63.0	11	123												
771129	0950	200	72	80	2.9	2.2	8.5	30	67												

Station Number is

Table A-1.--Continued

STATION - 02-21355 ALA RIVER NR BENTON, ALABAMA RIVER BASIN										
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRBDIMTR HACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIV FIELD MICROHMO	00299 DO PROBE MG/L	00310 DO 5 DAY MG/L	00335 COD LOWLEVEL MG/L
770816	1635	30.0	10.0	0.8	60	200	93	5.8	0.7	13.0
770901	1450	29.0	25.0	0.7	70	200	101	9.2	1.4	
770922	1445	21.0	40.0	0.6	100	110	160	6.7	0.7	
771014	0900	15.0	20.0	1.0	100	220	160	10.8	0.0	
771103	1500	13.0	25.0	0.8	70	140	172	13.0	0.3	70.0
771129	1115	9.0	50.0	0.8	110	100	101	11.4	0.0	
DATE	TIME	00400 PH	00410 T ALK CACO3 MG/L	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2+NO3 N-TOTAL MG/L	00655 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHO MG/L P	00680 T ORG C C MG/L	00900 TOT HARD CACO3 MG/L
770816	1635	7.4	28.7	0.07	0.16	0.12	0.11	0.02	1.4	29
770901	1450	6.9	38.5	0.11	0.10	0.18	0.22	0.05	2.2	31
770922	1445	7.2	47.6	0.01	0.44	0.15	0.25	0.03	2.0	48
771014	0900	7.4	54.1	0.96	0.09	0.23	0.03	0.02	1.7	36
771103	1500	7.5	49.2	0.00	0.18	0.18	0.13	0.09	2.8	38
771129	1115	7.3	30.3	0.01	0.07	0.26	0.19	0.05	8.2	34
DATE	TIME	00915 CALCIUM CA+DISS MG/L	00925 MAGNESIUM MG+DISS MG/L	00940 CHLORIDE CL MG/L	00948 SULFATE SO4+DISS MG/L	00968 SILICA DISSOLV MG/L	00985 IRON FETOT MG/L	01046 IRON FE+DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN+DISS UG/L
770816	1635	7.2	2.5	5.0	3.4	5.2	1.0	120	67	42.0
770901	1450	8.0	2.7	6.0	5.2	6.2	1.0	70	76	4.0
770922	1445	13.0	4.6	7.4	8.8	4.5	1.0	20	87	5.0K
771014	0900	6.5	4.8	7.8	5.0	5.0	1.0	0	93	5.0K
771103	1500	7.7	4.5	6.8	10.0	1.9	1.0	80	130	7.0
771129	1115	9.4	2.5	4.0	6.2	7.5	1.0	10	74	17.0
DATE	TIME	31501 TOT COLI MF/100ML	31616 FEC COLI MF+FCBR /100ML	31673 FECSTREP MFKFAGAR /100ML	32210 CHLPHYL A UG/L	32212 CHLPHYL B S/L	32217 CHLPHYL C S/L	32259 FESIDE A UG/L	70300 FESIDE C MG/L	
770816	1635	45000	140	130	15.0	9.2	25.0	12	57	
770901	1450	17000	4	38	5.3	4.0	11.0	14	65	
770922	1445	2000	42	40	4.6	2.8	7.3	19	84	
771014	0900	14000	120	44	7.8	1.6	31.0	15	108	
771103	1500	3400	24	120	7.3	9.5	34.0	3	190	
771129	1115	2500	65	110	2.8	2.5	5.2	28	65	

Table A-1.--Continued

STATION - 02-22170 ALABAMA RIVER BASIN												
DATE	TIME	WATER TEMP CENT	TRANSDUCER MACH FTU	TRANSP SECCHI	COLOR PT-CO	REDUX ORP	CONDUCTIVITY FIELD	DO PROBE	BOD 5 DAY	COD LOWLEVEL		
00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00310	00335	00335
770816	1800	30.0	15.0	0.8	35	220	99	7.5	1.3	13.0	00310	00335
770906	0820	28.0	30.0	0.8	90	230	98	7.5	0.3		00310	00335
770926	1120	21.0	40.0	0.8	70	160	170	8.5	0.0		00310	00335
771017	1330	14.0	15.0	0.9	20	210	172	10.6	0.4	160.0	00310	00335
771107	1255	12.0	30.0	0.6	160	210	154	11.2	1.2		00310	00335
771130	1130	9.0	20.0	0.7	150	160	94	12.4	0.0		00310	00335
00910	00910	00910	00910	00910	00910	00910	00910	00910	00910	00910	00910	00910
770816	1800	6.8	31.2	0.00	0.14	0.12	0.14	0.03	1.5	29	00910	00910
770906	0820	7.0	32.0	0.06	0.25	0.25	0.22	0.03	1.3	31	00910	00910
770926	1120	7.1	47.0	0.05	0.57	0.28	0.61	0.05	2.7	49	00910	00910
771017	1330	5.8	37.7	0.05	0.18	0.29	0.11	0.06	1.9	49	00910	00910
771107	1255	7.5	45.9	0.00	0.05	0.34	0.15	0.05	4.0	40	00910	00910
771130	1130	7.2	30.3	0.00	0.15	0.28	0.17	0.04	5.0	33	00910	00910
00915	00915	00915	00915	00915	00915	00915	00915	00915	00915	00915	00915	00915
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00915	00915
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00915	00915
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00915	00915
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00915	00915
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00915	00915
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00915	00915
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2	6.0	6.4	340	90	95	5.0K	00955	00955
771107	1255	9.8	3.7	6.0	8.0	6.7	2000	230	180	14.0	00955	00955
771130	1130	9.0	2.4	4.0	8.2	8.2	1300	190	85	12.0	00955	00955
00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955	00955
770816	1800	7.5	2.5	4.4	1.4	7.4	650	100	64	0.00	00955	00955
770906	0820	8.1	2.6	6.2	4.8	6.0	850	10	71	0.00	00955	00955
770926	1120	13.0	4.8	0.1	8.2	4.9	520	10	67	5.0	00955	00955
771017	1330	12.0	4.6	7.2								

Table A-1.--Continued

STATION - 02422625																	
ALA R BELOW MULBERRY CR NR BURNSV ALABAMA RIVER BASIN																	
DATE	TIME	WATER TEMP CENT	00010	TURBIDIMTR MACH FTU	00076	TRANSP SECCHI METERS	00078	COLOR PT-CO UNITS	00080	REDOX ORP MV	00090	CONDUCTIV FIELD MICROMHO	00094	DO PROBE MG/L	00299	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
770817	0915	29.0		15.0		1.2		10		140		95		8.1		1.6	15.0
770906	0935	28.0		35.0		0.7		100		130		100		7.0		0.3	
770926	1120	20.5		30.0		0.9		80		130		152		9.0		0.0	
771017	1420	14.0		20.0		0.8		40		200		171		10.6		0.3	
771107	1345	12.0		60.0		0.5		130		210		149		11.0		1.4	156.0
771130	1150	9.0		65.0		0.7		140		160		94		12.6		0.0	
DATE	TIME	PH	00400	TALK CAC03	00410	NH3-NH4- N TOTAL	00610	TOT KJEL N	00625	NO2-NH3 N-TOTAL	00630	PHOS-TOT MG/L P	00655	PHOS-DIS ORTHOP MG/L P	00671	T ORG C MG/L	00900 TOT HARD CAC03 MG/L
770817	0915	7.6		31.2		1.40		0.17		0.12		0.13		0.02		1.5	29
770906	0935	7.0		31.2		0.14		0.20		0.26		0.23		0.04		1.4	31
770926	1120	7.3		41.8		0.01		0.21		0.22		0.15		0.02		2.7	33
771017	1420	6.9		52.5		0.01K		0.38		0.27		0.08		0.05		2.3	51
771107	1345	7.6		44.3		0.01		0.00		0.36		0.18		0.17		3.6	40
771130	1150	6.8		27.1		0.00		0.12		0.19		0.17		0.04		3.4	33
DATE	TIME	CALCIUM CA-DISS MG/L	00915	MANGNIUM MG-DISS MG/L	00925	CHLORIDE CL MG/L	00940	SULFATE SO4-DISS MG/L	00945	SILICA DISSOLVED MG/L	01045	IRON TOTAL UG/L	01046	IRON FE-DISS UG/L	01055	MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L
770817	0915	7.6		2.4		6.0		5.0		3.2		130		10		47	18.0
770906	0935	8.1		2.5		7.2		5.4		7.5		120		SK		57	18.0
770926	1120	7.0		4.3		8.8		9.0		5.4		250		SK		91	27.0
771017	1420	13.0		4.4		7.0		7.0		5.7		300		20		98	5.0K
771107	1345	10.0		3.6		5.6		9.0		7.4		1500		140		200	17.0
771130	1150	9.2		2.4		6.4		4.0		6.7		1200		150		84	20.0
DATE	TIME	TOT COLI MFIMENDO /100ML	31501	FEC COLI MFIM-FCBR /100ML	31616	FECSTREP MFKFAGAR /100ML	31673	CHLORPHYL A	32210	CHLORPHYL B	32212	CHLORPHYL C	32214	CHLORPHYL AT 1000 MG/L	32219	CHLORPHYL AT 1000 MG/L	32300
770817	0915	37000		0		26		8.5		1.3		2.7		7		56	
770906	0935	2700		190		460		11.0		3.4		9.9		17		18	
770926	1120	10000		150		34		6.7		5.6		17.0		13		55	
771017	1420	3200		81		62		4.5		2.7		8.9		24		97	
771107	1345	6800		310		110		5.7		4.3		16.0		37		106	
771130	1150	1500		59		160		3.2		2.8		6.8		10		59	

Table A-1.--Continued

STATION - 02422650 ALA R NR MANILA ALABAMA RIVER BASIN										
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRP/LMTR MACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
770817	1030	29.5	15.0	1.0	50	130	102	8.3	1.4	10.0
770906	1100	28.0	30.0	0.8	110	210	97	7.8	0.3	
770926	1430	21.0	40.0	0.9	115	70	161	9.0	0.0	
771017	1445	14.0	20.0	0.8	60	200	181	10.6	0.6	118.0
771107	1500	12.0	50.0	0.5	150	210	150	11.0	1.3	
771130	1220	9.0	40.0	0.7	140	120	95	12.5	0.2	
DATE	TIME	00409 PH	00410 T ALK CACO3 MG/L	00510 NH3-NHA- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHO MG/L P	00680 T DFG C C MG/L	00900 TOT HARD CACO3 MG/L
770817	1030	7.5	32.0	0.07	0.17	0.09	0.04	0.02	1.5	30
770906	1100	7.0	31.2	0.03	0.23	0.25	0.18	0.05	1.2	31
770926	1430	7.4	44.3	0.01	0.58	0.22	0.24	0.05	2.3	46
771017	1445	6.9	50.8	0.05	0.11	0.26	0.10	0.07	2.5	47
771107	1500	7.5	41.0	0.01	0.05	0.37	0.18	0.14	4.2	43
771130	1220	6.4	27.1	0.12	0.14	0.29	0.21	0.04	19.0	32
DATE	TIME	00915 CALCIUM CA-DISS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00946 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE-TOT UG/L	01046 IRON FE-DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L
770817	1030	7.8	2.4	6.2	6.8	6.8	500	80	61	32.0
770906	1100	8.0	2.5	5.8	4.6	8.5	590	20	46	0.00
770926	1430	12.0	4.6	7.0	8.0	5.5	1100	10	89	23.0
771017	1445	11.0	4.6	9.2	6.0	7.6	370	40	220	39.0
771107	1500	11.0	3.7	6.0	8.0	5.0	2200	130	170	15.0
771130	1220	8.8	2.4	4.0	7.0	6.9	1400	180	83	25.0
DATE	TIME	31501 TOT COLL MFIMENDO /100ML	31016 FEC COLL MFIM-FCBR /100ML	31073 FECSTHET MFIFAGAR /100ML	32210 CHLRPHYL A UG/L	32212 CHLRPHYL B UG/L	32214 CHLRPHYL C UG/L	70299 RES-SUSP AT 180 C MG/L	70300 RESIDUE DISS-180 C MG/L	
770817	1030	99000	130	36	6.8	0.9	0.4	10	58	
770906	1100	780	110	350	7.5	2.7	9.8	13	66	
770926	1430	7000	560	190	6.7	4.0	13.0	21	83	
771017	1445	4300	150	58	5.8	3.7	15.0	11	111	
771107	1500	3700	140	620	7.7	3.9	25.0	11	76	
771130	1220	1900	170	270	2.4	2.4	7.6	5	61	

Table A-1.--Continued

STATION - 02422765													ALA R NR CRAIG AFB NH SELMA ALAPAMA RIVER BASIN												
00010		00076		00078		00080		00090		00094		00299		00310		00335									
WATER		TURB		TRANSP		COLOR		REDOX		CONDUCTV		DO		BOD		COD									
TEMP		TRBIDMTR		SECCHI		PT-CO		ORP		FIELD		PROBE		5 DAY		LOWLEVEL									
CENT		HACH FTU		METERS		UNITS		MV		MICROMHO		MG/L		MG/L		MG/L									
770817 1320		10.0		1.0		40		160		102		9.1		1.8		12.0									
770906 1235		15.0		0.9		50		150		92		8.2		0.0											
770926 1520		25.0		0.8		100		70		165		8.9		0.0											
771017 1450		50.0		0.8		60		200		185		10.4		0.7											
771107 1545		60.0		0.5		170		220		152		10.8		0.9		90.0									
771130 1230		70.0		0.7		145		120		95		12.2		0.0											
00400		00410		00610		00625		00630		00665		00671		00680		00900									
PH		T ALK		NH3+NH4-		TOT KJEL		NO2&NO3		PHOS-TOT		PHOS-DIS		T ORG C		TOT HARD									
		CAC03		N TOTAL		N		N-TOTAL		MG/L P		MG/L P		C		CAC03									
SU		MG/L		MG/L		MG/L		MG/L		MG/L		MG/L		MG/L		MG/L									
770817 1320		33.6		0.07		0.15		0.02		0.11		0.03		1.8		28									
770906 1235		29.5		0.05		0.23		0.21		0.25		0.02		1.4		29									
770926 1520		47.6		0.16		0.64		0.23		0.70		0.04		1.7		47									
771017 1450		51.7		0.01		0.17		0.25		0.12		0.08		1.6		49									
771107 1545		46.7		0.01		0.16		0.35		0.15		0.14		3.6		35									
771130 1230		25.4		0.00		0.04		0.28		0.16		0.03		4.5		31									
00915		00925		00940		00946		00955		01045		01046		01055		01056									
CALCIUM		MGNISIUM		CHLORIDE		SULFATE		SILICA		IRON		IRON		MANGNESE		MANGNESE									
CA-DISS		MG-DISS		CL		SO4-DISS		DISOLVED		FE-TOT		FE-DISS		MN		MN-DISS									
MG/L		MG/L		MG/L		MG/L		MG/L		UG/L		UG/L		UG/L		UG/L									
770817 1320		2.3		7.6		5.2		7.2		520		50		6		33.0									
770906 1235		2.4		6.0		4.2		6.5		500		40		50		0.00									
770926 1520		4.7		8.0		9.0		5.2		950		30		110		20.0									
771017 1450		4.6		9.0		7.0		6.2		790		50		130		61.0									
771107 1545		3.7		6.8		8.0		7.2		1500		170		180		12.0									
771130 1230		2.3		6.0		6.4		6.3		1600		270		83		41.0									
31501		31616		31673		32210		32212		32214		70299		70300											
TOT COLI		FEC COLI		FECSTREP		CHLRPHYL		CHLRPHYL		CHLRPHYL		RES-SUSP		RESIDUE											
MF100ML		MFM-FCBR		MFKFAGAR		A		B		C		AT 180 C		0155-180											
/100ML		/100ML		/100ML		UG/L		UG/L		UG/L		MG/L		C		MG/L									
770817 1320		0		24		4.6		0.0		0.0		9		61											
770906 1235		100		200		10.0		4.0		11.0		8		59											
770926 1520		180		120		5.9		3.5		7.4		22		56											
771017 1450		430		34		5.3		0.1		12.0		48		124											
771107 1545		180		560		5.2		3.4		12.0		5		80											
771130 1230		72		340		3.4		3.4		11.0		16		61											

Table A-1.--Continued

STATION - 02423000		AL R AT SELMA ALABAMA RIVER BASIN																	
DATE	TIME	00010 WATER TEMP CENT	00076 TUBS THRU/MT	00078 TRANSP SECCHI	00080 COLOR PT-CO	00090 REDOX ORP	00094 CONDUCTIV FIELD	00299 DO PROBE	00310 BOD 5 DAY	00335 COD LOWLEVEL									
					UNITS	MV	MG/L	MG/L	MG/L	MG/L									
770817	1625	31.0	22.0	1.0	20	240	107	9.6	2.0	24.0									
770906	1455	28.0	30.0	0.9	90	200	104	7.4	0.0										
770926	1640	20.0	30.0	0.8	120	50	169	8.2	0.0										
771017	1525	14.0	15.0	0.9	40	200	176	10.6	0.1	238.0									
771108	0930	12.0	50.0	0.5	160	200	145	11.7	0.5										
771130	1310	9.0	30.0	0.7	120	150	95	12.5	0.0										
DATE	TIME	00400 PH	00410 T ALK CACO3	00510 NH3-NH4-- N TO AL	00625 TOT KJEL N	00630 NO2&NO3 N-TOTAL	00665 PHOS-TOT	00671 PHOS-DIS ORTHO	00680 T ORG C C	00900 TOT MANU CACO3									
			MG/L	MG/L	MG/L	MG/L	MG/L P	MG/L P	MG/L	MG/L									
770817	1625	7.8	26.7	0.00	0.14	0.07	0.11	0.02	1.5	28									
770906	1455	7.1	31.2	0.03	0.25	0.26	0.25	0.03	2.3	30									
770926	1640	7.4	45.1	0.01	0.46	0.29	0.42	0.02	2.2	46									
771017	1525	7.1	50.0	0.03	0.24	0.23	0.00	0.00	2.3	52									
771108	0930	7.4	42.6	0.04	0.07	0.33	0.15	0.15	3.5	39									
771130	1310	6.3	23.8	0.00	0.13	0.29	0.21	0.05	3.6	30									
DATE	TIME	00915 CALCIUM CA-DISS	00925 MAGNESIUM MG-DISS	00940 CHLORIDE CL	00946 SULFATE SO4-DISS	00955 SILICA DISSOLVED	01045 IRON FE-TOT	01046 IRON FE-DISS	01055 MANGNESE MN	01056 MANGNESE MN-DISS									
		MG/L	MG/L	MG/L	MG/L	MG/L	UG/L	UG/L	UG/L	UG/L									
770817	1625	7.3	2.3	7.0	4.8	7.2	600	30	66	8.0									
770906	1455	7.8	2.5	8.0	4.8	6.6	610	70	60	60.0									
770926	1640	12.0	4.6	9.8	8.4	5.2	1100	10	140	54.0									
771017	1525	13.0	4.6	7.4	6.0	6.2	340	30	120	13.0									
771108	0930	9.9	3.4	11.2	8.0	6.5	2800	190	180	32.0									
771130	1310	8.5	2.2	4.8	2.0	7.0	1900	190	79	26.0									
DATE	TIME	31501 TOT COLI MP/100ML	31616 FEC COLI MP/100ML	31673 FECSTREP MFA/FAUR	32210 CHLRPHYL A	32212 CHLRPHYL B	32214 CHLRPHYL C	70299 RES-SUSP AT 180 C	70300 RESIDUE DISS-180 C	70300 RESIDUE DISS-180 C									
		/100ML	/100ML	/100ML	UG/L	UG/L	UG/L	MG/L	MG/L	MG/L									
770817	1625	210000	530	30	16.0	2.9	2.7	7	67	67									
770906	1455	11000	0	1300	12.0	8.4	26.0	8	74	74									
770926	1640	20000	1200	730	10.0	5.2	1.5	21	90	90									
771017	1525	3000	99	42	7.3	8.2	26.0	45	102	102									
771108	0930	4600	150	530	4.2	2.2	7.5	68	41	41									
771130	1310	3400	120	600	4.1	4.1	14.0	27	58	58									

Table A-1.--Continued

STATION - 02423050											
ALA R NR SELMA ALABAMA RIVER BASIN											
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRBIDMTN MACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIVITY FIELD MICROMHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	
770818	0810	29.0	25.0	0.9	90	190	98	5.8	0.9	19.0	
770907	0950	28.0	20.0	0.8	130	120	102	7.1	2.4		
770927	1005	20.0	30.0	0.9	100	140	162	7.2	0.4		
771018	0915	13.0	20.0	1.0	80	220	179	10.4	0.4	236.0	
771108	1020	12.0	50.0	0.5	170	220	148	11.6	0.6		
771201	1010	8.0	40.0	0.7	135	150	93	13.8	0.0		
DATE	TIME	00400 PH	00410 T ALK CAC03	00610 NH3-NH4- N TOTAL	00625 TOT KJEL N	00630 NO2&NO3 N-TOTAL	00655 PMOS-TOT MG/L P	00671 PHOS-DIS ORTH0	00680 T ORG C C	00900 TOT HARD CAC03	
770818	0810	7.0	25.4	0.00	0.30	0.12	0.12	0.02	1.2	28	
770907	0950	6.8	31.2	0.25	0.18	0.16	0.23	0.03	2.1	30	
770927	1005	7.4	45.9	0.18	0.54	0.23	0.57	0.02	1.9	49	
771018	0915	7.1	52.5	0.03	0.08	0.27	0.19	0.00	2.1	39	
771108	1020	7.1	37.7	0.02	0.02	0.34	0.18	0.15	3.9	32	
771201	1010	7.2	28.7	0.00	0.00	0.28	0.23	0.05	4.7	32	
DATE	TIME	00915 CALCIUM CA-DISS	00925 MGNISIUM MG-DISS	00940 CHLORIDE CL	00946 SULFATE SO4-DISS	00955 SILICA DISSOLVED	01045 IRON FE-TOT	01046 IRON FE-DISS	01055 MANGNESE MN	01056 MANGNESE MN-DISS	
770818	0810	7.2	2.3	7.4	4.4	7.8	440	90	85	16.0	
770907	0950	7.9	2.5	8.3	0.6	6.0	770	50	73	6.0	
770927	1005	12.0	4.6	10.0	8.0	5.6	440	64	63	14.0	
771018	0915	8.0	4.5	9.6	9.0	6.2	400	30	100	430.0	
771108	1020	7.2	3.4	6.0	7.2	6.1	270	190	190	10.0	
771201	1010	6.8	2.3	5.2	8.0	5.8	1500	150	930	22.0	
DATE	TIME	31501 TOT COLI MF/MIN/100ML	31616 FEC COLI MF/M-FCBR /100ML	31673 FECSTREP MFKFAGAR /100ML	32210 CHLRPHYL A	32212 CHLRPHYL B	32214 CHLRPHYL C	70299 RES-SUSP AT 150 C	70300 RES-SUSP AT 155-180 C		
770818	0810	1600	130	220	8.7	2.1	1.2	14	68		
770907	0950	17000	350	420	7.2	4.2	15.0	6	74		
770927	1005	7500	860	850	7.8	3.7	10.0	7	56		
771018	0915	4900	510	59	3.1	6.4	0.0	16	107		
771108	1020	3900	240	530	2.0	5.1	0.0	16	111		
771201	1010	5500	130	290	4.4	5.6	16.0	33	60		

Table A-1.--Continued

STATION - 32*23090 ALA R AB CANADA R NY CANADA ALABAMA RIVER BASIN									
DATE	TIME	WATER TEMP	WIND DIR	WIND SPEED	WIND GUST	WIND DIRECTION	WIND SPEED	WIND GUST	WIND DIRECTION
770818	0950	29.0	10.0	0.8	0.8	0.8	0.8	0.8	0.8
770907	1105	28.0	30.0	0.8	0.8	0.8	0.8	0.8	0.8
770927	1120	20.0	40.0	0.8	0.8	0.8	0.8	0.8	0.8
771018	1010	13.0	10.0	0.9	0.9	0.9	0.9	0.9	0.9
771108	1155	12.0	50.0	0.5	0.5	0.5	0.5	0.5	0.5
771201	1022	8.0	40.0	0.7	0.7	0.7	0.7	0.7	0.7
DATE	TIME	PH	COND	COND	COND	COND	COND	COND	COND
770818	0950	7.2	40.0	0.03	0.03	0.03	0.03	0.03	0.03
770907	1105	7.0	32.8	0.19	0.19	0.19	0.19	0.19	0.19
770927	1120	7.4	45.1	0.01K	0.01K	0.01K	0.01K	0.01K	0.01K
771018	1010	7.2	52.5	1.00K	1.00K	1.00K	1.00K	1.00K	1.00K
771108	1155	7.0	41.0	0.07	0.07	0.07	0.07	0.07	0.07
771201	1022	7.4	29.5	0.00	0.00	0.00	0.00	0.00	0.00
DATE	TIME	CALCIUM	MAGNESIUM	CHLORIDE	SULFATE	SILICA	IRON	FE	FE
770818	0950	13.0	3.4	5.2	6.0	7.6	750	70	72
770907	1105	8.7	2.8	8.7	1.4	5.7	850	5K	64
770927	1120	12.0	4.5	9.2	7.6	4.4	15000	105	130
771018	1010	6.4	4.4	8.4	7.2	5.8	530	50	87
771108	1155	12.0	3.6	6.0	9.0	7.6	2000	10	190
771201	1022	8.8	2.3	0.4	7.0	6.8	1400	220	84
DATE	TIME	TOT COULI	FEC COLI	FEC STREP	CHLOROPHYL A	CHLOROPHYL B	CHLOROPHYL C	RESIDUE	RESIDUE
770818	0950	80000	270	40	13.0	5.0	13.0	13	73
770907	1105	9000	40	250	8.1	7.6	6.7	13	78
770927	1120	9800	90	360	7.8	3.7	11.0	7	79
771018	1010	2400	10	51	5.8	3.6	11.0	20	103
771108	1155	2800	260	510	4.5	3.3	12.0	10	85
771201	1022	2700	400	180	2.2	2.3	4.8	15	33

Table A-1.--Continued

STATION - 02425115											ALA R NR CANADA ALABAMA RIVER BASIN										
DATE	TIME	00010 WATER TEMP CENT	00076 TURB HACH FTU	00078 TRANSP SECCHI METERS	00086 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L											
770818	1107	30.0	20.0	0.9	60	180	118	7.7	2.4	12.0											
770907	1350	28.0	30.0	0.7	100	110	112	7.0	1.2												
770927	1205	20.0	35.0	0.8	120	110	167	6.2	0.7												
771018	1100	13.0	50.0	0.8	40	230	176	1.0	0.7												
771108	1315	12.0	60.0	0.5	190	220	154	11.4	0.2	184.0											
771201	1010	8.0	50.0	0.6	135	170	97	13.8	0.1												
DATE	TIME	00400 PH	00410 T ALK CACO3 MG/L	00610 NH3-NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2+NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHO MG/L P	00680 T ORG C MG/L	00900 TOT HARD CACO3 MG/L											
770818	1107	7.2	41.8	0.07	0.21	0.13	0.11	0.03	0.9	35											
770907	1350	7.3	33.6	0.21	0.64	0.16	0.26	0.07	1.9	34											
770927	1205	7.4	48.4	0.39	0.77	0.27	0.52	0.06	2.2	52											
771018	1100	6.9	60.7	1.00K	0.12	0.28	0.09	0.03	2.2	36											
771108	1315	7.0	38.5	0.04	0.03	0.27	0.09	0.06	3.0	32											
771201	1010	7.3	31.2	0.20	0.05	0.27	0.20	0.09	3.9	34											
DATE	TIME	00915 CALCIUM CA+DISS MG/L	00925 MAGNESIUM MG+DISS MG/L	00940 CHLORIDE CL MG/L	00946 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE+TOT UG/L	01046 IRON FE+DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN+DISS UG/L											
770818	1107	9.2	2.8	8.0	5.4	7.0	130	80	57	6.00											
770907	1350	9.1	2.8	7.7	4.6	6.1	170	40	83	0.00											
770927	1205	13.0	4.6	9.2	8.0	6.6	110	35	60	9.0											
771018	1100	7.3	4.4	8.0	7.0	7.4	550	20	56	230.0											
771108	1315	6.8	3.5	6.0	9.4	6.0	1400	140	160	40.0											
771201	1010	9.4	2.4	4.0	8.0	6.9	150	120	88	7.0											
DATE	TIME	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	31673 FECSTREP MFK-AGAR /100ML	32210 CHLRPHYL A UG/L	32212 CHLRPHYL B UG/L	32214 CHLRPHYL C UG/L	32299 H2S+SO4 AT 110 C MG/L	70300 MESITUE DISS-180 C MG/L												
770818	1107	170000	20	32	12.0	5.8	20.0	2	74												
770907	1350	1800	26	76	7.8	3.7	4.9	14	80												
770927	1205	3000	40	280	10.0	4.7	13.0	6	77												
771018	1100	1400	93	35	5.8	4.0	12.0	21	134												
771108	1315	3900	190	160	3.2	1.2	4.9	23	45												
771201	1010	1700	130	150	2.1	1.2	4.7	27	27												

Table A-1.--Continued

STATION - 02425250											
ALA H AB CEDAR CR NW BELKNAP ALABAMA RIVER BASIN											
DATE	TIME	WATER TEMP CENT	TORR TRIMETER MM HG FTU	00076 TRANSP SECCMI METERS	00078 COLOR PT-CO UNITS	00080 REDOX ORP MV	00090 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	
770818	1230	30.0	30.0	0.7	50	120	116	5.2	0.6	12.0	
770907	1530	28.0	30.0	0.7	95	150	110	6.8	1.1		
770927	1415	21.0	40.0	0.8	140	80	171	6.5	0.2		
771018	1300	14.0	10.0	0.8	60	230	180	10.2	1.2	170.0	
771109	1035	12.0	60.0	0.6	130	220	147	11.7	1.2		
771201	1146	8.0	40.0	0.6	140	180	98	13.6	0.8		
DATE	TIME	PH	TALK CACU3 MG/L	NH3-NH4- N TOTAL MG/L	TOT KJEL N MG/L	NO2&NO3 N-TOTAL MG/L	PHOS-TOT MG/L P	PHOS-DIS ORTHOP MG/L P	T ORG C CACU3 MG/L	T ORG N CACU3 MG/L	
770818	1230	7.0	36.1	0.07	0.29	0.11	0.25	0.02	0.8	39	
770907	1530	7.1	31.2	0.16	0.17	0.20	0.14	0.05	3.4	31	
770927	1415	7.5	0.0	0.01K	0.37	0.24	0.13	0.06	3.7	52	
771018	1300	7.0	52.5	0.03	0.35	0.28	0.11	0.09	1.3	33	
771109	1035	7.2	35.3	0.04	0.01	0.33	0.15	0.07	3.5	28	
771201	1146	7.4	31.2	0.00	0.15	0.29	0.18	0.12	5.6	35	
DATE	TIME	CALCIUM CA.CISS MG/L	MAGNESIUM MG+UISS MG/L	CHLORIDE CL MG/L	SULFATE SO4-DISS MG/L	SILICA DISSOLVED MG/L	IRON FE+TOT UG/L	IRON FE+UISS UG/L	MANGNESE MN UG/L	MANGNESE MN+UISS UG/L	
770818	1230	11.0	2.7	6.6	5.0	7.2	930	10	52	3.0	
770907	1530	8.2	2.5	8.8	4.6	5.5	840	0	60	4.0	
770927	1415	13.0	4.6	9.0	0.1	5.3	480	10	74	10.0	
771018	1300	5.9	4.5	7.5	6.0	6.3	700	60	88	25.0	
771109	1035	5.5	3.3	2.0	10.2	4.1	2700	470	200	11.0	
771201	1146	9.7	2.6	4.0	8.0	7.3	880	220	90	14.0	
DATE	TIME	TOT CALCI MFI4400 /100ML	FEC CALCI MFI4400 /100ML	FECSTHER MFI4400 /100ML	CHLORPHYL A UG/L	CHLORPHYL B UG/L	CHLORPHYL C UG/L	RES-SUSP AT 180 C MG/L	RESIDUE DISS-180 C MG/L		
770818	1230	150000	14	24	8.5	3.8	10.0	17	78		
770907	1530	2000	0	68	4.6	3.9	9.4	7	42		
770927	1415	1000	12	90	3.0	6.0	18.0	8	7		
771018	1300	1000	44	34	6.2	4.1	13.0	10	46		
771109	1035	4300	140	210	4.1	3.2	9.9	5	85		
771201	1146	3900	200	340	7.6	23.0	84.0	15	65		

Table A-1.--Continued

STATION - 02425700																	
ALA R NR ELM BLUFF ALABAMA RIVER BASIN																	
DATE	TIME	WATER TEMP CENT	00010	TURBIDIMTR HACH FTU	00076	TRANSP SECCHI METERS	00074	COLOR PT-CO UNITS	00080	REDUX ORP MV	00090	CONDUCTIVITY FIELD MICROHMO	00094	DO PROBE MG/L	00299	00310 BOD 5 DAY MG/L	00335 COO LOWLEVEL MG/L
770819	1100	29.5		30.0		0.6		50		190		128		6.6		0.7	10.0
770907	1645	28.5		30.0		0.7		95		150		108		6.7		1.8	
770927	1505	21.0		30.0		0.7		100		80		169		7.0		0.0	
771018	1400	13.0		45.0		0.8		50		230		181		10.0		1.1	
771109	1110	12.0		40.0		0.5		150		210		146		11.5		1.4	106.0
771201	1208	8.0		35.0		0.6		130		180		99		13.6		0.2	

00400	PH			T ALK CAC03 MG/L	00410	NH3-NH4-N TOTAL MG/L	00510	TOT KJEL N MG/L	00625	NO2&NO3 N-TOTAL MG/L	00630	PHOS-TOT MG/L	00665	PHOS-DIS ORTHO MG/L	00671	T ORG C CAC03 MG/L	00900
770819	1100	7.9		50.8		0.11		0.20		0.19		0.17		0.03		0.7	40
770907	1645	7.1		31.2		0.24		0.24		0.17		0.27		0.05		2.0	33
770927	1505	7.4		48.4		0.01		0.52		0.23		0.12		0.03		3.0	52
771018	1400	7.1		50.8		0.01		0.13		0.26		0.08		0.34		1.6	40
771109	1110	7.2		40.2		0.00		0.05		0.53		0.19		0.10		4.1	38
771201	1208	7.5		32.0		0.05		0.08		0.28		0.14		0.08		6.4	36

00915	CALCIUM CA-DISS MG/L			MAGNESIUM MG-DISS MG/L	00925	CHLORIDE CL MG/L	00940	SULFATE SO4-DISS MG/L	00946	SILICA DISSOLVED MG/L	00955	IRON FE-DISS MG/L	00965	MANGNESE MN-DISS MG/L			
770819	1100	11.0		2.9		6.0		5.6		7.0		470		60		53	9.0
770907	1645	8.8		2.5		7.9		0.2		6.4		100		10		51	0.00
770927	1505	13.0		4.6		8.8		8.8		5.1		270		450		20	50.0
771018	1400	8.2		4.6		8.8		5.0		4.6		140		20		110	26.0
771109	1110	10.0		3.2		7.6		9.0		6.4		200		300		200	20.0
771201	1208	10.0		2.6		4.0		9.2		7.6		150		200		82	20.0

31501	TOT CULI MFIMENDO /100ML			FEC COLI MFM-FCBR /100ML	31616	FECSTHEP MFKFAGAR /100ML	31673	CHLRPHYL A UG/L	32210	CHLRPHYL B UG/L	32212	CHLRPHYL C UG/L	32214	H2S-10SP AT 150 C MG/L	70249	RESIDUE C155-180 C MG/L	70360
770819	1100	91000		0		44		5.6		1.8		4.7		22		65	
770907	1645	2000		0		95		16.0		5.8		17.0		22		86	
770927	1505	2000		30		730		10.0		3.6		0.1		8		78	
771018	1400	1200		40		43		4.9		5.4		1.4		4		155	
771109	1110	2800		320		240		4.9		5.8		19.0		6		96	
771201	1208	4100		140		210		5.2		5.0		17.0		16		33	

Table A-1.--Continued

STATION - 02+2500													ALABAMA RIVER BASIN												
DATE		TIME		WATER TEMP CENT	TRACER MACH FTD	TRANSF SECONDS METERS	COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIVITY FIELD MICROMHO	00299 DO PROBE MG/L	00310 DO 5 DAY MG/L	00335 DO DURABLE MG/L													
770819	1100	29.0	35.0	0.6	80	130	119	6.2	119	6.2	5.9	5.0													
770907	1750	29.0	30.0	0.7	110	160	104	6.8	104	6.8	2.2														
770927	1620	21.0	40.0	0.9	90	140	175	7.0	175	7.0	0.0														
771018	1500	14.0	15.0	0.7	60	230	191	10.2	191	10.2	1.0														
771109	1235	12.0	55.0	0.5	170	210	142	11.3	142	11.3	0.8														
771201	1300	8.0	40.0	0.7	120	170	99	13.0	99	13.0	0.1														
DATE		TIME		PH	T ALK CACO3 MG/L	NH3-NH4-- N TOTAL MG/L	TOT KJEL N MG/L	NO2&NO3 N-TOTAL MG/L	PHOS-TOT MG/L P	PHOS-DISS ORTHOPHOSPHATE MG/L P	T ORP C MG/L	TOT HARD CACO3 MG/L													
770819	1100	7.4	40.2	0.10	0.22	0.38	0.17	0.04	0.17	0.04	1.1	42													
770907	1750	7.1	29.5	0.13	0.18	0.23	0.24	0.04	0.24	0.04	1.5	30													
770927	1620	7.5	47.5	0.01K	0.41	0.25	0.06	0.01	0.06	0.01	2.3	51													
771018	1500	7.2	52.5	0.01	0.09	0.28	0.06	0.03	0.06	0.03	1.4	39													
771109	1235	7.3	40.2	0.09	0.57	0.34	0.18	0.08	0.18	0.08	3.6	41													
771201	1300	7.6	32.9	0.00	0.12	0.29	0.16	0.04	0.16	0.04	4.2	35													
DATE		TIME		CALCIUM CA+DISS MG/L	MANGANESE MG+DISS MG/L	CHLORIDE CL MG/L	SULFATE SO4-DISS MG/L	SILICA DISSOLVED MG/L	IRON FE+ICI UG/L	IRON FE+DISS UG/L	MANGANESE MN UG/L	MANGANESE MN+DISS UG/L													
770819	1100	12.0	2.0	6.4	6.0	7.0	810	1.0	1.0	1.0	54	0.00													
770907	1750	8.2	2.3	7.5	4.4	5.8	430	1.0	1.0	1.0	55	0.00													
770927	1620	13.0	4.5	9.4	9.2	5.3	6500	0.0	0.0	0.0	76	5.0K													
771018	1500	7.6	4.8	7.6	5.0	5.3	990	2.0	2.0	2.0	100	5.0K													
771109	1235	11.0	3.2	5.2	10.0	6.3	2500	950	950	950	100	0.0K													
771201	1300	9.8	2.5	4.0	8.0	7.4	1400	140	140	140	82	14.0													
DATE		TIME		TOT COLI MPN/100ML	FEC COLI MPN/100ML	FRESHWATER MPN/100ML	CHLOROPHYLL A UG/L	CHLOROPHYLL B UG/L	CHLOROPHYLL C UG/L	RES-SUSP AT 180 C MG/L	RESIDUE DISS-180 C MG/L	70300 RESIDUE DISS-180 C MG/L													
770819	1100	6100	0	24	14.0	3.6	7.6	18	76	18	76														
770907	1750	2000	2	54	13.0	5.3	18.0	8	85	8	85														
770927	1620	600	0	50	10.0	3.2	10.0	9	70	9	70														
771018	1500	530	0	15	8.6	6.0	18.0	21	140	21	140														
771109	1235	4600	5	240	4.7	5.5	18.0	22	67	22	67														
771201	1300	1600	11	200	4.6	4.6	15.0	16	42	16	42														

Table A-1.--(Continued)

STATION - 02427400 ALA R NR CAMDEN ALABAMA RIVER BASIN												
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRBDNTR MACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 RESOX ORP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 5 DAY BOD MG/L	00335 COD LOWLEVEL MG/L		
770819	1500	30.0	20.0	0.8	40	160	130	6.9	1.4	10.0		
770908	0805	28.5	40.0	0.8	120	180	120	6.3	0.7			
770928	1200	21.0	40.0	0.6	110	170	165	8.3	2.7			
771019	1045	14.0	40.0	0.7	70	250	185	8.8	0.5			
771110	0740	11.0	70.0	0.5	170	200	136	12.0	0.8	120.0		
771206	1300	8.0	60.0	0.6	160	220	120	11.6	0.1			
DATE	TIME	00400 PH	00410 T ALK CACO3 MG/L	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2+NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHOP MG/L P	00680 T ORG C MG/L	00900 TOT HARD CACO3 MG/L		
770819	1500	7.3	39.4	0.00	0.19	0.19	0.33	0.02	1.5	42		
770908	0805	7.0	41.0	0.15	0.36	0.20	0.27	0.05	4.5	39		
770928	1200	6.5	45.9	0.66	0.60	0.15	0.10	0.06	2.1	50		
771019	1045	7.1	50.0	0.26	0.25	0.25	0.06	0.05	1.6	42		
771110	0740	6.9	39.4	0.00	0.17	0.32	0.15	0.11	3.7	29		
771206	1300	6.7	38.5	0.15	0.13	0.29	0.26	0.05	4.1	36		
DATE	TIME	00915 CALCIUM CA+DISS MG/L	00925 MAGNESIUM MG+DISS MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON TOTAL MG/L	01046 IRON FE+DISS MG/L	01055 MANGNESE MN MG/L	01056 MANGNESE MN+DISS MG/L		
770819	1500	12.0	2.8	6.8	6.0	7.2	4.0	70	48	0.00		
770908	0805	10.0	2.7	8.5	6.8	5.4	3.0	40	64	2.0		
770928	1200	13.0	4.2	8.6	7.6	5.7	3.0	32	76	5.0K		
771019	1045	9.3	4.6	9.0	2.0	6.4	5.0	30	92	5.0K		
771110	0740	61.0	3.4	5.6	9.0	6.5	3.0	30	0	5.0K		
771206	1300	10.0	2.6	5.2	8.0	7.8	3.0	30	76	5.0K		
DATE	TIME	31501 TOT COLI MFIMENGO /100ML	31616 FEC COLI MFM-FCBR /100ML	31673 FECSTREP MFM-FAGAR /100ML	32210 CHLPHYL A UG/L	32212 CHLPHYL B UG/L	32214 CHLPHYL C UG/L	32299 RES+SUSP 27-180 C MG/L	70300 RESIDUE DISS-180 C MG/L			
770819	1500	110000	0	60	14.0	1.4	3.7	13	78			
770908	0805	17000	4	15	8.3	6.9	23.0	3	97			
770928	1200	650	100	60	25.0	3.6	4.8	37	59			
771019	1045	400	19	54	6.0	1.7	17.0	54	133			
771110	0740	2100	45	160	5.3	5.6	18.0	32	94			
771206	1300	4500	52	18	6.8	6.0	23.0	35	37			

Table A-1. --Continued

[illegible]

Table A-1.--Continued

STATION - 02+27500										
ALA R NR MILLERS FERRY ALABAMA RIVER BASIN										
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRBDIMTR HACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00097 REDOX ORP MV	00344 CONDUCTIVITY FIELD MICRO-MHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOW LEVEL MG/L
770822	1000	29.0	19.0	0.8	115	140	133	5.7	2.1	7.0
770908	1025	29.0	30.0	0.8	110	170	116	6.2	0.2	
770928	1515	22.0	30.0	0.6	80	170	170	9.2	7.0	
771019	1140	14.0	25.0	0.6	60	250	192	8.7	1.2	
771114	1210	10.0	40.0	0.7	120	220	137	10.4	0.0	98.0
771206	1605	7.0	400.0	0.8	140	280	128	12.6	1.0	
DATE	TIME	00400 PH	00410 T ALK CACO3 MG/L	00610 NH3+NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2+NO3 N-TOTAL MG/L	00685 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHOPHOS MG/L P	00680 T ORG C CACO3 MG/L	00900 TOT HARD CACO3 MG/L
770822	1000	7.0	36.1	0.00	0.16	0.24	0.07	0.03	0.8	38
770908	1025	7.2	37.7	0.28	0.16	0.18	0.26	0.03	18.0	36
770928	1515	7.4	45.1	0.15	0.78	0.20	0.07	0.00	2.5	53
771019	1140	7.1	49.2	1.00K	0.66	0.25	0.12	0.03	2.0	42
771114	1210	7.4	34.4	0.01	0.00	0.33	0.12	0.04	3.2	42
771206	1605	6.0	35.3	0.00	0.33	0.34	0.23	0.18	4.3	37
DATE	TIME	00915 CALCIUM CA-DISS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00946 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE-TOT UG/L	01846 IRON FE-DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L
770822	1000	11.0	2.6	6.8	6.2	3.0	750	50	47	0.00
770908	1025	9.9	2.7	9.0	5.0	5.0	910	40	52	0.00
770928	1515	14.0	4.3	6.8	9.0	5.5	910	48	58	5.0K
771019	1140	9.1	4.8	8.2	3.2	6.3	910	20	100	5.0K
771114	1210	11.0	3.5	6.0	8.2	6.7	1300	190	83	4.0
771206	1605	10.0	2.9	5.6	8.2	7.4	1200	210	62	17.0
DATE	TIME	31501 TOT COLI MF-MENDO /100ML	31616 FEC COLI MFC-FCBP /100ML	31673 FECSTREP MFKFAGAR /100ML	32210 CHLPHYL A UG/L	32212 CHLPHYL B UG/L	32314 CHLPHYL C UG/L	76099 FE-DISSP AT 180 C MG/L	70300 RESIDUE DISS-180 C MG/L	
770822	1000	200	20	230	9.2	3.3	14.0	11	85	
770908	1025	6800	0	34	4.6	7.6	23.0	10	69	
770928	1515	1000	0	120	10.0	1.6	18.0	25	57	
771019	1140	750	13	55	10.0	1.6	40.0	11	121	
771114	1210	1200	32	48	5.3	0.5	19.0	17	85	
771206	1605	2900	47	16	11.0	15.0	51.0	20	65	

Table A-1.--Continued

STATION - 02427504												ALABAMA RIVER BASIN											
DATE		TIME	WATER TEMP CENT	TURBIDITY NACH FTU	TRANS- SECT METERS	COLOR PT-CO UNITS	REDOX ORP MV	CONDUCTIVITY FIELD MICROHMO	DO PROBE MG/L	BOD 5 DAY MG/L	COO LOWLEVEL MG/L												
770822	1215	30.0	40.0	0.8	95	160	131	6.0	1.6	15.0	00335												
770903	1345	29.0	40.0	0.6	100	170	122	6.8	0.7		00310												
770928	1800	21.5	30.0	0.6	90	180	170	6.5	3.0		00310												
771019	1300	14.0	50.0	0.6	110	240	195	6.7	1.3		00310												
771114	1405	10.0	50.0	0.7	110	210	142	10.5	0.0	62.0	00310												
771207	0905	7.0	50.0	0.8	130	240	104	11.2	1.9		00310												
DATE		TIME	PH	TALK CACOD3 MG/L	NH3-NH4+ N TOTAL MG/L	TOTAL N MG/L	NH4NO3 N-TOTAL MG/L	PHOS-TOT MG/L P	PHOS-DIS ORTHOC MG/L P	TOTAL C MG/L	TOTAL CACOD3 MG/L												
770822	1215	7.1	36.1	0.07	0.00	0.24	0.21	0.03	1.5	39	00900												
770903	1345	7.3	35.3	0.17	0.10	0.17	0.16	0.03	4.9	35	00900												
770928	1800	7.3	47.5	0.10	0.05	0.21	0.11	0.03	8.1	45	00900												
771019	1300	7.1	51.7	0.01	0.23	0.24	0.05	0.04	1.8	56	00900												
771114	1405	7.4	36.9	0.04	0.52	0.25	0.12	0.00	15.0	42	00900												
771207	0905	7.0	37.7	0.00	0.24	0.30	0.19	0.12	3.9	43	00900												
DATE		TIME	CALCIUM MG/L	MAGNESIUM MG/L	CHLORIDE CL MG/L	SULFATE SO4-DISS MG/L	SILICA DISSOLVED MG/L	IRON FE-TOT UG/L	IRON FE-DISS UG/L	MANGNESE MN UG/L	MANGNESE MN-DISS UG/L												
770822	1215	11.0	2.7	7.4	5.4	7.5	760	40	49	0.00	01056												
770903	1345	9.6	2.5	17.0	5.4	5.5	890	10	52	4.0	01056												
770928	1800	11.0	4.3	8.4	5.6	6.2	360	10	38	5.0K	01056												
771019	1300	14.0	5.0	8.2	6.0	6.0	620	80	110	5.0K	01056												
771114	1405	11.0	3.4	5.2	8.2	4.5	1700	250	70	25.0	01056												
771207	0905	1.2	3.0	5.2	9.0	6.9	1200	210	66	17.0	01056												
DATE		TIME	TOTAL SOLIDS /100ML	FECAL COLIFORMS /100ML	FECAL STREPTOCOCCI /100ML	CHLOROPHYLL A UG/L	CHLOROPHYLL B UG/L	CHLOROPHYLL C UG/L	RES-SUSP AT 180 C MG/L	RESIDUE DISS-180 C MG/L													
770822	1215	50	8	600	12.0	2.3	2.3	2.3	15	79													
770903	1345	2500	0	60	6.3	6.9	22.0	22.0	15	85													
770928	1800	1000	200	50	10.0	4.8	11.0	11.0	16	64													
771019	1300	400	15	100	6.7	5.5	19.0	19.0	30	112													
771114	1405	3000	15	46	3.1	3.2	7.3	7.3	20	88													
771207	0905	3200	34	15	5.2	5.1	16.0	16.0	10	60													

Table A-1.--Continued

STATION - 02427507											ALA R AB PONEHOUSE AT MILLERS F ALABAMA RIVER BASIN										
DATE		TIME		00010 WATER TEMP CENT	00076 TURB TRIDUMTR HACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDUX URP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L									
770822	1430	30.0	30.0	0.6	60	190	137	6.4	1.8	12.0											
770908	1520	29.0	40.0	0.8	120	180	112	6.6	0.3												
770929	1010	20.0	30.0	0.7	80	160	150	7.0	0.7												
771019	1400	14.0	40.0	0.7	135	240	198	8.7	1.2												
771114	1515	10.0	35.0	0.6	140	210	140	9.9	0.0	88.0											
771207	1100	6.5	60.0	0.7	150	200	124	12.2	0.4												
DATE		TIME		00400 PH	00410 T ALK CACO3 MG/L	00610 NH3-NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO3-NH3 N-TOTAL MG/L	00655 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHO MG/L P	00680 T ORG C MG/L	00900 TOT HARD CACO3 MG/L									
770822	1430	7.2	37.7	0.07	0.00	0.23	0.19	0.04	1.1	39											
770908	1520	7.2	36.1	0.13	0.44	0.19	0.24	0.02	2.7	36											
770929	1010	7.3	45.9	0.10	0.64	0.25	0.19	0.00	1.3	5											
771019	1400	7.1	47.6	0.09	0.13	0.20	0.15	0.00	2.1	50											
771114	1515	7.3	35.3	0.01	0.10	0.31	0.12	0.02	5.1	42											
771207	1100	7.5	34.4	0.03	0.14	0.30	0.23	0.12	3.9	38											
DATE		TIME		00915 CALCIUM CA-DISS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE-TOT UG/L	01046 IRON FE-DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L									
770822	1430	11.0	2.7	7.8	5.8	7.4	1000	50	69	0.00											
770908	1520	9.9	2.7	8.4	6.2	5.7	1800	20	110	0.00											
770929	1010	14.0	4.4	9.0	8.4	7.2	820	10	40	6.0											
771019	1400	12.0	4.8	7.6	5.0	5.6	840	20	122	9.0											
771114	1515	11.0	3.4	5.2	7.0	9.1	2300	150	110	11.0											
771207	1100	10.0	3.0	3.6	8.0	7.0	1800	140	68	19.0											
DATE		TIME		31501 TOT COLI MFIRENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	31673 FECSTREP MFKREAGAR /100ML	32210 CHLRPHYL A UG/L	32212 CHLRPHYL B UG/L	32214 CHLRPHYL C UG/L	70299 RES-SUSP AT 160 C MG/L	70300 RESIDUE DISS-160 C MG/L										
770822	1430	35	24	1700	19.0	4.9	18.0	15	88												
770908	1520	5600	0	130	9.4	9.0	26.0	21	84												
770929	1010	2800	4	1400	9.9	1.9	16.0	18	76												
771019	1400	490	11	190	7.6	3.7	12.0	16	103												
771114	1515	1700	48	200	3.8	3.9	13.0	10	82												
771207	1100	1900	51	21	6.7	7.1	22.0	21	75												

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Table A-1.--Continued

STATION - 02-27745													ALA R NR YELLOW BLUFF ALABAMA RIVER BASIN												
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRIUMPH MACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 HEDDA OMP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 HDD MG/L	00335 COD LOWLEVEL MG/L	00400 PM SU MG/L	00410 T ALK CACO3 MG/L													
770823	0930	29.0	12.0	0.8	42	230	128	6.4	1.3	4.0	7.0	39.0													
770909	1000	27.0	9.0	0.8	100	160	124	6.6	1.0		7.2	38.0													
770929	1305	20.0	23.0	0.6	100	180	170	7.2	0.3		7.4	46.0													
771020	1100	13.0	36.0	0.6	88	250	195	4.7	0.2		7.3	57.0													
771115	1045	9.0	40.0	0.7	130	180	140	11.6	0.1	32.0	7.5	36.0													
771207	1313	7.0	30.0	0.6	150	220	127	12.2	0.0		7.3	34.0													
DATE	TIME	00610 NH3-NH4- N TOTAL MG/L	00625 TOT N MG/L	00630 NO2+NO3 N-TOTAL MG/L	00635 PHOS-TOT MG/L P	00671 PHOS-DIS D-THO MG/L P	00680 T ORC C MG/L	00400 TOT HARD CACO3 MG/L	00915 CALCIUM CAP-DISS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00955 SILICA DISSOLVED MG/L													
770823	0930	0.03	0.16	0.20	0.24	0.04	0.5	38	11.0	2.6	6.8	7.6													
770909	1000	0.11	0.53	0.19	0.23	0.03	2.5	30	4.8	2.6	6.2	5.4													
770929	1305	0.12	0.96	0.23	0.06	0.03	1.2	50	13.0	4.2	9.0	6.1													
771020	1100	0.01K	0.16	0.23	0.17	0.00	2.4	42	12.0	3.2	8.0	6.0													
771115	1045	0.03	0.23	0.28	0.12	0.02	19.0	42	11.0	3.4	5.2	5.0													
771207	1313	0.06	0.12	0.30	0.22	0.12	6.9	38	10.0	3.1	5.6	7.8													
DATE	TIME	01045 IRON FE+TOT UG/L	01046 IRON FE+DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN+DISS UG/L	01501 TOT COLI MET/MENDO /100ML	01616 FEC COLI MEM-F+BR /100ML	01673 F+BR /100ML	02010 CHLORPHYL C MG/L	02014 CHLORPHYL C MG/L	02049 H2S+HSP AT 180 C MG/L	02050 H2S+HSP AT 180 C MG/L													
770823	0930	1300	40	48	2.0	400	0	12	3.1	7.3	17	76													
770909	1000	880	70	43	70	2800	0	200	10.0	30.0	11	68													
770929	1305	420	OK	50	16.0	2100	12	150	5.3	25.0	27	104													
771020	1100	820	50	110	7.0	2200	-80	60	4.7	13.0	43	111													
771115	1045	1800	140	76	16.0	1700	91	150	5.0	17.0	22	87													
771207	1313	1400	180	70	15.0	2000	36	31	14.0	4.5	42	81													

Table A-1.--Continued

Station Number

STATION - 02428200		ALABAMA RIVER AT LOWER PEACH TREE ALABAMA RIVER									
DATE	TIME	WATER TEMP CENT	WIND MACH FTU	WIND SECONDS	WIND METERS	WIND UNITS	WIND PFT-CO	WIND ORP	WIND MV	WIND CNUCTVY FIELD	WIND MICROMHO
7/023	1100	30.0	55.0	0.6	0.6	85	120	220	240	129	129
7/0912	1300	23.0	50.0	0.7	0.7	120	90	160	220	134	134
7/1003	1245	19.0	30.0	0.7	0.7	90	160	152	220	152	152
7/1024	1230	14.0	35.0	0.6	0.6	80	191	80	220	191	191
7/1115	1610	9.0	65.0	0.7	0.7	130	180	146	180	146	146
7/1208	0915	7.0	0.0	0.7	0.7	130	190	118	190	118	118
DATE	TIME	NH3-NH4-N MG/L	TOT KJEL N MG/L	N-TOTAL MG/L	N-TOTAL MG/L	PHOS-TOT MG/L P	PHOS-TOT MG/L P	PHOS-DIS MG/L P	PHOS-DIS MG/L P	TOT HARD CACO3 MG/L	TOT HARD CACO3 MG/L
7/023	1100	0.00	0.18	0.23	0.23	0.20	0.20	0.04	0.04	39	39
7/0912	1300	0.10	0.33	0.23	0.23	0.24	0.24	0.02	0.02	33	33
7/1003	1245	0.03	0.46	0.22	0.22	0.08	0.08	0.03	0.03	54	54
7/1024	1230	0.014	0.16	0.24	0.24	0.14	0.14	0.00	0.00	56	56
7/1115	1510	0.02	0.00	0.21	0.21	0.12	0.12	0.09	0.09	42	42
7/1208	0915	0.06	0.11	0.29	0.29	0.16	0.16	0.15	0.15	38	38
DATE	TIME	IRON UG/L	IRON UG/L	MANGNESE MG/L	MANGNESE MG/L	MANGNESE MG/L	MANGNESE MG/L	TOT COLI /100ML	TOT COLI /100ML	FECSTREP /100ML	FECSTREP /100ML
7/023	1100	1500	60	73	0.00	0.00	0.00	60	60	110	110
7/0912	1300	1400	120	81	6.0	6.0	6.0	3700	3700	46	46
7/1003	1245	630	33	71	5.04	5.04	5.04	2400	2400	77	77
7/1024	1230	830	20	91	5.04	5.04	5.04	7100	7100	62	62
7/1115	1610	1400	120	79	14.0	14.0	14.0	2500	2500	100	100
7/1203	0915	1000	340	83	27.0	27.0	27.0	1950	1950	18	18
DATE	TIME	CHLORIDE MG/L	CHLORIDE MG/L	CHLORIDE MG/L	CHLORIDE MG/L	CHLORIDE MG/L	CHLORIDE MG/L	CHLORIDE MG/L	CHLORIDE MG/L	CHLORIDE MG/L	CHLORIDE MG/L
7/023	1100	70300	70300	70300	70300	70300	70300	70300	70300	70300	70300
7/0912	1300	70300	70300	70300	70300	70300	70300	70300	70300	70300	70300
7/1003	1245	70300	70300	70300	70300	70300	70300	70300	70300	70300	70300
7/1024	1230	70300	70300	70300	70300	70300	70300	70300	70300	70300	70300
7/1115	1610	70300	70300	70300	70300	70300	70300	70300	70300	70300	70300
7/1203	0915	70300	70300	70300	70300	70300	70300	70300	70300	70300	70300

Table A-1.--Continued

STATION - 02428335													ALA R ABOVE MCLEOD CK NR FRANKLIN ALABAMA RIVER												
WATER		00010	00076	00078	00079	00080	00090	00094	00294	00310	00335	00400	00410												
TEMP	TURB	TRBIDMTR	SECCHI	TRANSP	COLOR	PT-CO	REDOX	CONDUCTIV	DO	RDC	COD	PH	T ALK												
CENT	MACH	FTU	METERS	METERS	UNITS	UNITS	ORP	FIELD	P-PROBE	5 DAY	LOWLEVEL	SU	CAC03												
							MV	MICROMHO	MG/L	MG/L	MG/L		MG/L												
770824	0730	28.0	52.0	0.6	160	100	100	126	5.7	1.2	5.0	7.0	34.0												
770912	1415	22.0	50.0	0.7	120	220	220	124	6.2	0.5		7.2	36.0												
771003	1420	19.0	40.0	0.6	100	120	120	163	7.4	0.3		7.5	52.0												
771024	1330	14.0	25.0	0.7	70	230	230	189	6.8	1.0		7.0	56.0												
771116	0755	10.0	30.0	0.7	120	200	200	136	14.3	0.4	34.0	7.4	34.0												
771208	0955	7.0	45.0	0.8	130	270	270	140	10.8	0.5		7.2	33.0												
NH3-NH4-N TOTAL		00510	00625	00630	00665	00671	00680	00700	00915	00925	00940	00955													
			TOT KJEL	NO2&NO3	PHOS-TOT	PHOS-DIS	T ORG C	TOT HARD	CALCIUM	MANGNIUM	CHLORIDE	SILICA													
			N	N-TOTAL	MG/L P	ORTHO	C	CAC03	CA-DISS	MG-DISS	CL	DISSOLVED													
DATE	TIME	MG/L	MG/L	MG/L	MG/L P	MG/L P	MG/L	MG/L	MG/L	MG/L	MG/L	MG/L													
770824	0730	0.00	0.08	0.20	0.19	0.04	1.8	36	10.0	2.5	6.4	8.9													
770912	1415	0.45	0.17	0.21	0.13	0.01	1.8	35	9.4	2.7	7.5	5.2													
771003	1420	0.02	0.58	0.22	0.10	0.03	1.5	51	13.0	4.4	8.8	7.5													
771024	1330	0.01K	0.18	0.25	0.13	0.00	2.9	56	14.0	5.1	8.6	5.9													
771116	0755	0.00	0.16	0.20	0.11	0.09	3.9	39	10.0	3.4	5.6	7.0													
771208	0955	0.00	0.13	0.29	0.24	0.15	4.1	38	10.0	3.0	6.0	7.2													
IRON		01045	01046	01055	01056	01501	01616	01673	0212	02214	02099	02300													
FE-TOT	FE-DISS			MN	MANGNESE	TOT COLI	FEC COLI	FECSTREP	CHL-RPHYL	CHL-RPHYL	RES-SUSP	RESIDUE													
UG/L	UG/L			UG/L	UG/L	MFIM-NDO	MFIM-FCB	MFKFAGAR	B	C	AT 180 C	O:SS-180													
						/100ML	/100ML	/100ML	UG/L	UG	MG/L	C													
770824	0730	1400	120	48	37.0	160	4	140	2.4	6.4	42	78													
770912	1415	1300	40	97	3.0	1800	10	55	6.4	24.0	6	74													
771003	1420	710	22	75	5.0K	1600	26	100	4.5	14.0	32	96													
771024	1330	1200	20	77	5.0K	4000	5	58	1.2	3.9	17	160													
771116	0755	4700	340	87	8.0	2300	20	120	3.2	9.9	9	66													
771208	0955	1700	260	80	19.0	1400	26	27	3.2	12.0	25	55													

Table A-1.--Continued

Station Number 20

STATION - 02428345												
ALA R AT DAVIS FERRIS FRANKLIN ALABAMA RIVER												
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRILUMTR MACHITU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 HEDOX ORP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 SOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU	00410 TALK CACO3 MG/L
770824	0930	28.0	75.0	0.6	195	160	115	5.5	0.1	5.0	7.6	38.0
770912	1515	22.0	55.0	0.8	120	320	122	6.1	0.3		7.1	37.0
771003	1530	20.0	35.0	0.8	100	130	158	7.4	0.3		7.6	48.0
771024	1310	14.0	25.0	0.7	60	240	188	8.7	1.5		7.0	54.0
771116	0830	10.0	40.0	0.7	140	200	138	12.2	0.6	52.0	7.8	40.0
771208	1005	7.0	35.0	0.8	170	250	126	10.8	1.0		7.4	43.0
DATE	TIME	00610 NH3-NH4- N TOTAL MG/L	00625 TOT KUCL N MG/L	00630 NO2+NO3 N-TOTAL MG/L	00655 PHOS-TOT MG/L P	00671 PHOS-DIS ORP MG/L P	00680 T ORG C MG/L	00900 TOT HARD CACO3 MG/L	00915 CALCIUM CA-DISS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00955 SILICA DISSOLVED MG/L
770824	0930	0.06	0.05	0.20	0.20	0.03	2.1	71	24.0	2.5	6.8	8.1
770912	1515	0.08	0.15	0.23	0.17	0.01	2.7	35	9.5	2.7	7.0	5.7
771003	1530	0.08	0.51	0.23	0.06	0.00	2.7	54	12.0	4.5	8.4	10.0
771024	1310	0.02	0.10	0.25	0.09	0.00	2.3	52	12.0	5.2	8.8	6.4
771116	0830	0.01	0.67	0.24	0.13	0.13	3.2	39	10.0	3.4	5.2	8.8
771208	1005	0.00	0.13	0.29	0.17	0.15	3.6	41	11.0	3.1	5.2	7.6
DATE	TIME	01045 IRON FE-TOT UG/L	01046 IRON FE-DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L	01501 TOT COLI MFIMENDO /100ML	01616 FEC COLI MFM-FCBR /100ML	01673 FECSTREP MFCFAJAN /100ML	03212 CHLPHY. B UG/L	03214 CHLPHY. C UG/L	03299 RES-SUSP AT 160 C MG/L	03300 RESIOUE DISS-160 C MG/L
770824	0930	1200	90	49	9.0	380	93	310	2.3	7.5	19	72
770912	1515	1600	70	77	5.0	3000	60	140	8.3	30.0	17	90
771003	1530	430	45	51	6.0	1800	20	20	10.0	36.0	55	119
771024	1310	550	170	66	15.0	3600	5	59	1.1	4.8	6	111
771116	0830	1700	160	96	19.0	1600	57	100	3.7	14.0	10	93
771208	1005	1800	570	64	16.0	5400	32	31	5.6	21.0	20	60

Table A-1.--Continued

STATION 02408380		ALA 4 BELOW CANE CHECK NR CHANGE ALABAMA WATER									
DATE	TIME	WATER TEMP	TURB	COND	CHLOR	PH	DO	CO ₂	CO ₃	CO ₃	CO ₃
770824	1030	28.0	61.0	0.7	120	190	119	5.8	1.7	6.0	7.0
770912	1610	22.0	30.0	0.7	120	210	122	5.4	0.5		7.2
771003	1615	20.0	25.0	0.8	95	130	156	7.2	0.3		7.3
771024	1425	14.0	20.0	0.8	70	240	192	8.7	1.7		7.0
771116	0935	10.0	40.0	0.7	120	280	141	12.4	0.7	38.0	7.3
771208	1025	7.0	40.0	0.8	110	240	127	11.2	0.5		7.0
DATE	TIME	WATER TEMP	TURB	COND	CHLOR	PH	DO	CO ₂	CO ₃	CO ₃	CO ₃
770824	1030	0.03	0.03	0.26	0.17	0.05	1.5	1.1	12.0	2.6	6.8
770912	1610	0.00	0.16	0.22	0.11	0.04	2.8	35	9.4	2.7	6.9
771003	1615	0.04	0.65	0.22	0.08	0.02	1.3	35	8.0	4.2	8.6
771024	1425	0.01K	0.06	0.23	0.06	0.00	1.0	24	14.0	5.0	9.2
771116	0935	0.05	0.16	0.27	0.12	0.02	4.1	42	11.0	3.4	6.0
771208	1025	0.00	0.12	0.32	0.17	0.09	4.0	36	10.0	3.0	5.6
DATE	TIME	WATER TEMP	TURB	COND	CHLOR	PH	DO	CO ₂	CO ₃	CO ₃	CO ₃
770824	1030	1200	330	140	40.0	400	0	160	1.1	1.6	21
770912	1610	1400	30	81	0.0K	200	4	58	3.7	1.0	12
771003	1615	750	10	47	5.0K	250	23	20	4.0	14.0	82
771024	1425	550	30	100	4.0	600	0	54	4.9	17.0	11
771116	0935	790	200	69	40.0	1800	28	110	2.6	6.1	25
771208	1025	1300	220	60	29.0	1900	24	62	3.6	13.0	9

Table A-1.--Continued

STATION - 0242005											SILICA OR NA FINEGRADING ALABAMA RIVER BASIN										
DATE	TIME	00010 WATER TEMP CENT	00075 TURB MACH FID	00078 TRANSM SECT	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 CUD LOWLEVEL MG/L											
770824	1245	29.0	61.0	0.7	155	140	120	7.0	1.9	3.0											
770912	1715	23.0	30.0	0.8	120	210	120	6.4	1.0												
771003	1700	19.0	40.0	0.5	80	130	138	9.2	0.3												
771024	1515	13.0	25.0	0.8	70	240	191	8.7	1.4												
771116	1010	10.0	30.0	1.8	60	280	141	12.4	0.9	134.0											
771208	1107	5.0	50.0	0.5	160	240	100	10.4	0.5												
DATE	TIME	00400 PH	00410 T ALK CACO3 MG/L	00510 NH3-NH4- N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHO MG/L P	00680 T ORP C MG/L	00900 TOT HARD CACO3 MG/L											
770824	1245	7.1	36.1	0.05	0.07	0.02	0.20	0.01	2.1	40											
770912	1715	7.2	35.3	0.70	0.14	0.17	0.16	0.00	2.7	33											
771003	1700	7.8	44.3	0.03	0.62	0.04	0.05	0.00	3.3	35											
771024	1515	7.0	53.3	0.02	0.20	0.23	0.10	0.00	1.9	41											
771116	1010	7.5	41.8	0.02	0.04	0.14	0.09	0.00	22.0	43											
771208	1107	7.2	26.2	0.00	0.15	0.08	0.12	0.01	3.5	32											
DATE	TIME	00915 CALCIUM CA+DISS MG/L	00925 MAGNESIUM MG+DISS MG/L	00940 CHLORIDE CL MG/L	00946 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE+TOT UG/L	01046 IRON FE+DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN+DISS UG/L											
770824	1245	12.0	2.4	6.0	5.4	8.9	1500	30	110	61.0											
770912	1715	9.3	2.4	7.1	7.0	7.0	1200	00	47	0.00											
771003	1700	8.0	3.6	7.2	7.2	7.5	1200	55	62	5.00											
771024	1515	8.4	4.9	8.0	6.0	6.7	620	20	69	16.0											
771116	1010	12.0	3.1	6.0	7.0	8.8	1400	190	31	26.0											
771208	1107	10.0	1.6	3.2	0.8	15.0	1700	300	60	31.0											
DATE	TIME	31501 TOT CULI MFIMENDO /100ML	31616 FEC CULI MFM-FCHR /100ML	31673 FECSTHEP MFKFAGSR /100ML	32210 CHLRPHYL A UG/L	32212 CHLRPHYL B UG/L	32214 CHLRPHYL C UG/L	70299 MES-SUSP AT 160 C MG/L	70300 RESIDUE DISS-160 C MG/L												
770824	1245	45000	0	120	16.0	2.7	6.2	18	81												
770912	1715	890	13	290	8.4	4.5	13.0	22	79												
771003	1700	1500	29	580	16.0	0.0	0.0	9	66												
771024	1515	1700	6	69	13.0	5.8	19.0	23	122												
771116	1010	970	5	63	7.4	1.5	5.7	15	93												
771208	1107	46	200	120	6.0	4.2	14.0	25	61												

Table A-1.--Continued

STATION - 02428396 ALA R BELOW SILVER LK RM FINEMBG ALABAMA RIVER BASIN									
DATE	TIME	WATER TEMP C	00010	TURBIDIMTY MACH FTU	00076	TRANSP SECCHI METERS	00078	COLOR PT-CO UNITS	00080
770824	1435	30.0	30.0	30.0	0.7	0.7	130	130	130
770913	1015	22.0	40.0	40.0	0.7	0.7	110	230	230
771004	1120	19.0	30.0	30.0	0.8	0.8	80	140	140
771025	0945	14.0	40.0	40.0	1.0	1.0	65	230	230
771116	1150	10.0	40.0	40.0	0.7	0.7	120	280	280
771208	1130	7.0	30.0	30.0	0.8	0.8	120	240	240
DATE	TIME	PH	00400	T ALK CAC03 MG/L	00410	NH3-NH4-N TOTAL MG/L	00610	TOT KjEL N MG/L	00625
770824	1435	7.1	32.8	32.8	0.09	0.09	0.11	0.20	0.20
770913	1015	7.2	36.1	36.1	0.30	0.30	0.19	0.22	0.22
771004	1120	7.4	46.7	46.7	0.10	0.10	0.50	0.21	0.21
771025	0945	7.5	59.0	59.0	0.01K	0.01K	0.12	0.25	0.25
771116	1150	7.3	37.7	37.7	0.00	0.00	0.57	0.29	0.29
771208	1130	7.1	32.8	32.8	0.21	0.21	0.19	0.30	0.30
DATE	TIME	CALCIUM CA+DISS MG/L	00915	MAGNESIUM MG+DISS MG/L	00925	CHLORIDE CL MG/L	00940	SULFATE SO4-DISS MG/L	00946
770824	1435	11.0	2.6	2.6	6.4	6.4	7.2	2.0	2.0
770913	1015	9.3	2.6	2.6	6.5	6.5	2.0	6.0	6.0
771004	1120	13.0	4.3	4.3	8.0	8.0	9.2	6.6	6.6
771025	0945	12.0	5.2	5.2	8.8	8.8	4.0	6.1	6.1
771116	1150	11.0	3.4	3.4	6.0	6.0	8.0	9.3	9.3
771208	1130	10.0	2.9	2.9	5.2	5.2	1.1	6.8	6.8
DATE	TIME	TOT CU+I MFIMENDO /100ML	31501	FEC COLI MFIM-FCBR /100ML	31616	FECSTREP MFIM-FCBR /100ML	31673	CHLPHYL A UG/L	32210
770824	1435	480	0	0	61	61	9.1	3.7	3.7
770913	1015	24000	0	0	21	21	5.7	3.1	3.1
771004	1120	7000	4	4	17	17	16.0	0.0	0.0
771025	0945	21000	6	6	3	3	2.3	2.3	2.3
771116	1150	300	20	20	60	60	3.4	3.4	3.4
771208	1130	1800	13	13	36	36	4.9	5.4	5.4
DATE	TIME	RESIDUE AT 180 C MG/L	70299	RES-SUSP AT 180 C MG/L	70299	CHLPHYL C UG/L	32214	CHLPHYL B UG/L	32212
770824	1435	82	14	14	19.0	19.0	1.7	3.1	3.1
770913	1015	73	23	23	9.8	9.8	0.0	0.0	0.0
771004	1120	73	2	2	0.0	0.0	0.0	0.0	0.0
771025	0945	94	6	6	2.3	2.3	2.3	2.3	2.3
771116	1150	88	9	9	9.5	9.5	3.4	3.4	3.4
771208	1130	67	40	40	16.0	16.0	5.4	5.4	5.4
DATE	TIME	MANGNESE MN UG/L	01055	MANGNESE MN+DISS UG/L	01055	IRON FE+DISS UG/L	01046	IRON FE+TOT UG/L	01045
770824	1435	38	1.6	1.6	0.02	0.02	0.18	0.20	0.20
770913	1015	34	2.1	2.1	0.03	0.03	0.20	0.22	0.22
771004	1120	50	3.6	3.6	0.04	0.04	0.09	0.21	0.21
771025	0945	52	1.9	1.9	0.00	0.00	0.13	0.25	0.25
771116	1150	42	3.3	3.3	0.03	0.03	0.15	0.29	0.29
771208	1130	37	6.4	6.4	0.15	0.15	0.21	0.30	0.30
DATE	TIME	TOT HARD CAC03 MG/L	00900	T ORG C C	00680	PHOS-TOT MG/L	00665	PHOS-TOT N-TOTAL MG/L	00630
770824	1435	2.0	2.2	2.2	6.7	6.7	122	122	122
770913	1015		0.0	0.0	6.1	6.1	125	230	230
771004	1120		0.3	0.3	7.6	7.6	142	140	140
771025	0945	66.0	1.5	1.5	9.2	9.2	189	230	230
771116	1150		0.6	0.6	12.4	12.4	172	280	280
771208	1130		0.2	0.2	10.8	10.8	173	240	240

Table A-1.--Continued

STATION - 02428399 ALA R NH CLAYBORNE LOCK & DAM ALABAMA RIVER BASIN										
DATE	TIME	WATER TEMP CENT	00076 TONS TRAFIC/HR	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTVY FIELD MICROHMO	00299 DO PRUBE MG/L	00310 BOD 5 DAY MG/L	00335 COO LOWLEVEL MG/L
770824	1630	29.0	35.0	0.8	110	145	118	7.0	2.8	5.0
770913	1050	22.0	45.0	0.7	110	190	121	6.3	0.5	
771004	1155	19.0	40.0	0.8	80	140	151	7.7	0.3	
771025	1010	14.0	15.0	0.9	60	230	189	9.3	1.9	60.0
771116	1225	11.0	45.0	0.7	120	280	99	12.4	0.4	
771208	1220	7.5	45.0	0.8	120	210	138	10.8	0.7	
DATE	TIME	PH	00410 T ALK CAC03 MG/L	00610 NH3-NH4-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00671 PHOS-LIS ORTHO MG/L P	00689 T ORG C C MG/L	00400 TOT HARD CAC03 MG/L
770824	1630	7.1	36.1	0.07	0.16	0.24	0.19	0.02	1.1	38
770913	1050	7.1	36.1	0.67	0.03	0.21	0.20	0.03	21.0	34
771004	1155	7.5	46.7	0.33	0.30	0.24	0.10	0.07	1.9	53
771025	1010	7.1	52.5	0.01K	0.11	0.26	0.17	0.00	1.7	39
771116	1225	7.2	36.1	0.05	0.00	0.32	0.15	0.06	3.5	29
771208	1220	7.4	38.5	0.13	0.10	0.30	0.19	0.15	4.0	38
DATE	TIME	CALCIUM CA-DISS MG/L	00925 MGNISIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00946 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE-TOT UG/L	01046 IRON FE-DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L
770824	1630	11.0	2.6	5.6	5.4	7.6	910	90	42	0.00
770913	1050	9.3	2.7	6.5	3.0	5.9	1000	170	51	12.0
771004	1155	14.0	4.3	7.4	8.0	6.3	450	25	45	22.0
771025	1010	7.3	5.1	8.0	6.0	6.4	310	10	58	7.0
771116	1225	6.1	3.4	5.0	8.2	7.9	1800	210	73	14.0
771208	1220	10.0	3.0	7.2	5.2	7.0	1200	170	55	5.0
DATE	TIME	TOT COLI MP/100ML	03151 FEC COLI MP/100ML	03166 FECSTREP MP/100ML	03173 CHLPHYL A UG/L	03210 CHLPHYL B UG/L	03212 CHLPHYL C UG/L	03214 CHLPHYL C UG/L	03299 RES-SUSP AT 160 C MG/L	03300 RESIDUE DISS-180 C MG/L
770824	1630	9000	100	67	6.7	2.1	5.7	12	78	
770913	1050	400	0	49	6.8	6.8	22.0	20	88	
771004	1155	3100	0	57	4.6	3.0	11.0	40	74	
771025	1010	4100	6	36	5.7	6.0	22.0	6	73	
771116	1225	2000	20	64	3.7	2.9	10.0	10	68	
771208	1220	1200	24	32	4.7	5.1	18.0	5	62	

STATION - 02428405 ALA R 0.4 MI. BELOW CLAIRBORNE LD ALABAMA RIVER BASIN

DATE	TIME	00010 WATER TEMP CENT	00076 TURB INBIDMT MACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDUX OMP MV	00094 CONDUCTIV FIELD MICROHMO	00294 DO PHORE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
770824	1800	29.0	24.0	0.7	110	160	115	8.7	2.0	8.0
771004	1420	19.0	50.0	0.7	100	140	162	10.8	0.3	
771025	1100	14.0	40.0	0.8	60	190	189	11.8	0.3	18.0
771117	0800	10.0	70.0	0.7	130	270	111	13.5	1.1	
771208	1345	8.0	40.0	0.7	110	210	127	11.8	1.7	
00400 PH		00410 T ALK CACO3	00610 NH3-NH4- N TOTAL	00625 TOT KJEL N	00630 NO2&NO3 N-TOTAL	00665 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHOP MG/L P	00680 Y ORG C C	00900 TOT HARD CACO3 MG/L	
770824	1800	7.5	36.1	0.03	0.11	0.23	0.22	0.03	2.1	38
771004	1420	7.5	46.7	1.10	0.12	0.20	0.09	0.00	15.0	38
771025	1100	6.8	52.5	0.01K	0.04	0.25	0.23	0.00	2.4	51
771117	0800	7.4	38.5	0.01	0.22	0.32	0.09	0.03	3.3	42
771208	1345	7.4	43.5	0.00	0.11	0.29	0.18	0.15	3.8	38
00915 CALCIUM CA-DISS		00925 MAGNESIUM MG-DISS	00940 CHLORIDE CL	00946 SULFATE SO4-DISS	00955 SILICA DISSOLVED MG/L	01045 IRON FERRIC MG/L	01046 IRON FE-DISS MG/L	01055 MANGNESE MN MG/L	01056 MANGNESE MN-DISS MG/L	
770824	1800	11.0	2.5	5.6	6.2	8.2	8.0	100	45	0.00
771004	1420	8.0	4.4	8.0	8.0	5.4	10.0	11	72	5.0K
771025	1100	12.0	5.0	9.2	10.0	8.2	7.0	100	82	12.0
771117	0800	11.0	3.4	5.0	7.0	8.0	10.0	100	63	21.0
771208	1345	10.0	3.0	5.2	7.0	8.0	10.0	100	50	12.0
31501 TOT COLI MPN/100ML		31616 FEC COLI MPN-FECRM /100ML	31613 FECST-10 MPN/100ML	32210 CHLORPHYL A	32212 CHLORPHYL B	32214 CHLORPHYL C	32244 MUSCLE AT 18°C MG/L	70300 RESIDUE DISS-180 C		
770824	1800	1800	12	2.0	11.0	4.9	15.0	17	81	
771004	1420	5300	12	37	8.6	4.1	28.0	43	10	
771025	1100	4000	6	42	2.8	2.7	10.5	35	138	
771117	0800	3700	8	32	1.8	3.6	12.0	16	82	
771208	1345	1000	20	32	3.5	2.7	9.7	10	62	

Table A-1.--Continued

STATION - 02424500 ALA M AT CLAIRBORNE ALABAMA RIVER BASIN												
DATE	TIME	00010 WATER TEMP CENT	00015 TDS MG/L	00018 TRANSP SECCHI METERS	00020 COLOR PT-CO UNITS	00030 REDOX ORP MV	00094 CONDUCTIV FIELD MICROMHO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOW-LEVEL MG/L		
770825	0730	25.0	48.0	7.0	138	50	110	8.7	1.7	5.0		
770914	0830	27.0	50.0	6.7	140	160	131	6.3	0.2			
771004	1450	19.0	40.0	0.6	105	130	156	10.6	0.3			
771025	1135	14.0	40.0	0.9	80	210	188	11.3	0.5			
771117	0850	10.0	40.0	0.7	150	270	111	13.6	0.0	24.0		
771208	1400	8.0	30.0	0.7	110	180	128	12.2	0.5			
DATE	TIME	00630 PH	00610 TDS MG/L	00610 NH3-N MG/L	00625 TOT N MG/L	00630 NO3-N MG/L	00665 PHOS-TOT MG/L	00671 PHOS-DIS ORTHO MG/L	00680 T ORP C	00700 TOT AMO CALC MG/L		
770825	0730	7.3	43.5	0.08	0.39	0.23	0.25	0.05	1.8	38		
770914	0830	7.3	38.3	0.22	0.16	0.22	0.15	0.03	3.7	38		
771004	1450	7.5	47.5	0.03	0.40	0.23	0.09	0.05	2.0	38		
771025	1135	6.5	54.1	0.014	0.16	0.24	0.09	0.01	1.8	41		
771117	0850	7.4	37.7	0.00	0.17	0.33	0.09	0.02	4.2	32		
771208	1400	7.7	41.3	0.01	0.09	0.31	0.20	0.09	3.8	38		
DATE	TIME	00915 CALCIUM CA-DISS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-DISS MG/L	00955 SILICA DISSOLVED MG/L	01045 IRON FE-TOT UG/L	01046 IRON FE-DISS UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN-DISS UG/L		
770825	0730	11.0	2.5	6.8	5.4	7.0	1200	50	44	1.0		
770914	0830	10.0	2.7	4.4	3.0	6.4	1200	60	64	17.0		
771004	1450	8.0	4.4	7.8	8.0	5.4	710	23	100	5.0		
771025	1135	8.1	5.0	9.4	8.0	5.1	490	10	63	5.0		
771117	0850	7.3	3.3	5.2	6.4	7.2	2700	310	87	21.0		
771208	1400	10.0	3.0	5.6	5.0	7.1	1300	290	72	23.0		
DATE	TIME	31501 TOT COLI MFIM/100ML	31516 FEC COLI MFIM/100ML	31573 FEC STREP MFIM/100ML	32210 CHLOROPHYL A UG/L	32212 CHLOROPHYL B UG/L	32214 CHLOROPHYL C UG/L	70299 MES-SUSP AT 180 C MG/L	70300 RESIDUE DISS-180 C MG/L			
770825	0730	2300	10	190	4.1	1.4	2.0	16	80			
770914	0830	2400	0	120	7.0	5.2	15.0	53	91			
771004	1450	7500	4	14	6.6	8.4	27.0	15	54			
771025	1135	8000	10	19	11.0	15.0	47.0	5	177			
771117	0850	2700	40	50	4.7	5.2	17.0	10	82			
771208	1400	1500	8	37	3.7	2.5	4.6	10	61			

Table A-1.--Continued

STATION - 02424506 ALA R AT CEDAR CR NH GOSPORT ALABAMA RIVER BASIN										
DATE	TIME	00010 WATER TEMP CENT	00076 TURB TRUBIDMTR HACH FTU	00078 TRANSP SECCHI METERS	00080 COLOR PT-CO UNITS	00090 REDOX ORP MV	00094 CONDUCTIV FIELD MICROHMO	00299 DO PROBE MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
770825	0950	29.0	45.0	0.8	130	60	112	8.8	2.1	4.0
771004	1545	20.0	30.0	0.6	100	130	161	10.6	0.3	
771025	1230	14.0	50.0	0.8	80	210	188	11.0	0.2	
771117	0940	10.0	50.0	0.7	150	230	112	13.5	0.2	14.0
771208	1425	6.0	25.0	0.8	120	190	128	11.8	0.5	
DATE	TIME	00400 PH	00410 T ALK CACO3 MG/L	00610 NH3-NH4- N TOTAL MG/L	00625 TOT N MG/L	00630 NORANOS N-TOTAL MG/L	00655 PHOS-TOT MG/L P	00671 PHOS-DIS ORTHOD MG/L P	00680 T ORG C C MG/L	00900 TOT HARD CACO3 MG/L
770825	0950	7.1	39.4	0.04	0.32	0.22	0.28	0.04	2.0	38
771004	1545	6.3	46.7	0.17	0.38	0.33	0.39	0.04	1.7	32
771025	1230	6.6	50.0	0.01K	0.14	0.04	0.20	0.00	3.0	34
771117	0940	7.5	38.5	0.00	0.70	0.21	0.12	0.02	4.1	28
771208	1425	8.0	36.9	0.00	0.12	0.13	0.10	0.01	4.5	40
DATE	TIME	00915 CALCIUM CACO3SS MG/L	00925 MAGNESIUM MG-DISS MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-DISS MG/L	00950 SILICA MG/L	01045 IRON FERRIC MG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MANGNESE UG/L	
770825	0950	11.0	2.4	6.2	7.4	7.8	50	51	0.00	
771004	1545	6.0	4.0	9.0	9.0	8.0	00	65	5.0K	
771025	1230	7.2	5.0	1.2	2.0	2.0	00	96	12.0	
771117	0940	6.1	3.2	5.6	5.0	5.0	00	50	16.0	
771208	1425	11.0	2.9	4.0	1.4	1.4	00	50	16.0	
DATE	TIME	31501 TOT COLI MPN/100ML	31616 FEC COLI MPN-FEBR /100ML	31673 FECSTREP MPN-FABAR /100ML	32210 CHLROMYL A UG/L	32210 CHLROMYL B UG/L	32210 CHLROMYL C UG/L	70300 RESIDUE 0155-180 C MG/L	70300 RESIDUE 0155-180 C MG/L	
770825	0950	3700	91	150	6.2	1.0	1.0	24	82	
771004	1545	3000	34	80	5.3	1.4	1.4	21	60	
771025	1230	11000	50	40	5.0	1.0	1.0	5	94	
771117	0940	3200	25	60	4.9	1.2	1.2	10	82	
771208	1425	1800	74	1200	3.8	3.5	3.5	10	67	

Table A-1.--Inventory of municipal and industrial discharges
to the Alabama River Basin, September 1975

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant Receiving Stream (Water Use Classification)	Latitude NPDES Permit No.	Longitude NPDES Permit No.																																																																		
Reconchate WTP Montgomery (M-37-51-002)	350.5	T17N/R18E/S30 SE1/4 Alabama River (FW)	32°25'04" AL0022225	86°18'11" 14.																																																																		
Standard rate trickling filter with grease removal and Cl ₂ disinfection. Sludge to thickener, anaerobic digester and sand drying beds with ultimate disposal as fertilizer.																																																																						
<table><tr><td></td><td>Permit</td><td colspan="4">Reported (1975)</td></tr><tr><td></td><td></td><td>July</td><td>Aug.</td><td>Sept.</td><td>Nov.</td></tr><tr><td>Flow, mgd</td><td></td><td>10.9</td><td>10.2</td><td>11.3</td><td>11.3</td></tr><tr><td>pH, S.U.</td><td>6-9</td><td>6.6-7.1</td><td>6.5-7.2</td><td>6.2-7.2</td><td>6.4-7.0</td></tr><tr><td>BOD₅ (infl/effl), mg/l</td><td>30</td><td>158/5</td><td>139/7</td><td>172/7</td><td>187/2</td></tr><tr><td>SS (infl/effl), mg/l</td><td>30</td><td>206/14</td><td>160/27</td><td>169/16</td><td>154/11</td></tr><tr><td>Cl₂, mg/l (max.)</td><td>0.5</td><td>2.0</td><td>1.4</td><td>1.4</td><td>1.4</td></tr><tr><td>Fecal Coli, No/100 ml</td><td>200</td><td>598</td><td>4610</td><td>3110</td><td>25</td></tr><tr><td>Issuance Date</td><td>6/14/74</td><td></td><td></td><td></td><td></td></tr><tr><td>Expiration Date</td><td>3/31/79</td><td></td><td></td><td></td><td></td></tr><tr><td>Compliance Date</td><td>6/14/74</td><td></td><td></td><td></td><td></td></tr></table>						Permit	Reported (1975)						July	Aug.	Sept.	Nov.	Flow, mgd		10.9	10.2	11.3	11.3	pH, S.U.	6-9	6.6-7.1	6.5-7.2	6.2-7.2	6.4-7.0	BOD ₅ (infl/effl), mg/l	30	158/5	139/7	172/7	187/2	SS (infl/effl), mg/l	30	206/14	160/27	169/16	154/11	Cl ₂ , mg/l (max.)	0.5	2.0	1.4	1.4	1.4	Fecal Coli, No/100 ml	200	598	4610	3110	25	Issuance Date	6/14/74					Expiration Date	3/31/79					Compliance Date	6/14/74				
	Permit	Reported (1975)																																																																				
		July	Aug.	Sept.	Nov.																																																																	
Flow, mgd		10.9	10.2	11.3	11.3																																																																	
pH, S.U.	6-9	6.6-7.1	6.5-7.2	6.2-7.2	6.4-7.0																																																																	
BOD ₅ (infl/effl), mg/l	30	158/5	139/7	172/7	187/2																																																																	
SS (infl/effl), mg/l	30	206/14	160/27	169/16	154/11																																																																	
Cl ₂ , mg/l (max.)	0.5	2.0	1.4	1.4	1.4																																																																	
Fecal Coli, No/100 ml	200	598	4610	3110	25																																																																	
Issuance Date	6/14/74																																																																					
Expiration Date	3/31/79																																																																					
Compliance Date	6/14/74																																																																					
Lawrence WTP Montgomery (M-37-51-003)	358.6	T16N/R17E/S4 NE1/4 Alabama River (FW)	32°23'33" AL0022241	86°21'51" 3.0																																																																		
Standard rate trickling filter with grease removal and Cl ₂ disinfection. Sludge to anaerobic digester re sand drying beds with ultimate disposal as fertilizer.																																																																						
<table><tr><td></td><td>Permit</td><td colspan="4">Reported (1975)</td></tr><tr><td></td><td></td><td>July</td><td>Aug.</td><td>Sept.</td><td>Nov.</td></tr><tr><td>Q, mgd</td><td></td><td>2.1</td><td>2.4</td><td>2.8</td><td>2.7</td></tr><tr><td>pH, S.U.</td><td>6-9</td><td>7.6</td><td>6.9-7.6</td><td>6.8-7.7</td><td>6.8-7.7</td></tr><tr><td>BOD₅ (infl/effl), mg/l</td><td>30</td><td>161/5</td><td>138/6</td><td>127/7</td><td>162/9</td></tr><tr><td>SS (infl/effl), mg/l</td><td>30</td><td>166/7</td><td>206/13</td><td>138/8</td><td>153/10</td></tr><tr><td>Cl₂, mg/l (max.)</td><td>200</td><td>0.5</td><td>0.5</td><td>0.5</td><td>0.5</td></tr><tr><td>Fecal Coli, No/100 ml</td><td>0.5</td><td>800</td><td>4020</td><td>72</td><td>5</td></tr><tr><td>Issuance Date</td><td>6/14/74</td><td></td><td></td><td></td><td></td></tr><tr><td>Expiration Date</td><td>3/31/79</td><td></td><td></td><td></td><td></td></tr><tr><td>Compliance Date</td><td>6/14/74</td><td></td><td></td><td></td><td></td></tr></table>						Permit	Reported (1975)						July	Aug.	Sept.	Nov.	Q, mgd		2.1	2.4	2.8	2.7	pH, S.U.	6-9	7.6	6.9-7.6	6.8-7.7	6.8-7.7	BOD ₅ (infl/effl), mg/l	30	161/5	138/6	127/7	162/9	SS (infl/effl), mg/l	30	166/7	206/13	138/8	153/10	Cl ₂ , mg/l (max.)	200	0.5	0.5	0.5	0.5	Fecal Coli, No/100 ml	0.5	800	4020	72	5	Issuance Date	6/14/74					Expiration Date	3/31/79					Compliance Date	6/14/74				
	Permit	Reported (1975)																																																																				
		July	Aug.	Sept.	Nov.																																																																	
Q, mgd		2.1	2.4	2.8	2.7																																																																	
pH, S.U.	6-9	7.6	6.9-7.6	6.8-7.7	6.8-7.7																																																																	
BOD ₅ (infl/effl), mg/l	30	161/5	138/6	127/7	162/9																																																																	
SS (infl/effl), mg/l	30	166/7	206/13	138/8	153/10																																																																	
Cl ₂ , mg/l (max.)	200	0.5	0.5	0.5	0.5																																																																	
Fecal Coli, No/100 ml	0.5	800	4020	72	5																																																																	
Issuance Date	6/14/74																																																																					
Expiration Date	3/31/79																																																																					
Compliance Date	6/14/74																																																																					

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Design Flow (mgd)
Prattville WWTP (M-87-01-012)	333.5	T17N/R16E/S16 SW1/4	32°26'53"	87°27'59"
	Autauga Creek (FW)		AL0020397	1.0
High rate trickling filter with Cl ₂ disinfection. Sludge to anaerobic digester to sand drying beds with ultimate disposal to landfill.				
Reported (1975)				
	Permit	7/1-7/28	7/29-3/16	3/17-9/15
Q, mgd	1.0	1.0	1.66	0.97
pH, S.U.	6-9	6.4-7.6	6.8-7.0	6.9-7.1
BOD ₅ (infl/effl), mg/l	75	150/41	200/67	144/48
SS (infl/effl), mg/l	60	95/17	125/38	156/78
Fecal Coli, No/100 ml	200			
Issuance Date	10/15/74			
Expiration Date	6/30/77			
Compliance Date	11/30/74			
		9/16-10/13	10/15-11/17	11/18-12/8
Q, mgd		1.5	1.6	1.3
pH, S.U.		6.7-7.0	6.5-6.8	6.2-7.6
BOD ₅ (infl/effl), mg/l		122/36	67/27	120/37
SS (infl/effl), mg/l		102/44	36/12	92/35

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude		
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Design Flow (mgd)		
Catoma Creek WWTP Montgomery (M-37-S1-001)	339.5	T16N/R17E/S34 NE1/4	32°19'35"	86°20'32"		
	Catoma Creek (FWG) *		AL0022317	9.0		
	Standard rate trickling filter/conventional activated sludge with grease removal and Cl ₂ disinfection. Sludge to anaerobic digester to sand drying beds with ultimate disposal as fertilizer.					
			Reported (1975)			
		Permit	July	Aug.	Sept.	Nov.
	Q, mgd	9.0	9.5	9.8	9.3	9.1
	pH, S.U.	6-9	7.0-7.3	7.0-7.5	6.9-7.3	6.8-7.3
	BOD ₅ (infl/effl), mg/l	30	311/41	277/39	274/48	325/55
	SS (infl/effl), mg/l	30	163/39	147/50	195/60	174/76
	Cl ₂ , mg/l (max.)	0.5	1.3	1.0	1.0	0.91
	Fecal Coli, No/100 ml	200	TNTC	583	18,000	18,500
	Issuance Date	6/14/74				
	Expiration Date	12/ 1/77				
	Compliance Date	6/14/74				
	Plant sewer system infiltration rate is high.					
Thorsby WWTP (M-37-11-004)	324.0	T22N/R13E/S1 SE1/4	32°64'55"	86°45'30"		
	Charlotte Creek (FWG) *		AL0020478	0.19		
	Imhoff Tank. Sludge to Landfill.					
			Permit			
	Issuance Date	10/26/73				
	Expiration Date	9/30/78				
	Compliance Date	10/26/73				
	pH, S.U.	6-9				
	BOD ₅ , mg/l	30				
	SS, mg/l	30				
	Fecal Coli, No/100 ml	200				

Water Quality - Limited receiving segment.

Table A-2.—Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude																																									
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Design Flow (mgd)																																									
Valley Creek WWT (Selma) (M-37-24-011)	259.3	T17N/R10E/S35 SE1/4	32°23'42"	87°02'15"																																									
	Alabama River (FW)		AL0022578	6.0																																									
	High rate trickling filter with Cl ₂ disinfection. Sludge to storage tanks to anaerobic digesters to sand drying beds with ultimate disposal as fertilizer.																																												
	Reported (1975) <table><tr><th></th><th>Permit</th><th>July</th><th>Aug.</th><th>Sept.</th><th>Oct.</th><th>Nov.</th></tr><tr><td>Q, mgd</td><td>6.0</td><td>3.6</td><td>3.8</td><td>3.3</td><td>3.7</td><td>3.4</td></tr><tr><td>pH, S.U.</td><td>6-9</td><td>7.0-7.3</td><td>7.0-7.3</td><td>7.0-7.4</td><td>6.9-7.4</td><td>6.6-7.5</td></tr><tr><td>BOD₅ (infl/effl), mg/l</td><td>30</td><td>355/16</td><td>449/21</td><td>380/21</td><td>267/16</td><td>336/10</td></tr><tr><td>SS (infl/effl), mg/l</td><td>30</td><td>272/17</td><td>382/15</td><td>433/20</td><td>118/34</td><td>291/20</td></tr><tr><td>Fecal Coli, No/100 ml</td><td>200</td><td>108</td><td></td><td>117</td><td>175</td><td>182</td></tr></table> Issuance Date 6/ 4/74 Expiration Date 3/31/79 Compliance Date 6/ 4/74					Permit	July	Aug.	Sept.	Oct.	Nov.	Q, mgd	6.0	3.6	3.8	3.3	3.7	3.4	pH, S.U.	6-9	7.0-7.3	7.0-7.3	7.0-7.4	6.9-7.4	6.6-7.5	BOD ₅ (infl/effl), mg/l	30	355/16	449/21	380/21	267/16	336/10	SS (infl/effl), mg/l	30	272/17	382/15	433/20	118/34	291/20	Fecal Coli, No/100 ml	200	108		117	175
	Permit	July	Aug.	Sept.	Oct.	Nov.																																							
Q, mgd	6.0	3.6	3.8	3.3	3.7	3.4																																							
pH, S.U.	6-9	7.0-7.3	7.0-7.3	7.0-7.4	6.9-7.4	6.6-7.5																																							
BOD ₅ (infl/effl), mg/l	30	355/16	449/21	380/21	267/16	336/10																																							
SS (infl/effl), mg/l	30	272/17	382/15	433/20	118/34	291/20																																							
Fecal Coli, No/100 ml	200	108		117	175	182																																							
Marion WWT (M-37-53-014)	264.1	T19N/R7E/S11 S1/2	32°37'37"	87°20'33"																																									
	Bogue Chitto Creek (FW)*		AL0020681	-																																									
	No treatment provided.																																												
	Permit <table><tr><td>Issuance Date</td><td>6/20/75</td></tr><tr><td>Expiration Date</td><td>6/30/77</td></tr><tr><td>Compliance Date</td><td>7/ 1/77</td></tr><tr><td>pH, S.U.</td><td>6-9</td></tr><tr><td>BOD₅, mg/l</td><td>30</td></tr><tr><td>SS, mg/l</td><td>30</td></tr><tr><td>NH₃-N, mg/l</td><td>18</td></tr><tr><td>Fecal Coli, No/100 ml</td><td>200</td></tr></table>				Issuance Date	6/20/75	Expiration Date	6/30/77	Compliance Date	7/ 1/77	pH, S.U.	6-9	BOD ₅ , mg/l	30	SS, mg/l	30	NH ₃ -N, mg/l	18	Fecal Coli, No/100 ml	200																									
Issuance Date	6/20/75																																												
Expiration Date	6/30/77																																												
Compliance Date	7/ 1/77																																												
pH, S.U.	6-9																																												
BOD ₅ , mg/l	30																																												
SS, mg/l	30																																												
NH ₃ -N, mg/l	18																																												
Fecal Coli, No/100 ml	200																																												

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Design Flow (mgd)
Pine Hill Lagoon (M-37-66-007)	188.2	T12N/R5E/S28 SE1/4	31°58'40"	87°34'31"
	Cub Creek (FW)*		AL0024147	0.15
	Single cell, nonaerated stabilization lagoon. <u>Permit</u> Issuance Date 12/31/75 Expiration Date 6/30/77 Compliance Date 7/ 1/77 pH, S.U. 6-9 BOD ₅ , mg/l 30 SS, mg/l 30 Fecal Coli, No/100 ml 200			
Camden North Lagoon (M-37-66-008)	191.5	T12N/R7E/S13 SE1/4	32°00'36"	87°18'57"
	Rockwest Creek (FW)		AL0023701	0.09
	Single cell, nonaerated stabilization lagoon. <u>Permit</u> Issuance Date 10/15/74 Expiration Date 6/30/77 Compliance Date 7/ 1/77 pH, S.U. 6-9 BOD ₅ , mg/l 30 SS, mg/l 30 Fecal Coli, No/100 ml 200			

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Design Flow (mgd)
Camden West Lagoon (M-37-66-010)	178.1	T12N/R7E/S24 SW1/4	31°59'29"	87°19'37"
	Reed Creek (FW)*		AL0023698	0.09
	Single cell, nonaerated stabilization lagoon.			
			<u>Permit</u>	
			Issuance Date 10/15/74	
			Expiration Date 6/30/77	
			Compliance Date 7/ 1/77	
			pH, S.U. 6-9	
			BOD ₅ , mg/l 30	
			SS, mg/l 30	
			Fecal Coli, No/100 ml 200	
Camden South Lagoon (M-37-66-009)	177.3	T12N/R8E/S32 SW1/4	31°58'22"	87°17'25"
	Town Branch (FW)*		AL0023680	0.36
	Single cell, nonaerated stabilization lagoon.			
			<u>Permit</u>	
			Issuance Date 10/15/74	
			Expiration Date 6/30/77	
			Compliance Date 7/ 1/77	
			pH, S.U. 6-9	
			BOD ₅ , mg/l 30	
			SS, mg/l 30	
			Fecal Coli, No/100 ml 200	

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Design Flow (mgd)
Hudson Branch WWTP Monroeville (M-37-50-005)	143.4	T2N/R8E/S31 SE1/4	31°31'34"	87°17'58"
	Hudson Branch (FW)*		AL0022316	1.4
	Aerated lagoon with sludge return.			
			Permit	Reported (12/75)
	Q, mgd		1.2	0.75
	pH, S.U.		6-9	7.3
	BOD ₅ (infl/effl), mg/l		30	211/67
	SS (infl/effl), mg/l		30	58/26
	UOD, mg/l		62	
	NH ₃ -N, mg/l		5	
DO, mg/l		6		
Fecal Coli, No/100 ml		200		
Issuance Date		12/16/74		
Expiration Date		6/30/77		
Compliance Date		7/ 1/77		
Plant is to be expanded to 3 mgd capacity and upgraded to include nitrification, Cl ₂ disinfection, and post aeration. Approximately 90% of flow is due to Vanity Fair Mills.				
Broughton St. WWTP Monroeville (M-37-50-006)	137.1	T7N/R7E/S26 S1/2	31°32'16"	87°20'04"
	Tributary to Limestone Creek (FW)*		AL0020702	0.5
	High rate trickling filter. Sludge to anaerobic digester to sand drying beds with ultimate disposal to landfill and as fertilizer.			
			Permit	Reported (12/75)
	Q, mgd			0.35
	pH, S.U.		6-9	7.3
	BOD ₅ (infl/effl), mg/l		30	527/117
	SS (infl/effl), mg/l		30	152/22
	UOD, mg/l		126	
	NH ₃ -N, mg/l		18	
DO, mg/l		6		
Fecal Coli, No/100 ml		200	< 2	
Issuance Date		5/ 9/75		
Expiration Date		6/30/77		
Compliance Date		7/ 1/77		
Will go to proposed Doubles Branch WWTP.				

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude NAD83 UTM Zone No.	Longitude Design Flow (mgd)
Double Branches WWTP Monroeville (M-1) (Proposed)	136.6	T6N/R7E/S3 NW1/4	31°31'00"	87°21'20"
	Double Branches Creek (FW)		Application Filed	1.0
	Activated sludge with nitrification, Cl ₂ disinfection, and post aeration. Sludge will be sent to sludge thickener, aerobic digester, sludge drying beds, and disposed of at landfill. Plant is to be constructed by December, 1977.			
Frisco City WWTP (M-37-50-013)	116.0	T5N/R6E/S2 NE1/4	31°25'58"	87°26'22"
	Bear Creek (FW)*		-	0.15
	Imhoff Tank			

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Flow (mgd)
Brockway Glass Montgomery (I-37-S1-005)	352.3	T17N/R18E/S29 S1/2	32°25'10"	86°17'03"
	Tributary of Alabama River (FW)		AL0001899	0.024
	No treatment provided for noncontact cooling water.			
	Permit Issuance Date12/30/74 Expiration Date2/13/80 Compliance Date4/1/76 pH, S.U.6-9 Temperature, °F95 Cr(t), mg/l1.0 Zn(t), mg/l0.25 Cl₂, mg/l0.2			
Illinois Gulf Central Montgomery (I-37-S1-015)	341.4	T16N/R17E/S4 SW1/4	32°22'24"	86°20'30"
	Tributary to Alabama River (FW)		AL0004006	-
	No treatment provided for run off and sanitary waste- water.			
	Permit Permit Issuance Date11/14/73 Expiration Date9/30/78 Completion of Constr. Phenols, mg/l0.25 SS, mg/l30 Cr(t), mg/l0.25 Cu(t), mg/l0.2 pH, S.U.6-9 Surfactants, mg/l0.35 BOD₅, mg/l30 Fecal Coliform, No/100 ml200 Oil and Grease, mg/l10			

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
		Receiving Stream (Water Use Classification)	Permit	Flow (mgd)
J.P. Stevens Montgomery (I-37-51-024)	362.2	T17N/R18E/S29 NE1/4 Tributary of Alabama River (FW)	32°27'40"	80°28'35"
No treatment provided for industrial cooling water.				
Reported (6/8/75)				
001 002				
Permit Avg. Max. Avg. Max.				
Q, mgd 0.0096 0.00063				
pH, S.U. 6-9 8.3 8.0				
Temperature, °F 95 89 89 74 74				
SS, mg/l 30 2 2 <2 <2				
Cr(t), mg/l 0.5 <0.03 <0.03 <0.03 <0.03				
Zn(t), mg/l 0.5 0.2 0.35 1.98 2.40				
Cl ₂ , mg/l 0.2				
Issuance Date 6/30/75				
Expiration Date 8/14/80				
Compliance Date 8/14/75				
Gurney Manufacturing Prattville (I-37-01-012)	334.4	T17N/R16E/S33 NE1/4 Autauga Creek (FW)	32°27'40"	80°28'35"
No treatment provided for process wastewater.				
Permit Permit				
Issuance Date 6/10/74 SS, lbs/day 150				
Expiration Date 6/14/79 S ²⁻ , lbs/day 1.2				
Compliance Date 1/1/77 Cr(t), lbs/day 0.6				
pH, S.U. 6-9 Cr ⁺⁶ , lbs/day 0.015				
Temperature, °F 90 Fecal Coliform,				
BOD ₅ , lbs/day 120 No/100 ml 200				
Oil & Grease, mg/l(max) 15				
Phenols, lbs/day 0.6				

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Flow (mgd)
Union Camp Corp. Outfall 003 Prattville (I-37-01-026)	330.6	T17N/R16E/S33 NW1/4	32°24'58"	86°27'47"
	Autauga Creek (FW)		AL0003115	0.72
	No treatment is provided for cooling water. <u>Permit</u> Q, mgd pH, S.U. 6-9 Temperature, °F 95 Issuance Date 8/23/73 Expiration Date 9/22/78 Compliance Date 9/22/73			
Union Camp Corp. Outfall 002 Prattville (I-37-01-026)	329.1	T17N/R16E/S33 SW1/4	32°24'10"	80°27'50"
	Alabama River (SW)		AL0003115	1.3
	No treatment for cooling water. Part of discharge is recycled. <u>Permit</u> <u>Reported (11/75)</u> Q, mgd 0.13 pH, S.U. 6-9 Temperature, °F 95 89 Issuance Date 8/23/73 Expiration Date 9/22/78 Compliance Date 9/22/73			
American Oil Company Montgomery (I-37-51-004)	333.9	T16N/R17E/S17 SE1/4	32°21'30"	86°23'00"
	Tributary to Catoma Creek (FWG)*		AL0003573	Runoff
	Runoff from tank loading area is treated by oil- water separator. <u>Permit</u> Issuance Date 9/20/74 Expiration Date 11/8/79 Compliance Date 2/1/76 pH, S.U. 6-9 Oil and Grease, mg/l (max) 15			

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude																																						
	Receiving Stream (Water Use Classification)		Permit No.	Flow (cfs)																																						
Taxaco Montgomery (I-37-S)-024)	333.6	T17N/R17E/S31 SW1/4	32°22'00"	86°24'00"																																						
	Trib. to West End Disch (FB)		AL0001049	20 cfs																																						
	Runoff is discharged untreated. State inventory lists receiving stream as Pintlala Creek.																																									
	<u>Permit</u> Issuance Date 9/20/74 Expiration Date 11/8/79 Compliance Date 2/1/76 pH, S.U. 6-9 Oil and Grease, mg/l (max) 15																																									
Union Camp Corp. Outfall 001 Prattville (I-37-01-026)	325.3	T16N/R16E/S18 NE1/4	32°22'00"	86°29'10"																																						
	Alabama River (SW)		AL0003115	18.3																																						
	Process wastewater is treated by sedimentation. Some sludge is recovered and reused with the re- mainder lagooned.																																									
	<u>Reported (1975)</u> <table><tr><th>Permit</th><th>July</th><th>Aug</th><th>Sept.</th><th>Oct</th><th>Nov.</th></tr><tr><td>Q, mgd</td><td>25.8</td><td>37.9</td><td>24.4</td><td>26.2</td><td>20.7</td></tr><tr><td>pH, S.U.</td><td>6-9</td><td></td><td></td><td></td><td></td></tr><tr><td>Temperature, °F</td><td>80</td><td>80</td><td>79</td><td>75</td><td>69</td><td>64</td></tr><tr><td>BOD₅, lbs/day</td><td>5600</td><td>2550</td><td>3060</td><td>2040</td><td>2290</td><td>2450</td></tr><tr><td>SS, lbs/day</td><td>8425</td><td>3815</td><td>3190</td><td>2620</td><td>2690</td><td>175</td></tr></table> Issuance Date 8/23/73 Expiration Date 9/22/78 Compliance Date 9/22/73				Permit	July	Aug	Sept.	Oct	Nov.	Q, mgd	25.8	37.9	24.4	26.2	20.7	pH, S.U.	6-9					Temperature, °F	80	80	79	75	69	64	BOD ₅ , lbs/day	5600	2550	3060	2040	2290	2450	SS, lbs/day	8425	3815	3190	2620	2690
Permit	July	Aug	Sept.	Oct	Nov.																																					
Q, mgd	25.8	37.9	24.4	26.2	20.7																																					
pH, S.U.	6-9																																									
Temperature, °F	80	80	79	75	69	64																																				
BOD ₅ , lbs/day	5600	2550	3060	2040	2290	2450																																				
SS, lbs/day	8425	3815	3190	2620	2690	175																																				

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude		Longitude																																																																										
	Receiving Stream (Water Use Classification)		NPDES Permit No.		Flow (mgd)																																																																										
Dan River Mills Benton (I-37-24-008)	288.3	T15N/R12E/S2 NE1/4	32°18'40"		86°49'36"																																																																										
	Old Town Creek (FWG)		A10001759		0.108																																																																										
	Sanitary and process wastewater are treated in a stabilization basin. Sludge is taken to a land- fill.																																																																														
<table><tr><th rowspan="3"></th><th rowspan="3">Permit</th><th colspan="4">Reported (1975)</th></tr><tr><th colspan="2">Aug.</th><th colspan="2">Sept.</th></tr><tr><th>Avg.</th><th>Max.</th><th>Avg.</th><th>Max.</th></tr><tr><td>Q, mgd</td><td></td><td>0.47</td><td>0.54</td><td>0.54</td><td>0.55</td></tr><tr><td>pH, S.U.</td><td>6-9</td><td></td><td>9.0</td><td></td><td>8.6</td></tr><tr><td>Temperature, °F</td><td>94</td><td>89.8</td><td>98</td><td>80.3</td><td>92</td></tr><tr><td>BOD₅, lbs/day</td><td>12.6</td><td>5.6</td><td>6.8</td><td>8.2</td><td>14</td></tr><tr><td>SS, lbs/day</td><td>20</td><td>10.6</td><td>13.3</td><td>14</td><td>20.2</td></tr><tr><td>Settleable Solids, ml/l</td><td>0.1</td><td colspan="2"><0.05</td><td colspan="2"><0.05</td></tr><tr><td>Fecal Coliform, No/100 ml</td><td>200</td><td></td><td></td><td>2.5</td><td>10</td></tr><tr><td>Issuance Date</td><td colspan="5">7/25/74</td></tr><tr><td>Expiration Date</td><td colspan="5">12/31/78</td></tr><tr><td>Compliance Date</td><td colspan="5">9/30/74</td></tr></table>							Permit	Reported (1975)				Aug.		Sept.		Avg.	Max.	Avg.	Max.	Q, mgd		0.47	0.54	0.54	0.55	pH, S.U.	6-9		9.0		8.6	Temperature, °F	94	89.8	98	80.3	92	BOD ₅ , lbs/day	12.6	5.6	6.8	8.2	14	SS, lbs/day	20	10.6	13.3	14	20.2	Settleable Solids, ml/l	0.1	<0.05		<0.05		Fecal Coliform, No/100 ml	200			2.5	10	Issuance Date	7/25/74					Expiration Date	12/31/78					Compliance Date	9/30/74				
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Temperature, °F	94	89.8	98	80.3	92																																																																										
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Compliance Date	9/30/74																																																																														
Transcontinental Gas Billingsley (I-37-11-025)	300.0	T20N/R13E/S25 S1/2	32°40'30"		86°43'20"																																																																										
	Daylight Creek (FWG)		A10001732 (Draft)		0.5																																																																										
	Cooling water is recycled and reused. Cooling tower blowdown is discharged untreated.																																																																														
<table><tr><th rowspan="3"></th><th rowspan="3">Permit</th><th colspan="3">Reported (10/74, 4/75)</th></tr><tr><th>Min.</th><th>Avg.</th><th>Max.</th></tr><tr><th></th><th></th><th></th><th></th></tr><tr><td>Q, mgd</td><td></td><td>0.029</td><td>0.036</td><td>0.05</td></tr><tr><td>pH, S.U.</td><td>6-9</td><td></td><td></td><td></td></tr><tr><td>Temperature, °F</td><td>95</td><td>63</td><td>75</td><td>87</td></tr><tr><td>Cr(t), mg/l</td><td>5.0</td><td>0</td><td>0.06</td><td>0.15</td></tr><tr><td>Co(t), mg/l</td><td>1.0</td><td>0</td><td>0.2</td><td>0.6</td></tr><tr><td>Cl₂, mg/l</td><td>0.2</td><td>0</td><td>0</td><td>0</td></tr></table>							Permit	Reported (10/74, 4/75)			Min.	Avg.	Max.					Q, mgd		0.029	0.036	0.05	pH, S.U.	6-9				Temperature, °F	95	63	75	87	Cr(t), mg/l	5.0	0	0.06	0.15	Co(t), mg/l	1.0	0	0.2	0.6	Cl ₂ , mg/l	0.2	0	0	0																																
	Permit	Reported (10/74, 4/75)																																																																													
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Cl ₂ , mg/l	0.2	0	0	0																																																																											

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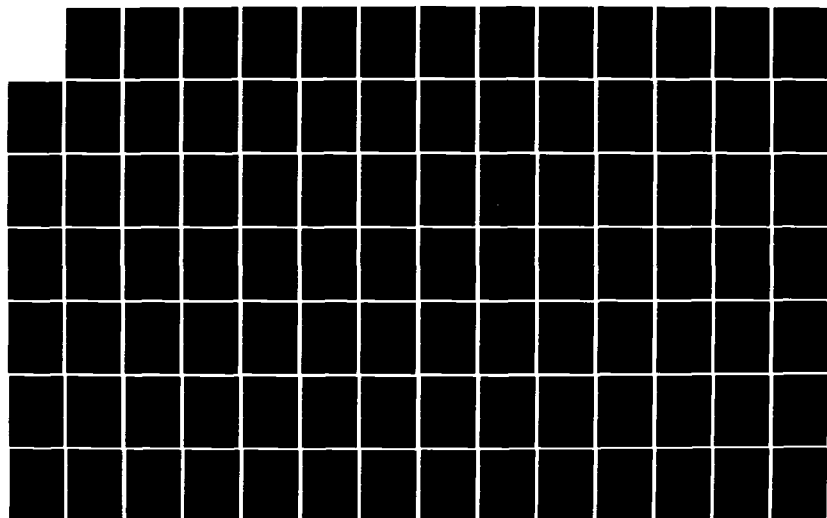
WATER QUALITY MANAGEMENT STUDIES ALABAMA RIVER R E
'BOB' WOODRUFF WILLIAM. (U) GEOLOGICAL SURVEY OF
ALABAMA UNIVERSITY MAR 83 DACW01-77-C-0140

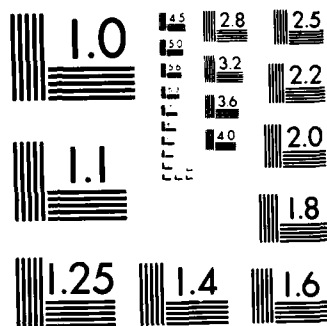
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MICROCOPY RESOLUTION TEST CHART
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Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Flow (mgd)
Hammermill Paper Selma (1-37-24-013)	273.6	T17N/R12E/S33 NE1/4	32°24'50"	86°51'42"
	Alabama River (FW)		AL0003018	20.8
	Process and sanitary wastes are treated in a sedi- mentation pond followed by a stabilization pond. Sludge to sludge lagoon. Part of wastes are recycled.			
	Reported (1975) Nov. Dec. Permit Avg. Max. Avg. Max.			
Q, mgd		17.1	24.0	11.0
pH, S.U.		6-9		7.5
Temperature, °F		105	62	72
BOD ₅ (infl/effl),		5775	32,365	50,865
lbs/day			4,328	7,932
SS (infl/effl),		5250	32,477	90,492
lbs/day			4,532	10,662
Issuance Date		10/9/73		
Expiration Date		9/30/78		
Compliance Date		12/31/75		
Southland Mower Selma (1-37-24-023)	263.3	T16N/R11E/S17 NE1/4	32°22'05"	86°59'10"
	Tarver Creek (FW)		AL0002585	0.003
	Process wastewater is treated in an equalization basin.			
	Reported (1975) Aug. Sept. Permit Avg. Max. Avg. Max.			
Q, mgd		0.0031	0.0034	0.0032
pH, S.U.		6-9		7.8
SS, lbs/day		.75	.08	0.2
Issuance Date		9/10/74		
Expiration Date		10/25/79		
Compliance Date		10/25/74		

Table A-2.--Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Flow (mgd)
General Battery Selma (I-37-24-010)	263.6	T16N/R11E/S17 NE1/4	32°22'05"	86°58'50"
	Alabama River (FW)		AL0025381	0.014
	No treatment on process wastewater. <u>Permit</u> Issuance Date 12/5/75 Expiration Date 1/9/81 Compliance Date 1/9/76 pH, S.U. 6-9 Temperature, °F 95 SS, mg/l 30 Cr(t), mg/l 0.5 Pb(t), mg/l 0.1 Zn(t), mg/l 0.8 Residual Chlorine, mg/l 0.2			
Cloverleaf Dairy Selma (I-37-24-007)	261.5	T16N/R11E/S7 NW1/4	32°23'19"	87°00'06"
	Alabama River (FW)		Draft	0.173
	No treatment provided for cooling and wash water. <u>Proposed Permit</u> BOD ₅ , mg/l 30 SS, mg/l 30			
Miller Plant No. 4 Selma (I-37-24-040)	262.6	T17N/R11E/S29	32°25'06"	86°59'43"
	Trib. to Beech Creek (FW)		AL0002372	0.04
	Process wastewater is discharged untreated. <u>Permit</u> Issuance Date 7/26/74 Expiration Date 7/26/79 Compliance Date 7/26/74 pH, S.U. 6-9 Temperature, °F 95 Oil & Grease, mg/l 15 Cr(t), mg/l 1.0 Zn(t), mg/l 0.5			

Table A-2.—Continued

Identification (AWIC Inventory No.)	River Mile	Township/Range Section/Quadrant	Latitude	Longitude																																																					
	Receiving Stream (Water Use Classification)		NPDES Permit No.	Flow (mgd)																																																					
Miller Plant No. 1 Selma (I-37-24-041)	258.8	T17N/R10E/S35 SE1/4	32°24'55"	87°02'06"																																																					
	Valley Creek (FW)		AL0002356	0.06																																																					
	Process wastewater is discharged untreated. Permit Issuance Date7/26/74 Expiration Date7/26/79 Compliance Date7/26/74 pH, S.U.6-9 Temperature, °F95 Oil and Grease, mg/l15 Cr(t), mg/l1.0 Zn(t), mg/l0.5																																																								
MacMillan-Bloedel Pine Hill (I-37-66-017)	176.2	T12N/R6E/S27	31°58'40"	87°27'58"																																																					
	Alabama River (FW)		AL0002674	14.0																																																					
	Process and sanitary wastewater. The treatment system includes equalization, sedimentation, flotation, stabilization, evaporation and incineration of liquid wastes, and reuse of water. Sludge is thickened, anaerobically digested, and lagooned. Reported (1975) <table><thead><tr><th rowspan="2">Permit</th><th colspan="2">Nov.</th><th colspan="2">Dec.</th></tr><tr><th>Avg.</th><th>Max.</th><th>Avg.</th><th>Max.</th></tr></thead><tbody><tr><td>Q, mgd</td><td>13.6</td><td>14.2</td><td>10</td><td>14.2</td></tr><tr><td>pH, S.U.</td><td>6-9</td><td>8.4</td><td></td><td>8.6</td></tr><tr><td>Temperature, °F (max.)</td><td>86</td><td>6274</td><td>53</td><td>62</td></tr><tr><td>BOD₅, lbs/day</td><td>6325</td><td>46477000</td><td>5994</td><td>7500</td></tr><tr><td>COD, lbs/day</td><td></td><td>22,250</td><td>17,860</td><td></td></tr><tr><td>SS, lbs/day</td><td>6325</td><td>54977800</td><td>5455</td><td>8500</td></tr><tr><td>Issuance Date</td><td>9/23/73</td><td></td><td></td><td></td></tr><tr><td>Expiration Date</td><td>9/22/78</td><td></td><td></td><td></td></tr><tr><td>Compliance Date</td><td>10/23/73</td><td></td><td></td><td></td></tr></tbody></table>				Permit	Nov.		Dec.		Avg.	Max.	Avg.	Max.	Q, mgd	13.6	14.2	10	14.2	pH, S.U.	6-9	8.4		8.6	Temperature, °F (max.)	86	6274	53	62	BOD ₅ , lbs/day	6325	46477000	5994	7500	COD, lbs/day		22,250	17,860		SS, lbs/day	6325	54977800	5455	8500	Issuance Date	9/23/73				Expiration Date	9/22/78				Compliance Date	10/23/73		
Permit	Nov.		Dec.																																																						
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Table A-3.--Vertical profile data collected on the Alabama River

A. Station 8 (collected August 11, 1977)

	<u>Left bank^a</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	9.2 9.2 9.3 9.4 9.2	9.7 9.2 9.3 9.3 9.5	10.9 10.7 10.8 10.0 10.0	9.5 9.4 9.6 9.9 9.3	9.0 8.9
Temperature (°C)	29.5 29.5 29.5 29.5 29.5	29.5 29.5 29.5 29.5 29.5	29.5 29.5 29.5 29.0 29.5	29.5 29.5 30.0 30.0 29.5	29.5 29.5
Specific con- ductance (micromhos @ 25°C)	112.0 112.0 112.0 112.0 112.0	112.0 112.0 111.0 111.0 112.0	119.0 115.0 114.0 114.0 105.0	116.0 115.0 114.0 114.0 112.0	120.0 118.0
pH (units)	7.2 7.1 7.2 7.2 7.2	7.2 7.3 7.3 7.2 7.3	7.2 7.1 7.8 7.5 7.3	7.2 7.2 7.2 7.3 7.2	7.1 7.3
Depth (in meters)	2 4 6 8 10	2 4 6 8 10	2 4 6 8 10	2 4 6 8 10	2 4

a-Observations made looking downstream

Shallowest measurements indicate surface samples

Deepest measurements indicate bottom samples

Table A-3.--Continued.

B. Station 16 (collected August 16, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	6.5 6.5 6.5 6.3	6.4 6.0 6.2 5.9 5.9	6.7 6.3 6.2 6.2 5.9	6.0 6.0 5.9 6.0 6.0	6.8 5.2
Temperature (°C)	29.5 29.5 29.5 29.5	29.5 29.5 29.5 29.5 29.5	30.0 30.0 30.0 29.5 29.5	30.0 30.0 30.0 29.5 29.5	29.5 29.0
Specific con- ductance (micromhos @ 25°C)	94.0 92.0 92.0 92.0	93.0 92.0 92.0 92.0 93.0	95.0 92.0 93.0 92.0 93.0	97.0 92.0 91.0 93.0 93.0	94.0 92.0
pH (units)	7.4 7.3 7.3 7.2	6.5 6.9 7.0 7.1 7.1	6.8 7.1 7.3 7.2 7.1	6.8 7.1 7.0 7.1 7.1	7.1 7.1
Depth (in meters)	0.3 2 4 7	4 8 12 16 20	4 8 12 16 20	4 8 12 16 18	0.3 2

Table A-3.--Continued.

C. Station 17 (collected August 16, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	9.2 7.4 7.0	8.4 8.0 7.1 6.7 6.5 6.5	8.1 7.5 7.0 6.7 6.5 6.2	7.7 7.4 7.3 7.1 7.0	7.7 7.1 7.1
Temperature (°C)	30.5 30.0 30.0	30.0 30.0 29.5 29.5 29.5 29.5	30.5 30.0 30.0 29.5 29.5 29.0	30.0 30.0 29.5 29.5 29.5	30.0 30.0 30.0
Specific con- ductance (micromhos @ 25°C)	90.0 91.0 90.0	91.0 91.0 91.0 90.0 91.0 91.0	92.0 91.0 93.0 90.0 90.0 90.0	92.0 93.0 90.0 93.0 93.0	93.0 92.0 90.0
pH (units)	6.7 6.4 6.4	6.4 6.5 6.5 6.4 6.4 6.4	6.4 6.5 7.0 7.0 7.0 7.0	7.1 7.0 6.9 7.0 6.9	7.0 7.2 7.2
Oxidation reduc- tion potential (millivolts+)	195.0 200.0 190.0	220.0 220.0 220.0 200.0 210.0 210.0	160.0 200.0 200.0 210.0 170.0 170.0	170.0 160.0 170.0 170.0	160.0 170.0 165.0
Depth (in meters)	0.3 2 3	0.3 2 4 6 8 11.6	0.3 2 4 6 8 12.2	0.3 2 4 6	0.3 2 4

Table A-3.--Continued.

D. Station 21 (collected August 17, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	9.3 9.1 8.6	9.0 8.7 8.4	9.1 8.6 8.3	9.4 8.4 8.2	10.0 8.9 8.5 8.1 7.9
Temperature (°C)	30.0 30.0 29.5	29.0 29.0 29.0	29.0 29.0 29.0	30.0 29.5 29.0	30.0 29.5 29.0 29.0 29.0
Specific con- ductance (micromhos @ 24°C)	98.0 98.0 98.0	99.0 98.0 98.0	102.0 102.0 102.0	104.0 104.0 104.0	101.0 99.0 97.0 96.0 100.0
pH (units)	7.8 7.7 7.6	7.1 7.3 7.4	7.5 7.5 7.5	7.0 7.3 7.4	7.0 7.3 7.5 7.4 7.6
Depth (in meters)	0.3 2 4	0.3 2 2.1	0.3 2 3	0.3 2 4	0.3 2 4 6 6.1

Table A-3.--Continued.

E. Station 32 (collected August 22, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	8.1 5.1	8.6 6.7	7.3 5.7 5.4 5.2 5.1 5.1	8.5 6.6	8.6 8.5
Temperature (°C)	29.0 28.0	29.0 28.0	29.0 28.0 28.0 28.0 28.0 28.0	29.0 28.0	28.0 28.0
Specific con- ductance (micromhos @ 25°C)	138.0 131.0	134.0 130.0	132.0 130.0 134.0 130.0 131.0 132.0	130.0 129.0	139.0 134.0
pH (units)	7.4 7.3	7.1 7.4	7.1 7.2 6.5 6.5 7.1 7.2	7.1 7.2	7.2 7.6
Oxidation reduc- tion potential (millivolts+)	150.0 150.0	180.0 180.0	170.0 160.0 160.0 180.0 165.0 130.0	165.0 170.0	173.0 170.0
Depth (in meters)	0.3 2	0.3 2	0.3 2 4 6 8 16	0.3 2	0.3 1

Table A-3.--Continued.

F. Station 33 (collected August 22, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	8.0	8.0	8.0	7.8	7.8
	7.8	7.6	7.0	7.0	7.5
		7.2	6.9	6.8	6.9
		6.8	6.8	6.5	6.6
		6.4	6.4	6.4	
			6.2	6.2	
Temperature (°C)	27.0	27.0	27.0	27.0	27.0
	27.0	26.5	26.5	27.0	26.5
		26.0	26.5	26.5	26.5
		26.0	26.5	26.5	26.5
		25.5	26.0	26.5	
			26.0	26.0	
Specific con- ductance (micromhos @ 24°C)	123.0	134.0	133.0	135.0	133.0
	131.0	132.0	131.0	131.0	129.0
		129.0	132.0	129.0	128.0
		129.0	134.0	128.0	128.0
		128.0	132.0	127.0	
			130.0	128.0	
pH (units)	6.4	6.8	7.0	6.5	6.6
	6.4	7.2	7.1	7.1	7.0
		6.5	7.1	7.1	7.2
		7.1	7.1	7.1	7.1
		7.1	7.2	7.2	
			7.0	7.1	
Oxidation reduc- tion potential (millivolts+)	192.0	160.0	170.0	150.0	170.0
	170.0	162.0	160.0	160.0	170.0
		170.0	167.0	162.0	170.0
		170.0	170.0	162.0	160.0
		173.0	165.0	160.0	
			205.0	160.0	
Depth (in meters)	0.3	0.3	0.3	0.3	0.3
	2	2	2	2	2
		4	4	4	4
		6	6	6	4.9
		6.9	8	8	
			15.5	14.6	

Table A-3.--Continued.

G. Station 34 (collected August 22, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	8.1 7.5	8.0 7.8 7.3	7.8 7.2	8.1 7.9 7.8 7.5	8.0 7.4
Temperature (°C)	29.5 29.0	29.5 29.5 29.0	29.5 29.0	29.5 29.5 29.5 29.0	29.5 29.0
Specific con- ductance (micromhos @ 24°C)	130.0 130.0	131.0 130.0 131.0	132.0 131.0	134.0 131.0 132.0 131.0	131.0 130.0
pH (units)	7.1 7.2	7.1 7.2 7.2	7.0 7.1	6.8 7.3 7.3 7.3	7.5 7.7
Oxidation reduc- tion potential (millivolts+)	190.0 120.0	190.0 180.0 142.0	190.0 194.0	190.0 190.0 180.0 180.0	180.0 170.0
Depth (in meters)	0.3 2	0.3 2 4	0.3 1	0.3 2 4 4.9	0.3 1

Table A-3.--Continued.

H. Station 37 (collected August 23, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	8.0 7.4 6.0	8.3 8.1 7.9 6.5 6.0	8.6 8.5 8.2 7.8 6.0	8.5 8.5 8.4 7.9 6.4 5.9	8.4 8.3
Temperature (°C)	28.5 28.5 29.0	29.0 28.5 29.0 29.0 28.5	29.0 28.5 28.5 28.5 28.5	29.0 29.0 29.0 28.5 29.0 28.5	29.0 28.5
Specific con- ductance (micromhos @ 25°C)	128.0 128.0 114.0	128.0 128.0 128.0 128.0	121.0 118.0 119.0 118.0 119.0	121.0 118.0 120.0 119.0 118.0 119.0	121.0 116.0
pH (units)	7.3 7.4 7.2	7.1 7.3 7.3 7.2 7.2	7.2 7.4 7.3 7.2 7.3	7.2 7.1 7.1 7.1 7.2 7.1	7.2 7.0
Oxidation reduc- tion potential (millivolts+)	110.0 130.0 130.0	130.0 125.0 85.0 95.0 80.0	190.0 190.0 130.0 135.0 140.0	145.0 145.0 230.0 210.0 270.0 260.0	185.0 160.0
Depth (in meters)	0.3 2 4	0.3 2 4 6 6.4	0.3 2 4 6 7.6	0.3 2 4 6 8 9.1	0.3 2

Table A-3.--Continued.

I. Station 43 (collected August 24, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	8.4 8.1	8.7 8.6 8.5 8.0 7.0	8.5 8.4 8.4 8.0 7.4 7.0	8.0 7.6 7.4 7.0 6.8 6.4	8.0 7.5
Temperature (°C)	30.0 30.0	30.0 30.0 30.0 30.0 30.0	30.0 30.0 30.0 30.0 30.0 30.0	30.0 30.0 30.0 30.0 30.0 30.0	30.0 30.0
Specific con- ductance (micromhos @ 24°C)	133.0 138.0	131.0 129.0 130.0 128.0 128.0	127.0 129.0 126.0 126.0 129.0 129.0	131.0 130.0 130.0 130.0 129.0 130.0	132.0 132.0
pH (units)	7.1 7.0	7.2 7.1 7.1 7.0 7.1	6.4 6.6 7.1 7.1 6.3 6.3	6.1 6.2 6.4 6.5 6.5 6.4	7.6 7.6
Oxidation reduc- tion potential (millivolts+)	190.0 192.0	200.0 197.0 200.0 190.0 190.0	189.0 160.0 160.0 175.0 175.0 175.0	240.0 180.0 170.0 120.0 140.0 120.0	210.0 205.0
Depth (in meters)	0.3 2	0.3 2 4 5.0 5.9	0.3 2 4 6 8 9.1	0.3 2 4 6 8 8.5	0.3 2

Table A-3.--Continued.

J. Station 17 (collected November 29, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	10.6 11.0 11.0	11.0 11.1 11.1 11.1 11.0 11.0	11.2 11.4 11.4 11.3 11.4 11.3 11.3	11.0 11.1 11.1 11.2 11.2	10.7 10.6
Temperature (°C)	10.0 9.0 9.0	9.0 9.0 8.0 8.0 8.0 8.0	8.0 8.0 8.0 8.0 8.0 8.0 8.0	8.0 8.0 8.0 8.0 8.0	8.0 10.0
Specific con- ductance (micromhos @ 25°C)	102.0 101.0 101.0	99.0 96.0 97.0 97.0 98.0 98.0	100.0 95.0 96.0 95.0 96.0 96.0 95.0	99.0 97.0 98.0 99.0 99.0	104.0 102.0
pH (units)	7.6 7.4 7.4	7.2 7.3 7.3 7.3 7.3 7.3	7.3 7.5 7.4 7.3 7.3 7.5 7.4	7.3 7.3 7.1 7.2 7.2	7.5 7.5
Oxidation reduc- tion potential (millivolts+)	110.0 110.0 110.0	110.0 120.0 110.0 110.0 110.0 110.0	150.0 150.0 140.0 140.0 70.0 80.0 90.0	150.0 150.0 150.0 140.0 140.0	60.0+ 60.0+
Depth (in meters)	0.3 2 2.7	0.3 2 4 6 8 14	0.3 2 4 6 8 10 15.9	0.3 2 4 6 6 9.1	0.3 1.5

Table A-3.--Continued.

K. Station 33 (collected December 7, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	12.4 12.0	11.2 11.7 11.2 11.2 11.2	12.2 12.0 11.8 11.7 11.7 11.6 11.6 11.4	11.4 12.0 11.4	11.7 11.7
Temperature (°C)	5.0 6.0	7.0 7.0 7.0 7.0 7.0	6.0 6.5 7.0 7.0 6.5 6.5 6.5 6.5	7.0 6.5 6.5	6.5 7.0
Specific con- ductance (micromhos @ 25°C)	98.0 100.0	114.0 98.0 117.0 98.0 100.0	100.0 110.0 110.0 118.0 110.0 101.0 101.0 100.0	118.0 124.0 104.0	112.0 120.0
pH (units)	7.8 7.7	7.2 7.3 7.6 7.7 7.5	7.8 7.7 7.1 7.5 7.7 7.5 7.5 7.5	7.4 7.4 7.4	7.4 7.5

Table A-3-K.--Continued.

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Oxidation reduction potential (millivolts+)	180.0	160.0	100.0	190.0	200.0
	190.0	230.0	220.0	200.0	190.0
		220.0	220.0	190.0	
		220.0	220.0		
		220.0	220.0		
			210.0		
			220.0		
			110.0		
Depth (in meters)	0.3	0.3	0.3	0.3	0.3
	1.5	2	2	2	3.7
		4	4	5.5	
		6	6		
		7.9	8		
			10		
			12		
			16.2		

Table A-3.--Continued.

L. Station 34 (collected December 7, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	12.4 12.2	12.0 11.8 11.8	12.4 12.0	11.8 11.8 11.8 11.8	12.6 12.4
Temperature (°C)	6.0 6.0	7.0 7.0 7.0	6.5 7.0	6.5 7.0 7.0 7.0	7.0 7.0
Specific con- ductance (micromhos @ 25°C)	124.0 123.0	126.0 126.0 127.0	128.0 127.0	125.0 126.0 126.0 126.0 126.0	126.0 127.0
pH (units)	7.4 7.6	7.4 7.3 7.3	6.9 7.3	7.6 7.5 7.5 8.0 7.9	7.5 7.6
Oxidation reduc- tion potential (millivolts+)	220.0 210.0	210.0 210.0 210.0	220.0 220.0	210.0 190.0 190.0 190.0 200.0	200.0 200.0
Depth (in meters)	0.3 0.9	0.3 2 4.6	0.3 3	0.3 2 4 6 7.9	0.3 0.9

Table A-3.--Continued.

M. Station 43 (collected December 8, 1977)

	<u>Left bank</u>	<u>Left midstream</u>	<u>Midstream</u>	<u>Right midstream</u>	<u>Right bank</u>
Dissolved oxygen (mg/l)	10.4 10.6	11.2 10.6 10.6 10.6 10.0 10.6	10.8 10.7 10.7 10.8 10.7	10.8 10.7 10.7 10.7 10.7	11.4 11.0
Temperature (°C)	7.5 7.5	7.5 7.5 7.5 7.5 7.5 7.5	7.5 7.5 7.5 7.5 7.5	7.5 7.5 7.5 7.5 7.5	7.5 7.5
Specific con- ductance (micromhos @ 25°C)	126.0 127.0	126.0 125.0 125.0 124.0 125.0 124.0	130.0 127.0 124.0 125.0 125.0	126.0 126.0 125.0 125.0 125.0	130.0 130.0
pH (units)	7.4 8.3	7.4 7.5 7.5 7.5 7.9 7.8	7.4 7.3 7.5 7.4 7.5	7.4 7.3 7.4 7.4 7.4	7.3 7.2
Oxidation reduc- tion potential (millivolts+)	190.0 210.0	210.0 205.0 210.0 205.0 205.0 200.0	240.0 235.0 240.0 230.0 230.0	220.0 220.0 210.0 210.0 210.0	210.0 190.0
Depth (in meters)	0.3 1	0.3 2 4 6 8 12.2	0.3 2 4 6 7.6	0.3 2 4 4 7.6	0.3 1.1

Table A-4 -- Biological data from the Alabama-Coosa River system for the period August 9 through December 8, 1977

Station number 1			COOSA R NR MONTGOMERY ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	G/SQ M	BIOMASS	00571	60990	71261	71291	71297	71311	71320	71322	71374
					BENTHIC		ZOOPLANK	PHYLLUM	0 CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD-CHLM	ORD-EUGL
							OTHER	PROTOZOA	UCERA	COPEPODA	RICHALES	OPHURALE	OCUCCALE	ENALES
							/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770809				1.3			0.0	0.0	0.0	0.0	0	0	0	0
770919				0.6			3.3	0.7	1.1	0.9	0	1	2	0
771031				5.4			3.2	0.1	9.3	2.0	0	0	3	0
Station number 2			COOSA R BELOW MONTGOMERY NR ELMOORE ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	G/SQ M	BIOMASS	00571	71395	71401	71408	75009	75018	75021	75024	75027
					BENTHIC		ORD CHRY	ORD CEN-	ORD PEN-	CADDIS	CHAORU	CHIRON	CURBI	HEAGE
							SOMONULS	THALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
							NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770809				2.3			10.5	0.0	24.5	13.6	2	0	3	0
770919				0.0			0.1	0.1	0.3	0.0	0	0	1	0
771031				5.7			1.3	0.0	9.6	1.4	0	0	1	0
Station number 3			ALA R AT COUSADA FERRY NR MONT. ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	G/SQ M	BIOMASS	00571	60990	71261	71291	71297	71311	71320	71322	71374
					BENTHIC		ZOOPLANK	PHYLLUM	0 CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD-CHLM	ORD-EUGL
							OTHER	PROTOZOA	UCERA	COPEPODA	RICHALES	OPHURALE	OCUCCALE	ENALES
							/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770809				2.9			21.8	0.0	16.3	15.4	0	0	2	0
770919				0.6			2.8	1.6	0.5	0.4	0	0	6	0
771031				1.6			2.3	0.3	5.8	1.4	0	0	1	0
Station number 4			COOSA R AT COUSADA FERRY NR MONT. ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	G/SQ M	BIOMASS	00571	71395	71401	71408	75009	75018	75021	75024	75027
					BENTHIC		ORD CHRY	ORD CEN-	ORD PEN-	CADDIS	CHAORU	CHIRON	CURBI	HEAGE
							SOMONULS	THALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
							NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770809				2.9			21.8	0.0	16.3	15.4	0	0	2	0
770919				0.6			2.8	1.6	0.5	0.4	0	0	6	0
771031				1.6			2.3	0.3	5.8	1.4	0	0	1	0
Station number 5			COOSA R AT COUSADA FERRY NR MONT. ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	G/SQ M	BIOMASS	00571	71395	71401	71408	75009	75018	75021	75024	75027
					BENTHIC		ORD CHRY	ORD CEN-	ORD PEN-	CADDIS	CHAORU	CHIRON	CURBI	HEAGE
							SOMONULS	THALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
							NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770809				2.9			21.8	0.0	16.3	15.4	0	0	2	0
770919				0.6			2.8	1.6	0.5	0.4	0	0	6	0
771031				1.6			2.3	0.3	5.8	1.4	0	0	1	0
Station number 6			COOSA R AT COUSADA FERRY NR MONT. ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	G/SQ M	BIOMASS	00571	71395	71401	71408	75009	75018	75021	75024	75027
					BENTHIC		ORD CHRY	ORD CEN-	ORD PEN-	CADDIS	CHAORU	CHIRON	CURBI	HEAGE
							SOMONULS	THALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
							NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770809				2.9			21.8	0.0	16.3	15.4	0	0	2	0
770919				0.6			2.8	1.6	0.5	0.4	0	0	6	0
771031				1.6			2.3	0.3	5.8	1.4	0	0	1	0

Station number: 4

STATION - 024199B3			ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	005/1	60990	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYTON	U CLAD-	OKOBI	UPU-DLOT	OKU-CLAD	OKU CHLM	OMD-EUGL
				BENTHIC	OTHER/	PROTOZOA	OCERA	COPEPODA	MICHALES	OPHOMALE	UCCUCCALE	ENALES
DATE	TIME	DATE	TIME	G/SC M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770809				1.3	9.7	0.0	13.4	3.1	0	0	2	0
770920				0.6	1.8	2.3	2.3	2.1	0	0	0	0
771031				0.6	4.0	1.1	3.7	1.4	0	0	1	0

				71383	71395	71401	71408	75009	75018	75021	75024	75027
				OKU-DINO	OKU CHRY	OKU GEN-	OKU PEN-	CALDIS	CHAOBU	CHIMON	CUMBI	MEAGE
				KONTAE	SOMUNDLS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
DATE	TIME	DATE	TIME	NO/LITER	NO/LITER	NO/LITER	NO/LITER					
770809				0	0			0	0	129	130	0
770920				0	0			0	0	57	25	210
771031				0	0	39.5	3.4	19	0	2177	67	0

Station number 5

STATION - 02419986			ALA M AT L&N RR NR MILLBROOK ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	00571	60940	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYLUM -	O CLAU -	ORDER	ORD-ULOT	ORD-CLAU	ORD CMLK	ORD-EUGL
				BENTHIC	OTHER	PROTOZOA	OCERA	COPEPODA	RICHALES	OPHOALE	OCOCCALE	ENALESE
				G/SQ M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770809				39.4	15.4	0.0	14.8	3.6	0	0	1	0
770920				5.1	1.5	2.0	1.7	0.5	0	0	2	0
771101				0.6	1.2	0.6	4.0	0.3	0	0	1	0
				71383	71395	71401	71408	75009	75018	75021	75024	75027
				ORD-DINO	ORD CMRY	ORD CEN-	ORD PEN-	CAUDIS	CHACBO	CHIRON	CUHBI	HEXAGE
				KONTAE	SOMUNDLS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
				NO/LITER	NO/LITER	NO/LITER	NO/LITER					
770809				0	0			0	0	86	574	0
770920				0	0			15	0	64	834	162
771101				0	0	13	4	0	19	124	57	0

Station number 6

STATION - 0241987												
ALABAMA RIVER BASIN												

DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYTUM	O CLAU-	ORDER	ORD-ULOT	ORD-CLAU	ORDU CHLN	ORD-EUGL
				B. YTHIC	OTHER	PROTOZOA	OCEA	COPEPODA	RICHIALES	OPHURAE	OCUCALAE	ENALAE
				G/SQ M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770811				2.3	19.1	0.0	19.7	13.8	0	0	4	0
770920				0.6	5.1	1.1	5.3	4.0	0	0	2	0
771101				3.2	2.8	2.0	11.1	2.1	0	0	3	0

71383												
				ORD-DINO	ORD CHRY	ORD GEN-	ORD PEN-	75009	75018	75021	75024	75027
				KONTAE	SOMONDS	TRALES	NALES	CADUS	CHAORO	CHIRON	CURBI	MEAGE
				NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
DATE	TIME	DATE	TIME	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
770811				0	0			0	0	115	301	0
770920				0	0			0	15	64	127	287
771101				0	0	7	3	0	19	38	277	0

Table A-4.--Continued

STATION - 02419459				ALA M NR MAXWELL AFB NR MONT. ALABAMA RIVER BASIN																	
DATE	TIME	DATE	TIME	00571		60990		71261		71291		71297		71311		71320		71322		71379	
				BIOMASS	G/SQ M	ZOOPLANK	OTHER	PHYLUM	PROTOZOA	OCERA	NO/LITER	ORDER	COPEPUDA	MICHALES	NO/LITER	ORD-CLAD	OPHURALE	ORD CMLK	OCUCCALE	ORD-EUGL	ENALES
770811				394.6		16.1		0.0	11.8			11.0		0		0		5		0	
770920				157.9		2.6		0.6	3.3			2.7		0		0		2		0	
771101				9.0		1.2		0.1	4.6			1.7		0		0		1		0	
STATION - 02420045				ALA M NR PRAITVILLE ALABAMA RIVER BASIN																	
DATE	TIME	DATE	TIME	71383		71395		71401		71408		75009		75018		75021		75024		75027	
				ORD-DINO	KONTAE	ORD CHRY	SOMUNLS	ORD CEN-	ORD PEN-	NALES	NO/LITER	CAUDIS	CHAORO	NO/M2	CHIRON	CURBI	HEKAGE	NO/M2			
770811				0	0	0	0	0	11.8			0		0		129		158		0	
770920				0	0	0	0	0	3.3			19		0		369		261		516	
771101				0	0	0	0	14	4.6			45		19		191		0		0	
STATION - 02420600				ALA M BELOW AUTAUGA CR NR PRATVL ALABAMA RIVER BASIN																	
DATE	TIME	DATE	TIME	00571		60990		71261		71291		71297		71311		71320		71322		71379	
				BIOMASS	G/SQ M	ZOOPLANK	OTHER	PHYLUM	PROTOZOA	OCERA	NO/LITER	ORDER	COPEPUDA	MICHALES	NO/LITER	ORD-CLAD	OPHURALE	ORD CMLK	OCUCCALE	ORD-EUGL	ENALES
770811				0	0	0	0	0	37.6			17.4		0		86		272		0	
770920				0	0	0	0	0.3	2.3			1.2		0		127		395		0	
771101				0	0	0	0	0.0	5.1			1.2		0		516		96		0	
STATION - 02420600				ALA M BELOW AUTAUGA CR NR PRATVL ALABAMA RIVER BASIN																	
DATE	TIME	DATE	TIME	00571		60990		71261		71291		71297		71311		71320		71322		71379	
				BIOMASS	G/SQ M	ZOOPLANK	OTHER	PHYLUM	PROTOZOA	OCERA	NO/LITER	ORDER	COPEPUDA	MICHALES	NO/LITER	ORD-CLAD	OPHURALE	ORD CMLK	OCUCCALE	ORD-EUGL	ENALES
770812				2527.5		40.7		0.0	91.3			18.2		0		0		3		0	
770921				1785.0		1.7		1.6	1.0			1.5		0		0		0		0	
771101				6.4		2.3		0.1	6.2			0.4		0		0		0		0	
STATION - 02420600				ALA M BELOW AUTAUGA CR NR PRATVL ALABAMA RIVER BASIN																	
DATE	TIME	DATE	TIME	71383		71395		71401		71408		75009		75018		75021		75024		75027	
				ORD-DINO	KONTAE	ORD CHRY	SOMUNLS	ORD CEN-	ORD PEN-	NALES	NO/LITER	CAUDIS	CHAORO	NO/M2	CHIRON	CURBI	HEKAGE	NO/M2			
770812				0	0	0	0	0	91.3			18.2		0		143		324		0	
770921				0	0	0	0	1.6	1.0			1.5		0		52		54		0	
771101				0	0	0	0	0.1	6.2			0.4		0		146		34		0	

Table A-4 --Continued

Station number 10	STATION - 02421060													ALA R BELOW CATTALA CR NR PRATTVIL ALABAMA RIVER BASIN												
	DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379													
					BIOMASS	ZOOPLANK	PHYLLUM	U CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD CHLM	ORD-EUGL													
					BENTHIC	OTHER	PROTOZOA	OCERA	COPEPODA	RICHALES	OPHOREA	OCUCCALE	ENALES													
					/SU M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER													
770812					2437.0	26.2	0.0	65.8	10.8	0	0	1	0													
770921					958.2	2.5	0.1	3.6	2.4	0	0	0.6	0													
771101					3.6	5.5	0.3	2.9	1.1	0	0	0.6	0													
	DATE	TIME	DATE	TIME	71383	71395	71401	71408	75009	75018	75021	75024	75027													
					ORD-DINO	ORD CHRY	ORD CEN-	ORD PEN-	CAODIS	CHABHU	CHIRON	CURBI	HEXAGE													
					KUNTAE	SOMONDS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2													
770812					0	0	0	0	0	43	287	1332	0													
770921					0	0	0	0	0	19	166	166	191													
771101					0	0	0	1	0	57	312	430	0													
Station number 11	STATION - 02421090													ALA R AB PINTILLA CR NR PRATTVIL ALABAMA RIVER BASIN												
	DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379													
					BIOMASS	ZOOPLANK	PHYLLUM	U CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD CHLM	ORD-EUGL													
					BENTHIC	OTHER	PROTOZOA	OCERA	COPEPODA	RICHALES	OPHOREA	OCUCCALE	ENALES													
					/SU M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER													
770812					7413.7	27.1	0.0	45.2	14.0	0	0	1	0													
770921					318.3	1.4	3.1	4.1	4.7	0	0	2	0													
771102					732.2	1.2	0.0	4.1	0.3	0	0	1	0													
	DATE	TIME	DATE	TIME	71383	71395	71401	71408	75009	75018	75021	75024	75027													
					ORD-DINO	ORD CHRY	ORD CEN-	ORD PEN-	CAODIS	CHABHU	CHIRON	CURBI	HEXAGE													
					KUNTAE	SOMONDS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2													
770812					0	0	0	0	129	0	244	2106	0													
770921					0	0	0	0	0	0	297	449	0													
771102					0	0	5	0	19	0	172	306	0													
Station number 12	STATION - 02421195													ALA R NR BUCKVILLE ALABAMA RIVER BASIN												
	DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379													
					BIOMASS	ZOOPLANK	PHYLLUM	U CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD CHLM	ORD-EUGL													
					BENTHIC	OTHER	PROTOZOA	OCERA	COPEPODA	RICHALES	OPHOREA	OCUCCALE	ENALES													
					/SU M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER													
770812					482.9	34.6	0.0	30.1	8.1	0	0	1	0													
770921					2101.0	4.0	3.8	3.7	5.9	0	0	3	0													
771102					445.7	0.4	0.0	1.2	0.2	0	0	0	0													
	DATE	TIME	DATE	TIME	71383	71395	71401	71408	75009	75018	75021	75024	75027													
					ORD-DINO	ORD CHRY	ORD CEN-	ORD PEN-	CAODIS	CHABHU	CHIRON	CURBI	HEXAGE													
					KUNTAE	SOMONDS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2													
770812					0	0	0	0	0	0	0	129	0													
770921					0	0	0	0	0	38	433	439	0													
771102					0	0	2	2	0	0	306	159	0													

Table A-4.--Continued.

STATION - 02421220				ALA M BELOW ROCKY BK NH LUNDS60 ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71324	71379			
				BIOMASS	ZOOPLANK	PHYLLUM	O CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD-CLM	ORD-EUGL			
				BENTHIC	OTHER	PROTOZOA	UCERA	COPEPODA	RICHALES	OPHOMALE	OCUCCALE	ENALES			
				G/SU M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER			
7 0912				1312.2	15.3	0.0	48.9	6.6	0	0	0	0	0		
7 0921				764.0	1.1	1.4	2.2	1.1	0	0	0.5	0	0		
7 1102				859.5	1.4	0.0	2.3	0.6	0	1	0	0	0		
DATE	TIME	DATE	TIME	71383	71395	71401	71408	75009	75018	75021	75024	75027			
				ORD-DINO	ORD CHRY	ORD CEN-	ORD PEN-	CADDIS	CHAORO	CHIRON	CURBI	HEXAGE			
				KONTAE	SOMONULS	THALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2			
				NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2			
770812				0	0			0	0	43	502	0	0		
770921				0	0			0	0	102	369	134	0		
771102				0	0	3	1	29	0	152	38	0	0		

STATION - 02421290				ALA M BELOW BEAVER CK NH AUTAUGA ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379			
				BIOMASS	ZOOPLANK	PHYLUM	O CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD-CHLK	ORD-EUGL			
				BENTHIC	OTHER	PROTOZOA	OCOMA	COPEPODA	RICHALES	OPHOMALE	OCUCCALE	ENALES			
				G/SU M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER			
770816				4.3	29.1	0.0	55.8	3.4	0	0	0	0			
770922				159.2	0.1	0.4	0.5	10.0	0	0	0	0			
771103				70.0	1.4	0.0	1.6	1.2	0	0	0	0			
				71383	71395	71401	71408	75009	75018	75021	75024	75027			
				ORD-DINO	ORD CHRY	ORD CEN-	ORD PEN-	CADDIS	CHAORO	CHIRON	CURBI	HEXAGE			
				KONTAE	SOMONULS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2			
				NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2			
770816				0	0	0	0	0	0	115	1490	0			
770922				0	0	0	0	19	0	67	51	255			
771103				0	0	11	2	0	96	242	38	0			

STATION - 02421315				ALABAMA RIVER BASIN											
				ALA M BELOW IVY CR NH MULBERRY											
DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379			
				BIOMASS	ZOOPLANK	PHYLUK	O CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD-CHLR	ORD-EUGL			
				BENTHIC	OTHER	PROTOZOA	UCERA	COPEPODA	RICHALES	OPHOMALE	OCUCCALE	ENALES			
				G/SU M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER			
770816				386.8	62.8	0.0	60.0	31.9	0	0	1	0			
770922				986.8	1.3	0.5	9.5	2.9	0	0	1	0			
771103				70.7	0.5	0.6	2.0	1.0	0	0	0	0			
DATE	TIME	DATE	TIME	71383	71395	71401	71408	75009	75018	75021	75024	75027			
				ORD-DINO	ORD CHRY	ORD CEN-	ORD PEN-	CADDIS	CHAORO	CHIRON	CURBI	HEXAGE			
				KONTAE	SOMUNULS	THALES	NALTS	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2			
				NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2			
770816				0	0	0	0	0	0	129	401	0			
770922				0	0	0	0	0	0	197	420	57			
771103				0	0	13	7	19	57	236	57	0			

Table 4. — Continued.

STATION - 02421325			ALA M AT DAYS BEND NW BRITON ALAPAPA RIVER PASIN									
DATE	TIME	DATE	TIME	00571	60490	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYTON	O CLAD-	ORDER	ORD-ULOT	ORD-CLAU	ORD CHLR	ORD-EUGL
				BENTHIC	OTHER	PROTIZOA	OTHER	COPEPODA	PICHALES	OPHOPLA	OCOCALC	ENALE
				G/SUM	LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770816				523.1	27.5	0.0	35.3	13.5	0	0	0	0
770922				1.9	0.9	0.5	2.6	2.1	0	0	0	0
771103				178.9	0.5	0.0	3.7	3.1	0	0	0	0
				71383	71395	71401	71408	75009	75018	75021	75024	75027
				ORD-UINO	ORD CMRY	ORD BEN-	ORD PEN-	CADDIS	CHAORO	CHIRON	CUMBI	HEXAGE
				KONTAE	SOMONULS	TRALES	RALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
				NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
770816				0	0	0	0	0	122	115	443	0
770922				0	0	0	0	0	0	96	127	497
771103				0	0	1	0	0	19	143	331	0

Section 1

STATION - 02421349			ALA R JONES BLUFF NR BENTON ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYTON	O CLAU-	ORDER	ORD-PULOT	ORD-CLAD	ORD CHLM	ORD-EUGL
				BENTHIC	OTHER	PROTIZGA	OCERA	COLEPUDA	PICHALES	OPHOREA	OCOCAL	ENALES
				G/SQ M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770816				945.5	9.0	0.0	5.7	6.6	0	0	0	0
770922				1990.0	0.5	0.3	3.6	2.1	0	0	0	0
771103				578.7	0.4	0.0	2.1	3.5	0	0	0	0
				71383	71395	71401	71408	75009	75018	75021	75024	75027
				ORD-OINO	ORD CMRY	ORD CEN-	ORD PEN-	CADUIS	CHAGRO	CHIRON	CURBI	HEXAGE
				KONTAE	SOMONDS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
				NO/LITER	NO/LITER	NO/LITER	NO/LITER					
770816				0	0	0	0	0	43	215	473	0
770922				0	0	0	0	0	19	96	258	153
771103				0	0	5	5	19	19	210	108	0

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STATION - 02421355			ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	ALA RIVER NR BENTON	60990	71261	71291	71297	71311	71320	71322	71379
					BIOMASS	PHYLUM	O CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD-CHLK	ORD-EUGL
					BENTHIC	PROTOZOA	OCEWA	COMPOUDA	RICHALES	UPHOPALE	OCC-CCALE	ENALES
					C/SQ M	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770516					44.3	10.7	46.4	16.4	0	0	1	0
770922					509.3	1.3	9.1	7.0	0	0	0	0
771103					16.5	0.2	1.6	1.1	0	0	0	0

DATE	TIME	DATE	TIME	71383	71395	71401	71408	75009	75018	75021	75024	75027
				OPD-DINO	ORD CHRY	ORD CEN-	ORD PEN-	CADDIS	CHAORO	CHIRON	CURBI	HEXAGE
				KONTAL	SOMONULS	TRALES	NALES	NO/M2	NC/M2	NO/M2	NO/M2	NO/M2
				NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
770816				0	0			0	0	0	320	0
770922				0	0			0	0	95	324	0
771103				0	0	3	2	0	0	32	71	0

Table A-2 (cont.) (cont.)

STATION - 02422100		ALABAMA RIVER BASIN											
ALABAMA RIVER BASIN		ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
7/08/17	1.1	7/08/17	10.1	7/08/17	16.1	7/08/17	20.1	7/08/17	24.1	7/08/17	28.1	7/08/17	32.1
7/09/26	5.1	7/09/26	9.1	7/09/26	13.1	7/09/26	17.1	7/09/26	21.1	7/09/26	25.1	7/09/26	29.1
7/11/07	0.6	7/11/07	4.6	7/11/07	8.6	7/11/07	12.6	7/11/07	16.6	7/11/07	20.6	7/11/07	24.6
ALABAMA RIVER BASIN													
7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0
7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0
7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0

Station
Number 19

STATION - 02422200		ALABAMA RIVER BASIN											
ALABAMA RIVER BASIN		ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
7/08/17	2.3	7/08/17	30.0	7/08/17	14.8	7/08/17	15.8	7/08/17	16.8	7/08/17	17.8	7/08/17	18.8
7/09/26	1.9	7/09/26	3.5	7/09/26	4.1	7/09/26	4.2	7/09/26	4.3	7/09/26	4.4	7/09/26	4.5
7/11/07	0.6	7/11/07	1.8	7/11/07	1.2	7/11/07	1.4	7/11/07	1.6	7/11/07	1.8	7/11/07	2.0
ALABAMA RIVER BASIN													
7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0
7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0
7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0

Station
Number 21

STATION - 02422300		ALABAMA RIVER BASIN											
ALABAMA RIVER BASIN		ALABAMA RIVER BASIN											
DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
7/08/17	4.3	7/08/17	109.9	7/08/17	17.7	7/08/17	21.7	7/08/17	25.7	7/08/17	29.7	7/08/17	33.7
7/09/26	5.7	7/09/26	0.7	7/09/26	1.2	7/09/26	1.7	7/09/26	2.2	7/09/26	2.7	7/09/26	3.2
7/11/07	0.6	7/11/07	3.2	7/11/07	3.7	7/11/07	4.2	7/11/07	4.7	7/11/07	5.2	7/11/07	5.7
ALABAMA RIVER BASIN													
7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0	7/08/17	0
7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0	7/09/26	0
7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0	7/11/07	0

Table A-4. --Continued

STATION - 02422765			ALA W NW CKAIG AFF NW SFUMA ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379
				BIO MASS	ZOOPLANK	PHYUM	O CLAU-	ORDER	ORD-ULOT	ORD-CLAU	ORD CHLM	ORD-EUGL
				BENTHIC	OTHER	PROTOZOA	OCEMA	CUPEPUDA	WICHIALES	OPHURALE	OCOCCEAL	ENALES
				G/SQ M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770817				1.3	19.6	0.0	20.8	24.1	0	0	1.3	0
770926				2.5	12.9	5.8	12.6	12.9	0	0	62.5	0
771107				10.8	2.7	0.1	3.2	2.2	0	0	1.4	0
				71383	71395	71401	71408	75009	75016	75021	75024	75027
				ORD-DINO	ORD CMRY	ORD CEN-	ORD PEN-	CAUDIS	CHAODIO	CHIRON	CUMBI	MEARGE
				KONTAE	SUMONULS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
				NO/LITER	NO/LITER	NO/LITER	NO/LITER					
770817				0	0			43	0	86	258	0
770926				0	0			19	0	86	38	0
771107				0	0	3	1	0	6	0	38	0

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STATION - 02423000			ALA N AT SELMA ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYTON	O CLAD-	GPBR	SPD-ULOT	OWD-CLAD	ORU CLKR	ORO-EUGL
				BENTHIC	OTHER	PHOTOZOA	UCERA	COSEPODA	MICHALES	CHEMOALL	OCUCCALE	ENALES
				G/SQ M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770817				34.4	17.3	0.0	28.3	5.8	0	0	4	0
770926				2.5	2.4	3.6	3.2	0.1	0	0	7.9	4
771108				0.6	3.4	0.3	5.3	6.2	0	0	1	0
				71383	71395	71401	71408	75004	75018	75021	75024	75027
				ORD-DINO	ORD CMRY	ORD CEN-	ORD PEN-	CAODIS	CHAOBO	CHIRON	CURBI	HEXAGE
				KONTAE	SOMONDS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
DATE	TIME	DATE	TIME	NO/LITER	NO/LITER	NO/LITER	NO/LITER					
770817				0	0			0	0	86	525	0
770926				0	0			0	0	57	153	57
771108				0	0	5	13	0	19	134	38	0

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STATION - 02423050			ALA R NR SELMA ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYLUM	O CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD CHLM	ORD-EUGL
				BENTHIC	OTHER	PROTOZOA	OCEMA	COPEPODA	MICHALES	OPHOREAL	OCUCCALE	ENALES
DATE	TIME	DATE	TIME	G/SO M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770818				5.6	25.8	0.8	19.1	6.2	0	0	2.2	1
770927				312.1	3.2	1.6	12.8	12.5	0	0	3.1	0
771108				0.6	2.6	0.7	3.6	1.6	0	0	0.5	0
				71383	71395	71407	71408	75009	75018	75021	75024	75027
				ORD-DINO	ORD CMRY	ORD GEN-	ORD PEN-	CAUDIS	CHAORO	CHIRON	CORBI	HEARGE
				KONTAE	SOMONDS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
				NO/LITER	NO/LITER	NO/LITER	NO/LITER					
770818				0	0			0	0	0	1690	0
771027				0	0			0	19	124	649	0
771108				0	0	3	1	0	0	19	220	0

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[illegible]

ALA & NR CANADA ALABAMA RIVER BASIN

STATION - 02425115

DATE	TIME	DATE	TIME	00571	60990	71261	71241	71297	71311	71320	71322	71374
				BIOMASS	ZOOPLANK	PHYLUM	O CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD CHLR	ORD-EUGL
				BENTHIC	OTHER	PROTOZOA	OCERA	COPEPODA	RICHALES	OPHURAE	OCUCCALE	ENALES
				G/SQ M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770816				8.6	23.2	0.2	44.7	11.2	0	0	2	0
770927				207.6	4.8	0.4	9.4	28.5	0	0	4	0
771104				62.4	3.7	1.4	2.3	1.8	0	0	3	0
				71383	71395	71401	71408	75009	75018	75021	75024	75027
				ORD-LING	ORD CHRY	ORD GEN-	ORD PEN-	CADOLIS	CHABDO	CHIRON	CORPT	MEASE
				ACUTAE	SOMONULS	IRALES	IRALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
				NO/LITER	NO/LITER	NO/LITER	NO/LITER					
770815				0	0			0	0	14.3	94.6	0
770927				0	0			19	0	0	24	0
771104				0	0	6	5	19	0	19	20	0

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STATION - 0245700
ALAN W. LUM B. 11/16 ALBANY, NEW YORK

DATE	TIME	DATE	TIME	U0571	60990	71261	71291	71311	71320	71322	71379
				BIO MASS	ZOOPLANK	PHYTON	URDER	ORD-ULOT	ORD-UAD	ORD-UMLH	ORD-EUGL
				BENTHIC	OTHER	PROTOZOA	CORPUSCULA	MICHALES	OPH-TAL	OPH-TAL	ENALES
				6/50 M	7/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770819		227.7		3.9	0.4	0.0	0.8	0	0	2	1
770927		827.7		4.7	1.0	3.0	1.0	0	0	3	0
771109		180.8		5.6	0.0	1.1	3.0	0	0	1	0

DATE	TIME	DATE	TIME	NO/LITER	SUBSIDIES NO/LITER	TRUCKS NO/LITER	WALL, NO/LITER	NOSE/2	NOSE	NOSE	NOSE/2
770619				0	0			107	0	258	487
770727				0	0			19	19	325	166
771109				0	0	26	7	0	0	57	102

ATION - 02425800 ALA R AB MOQUELITTO CREEK ALABAMA 35164 BASIN

DATE	TIME	DATE	TIME	60571	60990	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYTUM	O CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD CHLM	ORD-EUGL
				BENTHIC	OTHER	PROTOZOA	CELLA	CO-EPODA	RICHALES	OF MORALE	UCOCALC	ENALES
				G/SO M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
70819		245.0		5.4		0.2	5.3	14.7	0	0	3	0
70927		19.7		3.9		0.1	14.2	1.7	0	0	35	0
77109		1.0		3.1		1.0	5.0	2.2	0	0	3	0

DATE	TIME	DATE	TIME	KONTAE NO/LITER	SUMONDS NO/LITER	TRALES NO/LITER	NALES NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2
770819				0	0			43	344	702	0
770927				0	0			19	76	108	0
771109				0	0			38	344	509	0

TATION - 02427400

DATE	TIME	GATE	TIME	00571	60990	71261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYTUM	U CLAD-	ORDER	ORD-OLUT	ORD-CLAD	ORD CHLM	ORD-EUGL
				BENTHIC	UTHER	PROTOZOA	UCLEMA	COPEPODA	PICHALES	OPH-GRALE	OCUCCALE	ENALES
				W/SU M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
7/24/79	101.7			9.3		0.1	11.3	11.4	0	0	7	0
7/24/79	375.5			31.6		0.2	24.7	11.4	0	0	62	0
7/21/80	85.0			1.0		0.5	11.9	1.5	0	0	2	0

DATE	TIME	DATE	TIME	PONTAE NO/LITER	SUMONLS NO/LITER	TRALLS NO/LITER	NALES NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2
7-2-77				0	0			0	0	0	0
7-7-77				0	0			0	0	0	0
7-11-77				0	0	10	3	0	0	0	0

Table A-4 -- Continued

STATION - 02427507 ALA R AB POWERHOUSE AT MILLERS F ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME	DATE	TIME
770822		770822		770822		770822		770822	
770929		770929		770929		770929		770929	
771114		771114		771114		771114		771114	
STATION - 02427511 ALA R NK MIDWAY ALABAMA RIVER BASIN									
770822		770822		770822		770822		770822	
770929		770929		770929		770929		770929	
771114		771114		771114		771114		771114	
STATION - 02427745 ALA R NF YELLOW BLUFF ALABAMA RIVER BASIN									
770822		770822		770822		770822		770822	
770929		770929		770929		770929		770929	
771115		771115		771115		771115		771115	

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STATION - 050020

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Date	TIME	UNIT	TIME	UNIT	TIME	UNIT	TIME	UNIT	TIME	UNIT	TIME	UNIT
770823	91.8	3.4	1.4	15.7	3.1	0	0	0	0	0	0	0
771003	120.0	12.5	0.3	9.6	4.0	0	0	0	0	0	0	0
771115	35.0	0.5	0.1	0.2	0.2	0	0	0	0	0	0	0

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STATION -	ALABAMA	MOBILE	CH	IN	FRANKLIN	ALABAMA	MOBILE
770529	0	0	0	0	0	86	193
771025	0	0	0	0	0	19	105
771115	0	0	0	4	0	57	449
STATION - 02426335	ALABAMA	MOBILE	CH	IN	FRANKLIN	ALABAMA	MOBILE
	0	0	0	0	0	86	193
	0	0	0	0	0	19	105
	0	0	0	4	0	57	449
	0	0	0	0	0	0	0

2011. 7. 14.

ALABAMA ABOVE MCLEOD CEMETERY FRANKLIN ALABAMA RIVER

DATE	TIME	DATE	TIME	BIOASS BENTHIC W/SU M	6090 ZOOPLANK OTHER	71261 PHYLUM PROTOZOA NO/LITEM	71291 O CLAD- OUEMA NO/LITEM	71297 UNDER COPEPODA NO/LITEM	71311 UND-ULOT RICHALLES NO/LITEM	71320 UND-CLAD OPHOURE NO/LITEM	71322 ORU CHLM OCOSCALE NO/LITEM	71379 UND-EUGL ENALES NO/LITER
770824				83.0	0.2	0.0	9.4	2.2	0	0	1	0
771003				32.0	3.7	0.2	7.6	6.1	0	0	1	0
771116				117.0	0.6	0.1	0.9	1.3	0	0	1	0

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ALABAMA OF DAVID PENNY IN FRANKLIN ALABAMA RIVER

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STATION - 02428396			ALABAMA RIVER BASIN									
DATE	TIME	DATE	TIME	00571	60990	11261	71291	71297	71311	71320	71322	71379
				BIOMASS	ZOOPLANK	PHYLUM	O CLAD-	ORDER	ORD-ULOT	ORD-CLAD	ORD-CHLK	ORD-EUGL
				BLNTHIC	OTHER	PROTOZOA	OCERA	COPEPODA	RICH-LES	OPHROALE	OCUCCALE	EMALES
DATE	TIME	DATE	TIME	G/SO M	/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/LITER
770624				73.2	9.8	0.2	1.7	1.4	0	0	3	0
771004				350.2	3.1	0.3	4.3	1.7	0	0	1	0
771116				15.3	1.0	0.0	0.4	0.5	0	0	0	0

				71393	71395	71401	71408	75009	75015	75021	75024	75027
				ORD-DING	ORD CRY	ORD GEN-	ORD PEN-	CADDIS	CHA080	CHIRON	CURBI	HEARGE
				KONTAE	SOMONULS	TRALES	NALES	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
DATE	TIME	DATE	TIME	NO/LITER	NO/LITER	NO/LITER	NO/LITER	NO/M2	NO/M2	NO/M2	NO/M2	NO/M2
770624				0	0			0	0	559	1433	0
771004				0	0			0	96	312	809	0
771116				0	0	10	1	19	0	114	127	0

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DATE	TIME	DATE	TIME	BOARDS	TRALES	SALES
10/1/77	10:00	10/1/77	10:00	100	100	100
10/2/77	10:00	10/2/77	10:00	100	100	100
10/3/77	10:00	10/3/77	10:00	100	100	100
10/4/77	10:00	10/4/77	10:00	100	100	100
10/5/77	10:00	10/5/77	10:00	100	100	100
10/6/77	10:00	10/6/77	10:00	100	100	100
10/7/77	10:00	10/7/77	10:00	100	100	100
10/8/77	10:00	10/8/77	10:00	100	100	100
10/9/77	10:00	10/9/77	10:00	100	100	100
10/10/77	10:00	10/10/77	10:00	100	100	100
10/11/77	10:00	10/11/77	10:00	100	100	100
10/12/77	10:00	10/12/77	10:00	100	100	100
10/13/77	10:00	10/13/77	10:00	100	100	100
10/14/77	10:00	10/14/77	10:00	100	100	100
10/15/77	10:00	10/15/77	10:00	100	100	100
10/16/77	10:00	10/16/77	10:00	100	100	100
10/17/77	10:00	10/17/77	10:00	100	100	100
10/18/77	10:00	10/18/77	10:00	100	100	100
10/19/77	10:00	10/19/77	10:00	100	100	100
10/20/77	10:00	10/20/77	10:00	100	100	100
10/21/77	10:00	10/21/77	10:00	100	100	100
10/22/77	10:00	10/22/77	10:00	100	100	100
10/23/77	10:00	10/23/77	10:00	100	100	100
10/24/77	10:00	10/24/77	10:00	100	100	100
10/25/77	10:00	10/25/77	10:00	100	100	100
10/26/77	10:00	10/26/77	10:00	100	100	100
10/27/77	10:00	10/27/77	10:00	100	100	100
10/28/77	10:00	10/28/77	10:00	100	100	100
10/29/77	10:00	10/29/77	10:00	100	100	100
10/30/77	10:00	10/30/77	10:00	100	100	100
10/31/77	10:00	10/31/77	10:00	100	100	100

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STATION - 02-2845

Year	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100
1951	1952	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	2043	2044	2045	2046	2047	2048	2049	2050	2051	2052	2053	2054	2055	2056	2057	2058	2059	2060	2061	2062	2063	2064	2065	2066	2067	2068	2069	2070	2071	2072	2073	2074	2075	2076	2077	2078	2079	2080	2081	2082	2083	2084	2085	2086	2087	2088	2089	2090	2091	2092	2093	2094	2095	2096	2097	2098	2099	2100	

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ALABAMA - 10-2-51 ALABAMA RIVER BASIN

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ALA R AT CEDAR CK NW GOSPOUT ALABAMA RIVER BASIN

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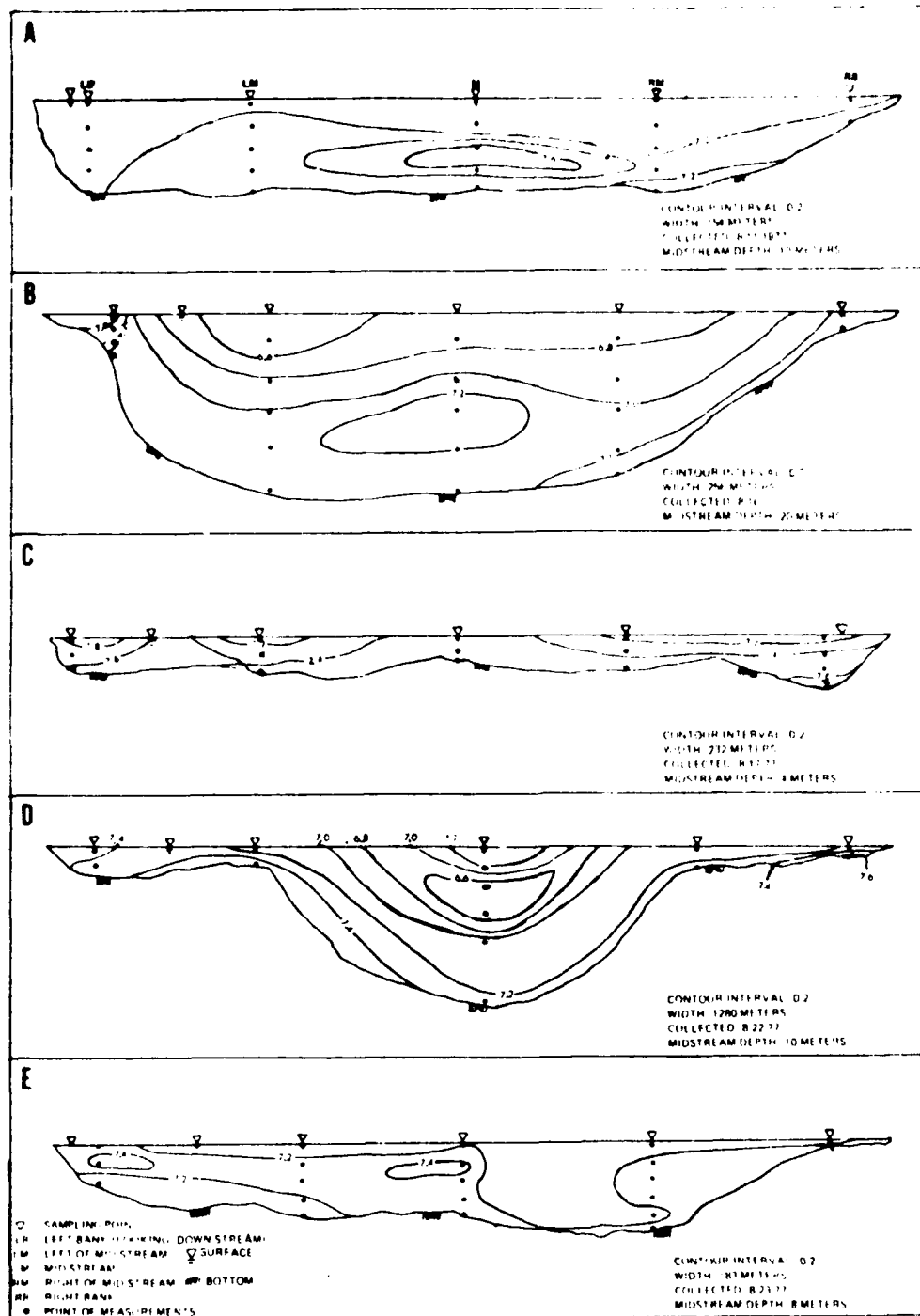


Figure A-1.--Isopleths of pH, specific conductance, temperature, and dissolved oxygen concentrations at station 8 during August 1977.

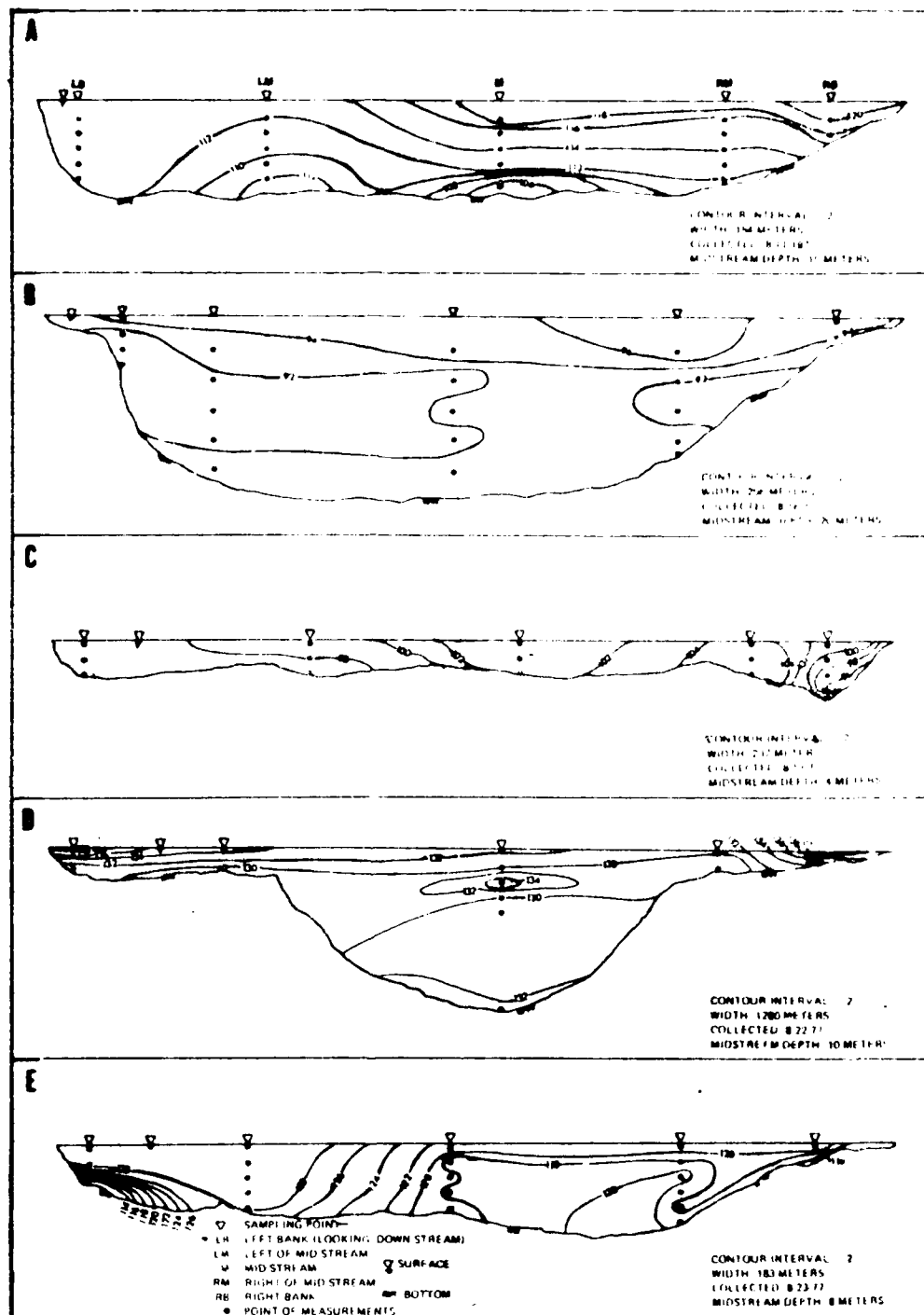


Figure A-2.--Isopleths of pLi, specific conductance, temperature, and dissolved oxygen concentrations at station 16 during August 1977.

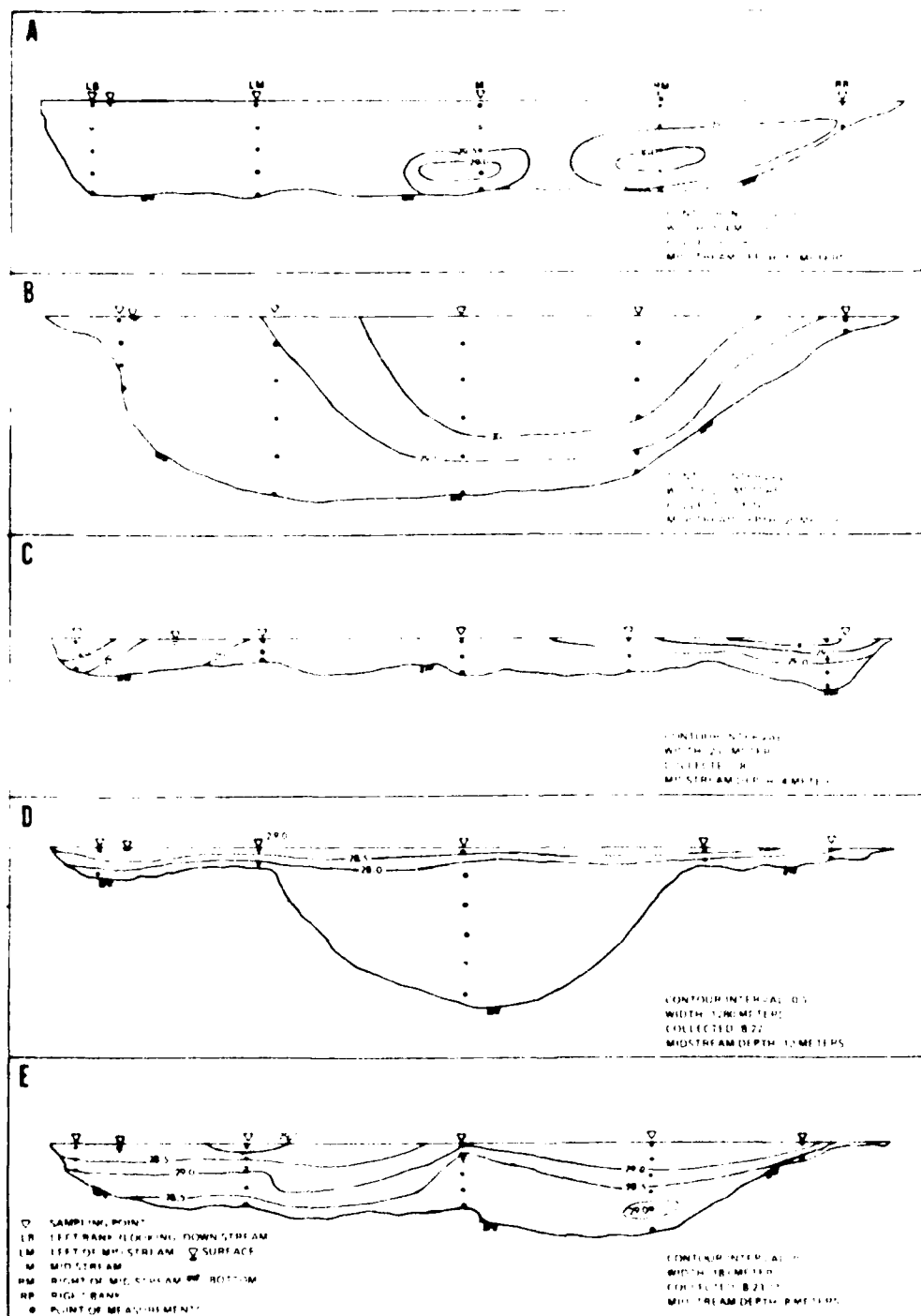


Figure A-3.--Isopleths of pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation-reduction potential at station 17 during August 1977.

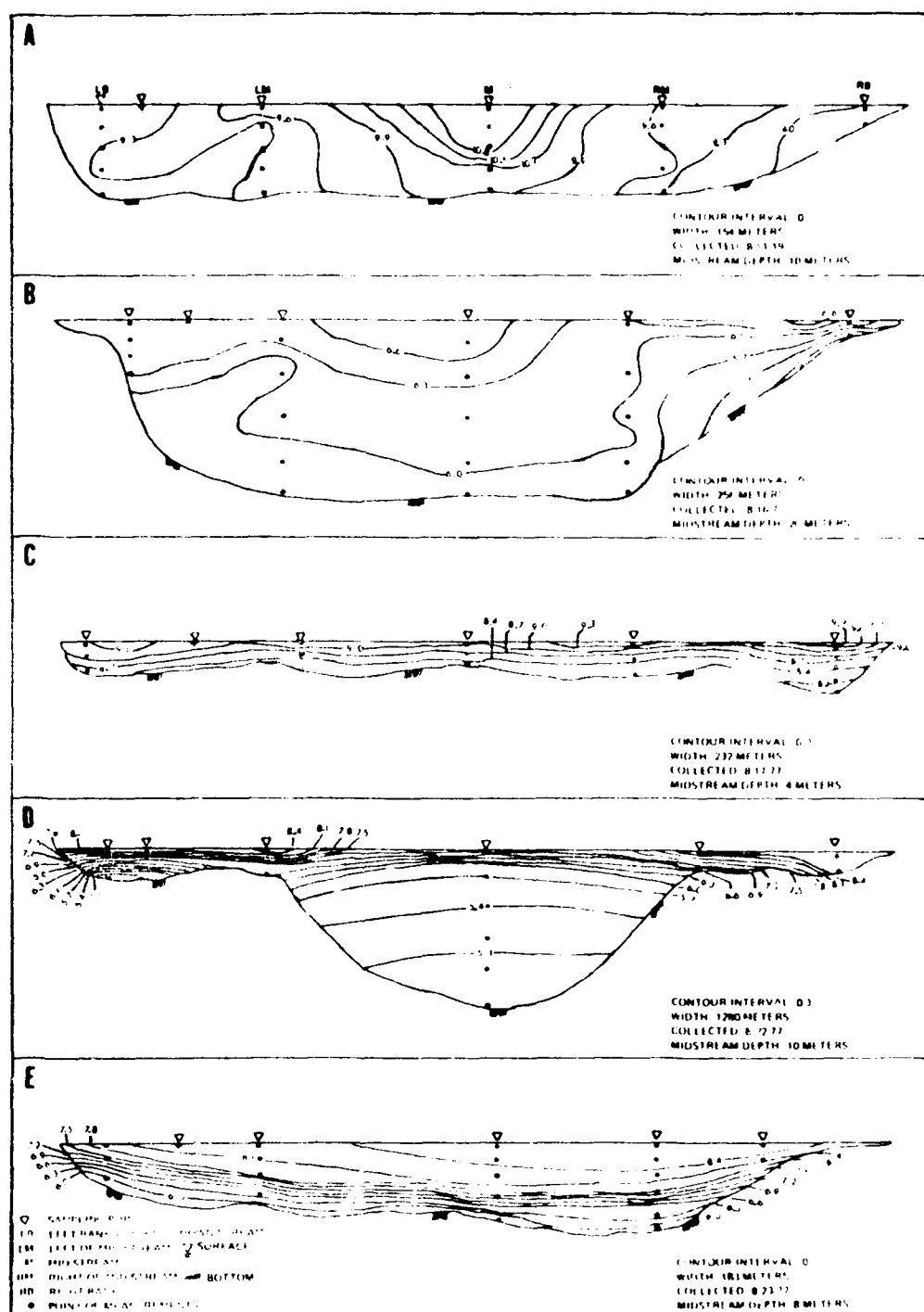


Figure A-4.--Isopleths of pH, specific conductance, temperature, and dissolved oxygen concentrations at station 21 during August 1977.

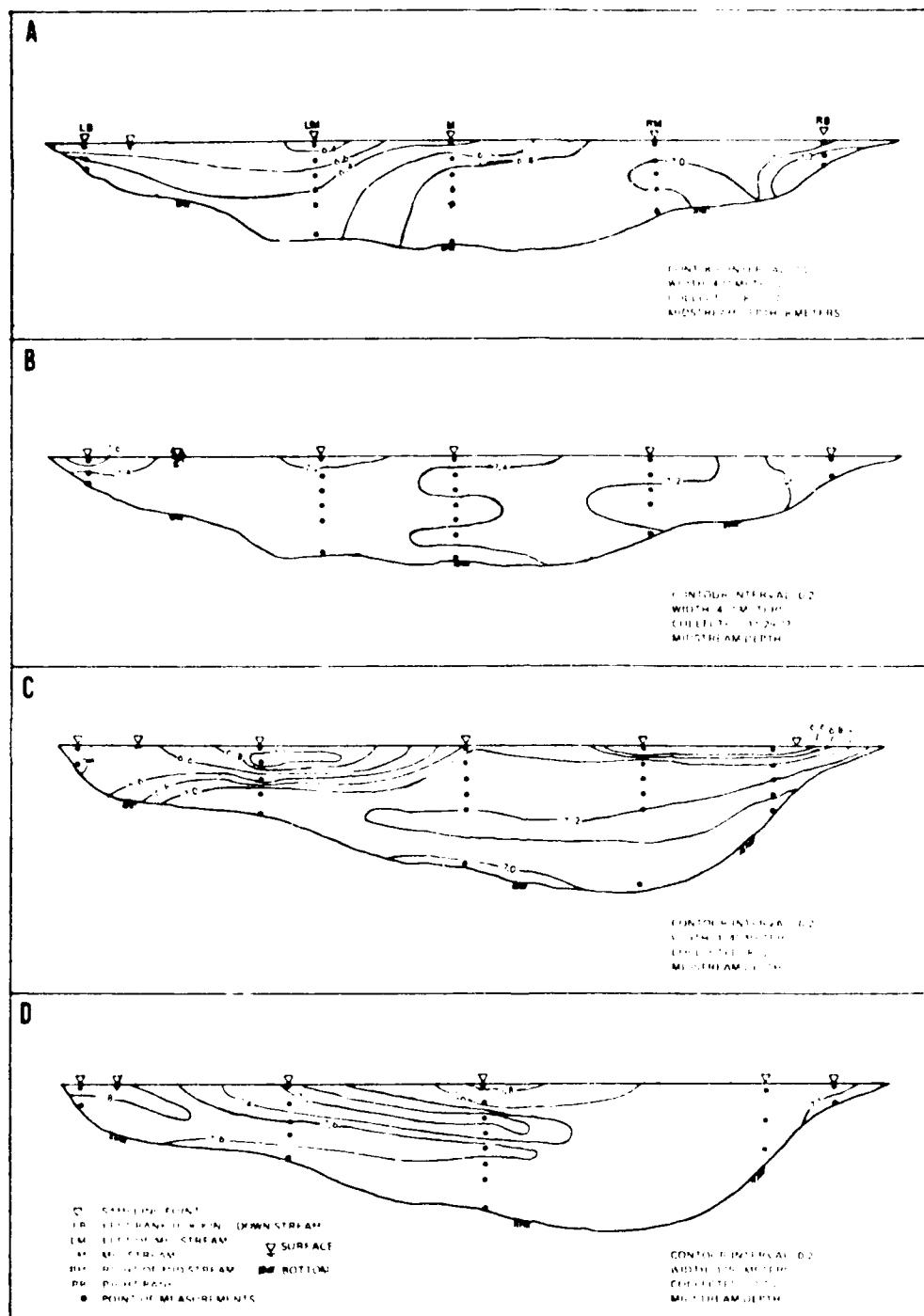


Figure A-5.--Isopleths of pH, specific conductance, temperature, and dissolved oxygen concentrations at station 32 during August 1977.

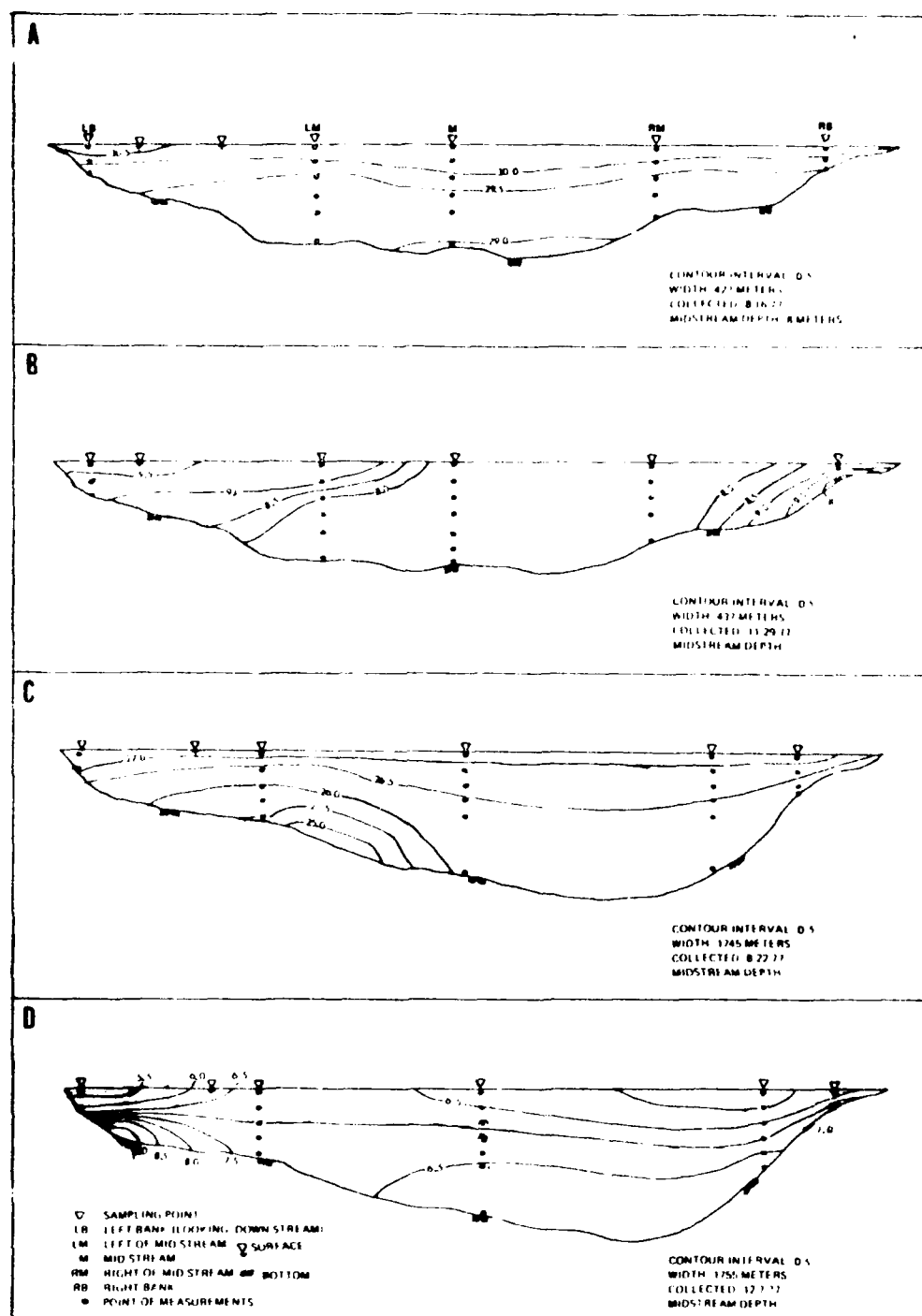


Figure A-6.--Isopleths of pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation reduction potential at station 33 during August 1977.

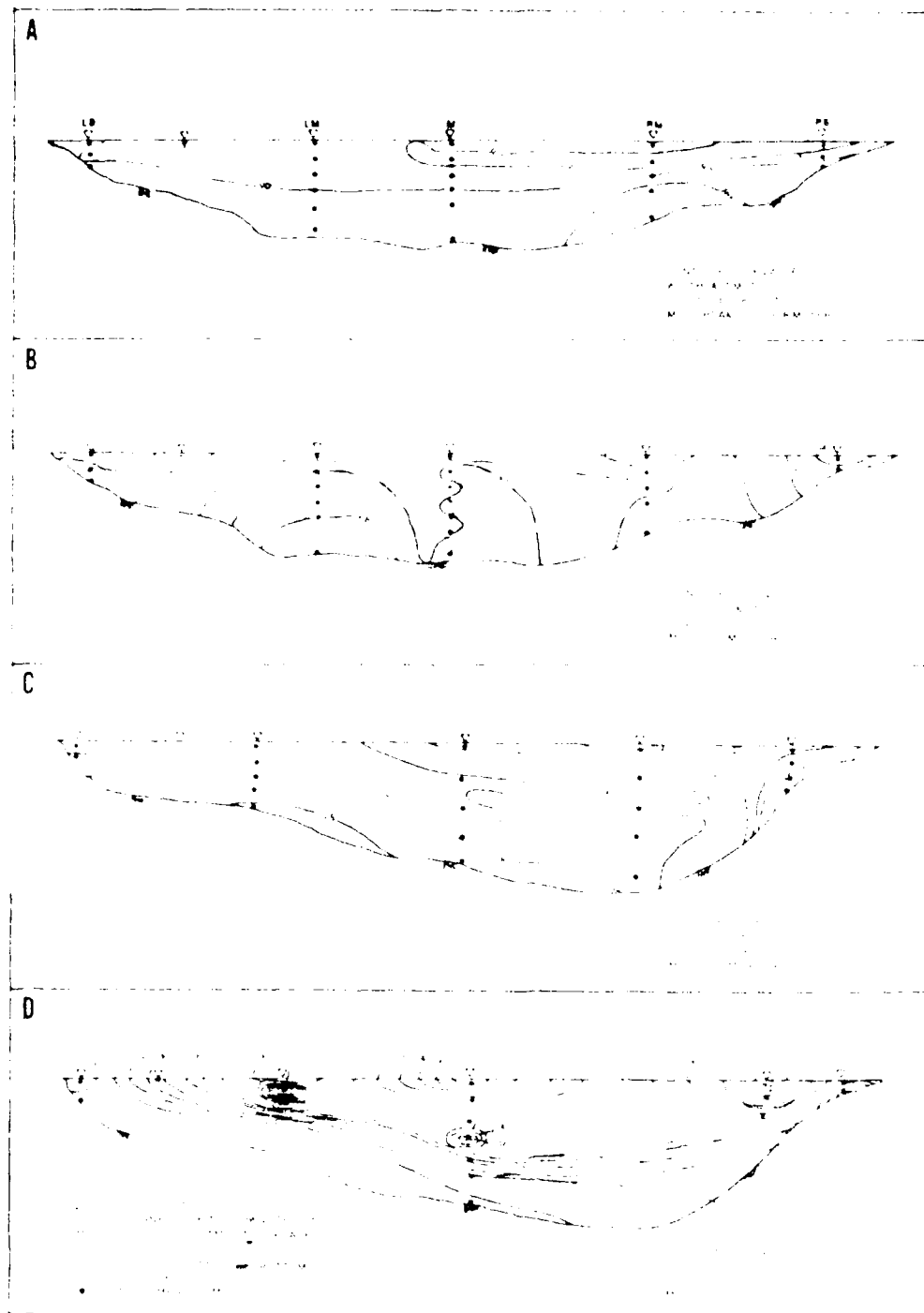


Figure A-7.--Isopleths of pH, specific conductance, temperature, dissolved oxygen concentration, and oxidation reduction potential at station 64 during August 1977.

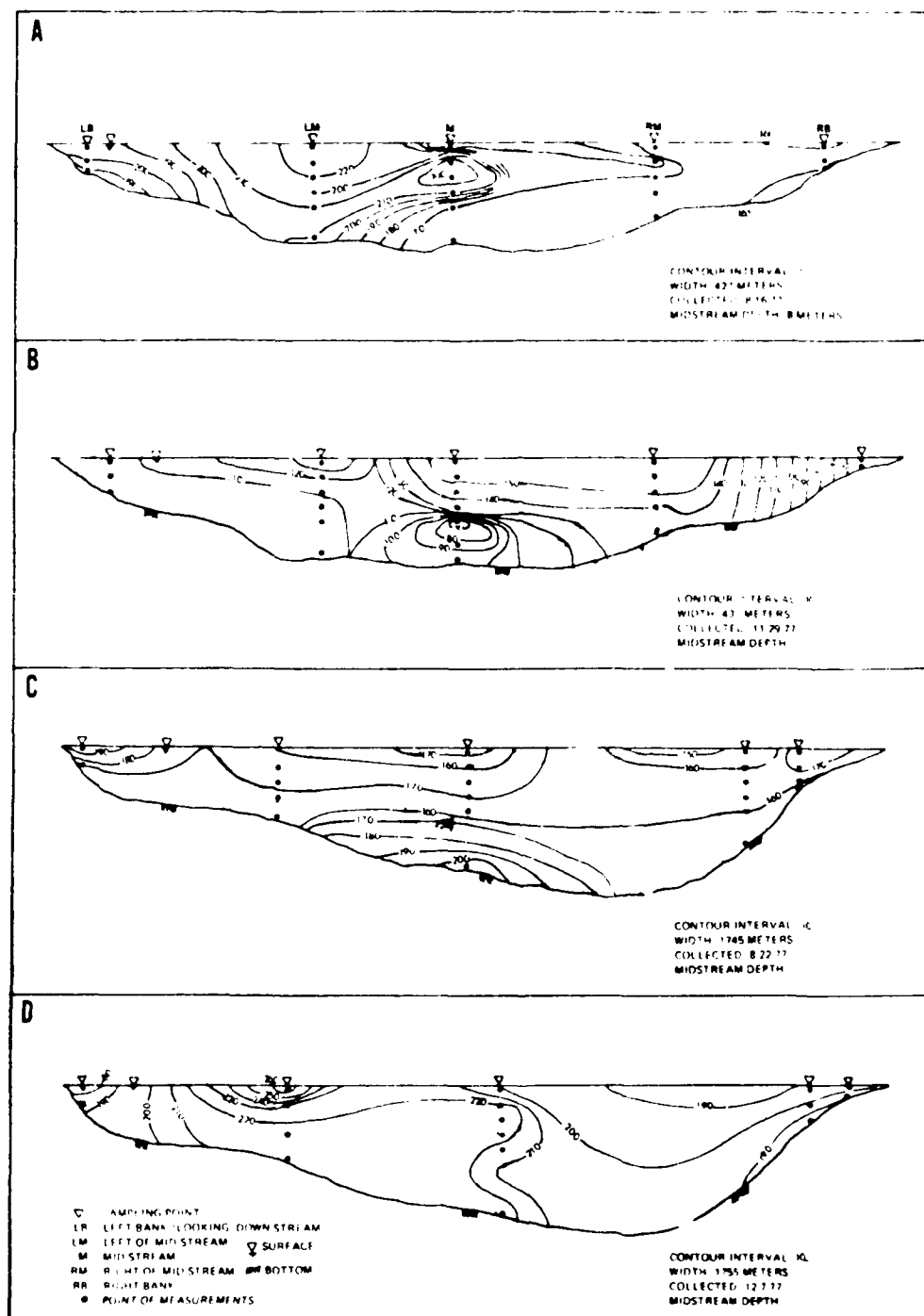


Figure A-9.--Isopleths of pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation reduction potential at station 43 during August 1977.

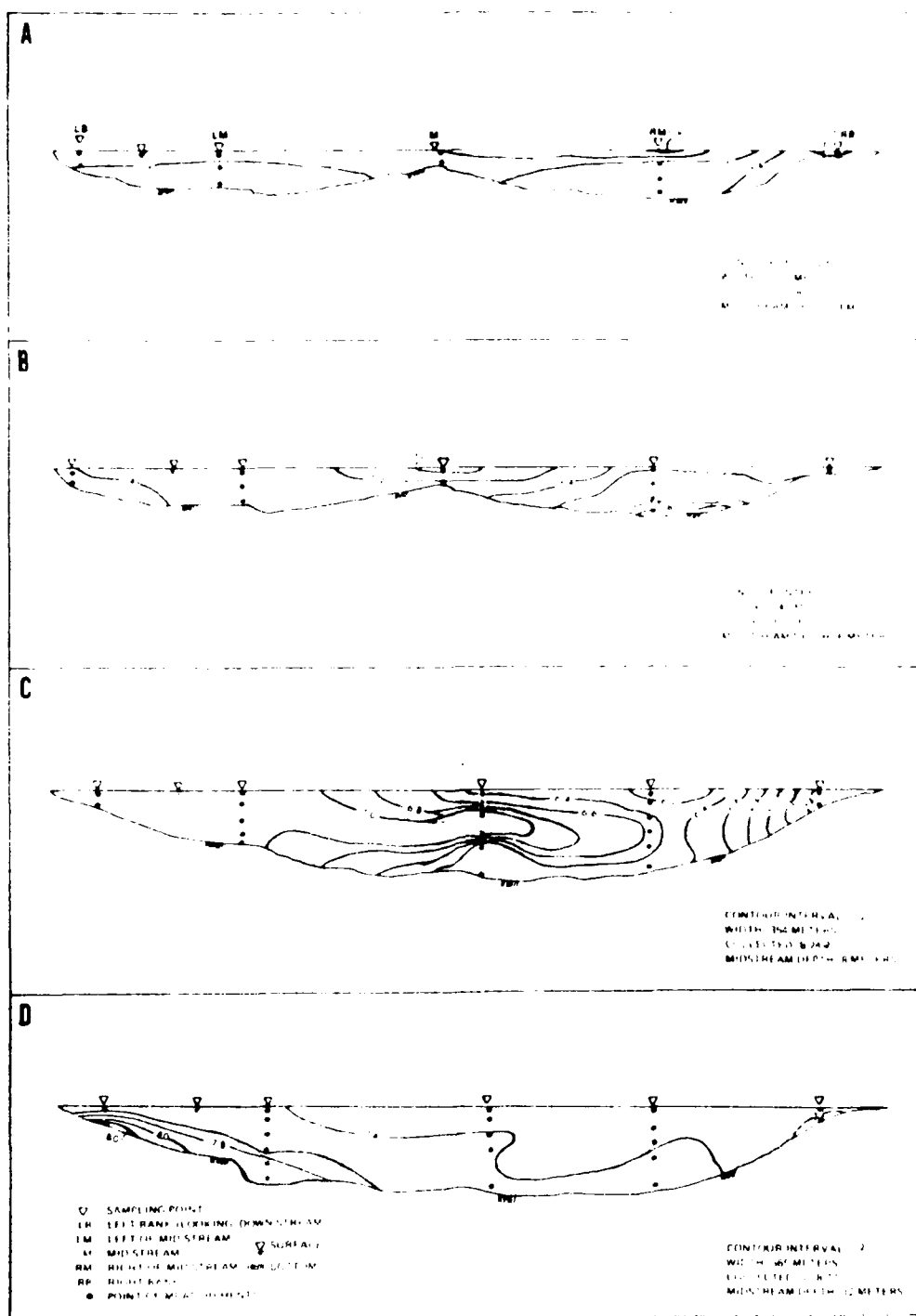


Figure A-10.--Isopleths of pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation reduction potential at station 17 during November 1977.

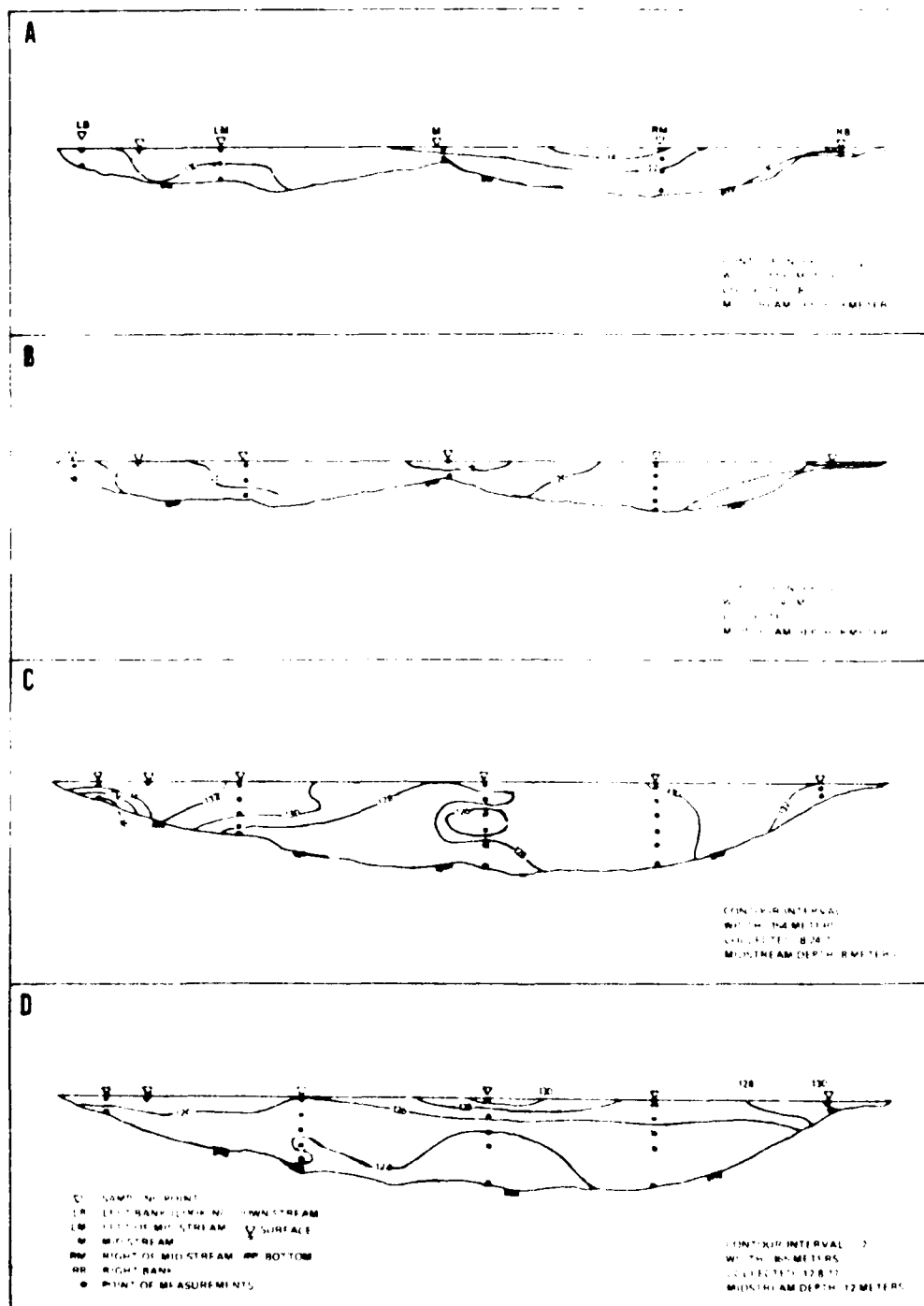


Figure A-11.--Isopleths of pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation reduction potential at station 33 during December, 1977.

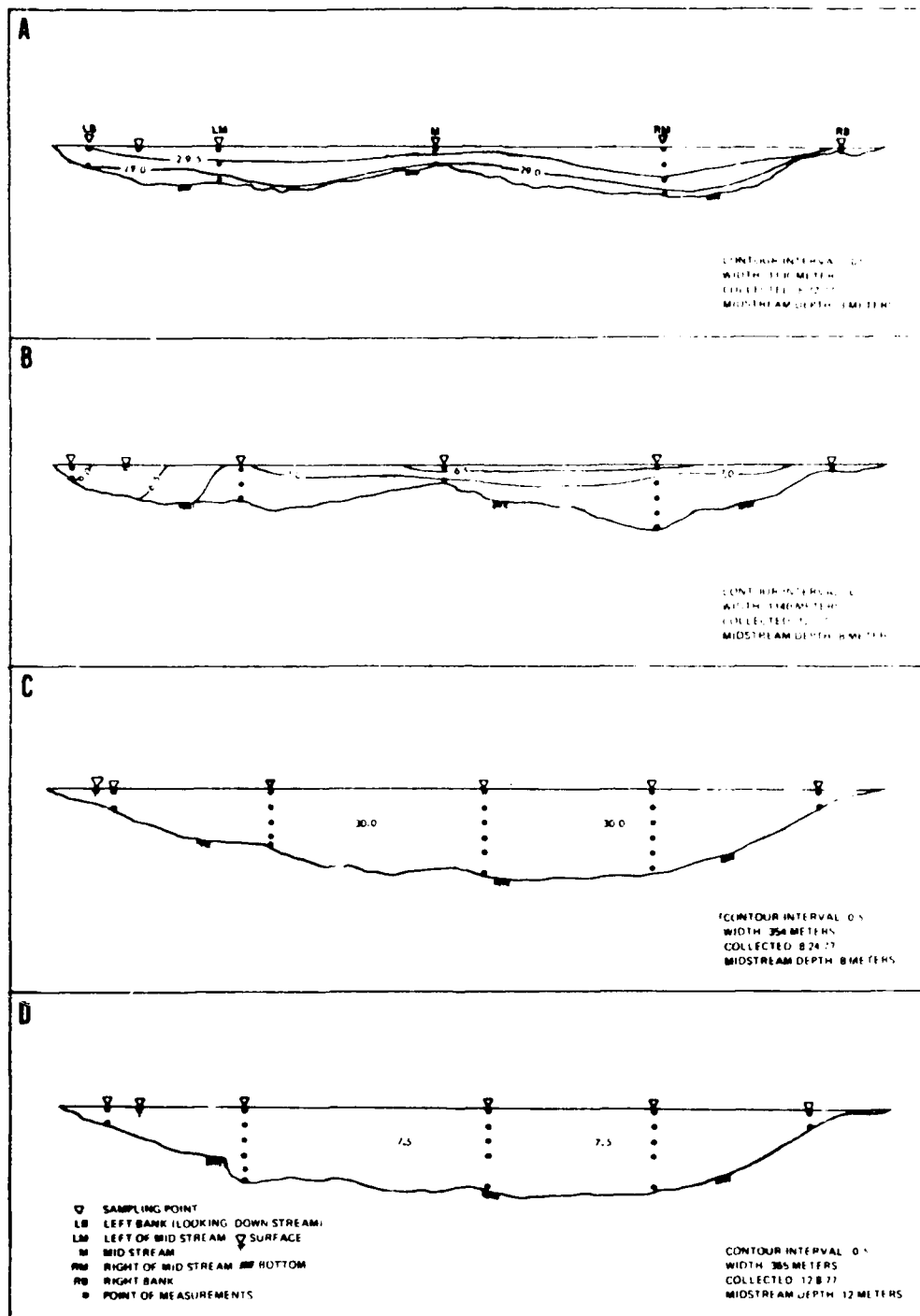


Figure A-12.--Isopleths of pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation reduction potential at station 34 during December 1977.

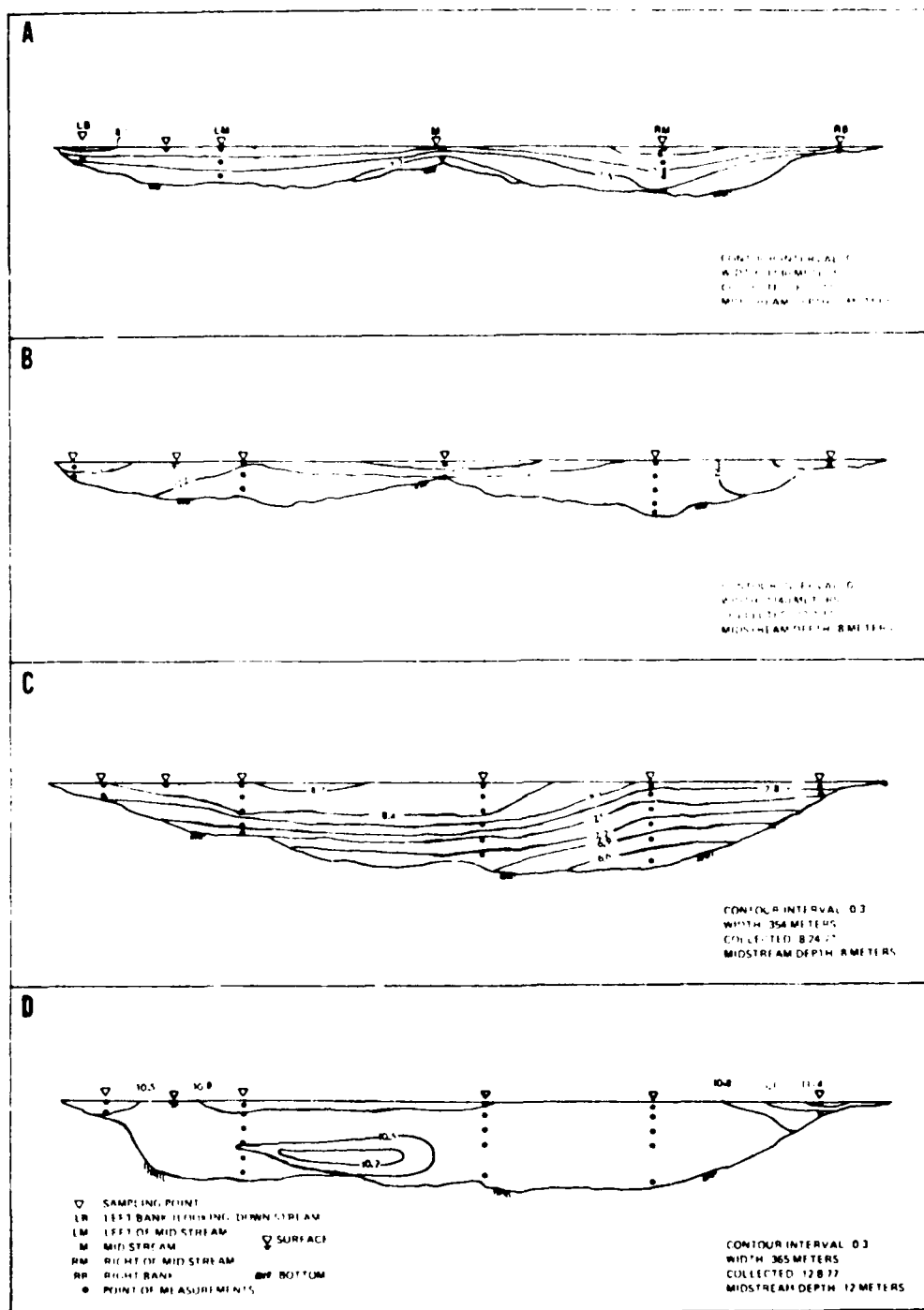


Figure A-13.--Isopleths of pH, specific conductance, temperature, dissolved oxygen concentrations, and oxidation reduction potential at station 43 during December 1977.

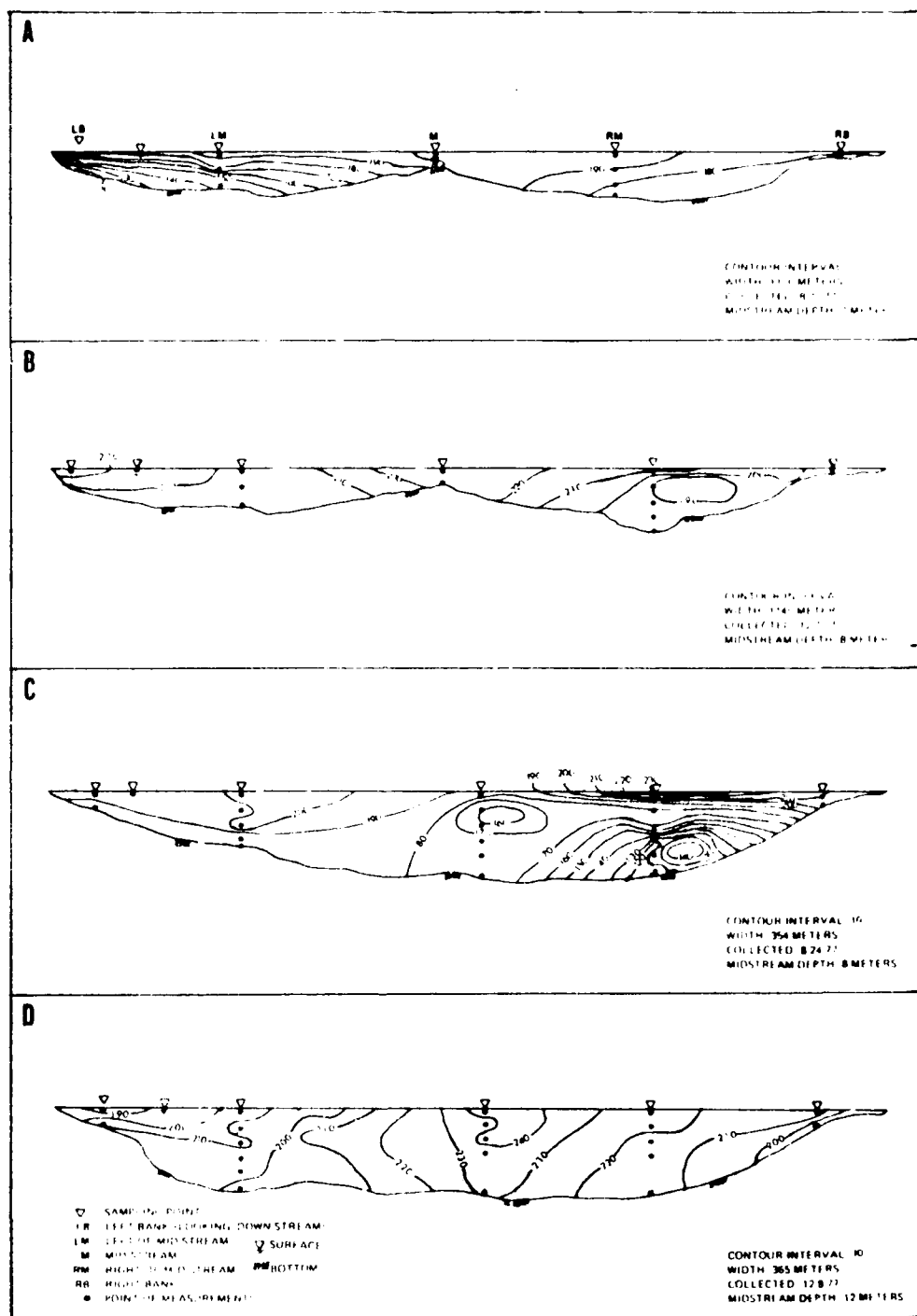


Figure A-14.--Oxidation reduction potential (millivolts +) versus depth (meters) profile for site 34 (A) and (B), and site 43 (C) and (D) on the Alabama River.

APPENDIX B
Plankton Data

Table B-1.--Estimated number (n/l) of crustaceans collected from the Alabama River with an 80-micron aperture Wisconsin plankton net.

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Phylum: Arthropoda (Crustacea)							
Cladocera							
Bosminidae							
<u>Bosmina</u>	I	-	12.80	9.79	8.90	9.64	11.89
	II	0.65	0.16	0.11	0.42	0.67	2.03
	III	6.40	6.69	3.95	2.55	2.71	7.44
<u>Bosminiopsis</u>	I	-	-	-	-	-	-
	II	0.05	0.06	0.18	0.05	0.06	0.37
	III	0.05	-	-	-	-	0.09
Daphnidae							
<u>Daphnia</u>	I	-	-	-	-	0.06	0.08
	II	-	-	-	-	0.06	-
	III	-	-	0.07	-	-	-
<u>Moina</u>	I	-	3.71	1.41	0.42	0.60	1.36
	II	0.07	-	0.01	0.33	0.26	0.64
	III	-	-	-	-	0.04	0.18
Holopedidae							
<u>Holopedium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Sididae							
<u>Latonopsis</u>	I	-	0.46	0.09	-	-	0.42
	II	-	-	0.01	0.76	0.06	0.51
	III	-	-	-	-	0.02	-
Chydoridae							
<u>Leydigia</u>	I	-	-	-	-	-	-
	II	-	-	-	0.05	-	-
	III	-	-	-	-	-	-
<u>Alona</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus undetermined							
	I	-	-	-	-	-	-
	II	-	-	-	-	0.06	0.14
	III	-	-	-	-	-	-

I=August 9-25, 1977, samples

II=September 19-October 4, 1977, samples

III=October 31-November 17, 1977, samples

NOTE: Due to a computation error, plankton concentrations in this table were underestimated. To obtain the correct concentration, all values should be divided by .694.

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Phylum: Arthropoda (Crustacea)							
Cladocera							
Bosminidae							
<u>Bosmina</u>	I	6.31	17.76	51.65	37.07	24.42	15.46
	II	1.56	0.53	0.16	0.64	1.13	1.07
	III	3.19	3.52	4.32	1.98	2.79	0.83
<u>Bosminiopsis</u>	I	-	0.40	0.40	-	0.28	0.20
	II	0.25	0.09	0.03	0.40	1.08	0.29
	III	-	-	-	-	-	-
Daphnidae							
<u>Daphnia</u>	I	0.16	-	0.13	-	-	0.10
	II	-	-	0.06	-	-	-
	III	-	-	-	-	-	-
<u>Moina</u>	I	1.10	4.51	5.40	4.90	2.54	1.28
	II	-	0.53	0.13	0.54	0.23	0.63
	III	-	-	-	-	0.04	-
Holopedidae							
<u>Holopedium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Sididae							
<u>Latonopsis</u>	I	0.63	3.45	5.80	3.68	4.10	3.84
	II	0.50	0.35	0.32	0.94	0.32	0.55
	III	-	-	-	-	-	-
Chydoridae							
<u>Leydigia</u>	I	-	-	-	-	-	-
	II	-	0.09	-	-	-	-
	III	-	-	-	-	-	-
<u>Alona</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus							
undetermined	I	-	-	-	-	-	-
	II	-	-	-	-	0.05	-
	III	-	-	-	-	-	-

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Phylum: Arthropoda (Crustacea)							
Cladocera							
Bosminidae							
<u>Bosmina</u>	I	30.37	24.36	24.50	12.90	3.64	15.92
	II	0.83	0.30	5.79	0.84	1.17	3.89
	III	1.59	0.34	1.38	1.19	1.46	1.09
<u>Bosminiopsis</u>	I	0.42	0.11	1.50	1.80	0.26	1.08
	II	0.10	0.03	0.35	0.31	0.19	0.52
	III	-	-	-	-	-	-
Daphnidae							
<u>Daphnia</u>	I	-	-	0.19	-	-	-
	II	-	-	-	0.04	-	0.02
	III	-	-	-	-	-	-
<u>Moina</u>	I	1.13	4.10	3.85	1.74	1.15	5.81
	II	0.26	-	0.09	0.27	0.32	0.73
	III	-	0.07	-	-	-	-
Holopedidae							
<u>Holopedium</u>	I	0.04	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Sididae							
<u>Latonopsis</u>	I	1.98	10.13	11.36	8.05	1.69	9.36
	II	0.31	-	0.35	0.31	0.81	1.10
	III	-	-	-	-	-	-
Chydoridae							
<u>Leydigia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Alona</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus undetermined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	0.02
	III	-	-	-	-	-	-

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Phylum: Arthropoda (Crustacea)							
Cladocera							
Bosminidae							
<u>Bosmina</u>	I	9.87	5.69	5.60	7.41	15.13	4.19
	II	8.57	2.34	0.49	6.40	1.77	6.96
	III	4.78	0.81	3.68	2.14	3.67	2.47
<u>Bosminiopsis</u>	I	1.05	0.86	0.62	0.73	2.89	1.12
	II	2.58	0.47	0.28	2.37	0.44	0.88
	III	-	-	-	-	-	-
Daphnidae							
<u>Daphnia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Moina</u>	I	0.10	1.07	1.09	2.05	1.32	1.54
	II	0.37	-	-	-	-	0.73
	III	0.09	-	-	0.06	-	-
Holopedidae							
<u>Holopedium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Sididae							
<u>Latonopsis</u>	I	0.10	2.63	4.98	4.24	0.33	2.23
	II	0.37	-	0.04	-	-	0.29
	III	-	-	0.11	-	-	-
Chydoridae							
<u>Leydigia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Alona</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus							
undetermined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Phylum: Arthropoda (Crustacea)							
Cladocera							
Bosminidae							
<u>Bosmina</u>	I	3.52	17.50	4.00	0.96	1.49	1.36
	II	12.27	5.65	14.04	1.34	8.87	8.00
	III	2.31	2.21	2.53	0.75	3.46	1.34
<u>Bosminiopsis</u>	I	0.59	0.56	0.51	0.34	0.03	-
	II	0.53	0.34	4.03	0.76	0.95	8.35
	III	-	-	-	-	-	-
Daphnidae							
<u>Daphnia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Moina</u>	I	3.12	3.47	2.69	0.52	2.07	0.84
	II	1.23	0.21	-	-	-	-
	III	0.06	0.06	0.11	-	-	-
Holopedidae							
<u>Holopedium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Sididae							
<u>Latonopsis</u>	I	6.14	9.52	6.98	3.74	9.77	5.96
	II	3.04	0.34	-	-	-	0.77
	III	0.06	-	-	-	-	-
Chydoridae							
<u>Leydigia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.06	-	-	-
<u>Alona</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus							
undetermined	I	-	-	-	-	-	-
	II	-	-	0.44	-	-	-
	III	-	-	-	-	-	-

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Phylum: Arthropoda (Crustacea)							
Cladocera							
Bosminidae							
<u>Bosmina</u>	I	4.29	1.46	3.42	5.33	7.34	3.06
	II	13.20	12.15	23.34	38.37	9.16	28.14
	III	0.50	0.56	0.58	0.29	0.81	1.03
<u>Bosminiopsis</u>	I	0.16	0.27	0.25	-	0.14	-
	II	7.73	11.38	43.97	20.60	12.65	45.33
	III	-	-	-	-	-	-
Daphnidae							
<u>Daphnia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Moina</u>	I	0.35	0.46	0.50	-	1.66	0.72
	II	-	-	7.10	0.71	-	-
	III	-	0.05	-	-	-	-
Holopedidae							
<u>Holopedium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Sididae							
<u>Latonopsis</u>	I	6.46	4.46	1.74	2.67	3.46	1.80
	II	-	-	5.07	3.55	-	-
	III	-	-	-	-	-	-
Chydoridae							
<u>Leydigia</u>	I	0.04	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Alona</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.06	-	-	-
Genus							
undetermined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-1.--Continued

Taxa		Station Numbers					
		37	38	39	40	41	42
Phylum: Arthropoda (Crustacea)							
Cladocera							
Bosminidae							
<u>Bosmina</u>	I	9.63	3.18	3.94	3.09	2.50	4.71
	II	2.06	2.19	3.01	3.45	0.93	1.13
	III	0.15	0.64	0.10	0.23	-	0.30
<u>Bosminiopsis</u>	I	0.14	0.49	-	0.08	0.71	-
	II	1.70	0.84	1.27	1.92	2.80	0.49
	III	-	-	-	-	-	-
Daphnidae							
<u>Daphnia</u>	I	-	-	-	-	-	-
	II	-	0.03	-	-	-	0.08
	III	-	-	-	-	-	-
<u>Moina</u>	I	0.21	0.39	0.49	0.31	0.36	1.43
	II	0.91	0.54	1.27	1.42	0.80	0.08
	III	-	-	-	-	-	-
Holopedidae							
<u>Holopedium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Sididae							
<u>Latonopsis</u>	I	0.92	2.45	5.91	4.02	1.07	6.14
	II	1.96	1.69	3.27	3.42	0.67	1.21
	III	-	-	-	-	-	-
Chydoridae							
<u>Leydigia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Alona</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus							
undetermined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-1. --Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Phylum: Arthropoda (Crustacea)					
Cladocera					
Bosminidae					
<u>Bosmina</u>	I	1.77	4.90	7.18	3.93
	II	2.21	2.25	1.29	2.06
	III	0.58	0.36	0.18	0.10
<u>Bosminiopsis</u>	I	0.05	0.49	0.41	-
	II	0.50	0.48	0.25	0.15
	III	-	-	-	-
Daphnidae					
<u>Daphnia</u>	I	-	-	-	-
	II	0.06	0.18	0.03	-
	III	-	0.04	-	-
<u>Moina</u>	I	0.78	1.14	1.02	0.39
	II	0.77	0.59	0.46	0.33
	III	-	-	-	-
Holopedidae					
<u>Holopedium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Sididae					
<u>Latonopsis</u>	I	3.86	4.57	6.15	1.44
	II	1.05	1.66	0.49	0.87
	III	-	-	-	-
Chydoridae					
<u>Leydigia</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Alona</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Genus					
undetermined	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Phylum: Arthropoda							
(cont'd)							
Copepoda							
Cyclopidae							
<u>Cyclops</u>	I	-	1.85	0.81	0.30	0.24	1.27
	II	0.25	-	0.07	0.42	0.03	0.47
	III	0.28	0.50	0.47	0.32	0.24	0.36
Diaptomidae							
<u>Diaptomus</u>	I	-	2.16	1.44	0.36	0.24	0.51
	II	0.05	0.03	0.01	0.09	0.06	0.20
	III	0.05	-	0.07	0.04	0.04	0.18
Ostracoda							
	I	-	0.15	-	-	-	-
	II	-	-	-	-	0.03	-
	III	-	-	-	-	-	-
Nauplii							
	I	-	5.41	8.54	1.43	2.01	7.82
	II	0.36	-	0.22	0.94	0.26	2.10
	III	1.02	0.43	0.44	0.61	0.24	0.91

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Phylum: Arthropoda							
(cont'd)							
Copepoda							
Cyclopidae							
<u>Cyclops</u>	I	1.20	2.40	3.43	2.14	1.70	0.69
	II	0.25	0.18	0.18	0.32	0.92	0.69
	III	0.34	0.19	-	0.36	0.04	-
Diaptomidae							
<u>Diaptomus</u>	I	1.61	2.80	1.32	2.45	2.12	1.18
	II	0.38	-	0.18	0.35	0.11	0.49
	III	0.08	-	0.09	0.08	-	0.06
Ostracoda							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	0.03
	III	-	-	-	0.04	-	-
Nauplii							
	I	4.85	6.89	7.51	5.52	5.93	3.74
	II	1.26	0.61	0.70	0.97	2.20	2.88
	III	0.79	0.60	0.18	0.36	0.12	0.06

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Phylum: Arthropoda							
(cont'd)							
Copepoda							
Cyclopidae							
<u>Cyclops</u>	I	1.13	1.29	3.38	1.33	0.75	1.18
	II	0.10	0.08	-	0.46	0.89	2.37
	III	0.23	0.20	0.16	0.36	0.43	0.25
Diaptomidae							
<u>Diaptomus</u>	I	0.99	1.08	2.54	1.33	1.18	2.46
	II	0.16	-	-	0.19	0.17	0.62
	III	-	0.13	0.16	0.04	0.11	0.05
Ostracoda							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Nauplii							
	I	2.40	6.90	16.24	6.72	2.67	7.74
	II	0.47	-	2.02	0.84	1.09	1.89
	III	0.23	0.47	0.32	0.32	0.76	0.50

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Phylum: Arthropoda							
(cont'd)							
Copepoda							
Cyclopidae							
<u>Cyclops</u>	I	1.10	0.70	1.09	2.44	1.32	1.26
	II	10.88	2.19	0.73	6.97	0.09	8.72
	III	1.02	0.60	0.82	0.82	2.99	0.33
Diaptomidae							
<u>Diaptomus</u>	I	0.20	1.15	1.40	4.44	-	0.70
	II	0.09	-	0.08	-	-	1.17
	III	0.26	0.07	0.33	0.13	0.17	-
Ostracoda							
	I	-	-	-	-	-	-
	II	0.09	-	-	-	-	-
	III	-	-	-	-	-	-
Nauplii							
	I	1.20	9.12	14.78	9.86	2.73	3.77
	II	6.73	-	0.32	2.00	0.03	2.93
	III	2.05	0.25	1.10	0.57	1.11	0.33

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Phylum: Arthropoda							
(cont'd)							
Copepoda							
Cyclopidae							
<u>Cyclops</u>	I	0.90	3.58	1.77	0.07	1.60	2.49
	II	4.73	17.93	3.81	0.67	1.18	8.41
	III	1.09	0.50	1.52	0.63	0.49	0.30
Diaptomidae							
<u>Diaptomus</u>	I	1.13	0.90	3.89	0.58	3.22	1.88
	II	0.23	0.48	-	-	-	1.23
	III	0.12	0.06	0.11	0.13	0.12	0.15
Ostracoda							
	I	-	-	-	-	-	-
	II	-	0.07	0.87	0.08	-	-
	III	-	0.06	-	-	0.06	-
Nauplii							
	I	3.48	3.36	5.03	1.34	5.37	3.80
	II	1.00	1.38	1.20	-	-	1.01
	III	0.49	0.69	1.18	1.64	0.91	0.59

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Phylum: Arthropoda							
(cont'd)							
Copepoda							
Cyclopidae							
<u>Cyclops</u>	I	2.41	1.82	1.31	2.22	3.88	2.70
	II	7.24	4.05	12.51	34.10	3.78	20.96
	III	0.15	0.20	0.13	0.29	0.52	0.30
Diaptomidae							
<u>Diaptomus</u>	I	2.80	2.10	0.62	2.22	3.60	2.34
	II	0.10	0.08	3.04	18.47	-	-
	III	0.07	0.10	0.06	0.29	0.07	0.24
Ostracoda							
	I	-	-	-	-	-	-
	II	0.20	0.08	0.68	-	-	-
	III	-	-	-	-	-	-
Nauplii							
	I	7.86	3.60	4.66	1.33	3.74	3.97
	II	-	0.08	41.26	26.29	1.04	17.80
	III	0.30	0.66	0.32	0.86	0.44	1.33

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		37	38	39	40	41	42
Phylum: Arthropoda							
(cont'd)							
Copepoda							
Cyclopidae							
<u>Cyclops</u>	I	0.99	0.44	0.98	0.46	0.18	0.71
	II	1.55	0.94	1.57	1.79	0.27	0.97
	III	0.05	0.35	0.10	0.16	0.29	-
Diaptomidae							
<u>Diaptomus</u>	I	0.85	0.78	0.66	0.54	-	0.43
	II	0.79	0.94	1.83	1.14	-	0.65
	III	-	0.14	0.10	-	-	0.30
Ostracoda							
	I	-	-	-	-	-	-
	II	-	-	-	0.09	-	-
	III	-	-	0.10	-	-	-
Nauplii							
	I	0.28	0.29	0.41	1.70	2.68	2.43
	II	0.43	2.36	9.56	3.45	1.33	0.97
	III	0.10	0.42	0.60	0.08	4.32	0.10

Table B-1.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Phylum: Arthropoda					
(cont'd)					
Copepoda					
Cyclopidae					
<u>Cyclops</u>	I	0.73	0.98	2.26	0.66
	II	0.83	1.03	0.52	1.14
	III	0.07	0.18	0.09	0.15
Diaptomidae					
<u>Diaptomus</u>	I	1.04	1.47	1.64	0.66
	II	0.44	1.36	0.71	0.84
	III	0.07	0.04	0.09	0.05
Ostracoda					
	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Nauplii					
	I	0.99	2.78	1.02	1.57
	II	1.99	4.13	1.45	1.63
	III	0.15	0.14	0.13	0.10

Table B-2.--Estimated number (n/l) of rotifers collected from the Alabama River with an 80-micron aperture Wisconsin plankton net.

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Phylum: Rotifera							
Ploima							
Brachionidae							
<u>Brachionus</u>	I	-	-	0.99	0.06	0.18	0.17
	II	0.09	-	0.25	0.09	-	0.27
	III	-	0.07	0.23	0.08	0.09	0.27
<u>Kellicottia</u>	I	-	-	-	-	-	0.17
	II	-	-	-	-	-	0.04
	III	-	0.07	0.07	0.20	0.04	0.09
<u>Keratella</u>	I	-	1.85	1.80	-	0.47	1.78
	II	0.07	0.06	0.80	0.24	0.12	1.15
	III	0.23	0.07	0.23	0.20	0.13	0.09
<u>Platys</u>	I	-	3.71	3.68	2.39	3.96	2.29
	II	0.58	-	0.18	0.24	0.23	0.81
	III	-	-	0.07	-	-	-
<u>Euchlanis</u>	I	-	-	-	-	-	-
	II	0.11	-	-	0.05	-	0.27
	III	-	-	-	-	-	-
<u>Notholca</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Macrochaetus</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lepadella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	0.09
Genus un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	-	0.03	-
	III	-	-	-	-	-	-
Gastropidae							
<u>Gastropus</u>	I	-	-	0.18	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

I=August 9-25, 1977, samples

II=September 19-October 4, 1977, samples

III=October 31-November 17, 1977, samples

NOTE: Due to a computation error, plankton concentrations in this table were underestimated. To obtain the correct concentration, all values should be divided by .694.

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Phylum: Rotifera							
Ploima							
Brachionidae							
<u>Brachionus</u>	I	0.47	0.27	0.40	1.53	1.98	3.74
	II	0.38	0.09	0.08	0.22	0.32	0.72
	III	0.08	0.28	-	1.62	0.28	0.06
<u>Kellicottia</u>	I	-	-	-	-	0.14	-
	II	-	-	-	-	0.05	-
	III	0.11	-	-	0.04	0.04	-
<u>Keratella</u>	I	1.58	4.51	4.22	0.92	3.11	5.02
	II	0.31	-	0.20	0.25	0.27	0.49
	III	0.08	0.14	0.09	0.04	-	-
<u>Platys</u>	I	2.20	3.18	4.22	2.14	3.25	1.87
	II	0.38	0.26	-	0.30	0.23	0.60
	III	-	-	-	-	-	-
<u>Euchlanis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Notholca</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Macrochaetus</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lepadella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Gastropidae							
<u>Gastropus</u>	I	-	-	-	0.15	-	0.10
	II	-	-	0.19	-	0.11	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Phylum: Rotifera							
Ploima							
Brachionidae							
<u>Brachionus</u>	I	1.27	1.19	6.48	3.33	1.83	1.29
	II	0.16	-	0.09	0.08	0.06	0.33
	III	0.40	-	-	0.04	-	-
<u>Kellicottia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.07	-	-	-	-
<u>Keratella</u>	I	1.98	3.77	4.50	3.40	1.49	2.26
	II	0.16	-	0.35	0.08	-	0.06
	III	0.06	-	-	-	-	-
<u>Platyus</u>	I	0.57	1.08	2.06	0.87	0.29	0.43
	II	0.10	-	-	0.08	-	0.21
	III	-	-	-	-	-	-
<u>Euchlanis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	0.02
<u>Notholca</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Macrochaetus</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lepadella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Gastropidae							
<u>Gastropus</u>	I	-	-	-	-	-	-
	II	0.16	-	-	-	0.02	-
	III	-	-	-	0.04	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Phylum: Rotifera							
Ploima							
Brachionidae							
<u>Brachionus</u>	I	2.06	4.20	6.07	1.99	3.80	4.75
	II	2.12	0.56	0.08	2.30	0.61	0.29
	III	0.77	0.14	0.33	0.25	0.34	0.33
<u>Kellicottia</u>	I	-	0.04	-	-	-	-
	II	0.09	0.06	-	-	-	0.07
	III	-	0.04	0.05	0.06	0.09	-
<u>Keratella</u>	I	3.58	4.40	7.78	2.45	4.80	4.61
	II	0.92	0.94	0.04	3.38	0.25	0.44
	III	0.43	0.28	0.16	0.38	0.58	0.16
<u>Platyus</u>	I	0.37	0.70	0.93	0.66	2.07	1.12
	II	0.65	0.31	-	2.01	0.17	0.29
	III	-	-	0.05	0.19	0.09	0.16
<u>Euchlanis</u>	I	-	-	-	-	-	-
	II	-	-	-	0.07	0.03	-
	III	-	-	-	-	0.09	-
<u>Notholca</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Macrochaetus</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lepadella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-	I	-	-	-	-	-	-
determined	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Gastropidae							
<u>Gastropus</u>	I	-	0.12	0.62	0.46	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Phylum: Rotifera							
Ploima							
Brachionidae							
<u>Brachionus</u>	I	6.55	3.02	0.74	0.45	0.62	0.80
	II	-	-	-	-	-	2.46
	III	0.12	0.25	0.22	0.38	0.24	0.15
<u>Kellicottia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	5.54
	III	0.12	0.13	0.06	0.50	0.12	-
<u>Keratella</u>	I	3.43	5.93	1.32	0.92	1.59	3.47
	II	0.29	0.28	1.31	0.34	-	1.39
	III	0.18	0.25	0.39	1.13	0.42	0.15
<u>Platyus</u>	I	4.38	2.02	0.11	0.17	0.38	0.09
	II	0.64	1.79	16.32	0.59	0.71	1.59
	III	-	-	0.17	-	0.06	-
<u>Euchlanis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.12	-
	III	-	-	-	-	-	-
<u>Notholca</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Macrochaetus</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.06	-	-	-
<u>Lepadella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un- determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Gastropidae							
<u>Gastropus</u>	I	0.36	-	-	-	-	-
	II	-	0.07	-	-	-	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Phylum: Rotifera							
Ploima							
Brachionidae							
<u>Brachionus</u>	I	0.78	0.77	0.31	-	0.69	-
	II	6.26	19.08	14.54	14.21	1.61	2.17
	III	-	-	-	-	-	0.12
<u>Kellicottia</u>	I	-	-	-	-	-	-
	II	4.40	1.83	-	2.13	-	-
	III	0.07	0.05	-	-	-	0.30
<u>Keratella</u>	I	1.48	0.64	1.68	1.33	0.97	-
	II	1.37	-	15.90	5.68	4.25	9.07
	III	-	0.05	-	-	-	0.06
<u>Platys</u>	I	0.08	0.14	-	-	1.11	-
	II	1.37	-	2.03	7.11	1.42	3.58
	III	-	-	-	-	-	-
<u>Euchlanis</u>	I	-	-	-	-	-	-
	II	0.20	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Notholca</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.06	-	-	-
<u>Macrochaetus</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lepadella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-	I	-	-	-	-	-	-
determined	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Gastropidae							
<u>Gastropus</u>	I	-	0.05	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		37	38	39	40	41	42
Phylum: Rotifera							
Ploima							
Brachionidae							
<u>Brachionus</u>	I	0.21	-	-	0.08	10.90	0.85
	II	0.89	0.03	0.26	0.06	17.97	0.89
	III	0.05	-	-	-	-	0.10
<u>Kellicottia</u>	I	-	-	-	-	-	-
	II	-	0.03	-	-	-	-
	III	-	-	0.10	-	-	-
<u>Keratella</u>	I	0.28	-	-	0.08	3.03	0.71
	II	0.18	-	0.35	0.09	0.93	0.08
	III	-	0.07	0.10	0.08	0.58	-
<u>Platyus</u>	I	0.42	0.10	-	0.38	0.71	-
	II	-	0.10	0.22	0.12	0.40	-
	III	-	-	-	-	-	-
<u>Euchlanis</u>	I	-	-	-	-	-	-
	II	-	0.07	-	-	-	-
	III	-	-	-	-	-	-
<u>Notholca</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Macrochaetus</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lepadella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un- determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Gastropidae							
<u>Gastropus</u>	I	-	-	-	-	-	-
	II	0.03	0.13	0.35	0.18	0.67	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Phylum: Rotifera					
Ploima					
Brachionidae					
<u>Brachionus</u>	I	0.10	1.96	-	-
	II	0.50	0.33	0.12	0.03
	III	-	-	0.04	-
<u>Kellicottia</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	0.04	-	0.05
<u>Keratella</u>	I	-	0.33	-	0.52
	II	-	0.26	0.06	0.06
	III	-	-	0.04	-
<u>Platys</u>	I	0.05	0.16	0.62	0.26
	II	-	0.04	0.06	-
	III	-	-	-	-
<u>Euchlanis</u>	I	-	-	-	-
	II	-	-	-	0.03
	III	-	-	-	-
<u>Notholca</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Macrochaetus</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Lepadella</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Genus un-					
determined	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Gastropidae					
<u>Gastropus</u>	I	-	-	-	-
	II	-	-	-	0.03
	III	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Phylum: Rotifera							
(cont'd)							
Lecanidae							
<u>Monostyla</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lecane</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Notomatidae							
<u>Tamphrocampa</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Trichocercidae							
<u>Trichocerca</u>	I	-	0.93	0.63	-	0.36	0.08
	II	0.05	-	0.11	-	0.06	0.03
	III	0.05	0.14	0.13	0.08	0.02	0.27
Asplanchnidae							
<u>Asplanchna</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.07	-	0.04	-	-
Synchaetidae							
<u>Pleosoma</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.10	-
	III	0.05	0.18	0.17	0.28	0.11	0.18
<u>Polyarthra</u>	I	-	0.62	1.08	0.66	1.80	2.38
	II	0.02	-	0.33	0.38	0.15	0.20
	III	1.21	0.07	0.20	1.38	0.12	0.27
<u>Synchaeta</u>	I	-	-	3.50	0.60	2.50	1.95
	II	-	-	-	-	0.03	0.04
	III	-	-	-	-	-	-
Flosculariaceae							
Testudinellidae							
<u>Filinia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	0.04
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Phylum: Rotifera							
(cont'd)							
Lecanidae							
<u>Monostyla</u>							
	I	-	-	-	-	-	-
	II	-	-	-	0.07	0.11	0.06
	III	-	-	-	-	0.04	-
<u>Lecane</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Notomatidae							
<u>Tamphrocampa</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Trichocercidae							
<u>Trichocerca</u>							
	I	0.16	0.27	0.53	0.15	0.42	0.39
	II	-	-	0.11	0.02	-	0.09
	III	-	0.05	-	-	-	-
Asplanchnidae							
<u>Asplanchna</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	0.11	-
	III	-	-	-	0.08	-	-
Synchaetidae							
<u>Pleosoma</u>							
	I	-	-	-	-	-	0.10
	II	0.13	-	0.03	-	0.11	0.03
	III	0.08	0.28	-	0.12	-	-
<u>Polyarthra</u>							
	I	2.84	1.72	3.82	4.44	3.39	4.43
	II	0.19	-	0.33	0.07	0.27	0.17
	III	0.11	0.09	0.18	0.28	0.04	-
<u>Synchaeta</u>							
	I	0.79	3.31	4.22	2.30	0.56	4.04
	II	0.06	-	0.06	-	-	-
	III	-	-	-	0.08	-	-
Flosculariaceae							
Testudinellidae							
<u>Filinia</u>							
	I	-	-	-	0.15	-	-
	II	-	-	0.02	0.02	-	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Phylum: Rotifera							
(cont'd)							
Lecanidae							
<u>Monostyla</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.06	-	-	-	-	-
<u>Lecane</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Notomatidae							
<u>Tamphrocampa</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Trichocercidae							
<u>Trichocerca</u>	I	-	0.32	0.75	0.67	0.11	0.22
	II	0.05	-	0.09	-	0.04	0.02
	III	-	-	-	-	0.05	-
Asplanchnidae							
<u>Asplanchna</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.08	0.07	-	-
Synchaetidae							
<u>Pleosoma</u>	I	0.14	1.72	5.54	0.39	0.49	0.22
	II	-	-	-	-	-	-
	III	-	0.33	0.08	-	-	-
<u>Polyarthra</u>	I	2.26	7.11	12.30	0.62	0.46	0.22
	II	0.10	0.03	0.26	0.08	0.11	0.04
	III	0.17	0.07	0.08	0.04	0.05	0.05
<u>Synchaeta</u>	I	2.12	1.62	2.72	0.67	0.11	0.75
	II	-	-	0.09	-	0.02	-
	III	0.06	-	-	0.04	-	-
Flosculariaceae							
Testudinellidae							
<u>Filinia</u>	I	-	-	-	-	-	-
	II	-	-	-	0.04	-	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Phylum: Rotifera							
(cont'd)							
Lecanidae							
<u>Monostyla</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lecane</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Notomatidae							
<u>Tamphrocampa</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Trichocercidae							
<u>Trichocerca</u>	I	0.07	0.37	0.47	-	-	0.70
	II	-	-	-	0.07	0.20	0.15
	III	-	-	0.05	-	-	-
Asplanchnidae							
<u>Asplanchna</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.11	0.13	-	-
Synchaetidae							
<u>Pleosoma</u>	I	0.25	2.14	5.60	1.92	-	1.95
	II	0.46	0.09	-	0.07	0.03	0.07
	III	0.26	0.14	0.22	0.25	0.26	0.66
<u>Polyarthra</u>	I	-	4.44	23.35	2.12	0.08	0.42
	II	0.83	0.25	-	-	-	-
	III	0.09	0.14	0.05	0.19	0.17	-
<u>Synchaeta</u>	I	-	2.17	1.87	-	-	0.70
	II	-	-	-	-	-	-
	III	-	-	-	-	0.09	-
Flosculariaceae							
Testudinellidae							
<u>Filinia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.05	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Phylum: Rotifera							
(cont'd)							
Lecanidae							
<u>Monostyla</u>	I	-	-	-	-	-	-
	II	-	-	0.11	0.08	-	-
	III	-	0.06	0.06	-	0.12	-
<u>Lecane</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Notomatidae							
<u>Tamphrocampa</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Trichocercidae							
<u>Trichocerca</u>	I	0.41	0.22	0.40	0.14	0.14	0.47
	II	-	-	0.33	-	-	1.95
	III	-	-	0.06	-	-	-
Asplanchnidae							
<u>Asplanchna</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.13	-	-	0.06	-
Synchaetidae							
<u>Pleosoma</u>	I	1.13	2.35	-	0.17	0.45	0.09
	II	-	-	4.35	-	-	-
	III	0.12	0.38	0.11	0.13	0.12	0.07
<u>Polyarthra</u>	I	0.36	0.45	0.29	0.45	0.21	0.47
	II	-	0.07	-	-	-	0.36
	III	0.06	0.50	-	-	-	-
<u>Synchaeta</u>	I	2.35	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Flosculariaceae							
Testudinellidae							
<u>Filinia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Phylum: Rotifera							
(cont'd)							
Lecanidae							
<u>Monostyla</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lecane</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Notomatidae							
<u>Tamphrocampa</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Trichocercidae							
<u>Trichocerca</u>	I	0.27	0.14	0.44	-	0.28	-
	II	0.10	0.08	1.01	0.71	0.19	-
	III	-	-	-	-	-	-
Asplanchnidae							
<u>Asplanchna</u>	I	-	-	-	-	-	-
	II	-	0.15	3.04	-	-	-
	III	0.07	0.05	0.06	-	0.07	0.06
Synchaetidae							
<u>Pleosoma</u>	I	-	-	-	-	0.14	-
	II	-	-	29.76	28.42	-	-
	III	-	-	0.06	-	-	-
<u>Polyarthra</u>	I	1.01	0.32	0.89	-	0.83	-
	II	-	-	22.32	19.89	0.09	-
	III	-	0.10	-	-	-	0.06
<u>Synchaeta</u>	I	0.12	-	-	-	0.55	-
	II	0.78	-	-	-	-	-
	III	-	0.05	-	-	-	0.06
Flosculariaceae							
Testudinellidae							
<u>Filinia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		37	38	39	40	41	42
Phylum: Rotifera							
(cont'd)							
Lecanidae							
<u>Monostyla</u>							
	I	-	-	-	-	-	-
	II	-	-	0.26	0.18	-	-
	III	-	-	-	-	-	-
<u>Lecane</u>							
	I	-	-	-	0.08	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Notomatidae							
<u>Tamphrocampa</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.07	-	-	-	-
Trichocercidae							
<u>Trichocerca</u>							
	I	-	-	-	-	-	-
	II	0.03	0.03	0.04	0.06	0.40	-
	III	-	-	-	-	-	-
Asplanchnidae							
<u>Asplanchna</u>							
	I	-	-	-	-	-	-
	II	0.18	-	0.35	0.12	2.66	0.08
	III	-	-	-	-	5.47	-
Synchaetidae							
<u>Pleosoma</u>							
	I	-	-	-	-	-	-
	II	1.68	0.88	1.35	1.20	4.79	0.40
	III	-	-	0.10	-	-	-
<u>Polyarthra</u>							
	I	-	-	-	0.39	23.40	1.71
	II	3.66	0.98	2.36	0.99	16.11	0.24
	III	0.05	0.07	-	-	2.59	-
<u>Synchaeta</u>							
	I	-	-	-	-	2.68	0.14
	II	0.69	0.03	-	-	2.13	-
	III	-	0.07	-	-	2.57	-
Flosculariaceae							
Testudinellidae							
<u>Filinia</u>							
	I	-	-	-	-	1.25	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Phylum: Rotifera					
(cont'd)					
Lecanidae					
<u>Monostyla</u>					
	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Lecane</u>					
	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Notomatidae					
<u>Tamphrocampa</u>					
	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Trichocercidae					
<u>Trichocerca</u>					
	I	0.52	-	-	-
	II	0.06	-	-	0.03
	III	-	-	-	-
Asplanchnidae					
<u>Asplanchna</u>					
	I	-	-	-	-
	II	-	-	-	-
	III	0.07	-	-	-
Synchaetidae					
<u>Pleosoma</u>					
	I	-	-	-	-
	II	0.39	0.55	0.37	0.15
	III	-	-	-	-
<u>Polyarthra</u>					
	I	0.16	1.31	0.20	0.26
	II	-	0.41	-	0.06
	III	-	-	-	0.05
<u>Synchaeta</u>					
	I	-	-	-	0.26
	II	-	-	-	-
	III	-	-	-	-
Flosculariaceae					
Testudinellidae					
<u>Filinia</u>					
	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Phylum: Rotifera							
(cont'd)							
Hexarthridae							
<u>Hexarthra</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Flosculariidae							
<u>Sinantharina</u>	I	-	-	-	-	-	-
	II	0.05	-	-	-	-	-
	III	-	-	-	-	-	-
Conochilidae							
<u>Conochiloides</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.03	-	-	-
Bdelloidea							
Habrotrochidae							
Genus un-	I	-	-	-	0.36	-	-
determined	II	1.21	-	0.15	0.14	0.17	0.44
	III	-	-	-	-	0.06	-
Philodinidae							
<u>Bdelloidea</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Family un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Eggs							
	I	-	-	3.23	2.63	1.42	4.42
	II	0.14	-	0.15	0.05	0.15	0.47
	III	0.60	0.25	0.47	0.53	0.18	0.63

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Phylum: Rotifera (cont'd)							
Hexarthridae							
<u>Hexarthra</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Flosculariidae							
<u>Sinantherina</u>							
	I	-	-	-	-	-	-
	II	0.05	-	-	-	-	-
	III	-	-	-	-	-	-
Conochilidae							
<u>Conochiloides</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.03	-	-	-
Bdelloidea							
Habrotrochidae							
Genus un-							
determined							
	I	-	-	-	0.36	-	-
	II	1.21	-	0.15	0.14	0.17	0.44
	III	-	-	-	-	0.06	-
Philodinidae							
<u>Bdelloidea</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-							
determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Family un-							
determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Eggs							
	I	-	-	3.23	2.63	1.42	4.42
	II	0.14	-	0.15	0.05	0.15	0.47
	III	0.60	0.25	0.47	0.53	0.18	0.63

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Phylum: Rotifera							
(cont'd)							
Hexarthridae							
<u>Hexarthra</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Flosculariidae							
<u>Sinanthrerina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Conochilidae							
<u>Conochiloides</u>	I	-	-	-	-	-	-
	II	-	-	0.03	-	-	-
	III	-	-	0.09	-	-	-
Bdelloidea							
Habrotrichidae							
Genus un-							
determined	I	-	-	-	-	-	-
	II	0.19	-	0.02	0.05	0.11	0.12
	III	-	-	0.09	-	-	-
Philodinidae							
<u>Bdelloidea</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	0.07	0.32	-
	III	-	-	-	0.04	-	-
Family un-							
determined	I	-	0.05	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Eggs							
	I	3.16	6.36	10.67	6.43	5.93	2.17
	II	0.13	0.35	0.08	0.69	0.97	0.43
	III	0.38	0.79	0.89	0.99	0.08	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Phylum: Rotifera							
(cont'd)							
Hexarthriidae							
<u>Hexarthra</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Flosculariidae							
<u>Sinantherina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Conochilidae							
<u>Conochiloides</u>	I	-	-	-	-	-	-
	II	-	-	-	0.04	-	-
	III	-	0.07	-	-	0.05	-
Bdelloidea							
Habrotrochidae							
Genus un-	I	-	-	-	-	-	-
determined	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Philodinidae							
<u>Bdelloidea</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	-	0.02	0.02
	III	-	-	-	-	-	-
Family un-							
determined	I	-	0.07	-	0.08	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Eggs							
	I	2.26	3.34	9.14	3.69	0.72	2.04
	II	-	0.03	-	0.08	0.08	0.17
	III	0.23	0.27	0.08	0.14	0.11	-

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Phylum: Rotifera							
(cont'd)							
Hexarthridae							
<u>Hexarthra</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Flosculariidae							
<u>Sinanthrina</u>	I	-	-	21.30	0.06	-	0.70
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Conochilidae							
<u>Conochiloides</u>	I	-	-	-	-	-	-
	II	-	-	0.04	-	-	-
	III	0.17	0.07	-	0.06	-	-
Bdelloidea							
Haerotrochidae							
Genus un-							
determined	I	-	-	1.09	-	-	-
	II	-	-	0.12	-	-	-
	III	-	-	-	-	-	-
Philodinidae							
<u>Bdelloidea</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.04	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	0.09	-	0.04	0.07	-	-
	III	-	-	-	-	-	-
Family un-							
determined	I	-	0.04	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Eggs							
	I	0.69	2.18	7.16	3.97	1.24	2.93
	II	1.01	0.16	0.20	0.79	0.03	0.81
	III	0.60	0.25	1.04	0.38	0.34	0.49

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Phylum: Rotifera							
(cont'd)							
Hexarthridae							
<u>Hexarthra</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Flosculariidae							
<u>Sinantherina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Conochilidae							
<u>Conochiloides</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.12	0.19	0.11	0.50	-	0.07
Bdelloidea							
Habrotrochidae							
Genus un-	I	-	-	-	-	-	-
determined	II	-	-	-	-	-	-
	III	-	-	0.06	0.25	-	-
Philodinidae							
<u>Bdelloidea</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.13	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	0.07	-	-	-	-	-
	III	0.06	-	-	0.13	-	-
Family un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Eggs							
	I	4.11	2.13	0.23	0.41	0.38	0.84
	II	2.22	1.17	5.66	0.50	1.72	8.41
	III	0.42	0.57	0.56	0.63	0.85	0.15

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Phylum: Rotifera (cont'd)							
Hexarthridae							
<u>Hexarthra</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Flosculariidae							
<u>Sinantharina</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Conochilidae							
<u>Conochiloides</u>							
	I	-	-	-	-	-	-
	II	-	-	5.75	-	0.09	-
	III	-	0.30	-	-	-	0.36
Bdelloidea							
Habrotrochidae							
Genus un- determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.37	-	-	-	0.22	-
Philodinidae							
<u>Bdelloidea</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un- determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Family un- determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Eggs							
	I	1.28	1.41	0.25	1.33	3.46	0.18
	II	5.48	9.32	14.20	7.82	11.71	6.23
	III	-	0.05	-	-	0.07	0.18

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		37	38	39	40	41	42
Phylum: Rotifera (cont'd)							
Hexarthridae							
<u>Hexarthra</u>							
	I	-	-	-	-	9.46	-
	II	0.11	-	0.13	-	-	-
	III	-	-	-	-	-	-
Flosculariidae							
<u>Sinantherina</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Conochilidae							
<u>Conochiloides</u>							
	I	-	-	-	-	11.96	1.14
	II	0.36	-	0.20	-	6.79	-
	III	-	-	-	-	39.43	0.40
Bdelloidea							
Habrotrochidae							
Genus un- determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	0.53	-
	III	-	-	-	-	-	-
Philodinidae							
<u>Bdelloidea</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un- determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Family un- determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Eggs							
	I	1.42	0.05	0.25	0.62	28.38	2.14
	II	0.79	0.24	0.31	0.12	28.48	0.49
	III	0.15	0.07	-	0.23	8.35	0.20

Table B-2.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Phylum: Rotifera					
(cont'd)					
Hexarthridae					
<u>Hexarthra</u>	I	-	0.16	-	-
	II	-	-	-	-
	III	-	-	-	-
Flosculariidae					
<u>Siranthrina</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Conochilidae					
<u>Conochiloides</u>	I	-	0.33	-	-
	II	-	0.07	-	-
	III	-	-	-	-
Bdelloidea					
Habrotrochidae					
Genus un-	I	-	-	-	-
determined	II	-	-	-	-
	III	-	-	-	-
Philodinidae					
<u>Bdelloidea</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Genus un-					
determined	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Family un-					
determined	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Eggs					
	I	0.47	1.31	0.82	0.26
	II	0.22	0.41	0.18	0.15
	III	0.15	0.18	-	0.10

Table B-3.--Estimated number (n/l) of Protozoa collected from the Alabama River with an 80-micron aperture Wisconsin plankton net.

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Phylum: Protozoa (Rhizopoda)							
Testacealobosa							
Arcellidae							
<u>Arcella</u>	I	-	-	-	-	-	-
	II	0.05	-	0.01	-	0.23	0.14
	III	-	-	0.01	0.12	0.08	0.45
Centropyxidae							
<u>Centropyxis</u>	I	-	-	-	-	-	-
	II	0.21	-	-	0.05	0.15	0.30
	III	0.05	-	0.07	0.16	0.14	0.63
Diffflugidae							
<u>Diffflugia</u>	I	-	-	-	-	-	-
	II	0.25	0.06	0.91	0.19	0.96	0.30
	III	0.05	-	0.10	0.40	0.12	0.27
Testaceafilosa							
Euglyphidae							
<u>Euglypha</u>	I	-	-	-	-	-	-
	II	-	-	0.11	-	-	-
	III	-	-	-	-	-	-
Spirotrichida (Cilaphora)							
Tintinnidae							
<u>Codonella</u>	I	-	-	-	-	-	-
	II	-	-	0.07	-	0.03	-
	III	-	-	-	0.08	0.04	-

I=August 9-25, 1977, samples

II=September 19-October 4, 1977, samples

III=October 31-November 17, 1977, samples

"-"=not encountered in collection

NOTE: Due to a computation error, plankton concentrations in this table were underestimated. To obtain the correct concentration, all values should be divided by .694.

Table B-3.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Phylum: Protozoa (Rhizopoda)							
Testacealobosa							
Arcellidae							
<u>Arcella</u>	I	-	-	-	-	-	-
	II	0.19	-	0.03	-	-	0.09
	III	-	-	-	-	-	-
Centropyxidae							
<u>Centropyxis</u>	I	-	-	-	-	-	-
	II	-	0.09	0.02	0.02	0.05	-
	III	0.19	-	0.09	0.12	-	-
Diffflugidae							
<u>Diffflugia</u>	I	-	-	-	-	-	-
	II	0.19	0.09	1.04	0.12	2.10	2.56
	III	0.04	-	-	0.08	-	-
Testaceafilosa							
Euglyphidae							
<u>Euglypha</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Spirotrichida (Cilaphora)							
Tintinnidae							
<u>Codonella</u>	I	-	-	-	-	-	-
	II	-	-	0.05	-	-	-
	III	-	-	-	-	-	-

Table B-3.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Phylum: Protozoa (Rhizopoda)							
Testacealobosa							
Arcellidae							
<u>Arcella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.08	-
	III	-	-	0.08	-	-	-
Centropyxidae							
<u>Centropyxis</u>	I	-	-	-	-	-	-
	II	-	-	-	0.04	-	0.02
	III	-	-	0.24	-	0.05	-
Diffflugidae							
<u>Diffflugia</u>	I	-	-	-	-	-	-
	II	0.99	0.24	0.35	0.31	0.15	0.08
	III	-	-	0.08	-	-	0.10
Testaceafilosa							
Euglyphidae							
<u>Euglypha</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Spirotrichida (Cilaphora)							
Tintinnidae							
<u>Codonella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-3.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Phylum: Protozoa (Rhizopoda)							
Testacealobosa							
Arcellidae							
<u>Arcella</u>	I	0.10	-	-	-	-	-
	II	0.65	0.12	0.04	0.72	0.06	0.15
	III	-	-	0.05	-	0.09	-
Centropyxidae							
<u>Centropyxis</u>	I	-	-	-	-	-	-
	II	0.37	-	0.04	0.14	-	-
	III	-	0.11	0.11	0.06	0.26	0.49
Diffflugidae							
<u>Diffflugia</u>	I	0.02	-	1.56	-	-	0.56
	II	0.46	0.75	0.24	3.16	2.40	0.51
	III	-	-	0.05	-	-	-
Testaceaifilosa							
Euglyphidae							
<u>Euglypha</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.20	-
	III	-	-	-	-	-	-
Spirotrichida (Cilaphora)							
Tintinnidae							
<u>Codonella</u>	I	-	-	-	-	-	-
	II	0.18	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-3.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Phylum: Protozoa (Rhizopoda)							
Testacealobosa							
Arcellidae							
<u>Arcella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.06	0.13	0.28	0.13	0.18	0.07
Centropyxidae							
<u>Centropyxis</u>	I	-	-	-	-	-	-
	II	0.06	0.14	-	0.08	-	-
	III	0.73	0.32	0.28	0.63	0.30	0.30
Diffflugidae							
<u>Diffflugia</u>	I	-	0.11	-	0.31	0.17	0.05
	II	0.29	0.07	0.11	0.59	0.06	0.36
	III	0.18	0.57	0.34	1.01	0.18	0.07
Testaceaefilosa							
Euglyphidae							
<u>Euglypha</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Spirotrichida (Cilaphora)							
Tintinnidae							
<u>Codonella</u>	I	-	-	-	-	-	-
	II	-	0.07	-	-	-	0.21
	III	0.06	-	-	-	-	-

Table B-3.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Phylum: Protozoa (Rhizopoda)							
Testacealobosa							
Arcellidae							
<u>Arcella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.05	-	-	-	-
Centropyxidae							
<u>Centropyxis</u>	I	-	-	-	-	-	-
	II	0.10	-	-	-	0.28	0.19
	III	-	0.05	0.06	-	-	0.12
Diffflugidae							
<u>Diffflugia</u>	I	0.35	0.23	-	-	0.14	0.18
	II	0.59	0.38	-	-	0.28	0.38
	III	-	-	-	-	-	-
Testaceafilosa							
Euglyphidae							
<u>Euglypha</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Spirotrichida (Cilaphora)							
Tintinnidae							
<u>Codonella</u>	I	-	-	-	-	-	-
	II	0.10	-	-	-	0.19	-
	III	-	-	-	-	-	-

Table B-3.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		37	38	39	40	41	42
Phylum: Protozoa (Rhizopoda)							
Testacealobosa							
Arcellidae							
<u>Arcella</u>	I	-	-	-	-	-	-
	II	-	0.03	-	-	-	-
	III	0.05	-	-	-	-	-
Centropyxidae							
<u>Centropyxis</u>	I	-	-	-	-	-	-
	II	-	0.03	0.04	0.06	-	-
	III	-	0.07	0.10	-	0.86	-
Diffflugidae							
<u>Diffugia</u>	I	0.99	-	-	-	2.14	0.14
	II	0.18	0.07	0.31	0.03	4.79	0.24
	III	0.05	-	-	0.16	4.60	-
Testaceafilosa							
Euglyphidae							
<u>Euglypha</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Spirotrichida (Cilaphora)							
Tintinnidae							
<u>Codonella</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.13	-
	III	-	-	-	-	0.86	-

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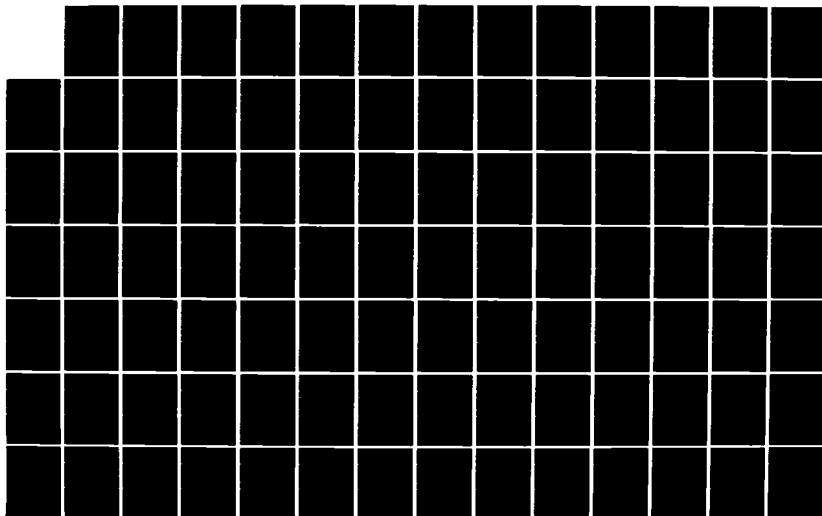
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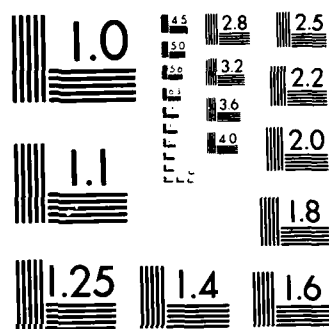
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Table B-3.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Phylum: Protozoa (Rhizopoda)					
Testacealobosa					
Arcellidae					
<u>Arcella</u>	I	-	-	-	-
	II	-	-	-	0.06
	III	0.07	-	-	-
Centropyxidae					
<u>Centropyxis</u>	I	-	-	-	-
	II	-	0.04	-	0.06
	III	0.15	-	-	-
Diffflugidae					
<u>Diffflugia</u>	I	0.05	-	-	-
	II	-	0.07	-	0.03
	III	-	-	-	0.10
Testaceafilosa					
Euglyphidae					
<u>Euglypha</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Spirotrichida (Cilaphora)					
Tintinnidae					
<u>Codonella</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-

Table B-4.--Estimated number (organisms/liter) of minor zooplankton taxa collected from the Alabama River with an 80-micron aperture Wisconsin plankton net.

Phylum: Arthropoda (Insecta)

Ephemeroptera

Ephemeridae

I: 3(0.09); II: 20(0.03), 23(0.06), 25(0.06), 26(0.78), 37(0.06), 38(0.07), 46(0.03);
III: 19(0.09), 30(0.07)

Caeniidae

II: 12(0.03)

Heptigeniidae

III: 5(0.02), 43(0.07)

Tricorythidae

Tricorythodes

III: 45(0.04)

Diptera

Chironomidae

I: 25(0.04), 26(0.11), 30(0.05), 32(0.18), 37(0.07),
II: 6(0.04), 11(0.05), 12(0.03), 24(0.22), 25
(0.06), 26(0.14), 27(0.54), 39(0.04), 46(0.15);
III: 20(0.04), 23(0.09), 29(0.06)

Culicidae

Chaoborus

I: 9(0.13), 15(0.09), 32(0.09), 35(0.14), 42
(0.14); II: 25(0.12), 27(0.22), 28(0.30),
29(0.11), 32(0.08), 43(0.06)

Genus undetermined

I: 35(0.14); II: 9(0.02), 31(0.20), 40(0.06),
41(0.13), 46(0.03)

Ceratopogonidae

II: 43(0.06), 46(0.03)

Simuliidae

II: 20(0.09), 24(0.07), 37(0.03), 40(0.03), 46(0.03)

Phylum: Nematoda

Rhabditidae

II: 5(0.06), 24(0.15), 38(0.03); III: 3(0.03),
4(0.08), 7(0.04), 29(0.06), 42(0.20)

Cephalobidae

III: 5(0.06), 30(0.07)

Family undetermined

III: 3(0.03), 6(0.09), 10(0.04), 28(0.13), 30
(0.07), 36(0.12)

Phylum: Pelecypoda

III: 1(0.09), 8(0.46), 9(0.27), 10(0.40),
11(0.36), 12(0.19), 13(0.06), 14(0.13), 18(0.05),
19(0.17), 20(0.07), 21(0.11), 23(0.17), 27(0.39),
37(0.05), 38(0.07), 41(0.29), 45(0.04), 46(0.05)

Explanation of I:3(0.09)--I = run number, 3 = station number, 0.09 = estimated number of organisms/liter of water sampled.

I=August 9-25, 1977, samples

II=September 19-October 4, 1977, samples

III=October 31-November 17, 1977, samples

"-"=not encountered in collection

NOTE: Due to a computation error, plankton concentrations in this table were underestimated. To obtain the correct concentration, all values should be divided by .694.

Table B-4.--Continued

Phylum: Gastrotricha
Chaetonotidae
Chaetonotus

II: 16(0.08)

Table B-5.--Estimated number (organisms/liter) of Chlorophyta collected from the Alabama River with an 80-micron aperture Wisconsin plankton net.

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Division: Chlorophyta							
Chlorococcales							
Chlorococcaceae							
Genus un-							
determined							
	I	-	-	-	-	-	-
	II	-	-	-	0.09	0.70	0.14
	III	0.32	-	-	-	-	-
Hydrodictaceae							
<u>Pediastrum</u> sp.							
	I	-	1.39	0.81	1.13	0.95	0.68
	II	-	-	0.15	-	0.03	0.27
	III	-	-	-	-	-	-
<u>Pediastrum</u>							
<u>simplex</u>							
	I	-	0.62	0.45	0.42	0.35	1.27
	II	1.15	0.44	2.22	0.11	0.61	0.81
	III	1.48	0.65	0.87	0.69	0.34	1.72
<u>Hydrodictyon</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oocystaceae							
<u>Trebaria</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Scenedesmaceae							
<u>Scenedesmus</u>							
	I	-	-	-	0.06	0.59	0.59
	II	0.02	-	1.71	-	0.03	-
	III	-	-	-	0.04	-	-
Coelastraceae							
<u>Coelastrum</u>							
	I	-	-	-	-	-	-
	II	-	-	0.15	-	-	-
	III	-	-	-	-	-	-
Cladophorales							
Cladophoraceae							
<u>Cladophora</u>							
	I	-	-	-	-	-	-
	II	0.68	0.12	0.15	0.14	0.09	0.17
	III	0.19	-	-	-	0.08	0.18
<u>Rhizoclonium</u>							
	I	-	-	-	-	-	-
	II	-	0.06	0.01	0.05	0.12	0.04
	III	-	-	-	-	-	-

I=August 9-25, 1977, samples

II=September 19-October 4, 1977, samples

III=October 31-November 17, 1977, samples

"-"=not encountered in collection

NOTE: Due to a computation error, plankton concentrations in this table were underestimated. To obtain the correct concentration, all values should be divided by .694.

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Division: Chlorophyta							
Chlorococcales							
Chlorococcaceae							
Genus un-							
determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	0.22	0.20
	III	-	-	-	-	0.08	-
Hydrodictaceae							
<u>Pediastrum</u> sp.							
	I	2.05	1.46	0.40	0.15	-	0.20
	II	0.06	-	-	0.02	0.05	0.12
	III	-	-	-	-	-	-
<u>Pediastrum</u>							
<u>simplex</u>							
	I	1.42	1.06	1.32	0.61	0.42	0.30
	II	1.26	-	0.29	0.37	0.86	1.67
	III	0.90	0.60	0.27	0.40	0.36	-
<u>Hydrodictyon</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oocystaceae							
<u>Trebaria</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Scenedesmaceae							
<u>Scenedesmus</u>							
	I	-	0.27	-	-	-	0.10
	II	-	-	0.08	0.02	-	-
	III	-	-	-	-	-	-
Coelastraceae							
<u>Coelastrum</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Cladophorales							
Cladophoraceae							
<u>Cladophora</u>							
	I	-	-	-	-	-	-
	II	0.06	-	-	0.02	-	-
	III	0.08	-	0.18	0.04	-	-
<u>Rhizoclonium</u>							
	I	-	-	-	-	-	-
	II	0.13	-	-	-	0.05	-
	III	0.04	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Division: Chlorophyta							
Chlorococcales							
Chlorococcaceae							
Genus un- determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hydrodictaceae							
<u>Pediastrum</u> sp.	I	0.14	-	0.47	0.10	0.03	-
	II	0.05	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pediastrum</u> <u>simplex</u>	I	-	0.22	-	0.05	0.09	0.22
	II	0.16	-	0.44	0.19	0.11	0.21
	III	0.23	0.07	-	0.11	0.22	0.05
<u>Hydrodictyon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oocystaceae							
<u>Trebaria</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Scenedesmaceae							
<u>Scenedesmus</u>	I	-	-	-	0.05	-	0.32
	II	0.05	0.03	-	-	-	-
	III	-	-	-	-	-	-
Coelastraceae							
<u>Coelastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Cladophorales							
Cladophoraceae							
<u>Cladophora</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.06	-	-	-	0.05	-
<u>Rhizoclonium</u>	I	-	-	-	-	-	-
	II	0.05	-	0.09	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Division: Chlorophyta							
Chlorococcales							
Chlorococcaceae							
Genus un-							
determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.17	-	-	0.19	-	-
Hydrodictaceae							
<u>Pediastrum</u> sp.	I	0.05	0.21	1.09	0.13	1.06	0.84
	II	0.18	-	-	1.22	0.26	-
	III	-	-	-	-	-	-
<u>Pediastrum</u>							
<u>simplex</u>	I	0.15	0.29	0.78	0.66	0.99	0.70
	II	15.78	2.06	0.32	42.13	5.20	2.05
	III	0.77	0.25	0.22	0.76	0.68	0.33
<u>Hydrodictyon</u>	I	-	-	-	-	-	-
	II	-	0.03	-	-	-	0.07
	III	-	0.04	-	-	-	-
Oocystaceae							
<u>Trebaria</u>	I	-	-	-	-	-	-
	II	0.09	-	-	-	-	-
	III	-	-	-	-	-	-
Scenedesmaceae							
<u>Scenedesmus</u>	I	-	-	0.78	0.46	0.66	-
	II	0.09	-	0.08	-	0.03	-
	III	-	-	-	-	-	-
Coelastraceae							
<u>Coelastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Cladophorales							
Cladophoraceae							
<u>Cladophora</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	0.09	0.16
<u>Rhizoclonium</u>	I	0.02	-	-	-	-	-
	II	-	-	-	-	-	0.15
	III	-	-	0.17	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Division: Chlorophyta							
Chlorococcales							
Chlorococcaceae							
Genus un-							
determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hydrodictaceae							
<u>Pediastrum</u> sp.	I	0.90	0.22	0.29	0.34	0.31	0.98
	II	0.06	-	0.76	-	0.06	-
	III	-	-	-	0.13	0.12	0.07
<u>Pediastrum</u>							
<u>simplex</u>	I	1.35	1.23	1.32	0.79	1.52	3.24
	II	1.70	2.62	19.15	2.18	23.90	43.00
	III	0.24	2.02	-	0.38	2.12	1.41
<u>Hydrodictyon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.06	-	0.06	-	-	0.07
Oocystaceae							
<u>Trebaria</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Scenedesmaceae							
<u>Scenedesmus</u>	I	-	0.11	0.23	0.38	0.24	0.52
	II	-	-	-	0.08	-	-
	III	-	-	-	-	-	-
Coelastraceae							
<u>Coelastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Cladophorales							
Cladophoraceae							
<u>Cladophora</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.06	-	0.13	-	-
<u>Rhizoclonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Division: Chlorophyta							
Chlorococcales							
Chlorococcaceae							
Genus un-							
determined							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hydrodictaceae							
<u>Pediastrum</u> sp.							
	I	0.43	0.41	0.50	-	-	-
	II	0.10	0.23	0.34	-	0.28	2.46
	III	-	-	-	-	-	-
<u>Pediastrum</u>							
<u>simplex</u>							
	I	5.17	1.00	2.49	0.89	1.25	0.54
	II	22.40	13.52	26.38	14.21	15.58	61.19
	III	0.52	0.71	0.45	1.15	0.44	1.09
<u>Hydrodictyon</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oocystaceae							
<u>Trebaria</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Scenedesmaceae							
<u>Scenedesmus</u>							
	I	0.04	1.28	0.62	-	-	-
	II	1.86	0.08	-	-	-	-
	III	-	-	-	-	-	-
Coelastraceae							
<u>Coelastrum</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Cladophorales							
Cladophoraceae							
<u>Cladophora</u>							
	I	-	-	0.89	-	-	-
	II	-	-	-	-	-	-
	III	-	0.05	-	-	-	-
<u>Rhizoclonium</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	0.07	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		37	38	39	40	41	42
Division: Chlorophyta							
Chlorococcales							
Chlorococcaceae							
Genus un- determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.10	-	-	-	-	-
Hydrodictaceae							
<u>Pediastrum</u> sp.	I	0.71	0.05	-	-	0.36	0.28
	II	-	-	-	-	0.27	-
	III	0.05	-	-	-	-	-
<u>Pediastrum</u> <u>simplex</u>							
	I	2.69	0.64	0.41	0.93	5.36	1.57
	II	1.91	1.08	2.18	1.94	3.59	0.81
	III	0.36	0.92	0.70	0.39	1.73	0.10
<u>Hydrodictyon</u>							
	I	-	-	-	-	-	-
	II	0.03	-	-	-	-	-
	III	-	-	-	-	-	-
Oocystaceae							
<u>Trebaria</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Scenedesmaceae							
<u>Scenedesmus</u>	I	0.42	0.34	0.08	-	0.89	0.57
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Coelastraceae							
<u>Coelastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Cladophorales							
Cladophoraceae							
<u>Cladophora</u>	I	-	-	-	-	-	-
	II	-	0.07	-	-	-	-
	III	-	-	-	-	-	-
<u>Rhizoclonium</u>							
	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Division: Chlorophyta					
Chlorococcales					
Chlorococcaceae					
Genus un-					
determined	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Hydrodictaceae					
<u>Pediastrum</u> sp.	I	-	-	-	-
	II	0.06	-	-	0.03
	III	-	-	-	-
<u>Pediastrum</u>					
<u>simplex</u>	I	0.10	0.98	-	0.79
	II	1.10	1.33	0.1	0.75
	III	0.44	0.22	0.1	0.25
<u>Hydrodictyon</u>	I	-	-	-	-
	II	-	-	-	-
	III	0.07	-	-	-
Oocystaceae					
<u>Trebaria</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Scenedesmaceae					
<u>Scenedesmus</u>	I	0.05	0.16	-	0.26
	II	-	-	-	-
	III	-	-	-	-
Coelastraceae					
<u>Coelastrum</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Cladophorales					
Cladophoraceae					
<u>Cladophora</u>	I	-	-	0.20	-
	II	-	-	-	-
	III	-	-	-	-
<u>Rhizoclonium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Division: Chlorophyta							
(cont'd)							
Ulotrichales							
Ulotrichaceae							
<u>Ulothrix</u>	I	-	0.93	0.09	0.12	0.24	-
	II	0.07	-	0.01	-	0.03	-
	III	-	-	0.10	0.08	-	-
Chaetophoraceae							
<u>Stigeoclonium</u>	I	-	0.31	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Zygnematales							
Desmidiaceae							
<u>Closterium</u>	I	-	0.31	-	-	-	-
	II	-	-	0.11	-	0.03	-
	III	-	-	0.10	-	-	0.09
<u>Cosmarium</u>	I	-	-	-	-	0.12	-
	II	0.02	-	0.11	-	-	0.04
	III	-	-	-	-	-	-
<u>Micrasterias</u>	I	-	-	-	-	0.35	-
	II	-	-	-	-	-	0.10
	III	-	-	-	-	-	-
<u>Staurastrum</u>	I	-	-	-	-	-	-
	II	-	-	0.29	-	-	0.04
	III	-	-	0.03	-	-	-
<u>Euastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	0.09
<u>Xanthidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	0.04
	III	-	-	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-	-	-
	II	-	-	0.07	-	-	-
	III	-	-	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.09	0.17
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Division: Chlorophyta							
(cont'd)							
Ulotrichales							
Ulotrichaceae							
<u>Ulothrix</u>	I	-	0.93	0.09	0.12	0.24	-
	II	0.07	-	0.01	-	0.03	-
	III	-	-	0.10	0.08	-	-
Chaetophoraceae							
<u>Stigeoclonium</u>	I	-	0.31	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Zygnematales							
Desmidiaceae							
<u>Closterium</u>	I	-	0.31	-	-	-	-
	II	-	-	0.11	-	0.03	-
	III	-	-	0.10	-	-	0.09
<u>Cosmarium</u>	I	-	-	-	-	0.12	-
	II	0.02	-	0.11	-	-	0.04
	III	-	-	-	-	-	-
<u>Micrasterias</u>	I	-	-	-	-	0.35	-
	II	-	-	-	-	-	0.10
	III	-	-	-	-	-	-
<u>Staurastrum</u>	I	-	-	-	-	-	-
	II	-	-	0.29	-	-	0.04
	III	-	-	0.03	-	-	-
<u>Euastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	0.09
<u>Xanthidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	0.04
	III	-	-	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-	-	-
	II	-	-	0.07	-	-	-
	III	-	-	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.09	0.17
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Division: Chlorophyta							
(cont'd)							
Ulotrichales							
Ulotrichaceae							
<u>Ulothrix</u>	I	-	-	-	-	-	-
	II	-	-	0.02	-	-	-
	III	-	-	-	-	-	-
Chaetophoraceae							
<u>Stigeoclonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Zygnematales							
Desmidiaceae							
<u>Closterium</u>	I	-	-	-	-	-	-
	II	-	0.09	0.02	-	0.05	-
	III	-	-	-	-	-	-
<u>Cosmarium</u>	I	-	-	-	-	-	-
	II	-	-	-	0.02	0.16	-
	III	-	-	-	-	-	-
<u>Micrasterias</u>	I	-	-	-	-	-	-
	II	0.06	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Staurostrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Euastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Xanthidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-	-	-
	II	0.06	-	-	-	0.05	-
	III	-	-	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-	-	-
	II	-	-	-	0.02	0.05	0.03
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Division: Chlorophyta							
(cont'd)							
Ulotrichales							
Ulotrichaceae							
<u>Ulothrix</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.02	-
	III	-	-	0.08	-	-	-
Chaetophoraceae							
<u>Stigeoclonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Zygnematales							
Desmidiaceae							
<u>Closterium</u>	I	-	-	-	-	-	-
	II	0.16	-	-	-	-	0.02
	III	-	-	-	-	-	-
<u>Cosmarium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Micrasterias</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Staurostrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Euastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Xanthidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	0.02
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Division: Chlorophyta							
(cont'd)							
Ulotrichales							
Ulotrichaceae							
<u>Ulothrix</u>	I	0.02	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	0.06	-	0.16
Chaetophoraceae							
<u>Stigeoclonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Zygnematales							
Desmidiaceae							
<u>Closterium</u>	I	0.02	-	-	0.40	-	-
	II	-	0.19	-	-	-	0.15
	III	-	0.04	0.05	-	0.09	-
<u>Cosmarium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Micrasterias</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Staurostrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Euastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Xanthidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	0.07
	III	-	-	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-	-	-
	II	0.02	0.09	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Division: Chlorophyta							
(cont'd)							
Ulotrichales							
Ulotrichaceae							
<u>Ulothrix</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	0.06	0.13	-	-
Chaetophoraceae							
<u>Stigeoclonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Zygnematales							
Desmidiaceae							
<u>Closterium</u>	I	-	-	-	0.03	-	-
	II	0.06	0.14	-	-	-	-
	III	-	-	-	0.13	-	-
<u>Cosmarium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Micrasterias</u>	I	-	-	-	-	-	-
	II	0.12	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Staurostrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.32	-	0.38	0.06	0.15
<u>Euastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Xanthidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-	-	-
	II	0.06	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Division: Chlorophyta							
(cont'd)							
Ulotrichales							
Ulotrichaceae							
<u>Ulothrix</u>	I	-	0.05	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Chaetophoraceae							
<u>Stigeoclonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Zygnematales							
Desmidiaceae							
<u>Closterium</u>	I	-	-	-	-	-	-
	II	0.10	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Cosmarium</u>	I	-	0.09	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Micrasterias</u>	I	-	-	-	-	-	-
	II	0.08	-	-	-	0.09	-
	III	-	-	-	-	-	-
<u>Staurastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.07	-	-	-	-	-
<u>Euastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Xanthidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		37	38	39	40	41	42
Division: Chlorophyta							
(cont'd)							
Ulotrichales							
Ulotrichaceae							
<u>Ulothrix</u>	I	-	-	-	-	-	-
	II	-	-	-	0.03	-	-
	III	-	-	-	-	-	-
Chaetophoraceae							
<u>Stigeoclonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Zygnematales							
Desmidiaceae							
<u>Closterium</u>	I	0.14	-	-	-	-	-
	II	-	-	-	0.09	-	-
	III	-	-	-	-	-	-
<u>Cosmarium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Microsterias</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Staurostrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.05	-	-	-	-	-
<u>Euastrum</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Xanthidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Division: Chlorophyta					
(cont'd)					
Ulotrichales					
Ulotrichaceae					
<u>Ulothrix</u>	I	-	-	-	-
	II	-	-	-	-
	III	0.07	-	-	-
Chaetophoraceae					
<u>Stigeoclonium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Zygnematales					
Desmidiaceae					
<u>Closterium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	0.04	-	-
<u>Cosmarium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Micrasterias</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Staurostrum</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Euastrum</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Xanthidium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Pleurotaenium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Desmidium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Division: Chlorophyta							
(cont'd)							
Zygnemataceae							
<u>Spirogyra</u>	I	-	2.01	0.09	-	0.35	1.10
	II	0.01	-	0.11	0.24	0.12	0.57
	III	0.14	-	0.03	0.04	0.02	-
<u>Mougeotia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Zygonema</u>	I	-	-	-	-	-	-
	II	-	-	0.01	-	-	-
	III	-	-	-	-	-	-
Oedogoniales							
Oedogoniaceae							
<u>Oedogonium</u>	I	-	-	-	-	-	-
	II	0.29	-	0.01	0.05	-	-
	III	0.09	-	-	-	0.04	0.18
Volvocales							
Volvocaceae							
<u>Gonium</u>	I	-	0.15	-	0.18	1.36	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pandorina</u>	I	-	-	-	-	-	0.76
	II	-	0.03	1.67	0.14	-	0.57
	III	-	-	-	-	-	-
<u>Eudorina</u>	I	-	-	-	-	-	-
	II	0.02	-	0.25	0.33	0.06	0.81
	III	-	-	-	-	-	-
<u>Platydorina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleodorina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Volvox</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	0.04
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		7	8	9	10	11	12
Division: Chlorophyta							
(cont'd)							
Zygnemataceae							
<u>Spirogyra</u>	I	0.95	-	-	0.15	-	-
	II	0.76	0.53	0.13	0.12	0.65	0.75
	III	0.02	-	-	0.08	0.04	0.13
<u>Mougeotia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Zygonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oedogoniales							
Oedogoniaceae							
<u>Oedogonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Volvocales							
Volvocaceae							
<u>Gonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pandorina</u>	I	-	0.80	0.40	0.46	-	0.79
	II	0.50	0.09	-	0.10	0.22	-
	III	0.04	-	-	-	-	-
<u>Eudorina</u>	I	-	-	-	-	-	-
	II	-	0.09	0.02	-	0.11	0.09
	III	0.04	-	-	-	-	-
<u>Platydorina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleodorina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Volvox</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Division: Chlorophyta							
(cont'd)							
Zygnemataceae							
<u>Spirogyra</u>	I	0.42	0.22	0.56	0.05	0.11	0.11
	II	0.31	-	0.53	0.08	0.06	0.31
	III	-	-	-	0.04	0.05	-
<u>Mougeotia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Zygonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oedogoniales							
Oedogoniaceae							
<u>Oedogonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Volvocales							
Volvocaceae							
<u>Gonium</u>	I	-	-	-	0.05	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pandorina</u>	I	0.14	0.43	0.28	-	-	-
	II	-	-	-	0.04	0.02	-
	III	-	-	-	-	-	-
<u>Eudorina</u>	I	-	0.11	-	1.59	1.38	0.43
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Platydorina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleodorina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Volvox</u>	I	-	-	-	-	-	0.11
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Division: Chlorophyta							
(cont'd)							
Zygnemataceae							
<u>Spirogyra</u>	I	0.17	0.08	0.16	0.40	0.66	-
	II	0.83	0.09	0.20	0.07	-	2.05
	III	0.17	0.07	0.11	0.25	0.43	0.33
<u>Mougeotia</u>	I	-	-	-	-	-	-
	II	-	-	0.03	-	-	-
	III	0.09	0.11	-	0.06	0.26	0.33
<u>Zygonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oedogoniales							
Oedogoniaceae							
<u>Oedogonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Volvocales							
Volvocaceae							
<u>Gonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pandorina</u>	I	0.70	-	-	1.26	-	-
	II	-	-	0.04	-	-	-
	III	-	-	-	-	-	-
<u>Eudorina</u>	I	1.35	0.12	-	3.84	19.68	0.84
	II	1.01	-	0.04	-	-	0.07
	III	-	-	-	-	-	-
<u>Platydorina</u>	I	-	-	-	0.13	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleodorina</u>	I	-	-	-	-	-	-
	II	0.09	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Volvox</u>	I	-	-	-	-	-	-
	II	0.28	0.03	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		25	26	27	28	29	30
Division: Chlorophyta							
(cont'd)							
Zygnemataceae							
<u>Spirogyra</u>	I	-	0.22	0.06	-	-	-
	II	0.82	1.24	0.33	-	0.59	0.21
	III	0.30	0.25	0.56	0.13	0.61	0.30
<u>Mougeotia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.25	0.17	0.38	0.49	0.15
<u>Zygonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oedogoniales							
Oedogoniaceae							
<u>Oedogonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	0.12	-
Volvocales							
Volvocaceae							
<u>Gonium</u>	I	-	-	-	-	0.10	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pandorina</u>	I	0.18	-	-	-	-	1.59
	II	-	-	0.33	-	-	0.46
	III	-	-	-	-	-	-
<u>Eudorina</u>	I	2.75	23.60	5.20	8.88	7.38	19.60
	II	0.12	-	1.20	-	2.72	23.88
	III	-	-	0.06	-	-	-
<u>Platydorina</u>	I	-	-	-	0.21	0.10	0.66
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleodorina</u>	I	-	-	-	-	-	0.32
	II	-	-	0.11	-	-	-
	III	-	-	-	-	-	-
<u>Volvox</u>	I	-	-	-	-	-	0.05
	II	-	-	0.22	-	-	0.92
	III	-	-	-	-	0.06	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Division: Chlorophyta							
(cont'd)							
Zygnemataceae							
<u>Spirogyra</u>	I	0.08	0.09	-	-	-	-
	II	0.39	1.23	0.34	-	0.85	0.94
	III	-	-	0.06	-	0.07	-
<u>Mougeotia</u>	I	-	-	-	-	-	-
	II	0.10	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Zygonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oedogoniales							
Oedogoniaceae							
<u>Oedogonium</u>	I	-	-	-	-	-	-
	II	0.10	-	-	-	-	-
	III	-	-	-	-	-	-
Volvocales							
Volvocaceae							
<u>Gonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pandorina</u>	I	1.09	1.78	0.87	3.55	0.55	-
	II	0.10	0.08	4.73	2.13	2.83	1.32
	III	-	-	-	-	-	-
<u>Eudorina</u>	I	0.54	0.82	0.62	-	-	-
	II	5.18	6.49	1.01	-	1.04	2.27
	III	-	-	-	-	-	-
<u>Platydorina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleodorina</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Volvox</u>	I	-	-	-	-	-	-
	II	-	-	0.34	-	-	0.19
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		37	38	39	40	41	42
Division: Chlorophyta							
(cont'd)							
Zygnemataceae							
<u>Spirogyra</u>	I	0.35	0.15	0.25	0.31	-	0.14
	II	0.25	0.20	0.31	0.18	-	0.08
	III	-	-	-	-	-	-
<u>Mougeotia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Zygonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oedogoniales							
Oedogoniaceae							
<u>Oedogonium</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Volvocales							
Volvocaceae							
<u>Gonium</u>	I	-	-	-	-	-	-
	II	-	-	-	0.06	-	-
	III	-	-	-	-	-	-
<u>Pandorina</u>	I	2.34	6.91	2.63	0.77	2.50	5.86
	II	-	-	0.04	0.12	-	-
	III	-	-	-	-	-	-
<u>Eudorina</u>	I	6.30	0.74	0.49	-	0.36	0.14
	II	0.56	0.24	0.74	0.03	0.27	0.08
	III	0.05	-	-	-	-	-
<u>Platydorina</u>	I	0.14	0.05	0.25	-	-	0.71
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Pleodorina</u>	I	-	-	-	-	-	-
	II	-	-	0.13	-	-	-
	III	-	-	-	-	-	-
<u>Volvox</u>	I	-	-	-	-	-	-
	II	0.03	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-5.--Continued

<u>Taxa</u>		<u>Station Number</u>			
		43	44	45	46
Division: Chlorophyta					
(cont'd)					
Zygnemataceae					
<u>Spirogyra</u>	I	0.21	0.33	1.23	-
	II	0.11	0.07	0.12	0.39
	III	-	-	-	-
<u>Mougeotia</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Zygonema</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Oedogoniales					
Oedogoniaceae					
<u>Oedogonium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Volvocales					
Volvocaceae					
<u>Gonium</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Pandorina</u>	I	1.67	1.63	0.20	0.52
	II	-	0.04	0.03	-
	III	-	-	-	-
<u>Eudorina</u>	I	0.36	0.81	0.62	-
	II	-	0.04	-	0.12
	III	-	-	-	-
<u>Platyderina</u>	I	0.05	0.16	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Pleodorina</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Volvox</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-

Table B-6.--Estimated numbers (organisms/liter) of diatoms collected from the Alabama River with an 80-micron aperture Wisconsin plankton net during the period of October 31-November 17, 1977

<u>Taxa</u>	<u>Station Numbers</u>					
	1	2	3	4	5	6
Division: Chrysophyta (Bacillariophyceae)						
Centrales						
Coscinodiscaceae						
<u>Melosira</u>	6.40	4.55	3.08	25.58	6.72	4.17
<u>Cyclotella</u>	1.60	1.65	1.93	0.47	0.23	-
Chaetoceraceae						
<u>Attheya</u>	0.53	0.41	-	-	-	-
Anaulaceae						
<u>Terpsinoe</u>	2.67	4.13	1.16	1.40	1.85	0.52
Pennales						
Tabellariaceae						
<u>Tabellaria</u>	-	-	-	-	0.23	-
Meridionaceae						
<u>Meridion</u>	-	-	-	-	0.46	-
Diatomaceae						
<u>Diatoma</u>	-	-	-	-	0.46	-
Fragilariaceae						
<u>Fragilaria</u>	-	-	5.39	-	-	2.09
<u>Synedra</u>	-	-	-	-	0.23	-
Achnanthaceae						
<u>Cocconeis</u>	-	-	-	-	0.23	-
Naviculariaceae						
<u>Navicula</u>	-	-	-	-	-	-
<u>Gyrosigma</u>	-	-	-	0.47	0.23	-
<u>Stauroneis</u>	-	-	-	-	-	-
<u>Pinnularia</u>	-	-	-	-	0.46	-
Gomphonemataceae						
<u>Gomphonema</u>	-	-	-	-	0.46	-
Cymbellaceae						
<u>Cymbella</u>	-	-	-	-	0.23	-
Nitzchiaceae						
<u>Nitzschia</u>	-	-	-	-	-	-
Surirellaceae						
<u>Surirella</u>	-	-	0.39	-	-	-
Family undetermined	0.53	-	-	1.86	-	-

NOTE: Due to a computation error, plankton concentrations in this table were underestimated. To obtain the correct concentration, all values should be divided by .694.

Table B-6.--Continued

<u>Taxa</u>	<u>Station Numbers</u>					
	7	8	9	10	11	12
Division: Chrysophyta (Bacillariophyceae)						
Centrales						
Coccinodiscaceae						
<u>Melosira</u>	8.63	4.53	8.27	6.15	3.43	1.10
<u>Cyclotella</u>	0.43	-	-		-	-
Chaetoceraceae						
<u>Attheya</u>	-	-	-		-	-
Anaulaceae						
<u>Terpsinoe</u>	0.43	1.06	1.03	0.23	-	-
Pennales						
Tabellariaceae						
<u>Tabellaria</u>	-	-	-	-	-	-
Meridionaceae						
<u>Meridion</u>	-	-	-	-	-	-
Diatomaceae						
<u>Diatoma</u>	-	-	-	-	-	-
Fragilariaceae						
<u>Fragilaria</u>	-	-	-	-	-	-
<u>Synedra</u>	-	-	-	-	-	-
Achnanthacea						
<u>Cocconeis</u>	-	-	-	-	-	-
Naviculariaceae						
<u>Navicula</u>	-	-	-	-	-	-
<u>Gyrosigma</u>	-	-	-	-	-	-
<u>Stauroneis</u>	-	-	-	-	-	-
<u>Pinnularia</u>	-	-	-	-	-	-
Gomphonemataceae						
<u>Gomphonema</u>	-	-	-	-	-	0.37
Cymbellaceae						
<u>Cymbella</u>	-	-	-	-	-	-
Nitzschaceae						
<u>Nitzschia</u>	0.43	-	-	0.23	-	-
Surirellaceae						
<u>Surirella</u>	-	-	-	0.23	-	-
Family undetermined	-	-	-	0.23	-	0.74

Table B-6.--Continued

<u>Taxa</u>	<u>Station Numbers</u>					
	13	14	15	16	17	18
Division: Chrysophyta (Bacillariophyceae)						
Centrales						
Coscinodiscaceae						
<u>Melosira</u>	1.96	7.68	8.84	0.83	3.42	1.70
<u>Cyclotella</u>		-	-	-	-	-
Chaetoceraceae						
<u>Attheya</u>		-	-	-	-	-
Anaulaceae						
<u>Terpsinoe</u>	0.33	-	-	-	-	-
Pennales						
Tabellariaceae						
<u>Tabellaria</u>	-	-	0.47	-	-	-
Meridionaceae						
<u>Meridion</u>	-	-	-	-	-	-
Diatomaceae						
<u>Diatoma</u>	-	0.76	0.93	-	0.31	-
Fragilariaceae						
<u>Fragilaria</u>	-	-	1.40	-	1.55	-
<u>Synedra</u>	-	-	-	-	-	0.28
Achnanthacea						
<u>Cocconeis</u>	-	-	-	-	0.31	-
Naviculariaceae						
<u>Navicula</u>	-	-	0.93	-	0.31	-
<u>Gyrosigma</u>	-	-	-	-	-	-
<u>Stauroneis</u>	-	-	-	-	-	-
<u>Pinnularia</u>	-	-	-	-	0.31	-
Gomphonemataceae						
<u>Gomphonema</u>	-	-	-	-	-	-
Cymbellaceae						
<u>Cymbella</u>	-	-	0.47	-	-	0.28
Nitzchiaceae						
<u>Nitzschia</u>	-	-	0.93	-	-	-
Surirellaceae						
<u>Surirella</u>	-	-	-	0.21	-	-
Family undetermined	0.33	0.38	-	-	0.31	0.85

Table B-6.--Continued

<u>Taxa</u>	<u>Station Numbers</u>					
	19	20	21	22	23	24
Division: Chrysophyta (Bacillariophyceae)						
Centrales						
Coscinodiscaceae						
<u>Melosira</u>	2.95	3.63	0.64	1.45	1.47	1.89
<u>Cyclotella</u>	-	-	-	-	-	-
Chaetoceraceae						
<u>Attheya</u>	-	-	-	-	-	-
Anaulaceae						
<u>Terpsinoe</u>	2.46	0.20	-	0.36	1.96	-
Pennales						
Tabellariaceae						
<u>Tabellaria</u>	-	-	-	-	0.49	-
Meridionaceae						
<u>Meridion</u>	-	0.40	-	-	-	-
Diatomaceae						
<u>Diatoma</u>	-	-	-	-	0.98	-
Fragilariaceae						
<u>Fragilaria</u>	-	-	0.32	-	0.98	-
<u>Synedra</u>	0.98	0.20	-	-	0.49	0.95
Achnanthacea						
<u>Cocconeis</u>	-	-	-	-	-	-
Naviculariaceae						
<u>Navicula</u>	-	-	-	-	0.49	-
<u>Gyrosigma</u>	-	-	-	-	-	-
<u>Stauroneis</u>	-	-	-	-	-	-
<u>Pinnularia</u>	-	-	-	-	-	-
Gomphonemataceae						
<u>Gomphonema</u>	-	-	-	-	-	-
Cymbellaceae						
<u>Cymbella</u>	-	-	-	-	-	-
Nitzchiaceae						
<u>Nitzschia</u>	-	-	-	-	4.42	-
Surirellaceae						
<u>Surirella</u>	-	-	-	0.36	-	-
Family undetermined	-	0.20	0.32	-	0.98	-

Table B-6.--Continued

<u>Taxa</u>	<u>Station Numbers</u>					
	25	26	27	28	29	30
Division: Chrysophyta (Bacillariophyceae)						
Centrales						
Coscinodiscaceae						
<u>Melosira</u>	0.70	3.62	1.62	17.37	2.44	8.53
<u>Cyclotella</u>	-	-	-	-	-	-
Chaetoceraceae						
<u>Attheya</u>	-	-	-	-	-	-
Anaulaceae						
<u>Terpsinoe</u>	-	0.36	0.97	0.72	0.70	2.56
Pennales						
Tabellariaceae						
<u>Tabellaria</u>	-	0.72	-	-	-	-
Meridionaceae						
<u>Meridion</u>	-	-	-	-	-	-
Diatomaceae						
<u>Diatoma</u>	-	0.72	-	-	-	-
Fragilariaceae						
<u>Fragilaria</u>	-	0.36	5.17	3.62	1.40	0.85
<u>Synedra</u>	-	0.72	-	-	-	-
Achnanthacea						
<u>Cocconeis</u>	-	-	-	-	-	-
Naviculariaceae						
<u>Navicula</u>	-	0.36	-	-	-	-
<u>Gyrosigma</u>	-	0.36	-	-	0.35	-
<u>Stauroneis</u>	-	-	-	0.72	-	-
<u>Pinnularia</u>	-	-	-	-	-	-
Gomphonemataceae						
<u>Gomphonema</u>	-	-	-	-	-	-
Cymbellaceae						
<u>Cymbella</u>	-	-	-	-	-	-
Nitzchiaceae						
<u>Nitzschia</u>	-	-	0.97	-	-	0.85
Surirellaceae						
<u>Surirella</u>	-	0.36	0.65	0.72	0.70	0.43
Family undetermined	0.35	-	-	-	0.35	-

Table B-6.--Continued

<u>Taxa</u>	<u>Station Numbers</u>					
	31	32	23	34	35	36
Division: Chrysophyta (Bacillariophyceae)						
Centrales						
Coccinodiscaceae						
<u>Melosira</u>	13.22	16.65	18.40	14.89	3.81	20.49
<u>Cyclotella</u>	-	0.29	-	-	-	-
Chaetoceraceae						
<u>Attheya</u>	-	-	-	-	-	-
Amulaceae						
<u>Terpsinoe</u>	0.43	-	-	-	-	-
Centricales						
Tabellariaceae						
<u>Tabellaria</u>	-	-	-	-	-	-
Meridionaceae						
<u>Meridion</u>	-	-	-	-	-	-
Piatomaceae						
<u>Piatoma</u>	-	-	-	-	-	-
Fragilariaceae						
<u>Fragilaria</u>	0.85	-	1.10	-	0.42	1.39
<u>Synedra</u>	-	-	-	-	-	-
Achnantheae						
<u>Cocconeis</u>	-	-	-	-	-	-
Naviculariaceae						
<u>Navicula</u>	-	-	-	-	0.85	-
<u>Gyrosigma</u>	-	-	-	-	-	-
<u>Stauroneis</u>	-	-	-	-	-	-
<u>Pinnularia</u>	-	-	-	-	-	-
Gomphonemataceae						
<u>Gomphonema</u>	-	-	-	-	-	-
Cymbellaceae						
<u>Cymbella</u>	-	-	-	-	-	-
Nitzschaceae						
<u>Nitzschia</u>	0.43	-	-	-	-	-
Surirellaceae						
<u>Surirella</u>	-	-	-	-	0.42	0.35
Family undetermined	-	-	-	-	-	0.35

Table B-6.--Continued

<u>Taxa</u>	<u>Location numbers</u>					
	37	38	39	40	41	42
Division: Chrysophyta (Bacillariophyceae)						
Centrales						
Coscinodiscaceae						
<u>Melosira</u>	6.19	15.02	6.95	14.84	79.43	6.26
<u>Cyclotella</u>	-	-	-	-	-	-
Chaetoceraceae						
<u>Attheya</u>	-	-	-	-	-	-
Anaulaceae						
<u>Terpsinoe</u>	0.29	0.41	-	-	-	0.57
Pennales						
Tabellariaceae						
<u>Tabellaria</u>	-	-	-	-	-	-
Meridionaceae						
<u>Meridion</u>	-	-	-	-	-	-
Diatomaceae						
<u>Diatoma</u>	-	-	-	-	-	-
Fragilariaceae						
<u>Fragilaria</u>	0.29	-	0.58	-	-	-
<u>Synedra</u>	-	-	-	-	-	-
Achnantheaceae						
<u>Cocconeis</u>	-	-	-	-	-	-
Naviculariaceae						
<u>Navicula</u>	-	0.41	-	-	-	-
<u>Gyrosigma</u>	-	-	-	-	-	-
<u>Stauroneis</u>	-	-	-	-	-	-
<u>Pinnularia</u>	-	-	-	-	-	-
Gomphonemataceae						
<u>Gomphonema</u>	-	-	-	-	-	-
Cymbellaceae						
<u>Cymbella</u>	-	-	-	-	-	-
Nitzchiaceae						
<u>Nitzschia</u>	-	-	-	-	1.65	-
Surirellaceae						
<u>Surirella</u>	-	-	-	-	-	-
Family undetermined	-	-	-	-	-	-

Table R-6.--Continued

<u>Taxa</u>	<u>Station Numbers</u>			
	43	44	45	46
Division: Chrysophyta (Bacillariophyceae)				
Centrales				
Coccinodiscaceae				
<u>Melosira</u>	10.09	2.28	1.27	1.99
<u>Cyclotella</u>	-	-	-	-
Chaetoceraceae				
<u>Attheya</u>	-	-	-	-
Anaulaceae				
<u>Terpsinoe</u>	-	-	-	0.28
Pennales				
Tabellariaceae				
<u>Tabellaria</u>	-	-	-	-
Meridionaceae				
<u>Meridion</u>	-	-	-	-
Diatomaceae				
<u>Diatoma</u>	-	-	-	-
Fragilariaceae				
<u>Fragilaria</u>	0.42	-	-	-
<u>Synedra</u>	-	-	-	-
Achnantheaceae				
<u>Cocconeis</u>	-	-	-	-
Naviculariaceae				
<u>Navicula</u>	-	-	-	-
<u>Gyrosigma</u>	0.42	-	-	-
<u>Stauroneis</u>	-	-	-	-
<u>Pinnularia</u>	-	-	-	-
Gomphonemataceae				
<u>Gomphonema</u>	-	0.21	-	-
Cymbellaceae				
<u>Cymbella</u>	-	-	-	-
Nitzchiaceae				
<u>Nitzschia</u>	-	-	-	0.28
Surirellaceae				
<u>Surirella</u>	-	-	-	-
Family undetermined	-	-	-	-

Table B-7.--Estimated number (organisms/liter) of cyanophytes collected from the Alabama River with an 80-micron aperture Wisconsin plankton net.

<u>Taxa</u>		<u>Station Numbers</u>					
		1	2	3	4	5	6
Division: Cyanophyta							
Chroococcaceae							
<u>Merismopedia</u>	I	-	-	-	-	-	-
	II	-	0.03	0.22	0.09	0.03	0.07
	III	-	-	-	-	0.02	-
Genus un-							
determined							
	I	-	-	-	-	-	-
	II	-	-	0.01	-	-	0.10
	III	-	-	-	-	-	-
Oscillatoriaceae							
<u>Arthrospira</u>	I	-	-	-	-	0.18	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lyngbya</u>	I	-	-	0.26	-	-	-
	II	-	0.03	0.07	-	0.12	-
	III	0.05	0.72	0.13	0.04	0.46	0.09
<u>Oscillatoria</u>	I	-	1.70	1.26	-	1.54	0.68
	II	0.36	0.03	1.57	1.79	0.09	0.71
	III	-	0.04	0.03	0.08	-	-
Nostocaceae							
<u>Anabaena</u>	I	-	0.46	0.18	2.45	1.30	1.19
	II	-	-	-	-	0.03	0.04
	III	-	-	-	-	-	-
<u>Nodularia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hammatoideaceae							
<u>Rhaphidiopsis</u>	I	-	-	-	-	-	0.08
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Stigonemataceae							
<u>Stigonema</u>	I	-	-	-	-	-	-
	II	0.05	-	-	-	-	-
	III	0.05	-	-	0.08	0.04	-
Dermocarpaceae							
<u>Stichosiphon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.14	-	-	-	-	-

I=August 9-25, 1977, samples

II=September 19-October 4, 1977, samples

III=October 31-November 17, 1977, samples

"-" = not encountered in collection

NOTE: Due to a computation error, plankton concentrations in this table were underestimated. To obtain the correct concentration, all values should be divided by .694.

Table B-7.--Continued

Taxa		Station Numbers					
		7	8	9	10	11	12
Division: Cyanophyta							
Chroococcaceae							
<u>Merismopedia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.05	0.03
	III	-	-	0.09	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	0.13	-	0.02	-	-	-
	III	-	-	-	-	-	-
Oscillatoriaceae							
<u>Arthrospira</u>	I	0.16	-	-	-	-	-
	II	-	0.53	-	-	-	-
	III	-	-	-	-	-	-
<u>Lyngbya</u>	I	-	0.13	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	0.08	-	-
<u>Oscillatoria</u>	I	-	0.13	-	0.15	-	-
	II	0.44	-	-	0.17	0.05	0.37
	III	-	-	-	0.04	-	0.06
Nostocaceae							
<u>Anabaena</u>	I	-	-	-	-	-	-
	II	0.13	-	-	0.02	-	-
	III	-	-	-	-	-	-
<u>Nodularia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hammatodeaceae							
<u>Rhaphidiopsis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Stigonemataceae							
<u>Stigonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Dermocarpaceae							
<u>Stichosiphon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-7.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		13	14	15	16	17	18
Division: Cyanophyta							
Chroococcaceae							
<u>Merismopedia</u>	I	0.71	-	-	-	-	-
	II	-	0.03	-	0.04	-	0.02
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	0.05	-
Oscillatoriaceae							
<u>Arthrospira</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lyngbya</u>	I	-	-	-	-	-	-
	II	-	-	-	0.04	-	-
	III	0.06	-	0.08	0.04	-	0.05
<u>Oscillatoria</u>	I	0.14	-	2.16	-	-	0.11
	II	0.10	0.13	-	0.08	0.04	0.04
	III	-	-	0.08	0.07	-	0.10
Nostocaceae							
<u>Anabaena</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Nodularia</u>	I	-	-	-	-	-	-
	II	-	-	-	0.11	-	-
	III	-	-	-	-	-	-
Hammatoideaceae							
<u>Rhaphidiopsis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Stigonemataceae							
<u>Stigonema</u>	I	-	-	-	-	-	-
	II	0.05	-	-	-	-	-
	III	-	-	-	-	-	-
Dermocarpaceae							
<u>Stichosiphon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-7.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		19	20	21	22	23	24
Division: Cyanophyta							
Chroococcaceae							
<u>Merismopedia</u>	I	-	-	15.56	-	3.31	-
	II	-	-	-	-	0.03	0.15
	III	0.09	-	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	0.20
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oscillatoriaceae							
<u>Arthrospira</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lyngbya</u>	I	0.20	-	-	-	-	-
	II	0.46	-	0.16	0.65	-	0.95
	III	0.09	0.04	0.49	0.38	0.43	-
<u>Oscillatoria</u>	I	0.02	0.04	0.16	0.07	-	0.14
	II	5.16	0.06	0.49	0.50	1.08	0.29
	III	0.09	0.11	-	0.13	-	-
Nostocaceae							
<u>Anabaena</u>	I	-	-	-	-	-	-
	II	0.09	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Nodularia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hamatoideaceae							
<u>Raphidiopsis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Stigonemataceae							
<u>Stigonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Dermocarpaceae							
<u>Stichosiphon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-7.--Continued

Taxa		Station numbers					
		25	26	27	28	29	30
Division: Cyanophyta							
Chroococcaceae							
<u>Merismopedia</u>	I	0.09	1.01	-	613.97	0.42	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	33.92	-	0.90	+
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oscillatoriaceae							
<u>Arthrospira</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	0.13	-	-
<u>Lyngbya</u>	I	-	-	-	-	-	-
	II	0.06	0.07	-	-	0.06	-
	III	-	0.38	0.34	0.88	0.24	0.37
<u>Oscillatoria</u>	I	-	0.34	-	-	0.13	+
	II	-	0.07	0.76	0.08	-	-
	III	0.24	-	-	-	-	-
Nostocaceae							
<u>Anabaena</u>	I	-	-	-	-	-	-
	II	-	-	-	-	0.12	-
	III	-	-	-	-	-	-
<u>Nodularia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hammatoideaceae							
<u>Raphidiopsis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Stigonemataceae							
<u>Stigonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	0.06	-	-	-	-
Dermocarpaceae							
<u>Stichosiphon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-7.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		31	32	33	34	35	36
Division: Cyanophyta							
Chroococcaceae							
<u>Merismopedia</u>	I	-	0.64	0.06	-	-	-
	II	0.51	-	-	-	-	0.19
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	0.06	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oscillatoriaceae							
<u>Arthrospira</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lyngbya</u>	I	-	0.09	-	-	-	-
	II	0.20	0.15	-	2.84	0.09	0.38
	III	-	0.20	-	-	0.07	0.24
<u>Oscillatoria</u>	I	0.12	0.27	-	0.44	-	-
	II	-	0.08	0.68	-	0.19	-
	III	-	0.05	0.06	-	-	0.06
Nostocaceae							
<u>Anabaena</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	0.07	-	-	-	-	-
<u>Nodularia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hammatoideaceae							
<u>Rhaphidiopsis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Stigonemataceae							
<u>Stigonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Dermocarpaceae							
<u>Stichosiphon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	0.15	-

Table B-7. (Continued)

Taxa		Station Numbers					
		37	38	39	40	41	4
Division: Cyanophyta							
Chroococcaceae							
<u>Merismopedia</u>	I	+	-	-	-	0.18	0.14
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Genus un-							
determined	I	-	-	-	-	-	0.43
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Oscillatoriaceae							
<u>Arthrospira</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
<u>Lyngbya</u>	I	-	-	-	-	-	-
	II	-	0.20	-	0.12	-	0.08
	III	-	0.35	0.10	0.31	-	0.10
<u>Oscillatoria</u>	I	+	0.10	0.25	0.08	0.18	0.14
	II	-	-	0.07	-	-	-
	III	-	0.07	0.10	-	-	-
Nostocaceae							
<u>Anabaena</u>	I	-	-	-	0.08	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	0.10
<u>Nodularia</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Hammatoideaceae							
<u>Rhaphidiopsis</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Stigonemataceae							
<u>Stigonema</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-
Dermocarpaceae							
<u>Stichosiphon</u>	I	-	-	-	-	-	-
	II	-	-	-	-	-	-
	III	-	-	-	-	-	-

Table B-7.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Division: Cyanophyta					
Chroococcaceae					
<u>Merismopedia</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Genus un-					
determined	I	-	-	0.20	-
	II	-	-	-	-
	III	-	-	-	-
Oscillatoriaceae					
<u>Arthrospira</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
<u>Lyngbya</u>	I	-	-	-	0.13
	II	0.11	0.33	0.28	0.06
	III	0.29	0.11	-	-
<u>Oscillatoria</u>	I	0.21	0.16	-	0.13
	II	-	0.07	0.03	-
	III	-	-	-	0.05
Nostocaceae					
<u>Anabaena</u>	I	-	-	-	-
	II	-	-	-	-
	III	0.07	-	0.04	-
<u>Nodularia</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Hammatoideaceae					
<u>Rhaphidiopsis</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-
Stigonemataceae					
<u>Stigonema</u>	I	-	-	-	-
	II	-	-	0.03	-
	III	-	-	-	-
Dermocarpaceae					
<u>Stichosiphon</u>	I	-	-	-	-
	II	-	-	-	-
	III	-	-	-	-

Table B-8.--Estimated number (organisms/liter) of minor phytoplankton taxa collected from the Alabama River with an 80-micron aperture Wisconsin plankton net.

Division: Chrysophyta

Chrysophyceae

Ochromonadaceae

Uroglenopsis

II: 12(0.03); III: 32 (0.10), 33(0.19), 36(0.12), 38(0.07), 40(0.31), 44(0.04)

Dinobryon

III: 20(0.28)

Xanthophyceae

Stipidococcaceae

Stipidococcus

II: 1(0.02), 18(0.02); III: 1(0.05), 7(0.04), 36(0.24)

Division: Pyrrophyta (Dinophyceae)

Ceratiaceae

Ceratium

III: 19(0.09), 22(0.06), 24(0.16), 26(0.06), 27(0.06), 28(0.25), 29(0.06)

Division: Euglenophyta

Euglenaceae

Phacus

I: 3(0.09), 24(0.58); II: 3(0.01), 23(0.61); III: 24(0.16)

Trachelomonas

I: 2(0.15), 13(0.14), 19(0.02), 28(1.41), 31(0.19), 32(0.50), 38(0.05), 40(0.08), 41(0.18); II: 3(0.01), 5(0.03), 7(0.06), 15(0.09), 19(0.09), 23(0.03), 27(132.30), 30 (0.05), 39(0.04); III: 1(0.05), 4(0.04), 22(0.06)

Euglena

I: 5(0.06); II: 23(1.93), 35(0.09), 36(0.19); III: 20(0.04), 28(0.13)

Explanation of II: 12(0.03)--II = run number, 12 = station number, 0.03 = estimated number of organisms/liter of water sampled.

I--August 9-25, 1977, samples

II--September 19-October 4, 1977, samples

III--October 31-November 17, 1977, samples

NOTE: Due to a computation error, plankton concentrations in this table were underestimated. To obtain the correct concentration, all values should be divided by .694.

Table B-9.--Estimated liters of water sampled with an
80-micron aperture Wisconsin plankton net at 46 Alabama
River stations, August through December 1977.

<u>Station number</u>	<u>I</u>	<u>II</u>	<u>III</u>
1	30	154	50
2	38	154	77
3	43	154	70
4	61	77	46
5	51	154	127
6	51	154	97
7	51	154	135
8	51	154	127
9	51	154	62
10	51	154	154
11	51	154	127
12	51	154	154
13	68	154	154
14	77	124	135
15	75	77	77
16	201	97	154
17	79	154	154
18	154	154	154
19	118	154	154
20	35	154	154
21	105	154	154
22	131	154	154
23	58	154	154
24	127	77	77
25	97	154	154
26	143	116	116
27	154	154	154
28	154	58	58
29	154	154	154
30	178	154	154

I=August 9-25, 1977, samples

II=September 19-October 17, 1977, samples

III=October 31-November 17, 1977, samples

Table B-9 -- Continued.

<u>Station number</u>	<u>I</u>	<u>II</u>	<u>III</u>
31	154	154	154
32	154	154	154
33	154	97	97
34	15	19	20
35	56	154	154
36	58	154	97
37	154	154	154
38	120	154	154
39	116	154	154
40	116	154	154
41	31	39	39
42	66	116	116
43	97	116	116
44	39	154	154
45	35	154	154
46	54	154	154

APPENDIX C

Benthic Macroinvertebrate Data

Table C-1.-- Insects (n/m²) collected in Ponar samples from the Alabama River.

Taxa		Station Numbers											
		1			2			3			4		
		L	M	R	L	M	R	L	M	R	L	M	R
Order Sphenoptera													
Sphenopteridae													
<i>Paranannia</i>	I	19.1	-	19.1	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenonema</i>	I	-	30.2	-	-	-	-	57.3	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Sphenoptera													
<i>Paranannia</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	57.3	-	-	-	-	-	19.1	-	401.1	171.9	240.3	267.4
	III	-	-	-	-	-	-	-	-	-	57.3	534.8	30.2
<i>Paranannia</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Cerambycidae													
<i>Cerambyx</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	1104.2	30.2	-	229.2	-	30.2	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Cerambycidae													
<i>Stenonema</i>	I	-	-	30.2	95.5	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Tricorythidae													
<i>Tricorythodes</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Polysphinctidae													
<i>Polysphincta</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Hemipteridae													
<i>Hemiptera</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	19.1	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	19.1	-	-	19.1	-	-	-	-	-
Coccinellidae													
<i>Coccinella</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	210.1	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Staphylinidae													
<i>Staphylinus</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Tricorythidae													
<i>Tricorythodes</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	57.3	-	19.1	57.3	19.1	-	-	-	-	-	-	19.1
	III	-	-	-	-	-	-	-	-	-	-	-	-
Order Odonata													
Zygoptera													
<i>Zygoptera</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	19.1	-	-	-	-	-	-	-	-	-	19.1
	III	-	-	-	-	-	-	-	-	-	-	-	-
Anisoptera													
<i>Anisoptera</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Libellulidae													
<i>Libellula</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Coenagrionidae													
<i>Coenagrion</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Zygoptera													
<i>Zygoptera</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Zygoptera													
<i>Zygoptera</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Zygoptera													
<i>Zygoptera</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

L=left bank sample looking downstream
M=mid-stream sample
R=right bank sample looking downstream

I=August 9-25, 1977, samples
II=September 19-October 4, 1977, samples
III=October 31-November 17, 1977, samples
"-="not encountered in collection

NOTE: Due to a computation error, benthic concentrations for August were underestimated. To obtain the correct concentration, multiply August values by 2.25.

Table C-1.--Continued

Taxa	Station Numbers																	
	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Order Ephemeroptera																		
Neptageniidae																		
<u>Neptagenia</u>	I																	
	II					19.1	19.1											
	III																	
<u>Siphonura</u>	I																	
	II																	
	III																	
Ephemeridae																		
<u>Hexagenia</u>	I																	
	II																	
	III		515.7				95.5			191.0						57.1		
<u>Pentagenia</u>	I																	
	II																	
	III																	
Caenidae																		
<u>Caenis</u>	I																	
	II																	
	III			19.1					19.1									19.1
Siphonuridae																		
<u>Siphonura</u>	I																	
	II																	
	III																	
Tricoxetidae																		
<u>Tricoxetodes</u>	I																	
	II																	
	III																	
Polystreptidae																		
<u>Polystreptus</u>	I																	
	II																	
	III																	
Neptageniidae																		
<u>Neptagenia</u>	I																	
	II																	
	III																	
Caenidae																		
<u>Caenis</u>	I																	
	II																	
	III															95.5		
Siphonuridae																		
<u>Siphonura</u>	I																	
	II																	
	III																	
Tricoxetidae																		
<u>Tricoxetodes</u>	I																	
	II		19.1				19.1	19.1	76.4	19.1	76.4		19.1					19.1
	III																	
Order Odonata																		
Gomphidae																		
<u>Gomphus</u>	I																	
	II		19.1															
	III																	
Aeshnidae																		
<u>Aeshna</u>	I																	
	II																	
	III																	
<u>Coryphaea</u>	I																	
	II																	
	III																	
Coenagrionidae																		
<u>Coenagrion</u>	I																	
	II															19.1		
	III																	
Aeshnidae																		
<u>Aeshna</u>	I																	
	II																	
	III																	
Gomphidae																		
<u>Gomphus</u>	I																	
	II																	
	III																	
Order Neuroptera																		
Syrphidae																		
<u>Syrphus</u>	I																	
	II																	
	III																	
Syrphidae																		
<u>Syrphus</u>	I																	
	II																	
	III																	

Table C-1.--Continued

Taxa		Station Numbers																		
		13			14			15			16			17			18			
Order	Family	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	
Order Ephemeroptera	Heptageniidae																			
	Heptagenia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Stenonema	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Ephemeridae																			
	Hexagenia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	131.7	-	-	121.9	95.5	496.6	57.3	-	-	247.8	131.7	1086.7	152.8	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Pentagenia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Caenidae																			
Caenis	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Siphonuridae																				
Siphonura	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tricorythidae																				
Tricorythodes	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Polystoechiidae																				
Polystoechus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Heptageniidae																				
Heptagenia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Caenidae																				
Caenis	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	111	95.5	-	114.5	19.1	-	19.1	-	-	-	248.3	-	57.3	-	-	191.1	-	19.1	-	
Siphonuridae																				
Siphonura	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tricorythidae																				
Tricorythodes	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Order Odonata	Lamphidae																			
	Lamphus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Aeshnidae																			
	Aeshna	1	-	-	-	-	-	19.1	19.1	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Coryphaea	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Zygopteridae																			
	Zygoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Aeshnidae																				
Aeshna	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Zygopteridae																				
Zygoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Order Neuroptera	Syrphidae																			
	Syrphus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Stenonema	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table C-1.--Continued

Taxa		Station Numbers																	
		19			20			21			22			23			24		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Order: Ephemeroptera																			
Heptageniidae																			
Heptagenia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stenonema	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	18.2	18.2	19.1	57.3	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ephemeridae																			
Hexagenia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	57.3	-	-	-	-	-
Pentagenia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caenidae																			
Caenis	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	19.1	-	57.3	57.3	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siphonuridae																			
Siphonura	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tricorythidae																			
Tricorythodes	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polymitarcidae																			
Tortopus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heptageniidae																			
Heptagenia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caenidae																			
Caenis	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Siphonuridae																			
Siphonura	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tricorythidae																			
Tricorythodes	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order: Odonata																			
Gomphidae																			
Gomphus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aeshnidae																			
Epischnura	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Goryphaechna	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coenagrionidae																			
Coenagrion	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aeshnidae																			
Aeshna	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gomphidae																			
Gomphus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order: Neuroptera																			
Sialidae																			
Sialis	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sialidae																			
Sialis	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

Taxa	Station Numbers														
	25			26			27			28			29		
	L	N	R	L	N	R	L	N	R	L	N	R	L	N	R
Order Ephemeroptera															
Heptageniidae															
Heptagenia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stenonema	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ephemeridae															
Heptagenia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pentagenia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caenidae															
Caenis	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	19.1	-	19.1	-	-	-	-	-	-	19.1	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stiphonuridae															
Stiphonurus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichoptera															
Trichoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polyneptidae															
Polyneptis	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hemipteridae															
Hemipteridae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cicadidae															
Cicada	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	152.0	-	19.1	-	-	-	-	-	19.1	-	-	-	19.1	-
Stenonuridae															
Stenonurus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tricorythidae															
Tricorythid	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Odonata															
Libellulidae															
Libellula	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Aeshnidae															
Aeshna	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zygoptera															
Zygoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gomphidae															
Gomphus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Zygoptera															
Zygoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Libellulidae															
Libellula	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	19.1	-	19.1	-	-	-	-	-	19.1	-	-	19.1	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Hymenoptera															
Chalcididae															
Chalcididae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ichneumonidae															
Ichneumonidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Braconidae															
Braconidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

Taxa	Station Numbers																	
	11			12			13			14			15			16		
	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Order Ephemeroptera																		
Heptageniidae																		
Heptagenia	1																	
	11																	
	111																19.1	
Stenonema	1																	
	11																	
	111																	
Ephemeridae																		
Heagenia	1																	
	11																	
	111																	
Pentagenia	1																	
	11																	
	111																	
Caenidae																		
Caenis	1																	
	11																	
	111		76.4				111.7										78.2	
Siphonuridae																		
Siphonurus	1																	
	11																	
	111																	
Tricorythidae																		
Tricorythodes	1																	
	11																	
	111																	
Polymitarcidae																		
Tortopus	1																	
	11																	
	111																	
Heptageniidae																		
Heptagenia	1																	
	11																	
	111																	
Caenidae																		
Caenis	1																	
	11																	
	111		19.1	19.1			57.3		76.4			19.1						
Siphonuridae																		
Siphonurus	1																	
	11																	
	111																	
Tricorythidae																		
Tricorythodes	1																	
	11																	
	111																	
Order Odonata																		
Gomphidae																		
Gomphus	1																	
	11																	
	111																	
Aeshnidae																		
Epieschna	1		57.3												19.1			19.1
	11																	
	111																	
Coryphaea	1																	
	11																	
	111																	
Coenagrionidae																		
Coenagrion	1																	
	11																	
	111																	
Aeshnidae																		
Aeshna	1																	
	11																	
	111							19.1										
Gomphidae																		
Gomphus	1																	
	11															19.1		
	111																	
Order Neuroptera																		
Sisyridae																		
Sisyra	1																	
	11																	
	111																	
Sisyridae																		
Sisyra	1																	
	11																	
	111																	

Table C-1.--Continued

Taxa	Station Numbers														
	37			38			39			40			41		
	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Order Ephemeroptera															
Heptageniidae															
Heptagenia	1														
11															
111															
Stenonema	1														
11															
111															
Ephemeridae															
Heugensia	1														
11															
111															
Pentagenia	1														
11										19.1					
111															
Caenidae															
Caenis	1														
11															
111	19.1		18.2												
Siphonuridae															
Siphonuraa	1														
11															
111															
Tricorythidae															
Tricorythodes	1														
11										19.1					
111															
Polymitacidae															
Polymita	1														
11															
111															
Heptageniidae															
Heptagenia	1														
11															
111													19.1		
Caenidae															
Caenis	1														
11															
111										19.1		19.1			
Siphonuridae															
Siphonuraa	1														
11															
111															
Tricorythidae															
Tricorythodes	1														
11															
111															
Order Odonata															
Gomphidae															
Gomphus	1	19.1									19.1				19.1
11															
111															
Aeshnidae															
Epiacantha	1														
11															
111															
Coryphaea	1														
11															
111															
Coenagrionidae															
Coenagrion	1														
11															
111															
Aeshnidae															
Aeshna	1														
11							19.1					19.1			
111															
Gomphidae															
Gomphus	1														
11															
111															
Order Neuroptera															
Syrphidae															
Syrphoctonus	1														
11															
111															
Syrphidae															
Syrphoctonus	1														
11															
111															

Table C-1.--Continued

Taxa		Station Numbers										
		1	2	3	4	5	6	7	8	9	10	11
Order Ephemeroptera												
Heptageniidae												
Hexagenia	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Stenonema	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Ephemeridae												
Hexagenia	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Pentagenia	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Caenidae												
Caenis	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Siphonuridae												
Siphonurus	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Tricorythidae												
Tricorythodes	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Polvitracidae												
Tortopus	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Heptageniidae												
	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Caenidae												
	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	19.1	-	19.1	-	-	-	-	-	-	-
Siphonuridae												
	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Tricorythidae												
	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Order Odonata												
Gomphidae												
Gomphus	I	-	-	-	-	-	-	-	-	19.1	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Aeshnidae												
Episaccha	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Coryphaea	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Coenagrionidae												
	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Aeshnidae												
	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Gomphidae												
	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Order Neuroptera												
Stenobothridae												
Stenobothrus	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-
Stenobothridae												
	I	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

[illegible]

Table C-1.—Continued

Table C-1.--Continued

Taxa			Station Numbers																	
			13			14			15			16			17			18		
	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R		
Order Diptera																				
Chironomidae																				
<u>Acanthocyclops</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Pseudochironomus</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Fraxetochironomus</u>	1	-	-	-	19.1	-	-	-	-	-	57.3	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Streblochironomus</u>	1	-	-	-	19.1	19.1	-	-	-	-	-	19.1	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Cladocyclops</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Streblochironomus</u>	1	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Chironomus</u>	1	-	-	-	-	19.1	38.2	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Polydora</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Procladius</u>	1	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Alpheidae</u>	1	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Chironomus</u>	1	-	-	-	19.1	38.2	-	-	-	-	-	19.1	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Chironomus</u>	1	-	-	-	-															
	11	-	-	-	-															
	111	-	-	-	-															
<u>Tipulidae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Psychodidae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Blephariceridae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Culicidae</u>																				
<u>Anopheles</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Dixidae</u>																				
<u>Paratania</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Simuliidae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Ceratopogonidae</u>																				
<u>Culicoides</u>	1	-	-	-	19.1	-	-	38.2	-	-	19.1	-	38.2	-	-	-	-	-		
	11	76.4	-	-	38.2	-	19.1	-	-	95.5	-	-	19.1	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Sciaridae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Chironomidae</u>																				
	1	-	-	-	-	-	-	-	-	38.2	-	-	-	-	95.5	-	-	-		
	11	133.7	57.3	38.2	114.5	19.1	-	229.2	114.5	248.3	95.5	19.1	171.9	38.2	19.1	229.2	76.4	114.5		
	111	152.8	-	-	229.2	57.3	439.3	420.2	229.2	57.3	133.7	-	152.8	19.1	-	401.1	19.1	19.1		
<u>Ceratopogonidae</u>																				
<u>Chironomidae</u>																				
	1	-	-	-	-	-	-	-	-	-	-	-	54.3	-	19.1	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-		
	111	-	-	-	-	95.5	-	57.3	-	-	-	-	19.1	19.1	-	-	-	-		
<u>Ceratopogonidae</u>																				
	1	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	19.1	-	-	-	-	-	-	57.3	-	-	-	-	-		
	111	38.2	-	-	19.1	38.2	19.1	-	-	-	-	-	19.1	-	-	-	-	-		

Table C-1.--Continued

Taxa		Station Numbers														
		19			20			21			22			23		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Order: Diptera																
Chironomidae																
<i>Streblospio</i>	1	-	-	-	-	-	-	-	-	57.3	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pseudochironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cryptochironomus</i>	1	-	-	-	-	-	-	-	-	-	57.3	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Streblospio</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gnathochironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Streblospio</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Glyptotendipes</i>	1	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pericoma</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pericoma</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Alibonnia</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Coleoceros</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Polynesiella</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Tanytarsus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tipulidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psychodidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blattellidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Culicidae																
<i>Anopheles</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dixidae																
<i>Paratya</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Simuliidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ceratopogonidae																
<i>Palpomyia</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	58.2	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Scleridae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chironomidae	1	-	-	133.7	-	477.5	171.9	19.1	-	611.2	19.1	-	19.1	57.3	15.1	-
	11	-	-	-	30.2	439.1	19.1	30.2	57.3	19.1	30.2	133.7	-	76.4	30.2	30.2
	111	-	-	30.2	30.2	95.5	114.6	114.6	-	-	-	-	-	19.1	19.1	95.5
Culicidae	1	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
<i>Chaoborus</i>	11	-	-	-	-	30.2	-	-	-	-	-	-	-	-	-	19.1
	111	-	-	-	-	-	19.1	-	-	-	19.1	-	-	19.1	-	-
Ceratopogonidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

[illegible]

Table C-1.--Continued

Taxa	Station Numbers																	
	17			18			19			20			41			42		
	L	M	K	L	M	K	L	M	K	L	M	K	L	M	K	L	M	K
Order Diptera																		
Chironomidae																		
<i>Xenochironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pseudochironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Ceratopogonidae</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Simuliidae</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gnathochironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stethochironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Chironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pedicia</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Procladius</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Allochironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Hydrochironomus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Euboreus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Limnocalanus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tipulidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psychodidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Blepharidoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Culicidae																		
Anopheles	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1
Dixidae																		
Parasit	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Simuliidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ceratopogonidae																		
<i>Palpomyia</i>	1	76.4	19.1	38.2	76.4	-	-	38.2	38.2	19.1	-	19.1	38.2	-	-	-	-	210.1
11	153.7	19.1	-	19.1	-	-	57.3	-	-	-	-	-	152.8	38.2	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	19.1	-	-
Scleridae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chironomidae	1	17.1	-	38.2	76.4	38.2	-	76.4	19.1	38.2	19.1	114.6	362.9	248.3	191.0	807.2	-	248.3
11	52.0	-	19.1	19.1	-	-	76.4	19.1	38.2	19.1	95.5	76.4	229.2	57.3	133.1	607.0	114.6	114.6
111	706.7	-	191.0	171.9	19.1	267.4	248.3	-	171.9	133.7	-	267.4	76.4	601.4	280.7	57.3	-	171.9
Culicidae																		
<i>Culiseta</i>	1	38.2	-	-	57.3	19.1	-	57.3	-	38.2	-	-	19.1	38.2	114.6	76.4	-	-
11	-	19.1	-	-	76.4	-	-	-	-	57.3	38.2	57.3	19.1	-	-	-	95.5	-
111	57.3	-	-	-	-	-	-	-	-	-	-	-	-	248.3	-	-	-	-
Ceratopogonidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	706.7	-	420.2	171.9	-	152.8	76.4	-	76.4	152.8	-	286.5	19.1	19.1	-	-	-	76.4

Table C-1.--Continued

Taxa		63			64			65			66		
		L	H	R	L	H	R	L	H	R	L	H	R
Order Diptera													
Chironomidae													
<i>Isonychia</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pseudochironomus</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Ectopochironomus</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenochironomus</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Gouldichironomus</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stictochironomus</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Glyptotendipes</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Pantaneura</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Procladius</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Alabesovia</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cricotopus</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Polypedilum</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
<i>Tanytarsini</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Tipulidae	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Psychodidae	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	19.1	-	-	-	-	-
Staphylinidae	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Calicidae	I	-	-	-	-	-	-	-	-	-	-	-	-
<i>Aschheia</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Dixidae	I	-	-	-	-	-	-	-	-	-	-	-	-
<i>Paradina</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Simuliidae	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Ceratopogonidae	I	-	-	-	-	-	-	-	-	-	-	-	-
<i>Falsopsis</i>	I	-	19.1	76.4	-	-	-	38.2	-	-	57.3	133.7	-
	II	439.3	19.1	-	-	19.1	-	-	19.1	-	-	19.1	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Sciaridae	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Chironomidae	I	-	19.1	229.2	-	38.2	38.2	133.7	-	-	19.1	-	38.2
	II	191.0	38.2	152.8	-	114.6	-	-	38.2	19.1	-	-	-
	III	286.5	19.1	210.1	-	57.3	57.3	-	-	-	-	19.1	19.1
Calicidae	I	-	38.2	-	-	-	-	76.4	-	-	57.3	-	19.1
<i>Chasmodon</i>	I	19.1	19.1	19.1	-	-	-	19.1	-	-	-	-	19.1
	II	-	-	-	-	-	-	-	-	-	-	-	-
Ceratopogonidae	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	76.4	-	38.2	-	-	133.7	19.1	-	-	-	38.2	57.3

Table C-1.--Continued

Taxa		Station Numbers															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Order Coleoptera Family Curculionidae Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Anthrenus	1	.	.	19.1	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Anthrenus	1	.	.	19.1	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Order Coleoptera Family Curculionidae Anthrenus	1	.	.	.	19.1	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	11	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Order Coleoptera Family Curculionidae Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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Order Coleoptera Family Curculionidae Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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Order Coleoptera Family Curculionidae Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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Order Coleoptera Family Curculionidae Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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Order Coleoptera Family Curculionidae Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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	111	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Order Coleoptera Family Curculionidae Anthrenus	1	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
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Table C-1.--Continued

[illegible]

Table C-1.--Continued

Taxa	Station Numbers																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	12	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	131	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Artemisia tridentata Gray	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1												

Table C-1.--Continued

Taxa	Station Numbers																							
	19			20			21			22			23			24								
	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Order Coleoptera																								
Ptilodactylidae																								
Anchicaris	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Achnicaris	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lacnidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyticidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	19.1	-	-	-	-	-	38.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhipididae	1	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysomelidae	1	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydraenidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Collembola																								
Isotomidae																								
Isotoma	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Isotomidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hemiptera																								
Scutellaridae																								
Scutella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.2	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cixiidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-
Order Homoptera																								
Delphacidae	1	-	-	-	-	-	-	-	-	-	-	38.2	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Psocoptera																								
Lepidoptera																								
Lepidoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Thysanoptera																								
Thysanoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Odonoptera																								
Libellulidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Tenebrionidae																								
Tenebrionidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

[illegible]

Table C-1.--Continued

Taxa	Station Numbers																	
	31			32			33			34			35			36		
	L	M	R	L	M	R	L	M	R	L	M	A	L	M	R	L	M	R
Order Coleoptera																		
Ptilodactylidae																		
Anchylidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Achyrodes	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1
Cupendidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dytiscidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Halplidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Thysanoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroscaphidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Hymenoptera																		
Ichneumonidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cteniscidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Hemiptera																		
Hemiptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Coreidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Homoptera																		
Delphacidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Hymenoptera																		
Aphididae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Thysanoptera																		
Thysanoptera	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Orthoptera																		
Tettigonidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Trichoptera																		
Hydropsychidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

Taxa		Station Numbers																	
		37			38			39			40			41			42		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Order Coleoptera																			
Psephenidae																			
Anchirus		1	-	-	-	-	-	-	-	-	-	-	-	18.3	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ampeliscidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crematidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dolichopidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Haliplidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chrysomelidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Curculionidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydrophilidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dytiscidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
		111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae		1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

Taxa	Station Numbers											
	63			64			65			66		
	L	H	R	L	H	R	L	H	R	L	H	R
Order Coleoptera												
Psephenidae												
<i>Psephenus</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Ampelidae												
<i>Ampela</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Cupedidae												
<i>Cupedia</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Dytiscidae												
<i>Dytiscus</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Psephenidae												
<i>Psephenus</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Chrysomelidae												
<i>Chrysomela</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Hydraenidae												
<i>Hydraena</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Psylliidae												
<i>Psyllia</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Order Collembola												
Isotomidae												
<i>Isotoma</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Isotomidae												
<i>Isotoma</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Order Hemiptera												
Coreidae												
<i>Corea</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Coreidae												
<i>Corea</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Order Homoptera												
Delphacidae												
<i>Delphacella</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Order Phasmatodea												
Phasmatidae												
<i>Phasmatodea</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Order Thysanoptera												
Phlaenothripidae												
<i>Phlaenothrips</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Order Orthoptera												
Tettigonidae												
<i>Tettigonia</i>	1	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-
Order Tricoptera												
Hydroptilidae												
<i>Hydroptila</i>	1	-	-	-	-	-	19.1	-	26.4	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

Taxa		Station Numbers																	
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Myrmecidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chironomidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ceratophyllidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overthrips	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-
Scutigeridae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phyllocnistidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phyllocnistidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhyacophilidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptoceridae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-
Lepidostomatidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Limnephilidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psychomyiidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhyacophilidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phyllocnistidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroptilidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	401.1	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-
Hydropsychidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
Tritoptera	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(Unidentified)	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued[illegible]

Table C-1.--Continued

Taxa		Station Numbers																	
		11			12			13			14			15			16		
		L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Hydroptilidae																			
Hydroptilidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Choristidae																			
Choristidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Choristidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Stenophyllidae																			
Stenophyllidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phyllocnistidae																			
Phyllocnistidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phyllocnistidae																			
Phyllocnistidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Brachymeriidae																			
Brachymeriidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Leptocryptidae																			
Leptocryptidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lepidocryptidae																			
Lepidocryptidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lianophyllidae																			
Lianophyllidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Psychomyiidae																			
Psychomyiidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rhyacophyllidae																			
Rhyacophyllidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phyllocnistidae																			
Phyllocnistidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroptilidae																			
Hydroptilidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	19.1	-	19.1	-	-	-	-	19.1	19.1	-	-	-	19.1	-	-	-	-	-
Hydroptilidae																			
Hydroptilidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tetropora																			
(Unidentified)	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

Taxa		Station Numbers																	
		19			20			21			22			23			24		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Hydroptilidae																			
Hydroptilidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chironomidae																			
Chironomidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroptilidae																			
Hydroptilidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Chironomidae																			
Chironomidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroptilidae																			
Hydroptilidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phlebotominae																			
Phlebotominae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phlebotominae																			
Phlebotominae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroptilidae																			
Hydroptilidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroptilidae																			
Hydroptilidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hydroptilidae																			
Hydroptilidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Trichoptera																			
(identified)	1	-	-	-	-	19.1	-	19.1	-	19.1	19.1	-	19.1	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

Taxa		Station Numbers																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	15.1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Acanthamoeba	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-1.--Continued

Taxa		Station Numbers																	
		70			82			83			84		85				86		
		H	R	L	H	R	L	H	R	L	H	P	L	H	R	L	H	R	
Hydrocossidae																			
<i>Hydrocossa</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Glyptotendipedae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	
Eubosciniidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ambystomidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Synanthomyidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Zygoptera																			
<i>Pseudocoryphella</i>																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Phaneropteridae																			
<i>Ctenophanes</i>																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Bracon phytoeciae																			
<i>Phytoecia</i>																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Dacnusa																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lepidostomatidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lissonota																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Psychomyiidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	133.7	-	-	-	-	-	-	-	-	-	
Phycophyllidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Philopotamidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Hydroptilidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	19.1	38.2	57.3	-	-	-	-	19.1	-	38.2	-	-	-	-	-	-	-	
Hydropsychidae																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Tricoptera																			
(Unidentified)																			
	I	19.1	-	-	-	-	-	-	-	19.1	-	-	-	95.5	38.2	-	-	-	
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Table C-1.--Continued

Taxa		Station Numbers															
		17		18		19		20		21		22		23		24	
Hymenoptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Coleoptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Diptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lepidoptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hemiptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Orthoptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Blattellidae	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Formicidae	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Dermaptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lepidoptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Limnephilidae	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Psychomyiidae	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rhyacophylidae	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Philopotamidae	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Hydropsychidae	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Trichoptera	I	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	II	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
	III	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Table C-1.--Continued

Taxa				Station Numbers											
				63			64			65			66		
		L	H	R	L	H	R	L	H	R	L	H	R		
<u>Hymenoptera</u>															
<u>Mesochoridae</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Mesochorini</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Oenochorini</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Exochorini</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Stenobothriini</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>															
	1	-	-	-	-	-	-	-	-	-	-	-	-		
	11	-	-	-	-	-	-	-	-	-	-	-	-		
	111	-	-	-	-	-	-	-	-	-	-	-	-		
<u>Phaenocarpa</u>															
<u>Phaenocarpa</u>						</									

Table C-2.-- Annelids (n/m²) collected in Ponar samples from the Alabama River.

Taxa		Station Numbers																	
		1			2			3			4			5			6		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Class Oligochaeta																			
Amphicercidae																			
Amphicercus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	19.1	-	19.1	-	19.1	19.1	57.3	-	-	19.1	171.9	57.3	-	-	38.2	-
Caprellidae																			
Caprellia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	38.2	-	-	-	-	114.5	210.1	-	-	-	-	-
Lumbricidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	57.3	-	-	-	-	-	-	-	-	-	133.7	-	133.7
Lumbricina	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	95.3	-	-	-	-	-	-	57.3	57.3	-	-	-	19.1	-	-	-
Kinorhynch	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57.3	-	19.1
Enchytraeidae																			
Enchytraeus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Endeidae																			
Ende	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	19.1	76.4	19.1	19.1	477.5	19.1	-	57.3	286.5	95.3	57.3	439.3	38.2	-	114.6	428.2	133.7
							133.7												
Subfamily																			
Amphicercus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	114.5	38.2	19.1	-	-	133.7	-	286.5	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Amphicercus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	19.1	-	19.1	287.4	-	19.1	38.2	-	-	19.1	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Branchiura																			
Branchiura	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	19.1	-	-	57.3	-	-	687.6	363.8	95.3	191.9	57.3	-	-	114.6	536.8	-
Lumbricidae																			
Lumbricina	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	57.3	-	-	-	19.1	-	-	-	-	-	-	-	-	19.1	-	19.1
Polychaeta																			
Polychaeta	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	57.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	171.9	19.1	-	-	76.4	19.1	-
Polychaeta																			
Polychaeta	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	19.1	152.8	38.2	152.8	-	57.3	439.3	287.4	367.4	439.3	477.5	611.2	687.6	95.3	848.4	420.2
	III	-	-	19.1	38.2	-	287.4	133.7	38.2	-	458.4	210.1	76.4	95.3	76.4	95.3	57.3	286.5	133.7
Lumbricina																			
Lumbricina	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polychaeta																			
Polychaeta	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	38.2	-	-	-	76.4	-	-	76.4	-	-	38.2	76.4
Class Hirudinea																			
Hirudinea	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Lophotrochozoa																			
Lophotrochozoa	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Mollusca																			
Mollusca	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Polychaeta																			
Polychaeta	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

L=left bank sample looking downstream
M=mid-stream sample
R=right bank sample looking downstream

I=August 9-25, 1977, samples
II=September 19-October 4, 1977, samples
III=October 31-November 17, 1977, samples
"-="not encountered in collection

NOTE: Due to a computation error, benthic concentrations for August were underestimated. To obtain the correct concentration, multiply August values by 2.25.

Table C-2.--Continued

Taxa		Station Numbers											
		7			8			9			10		
		L	M	R	L	M	R	L	M	R	L	M	R
Class Oligochaeta													
Acoelomatidae													
<i>Aesopus</i>	1	-	-	-	-	-	19.1	-	95.5	-	19.1	-	-
	11	-	-	-	-	-	-	-	-	-	19.1	19.1	19.1
	111	-	-	-	-	-	-	-	-	-	-	-	-
Nepiidae													
<i>Nepiopsis</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	19.1	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Lumbricidae													
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	515.2	-	-	-	-	-
	111	-	-	-	-	-	19.1	95.5	-	-	-	19.1	-
<i>Lumbricus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	19.1	-	-	19.1	-	-	18.2	19.1
<i>Kingidiana</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	19.1	-	-	-	-	-	-
<i>Polydora</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Naididae													
<i>Naidia</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	19.1	-	38.2	210.1	19.1	-	-	19.1	-	-	114.6	19.1
	111	-	-	-	38.2	19.1	-	-	-	-	-	-	19.1
Tubificidae													
<i>Tubificoides</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
<i>Bothrioneurus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	38.2	280.5	-	19.1	-	-	343.8	-	-	-	57.3	19.1
	111	-	-	-	-	-	-	-	-	-	-	-	324.7
<i>Branchiura</i>	1	-	-	-	-	-	19.1	2081.9	57.3	-	-	19.1	19.1
	11	133.7	915.9	95.5	534.8	343.8	133.7	2081.9	57.3	-	76.4	229.2	57.3
	111	76.4	267.4	-	-	-	343.8	-	-	76.4	477.5	95.5	95.5
<i>Limnodrilus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	19.1	-	-	114.5	38.2	-	-	-	-	-	-	76.4
<i>Palaemon</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	19.1
<i>Tubifex</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	1508.9	1146.0	819.5	1012.3	324.7	-	114.6	19.1	248.3	-	725.6	133.7
	111	648.5	95.5	-	725.8	897.7	1680.8	152.8	-	191.0	114.6	687.6	19.1
	111	133.7	248.3	-	133.7	38.2	152.8	57.3	-	-	114.6	114.6	343.8
Lumbricidae													
<i>Lumbricus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Tubificidae													
<i>Tubificoides</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	343.8	-	-	-	-	-	-	-	-	-	-
	111	382.0	-	-	57.3	-	477.5	573.0	-	152.8	171.9	114.6	1050.5
Class Hirudinea													
<i>Hirudo</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Class Sipunculidae													
<i>Sipunculus</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	19.1	-	-	19.1	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Class Nereididae													
<i>Nereis</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Class Eteimidae													
<i>Eteima</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Class Eteimidae													
<i>Eteima</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-

Table C-2.--Continued

[illegible]

Table C-2.--Continued

Taxa	Station Numbers																							
	10			20			21			22			23			24			25			26		
	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Class Oligochaeta																								
Aelosomatidae																								
<u>Aelosoma</u>	1	-	-	-	-	19.1	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	19.1	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Nephteridae																								
<u>Nephteris</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumbriculidae																								
<u>Species A</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Lumbriculus</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	95.5	19.1	210.1	-	-	-	-	210.1	-	-	114.6	-	-	57.3	-	-	-	-	-
<u>Aricadigma</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Polidrilus</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Valdidae	1	-	-	-	38.2	-	19.1	-	-	-	-	38.2	19.1	19.1	-	-	-	-	-	-	19.1	-	-	-
	11	-	-	-	19.1	-	-	-	38.2	-	-	266.5	-	-	38.2	-	-	38.2	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	57.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tubificidae																								
<u>Aradrilus</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Bothrioneurum</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	19.1	-	-	212.1	-	-	-
	111	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-
<u>Francheria</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	133.7	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	19.1	-	-	-	-	-	133.7	-	-	57.3	-	-	229.2	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	401.1	-	-	-	-	-	-
<u>Limnodrilus</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	19.1	57.3	19.1	-	-	-	-	-	-	-	-	-	133.7	-	-	-	-	19.1	-
<u>Pegeoia</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	38.2	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	76.4	-	-	-	-	-	-	-	-	-
<u>Tulifex</u>	1	-	-	152.8	-	286.5	-	57.3	-	-	-	267.4	592.1	1031.4	38.2	-	-	840.4	-	-	-	-	-	-
	11	-	-	19.1	-	-	-	-	-	-	-	-	-	114.5	-	-	76.4	-	-	-	19.1	-	95.5	
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Lumbriculidae																								
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tubificidae																								
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	114.6	-	-	38.2	-	-	-
Class Hirudinea																								
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Sipunculida																								
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hirudidae																								
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Propodeulidae																								
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-2.--Continued

Taxa		Station Numbers														
		27			28			29			30			31		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Class Oligochaeta																
Aeolosomatidae																
Aeolosoma	I	-	-	-	-	-	-	-	-	-	-	-	-	98.2	-	19.1
	II	-	95.5	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-
Nepheleidae																
Nephele	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	76.4	-	-	-	76.4	-	-	-	-	-	-	19.1
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lumbriculidae																
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	191.0
	III	19.1	-	-	-	-	-	-	76.4	-	-	-	152.9	-	-	-
Lumbriculus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	245.3	76.2	114.6	-	-	76.2	-	19.1	-	-	-	76.4	171.2	98.2	19.1
	III	-	-	-	57.3	-	-	-	-	-	-	-	-	-	-	13.1
Kinorhynchus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Polipididae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Naididae	I	19.1	-	-	-	57.3	-	95.5	-	-	76.4	76.4	19.1	57.3	15.2	8.2
	II	-	98.2	-	-	-	-	-	-	-	-	-	-	26.4	-	98.2
	III	-	19.1	-	-	57.3	-	-	57.3	-	-	-	-	-	-	19.1
Tubificidae																
Aulofilius	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bohringia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	131.7	-	-	19.1	-	19.1	-	-	-	19.1	76.4	-	19.1
	III	-	-	-	-	-	-	-	57.3	-	-	-	19.1	-	-	-
Branchiura	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	19.1	68.5	49.3	-	112.9	-	26.4	-	515.7	18.2	12.5	114.6	-	15.2
	III	152.8	-	-	59.3	-	-	-	-	-	362.5	-	57.3	-	-	4.9
Ligodrilus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	19.1	-	-	57.3	-	76.4	-	-	171.9	-	-	-	-	-	-
Pelocoles	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	76.4	-	-	-	-	-	-	-
	III	-	-	-	76.4	-	-	-	-	-	-	-	-	-	-	-
Tubifex	I	474.1	151.0	114.6	-	-	89.5	-	28.3	57.3	191.0	114.6	171.9	114.6	191.0	15.2
	II	-	38.2	38.2	-	-	95.5	-	267.4	-	191.0	-	-	95.5	474.1	9.1
	III	-	19.1	-	57.3	-	19.2	-	-	267.4	-	-	-	95.5	19.1	19.2
Lumbriculidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tubificidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-
	III	-	-	229.2	95.5	-	-	-	-	-	420.2	-	-	-	-	114.6
Class Hirudinea																
Hirudinae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Sipunculidae																
Sipunculinae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hirudinae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eropodellidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-2.--Continued

Taxa		Station Numbers															
		11			12			13			14			15			
		C	N	R	L	N	R	L	N	R	L	N	R	L	N	R	L
Class Oligochaeta																	
Aelosomatidae																	
<i>Aelosoma</i>	1																
	11																
	111																
Capitoniidae																	
<i>Capitonia</i>	1																
	11																
	111																
Lumbricidae																	
Species A	1																
	11							611.2			325.8						
	111												38.2				
<i>Lumbricus</i>	1																
	11	19.1			38.2		38.2	477.5			55.5			19.1			57.3
	111				38.2			748.3		114.6	133.7	19.1					76.4
<i>Einaxidius</i>	1																
	11																
	111										19.1						
<i>Eelipidrilus</i>	1																
	11																
	111																
Reididae																	
	1	57.3															
	11																
	111									19.1			19.1				748.3
Tubificidae																	
<i>Aulodrilus</i>	1																
	11																
	111																
<i>Bothrioseurum</i>	1																
	11							19.1									
	111							19.1									
<i>Braconius</i>	1	38.2					19.1				38.2	19.1				19.1	76.4
	11	267.4			267.4		392.1	229.2			191.0		268.3			76.4	38.2
	111	267.4		229.2			191.0	802.2		131.7			76.4				114.5
<i>Limodrilus</i>	1																
	11					19.1											439.3
	111				95.5			133.7		76.4	229.2						
<i>Parascole</i>	1																
	11																
	111							114.6									
<i>Tubific</i>	1	1012.3	744.9		19.1	668.5	19.1	1165.1	38.2	19.1	775.8	114.5	439.3	57.3	76.4		38.2
	11	286.5	114.6	133.7			19.1				649.4	38.6	649.4			57.3	38.2
	111	76.4		171.9	19.1	19.1	171.9	38.2		76.4		95.5	668.5			19.1	
Lumbricidae																	
	1																
	11																
	111																
Tubificidae																	
	1																
	11							630.3	38.2		706.7					19.1	248.3
	111												133.7				
Class Hirudinea																	
	1																
	11																
	111																
Class Sipunculidae																	
	1																
	11																
	111																
Hirudinea																	
	1																
	11																
	111																
Propodeolidae																	
	1																
	11																
	111																19.1

Table C-2.--Continued

Taxa	Station Numbers																	
	17			18			19			20			21			22		
	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Class Oligochaeta																		
Aelosomatidae																		
<i>Aelosoma</i>	1																	
11																		
111																		
Naploresidae																		
<i>Naploresia</i>	1																	
11																		
111																		
Lumbriculidae																		
Species A	1																	
11					19.1													
111					19.1													
<i>Lumbriculus</i>	1												19.1					
11																		
111										57.3								
<i>El. caudata</i>	1																	
11																		
111																		
<i>El. latifolius</i>	1																	
11																		
111																		
Malidae																		
1			19.1							19.1								76.4
11															19.1			
111							19.1											
Tubificidae																		
<i>Autodryas</i>	1																	
11																		
111																		
<i>Bocheinnus</i>	1																	
11										57.3	141.9					19.1		38.2
111										76.4	114.6							
<i>Branchiura</i>	1	57.3			26.4	76.4	38.2											
11										95.5	57.3		26.4			19.1		76.4
111			152.8							191.9								371.9
<i>Limnodrilus</i>	1																	152.8
11																		
111																		
<i>Pelodrilus</i>	1																	
11																		
111																		
<i>Tubifex</i>	1	57.3	171.9	38.2	38.2	38.2		19.1	57.3	19.1	191.9	38.2	38.2					
11																		
111								19.1	19.1	57.3					191.9			114.6
Lumbriculidae																		
1																		
11																		
111																		
Tubificidae																		
1																		
11																		
111			19.1	38.2														
Class Hirudinea																		
1																267.4		515.7
11																191.9	95.5	382.0
111																		
Glossiphoniidae																		
1																		
11																		
111																		
Hirudidae																		
1																		
11																		
111																		
Eropodellidae																		
1																		
11																		
111																		

Table C-2.--Continued

Taxa		Station Numbers								
		41			42			43		
		L	H	R	L	H	R	L	H	R
Class Oligochaeta										
Aelosomatidae										
<u>Aelosoma</u>	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
Maplelanidae										
<u>Maplelania</u>	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
Lumbriculidae										
Species A	1	-	-	-	-	-	-	-	-	-
	11	-	-	286.5	-	-	-	-	-	-
	111	-	19.1	229.2	-	-	-	-	-	-
<u>Lumbriculus</u>	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
<u>Kinceidiana</u>	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	76.4	-	-	-
	111	-	-	-	-	-	-	-	-	-
<u>Elipidorius</u>	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	95.5	-	-	-
Waldidae										
	1	-	-	-	-	-	-	-	38.2	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
Tubificidae										
<u>Autodrilus</u>	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
<u>Bothriogonum</u>	1	-	-	19.1	-	-	76.9	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
<u>Branchiura</u>	1	-	-	-	-	-	-	-	-	-
	11	57.3	-	19.1	-	-	38.2	-	-	-
	111	133.7	-	-	-	-	-	-	-	-
<u>Limnodrilus</u>	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	19.1	-
	111	-	-	-	-	-	-	-	19.1	-
<u>Peloscoides</u>	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
<u>Tubifex</u>	1	-	38.2	210.1	-	-	19.1	-	536.8	95.5
	11	-	95.5	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
Lumbriculidae										
	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
Tubificidae										
	1	-	-	-	-	-	-	-	-	-
	11	133.7	-	-	-	-	19.1	19.1	19.1	-
	111	95.5	38.2	-	19.1	19.1	19.1	19.1	19.1	-
Class Hirudinea										
	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
Glossiphoniidae										
	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
Hirudidae										
	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-
Eropodellidae										
	1	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-

Table C-3.-- Mollusks (n/m)² collected in Ponar samples from the Alabama River.

Taxa		Station Numbers																	
		1			2			3			4			5			6		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Class Gastropoda																			
Viviparidae																			
<i>Cerithium</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	19.1	-	-	-	19.1	19.1	-	-	38.2	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Physidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planorbidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cyrenoida</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Coniostoma</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Planorbis</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planorbidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bellidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Gastropoda	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Polygyræ																			
Cyrenidae																			
<i>Cerithium</i>	I	-	-	268.3	116.6	76.4	131.7	268.3	428.2	458.6	57.3	-	-	38.2	91.3	638.3	19.1	116.6	267.6
	II	19.1	1528.0	286.5	131.7	477.5	116.6	38.2	267.6	933.0	19.1	38.2	19.1	268.3	1967.3	286.5	19.1	305.6	57.3
	III	19.1	1089.6	57.3	57.3	764.0	481.1	38.2	76.4	286.5	57.3	-	76.4	38.2	116.6	19.1	116.6	439.3	-
Sphaeriidae																			
<i>Sphaerium</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57.3	-	19.1	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unionidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adumbrata																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Polygyræ	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

L=left bank sample looking downstream
M=mid-stream sample
R=right bank sample looking downstream

I=August 9-25, 1977, samples
II=September 19-October 4, 1977, samples
III=October 31-November 17, 1977, samples
"- "=not encountered in collection

NOTE: Due to a computation error, benthic concentrations for August were underestimated. To obtain the correct concentration, multiply August values by 2.25.

Table C-3.--Continued

Taxa	Station Numbers																	
	7			8			9			10			11			12		
	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Class Gastropoda																		
Vivipidae																		
Campsinae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	19.1	-	-	-	-	19.1	-	-	-	-	-	-	-	-
Physidae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pleuroceridae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclophoridae																		
Cyclophorus	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-
Goniobasis																		
Goniobasis	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planorbidae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bulimidae																		
Bulimidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Gastropoda																		
Other Gastropoda	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Pelecypoda																		
Cyclonidae																		
Cyclonidae	1	76.4	114.6	19.1	191.0	152.8	19.1	326	38.2	76.4	611.2	935.8	229.2	2368.4	420.2	19.1	114.6	38.2
	11	286.5	267.4	229.2	191.0	860.4	152.8	-	1069.6	19.1	152.8	326.7	19.1	-	802.2	95.5	152.8	1069.6
	111	-	-	-	-	152.8	38.2	610.3	326.7	76.4	76.4	783.1	-	171.9	458.4	286.5	57.3	401.1
Sphaeriidae																		
Sphaerium	1	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unionidae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adiantidae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Pelecypoda																		
Other Pelecypoda	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-3.--Continued

Taxa		Station Numbers																	
		11			12			13			16			17			18		
		L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Class Gastropoda																			
Viviparidae																			
Complanata	I	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-
Pneustidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pleuroceridae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyclostoma																			
Gonolobus	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planorbidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-
Bulimidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Gastropoda																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Pelecypoda																			
Cyrenidae																			
Corbicula	I	210.1	157.8	105.6	420.2	133.7	143.5	305.6	171.9	57.3	324.7	57.3	210.1	19.1	401.1	210.1	19.1	7-8.1	-
	II	420.2	302.0	105.6	19.1	76.4	57.3	114.6	191.0	955.0	114.6	114.6	152.8	-	496.6	19.1	458.4	191.0	-
	III	19.1	-	57.3	-	-	18.2	19.1	38.2	114.6	57.3	76.4	859.5	279.2	76.4	302.0	95.5	45.5	-
Sphaeriidae																			
Eupera	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unionidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adamsiinae																			
Species A	I	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Pelecypoda																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-3.--Continued

Taxa	Station Numbers																	
	19			20			21			22			23			24		
	L	P	B	L	H	B	L	H	B	L	H	B	L	H	B	L	H	B
Class Gastropoda																		
Volutariidae																		
Cymatium	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Physidae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pleuroceridae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cypridae																		
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Gastropoda																		
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-
Planorbidae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bulimidae																		
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Gastropoda																		
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Pelecypoda																		
Cyrenidae																		
Cyrenula	1	-	-	95.5	57.3	114.6	19.1	279.2	267.4	114.6	152.8	-	76.4	-	-	267.4	283.1	-
11	133.2	248.1	764.0	95.5	191.0	38.2	114.6	363.8	326.7	-	38.2	-	-	-	-	152.8	229.2	76.4
111	19.1	57.3	19.1	19.1	-	19.1	76.4	114.1	-	-	-	-	-	-	-	19.1	-	57.3
Sphaerillidae																		
Sphaerilla	1	-	-	-	-	38.2	-	-	-	57.3	19.1	-	19.1	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Dentalidae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adorinidae																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Pelecypoda																		
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-3.--Continued

Taxa		Station Numbers														
		25			26			27			28			29		
		L	M	P	L	M	P	L	M	P	L	M	P	L	M	P
Class Gastropoda																
Viviparidae																
<i>Composita</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-
	III	19.1	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-
Physidae																
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pleuroceridae																
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cyrtoma																
<i>Composita</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planorbidae																
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Helminidae																
<i>Composita</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Gastropoda																
<i>Composita</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Pelecypoda																
Cyrenidae																
<i>Composita</i>	I	470.2	3132.4	649.4	305.6	477.5	477.5	416.8	439.3	668.5	343.8	191.0	114.6	210.1	401.1	324.7
	II	191.0	324.7	95.5	1279.7	477.5	477.5	-	1508.9	17.3	191.0	171.9	133.7	38.2	267.4	19.1
	III	470.2	38.2	19.1	95.5	57.3	-	-	171.9	191.0	76.4	57.3	171.9	38.2	1451.6	38.2
Sphaeriidae																
<i>Composita</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unionidae																
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adiantinae																
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Pelecypoda																
<i>Composita</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-3.--Continued

Taxa		Station Numbers																	
		31			32			33			34			35			36		
		L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Class Gastropoda																			
Viviparidae																			
<i>Comptosia</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Ph. idae</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species A	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pleurostomidae																			
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	19.1	-	-	19.1	-	-	-	-	-	-	-	19.1	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cyrtoma</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Coniobasis</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planorbidae																			
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bulimidae																			
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Gastropoda	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Class Pelecypoda																			
<i>Cyrtolus</i>	1	248.3	706.7	95.5	229.2	229.2	38.2	439.3	515.7	367.5	343.8	553.9	1031.4	2170.1	38.2	2139.2	19.1	641.8	553.9
	11	131.7	95.5	248.3	725.8	286.5	19.1	515.7	210.1	57.3	668.5	1184.2	2158.3	57.3	1069.6	1012.3	878.6	2 01.0	1165.1
	111	57.3	171.9	191.0	38.2	611.2	382.0	95.5	248.3	19.1	229.2	439.3	916.8	19.1	-	95.5	-	-	-
Sphaeriidae																			
<i>Eupera</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	19.1	38.2	-	-	-	-
	11	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unionidae																			
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Adontinae																			
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Pelecypoda	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-3.--Continued

Taxa		Station Numbers																	
		1961						1962						1963					
		L	P	F	M	R	L	P	F	M	R	L	P	F	M	R			
Class Echinozoa																			
Volutellidae																			
Echinolimax	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Physidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Pleurocentridae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Eugeniidae																			
Eugenia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Crepidulidae																			
Crepidula	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Planorbidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Bulimidae																			
Bulimia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Other Echinozoa																			
Other Echinozoa	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Class Polerxypoda																			
Cyrenidae																			
Cyrenella	I	515.0	113.0	152.8	162.9	682.6	498.5	962.6	2002.6	-	1243.2	832.2	515.2	38.2	19.1	38.2			
	II	19.1	422.8	105.6	-	552.0	19.1	954.0	111.2	-	-	859.5	15.4	-	19.1	133.0			
	III	121.9	40.2	161.8	110.1	5152.0	2141.8	114.6	279.2	-	-	191.0	19.1	38.2	40.2	133.0			
Sphaeriidae																			
Eugenia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Unionidae																			
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Other Polerxypoda																			
Other Polerxypoda	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

Table C-3.--Continued

Taxa		Station Numbers											
		L	AL	R	L	AL	R	L	AL	R	L	AL	R
Class Gastropoda													
Viviparidae													
<i>Campeloma</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Phylidae													
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Pleuroceridae													
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Gymnidae													
<i>Gymnidae</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Goniistidae													
<i>Goniistidae</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Pleurobidae													
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Bulimidae													
<i>Bulimidae</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Other Gastropoda													
<i>Other Gastropoda</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Class Pelecypoda													
Cyrenidae													
<i>Corbicula</i>	I	248.3	171.7	439.3	229.2	229.2	38.2	1279.7	401.1	374.7	38.2	191.0	210.1
	II	19.1	-	19.1	-	-	38.2	19.1	38.2	19.1	19.1	-	-
	III	38.2	133.7	38.2	-	38.2	-	38.2	38.2	-	-	17.1	19.1
Sphaeriidae													
<i>Eupera</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Unionidae													
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Adontinae													
Species A	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Species B	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-
Other Pelecypoda													
<i>Other Pelecypoda</i>	I	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-

Table C-4.-- Miscellaneous benthic macroinvertebrates (n/m²)
collected in Ponar samples from the Alabama River.

Taxa		Station Numbers																	
		1			2			3			4			5			6		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Phylum Arthropoda																			
Order Cladocera																			
Sididae																			
<i>Limnocalanus</i>	I	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Boeckella</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	19.1	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-
Sididae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	57.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Boeckella</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Acari	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	19.1	-	-	57.3	-	-	-	-	30.2
Order Araneae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Cyclopoida																			
Cyclopoididae																			
<i>Cyclops</i>	I	-	-	-	-	-	-	57.3	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
<i>Diacyclops</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	133.7	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Coelenterata																			
Hydridae																			
<i>Hydra</i>	I	-	57.3	-	19.1	191.0	-	-	-	-	-	-	-	95.5	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																			
	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	19.1	-	-
Phylum Nemertea																			
<i>Caprellidae</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Platyhelminthes																			
Order Tricladida																			
Planariidae																			
<i>Dugesia</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	19.1	114.6	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	57.3	-
<i>Planaria</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																			
<i>Prostoma</i>	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	19.1	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-

L=left bank sample looking downstream

M=mid-stream sample

R=right bank sample looking downstream

I=August 9-25, 1977, samples

II=September 19-October 4, 1977, samples

III=October 31-November 17, 1977, samples

"-"=not encountered in collection

NOTE: Due to a computation error, benthic concentrations for August were underestimated. To obtain the correct concentration, multiply August values by 2.25.

AD-A131 664

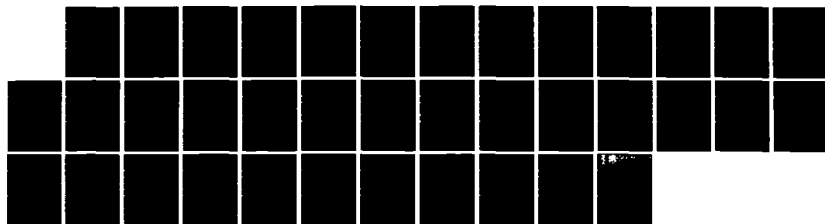
WATER QUALITY MANAGEMENT STUDIES ALABAMA RIVER R E
BOB WOODRUFF WILLIAM. (U) GEOLOGICAL SURVEY OF
ALABAMA UNIVERSITY MAR 83 DACW01-77-C-0140

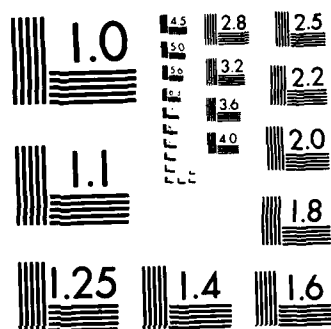
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UNCLASSIFIED

F/G 13/2

NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Table C-4.--Continued

Taxa	Station Numbers																	
	7			8			9			10			11			12		
	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Phylum Arthropoda																		
Order Cladocera																		
Sisidnae																		
<u>Sisidnae</u>	1	-	-	-	-	-	-	95.5	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Desmidae																		
<u>Desmidae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sisidnae																		
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Desmidae																		
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Acari																		
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	19.1	-	-	19.1	-	57.3	19.1	-	19.1	-
Order Araneae																		
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Cyclopoida																		
Cyclopoidae																		
<u>Cyclopoidae</u>	1	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
<u>Cyclopoidae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Coelenterata																		
Hydridae																		
<u>Hydridae</u>	1	-	-	-	-	-	-	-	-	-	-	95.5	-	-	-	-	-	-
	11	-	30.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	57.3	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																		
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																		
Cordilidae																		
<u>Cordilidae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	19.1	30.2	-	-	19.1	-	-
	111	19.1	-	19.1	19.1	-	19.1	-	-	-	-	-	19.1	-	19.1	19.1	-	19.1
Phylum Platyhelminthes																		
Order Tricladida																		
Planariidae																		
<u>Planariidae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-
<u>Planariidae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																		
Proceridae																		
<u>Proceridae</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-			

Table C-4.--Continued

Taxa	Station Numbers																	
	13			14			15			16			17			18		
	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Phylum Arthropoda																		
Order Cladocera																		
Sididae																		
<i>Latropoda</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosminidae																		
<i>Bosmina</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-
Sididae																		
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosminidae																		
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Acari																		
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	19.1	30.2	30.2	19.1	19.1	-	-	19.1	-	-	30.2	19.1	-	-	-
Order Araneae																		
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Cyclopoida																		
Cyclopoididae																		
<i>Cyclops</i>	1	-	-	-	30.2	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Bucyclops</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Coelenterata																		
Hydridae																		
<i>Hydra</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Mollusca																		
11	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Hemichordata																		
Cordiidae																		
11	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Platyhelminthes																		
Order Tricladida																		
Planariidae																		
<i>Planaria</i>	1	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Planaria</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																		
<i>Nemertea</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-

One sample taken of site 13--midstream.

Table C-4.--Continued

Taxa	Station Numbers														
	19			20			21			22			23		
	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Phylum Arthropoda															
Order Cladocera															
Sisididae															
<i>Lepidocyclops</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosminidae															
<i>Bosmina</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sisididae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosminidae	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Acari	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-
Order Anacardi	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Cyclopoida															
Cyclopoididae															
<i>Cyclops</i>	1	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-
<i>Eucyclops</i>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Coelenterata															
Hydridae					1069.6	-	-	-	-	-	-	-	-	-	-
<i>Hydra</i>	1	-	-	-	19.1	-	-	-	-	-	-	-	19.1	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertoda	1	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertomorpha															
Gordiliidae	1	-	-	-	-	-	30.2	-	-	-	-	-	-	19.1	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Platyhelminthes															
Order Tricladida															
Planariidae															
<i>Dugesia</i>	1	-	-	-	57.3	-	-	-	-	-	-	-	19.1	-	-
11	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-
<i>Planaria</i>	1	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea															
<i>Frustum</i>	1	-	-	-	-	-	-	-	-	-	-	-	19.1	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-4.--Continued

Taxa		Station Numbers														
		25			26			27			28			29		
		L	M	R	L	M	R	L	M	R	L	M	R	L	M	R
Phylum Arthropoda																
Order Cladocera																
Sididae																
<u>Latropia</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosminidae																
<u>Bosmina</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sididae																
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosminidae																
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Acari																
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	57.3
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	19.1	-	-	-	-	-	19.1	-	-
Order Araneae																
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	19.1	19.1
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Cyclopoida																
Cyclopoididae																
<u>Cyclops</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	19.1	-	19.1	-
<u>Eucyclops</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Coelenterata																
Hydridae																
<u>Hydra</u>	1	-	-	-	38.2	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																
Cordilidae																
	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	19.1	-	-	-	-	19.1	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	38.2	-	-	-	-	-
Phylum Platyhelminthes																
Order Tricladida																
Planariidae																
<u>Dugesia</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Planaria</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																
<u>Prostoma</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-4.--Continued

[illegible]

Table C-4.--Continued

Taxa		Station Numbers														
		17			18			39			40			41		
		L	P	R	L	H	R	L	H	R	L	H	R	L	H	R
Phylum Arthropoda																
Order Cladocera																
Sidae																
Laternipala	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosminidae																
Bosmina	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sidae																
Sida	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bosminidae																
Bosmina	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Acari																
Tetranychidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	95.5	-	-	-	-	-	152.0	-	-	19.1	57.3	38.2	19.1	-	15.1
Order Araneae																
Araneidae	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Order Cyclopoida																
Cyclopidae																
Cyclops	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eucyclops																
Eucyclops	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Coelenterata																
Hydridae																
Hydra	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Hemichordata																
Thaliacea																
Thalia	I	-	-	-	-	-	-	-	-	-	-	-	-	19.1	15.1	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Hemichordata																
Gordiidae																
Gordia	I	-	-	-	38.2	-	-	-	-	-	19.1	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Platyhelminthes																
Tricladida																
Planariidae																
Dugesia	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Planaria																
Planaria	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Nemertea																
Prostoma																
Prostoma	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-4.--Continued

Taxa		Station Numbers											
		43			44			45			46		
		L	N	R	L	N	R	L	N	R	L	N	R
Phylum Antheropoda													
Order Cladocera													
Stididae													
<i>Stenopoda</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	11	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	111	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	11	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	111	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	11	-	-	-	-	-	-	-	-	-	-	-	-
<i>Stenopoda</i>	111	-	-	-	-	-	-	-	-	-	-	-	-
Order Acari	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Order Araneae	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Order Cyclopoida													
Cyclopoididae													
<i>Cyclops</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
<i>Cyclops</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Coelocorata													
Hydridae													
<i>Hydra</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Hemichordata													
	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Hemichordata													
Coelocorata													
<i>Coelocorata</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Platyhelminthes													
Order Tricladida													
Planorbidae													
<i>Planorbidae</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
<i>Planorbidae</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Platyhelminthes													
Order Tricladida													
Planorbidae													
<i>Planorbidae</i>	1	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-

Table C-4.--Continued

Taxa				Station Numbers																		
				1			2			3			4			5			6			
				L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	
Phylum Ectoprocta																						
Urnatellidae																						
<u>Urnatella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	955.0	114.6	-	152.8	-	-	19.1	-	-	-	57.3	-	-	-	-	-	-
				III	19.1	-	-	-	-	-	-	-	382.0	534.8	-	229.2	1432.5	-	-	-	-	-
Phylum Ectoprocta																						
Gymnolaemata				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paludicellidae																						
<u>Potzeella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	57.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	38.2	-	-	1337.0	-	2674.0	382.0	-	-	-	-
<u>Paludicella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	305.6	-	-	-	-	-	-	-	-
Phylactolaemata				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cristatellidae																						
<u>Pulmatella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Pectinatella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ectoprocta																						
Species A				I	-	57.3	-	-	-	-	95.5	-	-	-	-	19.1	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	95.5	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				7			8			9			10			11			12			
				L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	L	M	R	
Phylum Ectoprocta																						
Urnatellidae																						
<u>Urnatella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	687.6	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta																						
Gymnolaemata				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paludicellidae																						
<u>Potzeella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	305.6	-	-	-	-	-	-	-	-	-	-	362.9	-	-	-
				III	-	-	-	38.2	-	-	-	229.2	-	38.2	-	-	-	-	324.7	-	-	-
<u>Paludicella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylactolaemata				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cristatellidae																						
<u>Pulmatella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Pectinatella</u>				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ectoprocta																						
Species A				I	19.1	19.1	95.5	-	-	-	-	-	-	-	-	-	19.1	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	57.3	-	-	-	-	-	-	-	-	-	-	-
Species B				I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				II	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				III	-	-	-	-	-	-	-	-	-	-	-	477.5	-	-	-	-	-	-

Table C-4.--Continued

Taxa	Station Numbers																							
	11			12			13			14			17			18								
Phylum Ectoprocta																								
Urocellidae																								
Urocella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	19.1	19.1	-	-	-	-	19.1	-	-	5467.6	-	-	677.5	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	677.5	7693.1	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta																								
Gymnolaemata																								
Paludicellidae																								
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	1261.5	-	-	-	-	-	-	-	542.1	1033.6	57.3	19.1	-	515.7	-	-	133.7	326.7	-	-	-	-	-
112	-	-	706.7	-	76.6	-	-	-	133.7	7429.9	19.1	152.8	210.1	-	1956.6	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paludicella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylactolaemata																								
Cristatellidae																								
Palmatella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pectinactinia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30.2	-	-	152.8	-	-	-	-	-
Ectoprocta																								
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta																								
Urocellidae																								
Urocella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	1337.0	-	-	-	-	-	-	-	191.0	-	-	19.1	-	-	-	-	-	19.1	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta																								
Gymnolaemata																								
Paludicellidae																								
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paludicella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylactolaemata																								
Cristatellidae																								
Palmatella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pectinactinia	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ectoprocta																								
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
112	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
113	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-4.--Continued

Taxa	Station Numbers																	
	25			26			27			28			29			30		
	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R	L	H	R
Phylum Ectoprocta																		
Urosetellidae																		
<u>Urosetella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	2307.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta																		
Oymatolomata	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paludicellidae																		
<u>Pectinella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	76.4	133.7	-	-	-	-	286.5	-	-	-	-	-	-	-	-	-
111	4007.4	-	-	-	-	420.2	-	-	-	1566.2	19.1	-	-	-	-	-	-	-
<u>Paludicella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylactolomata	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cristatellidae																		
<u>Palmatella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Pectinatella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ectoprocta																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta																		
Urosetellidae																		
<u>Urosetella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	93.5	-	-
11	19.1	-	-	19.1	-	-	382.0	-	38.2	-	-	38.2	-	19.1	-	-	-	-
111	-	-	-	-	-	-	-	-	-	133.7	-	-	-	-	-	-	-	-
Phylum Ectoprocta																		
Oymatolomata	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Paludicellidae																		
<u>Pectinella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	76.4	-	-
11	133.7	-	-	878.6	-	-	-	-	19.1	76.4	-	-	267.6	-	-	-	-	-
111	649.4	19.1	-	-	-	-	-	-	-	848.4	-	-	-	-	-	-	-	-
<u>Paludicella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylactolomata	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cristatellidae																		
<u>Palmatella</u>	1	-	-	19.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<u>Pectinatella</u>	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	38.2	-	-	-	-	229.2	-	-	-	-	-	-	-	-	-	-	-	-
Ectoprocta																		
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-4.--Continued

Taxa	Station Numbers														
	37			38			39			40			41		
	L	N	R	L	N	R	L	N	R	L	N	R	L	N	R
Phylum Ectoprocta															
Ornatellidae															
Ornatella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	38.2	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta															
Cynaloecata	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocellidae															
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	382.8	-	-	-
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylactolamata	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cristatellidae															
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ectoprocta															
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta															
Ornatellidae															
Ornatella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylum Ectoprocta															
Cynaloecata	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pseudocellidae															
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Phylactolamata	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cristatellidae															
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pectinella	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ectoprocta															
Species A	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Species B	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	11	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table C-5.--Shannon-Weaver diversity indices calculated from
three mathematically composited samples collected
at each of 46 Alabama River stations.

<u>Station number</u>	<u>I</u>	<u>II</u>	<u>III</u>
1	2.0192	2.4783	2.7230
2	1.6644	3.0270	1.5345
3	2.0390	2.5954	1.6236
4	1.1555	3.0140	1.8411
5	1.7275	2.5182	1.9589
6	1.5369	2.9655	2.3936
7	0.7753	2.8946	1.7215
8	1.9404	2.2092	2.2074
9	2.0693	2.6387	2.2475
10	1.5587	2.6158	2.2095
11	1.9129	1.8926	2.3324
12	0.8805	2.4256	2.1077
13	0.6309	3.1045	2.2826
14	1.5964	3.2484	2.0782
15	2.3379	2.5795	1.5974
16	2.2847	2.8005	2.8269
17	1.7888	2.0492	2.5484
18	1.0763	1.3425	0.7349
19	1.5589	1.5650	2.2842
20	2.2791	2.8432	0.3931
231	1.9524	2.6540	2.3836
22	2.3363	1.3998	2.4194
23	1.2443	3.4598	1.6946
24	1.5917	2.3674	1.2844
25	1.6251	3.3592	2.4442
26	1.8130	2.3810	1.9257
27	1.4455	2.4007	2.1723
28	2.8978	2.8082	2.1938
29	1.8855	3.2812	2.2912
30	2.4212	2.7910	2.3738

I=August 9-25, 1977, samples

II=September 19 through October 4, 1977, samples

III=October 31 through November 17, 1977, samples

Table C-5.--Continued

<u>Station number</u>	<u>I</u>	<u>II</u>	<u>III</u>
31	1.9548	3.1492	2.8713
32	2.7853	1.9651	2.4946
33	1.2755	3.1936	2.6340
34	1.4500	2.6306	1.9436
35	0.9788	3.2508	1.6122
36	2.2857	2.4955	1.3710
37	1.7786	1.5117	2.4789
38	1.9388	0.5442	0.7412
39	1.3595	2.2670	2.5378
40	1.5072	2.0995	1.9079
41	1.1378	1.3771	2.1210
42	1.7760	2.0072	1.8664
43	2.0476	2.9216	2.3343
44	0.7538	1.8676	2.5570
45	1.6492	2.7842	2.0382
46	2.1761	2.0000	2.0382

Table C-6.--Benthic biomass data (grams/m²) calculated from
three mathematically composited samples collected
at each of 46 Alabama River stations.

<u>Station number</u>	<u>I</u>	<u>II</u>	<u>III</u>
1	1.3	.6	5.4
2	2.3	.1	5.7
3	2.9	.6	1.6
4	1.3	.6	.6
5	39.4	5.1	.6
6	2.3	.6	3.2
7	399.6	157.9	.1
8	366.7	2076.0	.6
9	2857.5	1785.0	.6
10	2907.0	958.2	3.8
11	7413.7	318.3	732.2
12	482.9	2101.0	445.7
13	1312.2	764.0	859.5
14	4.3	159.2	70.0
15	386.8	986.8	70.6
16	573.1	1.9	178.9
17	945.5	1990.0	578.7
18	44.3	509.3	16.6
19	1.3	.1	.6
20	2.3	1.9	.6
21	4.3	5.7	.6
22	1.3	2.6	10.8
23	34.4	2.6	.6
24	5.6	312.1	.6
25	10.1	259.8	63.0
26	8.5	207.6	62.4
27	7.2	286.5	543.7
28	227.7	827.7	180.8
29	245.0	19.7	1.0
30	101.7	372.5	85.0

I=August 9-25, 1977, samples

II=September 19 through October 4, 1977, samples

III=October 31 through November 17, 1977, samples

Table C-6.--Continued

<u>Station number</u>	<u>I</u>	<u>II</u>	<u>III</u>
31	621.7	159.8	136.9
32	1.3	255.3	62.4
33	593.1	210.1	154.1
34	233.5	514.4	252.8
35	34.4	11.5	.6
36	153.2	291.6	.1
37	91.8	187.6	35.0
38	83.0	31.8	116.5
39	478.6	210.1	220.8
40	128.9	114.6	13.4
41	4.3	.6	198.6
42	73.3	350.2	15.3
43	567.2	.6	71.9
44	42.3	.6	5.1
45	24.3	1.9	1.3
46	24.3	.6	7.0

Table C-7.-- Taxa found on modified Dendy multiplate samplers collected from the Alabama River.

<u>Taxa</u>		<u>Station Numbers</u>					
		1	3	4	5	6	7
Caenidae	I	L	L		L	L	L
	II	L	L	L	L		
Hexageniidae	I			X			
	II					X	X
Ceratopogonidae	I			X			
	II						
Chironomidae*	I			X			
	II					X	X
Culicidae	I			X			
	II						
Simuliidae	I						
	II						
Psychomyiidae	I						
	II						
Hydroptilidae	I						
	II						X
Anisoptera	I						
	II						
Zygoptera	I						
	II						
Cladocera	I			X			
	II					X	
Acarina	I						
	II						
Bryozoa	I						
	II						
Hydra	I						
	II						

I=September 19-October 4, 1977, samples II=October 31-November 17, 1977, samples
 L indicates samplers were lost sometime during the sampling period and, therefore,
 were not retrieved.

X indicates presence of organisms.

*Chironomidae were the dominant organisms at each station during both runs.

Table C-7.- Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		8	9	10	11	13	14
Caenidae	I	L	L	L	X	X	X
	II		L		L	X	X
Hexageniidae	I						
	II	X		X			
Ceratopogonidae	I						
	II	X				X	
Chironomidae	I				X	X	X
	II	X		X		X	X
Culicidae	I						
	II						X
Simuliidae	I						
	II			X			
Psychomyiidae	I				X		
	II						
Hydroptilidae	I						
	II						
Anisoptera	I						
	II						
Zygoptera	I						
	II						
Cladocera	I					X	X
	II						X
Acarina	I						X
	II						
Bryozoa	I						X
	II						
Hydra	I						X
	II	X					X

Table C-7.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		15	16	17	19	21	23
Caenidae	I		X		L	X	X
	II		X	L	L	L	L
Hexageniidae	I			X			
	II						
Ceratopogonidae	I						
	II		X				
Chironomidae	I	X	X	X		X	X
	II	X	X				
Culicidae	I						
	II	X	X				
Simuliidae	I						
	II						
Psychomyiidae	I						
	II						
Hydroptilidae	I		X	X		X	
	II	X					
Anisoptera	I						
	II						X
Zygoptera	I	X					
	II	X					
Cladocera	I		X				
	II						
Acarina	I						
	II						
Bryozoa	I						
	II						
Hydra	I						
	II						

Table C-7.- Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		24	26	28	30	1	2
Caenidae	I	L	X	L		L	
	II			L		X	X
Hexageniidae	I						
	II						
Ceratopogonidae	I						
	II	X			X	X	X
Chironomidae	I		X		X		X
	II	X	X		X	X	X
Culicidae	I						
	II		X			X	X
Simuliidae	I		X				
	II		X				
Psychomyiidae	I				X		X
	II				X		
Hydroptilidae	I		X		X		X
	II		X		X	X	
Anisoptera	I						
	II	X					
Zygoptera	I		X				
	II						
Cladocera	I						
	II	X		X			
Acarina	I						
	II						
Bryozoa	I						
	II	X					
Hydra	I						
	II	X					

Table C-7.--Continued

<u>Taxa</u>		<u>Station Numbers</u>					
		33	34	36	38	41	42
Caenidae	I			X	L		L
	II	X	L	L	L	X	L
Hexageniidae	I						
	II						
Ceratopogonidae	I						
	II					X	
Chironomidae	I	X	X	X		X	
	II	X				X	
Culicidae	I			X			
	II					X	
Simuliidae	I						
	II						
Psychomyiidae	I	X	X			X	
	II						
Hydroptilidae	I	X	X	X		X	
	II						
Anisoptera	I						
	II	X				X	
Zygoptera	I			X			
	II						
Cladocera	I						
	II						
Acarina	I						
	II						
Bryozoa	I						
	II						
Hydra	I			X			
	II						

Table C-7.--Continued

<u>Taxa</u>		<u>Station Numbers</u>			
		43	44	45	46
Caenidae	I	L	L	L	L
	II	X	X		
Hexageniidae	I				
	II				
Ceratopogonidae	I				
	II	X	X	X	X
Chironomidae	I				
	II	X	X	X	X
Culicidae	I				
	II				
Simuliidae	I				
	II				
Psychomyiidae	I				
	II				
Hydroptilidae	I				
	II	X	X		X
Anisoptera	I				
	II				
Zygoptera	I				
	II				
Cladocera	I				
	II			X	
Acarina	I				
	II				
Bryozoa	I				
	II				
Hydra	I				
	II			X	

APPENDIX D
Macrophyte Data

Table D-1.-- Macrophyte sampling
stations on the Alabama River

<u>Site</u>	<u>River Mile</u>	<u>Bank*</u>
1	72.9	W
2	73.1	E
3	75.7	W
4	75.9	W
5	77.0	E
6	77.9	W
7	77.9	E
8	78.8	W
9	82.1	W
10	83.8	E
11	83.8	W
12	84.6	E
13	84.7	W
14	85.0	W
15	86.7	E
16	88.0	W
17	88.2	E
18	89.1	E
19	90.1	E
20	90.6	E
21	92.9	E
22	95.0	E
23	95.0	W
24	97.7	E
25	97.7	W
26	100.0	W
27	100.1	E
28	101.0	E
29	103.0	W
30	106.1	E
31	107.2	E
32	108.0	W
33	109.8	W
34	111.7	W
35	112.9	E

*E = east bank of river looking downstream
W = west bank of river looking downstream

Table D-1.--Continued

<u>Site</u>	<u>River Mile</u>	<u>Bank</u>
36	115.5	E
37	116.3	W
38	117.3	E
39	119.5	W
40	120.5	E
41	122.0	E
42	122.9	W
43	123.6	E
44	124.5	E
45	124.5	W
46	127.1	W
47	128.0	W
48	129.9	E
49	130.5	W
50	131.2	E
51	133.8	W
52	133.9	W
53	134.1	E
54	134.2	E
55	134.6	E
56	134.8	E
57	136.2	E
58	136.5	E
59	136.6	W
60	137.0	E
61	137.5	E
62	137.6	W
63	138.0	E
64	138.4	W
65	139.2	E
66	139.2	W
67	140.1	E
68	140.3	W
69	141.1	E
70	141.2	W

Table D-1. -- Continued

<u>Site</u>	<u>River Mile</u>	<u>Bank</u>
71	142.3	E
72	143.9	E
73	144.2	E
74	145.0	E
75	145.4	W
76	146.1	W
77	146.2	E
78	147.0	E
79	147.0	W
80	147.5	E
81	149.0	E
82	150.4	E
83	150.5	W
84	151.0	E
85	152.0	W
86	152.2	E
87	152.5	W
88	153.7	E
89	153.7	W
90	153.9	W
91	155.3	E
92	156.9	W
93	157.8	W
94	157.9	E
95	158.2	W
96	158.8	E
97	159.1	E
98	160.0	W
99	160.6	E
100	161.0	E
101	161.0	W
102	161.2	E
103	162.1	W
104	162.9	E
105	163.0	W

Table D-1.--Continued

<u>Site</u>	<u>River Mile</u>	<u>Bank</u>
106	163.1	E
107	164.0	W
108	164.1	E
109	164.4	W
110	165.0	E
111	165.5	W
112	166.1	E
113	166.7	E
114	166.9	W
115	167.8	E
116	167.8	W
117	Omitted	
118	168.0	W
119	168.4	E
120	168.7	E
121	168.7	W
122	169.1	W
123	170.5	E
124	171.5	E
125	172.0	E
126	173.0	W
127	173.5	W
128	176.0	E
129	177.2	W
130	177.5	E
131	178.5	W
132	179.3	E
133	180.0	W
134	183.5	E
135	184.6	E
136	185.5	W
137	186.0	W
138	186.0	E
139	187.0	E
140	187.7	W

Table D-1.--Continued

<u>Site</u>	<u>River Mile</u>	<u>Bank</u>
141	188.1	W
142	188.5	W
143	189.0	E
144	190.0	W
145	190.5	E
146	191.0	W
147	191.5	E
148	192.7	W
149	192.9	W
150	193.0	E
151	193.8	W
152	194.2	E
153	194.3	E
154	197.0	W
155	198.0	W
156	200.3	W
157	201.0	W
158	202.1	W
159	203.4	W
160	203.9	W
161	204.5	W
162	207.3	E
163	207.6	W
164	209.0	W
165	210.3	W
166	212.5	W
167	213.0	W
168	217.0	W
169	218.9	E
170	221.5	W
171	222.0	E
172	222.8	W
173	223.7	E
174	225.5	E
175	225.5	W

Table D-1.--Continued

<u>Site</u>	<u>River Mile</u>	<u>Bank</u>
176	226.5	W
177	Omitted	
178	227.5	W
179	228.0	W
180	228.0	E
181	22 .4	W
182	230.0	E
183	231.0	E
184	231.7	W
185	232.0	E
186	232.0	W
187	232.5	W
188	233.0	W
189	233.1	E
190	234.0	W
191	236.0	W
192	237.6	E
193	238.0	E
194	238.7	W
195	239.4	E
196	240.1	E
197	240.2	W
198	240.8	E
199	241.4	E
200	241.4	W
201	242.2	W
202	243.2	E
203	243.2	W
204	243.8	E
205	244.1	E
206	244.5	W
207	244.7	E
208	245.7	E
209	245.8	W
210	246.0	E

Table D-1.--Continued

<u>Site</u>	<u>River Mile</u>	<u>Bank</u>
211	246.2	W
212	247.0	E
213	247.0	W
214	247.3	W
215	247.8	E
216	248.0	E
217	248.0	W
218	248.5	E
219	248.5	W
220	249.2	E
221	250.0	W
222	250.3	E
223	250.7	W
224	250.9	E
225	251.4	E
226	251.8	W
227	252.0	E
228	252.0	W
229	252.4	W
230	253.0	W
231	253.6	E
232	255.5	E
233	255.7	W
234	256.0	E
235	256.0	W
236	256.2	W
237	257.1	W
238	257.4	E
239	258.5	W
240	259.1	W
241	259.3	E
242	259.5	E
243	260.0	E
244	260.1	W
245	260.8	E

Table D-1.--Continued

<u>Site</u>	<u>River Mile</u>	<u>Bank</u>
246	261.1	E
247	261.5	W
248	261.8	E
249	262.0	E
250	262.7	W
251	263.0	E
252	263.3	W
253	263.9	E
254	264.2	E
255	264.5	W
256	264.9	E
257	265.4	E
258	266.2	E
259	266.3	W
260	266.5	E
261	267.8	E
262	268.7	E
263	271.0	W
264	271.5	E
265	273.0	E
266	274.2	W
267	274.5	E
268	274.8	E
269	276.0	E
270	279.0	E
271	280.5	W
272	281.0	E
273	285.0	E
274	285.0	W
275	288.5	W
276	290.5	E
277	297.5	E
278	300.0	W

Table D-2.-- An annotated list of aquatic plants
found along the Alabama River *

(E=emergent; Fl=free floating;
Fl-lv=free floating, leaved; S=submersed)

TAXODIACEAE

- (E) Taxodium distichum (L.) Richard: 9, 38, 45, 50, 58, 102, 109, 110, 135, 144, 158, 169, 173, 181, 182.

TYPHACEAE

- (E) Typha latifolia L.: 2, 4, 6-8, 12, 51, 54, 55, 57, 60, 61, 64, 65, 69, 71, 72, 74, 75, 77, 78, 84, 86, 87, 91, 92, 103, 109, 112, 114, 119, 121, 126, 193, 199-201, 213, 214, 217, 230, 242, 248.

SPARGANIACEAE

- (E) Sparganium americanum Nuttall: 25.

ALISMACEAE

- (E) Echinodorus cordifolius (L.) Grisebach: 199.
(E) Sagittaria graminea Micheaux: 9.
(E) Sagittaria latifolia Willd.: 1, 5-7, 9, 12, 17, 54-56, 60, 61, 63, 67, 69, 72, 74-80, 82-84, 86, 89, 94-103, 106, 107, 110, 112, 114, 116, 119, 120, 122, 125, 126, 130, 139, 200, 203, 213, 219, 245, 251, 254, 274.

POACEAE

- (E) Echinochloa walteri (Pursh) Heller: 6, 10, 15, 31, 39, 42, 45, 65, 72, 75, 77, 91, 97, 100, 115, 122, 146, 150, 152, 214, 246, 248, 268, 271, 274.
(E) Eragrostis sp.: 40, 199, 238, 268.
(E) Erianthus giganteus (Walt.) Muhl.: 61, 67, 82, 96.
(Fl-lv) Hydrochloa caroliniensis Beauvois: 54, 99.
(E) Leersia virginica Willd.: 64, 65, 67, 69, 76, 86, 87, 93, 100, 104, 110, 112, 119, 132, 143, 163, 166.
(E) Panicum dichotomiflorum Michaux: 1, 2, 5-16, 18-32, 34, 35, 39-45, 58, 77, 80, 101, 106, 108, 112, 119, 128, 132, 145, 158, 163.
(E, Fl-lv) Paspalum fluitans (Ell.) Kunth--138, 139, 141, 142, 145, 148, 149, 153, 160, 161, 163, 170, 172. This species developed several large colonies and presumably could become a problem to recreation.

*--Numbers following each species name refer to the macrophyte sampling site number (Table D-1) at which the species was found.

Table D-2.--Continued

CYPERACEAE

- (E) Carex sp.: 234, 260, 268, 275.
- (E) Cyperus sp.: 2, 14, 54, 57, 60, 61, 64, 70, 71, 73, 80, 87, 88, 104, 110, 112, 115, 157, 167, 170, 172, 176, 198, 199, 205, 212, 213, 220, 222, 227, 233, 234, 238, 239, 248, 249, 254, 259, 262, 264, 268, 275.
- (E) Elcocharis quadrangulata (Michx.) R. & S.: 54.
- (E) Elcocharis sp.: 212, 220, 232-234, 238, 260, 264, 268.
- (E) Fimbristylis miliacea (L.) Vahl: 55, 115, 172, 199, 212, 220, 222, 231-234, 238, 239, 249, 254, 259-261, 264, 268, 277.
- (E) Rhynchospora corniculata (Lam.) Gray: 6, 8, 54, 55, 67, 69, 71, 88, 203, 227.
- (E) Scirpus cyperinus (L.) Kunth: 115, 276.

ARACEAE

- (E) Colocasia esculenta (L.) Schott: 6, 57, 61, 70. Although there are no large colonies on the river, this species may cause problems with recreation. It has been known to do so in other states.
- (E) Peltandra virginica (L.) Kunth: 69, 71, 77, 96, 124, 193, 214, 219, 221, 226, 227, 229, 230, 238, 245, 251, 261, 264.

LEMNACEAE

- (F1) Spirodela polyrrhiza (L.) Schleid.: 4.

COMMELINACEAE

- (E) Commelina communis L.: 254.

PONTEDERIACEAE

- (F1) Eichhornia crassipes (Martius) Solms: 7, 48, 54, 55, 57-62, 64, 68, 70. This species certainly can cause problems with recreation.

JUNCACEAE

- (E) Juncus effusus L.: 54, 71, 212.
- (E) Juncus sp.: 151.

SAURURACEAE

- (E) Saururus cernuus L.: 96.

Table D-2.--Continued

SALICACEAE

- (E) Populus deltoides Marshall: 10, 23, 26, 41.
- (E) Salix nigra Marshall: 14, 19, 21-23, 25, 26, 31-33, 36, 37, 45-50, 60, 76, 78, 80, 169, 176, 178.

JUGLANDACEAE

- (E) Carya aquatica (Michx. f.) Nuttall: 31, 38, 50, 179, 185.

BETULACEAE

- (E) Alnus serrulata (Aiton) Willd.: 57, 70.
- (E) Betula nigra L.: 12.

ULMACEAE

- (E) Planera aquatica Walter ex. J. F. Gmelin: 25, 29, 41, 45, 46, 48-50, 155, 153, 173, 174, 176, 178, 179, 181, 183, 191.

POLYGONACEAE

- (E) Polygonum hydropiperoides Michx.: 6, 9, 168, 254.
- (E) Polygonum lapathifolium L.: 172, 278.
- (E) Polygonum sp.: 71, 175, 199.

AMARANTHACEAE

- (E, Fl-lv) Alternanthera philoxeroides (Martius) Grisebach: 1, 3, 4, 6, 9-11, 48, 51, 53, 55, 57, 60, 61, 63, 65, 67, 68, 70-74, 77-79, 82, 84, 87, 88, 90-94, 96, 97, 99-103, 105-107, 109-111, 113-116, 118, 119, 121-125, 134, 135, 139, 141-144, 157, 175, 176, 179, 181, 184, 186, 187, 189, 190, 192, 193, 195-197, 200-202, 205, 207, 208, 210, 211, 213, 214, 217-219, 228, 232, 236, 237-241-251, 253, 254, 257, 258, 263-265, 270. This is probably the most abundant species and certainly can cause recreational problems.

NYMPHAEACEAE

- (Fl-lv) Nuphar luteum (L.) Sibthorp & Smith: 209, 210, 213, 251, 266.

NELUMBONACEAE

- (Fl-lv) Nelumbo pentapetala (Walt.) Fern.: 57, 60.

BRASSICACEAE

- (E) Rorippa palustris (L.) Besser: 151, 170, 171, 239, 261.

Table D-2.--Continued

CRASSULACEAE

- (E) Penthorum sedoides L.: 142, 172.

PLATANACEAE

- (E) Platanus occidentalis L.: 21, 39, 47, 48.

FABACEAE

- (E) Daubentonia punicea (Cav.) DC.: 71.
(E) Sesbania exaltata (Raf.) Rydberg ex A. W. Hill: 2, 9, 12, 67, 69, 74.

ACERACEAE

- (E) Acer rubrum L.: 12, 39, 46, 48-50.

MALVACEAE

- (E) Hibiscus militaris Cav.: 6, 54, 79, 86, 88, 112, 146, 184, 203, 213, 257, 261, 273, 275, 276.

HYPERICACEAE

- (E) Hypericum virginicum L.: 1, 6, 54, 55, 57, 70-72, 200.

LYTHRACEAE

- (E) Ammannia coccinea Rottboell: 8, 25, 54, 60, 63, 69, 72, 78, 115, 142, 145, 146, 151, 154, 156, 159, 162, 163, 165, 167, 170, 172, 176, 197-200, 209, 212, 220, 231-234, 238, 239, 248, 249, 251, 254, 260, 261, 264, 277.
(E) Rotala ramosior (L.) Koehne: 155, 156, 166, 167, 199, 200, 209, 232, 239, 248, 254, 262, 264, 265, 277.

ONAGRACEAE

- (E) Ludwigia alternifolia L.: 48, 110.
(E) Ludwigia leptocarpa (Nuttall) Hara: 57, 60, 64, 70, 92, 110, 232, 233, 238, 248.
(E) Ludwigia decurrens Walter: 9, 72, 78, 86, 119, 155, 158, 172, 199, 231.
(E, Fl-lv) Ludwigia peploides var. glabrescens (Kuntze) Shinnars: 1, 2, 5, 6, 9, 10, 40, 57, 60, 61, 65, 69, 71, 73, 78, 84, 87, 88, 94, 99, 111, 112, 132, 136, 138, 139, 142, 144-148, 155, 162, 193, 195, 197, 199, 200, 203, 205, 209, 213, 219, 230, 233, 238, 246, 249, 251-254, 258, 262, 268, 277. This species can cause recreational problems.

Table D-2.--Continued

ONAGRACEAE (cont'd)

- (E, Fl-lv) Ludwigia palustris (L.) Ell.: 12, 71, 81, 132, 143, 145, 164, 166, 172, 199, 203, 212, 220, 222, 227, 231, 248, 254, 260, 261, 264, 265, 268, 277, 278.
 (E) Ludwigia sp.: 6, 8, 12, 14, 58, 144, 145, 156, 167, 176, 196, 216, 220, 222, 236, 246, 249, 260, 264, 265, 277.

HALORAGACEAE

- (S) Myriophyllum spicatum L.: 53-55, 57, 58, 60, 61, 63, 65, 67, 71. This species has become very abundant in the north and has completely covered many lakes. This process is just beginning in the south and probably will get worse.

APIACEAE

- (Fl-lv) Hydrocotyle ranunculoides L. f.: 57, 61.
 (E) Hydrocotyle verticillata Thunberg: 131, 261.

OLEACEAE

- (E) Fraxinus sp.: 35.

CONVOLVULACEAE

- (E) Ipomoea sp.: 71.

HYDROPHYLLACEAE

- (E) Hydrolea quadrivalvis Walter: 2, 4, 5, 8, 15, 197, 199, 200, 220, 227, 232, 239, 249, 264, 277.

BORAGINACEAE

- (E) Heliotropium sp.: 48.

VERBENACEAE

- (E) Lippia lanceolata Michaux: 6, 10, 152.

LAMIACEAE

- (E) Lycopus sp.: 54, 55, 57, 58, 70, 71, 142, 144, 175.

SCROPHULARIACEAE

- (E) Bacopa rotundifolia (Michx.) Wettst.: 99, 199, 216, 234, 239, 249, 260, 268.
 (E) Gratiola virginiana L.: 60, 72, 81, 93, 151, 152, 154, 156, 163, 165, 170-172, 176, 199, 200, 205, 207, 209, 212, 213, 216, 220, 227, 231-233, 238, 239, 249, 251, 254, 259-262, 265, 268, 274, 276-278.
 (E) Nicranthemum umbrosum (Walt.) Blake: 172, 176, 212, 239, 260, 261.

Table D-2.--Continued

ACANTHACEAE

- (E, Fl-lv) Justicia americana (L.) Vahl: 3, 52, 54, 56-58, 60, 63-68, 70-73, 75-77, 79-84, 86, 88, 89, 91, 92, 94-99, 101, 104-106, 108-110, 112, 114-116, 119, 120, 122-127, 129, 130, 139-142, 156, 158, 176, 180, 185, 191, 193-195, 198, 204, 206, 209, 211, 215, 216, 219, 221-225, 227, 229, 231-233, 235-238, 240, 245, 247, 251, 255, 256, 259, 262, 267, 271, 272. This species can cause recreational problems.

RUBIACEAE

- (E) Cephalanthus occidentalis L.: 77, 257.

CAMPANULACEAE

- (E) Sphenoclea zeylanica Gaertn.: 9, 69, 92, 93.

ASTERACEAE

- (E) Bidens sp.: 57, 58.
(E) Eclipta alba (L.) Hassk.: 132, 142-146, 149, 151, 154-156, 164, 165, 168, 170-172, 199, 207, 209, 212, 213, 219, 220, 222, 227, 230, 232, 233, 236, 238, 248, 254, 258-264, 267, 268, 274-277.
(E) Mikania scandens (L.) Willd.: 137.
(E) Pluchea camphorata (L.) DC.: 2, 5-8, 11, 15, 18-20, 27, 42, 154, 157, 167, 170, 171, 175, 199, 205, 207, 232, 239, 249, 260, 268, 278.

END

FILMED

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