HYDROLOGIC DATA FOR INDIAN CREEK BASIN, FAYETTE AND WESTMORELAND COUNTIES, PENNSYLVANIA, 1985-87

By James I. Sams III and Emitt C. Witt III

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CONVERSION FACTORS AND ABBREVIATIONS

For the convenience of readers who may prefer to use metric (International System) units rather than the inch-pound units used in this report, values may be converted by using the following factors:

Multiply inch-pound unit	By	To obtain metric unit
	Length	
inch (in.)	25.4	millimeters (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
	Area	
acre	4,047.	square meter (m^2)
square inch (in^2)	6.452	square centimeter (cm^2)
square foot (ft^2)	929.0	square centimeter (cm^2)
square foot (ft^2)	0.09294	square meter (m^2)
square mile (mi^2)	2.590	square kilometer (km^2)
	Volume	
gallon (gal)	0.003785	cubic meter (m^3)
million gallons (Mgal)	3,785.	cubic meter (m^3)
cubic foot (ft^3)	0.02832	cubic meter (m^3)
	Flow	
foot per second (ft/s)	0.30480	meter per second (m/s)
foot per day (ft/d)	0.04800	meter per day (m/d)
mile per hour (mi/h)	1.609	kilometer per hour (km/h)
	Discharge	
cubic foot per second (ft^3/s)	0.02832	cubic meter per second (m^3/s)
gallon per day (gal/d)	0.003785	cubic meter per day (m^3/d)
million gallons per day (Mgal/d)	0.04381	cubic meters per second (m^3/s)
	Mass	
ounce, avoirdupois (oz)	28.35	gram (g)
pound, avoirdupois (Lb)	453.6	gram (g)
ton, short	0.9072	megagram (Mg)
	Temperature	
degree Fahrenheit (°F)	°C = 5 (°F-32)	degree Celsius (°C)

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ABSTRACT

Hydrologic data were collected in the Indian Creek basin, Fayette and Westmoreland Counties, Pennsylvania. Since the early 1900's, coal in the basin has been extensively mined by both underground and surface-mining techniques. Data-collection sites were located in mined and unmined areas of the basin. The hydrologic data presented are from 5 continuous-record surface-water data-collection sites, 1 ground-water well, 23 partial-record surface-water sites, and 2 continuous-record precipitation gages. Data from the five continuous-record surface-water sites include discharge, specific conductance, temperature, pH, and suspended-sediment concentration. Results of laboratory analyses are reported. Benthic macroinvertebrates collected at 23 sites are listed.

INTRODUCTION

The U.S. Geological Survey, in cooperation with the Bureau of Mining and Reclamation, Pennsylvania Department of Environmental Resources (PaDER), began a water resources investigation of the Indian Creek basin in August 1985. The purpose of the investigation was to provide background hydrologic data for the evaluation of coal-mine permit applications. In accordance with the Surface Mining Control and Reclamation Act of 1977, PaDER must evaluate each mine permit application in terms of potential effects on the hydrologic system. This report is a compilation of hydrologic data collected continuously at 5 streamflow-gaging stations, 1 observation well, 2 precipitation gages, and data collected intermittently at 23 partial-record sites in the basin from August 1985 through July 1987.

Special thanks are extended to Jane Earle and Tony Shaw, Water Pollution Biologists, M.C. McCommons, Chief, Environmental Studies Section, and Lynn Langer and Charles Hursh, Mining Specialists of the Bureau of Mining and Reclamation, Pennsylvania Department of Environmental Resources, for providing biological data and field assistance.

DESCRIPTION OF AREA

Location and Land Use

The Indian Creek basin is in rural Fayette and Westmoreland Counties (fig. 1). The watershed drainage area is about 125 square miles, and the main channel is 27 miles long. The first- and second-order tributaries to the main channel are Roaring Run, Champion Creek, Back Creek, Poplar Run, and Laurel Run. Indian Creek enters the Youghiogheny River about 4 miles south of the Mill Run Reservoir (fig. 1). Fifty percent of the basin is forested; the remaining area is dominated by cropland, pasture, and surface mines. Until 1960, coal mining in the basin was predominantly underground. Since 1960, coal has been surface mined.

Geology

The Indian Creek basin is in the Allegheny Mountain section of the Appalachian Plateaus physiographic province (Hickok and Moyer, 1940). The axis of the Indian Creek watershed parallels the Ligonier syncline between the Chestnut Ridge and Laurel Hill anticlines. Outcropping sedimentary rocks are of Pennsylvanian Age, and include the Conemaugh and the Allegheny Groups. The Lower Kittanning coal of the Allegheny Group was mined from the early 1900's until 1966. Almost all of the acid mine drainage (AMD) to the surface water is associated with abandoned mines, both surface and underground, of the Lower and Middle Kittanning coal seams.

Mine Drainage Flume

In the early 1900's, underground coal mining along Indian Creek near Champion, Pennsylvania, produced AMD from flooded mine shafts. AMD contaminated both Champion Creek and Indian Creek. In 1920, the severity of the problem necessitated the construction of a wooden flume to transport the AMD to below the Mill Run Reservoir (fig. 1). Mill Run Reservoir was used as a water supply for the area. The wooden flume was later replaced with a 24-inch inside-diameter concrete pipe. Most of the flume is in abandoned underground mine shafts. Lack of maintenance has caused leaks in the system. A study by Gibbs and Hill, Inc. (Gibbs and Hill Inc., written commun., 1971) documents the flume system and acid mine discharges in the Indian Creek basin. The study lists chemical analyses and acid loads from AMD points along the flume system.

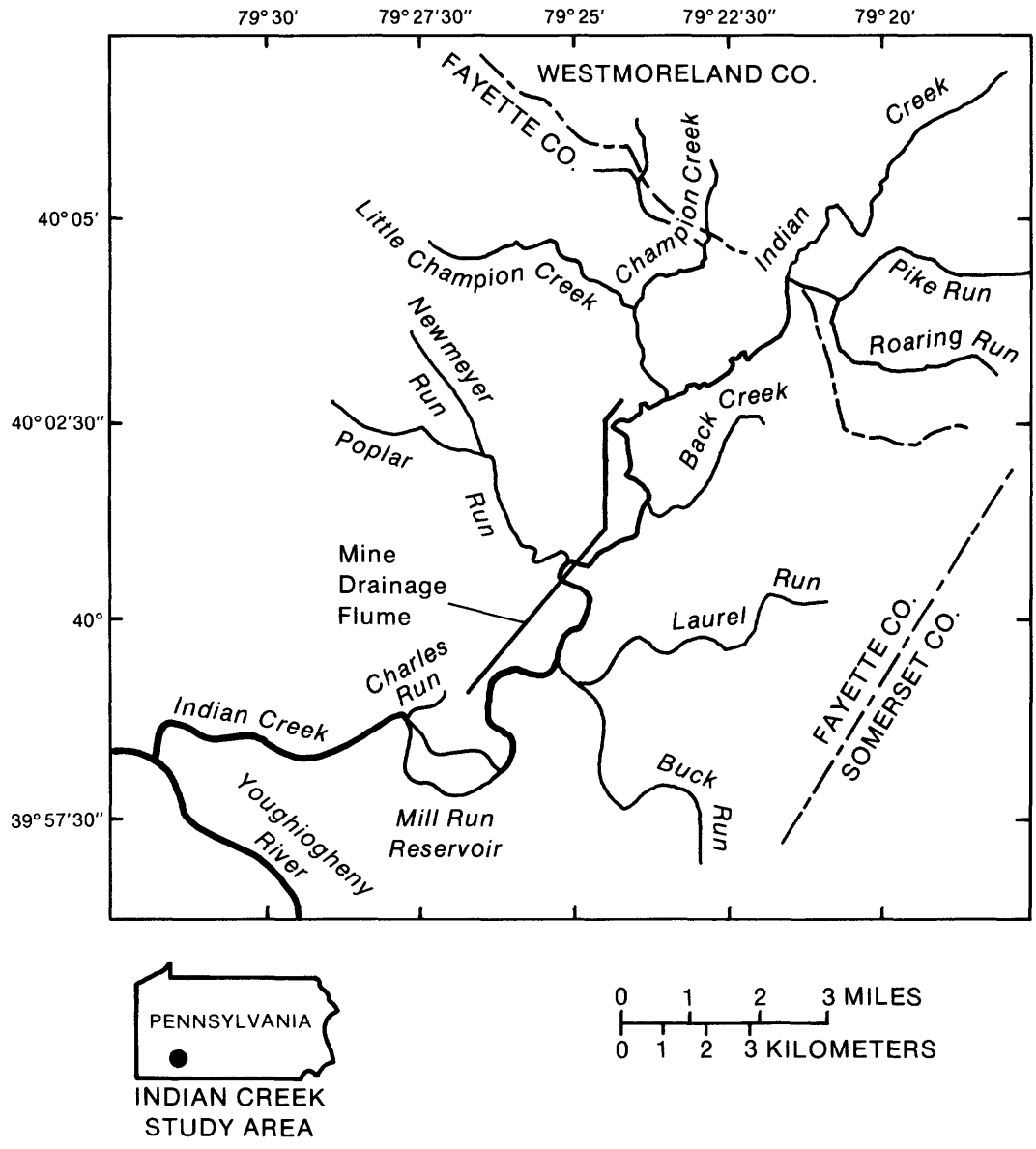
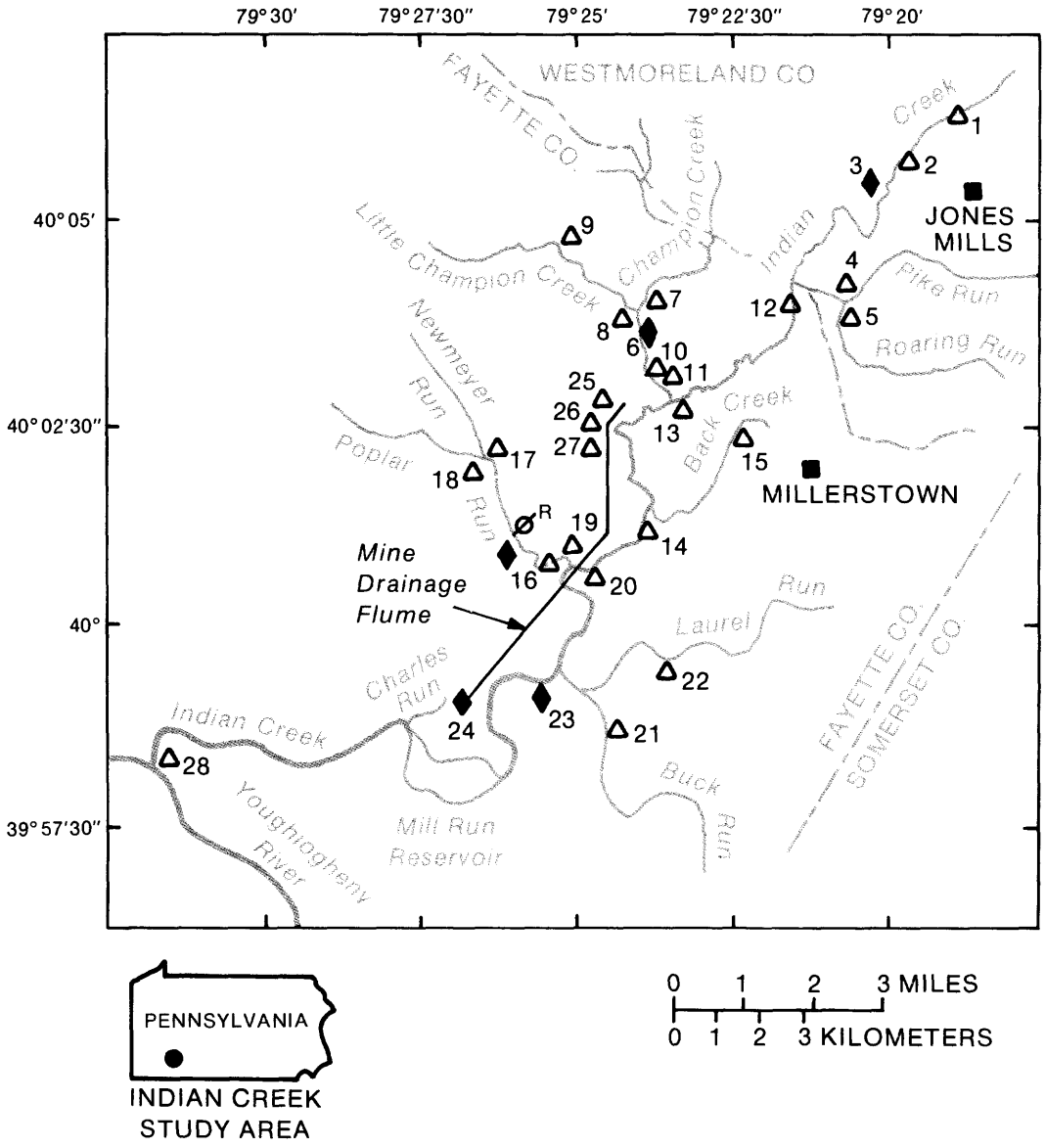


Figure 1.-- Location map of Indian Creek study area.

DATA BASE

The sampling sites were divided into continuous-record sites and partial-record sites. All sampling sites are located on figure 2.



EXPLANATION

- ♦ CONTINUOUS RECORD SITES
- ■ RECORDING RAIN GAGE
- △ PARTIAL RECORD SITES
- ⌀R OBSERVATION WELL WITH RECORDER

Figure 2.-- Location of Indian Creek basin sampling sites.

Continuous-Record Sites

Surface-water quantity and quality were measured continuously at five sites from October 1985 through June 1987. Water levels were continuously recorded from June 1986 through June 1987 at one ground-water well. Table 1 lists all the sampling sites by station numbers and names. Samples were collected monthly at each surface-water continuous-record site for laboratory analysis. The ground-water well was sampled once. The constituents and analytical methods are listed in table 2. Data for all continuous-record sites including the well are in tables 3-20, 23, and 24 (at back of report).

Partial-Record Sites

Twenty-three partial-record sites were selected at mine discharges, flume seeps, and at several tributaries to the main channel. Samples were collected monthly at seven of these sites (2, 4, 5, 15, 21, 22, 28) for laboratory analysis. The remaining sixteen sites were sampled quarterly. Discharge was measured at the time of sampling. Table 1 lists the monthly and quarterly sampling sites. Data for partial-record sites are in table 25 (at back of report).

Precipitation Sites

Precipitation quantity was continuously recorded at two sites, Jones Mills and Millerstown (fig. 2). An electronic tipping-bucket gage interfaced with an analytical digital recorder was used at each station. Snowfall was recorded as meltwater from the tipping-bucket gage. Precipitation at the Jones Mills site represents precipitation to the northern or main channel headwaters, and precipitation at the Millerstown site represents the precipitation to the middle of the basin. Precipitation data are in tables 21 and 22 (at back of report).

Data Collection and Computation

Streamflow data were collected at all sites during the study. Continuous discharge was collected at sites 3, 6, 16, 23, and 24, and instantaneous discharge was collected at all other sites during monthly and quarterly sampling. Stage-discharge relationships were determined at the continuous-record sites using the methods described by Rantz (1982).

Data for the determination of sediment concentration were collected using a U.S. Geological Survey PS-69 automatic sequential sampler activated by a rise in stage. Suspended-sediment concentrations were determined in the U.S. Geological Survey sediment laboratory in Harrisburg, Pennsylvania, by methods described by Guy (1969). Suspended-sediment discharge was computed using the techniques of Porterfield (1972). Sites 3, 6, 16, and 23 were sampled for suspended sediment.

Table 1.--Sampling sites in Indian Creek basin

Station number	Site number	Station name
[3]03082003	1	Abandoned deep mine discharge at Kregar
[2]03082005	2	Indian Creek at Kregar
[1,2]03082020	3	Indian Creek below LR 381 Bridge at Jones Mills
[2]03082040	4	Pike Run above confluence with Roaring Run at Champion
[2]03082045	5	Roaring Run above confluence with Pike Run at Champion
[1,2]03082120	6	Champion Creek at Melcroft
[3]03082110	7	Champion Creek above confluence with Little Champion Creek near Melcroft
[3]03082115	8	Little Champion Creek above confluence with Champion Creek near Melcroft
[3]03082112	9	Abandoned deep mine discharge near White
[3]03082122	10	Mine pool #3 at Melcroft
[3]03082125	11	Champion Creek at LR 381/711 bridge at Melcroft
[3]03082100	12	Indian Creek at Nebo
[3]03082105	13	Indian Creek at Coffman
[3]03082160	14	Indian Creek at Indian Head
[2]03082155	15	Back Creek at Indian Head
[1,2]03082190	16	Poplar Run near Normalville
[3]03082180	17	Newmyer Run above confluence with Poplar Run near Clinton
[3]03082175	18	Poplar Run above confluence with Newmyer Run near Clinton
[3]03082210	19	Poplar Run at mouth near Normalville

Table 1.--Sampling sites in Indian Creek basin--Continued

Station number	Site number	Station name
[3]03082168	20	Galentine mine discharge near Indian Head
[2]03082220	21	Buck Run above confluence with Laurel Run at Rogers Mill
[2]03082215	22	Laurel Run above confluence with Buck Run at Rogers Mill
[1,2]03082237	23	Indian Creek at White Bridge near Normalville
[1,2]03082258	24	Mine discharge from flume system at Normalville
[3]03082132	25	Big Kelp mine discharge at Romney
[3]03082133	26	Little Kelp mine discharge at Romney
[3]03082142	27	Mathew's mine discharge at Davistown
[2]03082300	28	Indian Creek at mouth near Mill Run

[1] Continuous-record sites
[2] Monthly laboratory analysis
[3] Quarterly laboratory analysis

Table 2.--Laboratory methods used to analyze surface- and ground-water samples

Chemical constituent	Analytical method
Specific conductance	Wheatstone bridge
pH	pH meter
Acidity	Electrometric titration
Akalinity, total as $CaCO_3$	Electrometric titration
Calcium, dissolved and total	Inductively coupled plasma-emission spectroscopy (ICP)
Magnesium, dissolved and total	ICP
Sodium, dissolved and total	ICP
Potassium, dissolved and total	ICP
	ICP
Sulfate, total	Automated calorimetric methylthymol Blue
Arsenic, dissolved and total	Atomic absorption spectrometric
Boron, total	Automated calorimetric methylthymol
Chromium, dissolved and total	ICP
Cobalt, dissolved and total	ICP
Copper, dissolved and total	ICP
Iron, dissolved and total	ICP
Lead, dissolved and total	Atomic absorption spectrometric
Manganese, dissolved and total	ICP
Nickel, dissolved and total	ICP
Strontium, dissolved and total	ICP
Zinc, dissolved and total	ICP
Aluminum, total	ICP

Samples of the surface waters were collected in polyethylene bottles at midstream. The ground-water sample was collected after pumping five bore-hole volumes from the well. Field analysis for most samples included pH, specific conductance, temperature, alkalinty, and acidity. Samples analyzed for dissolved constituents were filtered through a 0.45 micrometer membrane filter. Dissolved metal samples were acidified with ultra pure nitric acid following filtration. Chemical analyses were done in the PaDER Analytical Laboratory, Harrisburg, Pennsylvania. Table 2 lists the laboratory analysis and the analytical methods used.

Aquatic biology data were collected at 24 sites in the basin (July 29-31, 1986), by water pollution biologists of the PaDER. Benthic macroinvertebrates were collected at all the sites, and fish were collected at seven sites. Fish were collected with a back-pack electrofisher and a 150-volt AC generator. After identification, fish were released into the stream. Benthic macro-invertebrates were qualitatively sampled with a kick screen at riffles and by examining the underside of rocks. Sampling sites are shown on figure 3 and the data are listed in tables 26 and 27 (at back of report).

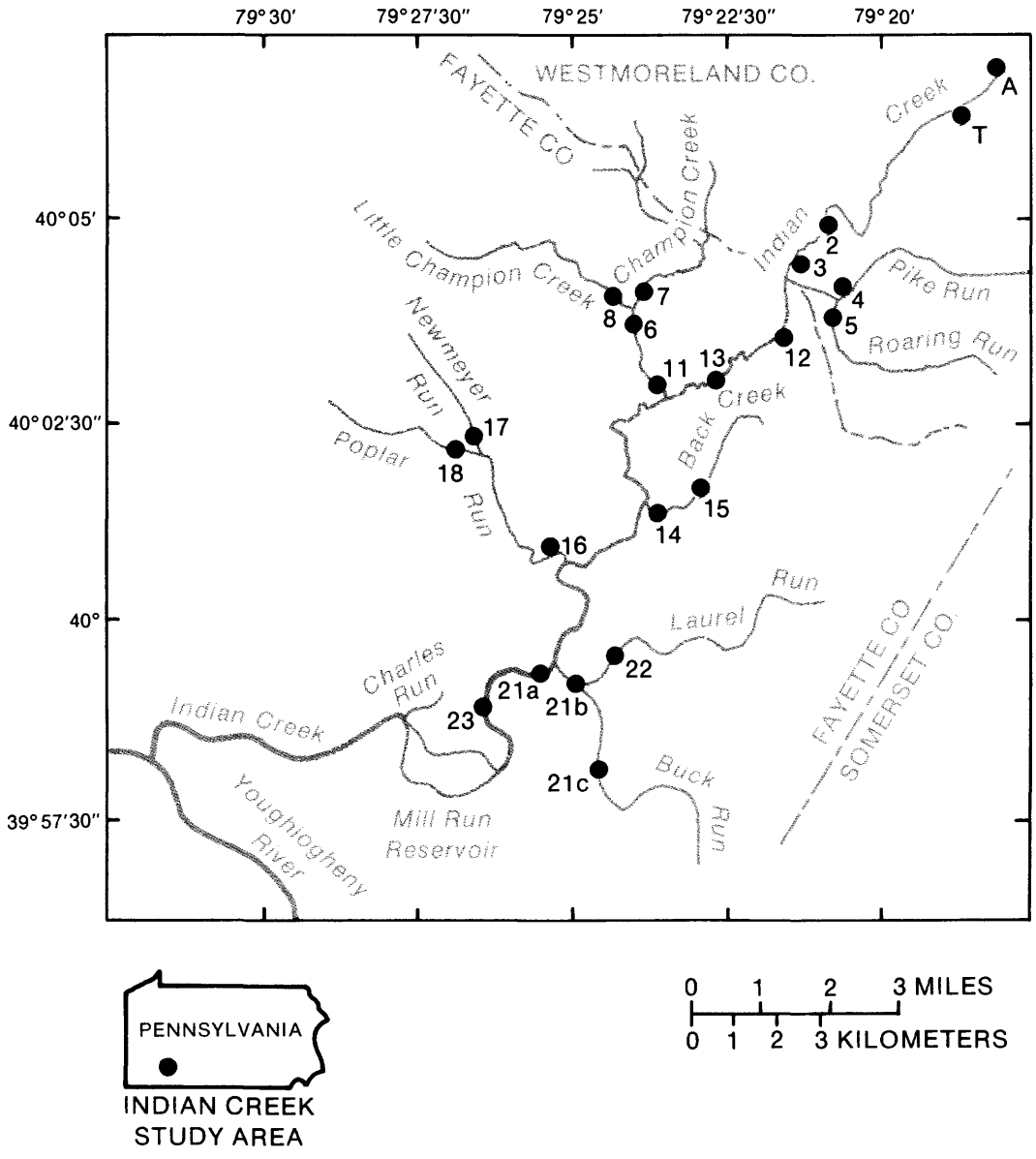


Figure 3.-- Location of Pennsylvania Department of Environmental Resources aquatic biology sampling sites.

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TABLE 3.-- DAILY DISCHARGE FOR INDIAN CREEK AT JONES MILLS (03082020)
(Lat 40°05'21", Long 79°20'04")

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2.6	3.5	94	15	27	31	15	23	11	4.3	8.8	3.5
2	4.2	4.1	71	13	33	28	14	20	11	8.3	8.1	3.6
3	2.9	6.5	53	15	71	25	14	18	9.6	5.1	7.5	3.4
4	2.8	18	42	15	344	24	13	17	9.0	4.2	6.6	3.3
5	2.8	62	37	15	653	23	14	16	9.2	3.8	6.1	4.2
6	2.8	55	36	16	371	22	22	15	9.2	3.6	6.3	3.4
7	2.8	41	30	14	183	21	28	17	8.9	3.6	7.7	3.2
8	2.7	32	29	13	109	32	21	14	9.6	6.0	6.2	3.0
9	2.6	24	27	12	76	31	20	12	7.9	91	5.8	2.8
10	2.9	23	29	12	60	65	22	11	6.8	26	6.9	2.7
11	3.5	38	44	12	51	143	26	11	7.4	19	13	2.7
12	3.2	66	86	12	41	94	27	10	12	18	6.1	3.5
13	3.9	72	90	12	42	96	27	9.8	8.1	20	5.4	3.1
14	4.5	89	83	9.5	66	149	26	15	6.7	20	5.0	2.7
15	4.7	100	56	8.4	29	281	31	10	6.0	15	4.8	2.6
16	4.1	269	45	9.2	32	159	53	10	6.4	14	8.1	2.5
17	3.4	216	37	12	79	101	69	11	11	13	5.8	2.5
18	3.3	118	33	22	230	73	61	9.3	6.1	11	5.2	3.5
19	3.6	77	29	33	327	63	57	13	5.6	127	4.8	5.5
20	5.0	57	27	62	259	49	55	19	5.3	120	4.5	3.4
21	9.3	42	25	54	212	38	57	17	5.0	77	4.6	3.1
22	6.0	47	24	58	145	33	71	15	4.7	48	4.5	2.9
23	5.3	39	24	60	103	29	58	15	5.9	33	5.8	4.5
24	6.7	32	22	52	77	26	51	14	4.7	27	9.2	26
25	9.0	30	24	43	61	24	47	13	4.4	22	4.6	31
26	4.7	194	42	41	51	22	42	12	4.2	18	4.2	12
27	4.2	379	29	36	43	23	36	17	4.2	15	5.5	9.4
28	4.0	483	17	32	35	20	31	19	6.1	13	4.9	7.6
29	3.7	263	16	27	---	18	28	14	4.7	12	4.2	6.4
30	3.5	145	15	25	---	17	24	13	4.3	11	3.8	5.8
31	3.7	---	15	24	---	16	---	13	---	9.7	3.6	---
TOTAL	128.4	3025.1	1231	784.1	3810	1776	1060	443.1	215.0	818.6	187.6	173.8
MEAN	4.14	101	39.7	25.3	136	57.3	35.3	14.3	7.17	26.4	6.05	5.79
MAX	9.3	483	94	62	653	281	71	23	12	127	13	31
MIN	2.6	3.5	15	8.4	27	16	13	9.3	4.2	3.6	3.6	2.5
CFSM	.24	5.80	2.28	1.46	7.83	3.30	2.03	.82	.41	1.52	.35	.33
IN.	.27	6.47	2.63	1.68	8.15	3.80	2.27	.95	.46	1.75	.40	.37

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	56	20	40	27	27	47	77	33	18	---	---	---
2	49	19	63	28	66	63	78	41	17	---	---	---
3	46	17	78	25	64	55	68	46	14	---	---	---
4	100	34	65	22	49	45	123	55	12	---	---	---
5	162	50	56	48	39	37	116	47	11	---	---	---
6	78	52	47	37	36	33	141	43	9.7	---	---	---
7	50	44	40	25	33	35	210	39	9.0	---	---	---
8	35	72	40	23	31	50	205	33	8.5	---	---	---
9	27	277	110	20	29	73	182	29	23	---	---	---
10	22	141	113	21	47	68	139	25	11	---	---	---
11	18	127	86	22	31	53	106	23	9.0	---	---	---
12	16	96	70	20	30	41	102	21	17	---	---	---
13	18	73	54	18	28	34	82	18	18	---	---	---
14	32	57	43	21	25	30	69	17	28	---	---	---
15	23	47	37	68	20	28	65	16	14	---	---	---
16	19	40	32	74	38	24	57	14	11	---	---	---
17	19	33	29	56	19	21	56	13	9.8	---	---	---
18	18	37	37	48	17	20	47	19	8.7	---	---	---
19	16	43	32	90	20	18	41	25	8.0	---	---	---
20	15	48	27	83	23	18	37	41	40	---	---	---
21	14	67	24	59	17	17	34	21	41	---	---	---
22	14	55	24	50	15	17	31	18	24	---	---	---
23	13	48	26	44	16	17	30	17	28	---	---	---
24	12	60	54	119	14	17	118	15	20	---	---	---
25	11	54	96	133	14	20	75	14	15	---	---	---
26	20	108	70	81	13	21	60	20	16	---	---	---
27	18	103	59	58	13	19	50	41	12	---	---	---
28	26	81	48	38	15	18	57	20	10	---	---	---
29	24	65	40	28	---	17	43	17	9.0	---	---	---
30	23	52	35	47	---	25	38	15	9.4	---	---	---
31	21	---	30	40	---	87	---	19	---	---	---	---
TOTAL	1015	2020	1605	1473	789	1068	2537	815	481.1	---	---	---
MEAN	32.7	67.3	51.8	47.5	28.2	34.5	84.6	26.3	16.0	---	---	---
MAX	162	277	113	133	66	87	210	55	41	---	---	---
MIN	11	17	24	18	13	17	30	13	8.0	---	---	---
CFSM	1.88	3.87	2.98	2.73	1.62	1.98	4.87	1.51	.92	---	---	---
IN.	2.17	4.32	3.44	3.15	1.69	2.29	5.43	1.74	1.03	---	---	---

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)
(Lat 40°05'21", Long 79°20'04")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	11.0	9.0	10.0	---	---	---	1.0	.5	.5
2	---	---	---	10.5	9.5	10.0	---	---	---	1.0	.5	1.0
3	---	---	---	11.0	10.0	10.5	4.0	3.5	4.0	2.0	1.0	2.0
4	---	---	---	11.5	10.0	11.0	5.0	4.0	4.5	3.0	2.0	2.5
5	---	---	---	11.5	10.5	11.0	5.5	4.5	5.0	3.0	.5	2.0
6	---	---	---	10.5	9.5	10.0	4.5	4.5	4.5	.5	.5	.5
7	---	---	---	10.0	8.5	9.5	---	---	---	.5	.5	.5
8	---	---	---	9.5	7.5	8.5	---	---	---	.5	.5	.5
9	---	---	---	9.5	6.5	8.0	---	---	---	1.0	.5	.5
10	15.0	11.0	14.0	10.5	9.5	10.0	---	---	---	1.0	.5	.5
11	14.5	12.0	13.5	12.5	10.5	11.5	---	---	---	1.0	.5	1.0
12	14.0	10.5	12.0	13.0	11.5	12.0	---	---	---	1.0	.5	1.0
13	15.0	12.5	13.5	13.0	12.0	12.5	---	---	---	1.0	.5	.5
14	16.0	13.0	14.5	14.0	13.0	13.5	---	---	---	.5	.5	.5
15	17.0	14.5	15.5	13.0	9.5	11.0	---	---	---	1.0	.5	.5
16	15.0	12.0	13.5	12.5	8.5	9.5	---	---	---	1.0	.5	1.0
17	12.5	8.0	10.5	---	---	---	3.0	3.0	3.0	1.0	1.0	1.0
18	14.5	9.5	12.0	---	---	---	3.0	.5	1.0	1.0	1.0	1.0
19	15.5	13.0	14.5	13.5	11.5	12.5	1.0	.5	.5	5.5	1.0	4.0
20	15.5	11.5	14.0	12.0	9.5	11.5	1.0	.5	.5	---	---	---
21	11.5	10.5	10.5	9.5	7.0	8.0	.5	.5	.5	---	---	---
22	13.0	10.5	11.5	8.0	6.5	7.0	.5	.5	.5	---	---	---
23	16.0	12.0	14.0	8.0	6.5	7.5	1.5	.5	1.0	---	---	---
24	15.0	13.5	14.5	8.0	5.5	7.0	3.0	1.5	2.5	---	---	---
25	15.0	11.0	14.0	6.5	5.5	6.0	2.0	.5	.5	---	---	---
26	11.5	7.5	10.0	14.0	6.5	9.0	1.0	.5	.5	---	---	---
27	12.0	7.5	10.0	12.0	11.0	11.5	.5	.5	.5	---	---	---
28	11.0	7.5	9.5	---	---	---	1.0	.5	.5	---	---	---
29	9.0	5.5	7.5	---	---	---	.5	.5	.5	---	---	---
30	9.5	7.0	8.0	---	---	---	.5	.5	.5	---	---	---
31	11.0	8.0	9.5	---	---	---	.5	.5	.5	1.0	1.0	1.0
MONTH	17.0	5.5	12.0	14.0	5.5	10.0	5.5	.5	1.5	5.5	.5	1.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	1.0	1.0	---	---	---	---	---	---	14.5	12.0	13.5
2	3.5	1.0	2.0	---	---	---	15.5	10.5	13.5	12.0	8.0	10.5
3	5.0	3.5	4.0	---	---	---	14.5	7.5	11.0	12.0	6.0	8.5
4	4.5	3.0	4.0	4.0	3.0	3.5	16.0	11.0	13.5	14.0	5.5	10.0
5	---	---	---	5.0	2.5	3.5	15.5	12.0	13.5	17.5	8.0	12.5
6	6.5	3.0	5.5	---	---	---	14.5	11.5	13.0	18.5	12.0	15.0
7	5.0	3.0	4.0	---	---	---	14.5	11.5	12.5	19.5	14.0	16.5
8	5.0	4.5	4.5	---	---	---	14.5	10.0	12.5	19.5	12.0	16.0
9	---	---	---	---	---	---	10.0	6.5	8.0	17.0	12.0	14.5
10	---	---	---	---	---	---	6.5	4.5	5.5	18.5	10.0	14.0
11	---	---	---	---	---	---	5.5	4.0	5.0	19.5	10.5	15.0
12	---	---	---	---	---	---	11.0	4.0	7.5	20.0	12.5	16.0
13	---	---	---	---	---	---	11.0	6.0	8.0	16.0	13.5	14.5
14	---	---	---	---	---	---	13.5	5.5	9.5	15.5	12.0	13.5
15	---	---	---	---	---	---	10.5	9.5	10.0	17.5	12.5	15.0
16	---	---	---	---	---	---	9.5	6.5	7.5	20.0	14.5	16.5
17	---	---	---	---	---	---	7.5	6.0	6.5	20.0	15.0	17.5
18	---	---	---	---	---	---	14.0	5.5	9.5	21.0	15.5	18.5
19	---	---	---	---	---	---	15.5	7.0	11.0	17.5	15.5	16.5
20	9.0	7.0	8.0	---	---	---	12.5	10.0	11.5	16.0	15.0	15.5
21	7.0	5.0	6.5	---	---	---	11.5	9.5	10.5	15.0	12.5	13.5
22	6.0	4.5	5.0	---	---	---	9.5	6.0	7.5	13.5	11.5	12.5
23	5.5	4.5	4.5	---	---	---	10.0	5.0	7.0	13.0	10.0	11.5
24	---	---	---	---	---	---	13.0	4.5	8.5	15.0	10.5	12.5
25	---	---	---	---	---	---	12.0	6.5	9.5	16.5	11.0	13.5
26	---	---	---	---	---	---	16.5	8.0	12.0	18.5	12.0	15.0
27	---	---	---	---	---	---	18.0	10.0	14.0	16.0	15.0	15.0
28	---	---	---	---	---	---	19.5	12.0	15.5	17.5	14.5	15.5
29	---	---	---	---	---	---	17.5	13.5	15.5	19.0	14.0	16.5
30	---	---	---	---	---	---	16.0	10.0	13.5	18.0	15.0	16.5
31	---	---	---	---	---	---	---	---	---	19.5	14.0	16.5
MONTH	9.0	1.0	4.5	5.0	2.5	3.5	19.5	4.0	10.5	21.0	5.5	14.5

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.5	14.5	17.0	19.0	15.0	17.0	19.0	15.0	17.0	16.0	13.5	15.0
2	17.5	14.0	16.0	18.5	17.0	17.5	19.0	16.0	17.5	17.5	15.0	16.0
3	16.0	10.5	13.5	19.0	15.5	17.5	18.5	15.5	17.0	19.0	15.5	17.5
4	13.5	11.5	12.5	19.5	13.0	16.5	18.5	14.5	16.5	19.0	17.0	18.0
5	18.0	15.0	16.5	21.0	14.5	18.0	18.5	14.5	16.5	20.0	17.5	18.5
6	18.0	16.0	17.0	22.0	17.0	19.5	20.0	16.5	18.0	17.5	15.0	16.5
7	20.5	16.0	18.0	23.0	18.5	21.0	20.0	17.0	18.5	15.5	13.5	14.5
8	19.5	17.5	18.5	23.0	19.0	21.0	20.0	17.5	18.5	---	---	---
9	19.5	14.5	17.0	20.5	18.5	19.5	21.5	17.5	19.5	---	---	---
10	18.0	14.0	16.5	19.0	16.5	18.0	20.0	17.0	18.5	---	---	---
11	21.5	17.0	19.0	17.5	16.0	16.5	19.5	18.0	18.5	---	---	---
12	21.0	18.0	19.5	19.5	17.0	18.0	18.5	15.0	17.0	---	---	---
13	19.0	16.5	17.5	19.0	18.5	18.5	19.5	16.0	17.5	---	---	---
14	20.5	15.0	17.5	19.5	17.5	18.5	20.0	16.5	18.5	---	---	---
15	21.0	16.0	18.5	19.5	15.5	17.5	20.5	17.0	19.0	---	---	---
16	21.0	17.5	19.0	18.0	16.0	17.0	21.0	18.0	19.5	---	---	---
17	---	---	---	20.0	17.0	18.0	19.5	19.0	19.0	---	---	---
18	---	---	---	22.0	18.0	20.0	21.0	18.5	19.5	---	---	---
19	---	---	---	20.5	18.5	19.5	20.5	17.0	19.0	---	---	---
20	---	---	---	---	---	---	19.5	17.5	18.5	---	---	---
21	---	---	---	---	---	---	19.0	18.0	18.5	---	---	---
22	---	---	---	---	---	---	20.5	17.0	18.5	---	---	---
23	---	---	---	---	---	---	19.5	16.5	18.5	---	---	---
24	---	---	---	18.0	17.0	18.0	19.0	16.5	18.0	---	---	---
25	19.0	15.0	17.5	19.5	16.5	18.0	17.5	13.5	16.0	20.0	18.0	19.0
26	19.0	13.0	16.0	20.0	17.0	18.5	19.5	15.0	17.5	20.5	18.0	19.5
27	18.0	14.0	16.5	20.0	17.5	18.5	18.5	17.0	18.0	19.0	16.0	18.0
28	17.5	17.0	17.0	19.0	16.5	18.0	17.0	13.5	15.5	20.0	15.5	18.0
29	22.0	17.0	19.0	18.5	17.0	17.5	14.0	10.5	12.5	20.5	16.0	18.0
30	19.5	16.5	18.0	18.0	16.5	17.0	14.5	9.5	12.5	21.5	16.0	19.0
31	---	---	---	18.5	15.0	16.5	16.0	11.5	14.0	---	---	---
MONTH	22.0	10.5	17.0	23.0	13.0	18.0	21.5	9.5	17.5	21.5	13.5	17.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	16.0	18.0	11.5	8.0	9.5	6.5	4.0	5.0	3.5	2.5	3.0
2	18.5	15.0	16.5	11.0	9.0	10.5	6.0	2.0	4.0	3.0	1.5	2.0
3	18.5	15.5	17.5	10.0	7.5	9.0	7.0	5.5	6.5	2.5	1.5	2.0
4	18.0	11.5	15.5	10.0	9.5	9.5	5.5	4.5	5.0	2.0	.0	1.0
5	13.5	10.0	12.5	9.5	8.5	8.5	4.5	4.0	4.0	1.0	.5	.5
6	11.0	9.5	10.0	10.5	8.5	9.5	4.5	2.0	3.5	1.0	.5	.5
7	12.0	10.0	11.0	11.0	8.5	10.0	6.5	4.5	5.5	2.5	.5	1.5
8	---	---	---	14.0	11.0	12.5	7.0	5.5	6.0	2.5	2.0	2.0
9	---	---	---	13.0	9.5	12.0	9.0	6.5	7.5	3.5	2.0	2.5
10	---	---	---	9.5	7.5	8.5	9.0	5.0	7.5	3.5	1.0	3.0
11	---	---	---	8.5	7.5	8.0	6.0	4.5	5.0	2.5	.0	2.0
12	---	---	---	9.0	7.5	8.5	5.5	4.5	5.0	1.5	.0	1.5
13	---	---	---	7.5	4.0	6.0	4.5	1.5	3.0	2.5	.0	2.0
14	---	---	---	5.5	.5	3.5	3.5	.5	2.0	3.5	.0	2.0
15	---	---	---	7.0	4.0	5.5	5.5	3.5	4.5	5.0	2.5	4.0
16	---	---	---	7.5	7.0	7.0	7.5	3.0	4.5	5.0	2.0	4.0
17	15.0	9.5	13.0	9.0	7.5	8.0	6.0	4.5	5.0	3.5	2.0	2.5
18	10.0	7.5	9.0	8.0	6.5	7.5	7.0	5.0	5.5	5.0	2.0	4.0
19	9.0	6.0	7.5	7.5	4.5	6.0	5.5	3.5	4.0	5.0	1.0	4.0
20	9.0	5.5	7.0	6.0	3.5	4.5	6.5	3.5	4.5	3.5	3.0	3.0
21	9.5	5.5	7.5	6.0	5.5	5.5	7.0	2.0	4.5	3.5	2.0	3.0
22	12.0	7.5	10.0	7.0	5.5	6.0	2.5	.5	1.0	2.0	1.0	1.5
23	12.5	9.5	11.0	8.5	5.5	7.0	4.0	.5	1.5	---	---	---
24	14.0	11.5	12.5	9.0	7.0	8.5	2.5	1.5	2.0	---	---	---
25	12.5	11.0	11.5	7.5	5.5	6.5	5.0	1.5	4.5	---	---	---
26	12.5	11.0	11.5	10.0	7.5	9.0	5.0	4.5	4.5	---	---	---
27	12.5	12.0	12.0	10.0	7.0	8.5	5.0	4.0	4.5	---	---	---
28	13.0	10.5	12.0	8.5	6.0	7.5	4.5	3.5	4.0	---	---	---
29	12.0	8.5	10.5	7.5	7.0	7.0	4.5	2.5	3.5	---	---	---
30	12.0	9.0	11.0	7.5	5.5	6.5	4.0	1.5	3.5	---	---	---
31	9.0	7.0	8.0	---	---	---	4.5	1.5	4.0	---	---	---
MONTH	19.5	5.5	11.5	14.0	.5	8.0	9.0	.5	4.5	5.0	.0	2.5

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	5.5	3.0	4.5	8.0	3.5	5.5	12.5	6.5	9.5
2	---	---	---	4.5	3.0	3.5	6.0	5.0	6.0	12.0	9.0	10.5
3	---	---	---	6.5	3.5	4.5	5.0	3.5	4.5	12.0	10.0	11.0
4	4.0	3.0	3.5	4.0	2.5	3.0	4.5	3.0	4.0	10.5	9.0	10.0
5	3.5	1.0	2.5	5.5	1.0	3.0	---	---	---	13.0	7.0	10.0
6	4.0	1.0	2.5	8.0	2.5	5.0	---	---	---	14.5	7.0	10.5
7	4.5	2.0	3.0	9.5	3.5	6.5	6.0	5.5	5.5	12.5	8.0	10.5
8	3.5	1.0	2.5	10.0	4.5	7.0	9.5	6.0	7.0	13.5	7.5	10.5
9	---	---	---	8.0	5.5	7.0	10.0	5.5	7.5	16.0	7.5	11.5
10	---	---	---	6.0	2.5	4.5	12.0	5.5	8.5	17.5	9.5	13.5
11	---	---	---	5.5	2.5	3.5	10.0	6.0	8.0	18.5	11.5	15.0
12	---	---	---	7.0	3.0	4.5	10.0	7.0	8.5	15.5	13.0	13.5
13	---	---	---	6.5	3.0	4.5	10.0	7.5	8.5	17.0	10.5	13.5
14	---	---	---	4.0	2.0	3.0	10.0	7.5	9.0	19.0	12.0	15.5
15	---	---	---	6.0	4.0	4.5	10.0	8.5	9.5	18.5	14.5	16.5
16	---	---	---	7.0	2.5	4.5	9.5	7.5	8.5	17.5	10.0	14.0
17	---	---	---	6.5	1.0	4.0	11.5	8.5	9.5	18.5	10.5	14.5
18	---	---	---	7.5	1.5	4.5	15.0	7.5	11.0	16.5	12.0	14.5
19	---	---	---	9.0	3.0	6.0	14.0	9.0	11.5	---	---	---
20	---	---	---	8.5	2.5	5.5	15.5	9.5	12.5	---	---	---
21	---	---	---	9.0	3.5	6.5	17.5	10.0	14.0	---	---	---
22	---	---	---	8.0	3.5	6.0	17.5	11.0	14.5	---	---	---
23	---	---	---	10.5	4.0	7.0	15.5	13.5	14.0	20.0	15.0	17.5
24	---	---	---	11.5	4.5	8.5	---	---	---	19.5	15.5	17.0
25	3.5	1.0	1.5	12.0	8.0	9.5	---	---	---	18.0	13.5	16.0
26	5.0	.5	2.5	11.5	8.0	9.5	---	---	---	21.5	15.0	17.0
27	3.5	1.5	2.5	10.5	6.0	8.5	---	---	---	23.0	16.5	21.0
28	4.0	2.0	3.0	13.5	8.5	10.5	---	---	---	19.5	15.5	17.0
29	---	---	---	13.5	7.0	10.5	---	---	---	20.0	15.5	18.0
30	---	---	---	11.5	10.0	11.0	---	---	---	20.0	16.5	18.5
31	---	---	---	10.5	3.5	7.0	---	---	---	19.0	17.0	18.0
MONTH	5.0	.5	2.5	13.5	1.0	6.0	17.5	3.0	9.0	23.0	6.5	14.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	20.0	16.0	17.5									
2	18.5	16.5	17.5									
3	19.0	16.0	17.5									
4	18.5	16.5	17.5									
5	18.0	13.5	16.0									
6	17.0	13.5	15.5									
7	19.5	14.0	16.5									
8	20.5	15.5	18.0									
9	---	---	---									
10	---	---	---									
11	---	---	---									
12	---	---	---									
13	---	---	---									
14	---	---	---									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	20.5	16.0	18.5									
19	21.0	16.5	19.0									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	21.0	13.5	17.5									

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	422	398	409	---	---	---	507	441	472
2	---	---	---	415	380	398	---	---	---	507	439	478
3	---	---	---	451	393	426	390	225	298	535	432	452
4	---	---	---	467	390	426	283	178	199	970	542	814
5	---	---	---	391	251	300	277	172	180	1170	626	762
6	---	---	---	267	203	226	587	309	456	1520	960	1270
7	---	---	---	222	194	199	---	---	---	967	732	831
8	---	---	---	322	205	212	---	---	---	763	551	645
9	---	---	---	216	206	211	---	---	---	625	510	565
10	323	313	316	243	212	221	---	---	---	509	436	467
11	321	293	304	264	239	247	---	---	---	502	424	447
12	323	294	306	240	181	209	---	---	---	483	395	418
13	359	297	312	185	164	173	---	---	---	489	408	454
14	366	307	329	165	134	151	---	---	---	859	461	720
15	377	326	345	144	130	137	---	---	---	973	622	735
16	376	337	352	---	---	---	---	---	---	963	716	772
17	362	335	345	---	---	---	328	232	279	760	686	705
18	336	320	326	---	---	---	835	273	434	918	667	827
19	326	315	321	152	145	147	275	231	250	1040	568	728
20	347	307	321	163	151	156	234	209	223	---	---	---
21	437	309	397	171	161	166	1030	208	703	---	---	---
22	429	388	400	582	167	253	943	415	687	---	---	---
23	450	415	433	218	183	194	965	332	505	---	---	---
24	453	370	414	185	180	181	997	313	606	---	---	---
25	495	412	450	223	176	185	1490	553	1080	---	---	---
26	440	412	428	283	153	232	996	673	775	---	---	---
27	426	392	412	---	---	---	1010	646	799	---	---	---
28	404	388	397	---	---	---	1100	841	939	---	---	---
29	398	375	388	---	---	---	907	652	756	---	---	---
30	387	376	381	---	---	---	729	534	616	---	---	---
31	424	372	394	---	---	---	556	447	493	1050	670	870
MONTH	495	293	367	582	130	237	1490	172	541	1520	395	672

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	860	570	720	---	---	---	---	---	---	236	224	229
2	1180	570	870	---	---	---	274	252	257	292	237	258
3	780	500	600	---	---	---	273	253	262	253	248	250
4	640	360	510	564	380	514	274	254	262	257	241	251
5	---	---	---	891	512	688	277	246	261	256	236	246
6	192	180	188	---	---	---	447	264	347	258	236	243
7	654	177	392	---	---	---	448	333	398	356	227	285
8	857	667	748	---	---	---	333	290	307	323	258	277
9	---	---	---	---	---	---	292	275	283	263	254	259
10	---	---	---	---	---	---	398	281	331	300	255	272
11	---	---	---	---	---	---	1280	382	916	307	283	296
12	---	---	---	---	---	---	1090	482	667	310	286	299
13	---	---	---	---	---	---	539	389	429	293	285	290
14	---	---	---	---	---	---	413	307	349	475	273	387
15	---	---	---	---	---	---	343	282	299	396	347	359
16	---	---	---	---	---	---	828	341	493	368	313	336
17	---	---	---	---	---	---	620	435	531	388	328	358
18	---	---	---	---	---	---	432	281	332	401	324	344
19	---	---	---	---	---	---	281	237	257	447	320	400
20	213	207	210	---	---	---	238	222	230	519	392	441
21	414	190	254	---	---	---	298	231	264	393	349	367
22	562	207	241	---	---	---	470	253	339	349	302	323
23	705	264	469	---	---	---	414	279	335	303	278	290
24	---	---	---	---	---	---	307	238	260	291	271	281
25	---	---	---	---	---	---	242	222	232	275	260	267
26	---	---	---	---	---	---	228	213	221	272	255	262
27	---	---	---	---	---	---	224	212	218	397	238	260
28	---	---	---	---	---	---	234	215	222	411	329	364
29	---	---	---	---	---	---	253	216	227	330	291	303
30	---	---	---	---	---	---	234	222	227	295	247	272
31	---	---	---	---	---	---	---	---	---	287	248	269
MONTH	1180	177	473	891	380	601	1280	212	336	519	224	301

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	273	248	261	372	338	350	249	227	237	329	314	321
2	264	245	253	420	308	368	250	222	240	330	316	323
3	254	246	249	419	383	396	273	235	246	334	319	325
4	248	244	246	384	364	371	257	239	246	335	319	327
5	296	261	287	376	311	346	258	240	248	357	300	329
6	300	286	294	346	335	339	263	245	254	344	331	337
7	365	302	330	343	317	332	291	236	272	334	301	326
8	341	308	321	428	312	386	280	264	272	---	---	---
9	349	321	335	501	250	328	278	266	274	---	---	---
10	332	303	320	334	315	322	288	216	265	---	---	---
11	342	313	329	316	273	302	354	258	300	---	---	---
12	416	295	352	342	279	311	300	283	289	---	---	---
13	400	358	362	343	255	304	286	279	281	---	---	---
14	361	344	352	289	251	281	284	276	280	---	---	---
15	348	327	338	279	255	267	285	276	280	---	---	---
16	364	315	336	264	248	254	367	281	327	---	---	---
17	---	---	---	277	257	267	348	323	332	---	---	---
18	---	---	---	275	256	268	323	318	320	---	---	---
19	---	---	---	273	155	227	320	311	314	---	---	---
20	---	---	---	---	---	---	316	306	309	---	---	---
21	---	---	---	---	---	---	310	299	304	---	---	---
22	---	---	---	---	---	---	319	306	311	---	---	---
23	---	---	---	---	---	---	319	223	301	---	---	---
24	---	---	---	199	182	187	355	264	324	---	---	---
25	339	323	333	210	176	192	328	315	322	367	329	337
26	334	319	328	213	190	201	323	311	317	345	336	343
27	330	308	323	227	198	214	336	291	314	344	300	326
28	391	298	363	229	208	218	363	330	342	337	308	324
29	388	374	380	230	211	222	333	325	329	330	303	317
30	379	341	358	234	221	227	327	313	320	329	298	320
31	---	---	---	243	225	232	334	312	322	---	---	---
MONTH	416	244	320	501	155	286	367	216	293	367	298	327

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	239	220	233	191	174	181	155	151	153	246	206	227
2	232	193	217	194	178	182	970	149	372	1600	206	795
3	209	110	187	197	183	191	320	280	305	2080	1490	1710
4	171	110	148	229	178	201	290	200	229	1540	487	1050
5	163	117	156	233	205	217	200	180	190	677	507	601
6	168	160	162	214	181	196	190	170	179	608	478	541
7	157	146	152	182	148	171	180	180	180	908	478	615
8	---	---	---	178	148	162	460	180	297	900	400	694
9	---	---	---	149	126	138	310	190	251	540	430	479
10	---	---	---	155	140	148	200	150	169	1280	410	623
11	---	---	---	337	150	187	170	160	162	1300	830	1100
12	---	---	---	174	148	161	160	150	159	1320	800	1070
13	---	---	---	195	148	172	210	160	164	920	430	835
14	---	---	---	170	140	155	200	160	159	730	400	592
15	---	---	---	175	148	169	170	170	170	810	400	621
16	---	---	---	173	165	168	180	100	90	600	220	381
17	227	204	215	167	165	166	270	180	214	330	200	234
18	231	212	221	250	156	177	370	180	203	310	200	274
19	221	211	216	274	199	231	460	110	370	880	200	395
20	220	209	214	608	151	223	290	160	177	710	400	484
21	215	204	210	407	219	285	210	150	180	530	340	395
22	210	201	205	237	171	187	250	210	215	560	300	360
23	213	204	208	172	155	162	230	190	197	---	---	---
24	211	203	206	243	152	205	830	190	359	---	---	---
25	216	207	212	186	142	160	901	271	429	---	---	---
26	258	207	231	215	166	180	262	202	226	---	---	---
27	233	207	225	166	145	156	223	200	193	---	---	---
28	254	234	242	145	141	143	194	180	185	---	---	---
29	236	203	219	146	143	144	185	175	123	---	---	---
30	208	184	192	151	146	148	425	165	209	---	---	---
31	197	191	197	---	---	---	426	246	287	---	---	---
MONTH	258	110	203	608	126	179	970	100	219	2080	200	640

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	940	510	700	610	330	445	200	180	193
2	---	---	---	1040	480	735	680	300	385	230	180	203
3	---	---	---	870	490	583	700	260	379	250	190	213
4	660	520	578	510	410	442	1570	720	1240	240	210	225
5	530	470	495	410	360	377	---	---	---	210	180	197
6	490	430	461	400	330	362	---	---	---	200	170	185
7	470	420	445	420	340	378	370	310	353	190	170	183
8	500	410	432	360	260	304	310	240	271	190	180	185
9	---	---	---	260	220	230	240	200	220	200	170	186
10	---	---	---	220	210	217	200	170	191	200	170	184
11	---	---	---	230	210	221	190	180	185	200	180	187
12	---	---	---	230	180	202	300	170	211	200	180	197
13	---	---	---	200	190	193	230	200	212	210	190	202
14	---	---	---	340	190	206	200	190	197	210	190	199
15	---	---	---	670	360	478	290	190	216	220	200	205
16	---	---	---	440	280	326	270	220	232	230	200	217
17	---	---	---	290	260	275	270	220	244	230	210	216
18	---	---	---	270	250	262	240	210	228	250	190	213
19	---	---	---	270	240	257	220	200	212	---	---	---
20	---	---	---	270	250	262	210	190	204	---	---	---
21	---	---	---	270	250	261	210	190	201	---	---	---
22	---	---	---	260	240	252	210	190	202	---	---	---
23	---	---	---	250	230	242	210	200	203	220	210	216
24	---	---	---	250	220	234	---	---	---	220	210	218
25	1020	730	835	340	210	239	---	---	---	230	210	221
26	790	610	687	660	270	381	---	---	---	230	190	196
27	650	560	599	280	240	257	---	---	---	---	---	---
28	560	460	525	270	240	247	---	---	---	251	242	246
29	---	---	---	260	220	241	---	---	---	245	239	242
30	---	---	---	650	220	342	---	---	---	242	238	240
31	---	---	---	---	---	---	---	---	---	262	220	244
MONTH	1020	410	562	1040	180	324	1570	170	297	262	170	208

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	253	209	241									
2	262	252	256									
3	259	244	251									
4	261	252	256									
5	261	257	259									
6	264	258	261									
7	267	261	264									
8	268	262	265									
9	359	260	319									
10	---	---	---									
11	---	---	---									
12	---	---	---									
13	---	---	---									
14	---	---	---									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	---	---	---									
19	---	---	---									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	359	209	264									

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	7.60	7.50	7.60	---	---	---	7.20	7.10	7.10
2	---	---	---	7.60	7.50	7.50	---	---	---	7.20	7.10	7.20
3	---	---	---	7.70	7.50	7.60	6.80	6.70	6.80	7.20	7.20	7.20
4	---	---	---	7.60	7.50	7.60	7.10	6.80	7.00	7.30	7.20	7.30
5	---	---	---	7.50	7.20	7.40	7.10	7.10	7.10	7.30	7.30	7.30
6	---	---	---	7.30	7.20	7.20	7.10	7.10	7.10	7.30	7.20	7.30
7	---	---	---	7.30	7.20	7.20	---	---	---	7.20	7.20	7.20
8	---	---	---	7.30	7.10	7.20	---	---	---	7.20	7.10	7.20
9	---	---	---	7.30	7.20	7.30	---	---	---	7.30	7.20	7.20
10	7.70	7.20	7.50	7.30	7.20	7.30	---	---	---	7.30	7.20	7.20
11	7.60	7.30	7.40	7.30	7.20	7.30	---	---	---	7.30	6.60	7.20
12	7.50	7.30	7.40	7.20	7.10	7.20	---	---	---	7.30	6.60	7.20
13	7.50	7.30	7.40	7.20	7.20	7.20	---	---	---	7.30	7.30	7.30
14	7.50	7.30	7.40	7.20	7.00	7.20	---	---	---	7.30	7.20	7.30
15	7.50	7.30	7.40	7.10	6.90	7.00	---	---	---	7.30	7.20	7.20
16	7.40	7.20	7.30	7.10	6.90	7.00	---	---	---	7.63	7.19	7.30
17	7.40	7.20	7.30	---	---	---	7.00	6.60	6.90	7.28	7.17	7.23
18	7.50	7.30	7.40	---	---	---	7.00	6.90	7.00	7.30	7.24	7.27
19	7.50	7.30	7.40	7.10	6.60	6.90	7.00	6.90	6.90	---	---	---
20	7.30	7.20	7.30	7.00	6.90	7.00	7.00	6.80	6.90	---	---	---
21	7.40	7.20	7.30	7.00	6.80	6.90	7.00	6.90	7.00	---	---	---
22	7.50	7.40	7.40	7.10	7.00	7.10	7.00	7.00	7.00	---	---	---
23	7.50	7.40	7.40	7.10	7.00	7.10	7.10	7.00	7.10	---	---	---
24	7.50	7.40	7.40	7.10	7.00	7.10	7.10	7.10	7.10	---	---	---
25	7.50	7.20	7.40	7.10	7.00	7.10	7.10	7.10	7.10	---	---	---
26	7.50	7.20	7.30	7.20	6.60	7.00	7.10	7.00	7.00	---	---	---
27	7.50	7.30	7.40	7.00	6.40	6.70	7.10	7.00	7.00	---	---	---
28	7.50	7.30	7.40	---	---	---	7.10	7.10	7.10	---	---	---
29	7.60	7.10	7.50	---	---	---	7.10	7.10	7.10	---	---	---
30	7.60	7.60	7.60	---	---	---	7.10	7.10	7.10	---	---	---
31	7.60	7.50	7.60	---	---	---	7.20	7.10	7.10	7.10	7.00	7.00
MONTH	7.70	7.10	7.40	7.70	6.40	7.19	7.20	6.60	7.02	7.63	6.60	7.22

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.20	7.00	7.10	---	---	---	---	---	---	7.40	7.10	7.20
2	7.10	7.10	7.10	---	---	---	7.39	7.21	7.30	7.40	7.10	7.20
3	7.10	7.00	7.10	---	---	---	7.50	7.23	7.37	7.40	7.10	7.20
4	7.10	6.80	6.90	7.60	7.30	7.30	7.56	7.29	7.39	7.50	7.10	7.30
5	---	---	---	7.50	7.30	7.40	7.54	7.20	7.35	7.60	7.10	7.30
6	7.30	6.50	6.70	---	---	---	7.68	7.25	7.38	7.70	7.10	7.40
7	6.80	6.60	6.70	---	---	---	7.48	7.32	7.38	7.80	7.10	7.40
8	6.90	6.80	6.90	---	---	---	7.50	7.25	7.39	7.70	7.10	7.40
9	---	---	---	---	---	---	7.35	7.22	7.27	7.70	7.10	7.40
10	---	---	---	---	---	---	7.33	7.22	7.25	7.70	7.10	7.40
11	---	---	---	---	---	---	7.40	7.30	7.30	7.70	7.10	7.40
12	---	---	---	---	---	---	7.40	7.30	7.30	7.80	7.20	7.40
13	---	---	---	---	---	---	7.40	7.30	7.30	7.60	7.20	7.40
14	---	---	---	---	---	---	7.50	7.20	7.30	7.60	7.20	7.40
15	---	---	---	---	---	---	7.40	7.20	7.30	7.60	7.30	7.40
16	---	---	---	---	---	---	7.30	7.20	7.30	7.70	7.10	7.40
17	---	---	---	---	---	---	7.20	7.20	7.20	7.70	7.10	7.40
18	---	---	---	---	---	---	7.30	7.10	7.20	7.70	7.20	7.40
19	---	---	---	---	---	---	7.30	7.00	7.20	7.60	7.20	7.40
20	7.33	6.53	6.68	---	---	---	7.30	7.00	7.20	7.44	7.30	7.36
21	6.86	6.54	6.62	---	---	---	7.30	7.10	7.20	7.43	7.26	7.32
22	6.77	6.61	6.70	---	---	---	7.20	7.00	7.10	7.47	7.28	7.37
23	6.87	6.76	6.79	---	---	---	7.20	7.00	7.10	7.46	7.24	7.33
24	---	---	---	---	---	---	7.30	7.00	7.10	7.50	7.23	7.35
25	---	---	---	---	---	---	7.30	7.00	7.10	7.54	7.20	7.36
26	---	---	---	---	---	---	7.30	7.00	7.10	7.57	7.16	7.35
27	---	---	---	---	---	---	7.40	6.90	7.20	7.38	7.19	7.30
28	---	---	---	---	---	---	7.50	7.00	7.20	7.52	7.19	7.36
29	---	---	---	---	---	---	7.40	7.00	7.20	7.57	7.24	7.38
30	---	---	---	---	---	---	7.50	7.00	7.20	7.54	7.19	7.32
31	---	---	---	---	---	---	---	---	---	7.54	7.18	7.33
MONTH	7.33	6.50	6.84	7.60	7.30	7.35	7.68	6.90	7.25	7.80	7.10	7.35

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.55	7.13	7.34	7.73	7.42	7.55	7.85	7.23	7.47	8.24	7.55	7.79
2	7.46	7.21	7.30	7.58	7.40	7.49	7.86	7.25	7.49	8.43	7.55	7.87
3	7.52	7.16	7.32	7.65	7.45	7.54	7.74	7.23	7.45	8.40	7.54	7.86
4	7.31	7.24	7.27	7.70	7.41	7.53	7.74	7.22	7.44	8.29	7.53	7.83
5	7.60	7.20	7.40	7.73	7.39	7.54	7.84	7.25	7.50	8.09	7.41	7.68
6	7.60	7.20	7.30	7.74	7.37	7.53	7.91	7.30	7.51	8.01	7.41	7.66
7	7.70	7.20	7.40	7.59	7.20	7.41	7.76	7.25	7.45	7.84	7.45	7.66
8	7.50	7.30	7.40	7.53	7.23	7.35	7.78	7.24	7.46	---	---	---
9	7.60	7.30	7.40	7.36	6.99	7.14	7.87	7.38	7.56	---	---	---
10	7.60	7.30	7.50	7.44	7.17	7.34	7.87	7.30	7.50	---	---	---
11	7.70	7.30	7.50	7.39	7.24	7.33	7.72	7.25	7.45	---	---	---
12	7.60	7.30	7.40	7.51	7.26	7.38	7.88	7.23	7.52	---	---	---
13	7.57	7.18	7.48	7.47	7.28	7.36	8.15	7.38	7.68	---	---	---
14	7.72	7.34	7.50	7.48	7.30	7.39	8.13	7.38	7.66	---	---	---
15	7.75	7.40	7.54	7.50	7.28	7.38	8.19	7.32	7.64	---	---	---
16	7.74	7.39	7.52	7.47	7.20	7.33	7.74	7.31	7.45	---	---	---
17	---	---	---	7.57	7.14	7.34	7.74	7.30	7.46	---	---	---
18	---	---	---	7.65	7.23	7.41	8.01	7.34	7.58	---	---	---
19	---	---	---	7.50	6.70	7.04	8.09	7.31	7.62	---	---	---
20	---	---	---	---	---	---	8.02	7.34	7.61	---	---	---
21	---	---	---	---	---	---	7.96	7.41	7.61	---	---	---
22	---	---	---	---	---	---	8.22	7.36	7.70	---	---	---
23	---	---	---	---	---	---	8.25	7.24	7.65	---	---	---
24	---	---	---	7.17	6.90	7.04	7.78	7.27	7.46	---	---	---
25	7.70	7.49	7.59	7.38	6.99	7.16	8.05	7.30	7.57	7.41	7.10	7.32
26	7.74	7.42	7.55	7.55	7.06	7.29	8.41	7.44	7.81	7.57	7.32	7.44
27	7.76	7.43	7.56	7.70	7.19	7.42	7.91	7.47	7.61	7.47	7.06	7.34
28	7.56	7.39	7.48	7.80	7.22	7.44	8.14	7.42	7.67	7.42	7.05	7.25
29	7.70	7.34	7.51	7.75	7.25	7.42	8.09	7.42	7.70	7.51	7.03	7.25
30	7.65	7.41	7.51	7.70	7.27	7.39	8.09	7.49	7.73	7.55	7.01	7.28
31	---	---	---	7.76	7.23	7.44	8.22	7.54	7.79	---	---	---
MONTH	7.76	7.13	7.44	7.80	6.70	7.37	8.41	7.22	7.57	8.43	7.01	7.56

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.13	6.85	7.02	7.42	7.25	7.31	7.16	7.05	7.09	7.29	7.15	7.22
2	7.10	7.01	7.07	7.38	7.27	7.32	7.25	7.08	7.13	7.31	7.17	7.24
3	7.09	6.83	7.01	7.46	7.28	7.37	7.13	6.98	7.09	7.34	7.28	7.30
4	6.85	6.37	6.81	7.35	7.21	7.30	7.13	7.02	7.06	7.38	7.26	7.31
5	6.93	6.80	6.85	7.34	7.26	7.31	7.08	6.99	7.02	7.30	7.23	7.26
6	6.90	6.86	6.89	7.31	7.16	7.24	7.14	7.01	7.07	7.35	7.26	7.30
7	7.25	7.10	7.15	7.28	7.16	7.22	7.23	7.11	7.15	7.38	7.33	7.36
8	---	---	---	7.24	7.09	7.18	7.23	7.11	7.16	7.37	7.24	7.31
9	---	---	---	7.08	6.58	6.80	7.81	7.04	7.17	7.35	7.25	7.31
10	---	---	---	6.92	6.73	6.83	7.09	6.95	7.01	7.36	7.30	7.34
11	---	---	---	6.98	6.90	6.95	7.09	6.95	7.02	7.39	7.23	7.35
12	---	---	---	7.04	6.94	6.98	7.11	7.03	7.06	7.42	7.28	7.37
13	---	---	---	7.50	6.93	7.03	7.06	6.99	7.02	7.41	7.22	7.34
14	---	---	---	7.21	7.01	7.09	7.22	7.03	7.14	7.43	7.28	7.35
15	---	---	---	7.21	7.12	7.17	7.28	7.16	7.21	7.38	7.01	7.19
16	---	---	---	7.24	7.18	7.21	7.32	6.36	7.16	7.18	7.00	7.08
17	7.11	6.92	7.08	7.28	7.17	7.23	7.28	7.13	7.21	7.12	7.00	7.04
18	7.33	7.11	7.21	7.33	7.16	7.22	7.38	6.75	7.24	7.23	7.03	7.15
19	7.37	7.19	7.28	7.28	7.18	7.22	7.32	7.19	7.25	7.22	6.99	7.10
20	7.39	7.26	7.32	7.38	7.23	7.30	7.39	7.12	7.25	7.01	6.99	7.00
21	7.40	7.26	7.31	7.23	7.19	7.21	7.37	7.07	7.26	7.16	7.07	7.10
22	7.40	7.21	7.29	7.26	7.19	7.22	7.33	7.11	7.21	7.21	7.12	7.18
23	7.41	7.20	7.27	7.31	7.19	7.24	7.38	7.21	7.29	---	---	---
24	7.41	7.19	7.28	7.24	7.18	7.21	7.35	7.01	7.21	---	---	---
25	7.34	7.24	7.27	7.18	6.55	7.12	7.04	6.96	7.00	---	---	---
26	7.35	7.16	7.25	7.23	7.05	7.15	7.03	6.97	6.99	---	---	---
27	7.33	7.13	7.21	7.13	6.97	7.04	7.07	6.97	7.01	---	---	---
28	7.29	7.14	7.19	7.10	6.93	7.01	7.08	7.00	7.04	---	---	---
29	7.28	7.10	7.18	7.09	6.99	7.03	7.16	7.05	7.10	---	---	---
30	7.27	7.09	7.19	7.13	7.00	7.05	7.16	7.09	7.11	---	---	---
31	7.09	7.05	7.06	---	---	---	7.23	7.11	7.15	---	---	---
MONTH	7.41	6.37	7.15	7.50	6.55	7.15	7.81	6.36	7.13	7.43	6.99	7.24

TABLE 4.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	7.44	7.24	7.36	7.22	7.02	7.12	7.32	7.02	7.15
2	---	---	---	7.24	7.15	7.19	7.16	7.08	7.13	7.27	7.08	7.15
3	---	---	---	7.21	7.09	7.16	7.16	7.06	7.11	7.22	7.04	7.10
4	7.17	7.07	7.10	7.15	7.05	7.10	7.18	7.14	7.17	7.19	7.04	7.10
5	7.23	7.08	7.15	7.22	7.06	7.15	---	---	---	7.29	6.99	7.12
6	7.29	7.18	7.23	7.26	7.13	7.18	---	---	---	7.30	6.98	7.12
7	7.31	7.23	7.27	7.29	7.11	7.19	7.08	6.81	6.96	7.24	6.96	7.10
8	7.33	7.19	7.27	7.27	7.10	7.18	6.85	6.73	6.81	7.33	6.99	7.04
9	---	---	---	7.11	6.96	7.04	6.87	6.65	6.76	7.39	7.01	7.08
10	---	---	---	7.09	6.91	6.99	6.96	6.67	6.81	7.53	6.94	7.15
11	---	---	---	7.16	6.97	7.07	6.96	6.74	6.85	7.57	6.92	7.21
12	---	---	---	7.13	6.43	7.05	7.12	6.86	6.96	7.16	6.97	7.03
13	---	---	---	7.22	7.12	7.16	7.04	6.90	6.95	7.55	7.04	7.27
14	---	---	---	7.29	7.14	7.21	7.13	6.92	7.05	7.79	7.12	7.41
15	---	---	---	7.33	7.23	7.29	7.20	7.07	7.13	7.60	7.19	7.36
16	---	---	---	7.33	7.18	7.27	7.22	7.09	7.15	7.62	7.05	7.30
17	---	---	---	7.35	7.16	7.25	7.28	7.10	7.18	7.71	7.09	7.37
18	---	---	---	7.40	7.20	7.28	7.31	7.02	7.16	7.48	7.10	7.26
19	---	---	---	7.41	7.20	7.30	7.34	6.98	7.15	---	---	---
20	---	---	---	7.43	7.20	7.29	7.43	6.99	7.20	---	---	---
21	---	---	---	7.44	7.26	7.33	7.56	7.00	7.25	---	---	---
22	---	---	---	7.41	7.24	7.32	7.62	7.00	7.29	---	---	---
23	---	---	---	7.45	7.25	7.33	7.44	7.19	7.32	7.74	7.03	7.35
24	---	---	---	7.47	7.24	7.33	---	---	---	7.67	7.25	7.45
25	7.47	7.31	7.39	7.40	7.08	7.29	---	---	---	7.65	7.15	7.40
26	7.49	7.01	7.39	7.49	7.28	7.39	---	---	---	7.70	6.66	7.40
27	7.49	7.41	7.45	7.46	7.23	7.34	---	---	---	7.83	6.00	7.04
28	7.51	7.40	7.46	7.50	7.23	7.36	---	---	---	7.72	7.13	7.40
29	---	---	---	7.51	7.17	7.33	---	---	---	7.85	7.24	7.53
30	---	---	---	7.45	7.34	7.39	---	---	---	7.88	7.29	7.56
31	---	---	---	7.82	6.19	6.98	---	---	---	7.64	7.30	7.46
MONTH	7.51	7.01	7.30	7.82	6.19	7.23	7.62	6.65	7.07	7.88	6.00	7.26

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	7.79	7.22	7.40									
2	7.58	7.22	7.37									
3	7.60	7.22	7.42									
4	7.59	7.26	7.42									
5	7.54	7.17	7.36									
6	7.59	7.20	7.39									
7	7.69	7.26	7.46									
8	7.77	7.28	7.50									
9	7.69	7.18	7.38									
10	---	---	---									
11	---	---	---									
12	---	---	---									
13	---	---	---									
14	---	---	---									
15	---	---	---									
16	---	---	---									
17	---	---	---									
18	7.97	7.33	7.62									
19	8.16	7.44	7.76									
20	---	---	---									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	---	---	---									
30	---	---	---									
31	---	---	---									
MONTH	8.16	7.17	7.46									

TABLE 5.--DAILY SEDIMENT DISCHARGE DATA FOR INDIAN CREEK AT JONES MILLS (03082020)
(Lat 40°05'21", Long 79°20'04")

1986 WATER YEAR

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	2.6	7	.05	3.5	1	.01	94	29	7.4
2	4.2	7	.08	4.1	1	.01	71	25	4.8
3	2.9	6	.05	6.5	4	.07	53	22	3.1
4	2.8	5	.04	18	10	.64	42	20	2.3
5	2.8	4	.03	62	60	12	37	18	1.8
6	2.8	5	.04	55	12	1.8	36	16	1.6
7	2.8	5	.04	41	5	.55	30	14	1.1
8	2.7	5	.04	32	5	.43	29	14	1.1
9	2.6	5	.04	24	2	.13	27	14	1.0
10	2.9	6	.05	23	5	.31	29	18	1.4
11	3.5	7	.07	38	23	2.4	44	17	2.0
12	3.2	6	.05	66	53	13	86	26	6.0
13	3.9	5	.05	72	23	4.7	90	26	6.3
14	4.5	5	.06	89	36	10	83	26	5.8
15	4.7	6	.08	100	28	8.6	56	20	3.0
16	4.1	5	.06	269	144	119	45	26	3.2
17	3.4	4	.04	216	49	32	37	23	2.3
18	3.3	4	.04	118	13	4.1	33	20	1.8
19	3.6	1	.01	77	9	1.9	29	35	2.7
20	5.0	5	.07	57	9	1.4	27	32	2.3
21	9.3	10	.25	42	9	1.0	25	9	.61
22	6.0	8	.13	47	9	1.1	24	6	.39
23	5.3	6	.09	39	9	.95	24	5	.32
24	6.7	8	.14	32	9	.78	22	5	.30
25	9.0	10	.24	30	9	.73	24	5	.32
26	4.7	2	.03	194	121	109	42	5	.57
27	4.2	1	.01	379	109	112	29	5	.39
28	4.0	1	.01	483	110	152	17	5	.23
29	3.7	1	.01	263	59	42	16	5	.22
30	3.5	3	.03	145	33	13	15	4	.16
31	3.7	2	.02	---	---	---	15	4	.16
TOTAL	128.4	---	1.95	3025.1	---	645.61	1231	---	64.67

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	15	5	.20	27	17	1.2	31	7	.59
2	13	4	.14	33	80	7.1	28	5	.38
3	15	4	.16	71	30	5.8	25	4	.27
4	15	4	.16	344	62	58	24	4	.26
5	15	4	.16	653	236	459	23	5	.31
6	16	8	.35	371	111	119	22	6	.36
7	14	10	.38	183	70	35	21	6	.34
8	13	9	.32	109	50	15	32	12	1.0
9	12	8	.26	76	39	8.0	31	16	1.3
10	12	7	.23	60	35	5.7	65	37	6.5
11	12	7	.23	51	26	3.6	143	65	25
12	12	7	.23	41	17	1.9	94	26	6.6
13	12	7	.23	42	15	1.7	96	26	6.7
14	9.5	6	.15	66	35	6.2	149	94	63
15	8.4	6	.14	29	30	2.3	281	125	102
16	9.2	6	.15	32	25	2.2	159	75	32
17	12	7	.23	79	44	9.4	101	36	9.8
18	22	9	.53	230	87	54	73	22	4.3
19	33	12	1.1	327	126	149	63	15	2.6
20	62	20	3.3	259	55	38	49	14	1.9
21	54	17	2.5	212	145	83	38	14	1.4
22	58	15	2.3	145	160	63	33	13	1.2
23	60	14	2.3	103	69	19	29	9	.70
24	52	10	1.4	77	20	4.2	26	5	.35
25	43	9	1.0	61	12	2.0	24	3	.19
26	41	8	.89	51	10	1.4	22	2	.12
27	36	7	.68	43	9	1.0	23	2	.12
28	32	11	.95	35	9	.85	20	2	.11
29	27	27	2.0	---	---	---	18	1	.05
30	25	24	1.6	---	---	---	17	1	.05
31	24	21	1.4	---	---	---	16	2	.09
TOTAL	784.1	---	25.67	3810	---	1156.55	1776	---	269.59

TABLE 5.--DAILY SEDIMENT DISCHARGE DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

1986 WATER YEAR

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	15	2	.08	23	6	.37	11	2	.06
2	14	4	.15	20	6	.32	11	2	.06
3	14	3	.11	18	5	.24	9.6	2	.05
4	13	3	.11	17	5	.23	9.0	2	.05
5	14	2	.08	16	5	.22	9.2	2	.05
6	22	7	.42	15	5	.20	9.2	3	.07
7	28	5	.38	17	6	.28	8.9	4	.10
8	21	1	.06	14	5	.19	9.6	5	.13
9	20	1	.05	12	5	.16	7.9	5	.11
10	22	1	.06	11	5	.15	6.8	5	.09
11	26	2	.14	11	5	.15	7.4	5	.10
12	27	2	.15	10	5	.14	12	5	.16
13	27	3	.22	9.8	6	.16	8.1	6	.13
14	26	3	.21	15	7	.28	6.7	7	.13
15	31	7	.59	10	6	.16	6.0	6	.10
16	53	10	1.4	10	6	.16	6.4	6	.10
17	69	14	2.6	11	4	.12	11	18	.53
18	61	12	2.0	9.3	4	.10	6.1	7	.12
19	57	10	1.5	13	8	.28	5.6	4	.06
20	55	7	1.0	19	6	.31	5.3	4	.06
21	57	7	1.1	17	5	.23	5.0	3	.04
22	71	13	2.5	15	4	.16	4.7	3	.04
23	58	10	1.6	15	3	.12	5.9	3	.05
24	51	9	1.2	14	3	.11	4.7	3	.04
25	47	9	1.1	13	3	.11	4.4	3	.04
26	42	9	1.0	12	2	.06	4.2	3	.03
27	36	8	.78	17	14	.64	4.2	4	.05
28	31	8	.67	19	8	.41	6.1	7	.12
29	28	7	.53	14	4	.15	4.7	6	.08
30	24	7	.45	13	3	.11	4.3	6	.07
31	---	---	---	13	3	.11	---	---	---
TOTAL	1060	---	22.24	443.1	---	6.43	215.0	---	2.82

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	4.3	6	.07	8.8	7	.17	3.5	5	.05
2	8.3	13	.29	8.1	7	.15	3.6	5	.05
3	5.1	4	.06	7.5	6	.12	3.4	5	.05
4	4.2	3	.03	6.6	5	.09	3.3	5	.04
5	3.8	3	.03	6.1	4	.07	4.2	5	.06
6	3.6	2	.02	6.3	4	.07	3.4	5	.05
7	3.6	3	.03	7.7	4	.08	3.2	5	.04
8	6.0	10	.16	6.2	4	.07	3.0	4	.03
9	91	311	139	5.8	3	.05	2.8	4	.03
10	26	23	1.6	6.9	11	.20	2.7	4	.03
11	19	16	.82	13	55	1.9	2.7	4	.03
12	18	12	.58	6.1	32	.53	3.5	5	.05
13	20	18	.97	5.4	15	.22	3.1	5	.04
14	20	12	.65	5.0	12	.16	2.7	4	.03
15	15	10	.41	4.8	11	.14	2.6	6	.04
16	14	11	.42	8.1	26	.57	2.5	5	.03
17	13	12	.42	5.8	7	.11	2.5	5	.03
18	11	10	.30	5.2	6	.08	3.5	8	.08
19	127	265	258	4.8	5	.06	5.5	8	.12
20	120	80	26	4.5	5	.06	3.4	6	.06
21	77	26	5.4	4.6	4	.05	3.1	5	.04
22	48	18	2.3	4.5	4	.05	2.9	5	.04
23	33	14	1.2	5.8	14	.22	4.5	9	.11
24	27	7	.51	9.2	21	.52	26	77	16
25	22	7	.42	4.6	7	.09	31	53	9.7
26	18	6	.29	4.2	6	.07	12	4	.13
27	15	6	.24	5.5	5	.07	9.4	4	.10
28	13	6	.21	4.9	5	.07	7.6	4	.08
29	12	6	.19	4.2	5	.06	6.4	3	.05
30	11	6	.18	3.8	5	.05	5.8	2	.03
31	9.7	7	.18	3.6	5	.05	---	---	---
TOTAL	818.6	---	440.98	187.6	---	6.20	173.8	---	27.22

TABLE 5.--DAILY SEDIMENT DISCHARGE DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

1987 WATER YEAR

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	56	222	54	20	2	.11	40	8	.86
2	49	30	4.0	19	2	.10	63	33	5.6
3	46	42	5.2	17	2	.09	78	14	2.9
4	100	22	5.9	34	12	1.1	65	8	1.4
5	162	29	13	50	13	1.8	56	6	.91
6	78	19	4.0	52	9	1.3	47	6	.76
7	50	2	.27	44	8	.95	40	7	.76
8	35	6	.57	72	19	3.7	40	12	1.3
9	27	8	.58	277	40	30	110	23	26
10	22	5	.30	141	27	10	113	22	6.7
11	18	4	.19	127	26	8.9	86	12	2.8
12	16	2	.09	96	10	2.6	70	13	2.5
13	18	1	.05	73	9	1.8	54	16	2.3
14	32	4	.35	57	7	1.1	43	15	1.7
15	23	3	.19	47	5	.63	37	14	1.4
16	19	2	.10	40	5	.54	32	12	1.0
17	19	2	.10	33	5	.45	29	13	1.0
18	18	2	.10	37	5	.50	37	21	2.1
19	16	3	.13	43	5	.58	32	17	1.5
20	15	4	.16	48	30	5.8	27	14	1.0
21	14	4	.15	67	22	4.0	24	8	.52
22	14	5	.19	55	10	1.5	24	16	1.0
23	13	3	.11	48	9	1.2	26	16	1.1
24	12	2	.06	60	12	1.9	54	6	21
25	11	1	.03	54	4	.58	96	47	12
26	20	5	.27	108	59	21	70	14	2.6
27	18	4	.19	103	28	7.8	59	9	1.4
28	26	6	.42	81	9	2.0	48	10	1.3
29	24	2	.13	65	7	1.2	40	9	.97
30	23	2	.12	52	6	.84	35	8	.76
31	21	2	.11	---	---	---	30	11	.89
TOTAL	1015	---	91.06	2020	---	114.07	1605	---	108.03

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	27	9	.66	27	20	1.5	47	36	5.6
2	28	9	.68	66	22	3.9	63	25	4.3
3	25	9	.61	64	24	4.1	55	23	3.4
4	22	11	.65	49	18	2.4	45	22	2.7
5	48	15	1.9	39	15	1.6	37	19	1.9
6	37	14	1.4	36	15	1.5	33	18	1.6
7	25	14	.95	33	13	1.2	35	13	1.2
8	23	12	.75	31	16	1.3	50	15	2.0
9	20	14	.76	29	22	1.7	73	20	3.9
10	21	19	1.1	47	26	3.3	68	21	3.9
11	22	20	1.2	31	25	2.1	53	16	2.3
12	20	15	.81	30	17	1.4	41	9	1.0
13	18	11	.53	28	14	1.1	34	9	.83
14	21	11	.62	25	14	.95	30	10	.81
15	68	50	9.2	20	15	.81	28	10	.76
16	74	27	5.4	38	14	1.4	24	9	.58
17	56	14	2.1	19	15	.77	21	9	.51
18	48	15	1.9	17	14	.64	20	10	.54
19	90	59	19	20	17	.92	18	10	.49
20	83	25	5.6	23	17	1.1	18	10	.49
21	59	15	2.4	17	16	.73	17	13	.60
22	50	14	1.9	15	9	.36	17	18	.83
23	44	13	1.5	16	5	.22	17	14	.64
24	119	15	4.8	14	5	.19	17	10	.46
25	133	15	5.4	14	5	.19	20	26	1.4
26	81	18	3.9	13	10	.35	21	7	.40
27	58	22	3.4	13	14	.49	19	6	.31
28	38	25	2.6	15	17	.69	18	4	.19
29	28	24	1.8	---	---	---	17	4	.18
30	47	23	2.9	---	---	---	25	16	1.1
31	40	22	2.4	---	---	---	87	111	34
TOTAL	1473	---	88.82	789	---	36.91	1068	---	78.92

TABLE 5.--DAILY SEDIMENT DISCHARGE DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

1987 WATER YEAR

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	77	19	4.0	33	10	.89	18	18	.87
2	78	13	2.7	41	20	2.2	17	10	.46
3	68	13	2.4	46	24	3.0	14	9	.34
4	123	25	8.3	55	15	2.2	12	8	.26
5	118	24	7.5	47	10	1.3	11	7	.21
6	141	27	10	43	9	1.0	9.7	7	.18
7	210	55	31	39	10	1.1	9.0	7	.17
8	205	48	27	33	14	1.2	8.5	7	.16
9	182	33	16	29	15	1.2	23	84	8.1
10	139	24	9.0	25	15	1.0	11	10	.30
11	106	20	5.7	23	12	.75	9.0	10	.24
12	102	24	6.6	21	8	.45	17	25	1.1
13	82	13	2.9	18	9	.44	18	46	5.3
14	69	14	2.6	17	9	.41	28	73	9.1
15	65	14	2.5	16	9	.39	14	10	.38
16	57	14	2.2	14	9	.34	11	9	.27
17	56	14	2.1	13	9	.32	9.8	8	.21
18	47	14	1.8	19	10	.51	8.7	8	.19
19	41	14	1.5	25	22	1.5	8.0	9	.19
20	37	16	1.6	41	85	14	40	120	28
21	34	16	1.5	21	12	.68	41	30	3.3
22	31	16	1.3	18	10	.49	24	20	1.3
23	30	8	.65	17	9	.41	28	25	1.9
24	118	57	25	15	8	.32	20	10	.54
25	75	24	4.9	14	8	.30	15	10	.41
26	60	20	3.2	20	41	5.7	16	13	.56
27	50	17	2.3	41	53	8.0	12	13	.42
28	57	15	2.3	20	9	.49	10	14	.38
29	43	11	1.3	17	9	.41	9.0	13	.32
30	38	9	.92	15	9	.36	9.4	12	.30
31	---	---	---	19	25	1.3	---	---	---
TOTAL	2537	---	190.77	815	---	52.66	481.1	---	65.46

TABLE 6.--MONTHLY LABORATORY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)
(Lat 40°05'21", Long 79°20'04")

SITE 3

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
AUG 12...	1045	5.6	275	7.10	15.5	0	0.0	16	2.4	22	0.6	24

DATE	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
AUG 12...	30	<10	50	<0.1	176	<2	1.14	<40	<4	<250	<10	<50

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
AUG 12...	<30	<10	20	<10	<4	17	<25	<10	<10	<6	<2.0

TABLE 6.--MONTHLY LABORATORY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

SITE 3

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY FIELD MG/L AS CACO3
OCT 23...	1015	5.3	470	7.40	12.0	0	21	3.5	35	1.3	42
NOV 25...	0930	27	180	7.80	4.5	0	--	--	--	--	14
DEC 23...	0910	24	425	7.80	0.5	0.1	--	--	--	--	13
JAN 15...	1200	8.5	775	7.30	0.0	0.1	--	--	--	--	20
FEB 19...	1045	204	310	6.30	6.0	0.1	--	--	--	--	80
MAR 17...	0945	106	200	5.80	5.5	0.2	--	--	--	--	8
APR 28...	0850	33	230	6.70	11.5	0.1	--	--	--	--	14
JUN 06...	0845	7.4	295	7.20	16.0	0.2	--	--	--	--	26
JUL 22...	1140	51	170	7.40	15.5	0	--	--	--	--	14
AUG 20...	0950	4.6	300	7.50	18.0	0	--	--	--	--	30
SEP 29...	0952	6.4	305	7.40	17.0	0	--	--	--	--	32

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 23...	16	--	368	<2	--	100	<4	<0	<50	<30	<10
NOV 25...	17	--	124	4	--	<40	--	--	--	--	--
DEC 23...	22	--	272	4	--	150	--	--	--	--	--
JAN 15...	26	--	520	2	<500	<500	--	--	--	--	--
FEB 19...	27	140	178	<2	330	<130	--	--	--	--	--
MAR 17...	13	--	96	4	360	<130	--	--	--	--	--
APR 28...	20	42	130	<2	830	<130	--	--	--	--	--
JUN 06...	14	--	164	<2	<130	700	--	--	--	--	--
JUL 22...	26	--	148	<2	380	380	--	--	--	--	--
AUG 20...	18	--	166	8	<130	<130	--	--	--	--	--
SEP 29...	27	--	178	<2	<130	<130	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 23...	--	54	<45	--	<10	<25	79	--	<10	<6	<1.0
NOV 25...	--	<10	--	--	52	--	--	--	<10	--	--
DEC 23...	--	65	--	--	65	--	--	--	32	--	--
JAN 15...	<300	<300	--	90	90	--	--	<10	<10	--	--
FEB 19...	230	38	--	92	78	--	--	30	<10	--	--
MAR 17...	230	<10	--	70	61	--	--	<10	<10	--	--
APR 28...	1100	100	--	320	69	--	--	60	39	--	--
JUN 06...	130	780	--	23	260	--	--	<10	40	--	--
JUL 22...	350	66	--	27	<10	--	--	20	22	--	--
AUG 20...	70	64	--	21	23	--	--	60	23	--	--
SEP 29...	140	90	--	11	11	--	--	30	16	--	--

TABLE 6.--MONTHLY LABORATORY CHEMICAL DATA FOR INDIAN CREEK AT JONES MILLS (03082020)--Continued
(Lat 40°05'21", Long 79°20'04")

SITE 3

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)
FEB 25...	1000	12	800	7.50	0.5	0	6.0	--	16	--
MAR 26...	0930	22	380	7.40	7.5	--	0.0	--	--	--
APR 14...	0800	71	190	7.26	7.0	--	16	--	--	--
MAY 18...	0810	13	220	7.13	12.0	--	0.0	--	--	--
JUN 29...	1110	9.1	285	7.60	15.0	--	10	15	15	2.8

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)
FEB 25...	2.9	--	130	--	0.82	16	24	43	220	310
MAR 26...	--	--	--	--	--	--	28	21	84	164
APR 14...	--	--	--	--	--	--	16	22	36	114
MAY 18...	--	--	--	--	--	--	30	22	42	150
JUN 29...	2.9	33	32	0.9	0.92	--	28	20	--	150

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
FEB 25...	18	--	<130	--	<4	<250	0	--	<50	--
MAR 26...	10	290	<130	--	--	--	--	--	--	--
APR 14...	6	<130	<130	--	--	--	--	--	--	--
MAY 18...	8	<130	<130	--	--	--	--	--	--	--
JUN 29...	10	<130	370	<4	<4	<250	0	<50	<50	<30

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
FEB 25...	<30	--	<10	--	87	--	<50	--	97	--
MAR 26...	--	--	--	300	<10	--	--	66	49	--
APR 14...	--	--	--	40	10	--	--	47	46	--
MAY 18...	--	--	--	100	44	--	--	56	55	--
JUN 29...	<30	<10	<10	130	48	<50	<50	62	60	<25

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
FEB 25...	<25	--	63	--	<10	--	<6	--	<1.0
MAR 26...	--	--	--	10	<10	--	--	--	--
APR 14...	--	--	--	20	18	--	--	--	--
MAY 18...	--	--	--	70	67	--	--	--	--
JUN 29...	<25	60	57	<10	<10	<6	<6	<1.0	<1.0

TABLE 7.-- DAILY DISCHARGE FOR CHAMPION CREEK AT MELCROFT (03082120)
(Lat 40°03'55", Long 79°23'55")

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.82	1.2	94	8.2	21	24	9.3	11	8.9	1.6	4.9	2.4
2	1.7	1.5	87	9.8	37	21	9.1	10	8.1	6.3	4.1	2.5
3	1.2	3.7	73	13	88	18	8.2	9.7	7.0	2.7	3.6	2.5
4	1.1	20	61	16	423	20	7.4	9.1	4.9	1.7	3.1	2.2
5	1.0	69	53	17	469	22	8.2	8.7	4.3	1.4	3.3	2.5
6	.99	35	62	11	181	25	19	7.5	4.2	1.2	2.7	2.2
7	.94	20	54	9.0	91	26	28	8.2	3.2	1.2	6.0	1.9
8	.92	16	50	8.0	59	32	24	6.4	3.4	6.1	3.3	2.0
9	.89	11	49	7.0	43	43	18	5.5	2.7	225	2.9	1.8
10	.86	16	37	6.5	34	81	16	4.9	2.1	44	3.8	1.5
11	.90	61	52	6.2	29	145	20	4.6	2.4	24	16	1.5
12	.99	112	109	6.0	25	85	23	4.4	5.8	20	4.6	1.9
13	1.1	97	94	5.7	26	95	20	4.2	3.5	25	3.3	1.8
14	1.6	119	75	5.5	49	138	17	6.6	2.4	22	2.6	1.5
15	1.9	131	49	5.5	43	195	25	4.6	2.0	14	2.6	1.3
16	1.8	253	39	6.0	35	107	52	4.4	2.9	11	5.2	1.1
17	1.2	138	25	8.0	108	66	74	4.3	6.2	13	5.6	1.0
18	1.1	76	22	36	243	37	50	3.9	2.3	9.6	3.5	1.7
19	1.1	47	19	48	249	35	37	8.6	1.9	95	2.5	4.7
20	1.7	33	16	59	148	26	31	17	1.9	125	2.2	2.1
21	4.8	21	15	42	132	20	34	11	1.9	80	2.2	1.7
22	2.2	26	14	30	88	18	66	9.0	1.7	37	2.2	1.5
23	1.7	25	13	25	60	16	47	9.3	2.3	29	30	2.3
24	3.4	19	12	22	45	14	37	9.5	1.6	33	27	31
25	3.5	13	11	20	36	12	30	9.2	1.3	18	7.3	64
26	2.0	233	11	19	32	11	24	8.3	1.2	14	4.7	18
27	1.6	297	10	18	28	14	19	19	1.6	10	9.0	11
28	1.4	363	10	17	24	11	16	24	3.7	8.6	6.3	8.0
29	1.3	167	9.4	17	---	10	14	14	2.1	7.8	4.0	6.2
30	1.2	108	8.8	18	---	9.3	12	11	1.6	6.8	3.2	5.1
31	1.2	---	8.4	19	---	9.2	---	11	---	5.8	2.7	---
TOTAL	48.11	2532.4	1242.6	538.4	2846	1385.5	795.2	278.9	99.1	899.8	184.4	188.9
MEAN	1.55	84.4	40.1	17.4	102	44.7	26.5	9.00	3.30	29.0	5.95	6.30
MAX	4.8	363	109	59	469	195	74	24	8.9	225	30	64
MIN	.82	1.2	8.4	5.5	21	9.2	7.4	3.9	1.2	1.2	2.2	1.0
CFSM	.11	6.13	2.91	1.26	7.38	3.25	1.92	.65	.24	2.11	.43	.46
IN.	.13	6.84	3.36	1.45	7.69	3.74	2.15	.75	.27	2.43	.50	.51

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	114	9.4	25	15	28	52	51	21	8.4	---	---	---
2	69	8.9	38	15	126	50	53	26	7.6	---	---	---
3	55	8.1	52	14	73	---	45	29	6.6	---	---	---
4	168	33	40	13	52	28	80	38	5.6	---	---	---
5	166	57	30	28	39	23	79	28	4.5	---	---	---
6	63	50	24	33	32	19	134	24	3.8	---	---	---
7	42	33	21	25	27	18	175	20	3.4	---	---	---
8	25	76	25	20	24	17	103	17	3.3	---	---	---
9	17	241	139	18	22	17	64	14	7.1	---	---	---
10	13	84	137	18	34	14	44	12	3.7	---	---	---
11	11	93	67	19	21	13	34	11	2.9	---	---	---
12	9.4	68	46	17	31	11	41	9.6	12	---	---	---
13	12	48	32	15	27	10	35	8.5	11	---	---	---
14	37	37	29	22	21	9.8	27	7.6	17	---	---	---
15	23	28	22	92	16	10	35	7.7	6.8	---	---	---
16	15	24	19	71	23	9.4	34	6.2	5.0	---	---	---
17	13	20	17	44	15	8.2	29	5.5	3.9	---	---	---
18	11	25	31	35	12	7.7	24	25	3.2	---	---	---
19	8.9	33	26	117	12	7.4	20	44	2.7	---	---	---
20	8.4	45	20	91	12	6.9	17	22	41	---	---	---
21	9.0	56	17	53	11	6.6	15	14	34	---	---	---
22	7.4	40	16	41	9.8	6.1	14	11	17	---	---	---
23	6.5	32	17	32	10	5.7	14	9.4	34	---	---	---
24	6.4	61	52	28	8.9	6.0	148	7.5	19	---	---	---
25	6.1	46	87	29	9.6	7.4	68	6.8	12	---	---	---
26	15	113	50	31	9.4	8.9	42	11	10	---	---	---
27	13	82	36	35	8.4	6.8	32	38	8.8	---	---	---
28	25	52	28	40	14	6.9	45	15	9.0	---	---	---
29	17	40	23	54	---	6.1	31	10	8.8	---	---	---
30	14	33	20	82	---	9.6	25	7.9	13	---	---	---
31	11	---	17	56	---	71	---	13	---	---	---	---
TOTAL	1011.1	1576.4	1203	1203	728.1	508.5	1558	519.7	325.1	---	---	---
MEAN	32.6	52.5	38.8	38.8	26.0	16.4	51.9	16.8	10.8	---	---	---
MAX	168	241	139	117	126	71	175	44	41	---	---	---
MIN	6.1	8.1	16	13	8.4	5.7	14	5.5	2.7	---	---	---
CFSM	2.37	3.82	2.82	2.82	1.89	1.19	3.77	1.22	.79	---	---	---
IN.	2.73	4.26	3.25	3.25	1.97	1.37	4.21	1.40	.88	---	---	---

TABLE 8.--DAILY SEDIMENT DISCHARGE DATA FOR CHAMPION CREEK AT MELCROFT (03082120)
(Lat 40°03'55", Long 79°23'55")

WATER YEAR 1986

DAY	DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.82	6	.01	1.2	1	.00	94	5	1.3
2	1.7	9	.04	1.5	2	.01	87	5	1.2
3	1.2	5	.02	3.7	5	.05	73	5	.99
4	1.1	5	.01	20	26	1.4	61	6	.99
5	1.0	6	.02	69	36	6.7	53	6	.86
6	.99	4	.01	35	14	1.3	62	5	.84
7	.94	5	.01	20	2	.11	54	4	.58
8	.92	4	.01	16	1	.04	50	6	.81
9	.89	4	.01	11	1	.03	49	6	.79
10	.86	4	.01	16	3	.13	37	10	1.0
11	.90	3	.01	61	20	3.3	52	30	4.2
12	.99	3	.01	112	265	80	109	55	16
13	1.1	4	.01	97	80	21	94	15	3.8
14	1.6	4	.02	119	190	61	75	8	1.6
15	1.9	4	.02	131	55	19	49	7	.93
16	1.8	10	.05	253	150	102	39	8	.84
17	1.2	8	.03	138	25	9.3	25	10	.68
18	1.1	5	.01	76	15	3.1	22	13	.77
19	1.1	5	.01	47	14	1.8	19	40	2.1
20	1.7	7	.03	33	9	.80	16	40	1.7
21	4.8	8	.10	21	5	.28	15	15	.61
22	2.2	3	.02	26	15	1.1	14	55	2.1
23	1.7	4	.02	25	7	.47	13	10	.35
24	3.4	11	.10	19	7	.36	12	10	.32
25	3.5	3	.03	13	2	.07	11	10	.30
26	2.0	3	.02	233	200	126	11	10	.30
27	1.6	3	.01	297	165	132	10	10	.27
28	1.4	3	.01	363	120	118	10	7	.19
29	1.3	3	.01	167	30	14	9.4	7	.18
30	1.2	2	.01	108	10	2.9	8.8	6	.14
31	1.2	1	.00	---	---	---	8.4	8	.18
TOTAL	48.11	---	0.68	2532.4	---	706.25	1242.6	---	46.92

DAY	DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	8.2	6	.13	21	25	1.4	24	9	.58
2	9.8	8	.21	37	115	11	21	8	.45
3	13	10	.35	88	20	4.8	18	8	.39
4	16	8	.35	423	470	537	20	9	.49
5	17	5	.23	469	325	412	22	10	.59
6	11	7	.21	181	67	33	25	9	.61
7	9.0	8	.19	91	30	7.4	26	9	.63
8	8.0	8	.17	59	20	3.2	32	5	.43
9	7.0	9	.17	43	20	2.3	43	68	7.9
10	6.5	10	.18	34	13	1.2	81	60	13
11	6.2	6	.10	29	12	.94	145	49	19
12	6.0	5	.08	25	12	.81	85	15	3.4
13	5.7	9	.14	26	12	.84	95	50	13
14	5.5	35	.52	49	13	1.7	138	105	39
15	5.5	25	.37	43	9	1.0	195	68	36
16	6.0	5	.08	35	40	3.8	107	17	4.9
17	8.0	5	.11	108	210	61	66	5	.89
18	36	22	2.1	243	170	112	37	7	.70
19	48	26	3.4	249	180	121	35	6	.57
20	59	6	.96	148	50	20	26	7	.49
21	42	19	2.2	132	115	41	20	4	.22
22	30	45	3.6	88	10	2.4	18	5	.24
23	25	11	.74	60	9	1.5	16	3	.13
24	22	9	.53	45	7	.85	14	4	.15
25	20	5	.27	36	10	.97	12	4	.13
26	19	9	.46	32	10	.86	11	3	.09
27	18	8	.39	28	9	.68	14	4	.15
28	17	26	1.2	24	9	.58	11	3	.09
29	17	35	1.6	---	---	---	10	3	.08
30	18	22	1.1	---	---	---	9.3	3	.08
31	19	37	1.9	---	---	---	9.2	2	.05
TOTAL	538.4	---	24.04	2846	---	1385.23	1385.5	---	144.43

TABLE 8.--DAILY SEDIMENT DISCHARGE DATA FOR CHAMPION CREEK AT MELCROFT (03082120)--Continued
(Lat 40°03'55", Long 79°23'55")

WATER YEAR 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	9.3	3	.08	11	9	.27	8.9	10	.24
2	9.1	3	.07	10	6	.16	8.1	5	.11
3	8.2	3	.07	9.7	4	.10	7.0	5	.09
4	7.4	4	.08	9.1	5	.12	4.9	5	.07
5	8.2	7	.15	8.7	15	.35	4.3	6	.07
6	19	15	.77	7.5	15	.30	4.2	8	.09
7	28	14	1.1	8.2	8	.18	3.2	8	.07
8	24	9	.58	6.4	6	.10	3.4	11	.10
9	18	8	.39	5.5	10	.15	2.7	6	.04
10	16	10	.43	4.9	10	.13	2.1	6	.03
11	20	15	.81	4.6	12	.15	2.4	25	.16
12	23	13	.81	4.4	10	.12	5.8	45	.70
13	20	13	.70	4.2	12	.14	3.5	22	.21
14	17	10	.46	6.6	6	.11	2.4	15	.10
15	25	35	2.4	4.6	7	.09	2.0	14	.08
16	52	49	6.9	4.4	8	.10	2.9	12	.09
17	74	20	4.0	4.3	6	.07	6.2	80	1.3
18	50	9	1.2	3.9	9	.09	2.3	19	.12
19	37	7	.70	8.6	11	.26	1.9	4	.02
20	31	8	.67	17	30	1.4	1.9	4	.02
21	34	20	1.8	11	5	.15	1.9	4	.02
22	66	70	12	9.0	6	.15	1.7	6	.03
23	47	20	2.5	9.3	6	.15	2.3	8	.05
24	37	15	1.5	9.5	10	.26	1.6	14	.06
25	30	10	.81	9.2	7	.17	1.3	9	.03
26	24	8	.52	8.3	13	.29	1.2	10	.03
27	19	7	.36	19	50	2.6	1.6	16	.07
28	16	7	.30	24	55	3.6	3.7	15	.15
29	14	6	.23	14	25	.95	2.1	12	.07
30	12	6	.19	11	20	.59	1.6	13	.06
31	---	---	---	11	10	.30	---	---	---
TOTAL	795.2	---	42.58	278.9	---	13.60	99.1	---	4.28

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	1.6	10	.04	4.9	3	.04	2.4	3	.02
2	6.3	60	1.0	4.1	3	.03	2.5	2	.01
3	2.7	18	.13	3.6	3	.03	2.5	2	.01
4	1.7	6	.03	3.1	3	.03	2.2	2	.01
5	1.4	5	.02	3.3	3	.03	2.5	3	.02
6	1.2	2	.01	2.7	3	.02	2.2	3	.02
7	1.2	3	.01	6.0	10	.16	1.9	4	.02
8	6.1	25	.41	3.3	6	.05	2.0	5	.03
9	225	315	191	2.9	6	.05	1.8	5	.02
10	44	40	4.8	3.8	23	.24	1.5	5	.02
11	24	40	2.6	16	98	4.2	1.5	5	.02
12	20	15	.81	4.6	7	.09	1.9	12	.06
13	25	50	3.4	3.3	8	.07	1.8	8	.04
14	22	10	.59	2.6	10	.07	1.5	2	.01
15	14	10	.38	2.6	10	.07	1.3	2	.01
16	11	8	.24	5.2	28	.39	1.1	2	.01
17	13	6	.21	5.6	15	.23	1.0	1	.00
18	9.6	6	.16	3.5	6	.06	1.7	15	.07
19	95	460	118	2.5	5	.03	4.7	26	.33
20	125	360	121	2.2	4	.02	2.1	8	.05
21	80	55	12	2.2	2	.01	1.7	5	.02
22	37	25	2.5	2.2	2	.01	1.5	3	.01
23	29	30	2.3	30	115	9.3	2.3	10	.06
24	33	14	1.2	27	55	4.0	31	200	17
25	18	5	.24	7.3	15	.30	64	135	23
26	14	5	.19	4.7	10	.13	18	10	.49
27	10	5	.14	9.0	65	1.6	11	7	.21
28	8.6	5	.12	6.3	6	.10	8.0	6	.13
29	7.8	5	.11	4.0	5	.05	6.2	5	.08
30	6.8	4	.07	3.2	5	.04	5.1	3	.04
31	5.8	3	.05	2.7	3	.02	---	---	---
TOTAL	899.8	---	463.76	184.4	---	21.47	188.9	---	41.82

TABLE 8.--DAILY SEDIMENT DISCHARGE DATA FOR CHAMPION CREEK AT MELCROFT (03082120)--Continued
(Lat 40°03'55", Long 79°23'55")

WATER YEAR 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	114	87	38	9.4	2	.05	25	2	.14
2	69	32	6.0	8.9	2	.05	38	5	.51
3	55	19	2.8	8.1	2	.04	52	10	1.4
4	168	75	39	33	9	.80	40	8	.86
5	166	39	17	57	37	5.7	30	6	.49
6	63	13	2.2	50	9	1.2	24	3	.19
7	42	9	1.0	33	5	.45	21	2	.11
8	25	7	.47	76	30	6.2	25	3	.20
9	17	6	.28	241	105	83	139	114	58
10	13	6	.21	84	16	3.6	137	25	9.2
11	11	5	.15	93	25	6.3	67	14	2.5
12	9.4	5	.13	68	10	1.8	46	8	.99
13	12	11	.36	48	5	.65	32	3	.26
14	37	42	4.2	37	4	.40	29	2	.16
15	23	8	.50	28	4	.30	22	2	.12
16	15	6	.24	24	4	.26	19	2	.10
17	13	4	.14	20	3	.16	17	2	.09
18	11	3	.09	25	13	.88	31	34	2.8
19	8.9	2	.05	33	15	1.3	26	10	.70
20	8.4	2	.05	45	17	2.1	20	7	.38
21	9.0	3	.07	56	19	2.9	17	6	.28
22	7.4	2	.04	40	16	1.7	16	6	.26
23	6.5	2	.04	32	15	1.3	17	7	.32
24	6.4	2	.03	61	20	3.3	52	19	2.7
25	6.1	2	.03	46	18	2.2	87	26	6.1
26	15	10	.41	113	26	7.9	50	12	1.6
27	13	4	.14	82	23	5.1	36	9	.87
28	25	11	.74	52	19	2.7	28	8	.60
29	17	3	.14	40	17	1.8	23	8	.50
30	14	3	.11	33	15	1.3	20	8	.43
31	11	2	.06	---	---	---	17	8	.37
TOTAL	1011.1	---	114.68	1576.4	---	145.44	1203	---	93.23

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	15	8	.32	28	12	.91	52	35	4.9
2	15	8	.32	126	72	32	50	24	3.2
3	14	8	.30	73	32	6.3	36	16	1.6
4	13	8	.28	52	14	2.0	28	14	1.1
5	28	12	.91	39	13	1.4	23	13	.81
6	33	33	2.9	32	12	1.0	19	13	.67
7	25	20	1.4	27	12	.87	18	13	.63
8	20	9	.49	24	11	.71	17	14	.64
9	18	8	.39	22	10	.59	17	14	.64
10	18	8	.39	34	18	1.7	14	10	.38
11	19	10	.51	21	12	.68	13	10	.35
12	17	9	.41	31	18	1.5	11	10	.30
13	15	8	.32	27	14	1.0	10	10	.27
14	22	7	.42	21	11	.62	9.8	10	.26
15	92	75	19	16	10	.43	10	10	.27
16	71	21	4.0	23	15	.93	9.4	10	.25
17	44	14	1.7	15	11	.45	8.2	10	.22
18	35	8	.76	12	10	.32	7.7	11	.23
19	117	173	86	12	10	.32	7.4	11	.22
20	91	28	6.9	12	10	.32	6.9	11	.20
21	53	20	2.9	11	8	.24	6.6	10	.18
22	41	10	1.1	9.8	6	.16	6.1	10	.16
23	32	10	.86	10	6	.16	5.7	10	.15
24	28	10	.76	8.9	6	.14	6.0	10	.16
25	29	10	.78	9.6	6	.16	7.4	10	.20
26	31	10	.84	9.4	6	.15	8.9	10	.24
27	35	11	1.0	8.4	8	.18	6.8	10	.18
28	40	12	1.3	14	16	.60	6.9	10	.19
29	54	16	2.3	---	---	---	6.1	10	.16
30	82	35	7.7	---	---	---	9.6	21	.54
31	56	20	3.0	---	---	---	71	36	6.9
TOTAL	1203	---	150.26	728.1	---	55.84	508.5	---	26.20

TABLE 8.--DAILY SEDIMENT DISCHARGE DATA FOR CHAMPION CREEK AT MELCROFT (03082120)--Continued
(Lat 40°03'55", Long 79°23'55")

WATER YEAR 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	51	26	3.6	21	7	.40	8.4	14	.32
2	53	24	3.4	26	10	.70	7.6	16	.33
3	45	21	2.6	29	10	.78	6.6	11	.20
4	80	31	6.7	38	14	1.4	5.6	12	.18
5	79	24	5.1	28	8	.60	4.5	10	.12
6	134	74	27	24	6	.39	3.8	10	.10
7	175	74	35	20	6	.32	3.4	10	.09
8	103	32	8.9	17	6	.28	3.3	10	.09
9	64	22	3.8	14	6	.23	7.1	19	.36
10	44	18	2.1	12	6	.19	3.7	10	.10
11	34	15	1.4	11	6	.18	2.9	8	.06
12	41	20	2.2	9.6	6	.16	12	30	.97
13	35	16	1.5	8.5	6	.14	11	19	.56
14	27	13	.95	7.6	6	.12	17	50	2.3
15	35	18	1.7	7.7	6	.12	6.8	35	.64
16	34	16	1.5	6.2	5	.08	5.0	30	.41
17	29	10	.78	5.5	5	.07	3.9	23	.24
18	24	9	.58	25	20	1.4	3.2	19	.16
19	20	9	.49	44	35	4.2	2.7	13	.09
20	17	8	.37	22	20	1.2	41	75	8.3
21	15	8	.32	14	13	.49	34	60	5.5
22	14	8	.30	11	10	.30	17	38	1.7
23	14	7	.26	9.4	8	.20	34	80	7.3
24	148	134	85	7.5	7	.14	19	36	1.8
25	68	36	6.6	6.8	6	.11	12	19	.62
26	42	28	3.2	11	11	.33	10	13	.35
27	32	22	1.9	38	33	3.4	8.8	13	.31
28	45	35	4.3	15	17	.69	9.0	13	.32
29	31	9	.75	10	13	.35	8.8	28	.67
30	25	8	.54	7.9	9	.19	13	27	.95
31	---	---	---	13	20	.70	---	---	---
TOTAL	1558	---	212.84	519.7	---	19.86	325.1	---	35.14

TABLE 9.--MONTHLY LABORATORY CHEMICAL DATA FOR CHAMPION CREEK AT MELCROFT (03082120)
(Lat 40°03'55", Long 79°23'55")

SITE 6

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
AUG 12...	1200	2.3	350	7.80	19.0	0.1	0.0	39	12	7.6	1.3	56

DATE	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
AUG 12...	60	87	17	<0.1	282	<2	0.520	<40	<4	<250	<10	<50

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
AUG 12...	<30	<10	<10	<10	<4	11	<25	<10	<10	<6	<2.0

TABLE 9.--MONTHLY LABORATORY CHEMICAL DATA FOR CHAMPION CREEK AT MELCROFT (03082120)--Continued
(Lat 40°03'55", Long 79°23'55")

SITE 6

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT 23...	1030	1.7	395	7.80	13.0	0	0.0	33	10	12	2.2	5
NOV 25...	1330	17	200	7.20	5.0	0	0.0	--	--	--	--	2
DEC 23...	1245	13	240	7.40	0.5	0	0.0	--	--	--	--	2
JAN 15...	1200	5.7	210	7.60	0.0	0	--	--	--	--	--	4
FEB 19...	1015	138	140	6.70	5.0	0	10	--	--	--	--	
MAR 17...	1320	51	150	6.40	6.0	0.1	28	--	--	--	--	1
APR 28...	1420	16	190	7.60	19.0	0	0.0	--	--	--	--	2
JUN 06...	1150	3.2	320	7.60	18.0	0.1	0.0	--	--	--	--	4
JUL 22...	1200	38	145	7.30	18.0	0	0.0	--	--	--	--	1
AUG 20...	1405	2.3	340	8.00	20.0	0	0.0	--	--	--	--	5
SEP 29...	1330	6.4	230	7.40	20.5	0	0.0	--	--	--	--	3

DATE	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER DIS-SOLVE (UG/L AS CU
OCT 23...	50	83	--	336	<2	--	300	<4	<0	<50	<30	<1
NOV 25...	30	52	--	168	6	--	<40	--	--	--	--	-
DEC 23...	30	51	--	174	2	--	200	--	--	--	--	-
JAN 15...	34	56	--	256	<2	<500	<500	--	--	--	--	-
FEB 19...	14	28	16	102	<2	390	<130	--	--	--	--	-
MAR 17...	20	26	--	86	4	300	<130	--	--	--	--	-
APR 28...	26	38	11	132	8	<130	<130	--	--	--	--	-
JUN 06...	50	61	--	204	<2	<130	<130	--	--	--	--	-
JUL 22...	26	36	--	124	<2	390	<130	--	--	--	--	-
AUG 20...	58	72	--	220	<2	<130	<130	--	--	--	--	-
SEP 29...	38	52	--	150	<2	<130	<130	--	--	--	--	-

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 23...	--	120	<45	--	<10	<25	77	--	<10	<6	<1.0
NOV 25...	--	14	--	--	43	--	--	--	<10	--	--
DEC 23...	--	52	--	--	62	--	--	--	28	--	--
JAN 15...	<300	<300	--	50	50	--	--	<10	<10	--	--
FEB 19...	550	53	--	92	84	--	--	<10	<10	--	--
MAR 17...	160	<10	--	64	58	--	--	<10	<10	--	--
APR 28...	170	54	--	28	27	--	--	20	18	--	--
JUN 06...	170	69	--	<10	<10	--	--	<10	<10	--	--
JUL 22...	430	28	--	<10	<10	--	--	20	25	--	--
AUG 20...	120	59	--	30	24	--	--	10	13	--	--
SEP 29...	160	47	--	<10	<10	--	--	20	22	--	--

TABLE 9.--MONTHLY LABORATORY CHEMICAL DATA FOR CHAMPION CREEK AT MELCROFT (03082120)--Continued
(Lat 40°03'55", Long 79°23'55")

SITE 6

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)
FEB 26...	1100	13	295	--	1.0	0.0	--	25	--	8.3	--	12
MAR 27...	0800	6.7	250	7.30	5.0	0.0	--	--	--	--	--	--
APR 14...	1300	28	--	7.43	9.0	10	--	--	--	--	--	--
MAY 19...	0800	53	175	7.16	14.0	0.0	--	--	--	--	--	--
JUN 29...	1510	5.3	295	7.20	19.5	0.0	30	29	9.6	9.4	7.6	7.4

DATE	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)
FEB 26...	--	1.2	42	75	--	96	12	--	<130	--	<4	<250
MAR 27...	--	--	38	54	16	186	6	<130	<130	--	--	--
APR 14...	--	--	24	41	10	114	2	<130	<130	--	--	--
MAY 19...	--	--	32	34	14	132	24	1500	<130	--	--	--
JUN 29...	2.0	1.9	52	71	--	206	10	<130	<130	<4	<4	<250

DATE	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)
FEB 26...	0	--	<50	--	<30	--	<10	--	28	--	<50	--
MAR 27...	--	--	--	--	--	--	--	230	36	--	--	46
APR 14...	--	--	--	--	--	--	--	170	50	--	--	45
MAY 19...	--	--	--	--	--	--	--	1800	160	--	--	120
JUN 29...	0	<50	<50	<30	<30	<10	<10	420	69	<50	<50	45

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
FEB 26...	78	--	<25	--	85	--	<10	--	<6	--	<1.0
MAR 27...	26	--	--	--	--	<10	<10	--	--	--	--
APR 14...	53	--	--	--	--	<10	<10	--	--	--	--
MAY 19...	68	--	--	--	--	40	38	--	--	--	--
JUN 29...	34	<25	<25	100	93	<10	<10	<6	<6	<1.0	<1.0

TABLE 10.--DAILY DISCHARGE FOR POPLAR RUN AT NORMALVILLE (03082190)
(Lat 40°01'09", Long 79°25'39")

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.44	5.3	37	5.4	8.6	12	5.8	8.2	4.1	.51	3.6	1.5
2	1.8	7.6	28	5.2	20	10	5.7	7.2	3.4	9.0	3.3	1.6
3	.73	16	20	5.0	54	9.9	5.1	6.1	2.5	3.5	2.7	1.6
4	.50	39	18	4.8	259	9.5	5.0	5.3	2.1	1.0	2.3	1.4
5	.79	63	17	4.7	338	8.8	5.6	5.0	2.8	.54	2.0	1.6
6	.52	37	17	4.5	130	8.9	12	4.4	2.8	.30	2.1	1.5
7	.53	24	14	4.3	64	7.8	15	5.1	2.0	.29	3.3	1.3
8	.48	18	14	4.2	40	7.0	11	4.3	2.3	2.4	2.4	1.3
9	.40	12	14	4.1	29	13	11	3.5	1.6	158	2.2	1.2
10	.57	15	18	4.0	23	48	11	3.1	.95	42	3.3	1.2
11	.85	44	31	3.9	20	91	13	2.5	.98	23	15	1.2
12	1.2	77	67	3.8	16	38	17	2.4	4.7	19	3.9	1.6
13	2.2	55	58	3.7	13	43	17	2.3	1.7	37	2.5	1.8
14	4.9	76	47	3.6	11	69	14	3.4	1.1	34	2.0	1.4
15	6.5	78	32	3.5	10	103	18	2.4	.65	17	1.9	1.3
16	5.4	192	26	3.7	9.2	48	33	5.8	1.8	12	2.1	1.5
17	3.8	95	21	4.0	55	32	51	7.7	7.7	12	2.0	1.5
18	2.7	48	16	6.0	146	24	38	4.0	1.5	7.8	1.9	1.8
19	5.1	32	14	10	164	22	27	9.0	.89	45	1.7	5.6
20	8.2	24	11	18	96	18	21	22	.74	161	1.6	2.5
21	15	18	9.0	27	85	14	22	14	.46	100	1.5	1.7
22	7.9	24	8.0	43	57	12	38	9.5	.28	39	1.7	1.5
23	6.4	21	10	41	39	11	32	7.4	.49	22	15	3.5
24	15	17	9.2	30	29	9.9	27	5.9	.40	14	14	52
25	13	16	8.4	20	23	8.7	22	4.6	.24	11	3.4	59
26	8.4	193	7.4	17	19	7.9	18	3.7	.20	8.5	2.6	19
27	7.0	205	7.0	15	17	10	15	11	.78	6.4	5.0	11
28	6.7	246	6.6	13	14	8.1	13	18	4.6	5.3	4.2	7.9
29	5.8	101	6.2	12	---	7.4	11	9.3	1.2	6.8	2.7	5.8
30	5.0	55	5.8	10	---	6.6	9.0	6.6	.54	5.1	2.0	4.9
31	5.4	---	5.6	9.2	---	5.9	---	5.5	---	4.1	1.5	---
TOTAL	143.21	1853.9	603.2	343.6	1788.8	724.4	543.2	209.2	55.50	807.54	115.4	200.7
MEAN	4.62	61.8	19.5	11.1	63.9	23.4	18.1	6.75	1.85	26.0	3.72	6.69
MAX	15	246	67	43	338	103	51	22	7.7	161	15	59
MIN	.40	5.3	5.6	3.5	8.6	5.9	5.0	2.3	.20	.29	1.5	1.2
CFSM	.52	7.00	2.20	1.26	7.24	2.65	2.05	.76	.21	2.95	.42	.76
IN.	.60	7.81	2.54	1.45	7.54	3.05	2.29	.88	.23	3.40	.49	.85

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	68	10	16	11	16	41	30	14	7.9	---	---	---
2	48	9.8	20	11	54	38	33	16	7.0	---	---	---
3	35	9.5	34	9.6	48	25	29	18	5.9	---	---	---
4	149	27	27	8.0	33	19	46	24	4.9	---	---	---
5	99	46	20	8.5	26	15	46	18	4.0	---	---	---
6	40	43	16	8.6	21	13	75	15	3.5	---	---	---
7	24	27	14	13	18	12	132	12	3.2	---	---	---
8	16	57	15	12	16	12	92	11	2.9	---	---	---
9	12	169	87	9.9	15	11	58	8.9	6.8	---	---	---
10	9.1	62	95	11	18	8.9	35	7.7	3.9	---	---	---
11	7.4	64	48	11	11	7.9	26	6.9	2.9	---	---	---
12	6.3	48	32	9.9	21	7.3	31	6.1	8.3	---	---	---
13	9.5	32	23	9.1	18	6.5	26	5.2	6.3	---	---	---
14	27	23	18	11	14	6.4	20	4.7	4.6	---	---	---
15	17	19	15	62	11	6.6	37	5.1	3.4	---	---	---
16	11	16	13	54	10	5.9	36	4.1	2.8	---	---	---
17	9.5	13	12	31	9.6	5.4	28	3.7	2.5	---	---	---
18	8.0	14	22	24	8.5	4.9	21	15	2.0	---	---	---
19	6.7	19	19	82	7.8	4.8	17	43	1.9	---	---	---
20	6.4	30	15	67	7.3	4.5	14	18	28	---	---	---
21	5.9	40	13	37	6.5	4.2	12	11	15	---	---	---
22	5.5	28	11	28	6.5	4.1	11	8.4	8.0	---	---	---
23	5.1	22	10	22	7.4	3.9	10	6.7	7.2	---	---	---
24	5.1	48	32	20	6.0	3.7	95	5.5	5.2	---	---	---
25	5.2	35	61	17	5.9	5.4	47	4.8	3.7	---	---	---
26	13	74	34	14	5.7	7.6	29	5.8	3.8	---	---	---
27	11	58	25	12	5.6	5.2	22	42	3.0	---	---	---
28	19	36	20	11	8.7	4.9	33	17	2.3	---	---	---
29	14	27	16	14	---	4.6	22	11	2.8	---	---	---
30	12	20	14	23	---	6.6	17	7.9	9.6	---	---	---
31	11	---	12	29	---	46	---	12	---	---	---	---
TOTAL	715.7	1126.3	809	690.6	435.5	351.3	1130	388.5	173.3	---	---	---
MEAN	23.1	37.5	26.1	22.3	15.6	11.3	37.7	12.5	5.78	---	---	---
MAX	149	169	95	82	54	46	132	43	28	---	---	---
MIN	5.1	9.5	10	8.0	5.6	3.7	10	3.7	1.9	---	---	---
CFSM	2.61	4.25	2.96	2.52	1.76	1.28	4.27	1.42	.65	---	---	---
IN.	3.02	4.74	3.41	2.91	1.83	1.48	4.76	1.64	.73	---	---	---

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)
(Lat 40°01'09" Long 79°25'39")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	11.0	10.0	10.5	10.0	8.5	9.5	.5	.0	.0
2	---	---	---	---	---	---	10.0	2.5	6.0	1.0	.0	.5
3	---	---	---	10.5	10.0	10.0	3.0	2.0	3.0	1.5	.5	1.0
4	---	---	---	13.0	10.5	11.5	4.0	2.5	3.0	2.0	1.0	1.5
5	---	---	---	14.0	10.0	12.0	4.5	3.0	3.5	1.5	.0	1.0
6	---	---	---	10.0	9.5	10.0	3.5	3.0	3.5	.5	.0	.0
7	---	---	---	10.0	7.5	9.0	4.0	3.5	3.5	.5	.0	.0
8	---	---	---	8.5	6.5	7.5	4.0	2.5	3.0	.5	.0	.0
9	---	---	---	9.0	6.0	7.5	4.5	2.0	3.0	.5	.0	.0
10	14.0	13.5	13.5	10.0	8.5	9.5	5.5	3.0	4.0	.5	.5	.5
11	14.0	12.0	13.5	11.5	10.0	11.0	8.0	5.5	7.0	.5	.5	.5
12	13.0	11.0	12.0	12.0	11.0	11.0	8.5	6.5	7.5	.5	.5	.5
13	14.5	12.5	13.5	---	---	---	6.5	4.5	6.0	.5	.0	.5
14	15.5	13.0	14.0	---	---	---	4.5	1.0	2.5	.0	.0	.0
15	16.5	14.5	15.5	---	---	---	2.0	.0	1.0	.5	.0	.0
16	15.0	12.0	13.0	---	---	---	3.0	2.0	2.5	.5	.0	.0
17	12.0	8.5	10.5	---	---	---	2.5	.5	1.5	.5	.0	.5
18	13.0	10.0	11.5	---	---	---	1.0	.0	.0	.5	.5	.5
19	15.0	12.5	13.5	---	---	---	.0	.0	.0	---	---	---
20	14.5	11.5	13.5	---	---	---	.0	.0	.0	---	---	---
21	11.5	10.5	11.0	---	---	---	.0	.0	.0	---	---	---
22	12.5	10.5	11.5	7.5	6.0	7.0	.0	.0	.0	2.5	2.0	2.5
23	14.0	12.0	13.0	7.5	5.5	6.5	.5	.0	---	3.5	1.0	2.5
24	14.5	13.0	13.5	7.0	5.0	6.0	1.5	.0	1.0	1.5	.0	.5
25	17.0	13.0	15.5	5.5	4.5	5.0	.0	.0	.0	2.5	1.0	2.0
26	15.5	7.5	11.0	10.5	5.5	8.5	.0	.0	.0	3.0	1.0	2.5
27	13.5	8.0	10.0	10.5	8.5	9.5	.0	.0	.0	1.0	.0	.0
28	12.0	8.0	10.0	9.5	8.5	9.0	.0	.0	.0	.0	.0	.0
29	8.0	6.0	7.5	9.0	8.0	8.5	.0	.0	.0	.0	.0	.0
30	9.0	7.0	8.0	9.0	8.0	8.5	.0	.0	.0	.5	.0	.5
31	10.5	8.5	9.5	---	---	---	.0	.0	.0	.5	.5	.5
MONTH	17.0	6.0	12.0	14.0	4.5	9.0	10.0	.0	2.5	3.5	.0	.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	1.0	.5	.5	15.0	9.5	12.5	15.5	13.0	14.5
2	3.5	.5	1.5	2.0	.5	1.0	14.5	10.0	12.0	12.5	9.0	11.0
3	5.0	3.5	4.0	3.0	1.0	2.0	14.0	7.0	10.5	12.5	6.0	9.0
4	4.5	3.0	4.0	3.0	2.0	2.5	16.0	11.0	13.0	14.0	6.0	10.0
5	6.5	4.5	5.5	3.5	1.5	2.5	16.0	12.0	14.0	17.0	8.5	12.5
6	6.0	3.5	5.5	2.0	.5	1.0	14.5	11.5	13.0	18.5	12.0	15.0
7	3.5	3.0	3.5	.5	.5	.5	14.0	11.0	12.0	20.0	14.5	17.0
8	3.5	3.0	3.5	.5	.5	.5	14.5	9.5	12.0	19.0	12.5	16.0
9	3.5	3.0	3.0	2.0	.5	.5	9.5	6.0	8.0	15.5	12.0	14.0
10	3.0	1.5	2.5	8.5	1.0	5.0	6.0	3.5	5.0	17.5	9.5	13.5
11	1.5	.5	.5	7.0	4.0	5.5	6.0	3.5	4.5	18.5	10.5	14.5
12	.5	.5	.5	4.5	3.0	4.0	10.5	4.0	7.0	18.5	12.0	15.0
13	.5	.5	.5	7.0	4.0	5.5	11.5	6.0	8.5	15.5	13.0	14.0
14	.5	.5	.5	7.5	6.5	7.0	13.0	6.0	9.5	15.5	12.5	14.0
15	.5	.5	.5	7.5	6.5	7.0	10.5	9.0	10.0	17.0	12.5	15.0
16	.5	.5	.5	6.5	5.0	6.0	9.0	6.5	7.5	19.5	14.5	16.5
17	3.0	.5	1.5	6.0	4.5	5.0	7.5	5.5	6.5	19.5	15.0	17.0
18	4.5	3.0	4.0	8.0	3.0	5.0	13.5	5.5	9.0	20.0	16.0	18.0
19	5.5	4.5	5.0	11.5	7.5	9.0	15.0	7.0	11.0	18.0	16.5	17.0
20	8.0	5.5	6.5	8.5	1.5	5.5	12.5	10.5	11.5	15.0	14.0	15.0
21	6.5	4.5	5.5	3.5	.5	1.5	11.5	9.5	11.0	14.0	12.5	13.0
22	5.0	3.5	4.0	5.0	.5	2.0	9.5	5.5	7.5	13.0	11.5	12.5
23	4.0	2.5	3.5	6.5	.5	3.5	9.5	4.5	6.5	13.0	10.0	11.5
24	3.0	1.5	2.5	8.0	3.5	5.5	12.0	4.5	8.0	14.5	11.0	12.5
25	3.5	.5	1.5	10.5	2.5	6.5	12.0	6.5	9.5	15.5	11.0	13.5
26	2.5	.5	1.0	12.5	6.0	9.0	16.5	8.5	12.5	17.0	12.5	15.0
27	3.5	1.0	2.0	10.0	6.5	9.0	18.5	10.0	14.0	16.0	14.5	15.0
28	1.0	.5	.5	10.5	4.0	7.0	20.0	11.5	15.5	17.0	14.5	15.5
29	---	---	---	13.0	5.5	9.0	18.5	14.0	16.0	18.5	14.5	16.0
30	---	---	---	15.0	8.0	11.0	17.0	10.5	14.0	17.5	15.5	16.5
31	---	---	---	15.5	9.5	12.5	---	---	---	19.0	14.5	16.5
MONTH	8.0	.5	2.5	15.5	.5	5.0	20.0	3.5	10.5	20.0	6.0	14.5

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	15.5	17.5	18.0	15.0	16.5	20.0	16.5	18.5	15.0	13.0	14.5
2	18.0	14.5	16.5	18.0	17.0	17.5	20.0	17.5	19.0	16.5	15.0	15.5
3	15.5	11.0	13.5	18.0	15.5	17.0	19.5	16.5	18.0	17.0	15.0	16.0
4	17.0	12.0	14.5	16.5	13.5	14.5	19.0	16.0	17.5	18.0	16.5	17.0
5	17.0	16.0	18.0	---	---	---	19.5	16.0	17.5	19.0	17.0	18.0
6	18.5	17.0	17.5	---	---	---	20.0	17.5	19.0	17.0	15.0	16.0
7	20.5	17.0	19.0	22.0	20.0	21.5	20.5	18.0	19.0	15.5	13.5	14.0
8	20.5	18.5	19.0	22.0	19.0	20.5	20.5	18.5	19.5	14.0	11.0	12.5
9	19.0	15.5	17.5	---	---	---	21.0	18.5	19.5	13.5	10.0	12.0
10	18.0	15.0	16.5	---	---	---	20.0	18.0	19.0	15.0	11.0	13.0
11	21.5	17.5	19.5	17.0	15.5	16.0	19.5	18.0	19.0	17.5	14.5	16.0
12	21.5	19.0	20.0	19.0	16.5	17.5	18.5	15.5	17.0	17.5	16.5	17.0
13	19.5	18.0	18.5	---	---	---	18.5	16.0	17.0	16.5	14.0	15.0
14	20.0	15.5	17.5	---	---	---	19.5	16.0	18.0	15.0	13.0	14.0
15	20.5	16.5	18.5	---	---	---	20.0	17.0	18.5	14.5	12.5	13.0
16	21.0	18.0	19.5	---	---	---	21.0	18.5	20.0	15.5	12.5	14.5
17	20.0	16.0	17.5	20.0	17.5	18.5	20.5	19.5	19.5	13.0	10.0	11.5
18	17.0	13.0	15.0	22.0	18.5	20.0	21.0	19.0	20.0	13.0	10.5	11.5
19	17.5	13.0	15.5	21.0	19.5	20.0	20.5	18.0	19.5	16.0	13.0	14.5
20	19.5	16.5	17.5	---	---	---	19.5	18.0	19.0	17.0	14.5	15.5
21	19.5	15.0	17.5	---	---	---	19.0	18.5	18.5	17.5	16.0	16.5
22	20.0	15.0	17.5	---	---	---	20.0	17.5	18.5	17.5	15.0	16.5
23	21.0	18.0	19.5	19.0	18.0	18.5	20.0	17.0	18.5	18.0	16.5	17.0
24	19.5	17.5	18.5	20.5	17.5	19.0	---	---	---	19.5	17.5	17.5
25	17.5	14.5	16.5	20.5	18.5	19.5	17.0	15.5	16.5	18.5	17.0	17.5
26	18.0	13.0	15.5	21.5	18.5	20.0	18.5	15.0	16.5	19.5	17.5	18.5
27	18.0	14.0	16.0	21.5	19.5	20.5	18.5	16.5	18.0	18.0	17.5	18.0
28	24.0	17.5	20.5	20.5	18.5	19.5	16.5	13.0	15.0	19.0	17.0	18.0
29	20.5	17.0	18.5	20.0	18.5	19.5	13.5	11.0	12.5	19.5	17.0	18.0
30	19.0	16.5	18.0	19.0	18.0	18.5	14.0	10.0	12.0	20.5	17.5	19.0
31	---	---	---	19.5	16.5	18.0	14.5	11.0	13.0	---	---	---
MONTH	24.0	11.0	17.5	22.0	13.5	18.5	21.0	10.0	18.0	20.5	10.0	15.5

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	19.5	18.0	19.0	11.0	7.5	9.0	5.5	2.5	4.0	2.5	1.5	2.0
2	18.5	17.0	18.0	10.5	8.5	10.0	5.5	2.5	4.0	2.0	.5	1.0
3	18.5	16.0	17.0	10.0	7.5	8.5	6.5	4.5	6.0	1.5	.5	1.0
4	18.5	17.5	17.5	9.5	9.0	9.5	4.5	3.5	4.0	1.0	.0	.5
5	17.5	14.0	15.5	9.0	8.5	8.5	3.5	2.5	3.0	.5	.5	.5
6	14.0	11.0	12.5	11.0	8.5	9.5	3.0	.5	2.0	.5	.0	.5
7	11.0	10.0	10.5	11.0	8.5	9.5	5.0	3.0	4.0	.5	.5	.5
8	13.0	8.5	11.0	13.5	10.5	12.0	6.0	4.5	5.0	1.5	.5	1.0
9	13.5	10.0	12.0	13.0	9.5	11.5	8.5	5.5	8.0	2.5	1.0	2.0
10	12.5	10.0	11.0	9.5	7.5	8.5	8.0	4.5	6.5	2.5	2.0	2.5
11	11.5	9.0	10.0	8.0	7.0	7.5	5.0	4.0	4.5	2.0	.5	1.0
12	13.5	10.0	11.5	8.5	7.0	8.0	4.5	3.0	4.0	1.0	.5	.5
13	14.0	13.0	13.5	7.0	3.0	5.0	3.0	.0	1.5	2.5	1.0	1.5
14	14.0	11.0	13.0	3.5	1.0	2.5	1.5	.0	.5	3.0	.0	1.5
15	11.0	9.0	10.0	5.5	2.5	4.0	3.5	1.5	2.5	4.5	3.0	4.0
16	10.5	8.5	9.5	6.5	5.5	6.0	3.0	1.0	2.0	4.5	3.0	4.0
17	10.5	9.5	10.0	8.0	6.5	7.0	4.5	3.0	4.0	3.0	1.5	2.5
18	10.0	8.0	9.0	7.5	6.0	6.5	5.0	3.0	4.0	4.5	2.5	3.5
19	9.0	6.0	7.5	6.5	3.5	5.0	3.0	2.5	2.5	4.5	3.0	4.0
20	8.5	5.5	7.0	6.0	3.0	4.0	3.0	2.0	2.5	3.5	3.0	3.5
21	9.0	5.5	7.0	6.0	5.0	5.0	3.0	1.0	2.0	3.0	2.0	2.5
22	11.5	8.5	10.0	6.5	4.5	5.5	1.0	.0	.0	1.5	.0	1.0
23	12.0	10.0	11.0	8.0	4.0	6.0	.0	.0	.0	.5	.0	.5
24	13.0	11.5	12.0	8.5	6.0	8.0	3.0	1.0	2.0	.0	.0	.0
25	12.0	11.0	11.5	7.0	5.0	6.0	4.5	3.0	4.0	.0	.0	.0
26	12.5	11.0	11.5	8.0	7.0	7.5	4.0	3.5	4.0	.0	.0	.0
27	12.5	11.5	12.0	9.5	6.5	8.0	4.0	3.0	3.5	.0	.0	.0
28	12.5	10.5	11.5	8.0	6.0	7.0	3.0	2.5	3.0	.0	.0	.0
29	12.0	8.5	11.5	7.0	6.0	6.5	3.5	1.5	2.5	2.0	.0	.0
30	11.5	9.0	11.0	7.0	4.5	5.5	2.5	2.0	2.5	.0	.0	.0
31	10.0	6.5	8.5	---	---	---	3.5	2.0	2.5	.0	.0	.0
MONTH	19.5	5.5	11.5	13.5	1.0	7.0	8.5	.0	3.0	4.5	.0	1.5

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.0	.5	5.5	3.5	4.5	6.5	2.0	4.0	---	---	---
2	2.0	.0	.5	4.0	2.5	3.0	5.0	4.0	4.5	---	---	---
3	3.5	2.0	3.0	6.0	2.5	4.0	4.0	2.5	3.0	---	---	---
4	4.0	2.5	3.0	3.0	1.0	2.0	3.5	1.5	2.5	---	---	---
5	3.0	.5	2.0	4.0	.0	1.5	5.5	2.5	4.0	---	---	---
6	3.5	.0	1.5	7.0	1.0	3.5	6.5	4.0	4.5	---	---	---
7	3.5	1.0	2.0	9.0	2.5	5.5	7.5	4.5	5.5	---	---	---
8	2.5	.0	1.5	9.0	3.5	6.5	9.5	5.0	6.5	---	---	---
9	.0	.0	.0	7.5	4.0	6.5	9.5	4.5	6.5	---	---	---
10	.0	.0	.0	4.0	.5	2.5	11.5	4.0	7.5	---	---	---
11	.5	.0	.0	3.0	.0	1.0	9.0	5.0	7.5	---	---	---
12	1.0	.0	.5	5.0	.5	2.5	8.5	6.0	7.0	---	---	---
13	2.5	.5	1.5	5.0	.0	2.5	9.0	7.0	7.5	17.0	11.0	14.0
14	1.5	.0	.5	1.5	.0	1.0	10.5	7.0	8.5	18.5	12.5	15.5
15	1.0	.0	.5	4.0	1.5	2.5	9.5	8.0	9.0	18.5	14.5	16.5
16	.0	.0	.0	6.0	.0	3.0	8.0	7.0	7.5	16.5	11.0	14.0
17	.0	.0	.0	5.5	.0	2.5	10.5	7.5	9.0	17.5	11.0	14.5
18	2.5	.0	.0	6.0	.0	3.0	14.0	7.0	10.5	18.0	13.0	14.5
19	1.0	.0	.5	8.0	1.5	4.5	14.0	8.5	11.5	---	---	---
20	1.0	.0	.5	8.0	1.5	4.5	16.0	9.5	12.5	---	---	---
21	2.5	.0	1.0	8.0	2.5	5.0	18.0	10.0	14.0	---	---	---
22	4.0	.0	2.0	7.5	2.5	5.0	18.0	11.5	15.0	---	---	---
23	2.5	1.5	2.0	9.5	2.5	6.0	16.0	13.5	14.5	---	---	---
24	1.5	.5	1.5	11.0	4.0	7.5	13.5	10.0	12.0	---	---	---
25	3.0	1.0	2.5	11.0	7.0	9.0	14.0	8.5	10.5	---	---	---
26	3.5	.0	1.5	11.0	7.0	8.5	13.5	7.0	10.0	---	---	---
27	3.0	1.0	2.0	9.5	5.5	7.5	14.5	7.5	11.0	18.0	15.5	16.5
28	3.5	1.5	2.5	12.5	7.5	10.0	11.0	7.5	9.0	17.5	14.5	16.0
29	---	---	---	13.5	6.5	10.5	14.0	5.5	9.5	19.0	15.0	17.0
30	---	---	---	11.0	10.0	10.5	11.5	8.0	9.0	19.5	16.0	18.0
31	---	---	---	10.0	3.0	5.5	---	---	---	18.5	16.5	17.5
MONTH	4.0	.0	1.0	13.5	.0	5.0	18.0	1.5	8.5	19.5	11.0	16.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	19.0	16.0	17.0									
2	18.0	16.5	17.0									
3	19.0	16.5	17.5									
4	18.5	16.5	17.5									
5	17.5	14.0	16.0									
6	17.0	14.0	15.5									
7	19.0	14.0	16.5									
8	20.0	16.0	18.0									
9	19.0	16.5	18.0									
10	16.5	12.5	14.5									
11	17.0	11.5	14.5									
12	16.5	14.5	15.5									
13	20.0	16.5	18.0									
14	20.5	16.5	18.5									
15	21.0	16.5	19.0									
16	21.0	18.5	19.5									
17	21.0	17.5	19.0									
18	20.5	16.5	18.5									
19	21.0	17.0	19.0									
20	24.0	18.5	19.0									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	18.5	17.5	20.5									
30	20.0	17.0	18.5									
31	---	---	---									
MONTH	24.0	11.5	17.5									

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	680	652	656	242	205	226	667	364	544
2	---	---	---	706	630	660	345	165	223	649	368	492
3	---	---	---	993	628	680	543	186	265	672	310	486
4	---	---	---	521	216	276	799	280	419	664	393	527
5	---	---	---	---	---	---	654	289	415	450	408	420
6	---	---	---	299	179	199	822	279	410	580	314	441
7	---	---	---	351	189	221	787	400	480	577	313	444
8	---	---	---	417	240	268	545	400	437	597	344	461
9	---	---	---	430	221	268	629	280	386	557	370	449
10	778	745	761	264	221	246	616	256	395	742	356	528
11	751	710	727	259	179	210	544	224	312	643	351	474
12	732	661	694	313	129	187	390	158	207	479	449	468
13	792	675	728	---	---	---	299	156	198	579	350	445
14	700	577	622	---	---	---	258	177	198	864	341	536
15	690	519	580	---	---	---	295	188	213	781	332	515
16	706	572	643	---	---	---	470	198	250	696	330	480
17	1050	717	882	---	---	---	612	233	305	715	300	471
18	1090	876	1040	---	---	---	468	256	336	505	201	298
19	872	748	798	---	---	---	585	267	395	220	188	206
20	926	733	828	---	---	---	489	268	379	---	---	---
21	732	448	552	---	---	---	596	390	452	---	---	---
22	509	461	474	352	159	221	427	397	410	374	140	189
23	612	511	538	388	172	215	562	289	390	261	159	186
24	752	377	548	375	176	222	634	287	449	290	163	192
25	---	---	---	370	166	252	677	397	447	315	204	232
26	516	367	399	320	61	174	636	334	476	343	220	235
27	704	308	610	113	65	92	660	319	449	228	193	210
28	932	683	788	103	73	89	636	372	510	251	214	226
29	1000	904	933	154	104	133	492	456	468	241	170	212
30	904	765	870	216	154	185	689	369	488	400	212	253
31	754	682	735	---	---	---	723	362	530	429	190	262
MONTH	1090	308	702	993	61	273	822	156	372	864	140	375

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	417	253	298	605	360	427	1130	530	726	823	290	399
2	262	127	161	522	374	398	889	452	655	613	382	442
3	217	135	156	731	287	411	644	406	499	1020	360	586
4	161	64	135	739	277	413	1260	435	692	507	358	427
5	124	74	98	585	286	439	778	374	552	711	485	540
6	265	113	155	646	257	405	736	274	472	708	488	566
7	346	168	206	725	279	418	456	247	319	760	534	594
8	356	242	288	702	292	512	606	245	381	630	503	561
9	388	294	327	580	235	421	488	247	332	724	477	573
10	621	236	336	331	127	218	350	329	364	818	509	670
11	652	238	342	260	109	141	491	319	354	598	468	573
12	679	254	379	291	150	182	468	241	316	1010	474	666
13	756	268	394	305	156	218	281	225	249	700	623	641
14	760	253	445	271	133	185	447	237	289	921	484	664
15	620	365	420	165	122	144	456	211	294	817	483	666
16	523	363	384	266	160	192	240	177	212	848	445	709
17	521	126	301	307	181	210	267	183	199	584	375	438
18	180	88	119	356	211	254	292	200	223	526	470	506
19	156	80	119	536	246	312	357	234	261	754	403	592
20	266	116	156	541	226	311	272	240	255	317	262	286
21	235	124	174	482	235	309	386	253	288	471	259	328
22	237	178	202	544	253	371	333	222	243	421	286	344
23	311	209	244	467	304	398	373	199	234	558	347	404
24	515	193	265	556	302	400	330	224	244	599	392	461
25	554	219	293	613	311	457	378	243	267	489	429	456
26	611	229	319	788	327	491	442	270	302	683	441	513
27	635	248	358	649	287	399	322	289	306	635	266	481
28	614	246	105	843	300	458	515	321	358	384	240	283
29	---	---	---	752	308	548	690	293	429	552	299	385
30	---	---	---	548	449	493	588	304	415	569	381	422
31	---	---	---	747	355	501	---	---	---	618	396	451
MONTH	760	64	256	843	109	356	1260	177	358	1020	240	504

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	500	425	464	943	698	834	980	460	714	870	630	730
2	742	471	552	896	352	562	950	530	774	1010	670	842
3	708	487	590	591	417	479	830	770	782	1300	700	992
4	935	491	706	532	412	468	970	780	862	1150	780	964
5	679	537	586	---	---	---	910	650	784	1130	780	966
6	733	568	604	---	---	---	860	650	719	1150	790	957
7	818	593	654	740	690	720	980	670	856	1150	840	999
8	676	604	630	830	620	716	1060	620	841	1150	840	985
9	743	570	626	---	---	---	1170	690	946	1040	840	948
10	822	564	670	---	---	---	1150	790	977	1100	940	1030
11	840	720	757	450	260	300	810	310	432	1210	950	1090
12	770	427	613	430	260	318	1020	380	741	1080	930	1010
13	691	472	596	---	---	---	840	610	758	1020	860	949
14	835	575	682	---	---	---	850	630	718	1090	930	1020
15	790	679	702	---	---	---	860	650	771	1070	930	1020
16	893	643	773	---	---	---	980	680	838	1160	970	1080
17	652	405	504	440	270	315	970	870	905	1290	1070	1190
18	752	436	597	490	330	364	960	890	909	1360	1050	1230
19	912	650	774	550	370	399	1130	770	962	1090	610	796
20	843	625	755	---	---	---	1100	820	973	1180	610	869
21	896	727	767	---	---	---	1090	840	952	1110	810	913
22	936	815	852	---	---	---	960	810	896	960	820	882
23	1140	804	868	280	260	268	980	810	846	1120	810	965
24	1130	828	902	490	280	352	---	---	---	750	180	376
25	904	757	816	600	320	408	680	450	550	330	150	233
26	984	898	932	980	340	521	1130	500	828	390	310	331
27	1000	874	957	520	500	508	870	410	641	500	350	391
28	---	---	---	670	420	541	1100	450	668	530	350	416
29	710	541	614	900	380	561	1090	490	773	450	350	392
30	970	711	813	950	390	633	1040	590	786	620	370	473
31	---	---	---	900	440	647	850	600	720	---	---	---
MONTH	1140	405	702	980	260	496	1170	310	797	1360	150	835

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	460	170	217	690	440	486	590	270	365	450	380	417
2	320	170	185	460	370	660	560	270	368	450	400	423
3	340	170	246	870	360	680	400	220	278	480	410	444
4	260	110	142	660	210	276	410	270	301	540	430	471
5	240	110	151	400	170	8890	470	300	338	570	460	505
6	270	190	204	330	170	213	540	330	379	540	490	516
7	350	240	283	340	190	225	660	350	389	500	440	476
8	420	270	308	300	140	192	790	260	399	630	320	397
9	450	280	344	180	110	132	330	150	191	440	310	385
10	500	310	397	280	150	181	280	140	173	750	310	434
11	630	340	469	270	170	197	430	190	232	430	390	404
12	760	350	488	250	180	197	380	230	273	440	400	414
13	940	320	508	310	210	243	470	300	346	680	350	452
14	740	200	373	390	260	287	620	350	378	480	390	438
15	440	240	327	440	280	318	590	300	392	380	170	228
16	540	280	366	590	310	355	890	300	495	220	170	194
17	600	290	882	830	270	380	760	320	437	260	210	239
18	660	450	1040	860	270	405	790	270	377	290	260	274
19	500	460	481	500	260	338	740	280	371	440	150	223
20	760	480	544	600	210	366	590	280	362	260	160	189
21	750	510	561	320	190	231	750	370	415	240	210	225
22	760	510	574	380	240	277	830	300	424	560	230	283
23	760	540	600	290	270	279	870	420	526	340	300	320
24	790	580	634	410	190	257	430	190	346	380	350	366
25	810	630	700	320	180	218	250	180	209	410	370	389
26	640	400	399	310	220	241	290	220	246	720	330	434
27	640	400	446	410	160	206	300	230	265	580	360	453
28	530	340	391	400	210	256	400	280	306	580	470	503
29	520	350	387	390	230	301	800	270	393	520	350	447
30	570	350	415	610	300	346	480	290	379	640	360	446
31	570	360	448	---	---	---	530	380	412	580	340	369
MONTH	940	110	436	870	110	588	890	140	347	750	150	379

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	520	370	408	500	180	278	240	190	219	---	---	---
2	490	200	278	240	180	191	430	210	231	---	---	---
3	240	210	227	270	220	248	290	190	216	---	---	---
4	270	240	258	290	250	272	240	190	215	---	---	---
5	300	270	285	330	290	300	230	200	207	---	---	---
6	720	260	327	380	300	328	250	160	195	---	---	---
7	610	270	341	360	320	337	210	130	153	---	---	---
8	550	270	342	580	260	333	170	140	155	---	---	---
9	390	290	344	630	280	383	340	170	184	---	---	---
10	750	300	440	400	280	346	310	210	220	---	---	---
11	750	310	383	420	360	384	500	220	288	---	---	---
12	740	270	377	410	370	399	460	250	299	520	370	444
13	630	290	353	430	400	422	400	230	274	790	380	515
14	440	350	377	490	430	441	440	260	296	550	440	521
15	760	320	411	450	440	445	610	190	336	560	510	541
16	730	310	484	1000	380	510	430	200	247	590	540	571
17	470	340	393	500	380	429	350	220	251	620	590	608
18	1030	350	515	650	390	456	460	240	305	640	360	524
19	580	400	466	530	390	470	470	320	357	---	---	---
20	630	390	484	640	400	494	360	280	308	---	---	---
21	580	480	515	610	370	467	650	280	380	---	---	---
22	820	410	555	390	360	369	830	300	412	---	---	---
23	860	380	489	980	390	544	670	280	416	---	---	---
24	710	390	537	890	430	587	560	110	233	---	---	---
25	570	380	515	960	400	534	210	170	181	---	---	---
26	680	380	454	860	350	445	260	230	249	---	---	---
27	510	480	496	560	360	396	420	230	271	290	190	212
28	870	450	557	660	370	460	410	210	242	460	250	291
29	---	---	---	380	370	378	410	230	276	360	310	337
30	---	---	---	790	320	473	460	240	308	410	370	390
31	---	---	---	450	170	244	---	---	---	410	330	368
MONTH	1030	200	415	1000	170	399	830	110	264	790	190	444

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	430	380	409									
2	580	360	441									
3	490	390	457									
4	520	460	485									
5	860	450	630									
6	640	440	528									
7	650	500	620									
8	1100	590	846									
9	590	350	477									
10	820	370	592									
11	590	460	532									
12	600	360	490									
13	670	360	476									
14	640	490	541									
15	650	580	617									
16	710	610	654									
17	780	670	723									
18	750	620	676									
19	660	570	608									
20	660	320	577									
21	---	---	---									
22	---	---	---									
23	---	---	---									
24	---	---	---									
25	---	---	---									
26	---	---	---									
27	---	---	---									
28	---	---	---									
29	1070	540	830									
30	720	510	572									
31	---	---	---									
MONTH	1100	320	581									

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	5.30	5.20	5.20	5.30	5.10	5.20	5.20	4.90	5.00
2	---	---	---	5.40	5.10	5.30	6.00	5.00	5.40	5.20	4.90	5.00
3	---	---	---	5.30	4.90	5.00	6.20	4.90	5.40	5.30	4.80	5.30
4	---	---	---	6.10	5.00	5.30	5.60	4.60	5.10	5.10	4.80	4.90
5	---	---	---	6.10	5.10	5.70	5.50	4.70	5.10	5.00	5.00	5.00
6	---	---	---	5.80	5.00	5.40	5.50	4.50	5.10	5.30	4.90	5.10
7	---	---	---	5.90	5.10	5.60	5.10	4.50	4.90	5.30	4.90	5.10
8	---	---	---	5.40	4.90	5.20	5.00	4.90	5.00	5.30	4.90	5.10
9	---	---	---	5.90	5.00	5.50	5.60	4.70	5.10	5.20	5.00	5.10
10	6.50	6.40	6.40	6.30	5.30	5.80	5.50	4.70	5.00	5.30	4.80	4.90
11	6.50	6.30	6.40	5.80	5.10	5.30	5.70	4.70	5.10	5.20	5.00	5.10
12	6.40	6.30	6.30	6.10	5.10	5.50	5.60	4.80	5.20	5.30	5.20	5.20
13	6.30	5.70	6.10	---	---	---	5.90	5.00	5.40	5.30	5.00	5.20
14	6.30	6.00	6.20	---	---	---	5.30	5.10	5.20	5.30	4.90	5.10
15	6.20	5.80	6.00	---	---	---	5.30	5.10	5.30	5.20	4.90	5.00
16	6.20	4.90	5.40	---	---	---	5.80	4.90	5.30	5.30	4.90	5.00
17	4.90	4.70	4.80	---	---	---	5.90	4.80	5.30	5.30	4.80	5.00
18	5.00	4.70	4.80	---	---	---	5.90	4.90	5.30	5.20	4.90	5.10
19	5.10	5.00	5.10	---	---	---	5.50	4.90	5.20	5.30	5.20	5.20
20	5.20	4.90	5.00	---	---	---	5.60	5.10	5.20	---	---	---
21	5.70	5.10	5.50	---	---	---	5.20	4.90	5.10	---	---	---
22	5.50	5.40	5.40	6.30	5.00	5.50	5.20	5.10	5.10	6.10	5.00	5.60
23	5.50	5.20	5.30	6.20	5.00	5.50	5.50	5.00	5.20	6.00	5.30	5.60
24	5.50	5.10	5.30	6.20	5.00	5.50	5.50	4.90	5.10	6.20	5.30	5.70
25	5.40	5.20	5.40	6.20	5.00	5.30	5.20	4.90	5.10	5.50	5.20	5.40
26	5.60	5.40	5.50	6.30	5.00	5.50	5.30	5.00	5.10	5.50	5.20	5.40
27	5.60	4.80	5.10	6.00	5.50	5.70	5.50	4.90	5.10	5.50	5.30	5.40
28	4.80	4.80	4.80	6.10	5.70	5.90	5.20	4.90	5.00	5.50	5.30	5.40
29	4.80	4.80	4.80	6.00	5.60	5.90	5.10	5.00	5.10	5.70	5.30	5.40
30	5.00	4.80	4.90	5.90	5.30	5.50	5.30	4.90	5.10	5.70	5.10	5.60
31	5.20	5.00	5.10	---	---	---	5.30	4.90	5.00	5.80	5.10	5.40
MONTH	6.50	4.70	5.44	6.30	4.90	5.48	6.20	4.50	5.15	6.20	4.80	5.22

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	5.30	5.10	5.20	5.10	4.80	5.00	5.20	5.00	5.10	6.60	5.40	6.30
2	5.50	5.20	5.40	5.10	5.00	5.10	5.40	5.00	5.20	6.60	5.30	6.20
3	6.10	5.30	5.60	5.40	4.80	5.10	5.40	5.10	5.20	7.50	5.40	6.60
4	5.90	5.50	5.70	5.20	4.70	5.10	5.20	4.90	5.10	6.40	6.00	6.30
5	6.10	5.50	5.60	5.40	4.90	5.10	5.30	4.90	5.00	6.30	4.90	5.50
6	6.10	5.20	5.70	5.50	4.90	5.20	5.60	4.80	5.10	6.40	5.30	6.10
7	6.20	5.10	5.70	5.50	4.90	5.20	5.80	5.10	5.50	6.50	5.10	6.10
8	5.30	5.10	5.20	5.40	4.90	5.00	5.90	5.10	5.60	6.20	5.90	6.10
9	5.20	5.10	5.10	5.40	5.00	5.10	5.90	5.20	5.70	6.50	5.90	6.30
10	5.80	4.90	5.30	5.60	5.00	5.20	5.90	5.70	5.80	6.40	5.10	6.00
11	5.80	4.80	5.30	6.10	5.10	5.50	6.40	5.30	6.10	6.20	5.70	6.10
12	5.60	4.70	5.20	5.90	5.10	5.50	6.40	5.20	6.00	6.20	5.30	6.00
13	5.50	4.80	5.20	6.10	5.00	5.40	6.20	5.70	6.00	6.10	5.60	5.90
14	5.40	4.70	5.10	6.10	5.10	5.50	6.30	5.20	5.90	6.90	5.80	6.50
15	5.10	4.70	5.00	5.60	5.30	5.40	6.40	5.30	6.00	6.70	6.20	6.50
16	5.10	5.00	5.00	5.50	5.20	5.40	6.40	5.90	6.30	6.30	6.10	6.20
17	5.50	4.90	5.10	6.00	5.10	5.60	6.50	5.70	6.20	6.40	6.10	6.30
18	5.70	5.20	5.50	6.00	5.00	5.50	6.20	5.50	6.00	6.20	6.10	6.20
19	5.90	5.20	5.50	5.80	4.80	5.30	6.30	5.30	6.10	6.60	6.20	6.40
20	6.00	5.00	5.50	5.80	4.80	5.30	6.40	6.30	6.40	6.30	5.90	6.20
21	6.20	5.20	5.50	5.70	5.00	5.30	6.50	5.40	6.20	6.60	5.30	6.30
22	5.40	5.20	5.30	5.60	5.00	5.20	6.60	5.70	6.40	6.70	5.60	6.40
23	5.30	5.10	5.20	5.40	4.90	5.00	6.40	6.10	6.30	6.70	6.00	6.50
24	5.90	4.90	5.40	5.40	4.90	5.10	6.40	5.50	6.20	6.60	5.40	6.30
25	5.90	4.90	5.40	5.50	4.80	5.00	6.50	5.40	6.30	6.60	6.40	6.50
26	5.70	4.80	5.30	5.20	4.60	4.90	6.60	5.30	6.20	6.60	5.60	6.30
27	5.60	4.80	5.20	5.30	4.80	5.00	6.70	6.30	6.60	6.50	5.90	6.30
28	5.50	4.80	5.20	5.30	4.80	5.00	7.00	6.60	6.80	6.50	5.30	6.30
29	---	---	---	5.30	4.70	5.00	7.50	6.60	7.00	6.70	5.30	6.30
30	---	---	---	5.10	5.00	5.00	6.70	5.30	6.40	6.70	5.90	6.40
31	---	---	---	5.10	4.80	5.00	---	---	---	6.70	6.00	6.40
MONTH	6.20	4.70	5.34	6.10	4.60	5.19	7.50	4.80	5.96	7.50	4.90	6.25

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.70	6.40	6.60	6.00	4.90	5.50	5.70	4.60	5.00	5.08	4.82	4.97
2	6.70	5.20	6.30	6.30	5.70	6.00	5.40	4.60	4.80	5.01	4.69	4.83
3	6.40	5.60	6.20	6.30	6.00	6.20	4.80	4.70	4.70	4.92	4.56	4.73
4	7.20	6.30	6.90	6.40	6.20	6.30	4.80	4.60	4.70	4.81	4.59	4.69
5	7.00	6.00	6.60	---	---	---	5.10	4.70	4.80	4.77	4.56	4.66
6	6.60	5.70	6.40	---	---	---	5.10	4.70	4.80	4.80	4.58	4.69
7	6.60	5.50	6.30	5.30	5.10	5.20	5.10	4.60	4.70	4.80	4.61	4.71
8	6.60	5.80	6.40	5.20	4.70	4.90	5.00	4.50	4.70	4.82	4.66	4.75
9	6.90	6.50	6.70	---	---	---	4.90	4.50	4.60	4.83	4.74	4.79
10	6.60	6.20	6.50	---	---	---	4.60	4.50	4.60	4.76	4.66	4.73
11	6.50	6.20	6.40	6.80	6.40	6.70	5.10	4.60	4.80	4.66	4.61	4.63
12	6.50	6.20	6.30	6.70	5.80	6.40	5.30	4.50	4.80	4.70	4.61	4.65
13	6.90	6.20	6.50	---	---	---	5.10	4.70	4.80	4.75	4.68	4.71
14	6.70	5.30	6.50	---	---	---	5.30	4.70	4.90	4.75	4.67	4.70
15	5.50	5.10	5.40	---	---	---	5.00	4.70	4.80	4.75	4.65	4.72
16	5.30	4.80	5.00	---	---	---	5.00	4.60	4.70	4.71	4.65	4.68
17	6.60	5.00	5.90	6.50	5.30	6.10	4.70	4.60	4.60	4.71	4.68	4.70
18	6.60	6.00	6.30	6.20	5.10	5.80	4.70	4.60	4.60	4.72	4.64	4.67
19	7.00	6.10	6.70	6.00	5.00	5.80	4.80	4.50	4.60	4.79	4.62	4.72
20	6.80	6.30	6.50	---	---	---	4.80	4.50	4.60	4.85	4.50	4.68
21	6.70	6.50	6.60	---	---	---	4.70	4.60	4.70	4.67	4.52	4.62
22	6.60	6.20	6.40	---	---	---	4.80	4.60	4.70	4.71	4.61	4.67
23	6.90	6.50	6.70	---	---	---	4.80	4.60	4.70	4.69	4.54	4.63
24	7.00	6.80	6.90	6.80	5.00	6.10	---	---	---	5.56	4.63	5.08
25	6.90	6.80	6.80	6.70	4.80	5.80	---	---	---	6.51	5.06	5.72
26	6.80	6.60	6.70	6.70	4.60	5.60	5.59	4.64	4.92	6.72	5.19	6.10
27	6.90	6.70	6.80	5.00	4.90	5.00	5.31	4.74	4.98	6.73	5.29	6.20
28	6.90	5.60	6.50	6.00	4.80	5.10	5.26	4.63	4.88	6.63	5.13	5.85
29	6.50	5.10	6.00	6.20	4.60	5.30	5.36	4.73	4.97	6.35	5.80	6.03
30	5.10	4.70	5.00	6.00	4.60	5.00	5.25	4.75	4.96	6.24	4.98	5.50
31	---	---	---	6.10	4.60	5.10	5.15	4.83	4.99	---	---	---
MONTH	7.20	4.70	6.36	6.80	4.60	5.68	5.70	4.50	4.77	6.73	4.50	4.96

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.43	4.97	5.88	6.75	5.34	6.33	6.70	5.29	6.38	6.69	6.22	6.53
2	6.37	5.74	6.01	6.47	6.27	6.40	6.97	5.91	6.61	6.70	6.39	6.57
3	6.42	5.12	5.81	6.36	5.09	5.73	6.52	5.52	6.34	6.77	6.47	6.62
4	6.26	6.08	6.17	6.43	5.79	6.16	6.50	5.43	6.32	6.84	6.48	6.66
5	6.44	6.16	6.29	6.57	6.27	6.37	6.52	5.40	6.33	6.83	6.40	6.61
6	6.61	6.02	6.29	6.54	6.23	6.42	6.54	5.33	6.24	6.74	6.30	6.61
7	6.61	6.42	6.49	6.50	6.11	6.39	6.65	6.46	6.49	6.71	6.31	6.51
8	6.75	5.83	6.56	6.51	6.36	6.44	6.69	6.23	6.44	7.08	6.53	6.78
9	6.75	5.72	6.47	6.47	6.35	6.39	6.63	5.48	6.37	6.83	6.36	6.59
10	6.68	5.74	6.46	6.55	6.30	6.41	6.96	5.71	6.27	6.80	6.39	6.59
11	6.70	5.49	6.42	6.57	6.47	6.53	6.83	5.59	6.48	6.76	5.74	6.42
12	6.75	6.56	6.66	6.57	6.49	6.53	6.78	5.54	6.49	6.82	5.75	6.48
13	6.65	6.18	6.44	6.75	6.45	6.63	6.64	5.42	6.33	6.79	5.66	6.50
14	6.57	6.05	6.42	6.77	5.70	6.61	6.38	5.38	6.20	6.79	6.13	6.47
15	6.56	5.94	6.41	6.74	5.55	6.52	6.44	5.22	6.04	6.72	6.00	6.28
16	6.61	5.81	6.37	6.66	6.07	6.57	6.84	5.23	6.27	6.25	5.96	6.10
17	6.70	5.45	6.47	6.71	5.57	6.39	7.06	5.35	6.41	6.46	6.24	6.36
18	6.75	5.32	6.45	6.67	5.22	5.94	6.46	5.25	6.19	6.50	6.40	6.45
19	6.79	6.57	6.69	6.64	5.29	6.29	7.25	5.41	6.38	6.54	5.87	6.35
20	6.74	5.33	6.38	6.72	5.17	6.33	7.37	5.17	6.24	6.37	6.14	6.24
21	6.77	5.49	6.36	6.65	5.81	6.47	6.84	6.49	6.57	6.44	6.37	6.41
22	6.73	5.27	6.31	6.70	5.58	6.50	6.87	5.38	6.38	6.96	6.55	6.66
23	6.69	5.24	6.25	6.72	6.69	6.71	6.64	5.46	6.18	6.61	6.27	6.47
24	6.57	5.32	6.25	6.72	5.50	6.39	6.65	6.04	6.35	6.44	5.88	6.23
25	6.60	5.39	6.29	6.65	5.55	6.28	6.36	6.04	6.14	5.99	5.70	5.87
26	6.73	6.34	6.54	6.52	6.49	6.50	6.74	5.80	6.45	6.73	5.33	6.04
27	6.73	5.33	6.36	6.35	5.53	6.16	6.47	5.63	6.04	6.81	6.19	6.47
28	6.74	5.32	6.40	6.62	5.46	6.31	6.48	5.61	6.39	6.97	6.66	6.78
29	6.72	5.53	6.50	6.71	5.69	6.49	6.82	5.61	6.33	6.87	6.42	6.73
30	6.77	5.36	6.45	6.71	6.44	6.65	6.94	5.42	5.94	6.81	5.90	6.38
31	6.81	5.55	6.49	---	---	---	6.46	5.98	6.32	7.20	6.66	6.82
MONTH	6.81	4.97	6.37	6.77	5.09	6.39	7.37	5.17	6.32	7.20	5.33	6.47

TABLE 11.--DAILY CHEMICAL DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	7.18	6.68	6.87	7.14	5.74	6.32	6.57	6.35	6.50	---	---	---
2	7.05	6.30	6.63	6.42	5.77	6.05	6.96	6.51	6.56	---	---	---
3	6.42	6.31	6.36	6.52	6.19	6.37	7.08	6.60	6.74	---	---	---
4	6.52	6.42	6.45	6.47	6.37	6.42	6.76	6.58	6.65	---	---	---
5	6.66	6.47	6.56	6.64	6.36	6.49	6.65	6.58	6.60	---	---	---
6	7.09	6.46	6.56	6.62	6.34	6.48	6.69	6.62	6.64	---	---	---
7	7.18	6.37	6.67	6.63	6.33	6.49	6.63	6.09	6.34	---	---	---
8	6.79	5.29	6.11	6.73	6.36	6.56	6.34	6.20	6.26	---	---	---
9	6.56	5.46	6.05	6.74	6.42	6.57	6.50	5.34	6.26	---	---	---
10	6.64	6.13	6.47	6.72	6.44	6.55	6.53	5.85	6.38	---	---	---
11	6.58	6.00	6.35	6.73	6.48	6.59	6.55	6.28	6.48	---	---	---
12	6.58	6.25	6.38	6.64	6.25	6.58	6.59	6.14	6.40	6.35	5.17	5.63
13	6.67	6.35	6.54	6.69	6.63	6.66	6.73	6.35	6.50	6.36	5.67	5.99
14	6.63	6.32	6.57	6.73	6.63	6.70	6.54	6.41	6.49	6.51	6.15	6.36
15	7.45	6.19	6.71	6.63	6.41	6.58	6.58	5.91	6.37	6.50	6.39	6.44
16	6.37	5.40	5.83	7.28	6.26	6.71	6.53	5.98	6.27	6.52	6.42	6.47
17	6.64	6.26	6.45	6.77	6.59	6.70	6.51	6.33	6.41	6.56	6.45	6.50
18	6.62	5.55	6.21	6.75	6.28	6.61	6.54	6.40	6.45	6.56	6.35	6.50
19	6.75	6.42	6.54	6.79	6.74	6.76	6.52	5.61	6.34	---	---	---
20	6.80	6.27	6.56	6.79	6.75	6.77	6.47	5.71	6.32	---	---	---
21	6.74	6.47	6.58	6.84	6.74	6.78	6.52	6.21	6.39	---	---	---
22	7.41	6.60	6.98	6.77	6.66	6.74	6.55	6.22	6.42	---	---	---
23	7.37	6.57	6.77	6.68	5.56	6.40	6.54	6.22	6.34	---	---	---
24	6.76	6.59	6.71	6.70	6.41	6.55	6.34	5.39	5.81	---	---	---
25	6.67	6.44	6.63	6.84	6.62	6.75	6.26	5.63	5.91	---	---	---
26	6.76	6.61	6.66	6.65	6.32	6.52	6.28	5.56	5.76	---	---	---
27	6.71	6.67	6.68	6.57	6.51	6.54	6.21	5.31	5.66	6.45	6.25	6.36
28	6.78	6.28	6.67	6.58	5.38	6.03	6.03	5.34	5.63	6.56	6.35	6.45
29	---	---	---	6.55	6.42	6.51	6.05	5.26	5.58	6.61	6.52	6.56
30	---	---	---	6.54	4.88	5.49	6.07	5.15	5.33	6.67	6.55	6.62
31	---	---	---	6.52	5.81	6.32	---	---	---	6.81	6.48	6.68
MONTH	7.45	5.29	6.52	7.28	4.88	6.50	7.08	5.15	6.26	6.81	5.17	6.38

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	6.70	6.59	6.62	---	---	---	5.93	5.44	5.73	6.86	5.28	6.32
2	6.76	6.63	6.69	---	---	---	5.85	5.11	5.69	6.78	6.57	6.70
3	6.70	6.54	6.62	---	---	---	---	---	---	6.82	6.62	6.75
4	6.64	6.56	6.60	---	---	---	---	---	---	6.85	6.58	6.75
5	6.60	5.41	5.98	---	---	---	---	---	---	6.77	6.49	6.68
6	6.41	5.86	6.27	---	---	---	---	---	---	6.84	6.45	6.69
7	6.35	5.18	5.95	---	---	---	---	---	---	6.55	4.88	5.80
8	5.18	4.66	4.84	6.49	4.86	5.75	---	---	---	6.19	4.57	5.50
9	5.51	4.96	5.29	6.44	4.98	5.62	---	---	---	---	---	---
10	5.78	4.91	5.27	6.40	4.76	5.43	---	---	---	---	---	---
11	5.51	5.13	5.37	6.27	4.81	5.42	5.63	4.70	4.97	---	---	---
12	5.40	5.20	5.29	6.12	5.07	5.85	5.69	4.72	5.05	---	---	---
13	5.38	4.89	5.12	6.19	4.52	5.29	5.89	4.82	5.34	---	---	---
14	5.01	4.83	4.94	5.40	4.70	5.06	6.19	5.61	6.06	---	---	---
15	4.94	4.81	4.87	5.34	4.65	4.81	5.57	5.11	5.25	---	---	---
16	4.91	4.76	4.85	5.59	4.84	5.17	6.13	5.49	5.91	---	---	---
17	4.92	4.74	4.81	6.11	4.73	5.16	6.31	.00	5.64	---	---	---
18	5.23	4.83	4.95	5.45	4.74	5.03	5.77	4.84	4.97	---	---	---
19	5.88	5.19	5.53	5.54	4.88	5.26	4.89	4.68	4.76	---	---	---
20	6.41	5.84	6.08	---	---	---	4.84	4.68	4.78	---	---	---
21	---	---	---	---	---	---	4.97	4.83	4.92	---	---	---
22	---	---	---	---	---	---	5.43	4.94	5.07	---	---	---
23	---	---	---	---	---	---	5.10	4.97	5.01	---	---	---
24	---	---	---	4.86	4.68	4.79	5.63	5.00	5.34	---	---	---
25	---	---	---	4.98	4.73	4.85	6.69	5.64	6.20	---	---	---
26	---	---	---	5.45	4.85	5.15	6.73	6.58	6.66	---	---	---
27	---	---	---	4.90	4.74	4.83	6.69	6.12	6.43	---	---	---
28	---	---	---	5.56	4.76	5.05	6.75	6.15	6.46	---	---	---
29	7.12	4.38	6.18	5.31	5.15	5.24	6.67	6.27	6.52	---	---	---
30	5.59	4.75	4.90	5.43	5.02	5.32	6.88	6.67	6.80	---	---	---
31	---	---	---	6.14	5.46	5.84	6.83	6.42	6.60	---	---	---
MONTH	7.12	4.38	5.59	6.49	4.52	5.25	6.88	.00	5.66	6.86	4.57	6.40

TABLE 12.--DAILY SEDIMENT DISCHARGE DATA FOR POPLAR RUN AT NORMALVILLE (03082190)
(Lat 40°01'09" Long 79°25'39")

WATER YEAR 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	.44	12	.01	5.3	3	.04	37	19	1.9
2	1.8	20	.10	7.6	3	.06	28	16	1.2
3	.73	23	.05	16	14	2.4	20	13	.70
4	.50	16	.02	39	89	13	18	13	.63
5	.79	14	.03	63	76	18	17	12	.55
6	.52	12	.02	37	11	1.1	17	11	.50
7	.53	11	.02	24	11	.71	14	11	.42
8	.48	12	.02	18	12	.58	14	11	.42
9	.40	15	.02	12	10	.32	14	11	.42
10	.57	15	.02	15	14	.57	18	11	.53
11	.85	7	.02	44	25	3.4	31	24	2.7
12	1.2	6	.02	77	54	18	67	24	4.7
13	2.2	8	.05	55	17	2.6	58	15	2.3
14	4.9	12	.16	76	58	21	47	12	1.5
15	6.5	12	.21	78	24	6.8	32	12	1.0
16	5.4	10	.15	192	104	62	26	12	.84
17	3.8	9	.09	95	26	6.7	21	12	.68
18	2.7	8	.06	48	21	2.7	16	13	.56
19	5.1	7	.10	32	15	1.3	14	12	.45
20	8.2	9	.20	24	15	.97	11	11	.33
21	15	15	.68	18	14	.68	9.0	11	.27
22	7.9	8	.17	24	15	.97	8.0	11	.24
23	6.4	7	.12	21	12	.68	10	11	.30
24	15	30	1.8	17	10	.46	9.2	11	.27
25	13	10	.35	16	10	.43	8.4	11	.25
26	8.4	6	.14	193	143	440	7.4	11	.22
27	7.0	6	.11	205	88	57	7.0	11	.21
28	6.7	6	.11	246	74	58	6.6	10	.18
29	5.8	4	.06	101	23	6.3	6.2	10	.17
30	5.0	3	.04	55	21	3.1	5.8	9	.14
31	5.4	3	.04	---	---	---	5.6	9	.14
TOTAL	143.21	---	4.99	1853.9	---	729.87	603.2	---	24.72

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	5.4	8	.12	8.6	7	.16	12	2	.06
2	5.2	7	.10	20	17	.92	10	2	.05
3	5.0	7	.09	54	24	3.5	9.9	2	.05
4	4.8	7	.09	259	210	204	9.5	2	.05
5	4.7	6	.08	338	193	199	8.8	3	.07
6	4.5	6	.07	130	40	14	8.9	3	.07
7	4.3	6	.07	64	25	4.3	7.8	3	.06
8	4.2	5	.06	40	18	1.9	7.0	2	.04
9	4.1	5	.06	29	14	1.1	13	30	1.1
10	4.0	5	.05	23	11	.68	48	41	5.3
11	3.9	5	.05	20	10	.54	91	114	28
12	3.8	4	.04	16	10	.43	38	40	4.1
13	3.7	4	.04	13	10	.35	43	49	5.7
14	3.6	4	.04	11	10	.30	69	75	14
15	3.5	4	.04	10	9	.24	103	84	23
16	3.7	4	.04	9.2	9	.22	48	18	2.3
17	4.0	3	.03	55	118	18	32	9	.78
18	6.0	3	.05	146	113	45	24	5	.32
19	10	3	.08	164	111	71	22	5	.30
20	18	3	.15	96	41	11	18	5	.24
21	27	3	.22	85	38	11	14	5	.19
22	43	18	2.5	57	13	2.0	12	5	.16
23	41	8	.89	39	12	1.3	11	5	.15
24	30	6	.49	29	9	.70	9.9	5	.13
25	20	6	.32	23	5	.31	8.7	5	.12
26	17	6	.28	19	4	.21	7.9	5	.11
27	15	6	.24	17	3	.14	10	8	.22
28	13	6	.21	14	2	.08	8.1	8	.17
29	12	6	.19	---	---	---	7.4	8	.16
30	10	6	.16	---	---	---	6.6	9	.16
31	9.2	6	.15	---	---	---	5.9	9	.14
TOTAL	343.6	---	7.00	1788.8	---	592.38	724.4	---	87.30

TABLE 12.--DAILY SEDIMENT DISCHARGE DATA FOR POPLAR RUN AT NORMALVILLE (03082190)--Continued
(Lat 40°01'09" Long 79°25'39")

WATER YEAR 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	5.8	9	.14	8.2	22	.49	4.1	10	.11
2	5.7	9	.14	7.2	22	.43	3.4	6	.06
3	5.1	9	.12	6.1	21	.35	2.5	5	.03
4	5.0	8	.11	5.3	21	.30	2.1	5	.03
5	5.6	9	.14	5.0	22	.30	2.8	16	.12
6	12	10	.32	4.4	20	.24	2.8	16	.12
7	15	9	.36	5.1	17	.23	2.0	15	.08
8	11	8	.24	4.3	15	.17	2.3	16	.10
9	11	7	.21	3.5	12	.11	1.6	14	.06
10	11	7	.21	3.1	10	.08	.95	13	.03
11	13	7	.25	2.5	9	.06	.98	12	.03
12	17	8	.37	2.4	9	.06	4.7	21	.27
13	17	9	.41	2.3	9	.06	1.7	18	.08
14	14	8	.30	3.4	10	.09	1.1	17	.05
15	18	33	1.6	2.4	9	.06	.65	15	.03
16	33	42	3.7	5.8	49	.77	1.8	12	.06
17	51	31	4.3	7.7	61	1.3	7.7	73	2.6
18	38	28	2.9	4.0	20	.22	1.5	20	.08
19	27	23	1.7	9.0	36	.87	89	13	.03
20	21	20	1.1	22	45	2.7	.74	8	.02
21	22	20	1.2	14	32	1.2	.46	7	.01
22	38	30	3.1	9.5	23	.59	.28	7	.01
23	32	21	1.8	7.4	19	.38	.49	9	.01
24	27	20	1.5	5.9	17	.27	.40	13	.01
25	22	20	1.2	4.6	14	.17	.24	13	.01
26	18	20	.97	3.7	11	.11	.20	13	.01
27	15	20	.81	11	47	1.4	.78	15	.03
28	13	20	.70	18	27	1.3	4.6	39	.48
29	11	21	.62	9.3	16	.40	1.2	20	.06
30	9.0	21	.51	6.6	16	.29	.54	18	.03
31	---	---	---	5.5	15	.22	---	---	---
TOTAL	543.2	---	31.03	209.2	---	15.22	55.50	---	4.65

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.51	12	.02	3.6	8	.08	1.5	5	.02
2	9.0	100	2.4	3.3	8	.07	1.6	5	.02
3	3.5	23	.22	2.7	7	.05	1.6	4	.02
4	1.0	14	.04	2.3	7	.04	1.4	4	.02
5	.54	13	.02	2.0	6	.03	1.6	3	.01
6	.30	12	.01	2.1	6	.03	1.5	2	.01
7	.29	12	.01	3.3	6	.05	1.3	2	.01
8	2.4	24	.16	2.4	6	.04	1.3	1	.00
9	158	366	368	2.2	6	.04	1.2	1	.00
10	42	90	8.3	3.3	8	.07	1.2	1	.00
11	23	25	1.6	15	110	9.7	1.2	1	.00
12	19	20	1.0	3.9	20	.21	1.6	2	.01
13	37	21	2.1	2.5	20	.14	1.8	2	.01
14	34	30	2.8	2.0	18	.10	1.4	1	.00
15	17	25	1.1	1.9	16	.08	1.3	1	.00
16	12	25	.81	2.1	15	.09	1.5	1	.00
17	12	25	.81	2.0	13	.07	1.5	1	.00
18	7.8	20	.42	1.9	11	.06	1.8	5	.02
19	45	22	2.7	1.7	10	.05	5.6	27	.41
20	161	35	15	1.6	9	.04	2.5	3	.02
21	100	30	8.1	1.5	7	.03	1.7	2	.01
22	39	20	2.1	1.7	5	.02	1.5	2	.01
23	22	10	.59	15	217	58	3.5	15	.14
24	14	10	.38	14	110	4.2	52	247	50
25	11	10	.30	3.4	10	.09	59	86	30
26	8.5	9	.21	2.6	6	.04	19	10	.51
27	6.4	9	.16	5.0	17	.23	11	10	.30
28	5.3	9	.13	4.2	4	.05	7.9	8	.17
29	6.8	9	.17	2.7	4	.03	5.8	5	.08
30	5.1	8	.11	2.0	4	.02	4.9	5	.07
31	4.1	8	.09	1.5	4	.02	---	---	---
TOTAL	807.54	---	419.86	115.4	---	73.77	200.7	---	81.87

TABLE 12.--DAILY SEDIMENT DISCHARGE DATA FOR POPLAR RUN AT NORMALVILLE (03082190)
(Lat 40°01'09" Long 79°25'39")

WATER YEAR 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	68	166	42	10	4	.11	16	9	.39
2	48	23	3.6	9.8	4	.11	20	10	.54
3	35	27	3.2	9.5	4	.10	34	10	.92
4	149	128	66	27	22	2.1	27	10	.73
5	99	25	6.7	46	30	3.7	20	10	.54
6	40	8	.86	43	10	1.2	16	10	.43
7	24	5	.32	27	3	.22	14	10	.38
8	16	7	.30	57	58	10	15	10	.41
9	12	8	.26	169	117	75	87	55	18
10	9.1	8	.20	62	18	3.0	95	32	10
11	7.4	8	.16	64	30	5.2	48	10	1.3
12	6.3	8	.14	48	18	2.3	32	9	.78
13	9.5	13	.33	32	4	.35	23	8	.50
14	27	20	1.5	23	4	.25	18	11	.53
15	17	13	.60	19	6	.31	15	10	.41
16	11	13	.39	16	6	.26	13	10	.35
17	9.5	13	.33	13	6	.21	12	10	.32
18	8.0	10	.22	14	10	.38	22	25	1.5
19	6.7	3	.05	19	10	.51	19	10	.51
20	6.4	3	.05	30	32	5.0	15	8	.32
21	5.9	4	.06	40	25	2.7	13	12	.42
22	5.5	4	.06	28	6	.45	11	12	.36
23	5.1	4	.06	22	5	.30	10	15	.41
24	5.1	4	.06	48	26	4.8	32	39	5.6
25	5.2	5	.07	35	4	.38	61	20	3.3
26	13	7	.25	74	45	13	34	12	1.1
27	11	6	.18	58	10	1.6	25	8	.54
28	19	6	.31	36	5	.49	20	8	.43
29	14	10	.38	27	5	.36	16	9	.39
30	12	7	.23	20	9	.49	14	10	.38
31	11	3	.09	---	---	---	12	12	.39
TOTAL	715.7	---	128.96	1126.3	---	134.88	809	---	52.18

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	11	15	.45	16	16	.69	41	90	14
2	11	20	.59	54	21	3.1	38	20	2.1
3	9.6	23	.60	48	11	1.4	25	15	1.0
4	8.0	23	.50	33	14	1.2	19	15	.77
5	8.5	23	.53	26	14	.98	15	15	.61
6	8.6	23	.53	21	13	.74	13	15	.53
7	13	22	.77	18	11	.53	12	14	.45
8	12	20	.65	16	9	.39	12	14	.45
9	9.9	14	.37	15	9	.36	11	14	.42
10	11	14	.42	18	10	.49	8.9	12	.29
11	11	14	.42	11	55	1.6	7.9	10	.21
12	9.9	14	.37	21	30	1.7	7.3	9	.18
13	9.1	14	.34	18	22	1.1	6.5	9	.16
14	11	14	.42	14	22	.83	6.4	10	.17
15	62	22	3.7	11	22	.65	6.6	10	.18
16	54	21	3.1	10	22	.59	5.9	10	.16
17	31	18	1.5	9.6	25	.65	5.4	14	.20
18	24	17	1.1	8.5	25	.57	4.9	10	.13
19	82	23	5.1	7.8	25	.53	4.8	10	.13
20	67	22	4.0	7.3	30	.59	4.5	10	.12
21	37	19	1.9	6.5	30	.53	4.2	10	.11
22	28	18	1.4	6.5	35	.61	4.1	10	.11
23	22	17	1.0	7.4	25	.50	3.9	10	.11
24	20	16	.86	6.0	24	.39	3.7	10	.10
25	17	16	.73	5.9	23	.37	5.4	25	.36
26	14	15	.57	5.7	22	.34	7.6	25	.51
27	12	14	.45	5.6	20	.30	5.2	20	.28
28	11	14	.42	8.7	---	.90	4.9	19	.25
29	14	15	.57	---	---	---	4.6	19	.24
30	23	17	1.1	---	---	---	6.6	20	.36
31	29	18	1.4	---	---	---	46	96	14
TOTAL	690.6	---	35.86	435.5	---	22.63	351.3	---	38.69

TABLE 12.--DAILY SEDIMENT DISCHARGE DATA FOR POPLAR RUN AT NORMALVILLE (03082190)
(Lat 40°01'09" Long 79°25'39")

WATER YEAR 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	30	20	1.6	14	15	.57	7.9	10	.21
2	33	22	2.0	16	19	.82	7.0	8	.15
3	29	20	1.6	18	20	.97	5.9	7	.11
4	46	20	2.5	24	20	1.3	4.9	7	.09
5	46	20	2.5	18	15	.73	4.0	7	.08
6	75	23	4.7	15	13	.53	3.5	9	.09
7	132	26	9.3	12	11	.36	3.2	11	.10
8	92	24	6.0	11	11	.33	2.9	13	.10
9	58	33	5.2	8.9	12	.29	6.7	40	.72
10	35	29	2.7	7.7	13	.27	3.9	15	.16
11	26	25	1.8	6.9	12	.22	2.9	15	.12
12	31	32	2.7	6.1	12	.20	8.2	27	.60
13	26	15	1.1	5.2	12	.17	6.3	14	.24
14	20	13	.70	4.7	12	.15	4.6	13	.16
15	37	52	5.2	5.1	20	.28	3.4	10	.09
16	36	25	2.4	4.1	13	.14	2.8	7	.05
17	28	24	1.8	3.7	14	.14	2.5	7	.05
18	21	22	1.2	15	75	8.1	2.0	7	.04
19	17	20	.92	43	57	7.2	1.9	7	.04
20	14	18	.68	18	24	1.2	28	230	59
21	12	18	.58	11	20	.59	15	30	1.2
22	11	18	.53	8.4	15	.34	8.0	22	.48
23	10	25	.68	6.7	9	.16	7.2	16	.31
24	95	24	6.2	5.5	9	.13	5.2	16	.22
25	47	40	5.1	4.8	9	.12	3.7	13	.13
26	29	25	2.0	5.8	40	1.6	3.8	13	.13
27	22	20	1.2	42	110	14	3.0	13	.11
28	33	20	1.8	17	18	.83	2.3	13	.08
29	22	15	.89	11	18	.53	2.8	15	.11
30	17	11	.50	7.9	18	.38	9.6	25	.65
31	---	---	---	12	30	.97	---	---	---
TOTAL	1130	---	76.08	388.5	---	43.62	173.1	---	65.62

TABLE 13.--MONTHLY LABORATORY CHEMICAL DATA FOR POPLAR RUN NEAR NORMALVILLE (03082190)
(Lat 40°01'09", Long 79°25'39")

SITE 16

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
AUG 13...	0910	2.4	1000	4.70	17.5	20	46	100	57	30	1.0	0

DATE	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
AUG 13...	8	540	4.0	0.4	898	<2	0.960	1600	<4	<250	<10	<50

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
AUG 13...	110	<10	250	250	<4	12000	<25	<10	520	<6	<2.0

TABLE 13.--MONTHLY LABORATORY CHEMICAL DATA FOR POPLAR RUN NEAR NORMALVILLE (03082190)--Continued
(Lat 40°01'09", Long 79°25'39")

SITE 16

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT 23...	1340	2.7	580	5.30	14.0	0.3	22	55	24	4.4	1.8	0
NOV 25...	1600	15	300	5.70	5.0	0.1	10	--	--	--	--	4
DEC 23...	1400	11	590	5.00	0.0	1.0	50	--	--	--	--	1
JAN 15...	1530	5.8	435	4.90	0.0	1.0	56	--	--	--	--	4
FEB 19...	1700	290	130	5.70	5.5	0	16	--	--	--	--	1
MAR 17...	1615	32	220	5.60	6.0	0.1	26	--	--	--	--	2
APR 29...	1255	10	480	6.10	16.0	0.2	24	--	--	--	--	2
JUN 05...	1700	2.7	630	6.20	19.0	0.2	6.0	--	--	--	--	4
JUL 23...	1200	22	305	6.50	17.0	0.1	6.0	--	--	--	--	4
AUG 20...	1630	1.3	920	4.60	19.5	1.0	68	--	--	--	--	0
SEP 30...	1257	4.6	560	5.00	19.5	0.3	26	--	--	--	--	0

DATE	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 23...	2	280	--	604	<2	--	260	<4	<0	<50	40	<10
NOV 25...	8	130	--	258	12	--	<40	--	--	--	--	--
DEC 23...	8	330	--	532	8	--	5900	--	--	--	--	--
JAN 15...	6	310	--	656	6	4300	3800	--	--	--	--	--
FEB 19...	6	35	3.0	88	46	2800	<130	--	--	--	--	--
MAR 17...	8	81	--	130	12	840	<130	--	--	--	--	--
APR 29...	10	220	3.0	396	8	1700	<130	--	--	--	--	--
JUN 05...	10	300	--	532	8	2300	<130	--	--	--	--	--
JUL 23...	12	120	--	248	10	760	<130	--	--	--	--	--
AUG 20...	8	580	--	814	6	7700	7400	--	--	--	--	--
SEP 30...	2	280	--	396	<2	1700	1300	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 23...	--	88	<45	--	4700	<25	83	--	190	<6	<1.0
NOV 25...	--	270	--	--	1700	--	--	--	98	--	--
DEC 23...	--	950	--	--	7800	--	--	--	410	--	--
JAN 15...	1200	520	--	8400	7000	--	--	410	420	--	--
FEB 19...	2500	110	--	600	550	--	--	40	41	--	--
MAR 17...	450	210	--	1200	1200	--	--	50	44	--	--
APR 29...	1300	410	--	5600	5600	--	--	210	200	--	--
JUN 05...	1900	330	--	6700	6400	--	--	260	200	--	--
JUL 23...	390	190	--	1400	1400	--	--	100	85	--	--
AUG 20...	370	94	--	11000	11000	--	--	610	590	--	--
SEP 30...	690	500	--	5000	5000	--	--	280	280	--	--

TABLE 13.--MONTHLY LABORATORY CHEMICAL DATA FOR POPLAR RUN NEAR NORMALVILLE (03082190)--Continued
(Lat 40°01'09", Long 79°25'39")

SITE 16

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)
FEB 25...	0825	6.1	400	7.30	0.0	0.2	36	--	43	--
MAR 26...	1310	6.3	410	6.60	9.5	--	8.0	--	--	--
APR 14...	1405	19	245	6.60	9.0	--	24	--	--	--
MAY 18...	1645	10	560	6.55	16.0	--	2.0	--	--	--
JUN 30...	0815	5.4	520	4.92	17.0	--	38	53	54	27

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)
FEB 25...	23	--	12	--	1.5	6	12	220	5.0	336
MAR 26...	--	--	--	--	--	--	12	180	5.0	304
APR 14...	--	--	--	--	--	--	10	120	2.0	180
MAY 18...	--	--	--	--	--	--	16	270	3.0	466
JUN 30...	25	4.9	5.4	2.3	2.1	--	8	210	--	386

DATE	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)
FEB 25...	18	--	<130	--	<4	<250	0	--	<50	--
MAR 26...	16	2700	520	--	--	--	--	--	--	--
APR 14...	16	1100	<130	--	--	--	--	--	--	--
MAY 18...	44	150	<130	--	--	--	--	--	--	--
JUN 30...	22	4000	1300	<4	<4	<250	0	<50	<50	30

DATE	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)
FEB 25...	<30	--	<10	--	970	--	<50	--	4100	--
MAR 26...	--	--	--	2100	290	--	--	3600	3700	--
APR 14...	--	--	--	640	270	--	--	1500	1600	--
MAY 18...	--	--	--	260	280	--	--	490	3300	--
JUN 30...	30	<10	<10	2000	250	<50	<50	5300	4500	<25

DATE	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
FEB 25...	<25	--	99	--	120	--	<6	--	<1.0
MAR 26...	--	--	--	160	<10	--	--	--	--
APR 14...	--	--	--	80	66	--	--	--	--
MAY 18...	--	--	--	40	68	--	--	--	--
JUN 30...	<25	100	97	260	100	<6	<6	<1.0	<1.0

TABLE 14.-- DAILY DISCHARGE FOR INDIAN CREEK AT WHITE BRIDGE (03082237)
(Lat 39°59'40", Long 79°25'59")

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	16	21	613	88	108	160	87	119	65	27	67	25
2	23	22	580	84	119	144	83	110	60	59	61	25
3	20	30	560	82	441	137	79	98	54	46	56	24
4	17	114	428	78	2060	133	78	90	51	29	51	23
5	17	360	213	75	3250	126	79	86	53	25	47	24
6	16	294	202	72	1780	126	104	81	55	23	46	24
7	16	219	190	68	871	113	142	89	52	21	55	21
8	15	179	177	66	547	114	115	80	52	32	47	21
9	15	141	193	64	386	149	108	72	48	879	43	19
10	14	133	168	62	299	296	111	67	40	280	41	18
11	15	228	224	60	257	679	127	63	40	180	97	18
12	16	399	470	58	214	425	138	61	64	166	49	20
13	17	399	465	56	186	448	140	58	50	185	40	21
14	24	478	450	54	198	629	132	69	40	197	36	18
15	30	631	334	52	163	1280	140	60	35	135	33	17
16	24	1430	275	52	153	702	236	57	41	114	36	16
17	19	1100	233	58	413	461	347	60	69	120	43	15
18	17	590	198	90	1310	339	305	52	40	92	36	17
19	16	386	175	212	1590	293	263	63	33	713	31	42
20	19	281	162	275	1260	235	240	126	32	1280	29	26
21	40	218	153	234	977	187	245	103	29	913	28	20
22	32	241	145	282	719	164	328	87	27	441	29	18
23	27	222	141	317	520	151	286	83	30	275	61	24
24	31	188	130	259	386	138	254	79	37	222	152	204
25	40	177	125	200	303	125	229	72	27	163	48	310
26	29	1100	120	170	253	118	204	66	23	134	37	132
27	25	2470	123	150	225	125	178	84	25	116	47	93
28	24	2590	110	135	184	111	158	126	53	98	48	75
29	22	1470	102	122	---	102	142	84	36	93	34	62
30	21	780	96	116	---	96	126	73	28	83	29	54
31	21	---	92	110	---	91	---	73	---	75	26	---
TOTAL	678	16891	7647	3801	19172	8397	5204	2491	1289	7216	1483	1426
MEAN	21.9	563	247	123	685	271	173	80.4	43.0	233	47.8	47.5
MAX	40	2590	613	317	3250	1280	347	126	69	1280	152	310
MIN	14	21	92	52	108	91	78	52	23	21	26	15
CFSM	.24	6.18	2.71	1.34	7.51	2.97	1.90	.88	.47	2.55	.52	.52
IN.	.28	6.89	3.12	1.55	7.82	3.43	2.12	1.02	.53	2.94	.61	.58

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	328	88	209	147	152	243	365	177	120	---	---	---
2	389	86	264	149	371	338	384	191	124	---	---	---
3	257	83	365	136	382	272	337	199	99	---	---	---
4	900	163	309	118	292	228	510	258	86	---	---	---
5	927	257	261	108	236	192	554	215	75	---	---	---
6	448	296	224	100	204	172	701	199	68	---	---	---
7	284	236	199	90	188	169	1020	181	62	---	---	---
8	208	394	194	84	178	202	915	162	57	---	---	---
9	164	1450	598	92	155	258	784	143	90	---	---	---
10	135	715	714	105	130	248	591	129	66	---	---	---
11	114	645	479	110	128	207	451	118	55	---	---	---
12	101	521	369	94	177	179	441	110	83	---	---	---
13	114	382	278	90	176	155	380	99	84	---	---	---
14	192	287	225	110	149	140	313	90	107	---	---	---
15	160	243	197	353	131	135	332	89	69	---	---	---
16	129	210	173	422	111	122	319	80	58	---	---	---
17	117	181	159	298	102	109	294	75	52	---	---	---
18	110	171	203	248	98	102	259	101	47	---	---	---
19	96	213	193	531	96	97	230	225	43	---	---	---
20	90	229	162	562	88	92	205	149	149	---	---	---
21	86	369	145	358	87	89	186	112	172	---	---	---
22	81	279	132	283	85	87	170	94	112	---	---	---
23	76	245	130	239	96	86	159	86	130	---	---	---
24	73	323	263	179	84	86	630	78	106	---	---	---
25	69	290	598	155	81	93	431	72	77	---	---	---
26	104	542	399	140	80	115	309	72	75	---	---	---
27	95	563	309	125	79	99	255	303	68	---	---	---
28	130	410	253	110	82	98	289	176	56	---	---	---
29	114	323	214	101	---	91	230	132	50	---	---	---
30	105	258	191	102	---	107	204	109	67	---	---	---
31	94	---	165	120	---	413	---	144	---	---	---	---
TOTAL	6290	10452	8574	5859	4218	5024	12248	4368	2507	---	---	---
MEAN	203	348	277	189	151	162	408	141	83.6	---	---	---
MAX	927	1450	714	562	382	413	1020	303	172	---	---	---
MIN	69	83	130	84	79	86	159	72	43	---	---	---
CFSM	2.23	3.82	3.03	2.07	1.65	1.78	4.48	1.55	.92	---	---	---
IN.	2.57	4.26	3.50	2.39	1.72	2.05	5.00	1.78	1.02	---	---	---

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)
(Lat 39°59'40", Long 79°25'59")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				---	---	---	10.0	8.0	9.0	.5	.5	.5
2				---	---	---	9.5	3.0	6.5	.5	.5	.5
3				---	---	---	3.0	2.0	2.5	.5	.5	.5
4				15.0	10.5	12.5	4.0	3.0	3.5	1.0	.5	.5
5				15.5	10.0	13.0	4.5	4.0	4.0	1.0	.5	.5
6				10.0	9.5	9.5	4.0	4.0	4.0	.5	.5	.5
7				---	---	---	4.5	4.0	4.0	.5	.5	.5
8				---	---	---	4.5	3.0	3.5	.5	.5	.5
9				---	---	---	4.5	2.5	3.5	.5	.5	.5
10				---	---	---	5.5	3.5	4.5	.5	.5	.5
11				---	---	---	8.0	5.5	7.0	.5	.5	.5
12				---	---	---	8.5	6.5	8.0	.5	.5	.5
13				---	---	---	9.5	6.0	6.5	.5	.5	.5
14				13.5	12.5	13.0	---	---	---	.5	.5	.5
15				13.0	9.5	11.0	---	---	---	.5	.5	.5
16				---	---	---	---	---	---	.5	.5	.5
17				---	---	---	---	---	---	.5	.5	.5
18				---	---	---	.5	---	.5	.5	.5	.5
19				---	---	---	.5	.5	.5	2.0	.5	.5
20				---	---	---	.5	.5	.5	---	---	---
21				7.5	6.5	7.0	.5	.5	.5	---	---	---
22				7.5	6.0	6.5	.5	.5	.5	3.0	2.5	3.0
23				7.0	6.0	7.0	1.0	.5	.5	4.0	2.0	3.0
24				7.0	5.5	6.5	1.5	.5	1.0	2.0	.5	1.0
25				5.5	5.0	5.0	.5	.5	.5	3.0	1.0	2.0
26				14.0	5.5	8.5	.5	.5	.5	---	---	---
27				10.5	8.5	10.0	.5	.5	.5	---	---	---
28				9.5	8.5	9.0	.5	.5	.5	---	---	---
29				9.5	8.0	8.5	.5	.5	.5	---	---	---
30				9.0	8.0	8.5	.5	.5	.5	---	---	---
31				---	---	---	.5	.5	.5	.5	.5	.5
MONTH				15.5	5.0	9.0	10.0	.5	2.5	4.0	.5	1.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.5	.5	.5	---	---	---	---	---	---	15.0	12.0	14.0
2	1.5	.5	.5	---	---	---	25.5	11.5	13.5	13.0	9.0	10.5
3	---	---	---	---	---	---	15.0	8.5	11.5	12.0	5.5	8.5
4	---	---	---	---	---	---	16.0	11.5	13.5	14.5	5.5	10.0
5	---	---	---	4.0	3.0	3.5	15.5	13.0	14.0	17.5	9.0	12.5
6	6.0	4.0	5.5	3.0	1.0	2.0	15.0	12.5	13.5	18.0	12.0	14.5
7	4.0	3.0	3.5	1.0	.5	.5	15.0	12.0	13.0	20.0	14.5	16.5
8	4.0	3.5	4.0	.5	.5	.5	15.0	11.5	13.0	20.5	12.5	16.5
9	4.0	3.5	3.5	---	---	---	11.0	7.5	9.0	18.0	12.0	15.0
10	3.5	2.5	3.0	---	---	---	7.0	4.5	5.5	19.5	10.0	14.5
11	2.0	.5	1.5	---	---	---	5.5	3.5	4.5	20.5	11.0	15.5
12	1.0	.0	.5	---	---	---	10.5	4.5	7.5	---	---	---
13	.5	.0	.0	---	---	---	10.5	6.5	8.5	---	---	---
14	.5	.0	.0	---	---	---	13.0	6.5	10.0	---	---	---
15	.5	.0	.0	---	---	---	11.0	9.5	10.5	---	---	---
16	1.0	.0	.5	---	---	---	9.5	6.5	8.0	---	---	---
17	3.0	1.0	2.0	---	---	---	7.5	6.0	6.5	---	---	---
18	---	---	---	---	---	---	12.5	6.0	9.0	---	---	---
19	---	---	---	---	---	---	14.0	8.0	11.0	---	---	---
20	---	---	---	---	---	---	12.5	11.0	11.5	---	---	---
21	---	---	---	---	---	---	11.5	10.5	11.0	---	---	---
22	---	---	---	---	---	---	10.0	5.0	7.5	---	---	---
23	---	---	---	---	---	---	8.0	5.0	6.0	---	---	---
24	---	---	---	---	---	---	11.0	5.0	8.0	---	---	---
25	---	---	---	---	---	---	11.0	7.0	9.0	---	---	---
26	---	---	---	---	---	---	15.5	7.5	12.0	---	---	---
27	---	---	---	---	---	---	17.5	10.0	14.0	---	---	---
28	---	---	---	---	---	---	19.5	12.0	15.5	---	---	---
29	---	---	---	---	---	---	18.0	14.5	16.0	---	---	---
30	---	---	---	---	---	---	16.0	10.5	13.5	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	6.0	.0	2.0	4.0	.5	1.5	25.5	3.5	10.5	20.5	5.5	13.5

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	22.0	17.0	18.5	22.5	16.5	19.5	---	---	---
2	---	---	---	20.5	19.0	19.5	22.0	18.0	20.0	---	---	---
3	---	---	---	22.0	16.5	19.0	22.0	17.0	19.5	---	---	---
4	---	---	---	24.0	15.5	19.5	22.5	16.5	19.5	---	---	---
5	---	---	---	25.5	17.0	21.0	22.5	16.5	19.5	---	---	---
6	20.5	18.5	19.5	27.0	19.5	23.0	24.0	18.5	21.0	---	---	---
7	23.5	13.0	19.0	28.0	21.0	24.0	23.0	19.0	21.0	---	---	---
8	22.5	14.0	18.0	27.5	22.0	24.5	23.0	19.0	21.0	---	---	---
9	23.5	12.0	17.0	24.0	17.5	20.0	24.5	19.0	21.5	---	---	---
10	---	---	---	20.0	16.0	18.0	23.0	19.0	21.0	---	---	---
11	---	---	---	18.0	16.0	17.0	21.5	19.0	20.5	---	---	---
12	---	---	---	20.0	16.5	18.0	22.5	16.5	19.5	---	---	---
13	---	---	---	19.5	18.0	18.5	22.0	17.0	19.5	---	---	---
14	24.5	16.5	20.0	20.0	17.0	18.5	23.0	17.5	20.0	---	---	---
15	25.0	18.5	21.5	21.5	16.5	18.5	23.5	18.5	21.0	19.5	17.5	18.5
16	25.0	19.5	22.0	19.0	17.0	18.0	24.0	20.0	22.0	19.5	14.5	17.0
17	22.5	18.0	20.0	21.0	17.5	19.0	22.5	20.5	21.5	18.0	11.0	14.0
18	21.5	14.5	18.0	24.5	18.5	21.0	24.5	19.5	21.5	14.0	12.0	13.0
19	22.5	14.5	18.5	22.0	20.0	21.0	24.5	19.0	21.5	17.5	14.0	15.5
20	24.5	18.0	20.5	---	---	---	21.5	19.5	20.5	19.5	16.0	17.5
21	25.0	16.5	20.5	---	---	---	20.5	19.0	20.0	20.5	17.0	18.5
22	25.5	17.5	21.5	---	---	---	24.0	18.0	20.5	21.0	16.5	18.5
23	26.0	20.5	23.0	18.5	17.0	18.0	23.0	19.0	21.0	19.5	17.5	18.5
24	23.5	19.5	21.5	20.0	16.5	18.0	21.0	17.5	19.0	18.5	17.5	18.0
25	24.0	16.5	19.5	20.0	17.0	18.5	19.5	15.0	16.5	19.0	17.0	18.0
26	24.0	15.5	19.5	21.5	18.0	19.5	---	---	---	20.5	17.5	19.0
27	21.5	16.5	19.0	22.5	18.5	20.0	---	---	---	19.0	18.0	18.5
28	19.5	18.0	18.5	21.5	18.0	20.0	---	---	---	21.0	17.5	19.0
29	25.0	18.0	21.0	20.5	18.0	19.0	---	---	---	21.5	18.0	19.5
30	22.5	18.5	20.5	19.5	17.5	18.5	---	---	---	21.5	18.0	20.0
31	---	---	---	21.0	16.5	18.5	---	---	---	---	---	---
MONTH	26.0	12.0	20.0	28.0	15.5	19.5	24.5	15.0	20.5	21.5	11.0	17.5

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	20.5	18.5	19.5	10.5	7.5	9.0	6.0	3.0	4.5	3.0	2.5	3.0
2	19.0	17.5	18.0	11.0	9.5	10.5	6.0	2.5	4.0	3.0	1.0	2.0
3	18.0	16.5	17.0	10.0	8.0	9.0	7.0	5.5	6.5	2.0	1.0	1.5
4	18.0	17.0	17.5	9.5	9.0	9.5	5.5	4.5	4.5	2.0	.5	1.0
5	17.0	14.0	15.5	9.0	8.5	9.0	4.0	3.5	4.0	.5	.5	.5
6	14.0	11.0	12.5	10.5	8.5	9.5	3.5	2.0	3.0	.5	.5	.5
7	11.5	9.5	10.5	10.5	8.5	9.5	5.5	3.5	4.5	1.0	.5	.5
8	12.0	8.5	10.5	13.5	10.5	12.0	6.5	5.5	6.0	2.0	1.0	1.5
9	13.0	10.0	11.5	13.0	10.0	12.0	8.5	6.5	7.5	3.0	2.0	2.5
10	12.5	10.0	11.5	10.0	8.0	8.5	8.5	5.5	7.5	3.0	2.5	3.0
11	11.5	8.5	10.0	8.0	7.5	8.0	5.5	4.5	5.0	3.0	1.5	2.0
12	13.0	9.5	11.0	8.5	7.5	8.0	5.0	4.0	4.5	1.5	1.0	1.0
13	13.5	12.5	13.0	7.5	4.0	6.0	4.0	1.5	2.5	3.0	1.5	2.0
14	13.5	11.5	13.0	4.0	2.0	3.0	2.0	.5	1.0	3.5	.5	2.0
15	11.5	9.0	10.0	6.0	3.0	4.5	4.0	2.0	3.5	5.0	3.5	4.5
16	10.5	8.5	9.5	7.0	6.0	6.5	4.0	2.0	3.0	5.0	3.5	4.5
17	10.5	9.5	10.0	8.0	7.0	7.5	5.5	4.0	4.5	3.5	2.0	3.0
18	10.5	8.5	9.0	7.5	6.5	7.0	5.5	4.0	5.0	5.0	3.0	4.0
19	9.5	7.0	8.0	7.5	4.5	6.0	4.0	3.5	3.5	5.0	3.5	4.5
20	9.0	6.0	7.5	5.5	4.0	4.5	3.5	3.0	3.0	4.0	3.5	3.5
21	9.0	5.5	7.5	6.0	5.0	5.5	3.5	2.0	3.0	3.5	2.5	3.0
22	11.5	8.0	9.5	6.5	5.0	5.5	2.0	.5	1.0	2.5	1.0	1.5
23	12.0	9.5	11.0	8.0	4.5	6.0	1.0	.5	1.0	1.0	.5	.5
24	13.5	11.0	12.0	8.5	7.0	8.0	3.5	1.0	2.0	.5	.5	.5
25	12.5	11.5	12.0	7.0	5.5	6.5	5.0	3.5	4.5	.5	.5	.5
26	12.5	11.0	12.0	10.0	7.0	8.5	5.0	4.5	4.5	.5	.5	.5
27	12.5	12.0	12.0	10.0	7.0	9.0	5.0	4.0	4.5	.5	.5	.5
28	12.5	10.5	12.0	8.0	6.5	7.0	4.0	3.5	4.0	.5	.5	.5
29	10.5	9.0	9.5	7.5	7.0	7.0	3.5	2.5	3.5	.5	.5	.5
30	12.0	9.5	11.0	7.0	5.5	6.0	3.5	3.0	3.0	.5	.5	.5
31	10.0	7.5	9.0	---	---	---	4.0	3.0	3.5	1.0	.5	.5
MONTH	20.5	5.5	11.5	13.5	2.0	7.5	8.5	.5	4.0	5.0	.5	2.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1.0	.5	1.0	5.5	4.0	5.0	---	---	---	12.5	7.5	10.0
2	2.0	1.0	1.5	5.0	3.0	4.0	---	---	---	11.5	9.5	10.5
3	4.0	2.0	3.5	6.0	3.5	4.5	---	---	---	12.0	10.5	11.0
4	4.0	3.0	3.5	4.5	2.5	3.0	---	---	---	10.5	9.5	10.0
5	3.0	1.0	2.5	4.5	1.0	2.5	---	---	---	12.0	8.0	10.0
6	3.0	.5	2.0	6.5	2.0	4.5	---	---	---	---	---	---
7	3.5	1.5	2.5	8.5	3.5	6.0	---	---	---	---	---	---
8	3.0	1.0	2.0	8.5	4.5	7.0	13.0	8.0	10.0	---	---	---
9	1.0	.5	.5	8.0	5.5	7.0	14.0	7.5	10.0	---	---	---
10	.0	.5	.5	5.5	2.5	4.0	16.5	7.5	11.5	---	---	---
11	2.0	.5	1.0	4.5	1.5	3.0	14.5	8.0	11.0	---	---	---
12	2.0	1.0	1.5	5.5	2.0	4.0	12.0	7.5	9.5	---	---	---
13	3.0	1.0	2.0	5.5	2.5	4.0	13.0	9.5	11.0	16.5	10.0	13.0
14	1.5	.5	1.0	3.5	1.5	2.5	12.0	8.0	10.0	18.5	11.5	15.0
15	2.0	.5	1.0	4.5	3.0	3.5	9.5	9.0	9.5	18.0	14.5	16.0
16	.5	.5	.5	6.5	2.5	4.5	---	---	---	17.5	10.5	14.0
17	1.0	.5	.5	6.0	1.5	4.0	---	---	---	14.0	10.5	13.0
18	3.5	.5	1.5	6.5	2.0	4.0	---	---	---	---	---	---
19	2.0	.5	1.0	8.5	3.0	5.5	---	---	---	---	---	---
20	2.0	.5	.0	8.5	3.0	6.0	---	---	---	---	---	---
21	3.0	.5	1.5	9.5	4.5	7.0	---	---	---	---	---	---
22	4.0	.5	2.5	9.0	4.5	7.0	---	---	---	---	---	---
23	3.0	2.0	2.5	12.0	4.5	8.5	---	---	---	---	---	---
24	4.5	1.5	3.0	---	---	---	---	---	---	---	---	---
25	4.0	.5	2.0	11.5	9.5	11.5	---	---	---	---	---	---
26	4.0	.5	2.5	12.0	8.0	10.0	---	---	---	---	---	---
27	3.5	2.0	2.5	10.0	7.0	8.5	---	---	---	15.0	14.0	14.5
28	4.0	2.5	3.5	12.5	8.5	10.5	---	---	---	17.5	13.0	15.0
29	---	---	---	14.0	8.0	11.0	---	---	---	19.0	14.0	16.5
30	---	---	---	12.0	10.5	11.0	12.5	10.0	10.5	20.0	15.5	17.5
31	---	---	---	10.5	7.5	8.0	---	---	---	17.5	10.5	12.5
MONTH	4.5	.5	2.0	14.0	1.0	6.0	16.5	7.5	10.5	20.0	7.5	13.0

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	386	365	374	---	---	---	139	127	134	291	260	269
2	405	354	376	---	---	---	151	139	142	277	255	266
3	405	356	371	---	---	---	204	144	169	276	251	262
4	381	363	370	---	---	---	207	178	186	310	242	267
5	389	366	380	---	---	---	225	175	189	343	307	325
6	397	374	383	176	152	162	346	174	223	329	293	308
7	389	379	384	---	---	---	391	275	337	485	296	404
8	393	374	380	---	---	---	273	231	244	463	353	399
9	400	375	385	---	---	---	235	217	223	404	312	347
10	387	374	382	---	---	---	243	205	219	315	276	295
11	---	---	---	---	---	---	252	195	217	284	256	264
12	---	---	---	---	---	---	212	157	173	277	257	263
13	---	---	---	---	---	---	201	143	154	264	247	254
14	---	---	---	152	129	140	---	---	---	308	252	272
15	---	---	---	134	122	126	---	---	---	361	271	298
16	---	---	---	---	---	---	---	---	---	345	307	331
17	---	---	---	---	---	---	---	---	---	370	319	340
18	---	---	---	---	---	---	293	195	239	332	242	284
19	---	---	---	---	---	---	241	204	223	272	102	252
20	---	---	---	---	---	---	217	189	202	---	---	---
21	---	---	---	158	146	150	227	189	203	---	---	---
22	---	---	---	170	147	156	346	229	303	269	206	231
23	---	---	---	225	157	176	330	236	282	287	192	248
24	---	---	---	174	156	163	485	236	367	198	156	171
25	---	---	---	181	157	167	326	272	286	185	159	171
26	---	---	---	187	79	154	462	282	379	---	---	---
27	---	---	---	98	79	92	393	304	342	---	---	---
28	---	---	---	98	84	91	380	293	322	---	---	---
29	---	---	---	112	94	104	382	344	358	---	---	---
30	---	---	---	127	112	120	342	309	327	---	---	---
31	---	---	---	---	---	---	333	281	302	327	295	310
MONTH	405	354	379	225	79	139	485	127	250	485	102	285

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	302	252	280	---	---	---	---	---	---	219	180	188
2	263	203	245	---	---	---	223	197	210	208	184	194
3	---	---	---	---	---	---	271	175	225	257	200	214
4	---	---	---	---	---	---	329	243	275	219	200	210
5	---	---	---	233	209	224	292	246	265	247	202	209
6	120	112	114	260	189	226	286	242	264	219	200	210
7	184	109	139	309	182	225	299	242	264	213	202	207
8	274	165	217	365	313	344	284	224	260	252	206	232
9	225	192	202	---	---	---	225	200	213	252	215	230
10	227	177	203	---	---	---	202	189	195	259	212	235
11	237	185	216	---	---	---	270	189	212	254	241	245
12	264	214	242	---	---	---	414	272	339	253	217	239
13	252	222	238	---	---	---	287	216	241	259	240	253
14	282	233	256	---	---	---	259	201	222	259	240	251
15	367	236	283	---	---	---	219	197	207	293	240	262
16	374	315	343	---	---	---	200	172	183	300	284	293
17	342	179	263	---	---	---	236	178	202	---	---	---
18	---	---	---	---	---	---	197	165	178	---	---	---
19	---	---	---	---	---	---	176	145	157	---	---	---
20	---	---	---	---	---	---	157	149	151	---	---	---
21	---	---	---	---	---	---	158	142	149	---	---	---
22	---	---	---	---	---	---	181	139	155	---	---	---
23	---	---	---	---	---	---	207	145	169	---	---	---
24	---	---	---	---	---	---	190	140	162	---	---	---
25	---	---	---	---	---	---	159	140	151	---	---	---
26	---	---	---	---	---	---	159	140	145	---	---	---
27	---	---	---	---	---	---	146	142	144	---	---	---
28	---	---	---	---	---	---	188	146	155	---	---	---
29	---	---	---	---	---	---	209	152	175	---	---	---
30	---	---	---	---	---	---	200	156	188	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	374	109	232	365	182	255	414	139	202	300	180	230

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	345	325	334	260	228	239	---	---	---
2	---	---	---	367	277	324	262	240	249	---	---	---
3	---	---	---	303	277	287	263	257	260	---	---	---
4	---	---	---	322	302	313	276	257	263	---	---	---
5	---	---	---	356	321	335	276	265	270	---	---	---
6	269	260	265	351	330	340	278	264	271	---	---	---
7	271	257	263	350	334	341	293	264	280	---	---	---
8	281	256	270	369	333	348	293	275	282	---	---	---
9	282	263	273	349	116	206	301	275	291	---	---	---
10	287	276	280	184	159	174	310	290	301	---	---	---
11	298	285	291	208	185	190	363	227	276	---	---	---
12	299	200	268	209	185	195	332	228	272	---	---	---
13	295	256	267	216	171	196	323	291	303	---	---	---
14	308	294	300	203	170	182	309	304	307	---	---	---
15	313	300	307	203	182	189	313	298	306	369	362	365
16	318	287	303	206	188	195	328	302	311	386	370	378
17	346	253	290	209	188	198	331	281	310	397	377	385
18	306	274	287	222	198	208	336	323	328	408	360	389
19	315	303	308	217	182	211	336	321	328	418	354	390
20	326	313	319	---	---	---	339	323	332	354	325	333
21	325	317	320	---	---	---	341	319	329	388	325	353
22	329	319	323	---	---	---	337	326	331	386	367	376
23	335	326	329	142	139	140	364	272	323	387	324	361
24	333	270	309	161	142	151	227	142	188	439	190	277
25	324	293	309	180	153	166	250	226	239	219	155	191
26	335	317	326	217	164	180	---	---	---	227	204	218
27	340	312	330	192	182	188	---	---	---	245	219	230
28	410	295	345	212	192	202	---	---	---	249	224	235
29	316	294	306	254	200	219	---	---	---	240	229	234
30	329	308	320	250	208	224	---	---	---	260	235	242
31	---	---	---	249	218	231	---	---	---	---	---	---
MONTH	410	200	300	369	116	231	364	142	288	439	155	310

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	321	144	186	224	204	210	178	154	163	207	192	196
2	162	144	157	223	205	209	514	152	208	195	183	187
3	180	152	166	241	202	217	486	187	241	489	184	384
4	170	121	131	226	175	197	188	165	178	565	425	514
5	128	109	120	199	157	174	172	159	163	454	295	396
6	131	125	128	177	150	156	177	160	165	327	278	310
7	143	129	137	165	147	152	169	164	166	277	253	269
8	160	141	150	169	132	144	206	166	179	339	256	310
9	174	151	163	140	100	110	216	137	173	320	256	289
10	182	163	174	116	109	113	154	130	135	272	246	251
11	204	173	190	150	117	125	154	131	135	386	242	307
12	223	187	200	132	123	125	153	136	141	408	335	376
13	254	193	212	138	124	130	160	143	149	410	329	363
14	238	165	197	149	134	140	171	151	158	353	313	334
15	203	170	186	159	142	148	185	162	172	315	231	258
16	203	180	189	160	150	156	217	163	179	253	184	217
17	207	180	189	181	160	169	209	181	190	184	177	179
18	219	192	200	209	163	176	230	177	189	178	176	177
19	210	204	205	205	171	184	225	180	205	232	152	177
20	229	204	209	204	151	189	264	187	215	232	180	195
21	231	210	219	254	145	178	196	187	193	224	181	201
22	232	219	223	208	159	175	231	182	201	205	170	180
23	235	218	224	160	158	159	234	180	206	356	171	227
24	234	225	229	180	155	160	202	143	189	368	328	353
25	252	231	243	178	149	160	277	146	205	340	260	287
26	260	213	237	162	132	145	187	150	158	269	249	261
27	242	215	226	140	132	134	152	147	150	264	251	257
28	232	210	221	149	131	135	155	149	152	266	250	256
29	215	210	213	152	139	145	198	156	161	254	225	239
30	225	211	214	155	146	150	202	160	169	314	221	238
31	219	204	210	---	---	---	222	167	195	534	324	472
MONTH	321	109	192	254	100	159	514	130	177	565	152	279

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	459	379	425	312	221	253	---	---	---	189	163	172
2	376	246	297	268	193	216	---	---	---	185	159	171
3	317	245	283	321	211	267	---	---	---	203	165	180
4	245	223	237	230	197	212	---	---	---	187	167	177
5	223	214	219	201	185	193	---	---	---	180	162	169
6	227	210	215	195	185	189	---	---	---	---	---	---
7	252	212	221	199	187	192	---	---	---	---	---	---
8	240	204	214	197	160	181	---	---	---	---	---	---
9	245	206	225	175	135	154	---	---	---	---	---	---
10	503	247	339	136	132	133	---	---	---	---	---	---
11	501	262	350	141	131	136	---	---	---	---	---	---
12	318	241	275	151	141	146	---	---	---	---	---	---
13	460	263	370	160	151	156	---	---	---	226	194	206
14	352	274	311	169	159	164	---	---	---	218	201	209
15	322	243	275	271	168	192	169	143	152	224	211	218
16	311	224	255	271	212	240	174	159	174	226	215	221
17	259	231	247	212	199	203	---	---	---	229	223	227
18	299	235	253	211	196	201	---	---	---	---	---	---
19	276	218	245	210	195	203	---	---	---	---	---	---
20	299	217	251	212	162	197	---	---	---	---	---	---
21	280	221	255	197	128	153	---	---	---	---	---	---
22	286	241	267	197	84	130	---	---	---	---	---	---
23	287	238	255	---	---	---	---	---	---	---	---	---
24	693	246	408	---	---	---	---	---	---	---	---	---
25	683	383	520	230	194	201	---	---	---	---	---	---
26	386	325	361	248	205	222	---	---	---	---	---	---
27	347	291	318	265	200	220	---	---	---	162	156	157
28	313	286	299	212	187	199	---	---	---	191	161	173
29	---	---	---	199	188	193	---	---	---	190	175	183
30	---	---	---	215	180	195	168	162	166	200	190	195
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	693	204	293	321	84	191	174	143	164	229	156	190

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.30	6.10	6.30	---	---	---	6.00	6.00	6.00	6.20	5.90	6.10
2	6.60	6.20	6.40	---	---	---	6.20	6.00	6.10	6.40	6.00	6.10
3	6.80	6.50	6.70	---	---	---	6.20	5.90	6.10	6.30	5.70	6.20
4	6.70	6.50	6.60	---	---	---	6.10	5.70	6.00	6.40	6.00	6.20
5	6.70	6.60	6.60	6.70	6.60	6.70	6.10	5.30	5.90	6.40	6.10	6.30
6	6.70	6.50	6.60	6.70	6.60	6.60	6.20	5.60	6.00	6.40	5.80	6.20
7	6.60	6.50	6.50	---	---	---	6.20	5.30	5.90	6.50	5.60	6.30
8	6.60	6.50	6.50	---	---	---	6.00	5.80	5.90	6.30	5.60	6.10
9	6.50	6.40	6.50	---	---	---	6.20	5.90	6.00	6.10	5.60	5.90
10	6.40	6.30	6.30	---	---	---	6.20	5.60	6.00	6.10	5.80	6.00
11	---	---	---	---	---	---	6.30	5.60	6.10	6.30	6.00	6.20
12	---	---	---	---	---	---	6.40	5.90	6.30	6.40	6.20	6.30
13	---	---	---	---	---	---	6.40	6.00	6.20	6.40	6.30	6.40
14	---	---	---	6.70	6.30	6.60	---	---	---	6.40	5.80	6.20
15	---	---	---	6.60	6.50	6.50	---	---	---	6.20	5.80	6.10
16	---	---	---	---	---	---	---	---	---	6.10	5.70	5.90
17	---	---	---	---	---	---	---	---	---	6.20	5.90	6.10
18	---	---	---	---	---	---	6.20	5.90	6.00	6.30	6.00	6.20
19	---	---	---	---	---	---	6.20	5.60	5.90	6.60	6.30	6.50
20	---	---	---	---	---	---	6.10	5.60	5.90	---	---	---
21	---	---	---	6.40	6.30	6.40	6.20	5.80	5.90	---	---	---
22	---	---	---	6.40	6.20	6.30	5.90	5.70	5.80	6.59	6.30	6.50
23	---	---	---	6.40	6.30	6.40	6.20	5.90	6.10	6.56	6.37	6.52
24	---	---	---	6.40	6.30	6.40	6.30	6.00	6.10	6.53	6.42	6.49
25	---	---	---	6.40	6.20	6.30	6.40	6.00	6.30	6.53	6.42	6.48
26	---	---	---	6.40	6.00	6.30	6.30	5.70	6.10	---	---	---
27	---	---	---	6.10	6.00	6.00	6.10	5.70	6.00	---	---	---
28	---	---	---	6.10	6.00	6.00	6.30	6.00	6.10	---	---	---
29	---	---	---	6.00	5.90	6.00	6.10	5.80	6.00	---	---	---
30	---	---	---	6.00	5.90	6.00	6.10	5.90	6.00	---	---	---
31	---	---	---	---	---	---	6.10	5.80	6.00	6.34	6.12	6.24
MONTH	6.80	6.10	6.50	6.70	5.90	6.32	6.40	5.30	6.03	6.60	5.60	6.23

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.37	6.22	6.29	---	---	---	---	---	---	6.90	6.50	6.70
2	6.49	6.27	6.35	---	---	---	6.70	6.50	6.60	6.90	6.60	6.80
3	---	---	---	---	---	---	7.10	6.50	6.60	7.10	6.80	6.90
4	---	---	---	---	---	---	6.60	6.50	6.60	8.50	6.60	7.50
5	---	---	---	6.20	5.90	6.00	6.70	6.50	6.60	8.90	7.00	8.20
6	5.98	5.86	5.94	6.30	5.80	6.10	6.80	6.50	6.60	7.00	6.80	6.90
7	6.09	5.87	6.01	6.30	5.40	5.80	6.90	6.60	6.90	7.00	6.60	6.80
8	6.08	5.94	6.03	5.50	5.30	5.40	6.90	6.80	6.90	7.00	6.90	6.90
9	6.09	5.96	6.06	---	---	---	6.90	6.80	6.80	6.90	6.90	6.90
10	6.25	6.01	6.13	---	---	---	6.90	6.69	6.82	6.90	6.80	6.90
11	6.20	5.59	6.02	---	---	---	6.86	6.78	6.83	6.90	6.80	6.80
12	6.24	5.53	5.98	---	---	---	6.90	6.77	6.84	6.90	6.80	6.80
13	6.21	5.57	5.91	---	---	---	6.85	6.77	6.81	6.90	6.80	6.80
14	6.21	5.43	5.83	---	---	---	6.85	6.77	6.82	7.10	6.80	6.90
15	6.15	5.48	5.73	---	---	---	6.86	6.75	6.82	7.00	6.90	6.80
16	5.91	5.62	5.77	---	---	---	6.89	6.72	6.84	6.90	6.80	6.80
17	6.34	5.61	5.86	---	---	---	6.85	6.77	6.81	---	---	---
18	---	---	---	---	---	---	6.78	6.68	6.75	---	---	---
19	---	---	---	---	---	---	6.76	6.71	6.74	---	---	---
20	---	---	---	---	---	---	6.79	6.71	6.75	---	---	---
21	---	---	---	---	---	---	6.88	6.77	6.83	---	---	---
22	---	---	---	---	---	---	6.86	6.50	6.70	---	---	---
23	---	---	---	---	---	---	6.80	6.50	6.60	---	---	---
24	---	---	---	---	---	---	6.60	6.50	6.50	---	---	---
25	---	---	---	---	---	---	6.50	6.50	6.50	---	---	---
26	---	---	---	---	---	---	6.50	6.50	6.50	---	---	---
27	---	---	---	---	---	---	6.60	6.50	6.50	---	---	---
28	---	---	---	---	---	---	6.80	6.50	6.60	---	---	---
29	---	---	---	---	---	---	7.20	6.50	6.80	---	---	---
30	---	---	---	---	---	---	6.90	6.50	6.70	---	---	---
31	---	---	---	---	---	---	---	---	---	---	---	---
MONTH	6.49	5.43	5.99	6.30	5.30	5.83	7.20	6.50	6.71	8.90	6.50	6.96

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	---	---	---	6.80	6.60	6.70	6.81	6.56	6.69	---	---	---
2	---	---	---	6.90	6.60	6.70	6.80	6.52	6.64	---	---	---
3	---	---	---	7.00	6.90	7.00	6.66	6.49	6.55	---	---	---
4	---	---	---	7.00	6.80	6.90	6.59	6.51	6.55	---	---	---
5	---	---	---	6.80	6.80	6.80	6.56	6.38	6.45	---	---	---
6	7.09	6.75	6.96	6.70	6.60	6.70	6.54	6.36	6.45	---	---	---
7	6.99	6.00	6.51	6.70	6.50	6.60	6.64	6.34	6.49	---	---	---
8	6.99	6.01	6.62	6.70	6.30	6.50	6.89	6.62	6.73	---	---	---
9	6.99	6.00	6.49	6.70	6.10	6.50	6.72	6.55	6.63	---	---	---
10	6.99	6.00	6.50	6.90	6.70	6.80	6.61	6.23	6.50	---	---	---
11	6.99	6.00	6.50	6.90	6.80	6.90	7.08	5.13	6.46	---	---	---
12	6.99	6.00	6.50	6.90	6.80	6.90	7.11	6.65	6.95	---	---	---
13	6.99	6.00	6.60	6.90	6.60	6.90	6.95	6.61	6.77	---	---	---
14	7.32	6.86	7.08	6.90	6.80	6.90	6.80	6.60	6.70	---	---	---
15	7.12	6.69	6.94	6.90	6.90	6.90	6.81	6.53	6.66	5.31	5.29	5.30
16	7.03	6.63	6.84	6.90	6.80	6.90	6.71	6.40	6.54	5.29	5.14	5.22
17	7.09	6.55	6.90	6.90	6.60	6.80	7.18	6.37	6.77	5.32	5.17	5.25
18	7.10	6.91	7.05	6.90	6.80	6.80	7.11	6.76	6.94	5.25	5.11	5.20
19	6.97	6.77	6.91	6.90	6.80	6.80	7.03	6.66	6.83	5.46	5.12	5.19
20	6.85	6.70	6.79	---	---	---	6.84	6.59	6.70	6.61	5.48	6.34
21	6.78	6.67	6.74	---	---	---	6.71	6.48	6.59	6.55	6.02	6.38
22	6.74	6.61	6.67	---	---	---	6.68	6.41	6.55	6.02	5.72	5.84
23	6.61	6.51	6.57	6.68	6.54	6.65	6.74	5.93	6.53	6.12	5.56	5.78
24	6.80	6.45	6.61	6.79	6.62	6.71	7.04	5.67	6.79	6.83	5.55	6.27
25	6.84	6.78	6.82	6.81	6.62	6.73	7.04	6.97	7.00	6.86	6.43	6.78
26	6.70	6.60	6.70	6.86	6.63	6.73	---	---	---	7.03	6.80	6.90
27	6.60	6.30	6.60	6.85	6.64	6.75	---	---	---	7.08	6.95	7.00
28	7.10	6.30	6.60	6.84	6.72	6.78	---	---	---	7.11	6.96	7.02
29	6.90	6.70	6.80	6.80	6.40	6.70	---	---	---	7.11	6.96	7.02
30	6.90	6.80	6.80	6.81	6.44	6.69	---	---	---	7.14	6.89	6.99
31	---	---	---	6.82	6.64	6.72	---	---	---	---	---	---
MONTH	7.32	6.00	6.73	7.00	6.10	6.77	7.18	5.13	6.66	7.14	5.11	6.16

TABLE 15.--DAILY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.89	6.12	6.70	6.95	6.83	6.92	6.72	6.63	6.67	6.71	6.64	6.68
2	6.74	6.56	6.67	6.93	6.81	6.88	6.71	6.60	6.65	6.68	6.65	6.66
3	6.83	6.65	6.73	6.92	6.81	6.89	6.77	6.68	6.71	6.69	6.66	6.68
4	6.80	6.47	6.58	6.88	6.72	6.81	6.78	6.73	6.76	6.74	6.62	6.71
5	6.56	6.47	6.52	6.89	6.80	6.86	6.74	6.69	6.72	6.77	6.35	6.65
6	6.63	6.52	6.57	6.84	6.78	6.80	6.72	6.57	6.67	6.72	6.52	6.64
7	6.84	6.60	6.68	6.81	6.75	6.77	6.66	6.64	6.65	6.87	6.59	6.69
8	6.82	6.75	6.78	6.75	6.61	6.69	6.74	6.65	6.69	6.96	6.86	6.93
9	6.87	6.79	6.83	6.69	6.52	6.57	6.78	6.40	6.68	6.93	6.86	6.91
10	6.96	6.86	6.91	6.59	6.52	6.56	6.66	6.54	6.59	6.87	6.82	6.85
11	6.95	6.87	6.92	6.59	6.52	6.56	6.66	6.58	6.61	6.92	6.85	6.90
12	6.94	6.87	6.91	6.62	6.55	6.58	6.63	6.60	6.61	6.92	6.89	6.91
13	6.89	6.81	6.85	6.65	6.50	6.62	6.66	6.55	6.62	6.92	6.88	6.90
14	6.95	6.83	6.88	6.67	6.62	6.64	6.66	6.51	6.60	6.90	6.82	6.86
15	6.98	6.90	6.94	6.63	6.58	6.61	6.63	6.49	6.57	6.95	6.82	6.88
16	6.93	6.86	6.89	6.66	6.60	6.64	6.65	6.54	6.62	6.82	6.79	6.80
17	6.95	6.85	6.89	6.70	6.58	6.64	6.69	6.59	6.64	6.80	6.74	6.78
18	6.98	6.90	6.94	6.69	6.62	6.65	6.80	6.60	6.66	6.77	6.69	6.73
19	6.96	6.92	6.93	6.82	6.61	6.77	6.81	6.71	6.76	6.81	6.69	6.74
20	6.93	6.90	6.92	6.81	6.57	6.74	6.87	6.59	6.71	6.69	6.58	6.62
21	6.96	6.89	6.93	6.76	6.69	6.74	6.74	6.67	6.70	6.67	6.61	6.64
22	6.96	6.86	6.92	6.74	6.67	6.71	6.80	6.58	6.73	6.77	6.65	6.71
23	6.91	6.86	6.88	6.73	6.64	6.68	6.75	6.36	6.66	6.74	6.66	6.70
24	6.91	6.70	6.86	6.78	6.64	6.69	6.75	6.63	6.68	6.71	6.56	6.63
25	6.99	6.86	6.93	6.80	6.65	6.73	6.72	6.62	6.65	6.69	6.54	6.62
26	7.02	6.86	6.93	6.74	6.56	6.66	6.69	6.64	6.66	6.73	6.53	6.62
27	7.04	6.96	7.00	6.67	6.62	6.65	6.65	6.59	6.62	6.75	6.51	6.64
28	7.06	6.96	7.03	6.63	6.53	6.60	6.67	6.63	6.65	6.69	6.55	6.64
29	7.06	7.04	7.05	6.61	6.57	6.59	6.69	6.63	6.66	6.69	6.64	6.67
30	7.02	6.92	6.98	6.63	6.60	6.62	6.69	6.61	6.64	6.76	6.60	6.65
31	7.00	6.94	6.98	---	---	---	6.72	6.62	6.67	6.95	6.76	6.87
MONTH	7.06	6.12	6.86	6.95	6.50	6.70	6.87	6.36	6.66	6.96	6.35	6.74

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	6.87	6.83	6.85	7.12	6.85	6.94	---	---	---	6.77	6.53	6.70
2	6.86	6.81	6.84	6.96	6.91	6.93	---	---	---	6.83	6.67	6.73
3	6.85	6.57	6.72	6.93	6.87	6.91	---	---	---	6.81	6.58	6.74
4	6.73	6.68	6.70	6.93	6.89	6.91	---	---	---	6.92	6.67	6.84
5	6.75	6.71	6.73	6.92	6.79	6.87	---	---	---	6.88	6.79	6.84
6	6.74	6.68	6.72	6.90	6.80	6.86	---	---	---	---	---	---
7	6.85	6.70	6.75	6.94	6.82	6.87	---	---	---	---	---	---
8	6.78	6.66	6.72	6.94	6.84	6.88	6.87	6.62	6.76	---	---	---
9	6.81	6.66	6.73	6.89	6.83	6.86	6.95	6.84	6.91	---	---	---
10	6.87	6.54	6.75	6.92	6.81	6.87	7.02	6.87	6.96	---	---	---
11	6.87	6.65	6.78	6.88	6.77	6.84	7.08	6.94	7.01	---	---	---
12	6.82	6.70	6.76	6.86	6.44	6.77	7.08	6.96	7.02	---	---	---
13	6.87	6.82	6.84	6.81	6.75	6.77	7.02	6.94	7.00	6.86	6.71	6.78
14	6.86	6.74	6.80	6.84	6.75	6.80	7.04	6.46	6.79	6.87	6.73	6.79
15	7.04	6.75	6.83	6.84	6.78	6.81	6.67	6.56	6.61	6.91	6.67	6.78
16	6.79	6.14	6.65	6.98	6.84	6.89	---	---	---	6.91	6.81	6.85
17	6.78	6.72	6.76	6.97	6.84	6.89	---	---	---	6.82	6.79	6.80
18	6.77	6.67	6.73	6.95	6.85	6.89	---	---	---	---	---	---
19	6.79	6.53	6.74	6.95	6.87	6.91	---	---	---	---	---	---
20	6.84	6.39	6.74	6.97	6.88	6.93	---	---	---	---	---	---
21	6.87	6.52	6.76	7.02	6.96	6.98	---	---	---	---	---	---
22	6.85	6.73	6.80	7.01	6.97	6.99	---	---	---	---	---	---
23	6.92	6.77	6.84	7.04	6.97	7.00	---	---	---	---	---	---
24	6.87	6.81	6.85	---	---	---	---	---	---	---	---	---
25	6.90	6.72	6.86	---	---	---	---	---	---	---	---	---
26	7.02	6.80	6.96	6.99	6.89	6.94	---	---	---	---	---	---
27	7.02	6.95	6.99	7.03	6.92	6.99	---	---	---	6.77	6.44	6.55
28	6.95	6.90	6.94	6.96	6.90	6.93	---	---	---	7.03	6.74	6.87
29	---	---	---	6.98	6.93	6.95	---	---	---	7.15	6.79	6.94
30	---	---	---	6.97	6.84	6.92	7.22	6.62	7.02	7.14	6.80	6.95
31	---	---	---	---	---	---	---	---	---	7.14	6.27	6.47
MONTH	7.04	6.14	6.79	7.12	6.44	6.90	7.22	6.46	6.90	7.15	6.27	6.78

TABLE 16.--DAILY SEDIMENT DISCHARGE DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)
(Lat 39°59'40", Long 79°25'59")

WATER YEAR 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	16	12	.52	21	1	.06	613	30	50
2	23	8	.50	22	3	.18	580	20	31
3	20	4	.22	30	4	.32	560	15	23
4	17	7	.32	114	92	28	428	10	12
5	17	9	.41	360	358	346	213	9	5.2
6	16	9	.39	294	145	115	202	8	4.4
7	16	9	.39	219	85	50	190	8	4.1
8	15	9	.36	179	29	14	177	8	3.8
9	15	10	.41	141	10	3.8	204	8	4.4
10	14	3	.11	133	7	2.5	168	20	9.1
11	15	4	.16	228	31	19	224	55	33
12	16	4	.17	399	53	57	470	114	151
13	17	4	.18	399	64	77	465	140	184
14	24	7	.45	478	353	629	450	77	94
15	30	9	.73	631	341	648	334	16	14
16	24	7	.45	1430	1060	4330	275	14	10
17	19	6	.31	1100	400	1190	233	13	8.2
18	17	6	.28	590	136	217	198	12	6.4
19	16	6	.26	386	23	24	175	14	6.6
20	19	6	.31	281	13	9.9	162	14	6.1
21	40	15	1.6	218	13	7.7	153	16	6.6
22	32	20	1.7	241	31	20	145	18	7.0
23	27	9	.66	222	8	4.8	141	18	6.9
24	31	9	.75	188	8	4.1	130	18	6.3
25	40	10	1.1	177	8	3.8	125	17	5.7
26	29	9	.70	1100	473	3820	120	17	5.5
27	25	6	.41	2470	145	1160	123	18	6.0
28	24	2	.13	2590	127	948	110	17	5.0
29	22	1	.06	1470	60	238	102	16	4.4
30	21	1	.06	780	40	84	96	16	4.1
31	21	1	.06	---	---	---	92	18	4.5
TOTAL	678	---	14.16	16891	---	14051.16	7658	---	722.3

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	88	20	4.8	108	15	4.4	160	76	33
2	84	25	5.7	119	253	420	144	48	19
3	82	36	8.0	441	195	232	137	30	11
4	78	51	11	2060	765	4690	133	25	9.0
5	75	55	11	3250	212	1970	126	15	5.1
6	72	54	10	1780	75	360	126	11	3.7
7	68	40	7.3	871	37	87	113	10	3.1
8	66	25	4.5	547	33	49	114	13	4.0
9	64	15	2.6	386	26	27	149	20	8.0
10	62	14	2.3	299	18	15	296	63	50
11	60	12	1.9	257	15	10	679	185	339
12	58	10	1.6	214	14	8.1	425	138	158
13	56	10	1.5	186	13	6.5	448	59	71
14	54	9	1.3	198	15	8.0	629	151	351
15	52	10	1.4	163	13	5.7	1280	297	1100
16	52	10	1.4	153	10	4.1	702	132	250
17	58	7	1.1	413	55	61	461	20	25
18	90	15	3.6	1310	162	573	339	14	13
19	212	28	16	1590	234	1310	293	14	11
20	275	38	28	1260	59	201	235	13	8.2
21	234	32	20	977	224	639	187	13	6.6
22	282	25	19	719	200	388	164	13	5.8
23	317	10	8.6	520	181	254	151	13	5.3
24	259	10	7.0	386	170	177	138	12	4.5
25	200	9	4.9	303	158	129	125	13	4.4
26	170	8	3.7	253	140	96	118	12	3.8
27	150	8	3.2	225	122	74	125	10	3.4
28	135	11	4.0	184	100	50	111	12	3.6
29	122	20	6.6	---	---	---	102	14	3.9
30	116	13	4.1	---	---	---	96	14	3.6
31	110	11	3.3	---	---	---	91	14	3.4
TOTAL	3801	---	209.4	19172	---	11848.8	8397	---	2520.4

TABLE 16.--DAILY SEDIMENT DISCHARGE DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

WATER YEAR 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	87	14	3.3	119	8	2.6	65	3	.53
2	83	14	3.1	110	8	2.4	60	2	.32
3	79	10	2.1	98	8	2.1	54	2	.29
4	78	9	1.9	90	8	1.9	51	5	.69
5	79	9	1.9	86	8	1.9	53	7	1.0
6	104	9	2.5	81	8	1.7	55	5	.74
7	142	13	5.0	89	8	1.9	52	3	.42
8	115	7	2.2	80	8	1.7	52	1	.14
9	108	7	2.0	72	7	1.4	48	1	.13
10	111	8	2.4	67	7	1.3	40	1	.11
11	127	10	3.4	63	7	1.2	40	3	.32
12	138	10	3.7	61	7	1.2	64	6	1.0
13	140	10	3.8	58	7	1.1	50	3	.41
14	132	10	3.6	69	14	2.6	40	3	.32
15	140	19	7.2	60	7	1.1	35	3	.28
16	236	23	15	57	10	1.5	41	3	.33
17	347	35	33	60	7	1.1	69	17	3.2
18	305	39	32	52	7	.98	40	8	.86
19	263	22	16	63	6	1.0	33	6	.53
20	240	21	14	126	10	3.4	32	2	.17
21	245	23	15	103	5	1.4	29	1	.08
22	328	24	21	87	4	.94	27	1	.07
23	286	20	15	83	4	.90	30	4	.32
24	254	19	13	79	4	.85	37	8	.80
25	229	18	11	72	4	.78	27	4	.29
26	204	14	7.7	66	4	.71	23	1	.06
27	178	13	6.2	84	13	2.9	25	1	.07
28	158	11	4.7	126	17	5.8	53	9	1.3
29	142	10	3.8	84	3	.68	36	1	.10
30	126	9	3.1	73	3	.59	28	1	.08
31	---	---	---	73	2	.39	---	---	---
TOTAL	5204	---	258.6	2491	---	50.02	1289	---	14.96

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	27	1	.07	67	5	.90	25	6	.41
2	59	24	3.8	61	5	.82	25	6	.41
3	46	8	.99	56	4	.60	24	5	.32
4	29	3	.23	51	4	.55	23	5	.31
5	25	3	.20	47	6	.76	24	5	.32
6	23	3	.19	46	11	1.4	24	6	.39
7	21	2	.11	55	14	2.1	21	6	.34
8	32	3	.26	47	13	1.6	21	5	.28
9	879	1280	6170	43	10	1.2	19	4	.21
10	280	78	59	41	6	.66	18	3	.15
11	180	12	5.8	97	31	8.1	18	3	.15
12	166	10	4.5	49	11	1.5	20	2	.11
13	185	54	27	40	11	1.2	21	3	.17
14	197	35	19	36	11	1.1	18	3	.15
15	135	15	5.5	33	11	.98	17	3	.14
16	114	12	3.7	36	10	.97	16	4	.17
17	120	14	4.5	43	10	1.2	15	3	.12
18	92	15	3.7	36	10	.97	17	2	.09
19	713	690	3500	31	9	.75	42	8	.91
20	1280	1090	3770	29	9	.70	26	3	.21
21	913	250	616	28	9	.68	20	2	.11
22	441	90	107	29	10	.78	18	1	.05
23	275	80	59	61	20	3.3	24	6	.39
24	222	112	67	152	143	288	204	215	171
25	163	95	42	48	12	1.6	310	187	235
26	134	60	22	37	7	.70	132	25	8.9
27	116	31	9.7	47	18	2.3	93	12	3.0
28	98	16	4.2	48	16	2.1	75	12	2.4
29	93	11	2.8	34	11	1.0	62	12	2.0
30	83	6	1.3	29	7	.55	54	12	1.7
31	75	6	1.2	26	7	.49	---	---	---
TOTAL	7216	---	14510.75	1483	---	329.56	1426	---	429.91

TABLE 16.--DAILY SEDIMENT DISCHARGE DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

WATER YEAR 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		OCTOBER			NOVEMBER			DECEMBER	
1	328	248	331	88	4	.95	209	21	12
2	389	152	248	86	4	.93	264	30	21
3	257	52	42	83	5	1.1	365	52	51
4	900	103	250	163	43	24	309	40	33
5	927	106	265	257	47	37	261	32	23
6	448	54	65	296	27	22	224	29	18
7	284	8	6.1	236	10	6.4	199	19	10
8	208	8	4.5	394	48	51	194	20	10
9	164	8	3.5	1450	161	630	598	117	251
10	135	8	2.9	715	84	162	714	65	133
11	114	8	2.5	645	76	132	479	30	39
12	101	8	2.2	521	62	87	369	30	30
13	114	30	9.2	382	10	10	278	30	23
14	192	35	18	287	10	7.7	225	27	16
15	160	25	11	243	10	6.6	197	20	11
16	129	20	7.0	210	10	5.7	173	19	8.9
17	117	16	5.1	181	8	3.9	159	17	7.3
18	110	16	4.8	171	30	14	203	15	8.2
19	96	16	4.1	213	40	23	193	20	10
20	90	13	3.2	229	76	69	162	15	6.6
21	86	12	2.8	369	123	125	145	7	2.7
22	81	10	2.2	279	100	75	132	7	2.5
23	76	10	2.1	245	50	33	130	11	3.9
24	73	10	2.0	323	40	35	263	50	70
25	69	10	1.9	290	10	7.8	598	59	109
26	104	15	4.2	542	91	179	399	18	19
27	95	6	1.5	563	41	67	309	18	15
28	130	12	4.2	410	20	22	253	15	10
29	114	6	1.8	323	20	17	214	13	7.5
30	105	5	1.4	258	20	14	191	---	---
31	94	4	1.0	---	---	---	165	---	---
TOTAL	6290	---	1310.2	10452	---	1869.08	8574	---	961.6

DAY	DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JANUARY			FEBRUARY			MARCH	
1	147	19	7.5	152	20	8.2	243	57	47
2	149	19	7.6	371	97	122	338	34	32
3	136	18	6.6	382	44	45	272	14	10
4	118	16	5.1	292	17	13	228	12	7.4
5	108	14	4.1	236	17	11	192	12	6.2
6	100	13	3.5	204	19	10	172	11	5.1
7	90	50	12	188	17	8.6	169	12	5.5
8	84	20	4.5	178	16	7.7	202	14	7.6
9	92	16	4.0	155	19	8.0	258	14	9.8
10	105	16	4.5	130	17	6.0	248	12	8.0
11	110	15	4.5	128	17	5.9	207	10	5.6
12	94	13	3.3	177	23	11	179	7	3.4
13	90	12	2.9	176	25	12	155	7	2.9
14	110	20	5.9	149	20	8.0	140	7	2.6
15	353	59	64	131	25	8.8	135	7	2.6
16	422	35	42	111	20	6.0	122	21	6.9
17	298	18	14	102	17	4.7	109	7	2.1
18	248	16	11	98	15	4.0	102	5	1.4
19	531	63	90	96	14	3.6	97	4	1.0
20	562	67	102	88	13	3.1	92	4	.99
21	358	15	14	87	14	3.3	89	4	.96
22	283	15	11	85	16	3.7	87	5	1.2
23	239	15	9.7	96	17	4.4	86	5	1.2
24	179	15	7.2	84	15	3.4	86	5	1.2
25	155	15	6.3	81	14	3.1	93	20	5.0
26	140	15	5.7	80	14	3.0	115	9	2.8
27	125	15	5.1	79	14	3.0	99	8	2.1
28	110	20	5.9	82	20	4.4	98	7	1.9
29	101	20	5.5	---	---	---	91	7	1.7
30	102	22	6.1	---	---	---	107	15	4.3
31	120	25	8.1	---	---	---	413	126	177
TOTAL	5859	---	483.6	4218	---	334.9	5024	---	367.45

TABLE 16.--DAILY SEDIMENT DISCHARGE DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

WATER YEAR 1987

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1	365	36	35	177	20	9.6	120	20	6.5
2	384	27	28	191	32	17	124	15	5.0
3	337	20	18	199	32	17	99	8	2.1
4	510	61	84	258	30	21	86	7	1.6
5	554	66	99	215	20	12	75	6	1.2
6	701	82	155	199	17	9.1	68	4	.73
7	1020	116	319	181	16	7.8	62	4	.67
8	915	105	259	162	15	6.6	57	3	.46
9	784	91	193	143	15	5.8	90	15	3.6
10	591	70	112	129	14	4.9	66	9	1.6
11	451	54	66	118	10	3.2	55	7	1.0
12	441	53	63	110	10	3.0	83	15	3.4
13	380	46	47	99	10	2.7	84	10	2.3
14	313	39	33	90	9	2.2	107	60	17
15	332	41	37	89	9	2.2	69	17	3.2
16	319	39	34	80	9	1.9	58	12	1.9
17	294	56	44	75	9	1.8	52	9	1.3
18	259	33	23	101	28	2.0	47	7	.89
19	230	29	18	225	65	45	43	6	.70
20	205	26	14	149	29	12	149	458	447
21	186	24	12	112	6	1.8	172	80	37
22	170	22	10	94	6	1.5	112	40	12
23	159	21	9.0	86	6	1.4	130	74	33
24	630	156	358	78	5	1.1	106	25	7.2
25	431	52	61	72	3	.58	77	10	2.1
26	309	38	32	72	7	1.4	75	12	2.4
27	255	32	22	303	143	136	68	9	1.7
28	289	36	28	176	15	7.1	56	8	1.2
29	230	25	16	132	10	3.6	50	6	.81
30	204	25	14	109	6	1.8	67	10	1.8
31	---	---	---	144	48	19	---	---	---
TOTAL	12248	---	2243.0	4368	---	362.08	2507	---	601.36

TABLE 17.--MONTHLY LABORATORY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)
(Lat 39°59'40", Long 79°25'59")

SITE 23

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
AUG 13...	1030	36	318	6.60	19.5	0.2	24	17	5.8	4.7	1.0	6

DATE	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
AUG 13...	12	110	12	<0.1	272	<2	1.08	120	<4	<250	12	<50

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
AUG 13...	40	28	<10	<10	<4	660	70	<10	60	<6	<2.0

TABLE 17.--MONTHLY LABORATORY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

SITE 23

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT 24...	0830	24	320	8.00	13.0	0	0.0	26	7.6	8.9	1.5	2
NOV 25...	0945	173	180	6.60	5.0	0	2.0	--	--	--	--	
DEC 23...	1015	141	310	6.10	0.5	0.1	14	--	--	--	--	
JAN 16...	1010	54	350	6.80	0.0	0.1	0.0	--	--	--	--	
FEB 19...	1215	1150	200	6.20	5.5	0.1	14	--	--	--	--	
MAR 17...	1420	435	122	6.40	6.0	0.1	18	--	--	--	--	
APR 29...	1045	146	185	7.10	14.5	0.1	0.0	--	--	--	--	1
JUN 05...	1335	54	270	6.80	20.0	0	0.0	--	--	--	--	
JUL 22...	1135	456	138	7.10	16.5	0	4.0	--	--	--	--	
AUG 20...	1130	28	325	6.70	21.0	0	0.0	--	--	--	--	
SEP 29...	1630	51	220	7.20	21.5	0	4.0	--	--	--	--	1

DATE	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER DIS-SOLVED (UG/L AS CU
OCT 24...	16	90	--	322	<2	--	<40	<4	<0	<50	<30	<1
NOV 25...	12	58	--	124	10	--	<40	--	--	--	--	
DEC 23...	10	66	--	178	14	--	220	--	--	--	--	
JAN 16...	12	83	--	344	8	<500	<500	--	--	--	--	
FEB 19...	8	32	20	100	6	340	<130	--	--	--	--	
MAR 17...	10	27	--	86	8	540	<130	--	--	--	--	
APR 29...	22	58	12	88	24	1300	<130	--	--	--	--	
JUN 05...	12	82	--	178	<2	<130	<130	--	--	--	--	
JUL 22...	14	41	--	122	<2	290	--	--	--	--	--	
AUG 20...	10	110	--	222	<2	<130	<130	--	--	--	--	
SEP 29...	14	66	--	170	<2	<130	<130	--	--	--	--	

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 24...	--	33	<45	--	590	<25	61	--	<10	<6	<1.0
NOV 25...	--	120	--	--	490	--	--	--	30	--	--
DEC 23...	--	300	--	--	570	--	--	--	100	--	--
JAN 16...	1100	380	--	670	650	--	--	50	40	--	--
FEB 19...	640	36	--	250	230	--	--	<10	<10	--	--
MAR 17...	780	180	--	270	270	--	--	<10	<10	--	--
APR 29...	1200	13	--	1100	850	--	--	70	32	--	--
JUN 05...	120	300	--	510	510	--	--	30	41	--	--
JUL 22...	280	--	--	290	--	--	--	40	--	--	--
AUG 20...	40	28	--	900	900	--	--	80	71	--	--
SEP 29...	280	<10	--	600	550	--	--	30	20	--	--

TABLE 17.--MONTHLY LABORATORY CHEMICAL DATA FOR INDIAN CREEK AT WHITE BRIDGE (03082237)--Continued
(Lat 39°59'40", Long 79°25'59")

SITE 23

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)
DEC 09...	1400	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	1110	0.45	1700	2.82	11.0	6.0	26	--	21	--	6.7	--
MAR 26...	1540	95	230	6.90	12.0	--	0.0	--	--	--	--	--
APR 14...	1100	310	140	6.65	8.0	--	18	--	--	--	--	--
MAY 18...	1630	94	238	6.83	16.0	--	0.0	--	--	--	--	--
JUN 29...	1130	51	250	6.00	19.0	--	18	23	22	7.1	6.9	10

DATE	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)
DEC 09...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	35	--	1.3	16	89	62	104	12	--	<130	--	<4
MAR 26...	--	--	--	16	51	22	130	6	240	<130	--	--
APR 14...	--	--	--	12	42	10	106	6	330	<130	--	--
MAY 18...	--	--	--	16	82	11	180	4	<130	<130	--	--
JUN 29...	10	1.6	1.6	16	66	--	202	10	<130	<130	<4	<4

DATE	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)
DEC 09...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	<250	0	--	<50	--	<30	--	<10	--	400	--	<50
MAR 26...	--	--	--	--	--	--	--	--	350	250	--	--
APR 14...	--	--	--	--	--	--	--	--	510	140	--	--
MAY 18...	--	--	--	--	--	--	--	--	200	<10	--	--
JUN 29...	<250	0	<50	<50	<30	<30	<10	<10	230	33	<50	<50

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
DEC 09...	--	--	--	--	--	--	--	--	--	--	--	--
FEB 26...	--	550	--	33	--	90	--	37	--	<6	--	<1.0
MAR 26...	470	460	--	--	--	--	30	<26	--	--	--	--
APR 14...	240	290	--	--	--	--	<10	<10	--	--	--	--
MAY 18...	490	480	--	--	--	--	<10	<10	--	--	--	--
JUN 29...	500	480	<25	<25	100	100	20	50	<6	<6	<1.0	<1.0

TABLE 18.-- DAILY DISCHARGE FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)
(Lat 39°59'20", Long 79°27'12")

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.42	.51	.72	.54	.48	.81	.67	.60	.60	.47	.47	.47
2	.43	.54	.78	.54	.48	.81	.65	.60	.60	.47	.47	.47
3	.43	.54	.70	.54	.50	.81	.64	.61	.60	.47	.47	.47
4	.43	.54	.70	.54	.74	.81	.61	.60	.55	.47	.47	.47
5	.44	.54	.69	.54	1.4	.81	.61	.60	.47	.47	.47	.47
6	.44	.54	.66	.53	1.7	.73	.60	.60	.47	.47	.47	.47
7	.44	.54	.60	.52	1.1	.68	.64	.60	.47	.47	.47	.47
8	.44	.54	.60	.48	.94	.68	.68	.60	.47	.47	.47	.47
9	.46	.51	.56	.49	.86	.68	.68	.60	.47	.60	.47	.47
10	.48	.48	.48	.54	.81	.68	.64	.60	.47	.52	.47	.47
11	.50	.48	.48	.54	.81	.74	.60	.60	.47	.48	.47	.47
12	.56	.52	.48	.54	.80	.74	.60	.60	.47	.58	.47	.47
13	.58	.53	.51	.54	.75	.74	.60	.60	.47	.47	.47	.47
14	.60	.55	.54	.54	.74	.78	.60	.60	.47	.47	.47	.47
15	.66	.55	.54	.52	.74	.90	.60	.60	.47	.47	.47	.47
16	.70	.61	.54	.48	.74	.90	.68	.60	.47	.53	.47	.44
17	.81	.63	.54	.48	.76	.83	.68	.60	.47	.54	.47	.44
18	.91	.58	.54	.48	.88	.77	.68	.60	.47	.47	.47	.44
19	1.0	.54	.49	.48	1.0	.76	.68	.60	.47	.56	.47	.44
20	1.0	.57	.51	.48	1.1	.76	.68	.60	.47	.63	.47	.44
21	.63	.57	.54	.48	1.1	.74	.68	.60	.47	.63	.47	.44
22	.43	.55	.54	.48	1.0	.74	.68	.60	.47	.62	.47	.44
23	.46	.54	.54	.48	.97	.74	.68	.60	.47	.58	.47	.44
24	.54	.54	.54	.49	.90	.72	.68	.60	.48	.55	.47	.60
25	.54	.54	.54	.52	.90	.71	.68	.60	.47	.53	.46	.59
26	.48	.68	.54	.54	.85	.73	.68	.60	.47	.50	.44	.58
27	.48	1.5	.54	.54	.81	.74	.68	.60	.47	.47	.44	.56
28	.48	1.3	.54	.54	.81	.74	.68	.60	.47	.47	.44	.55
29	.48	1.2	.54	.54	---	.74	.64	.60	.47	.47	.47	.54
30	.48	.87	.54	.53	---	.74	.60	.60	.47	.47	.47	.53
31	.48	---	.54	.50	---	.74	---	.60	---	.47	.47	---
TOTAL	17.21	19.13	17.60	15.98	24.67	23.50	19.50	18.61	14.58	15.84	14.47	14.52
MEAN	.56	.64	.57	.52	.88	.76	.65	.60	.49	.51	.47	.48
MAX	1.0	1.5	.78	.54	1.7	.90	.68	.61	.60	.63	.47	.60
MIN	.42	.48	.48	.48	.48	.68	.60	.60	.47	.47	.44	.44

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.53	.60	.72	.81	.79	.70	.75	.71	.60	---	---	---
2	.60	.60	.80	.81	.81	.74	.76	.69	.60	---	---	---
3	.60	.55	.80	.81	.81	.74	.77	.68	.60	---	---	---
4	.75	.59	.81	.74	.81	.74	.77	.68	.60	---	---	---
5	.69	.60	.81	.78	.81	.74	.77	.68	.60	---	---	---
6	.68	.60	.81	.74	.81	.74	.78	.68	.60	---	---	---
7	.61	.60	.81	.74	.83	.74	.76	.70	.60	---	---	---
8	.47	.61	.81	.74	.84	.74	2.8	.68	.60	---	---	---
9	.47	.74	.83	.74	.86	.74	.72	.68	.60	---	---	---
10	.47	.73	.90	.74	.81	.77	.75	.68	.60	---	---	---
11	.47	.71	.88	.74	.81	.74	.76	.68	.60	---	---	---
12	.47	.74	.90	.74	.83	.69	.77	.65	.60	---	---	---
13	.47	.74	.89	.74	.86	.42	.77	.61	.60	---	---	---
14	.54	.72	.81	.74	.81	.60	.77	.60	---	---	---	---
15	.60	.74	.81	.74	.85	.56	.78	.60	---	---	---	---
16	.60	.74	.81	.74	.82	.56	.81	.60	---	---	---	---
17	.60	.69	.81	.74	.81	.61	.76	.60	---	---	---	---
18	.60	.68	.81	.75	.81	.63	.74	.60	---	---	---	---
19	.60	.70	.81	.84	.81	.67	.71	.60	---	---	---	---
20	.60	.69	.81	.87	.81	.63	.68	.60	---	---	---	---
21	.60	.71	.77	.81	.81	.66	.68	.60	---	---	---	---
22	.60	.68	.75	.81	.81	.66	.68	.60	---	---	---	---
23	.60	.68	.78	.90	.81	.68	.68	.60	---	---	---	---
24	.60	.69	.79	.83	.81	.68	.72	.60	---	---	---	---
25	.60	.68	.81	.81	.81	.69	.74	.59	---	---	---	---
26	.60	.69	.81	.81	.76	.70	.74	.57	---	---	---	---
27	.60	.72	.81	.81	.68	.73	.73	.64	---	---	---	---
28	.68	.69	.81	.81	.68	.74	.74	.63	---	---	---	---
29	.60	.72	.81	.78	---	.73	.74	.60	---	---	---	---
30	.60	.71	.81	.79	---	.75	.74	.60	---	---	---	---
31	.60	---	.81	.81	---	.75	---	.60	---	---	---	---
TOTAL	18.10	20.34	25.20	24.26	22.57	21.27	24.37	19.63	---	---	---	---
MEAN	.58	.68	.81	.78	.81	.69	.81	.63	---	---	---	---
MAX	.75	.74	.90	.90	.86	.77	2.8	.71	---	---	---	---
MIN	.47	.55	.72	.74	.68	.42	.68	.57	---	---	---	---

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)
(Lat 39°59'20", Long 79°27'12")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				---	---	---	11.5	11.5	11.5	11.5	11.0	11.0
2				---	---	---	11.5	11.0	11.5	11.5	11.0	11.5
3				---	---	---	11.5	11.0	11.0	11.5	11.5	11.5
4				---	---	---	11.5	11.0	11.5	11.5	11.5	11.5
5				---	---	---	11.5	11.0	11.5	11.5	11.0	11.0
6				---	---	---	11.5	11.5	11.5	11.5	11.0	11.0
7				---	---	---	11.5	11.5	11.5	11.0	11.0	11.0
8				---	---	---	11.5	11.5	11.5	11.0	11.0	11.0
9				---	---	---	11.5	11.5	11.5	11.5	11.0	11.0
10				---	---	---	11.5	11.5	11.5	11.5	11.0	11.0
11				---	---	---	11.5	11.5	11.5	11.5	11.0	11.0
12				---	---	---	11.5	11.5	11.5	11.5	11.0	11.5
13				---	---	---	11.5	11.0	11.5	11.5	11.0	11.0
14				---	---	---	11.5	11.0	11.0	11.0	11.0	11.0
15				---	---	---	11.5	11.0	11.0	11.5	11.0	11.0
16				---	---	---	11.5	11.5	11.5	11.5	11.0	11.0
17				---	---	---	11.5	11.0	11.5	11.5	11.0	11.5
18				---	---	---	11.5	11.0	11.0	11.5	11.5	11.5
19				---	---	---	---	---	---	11.5	11.5	11.5
20				---	---	---	11.5	11.0	11.5	11.5	10.5	11.0
21				---	---	---	11.5	11.0	11.0	11.5	11.0	11.0
22				---	---	---	11.5	11.0	11.0	11.5	11.0	11.0
23				---	---	---	11.5	11.5	11.5	11.5	11.0	11.0
24				---	---	---	11.5	11.0	11.5	11.5	11.0	11.0
25				---	---	---	11.0	11.0	11.0	11.5	11.0	11.0
26				12.0	11.0	11.5	11.0	11.0	11.0	11.5	11.0	11.0
27				11.5	11.5	11.5	11.5	11.0	11.0	11.0	10.5	11.0
28				11.5	11.5	11.5	11.5	11.0	11.0	11.0	10.5	11.0
29				11.5	11.5	11.5	11.5	11.0	11.0	11.0	11.0	11.0
30				11.5	11.5	11.5	11.5	11.0	11.0	11.0	11.0	11.0
31				---	---	---	11.5	11.0	11.5	11.5	11.0	11.0
MONTH				12.0	11.0	11.5	11.5	11.0	11.5	11.5	10.5	11.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.5	11.0	11.0	11.0	10.5	11.0	12.0	11.0	11.5	12.0	11.5	11.5
2	11.5	11.0	11.0	11.0	10.5	11.0	12.0	11.0	11.5	11.5	11.0	11.5
3	11.0	11.0	11.0	11.0	11.0	11.0	12.0	11.0	11.5	12.0	11.0	11.5
4	11.0	8.5	10.0	11.0	11.0	11.0	12.0	11.5	11.5	12.0	11.0	11.5
5	11.5	10.0	11.0	11.0	11.0	11.0	12.0	11.5	11.5	12.5	11.5	11.5
6	11.5	10.5	11.0	11.0	10.5	11.0	12.0	11.5	11.5	12.5	11.5	11.5
7	10.5	10.5	10.5	11.0	10.5	11.0	12.0	11.5	11.5	12.5	11.5	12.0
8	10.5	10.5	10.5	11.5	10.5	11.0	12.0	11.0	11.5	12.5	11.5	11.5
9	10.5	10.5	10.5	11.5	11.0	11.0	11.5	11.0	11.5	12.0	11.5	11.5
10	10.5	10.5	10.5	11.5	11.0	11.5	11.5	11.0	11.0	12.0	11.5	11.5
11	11.0	10.5	10.5	11.0	11.0	11.0	11.5	11.0	11.0	12.5	11.5	11.5
12	10.5	10.5	10.5	11.0	11.0	11.0	12.0	11.0	11.5	12.0	11.5	11.5
13	11.0	10.5	10.5	11.0	11.0	11.0	12.0	11.0	11.5	11.5	11.5	11.5
14	11.0	10.5	10.5	11.0	10.5	11.0	12.0	11.0	11.5	12.0	11.5	11.5
15	11.0	10.5	11.0	11.0	10.5	11.0	11.5	11.5	11.5	12.0	11.5	11.5
16	11.0	10.5	11.0	11.0	11.0	11.0	11.5	11.0	11.0	12.0	11.5	11.5
17	11.0	10.5	11.0	11.5	11.0	11.0	11.5	11.0	11.0	12.0	11.5	12.0
18	10.5	10.5	10.5	11.5	11.0	11.0	12.0	11.0	11.5	12.0	11.5	12.0
19	11.0	10.0	10.5	11.5	11.0	11.5	12.0	11.0	11.5	12.0	11.5	11.5
20	11.5	11.0	11.0	11.0	10.5	11.0	11.5	11.5	11.5	12.0	11.5	11.5
21	11.0	11.0	11.0	11.5	10.5	11.0	12.0	11.5	11.5	11.5	11.5	11.5
22	11.0	11.0	11.0	11.5	10.5	11.0	11.5	11.0	11.0	12.0	11.5	11.5
23	11.0	10.5	11.0	11.5	11.0	11.0	12.0	11.0	11.0	12.0	11.5	11.5
24	11.0	10.5	10.5	11.5	11.0	11.0	12.0	11.0	11.5	12.0	11.5	11.5
25	11.0	10.5	10.5	12.0	11.0	11.0	12.0	11.0	11.5	12.0	11.5	11.5
26	11.0	10.5	11.0	11.5	11.0	11.5	12.0	11.5	11.5	12.0	11.5	11.5
27	11.0	10.5	11.0	11.5	11.0	11.0	12.5	11.5	11.5	12.0	11.5	11.5
28	11.0	10.5	11.0	12.0	11.0	11.0	12.5	11.5	11.5	12.0	11.5	12.0
29	---	---	---	12.0	11.0	11.5	12.0	11.5	11.5	12.0	11.5	12.0
30	---	---	---	12.0	11.0	11.5	12.0	11.5	11.5	12.0	11.5	12.0
31	---	---	---	12.0	11.0	11.5	---	---	---	12.0	11.5	12.0
MONTH	11.5	8.5	11.0	12.0	10.5	11.0	12.5	11.0	11.5	12.5	11.0	11.5

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continue
(Lat 39°59'20", Long 79°27'12")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
2	12.0	11.5	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
3	12.0	11.5	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
4	12.0	11.5	11.5	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0
5	12.0	11.5	12.0	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0
6	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
7	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
8	12.0	11.5	12.0	12.5	12.0	12.0	12.0	12.0	12.0	12.0	11.5	12.0
9	12.0	11.5	12.0	14.0	12.0	12.5	12.0	12.0	12.0	12.0	11.5	12.0
10	12.0	11.5	12.0	12.5	12.0	12.0	12.0	12.0	12.0	12.0	11.5	12.0
11	12.0	12.0	12.0	12.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
12	12.0	12.0	12.0	12.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
13	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
14	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
15	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
16	12.0	12.0	12.0	12.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0
17	12.0	11.5	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.0	11.5
18	12.0	11.5	11.5	12.0	12.0	12.0	12.0	12.0	12.0	11.5	11.5	11.5
19	12.0	11.5	12.0	15.5	12.0	12.5	12.0	12.0	12.0	11.5	11.5	11.5
20	12.0	12.0	12.0	13.0	12.0	12.5	12.0	12.0	12.0	12.0	11.5	11.5
21	12.0	11.5	12.0	12.5	12.0	12.5	12.0	12.0	12.0	12.0	11.5	11.5
22	12.0	11.5	12.0	---	---	---	12.0	12.0	12.0	12.0	11.5	11.5
23	12.0	12.0	12.0	---	---	---	12.0	12.0	12.0	12.0	11.5	11.5
24	12.0	12.0	12.0	---	---	---	12.0	12.0	12.0	12.5	11.5	12.0
25	12.0	11.5	12.0	---	---	---	12.0	12.0	12.0	12.0	11.5	12.0
26	12.0	11.5	12.0	---	---	---	12.0	12.0	12.0	12.0	11.5	12.0
27	12.0	11.5	12.0	---	---	---	12.0	12.0	12.0	12.0	11.5	11.5
28	12.0	12.0	12.0	---	---	---	12.0	11.5	12.0	12.0	11.5	12.0
29	12.0	12.0	12.0	---	---	---	12.0	11.5	12.0	12.0	11.5	12.0
30	12.0	12.0	12.0	12.0	12.0	12.0	12.0	11.5	12.0	12.0	11.5	12.0
31	---	---	---	12.0	12.0	12.0	12.0	11.5	12.0	---	---	---
MONTH	12.0	11.5	12.0	15.5	11.5	12.0	12.0	11.5	12.0	12.5	11.0	12.0

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	12.0	11.5	12.0	11.5	11.0	11.5	11.0	10.5	11.0	11.0	10.5	11.0
2	12.0	11.5	12.0	11.5	11.0	11.5	11.0	10.5	11.0	11.0	10.5	10.5
3	12.5	11.5	12.0	11.5	11.0	11.5	11.0	11.0	11.0	11.0	10.5	11.0
4	14.0	12.0	13.0	11.5	10.5	11.5	11.0	11.0	11.0	11.0	10.5	10.5
5	12.0	11.5	12.0	11.5	11.0	11.5	11.0	10.5	11.0	11.0	10.0	10.5
6	11.5	11.5	11.5	11.5	11.0	11.5	11.0	10.5	11.0	11.5	10.5	11.0
7	11.5	11.5	11.5	11.5	11.0	11.5	11.5	11.0	11.0	11.0	11.0	11.0
8	12.0	11.0	11.5	12.0	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.0
9	12.0	11.5	11.5	11.5	11.0	11.5	11.0	11.0	11.0	11.5	11.0	11.0
10	11.5	11.5	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.5	11.0	11.0
11	11.5	11.5	11.5	11.0	11.0	11.0	11.0	10.5	11.0	11.0	11.0	11.0
12	12.0	11.5	11.5	11.5	11.0	11.0	11.0	10.5	11.0	11.0	11.0	11.0
13	11.5	11.5	11.5	11.0	11.0	11.0	11.0	10.5	10.5	11.5	11.0	11.0
14	11.5	11.5	11.5	11.0	10.5	11.0	11.0	10.5	10.5	11.5	11.0	11.0
15	11.5	11.5	11.5	11.5	11.0	11.0	11.0	10.5	11.0	11.5	11.0	11.0
16	11.5	11.5	11.5	11.5	11.0	11.0	11.0	10.5	11.0	11.5	11.0	11.0
17	11.5	11.5	11.5	11.5	11.0	11.5	11.0	11.0	11.0	11.0	11.0	11.0
18	11.5	11.0	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.5	11.0	11.0
19	11.5	11.0	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.0	9.5	11.0
20	11.5	11.0	11.5	11.0	11.0	11.0	11.0	11.0	11.0	11.0	10.5	11.0
21	11.5	11.0	11.5	11.0	11.0	11.0	11.0	10.5	11.0	11.0	11.0	11.0
22	12.0	11.5	11.5	11.5	11.0	11.0	11.0	10.5	10.5	11.0	11.0	11.0
23	11.5	11.5	11.5	11.5	11.0	11.0	11.0	10.5	10.5	11.0	10.5	11.0
24	12.0	11.5	11.5	11.5	11.0	11.0	11.0	10.5	11.0	11.0	10.5	10.5
25	11.5	11.5	11.5	11.5	11.0	11.0	11.0	10.5	11.0	11.0	10.5	11.0
26	11.5	11.5	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.0	10.5	11.0
27	11.5	11.5	11.5	11.5	11.0	11.0	11.0	10.5	11.0	11.0	10.5	10.5
28	12.0	11.0	11.5	11.5	11.0	11.0	11.0	11.0	11.0	11.0	10.5	10.5
29	12.0	11.0	11.5	11.0	11.0	11.0	11.0	10.5	11.0	11.0	10.5	11.0
30	11.5	11.0	11.5	11.5	11.0	11.0	11.0	10.5	11.0	11.0	10.5	11.0
31	12.0	11.0	11.5	---	---	---	11.0	10.5	11.0	11.0	10.5	11.0
MONTH	14.0	11.0	11.5	12.0	10.5	11.0	11.5	10.5	11.0	11.5	9.5	11.0

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	11.0	11.0	11.0	11.5	11.0	11.5	11.5	10.5	11.0	12.0	11.0	11.5
2	11.0	10.5	11.0	11.5	11.0	11.0	11.0	11.0	11.0	11.5	11.0	11.5
3	11.0	10.5	11.0	11.5	11.0	11.0	11.0	10.5	11.0	11.5	11.5	11.5
4	11.0	11.0	11.0	---	---	---	11.0	9.5	10.5	11.5	11.0	11.5
5	11.5	11.0	11.0	---	---	---	11.0	10.5	11.0	12.0	11.0	11.5
6	11.5	11.0	11.0	---	---	---	11.0	10.5	10.5	12.0	11.0	11.5
7	11.5	11.0	11.0	---	---	---	11.0	10.5	11.0	12.0	11.0	11.5
8	11.0	10.5	11.0	---	---	---	11.5	11.0	11.0	12.0	11.0	11.5
9	11.0	10.5	11.0	---	---	---	11.5	11.0	11.5	12.0	11.0	11.5
10	11.5	10.5	11.0	---	---	---	12.0	11.0	11.5	12.5	11.0	11.5
11	11.5	10.5	11.0	---	---	---	11.5	11.0	11.5	12.0	11.5	11.5
12	11.0	11.0	11.0	---	---	---	11.5	11.0	11.0	---	---	---
13	11.0	10.5	11.0	11.5	11.0	11.0	11.5	11.0	11.0	---	---	---
14	11.0	10.5	11.0	11.0	11.0	11.0	11.5	11.0	11.5	---	---	---
15	11.0	10.5	11.0	11.5	11.0	11.0	11.0	11.0	11.0	---	---	---
16	11.0	10.5	11.0	11.5	11.0	11.0	11.0	11.0	11.0	---	---	---
17	11.0	11.0	11.0	11.5	11.0	11.0	11.5	11.0	11.0	---	---	---
18	11.5	11.0	11.0	11.5	11.0	11.0	12.0	11.0	11.5	---	---	---
19	11.5	10.5	11.0	12.0	11.0	11.0	12.0	11.0	11.5	---	---	---
20	11.5	10.5	11.0	12.0	11.0	11.0	12.0	11.0	11.5	---	---	---
21	11.5	11.0	11.0	12.0	11.0	11.0	12.0	11.0	11.5	---	---	---
22	11.5	11.0	11.0	---	---	---	12.0	11.0	11.5	---	---	---
23	11.0	11.0	11.0	---	---	---	11.5	11.5	11.5	---	---	---
24	11.5	11.0	11.0	---	---	---	11.5	11.0	11.5	---	---	---
25	11.5	10.5	11.0	---	---	---	12.0	11.0	11.5	---	---	---
26	11.5	11.0	11.0	---	---	---	12.0	11.0	11.5	---	---	---
27	11.0	11.0	11.0	12.0	11.0	11.5	12.0	11.0	11.5	---	---	---
28	11.5	11.0	11.0	12.0	11.0	11.5	11.5	11.0	11.5	---	---	---
29	---	---	---	12.0	11.0	11.5	12.0	11.0	11.5	---	---	---
30	---	---	---	11.5	11.5	11.5	12.0	11.0	11.5	---	---	---
31	---	---	---	11.5	10.5	11.0	---	---	---	---	---	---
MONTH	11.5	10.5	11.0	12.0	10.5	11.0	12.0	9.5	11.5	12.5	11.0	11.5

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				---	---	---	1640	1570	1600	2040	2010	2030
2				---	---	---	1680	1640	1660	2030	2010	2020
3				---	---	---	1730	1680	1700	2040	2020	2030
4				---	---	---	1770	1730	1750	2040	2030	2030
5				---	---	---	1830	1750	1790	2050	2030	2040
6				---	---	---	1890	1830	1860	2050	2020	2030
7				---	---	---	1910	1890	1900	2040	2020	2030
8				---	---	---	1950	1910	1930	2040	2030	2030
9				---	---	---	1950	1940	1940	2040	2030	2040
10				---	---	---	1980	1950	1970	2060	2040	2050
11				---	---	---	1990	1980	1980	2060	2040	2050
12				---	---	---	1970	1960	1970	2060	2040	2050
13				---	---	---	1980	1940	1960	2060	2030	2050
14				---	---	---	1980	1950	1960	2040	2030	2030
15				---	---	---	1970	1870	1940	2150	2040	2060
16				---	---	---	1890	1850	1870	2060	2050	2050
17				---	---	---	1880	1860	1870	2070	2050	2060
18				---	---	---	1880	1870	1880	2090	2070	2080
19				---	---	---	---	---	---	2090	2060	2070
20				---	---	---	2000	1990	2000	2070	2050	2060
21				---	---	---	2010	2000	2000	2060	2040	2050
22				---	---	---	2000	1980	1990	2050	2030	2040
23				---	---	---	2000	1980	1990	2050	2030	2040
24				---	---	---	2000	1980	1990	2050	2010	2020
25				---	---	---	2000	1980	1990	2030	2020	2030
26				2020	1290	1700	1980	1960	1970	2030	1990	2010
27				2000	1820	1890	2000	1980	1990	2000	1980	1990
28				1870	1620	1690	2020	2000	2010	1990	1970	1980
29				1650	1600	1620	2030	2010	2020	1980	1960	1970
30				1640	1570	1600	2030	2020	2030	1980	1970	1980
31				---	---	---	2030	2010	2020	2030	1970	2000
MONTH				2020	1290	1700	2030	1570	1920	2150	1960	2030

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2040	2020	2030	1710	1690	1700	1800	1790	1800	1760	1750	1750
2	2040	1960	2000	1730	1690	1710	1810	1790	1800	1760	1750	1760
3	1980	1950	1960	1770	1730	1750	1810	1790	1800	1760	1750	1760
4	1950	1540	1770	1780	1760	1770	1810	1790	1800	1780	1760	1770
5	1900	1710	1800	1790	1770	1780	1810	1800	1800	1790	1770	1780
6	1790	1520	1680	1810	1780	1790	1820	1800	1810	1790	1780	1790
7	1510	1410	1440	1810	1800	1810	1810	1800	1810	1790	1780	1780
8	1480	1400	1430	1820	1800	1810	1820	1800	1810	1790	1780	1790
9	1620	1480	1550	1820	1810	1820	1810	1800	1800	1790	1780	1790
10	1700	1620	1660	1830	1790	1810	1810	1790	1800	1800	1780	1790
11	1750	1700	1730	1810	1770	1790	1800	1780	1790	1810	1790	1800
12	1790	1760	1770	1810	1790	1800	1790	1780	1790	1820	1800	1810
13	1830	1790	1810	1800	1760	1780	1800	1780	1790	1810	1800	1810
14	1850	1820	1840	1770	1620	1730	1820	1800	1810	1820	1800	1810
15	1880	1860	1870	1780	1640	1740	1810	1800	1800	1820	1800	1810
16	1900	1880	1890	1770	1740	1760	1810	1780	1800	1820	1790	1810
17	1910	1820	1870	1750	1720	1740	1790	1770	1780	1820	1810	1820
18	1830	1770	1810	1730	1700	1710	1800	1780	1790	1820	1810	1820
19	1870	1600	1760	1710	1690	1700	1790	1780	1780	1820	1800	1810
20	1740	1670	1720	1700	1680	1690	1790	1780	1780	1810	1770	1790
21	1670	1610	1630	1690	1680	1690	1790	1770	1780	1800	1780	1790
22	1610	1540	1570	1690	1670	1680	1770	1740	1760	1810	1800	1800
23	1570	1540	1550	1740	1690	1720	1750	1740	1740	1810	1800	1800
24	1620	1540	1590	1760	1740	1750	1760	1740	1750	1810	1800	1800
25	1630	1610	1620	1770	1750	1760	1760	1740	1750	1810	1800	1810
26	1660	1630	1640	1790	1760	1780	1770	1750	1760	1810	1800	1800
27	1680	1650	1670	1780	1770	1780	1770	1750	1760	1810	1790	1800
28	1700	1680	1690	1790	1780	1780	1760	1750	1750	1810	1800	1800
29	---	---	---	1800	1780	1790	1760	1740	1750	1820	1800	1810
30	---	---	---	1790	1780	1790	1760	1740	1750	1810	1800	1800
31	---	---	---	1800	1780	1790	---	---	---	1820	1800	1810
MONTH	2040	1400	1730	1830	1620	1760	1820	1740	1780	1820	1750	1800

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	1820	1800	1810	1880	1870	1880	1800	1780	1790	1920	1910	1920
2	1810	1800	1810	1880	1840	1870	1800	1790	1800	1920	1910	1920
3	1820	1800	1810	1890	1870	1880	1820	1800	1810	1920	1920	1920
4	1820	1810	1810	1890	1880	1880	1820	1810	1810	1920	1910	1920
5	1830	1820	1820	1890	1880	1880	1830	1820	1820	1920	1910	1910
6	1830	1820	1830	1900	1880	1890	1840	1830	1830	1920	1910	1920
7	1830	1820	1820	1900	1890	1890	1850	1810	1840	1920	1910	1920
8	1830	1800	1820	1900	1880	1900	1850	1840	1850	1920	1910	1920
9	1830	1820	1830	1900	1350	1730	1860	1850	1860	1930	1920	1920
10	1830	1820	1830	1880	1770	1840	1870	1850	1860	1930	1920	1930
11	1850	1830	1840	1880	1800	1850	1870	1830	1860	1940	1930	1930
12	1850	1830	1840	1860	1800	1830	1880	1860	1870	1940	1920	1930
13	1850	1840	1840	1870	1830	1860	1890	1870	1880	1940	1920	1930
14	1850	1840	1840	1840	1830	1840	1890	1880	1890	1930	1920	1920
15	1860	1840	1850	1850	1840	1840	1890	1880	1890	1930	1920	1930
16	1860	1800	1850	1870	1790	1860	1890	1880	1880	1940	1920	1930
17	1860	1830	1850	1860	1840	1850	1890	1870	1880	1880	1880	1880
18	1860	1850	1860	1880	1860	1870	1890	1880	1880	1890	1860	1880
19	1860	1850	1860	1870	1180	1740	1890	1880	1880	1890	1880	1890
20	1870	1860	1860	1830	1650	1760	1890	1880	1890	1890	1880	1890
21	1870	1860	1860	1830	1750	1800	1900	1890	1890	1890	1880	1880
22	1870	1860	1860	---	---	---	1910	1890	1900	1890	1880	1880
23	1870	1860	1870	---	---	---	1910	1900	1910	1890	1860	1880
24	1870	1840	1870	---	---	---	1910	1900	1910	1890	1700	1860
25	1870	1860	1870	---	---	---	1910	1900	1910	1880	1800	1870
26	1870	1860	1870	---	---	---	1910	1890	1900	1890	1870	1880
27	1880	1860	1870	---	---	---	1910	1890	1900	1880	1870	1880
28	1880	1860	1870	---	---	---	1910	1900	1900	1880	1870	1880
29	1890	1870	1880	---	---	---	1910	1900	1900	1890	1870	1880
30	1880	1870	1880	1770	1770	1770	1920	1900	1910	1890	1850	1880
31	---	---	---	1790	1770	1780	1920	1910	1910	---	---	---
MONTH	1890	1800	1850	1900	1180	1840	1920	1780	1870	1940	1700	1900

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	1880	1820	1860	1850	1840	1840	1270	1250	1260	1250	1240	1240
2	1880	1840	1860	1860	1850	1850	1260	1240	1250	1250	1240	1250
3	1880	1730	1860	1860	1840	1850	1250	1240	1240	1240	1230	1240
4	1750	1330	1630	1830	1800	1810	1250	1240	1250	1250	1240	1240
5	1840	1740	1800	1810	1740	1770	1260	1240	1250	1270	1250	1250
6	1850	1840	1850	1800	1740	1770	1260	1240	1250	1720	1250	1450
7	1850	1840	1840	1800	1790	1800	1280	1240	1260	1730	1710	1720
8	1850	1780	1840	1800	1700	1740	1280	1270	1270	1730	1730	1730
9	1850	1780	1830	1760	1460	1620	1270	1140	1200	1740	1720	1730
10	1830	1800	1830	1790	1760	1780	1250	1190	1210	1740	1700	1710
11	1830	1800	1810	1770	1670	1720	1250	1190	1230	1710	1680	1690
12	1830	1800	1830	1740	1710	1730	1240	1190	1220	1720	1680	1700
13	1830	1770	1810	1720	1690	1710	1230	1210	1210	1730	1720	1720
14	1830	1770	1790	1690	1680	1680	1220	1200	1210	1730	1710	1720
15	1840	1830	1830	1690	1640	1680	1220	1210	1210	1720	1700	1710
16	1840	1830	1830	1660	1640	1650	1220	1210	1220	1720	1700	1710
17	1830	1780	1800	1650	1630	1640	1230	1210	1220	1730	1710	1720
18	1830	1820	1830	1650	1590	1610	1230	1210	1220	1740	1720	1730
19	1840	1820	1830	1640	1620	1630	1230	1220	1230	1730	1450	1640
20	1850	1830	1840	1640	1580	1620	1230	1220	1230	1680	1600	1660
21	1850	1840	1840	1670	1590	1630	1250	1230	1240	1680	1660	1670
22	1840	1830	1830	1670	1640	1670	1250	1230	1240	1660	1650	1650
23	1840	1830	1830	1700	1670	1680	1290	1260	1280	1650	1620	1640
24	1840	1830	1840	1700	1260	1470	1290	1200	1260	1630	1600	1610
25	1840	1830	1840	1300	1270	1280	1280	1210	1250	1610	1590	1600
26	1840	1820	1830	1290	1190	1240	1280	1270	1270	1600	1590	1600
27	1840	1830	1840	1290	1240	1270	1280	1270	1270	1600	1510	1540
28	1840	1830	1840	1290	1280	1280	1270	1240	1260	1560	1530	1540
29	1840	1830	1840	1290	1260	1280	1250	1240	1250	1570	1540	1560
30	1840	1830	1840	1270	1240	1260	1250	1240	1250	1570	1540	1550
31	1850	1840	1840	---	---	---	1260	1250	1250	1580	1550	1570
MONTH	1880	1330	1830	1860	1190	1620	1290	1140	1240	1740	1230	1580

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25 DEG. C, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	1580	1570	1570	1700	1690	1700	1680	1650	1670	1580	1560	1570
2	1570	1500	1540	1700	1680	1690	1680	1660	1670	1570	1550	1560
3	1630	1520	1560	1690	1650	1670	1690	1670	1680	1580	1550	1560
4	1660	1630	1650	---	---	---	1680	1580	1630	1580	1550	1560
5	1670	1650	1660	---	---	---	1650	1600	1630	1610	1580	1590
6	1660	1650	1660	---	---	---	1610	1530	1560	1610	1590	1600
7	1670	1650	1660	---	---	---	1580	1540	1560	1620	1600	1610
8	1650	1640	1650	---	---	---	1600	1580	1590	1620	1610	1610
9	1640	1630	1640	---	---	---	1590	1570	1580	1620	1600	1610
10	1630	1610	1620	---	---	---	1570	1540	1560	1620	1610	1610
11	1630	1610	1620	---	---	---	1550	1520	1530	1620	1600	1620
12	1630	1610	1620	---	---	---	1520	1480	1500	---	---	---
13	1640	1620	1630	1700	1680	1700	1490	1470	1480	---	---	---
14	1640	1630	1640	1700	1690	1700	1490	1470	1480	---	---	---
15	1650	1630	1640	1710	1700	1700	1500	1440	1470	---	---	---
16	1640	1630	1630	1710	1700	1710	1520	1470	1500	---	---	---
17	1670	1630	1650	1710	1700	1700	1540	1510	1520	---	---	---
18	1660	1640	1650	1710	1700	1710	1540	1530	1530	---	---	---
19	1660	1630	1650	1710	1700	1710	1540	1520	1530	---	---	---
20	1650	1630	1640	1720	1710	1710	1530	1520	1530	---	---	---
21	1650	1640	1650	1720	1710	1710	1550	1520	1540	---	---	---
22	1680	1650	1660	---	---	---	1570	1540	1560	---	---	---
23	1680	1670	1680	---	---	---	1580	1560	1570	---	---	---
24	1690	1670	1680	---	---	---	1570	1420	1500	---	---	---
25	1680	1670	1670	---	---	---	1570	1530	1560	---	---	---
26	1690	1670	1680	---	---	---	1590	1570	1580	---	---	---
27	1690	1670	1680	1720	1710	1710	1590	1580	1590	---	---	---
28	1700	1690	1690	1720	1710	1710	1590	1570	1580	---	---	---
29	---	---	---	1720	1710	1720	1580	1560	1570	---	---	---
30	---	---	---	1720	1710	1710	1580	1570	1570	---	---	---
31	---	---	---	1710	1610	1650	---	---	---	---	---	---
MONTH	1700	1500	1640	1720	1610	1700	1690	1420	1560	1620	1550	1590

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
2				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
3				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
4				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
5				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
6				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
7				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
8				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
9				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
10				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
11				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
12				---	---	---	3.00	3.00	3.00	3.20	3.20	3.20
13				---	---	---	3.10	3.00	3.00	3.20	3.20	3.20
14				---	---	---	3.10	3.10	3.10	3.20	3.20	3.20
15				---	---	---	3.10	3.10	3.10	3.30	2.90	3.20
16				---	---	---	3.10	3.10	3.10	3.20	3.20	3.20
17				---	---	---	3.10	3.10	3.10	3.20	3.20	3.20
18				---	---	---	3.10	3.10	3.10	3.20	3.20	3.20
19				---	---	---	---	---	---	3.20	3.20	3.20
20				---	---	---	3.10	3.10	3.10	3.30	3.20	3.20
21				---	---	---	3.10	3.10	3.10	3.30	3.20	3.30
22				---	---	---	3.10	3.10	3.10	3.30	3.20	3.30
23				---	---	---	3.10	3.10	3.10	3.30	3.30	3.30
24				---	---	---	3.20	3.10	3.10	3.30	3.30	3.30
25				---	---	---	3.20	3.10	3.20	3.30	3.30	3.30
26				3.10	2.90	3.00	3.20	3.20	3.20	3.30	3.30	3.30
27				3.00	2.90	2.90	3.20	3.20	3.20	3.30	3.30	3.30
28				3.00	3.00	3.00	3.20	3.20	3.20	3.30	3.30	3.30
29				3.00	3.00	3.00	3.20	3.20	3.20	3.30	3.30	3.30
30				3.00	3.00	3.00	3.20	3.20	3.20	3.30	3.30	3.30
31				---	---	---	3.20	3.20	3.20	3.30	3.30	3.30
MONTH				3.10	2.90	2.98	3.20	3.00	3.08	3.30	2.90	3.24

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	3.30	3.20	3.20	2.70	2.70	2.70	2.90	2.80	2.80	2.90	2.90	2.90
2	3.20	3.20	3.20	2.70	2.70	2.70	2.90	2.80	2.80	2.90	2.90	2.90
3	3.20	3.20	3.20	2.70	2.70	2.70	2.90	2.80	2.80	2.90	2.90	2.90
4	3.30	3.20	3.30	2.70	2.70	2.70	2.90	2.80	2.80	2.90	2.90	2.90
5	3.30	3.30	3.30	2.70	2.70	2.70	2.90	2.80	2.80	2.90	2.90	2.90
6	3.30	3.30	3.30	2.90	2.50	2.80	2.90	2.80	2.80	2.90	2.90	2.90
7	3.40	3.30	3.30	2.90	2.90	2.90	2.90	2.80	2.80	2.90	2.90	2.90
8	3.40	3.30	3.30	2.90	2.90	2.90	2.90	2.80	2.80	2.90	2.90	2.90
9	3.30	3.30	3.30	2.90	2.90	2.90	2.90	2.80	2.90	2.90	2.90	2.90
10	3.30	3.30	3.30	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
11	3.30	3.30	3.30	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
12	3.30	3.30	3.30	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
13	3.30	3.30	3.30	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
14	3.30	3.30	3.30	3.00	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
15	3.30	3.30	3.30	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
16	3.30	3.30	3.30	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
17	3.30	3.30	3.30	2.90	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
18	3.30	3.30	3.30	2.80	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
19	3.30	2.80	3.10	2.80	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
20	2.80	2.70	2.80	2.90	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
21	2.80	2.80	2.80	2.90	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
22	2.80	2.80	2.80	2.90	2.80	2.90	2.90	2.90	2.90	2.90	2.90	2.90
23	2.80	2.80	2.80	2.90	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
24	2.80	2.80	2.80	2.80	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
25	2.80	2.70	2.80	2.80	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
26	2.80	2.70	2.70	2.80	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
27	2.70	2.70	2.70	2.80	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
28	2.70	2.70	2.70	2.90	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
29	---	---	---	2.80	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
30	---	---	---	2.80	2.80	2.80	2.90	2.90	2.90	2.90	2.90	2.90
31	---	---	---	2.80	2.80	2.80	---	---	---	2.90	2.90	2.90
MONTH	3.40	2.70	3.11	3.00	2.50	2.82	2.90	2.80	2.87	2.90	2.90	2.90

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	2.90	2.90	2.90	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
2	2.90	2.90	2.90	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
3	2.90	2.90	2.90	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
4	2.90	2.90	2.90	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
5	2.90	2.90	2.90	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
6	2.90	2.90	2.90	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
7	2.90	2.90	2.90	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
8	2.90	2.90	2.90	3.00	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
9	2.90	2.90	2.90	3.10	2.90	3.00	3.00	3.00	3.00	3.00	3.00	3.00
10	2.90	2.90	2.90	3.00	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
11	2.90	2.90	2.90	3.00	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
12	2.90	2.90	2.90	3.00	2.90	3.00	3.00	3.00	3.00	3.00	3.00	3.00
13	2.90	2.90	2.90	3.00	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00
14	2.90	2.90	2.90	3.00	2.90	3.00	3.00	3.00	3.00	3.00	3.00	3.00
15	2.90	2.90	2.90	3.00	2.90	3.00	3.00	3.00	3.00	3.00	3.00	3.00
16	2.90	2.90	2.90	3.00	2.90	3.00	3.00	3.00	3.00	3.00	3.00	3.00
17	2.90	2.90	2.90	3.00	2.90	3.00	3.00	3.00	3.00	2.92	2.91	2.91
18	2.90	2.90	2.90	3.00	2.90	3.00	3.00	3.00	3.00	2.92	2.91	2.92
19	2.90	2.90	2.90	3.10	2.90	3.00	3.00	3.00	3.00	2.92	2.91	2.91
20	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00	2.92	2.91	2.92
21	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00	2.93	2.91	2.92
22	2.90	2.90	2.90	---	---	---	3.00	3.00	3.00	2.93	2.92	2.92
23	2.90	2.90	2.90	---	---	---	3.00	3.00	3.00	2.93	2.92	2.92
24	2.90	2.90	2.90	---	---	---	3.00	3.00	3.00	2.96	2.92	2.93
25	2.90	2.90	2.90	---	---	---	3.00	3.00	3.00	2.94	2.92	2.93
26	2.90	2.90	2.90	---	---	---	3.00	3.00	3.00	2.93	2.92	2.92
27	2.90	2.90	2.90	---	---	---	3.00	3.00	3.00	2.93	2.92	2.93
28	2.90	2.90	2.90	---	---	---	3.00	3.00	3.00	2.93	2.92	2.93
29	2.90	2.90	2.90	---	---	---	3.00	3.00	3.00	2.93	2.92	2.93
30	2.90	2.90	2.90	3.00	3.00	3.00	3.00	3.00	3.00	2.93	2.92	2.93
31	---	---	---	3.00	3.00	3.00	3.00	3.00	3.00	---	---	---
MONTH	2.90	2.90	2.90	3.10	2.90	2.95	3.00	3.00	3.00	3.00	2.91	2.96

TABLE 19.--DAILY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	2.94	2.92	2.93	2.98	2.96	2.97	3.04	3.02	3.03	3.07	3.05	3.06
2	2.94	2.92	2.93	2.98	2.96	2.97	3.04	3.03	3.04	3.06	3.05	3.06
3	2.96	2.93	2.93	2.98	2.96	2.97	3.04	3.03	3.04	3.07	3.06	3.06
4	3.06	2.96	2.98	2.98	2.97	2.98	3.04	3.03	3.03	3.07	3.05	3.06
5	2.96	2.93	2.94	2.99	2.98	2.98	3.04	3.03	3.04	3.07	3.05	3.06
6	2.94	2.93	2.94	2.99	2.98	2.99	3.05	3.03	3.04	3.07	3.05	3.06
7	2.95	2.93	2.94	2.99	2.98	2.98	3.04	3.03	3.03	3.07	3.05	3.06
8	2.95	2.93	2.94	3.01	2.98	2.99	3.04	3.03	3.03	3.06	3.05	3.06
9	2.95	2.94	2.95	3.05	2.99	3.01	3.06	3.04	3.05	3.06	3.05	3.05
10	2.96	2.94	2.95	3.00	2.99	2.99	3.05	3.04	3.04	3.06	3.05	3.05
11	2.96	2.95	2.95	3.02	2.99	3.01	3.05	3.04	3.04	3.07	3.05	3.06
12	2.96	2.95	2.95	3.02	3.00	3.01	3.05	3.04	3.04	3.07	3.05	3.06
13	2.96	2.95	2.96	3.02	3.01	3.02	3.05	3.04	3.05	3.07	3.06	3.06
14	2.96	2.95	2.96	3.03	3.01	3.02	3.05	3.04	3.05	3.07	3.05	3.06
15	2.96	2.95	2.96	3.02	3.01	3.02	3.05	3.04	3.05	3.08	3.05	3.07
16	2.96	2.95	2.96	3.02	3.01	3.01	3.05	3.04	3.05	3.07	3.06	3.07
17	2.96	2.96	2.96	3.02	3.01	3.02	3.05	3.04	3.05	3.08	3.06	3.07
18	2.97	2.96	2.96	3.02	3.01	3.02	3.05	3.04	3.04	3.08	3.06	3.07
19	2.97	2.95	2.96	3.03	3.01	3.02	3.05	3.04	3.04	3.12	3.06	3.09
20	2.97	2.96	2.96	3.03	3.01	3.02	3.05	3.04	3.04	3.10	2.87	3.01
21	2.97	2.95	2.96	3.03	3.01	3.02	3.05	3.04	3.04	2.90	2.87	2.88
22	2.97	2.96	2.97	3.02	3.01	3.01	3.05	3.04	3.04	2.90	2.88	2.89
23	2.97	2.96	2.96	3.02	3.00	3.01	3.05	3.04	3.04	2.90	2.88	2.88
24	2.97	2.95	2.96	3.02	3.01	3.02	3.06	3.04	3.05	2.91	2.89	2.90
25	2.97	2.96	2.96	3.02	3.01	3.02	3.06	3.04	3.05	2.91	2.89	2.90
26	2.97	2.95	2.96	3.03	3.01	3.02	3.06	3.05	3.05	2.90	2.88	2.89
27	2.97	2.95	2.96	3.03	3.01	3.02	3.06	3.05	3.05	2.89	2.87	2.88
28	2.97	2.95	2.96	3.03	3.01	3.02	3.07	3.06	3.06	2.88	2.87	2.87
29	2.97	2.96	2.96	3.03	3.02	3.03	3.07	3.06	3.06	2.88	2.86	2.88
30	2.97	2.96	2.96	3.04	3.02	3.03	3.07	3.06	3.06	2.90	2.87	2.88
31	2.97	2.96	2.96	---	---	---	3.07	3.06	3.06	2.89	2.88	2.88
MONTH	3.06	2.92	2.95	3.05	2.96	3.01	3.07	3.02	3.04	3.12	2.86	3.00

PH (STANDARD UNITS), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	2.89	2.87	2.88	2.91	2.90	2.91	2.90	2.88	2.89	2.89	2.85	2.87
2	2.90	2.88	2.89	2.92	2.90	2.91	2.90	2.88	2.89	2.88	2.85	2.87
3	2.90	2.87	2.89	2.92	2.91	2.91	2.89	2.88	2.88	2.87	2.85	2.86
4	2.91	2.90	2.90	---	---	---	2.90	2.88	2.89	2.88	2.85	2.87
5	2.91	2.89	2.90	---	---	---	2.91	2.89	2.90	2.89	2.87	2.88
6	2.92	2.89	2.90	---	---	---	2.92	2.90	2.91	2.88	2.87	2.87
7	2.92	2.91	2.91	---	---	---	2.92	2.91	2.92	2.88	2.86	2.87
8	2.91	2.91	2.91	---	---	---	2.92	2.90	2.91	2.88	2.86	2.87
9	2.92	2.91	2.91	---	---	---	2.93	2.91	2.92	2.88	2.86	2.87
10	2.92	2.91	2.92	---	---	---	2.93	2.91	2.92	2.88	2.86	2.87
11	2.91	2.90	2.91	---	---	---	2.93	2.92	2.93	2.89	2.87	2.88
12	2.92	2.90	2.91	---	---	---	2.94	2.92	2.93	---	---	---
13	2.92	2.90	2.91	2.89	2.88	2.89	2.94	2.92	2.93	---	---	---
14	2.92	2.90	2.91	2.89	2.88	2.88	2.94	2.88	2.90	---	---	---
15	2.92	2.90	2.91	2.89	2.87	2.87	2.89	2.85	2.87	---	---	---
16	2.92	2.90	2.91	2.88	2.86	2.87	2.86	2.84	2.85	---	---	---
17	2.91	2.90	2.91	2.88	2.87	2.87	2.86	2.85	2.85	---	---	---
18	2.91	2.90	2.91	2.88	2.87	2.87	2.87	2.85	2.85	---	---	---
19	2.92	2.90	2.91	2.88	2.86	2.87	2.88	2.85	2.86	---	---	---
20	2.91	2.89	2.90	2.87	2.87	2.87	2.89	2.85	2.88	---	---	---
21	2.91	2.89	2.90	2.88	2.87	2.87	2.89	2.87	2.88	---	---	---
22	2.90	2.89	2.90	---	---	---	2.89	2.87	2.88	---	---	---
23	2.91	2.89	2.90	---	---	---	2.88	2.87	2.87	---	---	---
24	2.90	2.89	2.90	---	---	---	2.89	2.87	2.88	---	---	---
25	2.91	2.90	2.90	---	---	---	2.88	2.86	2.87	---	---	---
26	2.91	2.89	2.90	---	---	---	2.88	2.86	2.87	---	---	---
27	2.91	2.90	2.91	2.89	2.86	2.88	2.87	2.85	2.86	---	---	---
28	2.91	2.90	2.91	2.89	2.87	2.88	2.86	2.85	2.86	---	---	---
29	---	---	---	2.89	2.87	2.88	2.89	2.85	2.87	---	---	---
30	---	---	---	2.89	2.87	2.88	2.87	2.86	2.86	---	---	---
31	---	---	---	2.89	2.87	2.88	---	---	---	---	---	---
MONTH	2.92	2.87	2.90	2.92	2.86	2.88	2.94	2.84	2.89	2.89	2.85	2.87

TABLE 20.--MONTHLY LABORATORY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)
(Lat 39°59'20", Long 79°27'12")

SITE 24

WATER QUALITY DATA, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)
AUG 12...	1600	0.68	1800	2.60	12.0	8.8	442	130	47	2.2	1.5

DATE	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)
AUG 12...	930	4.0	0.3	1690	<2	0.320	22000	12	<250	950	<50

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)
AUG 12...	200	35	71000	71000	<4	3500	250	70	880	<6	<2.0

TABLE 20.--MONTHLY LABORATORY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

SITE 24

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3
OCT 23...	1600	0.58	2000	2.40	13.0	21	418	80	40	2.2	1.8	0
NOV 25...	1415	0.57	1990	2.80	11.0	8.4	394	--	--	--	--	--
DEC 23...	1020	0.57	1990	3.10	11.0	8.8	400	--	--	--	--	0
JAN 15...	1410	0.52	1820	3.20	11.0	7.8	460	--	--	--	--	0
FEB 19...	1435	1.1	1600	2.80	10.5	6.2	302	--	--	--	--	0
MAR 17...	1100	0.82	1740	2.80	11.0	7.4	364	--	--	--	--	0
APR 29...	1130	0.59	1780	2.90	12.0	6.8	326	--	--	--	--	0
JUN 04...	1400	0.45	1810	2.90	12.0	7.8	320	--	--	--	--	0
JUL 22...	1340	0.61	1900	3.00	13.0	18	332	--	--	--	--	0
AUG 20...	1300	0.48	1900	2.80	12.0	7.1	390	--	--	--	--	0
SEP 30...	1100	0.46	1880	2.78	12.0	7.7	376	--	--	--	--	0

DATE	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, DIS-SOLVED (UG/L AS CU)
OCT 23...	0	860	--	1770	<2	--	21000	33	<0	<50	230	27
NOV 25...	--	860	--	1620	6	--	24000	--	--	--	--	--
DEC 23...	0	770	--	1380	2	--	24000	--	--	--	--	--
JAN 15...	0	690	--	1780	8	28000	27000	--	--	--	--	--
FEB 19...	0	680	4.0	1060	<2	18000	18000	--	--	--	--	--
MAR 17...	0	730	--	1220	2	22000	22000	--	--	--	--	--
APR 29...	0	600	3.0	1240	16	29000	28000	--	--	--	--	--
JUN 04...	0	770	--	1690	<2	22000	22000	--	--	--	--	--
JUL 22...	0	790	--	1540	16	22000	22000	--	--	--	--	--
AUG 20...	0	860	--	1370	2	26000	24000	--	--	--	--	--
SEP 30...	0	420	--	1390	<2	23000	23000	--	--	--	--	--

DATE	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY DIS-SOLVED (UG/L AS HG)
OCT 23...	--	54000	<45	--	3300	310	720	--	930	<6	<1.0
NOV 25...	--	47000	--	--	2700	--	--	--	790	--	--
DEC 23...	--	52000	--	--	2700	--	--	--	780	--	--
JAN 15...	54000	52000	--	2800	2700	--	--	800	800	--	--
FEB 19...	39000	38000	--	2400	2300	--	--	570	570	--	--
MAR 17...	46000	45000	--	2600	2600	--	--	650	650	--	--
APR 29...	37000	37000	--	2800	2700	--	--	700	680	--	--
JUN 04...	38000	38000	--	2900	2900	--	--	700	700	--	--
JUL 22...	43000	41000	--	2900	2900	--	--	730	720	--	--
AUG 20...	47000	43000	--	3200	3000	--	--	830	790	--	--
SEP 30...	42000	42000	--	3100	3100	--	--	840	840	--	--

TABLE 20.--MONTHLY LABORATORY CHEMICAL DATA FOR MINE DISCHARGE TO CHARLES RUN NEAR NORMALVILLE (03082258)--Continued
(Lat 39°59'20", Long 79°27'12")

SITE 24

WATER QUALITY DATA, WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM DIS-SOLVED (MG/L AS NA
FEB 26...	1415	--	--	--	--	320	--	120	--	38	--	2.7
MAR 26...	1615	0.47	1700	2.80	11.5	294	--	--	--	--	--	-
APR 14...	0935	0.69	1490	2.88	11.0	260	--	--	--	--	--	-
MAY 18...	0900	0.48	1630	2.87	11.5	282	--	--	--	--	--	-
JUN 29...	1200	0.60	1650	2.90	13.0	380	130	130	41	41	2.6	2.6

DATE	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON TOTAL RECOV ERABL (UG/L AS B)
FEB 26...	--	3.2	--	680	--	1100	14	--	19000	--	12	<25
MAR 26...	--	--	0	550	5.0	1200	10	21000	21000	--	--	-
APR 14...	--	--	--	520	2.0	1080	6	14000	16000	--	--	-
MAY 18...	--	--	--	590	3.0	1110	8	18000	18000	--	--	-
JUN 29...	3.4	3.3	--	600	--	1510	8	20000	20000	17	16	<25

DATE	BORON, DIS-SOLVED (UG/L AS B)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV ERABL (UG/L AS MN
FEB 26...	0	--	<50	--	120	--	<10	--	36000	--	<50	-
MAR 26...	--	--	--	--	--	--	--	40000	37000	--	--	300
APR 14...	--	--	--	--	--	--	--	29000	32000	--	--	220
MAY 18...	--	--	--	--	--	--	--	37000	35000	--	--	250
JUN 29...	0	<50	<50	120	110	<10	<10	40000	40000	<50	<50	270

DATE	MANGA-NESE, DIS-SOLVED (UG/L AS MN)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
FEB 26...	2600	--	230	--	880	--	510	--	8	--	<1.0
MAR 26...	2700	--	--	--	--	690	610	--	--	--	--
APR 14...	2400	--	--	--	--	600	550	--	--	--	--
MAY 18...	2500	--	--	--	--	530	530	--	--	--	--
JUN 29...	2700	230	230	950	950	580	580	<6	<6	<1.0	<1.0

TABLE 21.--DAILY PRECIPITATION DATA FOR JONES MILLS (400514079192201)

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.39	.00	.00	---	.00	.00	.00	.01	.00	.02	.00	.00
2	.03	.26	.00	---	.04	.00	.00	.00	.00	.40	.00	.00
3	.00	.34	.00	---	.00	.00	.00	.00	.00	.19	.00	.00
4	.00	.35	---	---	1.33	.05	.01	.00	.00	.00	.00	.00
5	.00	.43	---	---	.71	.02	.30	.00	.19	.00	.00	.13
6	.01	.11	---	.00	.24	.13	.56	.00	.06	.00	.14	.00
7	.00	.11	---	.00	.29	.04	.05	.26	.00	.00	.17	.00
8	.01	.00	---	.00	.00	.03	.00	.00	.27	.57	.05	.00
9	.00	.01	.00	.00	.00	.00	.06	.00	.00	2.45	.00	.00
10	.00	.27	.11	.00	.01	.35	.15	.00	.00	.01	.52	.00
11	.01	.10	.28	.00	.04	.07	.04	.00	.22	.30	.53	.00
12	.00	.18	.23	.00	.00	.03	.00	.00	.42	.11	.00	.00
13	.11	.16	.14	.00	.00	.32	.02	.40	.07	.56	.00	.00
14	.15	.61	.01	.00	.03	1.20	.00	.02	.00	.00	.00	.00
15	.09	.00	.00	.00	.00	.12	.36	.00	.00	.00	.00	.00
16	.00	.00	.00	.00	.00	.00	.33	.00	.23	.03	.16	.03
17	.00	.00	.00	.00	.40	.00	.15	.00	.39	.02	.03	.00
18	.00	.00	---	.00	.27	.00	.00	.00	.00	.00	.00	.69
19	.10	.02	---	.29	.65	.11	.00	.00	.00	2.21	.00	.09
20	.34	.01	---	1.52	.00	.00	.06	.11	.00	.64	.00	.00
21	.29	.00	---	.02	.52	.00	.44	.08	.00	.00	.04	.00
22	.13	.15	---	.00	.00	.00	.10	.00	.00	.00	.00	.00
23	.00	.00	---	.00	.00	.00	.00	.06	.00	.04	.99	.76
24	.00	.00	---	.00	.00	.00	.00	.01	.00	.00	.00	1.22
25	.00	.09	---	.00	.00	.00	.01	.00	.00	.00	.00	.86
26	.01	.98	---	.03	.00	.00	.00	.00	.00	.04	.00	.00
27	.00	.04	---	.00	.00	.21	.00	.57	.00	.00	.54	.12
28	.00	.17	---	.00	.00	.00	.00	.00	.47	.00	.04	.00
29	.00	.00	---	.02	---	.00	.01	.00	.10	.07	.00	.00
30	.02	.00	---	.00	---	.00	.00	.15	.01	.00	.50	.78
31	.05	---	---	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	1.74	4.39	---	---	4.53	2.68	2.65	1.67	2.43	7.66	3.71	4.68

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.21	.00	.00	.00	.03	.21	.00	.00	.66	1.09	.00	---
2	.00	.00	.48	.23	.07	.07	.06	.43	.00	.55	1.82	---
3	1.22	.00	.14	.01	.00	.01	.16	.51	.08	.00	.05	---
4	.95	.00	.00	.00	.00	.00	1.15	.03	---	.00	.00	---
5	.03	.00	.00	.00	.00	.00	.13	.00	---	.00	.52	---
6	.02	.00	.00	.00	.00	.00	.28	.00	---	.00	.00	---
7	.00	.00	.06	.00	.00	.00	.1	.00	---	.14	.01	---
8	.00	.00	.19	.00	.00	.00	.00	.00	---	.00	.00	---
9	.00	.00	.77	.00	.00	.00	.00	.00	---	.01	.06	---
10	.00	.00	.03	.13	.00	.00	.00	.00	---	.00	.01	---
11	.00	.00	.00	.00	.00	.00	.02	.00	---	.00	.00	---
12	.00	.00	.00	.00	.04	.01	.49	.00	---	.00	.00	---
13	.38	.00	.00	.00	.00	.00	.00	.00	---	.00	.00	---
14	.45	.01	.00	.00	.00	.12	.04	.00	---	.74	.00	---
15	.00	.00	.00	.21	.00	.00	.18	.09	---	.00	.00	---
16	.00	.00	.00	.00	.00	.00	.07	.00	---	.00	.00	---
17	.12	.00	.01	.00	.00	.00	.19	.00	.00	.00	.07	---
18	.00	.38	.25	.00	.00	.00	.00	1.04	.00	.00	.00	---
19	.00	.00	.00	.62	.00	.00	.00	.32	.00	.00	.00	---
20	.00	.34	.00	.00	.00	.00	.00	.00	1.19	.00	.00	---
21	.00	.01	.00	.00	.00	.00	.00	.00	.34	.00	.00	---
22	.00	.00	.00	.24	.02	.00	.00	.00	.04	.00	2.01	---
23	.00	.33	.00	.00	.00	.00	.32	.00	.55	.00	.00	---
24	.00	.26	.46	.00	.32	.00	1.10	.00	.01	.00	.00	---
25	.01	.00	.02	.00	.00	.28	.00	.00	.05	.00	---	---
26	.31	.77	.00	.00	.00	.00	.00	1.04	.21	.00	---	---
27	.00	.00	.00	.00	.00	.00	.42	.09	.05	.00	---	---
28	.00	.00	.00	.00	.21	.06	.02	.18	.00	.00	---	---
29	.00	.00	.00	.00	---	.00	.1	.01	.05	.00	---	---
30	.00	.00	.00	.11	---	.50	.00	.1	.25	.06	---	---
31	.00	---	.00	.05	---	1.08	---	.35	---	.08	---	---
TOTAL	4.70	2.10	2.41	1.60	.69	2.34	4.83	4.19	---	2.67	---	---

TABLE 22.--DAILY PRECIPITATION DATA MILLERSTOWN (400133079225201)

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	0.04	0.00	0.00	0.00	0.00	---	0.01	0.19	0.00	0.00
2	---	---	.02	.00	.07	.00	.00	---	.00	.25	.00	.00
3	---	---	.00	.02	.00	.00	.01	---	.00	.14	.00	.00
4	---	---	.00	.00	1.27	.00	.05	---	.00	.00	.00	.00
5	---	---	.25	.04	.87	.00	.25	.00	.09	.00	.00	.05
6	---	.00	.03	.00	.34	.11	.32	.25	.31	.00	.13	.00
7	---	.12	.00	.00	.19	.03	.00	.01	.00	.50	.17	.01
8	---	.00	.01	.00	.00	.00	.00	.00	.21	.31	.03	.00
9	---	.00	.00	.00	.00	.00	.03	.00	.00	2.31	.02	.00
10	---	.28	.10	.00	.01	.33	.14	.00	.00	.00	.31	.00
11	---	.23	.36	.00	.20	.04	.04	.00	.18	.39	.26	.00
12	---	.62	.06	.00	.00	.07	.00	.07	.35	.13	.16	.21
13	---	.16	.27	.00	.00	.33	.01	.01	.00	.50	.00	.00
14	---	.63	.00	.00	.05	.90	.02	.03	.00	.00	.00	.00
15	---	.07	.00	.00	.00	.05	.28	.49	.05	.00	.00	.01
16	---	1.31	.01	.00	.00	.00	.32	.01	.47	.23	.08	.08
17	---	.00	.01	.00	.45	.00	.16	.03	.01	.06	.03	.00
18	---	.00	.00	.00	.24	.01	.00	.41	.00	.00	.00	.50
19	---	.00	.00	.25	.50	.09	.00	.27	.00	1.77	.00	.20
20	---	.01	.02	1.15	.00	.00	.28	.04	.01	.37	.01	.02
21	---	.01	.00	.04	.42	.00	.15	.02	.00	.00	.05	.09
22	---	.44	.00	.00	.04	.00	---	.00	.00	.00	.00	.01
23	---	.00	.03	.00	.00	.00	---	.03	.22	.00	.82	.83
24	---	.00	.01	.00	.13	.00	---	.00	.41	.00	.00	1.32
25	---	.39	.00	.00	.00	.00	---	.00	.00	.00	.00	.66
26	---	1.83	.00	.04	.00	.00	---	.00	.00	.13	.00	.00
27	---	.55	.00	.03	.00	.15	---	.69	.68	.00	.41	.11
28	---	.93	.00	.00	.06	.00	---	.00	.11	.00	.05	.00
29	---	.00	.00	.01	---	.00	---	.00	.00	.20	.00	.00
30	---	.00	.00	.00	---	.00	---	.05	.08	.00	.00	.26
31	---	---	.00	.00	---	.00	---	.00	---	.00	.00	---
TOTAL	---	---	1.22	1.58	4.84	2.11	---	---	3.19	7.48	2.53	4.36

RAINFALL, ACCUMULATED (INCHES), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
SUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.98	.00	.00	.00	.03	.19	.00	.00	.42	.92	.00	.00
2	.00	.00	.51	.41	.07	.03	.05	.31	.00	.43	1.73	.00
3	.71	.01	.16	.11	.00	.00	.25	.38	.14	.00	.11	.00
4	.99	.52	.01	.00	.00	.00	1.01	.02	.00	.00	.00	.00
5	.08	.43	.01	.03	.00	.00	.17	.00	.00	.00	.74	.05
6	.00	.04	.01	.00	.00	.00	.22	.00	.00	.09	.00	.40
7	.00	.02	.05	.01	.00	.00	.08	.00	.00	.22	.00	.19
8	.00	.62	.27	.01	.08	.00	.00	.00	.09	.00	.00	.81
9	.00	.79	.84	.00	.00	.00	.00	.00	.58	.00	.00	.00
10	.00	.01	.10	.00	.00	.00	.00	.00	.00	.00	.04	.00
11	.00	.41	.00	.00	.00	.00	.01	.00	.00	.00	.01	.50
12	.00	.00	.00	.02	.35	.00	.46	.00	.55	.00	.00	.05
13	.46	.00	.00	.00	.00	.00	.00	.00	.28	.03	.00	.02
14	.44	.00	.00	.19	.00	.09	.00	.00	.01	.34	.00	.00
15	.00	.00	.00	.38	.00	.03	.33	.16	.00	.00	.00	.00
16	.00	.00	.05	.10	.00	.00	.02	.00	.00	.02	.00	.00
17	.04	.00	.04	.00	.00	.00	.17	.00	.00	.00	.02	.62
18	.00	.29	.35	.04	.00	.00	.00	.90	.00	.00	.00	.12
19	.00	.02	.02	.85	---	.00	.00	.33	.00	.00	.00	.14
20	.00	.48	.01	.05	---	.00	.00	.00	.76	.00	.00	.08
21	.00	.02	.00	.01	---	.00	.00	.00	.1	.00	.00	.15
22	.00	3.72	.00	.24	---	.00	.00	.00	.26	.00	1.41	.33
23	.00	---	.00	.00	---	.00	.26	.00	.08	.00	.00	.00
24	.00	.19	.97	.00	---	.00	.83	.00	.00	.00	.00	.07
25	.04	.00	.07	.00	---	.36	.00	.00	.11	.00	.00	.00
26	.35	.65	.00	.00	.00	.00	.00	.67	.31	.28	.29	.00
27	.18	.02	.01	.00	.00	.00	.26	.51	.05	.00	.02	.00
28	.07	.01	.00	.00	.18	.03	.11	.00	.00	.00	1.95	---
29	.00	.01	.02	.12	---	.00	.06	.00	.45	.00	.01	---
30	.00	.01	.08	.18	---	.27	.01	.00	.49	.08	.00	---
31	.00	---	---	.00	---	.85	---	.27	---	.02	.16	---
TOTAL	4.34	---	---	2.75	---	1.85	4.30	3.55	4.68	2.43	6.49	---

TABLE 23.--DAILY GROUND-WATER LEVELS FOR WELL STATION NUMBER 400112079254201 AT NORMALVILLE

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	8.92	9.22	9.05	10.08
2	---	---	---	---	---	---	---	---	9.00	9.08	9.10	10.17
3	---	---	---	---	---	---	---	---	9.06	9.02	9.16	10.24
4	---	---	---	---	---	---	---	---	9.09	9.06	9.24	10.30
5	---	---	---	---	---	---	---	---	9.12	9.13	9.31	10.38
6	---	---	---	---	---	---	---	---	9.16	9.24	9.39	10.47
7	---	---	---	---	---	---	---	---	9.18	9.35	9.41	10.55
8	---	---	---	---	---	---	---	---	9.19	9.40	9.48	10.64
9	---	---	---	---	---	---	---	---	9.21	8.33	9.55	10.72
10	---	---	---	---	---	---	---	---	9.23	7.89	9.60	10.78
11	---	---	---	---	---	---	---	---	9.25	8.06	9.33	10.84
12	---	---	---	---	---	---	---	---	9.17	8.09	9.30	10.91
13	---	---	---	---	---	---	---	---	9.16	8.09	9.36	11.04
14	---	---	---	---	---	---	---	---	9.23	8.01	9.41	11.13
15	---	---	---	---	---	---	---	---	9.29	8.13	9.50	11.19
16	---	---	---	---	---	---	---	---	9.30	8.24	9.59	11.34
17	---	---	---	---	---	---	---	8.84	9.10	8.30	9.69	11.49
18	---	---	---	---	---	---	---	8.91	9.07	8.43	9.75	11.47
19	---	---	---	---	---	---	---	8.97	9.13	8.38	9.83	11.03
20	---	---	---	---	---	---	---	8.86	9.21	7.63	9.91	10.95
21	---	---	---	---	---	---	---	8.81	9.33	6.75	9.97	10.96
22	---	---	---	---	---	---	---	8.82	9.41	7.29	10.03	10.99
23	---	---	---	---	---	---	---	8.84	9.48	7.86	10.02	10.93
24	---	---	---	---	---	---	---	8.89	9.50	8.17	9.77	9.80
25	---	---	---	---	---	---	---	8.94	9.55	8.37	9.73	8.40
26	---	---	---	---	---	---	---	8.98	9.61	8.54	9.78	8.33
27	---	---	---	---	---	---	---	8.96	9.63	8.68	9.74	8.46
28	---	---	---	---	---	---	---	8.78	9.20	8.78	9.68	8.61
29	---	---	---	---	---	---	---	8.79	9.12	8.87	9.77	8.76
30	---	---	---	---	---	---	---	8.82	9.17	8.95	9.88	8.88
31	---	---	---	---	---	---	---	8.86	---	9.00	9.98	---

DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET), WATER YEAR OCTOBER 1986 TO SEPTEMBER 1987
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8.62	8.93	8.43	8.73	8.74	8.86	8.55	8.55	8.33	8.77	10.55	8.61
2	8.18	8.93	8.47	8.80	8.53	8.75	8.40	8.60	8.43	8.19	10.61	8.75
3	8.25	8.95	8.43	8.89	8.18	8.66	8.28	8.60	8.53	8.11	9.08	8.89
4	7.63	8.80	8.40	8.94	8.18	8.59	8.08	8.54	8.61	8.28	8.86	9.01
5	7.35	8.49	8.43	8.97	8.23	8.56	7.77	8.55	8.70	8.45	8.71	9.11
6	7.81	8.24	8.47	8.99	8.28	8.59	7.54	8.53	8.80	8.60	8.37	9.05
7	8.07	8.19	8.54	9.00	8.36	8.64	7.26	8.52	8.89	8.72	8.55	9.03
8	8.24	8.12	8.62	8.97	8.44	8.68	7.51	8.57	8.96	8.85	8.71	8.54
9	8.39	7.25	8.32	8.90	8.57	8.74	7.81	8.64	8.93	8.95	8.83	8.15
10	8.56	7.23	7.91	8.84	8.65	8.81	8.04	8.70	8.94	9.03	8.96	8.27
11	8.70	7.63	7.92	8.81	8.72	8.85	8.20	8.76	9.01	9.12	9.07	8.38
12	8.80	7.84	8.07	8.78	8.69	8.89	8.29	8.82	8.95	9.22	9.18	8.41
13	8.81	8.03	8.23	8.76	8.60	8.92	8.33	8.88	8.89	9.30	9.31	---
14	8.69	8.17	8.37	8.73	8.53	8.95	8.40	8.91	8.90	9.27	9.46	---
15	8.67	8.28	8.53	8.59	8.53	8.99	8.36	8.94	8.95	9.25	9.63	---
16	8.69	8.41	8.64	8.26	8.56	9.02	8.23	8.98	9.02	9.34	9.80	---
17	8.74	8.55	8.74	8.22	8.62	9.04	8.22	9.01	9.07	9.43	9.98	---
18	8.82	8.61	8.74	8.26	8.69	9.05	8.28	8.95	9.12	9.51	10.19	---
19	8.88	8.66	8.69	8.19	8.77	9.06	8.36	8.44	9.18	9.59	10.38	---
20	8.93	8.64	8.72	7.72	8.82	9.09	8.44	8.35	9.15	9.69	10.59	---
21	8.98	8.39	8.74	7.83	8.85	9.12	8.50	8.38	8.95	9.80	10.74	---
22	9.04	8.30	8.75	8.01	8.89	9.14	8.57	8.43	8.97	9.88	10.24	---
23	9.09	8.30	8.77	8.20	8.91	9.17	8.63	8.52	9.00	9.98	9.51	---
24	9.12	8.30	8.69	8.37	8.94	9.19	8.33	8.61	9.03	10.09	9.53	---
25	9.14	8.31	8.21	8.51	8.96	9.17	8.11	8.70	9.05	10.20	9.62	---
26	9.04	8.21	8.16	8.61	8.98	9.15	8.12	8.78	9.09	10.29	9.67	---
27	9.01	8.06	8.22	8.71	8.99	9.16	8.19	8.25	9.13	10.39	9.67	---
28	8.96	8.08	8.31	8.79	8.99	9.18	8.28	8.05	9.22	10.49	8.92	---
29	8.93	8.18	8.42	8.85	---	9.19	8.37	8.14	9.28	10.58	8.10	---
30	8.94	8.30	8.54	8.84	---	9.15	8.48	8.26	9.19	10.65	8.27	---
31	8.94	---	8.66	8.80	---	8.83	---	8.26	---	10.49	8.45	---

TABLE 24.--GROUND-WATER QUALITY DATA FOR WELL STATION NUMBER (400112079254201)

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM)	PH (STANDARD UNITS)	TEMPERATURE WATER (DEG C)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM TOTAL RECOVERABLE (MG/L AS CA)	MAGNESIUM, TOTAL RECOVERABLE (MG/L AS MG)	SODIUM, TOTAL RECOVERABLE (MG/L AS NA)	SODIUM, DISSOLVED (MG/L AS NA)	POTASSIUM, TOTAL RECOVERABLE (MG/L AS K)
MAY										
14...	1300	355	5.30	11.0	10	35	12	7.9	7.7	2.6

DATE	POTASSIUM, DISSOLVED (MG/L AS K)	ALKALINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DISSOLVED (MG/L AS SO4)	CHLORIDE, DISSOLVED (MG/L AS CL)	FLUORIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DISSOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)
MAY										
14...	2.2	14	120	9.0	<0.1	254	<2	1.30	150	<4

DATE	ARSENIC DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)
MAY									
14...	<4	<250	<10	<50	<30	<30	<10	130	<4

DATE	MANGANESE, DISSOLVED (UG/L AS MN)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI)	STRONTIUM, TOTAL RECOVERABLE (UG/L AS SR)	STRONTIUM, DISSOLVED (UG/L AS SR)	ZINC, DISSOLVED (UG/L AS ZN)	SELENIUM, TOTAL (UG/L AS SE)	SELENIUM, DISSOLVED (UG/L AS SE)	MERCURY TOTAL RECOVERABLE (UG/L AS HG)	MERCURY DISSOLVED (UG/L AS HG)
MAY									
14...	170	44	<100	<100	92	<6	<6	<1.0	<1.0

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
03082003		ABANDONED DEEP MINE DISCHARGE AT KREGAR, PA SITE 1 (LAT 40 04 06N LONG 079 17 52W)									
AUG 1985 12...	0900	0.03	825	2.90	10.0	3.6	182	11	--	12	--
OCT 23...	0815	1.1	1160	2.90	9.0	4.8	262	--	22	--	23
JAN 1986 15...	0915	0.02	745	2.90	9.0	3.5	164	--	--	--	--
APR 28...	0825	0.20	580	3.10	10.0	2.4	116	--	--	--	--
JUL 22...	0845	15	635	2.90	10.5	2.8	118	--	--	--	--
FEB 1987 25...	0745	0.01	695	3.10	8.0	3.1	140	--	11	--	12
MAY 18...	0845	0.07	580	3.03	13.0	--	112	--	--	--	--
03082005		INDIAN CR AT KREGAR, PA SITE 2 (LAT 40 06 52N LONG 079 18 10W)									
AUG 1985 12...	0945	3.2	408	6.70	14.0	0.2	0.0	20	--	2.9	--
OCT 23...	0845	2.5	609	7.60	11.0	0	0.0	--	22	--	3.0
NOV 25...	0815	13	265	7.40	5.0	0	0.0	--	--	--	--
DEC 23...	0800	9.5	2800	6.80	3.0	0.1	4.0	--	--	--	--
JAN 1986 15...	1030	2.0	1460	7.00	0.0	0.1	0.0	--	--	--	--
FEB 19...	0915	67	615	7.60	6.5	0	14	--	--	--	--
MAR 17...	0845	41	335	6.00	6.0	0.1	36	--	--	--	--
APR 28...	0845	17	320	7.70	10.0	0	8.0	--	--	--	--
JUN 06...	0900	4.8	390	6.70	15.0	0.3	0.0	--	--	--	--
JUL 22...	1000	20	270	7.40	13.0	0	0.0	--	--	--	--
AUG 20...	0840	2.0	440	7.60	17.0	0	0.0	--	--	--	--
SEP 29...	0850	3.5	520	7.60	16.0	0	0.0	--	--	--	--
FEB 1987 25...	0900	4.3	1380	6.90	0.5	0	4.0	--	23	--	3.9
MAR 01...	0820	11	400	7.52	7.0	--	0.0	--	--	--	--
APR 14...	0905	28	280	7.33	7.0	--	14	--	--	--	--
MAY 18...	0945	6.6	340	7.30	13.0	--	0.0	--	--	--	--
JUN 29...	0945	4.3	470	6.70	14.0	--	14	17	17	3.1	3.1
03082040		PIKE RN 50FT ABOVE ROARING RN AT CHAMPION, PA SITE 4 (LAT 40 04 08N LONG 079 20 37W)									
AUG 1985 12...	1245	4.2	79	6.80	15.0	0.1	6.0	7.4	--	1.1	--
OCT 24...	0900	1.6	102	7.70	13.5	0	0.0	--	9.4	--	1.4
NOV 25...	1100	12	70	7.10	5.5	0	0.0	--	--	--	--
DEC 23...	1015	10	70	6.80	3.5	0	12	--	--	--	--
JAN 1986 15...	1350	4.2	75	7.40	0.0	0	0.0	--	--	--	--
FEB 19...	1215	55	80	6.10	6.5	0.1	16	--	--	--	--
MAR 07...	1050	36	65	5.80	7.0	0.1	34	--	--	--	--
APR 28...	1005	13	78	7.30	11.5	0.1	14	--	--	--	--
JUN 06...	1245	4.1	75	6.40	15.0	0.2	0.0	--	--	--	--
JUL 22...	1330	34	64	7.30	13.5	0	4.0	--	--	1.0	--
AUG 20...	1100	2.8	80	7.40	17.0	0	0.0	--	--	--	--
SEP 29...	1130	5.9	90	7.30	15.0	0	4.0	--	--	--	--
FEB 1987 25...	1130	5.0	100	6.40	2.0	0	10	--	7.6	--	1.3
MAR 26...	1100	22	380	7.40	7.5	--	0.0	--	--	--	--
APR 14...	1010	28	55	6.74	7.0	--	20	--	--	--	--
MAY 18...	1030	8.1	75	6.83	14.0	--	0.0	--	--	--	--
JUN 29...	1215	3.7	97	7.10	15.0	--	16	8.4	8.2	1.2	1.2

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
03082003	ABANDONED DEEP MINE DISCHARGE AT KREGAR, PA SITE 1 (LAT 40 04 06N LONG 079 17 52W)										
AUG 1985 12...	0.9	--	0.9	--	--	--	250	2.0	0.2	444	2
OCT 23...	--	0.61	--	1.1	0	0	360	--	--	832	<2
JAN 1986 15...	--	--	--	--	0	0	190	--	--	500	<2
APR 28...	--	--	--	--	0	0	110	3.0	--	200	10
JUL 22...	--	--	--	--	0	0	150	--	--	394	<2
FEB 1987 25...	--	0.65	--	1.0	--	--	140	--	--	254	8
MAY 18...	--	--	--	--	--	--	160	2.0	--	232	<2
03082005	INDIAN CR AT KREGAR, PA SITE 2 (LAT 40 06 52N LONG 079 18 10W)										
AUG 1985 12...	47	--	0.7	--	20	28	12	170	<0.1	264	<2
OCT 23...	--	53	--	1.2	40	38	22	--	--	432	<2
NOV 25...	--	--	--	--	12	18	20	--	--	182	<2
DEC 23...	--	--	--	--	14	22	25	--	--	1530	6
JAN 1986 15...	--	--	--	--	14	18	49	--	--	952	<2
FEB 19...	--	--	--	--	40	12	47	150	--	334	<2
MAR 17...	--	--	--	--	8	16	12	--	--	156	6
APR 28...	--	--	--	--	12	20	25	120	--	12	12
JUN 06...	--	--	--	--	24	30	17	--	--	226	<2
JUL 22...	--	--	--	--	16	20	31	--	--	182	<2
AUG 20...	--	--	--	--	25	32	38	--	--	256	6
SEP 29...	--	--	--	--	32	34	27	--	--	272	<2
FEB 1987 25...	--	260	--	1.0	14	22	52	430	--	610	14
MAR 01...	--	--	--	--	--	28	21	96	--	210	10
APR 14...	--	--	--	--	--	16	22	72	--	168	<2
MAY 18...	--	--	--	--	--	28	33	78	--	220	4
JUN 29...	65	63	1.1	0.99	--	24	35	--	--	276	8
03082040	PIKE RN 50FT ABOVE ROARING RN AT CHAMPION, PA SITE 4 (LAT 40 04 08N LONG 079 20 37W)										
AUG 1985 12...	2.6	--	0.5	--	8	18	<10	8.0	<0.1	70	<2
OCT 24...	--	3.1	--	1.1	24	22	<10	--	--	170	<2
NOV 25...	--	--	--	--	8	14	14	--	--	62	6
DEC 23...	--	--	--	--	10	14	12	--	--	70	<2
JAN 1986 15...	--	--	--	--	14	16	10	--	--	80	2
FEB 19...	--	--	--	--	40	8	16	14	--	74	<2
MAR 07...	--	--	--	--	4	12	<10	--	--	16	12
APR 28...	--	--	--	--	8	14	14	7.0	--	52	4
JUN 06...	--	--	--	--	32	20	<10	--	--	46	<2
JUL 22...	--	--	--	--	10	16	8.0	--	--	76	2
AUG 20...	--	--	--	--	16	22	<10	--	--	34	6
SEP 29...	--	--	--	--	16	20	24	--	--	60	<2
FEB 1987 25...	--	4.9	--	0.49	12	18	43	10	--	18	12
MAR 26...	--	--	--	--	--	16	11	10	--	38	4
APR 14...	--	--	--	--	--	12	22	6.0	--	56	8
MAY 18...	--	--	--	--	--	20	22	6.0	--	44	6
JUN 29...	4.1	4.0	0.7	0.68	--	22	13	--	--	54	10

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
03082003	ABANDONED DEEP MINE DISCHARGE AT KREGAR, PA SITE 1 (LAT 40 04 06N LONG 079 17 52W)									
AUG 1985										
12...	1.24	6500	--	<4	--	<250	--	<10	<50	--
OCT										
23...	--	--	7500	--	6	--	<0	--	--	<50
JAN 1986										
15...	--	9600	9700	--	--	--	--	--	--	--
APR										
28...	--	9500	9500	--	--	--	--	--	--	--
JUL										
22...	--	6900	6900	--	--	--	--	--	--	--
FEB 1987										
25...	--	--	8800	--	4	<250	0	--	--	<50
MAY										
18...	--	6800	6800	--	--	--	--	--	--	--
03082005	INDIAN CR AT KREGAR, PA SITE 2 (LAT 40 06 52N LONG 079 18 10W)									
AUG 1985										
12...	1.04	250	--	<4	--	<250	--	<10	<50	--
OCT										
23...	--	--	360	--	<4	--	<0	--	--	<50
NOV										
25...	--	--	<40	--	--	--	--	--	--	--
DEC										
23...	--	--	<130	--	--	--	--	--	--	--
JAN 1986										
15...	--	<500	<500	--	--	--	--	--	--	--
FEB										
19...	--	<130	<130	--	--	--	--	--	--	--
MAR										
17...	--	260	330	--	--	--	--	--	--	--
APR										
28...	--	<130	<130	--	--	--	--	--	--	--
JUN										
06...	--	<130	130	--	--	--	--	--	--	--
JUL										
22...	--	220	220	--	--	--	--	--	--	--
AUG										
20...	--	<130	<130	--	--	--	--	--	--	--
SEP										
29...	--	<130	<130	--	--	--	--	--	--	--
FEB 1987										
25...	--	--	<130	--	<4	<250	0	--	--	<50
MAR										
01...	--	<130	<130	--	--	--	--	--	--	--
APR										
14...	--	<130	<130	--	--	--	--	--	--	--
MAY										
18...	--	170	<130	--	--	--	--	--	--	--
JUN										
29...	--	290	<130	<4	<4	<250	0	--	<50	<50
03082040	PIKE RN 50FT ABOVE ROARING RN AT CHAMPION, PA SITE 4 (LAT 40 04 08N LONG 079 20 37W)									
AUG 1985										
12...	1.14	100	--	<4	--	<250	--	14	<50	--
OCT										
24...	--	--	290	--	<4	--	<0	--	--	<50
NOV										
25...	--	--	<40	--	--	--	--	--	--	--
DEC										
23...	--	--	170	--	--	--	--	--	--	--
JAN 1986										
15...	--	<500	<500	--	--	--	--	--	--	--
FEB										
19...	--	<130	<130	--	--	--	--	--	--	--
MAR										
07...	--	220	<130	--	--	--	--	--	--	--
APR										
28...	--	180	<130	--	--	--	--	--	--	--
JUN										
06...	--	<130	<130	--	--	--	--	--	--	--
JUL										
22...	--	430	--	--	--	--	--	--	--	--
AUG										
20...	--	<130	<130	--	--	--	--	--	--	--
SEP										
29...	--	<130	<130	--	--	--	--	--	--	--
FEB 1987										
25...	--	--	360	--	<4	<250	0	--	--	<50
MAR										
26...	--	150	<130	--	--	--	--	--	--	--
APR										
14...	--	<130	<130	--	--	--	--	--	--	--
MAY										
18...	--	<130	<130	--	--	--	--	--	--	--
JUN										
29...	--	<130	<130	<4	<4	<250	0	--	<50	<50

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
03082003	ABANDONED DEEP MINE DISCHARGE AT KREGAR, PA SITE 1 (LAT 40 04 06N LONG 079 17 52W)									
AUG 1985 12...	100	--	35	--	21000	17000	<4	--	2900	--
OCT 23...	--	150	--	18	--	42000	--	<45	--	5300
JAN 1986 15...	--	--	--	--	26000	26000	--	--	2600	2600
APR 28...	--	--	--	--	5200	9000	--	--	1900	1900
JUL 22...	--	--	--	--	13000	13000	--	--	2100	2100
FEB 1987 25...	--	70	--	23	--	14000	--	<50	--	2500
MAY 18...	--	--	--	--	13000	13000	--	--	2100	2100
03082005	INDIAN CR AT KREGAR, PA SITE 2 (LAT 40 06 52N LONG 079 18 10W)									
AUG 1985 12...	<30	--	<10	--	130	<10	<4	--	140	--
OCT 23...	--	<30	--	<10	--	85	--	<45	--	49
NOV 25...	--	--	--	--	--	<10	--	--	--	53
DEC 23...	--	--	--	--	--	45	--	--	--	76
JAN 1986 15...	--	--	--	--	<300	<300	--	--	150	150
FEB 19...	--	--	--	--	100	<10	--	--	100	99
MAR 17...	--	--	--	--	100	1000	--	--	91	160
APR 28...	--	--	--	--	60	19	--	--	82	79
JUN 06...	--	--	--	--	110	67	--	--	65	72
JUL 22...	--	--	--	--	150	150	--	--	22	38
AUG 20...	--	--	--	--	100	38	--	--	81	120
SEP 29...	--	--	--	--	130	60	--	--	43	43
FEB 1987 25...	--	<30	--	<10	--	37	--	<50	--	150
MAR 01...	--	--	--	--	120	29	--	--	66	78
APR 14...	--	--	--	--	60	<10	--	--	54	53
MAY 18...	--	--	--	--	170	71	--	--	89	76
JUN 29...	<30	<30	<10	<10	160	<10	<50	<50	130	130
03082040	PIKE RN 50FT ABOVE ROARING RN AT CHAMPION, PA SITE 4 (LAT 40 04 08N LONG 079 20 37W)									
AUG 1985 12...	<30	--	<10	--	<10	<10	<4	--	21	--
OCT 24...	--	<30	--	<10	--	260	--	46	--	16
NOV 25...	--	--	--	--	--	<10	--	--	--	24
DEC 23...	--	--	--	--	--	87	--	--	--	19
JAN 1986 15...	--	--	--	--	<300	<300	--	--	<50	<50
FEB 19...	--	--	--	--	140	<10	--	--	81	76
MAR 07...	--	--	--	--	70	<10	--	--	49	42
APR 28...	--	--	--	--	80	39	--	--	46	37
JUN 06...	--	--	--	--	70	46	--	--	<10	<10
JUL 22...	--	--	--	--	240	--	--	--	--	--
AUG 20...	--	--	--	--	60	120	--	--	22	21
SEP 29...	--	--	--	--	40	28	--	--	<10	<10
FEB 1987 25...	--	<30	--	<10	--	25	--	<50	--	33
MAR 26...	--	--	--	--	100	<10	--	--	27	11
APR 14...	--	--	--	--	40	<10	--	--	40	170
MAY 18...	--	--	--	--	70	11	--	--	20	14
JUN 29...	<30	<30	<10	<10	100	15	<50	<50	23	15

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
03082003	ABANDONED DEEP MINE DISCHARGE AT KREGAR, PA SITE 1 (LAT 40 04 06N LONG 079 17 52W)									
AUG 1985 12...	140	--	<10	--	300	--	<6	--	<2.0	--
OCT 23...	--	160	--	44	--	510	--	<6	--	<1.0
JAN 1986 15...	--	--	--	--	340	850	--	--	--	--
APR 28...	--	--	--	--	220	250	--	--	--	--
JUL 22...	--	--	--	--	240	240	--	--	--	--
FEB 1987 25...	--	120	--	70	--	270	--	<6	--	<1.0
MAY 18...	--	--	--	--	230	230	--	--	--	--
03082005	INDIAN CR AT KREGAR, PA SITE 2 (LAT 40 06 52N LONG 079 18 10W)									
AUG 1985 12...	<25	--	<10	--	<10	--	<6	--	<2.0	--
OCT 23...	--	<25	--	94	--	<10	--	<6	--	<1.0
NOV 25...	--	--	--	--	--	<10	--	--	--	--
DEC 23...	--	--	--	--	--	31	--	--	--	--
JAN 1986 15...	--	--	--	--	20	64	--	--	--	--
FEB 19...	--	--	--	--	20	<10	--	--	--	--
MAR 17...	--	--	--	--	<10	<10	--	--	--	--
APR 28...	--	--	--	--	70	22	--	--	--	--
JUN 06...	--	--	--	--	<10	20	--	--	--	--
JUL 22...	--	--	--	--	20	24	--	--	--	--
AUG 20...	--	--	--	--	60	170	--	--	--	--
SEP 29...	--	--	--	--	30	30	--	--	--	--
FEB 1987 25...	--	<25	--	92	--	18	--	<6	--	<1.0
MAR 01...	--	--	--	--	10	19	--	--	--	--
APR 14...	--	--	--	--	10	11	--	--	--	--
MAY 18...	--	--	--	--	60	43	--	--	--	--
JUN 29...	<25	<25	70	<67	10	<10	<6	<6	<1.0	<1.0
03082040	PIKE RN 50FT ABOVE ROARING RN AT CHAMPION, PA SITE 4 (LAT 40 04 08N LONG 079 20 37W)									
AUG 1985 12...	27	--	<10	--	<10	--	<6	--	<2.0	--
OCT 24...	--	<25	--	20	--	<10	--	<6	--	<1.0
NOV 25...	--	--	--	--	--	<10	--	--	--	--
DEC 23...	--	--	--	--	--	36	--	--	--	--
JAN 1986 15...	--	--	--	--	<10	<10	--	--	--	--
FEB 19...	--	--	--	--	<10	<10	--	--	--	--
MAR 07...	--	--	--	--	<10	<10	--	--	--	--
APR 28...	--	--	--	--	40	35	--	--	--	--
JUN 06...	--	--	--	--	20	19	--	--	--	--
JUL 22...	--	--	--	--	30	--	--	--	--	--
AUG 20...	--	--	--	--	10	10	--	--	--	--
SEP 29...	--	--	--	--	20	24	--	--	--	--
FEB 1987 25...	--	<25	--	25	--	<10	--	<6	--	<1.0
MAR 26...	--	--	--	--	20	<10	--	--	--	--
APR 14...	--	--	--	--	20	130	--	--	--	--
MAY 18...	--	--	--	--	20	<10	--	--	--	--
JUN 29...	<25	<25	30	25	<10	<10	<6	<6	<1.0	<1.0

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
03082045		ROARING RN 50FT ABOVE PIKE RN AT CHAMPION,PA SITE 5 (LAT 40 04 07N LONG 079 20 40W)									
AUG 1985											
12...	1300	2.4	62	6.70	15.5	0.1	0.0	8.4	--	1.2	--
OCT											
24...	0900	1.8	82	8.50	13.0	0	0.0	--	11	--	1.3
NOV											
25...	1115	11	65	7.90	5.5	0	0.0	--	--	--	--
DEC											
23...	1030	7.2	65	7.60	3.5	0.1	6.0	--	--	--	--
JAN 1986											
15...	1415	5.5	62	7.00	0.0	0	0.0	--	--	--	--
FEB											
19...	1250	62	58	6.30	6.5	0.1	14	--	--	--	--
MAR											
17...	1045	31	50	6.30	6.5	0.1	36	--	--	--	--
APR											
28...	1045	10	83	6.60	12.0	0.1	16	--	--	--	--
JUN											
06...	1325	3.4	70	7.60	14.5	0.1	0.0	--	--	--	--
JUL											
22...	1400	34	57	7.50	13.0	0	2.0	--	--	--	--
AUG											
20...	1140	2.1	70	7.50	16.5	0	0.0	--	--	--	--
SEP											
29...	1130	4.3	70	7.00	16.0	0	0.0	--	--	--	--
FEB 1987											
25...	1200	3.5	80	7.20	2.5	0	8.0	--	8.0	--	1.3
MAR											
26...	1055	9.4	60	7.53	8.0	--	0.0	--	--	--	--
APR											
14...	1050	23	55	7.10	7.5	--	18	--	--	--	--
MAY											
18...	1025	4.8	65	6.86	15.5	--	0.0	--	--	--	--
JUN											
29...	1245	1.6	87	7.20	15.0	--	12	9.1	8.9	1.3	1.3
03082100		INDIAN CREEK AT NEBO, PA					SITE 12 (LAT 40 03 37N LONG 079 21 53W)				
AUG 1985											
12...	1550	13	164	--	21.5	0	0.0	11	--	1.8	--
OCT											
23...	1800	9.7	290	7.70	15.5	0	0.0	--	15	--	2.6
JAN 1986											
16...	1030	18	515	6.70	0.0	0.1	0.0	--	--	--	--
APR											
29...	0840	53	160	7.30	13.5	0.1	10	--	--	--	--
JUL											
22...	1550	120	115	7.10	16.5	0.1	0.0	--	--	--	--
FEB 1987											
25...	1320	32	540	7.10	2.5	0	22	--	14	--	2.8
JUN											
29...	0915	20	170	7.05	14.5	--	6.0	12	12	2.5	2.5
03082105		INDIAN CREEK AT COFFMAN, PA					SITE 13 (LAT 40 03 07N LONG 079 22 55W)				
AUG 1985											
12...	1715	15	164	7.80	21.5	0	0.0	12	--	1.9	--
OCT											
23...	1645	9.7	285	7.50	15.0	0	1420	--	16	--	2.8
JAN 1986											
16...	0915	17	410	6.80	0.0	0.1	0.0	--	--	--	--
APR											
29...	0900	61	160	7.30	14.0	0.1	10	--	--	--	--
JUL											
23...	0840	99	110	7.20	14.5	0	0.0	--	--	--	--
FEB 1987											
26...	1440	38	360	7.40	2.5	0	20	--	12	--	2.3
JUN											
29...	1015	18	190	4.75	15.5	--	10	13	13	2.5	2.5

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
03082045	ROARING RN 50FT ABOVE PIKE RN AT CHAMPION, PA SITE 5 (LAT 40 04 07N LONG 079 20 40W)										
AUG 1985											
12...	0.4	--	0.5	--	14	22	<10	3.0	<0.1	94	<2
OCT											
24...	--	0.58	--	0.90	28	28	<10	--	--	186	14
NOV											
25...	--	--	--	--	12	16	18	--	--	60	6
DEC											
23...	--	--	--	--	11	18	15	--	--	66	<2
JAN 1986											
15...	--	--	--	--	16	20	11	--	--	84	<2
FEB											
19...	--	--	--	--	80	10	12	3.0	--	62	<2
MAR											
17...	--	--	--	--	6	14	<10	--	--	26	2
APR											
28...	--	--	--	--	10	16	<10	6.0	--	54	<2
JUN											
06...	--	--	--	--	12	22	<10	--	--	46	<2
JUL											
22...	--	--	--	--	8	16	13	--	--	80	<2
AUG											
20...	--	--	--	--	20	26	<10	--	--	42	4
SEP											
29...	--	--	--	--	16	20	24	--	--	48	<2
FEB 1987											
25...	--	0.67	--	0.52	14	20	45	2.0	--	2	10
MAR											
26...	--	--	--	--	--	18	10	3.0	--	30	2
APR											
14...	--	--	--	--	--	14	22	2.0	--	58	<2
MAY											
18...	--	--	--	--	--	24	12	2.0	--	44	10
JUN											
29...	0.6	0.54	0.8	0.77	--	24	15	--	--	44	8
03082100	INDIAN CREEK AT NEBO, PA						SITE 12 (LAT 40 03 37N LONG 079 21 53W)				
AUG 1985											
12...	10	--	0.6	--	16	26	<10	26	<0.1	156	<2
OCT											
23...	--	18	--	1.4	36	34	24	--	--	252	<2
JAN 1986											
16...	--	--	--	--	16	20	32	--	--	360	6
APR											
29...	--	--	--	--	14	20	24	26	--	104	<2
JUL											
22...	--	--	--	--	18	18	25	--	--	94	2
FEB 1987											
25...	--	86	--	0.99	18	22	51	130	--	246	12
JUN											
29...	18	18	1.0	0.99	--	30	35	--	--	90	6
03082105	INDIAN CREEK AT COFFMAN, PA						SITE 13 (LAT 40 03 07N LONG 079 22 55W)				
AUG 1985											
12...	9.9	--	0.6	--	20	26	<10	25	<0.1	132	<2
OCT											
23...	--	17	--	1.4	36	0	<10	--	--	420	<2
JAN 1986											
16...	--	--	--	--	20	24	24	--	--	280	2
APR											
29...	--	--	--	--	14	20	18	25	--	106	2
JUL											
23...	--	--	--	--	12	20	12	--	--	76	<2
FEB 1987											
26...	--	48	--	0.98	16	22	50	88	--	168	16
JUN											
29...	18	18	1.0	1.0	--	30	27	--	--	88	10

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
03082045	ROARING RN 50FT ABOVE PIKE RN AT CHAMPION,PA SITE 5 (LAT 40 04 07N LONG 079 20 40W)									
AUG 1985 12...	1.18	40	--	<4	--	<250	--	<10	<50	--
OCT 24...	--	--	140	--	<4	--	<0	--	--	<50
NOV 25...	--	--	<40	--	--	--	--	--	--	--
DEC 23...	--	--	<130	--	--	--	--	--	--	--
JAN 1986 15...	--	<500	<500	--	--	--	--	--	--	--
FEB 19...	--	730	<130	--	--	--	--	--	--	--
MAR 17...	--	<130	<130	--	--	--	--	--	--	--
APR 28...	--	<130	<130	--	--	--	--	--	--	--
JUN 06...	--	<130	<130	--	--	--	--	--	--	--
JUL 22...	--	290	<130	--	--	--	--	--	--	--
AUG 20...	--	<130	<130	--	--	--	--	--	--	--
SEP 29...	--	<130	<130	--	--	--	--	--	--	--
FEB 1987 25...	--	--	<130	--	<4	<250	0	--	--	<50
MAR 26...	--	<130	<130	--	--	--	--	--	--	--
APR 14...	--	<130	<130	--	--	--	--	--	--	--
MAY 18...	--	<130	<130	--	--	--	--	--	--	--
JUN 29...	--	<130	<130	<4	<4	<250	0	--	<50	<50
03082100	INDIAN CREEK AT NEBO, PA					SITE 12 (LAT 40 03 37N LONG 079 21 53W)				
AUG 1985 12...	0.960	100	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	250	--	<4	--	<0	--	--	<50
JAN 1986 16...	--	<500	<500	--	--	--	--	--	--	--
APR 29...	--	<130	<130	--	--	--	--	--	--	--
JUL 22...	--	210	<130	--	--	--	--	--	--	--
FEB 1987 25...	--	--	<130	--	<4	<250	0	--	--	<50
JUN 29...	--	150	<130	<4	<4	<250	0	--	<50	<50
03082105	INDIAN CREEK AT COFFMAN, PA					SITE 13 (LAT 40 03 07N LONG 079 22 55W)				
AUG 1985 12...	0.960	40	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	100	--	<4	--	<0	--	--	<50
JAN 1986 16...	--	<500	<500	--	--	--	--	--	--	--
APR 29...	--	<130	<130	--	--	--	--	--	--	--
JUL 23...	--	150	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50
JUN 29...	--	190	<130	<4	<4	<250	0	--	<50	<50

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
03082045	ROARING RN 50FT ABOVE PIKE RN AT CHAMPION, PA SITE 5 (LAT 40 04 07N LONG 079 20 40W)									
AUG 1985 12...	<30	--	<10	--	<10	<10	<4	--	<10	--
OCT 24...	--	<30	--	<10	--	37	--	<45	--	<10
NOV 25...	--	--	--	--	--	<10	--	--	--	10
DEC 23...	--	--	--	--	--	23	--	--	--	<10
JAN 1986 15...	--	--	--	--	<300	<300	--	--	<50	<50
FEB 19...	--	--	--	--	670	65	--	--	51	35
MAR 17...	--	--	--	--	40	<10	--	--	17	14
APR 28...	--	--	--	--	20	<10	--	--	11	11
JUN 06...	--	--	--	--	50	48	--	--	<10	<10
JUL 22...	--	--	--	--	180	<10	--	--	<10	<10
AUG 20...	--	--	--	--	90	120	--	--	14	21
SEP 29...	--	--	--	--	60	13	--	--	<10	<10
FEB 1987 25...	--	<30	--	<10	--	18	--	<85	--	<10
MAR 26...	--	--	--	--	70	21	--	--	<10	<10
APR 14...	--	--	--	--	60	16	--	--	<10	<10
MAY 18...	--	--	--	--	10	<10	--	--	<10	<10
JUN 29...	<30	<30	<10	<10	270	<10	<50	<50	<10	<10
03082100	INDIAN CREEK AT NEBO, PA					SITE 12 (LAT 40 03 37N LONG 079 21 53W)				
AUG 1985 12...	<30	--	<10	--	<10	<10	<4	--	110	--
OCT 23...	--	<30	--	<10	--	40	--	<45	--	<10
JAN 1986 16...	--	--	--	--	320	<300	--	--	70	70
APR 29...	--	--	--	--	90	65	--	--	34	35
JUL 22...	--	--	--	--	210	58	--	--	<10	<10
FEB 1987 25...	--	<30	--	<10	--	47	--	<50	--	72
JUN 29...	<30	<30	<10	<10	260	44	<50	<50	35	24
03082105	INDIAN CREEK AT COFFMAN, PA					SITE 13 (LAT 40 03 07N LONG 079 22 55W)				
AUG 1985 12...	<30	--	51	--	150	150	<4	--	31	--
OCT 23...	--	<30	--	<10	--	250	--	<45	--	65
JAN 1986 16...	--	--	--	--	<300	<300	--	--	100	90
APR 29...	--	--	--	--	120	26	--	--	52	48
JUL 23...	--	--	--	--	1200	81	--	--	10	<10
FEB 1987 26...	--	<30	--	<10	--	140	--	<50	--	68
JUN 29...	<30	<30	<10	<10	430	110	<50	<50	54	43

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
03082045	ROARING RN 50FT ABOVE PIKE RN AT CHAMPION, PA SITE 5 (LAT 40 04 07N LONG 079 20 40W)									
AUG 1985 12...	<25	--	<10	--	<10	--	<6	--	<2.0	--
OCT 24...	--	<25	--	13	--	<10	--	<6	--	<1.0
NOV 25...	--	--	--	--	--	<10	--	--	--	--
DEC 23...	--	--	--	--	--	23	--	--	--	--
JAN 1986 15...	--	--	--	--	<10	<10	--	--	--	--
FEB 19...	--	--	--	--	<10	<10	--	--	--	--
MAR 17...	--	--	--	--	<10	<10	--	--	--	--
APR 28...	--	--	--	--	10	19	--	--	--	--
JUN 06...	--	--	--	--	<10	<10	--	--	--	--
JUL 22...	--	--	--	--	30	21	--	--	--	--
AUG 20...	--	--	--	--	70	18	--	--	--	--
SEP 29...	--	--	--	--	20	12	--	--	--	--
FEB 1987 25...	--	<25	--	21	--	<10	--	<6	--	<1.0
MAR 26...	--	--	--	--	<10	<10	--	--	--	--
APR 14...	--	--	--	--	<10	15	--	--	--	--
MAY 18...	--	--	--	--	<10	<10	--	--	--	--
JUN 29...	<25	<25	30	24	<10	<10	<6	<6	<1.0	<1.0
03082100	INDIAN CREEK AT NEBO, PA					SITE 12 (LAT 40 03 37N LONG 079 21 53W)				
AUG 1985 12...	<25	--	<10	--	<10	--	<6	--	<2.0	--
OCT 23...	--	<25	--	39	--	<10	--	<6	--	<1.0
JAN 1986 16...	--	--	--	--	<10	<10	--	--	--	--
APR 29...	--	--	--	--	<10	31	--	--	--	--
JUL 22...	--	--	--	--	30	26	--	--	--	--
FEB 1987 25...	--	<25	--	54	--	<10	--	<6	--	<1.0
JUN 29...	<25	<25	50	45	<10	<10	<6	<6	<1.0	<1.0
03082105	INDIAN CREEK AT COFFMAN, PA					SITE 13 (LAT 40 03 07N LONG 079 22 55W)				
AUG 1985 12...	<25	--	<10	--	30	--	<6	--	<2.0	--
OCT 23...	--	<25	--	38	--	<10	--	<6	--	<1.0
JAN 1986 16...	--	--	--	--	<10	<10	--	--	--	--
APR 29...	--	--	--	--	10	32	--	--	--	--
JUL 23...	--	--	--	--	20	16	--	--	--	--
FEB 1987 26...	--	<25	--	43	--	<10	--	<6	--	<1.0
JUN 29...	<25	<25	40	43	<10	<10	<6	<6	<1.0	<1.0

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
03082110		CHAMPION C ABOVE L CHAMPION C NR MELCROFT, PA SITE 7 (LAT 40 04 05N LONG 079 23 57W)									
AUG 1985											
12...	0955	0.82	318	7.80	17.5	0	0.0	33	--	18	--
OCT											
23...	0910	0.71	480	7.80	12.5	0	0.0	--	30	--	9.4
NOV											
25...	1200	--	--	--	--	--	--	--	--	--	--
JAN 1986											
15...	1000	1.8	280	6.70	0.0	0.1	0.0	--	--	--	--
APR											
28...	1230	7.5	190	7.60	16.0	0	0.0	--	--	--	--
JUL											
22...	1035	18	150	7.40	16.5	0	0.0	--	--	--	--
FEB 1987											
26...	1000	4.2	428	--	1.0	--	0.0	--	32	--	10
JUN											
29...	1630	2.7	335	7.50	20.0	--	0.0	30	29	10	9.6
03082112		DEEP MINE DISCHARGE NR WHITE, PA					SITE 9 (LAT 40 04 30N LONG 079 25 03W)				
AUG 1985											
12...	0850	<0.01	580	4.20	11.0	1.2	64	66	--	19	--
OCT											
23...	0805	0.40	1300	3.60	12.5	4.6	198	--	80	--	40
JAN 1986											
15...	0915	0.01	330	6.40	5.5	0.6	0.0	--	--	--	--
APR											
28...	1115	0.04	315	6.40	11.0	0.9	0.0	--	--	--	--
JUL											
22...	0845	0.05	300	6.70	10.0	0.4	0.0	--	--	--	--
FEB 1987											
26...	0820	0.01	390	6.20	9.0	1.0	6.0	--	47	--	13
JUN											
29...	1715	0.01	385	6.40	11.0	--	0.0	46	46	13	13
03082115		L CHAMPION C ABOVE CHAMPION C NR MELCROFT, PA SITE 8 (LAT 40 04 03N LONG 079 23 59W)									
AUG 1985											
12...	1040	1.4	355	7.40	17.0	0.1	0.0	44	--	13	--
OCT											
23...	0844	0.93	335	7.80	12.5	0	0.0	--	33	--	10
NOV											
25...	1130	--	--	--	--	--	--	--	--	--	--
JAN 1986											
15...	1040	2.4	195	7.10	0.0	0.1	0.0	--	--	--	--
APR											
28...	1305	8.4	190	7.60	17.0	0	0.0	--	--	--	--
JUL											
22...	0945	18	150	7.30	17.0	0	0.0	--	--	--	--
FEB 1987											
26...	0915	3.4	237	--	0.5	--	0.0	--	25	--	8.3
JUN											
29...	1600	2.7	273	7.60	19.0	--	0.0	37	29	9.9	9.2
03082122		NUMBER 3 MINE POOL AT MELCROFT, PA					SITE 10 (LAT 40 03 24N LONG 079 23 33W)				
AUG 1985											
12...	1300	--	1680	2.60	28.0	10	492	74	--	32	--
OCT											
23...	1135	0.0	2000	2.60	15.0	11	550	--	80	--	40
JAN 1986											
15...	1405	0.0	1300	2.80	0.0	6.8	380	--	--	--	--
APR											
28...	1430	0.0	1340	2.80	24.0	8.6	452	--	--	--	--
JUL											
22...	1225	0.0	1700	2.80	27.5	3.5	460	--	--	--	--
FEB 1987											
26...	1215	--	1160	3.50	11.0	7.0	342	--	73	--	35
03082125		CHAMPION C (RT 381/711BRIDGE) AT MELCROFT,PA SITE 11 (LAT 40 03 06N LONG 079 23 27W)									
AUG 1985											
12...	1530	2.8	400	5.80	23.5	0.4	0.0	43	--	13	--
OCT											
23...	1335	2.0	470	6.70	17.0	0	0.0	--	38	--	12
JAN 1986											
15...	1435	6.7	345	6.30	0.0	0.3	2.0	--	--	--	--
APR											
28...	1515	18	225	6.90	20.5	0.2	18	--	--	--	--
JUL											
22...	1325	35	180	6.70	19.5	0.2	2.0	--	--	--	--
FEB 1987											
26...	1310	11	325	7.10	3.0	0.1	16	--	27	--	9.0
JUN											
29...	0815	6.2	240	6.40	14.5	--	14	30	31	12	11

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
03082110	CHAMPION C ABOVE L CHAMPION C NR MELCROFT, PA SITE 7 (LAT 40 04 05N LONG 079 23 57W)										
AUG 1985 12...	18	--	1.6	--	53	60	62	36	<0.1	252	<2
OCT 23...	--	25	--	2.2	60	58	59	--	--	386	2
NOV 25...	--	--	--	--	--	--	--	--	--	--	--
JAN 1986 15...	--	--	--	--	22	26	33	--	--	292	4
APR 28...	--	--	--	--	22	26	25	20	--	130	8
JUL 22...	--	--	--	--	18	24	32	--	--	118	<2
FEB 1987 26...	--	27	--	2.1	--	56	73	--	--	104	10
JUN 29...	13	13	2.2	2.1	--	54	68	--	--	236	20
03082112	DEEP MINE DISCHARGE NR WHITE, PA SITE 9 (LAT 40 04 30N LONG 079 25 03W)										
AUG 1985 12...	0.7	--	0.7	--	--	2	280	3.0	0.6	482	8
OCT 23...	--	0.75	--	1.2	0	0	740	--	--	1480	4
JAN 1986 15...	--	--	--	--	28	32	140	--	--	324	16
APR 28...	--	--	--	--	26	32	110	2.0	--	230	12
JUL 22...	--	--	--	--	34	40	86	--	--	230	6
FEB 1987 26...	--	0.57	--	1.1	26	24	160	--	--	244	32
JUN 29...	0.5	0.51	1.2	1.1	--	46	140	--	--	286	32
03082115	L CHAMPION C ABOVE CHAMPION C NR MELCROFT, PA SITE 8 (LAT 40 04 03N LONG 079 23 59W)										
AUG 1985 12...	13	--	1.2	--	56	64	110	6.0	<0.1	260	<2
OCT 23...	--	3.3	--	2.1	50	46	99	--	--	348	<2
NOV 25...	--	--	--	--	--	--	--	--	--	--	--
JAN 1986 15...	--	--	--	--	34	40	76	--	--	260	<2
APR 28...	--	--	--	--	22	28	52	4.0	--	134	6
JUL 22...	--	--	--	--	21	28	42	--	--	128	<2
FEB 1987 26...	--	3.3	--	1.3	--	38	81	--	--	48	12
JUN 29...	2.4	2.3	1.8	1.7	--	52	78	--	--	170	10
03082122	NUMBER 3 MINE POOL AT MELCROFT, PA SITE 10 (LAT 40 03 24N LONG 079 23 33W)										
AUG 1985 12...	11	--	2.5	--	--	--	650	3.0	0.2	1310	<2
OCT 23...	--	12	--	3.8	0	0	810	--	--	1840	<2
JAN 1986 15...	--	--	--	--	0	0	320	--	--	952	6
APR 28...	--	--	--	--	0	0	580	2.0	--	1200	<2
JUL 22...	--	--	--	--	0	0	560	--	--	1420	<2
FEB 1987 26...	--	10	--	4.4	--	--	520	--	--	836	14
03082125	CHAMPION C (RT 381/711BRIDGE) AT MELCROFT, PA SITE 11 (LAT 40 03 06N LONG 079 23 27W)										
AUG 1985 12...	7.3	--	1.4	--	20	28	150	16	0.2	384	<2
OCT 23...	--	12	--	2.3	24	22	170	--	--	484	10
JAN 1986 15...	--	--	--	--	12	16	100	--	--	316	14
APR 28...	--	--	--	--	8	16	85	11	--	156	6
JUL 22...	--	--	--	--	10	14	59	--	--	150	16
FEB 1987 26...	--	13	--	1.7	28	32	100	21	--	142	16
JUN 29...	7.1	7.3	2.1	2.0	--	22	130	--	--	262	24

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
03082110	CHAMPION C ABOVE L CHAMPION C NR MELCROFT, PA SITE 7 (LAT 40 04 05N LONG 079 23 57W)									
AUG 1985 12...	0.900	<40	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	170	--	<4	--	<0	--	--	<50
NOV 25...	--	--	--	--	--	--	--	--	--	--
JAN 1986 15...	--	<500	<500	--	--	--	--	--	--	--
APR 28...	--	<130	<130	--	--	--	--	--	--	--
JUL 22...	--	450	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50
JUN 29...	--	<130	<130	<4	<4	<250	0	--	<50	<50
03082112	DEEP MINE DISCHARGE NR WHITE, PA SITE 9 (LAT 40 04 30N LONG 079 25 03W)									
AUG 1985 12...	0.460	5800	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	2200	--	<4	--	<0	--	--	<50
JAN 1986 15...	--	800	<500	--	--	--	--	--	--	--
APR 28...	--	570	<130	--	--	--	--	--	--	--
JUL 22...	--	960	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50
JUN 29...	--	1600	<130	<4	<4	<250	0	--	180	<50
03082115	L CHAMPION C ABOVE CHAMPION C NR MELCROFT, PA SITE 8 (LAT 40 04 03N LONG 079 23 59W)									
AUG 1985 12...	0.320	<40	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	300	--	<4	--	<0	--	--	<50
NOV 25...	--	--	--	--	--	--	--	--	--	--
JAN 1986 15...	--	<500	<500	--	--	--	--	--	--	--
APR 28...	--	<130	<130	--	--	--	--	--	--	--
JUL 22...	--	180	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50
JUN 29...	--	<130	<130	<4	<4	<250	0	--	<50	<50
03082122	NUMBER 3 MINE POOL AT MELCROFT, PA SITE 10 (LAT 40 03 24N LONG 079 23 33W)									
AUG 1985 12...	0.160	25000	--	17	--	<250	--	<10	<50	--
OCT 23...	--	--	19000	--	19	--	<0	--	--	<50
JAN 1986 15...	--	22000	21000	--	--	--	--	--	--	--
APR 28...	--	33000	33000	--	--	--	--	--	--	--
JUL 22...	--	26000	25000	--	--	--	--	--	--	--
FEB 1987 26...	--	--	32000	--	19	<250	0	--	--	<50
03082125	CHAMPION C (RT 381/711BRIDGE) AT MELCROFT, PA SITE 11 (LAT 40 03 06N LONG 079 23 27W)									
AUG 1985 12...	0.400	970	--	<4	--	<250	--	<10	76	--
OCT 23...	--	--	430	--	<4	--	<0	--	--	<50
JAN 1986 15...	--	800	<500	--	--	--	--	--	--	--
APR 28...	--	<130	1100	--	--	--	--	--	--	--
JUL 22...	--	1000	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50
JUN 29...	--	2400	<130	<4	<4	<250	0	--	<50	<50

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
03082110	CHAMPION C ABOVE L CHAMPION C NR MELCROFT, PA SITE 7 (LAT 40 04 05N LONG 079 23 57W)									
AUG 1985 12...	<30	--	<10	--	100	<10	<4	--	26	--
OCT 23...	--	<30	--	<10	--	290	--	<45	--	63
NOV 25...	--	--	--	--	--	--	--	--	--	--
JAN 1986 15...	--	--	--	--	<300	<300	--	--	100	100
APR 28...	--	--	--	--	380	52	--	--	43	40
JUL 22...	--	--	--	--	500	24	--	--	12	<10
FEB 1987 26...	--	<30	--	<10	--	23	--	<50	--	110
JUN 29...	<30	<30	<10	<10	310	40	<50	<50	32	21
03082112	DEEP MINE DISCHARGE NR WHITE, PA SITE 9 (LAT 40 04 30N LONG 079 25 03W)									
AUG 1985 12...	40	--	37	--	1800	1800	<4	--	380	--
OCT 23...	--	80	--	<10	--	86000	--	<45	--	2400
JAN 1986 15...	--	--	--	--	4000	2000	--	--	180	230
APR 28...	--	--	--	--	3600	1400	--	--	98	96
JUL 22...	--	--	--	--	1800	650	--	--	25	<10
FEB 1987 26...	--	<30	--	<10	--	5200	--	<50	--	150
JUN 29...	<30	<30	53	<10	3300	2100	<50	<50	170	90000
03082115	L CHAMPION C ABOVE CHAMPION C NR MELCROFT, PA SITE 8 (LAT 40 04 03N LONG 079 23 59W)									
AUG 1985 12...	<30	--	<10	--	<10	<10	<4	--	<10	--
OCT 23...	--	<30	--	<10	--	34	--	<45	--	<10
NOV 25...	--	--	--	--	--	--	--	--	--	--
JAN 1986 15...	--	--	--	--	<300	<300	--	--	50	50
APR 28...	--	--	--	--	140	33	--	--	29	27
JUL 22...	--	--	--	--	180	36	--	--	<10	<10
FEB 1987 26...	--	<30	--	<10	--	28	--	<50	--	68
JUN 29...	<30	<30	<10	<10	220	25	<50	<50	43	31
03082122	NUMBER 3 MINE POOL AT MELCROFT, PA SITE 10 (LAT 40 03 24N LONG 079 23 33W)									
AUG 1985 12...	190	--	28	--	70000	70000	5	--	9700	--
OCT 23...	--	200	--	<10	--	80000	--	<45	--	11000
JAN 1986 15...	--	--	--	--	50000	48000	--	--	5000	4800
APR 28...	--	--	--	--	79000	76000	--	--	8100	7900
JUL 22...	--	--	--	--	66000	64000	--	--	9100	9000
FEB 1987 26...	--	220	--	<10	--	78000	--	<50	--	11000
03082125	CHAMPION C (RT 381/711BRIDGE) AT MELCROFT, PA SITE 11 (LAT 40 03 06N LONG 079 23 27W)									
AUG 1985 12...	<30	--	<10	--	1600	<10	<4	--	900	--
OCT 23...	--	<30	--	<10	--	2200	--	<45	--	650
JAN 1986 15...	--	--	--	--	1700	1200	--	--	520	520
APR 28...	--	--	--	--	800	1300	--	--	300	280
JUL 22...	--	--	--	--	890	460	--	--	240	240
FEB 1987 26...	--	<30	--	<10	--	490	--	<50	--	260
JUN 29...	<30	<250	<10	<10	3100	2300	<50	<50	560	630

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
03082110	CHAMPION C ABOVE L CHAMPION C NR MELCROFT, PA SITE 7 (LAT 40 04 05N LONG 079 23 57W)									
AUG 1985 12...	<25	--	<10	--	<10	--	<6	--	<2.0	--
OCT 23...	--	<25	--	82	--	<10	--	<6	--	<1.0
NOV 25...	--	--	--	--	--	--	--	--	--	--
JAN 1986 15...	--	--	--	--	<10	<10	--	--	--	--
APR 28...	--	--	--	--	20	<10	--	--	--	--
JUL 22...	--	--	--	--	20	11	--	--	--	--
FEB 1987 26...	--	<25	--	130	--	<10	--	<6	--	<1.0
JUN 29...	<25	<25	110	100	<10	<10	<6	<6	<1.0	<1.0
03082112	DEEP MINE DISCHARGE NR WHITE, PA SITE 9 (LAT 40 04 30N LONG 079 25 03W)									
AUG 1985 12...	56	--	<10	--	230	--	<6	--	<2.0	--
OCT 23...	--	<25	--	450	--	150	--	<6	--	<1.0
JAN 1986 15...	--	--	--	--	70	77	--	--	--	--
APR 28...	--	--	--	--	80	75	--	--	--	--
JUL 22...	--	--	--	--	50	37	--	--	--	--
FEB 1987 26...	--	<25	--	150	--	81	--	<6	--	<1.0
JUN 29...	65	<25	140	140	170	59	<6	<6	<1.0	<1.0
03082115	L CHAMPION C ABOVE CHAMPION C NR MELCROFT, PA SITE 8 (LAT 40 04 03N LONG 079 23 59W)									
AUG 1985 12...	<25	--	<10	--	<10	--	<6	--	<2.0	--
OCT 23...	--	<25	--	64	--	<10	--	<6	--	<1.0
NOV 25...	--	--	--	--	--	--	--	--	--	--
JAN 1986 15...	--	--	--	--	<10	<10	--	--	--	--
APR 28...	--	--	--	--	30	19	--	--	--	--
JUL 22...	--	--	--	--	20	16	--	--	--	--
FEB 1987 26...	--	<25	--	69	--	<10	--	<6	--	<1.0
JUN 29...	<25	<25	90	82	<10	<10	<6	<6	<1.0	<1.0
03082122	NUMBER 3 MINE POOL AT MELCROFT, PA SITE 10 (LAT 40 03 24N LONG 079 23 33W)									
AUG 1985 12...	72	--	30	--	490	--	<6	--	<2.0	--
OCT 23...	--	30	--	360	--	450	--	<6	--	<1.0
JAN 1986 15...	--	--	--	--	350	350	--	--	--	--
APR 28...	--	--	--	--	490	480	--	--	--	--
JUL 22...	--	--	--	--	440	440	--	--	--	--
FEB 1987 26...	--	160	--	390	--	450	--	<8	--	<1.0
03082125	CHAMPION C (RT 381/711BRIDGE) AT MELCROFT, PA SITE 11 (LAT 40 03 06N LONG 079 23 27W)									
AUG 1985 12...	<25	--	<10	--	40	--	<6	--	<2.0	--
OCT 23...	--	<25	--	100	--	14	--	<6	--	<1.0
JAN 1986 15...	--	--	--	--	40	40	--	--	--	--
APR 28...	--	--	--	--	50	41	--	--	--	--
JUL 22...	--	--	--	--	40	25	--	--	--	--
FEB 1987 26...	--	<25	--	98	--	<10	--	<6	--	<1.0
JUN 29...	<25	<25	120	120	40	36	<6	<6	<1.0	<1.0

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
03082132		KALP MINE DISCHARGE (LARGE) AT ROMNEY, PA SITE 25 (LAT 40 02 50N LONG 079 24 08W)									
AUG 1985											
12...	1615	1.0	1900	2.40	12.5	9.0	412	170	--	50	--
OCT											
23...	1440	0.17	2000	2.70	12.5	10	524	--	80	--	40
JAN 1986											
16...	0835	0.55	2000	2.90	10.5	9.8	500	--	--	--	--
APR											
28...	1305	1.8	1700	2.90	12.5	9.6	350	--	--	--	--
JUL											
23...	0810	0.86	1850	3.00	12.5	10	396	--	--	--	--
FEB 1987											
26...	1300	1.8	1700	2.86	12.0	8.4	352	--	150	--	44
JUN											
29...	1630	1.0	1850	2.92	14.0	--	440	150	150	45	45
03082133		KALP MINE DISCHARGE (SMALL) AT ROMNEY, PA SITE 26 (LAT 40 02 49N LONG 079 24 11W)									
AUG 1985											
12...	1655	<0.01	790	2.60	14.0	3.2	158	30	--	12	--
OCT											
23...	1500	0.0	0	0.0	0.0	0	26	--	24	--	6.0
JAN 1986											
16...	0910	0.00	675	3.10	0.5	2.2	108	--	--	--	--
APR											
29...	1315	0.01	360	3.20	14.0	1.2	64	--	--	--	--
JUL											
23...	0820	0.03	400	3.30	12.0	1.4	64	--	--	--	--
FEB 1987											
26...	1315	0.00	490	3.21	11.0	1.5	98	--	16	--	7.9
03082142		MATHEWS MINE DISCHARGE AT DAVISTOWN, PA SITE 27 (LAT 40 02 26N LONG 079 24 14W)									
AUG 1985											
12...	1745	--	165	4.10	14.5	0.9	48	29	--	7.7	--
OCT											
23...	1345	0.0	270	5.20	13.5	0.4	14	--	30	--	9.5
APR 1986											
29...	1335	0.33	1800	2.90	11.0	10	348	--	--	--	--
JUL											
23...	0845	0.34	1900	2.90	13.0	10	396	--	--	--	--
FEB 1987											
26...	1335	--	1750	2.83	11.0	8.4	354	--	150	--	45
JUN											
29...	1530	--	1800	2.91	14.0	--	440	150	150	45	45
03082155		BACK CREEK AT INDIAN HEAD, PA SITE 15 (LAT 40 01 33N LONG 079 23 47W)									
AUG 1985											
12...	0830	5.6	100	6.80	14.5	--	0.0	12	--	1.8	--
OCT											
23...	0830	4.4	120	7.50	12.0	0.1	0.0	--	13	--	2.0
NOV											
25...	1440	21	100	7.30	6.0	0	0.0	--	--	--	--
DEC											
23...	1350	13	90	7.10	2.5	0	4.0	--	--	--	--
JAN 1986											
15...	0930	2.6	82	6.80	0.5	0	16	--	--	--	--
FEB											
19...	1115	117	80	7.00	6.0	0.1	14	--	--	--	--
MAR											
17...	1355	57	80	6.40	6.5	0.1	14	--	--	--	--
APR											
29...	1045	17	75	7.30	13.0	0	8.0	--	--	--	--
JUN											
06...	1045	5.9	110	6.90	16.0	0.6	0.0	--	--	--	--
JUL											
23...	0945	45	78	7.10	13.5	0	0.0	--	--	--	--
AUG											
20...	1505	4.0	115	7.70	18.5	0	0.0	--	--	--	--
SEP											
29...	1412	8.2	105	7.60	18.5	0	0.0	--	--	--	--
FEB 1987											
25...	1415	8.2	100	6.40	3.0	0.1	20	--	11	--	2.1
MAR											
26...	1235	15	90	7.20	9.5	--	0.0	--	--	--	--
APR											
14...	1355	42	85	7.35	10.0	--	16	--	--	--	--
MAY											
18...	1435	9.3	105	7.03	16.0	--	0.0	--	--	--	--
JUN											
29...	1245	5.1	110	7.50	15.5	--	8.0	13	13	2.0	1.9

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
03082132	KALP MINE DISCHARGE (LARGE) AT ROMNEY, PA SITE 25 (LAT 40 02 50N LONG 079 24 08W)										
AUG 1985 12...	1.9	--	2.2	--	--	--	970	4.0	0.4	1690	<2
OCT 23...	--	2.1	--	2.3	0	0	1100	--	--	2150	<2
JAN 1986 16...	--	--	--	--	0	0	860	--	--	1990	4
APR 28...	--	--	--	--	0	0	790	2.0	--	1400	16
JUL 23...	--	--	--	--	0	0	1200	--	--	1870	4
FEB 1987 26...	--	2.2	--	3.9	--	--	750	--	--	1270	18
JUN 29...	2.1	2.0	4.1	4.1	--	--	800	--	--	1850	16
03082133	KALP MINE DISCHARGE (SMALL) AT ROMNEY, PA SITE 26 (LAT 40 02 49N LONG 079 24 11W)										
AUG 1985 12...	0.7	--	1.1	--	--	--	250	8.0	0.1	574	4
OCT 23...	--	1.4	--	3.8	0	2	130	--	--	306	12
JAN 1986 16...	--	--	--	--	0	0	140	--	--	448	2
APR 29...	--	--	--	--	0	0	100	<1.0	--	170	10
JUL 23...	--	--	--	--	0	0	120	--	--	190	<2
FEB 1987 26...	--	0.69	--	1.2	--	--	150	--	--	218	10
03082142	MATHEWS MINE DISCHARGE AT DAVISTOWN, PA SITE 27 (LAT 40 02 26N LONG 079 24 14W)										
AUG 1985 12...	0.6	--	1.5	--	--	6	120	2.0	<0.1	300	<2
OCT 23...	--	5.7	--	1.5	2	8	130	--	--	302	<2
APR 1986 29...	--	--	--	--	0	0	790	<1.0	--	1400	14
JUL 23...	--	--	--	--	0	0	1100	--	--	1910	<2
FEB 1987 26...	--	2.2	--	3.9	--	--	420	--	--	1300	14
JUN 29...	2.0	2.1	4.2	4.1	--	--	750	--	--	1710	8
03082155	BACK CREEK AT INDIAN HEAD, PA SITE 15 (LAT 40 01 33N LONG 079 23 47W)										
AUG 1985 12...	1.8	--	0.6	--	22	28	<10	6.0	<0.1	92	<2
OCT 23...	--	2.2	--	1.1	2	30	17	--	--	230	<2
NOV 25...	--	--	--	--	12	18	22	--	--	96	6
DEC 23...	--	--	--	--	16	22	26	--	--	78	<2
JAN 1986 15...	--	--	--	--	20	26	24	--	--	198	4
FEB 19...	--	--	--	--	6	12	16	2.0	--	66	<2
MAR 17...	--	--	--	--	9	16	<10	--	--	46	10
APR 29...	--	--	--	--	15	20	11	6.0	--	50	<2
JUN 06...	--	--	--	--	20	30	12	--	--	64	<2
JUL 23...	--	--	--	--	12	20	24	--	--	68	6
AUG 20...	--	--	--	--	26	34	<10	--	--	56	6
SEP 29...	--	--	--	--	22	26	27	--	--	70	2
FEB 1987 25...	--	3.5	--	0.94	16	24	52	8.0	--	4	12
MAR 26...	--	--	--	--	--	20	20	6.0	--	36	10
APR 14...	--	--	--	--	--	16	23	4.0	--	56	4
MAY 18...	--	--	--	--	--	32	18	5.0	--	78	8
JUN 29...	3.0	2.9	1.4	1.0	--	30	22	--	--	66	<2

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
03082132	KALP MINE DISCHARGE (LARGE) AT ROMNEY, PA SITE 25 (LAT 40 02 50N LONG 079 24 08W)									
AUG 1985 12...	0.620	21000	--	13	--	<250	--	<10	<50	--
OCT 23...	--	--	24000	--	41	--	<0	--	--	<50
JAN 1986 16...	--	30000	30000	--	--	--	--	--	--	--
APR 28...	--	32000	31000	--	--	--	--	--	--	--
JUL 23...	--	25000	25000	--	--	--	--	--	--	--
FEB 1987 26...	--	--	22000	--	14	<250	0	--	--	<50
JUN 29...	--	24000	24000	23	22	<250	0	--	<50	<50
03082133	KALP MINE DISCHARGE (SMALL) AT ROMNEY, PA SITE 26 (LAT 40 02 49N LONG 079 24 11W)									
AUG 1985 12...	0.140	7300	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	570	--	<4	--	<0	--	--	<50
JAN 1986 16...	--	6800	6800	--	--	--	--	--	--	--
APR 29...	--	3800	3600	--	--	--	--	--	--	--
JUL 23...	--	2500	2400	--	--	--	--	--	--	--
FEB 1987 26...	--	--	5000	--	<4	<250	0	--	--	<50
03082142	MATHEWS MINE DISCHARGE AT DAVISTOWN, PA SITE 27 (LAT 40 02 26N LONG 079 24 14W)									
AUG 1985 12...	0.300	1800	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	40	--	<4	--	<0	--	--	<50
APR 1986 29...	--	31000	31000	--	--	--	--	--	--	--
JUL 23...	--	26000	25000	--	--	--	--	--	--	--
FEB 1987 26...	--	--	22000	--	10	<250	0	--	--	<50
JUN 29...	--	24000	24000	22	22	<250	0	--	<50	<50
03082155	BACK CREEK AT INDIAN HEAD, PA SITE 15 (LAT 40 01 33N LONG 079 23 47W)									
AUG 1985 12...	0.960	60	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	80	--	<4	--	<0	--	--	<50
NOV 25...	--	--	<40	--	--	--	--	--	--	--
DEC 23...	--	--	480	--	--	--	--	--	--	--
JAN 1986 15...	--	<500	<500	--	--	--	--	--	--	--
FEB 19...	--	<130	<130	--	--	--	--	--	--	--
MAR 17...	--	<130	<130	--	--	--	--	--	--	--
APR 29...	--	<130	<130	--	--	--	--	--	--	--
JUN 06...	--	<130	<130	--	--	--	--	--	--	--
JUL 23...	--	250	<130	--	--	--	--	--	--	--
AUG 20...	--	<130	<130	--	--	--	--	--	--	--
SEP 29...	--	<130	<130	--	--	--	--	--	--	--
FEB 1987 25...	--	--	<130	--	<4	<250	0	--	--	<50
MAR 26...	--	<130	<130	--	--	--	--	--	--	--
APR 14...	--	<130	<130	--	--	--	--	--	--	--
MAY 18...	--	510	<130	--	--	--	--	--	--	--
JUN 29...	--	210	<130	<4	<4	<250	0	--	<50	<50

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
03082132	KALP MINE DISCHARGE (LARGE) AT ROMNEY, PA SITE 25 (LAT 40 02 50N LONG 079 24 08W)									
AUG 1985 12...	290	--	57	--	61000	60000	<4	--	3000	--
OCT 23...	--	310	--	33	--	85000	--	<45	--	3100
JAN 1986 16...	--	--	--	--	85000	85000	--	--	2600	2600
APR 28...	--	--	--	--	37000	57000	--	--	2600	2500
JUL 23...	--	--	--	--	72000	67000	--	--	2900	2900
FEB 1987 26...	--	190	--	21	--	49000	--	<50	--	2500
JUN 29...	210	210	11	11	73000	72000	<50	<50	2700	2700
03082133	KALP MINE DISCHARGE (SMALL) AT ROMNEY, PA SITE 26 (LAT 40 02 49N LONG 079 24 11W)									
AUG 1985 12...	70	--	16	--	19000	19000	<4	--	1100	--
OCT 23...	--	30	--	<10	--	2100	--	<45	--	840
JAN 1986 16...	--	--	--	--	6800	5700	--	--	680	650
APR 29...	--	--	--	--	1900	1900	--	--	450	440
JUL 23...	--	--	--	--	2800	2500	--	--	380	320
FEB 1987 26...	--	30	--	<10	--	3100	--	<50	--	650
03082142	MATHEWS MINE DISCHARGE AT DAVISTOWN, PA SITE 27 (LAT 40 02 26N LONG 079 24 14W)									
AUG 1985 12...	50	--	<10	--	1200	430	<4	--	1500	--
OCT 23...	--	<30	--	<10	--	<10	--	46	--	320
APR 1986 29...	--	--	--	--	37000	50000	--	--	2500	2500
JUL 23...	--	--	--	--	67000	61000	--	--	3000	2900
FEB 1987 26...	--	200	--	23	--	46000	--	<50	--	2500
JUN 29...	210	210	12	12	68000	68000	<50	<50	2700	2700
03082155	BACK CREEK AT INDIAN HEAD, PA SITE 15 (LAT 40 01 33N LONG 079 23 47W)									
AUG 1985 12...	<30	--	<10	--	<10	<10	<4	--	<10	--
OCT 23...	--	<30	--	<10	--	23	--	47	--	<10
NOV 25...	--	--	--	--	--	<10	--	--	--	<10
DEC 23...	--	--	--	--	--	180	--	--	--	<10
JAN 1986 15...	--	--	--	--	<300	<300	--	--	<50	<50
FEB 19...	--	--	--	--	240	<10	--	--	31	25
MAR 17...	--	--	--	--	120	<10	--	--	16	<10
APR 29...	--	--	--	--	50	13	--	--	12	11
JUN 06...	--	--	--	--	80	48	--	--	<10	<10
JUL 23...	--	--	--	--	180	14	--	--	<10	<10
AUG 20...	--	--	--	--	90	26	--	--	16	15
SEP 29...	--	--	--	--	90	35	--	--	<10	<10
FEB 1987 25...	--	<30	--	<10	--	22	--	<50	--	<10
MAR 26...	--	--	--	--	110	<10	--	--	<10	<10
APR 14...	--	--	--	--	130	48	--	--	<10	12
MAY 18...	--	--	--	--	570	27	--	--	32	<10
JUN 29...	<30	<30	<10	<10	240	14	<50	<50	19	<10

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
03082132	KALP MINE DISCHARGE (LARGE) AT ROMNEY, PA SITE 25 (LAT 40 02 50N LONG 079 24 08W)									
AUG 1985 12...	400	--	120	--	1200	--	<6	--	<2.0	--
OCT 23...	--	460	--	990	--	1200	--	<6	--	<1.0
JAN 1986 16...	--	--	--	--	940	1200	--	--	--	--
APR 28...	--	--	--	--	990	970	--	--	--	--
JUL 23...	--	--	--	--	1100	1100	--	--	--	--
FEB 1987 26...	--	370	--	1600	--	880	--	<6	--	<1.0
JUN 29...	420	420	1700	1600	910	910	<6	<6	<1.0	<1.0
03082133	KALP MINE DISCHARGE (SMALL) AT ROMNEY, PA SITE 26 (LAT 40 02 49N LONG 079 24 11W)									
AUG 1985 12...	140	--	<10	--	280	--	<6	--	<2.0	--
OCT 23...	--	<25	--	120	--	59	--	<6	--	<1.0
JAN 1986 16...	--	--	--	--	170	170	--	--	--	--
APR 29...	--	--	--	--	120	140	--	--	--	--
JUL 23...	--	--	--	--	90	90	--	--	--	--
FEB 1987 26...	--	75	--	170	--	140	--	<6	--	<1.0
03082142	MATHEWS MINE DISCHARGE AT DAVISTOWN, PA SITE 27 (LAT 40 02 26N LONG 079 24 14W)									
AUG 1985 12...	65	--	<10	--	160	--	<6	--	<2.0	--
OCT 23...	--	<25	--	70	--	<10	--	<6	--	<1.0
APR 1986 29...	--	--	--	--	970	990	--	--	--	--
JUL 23...	--	--	--	--	1100	1100	--	--	--	--
FEB 1987 26...	--	380	--	1600	--	890	--	9	--	<1.0
JUN 29...	430	420	1600	1600	920	920	<6	<6	<1.0	<1.0
03082155	BACK CREEK AT INDIAN HEAD, PA SITE 15 (LAT 40 01 33N LONG 079 23 47W)									
AUG 1985 12...	<25	--	<10	--	<10	--	<6	--	<2.0	--
OCT 23...	--	<25	--	19	--	<10	--	<6	--	<1.0
NOV 25...	--	--	--	--	--	<10	--	--	--	--
DEC 23...	--	--	--	--	--	56	--	--	--	--
JAN 1986 15...	--	--	--	--	60	<10	--	--	--	--
FEB 19...	--	--	--	--	<10	<10	--	--	--	--
MAR 17...	--	--	--	--	<10	<10	--	--	--	--
APR 29...	--	--	--	--	10	24	--	--	--	--
JUN 06...	--	--	--	--	<10	<10	--	--	--	--
JUL 23...	--	--	--	--	20	11	--	--	--	--
AUG 20...	--	--	--	--	20	14	--	--	--	--
SEP 29...	--	--	--	--	20	17	--	--	--	--
FEB 1987 25...	--	<25	--	32	--	<10	--	<6	--	<1.0
MAR 26...	--	--	--	--	30	<10	--	--	--	--
APR 14...	--	--	--	--	<10	20	--	--	--	--
MAY 18...	--	--	--	--	<10	<10	--	--	--	--
JUN 29...	<25	<25	30	32	<10	<10	<6	<6	<1.0	<1.0

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
03082160		INDIAN CREEK AT INDIAN HEAD, PA					SITE 14 (LAT 40 01 30N LONG 079 23 49W)				
AUG 1985											
12...	1130	28	230	6.60	19.0	0	20	23	--	5.2	--
OCT											
23...	1030	19	220	7.00	12.0	0.1	0.0	--	22	--	4.9
JAN 1986											
16...	1150	27	400	7.00	0.0	16	18	--	--	--	--
APR											
29...	0950	103	165	6.90	14.0	0.1	12	--	--	--	--
JUL											
23...	1020	178	105	7.10	15.0	0	0.0	--	--	--	--
FEB 1987											
25...	1140	48	260	6.80	2.0	0.2	24	--	16	--	3.7
JUN											
29...	1110	30	190	7.00	16.0	--	20	19	19	4.6	4.5
03082168		GALENTINE MINE DISCHARGE NR INDIAN HEAD, PA					SITE 20 (LAT 40 00 57N LONG 079 24 47W)				
AUG 1985											
13...	0900	0.46	1800	2.80	12.5	6.8	372	140	--	53	--
OCT											
24...	0900	0.35	1900	3.20	13.0	7.9	388	--	80	--	40
JAN 1986											
16...	1000	0.55	1900	2.40	11.0	180	440	--	--	--	--
APR											
28...	1400	0.74	1850	2.90	9.0	8.0	310	--	--	--	--
JUL											
23...	1140	0.62	1810	3.00	15.5	8.6	328	--	--	--	--
FEB 1987											
26...	1140	0.36	1670	3.60	11.5	5.2	324	--	130	--	43
JUN											
29...	1430	0.28	1650	2.94	14.0	--	360	130	130	41	41
03082175		POPLAR RUN ABOVE NEWMYER RN NR CLINTON, PA					SITE 18 (LAT 40 02 13N LONG 079 26 31W)				
AUG 1985											
12...	1400	1.2	440	5.10	19.0	0.1	24	51	--	16	--
OCT											
23...	1300	0.82	380	4.60	13.0	0.2	22	--	39	--	12
JAN 1986											
15...	1230	1.7	310	5.30	0.0	0.2	16	--	--	--	--
APR											
28...	1020	6.6	210	5.00	13.0	0	20	--	--	--	--
JUL											
22...	1500	14	205	6.70	18.5	0	10	--	--	--	--
FEB 1987											
25...	1020	4.0	180	6.01	0.0	0.4	36	--	31	--	11
JUN											
29...	1415	0.91	350	5.80	17.0	--	30	38	38	13	13
03082180		NEWMYER RUN ABOVE POPLAR RN NR CLINTON, PA					SITE 17 (LAT 40 02 13N LONG 079 26 29W)				
AUG 1985											
12...	1245	1.2	1900	4.50	17.5	2.1	214	150	--	57	--
OCT											
23...	1220	0.77	950	4.60	13.0	2.4	52	--	80	--	40
JAN 1986											
15...	1235	1.7	560	4.90	0.0	0.8	52	--	--	--	--
APR											
28...	1020	4.7	320	7.10	13.0	0	2.0	--	--	--	--
JUL											
22...	1600	11	358	7.10	18.5	0	0.0	--	--	--	--
FEB 1987											
25...	0900	189	420	7.40	0.0	0.5	52	--	85	--	60
JUN											
29...	1340	0.68	600	4.80	17.0	--	52	76	76	42	42
03082210		POPLAR RUN AT MOUTH NEAR NORMALVILLE, PA					SITE 19 (LAT 40 00 57N LONG 079 24 58W)				
AUG 1985											
13...	0930	2.6	1000	5.30	18.0	0.2	70	100	--	57	--
OCT											
23...	1700	2.2	650	5.70	14.0	0.1	20	--	64	--	29
JAN 1986											
16...	1030	4.5	900	4.40	0.0	72	64	--	--	--	--
APR											
28...	1315	15	390	6.20	17.5	0.1	16	--	--	--	--
JUL											
23...	1020	30	420	6.60	18.0	0.1	8.0	--	--	--	--
FEB 1987											
26...	1115	7.9	350	6.10	0.0	0.1	34	--	40	--	19

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
03082160		INDIAN CREEK AT INDIAN HEAD, PA					SITE 14 (LAT 40 01 30N LONG 079 23 49W)				
AUG 1985 12...	6.7	--	0.8	--	10	16	66	17	<0.1	216	<2
OCT 23...	--	12	--	1.6	1	26	54	--	--	280	<2
JAN 1986 16...	--	--	--	--	8	16	54	--	--	378	10
APR 29...	--	--	--	--	11	16	27	15	--	114	<2
JUL 23...	--	--	--	--	12	20	26	--	--	88	8
FEB 1987 25...	--	36	--	1.0	4	20	57	62	--	126	14
JUN 29...	10	10	1.3	1.3	--	20	35	--	--	140	6
03082168		GALENTINE MINE DISCHARGE NR INDIAN HEAD, PA					SITE 20 (LAT 40 00 57N LONG 079 24 47W)				
AUG 1985 13...	53	--	1.8	--	--	--	810	6.0	0.4	1560	<2
OCT 24...	--	2.1	--	2.2	0	0	790	--	--	1840	<2
JAN 1986 16...	--	--	--	--	0	0	770	--	--	1920	6
APR 28...	--	--	--	--	0	0	760	2.0	--	1290	18
JUL 23...	--	--	--	--	0	0	820	--	--	70	<2
FEB 1987 26...	--	3.1	--	3.2	0	--	570	3.0	--	1180	16
JUN 29...	2.7	2.7	3.7	3.6	--	--	490	--	--	1520	4
03082175		POPLAR RUN ABOVE NEWMYER RN NR CLINTON, PA					SITE 18 (LAT 40 02 13N LONG 079 26 31W)				
AUG 1985 12...	16	--	1.1	--	2	8	180	2.0	0.1	386	<2
OCT 23...	--	2.1	--	1.9	2	2	170	--	--	354	<2
JAN 1986 15...	--	--	--	--	2	6	150	--	--	412	4
APR 28...	--	--	--	--	2	8	78	2.0	--	104	16
JUL 22...	--	--	--	--	5	8	62	--	--	326	<2
FEB 1987 25...	--	2.4	--	1.4	4	8	85	--	--	108	22
JUN 29...	1.8	1.8	1.5	1.5	--	8	130	--	--	226	<2
03082180		NEWMYER RUN ABOVE POPLAR RN NR CLINTON, PA					SITE 17 (LAT 40 02 13N LONG 079 26 29W)				
AUG 1985 12...	68	--	1.4	--	--	10	1200	8.0	0.7	1900	12
OCT 23...	--	8.4	--	2.5	0	2	550	--	--	1100	4
JAN 1986 15...	--	--	--	--	2	8	280	--	--	668	10
APR 28...	--	--	--	--	30	28	230	5.0	--	338	20
JUL 22...	--	--	--	--	14	20	140	--	--	122	10
FEB 1987 25...	--	39	--	2.1	12	12	560	--	--	804	36
JUN 29...	5.9	5.9	2.2	2.2	--	8	350	--	--	698	10
03082210		POPLAR RUN AT MOUTH NEAR NORMALVILLE, PA					SITE 19 (LAT 40 00 57N LONG 079 24 58W)				
AUG 1985 13...	29	--	1.1	--	4	8	580	5.0	0.3	898	<2
OCT 23...	--	5.1	--	2.2	2	2	340	--	--	600	<2
JAN 1986 16...	--	--	--	--	0	8	460	--	--	874	6
APR 28...	--	--	--	--	8	14	200	2.0	--	292	24
JUL 23...	--	--	--	--	4	10	150	--	--	1640	6
FEB 1987 26...	--	8.7	--	1.4	7	12	190	--	--	262	20

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
03082160	INDIAN CREEK AT INDIAN HEAD, PA					SITE 14 (LAT 40 01 30N LONG 079 23 49W)				
AUG 1985 12...	0.860	270	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	140	--	<4	--	<0	--	--	<50
JAN 1986 16...	--	<500	<500	--	--	--	--	--	--	--
APR 29...	--	<130	<130	--	--	--	--	--	--	--
JUL 23...	--	390	180	--	--	--	--	--	--	--
FEB 1987 25...	--	--	170	--	<4	<250	0	--	--	<50
JUN 29...	--	250	<130	<4	<4	<250	0	--	<50	<50
03082168	GALENTINE MINE DISCHARGE NR INDIAN HEAD, PA SITE 20 (LAT 40 00 57N LONG 079 24 47W)									
AUG 1985 13...	0.340	21000	--	13	--	<250	--	<10	<50	--
OCT 24...	--	--	22000	--	31	--	<0	--	--	<50
JAN 1986 16...	--	31000	30000	--	--	--	--	--	--	--
APR 28...	--	32000	30000	--	--	--	--	--	--	--
JUL 23...	--	21000	21000	--	--	--	--	--	--	--
FEB 1987 26...	--	--	21000	--	13	<250	0	--	--	<50
JUN 29...	--	19000	19000	16	16	<250	0	--	<50	<50
03082175	POPLAR RUN ABOVE NEWMYER RN NR CLINTON, PA SITE 18 (LAT 40 02 13N LONG 079 26 31W)									
AUG 1985 12...	0.340	430	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	760	--	<4	--	<0	--	--	<50
JAN 1986 15...	--	<500	<500	--	--	--	--	--	--	--
APR 28...	--	<130	<130	--	--	--	--	--	--	--
JUL 22...	--	340	<130	--	--	--	--	--	--	--
FEB 1987 25...	--	--	330	--	<4	<250	0	--	--	<50
JUN 29...	--	420	<130	<4	<4	<250	0	--	<50	<50
03082180	NEWMYER RUN ABOVE POPLAR RN NR CLINTON, PA SITE 17 (LAT 40 02 13N LONG 079 26 29W)									
AUG 1985 12...	1.76	15000	--	8	--	<250	--	<10	<50	--
OCT 23...	--	--	4000	--	<4	--	<0	--	--	<50
JAN 1986 15...	--	4500	3200	--	--	--	--	--	--	--
APR 28...	--	910	<130	--	--	--	--	--	--	--
JUL 22...	--	1000	<130	--	--	--	--	--	--	--
FEB 1987 25...	--	--	<130	--	<4	<250	0	--	--	<50
JUN 29...	--	4900	2100	<4	<4	<250	0	--	<50	<50
03082210	POPLAR RUN AT MOUTH NEAR NORMALVILLE, PA SITE 19 (LAT 40 00 57N LONG 079 24 58W)									
AUG 1985 13...	4.18	720	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	40	--	<4	--	<0	--	--	<50
JAN 1986 16...	--	8900	8300	--	--	--	--	--	--	--
APR 28...	--	910	<130	--	--	--	--	--	--	--
JUL 23...	--	1100	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
03082160	INDIAN CREEK AT INDIAN HEAD, PA					SITE 14 (LAT 40 01 30N LONG 079 23 49W)				
AUG 1985 12...	<30	--	42	--	730	250	<4	--	280	--
OCT 23...	--	<30	--	<10	--	120	--	<45	--	210
JAN 1986 16...	--	--	--	--	1700	620	--	--	190	190
APR 29...	--	--	--	--	340	140	--	--	100	100
JUL 23...	--	--	--	--	380	78	--	--	22	<10
FEB 1987 25...	--	<30	--	<10	--	540	--	<50	--	130
JUN 29...	<30	<30	<10	<10	800	400	<50	<50	210	200
03082168	GALENTINE MINE DISCHARGE NR INDIAN HEAD,PA SITE 20 (LAT 40 00 57N LONG 079 24 47W)									
AUG 1985 13...	280	--	34	--	48000	47000	<4	--	3400	--
OCT 24...	--	290	--	25	--	53000	--	<45	--	3200
JAN 1986 16...	--	--	--	--	55000	51000	--	--	2900	2700
APR 28...	--	--	--	--	31000	40000	--	--	2900	2800
JUL 23...	--	--	--	--	54000	52000	--	--	3100	3000
FEB 1987 26...	--	170	--	11	--	40000	--	<50	--	2700
JUN 29...	160	150	310	<10	45000	45000	<50	<50	2500	2500
03082175	POPLAR RUN ABOVE NEWMYER RN NR CLINTON, PA SITE 18 (LAT 40 02 13N LONG 079 26 31W)									
AUG 1985 12...	<30	--	<10	--	240	240	<4	--	2600	--
OCT 23...	--	30	--	<10	--	170	--	<45	--	2400
JAN 1986 15...	--	--	--	--	<300	<300	--	--	1700	1700
APR 28...	--	--	--	--	90	190	--	--	1100	1100
JUL 22...	--	--	--	--	330	130	--	--	660	650
FEB 1987 25...	--	<30	--	<10	--	380	--	<50	--	1400
JUN 29...	<30	<30	<10	<10	310	130	<50	<50	1400	1400
03082180	NEWMYER RUN ABOVE POPLAR RN NR CLINTON, PA SITE 17 (LAT 40 02 13N LONG 079 26 29W)									
AUG 1985 12...	630	--	<10	--	7800	6100	<4	--	40000	--
OCT 23...	--	240	--	<10	--	1700	--	<45	--	17000
JAN 1986 15...	--	--	--	--	1200	680	--	--	8100	7100
APR 28...	--	--	--	--	370	170	--	--	2500	2100
JUL 22...	--	--	--	--	560	100	--	--	1200	1300
FEB 1987 25...	--	110	--	<10	--	2000	--	<50	--	12000
JUN 29...	40	50	<10	<10	1200	880	<50	<50	8400	8300
03082210	POPLAR RUN AT MOUTH NEAR NORMALVILLE, PA SITE 19 (LAT 40 00 57N LONG 079 24 58W)									
AUG 1985 13...	60	--	<10	--	270	110	<4	--	9700	--
OCT 23...	--	40	--	<10	--	100	--	<45	--	4700
JAN 1986 16...	--	--	--	--	1100	560	--	--	13000	13000
APR 28...	--	--	--	--	670	19	--	--	3600	3500
JUL 23...	--	--	--	--	610	320	--	--	2500	2500
FEB 1987 26...	--	<30	--	<10	--	730	--	<50	--	2700

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
03082160	INDIAN CREEK AT INDIAN HEAD, PA SITE 14 (LAT 40 01 30N LONG 079 23 49W)									
AUG 1985 12...	26	--	<10	--	70	--	<6	--	<2.0	--
OCT 23...	--	<25	--	64	--	<10	--	<6	--	<1.0
JAN 1986 16...	--	--	--	--	20	20	--	--	--	--
APR 29...	--	--	--	--	30	45	--	--	--	--
JUL 23...	--	--	--	--	20	<10	--	--	--	--
FEB 1987 25...	--	<25	--	71	--	<10	--	<6	--	<1.0
JUN 29...	<25	<25	90	89	30	16	<6	<6	<1.0	<1.0
03082168	GALENTINE MINE DISCHARGE NR INDIAN HEAD, PA SITE 20 (LAT 40 00 57N LONG 079 24 47W)									
AUG 1985 13...	370	--	160	--	1100	--	<6	--	<2.0	--
OCT 24...	--	410	--	1000	--	1100	--	<6	--	<1.0
JAN 1986 16...	--	--	--	--	1100	1000	--	--	--	--
APR 28...	--	--	--	--	920	880	--	--	--	--
JUL 23...	--	--	--	--	880	830	--	--	--	--
FEB 1987 26...	--	320	--	1300	--	740	--	9	--	<1.0
JUN 29...	430	310	1300	1300	750	700	<6	<6	<1.0	<1.0
03082175	POPLAR RUN ABOVE NEWMYER RN NR CLINTON, PA SITE 18 (LAT 40 02 13N LONG 079 26 31W)									
AUG 1985 12...	48	--	<10	--	180	--	<6	--	<2.0	--
OCT 23...	--	<25	--	59	--	160	--	<6	--	<1.0
JAN 1986 15...	--	--	--	--	140	140	--	--	--	--
APR 28...	--	--	--	--	110	120	--	--	--	--
JUL 22...	--	--	--	--	80	65	--	--	--	--
FEB 1987 25...	--	<25	--	80	--	94	--	<6	--	<1.0
JUN 29...	<25	<25	100	99	90	93	<6	<6	<1.0	<1.0
03082180	NEWMYER RUN ABOVE POPLAR RN NR CLINTON, PA SITE 17 (LAT 40 02 13N LONG 079 26 29W)									
AUG 1985 12...	410	--	10	--	1800	--	<6	--	<2.0	--
OCT 23...	--	110	--	120	--	520	--	<6	--	<1.0
JAN 1986 15...	--	--	--	--	300	290	--	--	--	--
APR 28...	--	--	--	--	80	24	--	--	--	--
JUL 22...	--	--	--	--	80	84	--	--	--	--
FEB 1987 25...	--	64	--	140	--	310	--	<6	--	<1.0
JUN 29...	<25	<25	150	150	280	280	<6	<6	<1.0	<1.0
03082210	POPLAR RUN AT MOUTH NEAR NORMALVILLE, PA SITE 19 (LAT 40 00 57N LONG 079 24 58W)									
AUG 1985 13...	<25	--	<10	--	380	--	<6	--	<2.0	--
OCT 23...	--	<25	--	93	--	210	--	<6	--	<1.0
JAN 1986 16...	--	--	--	--	520	520	--	--	--	--
APR 28...	--	--	--	--	100	67	--	--	--	--
JUL 23...	--	--	--	--	140	120	--	--	--	--
FEB 1987 26...	--	<25	--	100	--	83	--	<6	--	<1.0

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CAC03)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
03082215		LAUREL RUN ABOVE BUCK RN AT ROGERS MILL, PA SITE 22 (LAT 39 59 50N LONG 079 24 21W)									
AUG 1985											
13...	1015	1.9	75	7.00	15.0	0.2	0.0	8.8	--	1.4	--
OCT											
23...	1500	1.5	94	7.30	14.0	0	0.0	--	8.6	--	1.4
NOV											
25...	1330	16	60	7.00	5.0	0	0.0	--	--	--	--
DEC											
23...	1130	8.9	63	6.80	3.0	0	14	--	--	--	--
JAN 1986											
16...	1500	1.9	70	6.60	0.0	0	0.0	--	--	--	--
FEB											
19...	1630	174	50	6.30	6.5	0	16	--	--	--	--
MAR											
17...	1415	32	50	6.80	6.5	0	16	--	--	--	--
APR											
28...	1445	14	90	7.80	13.0	0	2.0	--	--	--	--
JUN											
05...	1500	3.1	80	6.90	15.0	0	0.0	--	--	--	--
JUL											
23...	0825	23	65	6.90	14.0	0	4.0	--	--	--	--
AUG											
20...	1410	1.4	105	7.40	18.0	0	0.0	--	--	--	--
SEP											
29...	1450	4.1	75	7.30	18.0	0	0.0	--	--	--	--
FEB 1987											
26...	1000	3.9	70	7.50	0.5	0.0	0.0	--	9.1	--	1.7
MAR											
26...	1345	6.9	55	7.40	10.0	--	0.0	--	--	--	--
APR											
14...	1300	31	55	7.25	9.5	--	18	--	--	--	--
MAY											
18...	1520	6.3	70	7.03	14.5	--	0.0	--	--	--	--
JUN											
30...	1000	1.9	70	--	15.5	--	12	8.9	8.9	1.5	1.5
03082220		BUCK RUN ABOVE LAUREL RN AT ROGERS MILL, PA SITE 21 (LAT 39 59 32N LONG 079 24 33W)									
AUG 1985											
13...	0930	4.2	86	6.60	15.0	0	0.0	8.7	--	1.7	--
OCT											
23...	1115	2.0	102	7.40	12.0	0	0.0	--	9.6	--	1.8
NOV											
25...	1230	10	85	6.80	5.5	0	4.0	--	--	--	--
DEC											
23...	1245	7.1	85	6.90	2.5	0.1	8.0	--	--	--	--
JAN 1986											
16...	1400	3.5	90	6.70	0.0	0	0.0	--	--	--	--
FEB											
19...	1600	83	65	5.50	6.5	0.1	16	--	--	--	--
MAR											
17...	1620	22	85	5.80	6.5	0.1	20	--	--	--	--
APR											
28...	1515	9.1	85	7.80	13.0	0.1	2.0	--	--	--	--
JUN											
05...	1600	1.8	90	6.90	15.0	0	0.0	--	--	--	--
JUL											
23...	0920	17	80	7.30	14.0	0	6.0	--	--	--	--
AUG											
20...	1445	0.61	95	7.40	18.0	0	0.0	--	--	--	--
SEP											
29...	1522	4.2	105	7.10	18.0	0	10	--	--	--	--
FEB 1987											
26...	0900	3.6	800	7.50	0.5	0.0	24	--	8.9	--	2.3
MAR											
26...	1445	4.8	75	7.20	10.0	--	0.0	--	--	--	--
APR											
14...	1330	28	58	7.15	9.0	--	20	--	--	--	--
MAY											
18...	1555	7.1	90	6.95	15.0	--	0.0	--	--	--	--
JUN											
30...	0920	2.6	110	6.00	16.0	--	20	9.5	9.3	2.1	2.0

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
03082215	LAUREL RUN ABOVE BUCK RN AT ROGERS MILL, PA SITE 22 (LAT 39 59 50N LONG 079 24 21W)										
AUG 1985 13...	0.7	--	0.7	--	16	22	11	3.0	<0.1	88	<2
OCT 23...	--	0.79	--	0.99	18	20	18	--	--	164	<2
NOV 25...	--	--	--	--	8	14	20	--	--	72	4
DEC 23...	--	--	--	--	10	16	22	--	--	68	<2
JAN 1986 16...	--	--	--	--	16	22	23	--	--	194	2
FEB 19...	--	--	--	--	4	8	12	2.0	--	44	<2
MAR 17...	--	--	--	--	6	12	<10	--	--	28	<2
APR 28...	--	--	--	--	10	16	23	<1.0	--	2	12
JUN 05...	--	--	--	--	14	20	<10	--	--	36	<2
JUL 23...	--	--	--	--	4	14	13	--	--	66	<2
AUG 20...	--	--	--	--	20	24	<10	--	--	34	<2
SEP 29...	--	--	--	--	16	18	29	--	--	72	<2
FEB 1987 26...	--	0.94	--	0.77	17	22	61	2.0	--	4	8
MAR 26...	--	--	--	--	--	16	14	2.0	--	20	6
APR 14...	--	--	--	--	--	12	26	1.0	--	52	<2
MAY 18...	--	--	--	--	--	22	17	2.0	--	48	10
JUN 30...	0.9	0.85	1	0.95	--	24	<10	--	--	36	2
03082220	BUCK RUN ABOVE LAUREL RN AT ROGERS MILL, PA SITE 21 (LAT 39 59 32N LONG 079 24 33W)										
AUG 1985 13...	1.7	--	0.6	--	10	20	39	4.0	<0.1	98	<2
OCT 23...	--	2.6	--	1.1	24	22	26	--	--	200	<2
NOV 25...	--	--	--	--	10	12	27	--	--	80	10
DEC 23...	--	--	--	--	12	14	34	--	--	80	<2
JAN 1986 16...	--	--	--	--	14	18	33	--	--	162	<2
FEB 19...	--	--	--	--	0	6	20	3.0	--	64	2
MAR 17...	--	--	--	--	2	8	20	--	--	40	4
APR 28...	--	--	--	--	8	14	31	2.0	--	20	12
JUN 05...	--	--	--	--	14	20	15	--	--	56	<2
JUL 23...	--	--	--	--	6	12	27	--	--	58	2
AUG 20...	--	--	--	--	20	24	21	--	--	46	6
SEP 29...	--	--	--	--	12	14	34	--	--	86	<2
FEB 1987 26...	--	2.6	--	0.73	14	18	6.3	--	--	4	<2
MAR 26...	--	--	--	--	--	18	21	2.0	--	34	8
APR 14...	--	--	--	--	--	12	40	3.0	--	54	6
MAY 18...	--	--	--	--	--	22	23	3.0	--	68	8
JUN 30...	3.1	3.0	1	0.91	--	22	28	--	--	54	6

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N)	ALUM-INUM, TOTAL RECOV-ERABLE (UG/L AS AL)	ALUM-INUM, DIS-SOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DIS-SOLVED (UG/L AS AS)	BORON, TOTAL RECOV-ERABLE (UG/L AS B)	BORON, DIS-SOLVED (UG/L AS B)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR)
03082215	LAUREL RUN ABOVE BUCK RN AT ROGERS MILL,PA SITE 22 (LAT 39 59 50N LONG 079 24 21W)									
AUG 1985 13...	1.44	140	--	<4	--	<250	--	16	<50	--
OCT 23...	--	--	50	--	<4	--	<0	--	--	<50
NOV 25...	--	--	<40	--	--	--	--	--	--	--
DEC 23...	--	--	350	--	--	--	--	--	--	--
JAN 1986 16...	--	<500	<500	--	--	--	--	--	--	--
FEB 19...	--	<130	<130	--	--	--	--	--	--	--
MAR 17...	--	<130	<130	--	--	--	--	--	--	--
APR 28...	--	<130	<130	--	--	--	--	--	--	--
JUN 05...	--	<130	<130	--	--	--	--	--	--	--
JUL 23...	--	<130	<130	--	--	--	--	--	--	--
AUG 20...	--	<130	<130	--	--	--	--	--	--	--
SEP 29...	--	<130	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50
MAR 26...	--	<130	<130	--	--	--	--	--	--	--
APR 14...	--	<130	<130	--	--	--	--	--	--	--
MAY 18...	--	380	<130	--	--	--	--	--	--	--
JUN 30...	--	160	<130	<4	<4	<250	0	--	<50	<50
03082220	BUCK RUN ABOVE LAUREL RN AT ROGERS MILL,PA SITE 21 (LAT 39 59 32N LONG 079 24 33W)									
AUG 1985 13...	1.04	210	--	<4	--	<250	--	<10	<50	--
OCT 23...	--	--	250	--	<4	--	<0	--	--	<50
NOV 25...	--	--	<40	--	--	--	--	--	--	--
DEC 23...	--	--	200	--	--	--	--	--	--	--
JAN 1986 16...	--	<500	<500	--	--	--	--	--	--	--
FEB 19...	--	610	<130	--	--	--	--	--	--	--
MAR 17...	--	540	<130	--	--	--	--	--	--	--
APR 28...	--	<130	<130	--	--	--	--	--	--	--
JUN 05...	--	330	610	--	--	--	--	--	--	--
JUL 23...	--	450	150	--	--	--	--	--	--	--
AUG 20...	--	530	<130	--	--	--	--	--	--	--
SEP 29...	--	500	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50
MAR 26...	--	290	<130	--	--	--	--	--	--	--
APR 14...	--	220	<130	--	--	--	--	--	--	--
MAY 18...	--	470	<130	--	--	--	--	--	--	--
JUN 30...	--	<130	<130	<4	<4	<250	0	--	<50	<50

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	COBALT, TOTAL RECOV-ERABLE (UG/L AS CO)	COBALT, DIS-SOLVED (UG/L AS CO)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU)	COPPER, DIS-SOLVED (UG/L AS CU)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE)	IRON, DIS-SOLVED (UG/L AS FE)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB)	LEAD, DIS-SOLVED (UG/L AS PB)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
03082215	LAUREL RUN ABOVE BUCK RN AT ROGERS MILL, PA SITE 22 (LAT 39 59 50N LONG 079 24 21W)									
AUG 1985 13...	<30	--	14	--	30	<10	<4	--	14	--
OCT 23...	--	<30	--	<10	--	22	--	65	--	<10
NOV 25...	--	--	--	--	--	<10	--	--	--	<10
DEC 23...	--	--	--	--	--	30	--	--	--	<10
JAN 1986 16...	--	--	--	--	<300	<300	--	--	<50	<50
FEB 19...	--	--	--	--	270	39	--	--	50	31
MAR 17...	--	--	--	--	30	<10	--	--	12	12
APR 28...	--	--	--	--	40	38	--	--	<10	13
JUN 05...	--	--	--	--	150	45	--	--	<10	<10
JUL 23...	--	--	--	--	60	20	--	--	<10	<10
AUG 20...	--	--	--	--	240	36	--	--	26	22
SEP 29...	--	--	--	--	190	45	--	--	<10	<10
FEB 1987 26...	--	<30	--	<10	--	44	--	<50	--	20
MAR 26...	--	--	--	--	100	<10	--	--	10	<10
APR 14...	--	--	--	--	10	31	--	--	<10	12
MAY 18...	--	--	--	--	320	210	--	--	31	11
JUN 30...	<30	<30	<10	<10	350	90	<50	<50	22	<10
03082220	BUCK RUN ABOVE LAUREL RN AT ROGERS MILL, PA SITE 21 (LAT 39 59 32N LONG 079 24 33W)									
AUG 1985 13...	<30	--	<10	--	<10	<10	<4	--	160	--
OCT 23...	--	<30	--	<10	--	26	--	65	--	93
NOV 25...	--	--	--	--	--	<10	--	--	--	210
DEC 23...	--	--	--	--	--	51	--	--	--	210
JAN 1986 16...	--	--	--	--	<300	<300	--	--	130	120
FEB 19...	--	--	--	--	390	12	--	--	230	220
MAR 17...	--	--	--	--	40	<10	--	--	390	380
APR 28...	--	--	--	--	40	49	--	--	180	160
JUN 05...	--	--	--	--	1700	17	--	--	180	160
JUL 23...	--	--	--	--	90	420	--	--	220	160
AUG 20...	--	--	--	--	60	18	--	--	160	160
SEP 29...	--	--	--	--	80	80	--	--	400	400
FEB 1987 26...	--	<30	--	<10	--	20	--	<50	--	250
MAR 26...	--	--	--	--	80	<10	--	--	140	130
APR 14...	--	--	--	--	80	32	--	--	130	140
MAY 18...	--	--	--	--	280	25	--	--	180	130
JUN 30...	<30	<30	<10	<10	120	78	<50	<50	99	86

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
03082215	LAUREL RUN ABOVE BUCK RN AT ROGERS MILL, PA SITE 22 (LAT 39 59 50N LONG 079 24 21W)									
AUG 1985 13...	55	--	<10	--	<10	--	<6	--	<2.0	--
OCT 23...	--	<25	--	15	--	<10	--	<6	--	<1.0
NOV 25...	--	--	--	--	--	<10	--	--	--	--
DEC 23...	--	--	--	--	--	23	--	--	--	--
JAN 1986 16...	--	--	--	--	<10	<10	--	--	--	--
FEB 19...	--	--	--	--	<10	<10	--	--	--	--
MAR 17...	--	--	--	--	<10	<10	--	--	--	--
APR 28...	--	--	--	--	10	26	--	--	--	--
JUN 05...	--	--	--	--	20	<10	--	--	--	--
JUL 23...	--	--	--	--	20	12	--	--	--	--
AUG 20...	--	--	--	--	20	21	--	--	--	--
SEP 29...	--	--	--	--	20	17	--	--	--	--
FEB 1987 26...	--	<25	--	28	--	<10	--	<6	--	<1.0
MAR 26...	--	--	--	--	20	<10	--	--	--	--
APR 14...	--	--	--	--	<10	<10	--	--	--	--
MAY 18...	--	--	--	--	20	13	--	--	--	--
JUN 30...	<25	<25	30	30	10	11	<6	<6	<1.0	<1.0
03082220	BUCK RUN ABOVE LAUREL RN AT ROGERS MILL, PA SITE 21 (LAT 39 59 32N LONG 079 24 33W)									
AUG 1985 13...	38	--	<10	--	20	--	<6	--	<2.0	--
OCT 23...	--	<25	--	17	--	<10	--	<6	--	<1.0
NOV 25...	--	--	--	--	--	<10	--	--	--	--
DEC 23...	--	--	--	--	--	43	--	--	--	--
JAN 1986 16...	--	--	--	--	<10	<10	--	--	--	--
FEB 19...	--	--	--	--	<10	<10	--	--	--	--
MAR 17...	--	--	--	--	<10	<10	--	--	--	--
APR 28...	--	--	--	--	30	26	--	--	--	--
JUN 05...	--	--	--	--	20	21	--	--	--	--
JUL 23...	--	--	--	--	40	40	--	--	--	--
AUG 20...	--	--	--	--	30	29	--	--	--	--
SEP 29...	--	--	--	--	60	60	--	--	--	--
FEB 1987 26...	--	<25	--	30	--	15	--	<6	--	<1.0
MAR 26...	--	--	--	--	20	<10	--	--	--	--
APR 14...	--	--	--	--	<10	18	--	--	--	--
MAY 18...	--	--	--	--	20	13	--	--	--	--
JUN 30...	<25	<25	30	33	<10	<10	<6	<6	<1.0	<1.0

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS)	SPE-CIFIC CON-DUCT-ANCE (US/CM)	PH (STAND-ARD UNITS)	TEMPER-ATURE WATER (DEG C)	ACIDITY (MG/L AS H)	ACIDITY TOTAL HEATED (MG/L AS CACO3)	CALCIUM TOTAL RECOV-ERABLE (MG/L AS CA)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-SIUM, TOTAL RECOV-ERABLE (MG/L AS MG)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG)
03082300		INDIAN CREEK AT MOUTH NEAR MILL RUN, PA					SITE 28 (LAT 39 58 12N LONG 079 30 44W)				
AUG 1985											
12...	1830	--	274	6.50	25.5	0	24	26	--	7.7	--
DEC											
23...	0830	--	235	6.80	0.5	0	14	--	--	--	--
JAN 1986											
16...	1130	--	295	7.00	0.0	0	0.0	--	--	--	--
FEB											
19...	1400	--	145	7.60	6.0	0.1	18	--	--	--	--
MAR											
17...	0900	--	145	6.50	6.0	0	20	--	--	--	--
APR											
29...	0910	210	150	7.30	11.0	0	6.0	--	--	--	--
JUN											
05...	1100	59	250	6.80	20.0	0	0.0	--	--	--	--
JUL											
22...	0930	--	120	7.10	18.0	0	8.0	--	--	--	--
AUG											
20...	1000	30	290	6.90	23.0	0	0.0	--	--	--	--
SEP											
30...	1010	39	325	6.80	15.0	0	6.0	--	--	--	--
FEB 1987											
26...	0930	93	280	6.90	1.0	0.1	28	--	20	--	6.7
MAR											
27...	1015	111	195	7.07	9.0	--	0.0	--	--	--	--
APR											
14...	0845	--	160	6.71	8.5	--	20	--	--	--	--
MAY											
19...	0945	--	220	7.00	16.0	--	0.0	--	--	--	--
JUN											
29...	1015	53	200	6.90	19.5	--	14	20	20	6.1	6.1

DATE	SODIUM, TOTAL RECOV-ERABLE (MG/L AS NA)	SODIUM, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, TOTAL RECOV-ERABLE (MG/L AS K)	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3	ALKA-LINITY WH WAT TOTAL LAB MG/L AS CACO3	SULFATE DIS-SOLVED (MG/L AS SO4)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)	FLUO-RIDE, TOTAL (MG/L AS F)	SOLIDS, RESIDUE AT 105 DEG. C, DIS-SOLVED (MG/L)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L)
03082300		INDIAN CREEK AT MOUTH NEAR MILL RUN, PA					SITE 28 (LAT 39 58 12N LONG 079 30 44W)				
AUG 1985											
12...	6.0	--	1.0	--	6	12	98	11	<0.1	248	<2
DEC											
23...	--	--	--	--	4	12	68	--	--	192	6
JAN 1986											
16...	--	--	--	--	6	12	100	--	--	322	4
FEB											
19...	--	--	--	--	20	8	53	16	--	104	24
MAR											
17...	--	--	--	--	2	10	34	--	--	88	<2
APR											
29...	--	--	--	--	4	14	67	9.0	--	90	14
JUN											
05...	--	--	--	--	8	14	100	--	--	166	<2
JUL											
22...	--	--	--	--	14	16	36	--	--	110	<2
AUG											
20...	--	--	--	--	8	12	130	--	--	200	10
SEP											
30...	--	--	--	--	12	14	100	--	--	182	2
FEB 1987											
26...	--	23	--	1.0	7	14	88	36	--	184	12
MAR											
27...	--	--	--	--	--	16	--	14	--	112	6
14...	--	--	--	--	--	14	48	9.0	--	98	<2
MAY											
19...	--	--	--	--	--	20	81	10	--	136	18
JUN											
29...	8.3	8.2	1.7	1.7	--	20	57	--	--	166	<2

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL)	ALUMINUM, DISSOLVED (UG/L AS AL)	ARSENIC TOTAL (UG/L AS AS)	ARSENIC DISSOLVED (UG/L AS AS)	BORON, TOTAL RECOVERABLE (UG/L AS B)	BORON, DISSOLVED (UG/L AS B)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR)	CHROMIUM, DISSOLVED (UG/L AS CR)
03082300	INDIAN CREEK AT MOUTH NEAR MILL RUN, PA					SITE 28 (LAT 39 58 12N LONG 079 30 44W)				
AUG 1985 12...	0.780	70	--	<4	--	<250	--	<10	<50	--
DEC 23...	--	--	230	--	--	--	--	--	--	--
JAN 1986 16...	--	<500	<500	--	--	--	--	--	--	--
FEB 19...	--	1200	<130	--	--	--	--	--	--	--
MAR 17...	--	<130	<130	--	--	--	--	--	--	--
APR 29...	--	<130	<130	--	--	--	--	--	--	--
JUN 05...	--	<130	<130	--	--	--	--	--	--	--
JUL 22...	--	440	<130	--	--	--	--	--	--	--
AUG 20...	--	<130	<130	--	--	--	--	--	--	--
SEP 30...	--	<130	<130	--	--	--	--	--	--	--
FEB 1987 26...	--	--	<130	--	<4	<250	0	--	--	<50
MAR 27...	--	170	<130	--	--	--	--	--	--	--
APR 14...	--	<130	2400	--	--	--	--	--	--	--
MAY 19...	--	670	<130	--	--	--	--	--	--	--
JUN 29...	--	<130	<130	<4	<4	<250	0	--	<50	<50

DATE	COBALT, TOTAL RECOVERABLE (UG/L AS CO)	COBALT, DISSOLVED (UG/L AS CO)	COPPER, TOTAL RECOVERABLE (UG/L AS CU)	COPPER, DISSOLVED (UG/L AS CU)	IRON, TOTAL RECOVERABLE (UG/L AS FE)	IRON, DISSOLVED (UG/L AS FE)	LEAD, TOTAL RECOVERABLE (UG/L AS PB)	LEAD, DISSOLVED (UG/L AS PB)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN)	MANGANESE, DISSOLVED (UG/L AS MN)
03082300	INDIAN CREEK AT MOUTH NEAR MILL RUN, PA					SITE 28 (LAT 39 58 12N LONG 079 30 44W)				
AUG 1985 12...	<30	--	<10	--	10	--	<4	--	420	--
DEC 23...	--	--	--	--	--	260	--	--	--	550
JAN 1986 16...	--	--	--	--	560	<300	--	--	660	690
FEB 19...	--	--	--	--	1200	<10	--	--	270	240
MAR 17...	--	--	--	--	290	290	--	--	260	260
APR 29...	--	--	--	--	150	160	--	--	270	260
JUN 05...	--	--	--	--	70	20	--	--	270	260
JUL 22...	--	--	--	--	310	69	--	--	180	150
AUG 20...	--	--	--	--	40	34	--	--	77	77
SEP 30...	--	--	--	--	200	42	--	--	150	140
FEB 1987 26...	--	<30	--	<10	--	150	--	<50	--	570
MAR 27...	--	--	--	--	280	<10	--	--	380	370
APR 14...	--	--	--	--	80	190	--	--	150	210
MAY 19...	--	--	--	--	1000	<10	--	--	500	510
JUN 29...	<30	<30	<10	<10	170	14	<50	<50	140	120

TABLE 25.--SURFACE-WATER QUALITY DATA FOR PARTIAL RECORD SITES, BY STATION NUMBER--Continued

DATE	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI)	NICKEL, DIS-SOLVED (UG/L AS NI)	STRON-TIUM, TOTAL RECOV-ERABLE (UG/L AS SR)	STRON-TIUM, DIS-SOLVED (UG/L AS SR)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN)	ZINC, DIS-SOLVED (UG/L AS ZN)	SELE-NIUM, TOTAL (UG/L AS SE)	SELE-NIUM, DIS-SOLVED (UG/L AS SE)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG)	MERCURY DIS-SOLVED (UG/L AS HG)
03082300	INDIAN CREEK AT MOUTH NEAR MILL RUN, PA					SITE 28 (LAT 39 58 12N LONG 079 30 44W)				
AUG 1985										
12...	<25	--	<10	--	<10	--	<6	--	<2.0	--
DEC										
23...	--	--	--	--	--	63	--	--	--	--
JAN 1986										
16...	--	--	--	--	30	30	--	--	--	--
FEB										
19...	--	--	--	--	<10	<10	--	--	--	--
MAR										
17...	--	--	--	--	<10	<10	--	--	--	--
APR										
29...	--	--	--	--	30	48	--	--	--	--
JUN										
05...	--	--	--	--	<10	<10	--	--	--	--
JUL										
22...	--	--	--	--	20	24	--	--	--	--
AUG										
20...	--	--	--	--	20	56	--	--	--	--
SEP										
30...	--	--	--	--	10	<10	--	--	--	--
FEB 1987										
26...	--	<25	--	82	--	33	--	<6	--	<1.0
MAR										
27...	--	--	--	--	20	21	--	--	--	--
APR										
14...	--	--	--	--	<10	<10	--	--	--	--
MAY										
19...	--	--	--	--	20	14	--	--	--	--
JUN										
29...	<25	<25	90	85	<10	<10	<6	<6	<1.0	<1.0

Table 26.--Benthic macroinvertebrate data for Indian Creek and tributaries to Indian Creek (July 29-31, 1986)

Common name	Phylum	Class	Order	Family	Genus	Species	Station number						
							A	2	3	12	13	14	23
Segmented worms	Annelida												
Earthworms		Oligochaeta					x			x			
Mollusks	Mollusca												
Snails, limpets		Gastropoda											
Pulmonate snails and limpets			Pulmonata										
				Ancylidae	Ferrissia					x	x		
Joint footed animals	Arthropoda												
Aquatic arthropods		Crustacea											
Aquatic sowbugs			Isopoda	Asellidae	Asellus			x					
Crayfish			Decapoda	Cambaridae	Cambarus		x		x	x	C	x	
Insects		Insecta											
Mayflies			Ephemeroptera	Baetidae	Baetis		C	x	x		x	C	
					Pseudocloeon					x	x		
				Oligoneuridae	Isonychia				x	x	x	x	
				Baetiscidae	Baetisca				x	x	x		
				Heptageniidae	Stenonema				x	x	x	x	
					Stenacron					x		x	
					Epeorus		x						
				Ephemerellidae	Ephemerella	catawba			x	x	x	x	
					Eurylophella							x	
				Tricorythidae	Tricorythodes					C			
				Caenidae	Caenis					C	x	x	
Dragonflies, damselflies			Odonata	Gomphidae	Lanthus					x			
Stoneflies			Plecoptera	Pteronarcyidae	Pteronarcys		x	x	x			x	
				Peltoperlidae	Tallaperla		x	x	C	x			
				Chloroperlidae	Alloperla		x					x	
				Perlodidae	Yugus		x						
			Plecoptera	Perlidae	Acroneuria	carolinensis		x	x	x		x	x
					Phasganophora	capitata							x
					Paragnetina	immarginata				x		x	
				Leuctridae	Leuctra				x	x	x	x	

A = abundant; C = common; x = present

Table 26.--Benthic mecroinvertebrate data for Indian Creek and tributaries to Indian Creek (July 29-31, 1986)--Continued

Common name	Phylum	Class	Order	Family	Genus	Species	Station number A	2	3	12	13	14	23
Dobsonflies, hellgrammites, fishflies, alderflies			Megaloptera	Corydalidae	Nigronia				x		x	x	x
				Sialidae	Sialis								x
Caddis flies			Trichoptera	Limnephilidae	Pycnopsyche						x		
					Neophylax		x				x		
				Lepidostomatidae	Lepidostoma		x						
				Rhyacophilidae	Rhyacophila	fuscula	x	x	x			x	x
				Hydropsychidae	Cheumatopsyche		x			x		x	x
					Diplectrona		x						
					Hydropsyche	betteni							x
					Ceratopsyche	sparna	x	x	x	C	C	x	x
					Ceratopsyche	bifida group				C	C	x	x
					Ceratopsyche	bronta				C	C	x	x
					Ceratopsyche	etnieri	x						
				Glossosomatidae	Glossosoma		x	x	x	x	x		
				Philopotamidae	Dolophilodes		x		x	x			
					Chimarra				x				
Beetles			Coleoptera	Elmidae	Oulimnius		x						x
					Optioservus			x	x	x	x	x	
				Psephenidae	Ectopria					x			
True flies			Diptera	Empididae			x						x
				Chironomidae			x		x	x	A	x	
				Simulidee					C				
				Athericidae	Atherix				x	x	x		
				Tanyderidae	Protoplasa	fitchii		x					
				Tipulidae	Antoche					x		x	
					Tipula			x					
					Hexatoma					x	x		x
					TOTAL TAXA		20	11	20	28	21	22	13

A = abundant; C = common; x = present

Table 26.--Benthic macroinvertebrate data for Indian Creek and tributaries to Indian Creek (July 29-31, 1986)--Continued

Common name	Phylum	Class	Order	Family	Genus	Species	Station number 4	5	8	7	6	11	15	18	17	16	21	22
				Limnephilidae	Pycnopsyche													x
					Neophylax		x	x										
				Lepidostomatidae	Lepidostoma			x										
				Rhyacophilidae	Rhyacophila	fuscula			x	x	x	x	x				x	
					Rhyacophila	nigrita							x					
				Hydropsychidae	Cheumato-psyche				x		x		C					x
					Diplectrona			x						C	x	x		
					Hydropsyche	betteni							C					
					Ceratopsyche	sparna	x	x	x	x	x	x	C			x	x	x
					Ceratopsyche	bifida group			x	x	x	x	C					
					Ceratopsyche	bronta					x							
					Ceratopsyche	slossonae			x		x	x						
					Ceratopsyche	etnieri				x								
				Glossosomatidae	Glossosoma		x	x	x		x	x	C				x	x
				Philopotamidae	Dolophilodes		x	x		x								x
					Chimarra				x									
Beetles			Coleoptera	Elmidae	Promoresia		x											
					Oulimnius								x					x
					Optioservus			x					x			x		
				Psephenidae	Ectopria		x	x			x		x					
True flies			Diptera	Empididae			x	x										
				Chironomidae			x	x		x	x	x					x	
				Simulidae					x		C						x	
				Athericidae	Atherix					x		x	x					x
				Tipulidae	Antocha				x	x	x							
					Tipula		x							x			x	
					Hexatoma					x	x							
					Dicranota				x									
					TOTAL TAXA		19	25	16	23	21	10	25	4	1	6	13	16

A = Abundant, C = Common, x = present

Table 26.--Benthic macroinvertebrate data for Indian Creek and tributaries to Indian Creek (July 29-31, 1986)--Continued

Common name	Phylum	Class	Order	Family	Genus	Species	Station number 4	5	8	7	6	11	15	18	17	16	21	22
				Limnephilidae	Pycnopsyche													x
					Neophylax		x	x										
				Lepidostomatidae	Lepidostoma			x										
				Rhyacophilidae	Rhyacophila	fuscula			x	x	x	x	x				x	
					Rhyacophila	nigrita							x					
				Hydropsychidae	Cheumato-psyche				x		x		C					x
					Diplectrona			x						C	x	x		
					Hydropsyche	betteni							C					
					Ceratopsyche	sparna	x	x	x	x	x	x	C			x	x	x
					Ceratopsyche	bifida group			x	x	x	x	C					
					Ceratopsyche	bronta					x							
					Ceratopsyche	slossonae			x		x	x						
					Ceratopsyche	etnieri				x								
				Glossosomatidae	Glossosoma		x	x	x		x	x	C				x	x
				Philopotamidae	Dolophilodes		x	x		x								x
					Chimarra				x									
Beetles			Coleoptera	Elmidae	Promoresia		x											
					Oulimnius								x					x
					Optioservus			x					x			x		
				Psephenidae	Ectopria		x	x			x		x					
True flies			Diptera	Empididae			x	x										
				Chironomidae			x	x		x	x	x					x	
				Simulidae					x		C						x	
				Athericidae	Atherix					x		x	x					x
				Tipulidae	Antocha				x	x	x							
					Tipula		x							x			x	
					Hexatoma					x	x							
					Dicranota				x									
					TOTAL TAXA		19	25	16	23	21	10	25	4	1	6	13	16

A = Abundant, C = Common, x = present

Table 27.--Fish species collected in Indian Creek watershed (July 29-31, 1986)

Common name	Phylum	Class	Order	Family	Genus	Species	Station number 2	13	8	7	21a	21b	21c
Chordate animals	Chordata												
bony fishes		Osteichthyes											
			Salmoniformes										
Trouts				Salmonidae									
Brook trout					Salvelinus	fontinalis	33	-	-	-	39	-	15
Rainbow trout					Salmo	gairdneri		-	-	-	3	-	-
Brown trout					Salmo	trutta	27	-	-	-	-	11	38
			Cypriniformes										
Minnows, carp				Cyprinidae									
Bluntnose minnow					Pimaphalas	notatus	-	3	-	-	-	-	-
Stoneroller					Campostoma	anomalum	-	3	9	-	-	-	-
Creek chub					Semotilus	atromaculatus	-	34	143	217	3	28	23
Blacknose dace					Rhinichthys	atratulus	-	12	122	113	-	17	8
Longnose dace					Rhinichthys	cataractae	-	-	-	-	12	-	31
Suckers				Catostomidae									
White sucker					Catostomus	commersoni		6	61	-	-	39	15
Northern hog sucker					Hypentelium	nigricans	-	9	13	13	-	-	-
			Perciformes										
Sunfishes				Centrarchidae									
Bluegill					Lepomis	macrochirus	-	-	9	-	-	-	-
Pumpkinseed					Lepomis	gibbosus	-	-	9	-	-	-	-
Perches				Percidae									
Fantail darter					Ethaostoma	flabellare	-	12	-	-	-	-	-
Johnny darter					Etheostoma	nigrum	-	12	-	-	-	-	-
Sculpins				Cottidae									
Mottled sculpin					Cottus	bairdi	33	146	495	452	24	-	8