

A STATISTICAL APPROACH TO EVALUATE THE RELATION OF
COAL MINING, LAND RECLAMATION, AND SURFACE-WATER
QUALITY IN OHIO

By Janet Hren, Karen S. Wilson, and Dennis R. Helsel

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 84-4117

Columbus, Ohio

1984



UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information
write to:

District Chief
U.S. Geological Survey
975 West Third Avenue
Columbus, Ohio 43212

Copies of this report can
be purchased from:

Open-File Services Section
Western Distribution Branch
U.S. Geological Survey
Box 25425, Federal Center
Denver, Colorado 80225
(Telephone: (303) 234-5888)

E R R A T A

p.18 -- Last paragraph should read:

"Figures 2 through 9 are box plots of the eight variables sorted into land-use groups. The plots give the maximum value, minimum value, mean, median, and 25th and 75th percentiles for each variable (unranked data). Groups that are not significantly different (Tukey's test on ranked data) are represented by the same letter."

CONTENTS

	Page
Abstract-----	1
Introduction-----	3
Land-use classification-----	3
Statistical methods and results-----	5
Descriptive statistics-----	5
Rank transformation of data-----	11
Correlation analysis-----	11
Regression analysis-----	16
Analysis of variance-----	18
Discriminant-function analysis-----	29
Classification of mixed land-use sites by discriminant-function analysis-----	30
Summary-----	34
References-----	35

ILLUSTRATIONS

Figure 1. Map showing location of data-collection sites in Eastern Appalachian Coal Province of Ohio-----	4
2-9. Graphs showing summary statistics and differ- ences in selected properties and constituents by land-use category:	
2. Specific conductance-----	20
3. pH-----	21
4. Alkalinity-----	22
5. Acidity-----	23
6. Sulfate concentration-----	24
7. Total iron concentration-----	25
8. Dissolved iron concentration-----	26
9. Total manganese concentration-----	27

TABLES

Tables 1-5. Statistical summaries of water-quality data:	
1. All sites-----	6
2. Abandoned land-use category-----	7
3. Reclaimed land-use category-----	8
4. Deep-mined land-use category-----	9
5. Unmined land-use category-----	10
6-9. Correlation analyses of water-quality data:	
6. Abandoned land-use category-----	12
7. Deep-mined land-use category-----	13
8. Reclaimed land-use category-----	14
9. Unmined land-use category-----	15

TABLES--Continued

	Page
10. Analysis of regression results of water-quality data as a function of land-use percentages-----	17
11. Results of analysis of variance of rank-transformed water-quality data-----	19
12. Median percent correct classification of land use by discriminant-function analysis-----	31
13. Number of observations and percentages reclassified from the mixed land-use category-----	32

APPENDIXES

1. Water-quality data from the Eastern Appalachian Coal Province of Ohio (1975-82)-----	37
2. Land-use percentages and drainage areas for water-quality data collection sites-----	308

CONVERSION FACTORS

For the convenience of readers who prefer to use the International System of units (SI), conversion factors for terms used in this report are listed below:

<u>Multiply inch-pound units</u>	<u>By</u>	<u>To obtain SI units</u>
square mile (mi ²)	2.590	square kilometer (km ²)
micromho per centimeter (μmho/cm)	1	microsiemens (uS)

ABBREVIATIONS USED IN TABLES

μmho/cm	micromho per centimeter
mg/L	milligram per liter
μg/L	microgram per liter
μg/g	microgram per gram

A STATISTICAL APPROACH TO EVALUATE THE RELATION OF COAL MINING,
LAND RECLAMATION, AND SURFACE-WATER QUALITY IN OHIO

By Janet Hren, Karen S. Wilson, and Dennis R. Helsel

ABSTRACT

Coal mining and reclamation activities have influenced low-flow water quality of streams in Ohio. In order to document how water quality has changed, and by how much, data collected from 779 sites during June 1975 through September 1982 were compiled and analyzed.

Sites were classified into five categories: Unmined (100 percent unmined land), abandoned (50 percent or more abandoned surface mines), reclaimed (50 percent or more reclaimed surface mines), deep-mined (50 percent or more underground mines), and mixed (all others). Specific conductance, pH, alkalinity, acidity, sulfate, dissolved iron, total iron, and total manganese in streams draining basins in the coal region were the eight characteristics selected for analysis.

Correlation analysis of rank-transformed data revealed that different combinations of variables were related for each of the categories of upstream mining activity. However, use of a regression equation to predict levels of the eight properties and constituents from land-use information alone was not successful.

Analysis of variance and Tukey's studentized range test were used to determine if there were significant differences between mining categories, and if so, which categories produce higher levels of each property or constituent relative to the others. These analyses revealed that at least one mining category was different from the others for all eight water-quality variables studied.

Discriminant-function analysis was used to determine how accurately upstream mining-related land use could be predicted from water-quality data. When all eight water-quality variables were used, discriminant analysis correctly classified the mining category for 93 percent of the observations. Moreover, 79 percent of the observations were correctly classified when only specific conductance and pH data were used.

Discriminant-function analysis was also used to reclassify a number of mixed land-use sites as being similar to unmined or mined sites. It appears that the dominant upstream land use for a site in Ohio's coal region can be reliably predicted from data for just a few variables measured at low flow at that site. An additional benefit is that sites where land use is mixed can now be classified as reflecting water quality of either unmined, reclaimed, or abandoned-mine basins; sites similar to abandoned-mine basins may be problem areas warranting future remedial action.

INTRODUCTION

In order to understand the effects of coal mining and reclamation on the quality of surface water in the Eastern Appalachian Coal Province of Ohio (fig. 1), water-quality data were collected by the U.S. Geological Survey during several studies of the hydrologic effects on mining on Ohio's streams (Roth and others, 1981; Engelke and others, 1981; D. K. Roth and others, U.S. Geological Survey, written commun., 1983). A study of the relationship of inorganic and organic constituents to coal mining (Pfaff and others, 1981) also provided water-quality data, as did a study ranking streams according to the severity of water-quality conditions caused by abandoned surface mines (C. J. O. Childress, U.S. Geological Survey, written commun., 1983).

The purpose of this report is to relate surface-water quality and land use (coal mining) by means of statistical analysis. Ranges and typical concentrations of various water-quality properties and constituents were used to evaluate the significance of these properties and constituents in defining the impacts of coal-mining activities on surface-water quality. Surface-water sites were classified into five categories on the basis of coal-related land uses within their drainage areas.

This report also provides a compilation of water-quality data collected in the Ohio coal region during June 1975 through September 1982 (appendix 1). Data from 779 collection sites were analyzed. Sites having drainage areas greater than 250 square miles were excluded. Water-quality data used for this study were limited to base-flow observations.

LAND-USE CLASSIFICATION

The dominant coal-related land use was determined for each basin where data were collected. Five land-use categories are used to describe the basins. These categories are "unmined," abandoned surface mines ("abandoned"), reclaimed surface mines ("reclaimed"), and abandoned underground mines or deep mines ("deep mined"). In many basins, there is no single dominant land use; these basins were classified as "mixed."

Ohio has coal-related land-use information in the form of 7.5-minute quadrangle maps. One series of maps delineates abandoned surface mines, reclaimed areas, and unmined areas (Ohio Department of Natural Resources, 1982). An abandoned surface mine has had no reclamation of the land surface, and natural revegetation has not occurred; areas of active surface mining were included in the abandoned category. In order for an area to be

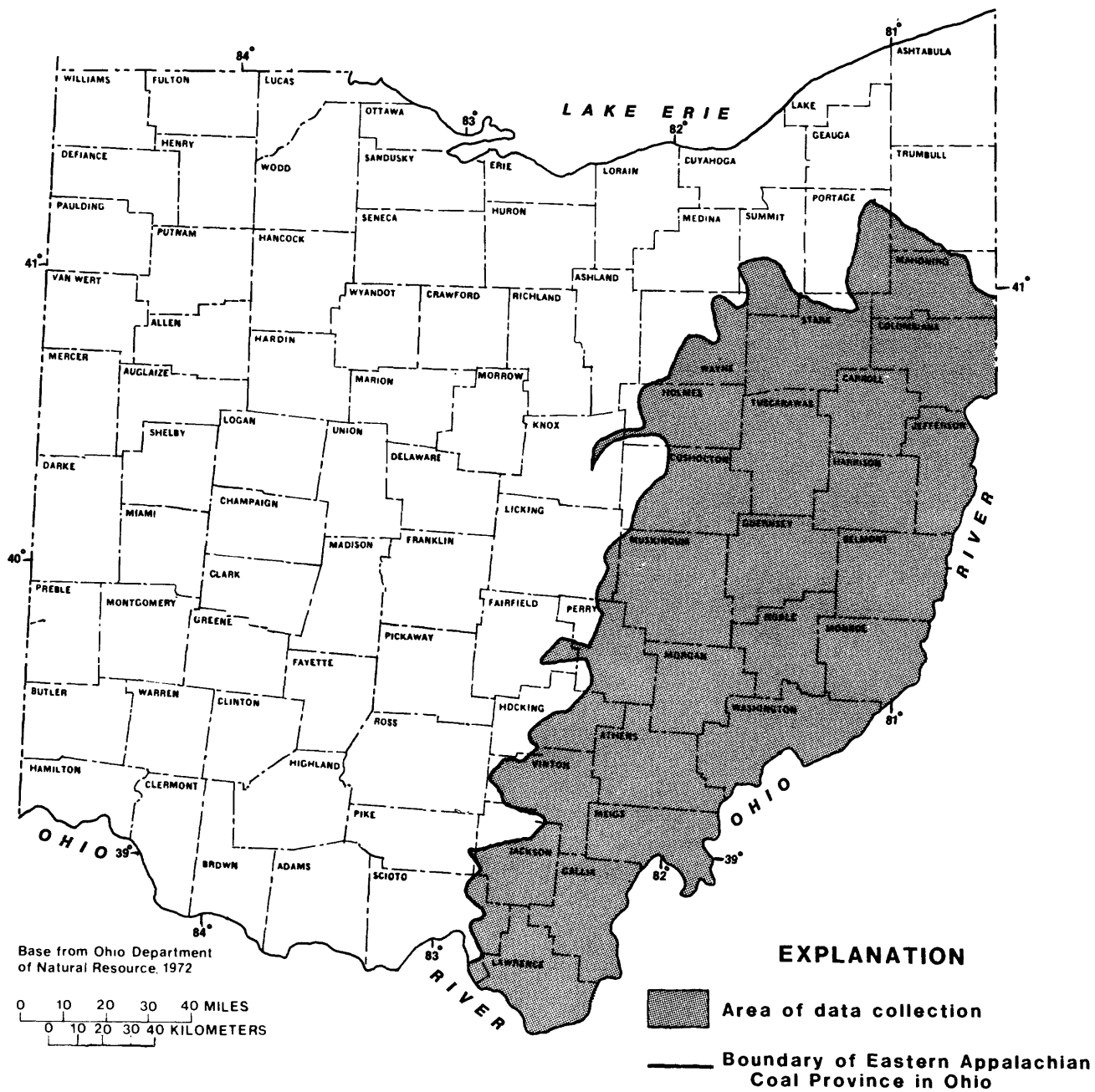


Figure 1.--Location of data-collection sites in Eastern Appalachian Coal Province of Ohio.

considered a reclaimed surface mine, some reclamation had to have occurred; this includes natural revegetation of abandoned surface mines. Another series of maps delineates abandoned underground mines (Crowell, D. L., 1980).

The criterion for selecting a dominant land use was the percentages of each category present in a basin. The percentages were estimated from the land-use and the abandoned-underground-mine maps (appendix 2). In order for a basin to be classified as unmined, the basin had to be 100 percent unmined land. To have a dominant land use of abandoned, reclaimed, or deep mined, the respective category had to comprise 50 percent or more of the land use within the basin. Basins that were neither 100 percent unmined nor 50 percent abandoned, reclaimed, or deep mined were classified as mixed.

The data compiled in this study include 1,476 observations from a total of 779 sites. In terms of dominant land use, 71 observations (4.8 percent) were from basins classified as abandoned, 48 observations (3.2 percent) were from reclaimed basins, 66 observations (4.5 percent) were from deep-mined basins, 185 observations (12.5 percent) were from unmined basins, and 1,106 observations (75 percent) were in basins classified as mixed.

STATISTICAL METHODS AND RESULTS

All statistical tests were performed with the Statistical Analysis System (SAS) (Helwig and Council, 1979).

Descriptive Statistics

Table 1 lists the number of observations, maximum value, minimum value, mean, standard deviation, median, and 75th and 25th percentiles for all observations and all variables. Tables 2-5 present the same information for all observations by land-use category. The median is a measure of the most typical value. The interquartile range (25-75 percentiles) defines the central 50 percent of the observations. This information can be used to determine the typical concentrations expected for various water-quality constituents in the different land-use categories.

Table 1.--Statistical summary of water-quality data, all sites

Constituent or property	Unit	No. of obser- vations	Maximum	Minimum	Mean	Standard deviation	Median	75th percentile	25th percentile
Specific conductance-----	umho/cm	1,190	9,260	60	997	811	750	1,300	443
pH-----		1,437	9	2.5	6.6	1.6	7.2	7.7	6.2
Alkalinity-----	mg/L	1,467	1,490	0	92.7	87.6	85	150	7
Acidity-----	mg/L	1,410	1,710	0	46.6	137	0	15	0
Bicarbonate-----	mg/L	1,298	1,816	0	127	104	120	192	49
Chloride, dissolved-----	mg/L	880	3,100	1.2	37.3	143	14	27	7.7
Sulfate, dissolved-----	mg/L	1,330	4,700	7.1	423	466	260	603	85
Arsenic, dissolved-----	ug/L	339	30	10	10.2	1.3	10	10	10
Iron, total-----	ug/L	1,099	960,000	10	9,720	50,931	730	2,490	350
Iron, dissolved-----	ug/L	916	927,000	0	4,634	35,266	90	460	40
Manganese, total-----	ug/L	1,093	79,000	5	4,051	8,269	500	4,100	130
Manganese, dissolved-----	ug/L	908	44,000	5	3,401	6,981	310	3,317	90
Nickel, dissolved-----	ug/L	410	727	10	140	155	100	200	20
Zinc, dissolved-----	ug/L	415	1,041	10	168	220	45	242	24
Aluminum, total-----	ug/L	653	110,000	10	5,968	11,941	737	6,557	229
Aluminum, dissolved-----	ug/L	411	91,300	3	5,051	9,836	253	6,200	148
Mercury, dissolved-----	ug/L	340	0.5	0.5	0.5	0	0.5	0.5	0.5
Solids, dissolved-----	mg/L	575	6,692	45	1,039	737	852	1,467	477
Arsenic, bottom material, total-----	ug/g	419	46	0	1.17	5.2	0	0	0
Cadmium, bottom material, total-----	ug/g	423	10	0	9.13	2.4	10	10	10
Chromium, bottom material, total-----	ug/g	419	110	1	14.1	10	10	20	10
Copper, bottom material, total-----	ug/g	419	440	1	15.1	22.7	10	20	10
Iron, bottom material, total-----	ug/g	425	120,000	600	23,071	16,825	18,000	30,000	11,000
Lead, bottom material, total-----	ug/g	419	4,200	1	47.3	251	20	30	10
Manganese, bottom material, total-----	ug/g	423	21,000	30	1,013	1,303	710	1,200	360
Mercury, bottom material, total-----	ug/g	418	0.25	0	.002	0.02	0	0	0
Zinc, bottom material, total-----	ug/g	423	770	10	63.2	68	50	76	30
Arsenic, total-----	ug/L	261	95	1	2.7	8.4	1	1	1
Chromium, total-----	ug/L	265	440	0	22.4	39.1	20	20	0
Copper, total-----	ug/L	261	1,000	0	22.2	65.4	20	20	0
Mercury, total-----	ug/L	265	4.5	0.5	0.58	0.38	0.5	0.5	0.5
Zinc, total-----	ug/L	261	1,700	0	146.7	255	30	170	20

Table 2.--Statistical summary of water-quality data, abandoned land-use category

Constituent or property	Unit	No. of obser- vations	Maximum	Minimum	Mean	Standard deviation	Median	75th percentile	25th percentile
Specific conductance*	µmho/cm	55	3,850	380	1,961	752	2,000	2,300	1,480
pH		71	8.8	2.6	3.8	1.4	3.3	4	3
Alkalinity	mg/L	70	167	0	7.9	31.6	0	1	0
Acidity*	mg/L	70	794	0	278	209	248	429	97.8
Bicarbonate	mg/L	42	204	0	15.6	49	0	5x10 ⁻⁶	0
Chloride, dissolved	mg/L	50	120	1.7	19.9	21.8	10.5	32.8	5.9
Sulfate, dissolved	mg/L	56	2,300	83	1,103	484	995	1,483	745
Arsenic, dissolved	µg/L	19	15	10	10.3	1.1	10	10	10
Iron, total	µg/L	53	240,000	241	27,824	49,271	8,600	25,865	2,500
Iron, dissolved	µg/L	39	105,500	10	16,331	24,418	5,300	23,000	971
Manganese, total*	µg/L	53	79,000	334	23,552	17,788	21,050	34,000	7,950
Manganese, dissolved*	µg/L	39	44,000	322	19,564	11,547	19,030	26,230	8,900
Nickel, dissolved*	µg/L	32	700	20	359	187	392	500	225
Zinc, dissolved*	µg/L	33	982	10	509	285	558	721	277
Aluminum, total	µg/L	47	80,000	210	23,071	17,421	20,380	34,620	11,000
Aluminum, dissolved*	µg/L	32	41,000	75	17,813	11,928	17,415	27,708	7,351
Mercury, dissolved	µg/L	19	0.5	0.5	0.5	0	0.5	0.5	0.5
Solids, dissolved	mg/L	35	3,422	664	1,721	645	1,627	2,120	1,127
Arsenic, bottom material, total	µg/g	6	11	0	2.8	4.66	0	7.25	0
Cadmium, bottom material, total	µg/g	6	10	4	8	3.1	10	10	4
Chromium, bottom material, total	µg/g	6	10	10	10	0	10	10	10
Copper, bottom material, total	µg/g	6	20	8	13.2	5.4	10.5	20	9.5
Iron, bottom material, total*	µg/g	6	77,000	14,000	40,167	27,549	31,000	72,500	16,250
Lead, bottom material, total*	µg/g	6	40	10	20	12.6	15	32.5	10
Manganese, bottom material, total	µg/g	6	3,600	110	953	1,357	310	1,800	170
Mercury, bottom material, total	µg/g	6	0	0	0	0	0	0	0
Zinc, bottom material, total*	µg/L	6	61	19	43.7	15.8	50	54.3	27.3
Arsenic, total	µg/L	15	5	1	1.5	1.1	1	2	1
Chromium, total	µg/L	15	290	0	41.3	70	20	30	20
Copper, total	µg/L	15	50	4	26.9	9.8	30	30	20
Mercury, total	µg/L	15	2.5	0.5	.66	0.51	0.5	0.5	0.5
Zinc, total	µg/L	15	1,700	40	741.3	496	730	1,100	310

*Normal distribution

Table 3.--Statistical summary of water-quality data, reclaimed land-use category

Constituent or property	Unit	No. of obser- vations	Maximum	Minimum	Mean	Standard deviation	Median	75th percentile	25th percentile
Specific conductance-----	µmho/cm	41	4,500	200	2,058	995	1,900	2,795	1,325
pH-----		47	8.4	3.3	7.5	1.0	7.85	8.1	7.3
Alkalinity*-----	mg/L	48	431	0	195	101	190	241	143
Acidity-----	mg/L	47	109	0	4.3	20.8	0	0	0
Bicarbonate-----	mg/L	47	525	0	241	119	232	294	182
Chloride, dissolved-----	mg/L	29	70	3	15.2	12.5	13	18.5	8
Sulfate, dissolved-----	mg/L	45	2,500	31	1,023	564	940	1,300	600
Arsenic, dissolved-----	µg/L	5	10	10	10	0	10	10	10
Iron, total-----	µg/L	40	23,000	90	1,731	4,693	395	705	253
Iron, dissolved-----	µg/L	18	500	10	120	140	50	151	37.5
Manganese, total-----	µg/L	40	8,400	29	874	1,715	315	518	206
Manganese, dissolved-----	µg/L	18	600	5	149	171	90	220	14.5
Nickel, dissolved-----	µg/L	5	100	20	36	35.8	20	60	20
Zinc, dissolved-----	µg/L	5	30	10	16.6	8.5	13	25	10
Aluminum, total-----	µg/L	27	2,400	10	499	664	220	520	120
Aluminum, dissolved*-----	µg/L	5	201	75	140	59.4	133	201	83
Mercury, dissolved-----	µg/L	5	0.5	0.5	0.5	0	0.5	0.5	0.5
Solids, dissolved*-----	mg/L	9	1,835	1,290	1,585	167	1,560	1,723	1,485
Arsenic, bottom material, total-----	µg/g	11	12	0	2.9	4.4	0	5	0
Cadmium, bottom material, total-----	µg/g	12	10	1	7.6	3.4	10	10	5
Chromium, bottom material, total-----	µg/g	11	20	6	11.5	4.4	10	10	10
Copper, bottom material, total-----	µg/g	11	40	10	16.1	9.3	10	20	10
Iron, bottom material, total-----	µg/g	13	55,000	4,000	17,808	14,286	13,000	21,500	9,300
Lead, bottom material, total-----	µg/g	11	70	10	30.3	20.8	23	50	10
Manganese, bottom material, total-----	µg/g	12	4,100	200	2,245	1,248	2,050	3,300	1,225
Mercury, bottom material, total-----	µg/g	11	.01	0	.002	0.004	0	0	0
Zinc, bottom material, total-----	µg/g	12	170	12	59	41.2	60	74.5	30
Arsenic, total-----	µg/L	20	2	1	1.1	0.31	1	1	1
Chromium, total-----	µg/L	22	40	0	19.3	8.7	20	20	20
Copper, total-----	µg/L	20	50	0	19.5	9.4	20	20	20
Mercury, total-----	µg/L	22	1.7	0.5	0.6	0.32	0.5	0.5	0.5
Zinc, total-----	µg/L	20	100	20	30.5	21.4	20	30	20

*Normal distribution

Table 4.--Statistical summary of water-quality data, deep-mined land-use category

Constituent or property	Unit	No. of Observations	Maximum	Minimum	Mean	Standard deviation	Median	75th percentile	25th percentile
Specific conductance-----	µmho/cm	49	3,520	965	1,960	575	1,850	2,240	1,555
pH-----		66	8.4	2.5	6.9	1.8	7.65	8	6.8
Alkalinity-----	mg/L	66	292	0	169	90.6	189	244	137
Acidity-----	mg/L	66	1,140	0	74	217	0	0	0
Bicarbonate-----	mg/L	63	356	0	215	103	232	301	176
Chloride, dissolved-----	mg/L	55	200	3.4	27	33.9	14	36	9
Sulfate, dissolved*-----	mg/L	65	1,800	300	885	308	840	1,090	660
Arsenic, dissolved-----	µg/L	24	16	10	10.25	1.2	10	10	10
Iron, total-----	µg/L	50	310,000	64	31,103	65,086	5,355	29,755	1,600
Iron, dissolved-----	µg/L	36	51,000	10	3,226	9,148	50	940	10
Manganese, total-----	µg/L	49	14,000	5	1,671	3,101	400	840	210
Manganese, dissolved-----	µg/L	36	8,942	5	836	1,976	238	440	103
Nickel, dissolved-----	µg/L	26	650	20	143	185	100	159	20
Zinc, dissolved-----	µg/L	26	590	10	65	116	30	47	19
Aluminum, total-----	µg/L	39	95,000	70	9,930	19,251	1,190	9,500	320
Aluminum, dissolved-----	µg/L	26	31,000	75	1,806	6,349	200	280	111
Mercury, dissolved-----	µg/L	24	0.5	0.5	0.5	0	0.5	0.5	0.5
Solids, dissolved*-----	mg/L	41	2,514	190	1,646	457	1,760	1,984	1,338
Arsenic, bottom material, total-----	µg/g	10	9	0	1.7	3.4	0	2.5	0
Cadmium, bottom material, total-----	µg/g	10	10	1	7.4	4.2	10	10	1.8
Chromium, bottom material, total-----	µg/g	10	30	10	15	7.1	10	20	10
Copper, bottom material, total-----	µg/g	10	30	10	22.6	7.9	23	30	17.5
Iron, bottom material, total*-----	µg/g	10	73,000	8,400	31,240	19,018	30,000	41,250	15,000
Lead, bottom material, total-----	µg/g	10	80	10	31.6	26.2	20	42.5	17.5
Manganese, bottom material, total*-----	µg/g	10	1,500	95	852	399	835	1,125	585
Mercury, bottom material, total-----	µg/g	10	0.01	0	.004	0.005	0	.01	0
Zinc, bottom material, total*-----	µg/g	10	140	28	82.3	34.5	90	102.5	48
Arsenic, total-----	µg/L	13	15	1	3.2	4.2	1	3.5	1
Chromium, total-----	µg/L	13	230	20	72.3	75.9	30	125	20
Copper, total-----	µg/L	13	120	0	30.8	30.1	20	30	20
Mercury, total-----	µg/L	13	1.9	0.5	0.7	0.41	0.5	0.7	0.5
Zinc, total-----	µg/L	13	1,400	40	351	388	220	565	65

*Normal distribution

Table 5.--Statistical summary of water-quality data, unmined land-use category

Constituent or property	Unit	No. of obser- vations	Maximum	Minimum	Mean	Standard deviation	Median	75th percentile	25th percentile
Specific conductance-----	µmho/cm	179	3,500	90	457	348	400	526	304
pH-----		179	8.8	4.7	7.5	0.55	7.5	7.9	7.3
Alkalinity-----	mg/L	185	340	0	125	66	120	170	82
Acidity-----	mg/L	177	467	0	3.1	35	0	0	0
Bicarbonate*-----	mg/L	179	412	0	157	74	150	208	105
Chloride, dissolved-----	mg/L	39	340	5.1	43.8	67.8	20	34	9
Sulfate, dissolved-----	mg/L	179	1,000	12	69	107	42	59	29
Arsenic, dissolved-----	µg/L	163	--	--	--	--	--	--	--
Iron, total-----	µg/L	163	39,000	40	1,166	4,237	430	800	210
Iron, dissolved-----	µg/L	152	430	0	83.6	77.4	60	108	30
Manganese, total-----	µg/L	163	910	10	151	163	90	210	30
Manganese, dissolved-----	µg/L	152	980	10	128	143	85	180	30
Nickel, dissolved-----	µg/L	--	--	--	--	--	--	--	--
Zinc, dissolved-----	µg/L	--	--	--	--	--	--	--	--
Aluminum, total-----	µg/L	25	9,000	20	968	2,373	120	380	70
Aluminum, dissolved-----	µg/L	--	--	--	--	--	--	--	--
Mercury, dissolved-----	µg/L	--	--	--	--	--	--	--	--
Solids, dissolved-----	mg/L	--	--	--	--	--	--	--	--
Arsenic, bottom material, total-----	µg/g	133	44	0	0.56	0.56	0	0	0
Cadmium, bottom material, total-----	µg/g	134	10	1	9.7	1.3	10	10	10
Chromium, bottom material, total-----	µg/g	133	60	10	14.6	8.2	10	20	10
Copper, bottom material, total-----	µg/g	133	40	9	13.7	6.9	10	19	10
Iron, bottom material, total-----	µg/g	134	70,000	2,000	23,673	15,094	18,000	32,000	13,000
Lead, bottom material, total-----	µg/g	133	2,300	10	50.5	220	20	30	10
Manganese, bottom material, total-----	µg/g	133	4,400	120	863	656	690	1,200	380
Mercury, bottom material, total-----	µg/g	133	0.24	0	.002	0.02	0	0	0
Zinc, bottom material, total-----	µg/g	133	770	10	59	70.8	50	70	30
Arsenic, total-----	µg/L	32	13	1	2.3	3	1	1	1
Chromium, total-----	µg/L	34	90	0	16	16.2	20	20	0
Copper, total-----	µg/L	32	50	0	14.6	13.7	20	20	0
Mercury, total-----	µg/L	34	0.5	0.5	0.5	1.3x10 ⁻⁷	0.5	0.5	0.5
Zinc, total-----	µg/L	32	250	20	37.5	48.4	20	30	20

*Normal distribution

All data were tested for conformity to a normal distribution by either the Shapiro-Wilk W statistic (for 50 or fewer observations) or a modified version of the Kolmogorov-Smirnov D statistic (51 or more observations per variable). For data to be normally distributed, most values would be in the central range, and there would be equal numbers of lower and higher measurements.

Each of the variables was rejected as being normally distributed when all the observations are considered together. However, when the observations are sorted by land-use categories, some of the variables exhibit an approximately normal distribution for some categories. These are noted in the table by an asterisk.

Because of the number of observations with missing constituents, only the constituents and properties common to the greatest number of observations were used for further analyses. These eight constituents and properties are:

Specific conductance	Sulfate
pH	Total iron
Alkalinity	Dissolved iron
Acidity	Total manganese

Rank Transformation of Data

Most common parametric statistical procedures require underlying assumptions of a normal distribution and equal variances among groups being compared. Nonparametric tests do not require these two assumptions about the population distribution. Many nonparametric procedures do not use the actual data, but instead use the ranks of those data (Conover and Iman, 1981). Observations are ranked from lowest to highest, the lowest value having a rank of one, the second lowest, two, and so forth. Average ranks are assigned in case of equal values. Because it was determined that water-quality data analyzed in this study are not normally distributed, nonparametric tests were used or parametric statistical tests were performed on the data ranks.

Correlation Analysis

Spearman rank-order correlations and significance probabilities were calculated for the eight water-quality variables after the observations were sorted into land-use categories (tables 6-9). The correlation coefficient R is a measure of the degree of association between two variables. Those variables

Table 6.--Correlation analysis of water-quality data for the abandoned land-use category

[Figures in each block represent (from top to bottom): Spearman correlation coefficient (R); probability that R=0 (no true correlation); number of observations]

Constituent or property	Specific conduct- ance (µmho/cm)	pH (units)	Alka- linity (mg/L)	Acidity (mg/L)	Sulfate (mg/L)	Total iron (mg/L)	Dis- solved iron (mg/L)	Total manga- nese (mg/L)
Specific conductance (µmho/cm)-----	1.00000 -0.73577 -0.15680 0.74319 0.93478 0.60092 0.78146 0.77075	0.0000 0.0001 0.2575 0.0001 0.0001 0.0001 0.0001 0.0001	55 55 54	54	40	40	26	40
pH (units)-----	-0.73577 1.00000 0.30472 -0.85797 -0.59529 -0.76294 -0.83398 -0.60704	0.0001 0.0000 0.0103 0.0001 0.0001 0.0001 0.0001 0.0001	55 71 70	70	56	53	39	53
Alkalinity (mg/L)-----	-0.15680 0.30472 1.00000 -0.33004 -0.25978 -0.09209 -0.47543 -0.20100	0.2575 0.0103 0.0000 0.0056 0.0532 0.5119 0.0022 0.1490	54 70 70	69	56	53	39	53
Acidity (mg/L)-----	0.74319 -0.85797 -0.33004 1.00000 0.63562 0.81385 0.90727 0.64911	0.0001 0.0001 0.0056 0.0000 0.0001 0.0001 0.0001 0.0001	54 70 69	70	55	52	38	52
Sulfate (mg/L)-----	0.93478 -0.59529 -0.25978 0.63562 1.00000 0.45650 0.61694 0.81088	0.0001 0.0001 0.0532 0.0001 0.0001 0.0006 0.0001 0.0001	40 56 56	55	56	53	39	53
Total iron (mg/L)-----	0.60092 -0.76294 -0.09209 0.81385 0.45650 1.00000 0.93147 0.43533	0.0001 0.0001 0.5119 0.0001 0.0006 0.0000 0.0001 0.0011	40 53 53	52	53	53	39	53
Dissolved iron (mg/L)-----	0.78146 -0.83398 -0.47543 0.90727 0.61694 0.93147 1.00000 0.58695	0.0001 0.0001 0.0022 0.0001 0.0001 0.0001 0.0000 0.0001	26 39 39	38	39	39	39	39
Total manganese (mg/L)-----	0.77075 -0.60704 -0.20100 0.64911 0.81088 0.43533 0.58695 1.00000	0.0001 0.0001 0.1490 0.0001 0.0001 0.0011 0.0001 0.0000	40 53 53	52	53	53	39	53

Table 7.--Correlation analysis of water-quality data for the reclaimed land-use category

[Figures in each block represent (from top to bottom): Spearman correlation coefficient (R); probability that R=0 (no true correlation); number of observations]

Constituent or property	Specific conductance (μ mho/cm)	pH (units)	Alka- linity (mg/L)	Acidity (mg/L)	Sulfate (mg/L)	Total iron (mg/L)	Dis- solved iron (mg/L)	Total manga- nese (mg/L)
Specific conductance (μ mho/cm)-----	1.00000 0.00000 41	0.41216 0.0074 41	0.75435 0.0001 41	-0.12420 0.4391 41	0.94593 0.0001 40	-0.42226 0.0074 39	0.12376 0.6360 17	-0.26423 0.1041 39
pH (units)-----	0.41216 0.0074 41	1.00000 0.0000 47	0.49044 0.0005 47	-0.35001 0.0159 47	0.39995 0.0065 45	-0.42729 0.0060 40	-0.40770 0.0931 18	-0.60131 0.0001 40
Alkalinity (mg/L)-----	0.75435 0.0001 41	0.49044 0.0005 47	1.00000 0.0000 48	-0.34970 0.0160 47	0.73441 0.0001 45	-0.44406 0.0041 40	-0.21518 0.3912 18	-0.32803 0.0388 40
Acidity (mg/L)-----	-0.12420 0.4391 41	-0.35001 0.0159 47	-0.34970 0.0160 47	1.00000 0.0000 47	-0.14131 0.3545 45	0.37731 0.0164 40	0.00000 1.0000 18	0.37734 0.0164 40
Sulfate (mg/L)-----	0.94593 0.0001 40	0.39995 0.0065 45	0.73441 0.0001 45	-0.14131 0.3545 45	1.00000 0.0000 45	-0.35462 0.0248 40	0.06136 0.8089 18	-0.34832 0.0276 40
Total iron (mg/L)-----	-0.42226 0.0074 39	-0.42729 0.0060 40	-0.44406 0.0041 40	0.37731 0.0164 40	-0.35462 0.0248 40	1.00000 0.0000 40	-0.09143 0.7182 18	0.53083 0.0004 40
Dissolved iron (mg/L)-----	0.12376 0.6360 17	-0.40770 0.0931 18	-0.21518 0.3912 18	0.00000 1.0000 18	0.06136 0.8089 18	-0.09143 0.7182 18	1.00000 0.0000 18	-0.30546 0.2177 18
Total manganese (mg/L)-----	-0.26423 0.1041 39	-0.60131 0.0001 40	-0.32803 0.0388 40	0.37734 0.0164 40	-0.34832 0.0276 40	0.53083 0.0004 40	-0.30546 0.2177 18	1.00000 0.0000 40

Table 8.--Correlation analysis of water-quality data for the deep-mined land-use category

[Figures in each block represent (from top to bottom): Spearman correlation coefficient (R); probability that R=0 (no true correlation); number of observations]

Constituent or property	Specific conduct- ance (μmho/cm)	pH (units)	Alka- linity (mg/L)	Acidity (mg/L)	Sulfate (mg/L)	Total iron (mg/L)	Dis- solved iron (mg/L)	Total manga- nese (mg/L)
Specific conductance (μmho/cm)-----	1.00000 -0.20203 0.00000 0.1639 49 49	0.25937 0.17181 0.0719 0.2378 49 49	0.65840 0.18600 0.0001 0.2056 48 48	0.05818 0.15861 0.7438 0.2869 34 47				
pH (units)-----	-0.20203 1.00000 0.1639 0.0000 49 49	0.63487 -0.70208 0.0001 0.0001 66 66	-0.59668 -0.71297 0.0001 0.0001 50 50	0.0001 0.0001 0.0001 0.0001 36 49				
Alkalinity (mg/L)-----	0.25937 0.63487 0.0719 0.0001 49 49	1.00000 -0.64533 0.0000 0.0001 66 66	-0.72266 -0.56422 0.0001 0.0003 50 49	-0.64131 0.0001 0.0003 0.0001 36 49				
Acidity (mg/L)-----	0.17181 -0.70208 0.2378 0.0001 49 49	1.00000 -0.07748 0.0000 0.5396 66 65	0.60150 0.64134 0.0001 0.0001 50 36	0.71011 0.0001 0.0001 0.0001 49 49				
Sulfate (mg/L)-----	0.65840 -0.00448 0.0001 0.9717 48 65	0.35066 -0.07748 0.0042 0.5396 65 65	-0.04083 -0.02786 0.8477 0.8131 50 36	-0.02006 0.8912 0.8131 0.8912 49 49				
Total iron (mg/L)-----	0.18600 -0.71297 0.2056 0.0001 48 50	1.00000 -0.02786 0.0001 0.8477 50 50	0.55894 0.80590 0.0004 0.0001 36 49	0.80590 0.70465 0.0004 0.0001 36 49				
Dissolved iron (mg/L)-----	-0.05818 -0.59668 0.7438 0.0001 34 36	-0.56422 -0.04083 0.0003 0.8131 36 36	0.70465 1.00000 0.0000 0.0000 36 36	0.70465 1.00000 0.0001 0.0001 36 49				
Total manganese (mg/L)-----	0.15861 -0.68970 0.2869 0.0001 47 49	-0.64131 0.71011 0.0001 0.0001 49 49	0.70465 0.80590 0.0001 0.0001 49 49	1.00000 0.0000 0.0001 0.0001 36 49				

Table 9.--Correlation analysis of water-quality data for the unmined land-use category

[Figures in each block represent (from top to bottom): Spearman correlation coefficient (R); probability that R=0 (no true correlation); number of observations]

Constituent or property	Specific conduct- ance ($\mu\text{mho/cm}$)	pH (units)	Alka- linity (mg/L)	Acidity (mg/L)	Sulfate (mg/L)	Total iron (mg/L)	Dis- solved iron (mg/L)	Total manga- nese (mg/L)
Specific conductance ($\mu\text{mho/cm}$)-----	1.00000 0.43832 0.71000 -0.28126 0.65960 0.07617 -0.38515 -0.00296 0.00000 0.00001 0.00001 0.00001 0.00001 0.3338 0.0001 0.9701 179 179 179 177 179 163 152 163							
pH (units)-----	0.43832 1.00000 0.69639 -0.39597 0.19288 -0.11250 -0.37245 -0.19255 0.00001 0.00000 0.00001 0.00001 0.0097 0.1528 0.0001 0.0138 179 179 179 177 179 163 152 163							
Alkalinity (mg/L)-----	0.71000 0.69639 1.00000 -0.35049 0.38170 -0.05267 -0.43450 -0.15748 0.00001 0.00001 0.00000 0.00001 0.00001 0.5043 0.0001 0.0447 179 179 185 177 179 163 152 163							
Acidity (mg/L)-----	-0.28126 -0.39597 -0.35049 1.00000 -0.23079 0.17927 0.30717 0.21923 0.00001 0.00001 0.00001 0.0000 0.0020 0.0229 0.0001 0.0054 177 177 177 177 177 161 152 161							
Sulfate (mg/L)-----	0.65960 0.19288 0.38170 -0.23079 1.00000 0.02069 -0.30849 0.05159 0.00001 0.0097 0.00001 0.0020 0.0000 0.7933 0.0001 0.5131 179 179 179 177 179 163 152 163							
Total iron (mg/L)-----	0.07617 -0.11250 -0.05267 0.17927 0.02069 1.00000 0.32220 0.76090 0.3338 0.1528 0.5043 0.0229 0.7933 0.0000 0.0001 0.0001 163 163 163 161 163 137 137 163							
Dissolved iron (mg/L)-----	-0.38515 -0.37245 -0.43450 0.30717 -0.30849 0.32220 1.00000 0.29400 0.00001 0.00001 0.00001 0.00001 0.00001 0.0001 0.0000 0.0005 152 152 152 152 152 137 152 137							
Total manganese (mg/L)-----	-0.00296 -0.19255 -0.15748 0.21823 0.05159 0.76090 0.29400 1.00000 0.9701 0.0138 0.0447 0.0054 0.5131 0.0001 0.0005 0.0000 163 163 163 161 163 163 137 163							

that are strongly related ($R \geq .8$) could be estimated using one or the other. Spearman's rank-correlation coefficient, the correlation coefficient for the ranks of the data, measures nonlinear as well as linear relationships.

The variables in the abandoned category that are strongly related (table 6) are those typically associated with the oxidation of pyrite and the formation of acid mine drainage (Stumm and Morgan, 1970; Hem, 1970). After reclamation, sulfate is still a major contributor to specific conductance, as indicated by the correlation ($R = +.95$), whereas the poor relationships among the other pyrite oxidation products (iron, acidity) may show that neutralization of acid mine drainage has occurred (table 7). This agrees with the findings of Pfaff and others (1981).

In the deep-mined category, total iron and total manganese concentrations are related ($R = +0.81$). pH is correlated (inversely) with acidity ($R = -0.70$), total iron ($R = -0.71$), and total manganese ($R = -0.69$) (table 8). Deep mines considered in this study typically are above the regional ground-water system, and have ample oxygen available for oxidation of pyrite. However, it is not known if deep mines underneath the basin were contributing drainage to the surface stream at the time of sampling. In the unmined category (table 9) no variables were strongly correlated, although total iron and total manganese had an R value of 0.76.

Regression Analysis

Linear regression analysis produces a linear equation that can be used to predict the value of a water-quality variable at base flow if the percentage of land use in each of the mining categories is known. From the data in table 10, for example:

$$\text{pH} = 7.2 - 0.052 (\text{percent abandoned}) + 0.018 (\text{percent reclaimed}).$$

In order to choose between equations with different dependent variables, such as concentration or log of concentration, the residual plots were examined. If increasing variance was found, a logarithmic transformation of the dependent variable was used. The log transformation was used for total iron and total manganese, whereas concentration was used for the other dependent variables (table 10). For any given site, only one concentration representative of base-flow conditions will be predicted using these equations. Additional variables that would account for variations in water quality at one site (such as discharge) would greatly improve the equations.

Table 10.--Results of regression analysis of water-quality data as a function of land-use percentages

Dependent variable	Regression constant	Regression coefficient for independent variables*			R ²	Standard error (percent)
		Abandoned	Reclaimed	Deep		
Specific conductance (umho/cm)-----	472	19.4	26.7	10.7	0.51	54
pH (units)-----	7.2	-0.052	0.018		.31	18
Alkalinity (mg/L)-----	95.8	-1.33	1.64	0.65	.18	71
Acidity (mg/L)-----	12.3	2.75	-0.842		.13	>100
Sulfate (mg/L)-----	81.9	14.7	17.7	5.2	.60	73
Iron, total (ug/L) (log ₁₀)---	2.806	.0109	-0.0035	.0149	.205	>100**
Iron, dissolved (ug/L)-----	None of the independent variables were significant at 0.05 level.					
Manganese, total (ug/L) (log ₁₀)-----	2.46	.027			.27	>100**

*Only those variables significant at the 0.05 level are included.

**Average of the positive and negative departures, calculated as described by Riggs (1968).

None of the R^2 values are very high, which indicates that little of the variation in the water quality data can be explained by a linear relation with land use alone. Other variables not considered here (for example, geologic formation) may also be important. Therefore, only crude predictions of water-quality concentrations are possible with regression equations based solely on land-use criteria.

Analysis of Variance

Analysis of variance examines the variance, or scatter, of data to determine whether differences between categories of variables are large enough to be discerned from scatter within each category. Analysis of variance was used in this study to determine if there are differences in water quality for streams draining different upstream mining activities.

Analysis of variance was performed on the ranks of the water-quality data (table 11). This procedure avoids problems due to non-normality and is identical to the nonparametric Kruskal-Wallis test (Conover and Iman, 1976); it tests for intergroup differences. The analysis of variance shows that there are significant (greater than 99 percent likelihood) differences between land-use categories for each of the eight water-quality variables. However, it does not indicate which land-use groups differ from others.

Tukey's studentized range test was used to determine the differences between the groups, that is, which land-use activities produce higher concentrations relative to the other land uses. Tukey's test determines the smallest difference required between mean values for two categories to be considered different. All possible pairs of categories are then compared. In this study, Tukey's procedure was used to show which land-use groups are different from the others on the basis of the eight water-quality variables. Tukey's procedure was performed on the rank-transformed data, at the 95 percent confidence level.

Figures 2 through 9 are box plots of the eight variables sorted into land-use groups. The plots give the maximum value, minimum value, mean, median, and 25th and 75th percentiles for each variable. Groups that are not significantly different (Tukey's test on unranked data) are represented by the same letter.

Table 11.--Results of analysis of variance of rank-transformed
water-quality data

Dependent variable	F value (variance ratio)	P*
Specific conductance-----	374	0.0001
pH-----	101	.0001
Alkalinity-----	96	.0001
Acidity-----	211	.0001
Sulfate-----	644	.0001
Total iron-----	85	.0001
Dissolved iron-----	41.4	.0001
Total manganese-----	207	.0001

*P = probability of statistically determining groups to be
different when they actually are not.

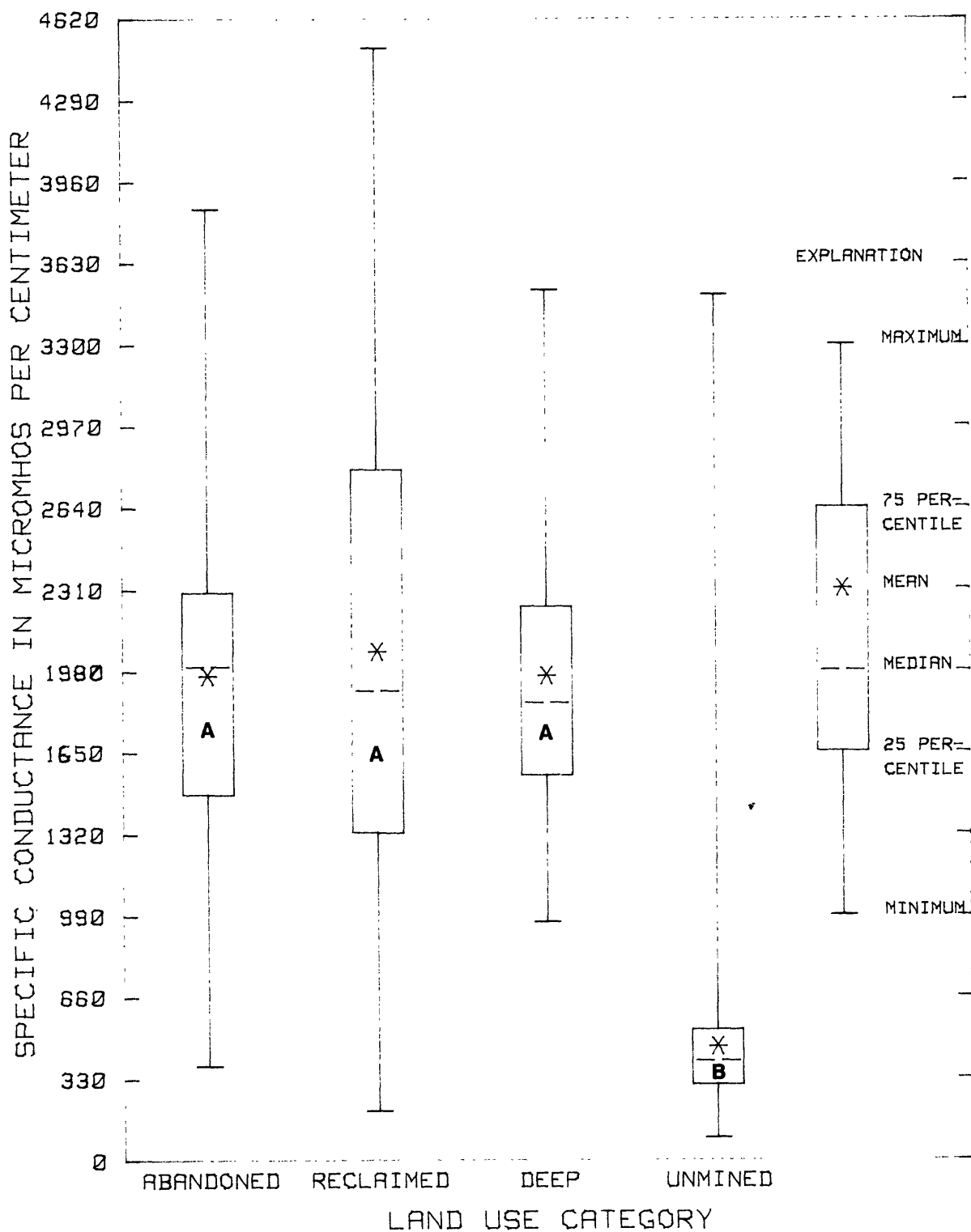


Figure 2.--Summary statistics and differences in specific conductance by land use category. (Categories with same letters are not statistically different at the 0.95 confidence level).

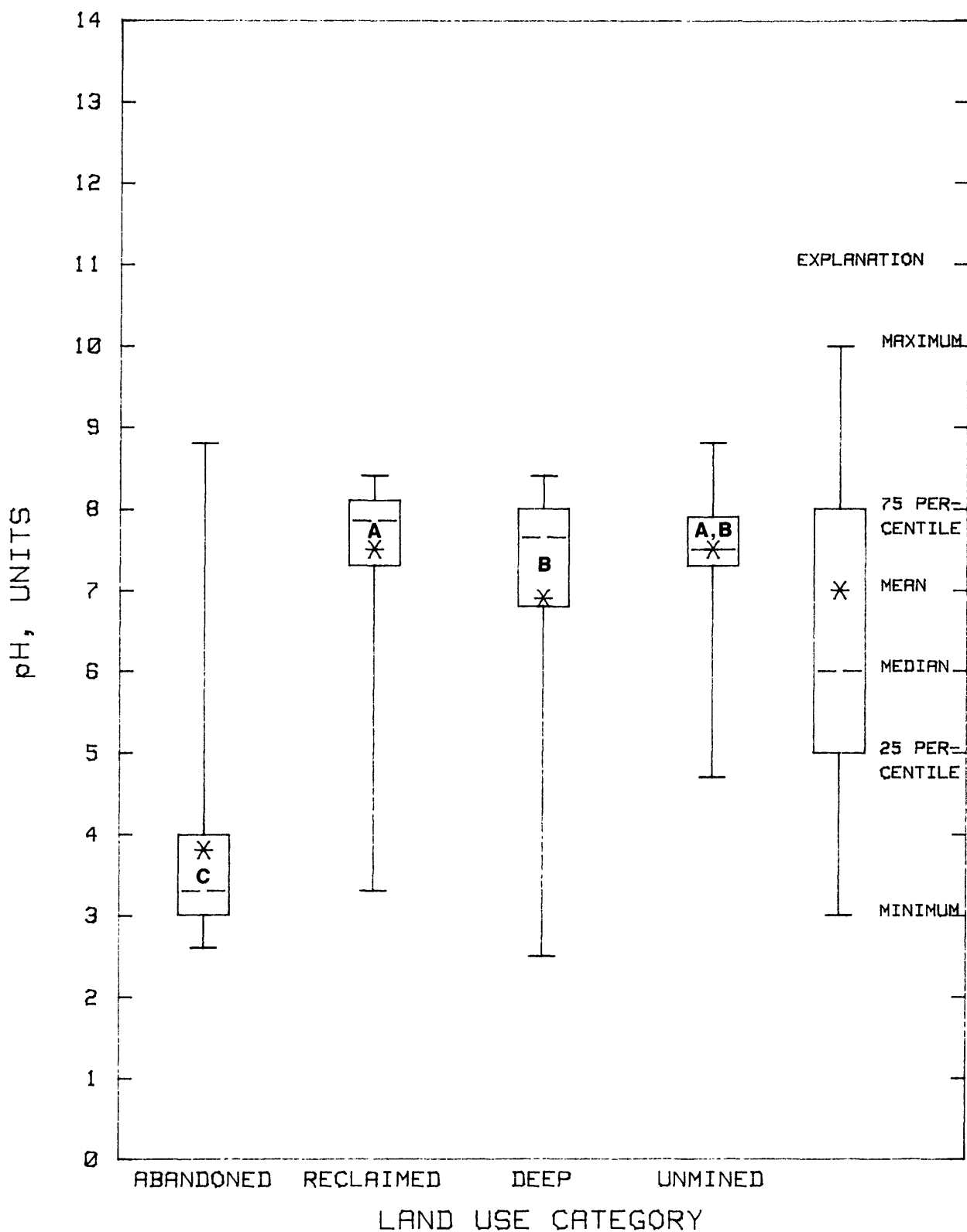


Figure 3.--Summary statistics and differences in pH by land use category. (Categories with different letters are statistically different at the 0.95 confidence level).

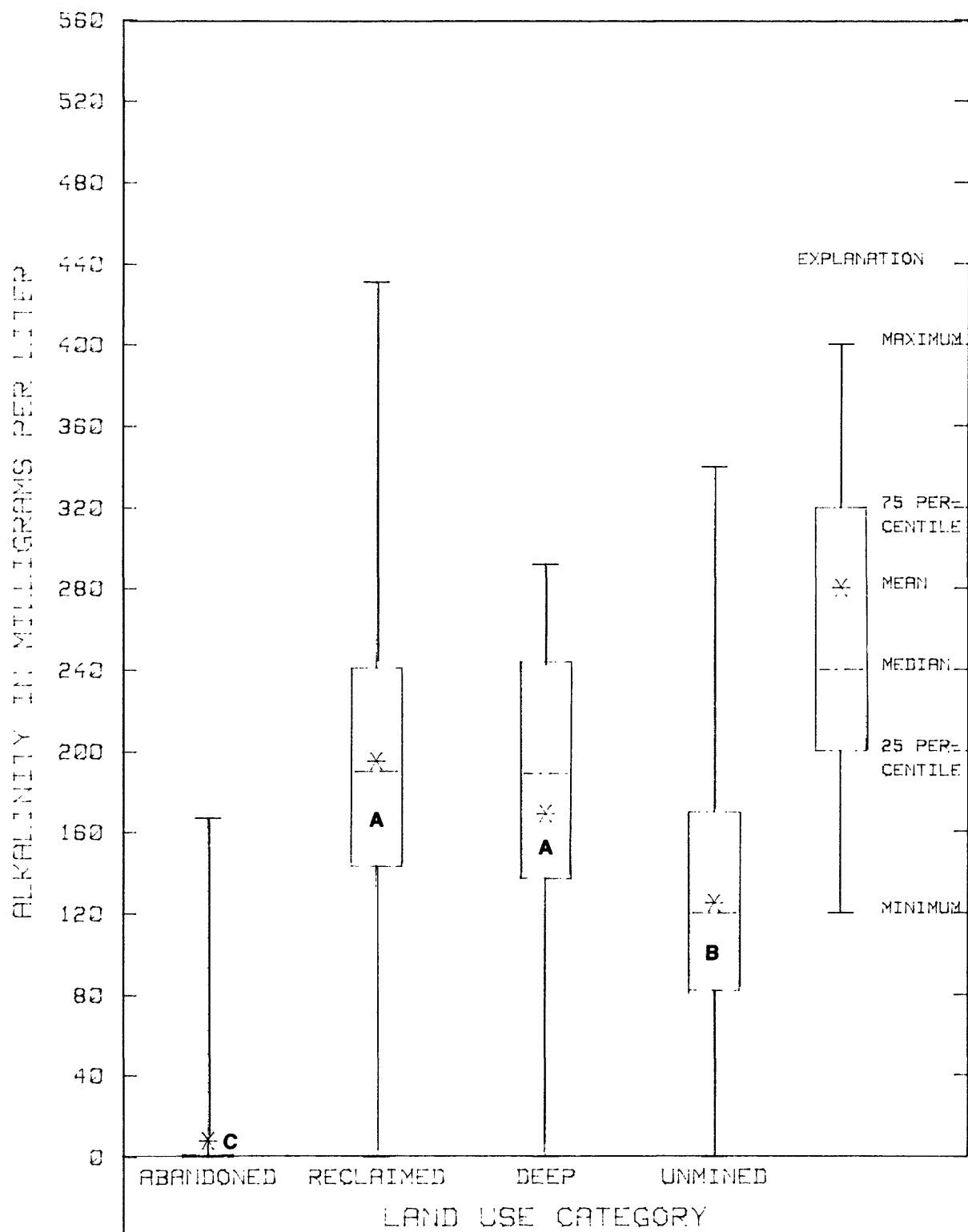


Figure 4.--Summary statistics and differences in alkalinity by land use category. (Categories with same letters are not statistically different at the 0.95 confidence level).

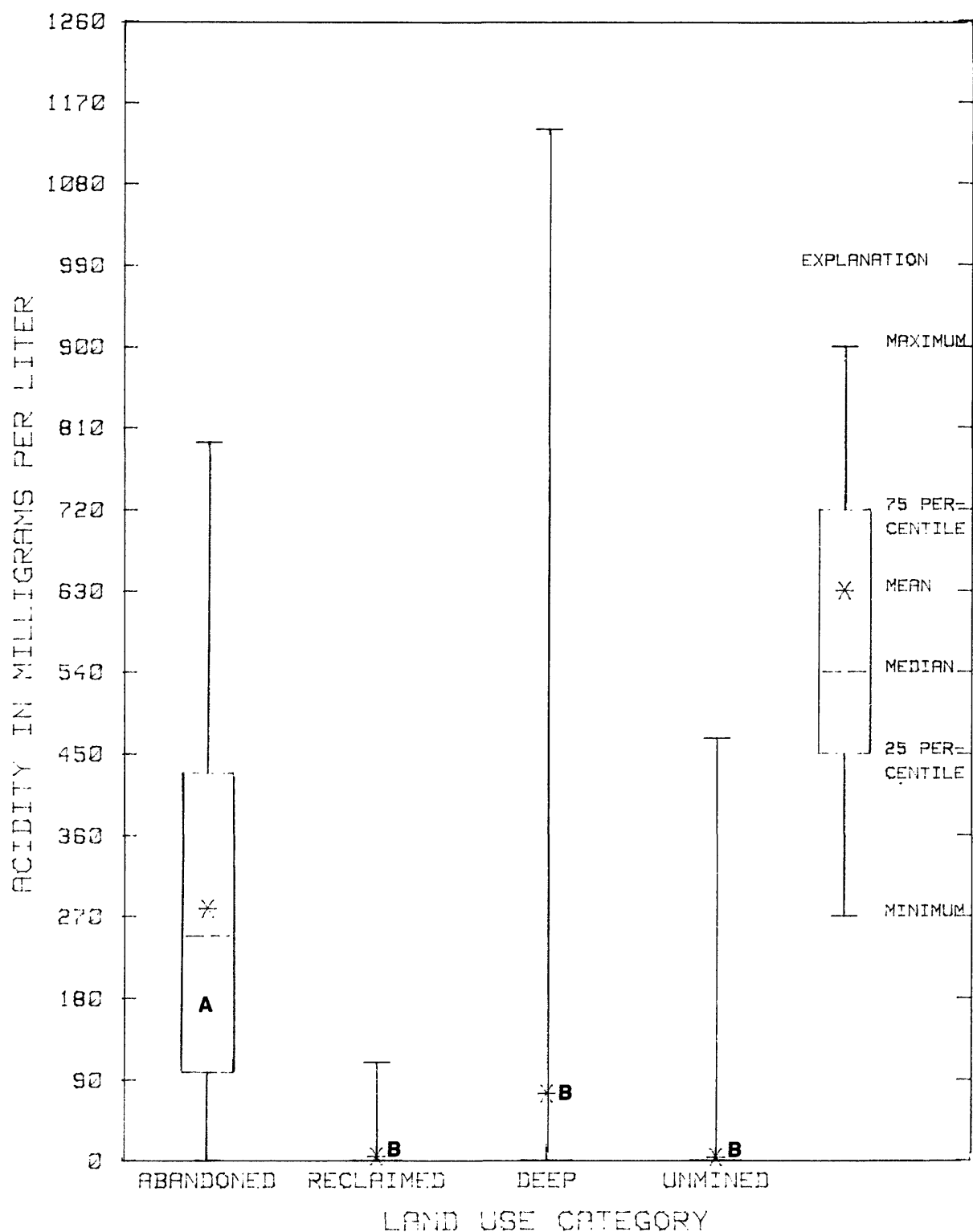


Figure 5.--Summary statistics and differences in acidity by land use category. (Categories with same letters are not statistically different at the 0.95 confidence level).

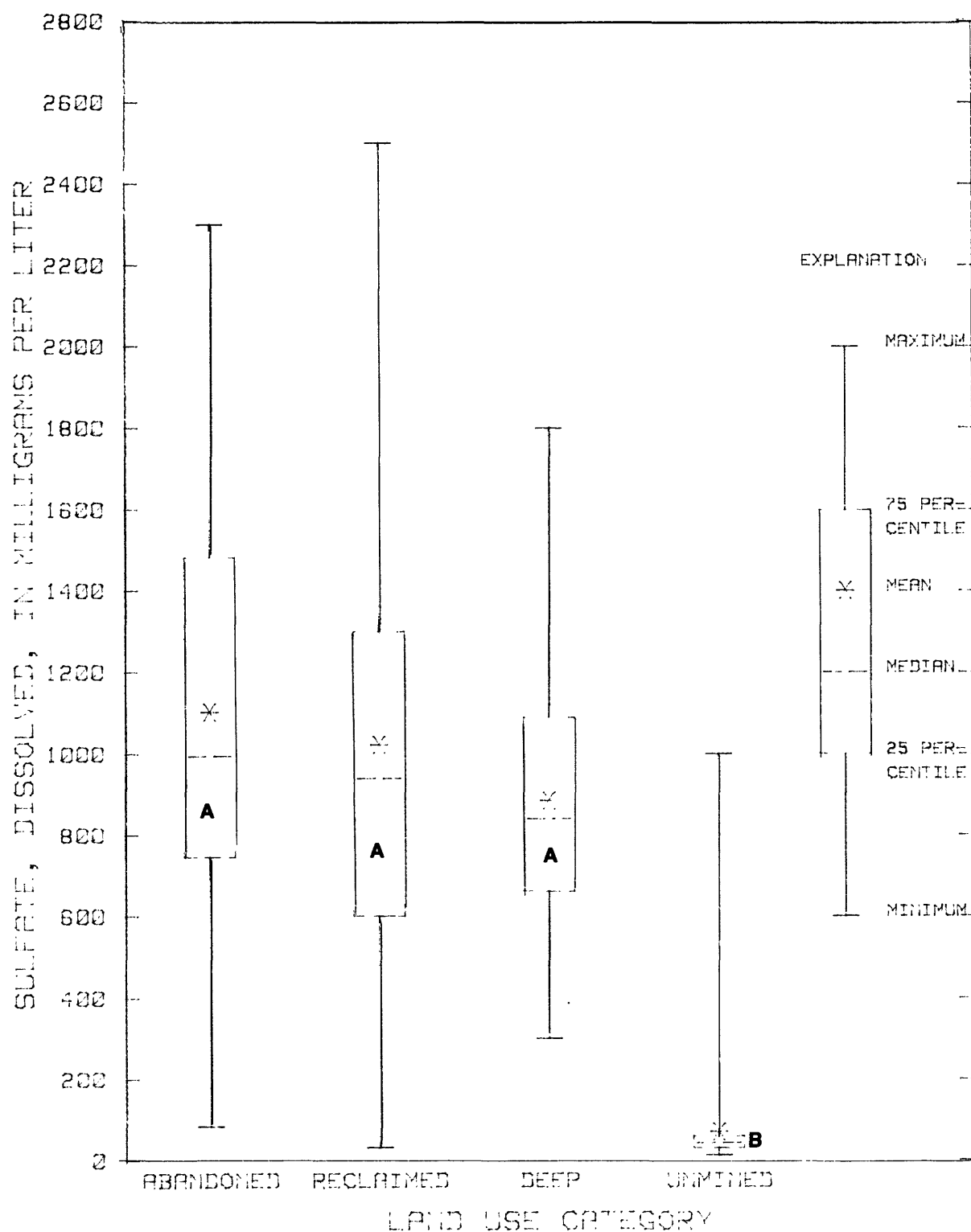


Figure 6.--Summary statistics and differences in sulfate by land use category. (Categories with same letters are not statistically different at the 0.95 confidence level).

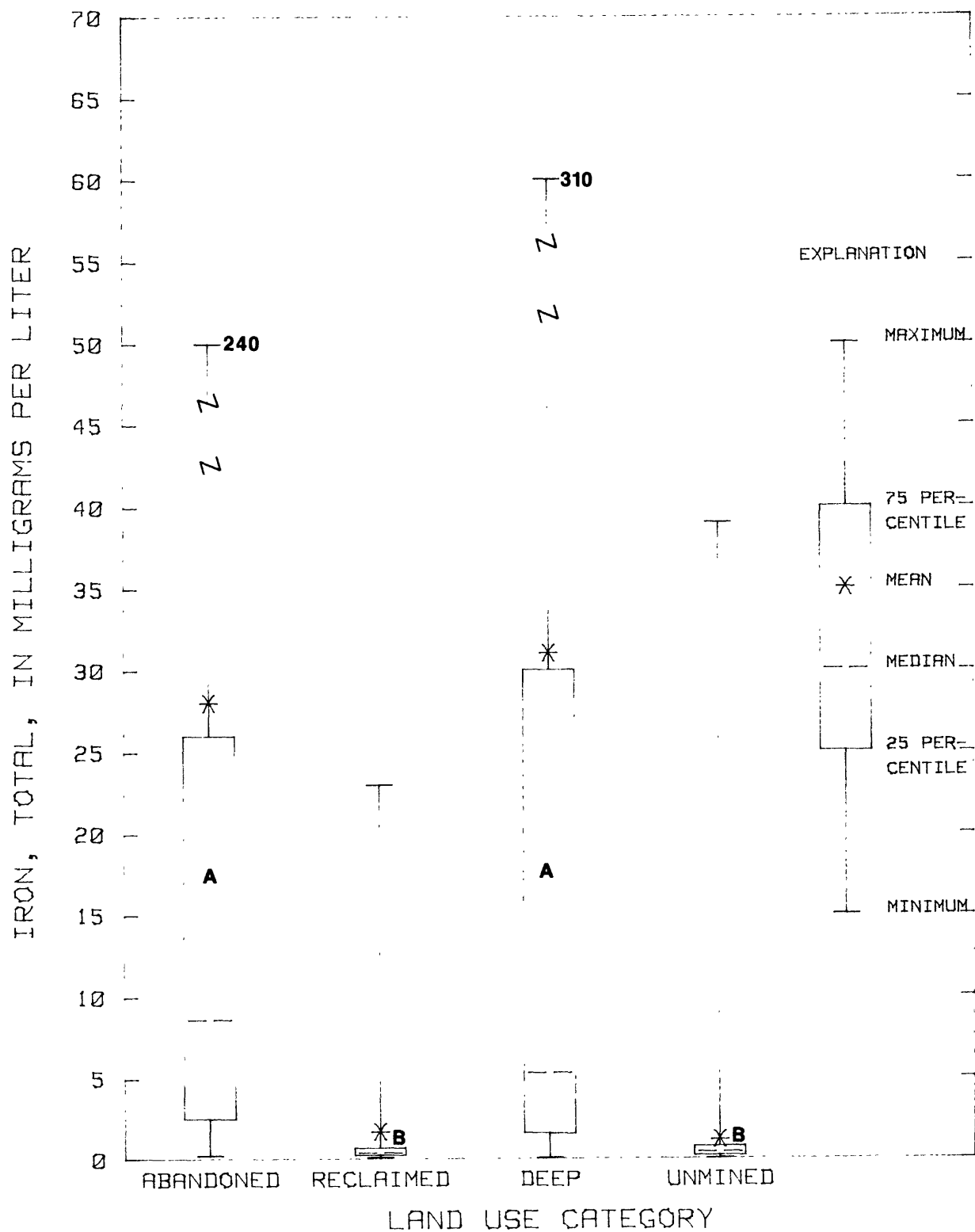


Figure 7.--Summary statistics and differences in total iron by land use category. (Categories with same letters are not statistically different at the 0.95 confidence level).

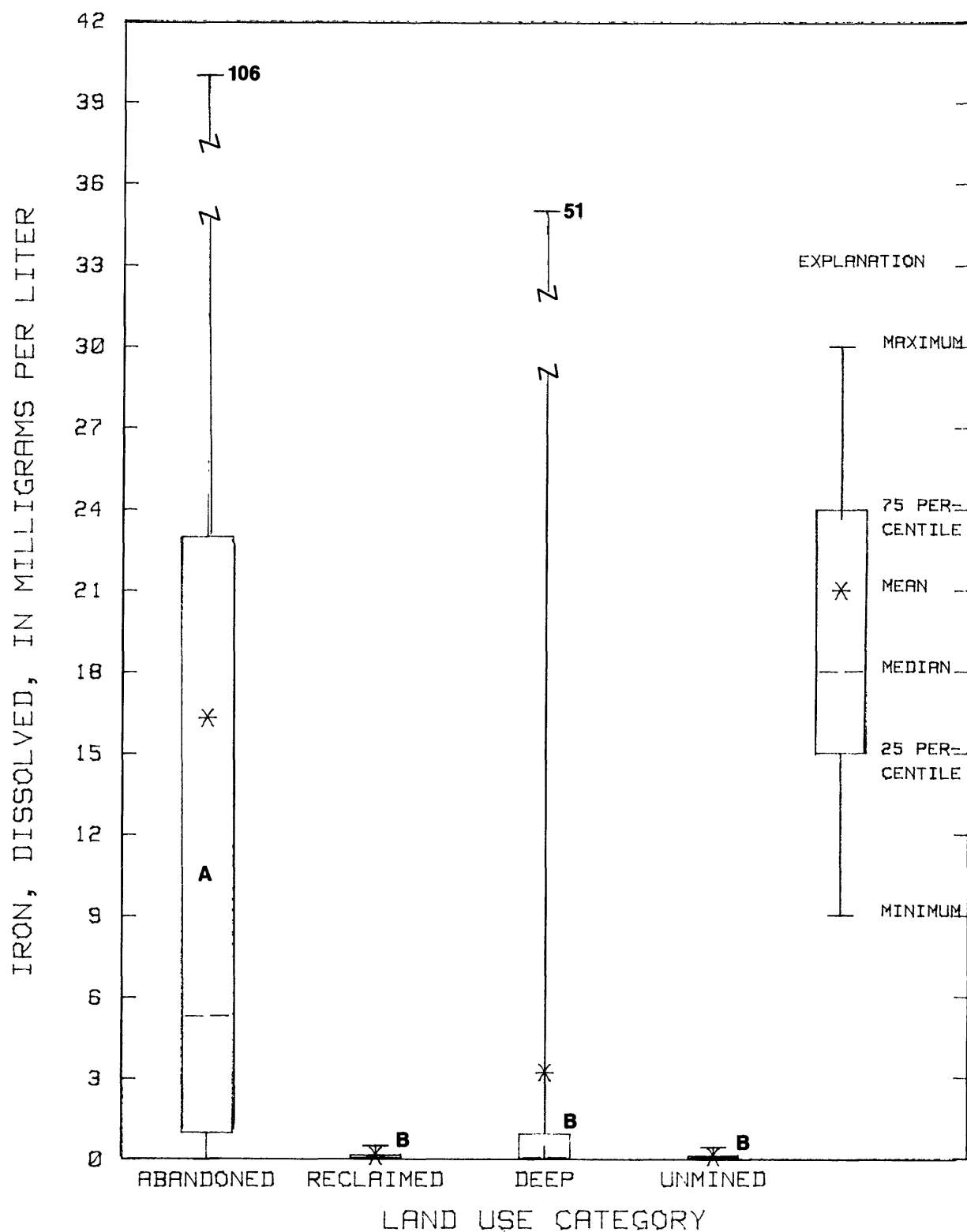


Figure 8.--Summary statistics and differences in dissolved iron by land use category. (Categories with same letters are not statistically different at the 0.5 confidence level).

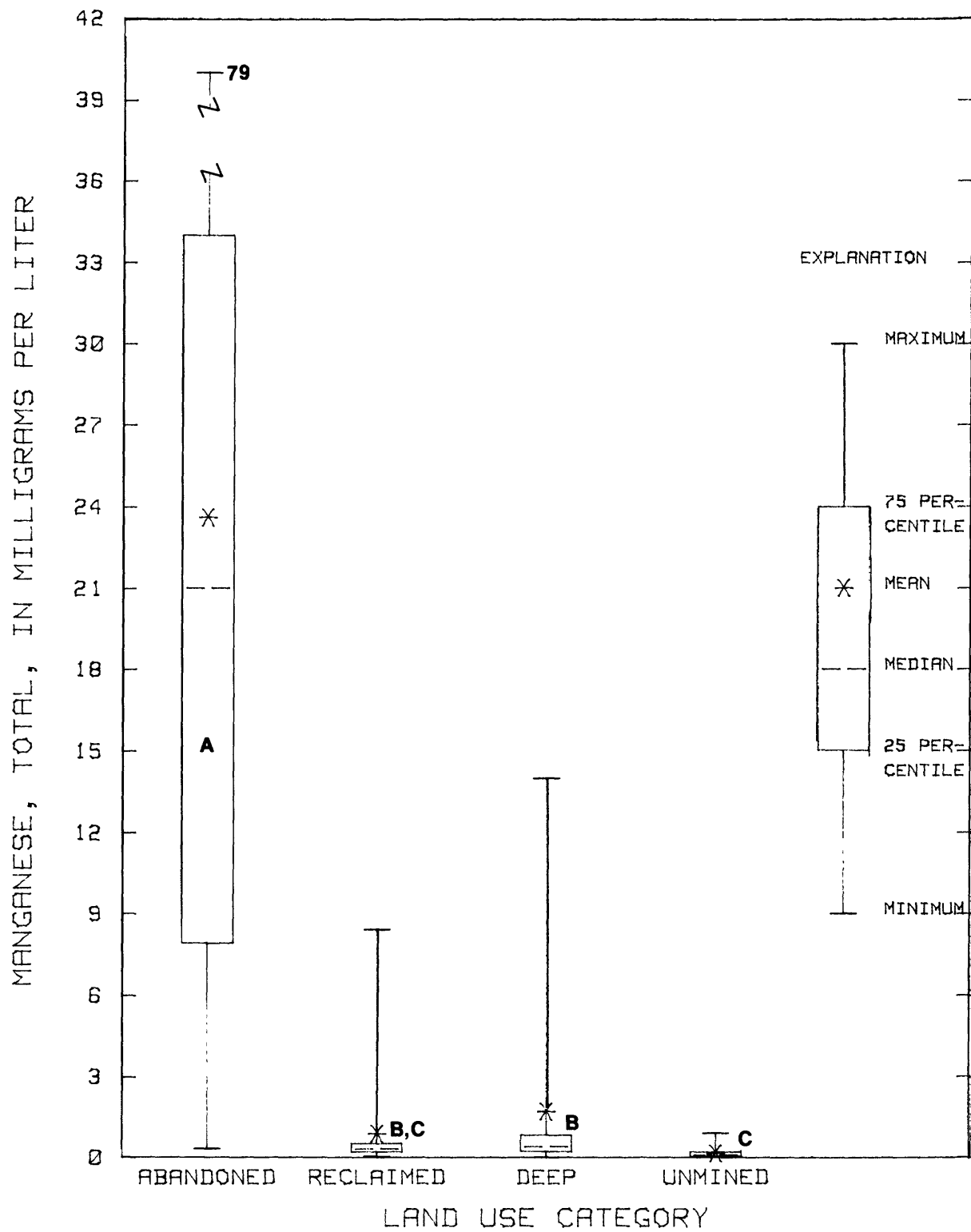


Figure 9.--Summary statistics and differences in total manganese by land use category. (Categories with same letters are not statistically different at the 0.95 confidence level).

Specific conductance is statistically the same in the abandoned, reclaimed, and deep-mined categories; however, it is much higher in these categories than in the unmined group (fig. 2). Reclamation did not reduce conductance to unmined levels. This is probably due to the higher sulfate concentrations and greater surface-area exposure of limestone rock fragments buried during reclamation.

pH is significantly lower in the abandoned category than in the others (fig. 3). The deep-mined category has a slightly lower pH than the reclaimed category, whereas the unmined category is similar to both the reclaimed and the deep-mined categories.

Alkalinity is much lower in the abandoned category than in the unmined category (fig. 4). The reclaimed and deep-mined categories are similar and slightly higher than the unmined category.

Acidity reflects the pH of the different land uses; there are high levels in the abandoned category and much lower values in reclaimed, deep-mined, and unmined categories (fig. 5). Reclamation lowered acidity to approximately the levels of unmined sites.

Sulfate exhibits a pattern similar to that of specific conductance, one that is characterized by high concentrations in the abandoned, reclaimed, and deep-mined categories (fig. 6). Reclamation did not reduce sulfate concentrations to unmined levels.

Total iron has similar high concentrations in the abandoned and deep-mined categories (fig. 7). Concentrations are significantly lower and are similar in the reclaimed and unmined categories.

Dissolved-iron concentrations are high in the abandoned group (fig. 8). Reclamation apparently reduces concentrations to unmined levels. Concentrations in the deep-mined category are occasionally much higher than those of reclaimed and unmined, but are statistically similar.

The total manganese concentration also is much higher in the abandoned category than in the others (fig. 9). Concentrations in the deep-mined and unmined categories are much lower but slightly different, whereas the reclaimed category is similar to both deep-mined and unmined.

Discriminant-Function Analysis

The purpose of discriminant-function analysis in this study was to determine how accurately the upstream mining-related land use can be predicted if the water quality is known. Water quality at sites with unknown or mixed land use can be classified into one of the categories. Those put in the abandoned category could be given priority for reclamation. Samples collected progressively downstream from a mine source would indicate the amelioration of mining impacts when the classification changes from abandoned to some other category.

Discriminant-function analysis classifies observations into groups on the basis of predictor variables. The variables measure characteristics on which the groups are expected to differ. The discriminant function is a weighted combination of the variables that maximizes the differences between groups (Kleinbaum and Kupper, 1978):

$$DF = a_1x_1 + a_2x_2 + \dots a_nx_n$$

where

DF is the numerical value of the function for an observation;

$a_1, a_2, \dots a_n$ are weighting factors;

$x_1, x_2, \dots x_n$ are water-quality variables.

Each observation is then assigned to one group based on the value of DF.

On the basis of observations from known land-use categories, the weighting factors maximizing group differentiation were calculated. Approximately 80 percent of the observations from each group were randomly chosen to develop the discriminant function. The remaining 20 percent were used to calculate the percentage of observations misclassified by the procedure. Water-quality variables for each observation were multiplied by the weighting factors, and were assigned to the group most likely to contain the resulting value of the discriminant function.

Because the data are not normally distributed, a rank transformation was performed prior to the discriminant procedure. The rank transformation has been shown to perform well in comparison with other discriminant-function analysis procedures (Conover and Iman, 1980), particularly for data that are not normal.

The discriminant function was calibrated with the eight water-quality variables discussed in previous sections. The random selection of 80 percent of the data, and subsequent calculation of misclassifications, was performed 10 times. Table 12 shows the median correct classifications, in percent, from the 10 repetitions.

One of the objectives of this study was to determine if the number of variables needed to define the effects of mining on water quality could be reduced. The variables were selected by performing a stepwise discriminant function analysis; the variables most important in discrimination (as determined by the F statistic) were entered first. However, the first two variables in every model were set to be pH and specific conductance, as these properties are routinely measured in the field and require no expensive analyses. The other variables selected were sulfate, alkalinity, total iron, and manganese. Table 12 shows the average correct classifications, in percent, with six, three, and two variables based on 10 calibration/verification data sets for each set of variables. Using six and three variables resulted in correct classifications of 87 and 83 percent, respectively. Seventy-nine percent of the observations can be correctly classified with only two field-measured variables -- pH and specific conductance.

Most of the misclassified observations during calibration and verification were in the deep-mined category. The median correct classification percentages with all deep-mined sites removed from calibration and verification data sets are shown in table 12. It is not known if the deep mines in any given basin were actually affecting the stream being sampled. It is also possible that effects of the deep mines were overshadowed by surface activities in some basins.

Classification of Mixed Land-Use Sites By Discriminant-Function Analysis

A total of 1,476 observations were compiled for this study and 1,106 (75 percent) were put into the mixed land-use category on the basis of land-use percentages. Discriminant-function analysis was used to determine which of the four mining categories each observation in the mixed category resembles the most. For reclamation purposes, it will be particularly helpful to determine which data-collection sites are similar to abandoned-mine areas.

Of the 1,106 observations classified in the mixed land-use category, 541 observations (49 percent) were reclassified by discriminant-function analysis as being similar to the other land-use categories (table 13). The other 565 observations were excluded because constituent values were missing. The analysis

Table 12.--Median percent correct classification of land use
by discriminant-function analysis

[Based on 10 calibration/verification sets. Number of observations: 25 abandoned, 34 deep-mined, 17 reclaimed, and 137 unmined]

Number of variables*	Calibration		Verification	
	With deep- mined sites	Without deep- mined sites	With deep- mined sites	Without deep- mined sites
8	98.3	100	92.6	94.7
6	93.1	94.8	87.3	91.6
3	83.1	92.2	82.9	90.0
2	83.8	89.0	78.6	87.1

*Number of variables:

8 - Specific conductance, pH, alkalinity, acidity, sulfate, total and dissolved iron, total manganese

6 - Specific conductance, pH, alkalinity, sulfate, total iron, total manganese

3 - Specific conductance, pH, sulfate

2 - Specific conductance, pH

Table 13.--Number of observations and percentages reclassified from mixed land-
use category

Land use	Aban- doned	Deep- mined	Reclaimed	Unmined	Total
Number of observations-----	88	76	87	290	541
Percentage-----	16.27	14.05	16.08	53.60	100.0

classified each observation on the basis of the value of the discriminant function, a linear combination of eight water-quality variables multiplied by weighting coefficients. An important consideration in interpreting the results of the discriminant-function analysis is that an undetermined factor, such as geologic formation, proximity of mining to the site, or the amount of sediment or water discharge, can cause the water-quality characteristics of an observation to reflect conditions that do not exist, such as reclamation.

The results of the discriminant function were analyzed along with the estimated land-use percentage. The discriminant function was very successful in classifying the mixed sites that resembled unmined and abandoned-mine sites. However, it was not as successful classifying sites that had water-quality characteristics of deep-mined and reclaimed basins.

The discriminant function classified 76 observations as having water-quality characteristics of a deep-mined basin. When compared to actual land-use percentages, 47 of the observations (61.8 percent) were from basins containing 0 to 5 percent deep mines. This high percentage of misclassified observations suggests that some other undetermined factor could cause the water-quality characteristics to be similar to those found in deep-mined basins. For example, drainage from deep mines in an adjoining basin might be seeping into a basin that has no deep mines.

Differences among land-use percentages and the discriminant-function reclassification were found for the reclaimed category. Forty-six percent of the observations put in the reclaimed category were from basins with 5 percent or less reclaimed land. However, study of the site data show that most of the observations from the low-percentage reclaimed land were clustered in areas. A possible explanation for this type of occurrence could be the geologic formation of the area. The geology of a basin can have an effect on the quality of surface water (Pfaff and others, 1981). The other 54 percent of the observations reflect very reasonable comparisons among the land-use percentages and the discriminant function classification.

The discriminant analysis was successful in classifying observations as being similar to the abandoned and unmined categories. Only 23 percent of the observations classified as abandoned land use were from basins with 5 percent or less abandoned mine land. Four percent of the observations classified as unmined were from basins with less than 70 percent unmined land.

The discriminant analysis was also successful in classifying observations from the same site into the same land-use category. An important consideration for multiple observations not classified in the same category at a site should be that data collection conditions were not the same from one period to another. Out of 378 collection sites with 541 observations in the mixed land-use category, 130 sites had more than one observation per site. For 61 percent of the sites with more than one observation, the discriminant analysis classified the observations from that site into the same land-use category.

SUMMARY

Low-flow water-quality data from 779 sites in the coal-bearing area of Ohio were classified according to land use and statistically analyzed. Sites in basins in which mining (surface or underground) or reclamation had taken place had higher levels of specific conductance and sulfate than unmined basins. Mining also affected pH, alkalinity, acidity, total and dissolved iron, and total manganese of streams draining the basins; reclamation returned levels of these properties and constituents to near those in unmined conditions. Analysis of variance indicates that there are significant differences between land-use categories for each of eight water quality variables.

After the observations had been sorted into categories based on land-use percentages, discriminant-function analysis was used to classify observations into categories based on water-quality information. With eight variables, 93 percent of the observations were correctly classified. To determine if fewer variables could be used to distinguish between land-use categories, thus reducing the cost of sampling, discriminant analysis was done with six, three, and two variables. Correct classification percentages were 87, 83, and 79, respectively. By means of the eight variables, the 541 observations originally classified as mixed were reclassified through discriminant analysis. Fifty-four percent were reclassified as unmined, 16 percent as abandoned, 16 percent as reclaimed, and 14 percent as deep mined.

The data in this report can be used to predict the impact of mining and reclamation on water quality. For example, by means of tables 2 and 3, one could determine the median and range of pH values expected in a basin that contains predominantly abandoned or reclaimed surface mines. Those sites reclassified as abandoned could be examined further to determine if reclamation is necessary. This report also provides a single reference containing base-flow water-quality data collected in Ohio's coal region during the 1975-82 water years.

REFERENCES

- Conover, W. J., and Iman, R. L., 1976, On some alternative procedures using ranks for the analysis of experimental designs: Communications in Statistics, Theory and Methods, A5(14), p. 1349-68.
- Conover, W. J., and Iman, R. L., 1980, The rank transformation as a method of discrimination with some examples: Communications in Statistics, Theory and Methods, A9(5), p. 465-87.
- 1981, Rank transformation as a bridge between parametric and nonparametric statistics: American Statistician, v. 35, p. 124-29.
- Crowell, D. L., compiler, 1980, Abandoned underground mine map series: Ohio Department of Natural Resources, Division of Geological Survey, scale 1:24,000.
- Engelke, M. J., Jr., Roth, D. K., and others, 1981, Hydrology of Area 7, Eastern Coal Province, Ohio: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-815, 60 p.
- Helwig, J. T., and Council, K. A., Editors, 1979, SAS User's Guide: Raleigh, N. C., SAS Institute, 494 p.
- Hem, John D., 1970, Study and interpretation of the chemical characteristics of natural water, 2d ed.: U.S. Geological Survey Water-Supply Paper 1473, 363 p.
- Kleinbaum, D. G., and Kupper, L. L., 1978, Applied Regression Analysis and other Multivariate Methods: North Scituate, Mass., Duxbury Press, 556 p.
- Ohio Department of Natural Resources, 1982, Level II Land Use Abandoned Mines Map Series: Ohio Capability Analysis Program, scale 1:24,000.
- Pfaff, C. L., Helsel, D. R., Johnson, D. P., and Angelo, C. G., 1981, Assessment of water quality in streams draining coal-producing areas in Ohio: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-409, 98 p.
- Riggs, H. C., 1968, Some statistical tools in hydrology: U.S. Geological Survey Techniques of Water-Resources Investigations, book 4, chap. A1, 39 p.

Roth, D. K., Engelke, M. J., Jr., and others, 1981, Hydrology of Area 4, Eastern Coal Province, Pennsylvania, Ohio, and West Virginia: U.S. Geological Survey Water-Resources Investigations Open-File Report 81-343, 62 p.

Stumm, W., and Morgan, J. J., 1970, Aquatic chemistry -- an introduction emphasizing chemical equilibria in natural waters: New York, Wiley, 583 p.

Appendix 1.--Water-Quality Data from the Eastern Appalachian Coal Province of Ohio (1975-1982)

The following tables contain water-quality data collected during base-flow conditions in the Eastern Appalachian Coal Province of Ohio between June 1975 and September 1982. Data from sites having drainage areas greater than 250 square miles are excluded. The sites are listed numerically by latitude and longitude. For each site, the station number, station name, latitude, longitude and dominant land use classification is given. Data for 33 properties and constituents are listed for each observation. Missing data are represented with a dash.

Site information is presented in the following format:

Station number	Station name	Latitude	Longitude	Land use
385612082095900	L Kyger C nr Kyger OH	Lat 385612	Long 0820959	(AB)

STANDARD ABBREVIATIONS USED IN STATION NAMES

AB Above	F Fork	NR Near
B Branch	G Great	R River
BK Brook	L Little	RN Run
BL Below	LK Lake	S South
C Creek	M Middle	TR Tributary
E East	N North	W West

LAND-USE CLASSIFICATIONS

AB	Abandoned surface mines
RC	Reclaimed surface mines
DP	Abandoned underground mines
UM	Unmined land
MX	Mixed land uses

OTHER SYMBOLS AND ABBREVIATIONS USED IN THE APPENDIX

UG/L	micrograms per liter ($\mu\text{g/L}$)	CL	chloride (Cl)
UG/G	micrograms per gram ($\mu\text{g/g}$)	NI	nickel (Ni)
FE	iron (Fe)	SO ₄	sulfate (SO_4)
AS	arsenic (As)	CACO ₃	calcium carbonate (CaCO_3)
HG	mercury (Hg)	HCO ₃	bicarbonate (HCO_3)
CU	copper (Cu)	CFS	cubic feet per second (ft^3/s)
CR	chromium (Cr)	FM	from
AL	aluminum (Al)	RECOV.	recoverable
MN	manganese (Mn)	FET-FLD	fixed endpoint titration - field determination
ZN	zinc (Zn)		
MG/L	milligrams per liter (mg/L)		

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03201615	BIG FOUR HOLLOW C AS E F NR LAKE HOPE OH						LAT 392216 LONG 0821911 (AB)				
10/12/78	-	-	3.6	1	35	0	3.0	140.0	-	-	-
385513082081400	L KYGER C NR ADDISON OH						LAT 385513 LONG 0820814 (AB)				
09/04/80	1.40	1900	4.0	-	214	-	-	-	-	-	-
07/21/81	2.40	1150	4.3	-	99	-	9.5	890.0	341	1627	11240
07/27/82	0.25	-	4.3	0	99	0	5.0	990.0	300	1470	11000
385548082092100	L KYGER C NR CHESHIRE OH						LAT 385548 LONG 0820921 (AB)				
07/24/75	0.10	-	3.3	1	79	0	10.0	1600.0	-	-	-
11/17/75	0.17	-	3.3	1	318	0	20.0	1700.0	-	-	-
385612082095900	L KYGER C NR KYGER OH						LAT 385612 LONG 0820959 (AB)				
09/19/80	0.71	2300	3.4	-	298	-	10.0	1430.0	500	2182	28300
07/22/81	0.61	1185	3.8	-	174	-	7.0	990.0	391	1907	16670
07/27/82	0.40	-	3.9	0	144	0	1.7	1000.0	400	1720	16000
390452082292800	UNAM TR TO RACCOON C NR ROADS OH						LAT 390452 LONG 0822928 (AB)				
09/15/80	0.63	1600	3.1	-	437	-	5.0	740.0	470	1029	36000
07/21/81	0.92	1200	3.0	-	288	-	2.0	530.0	402	1127	33110
07/12/82	0.38	-	2.9	0	427	0	11.0	760.0	600	1310	41000
392504082195100	UNAM TR TO E B RACCOON C NR STARK OH						LAT 392504 LONG 0821951 (AB)				
09/05/80	2.70	1500	3.5	-	273	-	-	-	-	-	-
07/15/81	0.89	1500	3.6	-	328	-	2.5	930.0	342	1382	28010
07/21/82	0.68	-	3.3	0	273	0	24.0	890.0	500	1510	19000
393632081245600	UNAM TR TO WF DUCK C AT ELBA OH						LAT 393632 LONG 0812456 (AB)				
08/27/80	1.70	810	8.8	5	25	6	-	-	-	-	-
08/12/81	0.23	835	6.2	5	-	6	3.0	435.0	20	693	214
07/15/82	0.54	-	6.1	3	5	4	2.4	83.0	-	664	-
393640081223400	UNAM TR TO E F DUCK C NR ELBA OH						LAT 393640 LONG 0812234 (AB)				
08/28/80	2.00	960	4.3	-	58	-	-	-	-	-	-
09/09/81	0.48	1100	4.0	-	84	-	2.0	670.0	150	1040	6135
07/14/82	0.72	-	4.0	0	60	0	2.0	710.0	200	1060	5700

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03201615	BIG FOUR HOLLOW C A3 E F NR LAKE HOPE OH							LAT 392215 LONG 0821911 (AB)			
10/12/78	210	50	7300	-	5800	5800	-	20	40	-	-
385513082081400	L KYGER C NR ADDISON OH							LAT 385513 LONG 0820814 (AB)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/21/81	12880	1094	1725	-	21250	23740	-	429	-	-	10
07/27/82	11000	830	1000	-	25000	25000	-	410	-	-	-
385548082092100	L KYGER C NR CHESHIRE OH							LAT 385548 LONG 0820921 (AB)			
07/24/75	37000	-	2500	-	-	52000	-	-	1100	-	-
11/17/75	40000	-	3200	-	-	47000	-	-	970	-	-
385612082095900	L KYGER C NR KYGER OH							LAT 385612 LONG 0820959 (AB)			
09/19/80	28100	1580	2720	-	31000	34000	-	640	-	-	15
07/22/81	20380	1094	1123	-	25230	25910	-	558	-	-	10
07/27/82	15000	850	1000	-	24000	24000	-	530	-	-	-
390452082292800	UNAM TR TO RACCOON C NR ROADS OH							LAT 390452 LONG 0822928 (AB)			
09/15/80	38000	27500	28300	-	15400	17000	-	690	-	-	10
07/21/81	34620	12970	11730	-	13140	13850	-	675	-	-	10
07/12/82	42000	23000	25000	-	17000	18000	-	890	-	-	-
392504082195100	UNAM TR TO E 3 RACCOON C NR STARR OH							LAT 392504 LONG 0821951 (AB)			
09/05/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	1684	1506	637	-	19030	21050	-	733	-	-	10
07/21/82	29000	1900	2300	-	23000	25000	-	700	-	-	-
393632081245600	UNAM TR TO WF DUCK C AT ELBA OH							LAT 393632 LONG 0812456 (AB)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	418	42	241	-	1046	1152	-	45	-	-	10
07/15/82	-	-	-	-	-	-	-	-	-	-	-
393640081223400	UNAM TR TO E F DUCK C NR ELBA OH							LAT 393640 LONG 0812234 (AB)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
09/09/81	8310	451	684	-	9334	10210	-	204	-	-	10
07/14/82	8300	490	8600	-	8900	9300	-	200	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CAESIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV- FM BOT- TOM MA- TERIAL (JG/G)
03201615	BIG FOUR HOLLOW C A3 E F NR LAKE HOPE OH						LAT 392216 LONG 0821911 (AB)				
10/12/78	1	-	-	0.5	-	4	-	0	-	-	-
385513082081400	L KYGER C NR ADJISON OH						LAT 385513 LONG 0820814 (AB)				
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/21/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
385548082092100	L KYGER C NR CHESHIRE OH						LAT 385548 LONG 0820921 (AB)				
07/24/75	1	-	-	0.6	-	30	-	20	-	-	-
11/17/75	1	-	-	0.5	-	20	-	20	-	-	-
385612082095900	L KYGER C NR KYGER OH						LAT 385612 LONG 0820959 (AB)				
09/19/80	-	-	0.5	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
390452082292800	UNAM TR TO RACCOON C NR ROADS OH						LAT 390452 LONG 0822928 (AB)				
09/15/80	-	-	0.5	-	-	-	-	-	-	-	-
07/21/81	-	-	0.5	-	-	-	-	-	-	-	-
07/12/82	-	-	-	-	-	-	-	-	-	-	-
392504082195100	UNAM TR TO E B RACCOON C NR STARR OH						LAT 392504 LONG 0821951 (AB)				
09/05/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
393632081245600	UNAM TR TO WF DUCK C AT ELBA OH						LAT 393632 LONG 0812456 (AB)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/15/82	-	-	-	-	-	-	-	-	-	-	-
393640081223400	UNAM TR TO E F DUCK C NR ELBA OH						LAT 393640 LONG 0812234 (AB)				
08/28/80	-	-	-	-	-	-	-	-	-	-	-
09/09/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

393800081270700 GOOSE HOLLOW RN NR WACKSBURG OH LAT 393500 LONG 0812707 (AB)											

05/28/75	0.70	-	3.1	1	214	0	39.0	700.0	-	-	-
11/19/75	1.50	-	4.1	1	104	0	35.0	710.0	-	-	-

393935081272600 BUFFALO RN NR DEXTER CITY OH LAT 393935 LONG 0812726 (AB)											

05/28/75	2.00	-	3.2	1	149	0	5.0	800.0	-	-	-
11/18/75	3.30	-	4.5	1	184	0	15.0	830.0	-	-	-

394006082080400 UNAM TR TO MOXAHALA C AT MOXAHALA OH LAT 394006 LONG 0820804 (AB)											

09/05/80	10.00	2300	3.1	-	556	-	-	-	-	-	-
08/05/81	5.60	2770	2.7	-	665	-	60.0	1660.0	395	2575	26540
07/20/82	4.00	-	3.1	0	437	0	55.0	1500.0	400	2420	1400

394024082091700 UNNAMED TR TO MOXAHALA C NR MOXAHALA OH LAT 394024 LONG 0820917 (AB)											

05/08/75	6.00	-	3.0	1	794	0	49.0	1900.0	-	-	-
09/15/75	7.00	-	2.9	1	745	0	35.0	1800.0	-	-	-

394306082121900 RUSH C AT NEW LEXINGTON OH LAT 394305 LONG 0821219 (AB)											

09/04/80	8.20	2300	3.0	-	606	-	-	-	-	-	-
07/17/81	5.90	2840	2.9	-	571	-	7.1	1760.0	394	2518	26790
07/29/75	1.00	-	2.8	1	646	0	45.0	2300.0	-	-	-
10/16/75	1.80	-	2.6	1	695	0	35.0	1800.0	-	-	-

394426082113600 UNAM TR TO RUSH C AT REHOBOTH OH LAT 394426 LONG 0821136 (AB)											

09/04/80	1.70	2300	3.0	-	487	-	-	-	-	-	-
07/15/81	1.80	2830	2.9	-	472	-	15.0	1720.0	567	2796	26900
07/12/82	0.73	-	2.8	0	437	0	120.0	1500.0	700	1850	21000

394430082070900 MCLUNEY C NR ROSE FARM OH LAT 394430 LONG 0820709 (AB)											

09/09/80	-	2000	3.1	-	358	-	-	-	-	-	-
07/15/81	4.90	2420	3.0	-	293	-	7.0	1640.0	305	2330	18150
07/20/82	4.80	-	3.1	0	228	0	24.0	1200.0	300	1890	13000

394439081413500 BRANNONS F NR REINERSVILLE OH LAT 394439 LONG 0814135 (AB)											

09/10/80	5.20	1400	7.5	167	-	204	-	-	-	-	-
08/26/81	1.40	1700	7.4	154	-	188	10.0	960.0	20	1578	75
08/03/82	0.41	-	8.0	139	-	170	15.0	870.0	-	1430	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)

393800081270700 GOOSE HOLLOW RN NR MACKSBURG OH LAT 393800 LONG 0812707 (AB)											

05/28/75	20000	-	6000	-	-	9000	-	-	440	-	-
11/19/75	14000	-	5400	-	-	5200	-	-	280	-	-

393935081272600 BUFFALO RN NR DEXTER CITY OH LAT 393935 LONG 0812726 (AB)											

05/28/75	17000	-	2500	-	-	9000	-	-	420	-	-
11/18/75	14000	-	2700	-	-	7100	-	-	320	-	-

394006082080400 UNAM TR TO MOXAHALA C AT MOXAHALA OH LAT 394006 LONG 0820804 (AB)											

09/05/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	26620	72920	75980	-	38270	38320	-	960	-	-	10
07/20/82	1500	58000	68000	-	34000	34000	-	730	-	-	-

394024082091700 UNNAMED TR TO MOXAHALA C NR MOXAHALA OH LAT 394024 LONG 0820917 (AB)											

05/08/75	55000	-	25000	-	-	61000	-	-	1700	-	-
09/15/75	49000	-	240000	-	-	55000	-	-	1400	-	-

394306082121900 RUSH C AT NEW LEXINGTON OH LAT 394306 LONG 0821219 (AB)											

09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/17/81	31200	105500	128500	-	35340	45130	-	620	-	-	10
07/29/75	49000	-	210000	-	-	79000	-	-	1200	-	-
10/16/75	80000	-	130000	-	-	50000	-	-	730	-	-

394426082113600 UNAM TR TO RUSH C AT REHOBOTH OH LAT 394426 LONG 0821136 (AB)											

09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	30640	24210	26730	-	41850	49740	-	982	-	-	10
07/12/82	21000	18000	18000	-	44000	44000	-	800	-	-	-

394430082070900 MCLUNEY C NR ROSE FARM OH LAT 394430 LONG 0820709 (AB)											

09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	18030	20270	20420	-	17000	18030	-	437	-	-	10
07/20/82	13000	13000	13000	-	18000	18000	-	350	-	-	-

394439081413500 BRANNONS F NR REINERSVILLE OH LAT 394439 LONG 0814135 (AB)											

09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/26/81	286	10	614	-	322	334	-	10	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/G)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
393800081270700	GOOSE HOLLOW RN NR MACKSBURG OH					LAT 393800 LONG 0812707		(AB)			
05/28/75	1	-	-	0.8	-	50	-	30	-	-	-
11/19/75	1	-	-	0.5	-	30	-	0	-	-	-
393935081272600	BUFFALO RV NR DEXTER CITY OH					LAT 393935 LONG 0812726		(AB)			
05/28/75	1	-	-	0.5	-	30	-	30	-	-	-
11/18/75	1	-	-	0.5	-	20	-	20	-	-	-
394006082080400	UNAM TR TO MOXAHALA C AT MOXAHALA OH					LAT 394006 LONG 0820804		(AB)			
09/05/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
394024082091700	UNNAMED TR TO MOXAHALA C NR MOXAHALA OH					LAT 394024 LONG 0820917		(AB)			
05/08/75	2	-	-	0.5	-	30	-	290	-	-	-
09/15/75	5	-	-	0.5	-	30	-	20	-	-	-
394306082121900	RUSH C AT NEW LEXINGTON OH					LAT 394306 LONG 0821219		(AB)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/17/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/75	2	-	-	0.5	-	30	-	40	-	-	-
10/16/75	2	-	-	0.5	-	30	-	30	-	-	-
394426082113600	UNAM TR TO RUSH C AT REMOOTH OH					LAT 394426 LONG 0821136		(AB)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/12/82	-	-	-	-	-	-	-	-	-	-	-
394430082070900	HCLUVEY C NR ROSE FARM OH					LAT 394430 LONG 0820709		(AB)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
394439081413500	BRANNONS F NR REINERSVILLE OH					LAT 394439 LONG 0814135		(AB)			
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
394451082074200 UNAM TR TO MCLUNEY C NR ROSE FARM OH LAT 394451 LONG 0820742 (AB)											
09/05/80	-	2400	3.0	-	596	-	-	-	-	-	-
07/15/81	0.57	3050	2.8	-	606	-	19.0	2080.0	528	3422	34480
07/12/82	0.25	-	2.6	0	596	0	15.0	1900.0	700	2980	35000
394508082092800 MC LUNEY C NR NEW LEXINGTON OH LAT 394508 LONG 0820928 (AB)											
09/11/79	3.10	-	3.0	1	159	0	-	1100.0	-	-	-
08/28/80	5.20	-	3.5	0	94	0	-	1000.0	-	-	-
07/17/81	2.00	-	3.1	0	214	0	-	1100.0	-	-	-
394712082101700 UNAM TR TO BUCKEYE F AT REDFIELD OH LAT 394712 LONG 0821017 (AB)											
09/10/80	1.50	2100	3.2	-	343	-	-	-	-	-	-
07/15/81	0.77	2050	3.0	-	323	-	9.0	1280.0	562	1810	22190
07/20/82	1.20	-	3.1	0	184	0	17.0	620.0	300	1120	11000
394739082084900 BUCKEYE F AT SALTILLO OH LAT 394735 LONG 0820856 (AB)											
05/14/75	8.00	-	3.9	1	248	0	32.0	840.0	-	-	-
09/09/75	7.00	-	2.7	1	387	0	20.0	1400.0	-	-	-
09/10/80	6.40	2000	3.2	-	278	-	-	-	-	-	-
07/16/81	3.70	2190	3.1	-	283	-	9.5	1420.0	500	2030	19800
07/20/82	5.10	-	3.3	0	214	0	35.0	950.0	500	1550	11000
394751082050000 UNAM TR TO MOXAHALA C AT ROSEVILLE OH LAT 394751 LONG 0820500 (AB)											
09/09/80	-	1720	4.3	-	65	-	-	-	-	-	-
07/15/81	3.10	1659	4.5	-	50	-	10.0	1090.0	95	1660	3905
07/21/82	2.60	-	4.2	0	40	0	54.0	920.0	100	1450	3100
394836082081600 BUCKEYE F NR FULTONHAM OH LAT 394836 LONG 0820816 (AB)											
09/11/79	6.30	-	3.2	1	248	0	-	1200.0	-	-	-
08/28/80	15.00	-	3.7	0	199	0	-	1000.0	-	-	-
07/17/81	4.20	-	3.0	0	248	0	-	1200.0	-	-	-
394951081591200 TURKEY RUN AT STOVERTOWN OH LAT 394951 LONG 0815912 (AB)											
09/10/80	1.10	1700	3.4	-	243	-	-	-	-	-	-
07/22/81	1.10	2200	3.8	-	487	-	5.5	1220.0	156	2120	29160
07/21/82	0.60	-	2.8	0	392	0	9.8	950.0	300	1840	14000

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
394451082074200	UNAM TR TO MCLUNEY C NR ROSE FARM OH							LAT 394451 LONG 0820742 (AB)			
09/05/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	48110	35180	48560	-	23320	32210	-	679	-	-	10
07/12/82	35000	30000	30000	-	37000	37000	-	760	-	-	-
394508082092800	MC LUNEY C NR NEW LEXINGTON OH							LAT 394508 LONG 0820928 (AB)			
09/11/79	-	4200	5100	71000	8000	9400	410	-	-	50	-
08/28/80	-	3500	3600	38000	6800	5800	1200	-	-	30	-
07/17/81	-	4400	4400	14000	7400	7500	3600	-	-	61	-
394712082101700	UNAM TR TO BUCKEYE F AT REDFIELD OH							LAT 394712 LONG 0821017 (AB)			
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	23110	16820	17270	-	24850	25060	-	785	-	-	10
07/20/82	11000	10000	11000	-	15000	15000	-	470	-	-	-
394739082084900	BUCKEYE F AT SALTILLO OH							LAT 394735 LONG 0820856 (AB)			
05/14/75	31000	-	18000	-	-	3200	-	-	900	-	-
09/09/75	45000	-	21000	-	-	45000	-	-	1100	-	-
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	23210	6992	8624	-	24400	30070	-	711	-	-	10
07/20/82	11000	6100	8900	-	22000	22000	-	650	-	-	-
394751082050000	UNAM TR TO MOXAHALA C AT ROSEVILLE OH							LAT 394751 LONG 0820500 (AB)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	4776	971	1384	-	4700	6040	-	130	-	-	10
07/21/82	3500	780	1700	-	5000	5400	-	120	-	-	-
394836082081600	BUCKEYE FK NR FULTONHAM OH							LAT 394836 LONG 0820816 (AB)			
09/11/79	-	5300	6300	77000	31000	31000	190	-	-	50	-
08/28/80	-	5000	5600	24000	22000	22000	110	-	-	19	-
07/17/81	-	5400	5900	17000	27000	27000	210	-	-	52	-
394951081591200	TURKEY RUN AT STOVERTOWN OH							LAT 394951 LONG 0815912 (AB)			
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	30730	77610	83960	-	15130	17290	-	432	-	-	10
07/21/82	20000	39000	39000	-	15000	15000	-	440	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
394451082074200	UNAM TR TO MCLUNEY C NR ROSE FARM OH					LAT 394451 LONG 0820742 (AB)				
09/05/80	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-
07/12/82	-	-	-	-	-	-	-	-	-	-
394508082092800	MC LUNEY C NR NEW LEXINGTON OH					LAT 394508 LONG 0820928 (AB)				
09/11/79	-	0	-	-	0.00	-	20	-	10	10
08/28/80	-	0	-	-	0.00	-	10	-	10	10
07/17/81	-	11	-	-	0.00	-	11	-	10	4
394712082101700	UNAM TR TO BUCKEYE F AT REDFIELD OH					LAT 394712 LONG 0821017 (AB)				
09/10/80	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-
394739082084900	BUCKEYE F AT SALTILLO OH					LAT 394735 LONG 0820856 (AB)				
05/14/75	1	-	-	0.5	-	30	-	50	-	-
09/09/75	1	-	-	0.5	-	30	-	20	-	-
09/10/80	-	-	-	-	-	-	-	-	-	-
07/16/81	-	-	0.5	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-
394751082050000	UNAM TR TO MOXAHALA C AT ROSEVILLE OH					LAT 394751 LONG 0820500 (AB)				
09/09/80	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-
394836082081600	BUCKEYE FK NR FULTONHAM OH					LAT 394836 LONG 0820816 (AB)				
09/11/79	-	0	-	-	0.00	-	20	-	10	10
08/28/80	-	0	-	-	0.00	-	10	-	10	10
07/17/81	-	6	-	-	0.00	-	9	-	10	4
394951081591200	TURKEY RUN AT STOVERTOWN OH					LAT 394951 LONG 0815912 (AB)				
09/10/80	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

395018082035800 UNAM TR TO MOXAHALA C NR ROSEVILLE OH LAT 395018 LONG 0820358 (AB)											

09/09/80	-	1100	6.4	-	10	-	-	-	-	-	-
07/15/81	1.70	1049	6.7	20	-	24	35.0	685.0	60	1116	237
07/27/82	0.46	-	6.8	43	-	52	11.0	620.0	-	1030	-

400908081461700 DUMP RN NR WILLS CREEK OH LAT 400908 LONG 0814617 (AB)											

07/10/75	0.10	-	2.9	1	367	0	5.0	560.0	-	-	-
09/29/75	0.10	-	3.8	1	243	0	3.0	490.0	-	-	-

392738082104700 SNOW F STATION 5 NR MURRAY CITY OH LAT 392738 LONG 0821047 (DP)											

06/17/76	9.20	-	2.9	-	243	-	35.0	640.0	-	-	-

03158195 SNOW F MONDAY C AT SUCHTEL OH LAT 392750 LONG 0821015 (DP)											

09/12/79	10.00	-	2.9	1	318	0	-	660.0	-	-	-

392917082095700 SNOW F NR MURRAY CITY OH LAT 392917 LONG 0820957 (DP)											

09/16/75	10.00	-	2.9	1	328	0	30.0	710.0	-	-	-
06/16/76	5.10	-	2.7	-	338	-	24.0	780.0	-	-	-

392944082100100 BRUSH F AT ORBISTON OH LAT 392944 LONG 0821001 (DP)											

08/28/81	0.24	1550	3.1	-	169	-	24.6	580.0	27	892	11430
07/28/82	3.50	-	3.0	0	35	0	45.0	840.0	300	1340	31000

393922082124100 MOXAHALA C NR BRISTOL OH LAT 393922 LONG 0821241 (DP)											

05/07/75	1.00	-	3.0	1	348	0	74.0	470.0	-	-	-
09/08/75	0.50	-	2.5	1	695	0	200.0	930.0	-	-	-

400138080490900 L MCMAHON C AT NEFFS OH LAT 400138 LONG 0804909 (DP)											

08/12/81	5.20	1270	7.2	120	-	146	7.0	535.0	20	1058	141
08/06/82	3.40	-	7.5	115	-	140	43.0	570.0	-	1020	-

400219080501700 L MCMAHON C NR NEFFS OH LAT 400219 LONG 0805017 (DP)											

08/12/81	4.70	1390	6.5	125	-	152	12.0	550.0	20	1040	76
08/06/82	2.70	-	5.5	23	40	28	45.0	810.0	100	1420	200

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
395018082035800	UNAM TR TO MOXAHALA C NR ROSEVILLE OH						LAT 395018 LONG 0820358 (AB)				
09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	424	77	490	-	3482	5405	-	20	-	-	10
07/27/82	-	-	-	-	-	-	-	-	-	-	-
400908081461700	DUAP RN NR WILLS CREEK OH						LAT 400908 LONG 0814617 (AB)				
07/10/75	1300	-	20000	-	-	4000	-	-	310	-	-
09/29/75	28000	-	63000	-	-	3000	-	-	210	-	-
392738082104700	SNOW F STATION 5 NR MURRAY CITY OH						LAT 392738 LONG 0821047 (DP)				
06/17/76	20000	-	14000	-	-	4600	-	-	390	-	-
03158195	SNOW F MONDAY C AT BUCHTEL OH						LAT 392750 LONG 0821015 (DP)				
09/12/79	-	13000	18000	73000	6100	6100	95	-	-	50	-
392917082095700	SNOW F NR MURRAY CITY OH						LAT 392917 LONG 0820957 (DP)				
09/16/75	42000	-	25000	-	-	8300	-	-	550	-	-
06/16/76	-	-	11000	-	-	-	-	-	-	-	-
392944082100100	BRUSH F AT ORBISTON OH						LAT 392944 LONG 0821001 (DP)				
08/28/81	12240	5200	5551	-	5	949	-	141	-	-	10
07/28/82	31000	16000	170000	-	6400	7000	-	590	-	-	-
393922082124100	MOXAHALA C NR BRISTOL OH						LAT 393922 LONG 0821241 (DP)				
05/07/75	20000	-	82000	-	-	3200	-	-	280	-	-
09/08/75	42000	-	140000	-	-	14000	-	-	700	-	-
400138080490900	L MCMAHON C AT NEFFS OH						LAT 400138 LONG 0804909 (DP)				
08/12/81	5024	54	14830	-	385	428	-	10	-	-	10
08/06/82	-	-	-	-	-	-	-	-	-	-	-
400219080501700	L MCMAHON C NR NEFFS OH						LAT 400219 LONG 0805017 (DP)				
08/12/81	6353	6218	21060	-	453	468	-	36	-	-	10
08/06/82	2900	13000	13000	-	400	400	-	120	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/G)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (JG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
395018082035800	UNAM TR TO MOXAHALA C NR ROSEVILLE OH						LAT 395018 LONG 0820358 (AB)				
09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
400908081461700	DUMP RN NR WILLS CREEK OH						LAT 400908 LONG 0814617 (AB)				
07/10/75	2	-	-	2.5	-	20	-	30	-	-	-
09/29/75	1	-	-	0.5	-	20	-	20	-	-	-
392738082104700	SNOW F STATION 5 NR MURRAY CITY OH						LAT 392738 LONG 0821047 (DP)				
06/17/76	1	-	-	0.5	-	20	-	20	-	-	-
03158195	SNOW F MONDAY C AT BUCHTEL OH						LAT 392750 LONG 0821015 (DP)				
09/12/79	-	0	-	-	0.00	-	10	-	20	10	10
392917082095700	SNOW F NR MURRAY CITY OH						LAT 392917 LONG 0820957 (DP)				
09/16/75	1	-	-	0.5	-	20	-	20	-	-	-
06/16/76	-	-	-	-	-	-	-	-	-	-	-
392944082100100	BRUSH F AT ORBISTON OH						LAT 392944 LONG 0821001 (DP)				
08/28/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
393922082124100	MOXAHALA C NR BRISTOL OH						LAT 393922 LONG 0821241 (DP)				
05/07/75	9	-	-	0.5	-	120	-	140	-	-	-
09/08/75	1	-	-	0.5	-	60	-	30	-	-	-
400138080490900	L MCMAHON C AT NEFFS OH						LAT 400138 LONG 0804909 (DP)				
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
08/06/82	-	-	-	-	-	-	-	-	-	-	-
400219080501700	L MCMAHON C NR NEFFS OH						LAT 400219 LONG 0805017 (DP)				
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
08/06/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
400223080502100	KINGS RN AT WILLOW GROVE OH						LAT 400223 LONG 0805021 (DP)				
06/25/75	0.10	-	3.0	1	1140	0	45.0	1800.0	-	-	-
400225080504100	L MCMAHON C NR NEFFS OH						LAT 400225 LONG 0805041 (DP)				
09/12/79	3.90	-	7.6	160	-	192	-	450.0	-	-	-
400248080512700	L MCMAHON C BL ADULTS RN NR ST CLAIRSVILLE OH						LAT 400248 LONG 0805127 (DP)				
06/25/75	3.00	-	8.4	144	-	176	60.0	1500.0	-	-	-
400308080540600	L MCMAHON C NR ST CLAIRSVILLE OH						LAT 400308 LONG 0805406 (DP)				
08/12/81	0.60	2140	6.2	27	139	33	40.0	1150.0	20	1910	75
07/28/82	0.63	-	8.1	156	-	190	65.0	810.0	-	1660	-
400322080535400	L MCMAHON C NR ST CLAIRSVILLE OH						LAT 400322 LONG 0805354 (DP)				
06/24/75	0.30	-	2.7	1	1040	0	40.0	340.0	-	-	-
400400080483100	WHEELING C AT BLAINE OH						LAT 400400 LONG 0804830 (DP)				
09/23/75	30.00	-	7.5	187	-	228	25.0	300.0	-	-	-
10/09/80	52.00	2250	7.7	233	-	284	11.0	1140.0	100	1940	330
08/25/81	43.00	2070	7.5	217	-	264	10.0	1080.0	20	1855	135
07/26/82	41.00	-	7.9	205	-	250	15.0	920.0	-	1710	-
400402080460200	WHEELING C NR LANSING OH						LAT 400402 LONG 0804602 (DP)				
09/12/79	40.00	-	8.1	200	-	244	-	980.0	-	-	-
400547080501700	WHEELING C AT BARTON OH						LAT 400547 LONG 0805017 (DP)				
10/09/80	49.00	2300	8.0	253	-	308	10.0	1060.0	100	1923	290
08/25/81	42.00	1993	7.8	239	-	292	5.5	1160.0	20	1885	75
07/27/82	35.00	-	7.9	189	-	230	14.0	930.0	-	1330	-
400549080583800	WHEELING C AT HANNOCK OH						LAT 400549 LONG 0805838 (DP)				
06/25/75	10.00	-	8.2	292	-	356	38.0	510.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
400223080502100	KINGS RN AT WILLOW GROVE OH							LAT 400223 LONG 0805021 (DP)			
06/25/75	95000	-	310000	-	-	4000	-	-	1400	-	-
400225080504100	L MCMAHON C NR NEFFS OH							LAT 400225 LONG 0805041 (DP)			
09/12/79	-	20	4700	37000	210	270	1100	-	-	100	-
400248080512700	L MCMAHON C BL AULTS RN NR ST CLAIRSVILLE OH							LAT 400248 LONG 0805127 (DP)			
06/25/75	1100	-	2100	-	-	870	-	-	70	-	-
400308080540600	L MCMAHON C NR ST CLAIRSVILLE OH							LAT 400308 LONG 0805406 (DP)			
08/12/81	5026	51000	68230	-	8942	9572	-	206	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-
400322080535400	L MCMAHON C NR ST CLAIRSVILLE OH							LAT 400322 LONG 0805354 (DP)			
06/24/75	55000	-	290000	-	-	10000	-	-	580	-	-
400400080483100	WHEELING C AT BLAINE OH							LAT 400400 LONG 0804830 (DP)			
09/23/75	4400	-	13000	-	-	670	-	-	80	-	-
10/09/80	1550	30	4190	-	250	360	-	30	-	-	10
08/25/81	886	10	2098	-	94	5	-	20	-	-	10
07/26/82	-	-	-	-	-	-	-	-	-	-	-
400402080460200	WHEELING C NR LANSING OH							LAT 400402 LONG 0804602 (DP)			
09/12/79	-	70	1600	35000	150	150	690	-	-	110	-
400547080501700	WHEELING C AT BARTON OH							LAT 400547 LONG 0805017 (DP)			
10/09/80	560	30	1630	-	110	310	-	30	-	-	10
08/25/81	292	10	1788	-	62	85	-	24	-	-	10
07/27/82	-	-	-	-	-	-	-	-	-	-	-
400549080583800	WHEELING C AT BANNOCK OH							LAT 400549 LONG 0805838 (DP)			
06/25/75	220	-	260	-	-	380	-	-	40	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/G) AS CR	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
400223080502100	KINGS RN AT WILLOW GROVE OH						LAT 400223 LONG 0805021 (DP)				
06/25/75	4	-	-	1.2	-	20	-	210	-	-	-
400225080504100	L MCMAHON C NR NEFFS OH						LAT 400225 LONG 0805041 (DP)				
09/12/79	-	0	-	-	0.00	-	30	-	30	10	80
400248080512700	L MCMAHON C BL ADULTS RN NR ST CLAIRSVILLE OH						LAT 400248 LONG 0805127 (DP)				
06/25/75	1	-	-	0.7	-	20	-	20	-	-	-
400308080540500	L MCMAHON C NR ST CLAIRSVILLE OH						LAT 400308 LONG 0805405 (DP)				
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
400322080535400	L MCMAHON C NR ST CLAIRSVILLE OH						LAT 400322 LONG 0805354 (DP)				
06/24/75	15	-	-	1.9	-	40	-	230	-	-	-
400400080483100	WHEELING C AT BLAINE OH						LAT 400400 LONG 0804830 (DP)				
09/23/75	2	-	-	0.5	-	20	-	40	-	-	-
10/09/80	-	-	0.5	-	-	-	-	-	-	-	-
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
400402080460200	WHEELING C NR LANSING OH						LAT 400402 LONG 0804602 (DP)				
09/12/79	-	0	-	-	0.00	-	30	-	10	10	80
400547080501700	WHEELING C AT BARTON OH						LAT 400547 LONG 0805017 (DP)				
10/09/80	-	-	0.5	-	-	-	-	-	-	-	-
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
400549080583800	WHEELING C AT BANNOCK OH						LAT 400549 LONG 0805838 (DP)				
06/25/75	1	-	-	0.5	-	0	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKAL- INITY FIELD AS (MG/L CAC03)	ACIDITY (MG/L CAC03)	BICAR- BONATE FET-FLD AS (MG/L HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

400634080581100 WHEELING C AT BANNOCK OH						LAT 400534 LONG 0805811 (DP)					

10/08/80	11.00	1900	7.3	259	-	316	12.0	940.0	100	2514	320
08/14/81	14.00	1630	7.8	239	-	292	5.8	790.0	572	1395	239
08/03/82	7.10	-	8.0	238	-	290	15.0	820.0	-	1410	-

400644080513200 WHEELING C NR BARTON OH						LAT 400544 LONG 0805132 (DP)					

10/09/80	47.90	2350	7.9	262	-	320	9.0	1210.0	100	1887	200
08/25/81	40.00	2080	7.9	248	-	302	8.4	1000.0	20	190	81
07/27/82	33.00	-	7.8	221	-	270	15.0	920.0	-	1840	-

400656080441100 GLENNS RN NR FLORENCE OH						LAT 400655 LONG 0804411 (DP)					

08/29/80	12.00	1098	6.8	190	-	232	-	-	-	-	-
08/14/81	3.30	2060	6.7	141	-	172	82.0	930.0	547	1567	222
08/05/82	2.00	-	7.0	148	-	180	140.0	1000.0	-	2120	-

400700080572000 CRABAPPLE C NR FAIRPOINT OH						LAT 400700 LONG 0805720 (DP)					

10/08/80	17.00	2600	6.8	249	11	304	11.0	1360.0	100	2299	200
08/14/81	19.00	2210	7.8	259	-	316	3.5	1420.0	650	2000	397
08/03/82	10.00	-	7.9	279	-	340	17.0	1300.0	-	2110	-

400700080572100 CRABAPPLE C NR FAIRPOINT OH						LAT 400700 LONG 0805721 (DP)					

06/26/75	6.00	-	7.2	236	-	288	14.0	1500.0	-	-	-

400710080430900 GLENNS RN NR MARTINS FERRY OH						LAT 400710 LONG 0804309 (DP)					

09/12/79	3.60	-	6.8	62	40	76	-	1300.0	-	-	-
08/05/81	6.50	-	7.8	159	-	194	-	620.0	-	-	-

400716080560400 WHEELING C AT FAIRPOINT OH						LAT 400716 LONG 0805604 (DP)					

10/08/80	35.00	2450	7.4	258	-	315	9.0	1230.0	120	2157	200
08/25/81	28.00	2230	7.5	266	-	324	7.5	1200.0	20	2083	75
08/02/82	18.00	-	8.0	254	-	310	12.0	1100.0	-	2080	-

400719080514400 FALL RN NR BARTON OH						LAT 400719 LONG 0805144 (DP)					

08/13/81	1.40	1630	7.5	181	-	221	9.3	820.0	275	1360	277
07/29/82	1.30	-	7.2	156	-	190	18.0	980.0	-	1760	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
400634080581100	WHEELING C AT BANNOCK OH							LAT 400634 LONG 0805811 (DP)			
10/08/80	320	380	2490	-	780	790	-	30	-	-	10
08/14/81	241	89	1566	-	155	171	-	39	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-
400644080513200	WHEELING C NR BARTON OH							LAT 400644 LONG 0805132 (DP)			
10/09/80	570	30	2880	-	230	330	-	30	-	-	10
08/25/81	246	10	983	-	5	71	-	16	-	-	10
07/27/82	-	-	-	-	-	-	-	-	-	-	-
400656080441100	GLENN'S RN NR FLORENCE OH							LAT 400656 LONG 0804411 (DP)			
08/29/80	-	-	-	-	-	-	-	-	-	-	-
08/14/81	5612	5320	46040	-	344	345	-	71	-	-	10
08/05/82	-	-	-	-	-	-	-	-	-	-	-
400700080572000	CRABAPPLE C NR FAIRPOINT OH							LAT 400700 LONG 0805720 (DP)			
10/08/80	1190	390	5260	-	460	500	-	30	-	-	16
08/14/81	536	69	3406	-	246	316	-	42	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-
400700080572100	CRABAPPLE C NR FAIRPOINT OH							LAT 400700 LONG 0805721 (DP)			
06/26/75	5700	-	33000	-	-	810	-	-	130	-	-
400710080430900	GLENN'S RN NR MARTINS FERRY OH							LAT 400710 LONG 0804309 (DP)			
09/12/79	-	3600	51000	24000	870	930	590	-	-	100	-
08/05/81	-	20	29000	8400	360	420	730	-	-	28	-
400716080560400	WHEELING C AT FAIRPOINT OH							LAT 400716 LONG 0805604 (DP)			
10/08/80	370	50	5450	-	520	580	-	30	-	-	10
08/25/81	75	10	64	-	59	85	-	10	-	-	10
08/02/82	-	-	-	-	-	-	-	-	-	-	-
400719080514400	FALL RN NR BARTON OH							LAT 400719 LONG 0805144 (DP)			
08/13/81	2057	30	32520	-	354	522	-	52	-	-	10
07/29/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
400634080581100	WHEELING C AT BANNOCK OH						LAT 400634 LONG 0805811 (DP)				
10/08/80	-	-	0.5	-	-	-	-	-	-	-	-
08/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
400644080513200	WHEELING C NR BARTON OH						LAT 400644 LONG 0805132 (DP)				
10/09/80	-	-	0.5	-	-	-	-	-	-	-	-
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
400656080441100	GLENNS RN NR FLORENCE OH						LAT 400656 LONG 0804411 (DP)				
08/29/80	-	-	-	-	-	-	-	-	-	-	-
08/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/05/82	-	-	-	-	-	-	-	-	-	-	-
400700080572000	CRABAPPLE C NR FAIRPOINT OH						LAT 400700 LONG 0805720 (DP)				
10/08/80	-	-	0.5	-	-	-	-	-	-	-	-
08/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
400700080572100	CRABAPPLE C NR FAIRPOINT OH						LAT 400700 LONG 0805721 (DP)				
06/26/75	1	-	-	0.7	-	20	-	60	-	-	-
400710080430900	GLENNS RN NR MARTINS FERRY OH						LAT 400710 LONG 0804309 (DP)				
09/12/79	-	0	-	-	0.00	-	20	-	10	10	20
08/05/81	-	7	-	-	0.01	-	10	-	10	2	20
400716080560400	WHEELING C AT FAIRPOINT OH						LAT 400716 LONG 0805604 (DP)				
10/08/80	-	-	0.5	-	-	-	-	-	-	-	-
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
08/02/82	-	-	-	-	-	-	-	-	-	-	-
400719080514400	FALL RN NR BARTON OH						LAT 400719 LONG 0805144 (DP)				
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

400727080561600 MCCracken RN AT FAIRPOINT OH _AT 400727 LONG 0805616 (DP)											

06/26/75	1.00	-	6.8	146	-	178	12.0	1300.0	-	-	-

400728080524300 WHEELING CR AT MAYNARD OH LAT 400728 LONG 0805243 (DP)											

10/09/80	43.00	2350	8.1	267	-	326	8.5	1185.0	100	2055	230
08/25/81	36.00	2150	7.7	254	-	322	8.2	1080.0	20	1968	120
08/04/82	24.00	-	8.1	254	-	310	19.0	950.0	-	1790	-

400835080540900 COX RN NR MIDWAY OH LAT 400834 LONG 0805410 (DP)											

06/26/75	0.50	-	8.1	228	-	278	8.0	520.0	-	-	-
08/13/81	3.70	1520	8.0	243	-	296	3.4	790.0	290	2164	174
08/17/82	1.70	-	8.4	268	-	310	8.3	620.0	-	1290	-

400918080571600 MCCracken RN AB FAIRPOINT OH LAT 400918 LONG 0805716 (DP)											

06/26/75	0.20	-	7.5	210	-	256	4.0	930.0	-	-	-

400944080442900 L SHORT C NR TILTONSVILLE OH LAT 400944 LONG 0804429 (DP)											

08/28/81	2.60	1700	7.1	144	-	176	29.0	740.0	34	1335	148
08/05/82	3.00	-	7.8	197	-	240	34.0	660.0	-	1480	-

401104080423000 L SHORT C NR TILTONSVILLE OH LAT 401104 LONG 0804230 (DP)											

09/10/79	3.40	-	7.9	160	-	196	-	670.0	-	-	-
08/26/80	26.00	-	8.0	187	-	228	-	380.0	-	-	-
08/27/81	3.20	-	7.6	161	-	196	-	700.0	-	-	-

401313080401800 RUSH RN NR TILTONSVILLE OH LAT 401313 LONG 0804018 (DP)											

09/12/79	3.40	-	8.0	180	-	228	-	710.0	-	-	-
08/05/81	7.30	-	8.1	179	-	218	-	610.0	-	-	-

401348080413700 RUSH RUN AT RJSH RUN OH LAT 401348 LONG 0804137 (DP)											

08/25/81	3.20	1800	7.7	189	-	230	10.5	790.0	20	1390	229
08/06/82	2.10	-	8.2	197	-	240	12.0	700.0	-	1140	-

401444080433000 RUSH RUN NR RJSH RUN OH LAT 401444 LONG 0804330 (DP)											

08/25/81	2.20	1690	7.9	247	-	301	9.0	680.0	20	1307	86
08/06/82	1.50	-	8.2	230	-	280	25.0	890.0	-	1810	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
400727080561600	MCCRACKEN RN AT FAIRPOINT OH							LAT 400727 LONG 0805616 (DP)			
06/26/75	9500	-	66000	-	-	530	-	-	220	-	-
400728080524300	WHEELING CR AT MAYNARD OH							LAT 400728 LONG 0805243 (DP)			
10/09/80	795	50	2750	-	230	410	-	30	-	-	10
08/25/81	360	10	552	-	5	110	-	11	-	-	10
08/04/82	-	-	-	-	-	-	-	-	-	-	-
400835080540900	COX RV NR MIDWAY OH							LAT 400834 LONG 0805410 (DP)			
06/26/75	260	-	380	-	-	280	-	-	60	-	-
08/13/81	275	54	392	-	100	115	-	45	-	-	10
08/17/82	-	-	-	-	-	-	-	-	-	-	-
400918080571600	MCCRACKEN RN AB FAIRPOINT OH							LAT 400918 LONG 0805716 (DP)			
06/26/75	70	-	440	-	-	290	-	-	60	-	-
400944080442900	L SHORT C NR TILTONSVILLE OH							LAT 400944 LONG 0804429 (DP)			
08/28/81	12360	1124	32020	-	603	699	-	37	-	-	10
08/05/82	-	-	-	-	-	-	-	-	-	-	-
401104080423000	L SHORT C NR TILTONSVILLE OH							LAT 401104 LONG 0804230 (DP)			
09/10/79	-	20	7300	42000	330	400	1100	-	-	100	-
08/26/80	-	20	8000	15000	250	280	570	-	-	42	-
08/27/81	-	50	1000	23000	90	90	940	-	-	73	-
401313080401800	RUSH RN NR TILTONSVILLE OH							LAT 401313 LONG 0804018 (DP)			
09/12/79	-	100	1600	41000	120	200	1500	-	-	140	-
08/05/81	-	30	3700	12000	180	190	1200	-	-	80	-
401348080413700	RUSH RUN AT RUSH RUN OH							LAT 401348 LONG 0804137 (DP)			
08/25/81	1043	36	1190	-	138	219	-	11	-	-	10
08/06/82	-	-	-	-	-	-	-	-	-	-	-
401444080433000	RUSH RUN NR RUSH RUN OH							LAT 401444 LONG 0804330 (DP)			
08/25/81	141	15	127	-	73	81	-	10	-	-	10
08/06/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
400727080561600	MCCRACKEN RN AT FAIRPOINT OH						LAT 400727 LONG 0805616 (DP)				
06/26/75	3	-	-	0.6	-	20	-	110	-	-	-
400728080524300	WHEELING CR AT MAYNARD OH						LAT 400728 LONG 0805243 (DP)				
10/09/80	-	-	0.5	-	-	-	-	-	-	-	-
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
08/04/82	-	-	-	-	-	-	-	-	-	-	-
400835080540900	COX RN NR MIDWAY OH						LAT 400834 LONG 0805410 (DP)				
06/26/75	1	-	-	0.5	-	20	-	20	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
08/17/82	-	-	-	-	-	-	-	-	-	-	-
400918080571600	MCCRACKEN RN AB FAIRPOINT OH						LAT 400918 LONG 0805716 (DP)				
06/26/75	1	-	-	0.5	-	20	-	20	-	-	-
400944080442900	L SHORT C NR TILTONSVILLE OH						LAT 400944 LONG 0804429 (DP)				
08/28/81	-	-	0.5	-	-	-	-	-	-	-	-
08/05/82	-	-	-	-	-	-	-	-	-	-	-
401104080423000	L SHORT C NR TILTONSVILLE OH						LAT 401104 LONG 0804230 (DP)				
09/10/79	-	0	-	-	0.00	-	30	-	20	10	10
08/26/80	-	0	-	-	0.01	-	20	-	10	10	20
08/27/81	-	1	-	-	0.01	-	26	-	10	1	26
401313080401800	RUSH RN NR TILTONSVILLE OH						LAT 401313 LONG 0804018 (DP)				
09/12/79	-	0	-	-	0.00	-	30	-	20	10	30
08/05/81	-	9	-	-	0.01	-	20	-	10	1	20
401348080413700	RUSH RUN AT RJSH RUN OH						LAT 401348 LONG 0804137 (DP)				
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
08/06/82	-	-	-	-	-	-	-	-	-	-	-
401444080433000	RUSH RUN NR RJSH RUN OH						LAT 401444 LONG 0804330 (DP)				
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
08/06/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLU (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03160105	CAMPAIGN C NR ADDISON OH					LAT 385349 LONG 0821131 (MX)					
09/19/80	1.10	680	7.0	75	-	92	24.0	260.0	100	432	200
07/28/81	0.90	445	7.2	105	-	128	9.0	115.0	92	307	103
07/26/82	1.00	-	7.8	107	-	130	5.5	100.0	-	256	-
03115700	W F DUCK C AT DEXTER CITY OH					LAT 393946 LONG 0812823 (MX)					
08/12/81	-	790	8.0	162	-	198	5.5	265.0	20	580	289
07/21/82	7.90	-	8.8	177	-	200	37.0	110.0	-	448	-
03148450	JONATHAN C AT FULTONHAM OH					LAT 395120 LONG 0820734 (MX)					
09/09/80	-	490	7.8	154	-	188	-	-	-	-	-
08/05/81	47.00	443	8.1	167	-	204	9.5	50.0	20	320	154
07/29/82	8.80	-	7.8	157	-	192	45.0	150.0	-	477	-
03201800	SANDY RN NR ZALESKI OH					LAT 392001 LONG 0821956 (MX)					
09/13/79	0.50	-	3.7	1	184	0	-	250.0	-	-	-
08/06/80	1.20	-	5.1	3	15	4	-	120.0	-	-	-
07/30/81	0.20	-	5.1	7	30	8	-	230.0	-	-	-
03108985	CHERRY VALLEY RN AT LEETONIA OH					LAT 405233 LONG 0804524 (MX)					
09/11/79	1.70	-	8.2	170	-	208	-	120.0	-	-	-
03086500	MAHONING R AT ALLIANCE OH					LAT 405558 LONG 0810541 (MX)					
08/26/75	19.00	-	7.3	137	-	167	23.0	130.0	-	-	-
03108980	M F L BEAVER C NR SALEM OH					LAT 405420 LONG 0804817 (MX)					
10/31/79	12.00	-	-	-	-	-	-	-	-	-	-
03108985	CHERRY VALLEY RN AT LEETONIA OH					LAT 405233 LONG 0804524 (MX)					
10/31/79	4.50	-	-	-	-	-	-	-	-	-	-
03108990	E B M F L BEAVER C AT LEETONIA OH					LAT 405216 LONG 0804554 (MX)					
10/31/79	5.70	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03160105	CAMPAIGN C NR ADDISON OH							LAT 385349 LONG 0821131 (MX)			
09/19/80	200	110	620	-	1260	1180	-	30	-	-	10
07/28/81	23	284	293	-	-	1012	-	57	-	-	10
07/26/82	-	-	-	-	-	-	-	-	-	-	-
03115700	W F JUCK C AT DEXTER CITY OH							LAT 393946 LONG 0812823 (MX)			
08/12/81	509	23	487	-	416	230	-	72	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-
03148450	JONATHAN C AT FULTONHAM OH							LAT 395120 LONG 0820734 (MX)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	398	298	588	-	147	172	-	13	-	-	10
07/29/82	-	-	-	-	-	-	-	-	-	-	-
03201800	SANDY RN NR ZALESKI OH							LAT 392001 LONG 0821956 (MX)			
09/13/79	-	830	1000	15000	3800	3800	120	-	-	20	-
08/06/80	-	300	640	14000	1600	1600	93	-	-	18	-
07/30/81	-	430	1800	7300	5700	5700	240	-	-	20	-
03108985	CHERRY VALLEY RN AT LEETONIA OH							LAT 405233 LONG 0804524 (MX)			
09/11/79	-	20	300	18000	80	100	1200	-	-	40	-
03086500	MAHONING R AT ALLIANCE OH							LAT 405558 LONG 0810541 (MX)			
08/26/75	-	30	-	-	90	-	-	-	30	-	-
03108980	M F L BEAVER C NR SALEM OH							LAT 405420 LONG 0804817 (MX)			
10/31/79	-	-	-	-	-	-	-	-	-	-	-
03108985	CHERRY VALLEY RN AT LEETONIA OH							LAT 405233 LONG 0804524 (MX)			
10/31/79	-	-	-	-	-	-	-	-	-	-	-
03108990	E 3 M F L BEAVER C AT LEETONIA OH							LAT 405216 LONG 0804554 (MX)			
10/31/79	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03160105	CAMPAIGN C NR ADDISON OH					LAT 395349 LONG 0821131 (MX)					
09/19/80	-	-	0.5	-	-	-	-	-	-	-	-
07/28/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
03115700	W F DUCK C AT DEXTER CITY OH					LAT 393946 LONG 0812823 (MX)					
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
03148450	JONATHAN C AT FULTONHAM OH					LAT 395120 LONG 0820734 (MX)					
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-
03201900	SANDY RN NR ZALESKI OH					LAT 392001 LONG 0821956 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
08/06/80	-	0	-	-	0.00	-	10	-	10	10	20
07/30/81	-	10	-	-	0.01	-	4	-	10	2	20
03108985	CHERRY VALLEY RN AT LEETONIA OH					LAT 405233 LONG 0804524 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
03086500	MAHONING R AT ALLIANCE OH					LAT 405558 LONG 0810541 (MX)					
08/26/75	3	-	-	0.5	-	20	-	20	-	-	-
03108980	M F L BEAVER C NR SALEM OH					LAT 405420 LONG 0804817 (MX)					
10/31/79	-	-	-	-	-	-	-	-	-	-	-
03108985	CHERRY VALLEY RN AT LEETONIA OH					LAT 405233 LONG 0804524 (MX)					
10/31/79	-	-	-	-	-	-	-	-	-	-	-
03108990	E B M F L BEAVER C AT LEETONIA OH					LAT 405216 LONG 0804554 (MX)					
10/31/79	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03109100	M F L BEAVER C NR ROGERS OH					LAT 404322 LONG 0803803 (MX)					
08/27/75	55.00	-	7.9	123	-	150	39.0	200.0	-	-	-
03109150	W F L BEAVER C AT GJILFORD OH					LAT 404730 LONG 0805212 (MX)					
11/01/79	28.00	-	-	-	-	-	-	-	-	-	-
03109200	W F L BEAVER C AT WEST POINT OH					LAT 404238 LONG 0804149 (MX)					
08/27/75	23.10	-	7.6	81	-	99	27.0	150.0	-	-	-
03109319	W F STATELINE C NR NEGLEY OH					LAT 404736 LONG 0803122 (MX)					
11/18/76	19.00	-	6.8	-	-	-	2100.0	470.0	-	-	-
03109395	BULL C AT NEGLEY OH					LAT 404715 LONG 0803242 (MX)					
10/31/79	19.00	-	-	-	-	-	-	-	-	-	-
03109860	ELKHORN C AT BERGHOLZ OH					LAT 403037 LONG 0805350 (MX)					
08/04/81	5.20	-	-	-	-	-	-	-	-	-	-
03110000	YELLOW C NR HAMMONDSVILLE OH					LAT 403216 LONG 0804331 (MX)					
08/28/75	9.10	-	7.2	22	-	27	29.0	340.0	-	-	-
03110850	ISLAND C NR TORONTO OH					LAT 402544 LONG 0803700 (MX)					
07/29/76	5.60	-	8.3	112	-	134	23.0	340.0	-	-	-
03110955	CROSS C AT BROADACRE OH					LAT 402156 LONG 0804705 (MX)					
08/12/81	12.20	-	-	-	-	-	-	-	-	-	-
03111500	SHORT C NR DILLONVALE OH					LAT 401136 LONG 0804404 (MX)					
08/12/75	49.00	-	7.7	131	-	160	58.0	1280.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03109100	M F L BEAVER C NR ROGERS OH						LAT 404322 LONG 0803803 (MX)				
08/27/75	-	30	-	-	90	-	-	-	-	-	-
03109150	W F L BEAVER C AT GUILFORD OH						LAT 404730 LONG 0805212 (MX)				
11/01/79	-	-	-	-	-	-	-	-	-	-	-
03109200	W F L BEAVER C AT WEST POINT OH						LAT 404238 LONG 0804149 (MX)				
08/27/75	-	70	-	-	120	-	-	-	-	-	-
03109319	W F STATELINE C NR NEGLEY OH						LAT 404736 LONG 0803122 (MX)				
11/18/76	-	-	46000	-	-	-	-	-	-	-	-
03109395	BULL C AT NEGLEY OH						LAT 404715 LONG 0803242 (MX)				
10/31/79	-	-	-	-	-	-	-	-	-	-	-
03109860	ELKHORN C AT BERGHOLZ OH						LAT 403037 LONG 0805350 (MX)				
08/04/81	-	-	-	-	-	-	-	-	-	-	-
03110000	YELLOW C NR HAMMONDSVILLE OH						LAT 403216 LONG 0804331 (MX)				
08/28/75	-	30	-	-	170	-	-	-	30	-	-
03110850	ISLAND C NR TORONTO OH						LAT 402544 LONG 0803700 (MX)				
07/29/76	-	30	-	-	40	-	-	-	-	-	-
03110955	CROSS C AT BROADACRE OH						LAT 402156 LONG 0804705 (MX)				
08/12/81	-	-	-	-	-	-	-	-	-	-	-
03111500	SHORT C NR DILLONVALE OH						LAT 401136 LONG 0804404 (MX)				
08/12/75	-	40	-	-	430	-	-	-	40	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03109100		M F L BEAVER C NR ROGERS OH						AT 404322 LONG 0803803	(MX)		
08/27/75	-	-	-	-	-	-	-	-	-	-	-
03109150		W F L BEAVER C AT GUILFORD OH						AT 404730 LONG 0805212	(MX)		
11/01/79	-	-	-	-	-	-	-	-	-	-	-
03109200		W F L BEAVER C AT WEST POINT OH						AT 404238 LONG 0804149	(MX)		
08/27/75	-	-	-	-	-	-	-	-	-	-	-
03109319		W F STATELINE C NR NEGLEY OH						AT 404736 LONG 0803122	(MX)		
11/18/75	-	-	-	-	-	-	-	-	-	-	-
03109395		HULL C AT NEGLEY OH						AT 404715 LONG 0803242	(MX)		
10/31/79	-	-	-	-	-	-	-	-	-	-	-
03109860		ELKHUR C AT BERGMOLZ OH						AT 403037 LONG 0805350	(MX)		
08/04/81	-	-	-	-	-	-	-	-	-	-	-
03110000		YELLOW C NR HAMMONDSVILLE OH						AT 403216 LONG 0804331	(MX)		
08/28/75	1	-	-	0.5	-	20	-	20	-	-	-
03110850		ISLAND C NR TORONTO OH						AT 402544 LONG 0803700	(MX)		
07/29/76	-	-	-	-	-	-	-	-	-	-	-
03110955		CROSS C AT BROADACRE OH						AT 402156 LONG 0804705	(MX)		
08/12/81	-	-	-	-	-	-	-	-	-	-	-
03111500		SHORT C NR DILLONVALE OH						AT 401136 LONG 0804404	(MX)		
08/12/75	2	-	-	0.5	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03112820	MCMAHON C AT GLENCOE OH										LAT 400010 LONG 0805238 (MX)
08/13/81	9.30	-	-	-	-	-	-	-	-	-	-
03113550	MCMAHON C AT BELLAIRE OH										LAT 400039 LONG 0804545 (MX)
08/13/81	21.00	-	-	-	-	-	-	-	-	-	-
03113840	N F CAPTIVA C NR BARNESVILLE OH										LAT 395444 LONG 0810251 (MX)
08/13/81	3.90	-	-	-	-	-	-	-	-	-	-
03114000	CAPTIVA C AT ARMSTRONGS MILLS OH										LAT 395431 LONG 0805527 (MX)
08/12/75	22.00	-	7.9	139	-	169	22.0	75.0	-	-	-
03114250	SUNFISH C AT CAMERON OH										LAT 394600 LONG 0805609 (MX)
07/22/75	30.00	-	7.7	144	-	176	32.0	27.0	-	-	-
03115650	E F DUCK C AT LOWER SALEM OH										LAT 393426 LONG 0812325 (MX)
05/29/75	52.00	-	7.2	73	-	89	7.0	270.0	-	-	-
03115890	TUSCARAWAS R AT UNIONTOWN OH										LAT 405918 LONG 0812404 (MX)
07/29/75	4.20	-	7.7	234	-	285	35.0	120.0	-	-	-
03115900	TUSCARAWAS R NR EAST LIBERTY OH										LAT 410025 LONG 0812931 (MX)
07/28/75	19.00	-	7.9	174	-	212	29.0	80.0	-	-	-
03115920	TUSCARAWAS R AT BARBERTON OH										LAT 410140 LONG 0813515 (MX)
07/30/75	4.00	-	7.4	201	-	245	110.0	130.0	-	-	-
03115990	WOLF C NR BARBERTON OH										LAT 410256 LONG 0813600 (MX)
07/30/75	6.20	-	7.3	164	-	200	40.0	90.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03112820	MCMAHON C AT GLENCOE OH						LAT 400010 LONG 0805238 (MX)				
08/13/81	-	-	-	-	-	-	-	-	-	-	-
03113550	MCMAHON C AT BELLAIRE OH						LAT 400039 LONG 0804545 (MX)				
08/13/81	-	-	-	-	-	-	-	-	-	-	-
03113840	N F CAPTINA C NR BARNESVILLE OH						LAT 395444 LONG 0810251 (MX)				
08/13/81	-	-	-	-	-	-	-	-	-	-	-
03114000	CAPTINA C AT ARMSTRONGS MILLS OH						LAT 395431 LONG 0805527 (MX)				
08/12/75	-	10	-	-	10	-	-	-	20	-	-
03114250	SUNFISH C AT CAMERON OH						LAT 394600 LONG 0805609 (MX)				
07/22/75	120	-	200	-	-	40	-	-	20	-	-
03115650	E F DUCK C AT LOWER SALEM OH						LAT 393426 LONG 0812325 (MX)				
05/29/75	1000	-	900	-	-	3200	-	-	40	-	-
03115890	TUSCARAWAS R AT UNIONTOWN OH						LAT 405918 LONG 0812404 (MX)				
07/29/75	-	30	-	-	130	-	-	-	-	-	-
03115900	TUSCARAWAS R NR EAST LIBERTY OH						LAT 410025 LONG 0812931 (MX)				
07/28/75	-	20	-	-	80	-	-	-	-	-	-
03115920	TUSCARAWAS R AT BARBERTON OH						LAT 410140 LONG 0813515 (MX)				
07/30/75	-	40	-	-	260	-	-	-	-	-	-
03115990	WOLF C NR BARBERTON OH						LAT 410256 LONG 0813600 (MX)				
07/30/75	-	70	-	-	170	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TERIAL (UG/G)	LEAD RECOV. FM BOT- TERIAL (UG/G)
03112820	MCMAHON C AT GLENCOE OH						LAT 400010 LONG 0805238 (MX)				
08/13/81	-	-	-	-	-	-	-	-	-	-	-
03113550	MCMAHON C AT BELLAIRE OH						LAT 400039 LONG 0804545 (MX)				
08/13/81	-	-	-	-	-	-	-	-	-	-	-
03113840	N F CAPTINA C NR BARNESVILLE OH						LAT 395444 LONG 0810251 (MX)				
08/13/81	-	-	-	-	-	-	-	-	-	-	-
03114000	CAPTINA C AT ARMSTRONGS MILLS OH						LAT 395431 LONG 0805527 (MX)				
08/12/75	1	-	-	0.5	-	0	-	20	-	-	-
03114250	SUNFISH C AT CAMERON OH						LAT 394600 LONG 0805609 (MX)				
07/22/75	1	-	-	0.5	-	0	-	0	-	-	-
03115650	E F DUCK C AT LOWER SALEM OH						LAT 393426 LONG 0812325 (MX)				
05/29/75	1	-	-	0.5	-	20	-	20	-	-	-
03115890	TUSCARAWAS R AT UNIONTOWN OH						LAT 405918 LONG 0812404 (MX)				
07/29/75	-	-	-	-	-	-	-	-	-	-	-
03115900	TUSCARAWAS R NR EAST LIBERTY OH						LAT 410025 LONG 0812931 (MX)				
07/28/75	-	-	-	-	-	-	-	-	-	-	-
03115920	TUSCARAWAS R AT BARBERTON OH						LAT 410140 LONG 0813515 (MX)				
07/30/75	-	-	-	-	-	-	-	-	-	-	-
03115990	WOLF C NR BARBERTON OH						LAT 410256 LONG 0813600 (MX)				
07/30/75	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLO (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03116000	TUSCARAWAS R AT CLINTON OH						LAT 405540 LONG 0813758 (MX)				
07/29/75	72.00	-	8.0	118	-	144	3100.0	75.0	-	-	-
03116950	NEWMAN C NR MASSILLON OH						LAT 404922 LONG 0813306 (MX)				
08/11/76	10.00	-	7.8	187	-	228	29.0	88.0	-	-	-
03117150	SANDY C AT MINERVA OH						LAT 404353 LONG 0810557 (MX)				
09/10/75	32.00	-	7.8	97	-	118	19.0	57.0	-	-	-
03117280	HUGLE RN NR MALVERN OH						LAT 404249 LONG 0810903 (MX)				
08/10/76	25.00	-	7.8	98	-	120	13.0	160.0	-	-	-
03117300	SANDY C AT MALVERN OH						LAT 404127 LONG 0811050 (MX)				
08/10/76	101.00	-	7.7	97	-	118	15.0	58.0	-	-	-
03117310	PIPE RN AT MALVERN OH						LAT 404116 LONG 0811102 (MX)				
08/10/76	8.30	-	7.6	48	-	58	12.0	40.0	-	-	-
03117450	L SANDY C NR ROBERTSVILLE OH						LAT 404403 LONG 0811440 (MX)				
08/11/76	27.00	-	7.7	112	-	137	40.0	140.0	-	-	-
03118000	M B NIMISHILLEN C AT CANTON OH						LAT 405029 LONG 0812114 (MX)				
07/29/75	13.00	-	8.3	158	-	187	31.0	130.0	-	-	-
03118100	E B NIMISHILLEN C NR CANTON OH						LAT 404924 LONG 0811755 (MX)				
09/10/75	7.70	-	7.8	177	-	216	98.0	200.0	-	-	-
03118300	W B NIMISHILLEN C AT CANTON OH						LAT 404748 LONG 0812326 (MX)				
09/11/75	21.00	-	8.2	204	-	249	75.0	120.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03116000	TUSCARAWAS R AT CLINTON OH						LAT 405540 LONG 0813758 (MX)				
07/29/75	-	70	-	-	310	-	-	-	30	-	-
03116950	NEWMAN C NR MASSILLON OH						LAT 404922 LONG 0813306 (MX)				
08/11/76	-	10	-	-	10	-	-	-	-	-	-
03117150	SANDY C AT MINERVA OH						LAT 404353 LONG 0810557 (MX)				
09/10/75	-	70	-	-	140	-	-	-	-	-	-
03117280	HUGLE RN NR MALVERN OH						LAT 404249 LONG 0810903 (MX)				
08/10/76	-	20	-	-	270	-	-	-	-	-	-
03117300	SANDY C AT MALVERN OH						LAT 404127 LONG 0811050 (MX)				
08/10/76	-	80	-	-	120	-	-	-	-	-	-
03117310	PIPE RN AT MALVERN OH						LAT 404116 LONG 0811102 (MX)				
08/10/76	-	440	-	-	90	-	-	-	-	-	-
03117450	L SANDY C NR ROBERTSVILLE OH						LAT 404403 LONG 0811440 (MX)				
08/11/76	-	40	-	-	1200	-	-	-	-	-	-
03118000	M B NIMISHILLEN C AT CANTON OH						LAT 405029 LONG 0812114 (MX)				
07/29/75	-	20	-	-	50	-	-	-	20	-	-
03118100	E B NIMISHILLEN C NR CANTON OH						LAT 404924 LONG 0811755 (MX)				
09/10/75	-	20	-	-	180	-	-	-	-	-	-
03118300	W B NIMISHILLEN C AT CANTON OH						LAT 404748 LONG 0812326 (MX)				
09/11/75	-	10	-	-	140	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03116000	TUSCARAWAS R AT CLINTON OH						_AT 405540 LONG 0813758 (MX)				
07/29/75	1	-	-	0.5	-	30	-	20	-	-	-
03116950	NEWMAN C NR MASSILLON OH						_AT 404922 LONG 0813306 (MX)				
08/11/76	-	-	-	-	-	-	-	-	-	-	-
03117150	SANDY C AT MINERVA OH						_AT 404353 LONG 0810557 (MX)				
09/10/75	-	-	-	-	-	-	-	-	-	-	-
03117280	HUGLE RN NR MALVERN OH						_AT 404249 LONG 0810903 (MX)				
08/10/76	-	-	-	-	-	-	-	-	-	-	-
03117300	SANDY C AT MALVERN OH						_AT 404127 LONG 0811050 (MX)				
08/10/76	-	-	-	-	-	-	-	-	-	-	-
03117310	PIPE RN AT MALVERN OH						_AT 404116 LONG 0811102 (MX)				
08/10/76	-	-	-	-	-	-	-	-	-	-	-
03117450	L SANDY C NR ROBERTSVILLE OH						_AT 404403 LONG 0811440 (MX)				
08/11/76	-	-	-	-	-	-	-	-	-	-	-
03118000	M B NIMISHILLEN C AT CANTON OH						_AT 405029 LONG 0812114 (MX)				
07/29/75	2	-	-	0.5	-	0	-	20	-	-	-
03118100	E B NIMISHILLEN C NR CANTON OH						_AT 404924 LONG 0811755 (MX)				
09/10/75	-	-	-	-	-	-	-	-	-	-	-
03118300	W B NIMISHILLEN C AT CANTON OH						_AT 404748 LONG 0812326 (MX)				
09/11/75	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03118500	NIMISHILLEN C AT NORTH INDUSTRY OH						LAT 404403 LONG 0812108 (MX)				
09/11/75	112.00	-	7.7	225	-	274	110.0	210.0	-	-	-
03119900	CONOTTON C AT LEESVILLE OH						LAT 402644 LONG 0811149 (MX)				
08/12/75	10.00	-	7.6	120	-	146	85.0	150.0	-	-	-
03120500	MCGUIRE C NR LEESVILLE OH						LAT 402813 LONG 0811148 (MX)				
08/26/75	4.50	-	6.9	57	-	69	4.0	21.0	-	-	-
03122850	SUGAR C NR ORRVILLE OH						LAT 404907 LONG 0814646 (MX)				
07/28/76	4.50	-	7.8	189	-	230	99.0	68.0	-	-	-
03122900	SUGAR C NR WEST LEBANON OH						LAT 404412 LONG 0813912 (MX)				
07/28/76	8.20	-	8.4	166	-	194	62.0	53.0	-	-	-
03123000	SUGAR C AB BEACH CITY DAM AT BEACH CITY OH						LAT 403924 LONG 0813437 (MX)				
09/11/75	39.00	-	7.8	144	-	176	25.0	86.0	-	-	-
03124705	STONE C NR NEW PHILADELPHIA OH						LAT 402842 LONG 0812859 (MX)				
08/21/81	4.50	-	7.5	79	-	96	20.0	190.0	-	-	-
03125000	HOME C NR NEW PHILADELPHIA OH						LAT 402806 LONG 0812410 (MX)				
08/25/75	0.07	-	7.5	66	-	80	-	430.0	-	-	-
03126170	SKULL F AT FREEPORT OH						LAT 401152 LONG 0811613 (MX)				
08/20/81	3.00	-	7.6	53	-	65	11.0	500.0	-	-	-
03127100	CROOKED C NR STILLWATER OH						LAT 401829 LONG 0811926 (MX)				
09/23/75	48.00	-	7.1	56	-	68	11.0	30.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03118500	NIMISHILLEN C AT NORTH INDUSTRY OH						LAT 404403 LONG 0812108 (MX)				
09/11/75	-	20	-	-	660	-	-	-	150	-	-
03119900	COVOTTON C AT LEESVILLE OH						LAT 402644 LONG 0811149 (MX)				
08/12/75	-	10	-	-	500	-	-	-	-	-	-
03120500	MCGUIRE C NR LEESVILLE OH						LAT 402813 LONG 0811148 (MX)				
08/26/75	-	1000	-	-	2800	-	-	-	30	-	-
03122850	SUGAR C NR ORRVILLE OH						LAT 404907 LONG 0814646 (MX)				
07/28/76	-	10	-	-	60	-	-	-	-	-	-
03122900	SUGAR C NR WEST LEBANON OH						LAT 404412 LONG 0813912 (MX)				
07/28/76	-	20	-	-	40	-	-	-	-	-	-
03123000	SUGAR C AB BEACH CITY DAM AT BEACH CITY OH						LAT 403924 LONG 0813437 (MX)				
09/11/75	-	10	-	-	320	-	-	-	40	-	-
03124705	STONE C NR NEW PHILADELPHIA OH						LAT 402842 LONG 0812859 (MX)				
08/21/81	-	40	-	-	1500	-	-	-	-	-	-
03125000	HOME C NR NEW PHILADELPHIA OH						LAT 402806 LONG 0812410 (MX)				
08/25/75	-	80	-	-	1700	-	-	-	-	-	-
03126170	SKJLL F AT FREEPORT OH						LAT 401152 LONG 0811613 (MX)				
08/20/81	-	40	-	-	290	-	-	-	-	-	-
03127100	CROOKED C NR STILLWATER OH						LAT 401829 LONG 0811926 (MX)				
09/23/75	-	90	-	-	350	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03118500											
09/11/75	1	-	-	0.5	-	20	-	20	-	-	-
03119900											
08/12/75	-	-	-	-	-	-	-	-	-	-	-
03120500											
08/26/75	3	-	-	0.5	-	20	-	20	-	-	-
03122850											
07/28/76	-	-	-	-	-	-	-	-	-	-	-
03122900											
07/28/76	-	-	-	-	-	-	-	-	-	-	-
03123000											
09/11/75	3	-	-	0.5	-	20	-	20	-	-	-
03124705											
08/21/81	-	-	-	-	-	-	-	-	-	-	-
03125000											
08/25/75	-	-	-	-	-	-	-	-	-	-	-
03126170											
08/20/81	-	-	-	-	-	-	-	-	-	-	-
03127100											
09/23/75	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLO (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03128600	L STILLWATER C NR DENNISON OH						LAT 402419 LONG 0811718 (MX)				
09/16/75	83.00	-	7.7	94	-	114	11.0	230.0	-	-	-
03129100	WHITE EYES C NR FRESNO OH						LAT 401817 LONG 0814501 (MX)				
09/23/75	75.00	-	7.2	64	-	78	8.7	60.0	-	-	-
03140000	MILL C NR COSHOCTON OH						LAT 402146 LONG 0815145 (MX)				
09/23/75	32.00	-	7.2	64	-	78	9.1	45.0	-	-	-
03140700	BUFFALO F AT PLEASANT CITY OH						LAT 395415 LONG 0813314 (MX)				
08/06/75	20.00	-	7.3	107	-	130	15.0	550.0	-	-	-
03142085	CROOKED C AT CAMBRIDGE OH						LAT 400207 LONG 0813707 (MX)				
08/20/81	1.40	-	7.8	162	-	198	35.0	39.0	-	-	-
03148150	MOXAHALA C NR CROOKSVILLE OH						LAT 394352 LONG 0820604 (MX)				
07/03/80	17.00	-	3.0	0	308	0	-	1300.0	-	-	-
03148300	MOXAHALA C AT ROSEVILLE OH						LAT 394838 LONG 0820413 (MX)				
05/14/75	70.00	-	3.7	1	228	0	20.0	770.0	-	-	-
03148450	JONATHAN C AT EAST FULTONHAM OH						LAT 395120 LONG 0820735 (MX)				
07/22/75	25.00	-	6.8	120	-	146	27.0	100.0	-	-	-
03150200	MEIGS C NR REINERSVILLE OH						LAT 393743 LONG 0814312 (MX)				
08/26/81	2.00	-	7.6	208	-	253	70.0	470.0	-	-	-
03150250	MEIGS C NR BEVERLY OH						LAT 393600 LONG 0814242 (MX)				
06/05/75	200.00	-	7.7	176	-	214	15.0	290.0	-	-	-

APPENDIX I. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03128600	L STILLWATER C NR DENNISON OH						LAT 402419 LONG 0811718 (MX)				
09/16/75	-	20	-	-	1100	-	-	-	-	-	-
03129100	WHITE EYES C NR FRESNO OH						LAT 401817 LONG 0814501 (MX)				
09/23/75	-	60	-	-	100	-	-	-	-	-	-
03140000	MILL C NR COSHOCTON OH						LAT 402146 LONG 0815145 (MX)				
09/23/75	-	80	-	-	180	-	-	-	130	-	-
03140700	BUFFALO F AT PLEASANT CITY OH						LAT 395415 LONG 0813314 (MX)				
08/06/75	1900	-	2800	-	-	1300	-	-	30	-	-
03142085	CROOKED C AT CAMBRIDGE OH						LAT 400207 LONG 0813707 (MX)				
08/20/81	-	60	-	-	50	-	-	-	-	-	-
03148150	MOXAHALA C NR CROOKSVILLE OH						LAT 394352 LONG 0820604 (MX)				
07/03/80	-	18000	28000	-	31000	31000	-	-	-	-	-
03148300	MOXAHALA C AT ROSEVILLE OH						LAT 394838 LONG 0820413 (MX)				
05/14/75	22000	-	36000	-	-	16000	-	-	400	-	-
03148450	JONATHAN C AT EAST FULTONHAM OH						LAT 395120 LONG 0820735 (MX)				
07/22/75	-	20	-	-	190	-	-	-	-	-	-
03150200	MEIGS C NR REINERSVILLE OH						LAT 393743 LONG 0814312 (MX)				
08/26/81	-	20	-	-	10	-	-	-	-	-	-
03150250	MEIGS C NR BEVERLY OH						LAT 393600 LONG 0814242 (MX)				
06/05/75	1300	-	2300	-	-	210	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03128600	L STILLWATER C NR DENNISON OH					LAT 402419 LONG 0811718 (MX)				
09/16/75	-	-	-	-	-	-	-	-	-	-
03129100	WHITE EYES C NR FRESNO OH					LAT 401817 LONG 0814501 (MX)				
09/23/75	-	-	-	-	-	-	-	-	-	-
03140000	MILL C NR COSHOCTON OH					LAT 402146 LONG 0815145 (MX)				
09/23/75	1	-	-	0.5	-	0	-	20	-	-
03140700	BUFFALO F AT PLEASANT CITY OH					LAT 395415 LONG 0813314 (MX)				
08/06/75	2	-	-	0.5	-	20	-	0	-	-
03142085	CROOKED C AT CAMBRIDGE OH					LAT 400207 LONG 0813707 (MX)				
08/20/81	-	-	-	-	-	-	-	-	-	-
03148150	MOXAHALA C NR CROOKSVILLE OH					LAT 394352 LONG 0820604 (MX)				
07/03/80	-	-	-	-	-	-	-	-	-	-
03148300	MOXAHALA C AT ROSEVILLE OH					LAT 394838 LONG 0820413 (MX)				
05/14/75	2	-	-	0.5	-	30	-	80	-	-
03148450	JONATHAN C AT EAST FULTONHAM OH					LAT 395120 LONG 0820735 (MX)				
07/22/75	-	-	-	-	-	-	-	-	-	-
03150200	MEIGS C NR REINERSVILLE OH					LAT 393743 LONG 0814312 (MX)				
08/26/81	-	-	-	-	-	-	-	-	-	-
03150250	MEIGS C NR BEVERLY OH					LAT 393600 LONG 0814242 (MX)				
06/05/75	1	-	-	0.5	-	20	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEDUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLO (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03150365	OLIVE GREEN C NR BEVERLY OH						LAT 393510 LONG 0813907 (MX)				
08/25/81	0.98	-	7.2	218	-	266	240.0	73.0	-	-	-
03150480	W B WOLF C NR WATERFORD OH						LAT 393143 LONG 0813922 (MX)				
08/07/75	168.00	-	7.6	151	-	184	7.7	32.0	-	-	-
03156549	CENTER B RUSH C NR JUNCTION CITY OH						LAT 394324 LONG 0822036 (MX)				
11/07/79	9.30	-	-	-	-	-	-	-	-	-	-
03156550	RUSH C NR JUNCTION CITY OH						LAT 394313 LONG 0822101 (MX)				
11/07/79	34.00	-	-	-	-	-	-	-	-	-	-
03158200	MONDAY C AT DOANVILLE OH						LAT 392607 LONG 0821130 (MX)				
05/21/75	80.00	-	4.1	1	10	0	33.0	340.0	-	-	-
03159000	SUNDAY C AT GLOUSTER OH						LAT 393003 LONG 0820507 (MX)				
07/31/75	7.90	-	2.9	1	407	0	33.0	1300.0	-	-	-
03159540	SHADE R NR CHESTER OH						LAT 390349 LONG 0815255 (MX)				
09/11/75	2.20	-	7.6	98	-	119	9.2	68.0	-	-	-
03160050	LEADING C NR MIDDLEPORT OH						LAT 390031 LONG 0820507 (MX)				
07/02/75	3.00	-	7.0	116	-	142	62.0	110.0	-	-	-
03160105	CAMPAIGN C NR GALLIPOLIS OH						LAT 385351 LONG 0821131 (MX)				
08/10/76	5.70	-	7.3	74	-	90	4.5	200.0	-	-	-
03201600	SANDY RN AB BIG FOUR HOLLOW C NR LAKE HOPE OH						LAT 392145 LONG 0821847 (MX)				
07/23/75	0.05	-	5.3	2	-	3	22.0	200.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03150365	OLIVE GREEN C NR BEVERLY OH						LAT 393510 LONG 0813907 (MX)				
08/25/81	-	50	-	-	20	-	-	-	-	-	-
03150480	W B WOLF C NR WATERFORD OH						LAT 393143 LONG 0813922 (MX)				
08/07/75	-	30	-	-	10	-	-	-	-	-	-
03156549	CENTER B RUSH C NR JUNCTION CITY OH						LAT 394324 LONG 0822036 (MX)				
11/07/79	-	-	-	-	-	-	-	-	-	-	-
03156550	RUSH C NR JUNCTION CITY OH						LAT 394313 LONG 0822101 (MX)				
11/07/79	-	-	-	-	-	-	-	-	-	-	-
03158200	MONDAY C AT DOANVILLE OH						LAT 392607 LONG 0821130 (MX)				
05/21/75	10000	-	6700	-	-	4000	-	-	1100	-	-
03159000	SUNDAY C AT GLOUSTER OH						LAT 393003 LONG 0820507 (MX)				
07/31/75	-	240000	-	-	8700	-	-	-	470	-	-
03159540	SHADE R NR CHESTER OH						LAT 390349 LONG 0815255 (MX)				
09/11/75	-	200	-	-	130	-	-	-	40	-	-
03160050	LEADING C NR MIDDLEPORT OH						LAT 390031 LONG 0820507 (MX)				
07/02/75	300	-	610	-	-	550	-	-	20	-	-
03160105	CAMPAIGN C NR GALLIPOLIS OH						LAT 385351 LONG 0821131 (MX)				
08/10/76	-	40	-	-	5600	-	-	-	-	-	-
03201600	SANDY RV AB BIG FOUR HOLLOW C NR LAKE HOPE OH						LAT 392145 LONG 0821847 (MX)				
07/23/75	3000	-	32000	-	-	2600	-	-	130	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03150365	OLIVE GREEN C NR BEVERLY OH					LAT 393510 LONG 0813907 (MX)					
08/25/81	-	-	-	-	-	-	-	-	-	-	-
03150480	W B WOLF C NR WATERFORD OH					LAT 393143 LONG 0813922 (MX)					
08/07/75	-	-	-	-	-	-	-	-	-	-	-
03156549	CENTER B RUSH C NR JUNCTION CITY OH					LAT 394324 LONG 0822036 (MX)					
11/07/79	-	-	-	-	-	-	-	-	-	-	-
03156550	RUSH C NR JUNCTION CITY OH					LAT 394313 LONG 0822101 (MX)					
11/07/79	-	-	-	-	-	-	-	-	-	-	-
03158200	MONDAY C AT DOANVILLE OH					LAT 392607 LONG 0821130 (MX)					
05/21/75	8	-	-	0.5	-	1000	-	20	-	-	-
03159000	SUNDAY C AT GLOSTER OH					LAT 393003 LONG 0820507 (MX)					
07/31/75	0	-	-	0.5	-	20	-	20	-	-	-
03159540	SHADE R NR CHESTER OH					LAT 390349 LONG 0815255 (MX)					
09/11/75	1	-	-	0.5	-	20	-	20	-	-	-
03160050	LEADING C NR MIDDLEPORT OH					LAT 390031 LONG 0820507 (MX)					
07/02/75	1	-	-	0.5	-	0	-	20	-	-	-
03160105	CAMPAIGN C NR GALLIPOLIS OH					LAT 385351 LONG 0821131 (MX)					
08/10/76	-	-	-	-	-	-	-	-	-	-	-
03201600	SANDY RN AB BIG FOUR HOLLOW C NR LAKE HOPE OH					LAT 392145 LONG 0821847 (MX)					
07/23/75	1	-	-	0.5	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03201630	F F BIG FOUR HOLLOW C NR LAKE HOPE OH						LAT 392218 LONG 0821909 (MX)				
10/13/78	1.49	-	6.5	27	-	33	2.7	62.0	-	-	-
03201660	BIG FOUR HOLLOW C BL E F NR LAKE HOPE OH						LAT 392212 LONG 0821906 (MX)				
11/06/78	0.96	-	-	-	-	-	-	-	-	-	-
03201700	BIG FOUR HOLLOW C NR LAKE HOPE OH						LAT 392148 LONG 0821851 (MX)				
10/15/75	0.11	-	3.4	1	124	0	4.6	390.0	-	-	-
03201720	HULL HOLLOW C NR LAKE HOPE OH						LAT 392132 LONG 0821905 (MX)				
11/06/78	0.15	-	5.9	15	-	18	1.6	57.0	-	-	-
03201722	SANDY RN BL HULL HOLLOW C NR LAKE HOPE OH						LAT 392130 LONG 0821904 (MX)				
10/13/78	-	-	4.6	1	20	0	9.0	160.0	-	-	-
03201800	SANDY RN NR LAKE HOPE OH						LAT 392001 LONG 0821956 (MX)				
07/24/75	0.07	-	4.1	1	25	0	10.0	210.0	-	-	-
03205210	INDIAN GUYAN C NR BRADRICK OH						LAT 382841 LONG 0822354 (MX)				
07/30/75	1.80	-	6.8	80	-	98	7.0	59.0	-	-	-
03216050	ICE C AT IRONTON OH						LAT 383101 LONG 0823829 (MX)				
08/10/76	3.80	-	7.5	85	-	104	11.0	99.0	-	-	-
03216640	PINE C NR WHEELERSBURG OH						LAT 383912 LONG 0824809 (MX)				
06/17/75	23.00	-	3.8	-	55	-	10.0	288.0	-	-	-
03108985	CHERRY VALLEY RN AT LEETOVIA OH						LAT 405233 LONG 0804524 (MX)				
09/11/79	1.70	-	8.2	170	-	208	-	120.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03201630	E F BIG FOUR HOLLOW C NR LAKE HOPE OH							LAT 392218 LONG 0821909 (MX)			
10/13/78	100	300	1300	-	120	130	-	20	20	-	-
03201660	BIG FOUR HOLLOW C BL E F NR LAKE HOPE OH							LAT 392212 LONG 0821906 (MX)			
11/06/78	-	-	-	-	-	-	-	-	-	-	-
03201700	BIG FOUR HOLLOW C NR LAKE HOPE OH							LAT 392148 LONG 0821851 (MX)			
10/15/75	-	15000	-	-	5700	-	-	-	260	-	-
03201720	HULL HOLLOW C NR LAKE HOPE OH							LAT 392132 LONG 0821905 (MX)			
11/06/78	90	130	130	-	110	130	-	30	30	-	-
03201722	SANDY RN BL HULL HOLLOW C NR LAKE HOPE OH							LAT 392130 LONG 0821904 (MX)			
10/13/78	2900	500	2200	-	1600	1600	-	80	90	-	-
03201800	SANDY RN NR LAKE HOPE OH							LAT 392001 LONG 0821956 (MX)			
07/24/75	-	450	-	-	2800	-	-	-	230	-	-
03205210	INDIAN GUYAN C NR BRADRICK OH							LAT 382841 LONG 0822354 (MX)			
07/30/75	-	30	-	-	700	-	-	-	-	-	-
03216050	ICE C AT IRONTON OH							LAT 383101 LONG 0823829 (MX)			
08/10/76	-	60	-	-	310	-	-	-	-	-	-
03216640	PINE C NR WHEELERSBURG OH							LAT 383912 LONG 0824809 (MX)			
06/17/75	6600	-	3300	-	-	3700	-	-	230	-	-
03108985	CHERRY VALLEY RN AT LEETONIA OH							LAT 405233 LONG 0804524 (MX)			
09/11/79	-	20	300	18000	80	100	1200	-	-	40	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/G)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03201630	E F BIG FOUR HOLLOW C NR LAKE HOPE OH					LAT 392218 LONG 0821909 (MX)				
10/13/78	1	-	-	0.5	-	4	-	0	-	-
03201660	BIG FOUR HOLLOW C BL E F NR LAKE HOPE OH					LAT 392212 LONG 0821906 (MX)				
11/06/78	-	-	-	-	-	-	-	-	-	-
03201700	BIG FOUR HOLLOW C NR LAKE HOPE OH					LAT 392148 LONG 0821851 (MX)				
10/15/75	38	-	-	0.5	-	20	-	20	-	-
03201720	HULL HOLLOW C NR LAKE HOPE OH					LAT 392132 LONG 0821905 (MX)				
11/06/78	1	-	-	0.5	-	2	-	0	-	-
03201722	SANDY RN BL HULL HOLLOW C NR LAKE HOPE OH					LAT 392130 LONG 0821904 (MX)				
10/13/78	1	-	-	0.5	-	5	-	0	-	-
03201900	SANDY RN NR LAKE HOPE OH					LAT 392001 LONG 0821956 (MX)				
07/24/75	1	-	-	0.5	-	40	-	0	-	-
03205210	INDIAN GUYAN C NR BRADRICK OH					LAT 382841 LONG 0822354 (MX)				
07/30/75	-	-	-	-	-	-	-	-	-	-
03216050	ICE C AT IRONTON OH					LAT 383101 LONG 0823829 (MX)				
08/10/76	-	-	-	-	-	-	-	-	-	-
03216640	PIVE C NR WHEELERSBURG OH					LAT 383912 LONG 0824809 (MX)				
06/17/75	1	-	-	0.5	-	20	-	20	-	-
03108985	CHERRY VALLEY RN AT LEETONIA OH					LAT 405233 LONG 0804524 (MX)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	HICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03115700	W F DUCK C AT DEXTER CITY OH					LAT 393946 LONG 0812823 (MX)					
08/27/80	52.00	635	7.3	131	-	160	-	-	-	-	-
08/12/81	-	790	8.0	162	-	198	5.5	255.0	20	580	299
07/21/82	7.90	-	8.8	177	-	200	37.0	110.0	-	448	-
03116950	NEWMAN C NR MASSILLON OH					LAT 404922 LONG 0813306 (MX)					
09/24/79	1.70	-	7.6	180	-	224	-	100.0	-	-	-
03127100	CROOKED C NR TIPPECANOE OH					LAT 401829 LONG 0811926 (MX)					
09/24/79	25.00	-	7.3	72	-	88	-	29.0	-	-	-
03138910	SALT C AT HOLMESVILLE OH					LAT 403807 LONG 0815527 (MX)					
09/12/79	8.30	-	7.0	180	-	220	-	44.0	-	-	-
03148450	JONATHAN C AT FULTONHAM OH					LAT 395120 LONG 0820734 (MX)					
09/09/80	-	490	7.8	154	-	188	-	-	-	-	-
08/05/81	47.00	443	8.1	167	-	204	9.5	50.0	20	320	154
07/29/82	8.80	-	7.8	157	-	192	45.0	150.0	-	477	-
03159000	SUNDAY C AT GLOUJSTER OH					LAT 393004 LONG 0820509 (MX)					
08/28/80	58.00	670	6.5	39	65	47	-	-	-	-	-
03160105	CAMPAIGN C NR ADDISON OH					LAT 395349 LONG 0821131 (MX)					
09/19/80	1.10	680	7.0	75	-	92	24.0	260.0	100	432	200
07/28/81	0.90	445	7.2	105	-	128	9.0	115.0	92	307	103
07/26/82	1.00	-	7.8	107	-	130	5.5	100.0	-	256	-
03201800	SANDY RV NR ZALESKI OH					LAT 392001 LONG 0821956 (MX)					
09/13/79	0.50	-	3.7	1	184	0	-	250.0	-	-	-
08/06/80	1.20	-	5.1	3	15	4	-	120.0	-	-	-
07/30/81	0.20	-	5.1	7	30	8	-	230.0	-	-	-
03205210	INDIAN GUYAN C NR PROCTORVILLE OH					LAT 382842 LONG 0822353 (MX)					
09/13/79	8.80	-	7.1	83	-	101	-	79.0	-	-	-

APPENDIX I. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03115700	W F DUCK C AT DEXTER CITY OH							LAT 393946 LONG 0812823 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	509	23	487	-	416	230	-	72	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-
03116950	NEWMAN C NR MASSILLON OH							LAT 404922 LONG 0813306 (MX)			
09/24/79	-	70	1200	20000	190	260	560	-	-	50	-
03127100	CROOKED C NR TIPPECANOE OH							LAT 401829 LONG 0811926 (MX)			
09/24/79	-	190	1000	11000	110	160	360	-	-	34	-
03138910	SALT C AT HOLMESVILLE OH							LAT 403807 LONG 0815527 (MX)			
09/12/79	-	50	70	47000	10	10	660	-	-	70	-
03148450	JONATHAN C AT FULTONHAM OH							LAT 395120 LONG 0820734 (MX)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	398	298	588	-	147	172	-	13	-	-	10
07/29/82	-	-	-	-	-	-	-	-	-	-	-
03159000	SUNDAY C AT GLOUSTER OH							LAT 393004 LONG 0820509 (MX)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
03160105	CAMPAIGN C NR ADDISON OH							LAT 385349 LONG 0821131 (MX)			
09/19/80	200	110	620	-	1260	1180	-	30	-	-	10
07/28/81	23	284	293	-	-	1012	-	57	-	-	10
07/26/82	-	-	-	-	-	-	-	-	-	-	-
03201800	SANDY RN NR ZALESKI OH							LAT 392001 LONG 0821956 (MX)			
09/13/79	-	430	1000	15000	3800	3800	120	-	-	20	-
08/06/80	-	300	640	14000	1600	1600	93	-	-	18	-
07/30/81	-	430	1800	7300	5700	5700	240	-	-	20	-
03205210	INDIAN GUYAN C NR PROCTORVILLE OH							LAT 382842 LONG 0822353 (MX)			
09/13/79	-	100	860	7900	460	500	710	-	-	20	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03115700	W F DUCK C AT DEXTER CITY OH					LAT 393945 LONG 0812823 (MX)					
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
03116950	NEWMAN C NR MASSILLON OH					LAT 404922 LONG 0813306 (MX)					
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
03127100	CROOKED C NR TIPPECANOE OH					LAT 401829 LONG 0811926 (MX)					
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
03138910	SALT C AT HOLMESVILLE OH					LAT 403807 LONG 0815527 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
03148450	JONATHAN C AT FULTONHAM OH					LAT 395120 LONG 0820734 (MX)					
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-
03159000	SUNDAY C AT GLOUSTER OH					LAT 393004 LONG 0820509 (MX)					
08/28/80	-	-	-	-	-	-	-	-	-	-	-
03160105	CAMPAIGN C NR ADDISON OH					LAT 385349 LONG 0821131 (MX)					
09/19/80	-	-	0.5	-	-	-	-	-	-	-	-
07/28/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
03201800	SANDY RN NR ZALESKI OH					LAT 392001 LONG 0821956 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
08/06/80	-	0	-	-	0.00	-	10	-	10	10	20
07/30/81	-	10	-	-	0.01	-	4	-	10	2	20
03205210	INDIAN GUYAN C NR PROCTORVILLE OH					LAT 382842 LONG 0822353 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS VI)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
382914082370900 L ICE C NR COAL GROVE OH LAT 382914 LONG 0823709 (MX)											
06/19/75	0.80	-	7.2	97	-	118	15.0	66.0	-	-	-
10/21/75	4.40	-	7.2	94	-	114	12.0	83.0	-	-	-
382958082372400 L ICE C NR COAL GROVE OH LAT 382958 LONG 0823724 (MX)											
10/30/79	3.50	-	7.7	98	-	120	-	110.0	-	-	-
08/27/80	1.90	-	7.7	112	-	136	-	89.0	-	-	-
07/14/81	2.10	-	7.7	113	-	138	-	93.0	-	-	-
383154082231800 INDIAN GUYAN C NR SCOTTOWN OH LAT 383154 LONG 0822318 (MX)											
06/19/75	5.00	-	7.3	62	-	76	10.0	100.0	-	-	-
10/21/75	17.00	-	7.1	54	-	66	9.0	120.0	-	-	-
383317082405100 L STORMS C NR TRENTON OH LAT 383317 LONG 0824051 (MX)											
09/16/80	0.40	610	4.5	-	70	-	9.0	410.0	170	666	5960
07/15/81	0.86	610	5.3	20	35	24	5.5	375.0	132	447	5249
08/23/82	0.15	-	4.8	-	40	-	11.0	360.0	100	617	1100
383337082430500 OSBORNE RN NR IRONTON OH LAT 383337 LONG 0824305 (MX)											
09/16/80	0.30	1000	5.0	10	70	12	11.0	690.0	350	1015	6400
07/15/81	0.70	1025	4.3	-	72	-	10.0	550.0	251	812	9803
08/23/82	0.10	-	6.6	15	-	18	3.8	570.0	-	940	-
383555082232900 L INDIAN GUYAN C NR RAPPSBURG OH LAT 383555 LONG 0822329 (MX)											
06/19/75	0.10	-	3.8	-	84	-	9.0	350.0	-	-	-
10/21/75	1.40	-	4.0	1	79	0	5.0	350.0	-	-	-
383638082440900 UNION B SPERRY C NR IRONTON OH LAT 383638 LONG 0824409 (MX)											
06/18/75	1.00	-	7.1	52	-	64	3.0	390.0	-	-	-
10/22/75	1.90	-	6.7	39	-	47	10.0	340.0	-	-	-
383657082124900 SWAN C NR CROWN CITY OH LAT 383657 LONG 0821249 (MX)											
09/13/79	1.10	-	7.2	90	-	110	-	68.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
382914082370900	L ICE C NR COAL GROVE OH						LAT 382914 LONG 0823709 (MX)				
06/19/75	130	-	370	-	-	210	-	-	20	-	-
10/21/75	70	-	240	-	-	130	-	-	0	-	-
382958082372400	L ICE C NR COAL GROVE OH						LAT 382958 LONG 0823724 (MX)				
10/30/79	-	60	580	11000	70	110	330	-	-	70	-
08/27/80	-	240	480	6400	190	190	330	-	-	27	-
07/14/81	-	40	740	5400	140	170	940	-	-	59	-
383154082231800	INDIAN GUYAN C NR SCOTTOWN OH						LAT 383154 LONG 0822318 (MX)				
06/19/75	170	-	400	-	-	360	-	-	20	-	-
10/21/75	350	-	480	-	-	580	-	-	20	-	-
383317082405100	L STORMS C NR TRENTON OH						LAT 383317 LONG 0824051 (MX)				
09/16/80	6260	1870	1860	-	8300	8300	-	280	-	-	10
07/15/81	6160	1240	2102	-	5275	5831	-	295	-	-	10
08/23/82	4300	1900	4600	-	5600	6200	-	760	-	-	-
383337082430500	OSBORNE HN NR IRONTON OH						LAT 383337 LONG 0824305 (MX)				
09/16/80	7000	3870	4230	-	11400	11800	-	420	-	-	10
07/15/81	11360	1867	3646	-	6726	7539	-	409	-	-	10
08/23/82	-	-	-	-	-	-	-	-	-	-	-
383555082232900	L INDIAN GUYAN C NR RAPPSBURG OH						LAT 383555 LONG 0822329 (MX)				
06/19/75	11000	-	320	-	-	7700	-	-	290	-	-
10/21/75	1200	-	550	-	-	5900	-	-	220	-	-
383638082440900	UNION B SPERRY C NR IRONTON OH						LAT 383638 LONG 0824409 (MX)				
06/18/75	170	-	700	-	-	1100	-	-	20	-	-
10/22/75	30	-	550	-	-	710	-	-	20	-	-
383657082124900	SWAN C NR CROWN CITY OH						LAT 383657 LONG 0821249 (MX)				
09/13/79	-	40	400	110000	190	190	650	-	-	40	-

APPENDIX I. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
382914082370900	L ICE C NR COAL GROVE OH					LAT 382914 LONG 0823709 (MX)					
06/19/75	1	-	-	0.5	-	0	-	20	-	-	-
10/21/75	1	-	-	0.5	-	0	-	0	-	-	-
382958082372400	L ICE C NR COAL GROVE OH					LAT 382958 LONG 0823724 (MX)					
10/30/79	-	0	-	-	0.00	-	10	-	10	10	10
08/27/80	-	0	-	-	0.00	-	10	-	10	10	40
07/14/81	-	4	-	-	0.00	-	7	-	10	2	30
383154082231800	INDIAN GUYAN C NR SCOTTOWN OH					LAT 383154 LONG 0822318 (MX)					
06/19/75	1	-	-	0.5	-	0	-	20	-	-	-
10/21/75	1	-	-	0.5	-	0	-	0	-	-	-
383317082405100	L STORMS C NR TRENTON OH					LAT 383317 LONG 0824051 (MX)					
09/16/80	-	-	0.5	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
383337082430500	OSBORNE RV NR IRONTON OH					LAT 383337 LONG 0824305 (MX)					
09/16/80	-	-	0.5	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
383555082232900	L INDIAN GUYAN C NR MAPPSBURG OH					LAT 383555 LONG 0822329 (MX)					
06/19/75	1	-	-	0.5	-	20	-	20	-	-	-
10/21/75	1	-	-	0.5	-	0	-	0	-	-	-
383638082440900	UNION B SPERRY C NR IRONTON OH					LAT 383638 LONG 0824409 (MX)					
06/18/75	1	-	-	0.5	-	0	-	20	-	-	-
10/22/75	1	-	-	0.5	-	0	-	0	-	-	-
383657082124900	SWAN C NR CROWN CITY OH					LAT 383657 LONG 0821249 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	20	10	20

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLDW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLJ- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

383711082443900 SPERRY F NR PINE GROVE OH LAT 383711 LONG 0824439 (MX)											

09/17/80	0.52	900	4.3	-	55	-	11.0	520.0	150	766	9370
07/14/81	2.70	950	3.8	-	60	-	7.5	510.0	135	701	7116
08/23/82	0.10	-	4.0	0	24	0	15.0	490.0	200	795	1100

383726082500200 GINAT C NR FRANKLIN FURNACE OH LAT 383726 LONG 0825002 (MX)											

10/30/79	2.80	-	7.0	34	-	42	-	48.0	-	-	-
08/27/80	0.46	-	7.4	60	-	73	-	42.0	-	-	-

383729082391400 ELLISONVILLE C NR ETNA OH LAT 383729 LONG 0823914 (MX)											

06/18/75	1.00	-	3.4	-	89	-	14.0	340.0	-	-	-
10/22/75	2.40	-	3.7	1	79	0	15.0	340.0	-	-	-

383735082445700 SPERRY F NR PINE GROVE OH LAT 383735 LONG 0824457 (MX)											

09/17/80	1.20	710	7.0	11	-	14	15.0	400.0	110	645	440
07/15/81	2.10	740	4.9	3	12	4	5.0	385.0	99	514	856
08/23/82	0.08	-	6.7	7	-	8	13.0	320.0	-	560	-

383750082435400 L PINE C NR PEDRO OH LAT 383750 LONG 0824354 (MX)											

08/27/80	2.00	-	7.3	36	-	44	-	380.0	-	-	-
09/17/80	2.10	-	6.7	49	-	60	-	420.0	-	-	-
07/21/81	4.30	-	7.4	36	-	44	-	315.0	-	-	-
08/23/82	3.30	-	7.2	68	-	83	-	270.0	-	-	-

383753082265500 BUCKEYE F AT WILGUS OH LAT 383753 LONG 0822655 (MX)											

09/16/80	0.11	290	7.8	87	-	106	9.0	75.0	100	188	220
07/22/81	0.14	320	7.7	69	-	84	5.0	73.0	20	212	75

383805082405400 ELLISONVILLE C AT PEDRO OH LAT 383805 LONG 0824054 (MX)											

09/17/80	0.95	830	4.4	-	89	-	7.0	540.0	200	810	11140
07/14/81	4.50	680	4.4	-	50	-	3.0	405.0	236	578	5296
08/24/82	1.20	-	5.8	13	10	16	5.5	360.0	-	663	-

383806082464100 PINE C NR POWELLSVILLE OH LAT 383806 LONG 0824641 (MX)											

09/18/80	14.00	560	6.8	71	-	86	7.0	174.0	100	329	200

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
383711082443900	SPERRY F NR PINE GROVE OH							LAT 383711 LONG 0824439 (MX)			
09/17/80	4420	460	930	-	11140	12150	-	170	-	-	10
07/14/81	8377	560	760	-	4573	5347	-	210	-	-	10
08/23/82	7000	920	1300	-	5800	5800	-	240	-	-	-
383726082500200	GINAT C NR FRANKLIN FURNACE OH							LAT 383726 LONG 0825002 (MX)			
10/30/79	-	60	550	25000	140	150	380	-	-	90	-
08/27/80	-	200	1300	7600	290	320	360	-	-	26	-
383729082391400	ELLISONVILLE C NR ETNA OH							LAT 383729 LONG 0823914 (MX)			
06/18/75	9100	-	2000	-	-	5000	-	-	300	-	-
10/22/75	950	-	3100	-	-	4800	-	-	260	-	-
383735082445700	SPERRY F NR PINE GROVE OH							LAT 383735 LONG 0824457 (MX)			
09/17/80	2250	260	1030	-	3160	2940	-	100	-	-	10
07/15/81	3346	228	834	-	2676	3134	-	132	-	-	10
08/23/82	-	-	-	-	-	-	-	-	-	-	-
383750082435400	L PINE C NR PEDRO OH							LAT 383750 LONG 0824354 (MX)			
08/27/80	-	250	570	5900	3000	3000	360	-	-	42	-
09/17/80	-	40	700	-	2900	2900	-	-	-	-	-
07/21/81	-	41	149	-	2723	2609	-	-	-	-	-
08/23/82	-	-	-	4200	-	-	820	-	-	80	-
383753082265500	BUCKEYE F AT WILGUS OH							LAT 383753 LONG 0822655 (MX)			
09/16/80	290	50	260	-	140	150	-	30	-	-	10
07/22/81	75	10	10	-	74	123	-	20	-	-	10
383805082405400	ELLISONVILLE C AT PEDRO OH							LAT 383805 LONG 0824054 (MX)			
09/17/80	12150	1150	1490	-	5000	4600	-	270	-	-	10
07/14/81	6718	1261	2325	-	4755	5732	-	353	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-
383806082464100	PINE C NR POWELLSVILLE OH							LAT 383806 LONG 0824641 (MX)			
09/18/80	270	50	1040	-	820	860	-	30	-	-	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
383711082443900	SPERRY F NR PINE GROVE OH					LAT 383711 LONG 0824439 (MX)					
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
07/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
383726082500200	GINAT C NR FRANKLIN FURNACE OH					LAT 383726 LONG 0825002 (MX)					
10/30/79	-	0	-	-	0.00	-	10	-	20	10	10
08/27/80	-	0	-	-	0.00	-	10	-	10	10	10
383729082391400	ELLISONVILLE C NR ETNA OH					LAT 383729 LONG 0823914 (MX)					
06/18/75	1	-	-	0.5	-	20	-	20	-	-	-
10/22/75	1	-	-	0.5	-	0	-	0	-	-	-
383735082445700	SPERRY F NR PINE GROVE OH					LAT 383735 LONG 0824457 (MX)					
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
383750082435400	L PINE C NR PEURO OH					LAT 383750 LONG 0824354 (MX)					
08/27/80	-	1	-	-	0.00	-	10	-	10	10	10
09/17/80	-	-	-	-	-	-	-	-	-	-	-
07/21/81	-	-	-	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
383753082265500	BUCKEYE F AT WILGUS OH					LAT 383753 LONG 0822655 (MX)					
09/16/80	-	-	0.5	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
383805082405400	ELLISONVILLE C AT PEURO OH					LAT 383805 LONG 0824054 (MX)					
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
07/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
383806082464100	PINE C NR POWELLSVILLE OH					LAT 383806 LONG 0824641 (MX)					
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS VI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

383833082402800 L PINE C AT PEDRO OH LAT 383833 LONG 0824028 (MX)											

09/17/80	0.63	30	7.8	151	-	184	9.0	350.0	100	670	340
07/15/81	1.60	735	7.8	120	-	146	5.0	245.0	53	525	285
08/24/82	2.20	-	7.8	139	-	170	2.4	190.0	-	572	-

383842082272700 LONG C NR WATERLOO OH LAT 383842 LONG 0822727 (MX)											

09/12/79	0.52	-	7.2	100	-	127	-	62.0	-	-	-

383918082224600 SAND F NR WILGUS OH LAT 383918 LONG 0822246 (MX)											

09/16/80	0.25	555	6.3	18	17	22	9.0	60.0	100	462	260
07/22/81	0.67	760	7.1	16	-	20	1.5	355.0	172	652	7

383944082292600 AARON C NR WATERLOO OH LAT 383944 LONG 0822926 (MX)											

09/12/79	0.45	-	7.4	110	-	131	-	130.0	-	-	-

384028082404400 HEAR RN AT SUPERIOR OH LAT 384028 LONG 0824044 (MX)											

06/18/75	2.00	-	7.9	158	-	193	9.0	366.0	-	-	-
10/22/75	3.50	-	7.6	164	-	200	10.0	610.0	-	-	-

384034082422100 PINE C NR PEDRO OH LAT 384034 LONG 0824221 (MX)											

09/18/80	7.30	315	7.1	82	-	100	7.0	106.0	100	248	200
07/21/81	6.40	508	7.6	79	-	96	9.5	135.0	173	357	20
08/24/82	2.20	-	8.0	107	-	130	9.0	170.0	-	479	-

384146082424600 PINE C NR BARTLES OH LAT 384146 LONG 0824246 (MX)											

09/18/80	5.90	225	7.2	69	-	84	7.0	61.0	100	172	450
07/21/81	4.50	345	7.5	65	-	79	9.5	85.0	92	240	20
08/24/82	0.83	-	7.5	54	-	66	7.0	77.0	-	222	-

384206082161600 BULLSKIN C NR MERCERVILLE OH LAT 384206 LONG 0821616 (MX)											

09/17/80	0.41	970	6.8	105	10	128	5.0	430.0	100	709	270
07/22/81	0.38	970	7.7	102	-	124	4.0	385.0	341	817	11220
08/23/82	0.16	-	7.2	98	-	120	17.0	420.0	-	793	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSEVIC, DIS- SOLVED (UG/L AS AS)

383833082402800 L PINE C AT PEDRO OH LAT 383833 LONG 0824028 (MX)											

09/17/80	200	50	600	-	38	40	-	30	-	-	10
07/15/81	314	55	2940	-	320	1324	-	10	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-

383842082272700 LONG C NR WATERLOO OH LAT 383842 LONG 0822727 (MX)											

09/12/79	-	70	350	11000	340	340	670	-	-	80	-

383918082224600 SAND F NR WILGUS OH LAT 383918 LONG 0822246 (MX)											

09/16/80	290	270	760	-	4600	4700	-	60	-	-	10
07/22/81	1021	589	421	-	6935	7006	-	136	-	-	10

383944082292600 AARON C NR WATERLOO OH LAT 383944 LONG 0822926 (MX)											

09/12/79	-	70	550	15000	250	250	1200	-	-	10	-

384028082404400 BEAR RN AT SUPERIOR OH LAT 384028 LONG 0824044 (MX)											

06/18/75	80	-	8700	-	-	3400	-	-	30	-	-
10/22/75	250	-	870	-	-	510	-	-	20	-	-

384034082422100 PINE C NR PEDRO OH LAT 384034 LONG 0824221 (MX)											

09/18/80	220	190	1440	-	520	540	-	30	-	-	10
07/21/81	81	151	180	-	644	927	-	13	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-

384146082424600 PINE C NR BARTLES OH LAT 384146 LONG 0824246 (MX)											

09/18/80	300	60	1550	-	760	810	-	30	-	-	10
07/21/81	82	117	214	-	640	952	-	1041	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-

384206082161600 BULLSKIN C NR MERCERVILLE OH LAT 384206 LONG 0821616 (MX)											

09/17/80	550	80	260	-	390	420	-	30	-	-	10
07/22/81	12880	584	595	-	21250	23740	-	429	-	-	10
08/23/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TERIAL (UG/G)	LEAD RECOV. FM BOT- TERIAL (UG/G)
383833082402800	L PINE C AT PEDRO OH					LAT 383833 LONG 0824028 (MX)					
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
383842082272700	LONG C NR WATERLOO OH					LAT 383842 LONG 0822727 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
383918082224600	SAND F NR WILGUS OH					LAT 383918 LONG 0822246 (MX)					
09/16/80	-	-	0.5	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
383944082292600	AARON C NR WATERLOO OH					LAT 383944 LONG 0822926 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	20
384028082404400	BEAR RN AT SUPERIOR OH					LAT 384028 LONG 0824044 (MX)					
06/18/75	2	-	-	0.5	-	0	-	30	-	-	-
10/22/75	1	-	-	0.5	-	20	-	0	-	-	-
384034082422100	PINE C NR PEDRO OH					LAT 384034 LONG 0824221 (MX)					
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
07/21/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
384146082424600	PINE C NR BARTLES OH					LAT 384146 LONG 0824246 (MX)					
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
07/21/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
384206082161600	HULLSKIN C NR MERCERVILLE OH					LAT 384206 LONG 0821616 (MX)					
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

384312082481700 LICK RN NR WHEELERSBURG OH LAT 384312 LONG 0824817 (MX)											

09/12/79	0.38	-	7.4	90	-	110	-	49.0	-	-	-
384333082150500 BULLSKIN C NR MERCERVILLE OH LAT 384333 LONG 0821505 (MX)											

09/17/80	0.94	880	7.0	94	-	115	5.0	400.0	100	644	200
07/22/81	0.71	870	-	54	-	78	7.0	340.0	108	690	203
08/23/82	0.15	-	7.6	75	-	92	12.0	350.0	-	614	-
384347082164400 L BULLSKIN C NR MERCERVILLE OH LAT 384347 LONG 0821644 (MX)											

09/17/80	0.11	650	7.1	84	-	102	5.0	245.0	100	460	200
09/17/80	-	-	-	-	-	-	5.0	255.0	100	442	200
07/22/81	0.06	615	7.9	97	-	118	7.0	210.0	20	642	75
08/23/82	-	-	7.5	139	-	170	9.9	200.0	-	466	-
384401082145000 BULLSKIN C NR GALLIPOLIS OH LAT 384401 LONG 0821450 (MX)											

09/12/79	3.30	-	7.2	63	-	77	-	390.0	-	-	-
08/26/80	2.70	-	7.3	77	-	94	-	360.0	-	-	-
384452082181400 CLAYLICK RN NR NORTHPUR OH LAT 384452 LONG 0821814 (MX)											

09/12/79	0.31	-	7.4	110	-	136	-	190.0	-	-	-
08/27/80	0.43	-	7.6	105	-	128	-	220.0	-	-	-
07/15/81	0.79	-	7.9	230	-	280	-	190.0	-	-	-
384452082381000 PINE C NR BUCKHORN OH LAT 384452 LONG 0823810 (MX)											

06/18/75	2.00	-	6.5	30	-	36	13.0	130.0	-	-	-
10/22/75	4.90	-	6.7	57	-	70	12.0	110.0	-	-	-
384454082223500 SAND F SYMMES C NR WATERLOO OH LAT 384454 LONG 0822235 (MX)											

09/11/79	4.60	-	7.3	56	-	68	-	80.0	-	-	-
384603082503400 WARDS RN NR MINFORD OH LAT 384603 LONG 0825034 (MX)											

09/12/79	1.40	-	7.3	63	-	77	-	54.0	-	-	-
384657082421300 HALES C NR S WEBSTER OH LAT 384657 LONG 0824213 (MX)											

09/18/80	2.20	175	7.0	69	-	84	9.0	59.0	100	177	330
08/20/81	0.11	315	6.5	75	-	92	5.0	70.0	10	220	75
08/24/82	0.10	-	7.9	76	-	93	11.0	56.0	-	220	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
384312082481700	LICK RN NR WHEELERSBURG OH						LAT 384312 LONG 0824817 (MX)				
09/12/79	-	120	370	18000	240	240	570	-	-	60	-
384333082150500	BULLSKIN C NR MERCERVILLE OH						LAT 384333 LONG 0821505 (MX)				
09/17/80	310	70	310	-	560	560	-	30	-	-	10
07/22/81	249	60	73	-	624	893	-	151	-	-	10
08/23/82	-	-	-	-	-	-	-	-	-	-	-
384347082164400	L BULLSKIN C NR MERCERVILLE OH						LAT 384347 LONG 0821644 (MX)				
09/17/80	200	70	190	-	100	120	-	30	-	-	10
09/17/80	200	50	270	-	70	70	-	30	-	-	10
07/22/81	75	10	10	-	5	5	-	10	-	-	10
08/23/82	-	-	-	-	-	-	-	-	-	-	-
384401082145000	BULLSKIN C NR GALLIPOLIS OH						LAT 384401 LONG 0821450 (MX)				
09/12/79	-	40	140	21000	570	590	680	-	-	30	-
08/26/80	-	20	240	8600	650	650	1200	-	-	28	-
384452082181400	CLAYLICK RN NR NORTHUP OH						LAT 384452 LONG 0821814 (MX)				
09/12/79	-	10	60	4100	20	40	2200	-	-	70	-
08/27/80	-	30	90	18000	40	40	2300	-	-	55	-
07/15/81	-	50	250	11000	70	70	4300	-	-	100	-
384452082381000	PINE C NR BUCKHORN OH						LAT 384452 LONG 0823810 (MX)				
06/18/75	820	-	2500	-	-	990	-	-	30	-	-
10/22/75	760	-	1300	-	-	710	-	-	20	-	-
384454082223500	SAND F SYMMES C NR WATERLOO OH						LAT 384454 LONG 0822235 (MX)				
09/11/79	-	20	450	20000	270	290	1900	-	-	100	-
384603082503400	WARDS RN NR MINFORD OH						LAT 384603 LONG 0825034 (MX)				
09/12/79	-	130	460	23000	140	140	380	-	-	30	-
384657082421300	HALES C NR S WEBSTER OH						LAT 384657 LONG 0824213 (MX)				
09/18/80	1060	170	2730	-	490	590	-	30	-	-	10
08/20/81	413	259	1208	-	1120	1590	-	10	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUE)--

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TERIAL (UG/G)	LEAD RECOV. FM BOT- TERIAL (UG/G)
384312082481700	LICK RN NR WHEELERSBURG OH	LAT 384312 LONG 0824817 (MX)									
09/12/79	-	0	-	-	0.00	-	10	-	30	10	20
384333082150500	BULLSKIN C NR MERCERVILLE OH	LAT 384333 LONG 0821505 (MX)									
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
384347082164400	L BULLSKIN C NR MERCERVILLE OH	LAT 384347 LONG 0821644 (MX)									
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
384401082145000	BULLSKIN C NR GALLIPOLIS OH	LAT 384401 LONG 0821450 (MX)									
09/12/79	-	0	-	-	0.00	-	10	-	10	10	20
08/26/80	-	0	-	-	0.00	-	10	-	10	10	10
384452082181400	CLAYLICK RN NR NORTUP OH	LAT 384452 LONG 0821814 (MX)									
09/12/79	-	0	-	-	0.00	-	20	-	30	10	30
08/27/80	-	0	-	-	-	-	20	-	70	10	10
07/15/81	-	4	-	-	0.00	-	29	-	30	6	50
384452082381000	PINE C NR BUCKHORN OH	LAT 384452 LONG 0823810 (MX)									
06/18/75	1	-	-	0.5	-	20	-	20	-	-	-
10/22/75	1	-	-	0.5	-	0	-	0	-	-	-
384454082223500	SAND F SYMMES C NR WATERLOO OH	LAT 384454 LONG 0822235 (MX)									
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
384603082503400	WARDS RN NR MINFORD OH	LAT 384603 LONG 0825034 (MX)									
09/12/79	-	0	-	-	0.00	-	10	-	20	10	10
384657082421300	HALES C NR S WEBSTER OH	LAT 384657 LONG 0824213 (MX)									
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
08/20/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
384700082505800 L SCIOTO R NR FAIR OAKS OH LAT 384700 LONG 0825058 (MX)											
06/17/75	40.00	-	7.1	31	-	38	12.0	29.0	-	-	-
11/05/75	43.00	-	6.5	28	-	34	13.0	31.0	-	-	-
384817082391600 BRADY RN NR S WEBSTER OH LAT 384817 LONG 0823916 (MX)											
09/12/79	0.56	-	6.7	53	10	65	-	110.0	-	-	-
08/27/80	0.72	-	7.4	62	-	75	-	87.0	-	-	-
07/15/81	0.72	-	7.2	56	-	68	-	80.0	-	-	-
384839082403100 HALES C NR EIFORT OH LAT 384839 LONG 0824031 (MX)											
09/18/80	1.40	200	7.3	66	-	80	5.0	68.0	100	181	380
07/16/81	1.40	295	7.6	52	-	64	5.5	80.0	59	125	239
08/24/82	0.01	-	7.6	90	-	110	13.0	84.0	-	249	-
384841082464000 FREDERICK C NR MINFORD OH LAT 384841 LONG 0824640 (MX)											
09/12/79	1.00	-	7.2	61	-	74	-	90.0	-	-	-
385028082305800 BLACK F NR GALLIA OH LAT 385028 LONG 0823058 (MX)											
11/13/75	13.00	-	6.6	31	-	38	7.0	66.0	-	-	-
385029082311900 BLACK F AT GALLIA OH LAT 385029 LONG 0823119 (MX)											
07/23/81	2.30	390	7.6	77	-	94	8.5	97.0	20	287	75
08/24/82	0.10	-	7.5	77	-	94	11.0	100.0	-	293	-
385117082500900 LONG RN NR MINFORD OH LAT 385117 LONG 0825009 (MX)											
09/12/79	2.10	-	7.3	56	-	68	-	35.0	-	-	-
385124082321400 BLACK F NR GALLIA OH LAT 385124 LONG 0823214 (MX)											
07/23/81	1.80	360	7.7	75	-	92	75.0	85.0	20	267	75
08/24/82	0.17	-	7.2	75	-	92	12.0	88.0	-	263	-
385343082293600 SYMMES C NR THURMAN OH LAT 385343 LONG 0822936 (MX)											
08/21/81	0.34	570	6.5	75	-	92	7.5	195.0	20	450	75
08/25/82	0.14	-	7.5	107	-	130	7.7	110.0	-	322	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
384700082505800	L SCIOTO R NR FAIR OAKS OH							LAT 384700 LONG 0825058 (MX)			
06/17/75	320	-	810	-	-	220	-	-	20	-	-
11/05/75	30	-	580	-	-	100	-	-	20	-	-
384817082391600	BRADY RN NR S WEBSTER OH							LAT 384817 LONG 0823916 (MX)			
09/12/79	-	220	2100	19000	1000	1000	290	-	-	30	-
08/27/80	-	110	1500	4500	980	980	960	-	-	11	-
07/15/81	-	130	1800	9500	750	820	890	-	-	55	-
384839082403100	HALES C NR EIFORT OH							LAT 384839 LONG 0824031 (MX)			
09/18/80	450	210	1490	-	480	490	-	30	-	-	10
07/16/81	674	222	1553	-	422	477	-	10	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-
384841082464000	FREDERICK C NR MINFORD OH							LAT 384841 LONG 0824640 (MX)			
09/12/79	-	200	340	25000	190	190	650	-	-	50	-
385028082305800	BLACK F NR GALLIA OH							LAT 385028 LONG 0823058 (MX)			
11/13/75	200	-	1100	-	-	700	-	-	30	-	-
385029082311900	BLACK F AT GALLIA OH							LAT 385029 LONG 0823119 (MX)			
07/23/81	75	162	427	-	816	1273	-	20	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-
385117082500900	LONG RN NR MINFORD OH							LAT 385117 LONG 0825009 (MX)			
09/12/79	-	170	390	30000	40	40	890	-	-	70	-
385124082321400	BLACK F NR GALLIA OH							LAT 385124 LONG 0823214 (MX)			
07/23/81	75	210	219	-	1016	1323	-	20	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-
385343082293600	SYMMES C NR THURMAN OH							LAT 385343 LONG 0822936 (MX)			
08/21/81	442	67	551	-	704	707	-	10	-	-	10
08/25/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TERIAL (UG/G)	LEAD RECOV. FM BOT- TERIAL (UG/G)
384700082505800	L SC1010 R NR FAIR OAKS OH					LAT 384700 LONG 0825058 (MX)					
06/17/75	1	-	-	0.5	-	0	-	20	-	-	-
11/05/75	1	-	-	0.5	-	0	-	0	-	-	-
384817082391600	GRADY RN NR S WEBSTER OH					LAT 384817 LONG 0823916 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
08/27/80	-	0	-	-	0.00	-	10	-	10	10	10
07/15/81	-	0	-	-	0.00	-	20	-	10	3	30
384839082403100	HALES C NR EIFORT OH					LAT 384839 LONG 0824031 (MX)					
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
384841082464000	FREDERICK C NR MINFORD OH					LAT 384841 LONG 0824640 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
385029082305800	BLACK F NR GALLIA OH					LAT 385028 LONG 0823058 (MX)					
11/13/75	1	-	-	0.5	-	20	-	0	-	-	-
385029082311900	BLACK F AT GALLIA OH					LAT 385029 LONG 0823119 (MX)					
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
385117082500900	LONG RN NR MINFORD OH					LAT 385117 LONG 0825009 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	30	10	30
385124082321400	BLACK F NR GALLIA OH					LAT 385124 LONG 0823214 (MX)					
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
385343082293500	SYMMES C NR THURMAN OH					LAT 385343 LONG 0822936 (MX)					
08/21/81	-	-	0.5	-	-	-	-	-	-	-	-
08/25/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
385405082431000	HOLLAND F TR NR S WEBSTER OH					LAT 385405 LONG 0824310 (MX)					
09/11/79	0.86	-	7.0	34	-	41	-	39.0	-	-	-
385412082191300	HARREN C NR HARRISBURG OH					LAT 385412 LONG 0821913 (MX)					
09/11/79	0.62	-	7.2	110	-	129	-	34.0	-	-	-
385418082131000	CHAMPAIGN C NR ADDISON OH					LAT 385418 LONG 0821310 (MX)					
09/09/79	1.80	-	7.3	89	-	108	-	150.0	-	-	-
385423082100000	L CAMPAIGN C NR ADDISON OH					LAT 385423 LONG 0821000 (MX)					
09/04/80	0.30	940	5.1	3	70	4	-	-	-	-	-
07/22/81	0.55	1100	4.6	2	50	2	8.5	500.0	349	980	75
385442082080800	KYGER C NR ADDISON OH					LAT 385442 LONG 0820808 (MX)					
09/19/80	44.00	1200	7.5	39	-	48	35.0	540.0	100	913	410
08/19/81	55.00	1300	6.6	39	-	48	42.0	540.0	20	1082	475
07/28/82	42.00	-	9.0	81	-	50	42.0	470.0	-	834	-
385504082105400	L CAMPAIGN C NR ADDISON OH					LAT 385504 LONG 0821054 (MX)					
09/04/80	0.19	1500	4.2	-	159	-	-	-	-	-	-
07/22/81	0.28	1135	4.3	-	127	-	8.0	850.0	20	1367	75
07/20/82	0.53	-	4.1	-	139	-	9.4	870.0	400	1310	12000
385520082322000	UNAM TR TO SYMMES C AT PYRO OH					LAT 385520 LONG 0823220 (MX)					
09/17/80	1.70	630	7.1	113	-	138	5.0	260.0	100	503	200
08/21/81	-	1250	6.3	102	10	124	7.8	570.0	20	1107	75
08/24/82	0.01	-	8.0	131	-	160	8.7	420.0	-	847	-
385543082140600	L WHITE OAK NR PORTER OH					LAT 385543 LONG 0821406 (MX)					
09/19/80	0.34	1950	4.1	-	273	-	5.0	1220.0	490	1857	27200
07/22/81	1.10	1145	4.0	-	171	-	4.5	870.0	508	1487	75
385708082073300	KYGER C NR CHESHIRE OH					LAT 385708 LONG 0820733 (MX)					
07/24/75	7.00	-	8.9	56	-	68	44.0	420.0	-	-	-
11/17/75	8.20	-	7.3	62	-	76	50.0	1600.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSEVIC, DIS- SOLVED (UG/L AS AS)	

385405082431000 HOLLAND F TR NR S WEBSTER OH LAT 385405 LONG 0824310 (MX)											

09/11/79	-	200	310	19000	120	120	270	-	-	30	-

385412082191300 BARREN C NR HARRISBURG OH LAT 385412 LONG 0821913 (MX)											

09/11/79	-	140	710	20000	160	190	1800	-	-	30	-

385418082131000 CHAMPAIGN C NR ADDISON OH LAT 385418 LONG 0821310 (MX)											

09/09/79	-	30	290	27000	2600	2800	2400	-	-	80	-

385423082100000 L CAMPAIGN C NR ADDISON OH LAT 385423 LONG 0821000 (MX)											

09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	75	54	127	-	50	50	-	10	-	-	10

385442082080800 KYGER C NR ADDISON OH LAT 385442 LONG 0820808 (MX)											

09/19/80	790	30	920	-	550	610	-	30	-	-	30
08/19/81	1380	22	479	-	50	50	-	10	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-

385504082105400 L CAMPAIGN C NR ADDISON OH LAT 385504 LONG 0821054 (MX)											

09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	75	10	10	-	50	50	-	10	-	-	10
07/20/82	12000	620	1900	-	21000	22000	-	580	-	-	-

385520082322000 UNAM TR TO SYMMES C AT PYRO OH LAT 385520 LONG 0823220 (MX)											

09/17/80	720	550	5620	-	1700	1760	-	30	-	-	10
08/21/81	14720	95	871	-	1547	1648	-	11	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-

385543082140600 L WHITE OAK NR PORTER OH LAT 385543 LONG 0821406 (MX)											

09/19/80	27900	720	1030	-	34000	33000	-	760	-	-	20
07/22/81	415	10	10	-	15870	25460	-	876	-	-	10

385708082073300 KYGER C NR CHESHIRE OH LAT 385708 LONG 0820733 (MX)											

07/24/75	2000	-	320	-	-	110	-	-	20	-	-
11/17/75	1400	-	480	-	-	1800	-	-	40	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
385405082431000	HOLLAND F TR NR S WEBSTER OH					LAT 385405 LONG 0824310 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
385412082191300	BARREN C NR HARRISBURG OH					LAT 385412 LONG 0821913 (MX)					
09/11/79	-	0	-	-	0.00	-	20	-	20	10	4200
385418082131000	CHAMPAIGN C NR ADDISON OH					LAT 385418 LONG 0821310 (MX)					
09/09/79	-	0	-	-	0.00	-	10	-	20	10	10
385423082100000	L CAMPAIGN C NR ADDISON OH					LAT 385423 LONG 0821000 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
385442082080800	KYGER C NR ADDISON OH					LAT 385442 LONG 0820808 (MX)					
09/19/80	-	-	0.5	-	-	-	-	-	-	-	-
08/19/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
385504082105400	L CAMPAIGN C NR ADDISON OH					LAT 385504 LONG 0821054 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
385520082322000	UNAM TR TO SYMMES C AT PYRO OH					LAT 385520 LONG 0823220 (MX)					
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
08/21/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
385543082140500	L WHITE OAK NR PORTER OH					LAT 385543 LONG 0821405 (MX)					
09/19/80	-	-	0.5	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
385708082073300	KYGER C NR CHESHIRE OH					LAT 385708 LONG 0820733 (MX)					
07/24/75	95	-	-	0.5	-	20	-	90	-	-	-
11/17/75	75	-	-	0.5	-	20	-	60	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LILITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

385711082215600 L RACCOON C NR VINTON OH LAT 385711 LONG 0822156 (MX)											

09/24/80	87.00	450	5.0	2	25	2	5.0	191.0	100	315	1450
385735082315700 SYMMES C NR PYRO OH LAT 385735 LONG 0823157 (MX)											

09/15/80	2.10	230	7.7	54	-	78	7.0	59.0	100	167	200
08/21/81	0.06	570	6.6	89	-	108	12.3	135.0	20	437	75
08/25/82	0.10	-	7.7	107	-	130	34.0	270.0	-	570	-
385804082095000 KYGER C AT KYGER OH LAT 385804 LONG 0820950 (MX)											

09/04/80	0.70	840	7.0	46	-	56	-	-	-	-	-
07/22/81	0.54	795	7.0	43	-	52	5.9	522.0	175	647	490
07/27/82	0.17	-	7.0	56	-	80	3.1	360.0	-	621	-
385848082082900 JESSIE C AT KYGER OH LAT 385848 LONG 0820829 (MX)											

09/04/80	0.24	1000	3.8	-	89	-	-	-	-	-	-
07/21/81	0.55	1100	3.5	-	79	-	3.7	360.0	203	842	7411
07/27/82	0.26	-	4.0	0	55	0	3.5	530.0	200	804	4900
385900082051900 STORYS RN NR MIDDLEPORT OH LAT 385900 LONG 0820519 (MX)											

09/04/80	0.46	1200	3.8	-	144	-	-	-	-	-	-
07/28/81	0.50	1130	3.5	-	216	-	4.0	415.0	320	1267	27330
08/24/82	0.21	-	4.0	0	32	0	10.0	720.0	200	1160	14000
385916082090200 JESSIE C NR RUTLAND OH LAT 385916 LONG 0820902 (MX)											

09/10/79	0.46	-	5.1	2	10	3	-	240.0	-	-	-
08/26/80	0.57	-	6.5	11	10	13	-	230.0	-	-	-
07/15/81	0.06	-	6.1	3	20	4	-	280.0	-	-	-
385924082295300 DIXON RN NR WINCHESTER OH LAT 385924 LONG 0822953 (MX)											

09/24/80	0.18	890	7.0	11	-	14	5.0	460.0	100	674	330
08/19/81	0.14	770	6.0	10	30	12	3.4	365.0	20	630	75
08/25/82	0.16	-	5.9	7	6	8	3.5	400.0	-	600	-
385933082042800 LEADING C AT MIDDLEPORT OH LAT 385933 LONG 0820428 (MX)											

09/25/80	9.40	750	7.3	56	-	80	71.0	183.0	100	468	220
08/24/82	-	-	6.7	39	-	48	180.0	380.0	-	858	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM. TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
385711082215600	L RACCOON C NR VINTON OH							LAT 385711 LONG 0822156 (MX)			
09/24/80	1670	180	600	-	3090	3080	-	60	-	-	10
385735082315700	SYMME C NR PYRO OH							LAT 385735 LONG 0823157 (MX)			
09/15/80	240	230	1730	-	590	650	-	30	-	-	10
08/21/81	474	122	1008	-	859	910	-	14	-	-	10
08/25/82	-	-	-	-	-	-	-	-	-	-	-
385804082095000	KYGER C AT KYGER OH							LAT 385804 LONG 0820950 (MX)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	521	1211	1849	-	8515	8823	-	23	-	-	10
07/27/82	-	-	-	-	-	-	-	-	-	-	-
385848082082900	JESSIE C AT KYGER OH							LAT 385848 LONG 0820829 (MX)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/21/81	8821	1366	2148	-	9807	10852	-	236	-	-	10
07/27/82	5100	550	1000	-	13000	13000	-	220	-	-	-
385900082051900	STORYS RN NR MIDDLEPORT OH							LAT 385900 LONG 0820519 (MX)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/28/81	36890	4083	4733	-	11590	14720	-	651	-	-	10
08/24/82	14000	1000	1600	-	12000	12000	-	450	-	-	-
385916082090200	JESSIE C NR RUTLAND OH							LAT 385916 LONG 0820902 (MX)			
09/10/79	-	130	200	7200	5400	5600	100	-	-	60	-
08/26/80	-	70	900	11000	5500	5500	680	-	-	27	-
07/15/81	-	480	1100	6100	5300	5600	31	-	-	72	-
385924082295300	DIXON RN NR WINCHESTER OH							LAT 385924 LONG 0822953 (MX)			
09/24/80	500	330	840	-	4300	4100	-	30	-	-	10
08/19/81	776	727	850	-	2450	2459	-	88	-	-	10
08/25/82	-	-	-	-	-	-	-	-	-	-	-
385933082042800	LEADING C AT MIDDLEPORT OH							LAT 385933 LONG 0820428 (MX)			
09/25/80	1460	130	900	-	1250	1200	-	30	-	-	10
08/24/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, RECOV. ERABLE AS CR	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
385711082215600	L RACCOON C NR VINTON OH					_AT 385711 LONG 0822156 (MX)					
09/24/80	-	-	0.5	-	-	-	-	-	-	-	-
385735082315700	SYMMES C NR PYRO OH					_AT 385735 LONG 0823157 (MX)					
09/15/80	-	-	0.5	-	-	-	-	-	-	-	-
08/21/81	-	-	0.5	-	-	-	-	-	-	-	-
08/25/82	-	-	-	-	-	-	-	-	-	-	-
385804082095000	KYGER C AT KYGER OH					_AT 385804 LONG 0820950 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
385848082082900	JESSIE C AT KYGER OH					_AT 385848 LONG 0820829 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/21/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
385900082051900	STORYS RN NR MIDDLEPORT OH					_AT 385900 LONG 0820519 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/28/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
385916082090200	JESSIE C NR RUTLAND OH					_AT 385916 LONG 0820902 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
08/26/80	-	0	-	-	0.00	-	10	-	10	10	10
07/15/81	-	5	-	-	0.00	-	5	-	20	6	60
385924082295300	DIXON RN NR WINCHESTER OH					_AT 385924 LONG 0822953 (MX)					
09/24/80	-	-	0.5	-	-	-	-	-	-	-	-
08/19/81	-	-	0.5	-	-	-	-	-	-	-	-
08/25/82	-	-	-	-	-	-	-	-	-	-	-
385933082042800	LEADING C AT MIDDLEPORT OH					_AT 385933 LONG 0820428 (MX)					
09/25/80	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

390012082283000 DIXON RUN NR EWINGTON OH LAT 390012 LONG 0822830 (MX)											

09/24/80	0.84	770	5.1	3	35	4	5.0	410.0	100	583	720
08/19/81	0.31	800	4.3	-	65	-	1.5	430.0	20	795	3599
07/22/82	0.26	-	3.5	0	65	0	2.5	430.0	100	716	4900

390017082042700 THOMAS F NR MIDDLEPORT OH LAT 390017 LONG 0820427 (MX)											

07/02/75	3.00	-	3.5	1	40	0	35.0	590.0	-	-	-
11/17/75	9.70	-	4.1	1	60	0	13.0	360.0	-	-	-

390021082071700 LEADING C NR RUTLAND OH LAT 390021 LONG 0820717 (MX)											

08/20/81	3.10	1000	6.5	79	-	96	91.0	220.0	20	615	75
07/28/82	6.50	-	7.5	98	-	120	110.0	200.0	-	573	-

390024082281200 DICKASON RUN NR THURMAN OH LAT 390024 LONG 0822812 (MX)											

09/13/79	3.20	-	6.2	13	15	16	-	160.0	-	-	-
08/29/80	6.00	-	6.8	20	10	24	-	130.0	-	-	-
09/03/81	2.50	-	4.4	0	84	0	-	190.0	-	-	-

390031082271900 DICKASON RUN NR EWINGTON OH LAT 390031 LONG 0822719 (MX)											

09/24/80	9.50	300	7.2	16	-	20	5.0	109.0	100	134	200
08/09/81	0.91	450	6.1	16	20	20	4.3	185.0	20	375	75
07/22/82	0.98	-	6.2	10	10	12	4.0	180.0	-	366	-

390038082270800 L RACCOON C NR EWINGTON OH LAT 390038 LONG 0822708 (MX)											

08/19/81	14.00	730	4.2	-	50	-	5.5	315.0	20	580	2457
07/22/82	15.00	-	3.7	0	16	0	13.0	320.0	-	530	4000

390038082270900 L RACCOON C NR WELLSTON OH LAT 390038 LONG 0822709 (MX)											

11/13/75	57.00	-	3.7	1	94	0	12.0	290.0	-	-	-

390046082081800 LEADING C NR RUTLAND OH LAT 390046 LONG 0820818 (MX)											

07/03/75	4.00	-	7.1	118	-	144	72.0	97.0	-	-	-

390049082053700 LEADING C NR MIDDLEPORT OH LAT 390049 LONG 0820537 (MX)											

07/02/75	3.00	-	7.0	116	-	142	62.0	110.0	-	-	-
11/17/75	14.00	-	6.6	75	-	92	13.0	120.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (JG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
390012082283000	DIXON RV NR EWINGTON OH							LAT 390012 LONG 0822830 (MX)			
09/24/80	1640	3700	5600	-	5400	5100	-	30	-	-	10
08/19/81	3607	1578	1976	-	5211	5224	-	146	-	-	10
07/22/82	5300	3400	3600	-	5000	5100	-	120	-	-	-
390017082042700	THOMAS F NR MIDDLEPORT OH							LAT 390017 LONG 0820427 (MX)			
07/02/75	15000	-	1600	-	-	6800	-	-	430	-	-
11/17/75	1100	-	6600	-	-	4000	-	-	190	-	-
390021082071700	LEADING C NR RUTLAND OH							LAT 390021 LONG 0820717 (MX)			
08/20/81	457	59	458	-	556	569	-	10	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-
390024082281200	DICKASON RN NR THURMAN OH							LAT 390024 LONG 0822812 (MX)			
09/13/79	-	950	1000	23000	3000	3000	190	-	-	60	-
08/29/80	-	810	2000	9000	2500	2500	130	-	-	18	-
09/03/81	-	1100	1800	600	6500	6500	900	-	-	12	-
390031082271900	DICKASON RUN NR EWINGTON OH							LAT 390031 LONG 0822719 (MX)			
09/24/80	280	150	1640	-	1740	1750	-	30	-	-	10
08/09/81	393	226	706	-	2070	2572	-	25	-	-	10
07/22/82	-	-	-	-	-	-	-	-	-	-	-
390038082270800	L RACCOON C NR EWINGTON OH							LAT 390038 LONG 0822708 (MX)			
08/19/81	2503	689	820	-	3269	3485	-	144	-	-	10
07/22/82	4000	1100	1700	-	3600	3600	-	110	-	-	-
390038082270900	L RACCOON C NR WELLSTON OH							LAT 390038 LONG 0822709 (MX)			
11/13/75	8800	-	1000	-	-	6000	-	-	200	-	-
390046082081800	LEADING C NR RUTLAND OH							LAT 390046 LONG 0820818 (MX)			
07/03/75	520	-	1300	-	-	620	-	-	20	-	-
390049082053700	LEADING C NR MIDDLEPORT OH							LAT 390049 LONG 0820537 (MX)			
07/02/75	300	-	610	-	-	550	-	-	20	-	-
11/17/75	360	-	570	-	-	610	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CAJMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
390012082283000	DIXON RV NR EWINGTON OH					LAT 390012 LONG 0822830 (MX)					
09/24/80	-	-	0.5	-	-	-	-	-	-	-	-
08/19/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
390017082042700	THOMAS F NR MIDDLEPORT OH					LAT 390017 LONG 0820427 (MX)					
07/02/75	1	-	-	0.5	-	30	-	20	-	-	-
11/17/75	1	-	-	0.5	-	20	-	20	-	-	-
390021082071700	LEADING C NR RUTLAND OH					LAT 390021 LONG 0820717 (MX)					
08/20/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
390024082281200	DICKASON RV NR THURMAN OH					LAT 390024 LONG 0822812 (MX)					
09/13/79	-	0	-	-	0.00	-	20	-	10	10	20
08/29/80	-	0	-	-	0.00	-	10	-	10	10	10
09/03/81	-	0	-	-	0.01	-	1	-	1	1	1
390031082271900	DICKASON RV NR EWINGTON OH					LAT 390031 LONG 0822719 (MX)					
09/24/80	-	-	0.5	-	-	-	-	-	-	-	-
08/09/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
390038082270300	L RACCOON C NR EWINGTON OH					LAT 390038 LONG 0822703 (MX)					
08/19/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
390038082270900	L RACCOON C NR WELLSTON OH					LAT 390038 LONG 0822709 (MX)					
11/13/75	1	-	-	0.5	-	20	-	0	-	-	-
390046082081800	LEADING C NR RUTLAND OH					LAT 390045 LONG 0820818 (MX)					
07/03/75	2	-	-	0.5	-	20	-	20	-	-	-
390049082053700	LEADING C NR MIDDLEPORT OH					LAT 390049 LONG 0820537 (MX)					
07/02/75	1	-	-	0.5	-	0	-	20	-	-	-
11/17/75	1	-	-	0.5	-	0	-	0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHDS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

390053082201000	STRONGS RV NR EWINGTON OH						LAT 390053 LONG 0822010 (MX)				
09/11/79	1.50	-	6.7	57	15	69	-	21.0	-	-	-

390110082050700	THOMAS F NR MIDDLEPORT OH						LAT 390110 LONG 0820507 (MX)				
09/03/80	5.00	1800	4.0	-	74	-	-	-	-	-	-
07/22/81	4.50	1235	3.9	-	84	-	145.0	520.0	190	1725	10550
07/27/82	4.50	-	3.9	0	84	0	200.0	540.0	200	978	9000

390150082081800	L LEADING C NR RUTLAND OH						LAT 390150 LONG 0820818 (MX)				
09/10/79	1.70	-	6.9	75	40	92	-	140.0	-	-	-

390201082034300	THOMAS F NR POMEROY OH						LAT 390201 LONG 0820343 (MX)				
09/03/80	3.50	1100	4.0	-	89	-	-	-	-	-	-
07/22/81	3.20	1160	4.1	-	84	-	65.0	415.0	207	1252	11530
07/27/82	2.90	-	3.8	0	109	0	130.0	580.0	200	1010	13000

390222081594900	KERR RV AT POMEROY OH						LAT 390222 LONG 0815949 (MX)				
07/03/75	0.10	-	4.7	3	-	4	10.0	270.0	-	-	-
11/17/75	0.45	-	6.1	20	-	24	18.0	200.0	-	-	-

390222082092200	LEADING C NR LANGSVILLE OH						LAT 390222 LONG 0820922 (MX)				
09/04/80	9.90	330	7.0	85	-	104	-	-	-	-	-
08/20/81	1.90	910	6.6	82	-	100	75.0	315.0	20	710	75
08/23/82	3.70	-	7.0	61	-	74	130.0	350.0	-	939	-

390224082282300	TARCAMP RV NR ROADS OH						LAT 390224 LONG 0822823 (MX)				
09/16/80	0.73	170	6.2	18	-	22	5.0	55.0	450	128	200
08/19/81	0.26	210	6.5	16	-	20	1.2	52.0	20	135	75
07/22/82	0.18	-	6.6	5	-	6	1.4	52.0	-	119	-

390238082093200	UNAM TR TO LEADING C NR RUTLAND OH						LAT 390238 LONG 0820932 (MX)				
09/03/80	0.15	525	7.1	102	-	124	-	-	-	-	-
07/22/81	0.00	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
390053082201000	STRONGS RV NR EWINGTON OH							LAT 390053 LONG 0822010 (MX)			
09/11/79	-	280	1300	24000	500	540	700	-	-	70	-
390110082050700	THOMAS F NR MIDDLEPORT OH							LAT 390110 LONG 0820507 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	10960	2011	1578	-	5076	5577	-	225	-	-	10
07/27/82	9800	1200	1900	-	5600	5800	-	280	-	-	-
390150082081800	L LEADING C NR RUTLAND OH							LAT 390150 LONG 0820818 (MX)			
09/10/79	-	70	410	15000	990	1000	1000	-	-	50	-
390201082034300	THOMAS F NR POMEROY OH							LAT 390201 LONG 0820343 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	12720	2101	2003	-	2004	3715	-	351	-	-	10
07/27/82	13000	2700	4400	-	4600	4700	-	300	-	-	-
390222081594900	KERR RN AT POMEROY OH							LAT 390222 LONG 0815949 (MX)			
07/03/75	3600	-	2100	-	-	1600	-	-	110	-	-
11/17/75	3400	-	6600	-	-	1700	-	-	100	-	-
390222082092200	LEADING C NR LANGSVILLE OH							LAT 390222 LONG 0820922 (MX)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
08/20/81	407	144	575	-	420	476	-	21	-	-	10
08/23/82	-	-	-	-	-	-	-	-	-	-	-
390224082282300	TARCAMP RV NR ROADS OH							LAT 390224 LONG 0822823 (MX)			
09/16/80	560	260	1980	-	830	840	-	30	-	-	15
08/19/81	6515	179	1557	-	420	503	-	32	-	-	10
07/22/82	-	-	-	-	-	-	-	-	-	-	-
390238082093200	UNAM TR TO LEADING C NR RUTLAND OH							LAT 390238 LONG 0820932 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/L AS CU)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV- FM BOT- TOM MA- TERIAL (UG/G)
390053082201000	STROVGS RV NR EWINGTON OH					LAT 390053 LONG 0822010 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
390110042050700	THOMAS F NR MIDDLEPORT OH					LAT 390110 LONG 0820507 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
390150082081800	L LEADING C NR RUTLAND OH					LAT 390150 LONG 0820818 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	20
390201082034300	THOMAS F NR POMEROY OH					LAT 390201 LONG 0820343 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
390222081594900	KERR RN AT POMEROY OH					LAT 390222 LONG 0815949 (MX)					
07/03/75	1	-	-	0.5	-	20	-	20	-	-	-
11/17/75	1	-	-	0.5	-	20	-	20	-	-	-
390222082092200	LEADING C NR LANGSVILLE OH					LAT 390222 LONG 0820922 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
08/20/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
390224082282300	TARCAMP RV NR ROADS OH					LAT 390224 LONG 0822823 (MX)					
09/16/80	-	-	0.5	-	-	-	-	-	-	-	-
08/19/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
390238082093200	UNAM TR TO LEADING C NR RUTLAND OH					LAT 390238 LONG 0820932 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLU (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (MG/L AS AL)
390239082030500 E B THOMAS F NR POMEROY OH LAT 390239 LONG 0820308 (MX)											
09/27/79	5.10	-	6.6	39	20	47	-	230.0	-	-	-
08/26/80	4.40	-	6.7	43	25	53	-	220.0	-	-	-
390240082075000 L LEADING C AT RUTLAND OH LAT 390240 LONG 0820750 (MX)											
09/03/80	1.80	1400	7.2	75	-	92	-	-	-	-	-
07/22/81	1.60	745	7.6	74	-	90	55.0	435.0	72	510	413
08/23/82	0.36	-	7.6	98	-	120	340.0	120.0	-	1090	-
390254082442400 BUCKEYE C TR NR JACKSON OH LAT 390254 LONG 0824424 (MX)											
09/13/79	0.70	-	6.7	21	5	26	-	7.1	-	-	-
390341082270700 BUFFER RN NR ROADS OH LAT 390341 LONG 0822707 (MX)											
09/16/80	0.69	2300	3.1	-	596	-	5.0	1280.0	430	1795	29500
08/19/81	0.30	2000	3.0	-	571	-	2.5	1340.0	20	2465	28040
07/12/82	0.40	-	2.5	0	695	0	5.0	1400.0	400	2190	37000
390509082281900 L RACCUON C NR ROADS OH LAT 390509 LONG 0822819 (MX)											
07/27/81	17.00	560	6.3	43	10	52	8.0	235.0	55	417	3
07/12/82	19.00	-	6.6	40	-	49	12.0	140.0	-	294	-
390539082083000 L LEADING C NR HARRISONVILLE OH LAT 390539 LONG 0820830 (MX)											
09/03/80	0.48	430	6.9	75	-	92	-	-	-	-	-
07/23/81	0.15	400	6.9	87	-	106	3.0	112.0	91	270	75
390622082131000 MUD F LEADING C NR DEXTER OH LAT 390622 LONG 0821310 (MX)											
10/31/79	2.10	-	7.5	100	-	124	-	150.0	-	-	-
08/26/80	3.30	-	7.6	94	-	114	-	120.0	-	-	-
390634082313600 MEADOW RN AT WELLSTON OH LAT 390634 LONG 0823136 (MX)											
09/11/79	0.68	-	7.1	72	-	88	-	64.0	-	-	-
08/25/80	3.80	-	7.0	53	-	65	-	75.0	-	-	-
390648082005600 KINGSBURY C NR POMEROY OH LAT 390648 LONG 0820056 (MX)											
09/13/79	2.00	-	8.0	79	-	96	-	97.0	-	-	-
08/26/80	5.90	-	7.3	62	-	75	-	69.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)

390239082030800 E 3 THOMAS F NR POMEROY OH LAT 390239 LONG 0820308 (MX)											

09/27/79	-	460	2000	17000	1900	2200	220	-	-	50	-
08/26/80	-	360	2200	15000	1900	1900	1300	-	-	91	-

390240082075000 L LEADING C AT RUTLAND OH LAT 390240 LONG 0820750 (MX)											

09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	777	2101	3142	-	141	170	-	50	-	-	10
08/23/82	-	-	-	-	-	-	-	-	-	-	-

390254082442400 BUCKEYE C TR NR JACKSON OH LAT 390254 LONG 0824424 (MX)											

09/13/79	-	150	670	2400	180	180	30	-	-	10	-

390341082270700 BUFFER RN NR ROADS OH LAT 390341 LONG 0822707 (MX)											

09/16/80	28000	133000	161000	-	12800	12500	-	470	-	-	10
08/19/81	29010	88390	89960	-	11710	12820	-	637	-	-	10
07/12/82	38000	160000	160000	-	13000	13000	-	530	-	-	-

390509082281900 L RACCUON C NR ROADS OH LAT 390509 LONG 0822819 (MX)											

07/27/81	22	653	681	-	4413	4570	-	91	-	-	10
07/12/82	-	-	-	-	-	-	-	-	-	-	-

390539082083000 L LEADING C NR HARRISONVILLE OH LAT 390539 LONG 0820830 (MX)											

09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	75	89	127	-	262	323	-	10	-	-	10

390622082131000 MUD F LEADING C NR DEXTER OH LAT 390622 LONG 0821310 (MX)											

10/31/79	-	30	770	20000	470	490	2200	-	-	70	-
08/26/80	-	20	1300	4900	120	160	1700	-	-	25	-

390634082313600 MEADOW RN AT WELLSSTON OH LAT 390634 LONG 0823136 (MX)											

09/11/79	-	100	590	16000	740	740	410	-	-	40	-
08/25/80	-	80	690	-	650	650	-	-	-	-	-

390648082005600 KINGSBURY C NR POMEROY OH LAT 390648 LONG 0820056 (MX)											

09/13/79	-	100	620	10000	460	490	290	-	-	70	-
08/26/80	-	60	640	5000	210	210	310	-	-	14	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
390239082030800	E 3 THUMAS F NR POMEROY OH					LAT 390239 LONG 0820308 (MX)					
09/27/79	-	0	-	-	0.00	-	10	-	10	10	10
08/26/80	-	0	-	-	0.00	-	20	-	10	10	20
390240082075000	L LEADING C AT RUTLAND OH					LAT 390240 LONG 0820750 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
08/23/82	-	-	-	-	-	-	-	-	-	-	-
390254082442400	BUCKEYE C TR NR JACKSON OH					LAT 390254 LONG 0824424 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
390341082270700	BUFFER RN NR ROADS OH					LAT 390341 LONG 0822707 (MX)					
09/16/80	-	-	0.5	-	-	-	-	-	-	-	-
08/19/81	-	-	0.5	-	-	-	-	-	-	-	-
07/12/82	-	-	-	-	-	-	-	-	-	-	-
390509082281900	L RACCOON C NR ROADS OH					LAT 390509 LONG 0822819 (MX)					
07/27/81	-	-	0.5	-	-	-	-	-	-	-	-
07/12/82	-	-	-	-	-	-	-	-	-	-	-
390539082083000	L LEADING C NR HARRISONVILLE OH					LAT 390539 LONG 0820830 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
390622082131000	MUD F LEADING C NR DEXTER OH					LAT 390622 LONG 0821310 (MX)					
10/31/79	-	0	-	-	0.00	-	10	-	10	10	10
08/26/80	-	0	-	-	0.01	-	10	-	10	10	10
390634082313500	MEADOW RN AT WELLSTON OH					LAT 390634 LONG 0823135 (MX)					
09/11/79	-	0	-	-	0.00	-	20	-	10	10	20
08/25/80	-	-	-	-	-	-	-	-	-	-	-
390648082005600	KINGSBURY C NR POMEROY OH					LAT 390648 LONG 0820056 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
08/26/80	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
390733082080300 UNAM TR TO L LEADING C AT HARRISON OH LAT 390733 LONG 0820803 (MX)											
09/03/80	0.15	555	7.3	121	-	148	-	-	-	-	-
07/23/81	0.09	550	6.9	125	-	152	7.5	290.0	103	385	75
07/20/82	0.30	-	8.0	98	-	120	8.5	140.0	-	377	-
390801082302800 L RACCOON C NR WELLSTON OH LAT 390801 LONG 0823028 (MX)											
09/15/80	29.00	300	6.2	-	15	-	5.0	102.0	100	181	350
07/27/81	1.70	360	6.3	28	-	34	5.0	135.0	45	287	75
07/23/82	1.50	-	6.7	25	-	31	11.0	84.0	-	212	-
390828082224900 PIERCE RN NR RADCLIFF OH LAT 390828 LONG 0822249 (MX)											
09/11/79	1.90	-	6.2	12	15	15	-	170.0	-	-	-
08/25/80	7.90	-	6.8	23	15	28	-	120.0	-	-	-
07/30/81	1.20	-	6.9	20	15	24	-	180.0	-	-	-
390900082100900 MUD F NR HARRISONVILLE OH LAT 390900 LONG 0821009 (MX)											
09/03/80	0.76	640	7.0	46	-	56	-	-	-	-	-
07/23/81	0.29	650	6.5	30	-	36	5.5	210.0	117	502	75
07/26/82	0.08	-	7.2	49	-	60	9.7	310.0	-	552	-
390924082303100 SUGAR RN AT HAMDEN OH LAT 390924 LONG 0823031 (MX)											
09/15/80	4.90	750	3.8	-	70	-	5.0	320.0	100	475	3470
07/21/81	3.40	1100	3.4	-	164	-	3.5	425.0	727	922	13890
07/20/82	0.28	-	2.8	0	228	0	55.0	900.0	500	1420	19000
390936082011400 W 3 SHADE R AT BURLINGHAM OH LAT 390936 LONG 0820114 (MX)											
09/03/80	7.00	420	6.5	58	5	68	-	-	-	-	-
07/23/81	4.50	445	6.5	39	-	48	4.8	170.0	96	302	70
07/19/82	3.60	-	7.2	44	-	54	9.5	160.0	-	348	-
390940082243000 PIERCE RN NR RADCLIFF OH LAT 390940 LONG 0822430 (MX)											
09/17/80	1.80	550	4.6	-	30	-	5.0	250.0	100	390	1160
07/15/81	0.97	595	6.7	13	-	16	5.0	290.0	64	472	248
07/15/81	0.97	595	6.7	13	-	16	9.0	275.0	82	450	732
390941082212200 ELK F NR RADCLIFF OH LAT 390941 LONG 0822122 (MX)											
09/24/80	10.00	390	6.2	-	15	-	9.0	117.0	100	277	200
07/27/81	3.30	410	6.8	46	-	56	8.5	160.0	20	370	75
07/20/82	6.30	-	6.9	41	-	50	13.0	81.0	-	215	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (JG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZV)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
390733082080300	UNAM TR TO L LEADING C AT HARRISON OH							LAT 390733 LONG 0820803 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	75	46	92	-	524	689	-	10	-	-	10
07/20/82	-	-	-	-	-	-	-	-	-	-	-
390801082302800	L RACCOON C NR WELLSTON OH							LAT 390801 LONG 0823028 (MX)			
09/15/80	500	210	1920	-	1810	1800	-	150	-	-	10
07/27/81	75	114	127	-	2589	3364	-	33	-	-	10
07/23/82	-	-	-	-	-	-	-	-	-	-	-
390828082224900	PIERCE RN NR RADCLIFF OH							LAT 390828 LONG 0822249 (MX)			
09/11/79	-	1300	1600	11000	4000	4000	100	-	-	20	-
08/25/80	-	350	1200	10000	1500	1500	190	-	-	21	-
07/30/81	-	210	1100	9100	3800	3800	290	-	-	30	-
390900082100900	MUD F NR HARRISONVILLE OH							LAT 390900 LONG 0821009 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	81	24	173	-	2090	2797	-	10	-	-	10
07/26/82	-	-	-	-	-	-	-	-	-	-	-
390924082303100	SUGAR RN AT HAMDEN OH							LAT 390924 LONG 0823031 (MX)			
09/15/80	3870	4750	5490	-	5300	5300	-	280	-	-	10
07/21/81	13920	13390	13820	-	11440	12150	-	589	-	-	10
07/20/82	19000	7100	7100	-	21000	21000	-	680	-	-	-
390936082011400	W B SHADE R AT BURLINGHAM OH							LAT 390936 LONG 0820114 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	82	254	322	-	2027	2783	-	10	-	-	10
07/19/82	-	-	-	-	-	-	-	-	-	-	-
390940082243000	PIERCE RN NR RADCLIFF OH							LAT 390940 LONG 0822430 (MX)			
09/17/80	1450	2450	3020	-	2940	3000	-	80	-	-	10
07/15/81	403	1531	1832	-	2410	2353	-	17	-	-	10
07/15/81	483	1551	2098	-	2527	2494	-	44	-	-	10
390941082212200	ELK F NR RADCLIFF OH							LAT 390941 LONG 0822122 (MX)			
09/24/80	200	210	990	-	370	390	-	30	-	-	10
07/27/81	75	348	391	-	-	1041	-	20	-	-	10
07/20/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
390733082080300	UNAM TR TO L LEADING C AT HARRISON OH				LAT 390733 LONG 0820803		(MX)				
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
390801082302800	L RACCOON C NR WELLSTON OH				LAT 390801 LONG 0823028		(MX)				
09/15/80	-	-	0.5	-	-	-	-	-	-	-	-
07/27/81	-	-	0.5	-	-	-	-	-	-	-	-
07/23/82	-	-	-	-	-	-	-	-	-	-	-
390828082224900	PIERCE RN NR RADCLIFF OH				LAT 390828 LONG 0822249		(MX)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
08/25/80	-	0	-	-	0.00	-	10	-	10	10	10
07/30/81	-	13	-	-	0.01	-	3	-	10	2	20
390900082100900	MUD F NR HARRISONVILLE OH				LAT 390900 LONG 0821009		(MX)				
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
390924082303100	SUGAR RV AT HAMDEN OH				LAT 390924 LONG 0823031		(MX)				
09/15/80	-	-	0.5	-	-	-	-	-	-	-	-
07/21/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
390936082011400	W B SHADE R AT BURLINGHAM OH				LAT 390936 LONG 0820114		(MX)				
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
390940082243000	PIERCE RN NR RADCLIFF OH				LAT 390940 LONG 0822430		(MX)				
09/17/80	-	-	0.5	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
390941082212200	ELK F NR RADCLIFF OH				LAT 390941 LONG 0822122		(MX)				
09/24/80	-	-	0.5	-	-	-	-	-	-	-	-
07/27/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
391009082053600 W B SHADE R NR BURLINGHAM OH LAT 391009 LONG 0820536 (MX)											
09/03/80	2.10	440	7.0	36	-	44	-	-	-	-	-
07/23/81	1.20	455	6.2	7	1	8	3.5	170.0	117	325	75
07/19/82	0.40	-	6.6	20	-	24	3.5	150.0	-	301	-
391016082025100 W B SHADE R NR BURLINGHAM OH LAT 391016 LONG 0820251 (MX)											
07/02/75	0.30	-	3.7	1	30	0	8.0	250.0	-	-	-
391148081583000 PRATT F M B SHADE R NR SHADE OH LAT 391148 LONG 0815830 (MX)											
09/27/79	4.70	-	7.8	120	-	146	-	60.0	-	-	-
391241082425300 M F SALT C NR RICHMOND DALE OH LAT 391241 LONG 0824253 (MX)											
09/10/79	9.80	-	7.1	41	-	50	-	27.0	-	-	-
391403082261600 ELK F NR MCARTHUR OH LAT 391403 LONG 0822616 (MX)											
09/18/80	5.70	500	7.2	38	-	46	14.0	172.0	100	313	200
08/26/81	0.04	1100	7.2	44	-	54	61.0	345.0	20	745	118
07/19/82	2.40	-	6.9	43	-	53	27.0	140.0	-	330	-
391416082255500 UNAM TR TO ELK F NR PRATTSVILLE OH LAT 391416 LONG 0822555 (MX)											
09/02/80	1.80	520	6.4	7	35	8	-	-	-	-	-
07/15/81	0.38	1275	7.4	184	-	224	20.0	215.0	34	880	320
07/19/82	0.55	-	7.6	17	-	21	49.0	150.0	-	647	-
391430082284600 PUNCHEON F AT MCARTHUR OH LAT 391430 LONG 0822846 (MX)											
09/18/80	1.00	330	6.1	26	-	32	7.0	107.0	100	194	200
08/26/81	0.00	-	-	-	-	-	-	-	-	-	-
07/19/82	0.18	-	6.8	41	-	50	11.0	86.0	-	220	-
391435082281800 PUNCHEON F AT MCARTHUR OH LAT 391435 LONG 0822818 (MX)											
09/10/79	1.60	-	6.8	39	20	48	-	110.0	-	-	-
08/29/80	3.70	-	7.2	34	-	42	-	81.0	-	-	-
391552082171900 RACCOON C NR MINERAL OH LAT 391552 LONG 0821719 (MX)											
09/19/80	36.00	375	5.3	3	17	4	23.0	181.0	100	322	560
09/07/82	2.00	-	4.4	0	14	0	25.0	300.0	100	483	6200

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
391009082053600	W B SHADE R NR BURLINGHAM OH						LAT 391009 LONG 0820536 (MX)				
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	75	41	128	-	3115	4077	-	10	-	-	10
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391016082025100	W B SHADE R NR BURLINGHAM OH						LAT 391016 LONG 0820251 (MX)				
07/02/75	1200	-	1800	-	-	6600	-	-	100	-	-
391148081583000	PRATT F M B SHADE R NR SHADE OH						LAT 391148 LONG 0815830 (MX)				
09/27/79	-	30	730	13000	130	150	350	-	-	30	-
391241082425300	M F SALT C NR RICHMOND DALE OH						LAT 391241 LONG 0824253 (MX)				
09/10/79	-	390	1400	3400	250	250	180	-	-	10	-
391403082261600	ELK F NR MCARTHUR OH						LAT 391403 LONG 0822616 (MX)				
09/18/80	840	320	1990	-	2450	2490	-	30	-	-	10
08/26/81	812	1993	2350	-	3077	3144	-	174	-	-	10
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391416082255500	UNAM TR TO ELK F NR PRATTSVILLE OH						LAT 391416 LONG 0822555 (MX)				
09/02/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	251	143	483	-	1078	1401	-	10	-	-	10
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391430082284600	PUNCHEON F AT MCARTHUR OH						LAT 391430 LONG 0822846 (MX)				
09/18/80	580	380	1600	-	2040	2060	-	30	-	-	10
08/26/81	-	-	-	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391435082281800	PUNCHEON F AT MCARTHUR OH						LAT 391435 LONG 0822818 (MX)				
09/10/79	-	150	2600	59000	1900	1900	450	-	-	60	-
08/29/80	-	60	1300	5900	1200	1200	200	-	-	27	-
391552082171900	RACCOON C NR MINERAL OH						LAT 391552 LONG 0821719 (MX)				
09/19/80	860	65	290	-	4100	4100	-	30	-	-	10
09/07/82	6200	160	280	-	4400	4400	-	140	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
391009082053600	W B SHADE R NR BURLINGHAM OH					LAT 391009 LONG 0820536 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391016082025100	W B SHADE R NR BURLINGHAM OH					LAT 391016 LONG 0820251 (MX)					
07/02/75	1	-	-	0.5	-	20	-	20	-	-	-
391148081583000	PRATT F M B SHADE R NR SHADE OH					LAT 391148 LONG 0815830 (MX)					
09/27/79	-	0	-	-	0.00	-	10	-	10	10	10
391241082425300	M F SALT C NR RICHMOND DALE OH					LAT 391241 LONG 0824253 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
391403082261600	ELK F NR MCARTHUR OH					LAT 391403 LONG 0822616 (MX)					
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391416082255500	UNAM TR TO ELK F NR PRATTSVILLE OH					LAT 391416 LONG 0822555 (MX)					
09/02/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391430082284600	PUNCHEON F AT MCARTHUR OH					LAT 391430 LONG 0822846 (MX)					
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	-	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391435082281800	PUNCHEON F AT MCARTHUR OH					LAT 391435 LONG 0822818 (MX)					
09/10/79	-	0	-	-	0.00	-	20	-	10	10	20
08/29/80	-	0	-	-	0.00	-	10	-	10	10	10
391552082171900	RACCOON C NR MINERAL OH					LAT 391552 LONG 0821719 (MX)					
09/19/80	-	-	0.5	-	-	-	-	-	-	-	-
09/07/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

391604082022300 LONG RN NR ATHENS OH LAT 391604 LONG 0820223 (MX)											

09/13/79	2.10	-	7.6	120	-	150	-	220.0	-	-	-
08/25/80	3.20	-	7.7	117	-	143	-	180.0	-	-	-
07/16/81	2.40	-	7.6	107	-	130	-	160.0	-	-	-

391637082291400 ELK F NR MCARTHUR OH LAT 391637 LONG 0822914 (MX)											

09/02/80	9.90	200	6.4	26	10	32	-	-	-	-	-
08/26/81	-	910	5.8	8	10	10	353.0	30.0	20	945	75
07/13/82	3.80	-	6.9	26	-	32	9.7	31.0	-	130	-

391642082232700 RACCOON C NR ZALESKI OH LAT 391642 LONG 0822327 (MX)											

09/25/80	15.00	720	4.6	-	50	-	54.0	275.0	100	484	4530
07/16/81	16.00	6400	4.6	-	50	-	13.0	315.0	245	435	4156
07/13/82	57.00	-	5.3	2	20	2	34.0	130.0	100	298	400

391743082100100 W B MARGARET C NR NEW MARSHFIELD OH LAT 391743 LONG 0821001 (MX)											

09/12/79	0.79	-	7.2	72	-	88	-	29.0	-	-	-

391830082262300 BRUSHY C NR CREOLA OH LAT 391830 LONG 0822623 (MX)											

09/18/80	5.90	1100	4.8	2	22	2	235.0	129.0	100	614	1590
08/26/81	0.13	1900	3.5	-	161	-	315.0	410.0	20	1427	12070
07/19/82	5.30	-	3.5	0	65	0	95.0	160.0	100	416	4700

391901082210400 RACCOON C NR ZALESKI OH LAT 391901 LONG 0822104 (MX)											

09/18/80	28.00	620	4.9	3	31	4	30.0	245.0	120	408	2760
09/02/81	3.20	830	5.2	10	79	12	57.0	300.0	20	580	4370
07/20/82	23.00	-	4.8	0	20	0	55.0	150.0	100	375	1000

391903082164200 HEWETT F NR ALBANY OH LAT 391903 LONG 0821642 (MX)											

09/13/79	4.80	-	3.5	1	174	0	-	370.0	-	-	-

391913082250500 RACCOON C NR ZALESKI OH LAT 391913 LONG 0822505 (MX)											

09/18/80	14.80	760	4.3	-	70	-	30.0	310.0	150	515	6000
08/26/81	0.14	1350	4.1	-	79	-	99.0	400.0	20	990	6069
07/19/82	14.00	-	3.1	0	25	0	41.0	190.0	100	432	1500

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)

391604082022300 LONG RN NR ATHENS OH LAT 391604 LONG 0820223 (MX)										

09/13/79	-	60	190	31000	60	60	1200	-	-	60
08/25/80	-	10	230	12000	110	110	990	-	-	32
07/16/81	-	90	230	10000	120	120	2800	-	-	92

391637082291400 ELK F NR MCARTHUR OH LAT 391637 LONG 0822914 (MX)										

09/02/80	-	-	-	-	-	-	-	-	-	-
08/26/81	458	460	526	-	514	527	-	16	-	10
07/13/82	-	-	-	-	-	-	-	-	-	-

391642082232700 RACCOON C NR ZALESKI OH LAT 391642 LONG 0822327 (MX)										

09/25/80	4550	200	290	-	7000	7200	-	120	-	14
07/16/81	5475	314	566	-	5257	6843	-	185	-	10
07/13/82	500	940	1200	-	2700	2700	-	62	-	-

391743082100100 W B MARGARET C NR NEW MARSHFIELD OH LAT 391743 LONG 0821001 (MX)										

09/12/79	-	290	720	58000	160	210	3100	-	-	110

391830082262300 BRUSHY C NR CREDLA OH LAT 391830 LONG 0822623 (MX)										

09/18/80	1720	1000	1450	-	3650	3650	-	30	-	10
08/26/81	13300	2873	3263	-	8231	8563	-	561	-	10
07/19/82	5300	960	3000	-	2800	2900	-	140	-	-

391901082210400 RACCOON C NR ZALESKI OH LAT 391901 LONG 0822104 (MX)										

09/18/80	2840	150	360	-	6000	6000	-	130	-	12
09/02/81	4577	217	528	-	7278	7030	-	189	-	10
07/20/82	1300	30	490	-	3600	3900	-	70	-	-

391903082164200 HEWETT F NR ALBANY OH LAT 391903 LONG 0821642 (MX)										

09/13/79	-	1100	1700	48000	3800	3800	70	-	-	20

391913082250500 RACCOON C NR ZALESKI OH LAT 391913 LONG 0822505 (MX)										

09/18/80	6900	240	520	-	7600	7700	-	170	-	10
08/26/81	6843	510	928	-	7769	8036	-	236	-	10
07/19/82	1700	140	560	-	4600	4800	-	98	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM 4A- TERIAL (UG/G)
391604082022300	LONG RN NR ATHENS OH				LAT 391604 LONG 0820223 (MX)						
09/13/79	-	0	-	-	0.00	-	20	-	30	10	20
08/25/80	-	0	-	-	0.00	-	10	-	10	10	10
07/16/81	-	5	-	-	0.00	-	12	-	10	4	40
391637082291400	ELK F NR MCARTHUR OH				LAT 391637 LONG 0822914 (MX)						
09/02/80	-	-	-	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-
391642082232700	RACCOON C NR ZALESKI OH				LAT 391642 LONG 0822327 (MX)						
09/25/80	-	-	0.5	-	-	-	-	-	-	-	-
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-
391743082100100	W B MARGARET C NR NEW MARSHFIELD OH				LAT 391743 LONG 0821001 (MX)						
09/12/79	-	0	-	-	0.00	-	20	-	30	10	50
391830082262300	HRUSHY C NR CREOLA OH				LAT 391830 LONG 0822623 (MX)						
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
391901082210400	RACCOON C NR ZALESKI OH				LAT 391901 LONG 0822104 (MX)						
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
09/02/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
391903082164200	HEWETT F NR ALBANY OH				LAT 391903 LONG 0821642 (MX)						
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
391913082250500	RACCOON C NR ZALESKI OH				LAT 391913 LONG 0822505 (MX)						
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLU (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
391915082274600 BRUSHY F NR CREOLA OH LAT 391915 LONG 0822746 (MX)											
09/13/79	2.40	-	3.6	1	79	0	-	180.0	-	-	-
08/06/80	12.00	-	4.3	0	45	0	-	130.0	-	-	-
07/30/81	0.24	-	3.3	0	258	0	-	510.0	-	-	-
391950082390200 PRETTY RN NR LONDONJERRY OH LAT 391950 LONG 0823902 (MX)											
09/10/79	3.10	-	7.2	20	-	24	-	24.0	-	-	-
391951032082400 FACTORY C NR THE PLAINS OH LAT 391951 LONG 0820824 (MX)											
09/12/79	0.41	-	7.1	89	-	108	-	55.0	-	-	-
392155082183300 SANDY RN AB LAKE HOPE OH LAT 392155 LONG 0821833 (MX)											
07/23/75	0.05	-	5.3	2	-	3	22.0	200.0	-	-	-
392201081524600 FEDERAL C AT BROADWELL OH LAT 392201 LONG 0815246 (MX)											
07/16/81	20.00	715	6.9	157	-	192	14.0	165.0	20	474	345
07/15/82	14.00	-	7.6	154	-	200	33.0	120.0	-	459	-
392205081524800 MARIETTA RN NR STEWART OH LAT 392205 LONG 0815248 (MX)											
09/11/79	1.60	-	7.7	160	-	198	-	130.0	-	-	-
392215082160800 HEWETT F NR MINERAL OH LAT 392216 LONG 0821608 (MX)											
09/18/80	4.10	960	3.5	-	139	-	5.0	410.0	100	503	11300
09/02/81	1.40	1800	3.1	-	492	-	4.5	890.0	20	1395	29560
07/20/82	7.60	-	3.5	0	70	0	4.8	310.0	100	554	4800
392240082275000 BRUSHY F NR MT PLEASANT OH LAT 392240 LONG 0822750 (MX)											
09/25/80	0.27	275	6.5	5	-	6	5.0	100.0	100	151	210
09/25/80	-	-	-	-	-	-	5.0	99.0	100	186	200
08/26/81	0.00	-	-	-	-	-	-	-	-	-	-
07/27/82	0.11	-	6.3	7	5	8	5.0	85.0	-	191	-
392241082275200 BRUSHY F NR MT PLEASANT OH LAT 392241 LONG 0822752 (MX)											
07/23/75	0.20	-	4.7	1	-	1	15.0	120.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
391915082274600	BRUSHY F NR CREOLA OH							LAT 391915 LONG 0822746 (MX)			
09/13/79	-	1800	8900	37000	4400	4500	120	-	-	30	-
08/06/80	-	2600	4400	36000	3100	3100	1900	-	-	62	-
07/30/81	-	20000	20000	14000	1500	12000	59	-	-	30	-
391950082390200	PRETTY RN NR LONDONDERRY OH							LAT 391950 LONG 0823902 (MX)			
09/10/79	-	50	160	-	20	20	-	-	-	-	-
391951082082400	FACTORY C NR THE PLAINS OH							LAT 391951 LONG 0820824 (MX)			
09/12/79	-	140	340	29000	100	120	720	-	-	40	-
392155082183300	SANDY RN AB LAKE HOPE OH							LAT 392155 LONG 0821833 (MX)			
07/23/75	3000	-	32000	-	-	2600	-	-	130	-	-
392201081524600	FEDERAL C AT BROADWELL OH							LAT 392201 LONG 0815246 (MX)			
07/16/81	372	458	999	-	380	414	-	10	-	-	10
07/15/82	-	-	-	-	-	-	-	-	-	-	-
392205081524800	MARIETTA RN NR STEWART OH							LAT 392205 LONG 0815248 (MX)			
09/11/79	-	30	1600	13000	1600	1800	400	-	-	30	-
392216082160800	HEWETT F NR MINERAL OH							LAT 392216 LONG 0821608 (MX)			
09/18/80	11200	10400	14700	-	3500	3400	-	120	-	-	10
09/02/81	31810	19180	20600	-	4480	4786	-	535	-	-	10
07/20/82	4800	3900	4900	-	3000	3200	-	140	-	-	-
392240082275000	BRUSHY F NR MT PLEASANT OH							LAT 392240 LONG 0822750 (MX)			
09/25/80	740	170	440	-	4100	4100	-	30	-	-	10
09/25/80	390	30	200	-	30	4600	-	30	-	-	10
08/26/81	-	-	-	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
392241082275200	BRUSHY F NR MT PLEASANT OH							LAT 392241 LONG 0822752 (MX)			
07/23/75	1500	-	3100	-	-	4800	-	-	150	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
391915082274600	BRUSHY F NR CREOLA OH					LAT 391915 LONG 0822746 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
08/06/80	-	0	-	-	0.00	-	20	-	10	10	20
07/30/81	-	4	-	-	0.01	-	8	-	10	2	20
391950082390200	PRETTY RN NR LONDON DERRY OH					LAT 391950 LONG 0823902 (MX)					
09/10/79	-	-	-	-	-	-	-	-	-	-	-
391951082082400	FACTORY C NR THE PLAINS OH					LAT 391951 LONG 0820824 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	20	10	10
392155082183300	SANDY RN AB LAKE HOPE OH					LAT 392155 LONG 0821833 (MX)					
07/23/75	1	-	-	0.5	-	20	-	20	-	-	-
392201081524600	FEDERAL C AT BROADWELL OH					LAT 392201 LONG 0815246 (MX)					
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
07/15/82	-	-	-	-	-	-	-	-	-	-	-
392205081524800	MARIETTA RN NR STEWART OH					LAT 392205 LONG 0815248 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
392216082160800	HEWETT F NR MINERAL OH					LAT 392216 LONG 0821608 (MX)					
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
09/02/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
392240082275000	BRUSHY F NR MT PLEASANT OH					LAT 392240 LONG 0822750 (MX)					
09/25/80	-	-	0.5	-	-	-	-	-	-	-	-
09/25/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	-	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
392241082275200	BRUSHY F NR MT PLEASANT OH					LAT 392241 LONG 0822752 (MX)					
07/23/75	1	-	-	0.5	-	30	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
392248082235200	RACCOON C NR NEW PLYMOUTH OH										LAT 392248 LONG 0822352 (MX)
07/23/75	20.00	-	3.5	1	25	0	22.0	270.0	-	-	-
392257082253800	RED RV NR ORLAND OH										LAT 392257 LONG 0822538 (MX)
07/23/75	0.05	-	2.8	1	497	0	20.0	530.0	-	-	-
392325082150300	HEWETT F NR KIMBERLY OH										LAT 392325 LONG 0821503 (MX)
09/18/80	2.40	550	4.4	-	31	-	5.0	230.0	100	369	1710
09/02/81	0.57	850	4.5	-	74	-	2.5	405.0	20	630	3994
07/20/82	4.00	-	4.5	0	15	0	3.2	170.0	100	359	300
392342082072000	SUNDAY C AT CHAUNCEY OH										LAT 392342 LONG 0820720 (MX)
08/28/80	105.00	325	7.2	52	-	63	-	-	-	-	-
392348082220200	E B RACCOON C NR NEW PLYMOUTH OH										LAT 392348 LONG 0822202 (MX)
09/13/79	6.30	-	-	-	-	-	-	-	-	-	-
09/25/79	16.00	-	3.6	1	139	0	-	400.0	-	-	-
08/06/80	9.30	-	3.6	0	134	0	-	440.0	-	-	-
07/30/81	2.40	-	3.6	0	308	0	-	950.0	-	-	-
392349082214000	E B RACCOON C AT STARR OH										LAT 392349 LONG 0822140 (MX)
09/05/80	10.90	1000	3.6	-	164	-	-	-	-	-	-
08/26/81	0.08	1650	3.7	-	211	-	3.7	860.0	20	1425	23450
07/21/82	5.60	-	3.4	0	169	0	13.0	830.0	400	1280	18000
392350082255200	HONEY F NR NEW PLYMOUTH OH										LAT 392350 LONG 0822552 (MX)
09/13/79	1.60	-	7.5	39	-	48	-	45.0	-	-	-
392359081522800	FEDERAL C AT AMESVILLE OH										LAT 392359 LONG 0815228 (MX)
08/06/75	10.00	-	6.7	90	-	110	20.0	75.0	-	-	-
12/04/75	9.00	-	6.9	158	-	192	14.0	110.0	-	-	-
392407081554700	SHARPS F NR AMESVILLE OH										LAT 392407 LONG 0815547 (MX)
07/16/81	7.40	795	7.3	177	-	216	13.0	260.0	20	568	332
07/15/82	5.30	-	7.9	172	-	210	24.0	150.0	-	459	-
08/06/75	9.00	-	7.0	87	-	106	14.0	100.0	-	-	-
12/04/75	7.00	-	7.1	171	-	208	24.0	150.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIA_ (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
392248082235200	RACCOON C NR NEW PLYMOUTH OH						LAT 392248 LONG 0822352 (MX)				
07/23/75	10000	-	2300	-	-	9700	-	-	300	-	-
392257082253800	RED RN NR ORLAND OH						LAT 392257 LONG 0822538 (MX)				
07/23/75	35000	-	58000	-	-	7300	-	-	310	-	-
392325082150300	HEWETT F NR KIMBERLY OH						LAT 392325 LONG 0821503 (MX)				
09/18/80	1730	400	480	-	2540	2530	-	30	-	-	10
09/02/81	4188	308	391	-	2782	2911	-	146	-	-	10
07/20/82	900	74	460	-	2600	2700	-	80	-	-	-
392342082072000	SUNDAY C AT CHAUNCEY OH						LAT 392342 LONG 0820720 (MX)				
08/28/80	-	-	-	-	-	-	-	-	-	-	-
392348082220200	E B RACCOON C NR NEW PLYMOUTH OH						LAT 392348 LONG 0822202 (MX)				
09/13/79	-	-	-	-	-	-	-	-	-	-	-
09/25/79	-	3300	4000	57000	1000	9300	150	-	-	40	-
08/06/80	-	2100	2600	45000	10000	10000	120	-	-	29	-
07/30/81	-	9800	9800	29000	22000	22000	130	-	-	30	-
392349082214000	E B RACCOON C AT STARR OH						LAT 392349 LONG 0822140 (MX)				
09/05/80	-	-	-	-	-	-	-	-	-	-	-
08/26/81	24380	1706	1842	-	-	15430	-	584	-	-	10
07/21/82	24000	1300	2000	-	20000	21000	-	570	-	-	-
392350082255200	HONEY F NR NEW PLYMOUTH OH						LAT 392350 LONG 0822552 (MX)				
09/13/79	-	90	1700	22000	40	320	910	-	-	50	-
392359081522800	FEDERAL C AT AMESVILLE OH						LAT 392359 LONG 0815228 (MX)				
08/06/75	3900	-	6300	-	-	250	-	-	30	-	-
12/04/75	180	-	360	-	-	120	-	-	20	-	-
392407081554700	SHARPS F NR AMESVILLE OH						LAT 392407 LONG 0815547 (MX)				
07/16/81	150	90	548	-	242	291	-	10	-	-	10
07/15/82	-	-	-	-	-	-	-	-	-	-	-
08/06/75	4400	-	6000	-	-	420	-	-	30	-	-
12/04/75	780	-	1700	-	-	840	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
392248082235200	RACCOON C NR NEW PLYMOUTH OH					LAT 392248 LONG 0822352 (MX)					
07/23/75	1	-	-	0.5	-	20	-	20	-	-	-
392257082253800	RED RN NR ORLAND OH					LAT 392257 LONG 0822538 (MX)					
07/23/75	1	-	-	0.5	-	30	-	20	-	-	-
392325082150300	HEWETT F NR KIMBERLY OH					LAT 392325 LONG 0821503 (MX)					
09/18/80	-	-	0.5	-	-	-	-	-	-	-	-
09/02/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
392342082072000	SUNDAY C AT CHAUNCEY OH					LAT 392342 LONG 0820720 (MX)					
08/28/80	-	-	-	-	-	-	-	-	-	-	-
392348082220200	E B RACCOON C NR NEW PLYMOUTH OH					LAT 392348 LONG 0822202 (MX)					
09/13/79	-	-	-	-	-	-	-	-	-	-	-
09/25/79	-	0	-	-	0.00	-	20	-	10	10	10
08/06/80	-	0	-	-	0.00	-	10	-	10	10	10
07/30/81	-	3	-	-	0.01	-	13	-	10	2	20
392349082214000	E B RACCOON C AT STARR OH					LAT 392349 LONG 0822140 (MX)					
09/05/80	-	-	-	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
392350082255200	HONEY F NR NEW PLYMOUTH OH					LAT 392350 LONG 0822552 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	20	10	20
392359081522800	FEDERAL C AT AMESVILLE OH					LAT 392359 LONG 0815228 (MX)					
08/06/75	3	-	-	0.5	-	20	-	20	-	-	-
12/04/75	1	-	-	0.5	-	20	-	20	-	-	-
392407081554700	SHARPS F NR AMESVILLE OH					LAT 392407 LONG 0815547 (MX)					
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
07/15/82	-	-	-	-	-	-	-	-	-	-	-
08/06/75	3	-	-	0.5	-	20	-	20	-	-	-
12/04/75	1	-	-	0.5	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS VI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

392427082200300 E B RACCOON C NR STARR OH LAT 392427 LONG 0822003 (MX)											

09/05/80	7.60	1200	3.6	-	199	-	-	-	-	-	-
07/15/81	2.90	1300	3.8	-	214	-	4.5	780.0	307	1148	21250
07/21/82	1.70	-	3.4	0	214	0	14.0	640.0	300	1030	14000

392535081251800 DUCK C AT MARIETTA OH LAT 392535 LONG 0812518 (MX)											

10/21/80	60.00	995	7.4	130	-	158	50.0	370.0	100	743	200
08/12/81	5.00	770	7.4	104	-	127	7.5	325.0	20	568	220
07/23/82	47.00	-	7.6	56	-	68	10.0	280.0	-	525	-

392548082071000 CARR BAILEY RV NR MORRISTOWN OH LAT 392548 LONG 0820710 (MX)											

05/22/75	1.00	-	6.5	48	-	58	5.0	120.0	-	-	-
09/17/75	0.30	-	5.2	11	-	14	10.0	280.0	-	-	-

392555082053200 SUNDAY C AT MILLFIELD OH LAT 392555 LONG 0820532 (MX)											

05/22/75	80.00	-	5.2	7	-	8	20.0	260.0	-	-	-
09/17/75	40.00	-	4.8	3	-	4	25.0	530.0	-	-	-

392606082112800 MONDAY C AT DOANVILLE OH LAT 392606 LONG 0821128 (MX)											

08/28/81	8.10	1600	3.3	-	204	-	37.0	740.0	20	1175	17280
07/20/82	33.00	-	3.2	0	94	0	60.0	430.0	200	734	8400

392611081544600 OPOSSUM RV NR AMESVILLE OH LAT 392611 LONG 0815446 (MX)											

09/10/79	2.10	-	7.7	220	-	264	-	110.0	-	-	-

392612081545700 SHARPS F AT SHARPSBURG OH LAT 392612 LONG 0815457 (MX)											

09/03/80	6.30	670	7.2	180	12	220	-	-	-	-	-
07/15/81	3.50	700	6.8	149	-	182	7.5	235.0	34	508	269
07/15/82	3.90	-	7.8	172	-	210	12.0	110.0	-	423	-

392623082354900 PINE C NR S BLOOMINGVILLE OH LAT 392623 LONG 0823549 (MX)											

09/25/79	21.00	-	7.0	20	-	24	-	30.0	-	-	-

392710081592600 MINERS F NR AMESVILLE OH LAT 392710 LONG 0815926 (MX)											

09/10/79	0.56	-	7.4	100	-	124	-	180.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIA- (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
392427082200300	E 3 RACCOON C NR STARR OH							LAT 392427 LONG 0822003 (MX)			
09/05/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	23420	1492	1677	-	16190	19470	-	520	-	-	10
07/21/82	18000	2800	3400	-	13000	13000	-	460	-	-	-
392535081251800	DUCK C AT MARIETTA OH							LAT 392535 LONG 0812518 (MX)			
10/21/80	750	50	590	-	380	430	-	30	-	-	10
08/12/81	529	486	437	-	160	263	-	34	-	-	10
07/23/82	-	-	-	-	-	-	-	-	-	-	-
392548082071000	CARR BAILEY RN NR MORRISTOWN OH							LAT 392548 LONG 0820710 (MX)			
05/22/75	1700	-	310	-	-	1100	-	-	30	-	-
09/17/75	2000	-	480	-	-	3100	-	-	50	-	-
392555082053200	SUNDAY C AT MILLFIELD OH							LAT 392555 LONG 0820532 (MX)			
05/22/75	560	-	34000	-	-	1800	-	-	270	-	-
09/17/75	2000	-	87000	-	-	4200	-	-	170	-	-
392606082112800	MONDAY C AT DOANVILLE OH							LAT 392606 LONG 0821128 (MX)			
08/28/81	17550	6355	6395	-	4137	4356	-	413	-	-	10
07/20/82	8600	1700	2600	-	3600	3900	-	210	-	-	-
392611081544600	OPOSSUM RN NR AMESVILLE OH							LAT 392611 LONG 0815446 (MX)			
09/10/79	-	50	260	15000	270	290	930	-	-	90	-
392612081545700	SHARPS F AT SHARPSBURG OH							LAT 392612 LONG 0815457 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	246	69	635	-	269	423	-	10	-	-	10
07/15/82	-	-	-	-	-	-	-	-	-	-	-
392623082354900	PIVE C NR S BLOOMINGVILLE OH							LAT 392623 LONG 0823549 (MX)			
09/25/79	-	210	600	2500	140	180	160	-	-	10	-
392710081592600	MINERS F NR AMESVILLE OH							LAT 392710 LONG 0815926 (MX)			
09/10/79	-	60	100	23000	50	50	2900	-	-	120	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
392427082200300	E B RACCOON C NR STARR OH					LAT 392427 LONG 0822003 (MX)					
09/05/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
392535081251800	DUCK C AT MARIETTA OH					LAT 392535 LONG 0812518 (MX)					
10/21/80	-	-	0.5	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/23/82	-	-	-	-	-	-	-	-	-	-	-
392548082071000	CARR BAILEY RN NR MORRISTOWN OH					LAT 392548 LONG 0820710 (MX)					
05/22/75	1	-	-	0.5	-	20	-	20	-	-	-
09/17/75	1	-	-	0.5	-	0	-	0	-	-	-
392555082053200	SUNDAY C AT MILLFIELD OH					LAT 392555 LONG 0820532 (MX)					
05/22/75	1	-	-	0.5	-	200	-	40	-	-	-
09/17/75	3	-	-	0.5	-	30	-	0	-	-	-
392606082112800	MONDAY C AT DOANVILLE OH					LAT 392606 LONG 0821128 (MX)					
08/28/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
392611081544600	OPOSSUM RN NR AMESVILLE OH					LAT 392611 LONG 0815446 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
392612081545700	SHARPS F AT SHARPSBURG OH					LAT 392612 LONG 0815457 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/15/82	-	-	-	-	-	-	-	-	-	-	-
392623082354900	PINE C NR S BLOOMINGVILLE OH					LAT 392623 LONG 0823549 (MX)					
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10
392710081592600	MINERS F NR AMESVILLE OH					LAT 392710 LONG 0815926 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	110	10	20

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
392733082120700 MONDAY C NR BUCHTEL OH LAT 392733 LONG 0821207 (MX)											
08/28/81	2.00	1250	4.1	-	45	-	88.0	500.0	20	927	4199
07/20/82	17.00	-	4.1	0	40	0	90.0	350.0	100	711	3300
392802081562100 SHARPS F NR SHARPSBURG OH LAT 392802 LONG 0815621 (MX)											
09/03/80	2.80	430	7.7	200	5	244	-	-	-	-	-
07/15/81	1.40	410	6.9	176	-	214	7.8	54.0	21	276	202
07/14/82	3.00	-	7.8	180	-	220	5.9	37.0	-	280	-
392826081185300 MOSS RN TR AT MOSS RUN OH LAT 392826 LONG 0811853 (MX)											
06/12/75	0.20	-	7.2	71	-	86	10.0	65.0	-	-	-
11/19/75	0.40	-	6.9	57	-	70	5.0	69.0	-	-	-
392845081191000 MOSS RN NR MOSS RUN OH LAT 392845 LONG 0811910 (MX)											
06/12/75	0.30	-	7.0	82	-	100	5.0	120.0	-	-	-
11/19/75	0.45	-	6.7	45	-	55	8.0	160.0	-	-	-
392853081594300 MINERS F NR SHARPSBURG OH LAT 392853 LONG 0815943 (MX)											
09/03/80	0.94	575	7.3	102	-	124	-	-	-	-	-
07/15/81	0.73	590	6.6	89	-	108	4.5	260.0	20	470	195
07/14/82	0.78	-	7.4	98	-	120	3.1	160.0	-	375	-
392909081593500 MINERS F NR SHARPSBURG OH LAT 392909 LONG 0815936 (MX)											
09/03/80	0.61	620	7.6	96	-	117	-	-	-	-	-
07/14/81	1.40	535	6.7	98	-	119	5.5	190.0	20	426	223
07/14/82	0.52	-	7.7	123	-	150	2.7	140.0	-	390	-
393004082052300 MUD F AT GLOUSTER OH LAT 393004 LONG 0820523 (MX)											
08/28/80	6.20	2350	5.8	54	695	66	-	-	-	-	-
08/27/81	1.60	5400	4.3	-	1710	-	140.0	4250.0	23	6692	16870
07/29/82	1.60	-	4.5	0	1590	0	25.0	4100.0	600	4620	21000
393006082052700 MUD F AT GLOUSTER OH LAT 393006 LONG 0820527 (MX)											
05/15/75	5.00	-	5.8	25	-	30	5.0	990.0	-	-	-
09/16/75	4.00	-	4.7	3	-	4	20.0	4700.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
392733082120700	MONDAY C NR BJCHTEL OH							LAT 392733 LONG 0821207 (MX)			
08/28/81	4693	500	1053	-	3134	3601	-	183	-	-	10
07/20/82	3500	270	1000	-	3500	3900	-	150	-	-	-
392802081562100	SHARPS F NR SHARPSBURG OH							LAT 392802 LONG 0815621 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	278	22	476	-	30	72	-	10	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
392826081185300	MOSS RN TR AT MOSS RUN OH							LAT 392826 LONG 0811853 (MX)			
06/12/75	950	-	520	-	-	270	-	-	20	-	-
11/19/75	1000	-	380	-	-	280	-	-	50	-	-
392845081191000	MOSS RN NR MOSS RUN OH							LAT 392845 LONG 0811910 (MX)			
06/12/75	3800	-	4500	-	-	2400	-	-	50	-	-
11/19/75	1300	-	1200	-	-	380	-	-	40	-	-
392853081594300	MINERS F NR SHARPSBURG OH							LAT 392853 LONG 0815943 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	150	18	99	-	84	98	-	10	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
392909081593600	MINERS F NR SHARPSBURG OH							LAT 392909 LONG 0815936 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/14/81	282	15	334	-	289	404	-	10	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393004082052300	MUD F AT GLOUSTER OH							LAT 393004 LONG 0820523 (MX)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/27/81	17690	927000	960000	-	15210	15810	-	868	-	-	10
07/29/82	26000	1000	710000	-	18000	18000	-	820	-	-	-
393006082052700	MUD F AT GLOUSTER OH							LAT 393006 LONG 0820527 (MX)			
05/15/75	13000	-	430000	-	-	10000	-	-	520	-	-
09/16/75	23000	-	700000	-	-	15000	-	-	810	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
392733082120700	MONDAY C NR BUCHTEL OH					LAT 392733 LONG 0821207 (MX)					
08/28/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
392802081562100	SHARPS F NR SHARPSBURG OH					LAT 392802 LONG 0815621 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
392826081185300	MOSS RN TR AT MOSS RUN OH					LAT 392826 LONG 0811853 (MX)					
06/12/75	1	-	-	0.5	-	20	-	20	-	-	-
11/19/75	1	-	-	0.5	-	0	-	0	-	-	-
392845081191000	MOSS RN NR MOSS RUN OH					LAT 392845 LONG 0811910 (MX)					
06/12/75	1	-	-	0.5	-	20	-	30	-	-	-
11/19/75	1	-	-	0.5	-	0	-	0	-	-	-
392853081594300	MINERS F NR SHARPSBURG OH					LAT 392853 LONG 0815943 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/15/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
392909081593600	MINERS F NR SHARPSBURG OH					LAT 392909 LONG 0815936 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/14/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393004082052300	MUD F AT GLOUSTER OH					LAT 393004 LONG 0820523 (MX)					
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-
393006082052700	MUD F AT GLOUSTER OH					LAT 393006 LONG 0820527 (MX)					
05/15/75	20	-	-	0.5	-	20	-	440	-	-	-
09/16/75	29	-	-	0.5	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MH/S)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLO (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
393051082095500 SNOW F AT MURRAY CITY OH LAT 393051 LONG 0820955 (MX)											
08/27/81	1.70	1500	3.5	-	189	-	13.1	700.0	20	1215	15490
07/21/82	4.40	-	3.7	0	119	0	5.5	100.0	200	830	13000
393052082252700 SCOTT C NR CARBON HILL OH LAT 393052 LONG 0822527 (MX)											
09/25/79	21.00	-	7.0	23	-	28	-	68.0	-	-	-
393053082095500 SNOW F STATION 3 AT MURRAY CITY OH LAT 393053 LONG 0820955 (MX)											
06/15/76	2.60	-	3.0	-	184	-	50.0	600.0	-	-	-
393109082162900 MONDAY C NR GREENDALE OH LAT 393109 LONG 0821629 (MX)											
05/06/75	60.00	-	3.8	1	50	0	68.0	270.0	-	-	-
09/16/75	50.00	-	5.4	6	-	7	270.0	220.0	-	-	-
393112081245600 WHIPPLE RN AT WHIPPLE OH LAT 393112 LONG 0812456 (MX)											
09/10/79	1.90	-	7.8	200	-	240	-	63.0	-	-	-
08/05/80	1.60	-	7.9	182	-	222	-	66.0	-	-	-
08/06/81	1.50	-	7.5	185	-	226	-	94.0	-	-	-
393122081242400 WHIPPLE RN NR WHIPPLE OH LAT 393122 LONG 0812424 (MX)											
05/29/75	1.00	-	7.7	179	-	218	11.0	60.0	-	-	-
11/19/75	3.90	-	7.8	153	-	186	12.0	71.0	-	-	-
393129081281800 BEAR C NR WHIPPLE OH LAT 393129 LONG 0812818 (MX)											
09/10/79	0.92	-	7.8	200	-	240	-	97.0	-	-	-
393211082232900 OLDTOWN C AT LOGAN OH LAT 393211 LONG 0822329 (MX)											
06/01/79	44.40	-	-	-	-	-	-	-	-	-	-
06/01/79	30.30	-	-	-	-	-	-	-	-	-	-
09/25/79	12.00	-	7.1	53	-	64	-	57.0	-	-	-
08/25/80	14.00	-	7.3	56	-	68	-	53.0	-	-	-
393226082163400 L MONDAY C NR CARBON HILL OH LAT 393226 LONG 0821634 (MX)											
06/21/79	81.26	-	-	-	-	-	-	-	-	-	-
06/22/79	59.30	-	-	-	-	-	-	-	-	-	-
09/25/79	24.00	-	7.1	56	-	68	-	150.0	-	-	-
08/25/80	30.00	-	7.6	51	-	62	-	170.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
393051082095500	SNOW F AT MURRAY CITY OH							LAT 393051 LONG 0820955 (MX)			
08/27/81	17650	13410	14610	-	5030	5202	-	352	-	-	10
07/21/82	13000	6300	8000	-	4200	4200	-	260	-	-	-
393052082252700	SCOTT C NR CARBON HILL OH							LAT 393052 LONG 0822527 (MX)			
09/25/79	-	120	570	22000	660	660	590	-	-	50	-
393053082095500	SNOW F STATION 3 AT MURRAY CITY OH							LAT 393053 LONG 0820955 (MX)			
06/15/76	-	-	9700	-	-	-	-	-	-	-	-
393109082162900	MONDAY C NR GREENDALE OH							LAT 393109 LONG 0821629 (MX)			
05/06/75	8000	-	1900	-	-	3400	-	-	170	-	-
09/16/75	3700	-	2000	-	-	4000	-	-	100	-	-
393112081245600	WHIPPLE RN AT WHIPPLE OH							LAT 393112 LONG 0812456 (MX)			
09/10/79	-	70	1100	44000	220	310	1500	-	-	80	-
08/05/80	-	30	1700	37000	190	280	1500	-	-	68	-
08/06/81	-	10	790	15000	270	340	1400	-	-	30	-
393122081242400	WHIPPLE RN NR WHIPPLE OH							LAT 393122 LONG 0812424 (MX)			
05/29/75	90	-	160	-	-	70	-	-	20	-	-
11/19/75	90	-	60	-	-	40	-	-	20	-	-
393129081281800	BEAR C NR WHIPPLE OH							LAT 393129 LONG 0812818 (MX)			
09/10/79	-	50	50	35000	10	10	1100	-	-	60	-
393211082232900	OLDTOWN C AT LOGAN OH							LAT 393211 LONG 0822329 (MX)			
06/01/79	-	-	-	-	-	-	-	-	-	-	-
06/01/79	-	-	-	-	-	-	-	-	-	-	-
09/25/79	-	60	560	14000	710	790	530	-	-	40	-
08/25/80	-	70	660	3400	710	710	260	-	-	19	-
393226082163400	L MONDAY C NR CARBON HILL OH							LAT 393226 LONG 0821634 (MX)			
06/21/79	-	-	-	-	-	-	-	-	-	-	-
06/22/79	-	-	-	-	-	-	-	-	-	-	-
09/25/79	-	60	490	17000	1700	1800	750	-	-	80	-
08/25/80	-	10	710	12000	1700	1700	830	-	-	29	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
393051082095500	SNOW F AT MURRAY CITY OH					LAT 393051 LONG 0820955 (MX)					
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
393052082252700	SCOTT C NR CARBON HILL OH					LAT 393052 LONG 0822527 (MX)					
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10
393053082095500	SNOW F STATION 3 AT MURRAY CITY OH					LAT 393053 LONG 0820955 (MX)					
06/15/76	-	-	-	-	-	-	-	-	-	-	-
393109082162900	MONDAY C NR GREENDALE OH					LAT 393109 LONG 0821629 (MX)					
05/06/75	1	-	-	0.5	-	20	-	20	-	-	-
09/16/75	1	-	-	0.5	-	0	-	20	-	-	-
393112081245600	WHIPPLE RV AT WHIPPLE OH					LAT 393112 LONG 0812456 (MX)					
09/10/79	-	0	-	-	0.00	-	20	-	30	10	20
08/05/80	-	0	-	-	0.00	-	20	-	20	10	30
08/06/81	-	5	-	-	0.01	-	10	-	10	1	20
393122081242400	WHIPPLE RV NR WHIPPLE OH					LAT 393122 LONG 0812424 (MX)					
05/29/75	32	-	-	0.5	-	20	-	20	-	-	-
11/19/75	1	-	-	0.5	-	0	-	0	-	-	-
393129081281800	BEAR C NR WHIPPLE OH					LAT 393129 LONG 0812818 (MX)					
09/10/79	-	0	-	-	0.00	-	20	-	50	10	10
393211082232900	OLDTOWN C AT LOGAN OH					LAT 393211 LONG 0822329 (MX)					
06/01/79	-	-	-	-	-	-	-	-	-	-	-
06/01/79	-	-	-	-	-	-	-	-	-	-	-
09/25/79	-	0	-	-	0.00	-	10	-	10	10	20
08/25/80	-	0	-	-	0.00	-	10	-	10	10	1400
393226082163400	L MONDAY C NR CARBON HILL OH					LAT 393226 LONG 0821634 (MX)					
06/21/79	-	-	-	-	-	-	-	-	-	-	-
06/22/79	-	-	-	-	-	-	-	-	-	-	-
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10
08/25/80	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INJM, DIS- SOLVED (US/L AS AL)
393235081225500	PAW PAW C AT LOWER SALEM OH									LAT 393235 LONG 0812255 (MX)	
09/11/79	3.10	-	7.2	120	-	150	-	69.0	-	-	-
393237082061300	JOHNSON RV NR GLOUSTER OH									LAT 393237 LONG 0820613 (MX)	
08/28/80	1.40	390	7.5	50	15	61	-	-	-	-	-
07/28/82	0.09	-	7.1	52	-	64	39.0	61.0	-	240	-
393239082113000	SNOW F STATION 2 NR MURRAY CITY OH									LAT 393239 LONG 0821130 (MX)	
06/09/76	1.90	-	3.3	-	139	-	18.0	530.0	-	-	-
393240081310500	CAT C AT LOWELL OH									LAT 393240 LONG 0813105 (MX)	
09/10/79	1.80	-	7.7	210	-	250	-	100.0	-	-	-
08/05/80	2.50	-	8.1	200	-	244	-	92.0	-	-	-
393241082034300	SUNDAY C NR OAKDALE OH									LAT 393241 LONG 0820343 (MX)	
08/29/80	10.00	730	6.6	30	36	36	-	-	-	-	-
08/05/81	3.50	1582	3.3	-	84	-	11.5	710.0	87	1022	3114
07/26/82	4.90	-	3.8	0	50	0	37.0	560.0	100	951	2200
393339081234500	E F DUCK C AT LOWER SALEM OH									LAT 393339 LONG 0812345 (MX)	
09/08/80	43.00	710	7.5	107	-	130	-	-	-	-	-
08/12/81	5.00	850	6.9	119	-	145	2.0	405.0	20	680	148
07/14/82	24.00	-	7.9	115	-	140	9.2	270.0	-	501	-
393344031243400	W F DUCK C AT WARNER OH									LAT 393344 LONG 0812434 (MX)	
08/27/80	67.00	700	7.5	126	-	154	-	-	-	-	-
08/12/81	6.50	928	7.5	108	-	132	5.0	395.0	20	723	232
07/15/82	14.00	-	8.1	139	-	170	55.0	160.0	-	533	-
393400081252100	W F DUCK C AT WARNER OH									LAT 393400 LONG 0812521 (MX)	
09/11/79	29.00	-	7.4	110	-	130	-	270.0	-	-	-
393412082015700	E 3 SUNDAY C AB BURR OAK LK OH									LAT 393412 LONG 0820157 (MX)	
05/21/75	10.00	-	6.7	72	-	88	9.0	37.0	-	-	-
09/16/75	7.00	-	6.9	80	-	98	12.0	22.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
393235081225500	PAW PAW C AT LOWER SALEM OH						LAT 393235 LONG 0812255 (MX)				
09/11/79	-	50	450	27000	110	120	820	-	-	40	-
393237082061300	JOHNSON RN NR GLOUSTER OH						LAT 393237 LONG 0820613 (MX)				
08/28/80	-	-	-	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
393239082113000	SNOW F STATION 2 NR MURRAY CITY OH						LAT 393239 LONG 0821130 (MX)				
06/09/76	-	-	4500	-	-	-	-	-	-	-	-
393240081310500	CAT C AT LOWELL OH						LAT 393240 LONG 0813105 (MX)				
09/10/79	-	60	170	48000	30	30	1800	-	-	110	-
08/05/80	-	20	450	39000	30	40	1600	-	-	69	-
393241082034300	SUNDAY C NR OAKDALE OH						LAT 393241 LONG 0820343 (MX)				
08/29/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	3365	8708	22810	-	6214	5285	-	280	-	-	10
07/26/82	2200	3100	6100	-	4700	4700	-	180	-	-	-
393339081234500	E F DUCK C AT LOWER SALEM OH						LAT 393339 LONG 0812345 (MX)				
09/08/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	366	17	210	-	751	826	-	24	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393344081243400	W F DUCK C AT WARNER OH						LAT 393344 LONG 0812434 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	384	19	227	-	532	621	-	26	-	-	10
07/15/82	-	-	-	-	-	-	-	-	-	-	-
393400081252100	W F DUCK C AT WARNER OH						LAT 393400 LONG 0812521 (MX)				
09/11/79	-	70	330	15000	1100	1200	590	-	-	50	-
393412082015700	E B SUNDAY C AB BURR OAK LK OH						LAT 393412 LONG 0820157 (MX)				
05/21/75	370	-	710	-	-	110	-	-	20	-	-
09/16/75	110	-	490	-	-	110	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
393235081225500	PAW PAW C AT LOWER SALEM OH						LAT 393235 LONG 0812255 (MX)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	30
393237082061300	JOHNSON RV NR GLOUSTER OH						LAT 393237 LONG 0820613 (MX)				
08/28/80	-	-	-	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
393239082113000	SNOW F STATION 2 NR MURRAY CITY OH						LAT 393239 LONG 0821130 (MX)				
06/09/76	-	-	-	-	-	-	-	-	-	-	-
393240081310500	CAT C AT LOWELL OH						LAT 393240 LONG 0813105 (MX)				
09/10/79	-	0	-	-	0.00	-	20	-	30	10	30
08/05/80	-	0	-	-	0.00	-	20	-	30	10	40
393241082034300	SUNDAY C NR OAKDALE OH						LAT 393241 LONG 0820343 (MX)				
08/29/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
393339081234500	E F DUCK C AT LOWER SALEM OH						LAT 393339 LONG 0812345 (MX)				
09/08/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393344081243400	W F DUCK C AT WARNER OH						LAT 393344 LONG 0812434 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/15/82	-	-	-	-	-	-	-	-	-	-	-
393400081252100	W F DUCK C AT WARNER OH						LAT 393400 LONG 0812521 (MX)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
393412082015700	E B SUNDAY C AB BURR OAK LK OH						LAT 393412 LONG 0820157 (MX)				
05/21/75	1	-	-	0.5	-	20	-	20	-	-	-
09/16/75	1	-	-	0.5	-	0	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
393413082123600	SNOW F STATION 1 NR MURRAY CITY OH					LAT 393413 LONG 0821236 (MX)					
06/08/76	0.11	-	7.6	95	-	116	10.0	52.0	-	-	-
393453082162800	MONDAY C AT OREVILLE OH					LAT 393453 LONG 0821628 (MX)					
08/27/80	32.00	870	4.7	2	70	2	-	-	-	-	-
09/01/81	2.90	1600	3.8	-	109	-	131.5	600.0	20	1155	9287
07/22/82	4.10	-	3.8	0	60	0	130.0	490.0	100	993	3500
393528081222500	E F DUCK C NR LOWER SALEM OH					LAT 393528 LONG 0812226 (MX)					
09/08/80	34.00	750	7.5	112	-	137	-	-	-	-	-
09/09/81	18.00	810	7.5	87	-	106	8.1	355.0	20	665	75
07/14/82	23.00	-	7.8	123	-	150	7.5	170.0	-	489	-
393528081251000	W F DUCK C NR ELBA OH					LAT 393528 LONG 0812510 (MX)					
08/27/80	60.00	690	7.5	128	-	156	-	-	-	-	-
08/12/81	4.80	925	7.5	115	-	140	4.0	375.0	20	698	253
07/15/82	15.00	-	7.4	123	-	150	42.0	170.0	-	544	-
393529082071500	W 3 SUNDAY C AT DRAKES OH					LAT 393529 LONG 0820715 (MX)					
09/15/75	5.00	-	4.3	1	45	0	25.0	330.0	-	-	-
393532032073200	W 3 SUNDAY C NR HEMLOCK OH					LAT 393532 LONG 0820732 (MX)					
08/29/80	12.00	840	6.6	15	22	18	-	-	-	-	-
07/14/81	6.90	560	6.1	10	15	12	13.0	370.0	77	601	242
07/19/82	5.40	-	5.1	3	10	4	50.0	420.0	100	732	700
393534082071500	NO NAME TR W 3 SUNDAY C NR CORNING OH					LAT 393534 LONG 0820715 (MX)					
09/12/79	4.70	-	6.2	10	20	12	-	290.0	-	-	-
08/25/81	0.82	-	4.5	0	18	0	-	390.0	-	-	-
393546082095600	PINE RUN AT HEMLOCK OH					LAT 393546 LONG 0820956 (MX)					
08/29/80	3.70	800	4.4	-	79	-	-	-	-	-	-
07/14/81	2.40	890	4.4	-	50	-	20.0	405.0	56	692	2615
07/19/82	1.70	-	3.7	0	84	0	75.0	420.0	100	811	4900

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
393413082123600	SNOW F STATION 1 NR MURRAY CITY OH							LAT 393413 LONG 0821236 (MX)			
06/08/76	-	-	70	-	-	-	-	-	-	-	-
393453082162800	MONDAY C AT OREVILLE OH							LAT 393453 LONG 0821628 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
09/01/81	9505	1026	2121	-	3556	3790	-	272	-	-	10
07/22/82	5700	810	1200	-	4600	4700	-	230	-	-	-
393528081222600	E F DUCK C NR LOWER SALEM OH							LAT 393528 LONG 0812226 (MX)			
09/08/80	-	-	-	-	-	-	-	-	-	-	-
09/09/81	420	50	292	-	2004	2155	-	10	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393528081251000	W F DUCK C NR ELBA OH							LAT 393528 LONG 0812510 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	531	16	508	-	353	451	-	30	-	-	10
07/15/82	-	-	-	-	-	-	-	-	-	-	-
393529082071500	W B SUNDAY C AT DRAKES OH							LAT 393529 LONG 0820715 (MX)			
09/15/75	4100	-	4400	-	-	4200	-	-	130	-	-
393532082073200	W B SUNDAY C NR HEMLOCK OH							LAT 393532 LONG 0820732 (MX)			
08/29/80	-	-	-	-	-	-	-	-	-	-	-
07/14/81	357	2280	4308	-	2118	3162	-	88	-	-	10
07/19/82	700	1000	2000	-	2000	2100	-	110	-	-	-
393534082071500	NO NAME TR W B SUNDAY C NR CORNING OH							LAT 393534 LONG 0820715 (MX)			
09/12/79	-	300	520	45000	2100	2200	2900	-	-	200	-
08/25/81	-	230	370	-	3600	3300	-	-	-	-	-
393546082095600	PIVE RUN AT HEMLOCK OH							LAT 393546 LONG 0820956 (MX)			
08/29/80	-	-	-	-	-	-	-	-	-	-	-
07/14/81	2989	5046	8055	-	3358	3771	-	129	-	-	10
07/19/82	5200	7000	9200	-	4000	4200	-	230	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
393413082123600	SNOW F STATION 1 NR MURRAY CITY OH						LAT 393413 LONG 0821236 (MX)				
06/08/76	-	-	-	-	-	-	-	-	-	-	-
393453082162800	MONDAY C AT OREVILLE OH						LAT 393453 LONG 0821628 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
09/01/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
393528081222600	E F DUCK C NR LOWER SALEM OH						LAT 393528 LONG 0812226 (MX)				
09/08/80	-	-	-	-	-	-	-	-	-	-	-
09/09/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393528081251000	W F DUCK C NR ELBA OH						LAT 393528 LONG 0812510 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/15/82	-	-	-	-	-	-	-	-	-	-	-
393529082071500	W 3 SUNDAY C AT DRAKES OH						LAT 393529 LONG 0820715 (MX)				
09/15/75	1	-	-	0.5	-	0	-	0	-	-	-
393532082073200	W 3 SUNDAY C NR HEMLOCK OH						LAT 393532 LONG 0820732 (MX)				
08/29/80	-	-	-	-	-	-	-	-	-	-	-
07/14/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
393534082071500	NO NAME TR W 3 SUNDAY C NR CORNING OH						LAT 393534 LONG 0820715 (MX)				
09/12/79	-	0	-	-	0.00	-	20	-	20	10	30
08/25/81	-	-	-	-	-	-	-	-	-	-	-
393546082095600	PINE RUN AT HEMLOCK OH						LAT 393546 LONG 0820956 (MX)				
08/29/80	-	-	-	-	-	-	-	-	-	-	-
07/14/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICHO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

393556082000000 E 3 SUNDAY C NR CORNING OH LAT 393556 LONG 0820000 (MX)											

09/12/79	0.45	-	7.3	99	-	121	-	31.0	-	-	-
08/05/80	3.10	-	7.7	84	-	102	-	39.0	-	-	-

393604081424300 MEIGS C NR NEELYSVILLE OH LAT 393604 LONG 0814243 (MX)											

09/09/80	78.00	1000	7.9	200	-	244	-	-	-	-	-

393609081094600 CLEAR F NR RINARD MILLS OH LAT 393609 LONG 0810946 (MX)											

09/12/79	11.00	-	7.7	180	-	220	-	35.0	-	-	-

393609082051900 SUNDAY C AT CORNING OH LAT 393609 LONG 0820519 (MX)											

08/29/80	7.00	1100	6.2	36	99	44	-	-	-	-	-
07/14/81	5.80	1075	6.0	23	99	28	10.0	580.0	38	878	150
07/26/82	3.00	-	5.2	10	-	12	20.0	770.0	100	1230	2100

393610082124400 SHAWNEE C AT SHAWNEE OH LAT 393610 LONG 0821244 (MX)											

08/27/80	1.40	670	7.5	71	5	87	-	-	-	-	-
08/27/81	0.20	1000	8.3	92	-	112	45.0	420.0	20	877	170
07/21/82	0.51	-	7.6	98	-	120	140.0	320.0	-	820	-

393621082102300 PINE F NR HEMLOCK OH LAT 393621 LONG 0821023 (MX)											

05/15/75	0.90	-	4.2	1	129	0	5.0	480.0	-	-	-
09/15/75	0.70	-	3.8	1	189	0	5.0	580.0	-	-	-

393622082150500 MONDAY C NR SHAWNEE OH LAT 393622 LONG 0821505 (MX)											

08/27/80	22.00	870	4.3	-	79	-	-	-	-	-	-
09/01/81	2.30	4100	3.7	-	134	-	1014.0	660.0	20	2903	10040
07/22/82	2.60	-	3.6	0	79	0	42.0	520.0	100	1050	6500

393627082145700 UNAM TR TO MONDAY C NR SHAWNEE OH LAT 393627 LONG 0821457 (MX)											

08/27/80	3.30	1200	4.9	3	50	4	-	-	-	-	-
08/26/81	0.00	-	-	-	-	-	-	-	-	-	-
07/22/82	0.22	-	5.1	1	20	1	120.0	530.0	100	1060	1200

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
393556082000000	E B SUNDAY C NR CORNING OH							LAT 393556 LONG 0820000 (MX)			
09/12/79	-	60	430	55000	180	240	2000	-	-	130	-
08/05/80	-	10	310	42000	90	90	1400	-	-	69	-
393604081424300	MEIGS C NR NEELYSVILLE OH							LAT 393604 LONG 0814243 (MX)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
393609081094600	CLEAR F NR RINARD MILLS OH							LAT 393609 LONG 0810946 (MX)			
09/12/79	-	50	270	36000	40	50	760	-	-	60	-
393609082051900	SUNDAY C AT CORNING OH							LAT 393609 LONG 0820519 (MX)			
08/29/80	-	-	-	-	-	-	-	-	-	-	-
07/14/81	1848	33250	52270	-	2339	3985	-	87	-	-	10
07/26/82	35000	93000	83000	-	5900	5900	-	250	-	-	-
393610082124400	SHAWNEE C AT SHAWNEE OH							LAT 393610 LONG 0821244 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/27/81	173	22	51	-	5	175	-	10	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-
393621082102300	PIVE F NR HEMLOCK OH							LAT 393621 LONG 0821023 (MX)			
05/15/75	10000	-	31000	-	-	2200	-	-	290	-	-
09/15/75	8600	-	30000	-	-	2600	-	-	300	-	-
393622082150500	MONDAY C NR SHAWNEE OH							LAT 393622 LONG 0821505 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
09/01/81	10510	2516	2654	-	3333	3439	-	265	-	-	10
07/22/82	6600	2400	4500	-	4300	4600	-	180	-	-	-
393627082145700	UNAM TR TO MONDAY C NR SHAWNEE OH							LAT 393627 LONG 0821457 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/26/81	-	-	-	-	-	-	-	-	-	-	-
07/22/82	1200	240	490	-	5200	5200	-	78	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
393556082000000	E B SUNDAY C NR CORNING OH						LAT 393556 LONG 0820000 (MX)				
09/12/79	-	0	-	-	0.00	-	20	-	30	10	30
08/05/80	-	0	-	-	0.00	-	20	-	10	10	40
393604081424300	MEIGS C NR NEELYVILLE OH						LAT 393604 LONG 0814243 (MX)				
09/09/80	-	-	-	-	-	-	-	-	-	-	-
393609081094500	CLEAR F NR RINARD MILLS OH						LAT 393609 LONG 0810946 (MX)				
09/12/79	-	0	-	-	0.00	-	20	-	20	10	10
393609082051900	SUNDAY C AT CORNING OH						LAT 393609 LONG 0820519 (MX)				
08/29/80	-	-	-	-	-	-	-	-	-	-	-
07/14/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
393610082124400	SHAWNEE C AT SHAWNEE OH						LAT 393610 LONG 0821244 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
393621082102300	PINE F NR HEMLOCK OH						LAT 393621 LONG 0821023 (MX)				
05/15/75	1	-	-	0.5	-	20	-	50	-	-	-
09/15/75	1	-	-	0.5	-	0	-	20	-	-	-
393622082150500	MONDAY C NR SHAWNEE OH						LAT 393622 LONG 0821505 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
09/01/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
393627082145700	UNAM TR TO MONDAY C NR SHAWNEE OH						LAT 393627 LONG 0821457 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/26/81	-	-	-	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

393646081222000 E F DUCK C NR HARRIETSVILLE OH LAT 393646 LONG 0812220 (MX)											

09/09/80	30.00	750	7.3	123	-	150	-	-	-	-	-
08/25/81	1.60	1050	6.5	90	-	110	5.0	520.0	20	948	75
07/14/82	22.00	-	7.8	131	-	160	5.9	230.0	-	504	-

393649082135300 MONDAY C NR SHAWNEE OH LAT 393649 LONG 0821353 (MX)											

08/27/80	8.40	1050	3.4	-	114	-	-	-	-	-	-
09/01/81	0.99	1550	3.8	-	283	-	149.0	570.0	20	1383	10120
07/21/82	1.30	-	3.3	0	129	0	210.0	560.0	200	1230	8400

393707081441400 FOURMILE RN NR MCCONNELSVILLE OH LAT 393707 LONG 0814414 (MX)											

09/24/79	16.00	-	8.0	250	-	308	-	38.0	-	-	-

393720081212100 M F DUCK C NR GERMANTOWN OH LAT 393720 LONG 0812121 (MX)											

09/11/79	9.20	-	5.3	6	35	7	-	590.0	-	-	-
08/28/80	14.00	-	6.8	37	10	45	-	-	-	-	-
08/06/81	12.00	-	4.8	3	30	4	-	560.0	-	-	-
08/11/81	2.10	-	4.7	-	45	-	-	740.0	-	-	-
07/14/82	3.90	-	6.6	16	-	20	-	550.0	-	-	-

393729081382200 L OLIVE GREEN C NR MCCONNELSVILLE OH LAT 393729 LONG 0813822 (MX)											

09/13/79	2.50	-	7.8	200	-	240	-	65.0	-	-	-

393739082140500 UNAM TR TO MONDAY C AT MCCUNEVILLE OH LAT 393739 LONG 0821405 (MX)											

08/27/80	3.00	920	3.7	-	94	-	-	-	-	-	-
08/06/81	1.00	1278	3.4	-	124	-	-	-	130	-	12570
07/29/82	0.13	-	3.7	0	109	0	100.0	470.0	100	872	11000

393742082135800 MONDAY C AT MCCUNEVILLE OH LAT 393742 LONG 0821358 (MX)											

08/27/80	4.10	1100	3.4	-	139	-	-	-	-	-	-
08/06/81	1.50	1669	3.0	-	214	-	19.0	670.0	208	1158	18320
07/29/82	0.60	-	3.1	0	199	0	200.0	740.0	200	1290	17000

393743082135800 MONDAY C AT MC CUNEVILLE OH LAT 393743 LONG 0821358 (MX)											

05/07/75	4.00	-	3.3	1	139	0	35.0	380.0	-	-	-
09/08/75	2.00	-	2.6	1	263	0	200.0	600.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
393646081222000	E F DUCK C NR HARRIETSVILLE OH							LAT 393646 LONG 0812220 (MX)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/25/81	322	22	221	-	3588	4810	-	75	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393649082135300	MONDAY C NR SHAWNEE OH							LAT 393649 LONG 0821353 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
09/01/81	10340	54440	54970	-	5399	5537	-	263	-	-	10
07/21/82	8500	2700	3400	-	6000	6000	-	270	-	-	-
393707081441400	FOURMILE RN NR MCCONNELSVILLE OH							LAT 393707 LONG 0814414 (MX)			
09/24/79	-	20	310	57000	10	20	2400	-	-	90	-
393720081212100	M F DUCK C NR GERMANTOWN OH							LAT 393720 LONG 0812121 (MX)			
09/11/79	-	180	2600	19000	70	6700	310	-	-	80	-
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	100	6000	10000	3300	3500	420	-	-	90	-
08/11/81	-	347	2039	-	5068	5360	-	-	-	-	-
07/14/82	-	-	-	13000	-	-	310	-	-	160	-
393729081382200	L OLIVE GREEN C NR MCCONNELSVILLE OH							LAT 393729 LONG 0813822 (MX)			
09/13/79	-	80	1000	62000	40	120	1800	-	-	70	-
393739082140600	UNAM TR TO MONDAY C AT MCCUNEVILLE OH							LAT 393739 LONG 0821406 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	12960	802	1042	-	5561	5590	-	232	-	-	10
07/29/82	11000	910	920	-	4900	4900	-	200	-	-	-
393742082135800	MONDAY C AT MCCUNEVILLE OH							LAT 393742 LONG 0821358 (MX)			
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	18960	4709	5294	-	7308	7722	-	412	-	-	10
07/29/82	17000	940	5400	-	8000	8000	-	360	-	-	-
393743082135800	MONDAY C AT MC CUNEVILLE OH							LAT 393743 LONG 0821358 (MX)			
05/07/75	11000	-	13000	-	-	5000	-	-	260	-	-
09/08/75	21000	-	11000	-	-	10000	-	-	420	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
393646081222000	E F DUCK C NR HARRIETSVILLE OH						LAT 393646 LONG 0812220 (MX)				
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393649082135300	MONDAY C NR SHAWNEE OH						LAT 393649 LONG 0821353 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
09/01/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
393707081441400	FOURMILE RN NR MCCONNELSVILLE OH						LAT 393707 LONG 0814414 (MX)				
09/24/79	-	0	-	-	0.00	-	30	-	30	10	30
393720081212100	M F DUCK C NR GERMANTOWN OH						LAT 393720 LONG 0812121 (MX)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	7	-	-	0.01	-	10	-	10	1	10
08/11/81	-	-	-	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393729081382200	L OLIVE GREEN C NR MCCONNELSVILLE OH						LAT 393729 LONG 0813822 (MX)				
09/13/79	-	0	-	-	0.00	-	20	-	40	10	30
393739082140600	UNAM TR TO MONDAY C AT MCCUNEVILLE OH						LAT 393739 LONG 0821406 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-
393742082135800	MONDAY C AT MCCUNEVILLE OH						LAT 393742 LONG 0821358 (MX)				
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-
393743082135800	MONDAY C AT MC CUNEVILLE OH						LAT 393743 LONG 0821358 (MX)				
05/07/75	1	-	-	0.5	-	20	-	20	-	-	-
09/08/75	1	-	-	0.5	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD AS (MG/L CACO3)	ACIDITY AS (MG/L CACO3)	BICAR- BONATE FET-FLD AS (MG/L HCO3)	CHLD- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
393743082183600 L MONDAY C NR MAXVILLE OH LAT 393743 LONG 0821836 (MX)											
09/01/81	0.40	1650	4.7	3	60	4	187.0	650.0	20	1380	2846
07/30/82	0.18	-	5.3	3	15	4	310.0	460.0	200	1300	800
393745082183300 L MONDAY C NR MAXVILLE OH LAT 393745 LONG 0821833 (MX)											
05/06/75	6.00	-	4.1	1	50	0	160.0	360.0	-	-	-
09/08/75	3.00	-	4.1	1	74	0	300.0	400.0	-	-	-
393754081274000 W F DUCK C AT MACKSBURG OH LAT 393754 LONG 0812740 (MX)											
09/08/80	35.00	645	7.9	182	-	1816	-	-	-	-	-
08/11/81	3.00	920	7.7	148	-	180	4.5	360.0	20	718	236
07/15/82	11.00	-	8.4	154	-	180	47.0	160.0	-	543	-
393840081360300 KEITH F NR CALDWELL OH LAT 393840 LONG 0813603 (MX)											
09/13/79	4.30	-	8.0	200	-	240	-	95.0	-	-	-
08/04/80	7.30	-	8.3	190	-	224	-	81.0	-	-	-
393841082314600 RUSH C NR SUGAR GROVE OH LAT 393841 LONG 0823146 (MX)											
07/29/75	46.00	-	6.5	61	-	74	62.0	230.0	-	-	-
10/16/75	35.00	-	6.7	95	-	116	64.0	180.0	-	-	-
393906081215800 M F DUCK C NR HARRIETSVILLE OH LAT 393906 LONG 0812158 (MX)											
08/25/81	0.32	1050	7.9	43	-	52	11.0	525.0	20	940	75
07/14/82	3.50	-	7.3	43	-	52	14.0	460.0	-	783	-
393943082080800 MOXAHALA C AT MOXAHALA OH LAT 393943 LONG 0820808 (MX)											
09/05/80	8.80	910	4.8	3	70	4	-	-	-	-	-
07/22/81	2.80	1415	4.0	-	124	-	7.0	770.0	105	1322	6389
393947081182500 E F DUCK C NR HARRIETSVILLE OH LAT 393947 LONG 0811825 (MX)											
09/09/80	18.00	590	7.8	190	-	232	-	-	-	-	-
08/11/81	4.30	650	7.2	152	-	185	5.0	235.0	20	483	186
07/21/82	9.40	-	8.1	148	-	180	8.4	170.0	-	446	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
393743082183600	L MONDAY C NR MAXVILLE OH							LAT 393743 LONG 0821836 (MX)			
09/01/81	3312	69	89	-	8514	8981	-	242	-	-	10
07/30/82	1800	210	1100	-	9300	10000	-	140	-	-	-
393745082183300	L MONDAY C NR MAXVILLE OH							LAT 393745 LONG 0821833 (MX)			
05/06/75	8700	-	1000	-	-	9000	-	-	280	-	-
09/08/75	6000	-	500	-	-	12000	-	-	260	-	-
393754081274000	W F DUCK C AT MACKS3URG OH							LAT 393754 LONG 0812740 (MX)			
09/08/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	474	10	439	-	154	501	-	72	-	-	10
07/15/82	-	-	-	-	-	-	-	-	-	-	-
393840081360300	KEITH F NR CALDWELL OH							LAT 393840 LONG 0813603 (MX)			
09/13/79	-	60	190	50000	30	30	1500	-	-	70	-
08/04/80	-	20	230	31000	20	30	69	-	-	27	-
393841082314600	RUSH C NR SUGAR GROVE OH							LAT 393841 LONG 0823146 (MX)			
07/29/75	500	-	960	-	-	5600	-	-	170	-	-
10/16/75	3400	-	4700	-	-	4600	-	-	80	-	-
393906081215800	M F DUCK C NR HARRIETSVILLE OH							LAT 393906 LONG 0812158 (MX)			
08/25/81	101	60	788	-	766	879	-	15	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393943082080800	MOXAMALA C AT MOXAMALA OH							LAT 393943 LONG 0820808 (MX)			
09/05/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	7246	902	914	-	8368	12210	-	202	-	-	10
393947081182500	E F DUCK C NR HARRIETSVILLE OH							LAT 393947 LONG 0811825 (MX)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	349	87	382	-	113	187	-	30	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TDM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TDM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TDM MA- TERIAL (UG/G)	CHRO- MIUM, RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TDM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TDM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TDM MA- TERIAL (UG/G)
393743082183600	L MONDAY C NR MAXVILLE OH					LAT 393743 LONG 0821836 (MX)					
09/01/81	-	-	0.5	-	-	-	-	-	-	-	-
07/30/82	-	-	-	-	-	-	-	-	-	-	-
393745082183300	L MONDAY C NR MAXVILLE OH					LAT 393745 LONG 0821833 (MX)					
05/06/75	1	-	-	0.5	-	0	-	20	-	-	-
09/08/75	1	-	-	0.5	-	20	-	20	-	-	-
393754081274000	W F DUCK C AT MACKSBURG OH					LAT 393754 LONG 0812740 (MX)					
09/08/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
07/15/82	-	-	-	-	-	-	-	-	-	-	-
393840081360300	KEITH F NR CALDWELL OH					LAT 393840 LONG 0813603 (MX)					
09/13/79	-	0	-	-	0.00	-	20	-	50	10	20
08/04/80	-	0	-	-	0.00	-	10	-	10	10	10
393841082314600	RUSH C NR SUGAR GROVE OH					LAT 393841 LONG 0823146 (MX)					
07/29/75	1	-	-	0.5	-	70	-	20	-	-	-
10/16/75	3	-	-	0.5	-	20	-	20	-	-	-
393906081215800	M F DUCK C NR HARRIETSVILLE OH					LAT 393906 LONG 0812158 (MX)					
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
393943082080800	MOXAHALA C AT MOXAHALA OH					LAT 393943 LONG 0820808 (MX)					
09/05/80	-	-	-	-	-	-	-	-	-	-	-
07/22/81	-	-	0.5	-	-	-	-	-	-	-	-
393947081182500	E F DUCK C NR HARRIETSVILLE OH					LAT 393947 LONG 0811825 (MX)					
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS VI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
393948081575600 W B WOLF C NR MALTA OH LAT 393948 LONG 0815756 (MX)											
05/30/75	3.00	-	7.0	69	-	84	98.0	27.0	-	-	-
11/11/75	6.50	-	7.2	92	-	112	50.0	39.0	-	-	-
393949082080700 MOXAHALA C AT MOXAHALA OH LAT 393949 LONG 0820807 (MX)											
05/08/75	10.00	-	3.8	1	55	0	22.0	430.0	-	-	-
09/08/75	3.00	-	2.7	1	248	0	200.0	1000.0	-	-	-
393950081361700 SHARON F NR CALDWELL OH LAT 393950 LONG 0813617 (MX)											
09/13/79	6.40	-	8.0	210	-	260	-	92.0	-	-	-
394007081285800 WARREN RN AT SOUTH OLIVE OH LAT 394007 LONG 0812858 (MX)											
08/12/81	0.16	1530	7.4	102	-	124	4.5	750.0	20	1353	180
07/22/82	0.21	-	8.1	92	-	100	15.0	610.0	-	1200	-
394014081232100 M F DUCK C AT MIDDLEBURG OH LAT 394014 LONG 0812321 (MX)											
08/25/81	0.32	1100	7.3	105	-	128	11.0	550.0	20	983	75
07/13/82	3.20	-	7.5	59	-	72	15.0	420.0	-	779	-
394032081181600 ROAD F AT ROAD FORK OH LAT 394032 LONG 0811816 (MX)											
05/29/75	3.00	-	7.5	99	-	121	12.0	140.0	-	-	-
11/20/75	6.40	-	7.4	121	-	147	10.0	93.0	-	-	-
394110081245700 M F DUCK NR MIDDLEBURG OH LAT 394110 LONG 0812457 (MX)											
08/25/81	0.16	1450	6.5	30	-	36	25.0	820.0	50	1280	75
07/13/82	2.40	-	7.4	79	-	96	15.0	410.0	-	734	-
394117081183800 FLAG RN NR FLAG OH LAT 394117 LONG 0811838 (MX)											
05/29/75	0.80	-	7.6	90	-	110	3.0	120.0	-	-	-
11/20/75	2.80	-	7.5	100	-	122	5.0	93.0	-	-	-
394117081452200 MAVS F NR MEIGS OH LAT 394117 LONG 0814522 (MX)											
08/26/81	1.60	1850	7.1	177	-	216	9.0	1040.0	20	1995	202
08/04/82	0.49	-	8.0	197	-	240	54.0	410.0	-	930	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSEVIC, DIS- SOLVED (UG/L AS AS)
393948081575600	W B WOLF C NR MALTA OH							LAT 393948 LONG 0815756 (MX)			
05/30/75	340	-	560	-	-	40	-	-	20	-	-
11/11/75	130	-	110	-	-	20	-	-	20	-	-
393949082080700	MOXAHALA C AT MOXAHALA OH							LAT 393949 LONG 0820807 (MX)			
05/08/75	8000	-	4100	-	-	10000	-	-	240	-	-
09/08/75	22000	-	11000	-	-	19000	-	-	550	-	-
393950081361700	SHARON F NR CALDWELL OH							LAT 393950 LONG 0813617 (MX)			
09/13/79	-	60	350	40000	10	30	21000	-	-	60	-
394007081285800	WARREN RN AT SOUTH OLIVE OH							LAT 394007 LONG 0812858 (MX)			
08/12/81	363	38	124	-	218	454	-	37	-	-	10
07/22/82	-	-	-	-	-	-	-	-	-	-	-
394014081232100	M F DUCK C AT MIDDLEBURG OH							LAT 394014 LONG 0812321 (MX)			
08/25/81	200	27	672	-	468	9255	-	23	-	-	10
07/13/82	-	-	-	-	-	-	-	-	-	-	-
394032081181600	ROAD F AT ROAD FORK OH							LAT 394032 LONG 0811816 (MX)			
05/29/75	250	-	250	-	-	280	-	-	20	-	-
11/20/75	390	-	440	-	-	250	-	-	20	-	-
394110081245700	M F DUCK NR MIDDLEBURG OH							LAT 394110 LONG 0812457 (MX)			
08/25/81	75	10	45	-	3023	3675	-	95	-	-	10
07/13/82	-	-	-	-	-	-	-	-	-	-	-
394117081183800	FLAG RN NR FLAG OH							LAT 394117 LONG 0811838 (MX)			
05/29/75	190	-	160	-	-	290	-	-	0	-	-
11/20/75	300	-	200	-	-	430	-	-	20	-	-
394117081452200	MANS F NR MEIGS OH							LAT 394117 LONG 0814522 (MX)			
08/26/81	262	308	203	-	5	217	-	10	-	-	10
08/04/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)

393948081575600 W B WOLF C NR MALTA OH LAT 393948 LONG 0815756 (MX)											

05/30/75	1	-	-	0.5	-	0	-	20	-	-	-
11/11/75	1	-	-	0.5	-	20	-	0	-	-	-

393949082080700 MOXAHALA C AT MOXAHALA OH LAT 393949 LONG 0820807 (MX)											

05/08/75	1	-	-	0.5	-	20	-	20	-	-	-
09/08/75	1	-	-	0.5	-	20	-	20	-	-	-

393950081361700 SHARON F NR CALDWELL OH LAT 393950 LONG 0813617 (MX)											

09/13/79	-	0	-	-	0.00	-	20	-	20	10	20

394007081285800 WARREN RN AT SOUTH OLIVE OH LAT 394007 LONG 0812858 (MX)											

08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-

394014081232100 M F DUCK C AT MIDDLEBURG OH LAT 394014 LONG 0812321 (MX)											

08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-

394032081181600 ROAD F AT ROAD FORK OH LAT 394032 LONG 0811816 (MX)											

05/29/75	1	-	-	0.5	-	20	-	20	-	-	-
11/20/75	1	-	-	0.5	-	0	-	0	-	-	-

394110081245700 M F DUCK NR MIDDLEBURG OH LAT 394110 LONG 0812457 (MX)											

08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-

394117081183800 FLAG RN NR FLAG OH LAT 394117 LONG 0811838 (MX)											

05/29/75	1	-	-	0.5	-	20	-	20	-	-	-
11/20/75	1	-	-	0.5	-	0	-	0	-	-	-

394117081452200 MAVS F NR MEIGS OH LAT 394117 LONG 0814522 (MX)											

08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
08/04/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

394121081250800 M F DUCK C NR MIDDLEBURG OH _AT 394121 LONG 0812508 (MX)											

05/28/75	6.00	-	6.1	39	-	47	9.0	350.0	-	-	-
11/18/75	8.40	-	6.6	52	-	76	12.0	350.0	-	-	-

394125081481500 MAVS F NR MCCONNELSVILLE OH _AT 394125 LONG 0814815 (MX)											

09/13/79	2.90	-	7.9	210	-	256	-	72.0	-	-	-

394129082065100 MOXAHALA C NR MOXAHALA OH _AT 394129 LONG 0820651 (MX)											

08/28/80	-	-	-	-	70	-	-	-	-	-	-
07/23/81	8.10	2310	3.3	-	323	-	9.5	1180.0	191	2057	15400
07/20/82	8.00	-	3.2	0	243	0	50.0	1100.0	300	1700	9800

394130081450700 MEIGS C NR MEIGS OH; _AT 394130 LONG 0814507 (MX)											

08/26/81	0.60	1100	7.1	226	-	276	14.0	420.0	20	885	94
08/04/82	0.74	-	8.0	213	-	260	20.0	350.0	-	797	-

394140081211000 E F DUCK C NR MIDDLEBURG OH _AT 394140 LONG 0812110 (MX)											

09/09/80	13.00	540	7.4	219	-	267	-	-	-	-	-
08/11/81	3.20	560	7.1	185	-	225	2.0	175.0	20	438	90
07/22/82	6.20	-	8.2	148	-	180	5.7	100.0	-	355	-

394153082180700 DRY RN NR JUNCTION CITY OH _AT 394153 LONG 0821807 (MX)											

09/03/80	1.20	720	5.6	12	40	15	-	-	-	-	-
07/24/81	0.30	838	6.4	10	35	12	90.0	305.0	20	695	13
07/12/82	0.30	-	7.0	33	-	40	110.0	180.0	-	636	-

394158081083600 RICH F NR WOODSFIELD OH _AT 394158 LONG 0810836 (MX)											

06/13/75	20.00	-	7.7	117	-	142	12.0	28.0	-	-	-
11/20/75	17.00	-	8.0	131	-	160	14.0	27.0	-	-	-

394214081270500 M F DUCK C NR SOUTH OLIVE OH _AT 394214 LONG 0812705 (MX)											

08/28/80	4.40	650	7.4	375	-	458	-	-	-	-	-
08/25/81	5.00	810	6.5	180	-	220	12.4	230.0	20	595	75
07/13/82	1.40	-	8.0	156	-	190	10.0	180.0	-	497	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
394121081250800	M F DUCK C NR MIDDLEBURG OH							LAT 394121 LONG 0812508 (MX)			
05/28/75	7200	-	5600	-	-	5000	-	-	180	-	-
11/18/75	5800	-	3700	-	-	5200	-	-	160	-	-
394125081481500	MAVS F NR MCCONNELSVILLE OH							LAT 394125 LONG 0814815 (MX)			
09/13/79	-	50	210	29000	20	20	760	-	-	40	-
394129082065100	MOXAHALA C NR MOXAHALA OH							LAT 394129 LONG 0820651 (MX)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	15970	48220	39050	-	17530	21190	-	493	-	-	10
07/20/82	11000	25000	31000	-	21000	21000	-	470	-	-	-
394130081450700	MEIGS C NR MEIGS OH							LAT 394130 LONG 0814507 (MX)			
08/26/81	228	297	107	-	5	122	-	10	-	-	10
08/04/82	-	-	-	-	-	-	-	-	-	-	-
394140081211000	E F DUCK C NR MIDDLEBURG OH							LAT 394140 LONG 0812110 (MX)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	384	37	613	-	-	211	-	10	-	-	10
07/22/82	-	-	-	-	-	-	-	-	-	-	-
394153082180700	DRY RN NR JUNCTION CITY OH							LAT 394153 LONG 0821807 (MX)			
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/24/81	152	311	420	-	-	5942	-	207	-	-	10
07/12/82	-	-	-	-	-	-	-	-	-	-	-
394158081083500	RICH F NR WOODSFIELD OH							LAT 394158 LONG 0810836 (MX)			
06/13/75	100	-	350	-	-	30	-	-	20	-	-
11/20/75	30	-	50	-	-	20	-	-	20	-	-
394214081270500	M F DUCK C NR SOUTH OLIVE OH							LAT 394214 LONG 0812705 (MX)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/25/81	338	10	597	-	509	838	-	17	-	-	10
07/13/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
394121081250800	M F DUCK C NR MIDDLEBURG OH					LAT 394121 LONG 0812508 (MX)					
05/28/75	1	-	-	1.6	-	20	-	40	-	-	-
11/18/75	1	-	-	0.5	-	20	-	20	-	-	-
394125081481500	MAVS F NR MCCONNELSVILLE OH					LAT 394125 LONG 0814815 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	20	0	20
394129082065100	MOXAMALA C NR MOXAMALA OH					LAT 394129 LONG 0820651 (MX)					
08/28/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
394130081450700	MEIGS C NR MEIGS OH					LAT 394130 LONG 0814507 (MX)					
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
08/04/82	-	-	-	-	-	-	-	-	-	-	-
394140081211000	F F DUCK C NR MIDDLEBURG OH					LAT 394140 LONG 0812110 (MX)					
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
394153082180700	DRY RV NR JUNCTION CITY OH					LAT 394153 LONG 0821807 (MX)					
09/03/80	-	-	-	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/12/82	-	-	-	-	-	-	-	-	-	-	-
394158081083600	RICH F NR WOODSFIELD OH					LAT 394158 LONG 0810836 (MX)					
06/13/75	1	-	-	0.5	-	20	-	30	-	-	-
11/20/75	1	-	-	0.5	-	0	-	20	-	-	-
394214081270500	M F DUCK C NR SOUTH OLIVE OH					LAT 394214 LONG 0812705 (MX)					
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MH/S)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS VI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (JG/L AS AL)
394214082160900	TURKEY RN NR JUNCTION CITY OH					LAT 394214 LONG 0821609 (MX)					
09/04/80	3.20	1100	4.4	-	89	-	-	-	-	-	-
07/24/81	1.40	1297	4.3	-	119	-	110.0	490.0	308	1280	10130
07/20/82	1.10	-	4.0	0	99	0	77.0	530.0	300	1050	9500
394238082205900	NO NAME C NR BREMAN OH					LAT 394238 LONG 0822059 (MX)					
09/10/79	2.20	-	7.5	62	-	76	-	72.0	-	-	-
394303081405800	BRANNONS F NR REINERSVILLE OH					LAT 394303 LONG 0814058 (MX)					
06/06/75	20.00	-	7.8	136	-	166	10.0	640.0	-	-	-
11/10/75	9.20	-	7.6	184	-	224	15.0	800.0	-	-	-
394306082240700	RUSH C NR BREMEN OH					LAT 394306 LONG 0822407 (MX)					
07/29/75	10.00	-	3.3	1	248	0	82.0	710.0	-	-	-
10/16/75	9.00	-	3.9	1	94	0	100.0	410.0	-	-	-
394310081215200	SCHWAB RN NR SUMMERFIELD OH					LAT 394310 LONG 0812152 (MX)					
09/11/79	1.50	-	7.8	180	-	220	-	130.0	-	-	-
394313082130500	UNAM TR TO RUSH C AT NEWLEXINGTON OH					LAT 394313 LONG 0821306 (MX)					
09/04/80	2.20	790	7.1	25	12	30	-	-	-	-	-
07/17/81	1.90	766	6.9	36	-	44	20.0	205.0	201	492	338
07/28/82	0.59	-	6.7	38	-	46	120.0	260.0	-	757	-
394317081401300	DYES C NR REINERSVILLE OH					LAT 394317 LONG 0814013 (MX)					
08/27/81	0.37	1250	6.7	169	-	206	5.0	570.0	20	1037	221
08/03/82	1.60	-	8.0	148	-	180	15.0	520.0	-	953	-
394317082164300	RUSH C NR JUNCTION CITY OH					LAT 394317 LONG 0821643 (MX)					
09/04/80	19.00	1500	3.2	-	233	-	-	-	-	-	-
08/05/81	8.30	2270	3.1	-	313	-	15.5	1100.0	270	1718	19590
07/20/82	15.00	-	2.9	0	462	0	110.0	1200.0	400	1960	16000
394327081452200	MEIGS C NR MEIGS OH					LAT 394327 LONG 0814522 (MX)					
08/26/81	0.29	900	-	230	-	280	14.0	250.0	20	640	103
08/04/82	0.27	-	7.8	221	-	270	23.0	260.0	-	644	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
394214082160900	TURKEY RN NR JUNCTION CITY OH							LAT 394214 LONG 0821609 (MX)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/24/81	11220	517	766	-	11960	12440	-	415	-	-	10
07/20/82	11000	690	1200	-	12000	12000	-	330	-	-	-
394238082205900	NO NAME C NR BREMAN OH							LAT 394238 LONG 0822059 (MX)			
09/10/79	-	90	630	12000	1600	1800	870	-	-	40	-
394303081405800	BRANVONS F NR REINERSVILLE OH							LAT 394303 LONG 0814058 (MX)			
06/06/75	100	-	110	-	-	130	-	-	30	-	-
11/10/75	20	-	90	-	-	200	-	-	20	-	-
394306082240700	RUSH C NR BREMEN OH							LAT 394306 LONG 0822407 (MX)			
07/29/75	15000	-	13000	-	-	23000	-	-	440	-	-
10/16/75	9700	-	4800	-	-	11000	-	-	200	-	-
394310081215200	SCHWAB RN NR SUMMERFIELD OH							LAT 394310 LONG 0812152 (MX)			
09/11/79	-	40	220	24000	80	90	1100	-	-	60	-
394313082130600	UNAM TR TO RUSH C AT NEWLEXINGTON OH							LAT 394313 LONG 0821306 (MX)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/17/81	161	331	768	-	3322	3832	-	34	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-
394317081401300	DYES C NR REINERSVILLE OH							LAT 394317 LONG 0814013 (MX)			
08/27/81	228	375	394	-	223	245	-	20	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-
394317082164300	RUSH C NR JUNCTION CITY OH							LAT 394317 LONG 0821643 (MX)			
09/04/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	19710	32000	34120	-	27830	27850	-	682	-	-	10
07/20/82	17000	53000	53000	-	30000	30000	-	670	-	-	-
394327081452200	MEIGS C NR MEIGS OH							LAT 394327 LONG 0814522 (MX)			
08/26/81	151	143	172	-	5	187	-	26	-	-	10
08/04/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
394214082160900	TURKEY RN NR JUNCTION CITY OH					LAT 394214 LONG 0821609 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
394238082205900	NO NAME C NR BREMAN OH					LAT 394238 LONG 0822059 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
394303081405800	BRANNONS F NR REINERSVILLE OH					LAT 394303 LONG 0814058 (MX)					
06/06/75	1	-	-	0.5	-	20	-	20	-	-	-
11/10/75	1	-	-	0.5	-	20	-	20	-	-	-
394306082240700	RUSH C NR BREMEN OH					LAT 394305 LONG 0822407 (MX)					
07/29/75	1	-	-	0.5	-	20	-	20	-	-	-
10/16/75	1	-	-	0.5	-	20	-	20	-	-	-
394310081215200	SCHWAB RN NR SUMMERFIELD OH					LAT 394310 LONG 0812152 (MX)					
09/11/79	-	0	-	-	0.00	-	20	-	10	10	30
394313082130600	UNAM TR TO RUSH C AT NEWLEXINGTON OH					LAT 394313 LONG 0821306 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/17/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
394317081401300	DYES C NR REINERSVILLE OH					LAT 394317 LONG 0814013 (MX)					
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
394317082164300	RUSH C NR JUNCTION CITY OH					LAT 394317 LONG 0821643 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
394327081452200	MEIGS C NR MEIGS OH					LAT 394327 LONG 0814522 (MX)					
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
08/04/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

394338081305400 W F DUCK C NR CALDWELL OH LAT 394338 LONG 0813054 (MX)											

08/25/81	0.50	800	7.3	177	-	216	10.0	185.0	20	535	103
07/22/82	5.10	-	8.5	162	-	190	60.0	110.0	-	465	-

394340081541400 ISLAND RN AT EAGLEPORT OH LAT 394340 LONG 0815414 (MX)											

05/30/75	10.00	-	6.9	96	-	117	30.0	49.0	-	-	-
11/11/75	11.00	-	7.2	133	-	162	5.0	61.0	-	-	-

394426081342000 SHARON F NR SHARON OH LAT 394426 LONG 0813420 (MX)											

05/28/75	1.00	-	7.8	212	-	258	12.0	210.0	-	-	-
09/24/75	20.00	-	7.3	103	-	125	5.0	120.0	-	-	-

394443081215300 E F DUCK C AT CARLISLE OH; LAT 394443 LONG 0812153 (MX)											

09/09/80	14.00	490	7.8	222	-	271	-	-	-	-	-
08/11/81	2.20	539	6.5	198	-	241	2.0	110.0	21	365	75
07/22/82	5.00	-	8.4	195	-	230	5.7	80.0	-	343	-

394456082195600 CENTER B NR SOMERSET OH LAT 394456 LONG 0821956 (MX)											

09/10/79	5.70	-	7.6	77	-	94	-	43.0	-	-	-

394519082051600 BLACK F NR CROOKSVILLE OH LAT 394519 LONG 0820516 (MX)											

09/09/80	6.20	1250	3.1	-	318	-	-	-	-	-	-
07/23/81	3.60	2209	3.1	-	273	-	35.0	575.0	120	1025	17940
07/21/82	6.50	-	3.6	0	119	0	58.0	320.0	100	417	6600

394547081393700 DYES F NR ZENO OH LAT 394547 LONG 0813937 (MX)											

09/10/80	5.20	1110	7.6	177	-	216	-	-	-	-	-
08/11/81	0.81	1100	7.0	161	-	196	2.0	595.0	20	1140	213
07/12/82	3.30	-	8.2	148	-	180	11.0	560.0	-	1100	-

394552082054700 MOXA-HALA C AT CROOKSVILLE OH LAT 394552 LONG 0820547 (MX)											

05/13/75	60.00	-	3.3	1	238	0	22.0	770.0	-	-	-
09/09/75	50.00	-	2.6	1	477	0	35.0	1200.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSEVIC, DIS- SOLVED (UG/L AS AS)
394338081305400	W F DUCK C NR CALDWELL OH						LAT 394338 LONG 0813054 (MX)				
08/25/81	222	427	456	-	5	176	-	10	-	-	10
07/22/82	-	-	-	-	-	-	-	-	-	-	-
394340081541400	ISLAND RN AT EAGLEPORT OH						LAT 394340 LONG 0815414 (MX)				
05/30/75	1800	-	3000	-	-	70	-	-	20	-	-
11/11/75	20	-	50	-	-	10	-	-	20	-	-
394426081342000	SHARON F NR SHARON OH						LAT 394426 LONG 0813420 (MX)				
05/28/75	600	-	900	-	-	200	-	-	0	-	-
09/24/75	900	-	1700	-	-	250	-	-	30	-	-
394443081215300	E F DUCK C AT CARLISLE OH;						LAT 394443 LONG 0812153 (MX)				
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	263	28	397	-	327	357	-	10	-	-	10
07/22/82	-	-	-	-	-	-	-	-	-	-	-
394456082195600	CENTER B NR SOMERSET OH						LAT 394456 LONG 0821956 (MX)				
09/10/79	-	150	500	56000	50	180	120	-	-	10	-
394519082051600	BLACK F NR CROOKSVILLE OH						LAT 394519 LONG 0820516 (MX)				
09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	18810	26490	22180	-	2990	4181	-	246	-	-	10
07/21/82	6600	24000	26000	-	1900	2100	-	100	-	-	-
394547081393700	DYES F NR ZENO OH						LAT 394547 LONG 0813937 (MX)				
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	334	324	332	-	223	295	-	31	-	-	10
07/12/82	-	-	-	-	-	-	-	-	-	-	-
394552082054700	MOXAHALA C AT CROOKSVILLE OH						LAT 394552 LONG 0820547 (MX)				
05/13/75	21000	-	37000	-	-	19000	-	-	420	-	-
09/09/75	38000	-	81000	-	-	20000	-	-	780	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
394338081305400	W F DUCK C NR CALDWELL OH						LAT 394338 LONG 0813054 (MX)				
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
394340081541400	ISLAND RN AT EAGLEPORT OH						LAT 394340 LONG 0815414 (MX)				
05/30/75	2	-	-	0.5	-	20	-	20	-	-	-
11/11/75	1	-	-	0.5	-	20	-	0	-	-	-
394426081342000	SHARON F NR SHARON OH						LAT 394426 LONG 0813420 (MX)				
05/28/75	2	-	-	0.5	-	20	-	20	-	-	-
09/24/75	2	-	-	0.5	-	20	-	20	-	-	-
394443081215300	E F DUCK C AT CARLISLE OH						LAT 394443 LONG 0812153 (MX)				
09/09/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
394456082195600	CENTER B NR SOMERSET OH						LAT 394456 LONG 0821956 (MX)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
394519082051600	BLACK F NR CROOKSVILLE OH						LAT 394519 LONG 0820516 (MX)				
09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
394547081393700	DYES F NR ZENO OH						LAT 394547 LONG 0813937 (MX)				
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
07/12/82	-	-	-	-	-	-	-	-	-	-	-
394552082054700	MOXAMALA C AT CROOKSVILLE OH						LAT 394552 LONG 0820547 (MX)				
05/13/75	1	-	-	0.5	-	30	-	80	-	-	-
09/09/75	10	-	-	0.5	-	30	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CACD3)	ACIDITY (MG/L AS CACD3)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
394558080580900 SUNFISH C NR CAMERON OH LAT 394558 LONG 0805809 (MX)											
07/22/75	31.00	-	7.7	144	-	176	32.0	27.0	-	-	-
11/06/75	18.00	-	7.5	118	-	144	24.0	32.0	-	-	-
394611082054700 MOXAHALA C AT CROOKSVILLE OH LAT 394611 LONG 0820547 (MX)											
09/04/80	22.40	1800	3.1	-	328	-	-	-	-	-	-
07/16/81	34.00	2040	3.0	-	233	-	25.0	1100.0	270	1461	13760
07/21/82	24.00	-	3.1	0	184	0	53.0	890.0	200	1410	10000
394614082163000 CTR B RUSH C NR SOMERSET OH LAT 394614 LONG 0821630 (MX)											
09/04/80	2.30	750	7.4	89	-	108	-	-	-	-	-
07/17/81	2.00	1221	6.7	75	-	92	23.5	130.0	21	950	150
07/28/82	11.00	-	7.0	52	-	64	750.0	300.0	-	1930	-
394641081342500 UNAM TR TO W F DUCK C NR BELLEVLY OH LAT 394641 LONG 0813425 (MX)											
08/27/80	2.90	810	7.5	227	-	277	-	-	-	-	-
08/27/81	0.06	1100	6.6	167	-	204	7.1	440.0	20	887	160
07/13/82	1.50	-	8.1	197	-	240	16.0	170.0	-	563	-
394708081331900 W F DUCK C AT BELLE VALLEY OH LAT 394708 LONG 0813319 (MX)											
05/22/75	20.00	-	7.6	163	-	199	15.0	220.0	-	-	-
11/18/75	12.00	-	7.5	166	-	202	15.0	230.0	-	-	-
394735081545600 BLUE ROCK C NR PHILO OH LAT 394735 LONG 0815456 (MX)											
09/12/79	0.98	-	8.0	110	-	140	-	53.0	-	-	-
394837081361300 COAL RN NR COAL RIDGE OH LAT 394837 LONG 0813613 (MX)											
08/27/81	0.11	1600	6.6	171	-	208	32.3	820.0	17	1417	170
07/21/82	0.38	-	8.4	159	-	190	15.0	670.0	-	1230	-
394837081361400 COAL R AT HIRAMSBURG OH LAT 394837 LONG 0813614 (MX)											
05/22/75	4.00	-	7.8	134	-	163	10.0	660.0	-	-	-
11/18/75	2.70	-	7.6	159	-	194	15.0	910.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (JG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (JG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
394558080580900 SUNFISH C NR CAMERON OH LAT 394558 LONG 0805809 (MX)											
07/22/75	120	-	200	-	-	40	-	-	20	-	-
11/06/75	150	-	40	-	-	20	-	-	20	-	-
394611082054700 MOXAHALA C AT CROOKSVILLE OH LAT 394611 LONG 0820547 (MX)											
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	14350	16430	17410	-	16620	18060	-	337	-	-	10
07/21/82	11000	14000	19000	-	15000	16000	-	350	-	-	-
394614082163000 CTR 3 RUSH C NR SOMERSET OH LAT 394614 LONG 0821630 (MX)											
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/17/81	150	79	646	-	1342	2260	-	10	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-
394641081342500 UNAM TR TO W F DUCK C NR BELLEVLY OH LAT 394641 LONG 0813425 (MX)											
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/27/81	564	1000	1005	-	5	467	-	10	-	-	10
07/13/82	-	-	-	-	-	-	-	-	-	-	-
394708081331900 W F DUCK C AT BELLE VALLEY OH LAT 394708 LONG 0813319 (MX)											
05/22/75	640	-	750	-	-	240	-	-	20	-	-
11/18/75	120	-	190	-	-	150	-	-	20	-	-
394735081545600 BLUE ROCK C NR PHILD OH LAT 394735 LONG 0815456 (MX)											
09/12/79	-	110	110	42000	50	50	1300	-	-	70	-
394837081361300 COAL RN NR COAL RIDGE OH LAT 394837 LONG 0813613 (MX)											
08/27/81	283	274	328	-	5	287	-	17	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-
394837081361400 COAL R AT HIRAMSBURG OH LAT 394837 LONG 0813614 (MX)											
05/22/75	940	-	430	-	-	1500	-	-	20	-	-
11/18/75	1200	-	490	-	-	2000	-	-	50	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
394558080580900	SUNFISH C NR CAMERON OH					LAT 394558 LONG 0805809 (MX)					
07/22/75	1	-	-	0.5	-	0	-	0	-	-	-
11/06/75	1	-	-	0.5	-	20	-	0	-	-	-
394611082054700	MOXAHALA C AT CROOKSVILLE OH					LAT 394611 LONG 0820547 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
394614082163000	CTR 3 RUSH C NR SOMERSET OH					LAT 394614 LONG 0821630 (MX)					
09/04/80	-	-	-	-	-	-	-	-	-	-	-
07/17/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
394641081342500	UNAM TR TO W F DUCK C NR BELLEVLY OH					LAT 394641 LONG 0813425 (MX)					
08/27/80	-	-	-	-	-	-	-	-	-	-	-
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-
394708081331900	W F DUCK C AT BELLE VALLEY OH					LAT 394708 LONG 0813319 (MX)					
05/22/75	1	-	-	0.5	-	20	-	20	-	-	-
11/18/75	1	-	-	0.5	-	0	-	0	-	-	-
394735081545600	BLJE ROCK C NR PHILD OH					LAT 394735 LONG 0815456 (MX)					
09/12/79	-	0	-	-	0.00	-	20	-	20	10	20
394837081361300	COAL RN NR COAL RIDGE OH					LAT 394837 LONG 0813613 (MX)					
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
394837081361400	COAL R AT HIRAMSBURG OH					LAT 394837 LONG 0813614 (MX)					
05/22/75	1	-	-	0.5	-	20	-	20	-	-	-
11/18/75	1	-	-	0.5	-	20	-	0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLO (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
394856082092200 UNAM TR TO BUTCHERKNIFE C NR SALTILLO OH LAT 394856 LONG 0820922 (MX)											
09/10/80	1.30	1650	3.5	-	159	-	-	-	-	-	-
07/16/81	1.10	1543	3.5	-	139	-	9.0	870.0	317	1470	9443
07/21/82	0.52	-	4.1	0	89	0	37.0	640.0	200	1090	5600
394901082043900 PORTER RN AT ROSEVILLE OH LAT 394901 LONG 0820438 (MX)											
09/09/80	-	1030	6.2	-	5	-	-	-	-	-	-
07/16/81	0.91	1015	6.3	10	-	12	7.0	530.0	20	908	150
07/26/82	0.30	-	7.2	15	-	18	17.0	470.0	-	794	-
394905081591600 BRUSH C AT CHANNELVILLE OH LAT 394905 LONG 0815916 (MX)											
09/10/80	5.00	630	5.9	7	37	8	-	-	-	-	-
07/23/81	2.30	974	4.6	-	74	-	7.0	522.0	20	795	7071
07/21/82	1.90	-	3.9	0	109	0	42.0	490.0	100	865	8100
394919082082000 BUTCHERKNIFE C NR FULTONHAM OH LAT 394919 LONG 0820820 (MX)											
09/10/80	-	1550	3.5	-	194	-	-	-	-	-	-
07/16/81	3.40	1538	3.3	-	154	-	9.0	190.0	317	1398	9973
07/20/82	2.90	-	4.2	0	55	0	3.5	530.0	200	905	4200
394947081421200 COLLINS F NR CUMBERLAND OH LAT 394947 LONG 0814212 (MX)											
09/10/80	6.70	1110	7.6	136	-	166	-	-	-	-	-
08/06/81	2.40	1750	7.3	223	-	272	3.5	940.0	20	1548	140
08/06/81	2.40	1750	7.3	223	-	272	3.0	980.0	20	1558	75
07/12/82	3.60	-	7.8	189	-	230	14.0	770.0	-	1480	-
395003081394500 RANNELS C NR CUMBERLAND OH LAT 395003 LONG 0813945 (MX)											
05/22/75	6.00	-	7.7	171	-	208	9.0	490.0	-	-	-
09/23/75	5.00	-	7.6	188	-	229	15.0	410.0	-	-	-
395029081590700 BRUSH C NR PHILO OH LAT 395029 LONG 0815907 (MX)											
09/12/79	5.60	-	3.3	1	124	0	-	600.0	-	-	-
08/28/80	12.00	-	4.0	0	55	0	-	410.0	-	-	-
09/10/80	8.20	-	4.4	-	50	-	-	-	-	-	-
07/17/81	5.30	-	3.3	0	129	0	-	620.0	-	-	-
07/23/81	5.10	-	3.5	-	134	-	-	640.0	-	-	-
07/21/82	5.00	-	3.4	0	114	0	-	580.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
394856082092200	UNAM TR TO BUTCHERKNIFE C NR SALTILLO OH							LAT 394856 LONG 0820922 (MX)			
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	10770	2654	3981	-	14530	17090	-	461	-	-	10
07/21/82	7700	880	32000	-	12000	13000	-	310	-	-	-
394901082043800	PORTER RN AT ROSEVILLE OH							LAT 394901 LONG 0820438 (MX)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	430	90	458	-	1592	2385	-	12	-	-	10
07/26/82	-	-	-	-	-	-	-	-	-	-	-
394905081591600	BRUSH C AT CHANNELVILLE OH							LAT 394905 LONG 0815916 (MX)			
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	7354	9808	9953	-	3081	3718	-	149	-	-	10
07/21/82	8200	7400	8400	-	3800	3800	-	170	-	-	-
394919082082000	BUTCHERKNIFE C NR FULTONHAM OH							LAT 394919 LONG 0820820 (MX)			
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	12490	3984	5265	-	11820	15540	-	407	-	-	10
07/20/82	4700	1300	2100	-	9300	9700	-	270	-	-	-
394947081421200	COLLINS F NR CUMBERLAND OH							LAT 394947 LONG 0814212 (MX)			
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	636	41	1171	-	1104	1267	-	10	-	-	10
08/06/81	75	624	793	-	724	1011	-	10	-	-	10
07/12/82	-	-	-	-	-	-	-	-	-	-	-
395003081394500	RAYNELLS C NR CUMBERLAND OH							LAT 395003 LONG 0813945 (MX)			
05/22/75	2900	-	8400	-	-	1200	-	-	40	-	-
09/23/75	290	-	330	-	-	1000	-	-	20	-	-
395029081590700	BRUSH C NR PHILO OH							LAT 395029 LONG 0815907 (MX)			
09/12/79	-	3700	4600	63000	7100	7200	270	-	-	60	-
08/28/80	-	2000	4600	27000	4200	4200	360	-	-	47	-
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/17/81	-	7200	11000	11000	5700	6900	280	-	-	50	-
07/23/81	-	14120	15690	-	6847	7230	-	-	-	-	-
07/21/82	-	2900	3500	-	6500	6500	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
394856082092200	UNAM TR TO BUTCHERKNIFE C NR SALTILLO OH					LAT 394856 LONG 0820922 (MX)					
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
394901082043800	PORTER RN AT ROSEVILLE OH					LAT 394901 LONG 0820438 (MX)					
09/09/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
394905081591600	BRUSH C AT CHANNELVILLE OH					LAT 394905 LONG 0815916 (MX)					
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
394919082082000	BUTCHERKNIFE C NR FULTONHAM OH					LAT 394919 LONG 0820820 (MX)					
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
394947081421200	COLLINS F NR CUMBERLAND OH					LAT 394947 LONG 0814212 (MX)					
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	-	0.5	-	-	-	-	-	-	-	-
08/06/81	-	-	0.5	-	-	-	-	-	-	-	-
07/12/82	-	-	-	-	-	-	-	-	-	-	-
395003081394500	PANNELLS C NR CUMBERLAND OH					LAT 395003 LONG 0813945 (MX)					
05/22/75	6	-	-	0.5	-	20	-	20	-	-	-
09/23/75	1	-	-	0.5	-	0	-	20	-	-	-
395029081590700	BRUSH C NR PHILO OH					LAT 395029 LONG 0815907 (MX)					
09/12/79	-	0	-	-	0.00	-	20	-	10	10	10
08/28/80	-	0	-	-	0.00	-	10	-	10	10	20
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/17/81	-	10	-	-	0.00	-	10	-	10	3	30
07/23/81	-	-	-	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
395039081343000 W F DUCK C NR AWA OH LAT 395039 LONG 0813430 (MX)											
05/22/75	0.50	-	7.6	127	-	155	22.0	52.0	-	-	-
09/23/75	2.00	-	7.5	115	-	140	17.0	44.0	-	-	-
395049082122600 TURKEY RN NR MT PERRY OH LAT 395049 LONG 0821226 (MX)											
09/10/80	4.10	975	6.1	11	30	13	-	-	-	-	-
07/16/81	3.20	820	6.3	33	20	40	19.0	355.0	231	510	204
07/28/82	0.56	-	6.8	25	-	30	400.0	38.0	-	1450	-
395052081401500 MILLER C AT CUMBERLAND OH LAT 395052 LONG 0814015 (MX)											
09/11/80	18.00	1125	7.8	150	-	183	-	-	-	-	-
08/06/81	9.90	1700	7.2	151	-	184	5.5	1040.0	20	1672	167
07/14/82	2.20	-	8.0	156	-	190	31.0	1300.0	-	1950	-
395052081401600 MILLER C NR CUMBERLAND OH LAT 395052 LONG 0814016 (MX)											
05/21/75	10.00	-	7.8	117	-	142	12.0	920.0	-	-	-
09/23/75	10.00	-	7.5	149	-	182	25.0	860.0	-	-	-
395059081392500 BUFFALO F AT CUMBERLAND OH LAT 395059 LONG 0813925 (MX)											
08/11/81	11.00	1850	7.1	171	-	208	2.0	980.0	20	1725	75
08/03/82	4.20	-	8.1	180	-	220	11.0	950.0	-	1770	-
395109082063700 BUCKEYE F NR WHITE COTTAGE OH LAT 395109 LONG 0820637 (MX)											
09/10/80	-	1300	4.5	-	119	-	-	-	-	-	-
07/24/81	8.70	1521	4.5	-	119	-	10.0	910.0	118	1472	10500
07/29/82	-	-	4.5	0	99	0	50.0	880.0	400	1490	13000
395111081542300 DUNCAN RN AT PHILO OH LAT 395111 LONG 0815423 (MX)											
09/10/80	2.80	320	7.2	105	-	128	-	-	-	-	-
08/11/81	0.43	460	6.9	125	-	152	4.0	135.0	20	345	200
07/19/82	1.50	-	7.6	115	-	140	29.0	69.0	-	319	-
395117081413700 MAYS F NR CUMBERLAND OH LAT 395117 LONG 0814137 (MX)											
09/11/80	3.00	2510	7.6	145	-	176	-	-	-	-	-
08/11/81	0.78	2675	7.0	138	-	168	4.0	1960.0	20	2993	75
07/14/82	0.55	-	8.0	123	-	150	25.0	1600.0	-	2400	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
395039081343000	W F DUCK C NR AWA OH						LAT 395039 LONG 0813430 (MX)				
05/22/75	360	-	490	-	-	90	-	-	20	-	-
09/23/75	30	-	200	-	-	70	-	-	20	-	-
395049082122600	TURKEY RN NR MT PERRY OH						LAT 395049 LONG 0821226 (MX)				
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	624	196	483	-	5526	5532	-	89	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-
395052081401500	MILLER C AT CUMBERLAND OH						LAT 395052 LONG 0814015 (MX)				
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	502	28	612	-	1440	1655	-	10	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
395052081401600	MILLER C NR CUMBERLAND OH						LAT 395052 LONG 0814016 (MX)				
05/21/75	1600	-	580	-	-	2700	-	-	40	-	-
09/23/75	2100	-	1300	-	-	3200	-	-	40	-	-
395059081392500	BUFFALO F AT CUMBERLAND OH						LAT 395059 LONG 0813925 (MX)				
08/11/81	75	10	10	-	5	5	-	10	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395109082063700	BUCKEYE F NR WHITE COTTAGE OH						LAT 395109 LONG 0820637 (MX)				
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/24/81	11980	342	409	-	15300	17250	-	464	-	-	10
07/29/82	13000	420	1000	-	18000	18000	-	510	-	-	-
395111081542300	DUNCAN RN AT PHILO OH						LAT 395111 LONG 0815423 (MX)				
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	203	137	109	-	229	228	-	35	-	-	10
07/19/82	-	-	-	-	-	-	-	-	-	-	-
395117081413700	MAYS F NR CUMBERLAND OH						LAT 395117 LONG 0814137 (MX)				
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	75	10	10	-	5	5	-	10	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TERIAL (UG/G)	LEAD RECOV. FM BOT- TERIAL (UG/G)
395039081343000	W F DUCK C NR AWA OH					LAT 395039 LONG 0813430 (MX)					
05/22/75	1	-	-	0.5	-	20	-	0	-	-	-
09/23/75	1	-	-	0.5	-	0	-	20	-	-	-
395049082122600	TURKEY RN NR MT PERRY OH					LAT 395049 LONG 0821226 (MX)					
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/16/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
395052081401500	MILLER C AT CUMBERLAND OH					LAT 395052 LONG 0814015 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
395052081401500	MILLER C NR CUMBERLAND OH					LAT 395052 LONG 0814016 (MX)					
05/21/75	1	-	-	0.5	-	20	-	20	-	-	-
09/23/75	1	-	-	0.5	-	20	-	20	-	-	-
395059081392500	BUFFALO F AT CUMBERLAND OH					LAT 395059 LONG 0813925 (MX)					
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395109082063700	BUCKEYE F NR WHITE COTTAGE OH					LAT 395109 LONG 0820637 (MX)					
09/10/80	-	-	-	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-
395111081542300	DUNCAN RN AT PHILO OH					LAT 395111 LONG 0815423 (MX)					
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
395117081413700	MAYS F NR CUMBERLAND OH					LAT 395117 LONG 0814137 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

395117082032400 MOXAHALA C NR AVONDALE OH LAT 395117 LONG 0820324 (MX)											

07/23/81	40.00	1892	3.3	-	194	-	4.5	980.0	161	1612	12040
07/27/82	17.00	-	3.2	0	189	0	53.0	1000.0	200	1650	12000

395128082121600 TURKEY RN NR SOMERSET OH LAT 395128 LONG 0821216 (MX)											

09/11/79	4.00	-	7.1	20	-	24	-	290.0	-	-	-

395140081504600 KENT RN NR CHANDLERSVILLE OH LAT 395140 LONG 0815046 (MX)											

09/12/79	0.65	-	7.7	170	-	210	-	73.0	-	-	-
08/29/80	2.00	-	7.4	162	-	198	-	93.0	-	-	-

395144081591500 UNAM TR TO BRUSH C NR STOVERTOWN OH LAT 395144 LONG 0815915 (MX)											

09/26/80	0.78	1920	2.8	-	367	-	5.0	1110.0	220	1655	15300
07/21/81	1.20	1733	3.0	-	223	-	2.5	590.0	237	1365	11740
07/21/82	0.63	-	2.8	0	248	0	5.2	820.0	200	1340	12000

395155081374200 BUFFALO F NR CUMBERLAND OH LAT 395155 LONG 0813742 (MX)											

09/11/80	36.00	1500	7.7	164	-	200	-	-	-	-	-
08/13/81	10.00	1800	5.3	144	181	176	2.5	930.0	20	1703	375
08/03/82	3.80	-	8.2	172	-	210	10.0	970.0	-	1790	-

395204081190400 UNAM TR TO SENECA F WILLS C NR CALAIS OH LAT 395204 LONG 0811904 (MX)											

10/07/80	0.17	665	7.6	254	-	310	8.0	104.0	100	398	200
08/05/81	0.06	570	7.1	220	-	268	3.0	90.0	20	370	75
07/13/82	0.15	-	8.2	230	-	280	8.1	130.0	-	475	-

395210082165600 PAINTER C NR SOMERSET OH LAT 395210 LONG 0821656 (MX)											

09/11/79	5.70	-	8.1	110	-	140	-	36.0	-	-	-

395214082054700 JONATHAN C AT WHITE COTTAGE OH LAT 395214 LONG 0820547 (MX)											

09/09/80	57.00	750	6.5	108	1	132	-	-	-	-	-

395216081373100 YOKER C NR CUMBERLAND OH LAT 395216 LONG 0813731 (MX)											

08/13/81	1.40	1800	6.3	105	-	128	3.0	140.0	20	2003	173
07/21/82	0.88	-	7.5	139	-	170	9.8	1100.0	-	1960	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
395117082032400	MOXAHALA C NR AVONDALE OH							LAT 395117 LONG 0820324 (MX)			
07/23/81	13150	11010	15420	-	-	14060	-	285	-	-	10
07/27/82	12000	990	8600	-	18000	18000	-	280	-	-	-
395128082121600	TURKEY RN NR SOMERSET OH							LAT 395128 LONG 0821216 (MX)			
09/11/79	-	10	160	30000	6000	6000	2000	-	-	90	-
395140081504600	KENT RN NR CHANDLERSVILLE OH							LAT 395140 LONG 0815046 (MX)			
09/12/79	-	70	110	44000	10	20	2300	-	-	70	-
08/29/80	-	10	160	17000	20	20	1100	-	-	31	-
395144081591500	UNAM TR TO BRUSH C NR STOVERTOWN OH							LAT 395144 LONG 0815915 (MX)			
09/26/80	16300	37400	37200	-	9100	9100	-	310	-	-	10
07/21/81	12230	19070	21740	-	6705	7860	-	275	-	-	10
07/21/82	13000	19000	19000	-	7200	7500	-	230	-	-	-
395155081374200	BUFFALO F NR CUMBERLAND OH							LAT 395155 LONG 0813742 (MX)			
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/13/81	418	131	562	-	413	509	-	10	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395204081190400	UNAM TR TO SENECA F WILLS C NR CALAIS OH							LAT 395204 LONG 0811904 (MX)			
10/07/80	230	30	70	-	30	30	-	30	-	-	10
08/05/81	235	94	211	-	25	56	-	13	-	-	10
07/13/82	-	-	-	-	-	-	-	-	-	-	-
395210082165600	PAINTER C NR SOMERSET OH							LAT 395210 LONG 0821656 (MX)			
09/11/79	-	50	370	11000	50	60	470	-	-	60	-
395214082054700	JONATHAN C AT WHITE COTTAGE OH							LAT 395214 LONG 0820547 (MX)			
09/09/80	-	-	-	-	-	-	-	-	-	-	-
395216081373100	YOKER C NR CUMBERLAND OH							LAT 395216 LONG 0813731 (MX)			
08/13/81	275	139	534	-	484	570	-	10	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/G AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
395117082032400	MOXAHALA C NR AVONDALE OH					LAT 395117 LONG 0820324 (MX)					
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
395128082121600	TURKEY RN NR SOMERSET OH					LAT 395128 LONG 0821216 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
395140081504600	KEVT RN NR CHANDLERSVILLE OH					LAT 395140 LONG 0815046 (MX)					
09/12/79	-	0	-	-	0.00	-	20	-	20	10	20
08/29/80	-	0	-	-	0.00	-	10	-	10	10	30
395144081591500	UNAM TR TO BRUSH C NR STOVERTOWN OH					LAT 395144 LONG 0815915 (MX)					
09/26/80	-	-	0.5	-	-	-	-	-	-	-	-
07/21/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
395155081374200	BUFFALO F NR CUMBERLAND OH					LAT 395155 LONG 0813742 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395204081190400	UNAM TR TO SENECA F WILLS C NR CALAIS OH					LAT 395204 LONG 0811904 (MX)					
10/07/80	-	-	0.5	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-
395210082165600	PAINTER C NR SOMERSET OH					LAT 395210 LONG 0821656 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
395214082054700	JOVATHAN C AT WHITE COTTAGE OH					LAT 395214 LONG 0820547 (MX)					
09/09/80	-	-	-	-	-	-	-	-	-	-	-
395216081373100	YOKER C NR CUMBERLAND OH					LAT 395216 LONG 0813731 (MX)					
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

395217082055300 KENT RN AT WHITE COTTAGE OH							LAT 395217 LONG 0820553 (MX)				

09/10/79	7.30	-	7.7	110	-	140	-	59.0	-	-	-
08/28/80	15.00	-	8.3	95	-	110	-	61.0	-	-	-

395249080503500 CAPTINA C NR CAPTINA OH							LAT 395249 LONG 0805035 (MX)				

07/21/75	10.00	-	7.5	148	-	180	24.0	120.0	-	-	-
11/05/75	15.00	-	7.3	144	-	176	24.0	130.0	-	-	-

395255082040900 THOMPSON RN NR WHITE COTTAGE OH							LAT 395255 LONG 0820409 (MX)				

09/10/79	5.00	-	7.7	82	-	100	-	130.0	-	-	-

395312081391600 YOKER C NR CUMBERLAND OH							LAT 395312 LONG 0813916 (MX)				

09/11/80	5.80	1750	7.9	131	-	160	-	-	-	-	-
08/06/81	2.20	1950	7.0	108	-	132	2.5	1180.0	20	1895	120
07/21/82	2.10	-	7.3	40	-	49	5.8	1200.0	-	2090	-

395312081522900 SALT C NR DUNCAN FALLS OH							LAT 395312 LONG 0815229 (MX)				

05/29/75	20.00	-	7.2	123	-	150	24.0	55.0	-	-	-
10/03/75	22.00	-	7.1	117	-	142	25.0	55.0	-	-	-

395313081324300 BUFFALO C NR PLEASANT CITY OH							LAT 395313 LONG 0813243 (MX)				

09/11/79	7.10	-	7.9	170	-	210	-	94.0	-	-	-

395320081401200 YOKER C NR CUMBERLAND OH							LAT 395320 LONG 0814012 (MX)				

09/11/79	4.50	-	7.8	160	-	200	-	780.0	-	-	-
08/25/80	9.00	-	8.0	149	-	182	-	150.0	-	-	-
07/17/81	2.90	-	8.1	102	-	124	-	1200.0	-	-	-

395328081415000 YOKER C NR CUMBERLAND OH							LAT 395328 LONG 0814150 (MX)				

09/11/80	3.60	2220	7.3	98	-	120	-	-	-	-	-
08/06/81	3.00	2400	6.9	80	-	98	1.5	1680.0	55	2640	322
07/21/82	1.20	-	7.7	156	-	190	8.4	550.0	-	1110	-

395329081530800 BOGGS C NR DUNCAN FALLS OH							LAT 395329 LONG 0815308 (MX)				

09/12/79	5.90	-	7.7	82	-	100	-	140.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
395217082055300	KENT RN AT WHITE COTTAGE OH						LAT 395217 LONG 0820553 (MX)				
09/10/79	-	100	200	8400	30	30	1200	-	-	130	-
08/28/80	-	50	350	14000	30	40	680	-	-	37	-
395249080503500	CAPTINA C NR CAPTINA OH						LAT 395249 LONG 0805035 (MX)				
07/21/75	330	-	880	-	-	100	-	-	20	-	-
11/05/75	180	-	770	-	-	100	-	-	20	-	-
395255082040900	THOMPSON RN NR WHITE COTTAGE OH						LAT 395255 LONG 0820409 (MX)				
09/10/79	-	70	410	50000	440	450	710	-	-	100	-
395312081391600	YOKER C NR CUMBERLAND OH						LAT 395312 LONG 0813916 (MX)				
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	469	43	472	-	1095	1318	-	10	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-
395312081522900	SALT C NR DUNCAN FALLS OH						LAT 395312 LONG 0815229 (MX)				
05/29/75	260	-	940	-	-	300	-	-	20	-	-
10/03/75	190	-	930	-	-	190	-	-	20	-	-
395313081324300	BUFFALO C NR PLEASANT CITY OH						LAT 395313 LONG 0813243 (MX)				
09/11/79	-	60	1200	62000	120	210	3600	-	-	80	-
395320081401200	YOKER C NR CUMBERLAND OH						LAT 395320 LONG 0814012 (MX)				
09/11/79	-	60	220	30000	3800	4000	3700	-	-	80	-
08/25/80	-	20	1400	13000	4200	4200	3200	-	-	64	-
07/17/81	-	40	250	13000	2900	3200	6300	-	-	180	-
395328081415000	YOKER C NR CUMBERLAND OH						LAT 395328 LONG 0814150 (MX)				
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	1109	97	416	-	8001	8753	-	54	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-
395329081530800	BOGGS C NR DUNCAN FALLS OH						LAT 395329 LONG 0815308 (MX)				
09/12/79	-	50	450	9800	150	150	330	-	-	20	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CH)	CHRO- MIUM, RECOV. FM BOT- TOM MA- (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- (UG/G)	LEAD RECOV. FM BOT- TOM MA- (UG/G)
395217082055300	KEVT RN AT WHITE COTTAGE OH					LAT 395217 LONG 0820553 (MX)					
09/10/79	-	0	-	-	0.00	-	440	-	20	10	50
08/28/80	-	0	-	-	0.00	-	10	-	10	10	10
395249080503500	CAPTINA C NR CAPTINA OH					LAT 395249 LONG 0805035 (MX)					
07/21/75	1	-	-	0.5	-	0	-	0	-	-	-
11/05/75	1	-	-	0.5	-	0	-	0	-	-	-
395255082040900	THOMPSON RN NR WHITE COTTAGE OH					LAT 395255 LONG 0820409 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	20	10	10
395312081391500	YOKER C NR CUMBERLAND OH					LAT 395312 LONG 0813916 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
395312081522900	SALT C NR DUNCAN FALLS OH					LAT 395312 LONG 0815229 (MX)					
05/29/75	2	-	-	0.5	-	20	-	0	-	-	-
10/03/75	1	-	-	0.5	-	20	-	20	-	-	-
395313081324300	BUFFALO C NR PLEASANT CITY OH					LAT 395313 LONG 0813243 (MX)					
09/11/79	-	0	-	-	0.00	-	20	-	20	10	20
395320081401200	YOKER C NR CUMBERLAND OH					LAT 395320 LONG 0814012 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	20	10	10
08/25/80	-	0	-	-	0.00	-	10	-	10	10	10
07/17/81	-	4	-	-	0.00	-	31	-	10	10	100
395328081415000	YOKER C NR CUMBERLAND OH					LAT 395328 LONG 0814150 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
395329081530800	BOGGS C NR DUNCAN FALLS OH					LAT 395329 LONG 0815308 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	20

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLU (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
395404081191000 BEAVER C NR BATESVILLE OH LAT 395404 LONG 0811910 (MX)											
09/26/80	4.60	775	8.0	244	-	298	5.0	132.0	100	491	200
08/05/81	2.50	700	7.0	190	-	232	2.5	182.0	23	468	75
07/13/82	2.50	-	8.7	197	-	240	3.7	160.0	-	457	-
395410081330200 BUFFALO C AT PLEASANT CITY OH LAT 395410 LONG 0813302 (MX)											
09/11/80	11.00	510	7.5	144	-	176	-	-	-	-	-
08/05/81	6.80	520	6.9	128	-	156	3.0	100.0	20	340	75
07/14/82	6.60	-	7.7	156	-	190	3.2	97.0	-	267	-
395411081492500 WILLIAMS F AT CHANDLERSVILLE OH LAT 395411 LONG 0814925 (MX)											
09/11/79	1.70	-	8.1	160	-	200	-	53.0	-	-	-
395419081044800 S F CAPTINA C NR SOMERTON OH LAT 395419 LONG 0810448 (MX)											
09/13/79	5.70	-	8.3	131	-	152	-	26.0	-	-	-
395435081013500 CAPTINA C AB ALLEDONIA OH LAT 395435 LONG 0810135 (MX)											
07/21/75	6.00	-	8.1	171	-	208	13.0	40.0	-	-	-
11/05/75	7.30	-	8.1	144	-	176	14.0	43.0	-	-	-
395444081273400 OPOSSUM RN NR SENECAVILLE OH LAT 395444 LONG 0812734 (MX)											
09/11/79	1.60	-	7.7	200	-	240	-	49.0	-	-	-
395507081200200 YOKER C NR BATESVILLE OH LAT 395507 LONG 0812002 (MX)											
08/25/80	3.70	445	7.6	182	-	222	-	-	-	-	-
08/05/81	0.39	730	6.7	167	-	204	1.5	210.0	20	528	75
08/26/82	0.28	-	8.3	197	-	240	4.5	87.0	-	339	-
395527081261700 SENECA F WILLS C NR SENECAVILLE OH LAT 395527 LONG 0812617 (MX)											
10/07/80	5.40	330	7.2	116	-	142	5.0	48.0	100	177	200
08/04/81	2.90	320	6.9	138	-	168	2.0	41.0	20	200	75
07/13/82	4.70	-	8.0	123	-	150	5.6	62.0	-	252	-
395553081541000 BOGGS C NR GRIFFIN OH LAT 395553 LONG 0815410 (MX)											
05/29/75	0.60	-	7.1	89	-	108	25.0	150.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
395404081191000	BEAVER C NR BATESVILLE OH							LAT 395404 LONG 0811910 (MX)			
09/26/80	200	30	110	-	30	50	-	30	-	-	10
08/05/81	505	46	763	-	73	144	-	10	-	-	10
07/13/82	-	-	-	-	-	-	-	-	-	-	-
395410081330200	BUFFALO C AT PLEASANT CITY OH							LAT 395410 LONG 0813302 (MX)			
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	402	50	694	-	190	300	-	10	-	-	10
07/14/82	-	-	-	-	-	-	-	-	-	-	-
395411081492500	WILLIAMS F AT CHANDLERSVILLE OH							LAT 395411 LONG 0814925 (MX)			
09/11/79	-	50	170	54000	30	40	1800	-	-	70	-
395419081044800	S F CAPTINA C NR SOMERTON OH							LAT 395419 LONG 0810448 (MX)			
09/13/79	-	30	390	20000	20	20	770	-	-	550	-
395435081013500	CAPTINA C AB ALLEDONIA OH							LAT 395435 LONG 0810135 (MX)			
07/21/75	190	-	290	-	-	50	-	-	20	-	-
11/05/75	100	-	80	-	-	20	-	-	20	-	-
395444081273400	OPPOSSUM RN NR SENECAVILLE OH							LAT 395444 LONG 0812734 (MX)			
09/11/79	-	200	6800	35000	110	510	1900	-	-	40	-
395507081200200	YOKER C NR BATESVILLE OH							LAT 395507 LONG 0812002 (MX)			
08/25/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	349	210	226	-	46	72	-	10	-	-	10
08/26/82	-	-	-	-	-	-	-	-	-	-	-
395527081261700	SENECA F WILLS C NR SENECAVILLE OH							LAT 395527 LONG 0812617 (MX)			
10/07/80	200	30	140	-	30	30	-	30	-	-	10
08/04/81	75	56	538	-	2904	3154	-	10	-	-	10
07/13/82	-	-	-	-	-	-	-	-	-	-	-
395553081541000	BOGGS C NR GRIFFIN OH							LAT 395553 LONG 0815410 (MX)			
05/29/75	670	-	1500	-	-	1400	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TERIAL (JG/G)	CHRO- MIUM TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM RECOV. FM BOT- TERIAL (JG/G)	CADMIUM RECOV. FM BOT- TERIAL (UG/G)	LEAD RECOV. FM BOT- TERIAL (JG/G)
395404081191000	BEAVER C NR HATESVILLE OH					LAT 395404 LONG 0811910 (MX)					
09/26/80	-	-	0.5	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-
395410041330200	BUFFALO C AT PLEASANT CITY OH					LAT 395410 LONG 0813302 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
07/14/82	-	-	-	-	-	-	-	-	-	-	-
395411081492500	WILLIAMS F AT CHANDLERSVILLE OH					LAT 395411 LONG 0814925 (MX)					
09/11/79	-	0	-	-	0.00	-	20	-	10	10	20
395419081044800	S F CAPTINA C NR SOMERTON OH					LAT 395419 LONG 0810448 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
395435081013500	CAPTINA C AB ALLEODONIA OH					LAT 395435 LONG 0810135 (MX)					
07/21/75	1	-	-	0.5	-	0	-	20	-	-	-
11/05/75	1	-	-	0.5	-	20	-	0	-	-	-
395444081273400	OPOSSUM RN NR SENECAVILLE OH					LAT 395444 LONG 0812734 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
395507081200200	YOKER C NR BATESVILLE OH					LAT 395507 LONG 0812002 (MX)					
08/25/80	-	-	-	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
08/26/82	-	-	-	-	-	-	-	-	-	-	-
395527081261700	SENECA F WILLS C NR SENECAVILLE OH					LAT 395527 LONG 0812617 (MX)					
10/07/80	-	-	0.5	-	-	-	-	-	-	-	-
08/04/81	-	-	0.5	-	-	-	-	-	-	-	-
07/13/82	-	-	-	-	-	-	-	-	-	-	-
395553081541000	BOGGS C NR GRIFFIN OH					LAT 395553 LONG 0815410 (MX)					
05/29/75	1	-	-	0.6	-	0	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
395618080592700	END F NR ARMSTRONGS MILLS OH					LAT 395618 LONG 0805927 (MX)					
09/13/79	4.30	-	8.6	150	-	168	-	39.0	-	-	-
395659081522700	L SALT C NR NORWICH OH					LAT 395659 LONG 0815227 (MX)					
09/11/79	5.70	-	7.5	110	-	130	-	84.0	-	-	-
395709081062900	LONG RN NR BARNESVILLE OH					LAT 395709 LONG 0810629 (MX)					
09/13/79	1.60	-	8.0	160	-	200	-	130.0	-	-	-
07/16/81	2.30	-	8.3	148	-	180	-	160.0	-	-	-
395710081135500	LEATHERWOOD C AT BAILEYS MILLS OH					LAT 395710 LONG 0811355 (MX)					
07/22/75	1.00	-	7.2	92	-	112	8.0	320.0	-	-	-
10/15/75	0.95	-	7.1	121	-	148	10.0	290.0	-	-	-
395738081133500	LEATHERWOOD C AT BAILEYS MILLS OH					LAT 395738 LONG 0811335 (MX)					
08/27/81	0.64	1035	7.3	115	-	140	4.2	480.0	124	853	75
08/12/82	2.00	-	7.8	139	-	170	9.4	340.0	-	654	-
395748081162000	LEATHERWOOD C AT SPENCER STATION OH					LAT 395748 LONG 0811620 (MX)					
08/05/81	7.20	735	6.6	125	-	152	3.0	-	-	545	-
08/03/82	4.30	-	7.7	123	-	150	8.3	410.0	-	781	-
395801081350200	CHAPMAN RN NR BYESVILLE OH					LAT 395801 LONG 0813502 (MX)					
09/10/79	2.00	-	7.4	120	-	150	-	85.0	-	-	-
395805081184800	LEATHERWOOD C AT QUAKER CITY OH					LAT 395805 LONG 0811848 (MX)					
08/05/81	10.00	880	7.3	118	-	144	-	350.0	20	-	84
08/03/82	3.00	-	7.7	115	-	140	9.5	410.0	-	766	-
395806081530800	L SALT C NR ZANESVILLE OH					LAT 395806 LONG 0815308 (MX)					
05/28/75	2.00	-	7.0	89	-	108	30.0	79.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
395618080592700	END F NR ARMSTRONGS MILLS OH							LAT 395618 LONG 0805927 (MX)			
09/13/79	-	10	630	12000	10	30	1500	-	-	30	-
395659081522700	L SALT C NR NORWICH OH							LAT 395659 LONG 0815227 (MX)			
09/11/79	-	140	590	27000	160	170	430	-	-	30	-
395709081062900	LONG RN NR BARNESVILLE OH							LAT 395709 LONG 0810629 (MX)			
09/13/79	-	30	190	15000	130	160	1100	-	-	30	-
07/16/81	-	30	420	11000	230	260	2000	-	-	44	-
395710081135500	LEATHERWOOD C AT BAILEYS MILLS OH							LAT 395710 LONG 0811355 (MX)			
07/22/75	220	-	430	-	-	1200	-	-	20	-	-
10/15/75	130	-	510	-	-	890	-	-	20	-	-
395738081133500	LEATHERWOOD C AT BAILEYS MILLS OH							LAT 395738 LONG 0811335 (MX)			
08/27/81	58260	12	23870	-	834	1536	-	226	-	-	10
08/12/82	-	-	-	-	-	-	-	-	-	-	-
395748081162000	LEATHERWOOD C AT SPENCER STATION OH							LAT 395748 LONG 0811620 (MX)			
08/05/81	433	-	703	-	-	364	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395801081350200	CHAPMAN RN NR BYESVILLE OH							LAT 395801 LONG 0813502 (MX)			
09/10/79	-	150	480	39000	130	130	1300	-	-	70	-
395805081184800	LEATHERWOOD C AT QUAKER CITY OH							LAT 395805 LONG 0811848 (MX)			
08/05/81	-	47	-	-	353	-	-	14	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395806081530800	L SALT C NR ZANESVILLE OH							LAT 395806 LONG 0815308 (MX)			
05/28/75	470	-	1300	-	-	470	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
395618080592700	ENJ F NR ARMSTRONGS MILLS OH					LAT 395618 LONG 0805927 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	50
395659081522700	L SALT C NR NORWICH OH					LAT 395659 LONG 0815227 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
395709081062900	LONG RN NR BARNESVILLE OH					LAT 395709 LONG 0810629 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	40
07/16/81	-	5	-	-	0.00	-	24	-	10	5	50
395710081135500	LEATHERWOOD C AT BAILEYS MILLS OH					LAT 395710 LONG 0811355 (MX)					
07/22/75	1	-	-	0.5	-	20	-	20	-	-	-
10/15/75	1	-	-	0.5	-	20	-	0	-	-	-
395738081133500	LEATHERWOOD C AT BAILEYS MILLS OH					LAT 395738 LONG 0811335 (MX)					
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
08/12/82	-	-	-	-	-	-	-	-	-	-	-
395748081162000	LEATHERWOOD C AT SPENCER STATION OH					LAT 395748 LONG 0811620 (MX)					
08/05/81	-	-	-	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395801081350200	CHAPMAN RN NR BYESVILLE OH					LAT 395801 LONG 0813502 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
395805081184800	LEATHERWOOD C AT QUAKER CITY OH					LAT 395805 LONG 0811848 (MX)					
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395806081530800	L SALT C NR ZANESVILLE OH					LAT 395806 LONG 0815308 (MX)					
05/28/75	1	-	-	0.9	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
395807081180000 LEATHERWOOD C AT QUAKER CITY OH LAT 395807 LONG 0811800 (MX)											
07/17/75	6.00	-	7.1	89	-	108	8.0	360.0	-	-	-
10/14/75	5.80	-	7.1	108	-	132	10.0	340.0	-	-	-
395825081505000 SALT C NR BRIDGEVILLE OH LAT 395825 LONG 0815050 (MX)											
05/28/75	10.00	-	7.1	94	-	114	28.0	28.0	-	-	-
10/03/75	12.00	-	7.0	90	-	110	22.0	31.0	-	-	-
395840081215900 LEATHERWOOD C NR SALESVILLE OH LAT 395840 LONG 0812159 (MX)											
08/05/81	12.00	840	7.0	98	-	120	3.0	362.0	20	392	75
08/03/82	3.80	-	8.0	123	-	150	13.0	430.0	-	824	-
395908081273400 BARTLETT RN NR ZANESVILLE OH LAT 395903 LONG 0820313 (MX)											
09/12/79	3.90	-	7.0	120	-	150	-	59.0	-	-	-
09/10/79	9.10	-	7.5	140	-	170	-	230.0	-	-	-
400023080532000 MCMAHON C AT GLENCOE OH LAT 400023 LONG 0805320 (MX)											
10/08/80	16.00	770	7.6	178	-	217	15.0	210.0	100	498	200
10/08/80	-	-	-	-	-	-	15.0	210.0	100	493	200
08/13/81	6.50	580	7.5	167	-	204	8.0	150.0	20	405	75
07/28/82	3.90	-	8.2	164	-	200	22.0	170.0	-	475	-
400031080450500 MCMAHON C AT BELLAIRE OH LAT 400003 LONG 0804505 (MX)											
11/05/75	19.00	-	7.4	164	-	200	20.0	230.0	-	-	-
400037081392700 PETERS C NR NEW CONCORD OH LAT 400037 LONG 0813927 (MX)											
09/10/79	2.70	-	7.3	120	-	150	-	80.0	-	-	-
400039080454600 MCMAHON C AT BELLAIRE OH LAT 400039 LONG 0804546 (MX)											
10/08/80	18.00	1020	7.5	146	-	178	22.0	360.0	100	758	200
08/13/81	20.00	910	7.8	157	-	192	6.0	365.0	20	685	263
07/28/82	21.00	-	8.0	148	-	180	31.0	380.0	-	873	-
400052080535400 MCMAHON C NR WARNOCK OH LAT 400052 LONG 0805354 (MX)											
06/25/75	9.00	-	8.1	149	-	182	22.0	57.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
395807081180000	LEATHERWOOD C AT QUAKER CITY OH						LAT 395807 LONG 0811800 (MX)				
07/17/75	290	-	280	-	-	1800	-	-	30	-	-
10/14/75	240	-	340	-	-	1700	-	-	30	-	-
395825081505000	SALT C NR BRIDGEVILLE OH						LAT 395825 LONG 0815050 (MX)				
05/28/75	240	-	950	-	-	270	-	-	20	-	-
10/03/75	170	-	840	-	-	170	-	-	20	-	-
395840081215900	LEATHERWOOD C NR SALESVILLE OH						LAT 395840 LONG 0812159 (MX)				
08/05/81	75	53	714	-	202	280	-	10	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395908081273400	BARTLETT RN NR ZANESVILLE OH						LAT 395903 LONG 0820313 (MX)				
09/12/79	-	70	1000	7800	170	190	150	-	-	20	-
09/10/79	-	80	480	15000	100	130	1200	-	-	60	-
400023080532000	MCMAHON C AT GLENCOE OH						LAT 400023 LONG 0805320 (MX)				
10/08/80	240	30	240	-	30	30	-	30	-	-	10
10/08/80	300	30	230	-	30	30	-	30	-	-	10
08/13/81	110	86	310	-	20	30	-	14	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-
400031080450500	MCMAHON C AT BELLAIRE OH						LAT 400003 LONG 0804505 (MX)				
11/05/75	530	-	1400	-	-	210	-	-	20	-	-
400037081392700	PETERS C NR NEW CONCORD OH						LAT 400037 LONG 0813927 (MX)				
09/10/79	-	70	600	23000	150	150	710	-	-	30	-
400039080454600	MCMAHON C AT BELLAIRE OH						LAT 400039 LONG 0804546 (MX)				
10/08/80	680	30	1310	-	190	290	-	30	-	-	10
08/13/81	280	1103	1220	-	60	63	-	10	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-
400052080535400	MCMAHON C NR WARNOCK OH						LAT 400052 LONG 0805354 (MX)				
06/25/75	320	-	470	-	-	50	-	-	50	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
395807081180000	LEATHERWOOD C AT QUAKER CITY OH					LAT 395807 LONG 0811800 (MX)					
07/17/75	1	-	-	0.5	-	20	-	20	-	-	-
10/14/75	1	-	-	0.5	-	0	-	0	-	-	-
395825081505000	SALT C NR BRIDGEVILLE OH					LAT 395825 LONG 0815050 (MX)					
05/28/75	1	-	-	0.5	-	20	-	20	-	-	-
10/03/75	1	-	-	0.5	-	20	-	20	-	-	-
395840081215900	LEATHERWOOD C NR SALESVILLE OH					LAT 395840 LONG 0812159 (MX)					
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
395908081273400	BARTLETT RN NR ZANESVILLE OH					LAT 395903 LONG 0820313 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
09/10/79	-	0	-	-	0.00	-	10	-	10	10	20
400023080532000	MCMAHON C AT GLENCOE OH					LAT 400023 LONG 0805320 (MX)					
10/08/80	-	-	0.5	-	-	-	-	-	-	-	-
10/08/80	-	-	0.5	-	-	-	-	-	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
400031080450500	MCMAHON C AT BELLAIRE OH					LAT 400003 LONG 0804505 (MX)					
11/05/75	1	-	-	0.5	-	20	-	20	-	-	-
400037081392700	PETERS C NR NEW CONCORD OH					LAT 400037 LONG 0813927 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
400039080454600	MCMAHON C AT BELLAIRE OH					LAT 400039 LONG 0804546 (MX)					
10/08/80	-	-	0.5	-	-	-	-	-	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
400052080535400	MCMAHON C NR WARNOCK OH					LAT 400052 LONG 0805354 (MX)					
06/25/75	1	-	-	0.5	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

400056081151200 SALT F NR BARNESVILLE OH LAT 400056 LONG 0811512 (MX)											

08/27/81	0.30	1200	7.4	95	-	116	2.5	640.0	20	1095	75
08/05/82	0.28	-	7.6	90	-	110	2.3	520.0	-	921	-

400123080594500 MCMAHON C NR WARNOCK OH LAT 400123 LONG 0805945 (MX)											

08/26/80	15.00	368	7.2	105	-	128	-	-	-	-	-
08/12/81	2.20	455	7.7	141	-	172	9.5	115.0	20	308	75
07/29/82	0.88	-	8.0	156	-	190	29.0	70.0	-	332	-

400124080473700 MCMAHON C NR BELLAIRE OH LAT 400124 LONG 0804737 (MX)											

10/08/80	15.00	1020	7.6	148	-	180	22.0	360.0	100	123	280
08/13/81	20.00	900	8.1	161	-	196	7.5	365.0	20	705	202
07/28/82	23.00	-	8.0	139	-	170	24.0	310.0	-	870	-

400129080492400 MCMAHON C AT NEFFS OH LAT 400129 LONG 0804924 (MX)											

10/08/80	11.00	815	7.1	154	-	188	14.0	240.0	100	519	200
08/13/81	13.00	710	7.6	154	-	188	4.0	240.0	20	515	106
08/17/82	4.80	-	8.0	148	-	180	27.0	330.0	-	653	-

400155080571100 BRUSH RN NR WARNOCK OH LAT 400155 LONG 0805711 (MX)											

08/12/81	1.20	965	7.8	-	-	-	9.0	375.0	20	752	75
07/29/82	0.84	-	8.2	230	-	280	45.0	570.0	-	1210	-

400223081093300 SPENCER C STATION 1 NR HENDRYSBURG OH LAT 400223 LONG 0810933 (MX)											

06/24/76	2.00	-	7.9	141	-	172	25.0	230.0	-	-	-

400224081093300 SPENCER C NR HENDRYSBURG OH LAT 400224 LONG 0810933 (MX)											

09/19/79	2.50	-	7.9	190	-	232	-	220.0	-	-	-
08/05/80	13.00	-	8.2	172	-	210	-	150.0	-	-	-
07/16/81	4.60	-	8.3	190	-	232	-	370.0	-	-	-

400238081212200 SALT F NR MIDDLEBOURNE OH LAT 400238 LONG 0812122 (MX)											

10/07/80	2.70	950	7.5	140	-	171	7.0	400.0	100	708	200
08/27/81	0.86	805	7.6	148	-	180	10.5	290.0	20	63	75
08/05/82	0.91	-	7.3	139	-	170	24.0	260.0	-	600	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)

400056081151200 SALT F NR BARNESVILLE OH						LAT 400056 LONG 0811512 (MX)					

08/27/81	360	10	572	-	416	853	-	14	-	-	10
08/05/82	-	-	-	-	-	-	-	-	-	-	-

400123080594500 MCMAHON C NR WARNOCK OH						LAT 400123 LONG 0805945 (MX)					

08/26/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	75	52	231	-	23	38	-	10	-	-	10
07/29/82	-	-	-	-	-	-	-	-	-	-	-

400124080473700 MCMAHON C NR BELLAIRE OH						LAT 400124 LONG 0804737 (MX)					

10/08/80	1250	30	4240	-	220	440	-	30	-	-	10
08/13/81	340	49	516	-	87	102	-	10	-	-	10
07/28/82	-	-	-	-	-	-	-	-	-	-	-

400129080492400 MCMAHON C AT NEFFS OH						LAT 400129 LONG 0804924 (MX)					

10/08/80	450	210	4750	-	130	130	-	30	-	-	10
08/13/81	164	88	1878	-	80	93	-	10	-	-	10
08/17/82	-	-	-	-	-	-	-	-	-	-	-

400155080571100 BRUSH RN NR WARNOCK OH						LAT 400155 LONG 0805711 (MX)					

08/12/81	75	60	272	-	13	72	-	13	-	-	10
07/29/82	-	-	-	-	-	-	-	-	-	-	-

400223081093300 SPENCER C STATION 1 NR HENDRYSBURG OH						LAT 400223 LONG 0810933 (MX)					

06/24/76	-	-	230	-	-	-	-	-	-	-	-

400224081093300 SPENCER C NR HENDRYSBURG OH						LAT 400224 LONG 0810933 (MX)					

09/19/79	-	30	200	23000	120	130	1100	-	-	120	-
08/05/80	-	30	1300	25000	120	180	1000	-	-	44	-
07/16/81	-	20	250	5800	50	60	2300	-	-	91	-

400238081212200 SALT F NR MIDDLEBOURNE OH						LAT 400238 LONG 0812122 (MX)					

10/07/80	980	30	980	-	30	220	-	30	-	-	10
08/27/81	357	50	586	-	74	293	-	35	-	-	10
08/05/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
400056081151200	SALT F NR BARNESVILLE OH					LAT 400056 LONG 0811512 (MX)					
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
08/05/82	-	-	-	-	-	-	-	-	-	-	-
400123080594500	MCMAHON C NR WARNOCK OH					LAT 400123 LONG 0805945 (MX)					
08/26/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-
400124080473700	MCMAHON C NR BELLAIRE OH					LAT 400124 LONG 0804737 (MX)					
10/08/80	-	-	0.5	-	-	-	-	-	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
07/28/82	-	-	-	-	-	-	-	-	-	-	-
400129080492400	MCMAHON C AT NEFFS OH					LAT 400129 LONG 0804924 (MX)					
10/08/80	-	-	0.5	-	-	-	-	-	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
08/17/82	-	-	-	-	-	-	-	-	-	-	-
400155080571100	BRUSH RN NR WARNOCK OH					LAT 400155 LONG 0805711 (MX)					
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/29/82	-	-	-	-	-	-	-	-	-	-	-
400223081093300	SPENCER C STATION 1 NR HENDRYSBURG OH					LAT 400223 LONG 0810933 (MX)					
06/24/76	-	-	-	-	-	-	-	-	-	-	-
400224081093300	SPENCER C NR HENDRYSBURG OH					LAT 400224 LONG 0810933 (MX)					
09/19/79	-	0	-	-	0.00	-	30	-	20	10	40
08/05/80	-	0	-	-	0.00	-	20	-	10	10	40
07/16/81	-	3	-	-	0.00	-	25	-	10	5	50
400238081212200	SALT F NR MIDDLEBOURNE OH					LAT 400238 LONG 0812122 (MX)					
10/07/80	-	-	0.5	-	-	-	-	-	-	-	-
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
08/05/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 JEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

400318081070800 STILLWATER C NR MORRISTOWN OH LAT 400318 LONG 0810708 (MX)											

07/02/75	3.00	-	7.5	176	-	215	11.0	560.0	-	-	-
09/23/75	7.00	-	7.4	158	-	192	15.0	490.0	-	-	-

400321081091300 SPENCER C AT HENDRYSBURG OH LAT 400321 LONG 0810913 (MX)											

10/15/75	6.30	-	7.7	203	-	248	20.0	410.0	-	-	-
06/25/76	14.00	-	7.8	136	-	166	-	-	-	-	-

400341080582500 BRUSH RN NR ST CLAIRSVILLE OH LAT 400341 LONG 0805825 (MX)											

07/02/75	0.10	-	7.2	263	-	320	80.0	270.0	-	-	-

400429082034500 BIG RN NR DRESDEN OH LAT 400429 LONG 0820345 (MX)											

09/12/79	2.40	-	7.1	110	-	140	-	44.0	-	-	-
08/04/80	6.70	-	8.0	95	-	116	-	32.0	-	-	-

400506081073900 STILLWATER C NR HENDRYSBURG OH LAT 400506 LONG 0810739 (MX)											

10/07/80	14.20	1975	7.7	228	-	278	9.0	930.0	100	1405	200
08/26/81	7.40	1690	7.3	230	-	280	5.9	940.0	20	1530	75
07/27/82	7.60	-	8.1	213	-	260	32.0	620.0	-	1220	-

400527081163600 SKULL F NR LONDONDERRY OH LAT 400527 LONG 0811636 (MX)											

07/28/75	1.00	-	7.6	72	-	88	19.0	1020.0	-	-	-
10/15/75	1.20	-	7.2	95	-	116	20.0	1000.0	-	-	-

400601081573600 N B SYMMES C NR ADAMSVILLE OH LAT 400601 LONG 0815736 (MX)											

09/11/79	4.90	-	7.1	44	-	54	-	98.0	-	-	-

400620081163000 SKULL F NR ANTRIM OH LAT 400620 LONG 0811630 (MX)											

10/07/80	2.30	2050	4.5	-	134	-	7.0	1370.0	240	1887	12700
08/26/81	2.00	2140	3.8	-	171	-	8.0	1420.0	308	2355	13040
08/12/82	2.30	-	4.6	0	22	0	-	1100.0	-	-	-

400635081011000 WHEELING C AT LAFFERTY OH LAT 400635 LONG 0810110 (MX)											

08/26/80	31.00	1477	7.6	190	-	232	-	-	-	-	-
08/14/81	7.00	1590	7.9	205	-	250	9.0	870.0	516	1460	206
08/04/82	3.10	-	8.1	197	-	240	22.0	850.0	-	1540	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSEVIC, DIS- SOLVED (UG/L AS AS)
400318081070800	STILLWATER C NR MORRISTOWN OH						LAT 400318 LONG 0810708 (MX)				
07/02/75	230	-	670	-	-	550	-	-	20	-	-
09/23/75	200	-	290	-	-	630	-	-	20	-	-
400321081091300	SPENCER C AT HENDRYSBURG OH						LAT 400321 LONG 0810913 (MX)				
10/15/75	180	-	300	-	-	310	-	-	170	-	-
06/25/76	-	-	-	-	-	-	-	-	-	-	-
400341080582500	BRUSH RN NR ST CLAIRSVILLE OH						LAT 400341 LONG 0805825 (MX)				
07/02/75	180	-	450	-	-	4200	-	-	20	-	-
400429082034500	BIG RN NR ORESSEN OH						LAT 400429 LONG 0820345 (MX)				
09/12/79	-	100	800	33000	110	120	860	-	-	50	-
08/04/80	-	520	2700	17000	170	240	330	-	-	200	-
400506081073900	STILLWATER C NR HENDRYSBURG OH						LAT 400506 LONG 0810739 (MX)				
10/07/80	670	30	830	-	530	660	-	30	-	-	10
08/26/81	6223	10	6637	-	1506	255	-	28	-	-	10
07/27/82	-	-	-	-	-	-	-	-	-	-	-
400527081163600	SKULL F NR LONDONOERRY OH						LAT 400527 LONG 0811636 (MX)				
07/28/75	760	-	290	-	-	9300	-	-	230	-	-
10/15/75	9200	-	3900	-	-	10000	-	-	150	-	-
400601081573600	N B SYMMES C NR ADAMSVILLE OH						LAT 400601 LONG 0815736 (MX)				
09/11/79	-	30	810	24000	540	580	920	-	-	40	-
400620081163000	SKULL F NR ANTRIM OH						LAT 400620 LONG 0811630 (MX)				
10/07/80	16700	30	500	-	14000	14500	-	300	-	-	10
08/26/81	17790	211	619	-	9920	10450	-	361	-	-	10
08/12/82	-	170	170	-	9700	12000	-	-	-	-	-
400635081011000	WHEELING C AT LAFFERTY OH						LAT 400635 LONG 0810110 (MX)				
08/26/80	-	-	-	-	-	-	-	-	-	-	-
08/14/81	217	135	272	-	898	907	-	55	-	-	10
08/04/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
400318081070800	STILLWATER C NR MORRISTOWN OH					LAT 400318 LONG 0810708 (MX)					
07/02/75	3	-	-	0.5	-	20	-	20	-	-	-
09/23/75	1	-	-	0.5	-	20	-	20	-	-	-
400321081091300	SPENCER C AT HENDRYSBURG OH					LAT 400321 LONG 0810913 (MX)					
10/15/75	1	-	-	0.5	-	20	-	20	-	-	-
06/25/76	-	-	-	-	-	-	-	-	-	-	-
400341080582500	BRUSH RN NR ST CLAIRSVILLE OH					LAT 400341 LONG 0805825 (MX)					
07/02/75	1	-	-	0.5	-	0	-	0	-	-	-
400429082034500	BIG RN NR DRESDEN OH					LAT 400429 LONG 0820345 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	20
08/04/80	-	0	-	-	0.00	-	30	-	10	10	90
400506081073900	STILLWATER C NR HENDRYSBURG OH					LAT 400506 LONG 0810739 (MX)					
10/07/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/27/82	-	-	-	-	-	-	-	-	-	-	-
400527081163500	SKULL F NR LONDONDERRY OH					LAT 400527 LONG 0811636 (MX)					
07/28/75	1	-	-	0.5	-	290	-	20	-	-	-
10/15/75	22	-	-	0.5	-	30	-	30	-	-	-
400601081573500	N B SYMMES C NR ADAMSVILLE OH					LAT 400601 LONG 0815736 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
400620081163000	SKULL F NR ANTRIM OH					LAT 400620 LONG 0811630 (MX)					
10/07/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
08/12/82	-	-	-	-	-	-	-	-	-	-	-
400635081011000	WHEELING C AT LAFFERTY OH					LAT 400635 LONG 0810110 (MX)					
08/26/80	-	-	-	-	-	-	-	-	-	-	-
08/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/04/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

400716080530900 COX RN NR MAYVARD OH LAT 400716 LONG 0805309 (MX)											

08/13/81	5.00	1615	8.0	290	-	354	5.5	770.0	569	1312	201
08/04/82	3.00	-	8.1	336	-	410	9.3	680.0	-	1400	-

400729081153400 CROSSBONES RN NR LONDONDERRY OH LAT 400729 LONG 0811534 (MX)											

10/15/75	0.80	-	7.1	112	-	136	12.0	90.0	-	-	-

400815090592700 CRABAPPLE C AT UNIONTOWN OH LAT 400815 LONG 0805927 (MX)											

08/13/81	8.60	1820	7.9	226	-	276	3.8	1140.0	620	1722	248
08/10/82	4.60	-	8.0	213	-	260	9.9	920.0	-	1780	-

400842081081000 TRAIL RN AT HOLLOWAY OH LAT 400842 LONG 0810810 (MX)											

07/28/75	0.90	-	8.1	218	-	266	15.0	870.0	-	-	-
11/03/75	2.50	-	7.3	185	-	226	20.0	730.0	-	-	-

400915080581900 CAMPBELL RN NR UNIONTOWN OH LAT 400915 LONG 0805819 (MX)											

08/25/80	13.00	2300	7.7	203	-	248	-	-	-	-	-
08/13/81	3.40	2400	7.8	249	-	304	5.7	1850.0	607	2422	358
08/10/82	2.70	-	7.9	246	-	300	15.0	1300.0	-	2350	-

400932081265100 CLEAR F NR BIRMINGHAM OH LAT 400932 LONG 0812651 (MX)											

09/11/79	3.70	-	6.8	82	20	100	-	30.0	-	-	-
07/16/81	3.00	-	7.6	95	-	116	-	34.0	-	-	-

400943081081500 TRAIL RN AT HOLLOWAY OH LAT 400943 LONG 0810815 (MX)											

10/07/80	4.70	2000	8.1	226	-	276	11.0	1150.0	100	1727	200
08/26/81	3.10	1940	7.8	225	-	274	12.0	1120.0	308	1813	75
07/26/82	2.00	-	8.2	213	-	260	19.0	880.0	-	1660	-

401005082001700 MILL F WAKATOMIKA C NR TRINWAY OH LAT 401005 LONG 0820017 (MX)											

09/12/79	12.46	-	-	-	-	-	-	-	-	-	-
09/12/79	12.00	-	7.1	48	-	58	-	870.0	-	-	-
08/30/80	25.00	-	7.1	42	-	51	-	860.0	-	-	-
07/14/81	15.00	-	7.6	49	-	60	-	960.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
400716080530900	COX RN NR MAYNARD OH							LAT 400716 LONG 0805309 (MX)			
08/13/81	270	36	382	-	70	70	-	57	-	-	10
08/04/82	-	-	-	-	-	-	-	-	-	-	-
400729081153400	CROSSBONES RN NR LONDONDERRY OH							LAT 400729 LONG 0811534 (MX)			
10/15/75	230	-	290	-	-	3400	-	-	60	-	-
400815080592700	CRABAPPLE C AT UNIONTOWN OH							LAT 400815 LONG 0805927 (MX)			
08/13/81	182	128	283	-	47	82	-	49	-	-	10
08/10/82	-	-	-	-	-	-	-	-	-	-	-
400842081081000	TRAIL RN AT HOLLOWAY OH							LAT 400842 LONG 0810810 (MX)			
07/28/75	140	-	360	-	-	620	-	-	20	-	-
11/03/75	40	-	210	-	-	520	-	-	20	-	-
400915080581900	CAMPBELL RN NR UNIONTOWN OH							LAT 400915 LONG 0805819 (MX)			
08/25/80	-	-	-	-	-	-	-	-	-	-	-
08/13/81	281	99	389	-	261	403	-	45	-	-	10
08/10/82	-	-	-	-	-	-	-	-	-	-	-
400932081265100	CLEAR F NR BIRMINGHAM OH							LAT 400932 LONG 0812651 (MX)			
09/11/79	-	110	740	8800	90	120	220	-	-	10	-
07/16/81	-	70	650	5800	130	150	680	-	-	31	-
400943081081500	TRAIL RN AT HOLLOWAY OH							LAT 400943 LONG 0810815 (MX)			
10/07/80	360	30	220	-	710	740	-	30	-	-	10
08/26/81	502	19	221	-	220	4810	-	361	-	-	10
07/26/82	-	-	-	-	-	-	-	-	-	-	-
401005082001700	MILL F WAKATOMIKA C NR TRINWAY OH							LAT 401005 LONG 0820017 (MX)			
09/12/79	-	-	-	-	-	-	-	-	-	-	-
09/12/79	-	100	730	36000	6800	6900	930	-	-	60	-
08/30/80	-	90	2000	11000	6300	5400	1000	-	-	33	-
07/14/81	-	30	560	10000	6700	6700	4400	-	-	110	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC	ARSENIC	MERCURY	MERCURY	MERCURY	COPPER	COPPER	CHRO-	CHRO-	CADMIUM	LEAD
	TOTAL	RECOV.	DIS-	TOTAL	RECOV.	TOTAL	RECOV.	MUM,	MUM,	RECOV.	RECOV
	RECOV-	FM BOT-	SOLVED	RECOV-	FM BOT-	RECOV-	FM BOT-	RECOV-	FM BOT-	FM BOT-	FM BOT-
	ERABLE	TOM MA-	ERABLE	TOM MA-	ERABLE	TOM MA-	ERABLE	TOM MA-	TOM MA-	TOM MA-	TOM MA-
	(UG/L	TERIAL	(UG/L	(UG/L	TERIAL	(UG/L	TERIAL	(UG/L	TERIAL	TERIAL	TERIAL
	AS AS)	(UG/G)	AS HG)	AS HG)	(UG/G)	AS CU)	(UG/G)	AS CR)	(UG/G)	(UG/G)	(UG/G)

400716080530900 COX RV NR MAYNARD OH LAT 400716 LONG 0805309 (MX)											

08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
08/04/82	-	-	-	-	-	-	-	-	-	-	-

400729081153400 CROSSBONES RN NR LONDONDERRY OH LAT 400729 LONG 0811534 (MX)											

10/15/75	1	-	-	0.5	-	0	-	20	-	-	-

400815080592700 CRABAPPLE C AT UNIONTOWN OH LAT 400815 LONG 0805927 (MX)											

08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
08/10/82	-	-	-	-	-	-	-	-	-	-	-

400842081081000 TRAIL RN AT HOLLOWAY OH LAT 400842 LONG 0810810 (MX)											

07/28/75	1	-	-	0.5	-	20	-	20	-	-	-
11/03/75	1	-	-	0.5	-	20	-	0	-	-	-

400915080581900 CAMPBELL RN NR UNIONTOWN OH LAT 400915 LONG 0805819 (MX)											

08/25/80	-	-	-	-	-	-	-	-	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
08/10/82	-	-	-	-	-	-	-	-	-	-	-

400932081265100 CLEAR F NR BIRMINGHAM OH LAT 400932 LONG 0812651 (MX)											

09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
07/16/81	-	5	-	-	0.00	-	3	-	10	3	30

400943081081500 TRAIL RN AT HOLLOWAY OH LAT 400943 LONG 0810815 (MX)											

10/07/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-

401005082001700 MILL F WAKATONIKA C NR TRINWAY OH LAT 401005 LONG 0820017 (MX)											

09/12/79	-	-	-	-	-	-	-	-	-	-	-
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
08/30/80	-	0	-	-	0.00	-	10	-	10	10	10
07/14/81	-	0	-	-	0.00	-	21	-	10	3	70

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLO (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

401049081500900 Z RN NR WILLS CREEK OH LAT 401049 LONG 0815009 (MX)											

07/10/75	2.00	-	6.1	31	-	38	8.0	610.0	-	-	-
09/29/75	5.00	-	6.3	31	-	38	15.0	580.0	-	-	-

401100082015200 SAND F WAKATOMIKA C NR TRINWAY OH LAT 401100 LONG 0820152 (MX)											

09/12/79	3.00	-	7.6	110	-	140	-	180.0	-	-	-
08/29/80	6.50	-	7.6	98	-	120	-	180.0	-	-	-

401106081500500 NO NAME TR WILLS C NR CONESVILLE OH LAT 401106 LONG 0815005 (MX)											

09/11/79	2.90	-	7.3	57	-	70	-	460.0	-	-	-
08/30/80	8.60	-	6.8	34	25	42	-	580.0	-	-	-
07/14/81	2.80	-	7.2	44	-	54	-	700.0	-	-	-

401107080475800 OLD FARM RN NR DILLONVALE OH LAT 401107 LONG 0804758 (MX)											

08/11/75	0.20	-	8.0	223	-	272	14.0	610.0	-	-	-

401120080425100 SHORT C NR RAYLAND OH LAT 401120 LONG 0804251 (MX)											

10/14/80	65.00	2500	7.9	230	-	280	15.0	1350.0	100	2124	200
08/18/81	72.00	2250	8.2	197	-	240	10.0	1150.0	20	2020	75
08/05/82	59.00	-	8.2	189	-	230	28.0	1000.0	-	1910	-

401122081585400 MOSCOW BK NR NEW MOSCOW OH LAT 401122 LONG 0815854 (MX)											

09/11/80	-	1500	6.7	-	25	-	-	-	-	-	-
08/12/81	3.10	2100	6.2	59	5	72	2.0	1460.0	20	2105	214
07/20/82	2.30	-	7.2	61	-	74	14.0	1200.0	-	1930	-

401126081121400 BOGGS F AT PIEDMONT OH LAT 401126 LONG 0811214 (MX)											

08/26/81	9.60	-	7.2	185	-	226	2.5	980.0	20	1663	75
07/26/82	5.10	-	7.8	154	-	200	11.0	860.0	-	1500	-

401144080472700 SHORT C AT DILLONVALE OH LAT 401144 LONG 0804727 (MX)											

10/14/80	47.00	2500	7.5	243	-	296	13.0	1480.0	100	2374	230
08/18/81	50.00	2500	7.2	180	-	220	14.5	1420.0	20	2383	75
08/18/82	27.00	-	7.2	154	-	200	39.0	1400.0	-	2310	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
401049081500900	Z RN NR WILLS CREEK OH							LAT 401049 LONG 0815009 (MX)			
07/10/75	580	-	19000	-	-	4100	-	-	120	-	-
09/29/75	580	-	14000	-	-	3700	-	-	90	-	-
401100082015200	SAND F WAKATOMIKA C NR TRINWAY OH							LAT 401100 LONG 0820152 (MX)			
09/12/79	-	100	570	19000	400	400	880	-	-	40	-
08/29/80	-	180	540	9000	330	330	820	-	-	25	-
401106081500500	NO NAME TR WILLS C NR CONESVILLE OH							LAT 401106 LONG 0815005 (MX)			
09/11/79	-	240	930	21000	1300	1400	360	-	-	50	-
08/30/80	-	3800	6300	9000	2500	2500	150	-	-	18	-
07/14/81	-	870	3400	30000	2600	2800	980	-	-	130	-
401107080475800	OLD FARM RN NR DILLONVALE OH							LAT 401107 LONG 0804758 (MX)			
08/11/75	150	-	520	-	-	150	-	-	20	-	-
401120080425100	SHORT C NR RAYLAND OH							LAT 401120 LONG 0804251 (MX)			
10/14/80	880	30	3200	-	210	200	-	30	-	-	10
08/18/81	75	29	1634	-	15	33	-	10	-	-	10
08/05/82	-	-	-	-	-	-	-	-	-	-	-
401122081585400	MOSCOW BK NR NEW MOSCOW OH							LAT 401122 LONG 0815854 (MX)			
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	293	74	324	-	7831	8036	-	43	-	-	10
07/20/82	-	-	-	-	-	-	-	-	-	-	-
401126081121400	806GS F AT PIEDMONT OH							LAT 401126 LONG 0811214 (MX)			
08/26/81	530	28	294	-	98	218	-	44	-	-	10
07/26/82	-	-	-	-	-	-	-	-	-	-	-
401144080472700	SHORT C AT DILLONVALE OH							LAT 401144 LONG 0804727 (MX)			
10/14/80	1590	230	4560	-	250	250	-	30	-	-	10
08/18/81	75	736	5436	-	125	202	-	10	-	-	10
08/18/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRD- MIUM, RECOV. ERABLE (UG/L AS CR)	CHRD- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
401049081500900	Z RN NR WILLS CREEK OH					LAT 401049 LONG 0815009 (MX)					
07/10/75	1	-	-	1.6	-	20	-	20	-	-	-
09/29/75	1	-	-	0.5	-	20	-	20	-	-	-
401100082015200	SAND F WAKATOMIKA C NR TRINWAY OH					LAT 401100 LONG 0820152 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
08/29/80	-	0	-	-	0.00	-	10	-	10	10	10
401106081500500	NO NAME TR WILLS C NR CONESVILLE OH					LAT 401106 LONG 0815005 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
08/30/80	-	0	-	-	0.00	-	10	-	10	10	10
07/14/81	-	34	-	-	0.00	-	35	-	10	5	60
401107080475800	OLD FARM RN NR DILLONVALE OH					LAT 401107 LONG 0804758 (MX)					
08/11/75	1	-	-	0.5	-	20	-	20	-	-	-
401120080425100	SHORT C NR RAYLAND OH					LAT 401120 LONG 0804251 (MX)					
10/14/80	-	-	0.5	-	-	-	-	-	-	-	-
08/18/81	-	-	0.5	-	-	-	-	-	-	-	-
08/05/82	-	-	-	-	-	-	-	-	-	-	-
401122081585400	MOSCOW BK NR VEW MOSCOW OH					LAT 401122 LONG 0815854 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
401126081121400	BOGGS F AT PIEDMONT OH					LAT 401126 LONG 0811214 (MX)					
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
401144080472700	SHORT C AT DILLONVALE OH					LAT 401144 LONG 0804727 (MX)					
10/14/80	-	-	0.5	-	-	-	-	-	-	-	-
08/18/81	-	-	0.5	-	-	-	-	-	-	-	-
08/18/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLO (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

401201081573500 MILL F NR NEW MOSCOW OH LAT 401201 LONG 0815735 (MX)											

09/11/80	-	1400	7.3	31	-	38	-	-	-	-	-
08/12/81	4.40	1900	6.6	38	-	46	3.0	1180.0	20	1927	1950
07/20/82	5.10	-	6.7	-	-	-	7.3	1000.0	-	1670	-

401211080462100 PINEY F AT DILLONVALE OH LAT 401211 LONG 0804621 (MX)											

09/10/79	7.00	-	8.2	95	-	116	-	690.0	-	-	-
08/18/81	11.00	-	8.0	208	-	253	-	640.0	-	-	-
08/26/81	11.00	-	7.4	210	-	256	-	680.0	-	-	-
08/26/81	11.00	-	7.4	210	-	256	-	640.0	-	-	-
08/18/82	4.60	-	8.2	205	-	250	-	590.0	-	-	-

401242080470000 PINEY F AT DILLONVALE OH LAT 401242 LONG 0804700 (MX)											

07/01/75	7.00	-	7.2	154	-	200	14.0	790.0	-	-	-

401247080532800 M F SHORT C NR ADENA OH LAT 401247 LONG 0805328 (MX)											

09/10/79	7.00	-	8.5	190	-	196	-	1000.0	-	-	-
07/15/81	14.00	-	8.4	197	-	192	-	1100.0	-	-	-

401247081512900 ROBINSON RN NR TYNDALL OH LAT 401247 LONG 0815129 (MX)											

08/25/80	-	890	5.4	3	79	4	-	-	-	-	-
08/12/81	2.20	1200	5.2	8	74	10	5.0	570.0	20	1050	75
07/20/82	1.90	-	3.9	0	65	0	23.0	580.0	100	949	3100

401248081512900 ROBINSON RN NR COSHOCTON OH LAT 401248 LONG 0815129 (MX)											

07/10/75	3.00	-	3.7	1	84	0	12.0	500.0	-	-	-
09/29/75	6.00	-	4.4	1	84	0	25.0	490.0	-	-	-

401253081564300 MILL F NR NEW MOSCOW OH LAT 401253 LONG 0815643 (MX)											

09/11/80	-	1320	6.5	44	12	54	-	-	-	-	-
08/12/81	2.40	1700	6.3	44	10	54	2.0	1020.0	20	1685	75
07/20/82	2.00	-	7.2	43	-	52	5.0	920.0	-	1570	-

401311081463100 BACON RN NR PLAINFIELD OH LAT 401311 LONG 0814631 (MX)											

10/22/80	1.10	1550	5.9	8	20	10	7.5	960.0	100	1403	1520
08/12/81	1.10	1500	5.4	7	37	8	1.5	890.0	20	1490	2123
07/20/82	1.00	-	6.4	11	5	14	7.7	690.0	-	1100	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
401201081573500	MILL F NR NEW MOSCOW OH							LAT 401201 LONG 0815735 (MX)			
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	3476	12450	18520	-	6906	7184	-	104	-	-	10
07/20/82	-	-	-	-	-	-	-	-	-	-	-
401211080462100	PIVEY F AT DILLONVALE OH							LAT 401211 LONG 0804621 (MX)			
09/10/79	-	20	340	39000	160	180	1200	-	-	90	-
08/18/81	-	70	390	13000	40	40	980	-	-	59	-
08/26/81	-	10	922	-	-	40	-	-	-	-	-
08/26/81	-	10	170	-	5	5	-	-	-	-	-
08/18/82	-	-	-	5900	-	-	1400	-	-	39	-
401242080470000	PIVEY F AT DILLONVALE OH							LAT 401242 LONG 0804700 (MX)			
07/01/75	7300	-	25000	-	-	870	-	-	120	-	-
401247080532800	M F SHORT C NR ADENA OH							LAT 401247 LONG 0805328 (MX)			
09/10/79	-	50	130	29000	30	40	1400	-	-	90	-
07/15/81	-	50	540	6600	60	90	2100	-	-	61	-
401247081512900	ROBINSON RN NR TYNDALL OH							LAT 401247 LONG 0815129 (MX)			
08/25/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	75	36	335	-	21	80	-	10	-	-	10
07/20/82	3700	6500	16000	-	5200	5400	-	98	-	-	-
401248081512900	ROBINSON RN NR COSHOCTON OH							LAT 401248 LONG 0815129 (MX)			
07/10/75	4200	-	21000	-	-	5900	-	-	170	-	-
09/29/75	4800	-	26000	-	-	5700	-	-	100	-	-
401253081564300	MILL F NR NEW MOSCOW OH							LAT 401253 LONG 0815643 (MX)			
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	848	47	1390	-	204	238	-	19	-	-	10
07/20/82	-	-	-	-	-	-	-	-	-	-	-
401311081463100	BACON RN NR PLAINFIELD OH							LAT 401311 LONG 0814631 (MX)			
10/22/80	4665	1600	3150	-	3600	3775	-	30	-	-	10
08/12/81	5420	1500	3056	-	2692	2795	-	132	-	-	10
07/20/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CP)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
401201081573500	MILL F NR NEW MOSCOW OH					LAT 401201 LONG 0815735 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
401211080462100	PINEY F AT DILLONVALE OH					LAT 401211 LONG 0804621 (MX)					
09/10/79	-	0	-	-	0.00	-	30	-	10	10	30
08/18/81	-	1	-	-	0.01	-	12	-	6	1	16
08/26/81	-	-	-	-	-	-	-	-	-	-	-
08/26/81	-	-	-	-	-	-	-	-	-	-	-
08/18/82	-	-	-	-	-	-	-	-	-	-	-
401242080470000	PINEY F AT DILLONVALE OH					LAT 401242 LONG 0804700 (MX)					
07/01/75	1	-	-	0.5	-	20	-	40	-	-	-
401247080532800	M F SHORT C NR ADEVA OH					LAT 401247 LONG 0805328 (MX)					
09/10/79	-	0	-	-	0.00	-	20	-	10	10	30
07/15/81	-	4	-	-	0.00	-	5	-	30	2	20
401247081512900	ROBINSON RN NR TYNDALL OH					LAT 401247 LONG 0815129 (MX)					
08/25/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
401248081512900	ROBINSON RN NR COSHOCTON OH					LAT 401248 LONG 0815129 (MX)					
07/10/75	1	-	-	2.1	-	20	-	20	-	-	-
09/29/75	1	-	-	0.5	-	20	-	20	-	-	-
401253081564300	MILL F NR NEW MOSCOW OH					LAT 401253 LONG 0815643 (MX)					
09/11/80	-	-	-	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
401311081463100	BACON RN NR PLAINFIELD OH					LAT 401311 LONG 0814631 (MX)					
10/22/80	-	-	0.5	-	-	-	-	-	-	-	-
08/12/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

401314080522300 N F SHORT C AT ADEVA OH LAT 401314 LONG 0805223 (MX)											

09/10/79	9.60	-	8.2	170	-	204	-	970.0	-	-	-
07/15/81	30.00	-	8.3	154	-	168	-	900.0	-	-	-

401357081435800 CENTER C NR PLAINFIELD OH LAT 401357 LONG 0814358 (MX)											

09/11/79	1.50	-	7.2	98	-	120	-	170.0	-	-	-

401417082085000 WINDING F WAKATOMIKA C NR WALHONDING OH LAT 401417 LONG 0820850 (MX)											

09/12/79	5.80	-	7.0	66	-	81	-	17.0	-	-	-

401430080534300 N F SHORT C NR ROBYVILLE OH LAT 401430 LONG 0805343 (MX)											

07/31/81	18.00	1750	7.9	177	-	216	4.5	900.0	30	1498	521
08/09/82	10.00	-	7.9	148	-	180	13.0	880.0	-	1490	-

401437080580700 SALLY BUFFALO C NR CADIZ OH LAT 401437 LONG 0805807 (MX)											

07/31/81	5.00	1700	7.8	177	-	216	5.5	750.0	20	1380	196
08/09/82	1.50	-	7.6	172	-	210	49.0	570.0	-	1110	-

401445080393000 SALT RN NR RUSH RN OH LAT 401445 LONG 0803930 (MX)											

08/25/81	1.50	1120	8.0	195	-	238	10.0	405.0	20	837	75
08/24/82	1.00	-	8.4	187	-	220	15.0	420.0	-	730	-

401508080492200 PINEY F AT PINEY FORK OH LAT 401508 LONG 0804922 (MX)											

07/01/75	2.00	-	7.6	246	-	300	12.0	670.0	-	-	-

401534080551000 N F SHORT C NR UNIONVALE OH LAT 401534 LONG 0805510 (MX)											

07/01/75	10.00	-	7.0	131	-	160	300.0	930.0	-	-	-
11/04/75	4.60	-	6.8	128	-	156	170.0	870.0	-	-	-

401619080510000 PINEY F NR PINEY FORK OH LAT 401619 LONG 0805100 (MX)											

07/31/81	11.00	1400	8.0	198	-	242	5.5	580.0	45	1115	326
08/16/82	1.90	-	8.2	205	-	250	19.0	770.0	-	1500	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)

401314080522300 N F SHORT C AT ADEVA OH LAT 401314 LONG 0805223 (MX)										

09/10/79	-	50	110	51000	180	180	1900	-	-	150
07/15/81	-	50	320	11000	180	190	3200	-	-	130

401357081435800 CENTER C NR PLAINFIELD OH LAT 401357 LONG 0814358 (MX)										

09/11/79	-	30	850	9700	170	210	340	-	-	20

401417082085000 WINDING F WAKATOMI CA C NR WALHONDING OH LAT 401417 LONG 0820850 (MX)										

09/12/79	-	100	740	7900	90	110	150	-	-	20

401430080534300 N F SHORT C NR ROBYVILLE OH LAT 401430 LONG 0805343 (MX)										

07/31/81	737	1381	1394	-	328	477	-	39	-	-
08/09/82	-	-	-	-	-	-	-	-	-	10

401437080580700 SALLY BUFFALO C NR CADIZ OH LAT 401437 LONG 0805807 (MX)										

07/31/81	389	66	462	-	222	279	-	10	-	-
08/09/82	-	-	-	-	-	-	-	-	-	10

401445080393000 SALT RN NR RUSH RN OH LAT 401445 LONG 0803930 (MX)										

08/25/81	75	25	83	-	6	7	-	10	-	-
08/24/82	-	-	-	-	-	-	-	-	-	10

401508080492200 PINEY F AT PINEY FORK OH LAT 401508 LONG 0804922 (MX)										

07/01/75	490	-	600	-	-	450	-	-	20	-

401534080551000 N F SHORT C NR UNIONVALE OH LAT 401534 LONG 0805510 (MX)										

07/01/75	2000	-	5300	-	-	1400	-	-	70	-
11/04/75	630	-	6300	-	-	1100	-	-	70	-

401619080510000 PINEY F NR PINEY FORK OH LAT 401619 LONG 0805100 (MX)										

07/31/81	454	724	893	-	284	301	-	29	-	-
08/16/82	-	-	-	-	-	-	-	-	-	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
401314080522300	N F SHORT C AT ADENA OH					LAT 401314 LONG 0805223 (MX)					
09/10/79	-	0	-	-	0.00	-	70	-	20	10	90
07/15/81	-	0	-	-	0.00	-	29	-	10	4	40
401357081435800	CENTER C NR PLAINFIELD OH					LAT 401357 LONG 0814358 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
401417082085000	WINDING F WAKATOMIKA C NR WALHONDING OH					LAT 401417 LONG 0820850 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
401430080534300	N F SHORT C NR ROBYVILLE OH					LAT 401430 LONG 0805343 (MX)					
07/31/81	-	-	0.5	-	-	-	-	-	-	-	-
08/09/82	-	-	-	-	-	-	-	-	-	-	-
401437080580700	SALLY BUFFALO C NR CADIZ OH					LAT 401437 LONG 0805807 (MX)					
07/31/81	-	-	0.5	-	-	-	-	-	-	-	-
08/09/82	-	-	-	-	-	-	-	-	-	-	-
401445080393000	SALT RN NR RUSH RN OH					LAT 401445 LONG 0803930 (MX)					
08/25/81	-	-	0.5	-	-	-	-	-	-	-	-
08/24/82	-	-	-	-	-	-	-	-	-	-	-
401508080492200	PINEY F AT PINEY FORK OH					LAT 401508 LONG 0804922 (MX)					
07/01/75	1	-	-	0.5	-	20	-	20	-	-	-
401534080551000	N F SHORT C NR UNIONVALE OH					LAT 401534 LONG 0805510 (MX)					
07/01/75	1	-	-	0.8	-	20	-	30	-	-	-
11/04/75	1	-	-	0.5	-	20	-	20	-	-	-
401619080510000	PINEY F NR PINEY FORK OH					LAT 401619 LONG 0805100 (MX)					
07/31/81	-	-	0.5	-	-	-	-	-	-	-	-
08/16/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

401621080553600 N F SHORT C AT UNIONVALE OH LAT 401621 LONG 0805536 (MX)											

08/17/81	4.30	1850	7.6	132	-	161	22.0	980.0	20	1698	75
08/13/82	2.10	-	7.7	107	-	130	30.0	850.0	-	1540	-

401645081215300 FALLEN TIMBER C NR TIPPECANOE OH LAT 401645 LONG 0812153 (MX)											

09/24/79	3.60	-	7.4	75	-	91	-	32.0	-	-	-

401801080373200 GEORGES RN NR MINGO JUNCTION OH LAT 401801 LONG 0803732 (MX)											

08/17/81	0.90	340	8.3	236	-	288	15.0	600.0	20	1210	75
08/12/82	0.57	-	8.3	254	-	310	25.0	530.0	-	1130	-

401805081394500 EVANS C NR W LAFAYETTE OH LAT 401805 LONG 0813945 (MX)											

09/11/79	9.30	-	7.2	75	-	92	-	47.0	-	-	-

401812081362400 LICK RN AT NEWCOMERSTOWN OH LAT 401812 LONG 0813624 (MX)											

06/21/79	2.19	-	-	-	-	-	-	-	-	-	-
08/10/79	1.58	-	-	-	-	-	-	-	-	-	-
08/24/79	11.40	-	-	-	-	-	-	-	-	-	-
09/11/79	0.77	-	3.9	1	35	0	-	200.0	-	-	-
08/25/80	4.90	-	6.4	66	15	80	-	140.0	-	-	-
07/14/81	0.60	-	5.0	2	35	2	-	200.0	-	-	-

401817080404800 CROSS C NR NEW ALEXANDER OH LAT 401817 LONG 0804048 (MX)											

10/15/80	16.00	1100	8.7	138	-	168	13.0	470.0	100	850	200
08/28/81	9.00	980	7.5	131	-	160	20.0	350.0	20	727	118
08/12/82	12.00	-	8.8	139	-	170	25.0	360.0	-	735	-

401857080391700 CROSS C NR MINGO JUNCTION OH LAT 401857 LONG 0803917 (MX)											

10/15/80	42.00	1700	7.3	128	-	156	14.0	950.0	100	1457	320

401908080374900 CROSS C NR MINGO JUNCTION OH LAT 401908 LONG 0803749 (MX)											

11/05/75	14.00	-	7.2	133	-	162	20.0	580.0	-	-	-

401914082042600 MOHAWK C VR WALHONDING OH LAT 401914 LONG 0820426 (MX)											

09/10/79	10.00	-	6.5	90	20	110	-	40.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
401621080553600	N F SHORT C AT UNIONVALE OH						LAT 401621 LONG 0805536 (MX)				
08/17/81	809	417	9359	-	552	881	-	29	-	-	10
08/13/82	-	-	-	-	-	-	-	-	-	-	-
401645081215300	FALLEN TIMBER C NR TIPPECANOE OH						LAT 401645 LONG 0812153 (MX)				
09/24/79	-	50	1100	20000	200	270	780	-	-	40	-
401801080373200	GEORGES RN NR MINGO JUNCTION OH						LAT 401801 LONG 0803732 (MX)				
08/17/81	1731	610	14690	-	5	5	-	114	-	-	10
08/12/82	-	-	-	-	-	-	-	-	-	-	-
401805081394500	EVANS C NR W LAFAYETTE OH						LAT 401805 LONG 0813945 (MX)				
09/11/79	-	70	2200	11000	520	550	290	-	-	20	-
401812081362400	LICK RN AT NEWCOMERSTOWN OH						LAT 401812 LONG 0813624 (MX)				
06/21/79	-	-	-	-	-	-	-	-	-	-	-
08/10/79	-	-	-	-	-	-	-	-	-	-	-
08/24/79	-	-	-	-	-	-	-	-	-	-	-
09/11/79	-	350	700	33000	5600	5600	490	-	-	40	-
08/25/80	-	1400	3100	18000	3100	3100	570	-	-	29	-
07/14/81	-	100	290	8900	5000	5000	630	-	-	59	-
401817080404800	CROSS C NR NEW ALEXANDER OH						LAT 401817 LONG 0804048 (MX)				
10/15/80	250	30	170	-	30	40	-	30	-	-	10
08/28/81	233	23	276	-	40	86	-	12	-	-	10
08/12/82	-	-	-	-	-	-	-	-	-	-	-
401857080391700	CROSS C NR MINGO JUNCTION OH						LAT 401857 LONG 0803917 (MX)				
10/15/80	2140	40	3480	-	850	980	-	30	-	-	10
401908080374900	CROSS C NR MINGO JUNCTION OH						LAT 401908 LONG 0803749 (MX)				
11/05/75	1100	-	1400	-	-	630	-	-	40	-	-
401914082042600	MOHAWK C NR WALHONDING OH						LAT 401914 LONG 0820426 (MX)				
09/10/79	-	20	550	25000	100	110	500	-	-	50	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TERIAL (UG/G)	LEAD RECOV. FM BOT- TERIAL (UG/G)
401621080553600	N F SHORT C AT UNIONVALE OH					LAT 401621 LONG 0805536 (MX)					
08/17/81	-	-	0.5	-	-	-	-	-	-	-	-
08/13/82	-	-	-	-	-	-	-	-	-	-	-
401645081215300	FALLEN TIMBER C NR TIPPECANOE OH					LAT 401645 LONG 0812153 (MX)					
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
401801080373200	GEORGES RN NR MINGO JUNCTION OH					LAT 401801 LONG 0803732 (MX)					
08/17/81	-	-	0.5	-	-	-	-	-	-	-	-
08/12/82	-	-	-	-	-	-	-	-	-	-	-
401805081394500	EVANS C NR W LAFAYETTE OH					LAT 401805 LONG 0813945 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
401812081362400	LICK RN AT NEWCOMERSTOWN OH					LAT 401812 LONG 0813624 (MX)					
06/21/79	-	-	-	-	-	-	-	-	-	-	-
08/10/79	-	-	-	-	-	-	-	-	-	-	-
08/24/79	-	-	-	-	-	-	-	-	-	-	-
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
08/25/80	-	0	-	-	0.00	-	10	-	10	10	10
07/14/81	-	5	-	-	0.00	-	7	-	10	4	40
401817080404800	CROSS C NR NEW ALEXANDER OH					LAT 401817 LONG 0804048 (MX)					
10/15/80	-	-	0.5	-	-	-	-	-	-	-	-
08/28/81	-	-	0.5	-	-	-	-	-	-	-	-
08/12/82	-	-	-	-	-	-	-	-	-	-	-
401857080391700	CROSS C NR MINGO JUNCTION OH					LAT 401857 LONG 0803917 (MX)					
10/15/80	-	-	0.5	-	-	-	-	-	-	-	-
401908080374900	CROSS C NR MINGO JUNCTION OH					LAT 401908 LONG 0803749 (MX)					
11/05/75	1	-	-	0.5	-	20	-	0	-	-	-
401914082042600	MOHAWK C NR WALHONDING OH					LAT 401914 LONG 0820426 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

401936081504900	SPOON C NR COSHOCTON OH						LAT 401936 LONG 0815049 (MX)				
09/10/79	3.70	-	7.2	90	-	110	-	190.0	-	-	-

401940081441400	E F WHITE EYES C NR FRESNO OH						LAT 401940 LONG 0814414 (MX)				
09/11/79	5.50	-	7.4	84	-	102	-	72.0	-	-	-

401953081163100	SKULL F NR FREEPORT OH						LAT 401953 LONG 0811631 (MX)				
09/24/79	50.00	-	7.4	43	-	52	-	210.0	-	-	-
08/26/80	43.00	-	7.8	59	-	72	-	300.0	-	-	-

402011081450500	W F WHITE EYES C NR FRESNO OH						LAT 402011 LONG 0814505 (MX)				
09/11/79	8.00	-	7.3	94	-	114	-	65.0	-	-	-

402012081051200	CLEAR F NR JEWETT OH						LAT 402012 LONG 0810512 (MX)				
09/25/79	9.60	-	7.6	150	-	178	-	450.0	-	-	-
07/15/81	8.00	-	8.2	144	-	176	-	520.0	-	-	-

402023081553800	BUCKLEW RN NR COSHOCTON OH						LAT 402023 LONG 0815538 (MX)				
09/11/79	2.20	-	6.4	41	15	50	-	440.0	-	-	-
08/30/80	6.50	-	7.1	33	-	40	-	470.0	-	-	-
07/14/81	3.20	-	7.4	26	-	32	-	540.0	-	-	-

402038080540700	CROSS C NR HOPEDALE OH						LAT 402038 LONG 0805407 (MX)				
07/02/75	4.00	-	7.2	126	-	154	15.0	250.0	-	-	-
10/29/75	5.20	-	7.2	92	-	112	14.0	190.0	-	-	-

402043080573600	CONOTTON C NR CADIZ JUNCTION OH						LAT 402043 LONG 0805736 (MX)				
07/02/75	0.40	-	7.7	148	-	180	13.0	290.0	-	-	-
10/29/75	0.75	-	7.5	112	-	136	15.0	270.0	-	-	-

402058082004800	BEAVER RN NR WARSAW OH						LAT 402058 LONG 0820048 (MX)				
09/10/79	9.20	-	7.8	61	-	74	-	24.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
401936081504900	SPOON C NR COSHOCTON OH							LAT 401936 LONG 0815049 (MX)			
09/10/79	-	50	510	31000	1100	1100	720	-	-	70	-
401940081441400	E F WHITE EYES C NR FRESNO OH							LAT 401940 LONG 0814414 (MX)			
09/11/79	-	70	920	8300	210	210	290	-	-	20	-
401953081163100	SKULL F NR FREEPORT OH							LAT 401953 LONG 0811631 (MX)			
09/24/79	-	30	240	29000	50	100	2800	-	-	110	-
08/26/80	-	40	430	13000	460	480	3300	-	-	110	-
402011081450500	W F WHITE EYES C NR FRESNO OH							LAT 402011 LONG 0814505 (MX)			
09/11/79	-	10	1600	-	2800	2800	-	-	-	-	-
402012081051200	CLEAR F NR JEWETT OH							LAT 402012 LONG 0810512 (MX)			
09/25/79	-	90	490	12000	110	150	530	-	-	30	-
07/15/81	-	100	670	15000	120	160	2800	-	-	90	-
402023081553800	BUCKLEW RV NR COSHOCTON OH							LAT 402023 LONG 0815538 (MX)			
09/11/79	-	150	540	23000	3000	3100	440	-	-	50	-
08/30/80	-	160	2200	15000	4500	4500	840	-	-	53	-
07/14/81	-	20	2500	4900	3300	3900	540	-	-	44	-
402038080540700	CROSS C NR HOPEDALE OH							LAT 402038 LONG 0805407 (MX)			
07/02/75	200	-	650	-	-	470	-	-	20	-	-
10/29/75	50	-	330	-	-	340	-	-	20	-	-
402043080573600	CONOTTON C NR CADIZ JUNCTION OH							LAT 402043 LONG 0805736 (MX)			
07/02/75	100	-	410	-	-	130	-	-	20	-	-
10/29/75	40	-	210	-	-	160	-	-	20	-	-
402058082004800	BEAVER RN NR WARSAW OH							LAT 402058 LONG 0820048 (MX)			
09/10/79	-	60	740	9400	80	90	270	-	-	30	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
401936081504900	SPONG C NR COSHOCTON OH					LAT 401936 LONG 0815049 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
401940081441400	E F WHITE EYES C NR FRESNO OH					LAT 401940 LONG 0814414 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
401953081163100	SKULL F NR FREEPORT OH					LAT 401953 LONG 0811631 (MX)					
09/24/79	-	0	-	-	0.00	-	20	-	20	10	70
08/26/80	-	0	-	-	0.00	-	10	-	10	10	20
402011081450500	W F WHITE EYES C NR FRESNO OH					LAT 402011 LONG 0814505 (MX)					
09/11/79	-	-	-	-	-	-	-	-	-	10	-
402012081051200	CLEAR F NR JEWETT OH					LAT 402012 LONG 0810512 (MX)					
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10
07/15/81	-	5	-	-	0.00	-	12	-	10	6	60
402023081553800	BUCKLEW RN NR COSHOCTON OH					LAT 402023 LONG 0815538 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
08/30/80	-	0	-	-	0.00	-	10	-	10	10	10
07/14/81	-	0	-	-	0.00	-	10	-	10	5	50
402038080540700	CROSS C NR HOPEDALE OH					LAT 402038 LONG 0805407 (MX)					
07/02/75	1	-	-	0.5	-	0	-	20	-	-	-
10/29/75	1	-	-	0.5	-	0	-	20	-	-	-
402043080573600	CONVOTON C NR CADIZ JUNCTION OH					LAT 402043 LONG 0805736 (MX)					
07/02/75	1	-	-	0.5	-	20	-	20	-	-	-
10/29/75	1	-	-	0.5	-	0	-	0	-	-	-
402058082004800	BEAVER RN NR WARSAW OH					LAT 402058 LONG 0820048 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

402137081505300 L MILL C NR KEEVE OH LAT 402137 LONG 0815053 (MX)											

09/10/79	2.40	-	7.1	82	-	100	-	87.0	-	-	-

402140080444900 CROSS C NR WINTERSVILLE OH LAT 402140 LONG 0804449 (MX)											

10/16/80	10.00	1050	7.9	151	-	184	19.0	420.0	100	791	200
08/17/81	15.00	990	7.9	144	-	176	18.0	315.0	20	703	75
08/13/82	5.50	-	8.2	148	-	180	23.0	340.0	-	698	-

402214080474600 SALEM C NR BLOOMINGDALE OH LAT 402214 LONG 0804746 (MX)											

09/11/79	3.40	-	8.2	110	-	140	-	170.0	-	-	-

402245080532300 N 3 CROSS C NR HOPEDALE OH LAT 402245 LONG 0805323 (MX)											

09/11/79	2.10	-	8.0	200	-	240	-	760.0	-	-	-
08/31/81	4.60	-	7.9	126	-	154	-	560.0	-	-	-

402253081134000 PLUM RN NR BOWERSTON OH LAT 402253 LONG 0811340 (MX)											

07/16/75	0.40	-	5.2	3	-	4	12.0	410.0	-	-	-
10/22/75	1.70	-	6.6	34	-	42	10.0	160.0	-	-	-

402258080455800 CEDAR LICK C NR RICHMOND OH LAT 402258 LONG 0804558 (MX)											

09/11/79	1.80	-	8.4	160	-	184	-	250.0	-	-	-
08/27/81	0.43	-	7.9	136	-	166	-	200.0	-	-	-

402309080401000 WILLS C AT STEUBENVILLE OH LAT 402309 LONG 0804010 (MX)											

09/11/79	2.30	-	8.3	167	-	196	-	450.0	-	-	-
08/27/80	6.40	-	8.3	179	-	218	-	550.0	-	-	-

402357081260700 MUD RN NR TUSCARAWAS OH LAT 402357 LONG 0812607 (MX)											

07/16/75	0.60	-	2.8	1	745	0	14.0	1400.0	-	-	-
10/22/75	2.30	-	3.2	1	199	0	15.0	550.0	-	-	-

402415081025500 IRISH C NR SCIO OH LAT 402415 LONG 0810255 (MX)											

09/25/79	7.20	-	7.1	68	-	83	-	45.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
402137081505300	L MILL C NR KEENE OH							LAT 402137 LONG 0815053 (MX)			
09/10/79	-	120	820	45000	230	230	470	-	-	70	-
402140080444900	CROSS C NR WINTERSVILLE OH							LAT 402140 LONG 0804449 (MX)			
10/16/80	200	30	80	-	30	30	-	30	-	-	10
08/17/81	75	10	592	-	5	5	-	10	-	-	10
08/13/82	-	-	-	-	-	-	-	-	-	-	-
402214080474600	SALEM C NR BLOOMINGDALE OH							LAT 402214 LONG 0804746 (MX)			
09/11/79	-	40	130	27000	10	20	1800	-	-	60	-
402245080532300	N B CROSS C NR HOPEDALE OH							LAT 402245 LONG 0805323 (MX)			
09/11/79	-	30	450	22000	270	300	1100	-	-	40	-
08/31/81	-	40	4800	11000	290	410	680	-	-	31	-
402253081134000	PLUM RN NR BOWENSTON OH							LAT 402253 LONG 0811340 (MX)			
07/16/75	840	-	640	-	-	9000	-	-	100	-	-
10/22/75	360	-	1900	-	-	1100	-	-	30	-	-
402258080455800	CEDAR LICK C NR RICHMOND OH							LAT 402258 LONG 0804558 (MX)			
09/11/79	-	20	250	17000	10	20	1200	-	-	30	-
08/27/81	-	30	1600	11000	10	30	1700	-	-	36	-
402309080401000	WILLS C AT STEUBENVILLE OH							LAT 402309 LONG 0804010 (MX)			
09/11/79	-	60	50	3400	30	30	1500	-	-	80	-
08/27/80	-	20	170	12000	10	20	750	-	-	30	-
402357081260700	MUD RN NR TUSCARAWAS OH							LAT 402357 LONG 0812607 (MX)			
07/16/75	32000	-	300000	-	-	15000	-	-	660	-	-
10/22/75	990	-	72000	-	-	3800	-	-	160	-	-
402415081025500	IRISH C NR SCIOTO OH							LAT 402415 LONG 0810255 (MX)			
09/25/79	-	190	770	8900	140	180	400	-	-	20	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, RECOV. ERABLE AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
402137081505300	L MILL C NR KEEVE OH					LAT 402137 LONG 0815053 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
402140080444900	CROSS C NR WINTERSVILLE OH					LAT 402140 LONG 0804449 (MX)					
10/16/80	-	-	0.5	-	-	-	-	-	-	-	-
08/17/81	-	-	0.5	-	-	-	-	-	-	-	-
08/13/82	-	-	-	-	-	-	-	-	-	-	-
402214080474600	SALEM C NR BLOOMINGDALE OH					LAT 402214 LONG 0804746 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
402245080532300	N B CROSS C NR HOPEDALE OH					LAT 402245 LONG 0805323 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	30
08/31/81	-	1	-	-	0.01	-	5	-	6	1	8
402253081134000	PLUM RN NR BOWERSTON OH					LAT 402253 LONG 0811340 (MX)					
07/16/75	1	-	-	0.5	-	20	-	20	-	-	-
10/22/75	1	-	-	0.5	-	0	-	0	-	-	-
402258080455800	CEDAR LICK C NR RICHMOND OH					LAT 402258 LONG 0804558 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
08/27/81	-	1	-	-	0.01	-	8	-	8	1	20
402309080401000	WILLS C AT STEUBENVILLE OH					LAT 402309 LONG 0804010 (MX)					
09/11/79	-	0	-	-	0.00	-	20	-	20	10	30
08/27/80	-	0	-	-	0.00	-	10	-	20	10	10
402357081260700	MUD RV NR TUSCARAWAS OH					LAT 402357 LONG 0812607 (MX)					
07/16/75	4	-	-	1.1	-	30	-	20	-	-	-
10/22/75	3	-	-	0.5	-	20	-	20	-	-	-
402415081025500	IRISH C NR SCIO OH					LAT 402415 LONG 0810255 (MX)					
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

402430081310400 OLDTOWN C NR STONE CREEK OH LAT 402430 LONG 0813104 (MX)											

10/06/80	0.79	590	6.8	87	-	106	10.0	168.0	100	330	200
07/30/81	1.60	330	7.4	92	-	112	4.0	70.0	20	198	75
07/30/82	0.32	-	8.0	98	-	120	11.0	110.0	-	333	-

402431081234300 MUD RN AT TUSCARAWAS OH LAT 402431 LONG 0812343 (MX)											

09/13/79	2.10	-	2.8	1	278	0	-	1200.0	-	-	-

402517081324000 STONE C NR STONE CREEK OH LAT 402517 LONG 0813240 (MX)											

07/15/75	2.00	-	7.5	79	-	96	24.0	54.0	-	-	-
10/22/75	5.20	-	6.5	43	-	52	12.0	45.0	-	-	-

402520081050600 DINING F NR SCIO OH LAT 402520 LONG 0810506 (MX)											

09/25/79	6.50	-	7.3	59	-	72	-	27.0	-	-	-

402548081560600 DOUGHTY C NR CLARK OH LAT 402548 LONG 0815606 (MX)											

1/10/79	30.00	-	7.4	110	-	130	-	41.0	-	-	-

402552081281100 OLDTOWN C NR WAINWRIGHT OH LAT 402552 LONG 0812811 (MX)											

10/03/80	2.70	1310	7.3	104	-	127	19.0	690.0	100	1092	200
07/30/81	3.30	1100	7.6	107	-	131	7.5	510.0	20	870	75
07/23/82	1.50	-	7.6	98	-	120	33.0	560.0	-	1020	-

402559081592100 BIG RN NR KILLBUCK OH LAT 402559 LONG 0815921 (MX)											

09/10/79	2.50	-	6.3	62	20	76	-	43.0	-	-	-

402602081224100 PIKE RN AT MIDVALE OH LAT 402602 LONG 0812241 (MX)											

10/06/80	1.60	2100	5.6	-	596	-	19.0	1220.0	100	1594	27000
07/30/81	3.20	1600	3.4	-	504	-	5.5	870.0	109	1338	20740
07/23/82	1.30	-	2.7	0	646	0	28.0	1100.0	100	1740	32000

402610080375700 ISLAND C NR TORONTO OH LAT 402610 LONG 0803757 (MX)											

09/11/79	13.00	-	8.4	140	-	168	-	390.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
402430081310400	OLDTOWN C NR STONE CREEK OH							LAT 402430 LONG 0813104 (MX)			
10/06/80	1120	90	1430	-	730	790	-	30	-	-	10
07/30/81	75	313	504	-	5	72	-	41	-	-	10
07/30/82	-	-	-	-	-	-	-	-	-	-	-
402431081234300	MUD RN AT TUSCARAWAS OH							LAT 402431 LONG 0812343 (MX)			
09/13/79	-	19000	28000	120000	6800	6800	270	-	-	50	-
402517081324000	STONE C NR STONE CREEK OH							LAT 402517 LONG 0813240 (MX)			
07/15/75	200	-	660	-	-	200	-	-	20	-	-
10/22/75	160	-	710	-	-	190	-	-	20	-	-
402520081050600	DINING F NR SCIO OH							LAT 402520 LONG 0810506 (MX)			
09/25/79	-	120	850	9000	100	150	560	-	-	20	-
402548081560600	DOUGHTY C NR CLARK OH							LAT 402548 LONG 0815606 (MX)			
09/10/79	-	50	570	12000	90	100	250	-	-	30	-
402552081281100	OLDTOWN C NR MAINWRIGHT OH							LAT 402552 LONG 0812811 (MX)			
10/03/80	200	30	320	-	2520	2570	-	30	-	-	10
07/30/81	75	287	299	-	418	422	-	31	-	-	10
07/23/82	-	-	-	-	-	-	-	-	-	-	-
402559081592100	BIG RN NR KILLBUCK OH							LAT 402559 LONG 0815921 (MX)			
09/10/79	-	220	1300	9100	180	200	250	-	-	20	-
402602081224100	PIKE RN AT MIDVALE OH							LAT 402602 LONG 0812241 (MX)			
10/06/80	27800	199000	205000	-	5200	5050	-	30	-	-	-
07/30/81	22100	165400	167300	-	4206	4984	-	401	-	-	10
07/23/82	32000	170000	170000	-	4800	5500	-	370	-	-	-
402610080375700	ISLAND C NR TORONTO OH							LAT 402610 LONG 0803757 (MX)			
09/11/79	-	20	410	18000	10	20	710	-	-	50	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
402430081310400	OLDTOWN C NR STONE CREEK OH					LAT 402430 LONG 0813104 (MX)				
10/06/80	-	-	0.5	-	-	-	-	-	-	-
07/30/81	-	-	0.5	-	-	-	-	-	-	-
07/30/82	-	-	-	-	-	-	-	-	-	-
402431081234300	MUD RV AT TUSCARAWAS OH					LAT 402431 LONG 0812343 (MX)				
09/13/79	-	0	-	-	0.00	-	20	-	10	10 30
402517081324000	STONE C NR STONE CREEK OH					LAT 402517 LONG 0813240 (MX)				
07/15/75	1	-	-	0.5	-	0	-	0	-	-
10/22/75	1	-	-	0.5	-	0	-	0	-	-
402520081050600	DIVING F VR SCIO OH					LAT 402520 LONG 0810505 (MX)				
09/25/79	-	0	-	-	0.00	-	10	-	10	10 10
402548081560600	DOUGHTY C NR CLARK OH					LAT 402548 LONG 0815606 (MX)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10 10
402552081281100	OLDTOWN C NR MAINWRIGHT OH					LAT 402552 LONG 0812811 (MX)				
10/03/80	-	-	0.5	-	-	-	-	-	-	-
07/30/81	-	-	0.5	-	-	-	-	-	-	-
07/23/82	-	-	-	-	-	-	-	-	-	-
402559081592100	HIG RV NR KILLBUCK OH					LAT 402559 LONG 0815921 (MX)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10 10
402602081224100	PIKE RV AT MIDVALE OH					LAT 402602 LONG 0812241 (MX)				
10/06/80	-	-	0.5	-	-	-	-	-	-	-
07/30/81	-	-	0.5	-	-	-	-	-	-	-
07/23/82	-	-	-	-	-	-	-	-	-	-
402610080375700	ISLAND C NR TORONTO OH					LAT 402610 LONG 0803757 (MX)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10 20

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
402636080400700	ISLAND C NR PEKIN OH					LAT 402636 LONG 0804007 (MX)					
07/07/75	2.00	-	6.8	141	-	172	35.0	500.0	-	-	-
10/28/75	6.80	-	8.0	135	-	154	15.0	310.0	-	-	-
402705080565600	ELK LICK NR AMSTERDAM OH					LAT 402705 LONG 0805656 (MX)					
09/24/79	2.50	-	8.0	96	-	117	-	150.0	-	-	-
402715081300800	STONE C NR NEW PHILADELPHIA OH					LAT 402715 LONG 0813008 (MX)					
10/03/80	5.60	650	6.6	52	-	64	15.0	260.0	100	449	200
07/30/81	10.00	650	6.2	44	-	54	9.0	235.0	79	405	387
07/30/82	2.40	-	7.3	82	-	100	31.0	180.0	-	450	-
402738081262300	OLD TOWN C AT NEW PHILADELPHIA OH					LAT 402738 LONG 0812623 (MX)					
09/13/79	4.60	-	7.4	67	-	82	-	560.0	-	-	-
07/30/81	5.40	-	7.2	50	-	61	-	490.0	-	-	-
402815080532100	WOLF RN NR AMSTERDAM OH					LAT 402815 LONG 0805321 (MX)					
08/28/80	2.40	1385	3.0	-	497	-	-	-	-	-	-
08/14/81	0.47	2500	2.7	-	1440	-	41.0	1780.0	20	3163	91300
08/16/82	0.36	-	2.7	0	335	0	35.0	1400.0	400	2310	82000
402823080552300	YELLOW C AT AMSTERDAM OH					LAT 402823 LONG 0805523 (MX)					
08/14/81	2.40	620	7.2	100	-	122	23.0	165.0	20	45	75
08/16/82	1.80	-	7.6	123	-	150	33.0	140.0	-	379	-
402841081285900	STONE C NR NEW PHILADELPHIA OH					LAT 402841 LONG 0812859 (MX)					
10/03/80	7.60	660	6.7	56	-	68	15.0	265.0	140	453	200
07/31/81	9.10	680	7.1	36	-	44	9.0	280.0	20	453	242
08/19/82	1.60	-	7.6	107	-	130	31.0	160.0	-	417	-
402843082012600	WOLF C NR KILLBUCK OH					LAT 402843 LONG 0820126 (MX)					
09/11/79	9.40	-	7.2	59	-	72	-	25.0	-	-	-
402857081220300	BEAVERDAM C NR MIDVALE OH					LAT 402857 LONG 0812203 (MX)					
10/02/80	0.90	980	3.1	74	-	90	21.0	500.0	100	834	200
08/13/81	0.70	920	8.0	85	-	104	22.0	350.0	20	750	75
07/30/82	0.44	-	7.2	74	-	90	23.0	490.0	-	840	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
402636080400700	ISLAND C NR PEKIN OH							LAT 402636 LONG 0804007 (MX)			
07/07/75	50	-	90	-	-	10	-	-	20	-	-
10/28/75	630	-	1300	-	-	60	-	-	20	-	-
402705080565600	ELK LICK NR AMSTERDAM OH							LAT 402705 LONG 0805656 (MX)			
09/24/79	-	20	260	17000	90	130	590	-	-	40	-
402715081300800	STONE C NR NEW PHILADELPHIA OH							LAT 402715 LONG 0813008 (MX)			
10/03/80	1880	230	4700	-	2560	2600	-	30	-	-	10
07/30/81	692	3241	4975	-	63	725	-	20	-	-	10
07/30/82	-	-	-	-	-	-	-	-	-	-	-
402738081262300	OLD TOWN C AT NEW PHILADELPHIA OH							LAT 402738 LONG 0812623 (MX)			
09/13/79	-	20	240	43000	2200	2300	840	-	-	80	-
07/30/81	-	190	410	21000	3000	3000	700	-	-	170	-
402815080532100	WOLF RN NR AMSTERDAM OH							LAT 402815 LONG 0805321 (MX)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/14/81	92360	90800	99190	-	9616	9684	-	765	-	-	10
08/16/82	110000	120000	120000	-	9800	11000	-	860	-	-	-
402823080552300	YELLOW C AT AMSTERDAM OH							LAT 402823 LONG 0805523 (MX)			
08/14/81	75	162	756	-	203	226	-	10	-	-	10
08/16/82	-	-	-	-	-	-	-	-	-	-	-
402841081285900	STONE C NR NEW PHILADELPHIA OH							LAT 402841 LONG 0812859 (MX)			
10/03/80	320	210	890	-	2210	2470	-	30	-	-	10
07/31/81	407	3212	3334	-	672	770	-	143	-	-	10
08/19/82	-	-	-	-	-	-	-	-	-	-	-
402843082012600	WOLF C NR KILLBUCK OH							LAT 402843 LONG 0820126 (MX)			
09/11/79	-	300	720	9900	90	90	420	-	-	20	-
402857081220300	BEAVERDAM C NR MIOVALE OH							LAT 402857 LONG 0812203 (MX)			
10/02/80	200	490	1300	-	1800	1930	-	40	-	-	10
08/13/81	75	20	488	-	932	1062	-	10	-	-	10
07/30/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
402636080400700	ISLAND C NR PEKIN OH					LAT 402636 LONG 0804007 (MX)					
07/07/75	1	-	-	0.5	-	20	-	20	-	-	-
10/28/75	1	-	-	0.5	-	20	-	0	-	-	-
402705080565600	ELK LICK NR AMSTERDAM OH					LAT 402705 LONG 0805656 (MX)					
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
402715081300800	STONE C NR NEW PHILADELPHIA OH					LAT 402715 LONG 0813008 (MX)					
10/03/80	-	-	0.5	-	-	-	-	-	-	-	-
07/30/81	-	-	0.5	-	-	-	-	-	-	-	-
07/30/82	-	-	-	-	-	-	-	-	-	-	-
402738081262300	OLD TOWN C AT NEW PHILADELPHIA OH					LAT 402738 LONG 0812623 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	20
07/30/81	-	33	-	-	0.01	-	7	-	10	3	33
402815080532100	WOLF RN NR AMSTERDAM OH					LAT 402815 LONG 0805321 (MX)					
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/16/82	-	-	-	-	-	-	-	-	-	-	-
402823080552300	YELLOW C AT AMSTERDAM OH					LAT 402823 LONG 0805523 (MX)					
08/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/16/82	-	-	-	-	-	-	-	-	-	-	-
402841081285900	STONE C NR NEW PHILADELPHIA OH					LAT 402841 LONG 0812859 (MX)					
10/03/80	-	-	0.5	-	-	-	-	-	-	-	-
07/31/81	-	-	0.5	-	-	-	-	-	-	-	-
08/19/82	-	-	-	-	-	-	-	-	-	-	-
402843082012600	WOLF C NR KILLBUCK OH					LAT 402843 LONG 0820126 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
402857081220300	BEAVERDAM C NR MIDVALE OH					LAT 402857 LONG 0812203 (MX)					
10/02/80	-	-	0.5	-	-	-	-	-	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
07/30/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	A_KA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
402857081330700 CROOKED RN NR NEW PHILADELPHIA OH LAT 402857 LONG 0813307 (MX)											
07/15/75	0.40	-	3.0	1	243	0	85.0	630.0	-	-	-
10/22/75	2.10	-	4.3	1	50	0	23.0	270.0	-	-	-
402859081290700 CROOKED RN AT NEW PHILADELPHIA OH LAT 402859 LONG 0812907 (MX)											
09/13/79	2.60	-	7.4	75	-	92	-	390.0	-	-	-
08/21/80	13.00	-	4.8	2	40	2	-	390.0	-	-	-
07/30/81	3.00	-	7.2	44	-	54	-	450.0	-	-	-
402950080493400 LONG RN NR E SPRINGFIELD OH LAT 402950 LONG 0804934 (MX)											
08/28/80	3.70	328	7.1	66	-	80	-	-	-	-	-
08/14/81	0.20	400	7.6	100	-	122	5.0	70.0	20	248	75
08/18/82	0.02	-	7.7	139	-	170	9.5	74.0	-	-	-
403001080474700 LONG RN NR EAST SPRINGFIELD OH LAT 403001 LONG 0804747 (MX)											
09/24/79	1.70	-	7.7	76	-	93	-	67.0	-	-	-
403003081250600 HEAVERDAM C NR NEW PHILADELPHIA OH LAT 403003 LONG 0812506 (MX)											
10/02/80	3.50	1110	6.8	60	-	74	15.0	57.0	100	899	200
07/24/81	3.40	1050	7.5	70	-	85	5.5	560.0	20	888	75
07/21/82	1.80	-	7.6	62	-	76	21.0	490.0	-	918	-
403017081134000 THOMPSON RN AT SHERRODSVILLE OH LAT 403017 LONG 0811340 (MX)											
07/16/75	1.00	-	6.6	79	-	96	70.0	140.0	-	-	-
10/22/75	3.60	-	7.0	43	-	52	40.0	88.0	-	-	-
403044080445800 YELLOW C NR NEW SOMERSET OH LAT 403044 LONG 0804458 (MX)											
07/07/75	20.00	-	6.6	23	-	28	25.0	220.0	-	-	-
403049081163000 COWTOWN C NR NEW CUMBERLAND OH LAT 403049 LONG 0811630 (MX)											
10/02/80	32.00	510	7.1	93	-	113	23.0	108.0	100	290	200
403102080435200 TOWN F NR HAMMONDSVILLE OH LAT 403102 LONG 0804352 (MX)											
09/25/79	11.00	-	8.7	99	-	109	-	170.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
402857081330700	CROOKED RN NR NEW PHILADELPHIA OH						LAT 402857 LONG 0813307 (MX)				
07/15/75	20000	-	22000	-	-	5600	-	-	320	-	-
10/22/75	5400	-	6500	-	-	1900	-	-	90	-	-
402859081290700	CROOKED RN AT NEW PHILADELPHIA OH						LAT 402859 LONG 0812907 (MX)				
09/13/79	-	40	740	29000	2200	2200	940	-	-	70	-
08/21/80	-	660	14000	15000	6900	7000	590	-	-	46	-
07/30/81	-	40	1400	21000	3100	3100	530	-	-	180	-
402950080493400	LONG RN NR E SPRINGFIELD OH						LAT 402950 LONG 0804934 (MX)				
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/14/81	75	606	603	-	33	139	-	10	-	-	10
08/18/82	-	-	-	-	-	-	-	-	-	-	-
403001080474700	LONG RN NR EAST SPRINGFIELD OH						LAT 403001 LONG 0804747 (MX)				
09/24/79	-	40	130	17000	20	50	680	-	-	40	-
403003081250600	BEAVERDAM C NR NEW PHILADELPHIA OH						LAT 403003 LONG 0812506 (MX)				
10/02/80	200	30	470	-	2760	2710	-	30	-	-	10
07/24/81	75	530	541	-	780	2177	-	25	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-
403017081134000	THOMPSON RN AT SHERRODSVILLE OH						LAT 403017 LONG 0811340 (MX)				
07/16/75	140	-	810	-	-	1800	-	-	20	-	-
10/22/75	330	-	980	-	-	760	-	-	20	-	-
403044080445800	YELLOW C NR NEW SOMERSET OH						LAT 403044 LONG 0804458 (MX)				
07/07/75	350	-	3900	-	-	360	-	-	50	-	-
403049081163000	CONOTTON C NR NEW CUMBERLAND OH						LAT 403049 LONG 0811630 (MX)				
10/02/80	200	30	1370	-	660	690	-	30	-	-	10
403102080435200	TOWN F NR HAMMONDSVILLE OH						LAT 403102 LONG 0804352 (MX)				
09/25/79	-	10	2500	17000	20	30	740	-	-	40	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- (UG/G)	LEAD RECOV. FM BOT- TOM MA- (UG/G)
402857081330700	CROOKED RN NR NEW PHILADELPHIA OH						LAT 402857 LONG 0813307 (MX)				
07/15/75	2	-	-	0.5	-	30	-	20	-	-	-
10/22/75	1	-	-	0.5	-	0	-	0	-	-	-
402859081290700	CROOKED RN AT NEW PHILADELPHIA OH						LAT 402859 LONG 0812907 (MX)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
08/21/80	-	0	-	-	0.00	-	10	-	10	0	10
07/30/81	-	45	-	-	0.01	-	59	-	10	8	80
402950080493400	LONG RN NR E SPRINGFIELD OH						LAT 402950 LONG 0804934 (MX)				
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/14/81	-	-	0.5	-	-	-	-	-	-	-	-
08/18/82	-	-	-	-	-	-	-	-	-	-	-
403001080474700	LONG RN NR EAST SPRINGFIELD OH						LAT 403001 LONG 0804747 (MX)				
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
403003081250600	BEAVERDAM C NR NEW PHILADELPHIA OH						LAT 403003 LONG 0812506 (MX)				
10/02/80	-	-	0.5	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
403017081134000	THOMPSON RN AT SHERRODSVILLE OH						LAT 403017 LONG 0811340 (MX)				
07/16/75	3	-	-	0.5	-	20	-	0	-	-	-
10/22/75	1	-	-	0.5	-	0	-	0	-	-	-
403044080445800	YELLOW C NR NEW SOMERSET OH						LAT 403044 LONG 0804458 (MX)				
07/07/75	1	-	-	1.3	-	20	-	0	-	-	-
403049081163000	CONOTTON C NR NEW CUMBERLAND OH						LAT 403049 LONG 0811630 (MX)				
10/02/80	-	-	0.5	-	-	-	-	-	-	-	-
403102080435200	TOWN F NR HAMMONDSVILLE OH						LAT 403102 LONG 0804352 (MX)				
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD AS (MG/L CAC03)	ACIDITY AS (MG/L CAC03)	BICAR- BONATE FET-FLO AS (MG/L HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (JG/L AS AL)
403103080453400	YELLOW C NR NEW SOMERSET OH					LAT 403103 LONG 0804534 (MX)					
10/15/80	17.00	605	7.0	75	-	91	15.0	192.0	100	371	200
403108081364900	E BRANCH AT SUGARCREEK OH					LAT 403108 LONG 0813649 (MX)					
09/12/79	12.00	-	7.1	59	-	72	-	390.0	-	-	-
08/25/80	49.00	-	6.8	55	15	67	-	270.0	-	-	-
403112080461100	ROACH RN NR BERGHOLZ OH					LAT 403112 LONG 0804611 (MX)					
07/08/75	0.20	-	2.7	1	993	0	20.0	1200.0	-	-	-
403114080513900	YELLOW C NR BERGHOLZ OH					LAT 403114 LONG 0805139 (MX)					
10/15/80	13.00	515	7.0	72	-	88	15.0	139.0	100	292	200
08/05/81	19.00	470	7.6	74	-	90	13.0	138.0	321	292	203
08/17/82	5.60	-	7.5	65	-	79	27.0	190.0	-	370	-
403124081272600	UNAM TR TO TUSCARAWAS R AT DOVER OH					LAT 403124 LONG 0812726 (MX)					
09/30/80	0.59	845	7.4	56	-	68	23.0	420.0	150	694	200
07/24/81	1.30	765	7.3	46	-	56	9.5	385.0	20	675	75
07/19/82	0.41	-	7.5	59	-	72	37.0	420.0	-	832	-
403128080402700	HOLLOW ROCK RN NR NEW SOMERSET OH					LAT 403128 LONG 0804027 (MX)					
08/28/80	16.00	1110	7.6	190	-	232	-	-	-	-	-
08/13/81	2.20	1500	8.1	191	-	233	17.0	620.0	20	1341	75
08/20/82	0.61	-	8.2	154	-	200	22.0	550.0	-	1010	-
403133080560800	STRAWCAMP RN NR BERGHOLZ OH					LAT 403133 LONG 0805608 (MX)					
09/24/79	1.30	-	7.9	77	-	94	-	29.0	-	-	-
403135080530200	YELLOW C AT BERGHOLZ OH					LAT 403135 LONG 0805302 (MX)					
10/28/75	22.00	-	6.9	52	-	64	22.0	110.0	-	-	-
403144080585500	CENTER F NR HARLEM SPRINGS OH					LAT 403144 LONG 0805855 (MX)					
09/24/79	3.40	-	8.2	70	-	85	-	90.0	-	-	-
08/27/80	10.00	-	8.1	98	-	120	-	82.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (JG/G)	MANGA- NESE, DIS- SOLVED (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (JG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
403103080453400	YELLOW C NR NEW SOMERSET OH							LAT 403103 LONG 0804534 (MX)			
10/15/80	450	50	1340	-	240	250	-	30	-	-	10
403108081364900	E BRANCH AT SUGARCREEK OH							LAT 403108 LONG 0813649 (MX)			
09/12/79	-	30	3100	35000	2100	2400	760	-	-	100	-
08/25/80	-	130	3000	17000	1500	1500	180	-	-	71	-
403112080461100	ROACH RN NR BERGHOLZ OH							LAT 403112 LONG 0804611 (MX)			
07/08/75	46000	-	260000	-	-	5000	-	-	550	-	-
403114080513900	YELLOW C NR BERGHOLZ OH							LAT 403114 LONG 0805139 (MX)			
10/15/80	400	430	450	-	510	490	-	30	-	-	10
08/05/81	166	126	327	-	21	66	-	86	-	-	10
08/17/82	-	-	-	-	-	-	-	-	-	-	-
403124081272600	UNAM TR TO TUSCARAWAS R AT DOVER OH							LAT 403124 LONG 0812726 (MX)			
09/30/80	510	30	860	-	2830	2960	-	30	-	-	10
07/24/81	75	10	10	-	5	5	-	30	-	-	10
07/19/82	-	-	-	-	-	-	-	-	-	-	-
403128080402700	HOLLOW ROCK RN NR NEW SOMERSET OH							LAT 403128 LONG 0804027 (MX)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/13/81	75	20	744	-	5	5	-	10	-	-	10
08/20/82	-	-	-	-	-	-	-	-	-	-	-
403133080560800	STRAWCAMP RN NR BERGHOLZ OH							LAT 403133 LONG 0805608 (MX)			
09/24/79	-	110	290	35000	10	50	850	-	-	50	-
403135080530200	YELLOW C AT BERGHOLZ OH							LAT 403135 LONG 0805302 (MX)			
10/28/75	1800	-	3200	-	-	320	-	-	30	-	-
403144080585500	CENTER F NR HARLEM SPRINGS OH							LAT 403144 LONG 0805855 (MX)			
09/24/79	-	60	430	20000	50	80	680	-	-	30	-
08/27/80	-	80	370	17000	60	70	1400	-	-	48	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CH)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
403103080453400	YELLOW C NR NEW SOMERSET OH					LAT 403103 LONG 0804534 (MX)					
10/15/80	-	-	0.5	-	-	-	-	-	-	-	-
403108081364900	E BRANCH AT SUGARCREEK OH					LAT 403108 LONG 0813649 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
08/25/80	-	0	-	-	0.00	-	10	-	10	10	10
403112080461100	ROAD R NR BERGHOLZ OH					LAT 403112 LONG 0804611 (MX)					
07/08/75	3	-	-	4.5	-	30	-	50	-	-	-
403114080513900	YELLOW C NR BERGHOLZ OH					LAT 403114 LONG 0805139 (MX)					
10/15/80	-	-	0.5	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
08/17/82	-	-	-	-	-	-	-	-	-	-	-
403124081272600	UNAM TR TO TUSCARAWAS R AT DOVER OH					LAT 403124 LONG 0812726 (MX)					
09/30/80	-	-	0.5	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
403128080402700	HOLLOW ROCK RN NR NEW SOMERSET OH					LAT 403128 LONG 0804027 (MX)					
08/28/80	-	-	-	-	-	-	-	-	-	-	-
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
08/20/82	-	-	-	-	-	-	-	-	-	-	-
403133080560800	STRAWCAMP RN NR BERGHOLZ OH					LAT 403133 LONG 0805608 (MX)					
09/24/79	-	0	-	-	0.00	-	10	-	10	10	20
403135080530200	YELLOW C AT BERGHOLZ OH					LAT 403135 LONG 0805302 (MX)					
10/28/75	1	-	-	0.5	-	20	-	0	-	-	-
403144080585500	CENTER F NR HARLEM SPRINGS OH					LAT 403144 LONG 0805855 (MX)					
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
08/27/80	-	0	-	-	0.00	-	10	-	10	10	20

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

403150080531200 UPPER N F AT BERGHOLZ OH							LAT 403150 LONG 0805312 (MX)				

09/24/79	5.60	-	7.9	72	-	88	-	38.0	-	-	-
403229081290600 GOETTGE RN AT DOVER OH							LAT 403229 LONG 0812906 (MX)				

09/30/80	1.30	2250	3.4	-	551	-	24.0	1570.0	620	2322	21200
08/11/81	1.30	2280	3.5	-	128	-	69.0	1260.0	723	1922	3500
07/19/82	0.65	-	4.0	0	79	0	130.0	1000.0	400	1880	2600
403237081185200 DOG RN AT NEW CUMBERLAND OH							LAT 403237 LONG 0811852 (MX)				

09/30/80	0.95	1000	7.3	92	-	112	12.0	420.0	100	683	200
07/23/81	1.50	830	7.5	104	-	127	3.0	375.0	20	633	75
07/22/82	0.56	-	8.2	82	-	100	13.0	390.0	-	728	-
403242081413800 GOOSE C NR WALNUT CREEK OH							LAT 403242 LONG 0814138 (MX)				

09/12/79	1.30	-	7.3	130	-	160	-	240.0	-	-	-
403257080430500 BRUSH C AT HAMMONDSVILLE OH							LAT 403257 LONG 0804306 (MX)				

09/25/79	5.80	-	7.9	65	-	79	-	87.0	-	-	-
403304081191600 UNAM TR TO CONOTTON C NR NEW CUMBERLAND OH							LAT 403304 LONG 0811916 (MX)				

10/01/80	1.50	1000	7.2	62	-	76	22.0	560.0	100	852	220
07/23/81	3.00	1000	7.1	69	-	84	3.5	460.0	20	735	75
07/21/82	0.92	-	7.6	39	-	47	23.0	450.0	-	808	-
403316080403100 HOLLOW ROCK RN NR HAMMONDSVILLE OH							LAT 403316 LONG 0804031 (MX)				

08/13/81	2.90	1350	8.1	130	-	158	14.0	510.0	20	1070	75
08/20/82	0.82	-	7.9	115	-	140	22.0	490.0	-	901	-
403345080423300 N F YELLOW C AT HAMMONDSVILLE OH							LAT 403345 LONG 0804233 (MX)				

10/15/80	4.70	610	6.5	46	5	56	20.0	196.0	100	407	200
08/05/81	8.60	590	8.4	50	-	60	21.0	186.0	550	372	176
08/18/82	2.30	-	8.4	54	-	78	33.0	200.0	-	400	-
403420081181000 REGGAR RN NR NEW CUMBERLAND OH							LAT 403420 LONG 0811810 (MX)				

10/01/80	0.44	2400	7.2	138	-	168	59.0	1600.0	190	2595	220
07/24/81	0.70	710	7.6	182	-	222	4.0	1450.0	20	2418	75
07/21/82	0.39	-	7.7	123	-	150	42.0	1300.0	-	2400	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
403150080531200	UPPER N F AT BERGHOLZ OH						LAT 403150 LONG 0805312 (MX)				
09/24/79	-	20	2500	14000	40	250	830	-	-	70	-
403229081290600	GOETTGE RN AT DOVER OH						LAT 403229 LONG 0812906 (MX)				
09/30/80	22400	90000	101000	-	36000	36000	-	780	-	-	10
08/11/81	3959	1132	1755	-	11030	11660	-	422	-	-	10
07/19/82	2600	410	1100	-	31000	31000	-	350	-	-	-
403237081185200	DOG RN AT NEW CUMBERLAND OH						LAT 403237 LONG 0811852 (MX)				
09/30/80	200	70	330	-	900	980	-	30	-	-	10
07/23/81	75	517	428	-	1024	1167	-	10	-	-	10
07/22/82	-	-	-	-	-	-	-	-	-	-	-
403242081413800	GOOSE C NR WALNUT CREEK OH						LAT 403242 LONG 0814138 (MX)				
09/12/79	-	30	720	40000	3300	3400	1500	-	-	80	-
403257080430600	BRUSH C AT HAMMONDSVILLE OH						LAT 403257 LONG 0804306 (MX)				
09/25/79	-	40	100	19000	10	20	640	-	-	40	-
403304081191600	UNAM TR TO CONOTTON C NR NEW CUMBERLAND OH						LAT 403304 LONG 0811916 (MX)				
10/01/80	430	30	2090	-	3200	3250	-	30	-	-	10
07/23/81	75	1214	1333	-	2303	2752	-	222	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-
403316080403100	HOLLOW ROCK RN NR HAMMONDSVILLE OH						LAT 403316 LONG 0804031 (MX)				
08/13/81	75	70	1106	-	76	92	-	10	-	-	10
08/20/82	-	-	-	-	-	-	-	-	-	-	-
403345080423300	N F YELLOW C AT HAMMONDSVILLE OH						LAT 403345 LONG 0804233 (MX)				
10/15/80	240	130	390	-	250	260	-	30	-	-	10
08/05/81	86	117	488	-	21	25	-	63	-	-	10
08/18/82	-	-	-	-	-	-	-	-	-	-	-
403420081181000	BEGGAR RN NR NEW CUMBERLAND OH						LAT 403420 LONG 0811810 (MX)				
10/01/80	240	30	1260	-	22100	22500	-	30	-	-	10
07/24/81	75	1020	1034	-	4113	4240	-	37	-	-	10
07/21/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
403150080531200	UPPER N F AT BERGHOLZ OH						LAT 403150 LONG 0805312 (MX)				
09/24/79	-	0	-	-	0.00	-	20	-	20	10	20
403229081290500	GOETTIGE RN AT DOVER OH						LAT 403229 LONG 0812905 (MX)				
09/30/80	-	-	0.5	-	-	-	-	-	-	-	-
08/11/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
403237081185200	DOG RN AT NEW CUMBERLAND OH						LAT 403237 LONG 0811852 (MX)				
09/30/80	-	-	0.5	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/22/82	-	-	-	-	-	-	-	-	-	-	-
403242081413800	GOOSE C NR WALNJT CREEK OH						LAT 403242 LONG 0814138 (MX)				
09/12/79	-	0	-	-	0.00	-	20	-	20	10	20
403257080430500	BRUSH C AT HAMMONDSVILLE OH						LAT 403257 LONG 0804305 (MX)				
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10
403304081191600	UNAM TR TO CONOTTON C NR NEW CUMBERLAND OH						LAT 403304 LONG 0811916 (MX)				
10/01/80	-	-	0.5	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
403316080403100	HOLLOW ROCK RN NR HAMMONDSVILLE OH						LAT 403316 LONG 0804031 (MX)				
08/13/81	-	-	0.5	-	-	-	-	-	-	-	-
08/20/82	-	-	-	-	-	-	-	-	-	-	-
403345080423300	N F YELLOW C AT HAMMONDSVILLE OH						LAT 403345 LONG 0804233 (MX)				
10/15/80	-	-	0.5	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
08/18/82	-	-	-	-	-	-	-	-	-	-	-
403420081181000	REGGAR RN NR NEW CUMBERLAND OH						LAT 403420 LONG 0811810 (MX)				
10/01/80	-	-	0.5	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

403440081113400 WILLOW RN NR DELLROY OH LAT 403440 LONG 0811134 (MX)											

09/10/79	1.00	-	7.2	72	-	98	-	14.0	-	-	-
08/03/81	1.40	-	7.5	70	-	85	-	25.0	-	-	-

403445081313200 BROAD RN AT STRASBURG OH LAT 403445 LONG 0813132 (MX)											

09/12/79	5.30	-	6.7	60	20	73	-	610.0	-	-	-

403446081194800 UNAM TR TO CONYOTTON C NR SOMERDALE OH LAT 403446 LONG 0811948 (MX)											

09/30/80	0.43	4720	6.0	15	94	18	570.0	2500.0	400	4179	200
07/24/81	0.70	4700	6.5	20	16	24	50.0	2050.0	20	4445	25
07/19/82	0.41	-	4.9	0	30	0	950.0	450.0	300	4850	19000

403446081194900 X RN NR MINERAL CITY OH LAT 403446 LONG 0811949 (MX)											

07/09/75	0.40	-	3.8	1	60	0	40.0	2000.0	-	-	-
10/23/75	1.60	-	6.4	18	-	22	55.0	970.0	-	-	-

403458081254900 UNAM TR TO S M MIDDLE RN NR ZOAR OH LAT 403458 LONG 0812549 (MX)											

10/03/80	0.55	1790	6.6	10	-	12	8.0	1110.0	430	1663	200
07/23/81	0.90	1700	5.9	2	97	2	4.0	980.0	75	1558	1927
07/20/82	0.35	-	4.3	0	65	0	2.2	1100.0	300	1700	2300

403550081213400 HUFF RN AT MINERAL CITY OH LAT 403550 LONG 0812134 (MX)											

09/13/79	4.10	-	3.4	1	109	0	-	790.0	-	-	-
08/26/80	19.00	-	4.4	0	60	0	-	530.0	-	-	-
08/06/81	4.70	-	3.8	0	114	0	-	870.0	-	-	-

403551081213300 HUFF RN AT MINERAL CITY OH LAT 403551 LONG 0812133 (MX)											

07/09/75	5.00	-	3.4	1	104	0	75.0	650.0	-	-	-
10/23/75	8.40	-	4.1	1	55	0	70.0	430.0	-	-	-
05/13/76	5.70	-	3.6	-	109	-	75.0	770.0	-	-	-
08/26/76	4.00	-	3.4	-	119	-	-	-	-	-	-

403555081393700 INDIAN TRAIL C NR WINESBURG OH LAT 403555 LONG 0813937 (MX)											

09/12/79	5.10	-	7.5	120	-	143	-	140.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
403440081113400	WILLOW RN NR DELLROY OH							LAT 403440 LONG 0811134 (MX)			
09/10/79	-	310	1000	17000	490	530	420	-	-	140	-
08/03/81	-	180	-	10000	200	-	450	-	-	40	-
403445081313200	BROAD RN AT STRASBURG OH							LAT 403445 LONG 0813132 (MX)			
09/12/79	-	50	250	54000	12000	12000	870	-	-	90	-
403446081194800	UNAM TR TO CONOTTON C NR SOMERDALE OH							LAT 403446 LONG 0811948 (MX)			
09/30/80	1190	3250	6300	-	37000	37500	-	80	-	-	10
07/24/81	169	4614	4843	-	6717	5820	-	67	-	-	10
07/19/82	19000	360	1100	-	44000	44000	-	120	-	-	-
403446081194900	X RN NR MINERAL CITY OH							LAT 403446 LONG 0811949 (MX)			
07/09/75	3600	-	4800	-	-	46000	-	-	300	-	-
10/23/75	2100	-	5200	-	-	16000	-	-	110	-	-
403458081254900	UNAM TR TO S M MIDDLE RN NR ZOAR OH							LAT 403458 LONG 0812549 (MX)			
10/03/80	1160	13500	15200	-	37000	38000	-	210	-	-	10
07/23/81	2175	11010	11220	-	29290	30130	-	295	-	-	10
07/20/82	2800	2900	6100	-	32000	32000	-	220	-	-	-
403550081213400	HUFF RN AT MINERAL CITY OH							LAT 403550 LONG 0812134 (MX)			
09/13/79	-	9400	14000	10000	20000	20000	270	-	-	50	-
08/26/80	-	6500	14000	23000	14000	14000	150	-	-	20	-
08/06/81	-	19000	27000	72000	24000	24000	230	-	-	58	-
403551081213300	HUFF RN AT MINERAL CITY OH							LAT 403551 LONG 0812133 (MX)			
07/09/75	5200	-	25000	-	-	23000	-	-	370	-	-
10/23/75	3500	-	13000	-	-	12000	-	-	160	-	-
05/13/76	5100	-	30000	-	-	25000	-	-	210	-	-
08/26/76	4200	-	21000	-	-	22000	-	-	230	-	-
403555081393700	INDIAN TRAIL C NR WINESBURG OH							LAT 403555 LONG 0813937 (MX)			
09/12/79	-	40	740	21000	630	680	760	-	-	60	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
403440081113400	WILLOW RN NR DELLROY OH					LAT 403440 LONG 0811134 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
08/03/81	-	8	-	-	0.01	-	5	-	10	2	14
403445081313200	HROAD RN AT STRASBURG OH					LAT 403445 LONG 0813132 (MX)					
09/12/79	-	0	-	-	0.00	-	20	-	10	10	10
403446081194800	UNAM TR TO CONOTTON C NR SOMERDALE OH					LAT 403446 LONG 0811948 (MX)					
09/30/80	-	-	0.5	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
403446081194900	X RN NR MINERAL CITY OH					LAT 403446 LONG 0811949 (MX)					
07/09/75	1	-	-	1.5	-	20	-	30	-	-	-
10/23/75	1	-	-	0.5	-	0	-	20	-	-	-
403458081254900	UNAM TR TO S M MIDDLE RN NR ZOAR OH					LAT 403458 LONG 0812549 (MX)					
10/03/80	-	-	0.5	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/20/82	-	-	-	-	-	-	-	-	-	-	-
403550081213400	HUFF RN AT MINERAL CITY OH					LAT 403550 LONG 0812134 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	20	10	70
08/26/80	-	0	-	-	0.04	-	10	-	10	10	20
08/06/81	-	46	-	-	0.01	-	70	-	10	1	50
403551081213300	HUFF RN AT MINERAL CITY OH					LAT 403551 LONG 0812133 (MX)					
07/09/75	1	-	-	3.2	-	20	-	20	-	-	-
10/23/75	1	-	-	0.5	-	0	-	0	-	-	-
05/13/76	1	-	-	0.5	-	20	-	20	-	-	-
08/26/76	1	-	-	0.5	-	20	-	20	-	-	-
403555081393700	INDIAN TRAIL C NR WINESBURG OH					LAT 403555 LONG 0813937 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW- INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD AS (MG/L CAC03)	ACIDITY AS (MG/L CAC03)	BICAR- BONATE FET-FLD AS (MG/L HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

403600081244900 UNAM TR TO TUSCARAWAS R NR ZOAR OH LAT 403600 LONG 0812449 (MX)											

10/02/80	0.63	1200	3.9	-	94	-	5.0	790.0	180	1169	4670
07/23/81	1.20	1250	3.7	-	119	-	4.0	650.0	153	1018	4787
08/19/82	0.34	-	4.0	0	22	0	5.5	780.0	200	1130	3000

403614081180700 HUFF RN NR MINERAL CITY OH LAT 403614 LONG 0811807 (MX)											

09/30/80	1.50	1300	6.3	57	45	70	41.0	610.0	100	1015	200
07/24/81	3.60	800	6.8	53	25	65	5.0	270.0	20	598	75
07/19/82	1.80	-	6.8	57	-	70	67.0	360.0	-	776	-

403614081202100 HUFF RN NR MINERAL CITY OH LAT 403614 LONG 0812021 (MX)											

09/30/80	2.90	1900	3.9	-	109	-	50.0	1000.0	270	1555	1910
07/30/81	4.00	1700	4.2	-	104	-	5.0	875.0	20	1358	214
07/19/82	3.30	-	4.2	0	84	0	50.0	860.0	200	1500	2200

403619081254300 MIDDLE RN AT ZOAR OH LAT 403619 LONG 0812543 (MX)											

10/02/80	0.76	1150	3.7	-	70	-	32.0	630.0	230	952	1810
07/23/81	0.90	1100	3.8	-	71	-	7.5	530.0	64	833	1930
07/21/82	0.46	-	3.6	0	55	0	15.0	660.0	200	1040	2200

403639080472200 N F YELLOW C NR SALINEVILLE OH LAT 403639 LONG 0804722 (MX)											

10/15/80	5.00	565	7.4	86	-	105	14.0	171.0	100	328	200
08/05/81	5.60	540	8.7	82	-	88	17.0	146.0	275	327	75
08/17/82	1.70	-	7.8	107	-	130	23.0	190.0	-	404	-

403655081550200 MARTINS C NR HOLMESVILLE OH LAT 403655 LONG 0815502 (MX)											

09/12/79	7.00	-	8.2	210	-	260	-	50.0	-	-	-

403706081262900 WOLF RN NR ZOAR OH LAT 403706 LONG 0812629 (MX)											

10/03/80	1.70	1700	3.4	-	194	-	14.0	1370.0	460	2094	8500
07/24/81	1.90	2100	3.0	-	214	-	4.5	1260.0	123	1905	7430
07/21/82	1.40	-	3.1	0	169	0	14.0	1200.0	300	1910	6500

403715080391400 L YELLOW C NR WELLSVILLE OH LAT 403715 LONG 0803914 (MX)											

09/25/79	1.80	-	7.6	30	-	36	-	170.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSEVIC, DIS- SOLVED (UG/L AS AS)
403600081244900	UNAM TR TO TUSCARAWAS R NR ZOAR OH							LAT 403600 LONG 0812449 (MX)			
10/02/80	4750	1030	1260	-	23900	23900	-	170	-	-	10
07/23/81	5296	1013	1205	-	18630	20890	-	280	-	-	10
08/19/82	3000	790	1000	-	19000	19000	-	150	-	-	-
403614081180700	HUFF RN NR MINERAL CITY OH							LAT 403614 LONG 0811807 (MX)			
09/30/80	480	3600	9500	-	10100	10100	-	30	-	-	10
07/24/81	75	2874	2931	-	3726	4955	-	10	-	-	10
07/19/82	-	-	-	-	-	-	-	-	-	-	-
403614081202100	HUFF RN NR MINERAL CITY OH							LAT 403614 LONG 0812021 (MX)			
09/30/80	2240	13500	16700	-	24400	25300	-	190	-	-	12
07/30/81	342	10	10	-	5	5	-	36	-	-	10
07/19/82	2900	9700	13000	-	20000	21000	-	250	-	-	-
403619081254300	MIDDLE RN AT ZOAR OH							LAT 403619 LONG 0812543 (MX)			
10/02/80	1940	1580	1830	-	20400	21300	-	130	-	-	10
07/23/81	2681	1994	1985	-	17030	17830	-	204	-	-	10
07/21/82	2600	1700	2200	-	18000	20000	-	160	-	-	-
403639080472200	N F YELLOW C NR SALINEVILLE OH							LAT 403639 LONG 0804722 (MX)			
10/15/80	200	30	90	-	30	40	-	30	-	-	10
08/05/81	75	127	187	-	5	5	-	74	-	-	10
08/17/82	-	-	-	-	-	-	-	-	-	-	-
403655081550200	MARTINS C NR HOLMESVILLE OH							LAT 403655 LONG 0815502 (MX)			
09/12/79	-	20	130	24000	10	20	420	-	-	40	-
403706081262900	WOLF RN NR ZOAR OH							LAT 403706 LONG 0812629 (MX)			
10/03/80	8700	11000	11800	-	40000	40000	-	350	-	-	10
07/24/81	7722	5415	6046	-	29270	30900	-	359	-	-	10
07/21/82	6600	7800	7800	-	33000	30000	-	300	-	-	-
403715080391400	L YELLOW C NR WELLSVILLE OH							LAT 403715 LONG 0803914 (MX)			
09/25/79	-	30	50	57000	40	60	4400	-	-	170	-

APPENDIX I. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
403600081244900	UNAM TR TO TUSCARAWAS R NR ZOAR OH					LAT 403600 LONG 0812449 (MX)					
10/02/80	-	-	0.5	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
08/19/82	-	-	-	-	-	-	-	-	-	-	-
403614081180700	HUFF RN NR MINERAL CITY OH					LAT 403614 LONG 0811807 (MX)					
09/30/80	-	-	0.5	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
403614081202100	HUFF RN NR MINERAL CITY OH					LAT 403614 LONG 0812021 (MX)					
09/30/80	-	-	0.5	-	-	-	-	-	-	-	-
07/30/81	-	-	0.5	-	-	-	-	-	-	-	-
07/19/82	-	-	-	-	-	-	-	-	-	-	-
403619081254300	MIDDLE RN AT ZOAR OH					LAT 403619 LONG 0812543 (MX)					
10/02/80	-	-	0.5	-	-	-	-	-	-	-	-
07/23/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
403639080472200	N F YELLOW C NR SALINEVILLE OH					LAT 403639 LONG 0804722 (MX)					
10/15/80	-	-	0.5	-	-	-	-	-	-	-	-
08/05/81	-	-	0.5	-	-	-	-	-	-	-	-
08/17/82	-	-	-	-	-	-	-	-	-	-	-
403655081550200	MARTINS C NR HOLMESVILLE OH					LAT 403655 LONG 0815502 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
403706081262900	WOLF RN NR ZOAR OH					LAT 403706 LONG 0812629 (MX)					
10/03/80	-	-	0.5	-	-	-	-	-	-	-	-
07/24/81	-	-	0.5	-	-	-	-	-	-	-	-
07/21/82	-	-	-	-	-	-	-	-	-	-	-
403715080391400	L YELLOW C NR WELLSVILLE OH					LAT 403715 LONG 0803914 (MX)					
09/25/79	-	0	-	-	0.00	-	30	-	20	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
403724080500700	RILEY RN AT SALINEVILLE OH							LAT 403724 LONG 0805007 (MX)			
09/24/79	6.30	-	7.6	54	-	66	-	110.0	-	-	-
403851081414500	CRABAPPLE C NR MOUNT EATON OH							LAT 403851 LONG 0814145 (MX)			
09/10/79	4.20	-	8.0	140	-	170	-	61.0	-	-	-
404023081161200	INDIAN RN NR WAYNESBURG OH							LAT 404023 LONG 0811612 (MX)			
09/11/79	1.10	-	6.9	43	10	52	-	610.0	-	-	-
08/26/80	8.00	-	6.8	28	10	34	-	400.0	-	-	-
07/31/81	5.20	-	6.8	44	10	54	-	440.0	-	-	-
404026081174100	PLEASANT VALLEY RN NR WAYNESBURG OH							LAT 404026 LONG 0811741 (MX)			
09/11/79	1.90	-	6.8	46	15	56	-	480.0	-	-	-
08/26/80	9.80	-	7.0	41	-	50	-	380.0	-	-	-
07/31/81	5.60	-	7.0	43	-	52	-	410.0	-	-	-
404052081281900	UNNAMED C NR BOLIVAR OH							LAT 404052 LONG 0812819 (MX)			
09/12/79	1.90	-	8.5	210	-	236	-	100.0	-	-	-
404140080351100	LONGS RV NR CALCUTTA OH							LAT 404140 LONG 0803511 (MX)			
09/25/79	2.60	-	7.9	83	-	101	-	86.0	-	-	-
404155081241400	BEAR RN NR CANTON OH							LAT 404155 LONG 0812414 (MX)			
09/12/79	1.00	-	7.3	39	-	48	-	360.0	-	-	-
08/26/80	5.00	-	6.7	32	15	39	-	260.0	-	-	-
404206080520000	WILLIARD RN NR LISBON OH							LAT 404206 LONG 0805200 (MX)			
09/13/79	0.37	-	8.3	144	-	174	-	72.0	-	-	-
08/14/81	1.00	-	7.7	125	-	152	-	97.0	-	-	-
404210081023700	MUDDY F NR MINERVA OH							LAT 404210 LONG 0810237 (MX)			
09/10/79	1.80	-	8.7	112	-	120	-	89.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BDT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
403724080500700	RILEY RN AT SALINEVILLE OH							LAT 403724 LONG 0805007 (MX)			
09/24/79	-	30	490	46000	190	200	1100	-	-	110	-
403851081414500	CRABAPPLE C NR MOUNT EATON OH							LAT 403851 LONG 0814145 (MX)			
09/10/79	-	10	240	10000	110	110	340	-	-	20	-
404023081161200	INDIAN RN NR WAYNESBURG OH							LAT 404023 LONG 0811612 (MX)			
09/11/79	-	490	800	40000	7200	7400	3400	-	-	90	-
08/26/80	-	190	1100	12000	5200	5200	320	-	-	40	-
07/31/81	-	3300	4200	21000	5900	5900	710	-	-	80	-
404026081174100	PLEASANT VALLEY RN NR WAYNESBURG OH							LAT 404026 LONG 0811741 (MX)			
09/11/79	-	570	1100	89000	3700	3800	1100	-	-	170	-
08/26/80	-	260	1000	21000	4100	4100	920	-	-	78	-
07/31/81	-	1200	1200	35000	5700	5700	1200	-	-	170	-
404052081281900	UNNAMED C NR BOLIVAR OH							LAT 404052 LONG 0812819 (MX)			
09/12/79	-	60	400	15000	90	110	620	-	-	120	-
404140080351100	LONGS RN NR CALCUTTA OH							LAT 404140 LONG 0803511 (MX)			
09/25/79	-	30	270	19000	40	90	560	-	-	40	-
404155081241400	BEAR RN NR CANTON OH							LAT 404155 LONG 0812414 (MX)			
09/12/79	-	110	430	66000	7500	7700	1200	-	-	130	-
08/26/80	-	360	1200	18000	7000	7000	1300	-	-	63	-
404206080520000	WILLIARD RN NR LISBON OH							LAT 404206 LONG 0805200 (MX)			
09/13/79	-	80	630	22000	90	150	2200	-	-	70	-
08/14/81	-	110	880	12000	120	190	800	-	-	25	-
404210081023700	MUDDY F NR MINERVA OH							LAT 404210 LONG 0810237 (MX)			
09/10/79	-	110	770	19000	160	180	950	-	-	30	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
403724080500700	RILEY RN AT SALINEVILLE OH						LAT 403724 LONG 0805007 (MX)				
09/24/79	-	0	-	-	0.00	-	30	-	20	10	30
403851081414500	CRABAPPLE C NR MOUNT EATON OH						LAT 403851 LONG 0814145 (MX)				
09/10/79	-	0	-	-	0.12	-	10	-	10	10	10
404023081161200	INDIAN RN NR WAYNESBURG OH						LAT 404023 LONG 0811612 (MX)				
09/11/79	-	0	-	-	0.00	-	20	-	90	10	60
08/26/80	-	0	-	-	0.00	-	10	-	20	10	10
07/31/81	-	8	-	-	0.01	-	10	-	30	2	16
404026081174100	PLEASANT VALLEY RN NR WAYNESBURG OH						LAT 404026 LONG 0811741 (MX)				
09/11/79	-	0	-	-	0.00	-	30	-	20	10	20
08/26/80	-	0	-	-	0.00	-	10	-	10	10	10
07/31/81	-	43	-	-	0.01	-	47	-	20	3	38
404052081281900	UNNAMED C NR BOLIVAR OH						LAT 404052 LONG 0812819 (MX)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
404140080351100	LONGS RN NR CALCUTTA OH						LAT 404140 LONG 0803511 (MX)				
09/25/79	-	0	-	-	0.00	-	10	-	10	10	20
404155081241400	BEAR RN NR CANTON OH						LAT 404155 LONG 0812414 (MX)				
09/12/79	-	0	-	-	0.00	-	30	-	20	10	30
08/26/80	-	0	-	-	0.00	-	10	-	10	10	20
404206080520000	WILLIARD RN NR LISBON OH						LAT 404206 LONG 0805200 (MX)				
09/13/79	-	0	-	-	0.00	-	30	-	10	10	20
08/14/81	-	3	-	-	0.01	-	10	-	10	1	10
404210081023700	MUDDY F NR MINERVA OH						LAT 404210 LONG 0810237 (MX)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
404310081090800	HUGLE RN NR MALVERN OH										LAT 404310 LONG 0810908 (MX)
09/11/79	3.60	-	8.0	160	-	196	-	75.0	-	-	-
404423080502900	COLD RN NR LISBON OH										LAT 404423 LONG 0805029 (MX)
09/13/79	0.53	-	8.4	180	-	209	-	210.0	-	-	-
08/26/80	15.00	-	8.0	74	-	90	-	95.0	-	-	-
404444081142700	BLACK RN NR ROBERTSVILLE OH										LAT 404444 LONG 0811427 (MX)
09/11/79	2.60	-	8.1	210	-	256	-	120.0	-	-	-
404505081041100	M B SANDY C NR MINERVA OH										LAT 404505 LONG 0810411 (MX)
09/10/79	1.20	-	8.3	231	-	278	-	52.0	-	-	-
404544080415400	ELK RN AT ELKTON OH										LAT 404544 LONG 0804154 (MX)
09/24/79	2.80	-	7.6	150	-	180	-	240.0	-	-	-
08/20/80	21.00	-	7.8	112	-	137	-	150.0	-	-	-
404629080453500	LISBON C AT LISBON OH										LAT 404629 LONG 0804535 (MX)
09/13/79	0.58	-	7.9	190	-	227	-	140.0	-	-	-
404655080455301	LISBON C AT LISBON OH										LAT 404655 LONG 0804553 (MX)
09/13/79	0.65	-	8.3	166	-	198	-	170.0	-	-	-
404722080325700	LESLIE RN NR NEGLEY OH										LAT 404722 LONG 0803257 (MX)
09/25/79	4.50	-	8.0	170	-	204	-	130.0	-	-	-
08/21/80	16.00	-	7.9	139	-	170	-	110.0	-	-	-
404756080355800	L BULL C NR ROGERS OH										LAT 404756 LONG 0803558 (MX)
09/25/79	2.60	-	8.0	160	-	192	-	200.0	-	-	-
404858081464900	L SUGAR C NR ORRVILLE OH										LAT 404858 LONG 0814649 (MX)
09/13/79	1.60	-	7.5	180	-	220	-	52.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
404310081090800	HUGLE RN NR MALVERN OH							LAT 404310 LONG 0810908 (MX)			
09/11/79	-	80	420	11000	190	200	970	-	-	30	-
404423080502900	COLD RN NR LISBON OH							LAT 404423 LONG 0805029 (MX)			
09/13/79	-	10	270	47000	240	250	1900	-	-	140	-
08/26/80	-	110	1100	9800	130	170	370	-	-	22	-
404444081142700	BLACK RN NR ROBERTSVILLE OH							LAT 404444 LONG 0811427 (MX)			
09/11/79	-	600	600	16000	290	290	2100	-	-	50	-
404505081041100	M B SANDY C NR MINERVA OH							LAT 404505 LONG 0810411 (MX)			
09/10/79	-	30	260	28000	30	50	950	-	-	40	-
404544080415400	ELK RN AT ELKTON OH							LAT 404544 LONG 0804154 (MX)			
09/24/79	-	40	240	-	200	250	-	-	-	-	-
08/20/80	-	50	340	9500	150	150	810	-	-	32	-
404629080453500	LISBON C AT LISBON OH							LAT 404629 LONG 0804535 (MX)			
09/13/79	-	40	290	-	210	220	-	-	-	-	-
404655080455301	LISBON C AT LISBON OH							LAT 404655 LONG 0804553 (MX)			
09/13/79	-	40	270	20000	60	60	570	-	-	70	-
404722080325700	LESLIE RN NR NEGLEY OH							LAT 404722 LONG 0803257 (MX)			
09/25/79	-	20	420	22000	180	220	530	-	-	650	-
08/21/80	-	80	300	8100	30	50	560	-	-	510	-
404756080355800	L BULL C NR ROGERS OH							LAT 404756 LONG 0803558 (MX)			
09/25/79	-	40	190	22000	20	50	660	-	-	40	-
404858081464900	L SUGAR C NR ORRVILLE OH							LAT 404858 LONG 0814649 (MX)			
09/13/79	-	80	1500	24000	150	190	480	-	-	40	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRD- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
404310081090800	HUGLE RN NR MALVERN OH					LAT 404310 LONG 0810908 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
404423080502900	COLD RN NR LISBON OH					LAT 404423 LONG 0805029 (MX)					
09/13/79	-	0	-	-	0.00	-	30	-	40	10	550
08/26/80	-	0	-	-	0.00	-	10	-	10	10	10
404444081142700	BLACK RN NR ROBERTSVILLE OH					LAT 404444 LONG 0811427 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
404505081041100	M B SANDY C NR MINERVA OH					LAT 404505 LONG 0810411 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	20
404544080415400	ELK RN AT ELKTON OH					LAT 404544 LONG 0804154 (MX)					
09/24/79	-	0	-	-	-	-	-	-	-	10	-
08/20/80	-	0	-	-	0.00	-	10	-	10	10	10
404629080453500	LISBON C AT LISBON OH					LAT 404629 LONG 0804535 (MX)					
09/13/79	-	-	-	-	-	-	-	-	-	-	-
404655080455301	LISBON C AT LISBON OH					LAT 404655 LONG 0804553 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
404722080325700	LESLIE RN NR NEGLEY OH					LAT 404722 LONG 0803257 (MX)					
09/25/79	-	0	-	-	0.00	-	20	-	20	10	90
08/21/80	-	0	-	-	0.00	-	10	-	20	10	90
404756080355800	L BULL C NR ROGERS OH					LAT 404756 LONG 0803558 (MX)					
09/25/79	-	-	-	-	0.00	-	10	-	10	10	90
404858081464900	L SUGAR C NR ORRVILLE OH					LAT 404858 LONG 0814649 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLD- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (JG/L AS AL)
404909081163100	UNNAMED C NR LOUISVILLE OH									LAT 404909 LONG 0811631 (MX)	
09/13/79	0.75	-	7.8	200	-	244	-	54.0	-	-	-
405022081242200	UNNAMED C AT AVONDALE OH									LAT 405022 LONG 0812422 (MX)	
09/13/79	2.70	-	8.0	230	-	280	-	130.0	-	-	-
405128081011500	BEAVER RN NR HOMEWORTH OH									LAT 405128 LONG 0810115 (MX)	
09/12/79	0.22	-	7.9	360	-	436	-	260.0	-	-	-
405322081004400	NAYLOR D NR SEBRING OH									LAT 405322 LONG 0810044 (MX)	
09/24/79	1.50	-	7.1	94	-	114	-	48.0	-	-	-
405405080583200	NAYLOR D NR DAMASCUS OH									LAT 405405 LONG 0805832 (MX)	
09/11/79	0.06	-	8.0	220	-	268	-	460.0	-	-	-
405610081403300	SILVER C NR CLINTON OH									LAT 405610 LONG 0814033 (MX)	
09/10/79	4.60	-	7.8	110	-	130	-	75.0	-	-	-
405620081171300	SWARTZ D NR HARTVILLE OH									LAT 405620 LONG 0811713 (MX)	
09/12/79	1.70	-	7.8	250	-	308	-	94.0	-	-	-
405823081004700	ISLAND C NR N BENTON OH									LAT 405823 LONG 0810047 (MX)	
09/24/79	0.34	-	7.0	120	-	148	-	260.0	-	-	-
405830081462000	RIVER STYX AT RITTMAN OH									LAT 405830 LONG 0814620 (MX)	
09/12/79	11.00	-	7.7	240	-	290	-	79.0	-	-	-
405926080345800	BURGESS RN NR NEW MIDDLETOWN OH									LAT 405926 LONG 0803458 (MX)	
09/13/79	0.24	-	7.9	250	-	310	-	790.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
404909081163100	UNNAMED C NR LOUISVILLE OH							LAT 404909 LONG 0811631 (MX)			
09/13/79	-	140	410	15000	310	310	540	-	-	40	-
405022081242200	UNNAMED C AT AVONDALE OH							LAT 405022 LONG 0812422 (MX)			
09/13/79	-	80	350	5100	200	200	110	-	-	120	-
405128081011500	BEAVER RN NR HOMEWORTH OH							LAT 405128 LONG 0810115 (MX)			
09/12/79	-	40	380	25000	310	400	750	-	-	50	-
405322081004400	NAYLOR D NR SEBRING OH							LAT 405322 LONG 0810044 (MX)			
09/24/79	-	50	540	9600	190	280	840	-	-	20	-
405405080583200	NAYLOR D NR DAMASCUS OH							LAT 405405 LONG 0805832 (MX)			
09/11/79	-	70	430	19000	170	180	330	-	-	70	-
405610081403300	SILVER C NR CLINTON OH							LAT 405610 LONG 0814033 (MX)			
09/10/79	-	30	290	7000	100	110	350	-	-	20	-
405620081171300	SWARTZ D NR HARTVILLE OH							LAT 405620 LONG 0811713 (MX)			
09/12/79	-	60	450	10000	270	270	320	-	-	30	-
405823081004700	ISLAND C NR N BENTON OH							LAT 405823 LONG 0810047 (MX)			
09/24/79	-	30	530	15000	60	100	180	-	-	80	-
405830081462000	RIVER STYX AT RITTMAN OH							LAT 405830 LONG 0814620 (MX)			
09/12/79	-	40	2100	12000	210	230	230	-	-	110	-
405926080345800	BURGESS RN NR NEW MIDDLETOWN OH							LAT 405926 LONG 0803458 (MX)			
09/13/79	-	30	390	16000	170	180	380	-	-	80	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, RECOV. ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
404909081163100	UNNAMED C NR LOUISVILLE OH					LAT 404909 LONG 0811631 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	120
405022081242200	UNNAMED C AT AVONDALE OH					LAT 405022 LONG 0812422 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
405128081011500	BEAVER RN NR HOMEWORTH OH					LAT 405128 LONG 0810115 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
405322081004400	NAYLOR D NR SEBRING OH					LAT 405322 LONG 0810044 (MX)					
09/24/79	-	0	-	-	0.00	-	10	-	10	10	20
405405080583200	NAYLOR D NR DAMASCUS OH					LAT 405405 LONG 0805832 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
405610081403300	SILVER C NR CLINTON OH					LAT 405610 LONG 0814033 (MX)					
09/10/79	-	0	-	-	0.25	-	10	-	10	10	10
405620081171300	SWARTZ D NR HARTVILLE OH					LAT 405620 LONG 0811713 (MX)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
405823081004700	ISLAND C NR N BENTON OH					LAT 405823 LONG 0810047 (MX)					
09/24/79	-	0	-	-	0.00	-	10	-	10	10	20
405830081462000	RIVER STYX AT HITTMAN OH					LAT 405830 LONG 0814620 (MX)					
09/12/79	-	0	-	-	0.00	-	20	-	10	10	10
405926080345800	BURGESS RN NR NEW MIDDLETOWN OH					LAT 405926 LONG 0803458 (MX)					
09/13/79	-	0	-	-	0.00	-	20	-	10	10	30

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD AS (MG/L CAC03)	ACIDITY AS (MG/L CAC03)	BICAR- BONATE FET-FLD (MG/L HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
410001080580701	MILL C NR BERLIN CENTER OH					LAT 410001 LONG 0805807 (MX)					
09/11/79	1.20	-	8.2	260	-	320	-	160.0	-	-	-
08/20/80	5.80	-	7.8	185	-	226	-	100.0	-	-	-
08/03/81	0.79	-	7.8	220	-	268	-	130.0	-	-	-
410010080363700	HURGESS RV AT POLAND OH					LAT 410010 LONG 0803637 (MX)					
09/13/79	0.10	-	8.1	120	-	148	-	280.0	-	-	-
410024081380400	HUDSON RN AT BARBERTON OH					LAT 410024 LONG 0813804 (MX)					
09/12/79	4.10	-	7.6	110	-	140	-	59.0	-	-	-
410049080512800	W B MEANDER C AT ELLSWORTH OH					LAT 410049 LONG 0805128 (MX)					
09/24/79	1.40	-	7.6	46	-	56	-	47.0	-	-	-
410128040415700	INDIAN RN NR BOARDMAN OH					LAT 410128 LONG 0804157 (MX)					
09/13/79	0.66	-	7.7	150	-	184	-	140.0	-	-	-
410132081394400	HUDSON RN NR NORTON OH					LAT 410132 LONG 0813944 (MX)					
09/11/79	2.30	-	7.8	140	-	172	-	68.0	-	-	-
410318041363200	WOLF C NR BARBERTON OH					LAT 410318 LONG 0813632 (MX)					
09/10/79	0.76	-	7.0	130	-	164	-	44.0	-	-	-
410424081290400	L CUYAHOGA R AT AKRON OH					LAT 410424 LONG 0812904 (MX)					
09/10/79	34.00	-	7.7	140	-	176	-	69.0	-	-	-
410517081411500	WOLF C NR COPLEY OH					LAT 410517 LONG 0814115 (MX)					
09/11/79	5.40	-	7.5	160	-	192	-	41.0	-	-	-
03110983	CONSOL RN NR BLOOMINGDALE OH					LAT 401918 LONG 0804849 (RC)					
12/01/78	0.61	-	7.3	221	-	270	-	530.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
410001080580701	MILL C NR BERLIN CENTER OH						LAT 410001 LONG 0805807 (MX)				
09/11/79	-	60	210	18000	120	150	2200	-	-	50	-
08/20/80	-	50	2500	8000	140	260	520	-	-	34	-
08/03/81	-	20	1700	12000	250	330	1200	-	-	40	-
410010080363700	BURGESS RN AT POLAND OH						LAT 410010 LONG 0803637 (MX)				
09/13/79	-	20	220	14000	70	120	1100	-	-	100	-
410024081380400	HUDSON RN AT BARBERTON OH						LAT 410024 LONG 0813804 (MX)				
09/12/79	-	80	490	41000	160	190	360	-	-	140	-
410049080512800	W B MEANDER C AT ELLSWORTH OH						LAT 410049 LONG 0805128 (MX)				
09/24/79	-	110	300	37000	10	50	2700	-	-	70	-
410128080415700	INDIAN RN NR BOARDMAN OH						LAT 410128 LONG 0804157 (MX)				
09/13/79	-	60	440	27000	110	110	620	-	-	100	-
410132081394400	HUDSON RN NR VORTON OH						LAT 410132 LONG 0813944 (MX)				
09/11/79	-	20	530	5900	120	140	190	-	-	20	-
410318081363200	WOLF C NR BARBERTON OH						LAT 410318 LONG 0813632 (MX)				
09/10/79	-	30	490	9500	240	310	290	-	-	40	-
410424081290400	L CUYAHOGA R AT AKRON OH						LAT 410424 LONG 0812904 (MX)				
09/10/79	-	40	580	48000	110	160	870	-	-	360	-
410517081411500	WOLF C NR COPLEY OH						LAT 410517 LONG 0814115 (MX)				
09/11/79	-	70	500	10000	40	50	340	-	-	20	-
03110983	CONSOL RN NR BLOOMINGDALE OH						LAT 401918 LONG 0804849 (RC)				
12/01/78	120	-	400	-	-	1100	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM. TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM. TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
410001080580701	MILL C NR BERLIN CENTER OH					_AT 410001 LONG 0805807 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
08/20/80	-	0	-	-	0.00	-	10	-	10	10	10
08/03/81	-	6	-	-	0.01	-	5	-	10	1	11
410010080363700	BURGESS RN AT POLAND OH					_AT 410010 LONG 0803637 (MX)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	30
410024081380400	HUDSON RN AT BARBERTON OH					_AT 410024 LONG 0813804 (MX)					
09/12/79	-	0	-	-	0.00	-	20	-	20	10	490
410049080512900	W 3 MEANDER C AT ELLSWORTH OH					_AT 410049 LONG 0805129 (MX)					
09/24/79	-	0	-	-	0.00	-	20	-	10	10	70
410128080415700	INDIAN RN NR BOARDMAN OH					_AT 410128 LONG 0804157 (MX)					
09/13/79	-	0	-	-	0.00	-	20	-	20	10	30
410132081394400	HUDSON RN NR VORTON OH					_AT 410132 LONG 0813944 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
410318081363200	WOLF C NR BARBERTON OH					_AT 410318 LONG 0813632 (MX)					
09/10/79	-	0	-	-	0.00	-	10	-	40	10	40
410424081290400	L CUYAHOGA R AT AKRON OH					_AT 410424 LONG 0812904 (MX)					
09/10/79	-	0	-	-	0.00	-	90	-	50	10	200
410517081411500	WOLF C NR COPLEY OH					_AT 410517 LONG 0814115 (MX)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
03110983	CONSOL RN NR BLOOMINGDALE OH					_AT 401918 LONG 0804849 (RC)					
12/01/78	-	-	-	0.5	-	-	-	2	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD AS (MG/L CAC03)	ACIDITY AS (MG/L CAC03)	BICAR- BONATE FET-FLD AS (MG/L HCO3)	CHLO- RIDE, DIS- SOLVED AS (MG/L CL)	SULFATE, DIS- SOLVED AS (MG/L SO4)	NICKEL, DIS- SOLVED AS (UG/L VI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AL)
03111465	SHORT C AT ADENA OH					LAT 401309 LONG 0805222 (RC)					
08/12/81	43.00	-	-	-	-	-	-	-	-	-	-
03144400	SAND F NR WAKATOWIKA OH					LAT 401337 LONG 0815936 (RC)					
12/07/78	4.90	-	7.3	57	-	70	-	220.0	-	-	-
393745081431000	DYES F NR HACKNEY OH					LAT 393745 LONG 0814310 (RC)					
08/26/81	2.00	2100	6.9	141	-	172	70.0	1300.0	20	1835	201
08/04/82	3.20	-	8.1	139	-	170	17.0	780.0	-	1460	-
393826031430700	DYES C NR UNIONVILLE OH					LAT 393826 LONG 0814307 (RC)					
06/06/75	70.00	-	7.5	141	-	172	13.0	430.0	-	-	-
11/10/75	46.00	-	7.7	190	-	232	15.0	600.0	-	-	-
394053081415500	DYES F NR REINERSVILLE OH					LAT 394053 LONG 0814155 (RC)					
08/27/81	2.60	1700	6.7	154	-	188	5.0	880.0	20	1510	133
08/03/82	4.40	-	8.0	139	-	170	13.0	750.0	-	1290	-
394109081414500	HORSE RV NR REINERSVILLE OH					LAT 394109 LONG 0814145 (RC)					
06/06/75	20.00	-	7.7	154	-	188	10.0	450.0	-	-	-
11/10/75	15.00	-	7.5	190	-	232	15.0	570.0	-	-	-
394311081425700	HORSE RV NR MCCONNESVILLE OH					LAT 394311 LONG 0814257 (RC)					
09/13/79	4.10	-	7.7	170	-	210	-	460.0	-	-	-
08/04/80	7.10	-	8.2	149	-	182	-	400.0	-	-	-
09/10/80	4.20	-	7.8	174	-	212	-	-	-	-	-
08/06/81	1.90	-	7.4	153	-	186	-	490.0	-	-	-
08/26/81	0.49	-	7.3	161	-	196	-	600.0	-	-	-
08/03/82	0.55	-	8.0	156	-	190	-	590.0	-	-	-
400544081094200	SIXTEEN VALLEY C NR HENDRYSBURG OH					LAT 400544 LONG 0810942 (RC)					
10/15/75	1.80	-	7.1	108	-	132	15.0	1100.0	-	-	-
400942081444100	ELUSIVE RV NR PLAINFIELD OH					LAT 400942 LONG 0814441 (RC)					
09/30/75	0.70	-	7.2	56	-	68	3.0	31.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03111465	SHORT C AT ADENA OH						LAT 401309 LONG 0805222 (RC)				
08/12/81	-	-	-	-	-	-	-	-	-	-	-
03144400	SAND F NR WAKATOMIKA OH						LAT 401337 LONG 0815936 (RC)				
12/07/78	770	-	3400	-	-	2500	-	-	-	-	-
393745081431000	DYES F NR HADENNEY OH						LAT 393745 LONG 0814310 (RC)				
08/26/81	313	500	604	-	5	78	-	10	-	-	10
08/04/82	-	-	-	-	-	-	-	-	-	-	-
393826081430700	DYES C NR UNIONVILLE OH						LAT 393826 LONG 0814307 (RC)				
06/06/75	1800	-	4500	-	-	500	-	-	30	-	-
11/10/75	280	-	920	-	-	340	-	-	20	-	-
394053081415500	DYES F NR REINERSVILLE OH						LAT 394053 LONG 0814155 (RC)				
08/27/81	731	327	439	-	5	204	-	10	-	-	10
08/03/82	-	-	-	-	-	-	-	-	-	-	-
394109081414500	HORSE RN NR REINERSVILLE OH						LAT 394109 LONG 0814145 (RC)				
06/06/75	180	-	220	-	-	210	-	-	20	-	-
11/10/75	160	-	330	-	-	310	-	-	20	-	-
394311081425700	HORSE RN NR MCCONNELSVILLE OH						LAT 394311 LONG 0814257 (RC)				
09/13/79	-	90	260	4900	10	310	3100	-	-	60	-
08/04/80	-	30	370	21000	170	220	1100	-	-	30	-
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	50	760	13000	390	510	1600	-	-	20	-
08/26/81	-	303	479	-	25	453	-	-	-	-	-
08/03/82	-	-	-	4000	-	-	3300	-	-	12	-
400544081094200	SIXTEEN VALLEY C NR HENDRYSBURG OH						LAT 400544 LONG 0810942 (RC)				
10/15/75	220	-	240	-	-	370	-	-	20	-	-
400942081444100	ELUSIVE RN NR PLAINFIELD OH						LAT 400942 LONG 0814441 (RC)				
09/30/75	1200	-	2800	-	-	900	-	-	30	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03111465	SHORT C AT ADENA OH					LAT 401309 LONG 0805222 (RC)					
08/12/81	-	-	-	-	-	-	-	-	-	-	-
03144400	SAND F VR WAKATONIKA OH					LAT 401337 LONG 0815936 (RC)					
12/07/78	-	-	-	0.5	-	-	-	3	-	-	-
393745081431000	DYES F VR HACKNEY OH					LAT 393745 LONG 0814310 (RC)					
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
08/04/82	-	-	-	-	-	-	-	-	-	-	-
393826081430700	DYES C VR UNIONVILLE OH					LAT 393826 LONG 0814307 (RC)					
06/06/75	2	-	-	0.5	-	50	-	20	-	-	-
11/10/75	1	-	-	0.5	-	0	-	0	-	-	-
394053081415500	DYES F VR REINERSVILLE OH					LAT 394053 LONG 0814155 (RC)					
08/27/81	-	-	0.5	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
394109081414500	HORSE RN VR REINERSVILLE OH					LAT 394109 LONG 0814145 (RC)					
06/06/75	1	-	-	0.5	-	20	-	20	-	-	-
11/10/75	1	-	-	0.5	-	20	-	20	-	-	-
394311081425700	HORSE RN VR MCCONNELSVILLE OH					LAT 394311 LONG 0814257 (RC)					
09/13/79	-	0	-	-	0.00	-	20	-	20	10	30
08/04/80	-	0	-	-	0.00	-	10	-	10	10	10
09/10/80	-	-	-	-	-	-	-	-	-	-	-
08/06/81	-	12	-	-	0.01	-	10	-	10	1	20
08/26/81	-	-	-	-	-	-	-	-	-	-	-
08/03/82	-	-	-	-	-	-	-	-	-	-	-
400544081094200	SIXTEEN VALLEY C NR HENDRYSBURG OH					LAT 400544 LONG 0810942 (RC)					
10/15/75	1	-	-	0.5	-	20	-	20	-	-	-
400942081444100	ELUSIVE RN NR PLAINFIELD OH					LAT 400942 LONG 0814441 (RC)					
09/30/75	2	-	-	0.5	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

401021081075500 HOGGS F AT HOLLOWAY OH LAT 401021 LONG 0810755 (RC)											

10/07/80	9.00	1900	7.7	208	-	254	5.0	1010.0	100	1645	200
08/26/81	6.40	1710	8.2	197	-	240	4.0	940.0	20	1618	90
07/26/82	3.40	-	8.2	180	-	220	11.0	950.0	-	1550	-
07/28/75	3.00	-	8.2	197	-	240	25.0	880.0	-	-	-
11/03/75	3.30	-	6.9	241	-	294	20.0	910.0	-	-	-

401021081454400 RECLAIM RN NR PLAINFIELD OH LAT 401021 LONG 0814544 (RC)											

07/10/75	0.30	-	6.7	56	-	68	5.0	800.0	-	-	-
09/29/75	1.00	-	6.8	62	-	76	9.0	620.0	-	-	-

401058081504500 Y RN NW WILLS CREEK OH LAT 401058 LONG 0815045 (RC)											

07/10/75	0.30	-	3.3	1	109	0	15.0	630.0	-	-	-
09/29/75	0.60	-	3.4	1	94	0	20.0	710.0	-	-	-

401142080583200 S F SHORT C NR NEW ATHENS OH LAT 401142 LONG 0805832 (RC)											

06/30/75	1.00	-	8.1	402	-	490	15.0	2500.0	-	-	-
11/04/75	0.87	-	7.4	431	-	525	20.0	2400.0	-	-	-

401224080545800 S F SHORT C AT GEORGETOWN OH LAT 401224 LONG 0805458 (RC)											

06/30/75	6.00	-	8.1	345	-	420	12.0	1800.0	-	-	-
11/04/75	3.70	-	7.8	381	-	464	10.0	1900.0	-	-	-

401227080551201 S F SHORT C AT GEORGETOWN OH LAT 401227 LONG 0805512 (RC)											

09/10/79	14.00	-	8.0	360	-	440	-	1800.0	-	-	-
08/26/80	43.00	-	8.1	413	-	504	-	1900.0	-	-	-
07/15/81	9.90	-	8.3	227	-	252	-	2000.0	-	-	-

401241080533000 S F SHORT C STATION 6 NR ADENA OH LAT 401241 LONG 0805330 (RC)											

06/04/76	8.20	-	7.9	276	-	336	15.0	1930.0	-	-	-

401310080522300 SHORT C AT ADENA OH LAT 401310 LONG 0805223 (RC)											

06/30/75	20.00	-	8.3	267	-	325	24.0	1400.0	-	-	-
11/04/75	12.00	-	7.9	259	-	316	30.0	1000.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
401021081075500	ROGGS F AT HOLLOWAY OH						LAT 401021 LONG 0810755 (RC)				
10/07/80	520	30	500	-	600	690	-	30	-	-	10
08/26/81	297	10	539	-	149	293	-	13	-	-	10
07/26/82	-	-	-	-	-	-	-	-	-	-	-
07/28/75	120	-	250	-	-	350	-	-	20	-	-
11/03/75	30	-	230	-	-	380	-	-	20	-	-
401021081454400	RECLAIM RV NR PLAINFIELD OH						LAT 401021 LONG 0814544 (RC)				
07/10/75	50	-	600	-	-	2600	-	-	40	-	-
09/29/75	490	-	1800	-	-	2800	-	-	30	-	-
401058081504500	Y RN NR WILLS CREEK OH						LAT 401058 LONG 0815045 (RC)				
07/10/75	2300	-	20000	-	-	6900	-	-	80	-	-
09/29/75	2400	-	23000	-	-	8400	-	-	100	-	-
401142080583200	S F SHORT C NR NEW ATHENS OH						LAT 401142 LONG 0805832 (RC)				
06/30/75	30	-	300	-	-	110	-	-	20	-	-
11/04/75	10	-	380	-	-	960	-	-	20	-	-
401224080545800	S F SHORT C AT GEORGETOWN OH						LAT 401224 LONG 0805458 (RC)				
06/30/75	310	-	150	-	-	260	-	-	20	-	-
11/04/75	500	-	580	-	-	520	-	-	30	-	-
401227080551201	S F SHORT C AT GEORGETOWN OH						LAT 401227 LONG 0805512 (RC)				
09/10/79	-	40	390	55000	310	320	-	-	-	-	-
08/26/80	-	50	800	8700	400	410	200	-	-	30	-
07/15/81	-	100	330	12000	190	210	4100	-	-	170	-
401241080533000	S F SHORT C STATION 6 NR ADENA OH						LAT 401241 LONG 0805330 (RC)				
06/04/76	160	-	180	-	-	240	-	-	20	-	-
401310080522300	SHORT C AT ADENA OH						LAT 401310 LONG 0805223 (RC)				
06/30/75	140	-	220	-	-	110	-	-	20	-	-
11/04/75	170	-	90	-	-	220	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
401021081075500	HOGGS F AT HOLLOWAY OH						LAT 401021 LONG 0810755 (RC)				
10/07/80	-	-	0.5	-	-	-	-	-	-	-	-
08/26/81	-	-	0.5	-	-	-	-	-	-	-	-
07/26/82	-	-	-	-	-	-	-	-	-	-	-
07/28/75	1	-	-	0.5	-	20	-	20	-	-	-
11/03/75	1	-	-	0.5	-	20	-	20	-	-	-
401021081454400	RECLAIM RN NR PLAINFIELD OH						LAT 401021 LONG 0814544 (RC)				
07/10/75	1	-	-	0.7	-	20	-	20	-	-	-
09/29/75	1	-	-	0.5	-	20	-	20	-	-	-
401058081504500	Y RN NR WILLS CREEK OH						LAT 401058 LONG 0815045 (RC)				
07/10/75	1	-	-	1.7	-	0	-	20	-	-	-
09/29/75	1	-	-	0.5	-	20	-	20	-	-	-
401142080583200	S F SHORT C NR NEW ATHENS OH						LAT 401142 LONG 0805832 (RC)				
06/30/75	1	-	-	0.5	-	20	-	30	-	-	-
11/04/75	1	-	-	0.5	-	20	-	20	-	-	-
401224080545800	S F SHORT C AT GEORGETOWN OH						LAT 401224 LONG 0805458 (RC)				
06/30/75	1	-	-	0.5	-	20	-	20	-	-	-
11/04/75	1	-	-	0.5	-	20	-	20	-	-	-
401227080551201	S F SHORT C AT GEORGETOWN OH						LAT 401227 LONG 0805512 (RC)				
09/10/79	-	-	-	-	-	-	-	-	-	10	-
08/26/80	-	0	-	-	0.00	-	10	-	10	10	10
07/15/81	-	5	-	-	0.00	-	40	-	10	8	70
401241080533000	S F SHORT C STATION 6 NR ADENA OH						LAT 401241 LONG 0805330 (RC)				
06/04/76	1	-	-	1.5	-	20	-	40	-	-	-
401310080522300	SHORT C AT ADENA OH						LAT 401310 LONG 0805223 (RC)				
06/30/75	1	-	-	0.5	-	20	-	30	-	-	-
11/04/75	1	-	-	0.5	-	20	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
401341081043900	SOUTH F NR FLUSHING OH					LAT 401341 LONG 0810439 (RC)					
07/28/75	3.00	-	8.0	220	-	268	3.0	1250.0	-	-	-
401505081061800	BRUSHY F NR CADIZ OH					LAT 401505 LONG 0810618 (RC)					
09/25/79	15.00	-	8.0	240	-	294	-	1000.0	-	-	-
07/16/81	17.00	-	8.1	249	-	304	-	1330.0	-	-	-
401716080451300	MCINTYRE C NR SMITHFIELD OH					LAT 401716 LONG 0804513 (RC)					
08/28/80	30.00	1758	7.5	215	-	262	-	-	-	-	-
07/31/81	14.00	1200	7.9	208	-	254	4.0	940.0	20	1543	75
08/16/82	4.30	-	8.2	213	-	260	9.7	950.0	-	1800	-
401756081050800	STANDING STONE F NR CADIZ OH					LAT 401756 LONG 0810508 (RC)					
09/25/79	4.10	-	7.9	240	-	289	-	980.0	-	-	-
07/15/81	4.00	-	8.4	253	-	260	-	1300.0	-	-	-
401803080410400	MC INTYRE C NR MINGO JUNCTION OH					LAT 401803 LONG 0804104 (RC)					
09/11/79	13.00	-	8.2	160	-	196	-	990.0	-	-	-
08/27/81	11.00	-	7.8	185	-	226	-	1000.0	-	-	-
03092000	KALE C NR PRICETOWN OH					LAT 410823 LONG 0805943 (UM)					
08/21/75	1.00	-	7.8	119	-	145	29.0	130.0	-	-	-
03092090	W B MAHONING R NR RAVENNA OH					LAT 410941 LONG 0811150 (UM)					
08/21/75	2.40	-	8.2	139	-	170	39.0	48.0	-	-	-
03092099	HINKLEY C AT CHARLESTOWN OH					LAT 410916 LONG 0810851 (UM)					
08/05/75	0.78	-	7.7	141	-	172	15.0	55.0	-	-	-
03092460	W B MAHONING R AT WAYLAND OH					LAT 410925 LONG 0810419 (UM)					
08/18/75	47.00	-	7.4	68	-	83	22.0	47.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (JG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (JG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
401341081043900	SOUTH F NR FLUSHING OH							LAT 401341 LONG 0810439 (RC)			
07/28/75	100	-	210	-	-	500	-	-	30	-	-
401505081061800	BRUSHY F NR CADIZ OH							LAT 401505 LONG 0810618 (RC)			
09/25/79	-	40	320	38000	40	100	1600	-	-	60	-
07/16/81	-	70	460	9900	70	110	3300	-	-	79	-
401716080451300	MCINTYRE C NR SMITHFIELD OH							LAT 401716 LONG 0804513 (RC)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
07/31/81	75	312	314	-	16	29	-	20	-	-	10
08/16/82	-	-	-	-	-	-	-	-	-	-	-
401756081050800	STANDING STONE F NR CADIZ OH							LAT 401756 LONG 0810508 (RC)			
09/25/79	-	30	660	22000	160	230	840	-	-	60	-
07/15/81	-	80	720	13000	110	150	3700	-	-	61	-
401803080410400	MC INTYRE C NR MINGO JUNCTION OH							LAT 401803 LONG 0804104 (RC)			
09/11/79	-	40	150	19000	10	30	2400	-	-	80	-
08/27/81	-	50	330	11000	30	30	1700	-	-	51	-
03092000	KALE C NR PRICETOWN OH							LAT 410823 LONG 0805943 (UM)			
08/21/75	-	320	-	-	220	-	-	-	20	-	-
03092090	W 3 MAHONING R NR RAVENNA OH							LAT 410941 LONG 0811150 (UM)			
08/21/75	-	100	-	-	120	-	-	-	20	-	-
03092099	HINKLEY C AT CHARLESTOWN OH							LAT 410916 LONG 0810851 (UM)			
08/05/75	-	50	-	-	40	-	-	-	-	-	-
03092460	W 3 MAHONING R AT WAYLAND OH							LAT 410925 LONG 0810419 (UM)			
08/18/75	-	210	-	-	980	-	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, RECOV. TOTAL ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
401341081043900	SOUTH F NR FLUSHING OH					LAT 401341 LONG 0810439		(RC)			
07/28/75	1	-	-	0.5	-	20	-	20	-	-	-
401505081061800	BRUSHY F NR CADIZ OH					LAT 401505 LONG 0810618		(RC)			
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10
07/16/81	-	10	-	-	0.00	-	15	-	10	5	50
401716080451300	MCINTYRE C NR SMITHFIELD OH					LAT 401716 LONG 0804513		(RC)			
08/28/80	-	-	-	-	-	-	-	-	-	-	-
07/31/81	-	-	0.5	-	-	-	-	-	-	-	-
08/16/82	-	-	-	-	-	-	-	-	-	-	-
401756081050800	STANDING STONE F NR CADIZ OH					LAT 401756 LONG 0810508		(RC)			
09/25/79	-	0	-	-	0.00	-	20	-	10	10	20
07/15/81	-	4	-	-	0.00	-	22	-	20	5	60
401803080410400	MC INTYRE C NR MINGO JUNCTION OH					LAT 401803 LONG 0804104		(RC)			
09/11/79	-	0	-	-	0.00	-	10	-	10	10	30
08/27/81	-	1	-	-	0.01	-	10	-	6	2	23
03092000	KALE C NR PRICETOWN OH					LAT 410823 LONG 0805943		(UM)			
08/21/75	3	-	-	0.5	-	30	-	20	-	-	-
03092090	W B MAHONING R NR RAVENNA OH					LAT 410941 LONG 0811150		(UM)			
08/21/75	1	-	-	0.5	-	20	-	90	-	-	-
03092099	HINKLEY C AT CHARLESTOWN OH					LAT 410916 LONG 0810851		(UM)			
08/05/75	-	-	-	-	-	-	-	-	-	-	-
03092460	W B MAHONING R AT WAYLAND OH					LAT 410925 LONG 0810419		(UM)			
08/18/75	5	-	-	0.5	-	0	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLJW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INJM, DIS- SOLVED (UG/L AS AL)
03092500	W B MAHOVING R NR NEWTON FALLS OH					LAT 411018 LONG 0810116 (UM)					
08/18/75	44.00	-	7.3	72	-	88	23.0	50.0	-	-	-
03093000	EAGLE C AT PHALANX STATION OH					LAT 411540 LONG 0805716 (UM)					
08/05/75	38.00	-	7.5	121	-	148	23.0	53.0	-	-	-
03115300	L MUSKINGUM R NR RIVARD MILLS OH					LAT 393625 LONG 0810721 (UM)					
08/07/75	2.10	-	7.1	115	-	140	44.0	21.0	-	-	-
03115400	L MUSKINGUM R AT BLOOMFIELD OH					LAT 393347 LONG 0811214 (UM)					
08/07/75	14.00	-	7.4	117	-	143	25.0	25.0	-	-	-
03115700	W F DUCK C AT DEXTER CITY OH					LAT 393945 LONG 0812825 (UM)					
06/13/75	70.00	-	7.4	147	-	179	18.0	110.0	-	-	-
03116080	CHIPPEWA CR AT STERLING OH					LAT 405724 LONG 0815031 (UM)					
07/31/75	1.70	-	7.7	255	-	311	80.0	120.0	-	-	-
03116200	CHIPPEWA C AT EASTON OH					LAT 405647 LONG 0814435 (UM)					
07/31/75	8.40	-	7.3	246	-	300	150.0	180.0	-	-	-
03116410	NIMISILA C NR CANAL FULTON OH					LAT 405457 LONG 0813343 (UM)					
07/29/75	7.30	-	7.6	184	-	224	25.0	37.0	-	-	-
03117160	STILL F NR MINERVA OH					LAT 403949 LONG 0810224 (UM)					
09/10/75	32.00	-	6.9	36	-	44	7.7	34.0	-	-	-
03127970	CLEAR FORK TR NR HANOVER OH					LAT 402107 LONG 0810414 (UM)					
12/01/78	0.89	-	7.3	59	-	72	-	34.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03092500	W B MAHONING R NR NEWTON FALLS OH						LAT 411018 LONG 0810116 (UM)				
08/18/75	-	180	-	-	510	-	-	-	40	-	-
03093000	EAGLE C AT PHALANX STATION OH						LAT 411540 LONG 0805716 (UM)				
08/05/75	-	20	-	-	170	-	-	-	20	-	-
03115300	L MUSKINGUM R NR RINARD MILLS OH						LAT 393625 LONG 0810721 (UM)				
08/07/75	-	30	-	-	200	-	-	-	-	-	-
03115400	L MUSKINGUM R AT BLOOMFIELD OH						LAT 393347 LONG 0811214 (UM)				
08/07/75	-	30	-	-	90	-	-	-	20	-	-
03115700	W F DUCK C AT DEXTER CITY OH						LAT 393945 LONG 0812825 (UM)				
06/13/75	2600	-	3200	-	-	430	-	-	40	-	-
03116080	CHIPPEWA CR AT STERLING OH						LAT 405724 LONG 0815031 (UM)				
07/31/75	-	20	-	-	300	-	-	-	-	-	-
03116200	CHIPPEWA C AT EASTON OH						LAT 405647 LONG 0814435 (UM)				
07/31/75	-	110	-	-	560	-	-	-	30	-	-
03116410	NIMISILA C NR CANAL FULTON OH						LAT 405457 LONG 0813343 (UM)				
07/29/75	-	30	-	-	120	-	-	-	-	-	-
03117160	STILL F NR MINERVA OH						LAT 403949 LONG 0810224 (UM)				
09/10/75	-	400	-	-	80	-	-	-	-	-	-
03127970	CLEAR FORK TR NR HAYOVER OH						LAT 402107 LONG 0810414 (UM)				
12/01/78	80	-	280	-	-	130	-	-	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03092500	W B MAHONING R NR NEWTON FALLS OH						LAT 411018 LONG 0810116 (UM)				
08/18/75	1	-	-	0.5	-	20	-	20	-	-	-
03093000	EAGLE C AT PHALANX STATION OH						LAT 411540 LONG 0805716 (UM)				
08/05/75	9	-	-	0.5	-	20	-	20	-	-	-
03115300	L MUSKINGUM R NR RIVARD MILLS OH						LAT 393625 LONG 0810721 (UM)				
08/07/75	-	-	-	-	-	-	-	-	-	-	-
03115400	L MUSKINGUM R AT BLOOMFIELD OH						LAT 393347 LONG 0811214 (UM)				
08/07/75	1	-	-	0.5	-	20	-	20	-	-	-
03115700	W F DUCK C AT DEXTER CITY OH						LAT 393945 LONG 0812825 (UM)				
06/13/75	1	-	-	0.5	-	20	-	30	-	-	-
03116080	CHIPPEWA CR AT STERLING OH						LAT 405724 LONG 0815031 (UM)				
07/31/75	-	-	-	-	-	-	-	-	-	-	-
03116200	CHIPPEWA C AT EASTON OH						LAT 405647 LONG 0814435 (UM)				
07/31/75	10	-	-	0.5	-	20	-	20	-	-	-
03116410	NIMISILA C NR CANAL FULTON OH						LAT 405457 LONG 0813343 (UM)				
07/29/75	-	-	-	-	-	-	-	-	-	-	-
03117160	STILL F NR MINERVA OH						LAT 403949 LONG 0810224 (UM)				
09/10/75	-	-	-	-	-	-	-	-	-	-	-
03127970	CLEAR FORK TR NR HANOVER OH						LAT 402107 LONG 0810414 (UM)				
12/01/78	-	-	-	0.5	-	-	-	2	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS VI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
03142240	SUGARTREE F NR BIRMINGHAM OH					LAT 401012 LONG 0812228 (UM)					
07/15/81	0.90	-	8.0	128	-	156	-	29.0	-	-	-
03143760	WAKATOMIKA C NR PERRYTON OH					LAT 401310 LONG 0821053 (UM)					
10/06/81	11.90	-	-	-	-	-	-	-	-	-	-
03144000	WAKATOMIKA C NR FRAZEYSBURG OH					LAT 400757 LONG 0820853 (UM)					
07/23/75	16.00	-	6.6	82	-	100	53.0	18.0	-	-	-
03144450	OPOSSUM RUN TR NR WAKATOMIKA OH					LAT 401010 LONG 0820352 (UM)					
12/07/78	1.40	-	6.9	100	-	122	-	37.0	-	-	-
03146915	ROCKY F AT HANOVER OH					LAT 400415 LONG 0821555 (UM)					
10/05/81	18.20	-	-	-	-	-	-	-	-	-	-
03150490	S B WOLF C NR WATERFORD OH					LAT 393128 LONG 0813931 (UM)					
08/07/75	14.00	-	7.0	62	-	76	5.1	33.0	-	-	-
03156600	SI L RUSH CR AT SR 664 NR RUSHVILLE OH					LAT 394801 LONG 0822540 (UM)					
06/07/79	17.00	-	7.6	180	-	220	20.0	48.0	-	-	-
03159555	E B SHADE R NEAR TUPPERS PLAINS OH					LAT 390829 LONG 0815239 (UM)					
07/02/80	19.00	-	7.8	150	-	178	-	32.0	-	-	-
03092099	HINKLEY C AT CHARLESTOWN OH					LAT 410916 LONG 0810851 (UM)					
09/11/79	0.22	-	7.6	170	-	208	-	34.0	-	-	-
03116410	NIMISILA C NR CANAL FULTON OH					LAT 405457 LONG 0813343 (UM)					
09/13/79	6.10	-	8.2	220	-	268	-	27.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (JG/G)	MANGA- NESE, DIS- SOLVED (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (JG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
03142240	SUGARTREE F NR BIRMINGHAM OH						LAT 401012 LONG 0812228 (UM)				
07/15/81	-	60	450	-	70	90	-	-	-	-	-
03143760	WAKATOMIKA C NR PERRYTON OH						LAT 401310 LONG 0821053 (UM)				
10/06/81	-	-	-	-	-	-	-	-	-	-	-
03144000	WAKATOMIKA C NR FRAZEYSBURG OH						LAT 400757 LONG 0820853 (UM)				
07/23/75	-	50	-	-	110	-	-	-	110	-	-
03144450	OPOSSUM RUN TR NR WAKATOMIKA OH						LAT 401010 LONG 0820352 (UM)				
12/07/78	70	-	100	-	-	20	-	-	-	-	-
03146915	ROCKY F AT HANOVER OH						LAT 400415 LONG 0821555 (UM)				
10/05/81	-	-	-	-	-	-	-	-	-	-	-
03150490	S B WOLF C NR WATERFORD OH						LAT 393128 LONG 0813931 (UM)				
08/07/75	-	200	-	-	100	-	-	-	-	-	-
03156600	SI L RUSH CR AT SR 564 NR RJSHVILLE OH						LAT 394801 LONG 0822540 (UM)				
06/07/79	-	-	800	-	-	50	-	-	20	-	-
03159555	E B SHADE R NEAR TUPPERS PLAINS OH						LAT 390829 LONG 0815239 (UM)				
07/02/80	-	0	1700	-	310	370	-	-	-	-	-
03092099	HINKLEY C AT CHARLESTOWN OH						LAT 410916 LONG 0810851 (UM)				
09/11/79	-	130	880	5500	50	160	150	-	-	90	-
03116410	NIMISILA C NR CANAL FULTON OH						LAT 405457 LONG 0813343 (UM)				
09/13/79	-	150	470	5600	90	90	200	-	-	10	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
03142240	SUGARTREE F NR BIRMINGHAM OH					LAT 401012 LONG 0812228 (UM)					
07/15/81	-	-	-	-	-	-	-	-	-	-	-
03143760	WAKATOMIKA C NR PERRYTON OH					LAT 401310 LONG 0821053 (UM)					
10/06/81	-	-	-	-	-	-	-	-	-	-	-
03144000	WAKATOMIKA C NR FRAZEYSBURG OH					LAT 400757 LONG 0820853 (UM)					
07/23/75	1	-	-	0.5	-	40	-	0	-	-	-
03144450	OPOSSUM RUN TR NR WAKATOMIKA OH					LAT 401010 LONG 0820352 (UM)					
12/07/78	-	-	-	0.5	-	-	-	2	-	-	-
03146915	ROCKY F AT HANOVER OH					LAT 400415 LONG 0821555 (UM)					
10/05/81	-	-	-	-	-	-	-	-	-	-	-
03150490	S 3 WOLF C NR WATERFORD OH					LAT 393128 LONG 0813931 (UM)					
08/07/75	-	-	-	-	-	-	-	-	-	-	-
03156600	S1 L RUSH CR AT SR 564 NR RUSHVILLE OH					LAT 394801 LONG 0822540 (UM)					
06/07/79	1	-	-	0.5	-	6	-	20	-	-	-
03159555	E 3 SHADE R NEAR TUPPERS PLAINS OH					LAT 390829 LONG 0815239 (UM)					
07/02/80	-	-	-	-	-	-	-	-	-	-	-
03092099	HINKLEY C AT CHARLESTOWN OH					LAT 410916 LONG 0810851 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
03116410	NIMISILA C NR CANAL FULTON OH					LAT 405457 LONG 0813343 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD AS HCO3	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
382945082291700	LEATHERWOOD C NR CHESAPEAKE OH										
09/13/79	0.25	-	7.4	110	-	140	-	56.0	-	-	-
383353082330600	DOG F AT KITT'S HILL OH										
09/13/79	0.26	-	7.4	110	-	137	-	71.0	-	-	-
383640082352700	PADDLE C NR KITT'S HILL OH										
09/13/79	0.10	-	7.2	100	-	122	-	59.0	-	-	-
383644082313900	SHARPS C NR KITT'S HILL OH										
09/13/79	0.15	-	7.3	91	-	111	-	89.0	-	-	-
384149082315400	BUCKEYE C NR WATERLOO OH										
09/12/79	0.14	-	7.2	78	-	95	-	42.0	-	-	-
385007082305100	DIRTY FACE C NR GALLIA OH										
09/11/79	0.85	-	6.7	57	10	70	-	12.0	-	-	-
385027082131800	CHICKAMAUGA C NR GALLIPOLIS OH										
09/10/79	1.10	-	7.7	120	-	149	-	59.0	-	-	-
385316082521200	MCCONNEL C NR STOCKDALE OH										
09/13/79	0.63	-	6.6	33	5	40	-	19.0	-	-	-
385334082225800	L INDIAN C NR RIO GRANDE OH										
09/11/79	1.10	-	6.8	43	5	52	-	21.0	-	-	-
385406082450500	BUCKLICK C NR STOCKDALE OH										
09/12/79	0.61	-	6.6	34	10	42	-	29.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
382945082291700	LEATHERWOOD C NR CHESAPEAKE OH						LAT 382945 LONG 0822917 (UM)				
09/13/79	-	30	130	19000	80	80	690	-	-	40	-
383353082330600	DOG F AT KITT'S HILL OH						LAT 383353 LONG 0823306 (UM)				
09/13/79	-	30	110	15000	40	50	510	-	-	30	-
383640082352700	PADDOLE C NR KITT'S HILL OH						LAT 383640 LONG 0823527 (UM)				
09/13/79	-	10	280	23000	90	100	730	-	-	60	-
383644082313900	SHARPS C NR KITT'S HILL OH						LAT 383644 LONG 0823139 (UM)				
09/13/79	-	10	80	23000	10	20	600	-	-	40	-
384149082315400	BUCKEYE C NR WATERLOO OH						LAT 384149 LONG 0823154 (UM)				
09/12/79	-	160	730	15000	530	570	650	-	-	10	-
385007082305100	DIRTY FACE C NR GALLIA OH						LAT 385007 LONG 0823051 (UM)				
09/11/79	-	430	1100	3800	320	320	140	-	-	10	-
385027082131800	CHICKAMAUGA C NR GALLIPOLIS OH						LAT 385027 LONG 0821318 (UM)				
09/10/79	-	40	470	14000	130	140	790	-	-	20	-
385316082521200	MCCOYNE C NR STOCKDALE OH						LAT 385316 LONG 0825212 (UM)				
09/13/79	-	230	1400	4600	70	210	220	-	-	10	-
385334082225800	L INDIAN C NR RIO GRANDE OH						LAT 385334 LONG 0822258 (UM)				
09/11/79	-	320	600	39000	340	340	760	-	-	10	-
385406082450600	BUCKLICK C NR STOCKDALE OH						LAT 385406 LONG 0824506 (UM)				
09/12/79	-	220	640	23000	270	290	540	-	-	30	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
382945082291700	LEATHERWOOD C NR CHESAPEAKE OH						LAT 382945 LONG 0822917 (UM)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10	20
383353082330600	DOG F AT KITTS HILL OH						LAT 383353 LONG 0823306 (UM)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
383640082352700	PADDLE C NR KITTS HILL OH						LAT 383640 LONG 0823527 (UM)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10	20
383644082313900	SHARPS C NR KITTS HILL OH						LAT 383644 LONG 0823139 (UM)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10	20
384149082315400	BUCKEYE C NR WATERLOO OH						LAT 384149 LONG 0823154 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10	20
385007082305100	DIRTY FACE C NR GALLIA OH						LAT 385007 LONG 0823051 (UM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
385027082131800	CHICKAMAUGA C NR GALLIPOLIS OH						LAT 385027 LONG 0821318 (UM)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10	20
385316082521200	MCCONVEL C NR STOCKDALE OH						LAT 385316 LONG 0825212 (UM)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
385334082225800	L INDIAN C NR RIO GRANDE OH						LAT 385334 LONG 0822258 (UM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
385406082450600	BUCKLICK C NR STOCKDALE OH						LAT 385406 LONG 0824506 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	20	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE RIDE, FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
385740082430200	SUGARCAMP C NR STOCKDALE OH					LAT 385740 LONG 0824302 (UM)					
09/11/79	0.26	-	6.6	30	10	36	-	40.0	-	-	-
385809082474400	MCDOWELL C NR STOCKDALE OH					LAT 385809 LONG 0824744 (UM)					
09/13/79	0.61	-	6.6	23	5	28	-	21.0	-	-	-
390010082370800	FOURMILE C NR JACKSON OH					LAT 390010 LONG 0823708 (UM)					
09/11/79	0.53	-	7.0	47	-	57	-	38.0	-	-	-
08/25/80	5.90	-	7.2	34	-	42	-	49.0	-	-	-
390221082515600	BUCKHOLLOW C NR BEAVER OH					LAT 390221 LONG 0825156 (UM)					
09/13/79	0.43	-	6.1	16	10	20	-	51.0	-	-	-
390345082372300	SUGAR RN NR JACKSON OH					LAT 390345 LONG 0823723 (UM)					
09/11/79	0.47	-	7.2	80	-	98	-	57.0	-	-	-
390346081540100	HORSE CAVE C NR CHESTER OH					LAT 390345 LONG 0815401 (UM)					
10/31/79	3.60	-	7.5	94	-	114	-	42.0	-	-	-
08/29/80	3.40	-	7.3	85	-	104	-	35.0	-	-	-
07/31/81	0.96	-	6.5	89	20	108	-	24.0	-	-	-
390611081514400	F B SHADE R NR LONG BOTTOM OH					LAT 390611 LONG 0815144 (UM)					
09/13/79	6.50	-	8.0	170	-	208	-	28.0	-	-	-
390711081482400	FORKED RN NR LONG BOTTOM OH					LAT 390711 LONG 0814824 (UM)					
09/13/79	0.08	-	7.6	77	-	94	-	21.0	-	-	-
391453082430100	NO NAME C NR LONDONDERRY OH					LAT 391453 LONG 0824301 (UM)					
09/10/79	0.29	-	7.1	30	-	36	-	24.0	-	-	-
391649081442200	W 3 L HOCKING R NR L HOCKING OH					LAT 391649 LONG 0814422 (UM)					
12/04/75	25.00	-	6.7	67	-	82	12.0	45.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (JG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (JG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (JG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
385740082430200	SUGARCAMP C NR STOCKDALE OH							LAT 385740 LONG 0824302 (UM)			
09/11/79	-	80	800	59000	220	240	1500	-	-	60	-
385809082474400	MCDOWELL C NR STOCKDALE OH							LAT 385809 LONG 0824744 (UM)			
09/13/79	-	70	480	7100	90	90	150	-	-	10	-
390010082370800	FOURMILE C NR JACKSON OH							LAT 390010 LONG 0823708 (UM)			
09/11/79	-	170	870	24000	310	310	500	-	-	30	-
08/25/80	-	120	710	8200	340	340	500	-	-	17	-
390221082515600	BUCKHOLLOW C NR BEAVER OH							LAT 390221 LONG 0825156 (UM)			
09/13/79	-	80	100	35000	20	20	330	-	-	30	-
390345082372300	SUGAR RN NR JACKSON OH							LAT 390345 LONG 0823723 (UM)			
09/11/79	-	90	630	31000	330	340	790	-	-	50	-
390346081540100	HORSE CAVE C NR CHESTER OH							LAT 390346 LONG 0815401 (UM)			
10/31/79	-	250	1100	15000	220	270	900	-	-	30	-
08/29/80	-	70	1100	8300	290	290	790	-	-	18	-
07/31/81	-	150	1200	9900	670	730	1100	-	-	30	-
390611081514400	E 3 SHADE R NR LONG BOTTOM OH							LAT 390611 LONG 0815144 (UM)			
09/13/79	-	50	620	11000	170	180	460	-	-	60	-
390711081482400	FORKED RN NR LONG BOTTOM OH							LAT 390711 LONG 0814824 (UM)			
09/13/79	-	70	510	23000	220	270	800	-	-	70	-
391453082430100	NO NAME C NR LONDONDERRY OH							LAT 391453 LONG 0824301 (UM)			
09/10/79	-	60	210	34000	70	70	760	-	-	50	-
391649081442200	W 3 L HOCKING R NR L HOCKING OH							LAT 391649 LONG 0814422 (UM)			
12/04/75	220	-	480	-	-	60	-	-	20	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
385740082430200	SUGARCAMP C NR STOCKDALE OH					LAT 385740 LONG 0824302 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	30	10	10
385809082474400	MCJOWELL C NR STOCKDALE OH					LAT 385809 LONG 0824744 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
390010082370800	FOURMILE C NR JACKSON OH					LAT 390010 LONG 0823708 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
08/25/80	-	0	-	-	0.00	-	10	-	10	10	30
390221082515500	BUCKHOLLOW C NR BEAVER OH					LAT 390221 LONG 0825156 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	20	10	10
390345082372300	SUGAR RV NR JACKSON OH					LAT 390345 LONG 0823723 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
390346081540100	HORSE CAVE C NR CHESTER OH					LAT 390346 LONG 0815401 (UM)					
10/31/79	-	0	-	-	0.00	-	10	-	10	10	10
08/29/80	-	0	-	-	0.00	-	10	-	10	10	20
07/31/81	-	11	-	-	0.01	-	9	-	10	2	20
390611081514400	E 3 SHADE R NR LONG BOTTOM OH					LAT 390611 LONG 0815144 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
390711081482400	FORKED RN NR LONG BOTTOM OH					LAT 390711 LONG 0814824 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	20	10	10
391453082430100	NO NAME C NR LONDONJERRY OH					LAT 391453 LONG 0824301 (UM)					
09/10/79	-	0	-	-	0.00	-	10	-	20	10	10
391649081442200	W 3 L HOCKING R NR L HOCKING OH					LAT 391649 LONG 0814422 (UM)					
12/04/75	1	-	-	0.5	-	0	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
391720082463800	POE RV AT LONDON	DERRY OH									
09/10/79	0.74	-	7.2	36	-	44	-	71.0	-	-	-
391739081411500	E B L HOCKING R NR PORTER	FIELD OH									
12/04/75	20.00	-	6.9	94	-	114	14.0	53.0	-	-	-
391805081434200	L W B L HOCKING R NR LITTLE	HOCKING OH									
09/12/79	0.24	-	7.4	94	-	114	-	59.0	-	-	-
391810081453000	W B L HOCKING R NR CUTLER	OH									
09/13/79	1.90	-	7.2	98	-	120	-	39.0	-	-	-
392010081371500	E B L HOCKING R NR BELPRE	OH									
09/12/79	0.33	-	7.5	130	-	155	-	42.0	-	-	-
392108082432100	PIKE RN NR LONDON	DERRY OH									
09/10/79	0.88	-	7.1	25	-	31	-	24.0	-	-	-
392224081391400	TUPPER C AT VINCENT	OH									
09/12/79	0.09	-	7.3	120	-	148	-	60.0	-	-	-
392250081592900	MUSH RN NR AMESVILLE	OH									
09/10/79	2.00	-	7.4	190	-	226	-	34.0	-	-	-
392324081350000	BROWNS RN NR BARLOW	OH									
09/11/79	0.20	-	7.6	160	-	196	-	70.0	-	-	-
392355082331700	E F QUEER C NR S BLOOMINGVILLE	OH									
09/25/79	13.00	-	7.2	16	-	20	-	31.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (JG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (JG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
391720082463800	POE RN AT LONDONDERRY OH							LAT 391720 LONG 0824638 (UM)			
09/10/79	-	70	170	69000	120	120	1400	-	-	70	-
391739081411600	F B L HOCKING R NR PORTERFIELD OH							LAT 391739 LONG 0814116 (UM)			
12/04/75	100	-	400	-	-	130	-	-	20	-	-
391805081434200	L W B L HOCKING R NR LITTLE HOCKING OH							LAT 391805 LONG 0814342 (UM)			
09/12/79	-	30	180	13000	140	140	600	-	-	20	-
391810081453000	W B L HOCKING R NR CUTLER OH							LAT 391810 LONG 0814530 (UM)			
09/13/79	-	60	290	20000	90	100	1800	-	-	210	-
392010081371600	E B L HOCKING R NR BELPRE OH							LAT 392010 LONG 0813716 (UM)			
09/12/79	-	30	250	27000	100	140	1200	-	-	80	-
392108082432100	PIKE RN NR LONDONDERRY OH							LAT 392108 LONG 0824321 (UM)			
09/10/79	-	70	200	44000	50	50	500	-	-	40	-
392224081391400	TUPPER C AT VINCENT OH							LAT 392224 LONG 0813914 (UM)			
09/12/79	-	20	210	34000	350	350	2900	-	-	120	-
392250081592900	MUSH RN NR AMESVILLE OH							LAT 392250 LONG 0815929 (UM)			
09/10/79	-	70	170	30000	80	80	1100	-	-	50	-
392324081350000	BROWNS RN NR FARLOW OH							LAT 392324 LONG 0813500 (UM)			
09/11/79	-	20	120	32000	160	160	2600	-	-	50	-
392355082331700	E F QUEER C NR S BLOOMINGVILLE OH							LAT 392355 LONG 0823317 (UM)			
09/25/79	-	110	290	17000	200	200	330	-	-	20	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL DIS- SOLVED (UG/L AS H3)	MERCURY TOTAL RECOV- ERABLE (UG/L AS H6)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
391720082463800	POE RN AT LONJONDERRY OH					_AT 391720 LONG 0824638 (UM)					
09/10/79	-	0	-	-	0.00	-	10	-	30	10	30
391739081411600	E B L HOCKING R NR PORTERFIELD OH					_AT 391739 LONG 0814116 (UM)					
12/04/75	1	-	-	0.5	-	20	-	0	-	-	-
391805081434200	L W B L HOCKING R NR LITTLE HOCKING OH					_AT 391805 LONG 0814342 (UM)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
391810081453000	W B L HOCKING R NR CUTLER OH					_AT 391810 LONG 0814530 (UM)					
09/13/79	-	0	-	-	0.00	-	40	-	30	10	290
392010081371500	E B L HOCKING R NR BELPRE OH					_AT 392010 LONG 0813715 (UM)					
09/12/79	-	0	-	-	0.00	-	10	-	30	10	20
392108082432100	PIKE RN NR LONDONDERRY OH					_AT 392108 LONG 0824321 (UM)					
09/10/79	-	0	-	-	0.00	-	10	-	20	10	20
392224081391400	TUPPER C AT VINCENT OH					_AT 392224 LONG 0813914 (UM)					
09/12/79	-	0	-	-	0.00	-	20	-	30	10	30
392250081592900	MUSH RN NR AMESVILLE OH					_AT 392250 LONG 0815929 (UM)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
392324081350000	BROWNS RN NR BARLOW OH					_AT 392324 LONG 0813500 (UM)					
09/11/79	-	0	-	-	0.00	-	20	-	50	10	20
392355082331700	E F JEEER C NR S BLOOMINGVILLE OH					_AT 392355 LONG 0823317 (UM)					
09/25/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLU (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
392503081351300	HORSE RV NR BARLOW OH									LAT 392503 LONG 0813513 (UM)	
09/11/79	0.39	-	7.5	140	-	172	-	31.0	-	-	-
392557081384900	S F WOLF C NR WATERTOWN OH									LAT 392557 LONG 0813849 (UM)	
09/11/79	0.22	-	7.8	140	-	174	-	58.0	-	-	-
392713081085800	LEITH RV NR NEWPORT OH									LAT 392713 LONG 0810858 (UM)	
09/12/79	0.67	-	7.3	110	-	130	-	29.0	-	-	-
392756081512000	N B COAL RN AT CHESTERHILL OH									LAT 392756 LONG 0815120 (UM)	
09/11/79	0.64	-	7.7	180	-	224	-	31.0	-	-	-
392814081135000	ARCHERS F L MUSKINGUM R NR NEWPORT OH									LAT 392814 LONG 0811350 (UM)	
09/11/79	0.88	-	7.5	110	-	130	-	30.0	-	-	-
392840081174000	FIFTEENMILE C AT DART OH									LAT 392840 LONG 0811740 (UM)	
09/11/79	2.70	-	7.4	120	-	150	-	44.0	-	-	-
392914081474200	ALDRIDGE RN NR CHESTERHILL OH									LAT 392914 LONG 0814742 (UM)	
09/24/79	16.00	-	7.8	170	-	212	-	40.0	-	-	-
392947081314000	RAINBOW C NR DEVOLA OH									LAT 392947 LONG 0813140 (UM)	
09/10/79	0.52	-	7.8	160	-	190	-	51.0	-	-	-
393101081523700	GOSHEN C NR CHESTERHILL OH									LAT 393101 LONG 0815237 (UM)	
09/24/79	10.00	-	7.9	190	-	226	-	30.0	-	-	-
393112082300800	DUCK C NR ROCKBRIDGE OH									LAT 393112 LONG 0823008 (UM)	
09/25/79	1.40	-	7.1	41	-	50	-	29.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)	
392503081351300	HORSE RV NR BARLOW OH						_AT 392503 LONG 0813513 (UM)				
09/11/79	-	50	2600	18000	400	400	2000	-	-	100	-
392557081384900	S F WOLF C NR WATERTOWN OH						_AT 392557 LONG 0813849 (UM)				
09/11/79	-	80	380	43000	180	210	1500	-	-	60	-
392713081085800	LEITH RV NR NEWPORT OH						_AT 392713 LONG 0810858 (UM)				
09/12/79	-	70	110	14000	10	10	350	-	-	30	-
392756081512000	N B COAL RN AT CHESTERHILL OH						_AT 392756 LONG 0815120 (UM)				
09/11/79	-	20	170	28000	50	50	1100	-	-	70	-
392814081135000	ARCHERS F L MJSKINGUM R NR NEWPORT OH						_AT 392814 LONG 0811350 (UM)				
09/11/79	-	100	380	13000	30	40	320	-	-	20	-
392840081174000	FIFTEENMILE C AT DART OH						_AT 392840 LONG 0811740 (UM)				
09/11/79	-	40	500	24000	10	40	650	-	-	40	-
392914081474200	ALDRIDGE RN NR CHESTERHILL OH						_AT 392914 LONG 0814742 (UM)				
09/24/79	-	210	340	27000	10	20	880	-	-	40	-
392947081314000	RAINBOW C NR DEVOLA OH						_AT 392947 LONG 0813140 (UM)				
09/10/79	-	40	170	42000	10	20	1600	-	-	60	-
393101081523700	GOSHEV C NR CHESTERHILL OH						_AT 393101 LONG 0815237 (UM)				
09/24/79	-	20	210	29000	10	20	1500	-	-	60	-
393112082300800	DUCK C NR ROCKBRIDGE OH						_AT 393112 LONG 0823008 (UM)				
09/25/79	-	70	120	27000	10	10	630	-	-	30	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/G AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
392503081351300	HORSE RV NR BARLOW OH					LAT 392503 LONG 0813513 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
392557081384900	S F WOLF C NR WATERTOWN OH					LAT 392557 LONG 0813849 (UM)					
09/11/79	-	0	-	-	0.24	-	20	-	10	10	1100
392713081085800	LEITH RV NR NEWPORT OH					LAT 392713 LONG 0810858 (UM)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
392756081512000	N 3 COAL RN AT CHESTERHILL OH					LAT 392756 LONG 0815120 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	30	10	20
392814081135000	ARCHERS F L MJSKINGJM R NR NEWPORT OH					LAT 392814 LONG 0811350 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	20
392840081174000	FIFTEENMILE C AT DART OH					LAT 392840 LONG 0811740 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
392914081474200	ALDRIDGE RN NR CHESTERHILL OH					LAT 392914 LONG 0814742 (UM)					
09/24/79	-	0	-	-	0.00	-	20	-	20	10	20
392947081314000	RAINBOW C NR DEVOLA OH					LAT 392947 LONG 0813140 (UM)					
09/10/79	-	0	-	-	0.00	-	20	-	30	10	10
393101081523700	GOSHEN C NR CHESTERHILL OH					LAT 393101 LONG 0815237 (UM)					
09/24/79	-	0	-	-	0.00	-	20	-	20	10	20
393112082300800	DUCK C NR ROCKBRIDGE OH					LAT 393112 LONG 0823008 (UM)					
09/25/79	-	0	-	-	0.00	-	10	-	20	10	30

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCTI- VANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLU (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (JG/L AS AL)
393317081475100	BALD EAGLE RN AT STOCKPORT OH					LAT 393317 LONG 0814751 (UM)					
09/13/79	4.10	-	7.6	230	-	280	-	28.0	-	-	-
393343081554600	UNNAMED C L WOLF C NR PENNSVILLE OH					LAT 393343 LONG 0815546 (UM)					
09/24/79	8.10	-	7.7	140	-	172	-	43.0	-	-	-
393554082041500	DOTSON C NR CORNING OH					LAT 393554 LONG 0820415 (UM)					
09/12/79	0.33	-	7.3	82	-	100	-	43.0	-	-	-
393620081554200	HUCK RN NR PENNSVILLE OH					LAT 393620 LONG 0815542 (UM)					
09/24/79	3.70	-	7.6	140	-	168	-	45.0	-	-	-
393657081091500	STRAIGHT F NR RINARD MILLS OH					LAT 393657 LONG 0810915 (UM)					
09/12/79	1.80	-	7.6	180	-	220	-	28.0	-	-	-
394101080555800	OPOSSUM C NR HANNIBAL OH					LAT 394101 LONG 0805558 (UM)					
09/12/79	0.60	-	7.8	90	-	110	-	28.0	-	-	-
394129082334300	PLEASANT RN NR LANCASTER OH					LAT 394129 LONG 0823343 (UM)					
09/10/79	8.20	-	8.0	230	-	283	-	52.0	-	-	-
394232081091900	TOWN F NR GRAYSVILLE OH					LAT 394232 LONG 0810919 (UM)					
09/12/79	1.00	-	7.8	160	-	200	-	30.0	-	-	-
394310081570000	ISLAND RN NR MCCONNELSVILLE OH					LAT 394310 LONG 0815700 (UM)					
09/12/79	0.39	-	8.0	120	-	150	-	50.0	-	-	-
394331082021000	OGG C NR NEW LEXINGTON OH					LAT 394331 LONG 0820210 (UM)					
09/11/79	0.58	-	7.7	100	-	124	-	26.0	-	-	-
08/28/80	2.20	-	7.4	100	-	122	-	28.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
393317081475100	BALD EAGLE RN AT STOCKPORT OH							LAT 393317 LONG 0814751 (UM)			
09/13/79	-	100	420	41000	10	30	1600	-	-	60	-
393343081554600	UNNAMED C L WOLF C NR PENNSVILLE OH							LAT 393343 LONG 0815546 (UM)			
09/24/79	-	30	320	27000	20	50	960	-	-	40	-
393554082041500	DOTSON C NR CORVING OH							LAT 393554 LONG 0820415 (UM)			
09/12/79	-	110	590	28000	330	330	710	-	-	100	-
393620081554200	HUCK RN NR PENNSVILLE OH							LAT 393620 LONG 0815542 (UM)			
09/24/79	-	40	360	53000	10	30	1700	-	-	80	-
393657081091500	STRAIGHT F NR RINARD MILLS OH							LAT 393657 LONG 0810915 (UM)			
09/12/79	-	60	350	49000	30	40	1600	-	-	70	-
394101080555800	OPOSSUM C NR HANNIBAL OH							LAT 394101 LONG 0805558 (UM)			
09/12/79	-	10	280	38000	10	10	950	-	-	70	-
394129082334300	PLEASANT RN NR LANCASTER OH							LAT 394129 LONG 0823343 (UM)			
09/10/79	-	10	560	13000	90	100	190	-	-	70	-
394232081091900	TOWN F NR GRAYSVILLE OH							LAT 394232 LONG 0810919 (UM)			
09/12/79	-	50	310	40000	10	20	1100	-	-	60	-
394310081570000	ISLAND RN NR MCCONNELSVILLE OH							LAT 394310 LONG 0815700 (UM)			
09/12/79	-	50	110	70000	10	10	1600	-	-	80	-
394331082021000	OGG C NR NEW LEXINGTON OH							LAT 394331 LONG 0820210 (UM)			
09/11/79	-	20	90	40000	10	10	1600	-	-	70	-
08/28/80	-	10	110	24000	10	30	1500	-	-	46	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
393317081475100	HALD EAGLE RN AT STOCKPORT OH						LAT 393317 LONG 0814751 (UM)				
09/13/79	-	0	-	-	0.00	-	20	-	30	10	20
393343081554600	UNNAMED C L WOLF C NR PENNSVILLE OH						LAT 393343 LONG 0815546 (UM)				
09/24/79	-	0	-	-	0.00	-	10	-	20	10	20
393554082041500	DOTSON C NR CORVING OH						LAT 393554 LONG 0820415 (UM)				
09/12/79	-	0	-	-	0.00	-	20	-	20	10	30
393620081554200	BUCK RN NR PENNSVILLE OH						LAT 393620 LONG 0815542 (UM)				
09/24/79	-	0	-	-	0.00	-	20	-	30	10	30
393657081091500	STRAIGHT F NR RINARD MILLS OH						LAT 393657 LONG 0810915 (UM)				
09/12/79	-	0	-	-	0.00	-	20	-	30	10	40
394101080555800	OPOSSUM C NR HANNIBAL OH						LAT 394101 LONG 0805558 (UM)				
09/12/79	-	0	-	-	0.00	-	30	-	20	10	10
394129082334300	PLEASANT RN NR LANCASTER OH						LAT 394129 LONG 0823343 (UM)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10	20
394232081091900	TOWN F NR GRAYSVILLE OH						LAT 394232 LONG 0810919 (UM)				
09/12/79	-	0	-	-	0.00	-	20	-	20	10	30
394310081570000	ISLAND RN NR MCCONNELSVILLE OH						LAT 394310 LONG 0815700 (UM)				
09/12/79	-	1	-	-	0.00	-	30	-	30	10	20
394331082021000	OGG C NR NEW LEXINGTON OH						LAT 394331 LONG 0820210 (UM)				
09/11/79	-	0	-	-	0.00	-	20	-	20	10	40
08/28/80	-	0	-	-	0.00	-	20	-	10	10	30

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
394412081062900	CRANENEST F NR WOODSFIELD OH					LAT 394412 LONG 0810629 (UM)					
06/13/75	10.00	-	7.4	84	-	102	32.0	31.0	-	-	-
11/20/75	15.00	-	7.6	82	-	100	22.0	33.0	-	-	-
394548080533100	NIGGER RN NR CLARINGTON OH					LAT 394548 LONG 0805331 (UM)					
07/22/75	2.00	-	7.4	125	-	152	5.0	45.0	-	-	-
11/06/75	0.32	-	8.1	108	-	132	5.0	55.0	-	-	-
394624080560200	FLATROCK C NR CAMERON OH					LAT 394624 LONG 0805602 (UM)					
07/21/75	0.10	-	7.3	130	-	158	5.0	69.0	-	-	-
11/06/75	0.03	-	7.2	115	-	140	5.0	92.0	-	-	-
394624080563600	ACKERSON RN NR CAMERON OH					LAT 394624 LONG 0805636 (UM)					
09/13/79	0.56	-	8.0	160	-	200	-	57.0	-	-	-
394627080561900	PAINE RN NR CAMERON OH					LAT 394627 LONG 0805619 (UM)					
09/13/79	0.81	-	7.6	160	-	200	-	45.0	-	-	-
394645081004100	PINEY F NR WOODSFIELD OH					LAT 394645 LONG 0810041 (UM)					
09/13/79	1.80	-	8.1	120	-	150	-	32.0	-	-	-
394706081082000	WHEELER RN NR WOODSFIELD OH					LAT 394706 LONG 0810820 (UM)					
09/13/79	0.70	-	7.7	110	-	130	-	27.0	-	-	-
394716082273400	UNNAMED TR L RUSH C NR RUSHVILLE OH					LAT 394716 LONG 0822734 (UM)					
09/10/79	5.50	-	7.5	230	-	280	-	54.0	-	-	-
394745081162800	S F WILLS C NR SUMMERFIELD OH					LAT 394745 LONG 0811628 (UM)					
10/14/75	7.20	-	7.6	177	-	216	14.0	39.0	-	-	-
394827081065300	BAKER F NR WOODSFIELD OH					LAT 394827 LONG 0810653 (UM)					
09/13/79	0.89	-	7.7	98	-	120	-	24.0	-	-	-
08/04/80	11.00	-	8.3	82	-	96	-	21.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
394412081062900	CRANENEST F NR WOODSFIELD OH							LAT 394412 LONG 0810629 (UM)			
06/13/75	140	-	270	-	-	40	-	-	20	-	-
11/20/75	90	-	120	-	-	40	-	-	20	-	-
394548080533100	NIGGER RN NR CLARINGTON OH							LAT 394548 LONG 0805331 (UM)			
07/22/75	800	-	1200	-	-	50	-	-	20	-	-
11/06/75	20	-	40	-	-	10	-	-	20	-	-
394624080560200	FLATROCK C NR CAMERON OH							LAT 394624 LONG 0805602 (UM)			
07/21/75	440	-	680	-	-	20	-	-	20	-	-
11/06/75	50	-	60	-	-	10	-	-	20	-	-
394624080563600	ACKERSON RN NR CAMERON OH							LAT 394624 LONG 0805636 (UM)			
09/13/79	-	70	110	50000	10	10	1200	-	-	90	-
394627080561900	PAINE RN NR CAMERON OH							LAT 394627 LONG 0805619 (UM)			
09/13/79	-	40	130	63000	10	10	1600	-	-	90	-
394645081004100	PINEY F NR WOODSFIELD OH							LAT 394645 LONG 0810041 (UM)			
09/13/79	-	60	150	28000	10	10	800	-	-	50	-
394706081082000	WHEELER RN NR WOODSFIELD OH							LAT 394706 LONG 0810820 (UM)			
09/13/79	-	50	170	47000	10	20	1500	-	-	70	-
394716082273400	UNNAMED TR L RUSH C NR RUSHVILLE OH							LAT 394716 LONG 0822734 (UM)			
09/10/79	-	30	390	11000	40	50	290	-	-	90	-
394745081162800	S F WILLS C NR SUMMERFIELD OH							LAT 394745 LONG 0811628 (UM)			
10/14/75	120	-	50	-	-	10	-	-	30	-	-
394827081065300	BAKER F NR WOODSFIELD OH							LAT 394827 LONG 0810653 (UM)			
09/13/79	-	50	190	43000	10	30	1500	-	-	80	-
08/04/80	-	0	200	24000	10	30	1600	-	-	43	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM. TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM. RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (JG/G)
394412081062900	CRANENEST F NR WOODSFIELD OH					LAT 394412 LONG 0810629 (UM)					
06/13/75	1	-	-	0.5	-	20	-	20	-	-	-
11/20/75	1	-	-	0.5	-	20	-	0	-	-	-
394548080533100	NIGGER RN NR CLARINGTON OH					LAT 394548 LONG 0805331 (UM)					
07/22/75	1	-	-	0.5	-	0	-	20	-	-	-
11/06/75	1	-	-	0.5	-	0	-	0	-	-	-
394624080560200	FLATROCK C NR CAMERON OH					LAT 394624 LONG 0805602 (UM)					
07/21/75	1	-	-	0.5	-	0	-	20	-	-	-
11/06/75	1	-	-	0.5	-	0	-	20	-	-	-
394624080563600	ACKERSON RN NR CAMERON OH					LAT 394624 LONG 0805636 (UM)					
09/13/79	-	0	-	-	0.00	-	30	-	20	10	30
394627080561900	PAINE RN NR CAMERON OH					LAT 394627 LONG 0805619 (UM)					
09/13/79	-	0	-	-	0.00	-	30	-	10	10	40
394645081004100	PINEY F NR WOODSFIELD OH					LAT 394645 LONG 0810041 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
394706081082000	WHEELER RN NR WOODSFIELD OH					LAT 394706 LONG 0810820 (UM)					
09/13/79	-	0	-	-	0.00	-	20	-	10	10	20
394716082273400	UNNAMED TR L RUSH C NR RUSHVILLE OH					LAT 394716 LONG 0822734 (UM)					
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
394745081162800	S F WILLS C NR SUMMERFIELD OH					LAT 394745 LONG 0811628 (UM)					
10/14/75	1	-	-	0.5	-	20	-	0	-	-	-
394827081065300	BAKER F NR WOODSFIELD OH					LAT 394827 LONG 0810653 (UM)					
09/13/79	-	0	-	-	0.00	-	20	-	20	10	30
08/04/80	-	0	-	-	0.00	-	10	-	10	10	20

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)

394953081182800 SKIN C NR SUMMERFIELD OH LAT 394953 LONG 0811828 (UM)											

09/19/79	2.40	-	7.7	240	-	288	-	32.0	-	-	-
08/25/80	15.00	-	8.4	208	-	254	-	45.0	-	-	-
07/17/81	1.10	-	8.4	233	-	260	-	32.0	-	-	-

395115081163800 PAYNES FORK WILLS C AT CALAIS OH LAT 395114 LONG 0811638 (UM)											

10/14/75	7.60	-	7.3	207	-	252	8.0	41.0	-	-	-
09/19/79	6.90	-	7.8	220	-	268	-	39.0	-	-	-

395124080521000 CAT RV AB MINE NR STEINERSVILLE OH LAT 395124 LONG 0805210 (UM)											

07/21/75	1.00	-	7.9	144	-	176	5.0	51.0	-	-	-
11/05/75	0.98	-	8.0	161	-	196	5.0	56.0	-	-	-

395138080520300 CAT RV BL MINE NR STEINERSVILLE OH LAT 395138 LONG 0805203 (UM)											

07/21/75	2.00	-	4.7	2	-	2	25.0	370.0	-	-	-
11/05/75	1.20	-	6.3	46	-	56	15.0	320.0	-	-	-

395201080514000 CAT RV NR POWHATTAN POINT OH LAT 395201 LONG 0805140 (UM)											

09/13/79	2.70	-	8.2	190	-	232	-	88.0	-	-	-

395256081462200 FREELAND F NR CHANDLERSVILLE OH LAT 395256 LONG 0814622 (UM)											

05/29/75	0.30	-	7.8	171	-	208	19.0	310.0	-	-	-
09/30/75	0.70	-	7.7	176	-	214	20.0	239.0	-	-	-

395333080541300 PEA VINE C NR ARMSTRONGS MILLS OH LAT 395333 LONG 0805413 (UM)											

09/13/79	1.00	-	8.2	190	-	228	-	54.0	-	-	-

395419082184400 VALLEY RN NR GLENFORD OH LAT 395419 LONG 0821844 (UM)											

09/13/79	9.50	-	7.1	107	-	130	-	40.0	-	-	-

395429080592200 HUNTER RN NR ALLEDONIA OH LAT 395429 LONG 0805922 (UM)											

07/21/75	0.30	-	7.8	138	-	168	165.0	820.0	-	-	-
11/05/75	0.15	-	7.7	174	-	212	340.0	1000.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
394953081182800	SKIN C NR SUMMERFIELD OH					LAT 394953 LONG 0811828 (UM)					
09/19/79	-	10	270	52000	60	80	2900	-	-	100	-
08/25/80	-	10	350	17000	80	80	910	-	-	29	-
07/17/81	-	10	950	14000	60	130	4400	-	-	76	-
395115081163800	PAYNES FORK MILLS C AT CALAIS OH					LAT 395114 LONG 0811638 (UM)					
10/14/75	160	-	320	-	-	70	-	-	20	-	-
09/19/79	-	30	1100	30000	70	150	1000	-	-	40	-
395124080521000	CAT RN AB MINE NR STEINERSVILLE OH					LAT 395124 LONG 0805210 (UM)					
07/21/75	8300	-	36000	-	-	910	-	-	250	-	-
11/05/75	80	-	50	-	-	10	-	-	20	-	-
395138080520300	CAT RN BL MINE NR STEINERSVILLE OH					LAT 395138 LONG 0805203 (UM)					
07/21/75	80	-	110	-	-	10	-	-	20	-	-
11/05/75	9000	-	39000	-	-	530	-	-	160	-	-
395201080514000	CAT RN NR POWHATTAN POINT OH					LAT 395201 LONG 0805140 (UM)					
09/13/79	-	50	200	49000	10	20	1400	-	-	110	-
395256081462200	FREELAND F NR CHANDLERSVILLE OH					LAT 395256 LONG 0814622 (UM)					
05/29/75	70	-	80	-	-	20	-	-	20	-	-
09/30/75	30	-	90	-	-	10	-	-	20	-	-
395333080541300	PEA VINE C NR ARMSTRONGS MILLS OH					LAT 395333 LONG 0805413 (UM)					
09/13/79	-	10	100	64000	10	10	1500	-	-	100	-
395419082184400	VALLEY RN NR GLENFORD OH					LAT 395419 LONG 0821844 (UM)					
09/13/79	-	100	900	7400	90	110	230	-	-	20	-
395429080592200	HUNTER RN NR ALLEDONIA OH					LAT 395429 LONG 0805922 (UM)					
07/21/75	830	-	2300	-	-	470	-	-	40	-	-
11/05/75	320	-	1500	-	-	830	-	-	40	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/G)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
394953081182800	SKIN C NR SUMMERFIELD OH					LAT 394953 LONG 0811828 (UM)					
09/19/79	-	0	-	-	0.00	-	40	-	30	10	60
08/25/80	-	0	-	-	0.00	-	10	-	10	10	20
07/17/81	-	5	-	-	0.00	-	25	-	20	5	130
395115081163800	PAYNES FORK WILLS C AT CALAIS OH					LAT 395114 LONG 0811638 (UM)					
10/14/75	1	-	-	0.5	-	0	-	0	-	-	-
09/19/79	-	0	-	-	0.00	-	10	-	20	10	30
395124080521000	CAT RN AB MINE NR STEINERSVILLE OH					LAT 395124 LONG 0805210 (UM)					
07/21/75	5	-	-	0.5	-	50	-	20	-	-	-
11/05/75	1	-	-	0.5	-	0	-	0	-	-	-
395138080520300	CAT RN BL MINE NR STEINERSVILLE OH					LAT 395138 LONG 0805203 (UM)					
07/21/75	1	-	-	0.5	-	0	-	20	-	-	-
11/05/75	13	-	-	0.5	-	40	-	20	-	-	-
395201080514000	CAT RN NR POWHATTAN POINT OH					LAT 395201 LONG 0805140 (UM)					
09/13/79	-	0	-	-	0.00	-	30	-	20	10	20
395256081462200	FREELAND F NR CHANDLERSVILLE OH					LAT 395256 LONG 0814622 (UM)					
05/29/75	1	-	-	0.5	-	0	-	20	-	-	-
09/30/75	1	-	-	0.5	-	20	-	20	-	-	-
395333080541300	PEA VINE C NR ARMSTRONGS MILLS OH					LAT 395333 LONG 0805413 (UM)					
09/13/79	-	0	-	-	0.00	-	30	-	20	10	50
395419082184400	VALLEY RN NR GLENFORD OH					LAT 395419 LONG 0821844 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
395429080592200	HUNTER RN NR ALLEDONIA OH					LAT 395429 LONG 0805922 (UM)					
07/21/75	3	-	-	0.5	-	20	-	20	-	-	-
11/05/75	1	-	-	0.5	-	0	-	20	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHMS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLU (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
395441081000000	PINEY C NR ARMSTRONGS MILLS OH										
09/13/79	0.92	-	8.2	140	-	168	-	190.0	-	-	-
395522081514100	WHITE EYES C NR CHANDLERSVILLE OH										
09/11/79	2.90	-	8.0	160	-	190	-	45.0	-	-	-
08/29/80	4.70	-	7.7	146	-	178	-	44.0	-	-	-
07/17/81	2.10	-	8.5	154	-	164	-	45.0	-	-	-
395550080505900	PIPE C NR JACOBSBURG OH										
09/13/79	1.90	-	8.0	190	-	232	-	57.0	-	-	-
08/05/80	7.80	-	8.5	168	-	188	-	44.0	-	-	-
395639081083200	UNNAMED STR NR BARNESVILLE OH										
09/13/79	0.61	-	8.2	160	-	192	-	24.0	-	-	-
395727080461400	WESEE C NR SHADYSIDE OH										
09/12/79	5.20	-	7.7	120	-	152	-	240.0	-	-	-
08/05/80	9.30	-	8.1	153	-	186	-	130.0	-	-	-
395941081432900	N CROOKED C AT NEW CONCORD OH										
09/10/79	2.30	-	7.4	160	-	200	-	45.0	-	-	-
08/04/80	9.70	-	8.0	139	-	170	-	34.0	-	-	-
400013080533000	WILLIAMS C AT GLENCO OH										
09/12/79	1.20	-	8.2	150	-	188	-	50.0	-	-	-
400233082153400	BRUSHY F NR NEWARK OH										
09/13/79	4.10	-	7.2	59	-	72	-	23.0	-	-	-
400329082171800	CLAYLICK C NR NEWARK OH										
09/13/79	8.40	-	7.7	110	-	140	-	25.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
395441081000000	PIVEY C NR ARMSTRONGS MILLS OH							LAT 395441 LONG 0810000 (UM)			
09/13/79	-	30	310	32000	10	10	-	-	-	-	-
395522081514100	WHITE EYES C NR CHANDLERSVILLE OH							LAT 395522 LONG 0815141 (UM)			
09/11/79	-	50	700	38000	30	50	850	-	-	50	-
08/29/80	-	10	7600	10000	30	350	530	-	-	25	-
07/17/81	-	50	190	9100	50	50	1500	-	-	54	-
395550080505900	PIPE C NR JACOBSBURG OH							LAT 395550 LONG 0805059 (UM)			
09/13/79	-	10	650	41000	10	20	1600	-	-	110	-
08/05/80	-	30	400	-	10	10	-	-	-	-	-
395639081083200	UNNAMED STR NR JARVESVILLE OH							LAT 395639 LONG 0810832 (UM)			
09/13/79	-	10	510	12000	30	60	660	-	-	30	-
395727080461400	WEGEE C NR SHADYSIDE OH							LAT 395727 LONG 0804614 (UM)			
09/12/79	-	10	1800	28000	260	320	1300	-	-	90	-
08/05/80	-	30	1500	41000	100	120	1300	-	-	96	-
395941081432900	N CROOKED C AT VEW CONCORD OH							LAT 395941 LONG 0814329 (UM)			
09/10/79	-	80	330	45000	50	60	1100	-	-	60	-
08/04/80	-	250	11000	52000	80	560	1900	-	-	90	-
400013080533000	WILLIAMS C AT GLENCO OH							LAT 400013 LONG 0805330 (UM)			
09/12/79	-	20	160	47000	10	10	1200	-	-	90	-
400233082153400	BRUSHY F NR NEWARK OH							LAT 400233 LONG 0821534 (UM)			
09/13/79	-	190	630	14000	80	100	240	-	-	30	-
400329082171800	CLAYLICK C NR NEWARK OH							LAT 400329 LONG 0821718 (UM)			
09/13/79	-	70	180	15000	10	10	260	-	-	30	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
395441081000000	PINEY C NR ARMSTRONGS MILLS OH					LAT 395441 LONG 0810000 (UM)					
09/13/79	-	-	-	-	-	-	-	-	-	10	-
395522081514100	WHITE EYES C NR CHANDLERSVILLE OH					LAT 395522 LONG 0815141 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
08/29/80	-	0	-	-	0.00	-	10	-	10	10	10
07/17/81	-	5	-	-	0.00	-	15	-	10	5	40
395550080505900	PIPE C NR JACOBSTOWN OH					LAT 395550 LONG 0805059 (UM)					
09/13/79	-	0	-	-	0.00	-	30	-	20	10	60
08/05/80	-	-	-	-	-	-	-	-	-	-	-
395639081083200	UNNAMED STR NR BARNESVILLE OH					LAT 395639 LONG 0810832 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
395727080461400	WEGEE C NR SHADYSIDE OH					LAT 395727 LONG 0804614 (UM)					
09/12/79	-	0	-	-	0.00	-	20	-	10	10	60
08/05/80	-	0	-	-	0.00	-	30	-	20	10	30
395941081432900	N CROOKED C AT NEW CONCORD OH					LAT 395941 LONG 0814329 (UM)					
09/10/79	-	0	-	-	0.00	-	20	-	20	10	30
08/04/80	-	0	-	-	0.00	-	30	-	50	10	50
400013080533000	WILLIAMS C AT GLENCO OH					LAT 400013 LONG 0805330 (UM)					
09/12/79	-	0	-	-	0.00	-	20	-	20	10	40
400233082153400	BRUSHY F NR NEWARK OH					LAT 400233 LONG 0821534 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	20
400329082171800	CLAYLICK C NR NEWARK OH					LAT 400329 LONG 0821718 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- Y FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (JG/L AS AL)
400520081411700	INDIAN CAMP RV NR NEW CONCORD OH									LAT 400520 LONG 0814117 (UM)	
09/10/79	2.20	-	7.0	90	-	110	-	33.0	-	-	-
400748081191700	LOST RN NR NEWARK OH									LAT 400748 LONG 0811917 (UM)	
09/13/79	12.00	-	7.8	140	-	170	-	15.0	-	-	-
400817082120400	BRUSHY F WAKATOMIKA C. NR FRAZEYSBURG OH									LAT 400817 LONG 0821204 (UM)	
09/12/79	6.30	-	7.4	57	-	70	-	15.0	-	-	-
400832081252600	SUGARTREE F NR INTERSET OH									LAT 400832 LONG 0812526 (UM)	
08/07/75	3.00	-	7.5	125	-	152	34.0	22.0	-	-	-
10/30/75	6.50	-	7.4	56	-	105	9.0	28.0	-	-	-
400932081265100	CLEAR F NR BIRMINGHAM OH									LAT 400932 LONG 0812652 (UM)	
08/07/75	2.00	-	7.4	113	-	138	130.0	41.0	-	-	-
10/30/75	3.20	-	7.0	73	-	89	15.0	28.0	-	-	-
400945082094600	NICKEL VALLEY RV NR FRAZEYSBURG OH									LAT 400945 LONG 0820946 (UM)	
09/12/79	1.30	-	7.0	60	-	73	-	20.0	-	-	-
401028081294100	ROCKY F NR BIRMINGHAM OH									LAT 401028 LONG 0812941 (UM)	
09/11/79	2.00	-	6.6	90	15	110	-	23.0	-	-	-
401247081172700	CRABORCHARD C NR FREEPORT OH									LAT 401247 LONG 0811727 (UM)	
09/24/79	7.40	-	7.4	82	-	100	-	32.0	-	-	-
401314081191700	ATKINSON C NR FREEPORT OH									LAT 401314 LONG 0811917 (UM)	
09/24/79	5.30	-	7.3	82	-	100	-	23.0	-	-	-
08/29/80	5.30	-	7.7	85	-	104	-	21.0	-	-	-
401342081343200	POSTBUY C NR KIMBOLTON OH									LAT 401342 LONG 0813432 (UM)	
09/11/79	1.60	-	7.1	66	-	80	-	43.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
400520081411700	INDIAN CAMP RV NR NEW CONCORD OH							LAT 400520 LONG 0814117 (UM)			
09/10/79	-	310	950	22000	190	200	680	-	-	40	-
400748081191700	LOST RV NR NEWARK OH							LAT 400748 LONG 0811917 (UM)			
09/13/79	-	70	350	11000	30	30	440	-	-	30	-
400817082120400	BRUSHY F WAKATOMIKA C NR FRAZEYSBURG OH							LAT 400817 LONG 0821204 (UM)			
09/12/79	-	120	750	17000	150	150	530	-	-	40	-
400832081252600	SUGARTREE F NR WINTERSET OH							LAT 400832 LONG 0812526 (UM)			
08/07/75	250	-	800	-	-	180	-	-	20	-	-
10/30/75	50	-	390	-	-	70	-	-	20	-	-
400932081265100	CLEAR F NR BIRMINGHAM OH							LAT 400932 LONG 0812652 (UM)			
08/07/75	290	-	1100	-	-	340	-	-	20	-	-
10/30/75	20	-	530	-	-	130	-	-	20	-	-
400945082094600	NICKEL VALLEY RV NR FRAZEYSBURG OH							LAT 400945 LONG 0820946 (UM)			
09/12/79	-	190	680	18000	130	130	320	-	-	30	-
401028081294100	ROCKY F NR BIRMINGHAM OH							LAT 401028 LONG 0812941 (UM)			
09/11/79	-	240	1400	29000	310	330	540	-	-	30	-
401247081172700	CRABORCHARD C NR FREEPORT OH							LAT 401247 LONG 0811727 (UM)			
09/24/79	-	70	650	2000	90	130	1100	-	-	60	-
401314081191700	ATKINSON C NR FREEPORT OH							LAT 401314 LONG 0811917 (UM)			
09/24/79	-	110	490	15000	70	100	720	-	-	30	-
08/29/80	-	190	1100	20000	370	370	1100	-	-	770	-
401342081343200	POSTBOY C NR KIMBOLTON OH							LAT 401342 LONG 0813432 (UM)			
09/11/79	-	100	870	21000	240	250	720	-	-	50	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM 4A- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM 4A- TERIAL (UG/G)
400520081411700	INDIAN CAMP RV NR NEW CONCORD OH						LAT 400520 LONG 0814117 (UM)				
09/10/79	-	2	-	-	0.00	-	10	-	10	10	20
400748081191700	LOST RV NR NEWARK OH						LAT 400748 LONG 0811917 (UM)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
400817082120400	BRUSHY F WAKATOMIKA C NR FRAZEYSBURG OH						LAT 400817 LONG 0821204 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10	20
400832081252600	SUGARTREE F NR WINTERSET OH						LAT 400832 LONG 0812526 (UM)				
08/07/75	1	-	-	0.5	-	20	-	20	-	-	-
10/30/75	1	-	-	0.5	-	20	-	0	-	-	-
400932081265100	CLEAR F NR BIRMINGHAM OH						LAT 400932 LONG 0812652 (UM)				
08/07/75	1	-	-	0.5	-	20	-	20	-	-	-
10/30/75	1	-	-	0.5	-	0	-	0	-	-	-
400945082094600	NICKEL VALLEY RV NR FRAZEYSBURG OH						LAT 400945 LONG 0820946 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
401028081294100	ROCKY F NR BIRMINGHAM OH						LAT 401028 LONG 0812941 (UM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
401247081172700	CRABORCHARD C NR FREEPORT OH						LAT 401247 LONG 0811727 (UM)				
09/24/79	-	0	-	-	0.00	-	10	-	20	10	20
401314081191700	ATKINSON C NR FREEPORT OH						LAT 401314 LONG 0811917 (UM)				
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
08/29/80	-	0	-	-	0.01	-	10	-	10	10	270
401342081343200	POSTBOY C NR KIMBOLTON OH						LAT 401342 LONG 0813432 (UM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT- FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
402150082203700	INDIANFIELD RV NR HOWARD OH									LAT 402150 LONG 0822037 (UM)	
09/11/79	2.80	-	8.1	90	-	110	-	22.0	-	-	-
402757082171800	SAPPS RV NR DANVILLE OH									LAT 402757 LONG 0821718 (UM)	
09/11/79	1.20	-	7.1	90	-	110	-	18.0	-	-	-
402803082201200	L JELLOWAY C NR HOWARD OH									LAT 402803 LONG 0822012 (UM)	
09/11/79	4.40	-	7.3	110	-	130	-	17.0	-	-	-
402835082163700	DOWD C NR DANVILLE OH									LAT 402835 LONG 0821637 (UM)	
09/11/79	1.60	-	7.4	110	-	130	-	20.0	-	-	-
403041082062900	BLACK C TR AT GLENMONT OH									LAT 403041 LONG 0820629 (UM)	
09/11/79	1.90	-	7.1	62	-	76	-	20.0	-	-	-
403047081064700	N F MCGUIRE C NR CARROLLTON OH									LAT 403047 LONG 0810647 (UM)	
09/10/79	2.10	-	8.2	110	-	132	-	25.0	-	-	-
403641081565100	PAINT C NR HOLMESVILLE OH									LAT 403641 LONG 0815651 (UM)	
09/12/79	10.00	-	7.5	200	-	240	-	36.0	-	-	-
403729081164100	HUFF RN STATION 1 NR MINERAL CITY OH									LAT 403729 LONG 0811641 (UM)	
05/11/76	0.47	-	7.7	82	-	100	210.0	40.0	-	-	-
403755081022200	PIPES F NR CARROLLTON OH									LAT 403755 LONG 0810222 (UM)	
09/10/79	0.48	-	7.4	53	-	64	-	24.0	-	-	-
403925082080700	CRAB RN AT LAKEVILLE OH									LAT 403925 LONG 0820807 (UM)	
09/12/79	14.00	-	7.9	180	-	220	-	35.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (JG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (JG/G)	MANGA- NESE, TOTAL DIS- SOLVED (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (JG/L AS MN)	MANGA- NESE, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (JG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV- FM BOT- TOM MA- TERIAL (JG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
402150082203700	INDIANFIELD RN NR HOWARD OH							LAT 402150 LONG 0822037 (UM)			
09/11/79	-	50	140	15000	40	40	320	-	-	20	-
402757082171800	SAPPS RN NR DANVILLE OH							LAT 402757 LONG 0821718 (UM)			
09/11/79	-	70	190	29000	30	30	340	-	-	30	-
402803082201200	L JELLOWAY C NR HOWARD OH							LAT 402803 LONG 0822012 (UM)			
09/11/79	-	160	410	12000	20	20	230	-	-	40	-
402835082163700	DOWD C NR DANVILLE OH							LAT 402835 LONG 0821637 (UM)			
09/11/79	-	50	630	13000	60	70	250	-	-	30	-
403041082062900	BLACK C TR AT GLENMONT OH							LAT 403041 LONG 0820629 (UM)			
09/11/79	-	170	310	28000	60	70	690	-	-	40	-
403047081064700	N F MCGUIRE C NR CARROLLTON OH							LAT 403047 LONG 0810647 (UM)			
09/10/79	-	100	420	9900	120	120	610	-	-	20	-
403641081565100	PAINT C NR HOLMESVILLE OH							LAT 403641 LONG 0815651 (UM)			
09/12/79	-	50	70	49000	20	20	750	-	-	80	-
403729081164100	HUFF RN STATION 1 NR MINERAL CITY OH							LAT 403729 LONG 0811641 (UM)			
05/11/76	-	-	-	-	-	-	-	-	-	-	-
403755081022200	PIPES F NR CARROLLTON OH							LAT 403755 LONG 0810222 (UM)			
09/10/79	-	190	640	20000	170	260	710	-	-	70	-
403925082080700	CRAB RN AT LAKEVILLE OH							LAT 403925 LONG 0820807 (UM)			
09/12/79	-	50	300	18000	20	50	350	-	-	30	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRD- MIUM, RECOV. AS CP)	CHRD- MIUM, RECOV. (UG/G)	CADMIUM RECOV. (UG/G)	LEAD RECOV. (UG/G)
402150082203700	INDIANFIELD RV NR HOWARD OH						LAT 402150 LONG 0822037 (UM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
402757082171800	SAPPS RV NR DANVILLE OH						LAT 402757 LONG 0821718 (UM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
402803082201200	L JELLOWAY C NR HOWARD OH						LAT 402803 LONG 0822012 (UM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
402835082163700	DOWD C NR DANVILLE OH						LAT 402835 LONG 0821637 (JM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
403041082062900	BLACK C TR AT GLENMONT OH						LAT 403041 LONG 0820629 (UM)				
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
403047081064700	N F MCGUIRE C NR CARROLLTON OH						LAT 403047 LONG 0810647 (UM)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10	20
403641081565100	PAINT C NR HOLMESVILLE OH						LAT 403641 LONG 0815651 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
403729081164100	HUFF RN STATION 1 NR MINERAL CITY OH						LAT 403729 LONG 0811641 (UM)				
05/11/76	-	-	-	-	-	-	-	-	-	-	-
403755081022200	PIPES F NR CARROLLTON OH						LAT 403755 LONG 0810222 (UM)				
09/10/79	-	0	-	-	0.00	-	10	-	20	10	20
403925082080700	CRAB RN AT LAKEVILLE OH						LAT 403925 LONG 0820807 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICHO)- MHOS)	PH (UNITS)	ALKA- LILITY FIELD (MG/L AS CACO3)	ACIDITY (MG/L AS CACO3)	BICAR- BONATE FET-FLO (MG/L AS HCO3)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS SO4)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
404136082001800	SHREVE C NR SHREVE OH									AT 404136 LONG 0820018 (UM)	
09/12/79	4.40	-	7.9	250	-	300	-	48.0	-	-	-
404229081352300	ELM RN AT BREWSTER OH									AT 404229 LONG 0813523 (UM)	
09/24/79	3.80	-	7.4	110	-	132	-	56.0	-	-	-
404300081395000	NORTH FORK NR W LEBANON OH									AT 404300 LONG 0813950 (UM)	
09/10/79	5.00	-	8.0	100	-	126	-	45.0	-	-	-
404434081315500	PIGEON RN NR NAVARRE OH									AT 404434 LONG 0813155 (UM)	
09/24/79	4.80	-	8.2	180	-	222	-	66.0	-	-	-
404507091022000	CONSER RN NR MINERVA OH									AT 404507 LONG 0810220 (UM)	
06/10/79	2.70	-	-	-	-	-	-	-	-	-	-
07/31/79	3.77	-	-	-	-	-	-	-	-	-	-
08/10/79	3.09	-	-	-	-	-	-	-	-	-	-
08/24/79	4.75	-	-	-	-	-	-	-	-	-	-
09/10/79	2.70	-	8.6	140	-	164	-	26.0	-	-	-
08/26/80	25.00	-	7.4	79	-	96	-	33.0	-	-	-
08/12/81	4.00	-	8.4	146	-	170	-	35.0	-	-	-
404512081584800	UNNAMED C NR SHREVE OH									AT 404512 LONG 0815848 (UM)	
09/12/79	1.70	-	8.0	210	-	260	-	36.0	-	-	-
404808081302600	SIPPO C AT MASSILLON OH									AT 404808 LONG 0813026 (UM)	
09/24/79	13.00	-	8.0	190	-	232	-	78.0	-	-	-
404818081331700	W B SIPPO C AT MASSILLON OH									AT 404818 LONG 0813317 (UM)	
09/24/79	3.90	-	7.8	230	-	276	-	65.0	-	-	-
404831081301000	SIPPO C AT MASSILLON OH									AT 404831 LONG 0813010 (UM)	
09/24/79	13.00	-	7.8	190	-	232	-	81.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)

404136082001800	SHREVE C NR SHREVE OH						LAT 404136 LONG 0820018 (UM)				

09/12/79	-	50	390	17000	130	140	360	-	-	40	-

404229081352300	ELM RN AT BREWSTER OH						LAT 404229 LONG 0813523 (UM)				

09/24/79	-	70	770	23000	220	280	590	-	-	60	-

404300081395000	NORTH FORK NR W LEBANON OH						LAT 404300 LONG 0813950 (UM)				

09/10/79	-	50	2400	10000	140	200	230	-	-	20	-

404434081315500	PIGEON RN NR NAVARRE OH						LAT 404434 LONG 0813155 (UM)				

09/24/79	-	30	430	11000	10	50	310	-	-	30	-

404507081022000	CONSER RN NR MINERVA OH						LAT 404507 LONG 0810220 (UM)				

06/10/79	-	-	-	-	-	-	-	-	-	-	-
07/31/79	-	-	-	-	-	-	-	-	-	-	-
08/10/79	-	-	-	-	-	-	-	-	-	-	-
08/24/79	-	-	-	-	-	-	-	-	-	-	-
09/10/79	-	40	360	6100	130	140	450	-	-	50	-
08/26/80	-	140	950	6500	150	150	540	-	-	14	-
08/12/81	-	140	440	9600	190	210	920	-	-	21	-

404512081584800	UNNAMED C NR SHREVE OH						LAT 404512 LONG 0815848 (UM)				

09/12/79	-	80	690	32000	10	30	530	-	-	60	-

404808081302600	SIPPO C AT MASSILLON OH						LAT 404808 LONG 0813026 (UM)				

09/24/79	-	80	1400	32000	180	280	780	-	-	130	-

404818081331700	W B SIPPO C AT MASSILLON OH						LAT 404818 LONG 0813317 (UM)				

09/24/79	-	50	330	15000	40	90	350	-	-	40	-

404831081301000	SIPPO C AT MASSILLON OH						LAT 404831 LONG 0813010 (UM)				

09/24/79	-	60	820	15000	200	280	440	-	-	40	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CJ)	COPPER RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (UG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
404136082001800	SHREVE C NR SHREVE OH						LAT 404136 LONG 0820018 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
404229081352300	ELM RN AT BREWSTER OH						LAT 404229 LONG 0813523 (UM)				
09/24/79	-	0	-	-	0.00	-	10	-	10	10	30
404300081395000	NORTH FORK NR W LEBANON OH						LAT 404300 LONG 0813950 (UM)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
404434081315500	PIGEON RN NR NAVARRE OH						LAT 404434 LONG 0813155 (UM)				
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
404507081022000	CONSER RN NR MINERVA OH						LAT 404507 LONG 0810220 (UM)				
06/10/79	-	-	-	-	-	-	-	-	-	-	-
07/31/79	-	-	-	-	-	-	-	-	-	-	-
08/10/79	-	-	-	-	-	-	-	-	-	-	-
08/24/79	-	-	-	-	-	-	-	-	-	-	-
09/10/79	-	0	-	-	0.00	-	10	-	10	10	10
08/26/80	-	0	-	-	0.01	-	10	-	10	10	10
08/12/81	-	5	-	-	0.01	-	10	-	10	1	10
404512081584800	UNNAMED C NR SHREVE OH						LAT 404512 LONG 0815848 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
404808081302600	SIPPO C AT MASSILLON OH						LAT 404808 LONG 0813026 (UM)				
09/24/79	-	0	-	-	0.00	-	30	-	20	10	60
404818081331700	W 3 SIPPO C AT MASSILLON OH						LAT 404818 LONG 0813317 (UM)				
09/24/79	-	0	-	-	0.00	-	10	-	10	10	10
404831081301000	SIPPO C AT MASSILLON OH						LAT 404831 LONG 0813010 (UM)				
09/24/79	-	0	-	-	0.00	-	10	-	10	10	70

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LITY FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
405027081554200	L APPLE C NR WOOSTER OH									LAT 405027 LONG 0815542 (UM)	
09/13/79	1.10	-	8.2	240	-	290	-	36.0	-	-	-
405035080592300	UNNAMED C AT N GEORGETOWN OH									LAT 405035 LONG 0805923 (UM)	
09/12/79	1.40	-	8.0	340	-	412	-	210.0	-	-	-
405116080593900	UNNAMED C NR N GEORGETOWN OH									LAT 405116 LONG 0805939 (UM)	
09/12/79	1.50	-	8.0	260	-	313	-	210.0	-	-	-
405120081345100	FOX RN NR MASSILLON OH									LAT 405120 LONG 0813451 (UM)	
09/13/79	0.98	-	5.2	1	467	0	-	40.0	-	-	-
405432081294900	NIMISILA C NR N CANTON OH									LAT 405432 LONG 0812949 (UM)	
09/13/79	1.70	-	8.5	170	-	192	-	32.0	-	-	-
405606081082200	BEECH C NR ALLIANCE OH									LAT 405606 LONG 0810822 (UM)	
09/11/79	0.50	-	8.6	256	-	288	-	90.0	-	-	-
405645081484300	L CHIPPEWA C NR RITTMAN OH									LAT 405645 LONG 0814843 (UM)	
09/13/79	5.90	-	8.8	320	-	280	-	190.0	-	-	-
405709081440300	MILL C AT EASTON OH									LAT 405709 LONG 0814403 (UM)	
09/13/79	1.10	-	7.2	160	-	200	-	51.0	-	-	-
405758081485600	TOMMY RN NR RITTMAN OH									LAT 405758 LONG 0814856 (UM)	
09/13/79	0.46	-	8.1	210	-	250	-	65.0	-	-	-
405843081094600	DEER C NR LIMAVILLE OH									LAT 405843 LONG 0810946 (UM)	
09/12/79	21.00	-	7.5	120	-	144	-	43.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INJM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)	

405027081554200 L APPLE C NR WOOSTER OH LAT 405027 LONG 0815542 (UM)											

09/13/79	-	100	300	15000	10	30	490	-	-	60	-

405035080592300 UNNAMED C AT N GEORGETOWN OH LAT 405035 LONG 0805923 (UM)											

09/12/79	-	30	640	13000	440	510	310	-	-	30	-

405116080593900 UNNAMED C NR N GEORGETOWN OH LAT 405116 LONG 0805939 (UM)											

09/12/79	-	40	480	14000	280	540	1900	-	-	90	-

405120081345100 FOX RN NR MASSILLON OH LAT 405120 LONG 0813451 (UM)											

09/13/79	-	120	810	18000	210	300	560	-	-	30	-

405432081294900 NIMISILA C NR N CANTON OH LAT 405432 LONG 0812949 (UM)											

09/13/79	-	170	310	11000	60	70	320	-	-	100	-

405606081082200 BEECH C NR ALLIANCE OH LAT 405606 LONG 0810822 (UM)											

09/11/79	-	80	390	14000	90	110	590	-	-	40	-

405645081484300 L CHIPPEWA C NR RITTMAN OH LAT 405645 LONG 0814843 (UM)											

09/13/79	-	90	800	9400	50	60	160	-	-	50	-

405709081440300 MILL C AT EASTON OH LAT 405709 LONG 0814403 (UM)											

09/13/79	-	80	720	5300	110	120	220	-	-	20	-

405758081485600 TOMMY RN NR RITTMAN OH LAT 405758 LONG 0814856 (UM)											

09/13/79	-	130	240	24000	60	70	320	-	-	40	-

405843081094600 DEER C NR LIMAVILLE OH LAT 405843 LONG 0810946 (UM)											

09/12/79	-	40	780	17000	90	510	2400	-	-	30	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY DIS- SOLVED (UG/L AS HG)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CR)	CHRO- MIUM, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
405027081554200	L APPLE C NR WOOSTER OH					LAT 405027 LONG 0815542 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
405035080592300	UNNAMED C AT N GEORGETOWN OH					LAT 405035 LONG 0805923 (UM)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	20
405116080593900	UNNAMED C NR N GEORGETOWN OH					LAT 405115 LONG 0805939 (UM)					
09/12/79	-	0	-	-	0.00	-	20	-	10	10	2300
405120081345100	FOX RN NR MASSILLON OH					LAT 405120 LONG 0813451 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	40
405432081294900	NIMISILA C NR N CANTON OH					LAT 405432 LONG 0812949 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	20
405606081082200	BEECH C NR ALLIANCE OH					LAT 405606 LONG 0810822 (UM)					
09/11/79	-	0	-	-	0.00	-	10	-	10	10	10
405645081484300	L CHIPPEWA C NR RITTMAN OH					LAT 405645 LONG 0814843 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
405709081440300	MILL C AT EASTON OH					LAT 405709 LONG 0814403 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	20
405758081485600	TOMMY RN NR RITTMAN OH					LAT 405758 LONG 0814856 (UM)					
09/13/79	-	0	-	-	0.00	-	10	-	10	10	10
405843081094600	DEER C NR LIMAVILLE OH					LAT 405843 LONG 0810946 (UM)					
09/12/79	-	0	-	-	0.00	-	10	-	10	10	30

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLD (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
405919081261300	UNNAMED C NR UNIONTOWN OH					LAT 405919 LONG 0812613 (UM)					
09/12/79	6.40	-	8.0	230	-	280	-	84.0	-	-	-
410128080571600	TURKEY BROTH C AT BERLIN CENTER OH					LAT 410128 LONG 0805716 (UM)					
09/25/79	0.11	-	7.4	98	-	120	-	85.0	-	-	-
410554081111500	BARREL RN NR ROOTSTOWN OH					LAT 410554 LONG 0811115 (UM)					
09/12/79	1.90	-	8.1	300	-	362	-	130.0	-	-	-
410644081365300	SCHOCALOG RN NR FAIRLAWN OH					LAT 410644 LONG 0813653 (UM)					
09/10/79	0.74	-	8.4	209	-	230	-	90.0	-	-	-
410705080512000	MORRISON RN NR N JACKSON OH					LAT 410705 LONG 0805120 (UM)					
09/25/79	0.27	-	7.3	110	-	136	-	99.0	-	-	-
410715080440500	FOURMILE RN AT WICKLIFFE OH					LAT 410715 LONG 0804405 (UM)					
09/13/79	0.24	-	7.4	150	-	180	-	180.0	-	-	-
410720080380801	CRAB C AT YOUNGSTOWN OH					LAT 410720 LONG 0803808 (UM)					
09/13/79	3.00	-	7.4	180	-	218	-	84.0	-	-	-
410823080594300	KALE C NR NEWTON FALLS OH					LAT 410823 LONG 0805943 (UM)					
09/25/79	2.30	-	7.1	110	-	128	-	120.0	-	-	-
08/20/80	4.40	-	7.4	128	-	156	-	120.0	-	-	-
08/03/81	6.00	-	7.6	169	-	206	-	290.0	-	-	-
411034080481800	MUD C NR NILES OH					LAT 411034 LONG 0804818 (UM)					
09/25/79	0.57	-	7.1	87	-	106	-	110.0	-	-	-
411249080525100	L DUCK C NR LEAVITTSBURG OH					LAT 411249 LONG 0805251 (UM)					
09/25/79	0.25	-	7.0	92	-	112	-	85.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
405919081261300	UNNAMED C NR JNIONTOWN OH						LAT 405919 LONG 0812613 (UM)				
09/12/79	-	30	6400	15000	130	290	660	-	-	50	-
410128080571600	TURKEY BROTH C AT BERLIN CENTER OH						LAT 410128 LONG 0805715 (UM)				
09/25/79	-	40	820	23000	10	100	550	-	-	50	-
410554081111500	BARREL RN NR ROOTSTOWN OH						LAT 410554 LONG 0811115 (UM)				
09/12/79	-	10	540	9600	120	210	450	-	-	50	-
410644081365300	SCHOCALOG RN NR FAIRLAWN OH						LAT 410644 LONG 0813653 (UM)				
09/10/79	-	30	310	12000	70	70	400	-	-	90	-
410705080512000	MORRISON RN NR N JACKSON OH						LAT 410705 LONG 0805120 (UM)				
09/25/79	-	150	700	14000	90	140	440	-	-	50	-
410715080440500	FOURMILE RN AT WICKLIFFE OH						LAT 410715 LONG 0804405 (UM)				
09/13/79	-	20	420	14000	40	60	710	-	-	50	-
410720080380801	CRAB C AT YOUNGSTOWN OH						LAT 410720 LONG 0803808 (UM)				
09/13/79	-	50	670	9500	220	240	530	-	-	20	-
410823080594300	KALE C NR NEWTON FALLS OH						LAT 410823 LONG 0805943 (UM)				
09/25/79	-	10	620	-	50	110	-	-	-	-	-
08/20/80	-	150	1000	13000	170	180	540	-	-	57	-
08/03/81	-	20	-	15000	250	-	960	-	-	70	-
411034080481800	MUD C NR NILES OH						LAT 411034 LONG 0804818 (UM)				
09/25/79	-	70	950	15000	30	70	120	-	-	40	-
411249080525100	L DUCK C NR LEAVITTSBURG OH						LAT 411249 LONG 0805251 (UM)				
09/25/79	-	40	280	2400	10	40	1400	-	-	230	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC TOTAL RECOV- ERABLE (UG/L AS AS)	ARSENIC RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MERCURY TOTAL RECOV- ERABLE (UG/L AS HG)	MERCURY TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	COPPER TOTAL RECOV- ERABLE (UG/L AS CU)	COPPER TOTAL RECOV. FM BOT- TOM MA- TERIAL (JG/G)	CHRO- MIUM, TOTAL RECOV- ERABLE (JG/L AS CP)	CHRO- MIUM, TOTAL RECOV. FM BOT- TOM MA- TERIAL (UG/G)	CADMIUM RECOV. FM BOT- TOM MA- TERIAL (UG/G)	LEAD RECOV. FM BOT- TOM MA- TERIAL (UG/G)
405919081261300	UNNAMED C NR UNIONTOWN OH					LAT 405919 LONG 0812613 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10 20
410128080571600	TURKEY BROTH C AT BERLIN CENTER OH					LAT 410128 LONG 0805716 (UM)				
09/25/79	-	0	-	-	0.00	-	10	-	10	10 20
410554081111500	BARREL RN NR ROOTSTOWN OH					LAT 410554 LONG 0811115 (UM)				
09/12/79	-	0	-	-	0.00	-	10	-	10	10 10
410644081365300	SCHOCALOG RN NR FAIRLAWN OH					LAT 410644 LONG 0813653 (UM)				
09/10/79	-	0	-	-	0.00	-	10	-	10	10 20
410705080512000	MORRISON RN NR N JACKSON OH					LAT 410705 LONG 0805120 (UM)				
09/25/79	-	0	-	-	0.00	-	10	-	10	10 10
410715080440500	FOURMILE RN AT WICKLIFFE OH					LAT 410715 LONG 0804405 (UM)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10 30
410720080380801	CRAB C AT YOUNGSTOWN OH					LAT 410720 LONG 0803808 (UM)				
09/13/79	-	0	-	-	0.00	-	10	-	10	10 10
410823080594300	KALE C NR NEWTON FALLS OH					LAT 410823 LONG 0805943 (UM)				
09/25/79	-	-	-	-	-	-	-	-	-	-
08/20/80	-	0	-	-	0.00	-	10	-	10	10 20
08/03/81	-	44	-	-	0.01	-	14	-	20	3 93
411034080481800	MUD C NR VILES OH					LAT 411034 LONG 0804818 (UM)				
09/25/79	-	0	-	-	0.00	-	10	-	10	10 10
411249080525100	L DUCK C NR LEAVITTSBURG OH					LAT 411249 LONG 0805251 (UM)				
09/25/79	-	0	-	-	0.00	-	20	-	20	10 60

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	STREAM- FLOW, INSTAN- TANEOUS (CFS)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	ALKA- LINIT FIELD (MG/L AS CAC03)	ACIDITY (MG/L AS CAC03)	BICAR- BONATE FET-FLO (MG/L AS HC03)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SULFATE, DIS- SOLVED (MG/L AS S04)	NICKEL, DIS- SOLVED (UG/L AS NI)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L)	ALUM- INUM, DIS- SOLVED (UG/L AS AL)
------	---	--	---------------	--	----------------------------------	---	---	--	--	--	---

411738081072700	SILVER C NR GARRETTSVILLE OH										
09/12/79	2.00	-	8.0	160	-	194	-	57.0	-	-	-
411807081032600	TINKER C NR GARRETTSVILLE OH										
09/12/79	0.64	-	7.4	110	-	136	-	28.0	-	-	-
411836081055000	CAMP C NR GARRETTSVILLE OH										
09/12/79	0.77	-	7.3	120	-	152	-	69.0	-	-	-

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ALUM- INUM, TOTAL RECOV- ERABLE (UG/L AS AL)	IRON, DIS- SOLVED (UG/L AS FE)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE)	IRON, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	MANGA- TOTAL RECOV- ERABLE (UG/L AS MN)	MANGA- NESE, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ZINC, DIS- SOLVED (UG/L AS ZN)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN)	ZINC, RECOV. FM BOT- TOM MA- TERIAL (UG/G)	ARSENIC, DIS- SOLVED (UG/L AS AS)
------	--	--	---	---	--	--	---	--	---	---	---

411738081072700 SILVER C NR GARRETTSVILLE OH LAT 411738 LONG 0810727 (UM)

09/12/79 - 50 450 9100 170 180 300 - - 20 -

411807081032600 TINKER C NR GARRETTSVILLE OH LAT 411807 LONG 0810326 (UM)

09/12/79 - 90 2400 13000 210 310 150 - - 90 -

411836081055000 CAMP C NR GARRETTSVILLE OH LAT 411836 LONG 0810550 (UM)

09/12/79 - 60 750 9300 170 170 150 - - 80 -

APPENDIX 1. WATER QUALITY DATA FROM THE EASTERN APPALACHIAN
COAL PROVINCE OF OHIO (1975-1982). --(CONTINUED)

DATE	ARSENIC	ARSENIC	MERCURY	MERCURY	MERCURY	COPPER	COPPER	CHRO-	CHRO-	CADMIUM	LEAD
	TOTAL	RECOV.	TOTAL	RECOV.	TOTAL	RECOV.	RECOV.	MIUM,	MIUM,	RECOV.	RECOV.
	RECOV-	FM BOT-	DIS-	RECOV-	FM BOT-	RECOV-	FM BOT-	RECOV-	FM BOT-	FM BOT-	FM BOT-
	ERABLE	TOM MA-	SOLVED	ERABLE	TOM MA-	ERABLE	TOM MA-	ERABLE	TOM MA-	TOM MA-	TOM MA-
	(UG/L	TERIAL	(UG/L	(UG/L	TERIAL	(UG/L	TERIAL	(UG/L	TERIAL	TERIAL	TERIAL
	AS AS)	(UG/G)	AS HG)	AS HG)	(UG/G)	AS CU)	(JG/G)	AS CR)	(UG/G)	(UG/G)	(JG/G)

411738081072700	SILVER C	NR GARRETTSVILLE OH									
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
411807081032500	TINKER C	NR GARRETTSVILLE OH									
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10
411836081055000	CAMP C	NR GARRETTSVILLE OH									
09/12/79	-	0	-	-	0.00	-	10	-	10	10	10

Appendix 2.--Land-use percentages and drainage areas for water-quality data collection sites

The following tables contain coal-mining related land-use data (in percentage) and drainage areas (mi²) for sites where water-quality data were collected in the Eastern Appalchian Coal Province of Ohio between June 1975 and September 1982. The sites are listed numerically by station number. Missing drainage areas are represented by a dash.

Standard Abbreviations Used in Station Numbers

AB	Above	F	Fork	NR	Near
B	Branch	G	Great	R	River
BK	Brook	L	Little	RN	Run
BL	Below	LK	Lake	S	South
C	Creek	M	Middle	TR	Tributary
E	East	N	North	W	West

**Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued**

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
03085500	MAHONING R AT ALLIANCE OH	3	3	1	89.20
03092000	KALE C NR PRICETOWN OH	0	0	0	21.90
03092090	W B MAHONING R NR RAVENNA OH	0	0	0	21.80
03092099	HINKLEY C AT CHARLESTOWN OH	0	0	0	7.85
03092460	W B MAHONING R AT WAYLAND OH	0	0	0	81.70
03092500	W B MAHONING R NR NEWTON FALLS OH	0	0	0	96.30
03093000	ENGLE C AT PHALANX STATION OH	0	0	0	97.60
03103980	M F L BEAVER C NR SALEM OH	2	2	4	35.70
03103985	CHERRY VALLEY RN AT LEETONIA OH	2	2	15	11.90
03103990	E B M F L BEAVER C AT LEETONIA OH	1	1	3	28.00
03109100	M F L BEAVER C NR ROGERS OH	2	8	5	149.00
03109150	M F L BEAVER C AT GUILFORD OH	1	3	1	-
03109200	M F L BEAVER C AT WEST POINT OH	1	20	4	99.90
03109319	M F STATELINE C NR NEGLEY OH	8	40	40	1.43
03109395	HULL C AT NEGLEY OH	1	7	2	55.40
03109860	ELKHORN C AT BERGHOLZ OH	2	3	3	-
03110000	YELLOW C NR HAMMONDSVILLE OH	3	1	5	147.00
03110450	ISLAND C NR TORONTO OH	1	10	1	26.40
03110455	CROSS C AT BRODAGACHE OH	2	10	1	-
03110983	CONVOL RN NR BLOOMINGDALE OH	0	54	0	0.98
03111165	SHORT C AT ADENA OH	20	50	5	-
03111500	SHORT C NR DILLONVALE OH	3	30	30	123.00
03112820	MCMAHON C AT GLENQUE OH	5	5	10	-
03113550	MCMAHON C AT BELLAIRE OH	5	5	30	-
03113840	M F CAPTIVA C NR BARNESVILLE OH	1	2	0	-
03114000	CAPTIVA C AT ARMSTRONGS MILLS OH	1	1	0	134.00
03114250	SUNFISH C AT CAMERON OH	1	0	0	99.60
03115300	L MUSKINGUM R NR RIVARD MILLS OH	0	0	0	130.00
03115400	L MUSKINGUM R AT BLOOMFIELD OH	0	0	0	210.00
03115650	E F DUCK C AT LOWER SALEM OH	30	1	1	111.00
03115700	M F DUCK C AT DEXTER CITY OH	0	0	0	75.40
03115890	TUSCARAWAS R AT UNIONTOWN OH	0	1	0	8.26
03115900	TUSCARAWAS R NR EAST LIBERTY OH	0	1	1	33.10
03115920	TUSCARAWAS R AT BARBERTON OH	0	1	1	72.50
03115990	WOLF C NR BARBERTON OH	0	0	1	53.90
03116000	TUSCARAWAS R AT CLINTON OH	0	1	1	174.00
03116080	CHIPPEWA CR AT STERLING OH	0	0	0	64.40
03116200	CHIPPEWA C AT EASTON OH	0	0	0	146.00
03116410	NIWISILA C NR CANAL FULTON OH	0	0	0	23.10
03116450	HEWMAN C NR MASSILLON OH	0	0	2	38.20
03117150	SANDY C AT MINERVA OH	1	2	1	61.90
03117160	STILL F NR MINERVA OH	0	0	0	36.20
03117280	HUGLE RN NR MALVERN OH	5	10	2	21.30
03117300	SANDY C AT MALVERN OH	1	1	2	163.00
03117310	PIPE RN AT MALVERN OH	0	0	3	27.70
03117450	L SANDY C NR ROBERTSVILLE OH	2	3	3	29.70

Appendix 2.--Land-use percentages and drainage areas for water-quality data collection sites

--Continued

Station number or site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
03118000	M 3 NIMISHILLEN C AT CANTON OH	1	3	0	43.10
03118100	E 3 NIMISHILLEN C NR CANTON OH	0	1	1	33.40
03118300	W 3 NIMISHILLEN C AT CANTON OH	1	1	2	43.90
03118500	NIMISHILLEN C AT NORTH INDUSTRY OH	1	3	3	175.00
03119900	CONOTTON C AT LEESVILLE OH	1	1	2	87.10
03120500	MCGUIRE C NR LEESVILLE OH	0	1	1	48.30
03122850	SUGAR C NR ORRVILLE OH	1	0	0	47.20
03122900	SUGAR C NR WEST LEBANON OH	0	0	1	69.80
03123000	SUGAR C AB BEACH CITY DAM AT BEACH CITY OH	1	2	1	160.00
03124705	STONE C NR NEW PHILADELPHIA OH	3	3	1	-
03125000	HOME C NR NEW PHILADELPHIA OH	0	15	30	1.64
03126170	SKULL F AT FREEPORT OH	1	12	1	-
03127100	CROOKED C NR STILLWATER OH	0	3	0	47.50
03127970	CLEAR FUNK TR NR HANOVER OH	0	0	0	0.68
03128600	L STILLWATER C NR DENNISON OH	1	15	5	96.40
03129100	WHITE EYES C NR FRESNO OH	3	2	0	52.10
03138910	SALT C AT HOLMESVILLE OH	1	1	1	42.60
03140000	MILL C NR CUSHOCTON OH	1	1	0	27.20
03140700	BUFFALO F AT PLEASANT CITY OH	16	20	1	71.10
03142085	CROOKED C AT CAMBRIDGE OH	2	2	0	-
03142240	SUGARTREE F NR BIRMINGHAM OH	0	0	0	3.45
03143750	WAKATOMIKA C NR PERRYTON OH	0	0	0	-
03144000	WAKATOMIKA C NR FRAZEYSBURG OH	0	0	0	140.00
03144400	SAND F NR WAKATOMIKA OH	0	65	3	1.34
03144450	OPOSSUM RUN TR NR WAKATOMIKA OH	0	0	0	1.27
03146915	ROCKY F AT HANOVER OH	0	0	0	-
03148150	MOXAHALA C NR CROOKSVILLE OH	30	1	10	28.90
03148300	MOXAHALA C AT ROSEVILLE OH	15	3	3	80.60
03148450	JONATHAN C AT EAST FULTONHAM OH	2	1	2	125.00
03150200	MEIGS C NR HEINERSVILLE OH	10	20	1	-
03150250	MEIGS C NR BEVERLY OH	10	20	1	136.00
03150365	OLIVE GREEN C NR BEVERLY OH	1	3	1	-
03150480	W 3 WOLF C NR WATERFORD OH	1	0	0	144.00
03150490	S 3 WOLF C NR WATERFORD OH	0	0	0	79.30
03156549	CENTER B RUSH C NR JUNCTION CITY OH	1	1	0	24.90
03156550	RUSH C NR JUNCTION CITY OH	20	2	10	71.00
03156600	S1 L RUSH CR AT SR 564 NR RUSHVILLE OH	0	0	0	29.95
03158195	SNOW F MONDAY C AT BUCHTEL OH	16	1	53	24.40
03158200	MONDAY C AT JOANVILLE OH	10	12	5	114.00
03159000	SUNDAY C AT GLOUSTER OH	2	2	1	104.00
03159540	SHADE R NR CHESTER OH	4	1	2	156.00
03159555	E 3 SHADE R NEAR TUPPERS PLAINS OH	0	0	0	-
03160050	LEADING C NR MIDDLEPORT OH	15	1	4	117.00
03160105	CAMPAIGN C NR GALLIPOLIS OH	5	0	0	35.50
03201600	SANDY KN AB BIG FOUR HOLLOW C NR LAKE HOPE OH	0	0	20	0.98
03201615	BIG FOUR HOLLOW C AB E F NR LAKE HOPE OH	55	0	1	0.27

Appendix 2.--Land-use percentages and drainage areas for water-quality data collection sites

--Continued

Station number or site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
03201630	E F BIG FOUR HOLLOW C NR LAKE HOPE OH	0	0	1	0.46
03201660	HIG FOUR HOLLOW C BL E F NR LAKE HOPE OH	30	0	0	0.73
03201700	HIG FOUR HOLLOW C NR LAKE HOPE OH	5	0	20	1.01
03201720	HULL HOLLOW C NR LAKE HOPE OH	20	0	10	0.22
03201722	SANDY RN BL HULL HOLLOW C NR LAKE HOPE OH	10	0	30	2.24
03201800	SANDY RN NR LAKE HOPE OH	1	0	10	4.99
03205210	INDIAN GUYAN C NR BRADICK OH	2	1	1	67.50
03216050	ICE C AT IRONTON OH	1	0	1	37.20
03216640	PINE C NR WHEELERSBURG OH	10	5	7	152.00
382914082370900	L ICE C NR COAL GROVE OH	1	0	0	-
382945082291700	LEATHERWOOD C NR CHESAPEAKE OH	0	0	0	3.97
382958082372400	L ICE C NR COAL GROVE OH	1	0	0	1.50
383154082231800	INDIAN GUYAN C NR SCOTTOWN OH	3	1	1	-
383317082405100	L STORMS C NR TRENTON OH	28	0	5	5.20
383337082430500	OSBORNE RN NR IRONTON OH	29	10	5	3.10
383353082330600	DOG F AT KITTS HILL OH	0	0	0	2.75
383555082232900	L INDIAN GUYAN C NR RAPPSSBURG OH	5	0	1	-
383638082440900	UNION B SPERRY C NR IRONTON OH	0	30	0	-
383640082352700	PADDLE C NR KITTS HILL OH	0	0	0	2.25
383644082313900	SHARPS C NR KITTS HILL OH	0	0	0	2.32
383657082124900	SWAN C NR CROWN CITY OH	1	0	0	14.72
383711082443900	SPERRY F NR PINE GROVE OH	20	29	10	5.30
383726082500200	GINAT C NR FRANKLIN FURNACE OH	1	0	1	8.64
383729082391400	ELLISONVILLE C NR ETNA OH	10	0	1	-
383735082445700	SPERRY F NR PINE GROVE OH	11	31	5	5.90
383750082435400	L PINE C NR PEDRO OH	20	0	5	29.22
383753082265500	BUCKEYE F AT WILGUS OH	1	0	1	4.10
383805082405400	ELLISONVILLE C AT PEDRO OH	5	1	0	8.60
383806082464100	PINE C NR POWELLSVILLE OH	12	1	5	10.10
383833082402800	L PINE C AT PEDRO OH	10	0	10	2.20
383842082272700	LONG C NR WATERLOO OH	3	1	0	13.99
383918082224600	SAND F NR WILGUS OH	15	3	0	8.90
383944082292600	AARON C NR WATERLOO OH	1	0	0	8.21
384028082404400	BEAR RN AT SUPERIOR OH	44	0	35	-
384034082422100	PINE C NR PEDRO OH	5	1	5	95.00
384146082424600	PINE C NR BARTLES OH	5	1	5	88.00
384149082315400	BUCKEYE C NR WATERLOO OH	0	0	0	6.67
384206082161600	BULLSKIN C NR MERCERVILLE OH	18	0	0	4.50
384312082481700	LICK RN NR WHEELERSBURG OH	1	0	0	4.43
384333082150500	BULLSKIN C NR MERCERVILLE OH	17	3	0	13.10
384347082164400	L BULLSKIN C NR MERCERVILLE OH	19	2	0	3.30
384401082145000	BULLSKIN C NR GALLIPOLIS OH	15	4	0	14.38
384452082181400	CLAYLICK RN NR NORTUP OH	8	13	0	4.75
384452082381000	PINE C NR BUCKHORN OH	0	1	2	-
384454082223500	SAND F SYMMES C NR WATERLOO OH	5	3	1	37.11
384603082503400	WARDS RN NR WINFORD OH	0	0	1	7.36

Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
384557082421300	HALES C NR S WEBSTER OH	5	1	3	31.90
384700082505800	L SCIUTO R NR FAIR OAKS OH	1	1	1	-
384817082391500	BRADY RN NR S WEBSTER OH	5	4	1	6.06
384839082403100	HALES C NR EIFORT OH	9	3	5	14.40
384841082464000	FREDERICK C NR MINFORD OH	0	0	2	9.38
385007082305100	DIRTY FACE C NR GALLIA OH	0	0	0	13.13
385027082131800	CHICKAMAUGA C NR GALLIPOLIS OH	0	0	0	19.42
385028082305800	BLACK F NR GALLIA OH	6	3	1	-
385029082311900	BLACK F AT GALLIA OH	6	3	1	46.40
385117082500900	LONG RN NR MINFORD OH	0	1	0	17.94
385124082321400	BLACK F NR GALLIA OH	6	3	1	37.70
385316082521200	MCCONNEL C NR STOCKDALE OH	0	0	0	10.18
385334082225900	L INDIAN C NR RIO GRANDE OH	0	0	0	10.29
385343082293600	SYMMES C NR THURMAN OH	7	4	1	27.40
385405082431000	HOLLAND F TR NR S WEBSTER OH	1	0	0	8.33
385406082450600	BUCKLICK C NR STOCKDALE OH	0	0	0	6.71
385412082191300	BARREN C NR HARRISBURG OH	0	1	0	7.21
385418082131000	CHAMPAIGN C NR ADDISON OH	5	0	0	32.25
385423082100000	L CAMPAIGN C NR ADDISON OH	21	0	0	4.40
385442082090800	KYGER C NR ADDISON OH	35	1	10	30.80
385504082105400	L CAMPAIGN C NR ADDISON OH	29	0	0	2.30
385513082091400	L KYGER C NR ADDISON OH	58	0	5	5.50
385520082322000	UNAM TR TO SYMMES C AT PYRO OH	13	5	5	12.60
385543082140600	L WHITE JAK NR PORTER OH	35	0	0	5.00
385548082092100	L KYGER C NR CHESHIRE OH	55	0	1	-
385512082095900	L KYGER C NR KYGER OH	68	0	2	2.70
385708082073300	KYGER C NR CHESHIRE OH	20	1	2	-
385711082215600	L RACCOON C NR VINTON OH	16	1	5	154.00
385735082315700	SYMMES C NR PYRO OH	10	1	0	11.00
385740082430200	SUGARCAMP C NR STOCKDALE OH	0	0	0	3.68
385804082095000	KYGER C AT KYGER OH	23	0	1	7.90
385809082474400	MCDOWELL C NR STOCKDALE OH	0	0	0	6.54
385548082092900	JESSIE C AT KYGER OH	35	0	10	3.40
385500082051900	STORYS RV NR MIDDLEPORT OH	34	0	23	3.10
385516082090200	JESSIE C NR RUTLAND OH	33	0	1	2.69
385524082293300	DIXON RV NR WINCHESTER OH	34	0	5	1.20
385533082042800	LEADING C AT MIDDLEPORT OH	15	1	1	150.00
390010082370800	FOURMILE C NR JACKSON OH	0	0	0	10.26
390012082243000	DIXON RV NR EWINGTON OH	37	0	5	4.00
390017082042700	THOMAS F NR MIDDLEPORT OH	25	0	30	-
390021082071700	LEADING C NR RUTLAND OH	15	1	1	89.30
390024082231200	DICKASON RN NR THURMAN OH	17	1	1	22.50
390031082271900	DICKASON RUN NR EWINGTON OH	17	1	1	26.90
390038082270800	L RACCOON C NR EWINGTON OH	18	3	5	99.70
390038082270900	L RACCOON C NR WELLSTON OH	18	3	5	99.70
390046082091300	LEADING C NR RUTLAND OH	15	1	1	-

**Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued**

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
390049082053700	LEADING C NR MIDDLEPORT OH	15	1	1	-
390053082201000	STRONGS RN NR EWINGTON OH	1	0	0	15.69
390110082050700	THOMAS F NR MIDDLEPORT OH	20	0	10	29.20
390150082061800	L LEADING C NR RUTLAND OH	32	0	5	24.15
390201082034300	THOMAS F NR POMEROY OH	10	0	10	21.10
390221082515600	BUCKHOLLOW C NR BEAVER OH	0	0	0	4.59
390222081594900	KERR RN AT POMEROY OH	0	0	20	-
390222082092200	LEADING C NR LANGSVILLE OH	15	1	1	80.80
390224082282300	TARCAMP RN NR ROADS OH	10	0	5	2.90
390238082093200	UNAM TR TO LEADING C NR RUTLAND OH	37	0	0	0.60
390239082039500	E B THOMAS F NR POMEROY OH	6	0	22	10.81
390240082075000	L LEADING C AT RUTLAND OH	35	0	5	21.60
390254082442400	BUCKEYE C TR NR JACKSON OH	1	0	0	2.27
390341082270700	HUFFER RN NR ROADS OH	20	0	30	1.80
390345082372300	SUGAR RN NR JACKSON OH	0	0	0	3.53
390346081540100	HORSE CAVE C NR CHESTER OH	0	0	0	18.33
390452082292800	UNAM TR TO RACCOON C NR ROADS OH	63	0	5	1.80
390509082281900	L RACCOON C NR ROADS OH	15	5	1	67.50
390539082083000	L LEADING C NR HARRISONVILLE OH	20	0	0	5.50
390611081514400	E B SHADE R NR LONG BOTTOM OH	0	0	0	39.32
390622082131000	MUD F LEADING C NR DEXTER OH	5	0	0	12.22
390634082313500	MEADOW RN AT WELLSTON OH	5	0	0	8.63
390648082005600	KINGSBURY C NR POMEROY OH	7	0	0	13.48
390711081482400	FORKED RN NR LONG BOTTOM OH	0	0	0	3.98
390733082080300	UNAM TR TO L LEADING C AT HARRISON OH	45	0	0	1.30
390801082302800	L RACCOON C NR WELLSTON OH	5	1	1	47.70
390828082224900	PIERCE RN NR RADCLIFF OH	10	1	2	9.70
390900082100900	MUD F NR HARRISONVILLE OH	20	1	0	3.50
390924082303100	SUGAR RN AT HAMDEN OH	26	10	5	5.00
390936082011400	W B SHADE R AT BURLINGHAM OH	25	1	0	29.80
390940082243000	PIERCE RN NR RADCLIFF OH	20	4	5	5.20
390941082212200	ELK F NR RADCLIFF OH	5	5	5	59.50
391009082053600	W B SHADE R NR BURLINGHAM OH	35	2	0	10.20
391016082025100	W B SHADE R NR BURLINGHAM OH	35	2	0	-
391148081583000	PRATT F M B SHADE R NR SHADE OH	7	0	0	10.73
391241082425300	M F SALT C NR RICHMOND DALE OH	1	1	1	56.35
391403082261600	ELK F NR MCARTHUR OH	8	5	5	26.40
391416082255500	UNAM TR TO ELK F NR PRATTSVILLE OH	21	0	0	2.40
391430082284600	PUNCHEON F AT MCARTHUR OH	10	0	1	6.30
391435082281800	PUNCHEON F AT MCARTHUR OH	10	1	1	9.44
391453082430100	NO NAME C NR LONDONDERRY OH	0	0	0	1.99
391552082171900	RACCOON C NR MINERAL OH	3	1	2	194.00
391604082022300	LONG RN NR ATHENS OH	3	9	1	4.96
391637082291400	ELK F NR MCARTHUR OH	7	0	5	8.60
391642082232700	RACCOON C NR ZALESKI OH	3	1	5	114.00
391649081442200	W B L HOCKING R NR L HOCKING OH	0	0	0	-

Appendix 2.--Land-use percentages and drainage areas for water-quality data collection sites

--Continued

Station number or site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
391720082463800	PJE RN AT LONDONDERRY OH	0	0	0	5.84
391739081411600	E B L HOCKING R NR PORTERFIELD OH	0	0	0	-
391743082100100	W B MARGARET C NR NEW MARSHFIELD OH	0	0	1	9.40
391505081434200	L W B L HOCKING R NR LITTLE HOCKING OH	0	0	0	4.59
391810081453000	W B L HOCKING R NR CUTLER OH	0	0	0	30.36
391830082262300	BRUSHY C NR CREOLA OH	2	2	0	33.70
391901082210400	RACCOON C NR ZALESKI OH	3	1	5	122.00
391903082154200	HEWETT F NR ALBANY OH	3	1	25	27.79
391913082250500	RACCOON C NR ZALESKI OH	10	1	5	56.30
391915082274600	BRUSHY F NR CREOLA OH	2	2	0	25.44
391950082390200	PHETTY RV NR LONDONDERRY OH	0	1	0	13.58
391951082082400	FACTORY C NR THE PLAINS OH	0	0	18	8.89
392010081371600	E B L HOCKING R NR BELPRE OH	0	0	0	12.00
392108082432100	PIKE RV NR LONDONDERRY OH	0	0	0	8.06
392155082183300	SANDY RN AB LAKE HOPE OH	0	0	15	0.71
392201081524600	FEDERAL C AT BROUWELL OH	5	1	1	107.00
392205081524800	MARIETTA RN NR STEWART OH	3	0	7	10.11
392216082160800	HEWETT F NR MINERAL OH	10	5	30	11.80
392224081391400	TUPPER C AT VINCENT OH	0	0	0	5.24
392240082275000	BRUSHY F NR MT PLEASANT OH	2	0	0	4.80
392241082275200	BRUSHY F NR MT PLEASANT OH	2	0	0	4.80
392248082235700	RACCOON C NR NEW PLYMOUTH OH	1	1	0	-
392250081592900	MUSH RV NR AMESVILLE OH	0	0	0	13.09
392257082253800	RED RN NR ORLAND OH	1	0	0	0.49
392324081350000	BROWNS RV NR BARLOW OH	0	0	0	3.71
392325082150300	HEWETT F NR KIMBERLY OH	13	0	35	7.80
392342082072000	SUNDAY C AT CHAUNCEY OH	1	1	1	139.00
392348082220200	E B RACCOON C NR NEW PLYMOUTH OH	29	2	1	14.46
392349082214000	E B RACCOON C AT STARR OH	29	3	5	13.70
392350082255200	MONEY F NR NEW PLYMOUTH OH	1	0	0	9.46
392355082331700	E F QUEER C NR S BLOOMINGVILLE OH	0	0	0	9.98
392359081522800	FEDERAL C AT AMESVILLE OH	2	1	0	-
392407081554700	SHARPS F NR AMESVILLE OH	5	0	0	35.70
392427082200300	E B RACCOON C NR STARR OH	47	2	0	2.30
392503081351300	HORSE RN NR BARLOW OH	0	0	0	13.04
392504082195100	JNAM TR TO E B RACCOON C NR STARR OH	68	0	0	6.40
392535081251800	DUCK C AT MARIETTA OH	15	5	1	286.00
392548082071000	CARR BAILEY RN NR MORRISTOWN OH	0	0	10	-
392555082053200	SUNDAY C AT MILLFIELD OH	5	0	12	-
392557081384900	S F WOLF C NR WATERTOWN OH	0	0	0	7.54
392606082112800	MONDAY C AT JOANVILLE OH	15	8	5	114.00
392611081544600	POSSUM RN NR AMESVILLE OH	3	0	1	8.97
392612081545700	SHARPS F AT SHARPSBURG OH	7	0	0	21.10
392623082354900	PINE C NR S BLOOMINGVILLE OH	1	0	0	21.10
392710081592600	MINERS F NR AMESVILLE OH	5	1	1	9.88
392713081085800	LEITH RN NR NEWPORT OH	0	0	0	9.50

Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
342733032120700	MONDAY C NR BUCHTEL OH	15	10	5	85.00
342733032104700	SNOW F STATION 5 NR MURRAY CITY OH	15	2	56	-
342756031512000	N B CUAL RN AT CHESTERHILL OH	0	0	0	2.60
342802031562100	SHARPS F NR SHARPSBURG OH	5	0	0	11.80
342814031135000	ARCHERS F L MUSKINGUM R NR NEWPORT OH	0	0	0	15.45
342826031185300	MOSS RN TR AT MOSS RUN OH	1	0	1	-
342840031174000	FIFTEENMILE C AT DART OH	0	0	0	20.20
342845031191000	MOSS RN NR MOSS RUN OH	10	0	0	-
342853031594300	MINERS F NR SHARPSBURG OH	1	3	0	7.10
342909031593600	MINERS F NR SHARPSBURG OH	10	0	1	3.50
342914031474200	ALDRIDGE RN NR CHESTERHILL OH	0	0	0	11.23
342917032095700	SNOW F NR MURRAY CITY OH	33	1	50	-
342944032100100	BRUSH F AT ORBISTON OH	24	0	95	4.80
342947031314000	RAINBOW C NR DEVOLA OH	0	0	0	13.68
343004032052300	MUD F AT GLOUSTER OH	0	0	1	7.30
343006032052700	MUD F AT GLOUSTER OH	0	0	20	-
343051032095500	SNOW F AT MURRAY CITY OH	15	0	10	27.30
343052032252700	SCOTT C NR CARBON HILL OH	1	0	0	13.26
343053032095500	SNOW F STATION 3 AT MURRAY CITY OH	15	0	10	-
343101031523700	GOSHEV C NR CHESTERHILL OH	0	0	0	6.94
343109032162900	MONDAY C NR GREENDALE OH	10	10	5	-
343112031245600	WHIPPLE RN AT WHIPPLE OH	0	1	0	9.50
343112032300800	DUCK C NR ROCKBRIDGE OH	0	0	0	2.32
343122031242400	WHIPPLE RN NR WHIPPLE OH	1	0	0	-
343129031281800	BEAR C NR WHIPPLE OH	1	0	0	5.55
343211032232900	OLDTOWN C AT LOGAN OH	1	1	0	21.92
343226032163400	L MONDAY C NR CARBON HILL OH	5	2	1	25.13
343235031225500	PAW PAW C AT LOWER SALEM OH	1	1	0	21.44
343237032061300	JOHNSON RN NR GLOUSTER OH	2	5	1	4.20
343239032113000	SNOW F STATION 2 NR MURRAY CITY OH	15	1	15	-
343240031310500	CAT C AT LOWELL OH	0	5	0	10.91
343241032034300	SUNDAY C NR OAKDALE OH	1	0	0	21.50
343317031475100	HALD EAGLE RN AT STOCKPORT OH	0	0	0	10.15
343339031234500	E F DUCK C AT LOWER SALEM OH	30	1	1	135.00
343343031554600	UNNAMED C L WOLF C NR PENNSVILLE OH	0	0	0	7.87
343344031243400	W F DUCK C AT WARNER OH	7	2	1	106.00
343400031252100	W F DUCK C AT WARNER OH	25	15	1	30.55
343412032015700	E B SUNDAY C AB BURR OAK LK OH	0	0	1	-
343413032123600	SNOW F STATION 1 NR MURRAY CITY OH	0	1	40	-
343453032162800	MONDAY C AT OREVILLE OH	25	15	15	27.00
343528031222600	E F DUCK C NR LOWER SALEM OH	30	1	1	106.00
343528031251000	W F DUCK C NR ELBA OH	5	3	1	97.70
343529032071500	W B SUNDAY C AT DRAKES OH	9	3	43	-
343532032073200	W B SUNDAY C NR HEMLOCK OH	10	1	45	47.30
343534032071500	NO NAME TR W B SUNDAY C NR CORNING OH	2	6	5	7.78
343546032095600	PIKE RUN AT HEMLOCK OH	10	2	45	42.50

Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
393554052041500	DUTSON C NR CORNING OH	0	0	0	5.99
393556032070000	E B SUNDAY C NR CORNING OH	0	0	2	8.15
393504051424300	MEIGS C NR NEELYSVILLE OH	10	20	1	136.00
393509051094600	CLEAR F NR RINARD MILLS OH	1	0	0	197.80
393509052051900	SUNDAY C AT CORNING OH	5	0	0	8.90
393510082124400	SHAWNEE C AT SHAWNEE OH	30	0	30	1.40
393520051554200	DUCK RN NR PENNSVILLE OH	0	0	0	5.51
393521052102300	PINE F NR HEMLOCK OH	15	2	43	-
393522052150500	MONDAY C NR SHAWNEE OH	28	15	15	17.80
393527052145700	JUNAM TR TO MONDAY C NR SHAWNEE OH	25	15	5	3.40
393532051245600	JUNAM TR TO WF DUCK C AT ELBA OH	53	0	1	3.80
393540051223400	JUNAM TR TO E F DUCK C NR ELBA OH	67	0	0	4.10
393546051222000	E F DUCK C NR HARRIETSVILLE OH	30	1	1	100.00
393549052135300	MONDAY C NR SHAWNEE OH	30	5	20	7.70
393557051094500	STRAIGHT F NR RINARD MILLS OH	0	0	0	11.35
393707051441400	FURRAILE RN NR MCCONNELLSVILLE OH	1	0	0	12.15
393720051212100	M F DUCK C NR GERMANTOWN OH	42	1	0	26.48
393729051382200	L OLIVE GREEN C NR MCCONNELLSVILLE OH	1	0	0	15.18
393739052140600	JUNAM TR TO MONDAY C AT MCCONNEVILLE OH	42	5	15	3.40
393742052135400	MONDAY C AT MCCONNEVILLE OH	27	1	30	3.50
393743052135600	MONDAY C AT MCCONNEVILLE OH	27	1	30	-
393743052183600	L MONDAY C NR MAXVILLE OH	35	0	0	4.80
393745051431000	JYES F NR HACKNEY OH	20	55	1	45.00
393745052133300	L MONDAY C NR MAXVILLE OH	35	0	0	-
393754051274000	M F DUCK C AT MACKSBURG OH	5	3	1	84.40
393800051270700	GOOSE HOLLOW RN NR MACKSBURG OH	50	0	0	-
393826051430700	JYES C NR UNIONVILLE OH	20	55	1	-
393840051350300	KEITH F NR CALDWELL OH	1	9	1	14.87
393841052314600	RUSH C NR SUGAR GROVE OH	5	1	2	-
393846051215400	M F DUCK C NR HARRIETSVILLE OH	41	1	0	24.10
393822052124100	MOXAHALA C NR BRISTOL OH	0	7	68	-
393835051272500	SUFFALO RN NR DEXTER CITY OH	95	0	1	-
393843052030400	MOXAHALA C AT MOXAHALA OH	28	0	15	7.40
393847051182500	E F DUCK C NR HARRIETSVILLE OH	12	5	0	58.90
393848051575600	M B WOLF C NR MALTA OH	1	1	0	-
393849052080700	MOXAHALA C AT MOXAHALA OH	29	0	15	-
393850051351700	SHARON F NR CALDWELL OH	2	1	1	19.60
394006052080400	JUNAM TR TO MOXAHALA C AT MOXAHALA OH	57	0	40	3.50
394007051285800	WARREN RN AT SOUTH OLIVE OH	47	0	0	2.90
394014051232100	M F DUCK C AT MIDDLEBURG OH	42	1	0	20.50
394024052091700	JUNAM TR TO MOXAHALA C NR MOXAHALA OH	53	0	33	-
394032051181600	ROAD F AT ROAD FORK OH	4	0	1	-
394053051+15500	JYES F NR REINERSVILLE OH	20	55	1	38.10
394101050555800	DPOSSUM C NR HANNIBAL OH	0	0	0	7.38
394109051414500	HORSE RN NR REINERSVILLE OH	0	65	0	-
394110051245700	M F DUCK NR MIDDLEBURG OH	36	1	0	15.30

**Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued**

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
394117081183800	FLAG RN NR FLAG OH	8	0	0	-
394117081452200	MANS F NR MEIGS OH	5	15	1	28.00
394121081250800	M F DUCK C NR MIDDLEBURG OH	36	1	0	-
394125081481500	MANS F NR MCCONNELLSVILLE OH	1	16	0	11.82
394129082055100	MOXAHALA C NR MOXAHALA OH	37	1	15	18.10
394129082334300	PLEASANT RN NR LANCASTER OH	0	0	0	14.78
394130081450700	MEIGS C NR MEIGS OH	5	5	1	35.70
394140081211000	E F DUCK C NR MIDDLEBURG OH	15	5	0	42.50
394155082180700	DRY RN NR JUNCTION CITY OH	11	0	0	29.20
394159081083500	RICH F NR WOODSFIELD OH	1	0	0	-
394214081270500	M F DUCK C NR SOUTH OLIVE OH	5	1	0	9.80
394214082160900	TURKEY RN NR JUNCTION CITY OH	20	0	5	4.70
394232081091900	TOWN F NR GRAYSVILLE OH	0	0	0	9.66
394238082205900	NO NAME C NR BREMAN OH	2	0	0	6.14
394303081405500	BRANNONS F NR REINERSVILLE OH	43	22	0	-
394305082121900	RUSH C AT NEW LEXINGTON OH	50	0	5	9.40
394306082240700	RUSH C NR BREMAN OH	10	2	5	-
394310081215200	SCHWAB RN NR SUMMERFIELD OH	19	0	0	3.74
394310081570000	ISLAND RN NR MCCONNELLSVILLE OH	0	0	0	5.57
394311081425700	HORSE RN NR MCCONNELLSVILLE OH	3	53	0	4.50
394313082130600	UNAM TR TO RUSH C AT NEWLEXINGTON OH	21	0	0	4.70
394317081401300	DYES C NR REINERSVILLE OH	5	35	0	16.70
394317082164300	RUSH C NR JUNCTION CITY OH	20	1	15	87.80
394327081452200	MEIGS C NR MEIGS OH	1	5	1	31.30
394331082021000	OGG C NR NEW LEXINGTON OH	0	0	0	8.15
394338081305400	W F DUCK C NR CALDWELL OH	3	3	1	60.30
394340081541400	ISLAND RN AT EAGLEPORT OH	0	1	0	-
394412081052900	CHANEVEST F NR WOODSFIELD OH	0	0	0	-
394426081342000	SHARON F NR SHARON OH	43	0	0	-
394426082113500	UNAM TR TO RUSH C AT REMOOTH OH	64	0	1	1.60
394430082070900	MCLUNEY C NR ROSE FARM OH	73	0	10	6.20
394439081413500	BRANNONS F NR REINERSVILLE OH	65	0	0	5.00
394443081215300	E F DUCK C AT CARLISLE OH	5	5	0	31.70
394451082074200	UNAM TR TO MCLUNEY C NR ROSE FARM OH	95	0	10	1.40
394456082195600	CENTER B NR SOMERSET OH	1	1	0	18.60
394508082092800	MC LUNEY C NR NEW LEXINGTON OH	83	0	10	2.28
394519082051600	BLACK F NR CROOKSVILLE OH	5	2	10	28.50
394547081393700	DYES F NR ZENO OH	10	38	0	5.40
394548080533100	NIGGER RN NR CLARINGTON OH	0	0	0	-
394552082054700	MOXAHALA C AT CROOKSVILLE OH	20	5	5	-
394558080580900	SUNFISH C NR CAMERON OH	1	0	0	-
394611082054700	MOXAHALA C AT CROOKSVILLE OH	20	5	5	40.20
394614082163000	CTR B RUSH C NR SOMERSET OH	1	5	0	6.70
394624080560200	FLATROCK C NR CAMERON OH	0	0	0	-
394624080563600	ACKERSON RN NR CAMERON OH	0	0	0	6.47
394627080561900	PAINE RN NR CAMERON OH	0	0	0	7.90

Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
394641081342500	UNAM TR TO W F DUCK C NR BELLEVLY OH	8	13	0	7.80
394645081004100	PINEY F NR WOODSFIELD OH	0	0	0	15.27
394706081032000	WHEELER RN NR WOODSFIELD OH	0	0	0	6.95
394708081331900	W F DUCK C AT BELLE VALLEY OH	3	3	1	-
394712082101700	UNAM TR TO BUCKEYE F AT REDFIELD OH	65	0	1	1.40
394716082273400	UNNAMED TR L RUSH C NR RUSHVILLE OH	0	0	0	13.40
394735081545600	BLUE ROCK C NR PHILO OH	0	0	1	9.88
394739082084900	BUCKEYE F AT SALTILLO OH	71	0	5	7.30
394745081162800	S F WILLS C NR SUMMERFIELD OH	0	0	0	-
394751082050000	UNAM TR TO MOXAHALA C AT ROSEVILLE OH	73	0	5	4.20
394827081065300	BAKER F NR WOODSFIELD OH	0	0	0	8.09
394836082081600	BUCKEYE FK NR FULTONHAM OH	70	0	5	8.62
394837081361300	COAL RN NR COAL RIDGE OH	9	31	0	4.10
394837081361400	COAL R AT HIRAMSBURG OH	9	31	0	-
394856082092200	UNAM TR TO BUTCHERKNIFE C NR SALTILLO OH	44	0	1	2.00
394901082043800	PORTER RN AT ROSEVILLE OH	31	1	1	3.40
394905081591600	BRUSH C AT CHANNELVILLE OH	5	1	5	11.50
394919082082000	BUTCHERKNIFE C NR FULTONHAM OH	38	0	1	7.10
394947081421200	COLLINS F NR CUMBERLAND OH	29	16	0	6.90
394951081591200	TURKEY RUN AT STOVERTOWN OH	66	12	5	2.10
394953081182800	SKIN C NR SUMMERFIELD OH	0	0	0	7.10
395003081394500	RANNELLS C NR CUMBERLAND OH	46	8	1	-
395018082035800	UNAM TR TO MOXAHALA C NR ROSEVILLE OH	65	0	1	2.20
395029081590700	BRUSH C NR PHILO OH	15	5	18	18.57
395039081343000	W F DUCK C NR AVA OH	15	0	0	-
395049082122600	TURKEY RN NR MT PERRY OH	14	0	1	10.20
395052081401500	MILLER C AT CUMBERLAND OH	27	42	0	11.90
395052081401600	MILLER C NR CUMBERLAND OH	27	42	0	-
395059081392500	BUFFALO F AT CUMBERLAND OH	25	30	0	27.80
395109082063700	BUCKEYE F NR WHITE COTTAGE OH	35	1	5	23.10
395111081542300	DUNCAN RN AT PHILO OH	5	1	5	7.40
395115081163800	PAYNES FORK WILLS C AT CALAIS OH	0	0	0	17.79
395117081413700	MAYS F NR CUMBERLAND OH	49	24	0	3.40
395117082032400	MOXAHALA C NR AVONDALE OH	15	3	3	98.00
395124080521000	CAT RN AB MINE NR STEINERSVILLE OH	0	0	0	-
395128082121600	TURKEY RN NR SOMERSET OH	12	0	1	11.73
395138080520300	CAT RN BL MINE NR STEINERSVILLE OH	0	0	0	-
395140081504600	KENT RN NR CHANDLERSVILLE OH	0	0	1	7.43
395144081591500	UNAM TR TO BRUSH C NR STOVERTOWN OH	40	0	10	2.30
395155081374200	BUFFALO F NR CUMBERLAND OH	25	30	0	32.60
395201080514000	CAT RN NR POWHATTAN POINT OH	0	0	0	12.18
395204081190400	UNAM TR TO SENECA F WILLS C NR CALAIS OH	15	0	0	1.80
395210082165600	PAINTER C NR SOMERSET OH	1	0	0	17.96
395214082054700	JONATHAN C AT WHITE COTTAGE OH	7	1	3	150.00
395216081373100	YOKER C NR CUMBERLAND OH	10	15	0	23.00
395217082055300	KENT RN AT WHITE COTTAGE OH	1	1	0	22.82

**Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued**

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
395249080503500	CAPTINA C NR CAPTINA OH	1	1	1	-
395255082040900	THOMPSON RN NR WHITE COTTAGE OH	2	9	1	15.32
395256081462200	FREELAND F NR CHANDLERSVILLE OH	0	0	0	-
395312081391600	YOKER C NR CUMBERLAND OH	15	30	0	-
395312081522900	SALT C NR DUNCAN FALLS OH	1	2	1	-
395313081324300	BUFFALO C NR PLEASANT CITY OH	5	1	1	42.15
395320081401200	YOKER C NR CUMBERLAND OH	17	33	0	12.00
395325081415000	YOKER C NR CUMBERLAND OH	19	45	0	6.70
395329081530900	BOGGS C NR DUNCAN FALLS OH	3	2	2	17.90
395333080541300	PEA VINE C NR ARMSTRONGS MILLS OH	0	0	0	9.79
395404081191000	BEAVER C NR BATESVILLE OH	8	0	1	16.80
395410081330200	BUFFALO C AT PLEASANT CITY OH	5	1	1	49.90
395411081492500	WILLIAMS F AT CHANDLERSVILLE OH	0	5	0	6.47
395419081044800	S F CAPTINA C NR SOMERTON OH	0	0	1	33.38
395419082144400	VALLEY RN NR GLENFORD OH	0	0	0	29.71
395429080592200	HUNTER RN NR ALLEDONIA OH	0	0	0	-
395435081013500	CAPTINA C AB ALLEDONIA OH	1	1	0	-
395441081000000	PINEY C NR ARMSTRONGS MILLS OH	0	0	0	9.92
395444081273400	POSSUM RN NR SENECAVILLE OH	1	1	0	10.72
395507081200200	YOKER C NR BATESVILLE OH	2	0	0	2.40
395522081514100	WHITE EYES C NR CHANDLERSVILLE OH	0	0	0	12.37
395527081261700	SENECA F MILLS C NR SENECAVILLE OH	5	1	1	118.00
395550080505900	PIPE C NR JACOBSBURG OH	0	0	0	8.06
395553081541000	BOGGS C NR GRIFFIN OH	10	10	1	-
395618080592700	END F NR ARMSTRONGS MILLS OH	0	1	0	19.88
395639081083200	UNNAMED STR NR BARNESVILLE OH	0	0	0	2.89
395659081522700	L SALT C NR NORWICH OH	1	2	0	13.19
395709081062900	LONG RN NR BARNESVILLE OH	0	12	0	6.53
395710081135500	LEATHERWOOD C AT BAILEYS MILLS OH	12	1	10	-
395727080461400	WEGEE C NR SHADYSIDE OH	0	0	0	9.91
395739081133500	LEATHERWOOD C AT BAILEYS MILLS OH	12	1	10	8.00
395748081162000	LEATHERWOOD C AT SPENCER STATION OH	10	1	1	17.70
395801081350200	CHAPMAN RN NR BYESVILLE OH	0	1	0	11.36
395805081184800	LEATHERWOOD C AT QUAKER CITY OH	10	1	1	26.90
395806081530800	L SALT C NR ZANESVILLE OH	0	5	1	-
395807081180000	LEATHERWOOD C AT QUAKER CITY OH	10	1	1	-
395825081505000	SALT C NR BRIDGEVILLE OH	1	0	0	-
395840081215900	LEATHERWOOD C NR SALESVILLE OH	10	1	1	35.70
395906081273400	BARTLETT RN NR ZANESVILLE OH	0	1	1	57.45
395941081432900	N CROOKED C AT NEW CONCORD OH	0	0	0	8.81
400013080533000	WILLIAMS C AT GLENCO OH	0	0	0	12.35
400023080532000	MCMAHON C AT GLENCO OH	5	5	10	36.70
400031080450500	MCMAHON C AT BELLAIRE OH	5	5	30	-
400037081392700	PETERS C NR NEW CONCORD OH	1	0	0	10.36
400039080454600	MCMAHON C AT BELLAIRE OH	5	5	30	89.50
400052080535400	MCMAHON C NR WARNOCK OH	5	5	5	-

Appendix 2.--Land-use percentages and drainage areas for water-quality data collection sites

--Continued

Station number or site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
400050081151200	SALT F NR BARNESVILLE OH	37	4	1	4.00
40012300594500	MCMAHON C NR WARNOCK OH	5	5	5	12.40
400124000473700	MCMAHON C NR BELLAIRE OH	5	5	30	80.00
400129000492400	MCMAHON C AT NEFFS OH	5	5	25	62.80
400138000490900	L MCMAHON C AT NEFFS OH	10	4	65	14.20
400155000571100	BRUSH RN NR WARNOCK OH	8	11	0	4.00
400219000501700	L MCMAHON C NR NEFFS OH	11	4	75	12.40
400223000502100	KINGS RN AT WILLOW GROVE OH	30	0	96	-
400223001093300	SPENCER C STATION 1 NR HENDRYSBURG OH	10	25	1	-
400224001093300	SPENCER C NR HENDRYSBURG OH	11	0	1	8.75
400225000504100	L MCMAHON C NR NEFFS OH	11	4	80	11.10
400233002153400	BRUSHY F NR NEWARK OH	0	0	0	16.34
4002330081212200	SALT F NR MIDDLEBOURNE OH	10	2	1	31.50
400243000512700	L MCMAHON C BL AULTS RN NR ST CLAIRSVILLE OH	11	4	75	-
400303000505000	L MCMAHON C NR ST CLAIRSVILLE OH	12	0	50	3.80
400313001070800	STILLWATER C NR MORRISTOWN OH	13	31	6	-
400321001091300	SPENCER C AT HENDRYSBURG OH	10	25	1	-
400322000535400	L MCMAHON C NR ST CLAIRSVILLE OH	12	0	50	-
400329002171800	CLAYLICK C NR NEWARK OH	0	0	0	20.72
400341000502500	BRUSH RN NR ST CLAIRSVILLE OH	0	30	0	-
4004000004053100	WHEELING C AT BLAINE OH	35	15	70	97.70
400402000400200	WHEELING C NR LANSING OH	35	15	70	104.75
400429002034500	BIG RN NR DRESDEN OH	0	1	0	6.30
400505001073900	STILLWATER C NR HENDRYSBURG OH	12	30	5	37.80
400520001411700	INDIAN CAMP RN NR NEW CONCORD OH	0	0	0	6.65
400527001153600	SKULL F NR LONDONDERRY OH	7	23	1	-
400544001094200	SIXTEEN VALLEY C NR HENDRYSBURG OH	0	80	1	-
400547000501700	WHEELING C AT BARTON OH	35	15	70	88.60
400549000505800	WHEELING C AT BANNOCK OH	15	15	60	-
400501001573600	V H SYMMES C NR ADAMSVILLE OH	0	0	1	12.22
400520001163000	SKULL F NR ANTRIM OH	7	23	1	14.60
4005340005081100	WHEELING C AT HANNOCK OH	15	15	60	24.40
400535001011000	WHEELING C AT LAFFERTY OH	19	8	20	11.80
400544000513200	WHEELING C NR BARTON OH	30	15	70	82.50
400556000441100	GLEVNS RN NR FLORENCE OH	5	0	75	8.20
400700000572000	CRABAPPLE C NR FAIRPOINT OH	65	10	60	19.60
400700000572100	CRABAPPLE C NR FAIRPOINT OH	65	10	60	-
400710000430900	GLEVNS RN NR MARTINS FERRY OH	8	0	75	8.82
400715000530900	COX RN NR MAYNARD OH	34	6	45	7.10
400716000550400	WHEELING C AT FAIRPOINT OH	4	10	60	50.30
400719000514400	FALL RN NR BARTON OH	5	23	95	4.00
400727000561600	ACCRACKEN RN AT FAIRPOINT OH	72	0	69	-
400728000524300	WHEELING CR AT MAYNARD OH	45	15	70	68.80
400729001153400	CROSSBONES RN NR LONDONDERRY OH	1	10	0	-
400748001191700	LOST RN NR NEWARK OH	0	0	0	21.75
400915000592700	CRABAPPLE C AT UNIONTOWN OH	47	13	37	10.10

Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
400317082120400	BRUSHY F WAKATOMIKA C NR FRAZEYSBURG OH	0	0	0	14.75
400332081252600	SUGARTREE F NR WINTERSET OH	0	0	0	-
400335080540900	COX RN NR MIJWAY OH	40	5	90	5.50
400342081031000	TRAIL RN AT HOLLOWAY OH	28	29	10	-
400908081451700	JUMP RN NR WILLS CREEK OH	75	0	33	-
400915080531900	CAMPBELL RN NR UNIONTOWN OH	38	16	49	3.40
400918080571600	MCCRACKEN RN AB FAIRPOINT OH	72	0	69	-
400932081265100	CLEAR F NR BIRMINGHAM OH	0	0	1	11.23
400942081444100	ELUSIVE RN NR PLAINFIELD OH	0	100	1	-
400943081041500	TRAIL RN AT HOLLOWAY OH	28	29	10	6.40
400944080442900	L SHORT C NR TILTONSVILLE OH	5	11	95	14.30
400945082094600	NICKEL VALLEY RN NR FRAZEYSBURG OH	0	0	0	4.10
401005082001700	MILL F WAKATOMIKA C NR TRINWAY OH	9	29	3	23.17
401021081075500	BOGGS F AT HOLLOWAY OH	3	63	1	12.70
401021081454400	RECLAIM RN NR PLAINFIELD OH	0	67	20	-
401028081294100	ROCKY F NR BIRMINGHAM OH	0	0	0	12.26
401049081500900	Z RN NR WILLS CREEK OH	5	38	33	-
401058081504500	Y RN NR WILLS CREEK OH	0	52	15	-
401100082015200	SAND F WAKATOMIKA C NR TRINWAY OH	0	21	1	8.79
401104080423000	L SHORT C NR TILTONSVILLE OH	2	9	90	17.60
401106081500500	NO NAME TR WILLS C NR CONESVILLE OH	1	45	20	3.00
401107080475800	OLD FARM RN NR DILLONVALE OH	0	15	40	-
401120080425100	SHORT C NR RAYLAND OH	3	30	30	127.00
401122081585400	MOSCOW BK NR NEW MOSCOW OH	17	26	5	7.20
401126081121400	BOGGS F AT PIEDMONT OH	5	20	1	36.50
401142080583200	S F SHORT C NR NEW ATHENS OH	0	78	13	-
401144080472700	SHORT C AT DILLONVALE OH	5	35	25	84.20
401201081573500	MILL F NR NEW MOSCOW OH	9	41	5	9.60
401211080462100	PINEY F AT DILLONVALE OH	1	41	42	22.24
401224080545400	S F SHORT C AT GEORGETOWN OH	19	72	5	-
401227080551201	S F SHORT C AT GEORGETOWN OH	19	72	5	9.64
401241080533000	S F SHORT C STATION 6 NR ADENA OH	19	65	19	-
401242080470000	PINEY F AT DILLONVALE OH	1	41	42	-
401247080532800	M F SHORT C NR ADENA OH	1	35	1	24.32
401247081172700	CRABORCHARD C NR FREEPORT OH	0	0	0	11.47
401247081512900	ROBINSON RN NR TYNDALL OH	14	8	30	3.70
401248081512900	ROBINSON RN NR COSHOCTON OH	14	8	30	-
401253081564300	MILL F NR NEW MOSCOW OH	4	45	5	4.50
401310080522300	SHORT C AT ADENA OH	20	50	0	-
401311081453100	BACON RN NR PLAINFIELD OH	48	19	15	3.20
401313080401800	RUSH RN NR TILTONSVILLE OH	8	16	50	12.30
401314080522300	N F SHORT C AT ADENA OH	1	40	12	22.13
401314081191700	ATKINSON C NR FREEPORT OH	0	0	0	8.55
401341081043900	SOUTH F NR FLUSHING OH	0	70	0	-
401342081343200	POSTBOY C NR KIMBOLTON OH	0	0	0	5.00
401348080413700	RUSH RUN AT RUSH RUN OH	10	10	50	9.70

Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
401357081435800	CENTER C NR PLAINFIELD OH	4	3	0	5.50
401417082085000	WINDING F WAKATOMIKA C NR WALHONDING OH	1	0	0	16.90
401430080534300	V F SHORT C NR RUBYVILLE OH	3	30	5	17.70
401437080580700	SALLY BUFFALO C NR CADIZ OH	16	44	0	9.50
401444080433000	RUSH RUN NR RUSH RUN OH	7	9	65	5.90
401445080393000	SALT RN NR RUSH RN OH	7	16	5	5.40
401505081061800	BRUSHY F NR CADIZ OH	0	62	0	18.54
401508080492200	PINEY F AT PINEY FORK OH	1	30	23	-
401534080551000	V F SHORT C NR UNIONVALE OH	3	19	5	-
401619080510000	PINEY F NR PINEY FORK OH	1	30	10	11.30
401621080553600	V F SHORT C AT UNIONVALE OH	3	19	5	10.60
401645081215300	FALLEN TIMBER C NR TIMPECANOE OH	1	0	0	7.60
401716080451300	MCINTYRE C NR SMITHFIELD OH	3	53	5	14.30
401756081050800	STANDING STONE F NR CADIZ OH	3	50	0	9.45
401801080373200	GEORGES RN NR MINGO JUNCTION OH	5	19	5	2.60
401803080410400	MC INTYRE C NR MINGO JUNCTION OH	6	51	5	24.20
401805081394500	EVANS C NR W LAFAYETTE OH	4	2	1	21.02
401812081362400	LICK RN AT NEWCOMERSTOWN OH	0	6	1	1.90
401817080404800	CROSS C NR NEW ALEXANDER OH	3	1	1	88.80
401857080391700	CROSS C NR MINGO JUNCTION OH	10	25	2	118.00
401908080374900	CROSS C NR MINGO JUNCTION OH	10	25	10	-
401914082042600	MOHAWK C NR WALHONDING OH	1	0	0	22.25
401936081504900	SPOON C NR COSHOCTON OH	2	1	0	7.70
401940081441400	E F WHITE EYES C NR FRESNO OH	1	1	0	12.41
401953081163100	SKULL F NR FREEPORT OH	1	15	1	38.83
402011081450500	W F WHITE EYES C NR FRESNO OH	1	1	0	20.00
402012081051200	CLARK F NR JEWETT OH	1	27	1	21.53
402023081553800	BUCKLEW RN NR COSHOCTON OH	13	6	0	5.90
402038080540700	CROSS C NR HOPEDALE OH	1	5	1	-
402043080573600	CONOTTON C NR CADIZ JUNCTION OH	0	20	0	-
402058082004800	BEAVER RN NR WARSAW OH	1	1	0	12.90
402137081505300	L MILL C NR KEENE OH	1	1	0	7.43
402140080444900	CROSS C NR WINTERSVILLE OH	1	3	1	71.80
402150082203700	INDIANFIELD RN NR HOWARD OH	0	0	0	10.64
402214080474600	SALEM C NR BLOOMINGDALE OH	2	3	1	15.27
402245080532300	V B CROSS C NR HOPEDALE OH	1	20	0	5.00
402253081134000	PLUM RV NR BOWERSTON OH	1	6	11	-
402258080455800	CEJAR LICK C NR RICHMOND OH	0	10	0	5.55
402309080401000	WILLS C AT STEUBENVILLE OH	0	18	0	5.45
402357081260700	MUD RN NR TUSCARAWAS OH	7	3	44	-
402415081025500	IRISH C NR SCIO OH	1	1	1	16.02
402430081310400	OLDTOWN C NR STONE CREEK OH	0	1	1	14.10
402431081234300	MUD RN AT TUSCARAWAS OH	1	12	39	9.20
402517081324000	STONE C NR STONE CREEK OH	0	1	1	-
402520081050600	DIVING F NR SCIO OH	0	1	0	12.70
402548081560600	DOUGHTY C NR CLARK OH	1	1	0	55.75

Appendix 2.--Land-use percentages and drainage areas for water-quality data collection sites

--Continued

Station number or site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
402552081281100	OLDTOWN C NR WAINWRIGHT OH	5	10	1	10.80
402559081592100	BIG RN NR KILLBUCK OH	1	1	0	10.46
402602081224100	PIKE RN AT MIDVALE OH	4	11	20	5.30
402610080375700	ISLAND C NR TORONTO OH	1	10	1	22.50
402636080400700	ISLAND C NR PEKIN OH	2	23	0	-
402705080565600	ELK LICK NR AMSTERDAM OH	1	2	0	5.01
402715081300800	STONE C NR NEW PHILADELPHIA OH	2	3	1	21.30
402738081262300	OLD TOWN C AT NEW PHILADELPHIA OH	3	20	10	18.60
402757082171600	SAPPS RN NR DANVILLE OH	0	0	0	3.69
402803082201200	L JELLOWAY C NR HOWARD OH	0	0	0	11.85
402815080532100	WOLF RN NR AMSTERDAM OH	15	1	0	2.50
402823080552300	YELLOW C AT AMSTERDAM OH	1	3	0	19.80
402835082163700	DOWD C NR DANVILLE OH	0	0	0	5.78
402841081285900	STONE C NR NEW PHILADELPHIA OH	3	3	1	25.20
402843082012600	WOLF C NR KILLBUCK OH	2	0	0	23.13
402857081220300	BEAVERDAM C NR MIDVALE OH	5	5	25	3.70
402857081330700	CROOKED RN NR NEW PHILADELPHIA OH	0	23	8	-
402859081290700	CROOKED RN AT NEW PHILADELPHIA OH	5	20	1	7.70
402950080493400	LONG RN NR E SPRINGFIELD OH	5	0	0	4.20
403001080474700	LONG RN NR EAST SPRINGFIELD OH	5	0	0	6.51
403003081250600	BEAVERDAM C NR NEW PHILADELPHIA OH	9	10	20	12.80
403017081134000	THOMPSON RN AT SHERRODSVILLE OH	0	11	8	-
403041082002900	BLACK C TR AT GLENMONT OH	0	0	0	5.40
403044080445800	YELLOW C NR NEW SOMERSET OH	3	1	5	-
403047081064700	N F MCGUIRE C NR CARROLLTON OH	0	0	0	11.24
403049081163000	CONOTTON C NR NEW CUMBERLAND OH	3	3	1	68.50
403102080435200	TOWN F NR HAMMONDSVILLE OH	1	5	0	25.91
403103080453400	YELLOW C NR NEW SOMERSET OH	3	1	5	105.00
403108081364900	E BRANCH AT SUGARCREEK OH	4	18	2	28.20
403112080461100	RUACH RN NR BERGHOLZ OH	5	0	20	-
403114080513900	YELLOW C NR BERGHOLZ OH	3	1	5	82.40
403124081272600	UNAM TR TO TUSCARAWAS R AT DOVER OH	0	25	1	2.70
403128080402700	HOLLOW ROCK RN NR NEW SOMERSET OH	16	16	0	5.60
403133080560800	STRAWCAMP RN NR BERGHOLZ OH	1	0	0	4.98
403135080530200	YELLOW C AT BERGHOLZ OH	3	1	5	-
403144080585500	CENTER F NR HARLEM SPRINGS OH	6	7	1	10.23
403150080531200	UPPER N F AT BERGHOLZ OH	0	1	1	18.70
403229081290600	GOETTGE RN AT DOVER OH	11	16	0	4.40
403237081185200	DUG RN AT NEW CUMBERLAND OH	5	10	10	2.80
403242081413800	GOOSE C NR WALNUT CREEK OH	0	5	1	6.09
403257080430600	BRUSH C AT HAMMONDSVILLE OH	1	2	12	15.31
403304081191600	UNAM TR TO CONOTTON C NR NEW CUMBERLAND OH	5	5	30	5.50
403316080403100	HOLLOW ROCK RN NR HAMMONDSVILLE OH	14	11	0	9.20
403345080423300	N F YELLOW C AT HAMMONDSVILLE OH	3	3	5	58.00
403420081181000	BEGGAR RN NR NEW CUMBERLAND OH	42	21	5	1.80
403440081113400	WILLOW RN NR DELLROY OH	1	0	0	7.85

Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
403445081313200	BROAD RN AT STRASBURG OH	18	13	1	19.50
403445081194800	UNAM TR TO CONOTTON C NR SOMERDALE OH	8	37	5	1.40
403446081194900	X RN NR MINERAL CITY OH	8	37	5	-
403458081254900	UNAM TR TO S M MIDDLE RN NR ZOAR OH	17	15	0	1.20
403550081213400	HUFF RN AT MINERAL CITY OH	16	5	0	12.10
403551081213300	HUFF RN AT MINERAL CITY OH	16	5	0	-
403555081393700	INDIAN TRAIL C NR WINESBURG OH	9	2	1	13.50
403600081244900	UNAM TR TO TUSCARAWAS R NR ZOAR OH	22	6	0	1.80
403614081180700	HUFF RN NR MINERAL CITY OH	10	5	5	13.00
403614081202100	HUFF RN NR MINERAL CITY OH	15	5	7	10.60
403619081254300	MIDDLE RN AT ZOAR OH	30	5	1	2.30
403639080472200	N F YELLOW C NR SALINEVILLE OH	3	3	10	40.30
403641081565100	PAINT C NR HOLMESVILLE OH	0	0	0	27.20
403655081550200	MARTINS C NR HOLMESVILLE OH	1	0	0	22.88
403706081262900	WOLF RN NR ZOAR OH	35	1	0	3.50
403715080391400	L YELLOW C NR WELLSVILLE OH	2	3	3	22.04
403724080500700	RILEY RN AT SALINEVILLE OH	4	10	20	15.71
403729081164100	HUFF RN STATION 1 NR MINERAL CITY OH	0	0	0	-
403755081022200	PIPES F NR CARROLLTON OH	0	0	0	6.12
403851081414500	CRABAPPLE C NR MOUNT EATON OH	0	2	0	10.77
403925082080700	CRAB RN AT LAKEVILLE OH	0	0	0	31.14
404023081161200	INDIAN RN NR WAYNESBURG OH	15	3	4	3.57
404026081174100	PLEASANT VALLEY RN NR WAYNESBURG OH	20	5	0	9.98
404052081281900	UNNAMED C NR BOLIVAR OH	2	3	0	8.58
404136082001800	SHREVE C NR SHREVE OH	0	0	0	10.58
404140080351100	LONGS RN NR CALCUTTA OH	2	3	2	13.10
404155081241400	BEAR RN NR CANTON OH	10	5	5	5.07
404205080520000	WILLIARD RN NR LISBON OH	3	20	0	6.31
404210081023700	MUDDY F NR MINERVA OH	1	5	2	11.81
404229081352300	ELM RN AT BREWSTER OH	0	0	0	6.25
404300081395000	NORTH FORK NR W LEBANON OH	0	0	0	16.83
404310081090800	HUGLE RN NR MALVERN OH	5	10	2	21.00
404423080502900	COLD RN NR LISBON OH	1	10	2	31.77
404434081315500	PIGEON RN NR NAVARRE OH	0	0	0	9.52
404444081142700	BLACK RN NR ROBERTSVILLE OH	5	10	0	16.39
404505081041100	M B SANDY C NR MINERVA OH	0	0	1	20.31
404507081022000	CONSER RN NR MINERVA OH	0	0	0	15.44
404512081584800	UNNAMED C NR SHREVE OH	0	0	0	5.79
404544080415400	ELK RN AT ELKTON OH	3	23	2	11.27
404629080453500	LISBON C AT LISBON OH	1	3	0	6.61
404655080455301	LISBON C AT LISBON OH	1	3	0	6.18
404722080325700	LESLIE RN NR NEGLEY OH	1	10	2	13.74
404756080355800	L BULL C NR ROGERS OH	1	17	3	15.04
404808081302600	SIPPO C AT MASSILLON OH	0	0	0	17.27
404818081331700	W B SIPPO C AT MASSILLON OH	0	0	0	9.78
404831081301000	SIPPO C AT MASSILLON OH	0	0	0	16.15

Appendix 2.--Land-use percentages and drainage areas for water-quality data
collection sites--Continued

Station number site ID number	Station name	Type of land use (in percent)			Drain- age area (mi ²)
		Abandoned	Reclaimed	Deep mined	
404858081464900	L SUGAR C NR ORRVILLE OH	1	0	0	17.93
404909081163100	UNNAMED C NR LOUISVILLE OH	0	1	0	13.17
405022081242200	UNNAMED C AT AVONDALE OH	0	0	3	15.52
405027081554200	L APPLE C NR WOOSTER OH	0	0	0	9.07
405035080592300	UNNAMED C AT N GEORGETOWN OH	0	0	0	9.44
405115080593900	UNNAMED C NR N GEORGETOWN OH	0	0	0	10.25
405120081345100	FOX RN NR MASSILLON OH	0	0	0	13.17
405128081011500	BEAVER RN NR HUMEWORTH OH	0	1	0	4.91
405322081004400	NAYLOR D NR SEBRING OH	1	1	1	3.96
4054050805083200	NAYLOR D NR DAMASCUS OH	1	1	0	4.83
405432081294900	VIMISILA C NR N CANTON OH	0	0	0	8.26
405605081082200	BEECH C NR ALLIANCE OH	0	0	0	17.74
405610081403300	SILVER C NR CLINTON OH	0	0	3	8.39
405620081171300	SWARTZ D NR HARTVILLE OH	0	1	0	9.74
405645081484300	L CHIPPEWA C NR RITTMAN OH	0	0	0	26.55
405709081440300	MILL C AT EASTON OH	0	0	0	7.18
405758081485600	TOMMY RN NR RITTMAN OH	0	0	0	6.30
405823081004700	ISLAND C NR N BENTON OH	2	5	1	4.89
405830081462000	RIVER STYX AT RITTMAN OH	0	0	1	28.37
405843081094500	DEER C NR LIMAVILLE OH	0	0	0	32.54
405919081261300	UNNAMED C NR UNIONTOWN OH	0	0	0	12.97
405926080345800	BURGESS RN NR NEW MIDDLETOWN OH	1	14	0	2.34
410001080580701	MILL C NR BERLIN CENTER OH	1	2	1	19.01
410010080363700	BURGESS RN AT POLAND OH	1	5	0	7.32
410024081380400	HUDSON RN AT BARBERTON OH	0	0	5	11.78
410049080512300	W B MEANDER C AT ELLSWORTH OH	3	0	0	7.09
410128080415700	INDIAN RN NR BOARDMAN OH	1	0	0	14.34
410128080571600	TURKEY BROTH C AT BERLIN CENTER OH	0	0	5	5.45
410132081394400	HUDSON RN NR NORTON OH	0	0	5	4.83
410318081363200	WOLF C NR BARBERTON OH	0	0	1	28.80
410424081290400	L CUYAHOGA R AT AKRON OH	0	0	1	48.33
410517081411500	WOLF C NR COPLEY OH	0	0	1	20.67
410554081111500	BARREL RN NR ROOTSTOWN OH	0	0	0	9.53
410644081365300	SCHOCALUG RN NR FAIRLAWN OH	0	0	0	3.20
410705080512000	MORRISON RN NR N JACKSON OH	0	0	0	5.46
410715080440500	FOURMILE RN AT WICKLIFFE OH	0	0	0	2.59
410720080380801	CRAH C AT YOUNGSTOWN OH	0	0	0	14.00
410823080594300	KALE C NR NEWTON FALLS OH	0	0	0	21.90
411034080481800	MUD C NR NILES OH	0	0	0	13.36
411249080525100	L DUCK C NR LEAVITTSBURG OH	0	0	0	4.09
411738081072700	SILVER C NR GARRETTSVILLE OH	0	0	0	9.00
411807081032600	TINKER C NR GARRETTSVILLE OH	0	0	0	4.35
411836081055000	CAMP C NR GARRETTSVILLE OH	0	0	0	3.96