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Stream Water Quality in the Coal Region of Pennsylvania

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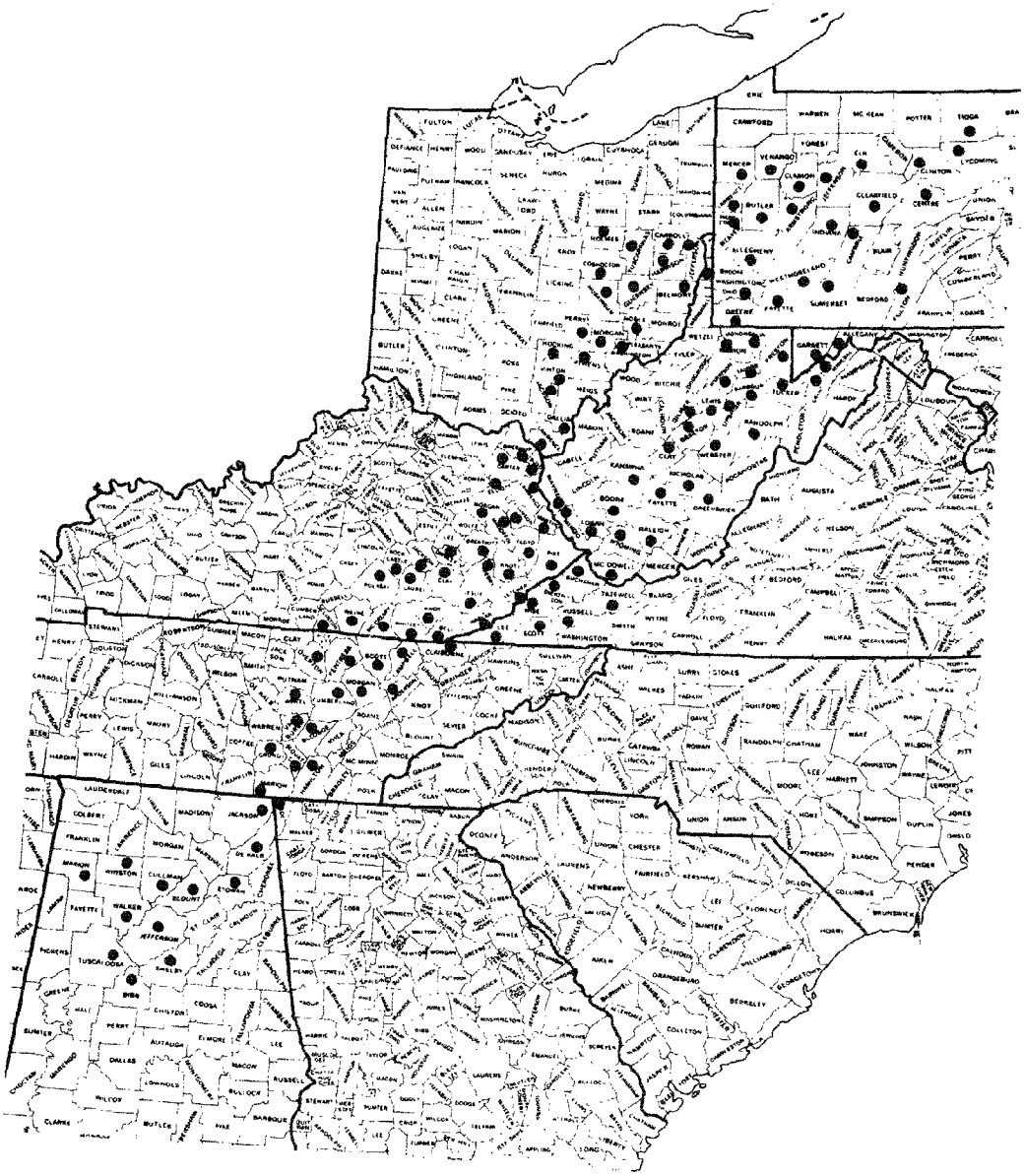

STREAM WATER QUALITY IN THE COAL REGION OF PENNSYLVANIA

by

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This study was conducted
in coopration with
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ABSTRACT

This report is a compilation of water quality data for 86 small streams sampled in 23 counties of Pennsylvania where coal is surface-mined. Twenty-nine of these streams drain unmined watersheds; 57 drain areas where coal has been surface-mined. Most of these streams were sampled at approximate monthly intervals. The water quality data from these streams are presented in this report and should help fill the need for data from small watersheds in Pennsylvania. Data reported include the common ions, alkalinity, acidity, pH, 16 trace elements, 5 nitrogen and phosphorus species, specific conductance, suspended solids, turbidity, settleable matter, water temperature and estimated discharge.

Data contained in this report should not only be useful in assessing the impacts on stream water quality of old and recent surface mining for coal, it should also provide a data base of small reference watersheds which can serve as a basis for future studies. The report covers the period July 13, 1977 to October 4, 1979.

THE AUTHOR

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FOREWORD

When energy and material resources are extracted, processed, converted, and used, these operations usually pollute our environment. The resultant air, land, solid waste, and other pollution may adversely affect our aesthetic and physical well-being. Protection of our environment requires that we recognize and understand the complex environmental impacts of these operations and apply corrective measures.

This study was undertaken with the primary objective of establishing a water quality data base for small first-order unmined and surface-mined watersheds throughout Appalachia. There is a need for data that explicitly show changes in water quality attributable to past and recent surface mining. Most previous water quality data in the study area came from watersheds so large that it was impossible to isolate the effects of surface mining from the confounding effects of other human activities.

This report includes a compilation of water quality data for 86 small watersheds in Pennsylvania. Most streams were sampled at approximate monthly intervals from about August 1977 through October 1979, as part of a study of the effects of surface mining on water quality in Appalachia. Twenty-nine of these sampled watersheds were unmined; 57 contained areas that had been surface-mined for coal. These data are being released ahead of the interpretative report because of the immediate needs of many potential users.

Regulatory agencies, environmentalists, and writers of environmental impact statements will be particularly interested in these data. The water quality data base provided in this report for small reference watersheds should provide a basis for future studies and should be especially helpful in determining the probable hydrologic consequences of future mining operations.

This study was made possible by funding from the U.S. Environmental Protection Agency, Office of Research and Development, Cincinnati, Ohio, and was completed under Contract No. EPA-IAG-DE-E764 by the U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station, Broomall, Pennsylvania. The Surface-Mined Area Reclamation Research Unit of the Northeastern Forest Experiment Station in Berea, Kentucky, may be contacted for further information.

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LIST OF ABBREVIATIONS AND SYMBOLS

AL = Aluminum
B = Boron
BA = Barium
BE = Beryllium
C = Celsius
CA = Calcium
CFS = Cubic feet per second
CL = Chloride
CO = Cobalt
CO3 = Carbonate
CU = Copper
DA = Day
DEG C = Degrees Celsius
DIS SOLID = Calculated total dissolved solids
EST DISCH = Estimated Discharge
F = Filtered water sample (see Table 2)
FA = Filtered water sample preserved with nitric acid (see Table 2)
FE = Iron
FN = Filtered water sample preserved with sulfuric acid (see Table 2)
FP = Filtered water sample preserved with mercuric chloride (see Table 2)
HCO3 = Bicarbonate
JTU = Jackson turbidity units (assumed to be equivalent to both nephelometric and formazin turbidity units)
K = Potassium
KJ = Unfiltered sample preserved with sulfuric acid (see Table 2)
L (or l) = Liter
LI = Lithium
MG = Magnesium
MG/L (or mg/l) = Milligrams per liter. Essentially the same value as parts per million for concentrations given in this report.
ML/L (or ml/l) = Milliliters per liter
MO = Molybdenum (when found under the date heading MO = Month)
MN = Manganese
N = Nitrogen
NA = Sodium
NEUT RATIO = Neutralization ratio
NH3 = Ammonia
NI = Nickel
NO3 = Nitrate plus nitrite as N, determined on an unpreserved sample (sample F)
*NO3 = Nitrate plus nitrite as N, determined on a sample preserved with H_2SO_4 (sample FN)
ORTHO PO4 = Orthophosphate
P = Phosphorus
PB = Lead

PH = pH
SA = Unfiltered water sample preserved with nitric acid (see Table 2)
SETT MATTER = Settleable matter
SI - Silicon
SO4 - Sulfate
SPEC COND = Specific conductance at 25° Celsius
SR = Strontium
SUSP SOL = Suspended solids
SV = Unfiltered, untreated water sample for settleable matter analyses (see Table 2)
TEMP = Temperature
TI = Titanium
TKN = Total Kjeldahl nitrogen
TOT = Total
TURB = Turbidity
U = Unfiltered, untreated water sample (see Table 2)
UM/CM = Micromhos/centimeter
YR = Year
ZN = Zinc

ACKNOWLEDGMENTS

The cooperation of the Pennsylvania Department of Environmental Resources, Bureau of Surface Mine Reclamation is gratefully acknowledged. Personnel from this agency designated those areas in which sites suitable for this study might be found. Numerous individuals, including landowners and mining company representatives, cooperated in this study by helping select watersheds which met the criteria for this study, or by allowing access onto or over their land so that the samples might be taken, or both.

SECTION 1

INTRODUCTION

Surface mining throughout Appalachia is known to cause changes in the quality of water downstream from the mined areas (U.S. Army Corps of Engineers and others 1969). Numerous water quality sampling sites have been established on Appalachian streams since 1950, but most of these are on streams that drain large watersheds with multiple land uses so that it is not possible to correlate surface mining with downstream water quality.

A network of sampling sites on small first-order surface-mined and unmined watersheds throughout Appalachia was needed so that water quality data could be correlated with the type and date of surface mining, the type and date of reclamation, and the type of coal mined. These small reference watersheds should provide a good data base for future studies to aid in determining differences in stream water quality from mined and unmined watersheds, differences in the effects of various mining and reclamation techniques on water quality, and water quality recovery rates in streams that have been affected by mining.

Such a network of sampling sites was established in 1977 in the 135 Appalachian counties in nine states where coal was surface mined. The three sites initially selected in each county were to represent three watershed conditions: (1) unmined, (2) surface mined before January 1972, and (3) surface mined after January 1972. The 135 Appalachian counties which comprise the study area are mapped in Figure 1.

Starting in July 1977, 86 water sampling sites were established in the 23 counties of Pennsylvania in which surface mining for coal was practiced. Most of these were sampled at approximately monthly intervals until October 1979.

Time was not available for a detailed examination of each watershed, so some may not now be correctly classified by mining status, dates of mining, or hydrologic boundaries. The user of this report should not make crucial decisions based on these data unless the classification of the site can be verified. Verification of mining activity is of special concern as there may be old, unreported underground mine discharge in some watersheds.

Ultimately the data from throughout Appalachia should help determine which methods of surface mining are most effective in reducing the quantity of pollution reaching streams. An interpretive report covering the entire Appalachian study area is to be published later.

SECTION 2

STUDY METHODS

SITE SELECTION

A critical element in collecting valid water-quality data is site selection. Procedures and criteria used for site selection follow:

General Criteria for all Watersheds

1. A first order stream was to be selected if at all practical. A first-order stream is defined as a stream with perennial flow but without perennial tributaries. Information provided by local residents was often used to identify perennial streams. When possible, sampling sites were selected at points where flow was over bedrock to lessen the chance of contamination of samples with streambed materials, to increase likelihood of perennial flow, and to improve the discharge estimates.

2. Springs flowing from hillsides were not to be sampled.

3. When possible watersheds from 50 to 250 acres were selected.

Criteria for Unmined Watersheds

1. These watersheds were to be strictly unmined.

2. These watersheds were to have no roads or cuts which exposed bare ground. Old revegetated logging roads and skid trails were allowed.

3. These watersheds were not to be farmed, disturbed, or developed in any way.

4. Watersheds that were completely forested were to be selected if at all possible; when no completely forested watersheds were available, one that was part forest and part grassland or pasture was substituted.

5. Unmined watersheds were to be as close as possible to the mined watersheds, and as similar in aspect as possible.

6. There were to be no plans to mine or develop the watershed within the 2-year study period.

Criteria for Newly Mined Watersheds

1. No mining should have occurred before January 1972.

2. From 10 to 100 percent of the watershed should have been disturbed by surface mining after January 1972. Active surface mines were permitted on watersheds in this category. Old mines that were worked before January 1972, were permitted provided that all surfaces exposed to the atmosphere before then were completely reworked after January 1972.

3. When possible, watersheds were to be selected where only one seam of coal had been or was being mined. This was to make it possible to better evaluate the effects of mining each coal seam on water quality. Watersheds with two or more seams of coal mined were selected when these were the best available.

Criteria for Old Mined Watersheds

1. No mining or reclamation should have occurred since January 1972.

2. From 10 to 100 percent of the watershed should have been disturbed by surface mining before January 1972.

3. When possible, watersheds were to be selected where only one seam of coal had been mined. Watersheds with two or more seams of coal mined were selected when these were the best available.

4. There should be no plans for further mining or development in the watershed within the 2-year study period.

Problems in Site Selection

Site selection was carried out under severe time restraints; therefore, few of the watersheds selected met the specified criteria fully. Many of the watersheds initially classified as either old mined or newly mined have been found to be a mixture of the two. These have been arbitrarily given site classification numbers indicative of newly mined watersheds--even though in some cases the old mining may have had a greater impact on water quality.

Underground mines were prevalent over much of the area in Pennsylvania, making it difficult to find watersheds suitable for study there. Time was not available for close examination of the watersheds, thus some may not be what they appeared to be from the limited information then available on mining status, dates of mining, or hydrologic boundaries.

SITE NOMENCLATURE

Site Numbers

Four-digit site numbers were assigned thus:

First digit designates state:

1. Alabama	4. Maryland	7. Tennessee
2. Georgia	5. Ohio	8. Virginia
3. Kentucky	6. Pennsylvania	9. West Virginia

Second and third digits designate county:

(See Table 1 for county designations)

Fourth digit:

0 used as needed for any watershed condition

1, 4, or 7 indicates an unmined watershed

2, 5, or 8 indicates a watershed that has been surface mined since January 1972 (surface mining may still be in progress on some of these)

3, 6, or 9 indicates a watershed that was surface mined before January 1972

Example: In site number 6012 the 6 indicates Pennsylvania, the 01 indicates Allegheny County, and the 2 designates this as a watershed on which surface mining for coal has occurred after January 1972.

Site Names

Names are taken from U.S. Geological Survey topographic maps of the 7-1/2 minute series (scale 1:24,000). The site is designated as being *at* a community when it is within a mile of the center of the community or within the urbanized area of the community. The site is designated as being *near* a community when it is more than a mile from the center of the community and outside an urbanized area.

STREAM SAMPLING PROCEDURES

Samples collected as part of this study are listed in Table 2 with treatment, time interval over which collected, and approximate volume of sample.

In addition to the samples described in Table 2 two samples of bottom material (generally rocks, sand, gravel, and/or mud) were collected from the bottoms of most streams sampled, one early in 1978 and one early in 1979. These samples were analyzed by X-ray diffraction for mineralogy and by X-ray fluorescence for major and minor elements including aluminum, calcium, iron, manganese, magnesium, potassium, silicon, and titanium. Data from the analyses of these samples are not given in this report but will be released later.

All samples were collected in plastic bottles, rinsed twice with at least 25 ml of the water being collected. Attempts were made to collect representative stream samples free of bottom material, floating debris, or material put in suspension through disturbance of the stream bottom. Unfiltered samples (KJ, SA, SV, and U) were generally dipped from flowing water or pools, but in extremely shallow streams these samples were collected with a 50-ml prerinsed syringe. When necessary, a clean thin rock was placed on the stream bottom at the collection site to avoid inadvertent collection of bottom material with the syringe.

All filtered samples were collected in a 50 ml plastic syringe and forced through a 0.45-micron type HAWG millipore filter 47 millimeters in diameter. The syringe was prerinsed with two 50 ml slugs of sample water and each filter was prerinsed with 50 ml of sample water. Filters for samples FN and FP (see Table 2 for description) were prerinsed with 200 ml of distilled water or sample water. Collection of samples F and FA generally sufficed for the prerinsing of the filters for samples FN and FP. A few samples were so muddy they could not be filtered at the site; so, liter samples of these were collected, allowed to settle a few hours, and then filtered.

Samples were refrigerated from the time they were received in Berea until they could be analyzed. As much as 2 weeks could pass between collection and refrigeration. Samples were usually stored in the refrigerator a month or two before they were analyzed in the lab. Samples were protected from freezing during the winter.

FIELD MEASUREMENTS

Field measurements were performed concurrently with stream sampling. The reported stream discharges are all listed as estimates, though in a very few cases the discharge was computed when the entire flow was allowed to fill a cup or bucket of known volume during a measured time. Discharge in cubic feet per second was generally estimated by multiplying the mean estimated cross-sectional area of flow in square feet by the mean surface velocity (estimated by movement of a floating leaf or stick) in feet per second times a roughness factor. The assigned roughness factors ranged from 0.5 to 0.9 and were designed to compensate for differences in stream channel shape and roughness.

Field pH measurements were obtained at streamside for most samples collected during the first half of the study. These were generally measured in the flowing stream unless velocities exceeded about 0.5 ft/sec, in which case they were measured at streamside in a cup of water collected for the purpose. Field pH readings were made with a Markson digi-sense pH meter, Model 5985-40, which was standardized with two buffers at each sampling site. The collection of field pH values was discontinued after we discovered that even under carefully controlled laboratory conditions the field meters were giving pH values for natural waters which, though stable, sometimes differed by as much as two whole pH units from readings taken only a few minutes before. Time was not available either to ascertain why field pH readings were inconsistent or to develop a better system for measuring. Because of the unreliability of many of these values, no field pH data are included in this report.

Water temperatures were measured with a thermometer placed in a flowing portion of the stream and are reported in degrees Celsius.

LABORATORY ANALYSES

Most analyses given in this report were determined at the laboratory of the Surface-Mined Area Reclamation Research Unit of the Northeastern Forest Experiment Station in Berea, Kentucky. Most samples of suspended solids were analyzed at Eastern Kentucky University in Richmond, Kentucky under the direction of Dr. Samuel S. Leung, Department of Geology. Special Nutrient samples collected between July 10 and September 28, 1979, were analyzed at the Argonne National Laboratory at Argonne, Illinois, under the direction of Dr. Richard D. Olsen.

An attempt was made to maintain the same analytical techniques throughout the study; however, this was not always possible. Changes and the dates they were instituted have been specified in the following discussions of individual parameters.

Elemental Analyses by Emission Spectrometer

A total of 31 elements was analyzed on the "FA" samples using a Spectraspan III emission spectrometer with DC argon plasma source. Data for 20 of these elements are included in this report. These 20 elements are tabulated in Table 3 along with approximate detection limits and approximate levels of reproducibility.

Concentrations of 11 additional elements were obtained but are not published in this report because their concentrations in natural waters were generally far below the detection limits of the emission spectrometer. These elements and their approximate detection limits in mg/l are: Arsenic (3), bismuth (5), cadmium (0.5), chromium (0.1), germanium (0.1), mercury (0.05), phosphorus (0.7), selenium (0.3), silver (0.05), tin (0.2), and vanadium (0.2).

Other Analyses

Descriptions of the remaining laboratory analyses (anions, nutrients, physical parameters, and calculated values) follow in alphabetical sequence.

Acidity--

Reported as mg/l calcium carbonate equivalent and analyzed in accordance with a modification of the procedure published in Methods for Chemical Analysis of Water and Wastes (EPA 1974). A 25-ml portion of the filtered "F" sample was first acidified to pH 4.0 with 0.02 N H_2SO_4 with a Mettler autotitrator consisting of modules DK 10, DK 11, DK 12, DK 13, and DV 210. Three drops of 30 percent H_2O_2 were then added and the sample boiled for 2 to 4 minutes. Upon cooling, samples were titrated by autotitrator with either 0.02 N NaOH; or 0.1 N NaOH. Paired aliquots titrated with 0.1 N NaOH and containing less than 20 mg/l acidity as $CaCO_3$ differed from their respective means by an average of $\pm$ 2.4 mg/l while those containing more than 20 mg/l acidity as $CaCO_3$ differed from their respective means by an average of $\pm$ 6.9 percent. Paired samples titrated with 0.02 N NaOH should be in much better agreement in the lower range and in slightly better agreement in the upper range.

Negative acidity values represent excess alkalinity contributed by constituents such as bicarbonates. Negative acidities are frequently reported as zero but the negative values are needed if the final acidity of a mixed water system is to be computed from the acidities of each of its component waters. In general, the negative acidities should be fairly close in absolute value to the alkalinity concentrations, though there can be exceptions.

Acidity is normally determined on unfiltered and untreated raw water samples but such samples were not available at the end of the study when the decision was made to analyze the available samples for acidity. Only filtered samples were available then, so the acidity data reported may differ appreciably from what would have been obtained from unfiltered, untreated samples. If the sediment contained pyritic materials, as was sometimes the case in the study area, then the unfiltered samples would have been higher in acidity than the filtered samples used in this study. If the sediment contained carbonate minerals (rarely the case in the study area) then the unfiltered samples would have been lower in acidity than the values given in this report.

Alkalinity--

Reported as mg/l calcium carbonate equivalent. A 25 ml portion of the "F" sample was titrated with 0.02 N H_2SO_4 to a calculated end point using a Mettler autotitrator (described above). During the first few months of the study alkalinity was determined on 50 ml portions of the unfiltered, untreated "U" sample. After it was observed that the pH of a few of the "U" samples dropped appreciably during storage before analysis, the remaining alkalinities were determined on 25 ml portions of the "F" samples. It had been observed that the "F" samples were not only more stable than the "U" samples, but maintained pH

values that agreed more closely with field pH values. The titration was done in two steps, first to a preliminary end point at pH 5.64, then to a final computed end point based on the number of milliliters of titrant required to reach the preliminary end point. Samples with pH values less than 5.64 were assumed to have no measurable alkalinity. The end points used were essentially the same as those given by Barnes (1964, p. H15, Table 4) but minor corrections were added to account for dilution of the samples by titrant.

Alkalinities of the filtered samples used in this study may be either higher or lower than alkalinities that would have been measured in unfiltered samples, as explained in the preceding section on acidity.

During storage calcium carbonate tended to precipitate from many of those samples in which alkalinity exceeded about 100 mg/l. The reported alkalinity, carbonate, and bicarbonate values from these samples may be lower than the concentrations that would have been found had the samples been analyzed before storage.

Ammonia--

Reported as mg/l N. Ammonia was analyzed on the "FN" sample with a Technicon autoanalyzer II using industrial method number 154-71W tentative, dated February 1973. Technicon gives the detection limit for this method as 0.024 mg N/l and the coefficient of variation at 0.14 mg N/l as 0.31 percent.

Bicarbonate--

Computed from alkalinity, pH, and ionic strength using the formula:

$$HCO_3 = \frac{(1.219)(A2)(HYD)(ALK)}{(9.6 \times 10^{-11}) + (HYD)(A2)}$$

Wherein HCO_3 is bicarbonate in mg/l, ALK is the alkalinity in mg/l calcium carbonate equivalent, HYD is the hydrogen ion concentration in moles/l computed by: HYD = antilog (-pH), and A2 is the activity coefficient for divalent ions computed from the equation:

$$A2 = \text{antilog} \frac{-2.034 \quad \sqrt{I}}{1 + 1.64 \sqrt{I}}$$

where I is the ionic strength (Garrels and Christ 1965, p. 61-62). The value 1.64 is the product of 0.3281 (Garrels and Christ 1965, Table 2.6) and 5 [an approximate value for major ions in the streams sampled (Garrels and Christ

1965, Table 2.7)]. This equation is valid when the total ionic concentration is less than or equal to 0.1 mole per liter and the sample temperature is near 25°C. The ionic strength, I, is defined by:

$$I = 0.5 \sum_{i=1}^{n} C_i Z_i^2$$

wherein n is the number of ion species, i, in the solution; C_i is the concentration in moles/l of ion species, i, in the solution; and Z_i is the charge (or valence) of the ion (Garrels and Christ 1965, p. 56).

Carbonate--

Computed from alkalinity and bicarbonate using the equation:

$$CO_3 = 0.4917\ (1.219\ ALK - HCO_3)$$

wherein CO_3 is carbonate as mg/l, HCO_3 is bicarbonate in mg/l, and ALK is alkalinity in mg/l calcium carbonate equivalent.

Chloride--

Except for the last few samples chloride was determined on the "F" sample with a Technicon autoanalyzer II using industrial method number 99-70 W/B released September 1974, revised February 1976. This procedure depends on the liberation of thiocyanate ion from mercuric thiocyanate by the formation of soluble, un-ionized mercuric chloride. In the presence of ferric ion, the liberated thiocyanate forms a highly colored ferric thiocyanate proportional to the original chloride concentration. Technicon gives the coefficient of variation of this method at 5.0 mg/l as $\pm$ 0.42 percent, and the detection limit as 0.2 mg/l.

Chloride samples collected during the last 2 months of the study were analyzed on a Coulter Industrial Kem-O-Lab, model IKL, using procedures supplied with the instrument dated February 1979. This procedure uses ferric thiocyanate as the colorimetric indicator and is similar to the automated method described in Methods for Chemical Analysis of Water and Wastes (EPA 1974, p. 31-34). The detection limit is about 0.1 mg/l.

Conductivity--

See Specific Conductance

Dissolved Solids--

See Total Dissolved Solids, calculated

Neutralization Ratio--

Computed from the equation:

$$\text{Neutralization ratio} = \frac{\text{gross alkalinity (in meq/l)}}{\text{gross acidity (in meq/l)}}$$

$$= \frac{(Ca^{++} + Mg^{++} + Na^{+} + K^{+}) - (Cl^{-} + F^{-} + NO_3^{-})}{SO_4^{=}}$$

wherein all ions in the water sample are reported in milliequivalents per liter (Hollyday and McKenzie 1973, p. 24-25). The neutralization ratio is unity when the gross alkalinity produced during formation and neutralization of mine drainage is equal to the gross acidity produced concurrently. A neutralization ratio greater than 1.00 indicates that the alkalinity formed was more than enough to neutralize the gross acidity from sulfuric acid released to the water by oxidation of iron sulfide.

Fluoride concentrations were not obtained as a part of this study and so were omitted from the computation of the neutralization ratios. Since fluoride rarely exceeds a few mg/l in natural waters and is low in comparison to the other ions summed in the computations, only negligible errors have been introduced by its omission.

Nitrate--

See Nitrate Plus Nitrite

Nitrate Plus Nitrite--

Nitrate and nitrite were analyzed together on the "F" sample with a Technicon autoanalyzer II using a modification of industrial method number 100-70W, released September 1973. Nitrate is reduced to nitrite by a copper-cadmium reductor column developed by Willis (1980). The nitrite ion reacts with sulfanilamide under acidic conditions to form a diazo compound, which couples with N-1-naphthylethylenediamine dihydrochloride to form a reddish purple azo dye. Technicon states that the coefficient of variation at 1.0 mg N/l is 0.31 percent and that the detection limit is 0.04 mg N/l.

The preserved "FN" samples collected late in the study were analyzed by the Argonne National Laboratory using a similar procedure (Technicon industrial method number 158-71W/A tentative, released December 1972, revised June 1977). The Argonne National Lab reported the detection limit using this method as 0.1 mg N/l.

Nitrite--

See Nitrate Plus Nitrite

Nitrogen, Total Kjeldahl--

Total Kjeldahl nitrogen was analyzed simultaneously with total phosphorus on the "KJ" sample using a Technicon autoanalyzer II and industrial methods number 376-75W/B, released November 1975, and number 334-74W/B released January 1976, both methods revised March 1977. The Argonne National Laboratory reported the detection limit using this method as 0.20 mg/l.

Orthophosphate--

Orthophosphate was analyzed colorimetrically on the "FP" sample with a Technicon autoanalyzer II using industrial method number 155-71W tentative, released January 1973. Ammonium molybdate reacts in an acid medium containing ascorbic acid and antimony to form a phosphomolybdenum-blue complex. The Argonne National Laboratory reported the detection limit using this method as about 0.01 mg/l.

pH--

Reported as pH units. The laboratory pH values were initially analyzed on the unfiltered "U" samples; but after a few months were analyzed only on the filtered "F" samples after it was observed that the latter were in closer agreement with field pH measurements than were the former. The pH value of many of the "U" samples tended to change appreciably (usually to lower pH values) during a few weeks in storage, while the pH value of almost all the "F" samples remained nearly constant for a year or more. Five different types of meters were used to measure pH values. Two of these were highly accurate while two used during the first half of the study were frequently in error, sometimes by as much as two full pH units. Questionable pH values were rerun using one of the more reliable meters when sufficient sample remained.

Phosphorus, Total--

Total phosphorus was analyzed simultaneously with total nitrogen on the "KJ" sample using a Technicon autoanalyzer II and the same methods given earlier for total Kjeldahl nitrogen. The Argonne National Laboratory reported the detection limit using this method as 0.05 mg/l.

Settleable Matter--

Settleable matter was determined as the volume of material settling in an Imhoff cone in 45 minutes, in accordance with the procedure given in Standard Methods for the Examination of Water and Waste Water (APHA 1975, p. 95-96). Precision data are not available but samples were usually read to hundredths of a milliliter. Settleable matter was determined on the approximately 1-liter "SV" sample.

Specific Conductance--

Reported as micromhos/cm at 25° Celsius. Specific conductance was determined on the "U" sample during the first few months of the study, then on the "F" sample for the remainder of the study. This change was made because some samples containing sediment increased in conductivity after a few months storage. The use of the "F" sample gave more reliable results, since most samples were stored prior to analysis. Samples collected during the first third of the study were analyzed on a Yellow Springs Instrument Company model 31 conductivity bridge which gave values reproducible to within ± 30 percent. Many of these samples were rerun on the equipment used for the later samples.

The last two-thirds of the samples were analyzed using improved techniques and a temperature-compensated Markson Electromark analyzer. Precision data are not available but sample reproducibility is about ± 2 percent.

Sulfate--

Sulfate was analyzed on the "F" sample during the first few months of the study, and on the "FA" sample during the remainder of the study. The change was made to avoid interference from the precipitate which formed in some of the unacidified samples. Sulfates were analyzed by a turbidimetric technique using Sulfaver IV powder pillows (Hach Chemical Company 1970, p. 91). Absorbance by the barium sulfate suspension was measured using a Bausch and Lomb Spectronic 20 spectrophotometer. Sulfate standards deviated as much as ± 30 percent from the known concentration when measured from this standard curve. In the latter months of the study the standard curve was calibrated daily, and data obtained during this period probably did not deviate more than about ± 15 percent from the true values.

Suspended Solids--

Suspended solids were determined gravimetrically on either the "U" or "SA" sample using Millipore 47-mm fiberglass filter paper (equivalent to about 0.45 micron pore size), and an analytical balance sensitive to 0.1 mg. Samples and filter paper were dried at 105° C for a minimum of 4 hours and cooled 1.5 hours in a desiccator before being weighed. Acidified "SA" samples were used in the beginning of the study to prevent precipitation of salts which might add to the suspended solids concentration. Unacidified samples were used after a preliminary investigation indicated that error due to precipitation of salts was negligible, and that dissolution of some of the sediment by the acid might introduce a larger error. A further inspection and analysis of "U" and "SA" samples late in the study indicated that during storage there had been appreciable precipitation of iron compounds from the more acid samples, and of calcium carbonate from the more alkaline samples. In either case this would cause the measured suspended solids concentrations to be higher than they would have been at the time the samples were collected. Unreasonably high suspended solids values were systematically deleted when field notes indicated that the streams had been

clear when sampled and when orange or yellow precipitates of iron compounds had formed before analysis. Suspended solids concentrations were less seriously affected by precipitation of calcium carbonate (most adhered to the walls of the container), so little effort was made to delete data that might have been affected by this precipitate. Samples collected during the first half of the study were stored for a year or more before analysis for suspended solids and so are more likely to have been affected by precipitates than the remaining samples, which received more prompt analysis.

The "U" and "SA" samples were collected solely for turbidity and suspended solids analyses; nevertheless, by the time the suspended solids analyses were performed an appreciable part of many of these samples had been lost--either through use in other analyses or through slow leakage from overturned containers. In both cases supernatant liquid was lost, leaving essentially all the now-settled suspended solids. All samples weighing less than 100 grams were corrected for this loss of liquid and were assumed to have weighed exactly 100 grams when collected. Suspended solids concentrations in these 100-ml samples are not highly reproducible, so errors introduced by this type of sample reconstruction should be minor by comparison. Most of these samples were collected from shallow streams and there is some evidence that the recommended collection techniques were not always carefully followed. Traces of bottom material, algae, and/or floating debris probably account for many of the higher values observed in the unmined watershed samples. Suspended solids data were deleted where there was evidence that bottom materials (generally sand and gravel) had been scooped up from the streambed during seasons of low flow. The true suspended solids concentrations should almost always be equal to or less than the reported values.

A big percentage of the samples were clear and without visible turbidity. Careful work by the author indicated that most of these should contain no more than 4 or 5 mg/l suspended solids. After a certain date, the suspended solids data generated by two of the eight analysts stand apart in that most of them run 20 to 100 mg/l higher than data by the other analysts, or data analyzed earlier by these two analysts. The data in question, 2,300 values out of a total of 6,400 analyzed can readily be identified as work of these two analysts from the data alone. Suspended solids data that ran about 40 to 100 mg/l or more above the norm for one group of 300 of these samples were deemed so defective that all of them were deleted. Most of the remaining 2,000 questionable values have been left in the various state reports but they have been marked with asterisks to indicate that they are 5 to 80 mg/l (generally 20 to 40 mg/l) higher than the true values.

Total Dissolved Solids, Calculated--

The calculated total dissolved solids value is the sum of all the dissolved constituents and approximates the quantity of dry residue that would be left after evaporation. It is assumed that all the bicarbonate is converted to carbonate and carbon dioxide when evaporated to dryness at 180° C, so the bicarbonate is multiplied by 0.4917 to give an estimate of residual carbonate. The silicon value is multiplied by 2.142, on the assumption that silicon dioxide residue is left upon evaporation.

Turbidity--

Reported as Jackson turbidity units (JTU)--equivalent to formazin or nephelometric turbidity units. Turbidity was measured on the "U" samples except for a few measured on "SA" samples. Transmittance of light through the sample contained in a 1-inch test tube was measured at a wavelength of 450 nanometers with a Bausch and Lomb Spectronic 20 spectrophotometer. Turbidity was determined from transmittance using a table prepared by the Hach Chemical Company (1970, p. 97). This table was prepared from standard formazin solutions calibrated with a Jackson candle turbidimeter. Recent checking indicates that this table is not very suitable for analysis of natural water samples in that values obtained in the more turbid samples were highly dependent upon the dilution chosen. Turbidities computed from a transmittance of 80 would be about double those computed from a transmittance of 20.

The turbidity values reported have not been corrected for the small positive bias which may have been introduced by the presence of true color in some of the water samples. Numerous analysts produced the turbidity data contained in this report and it is obvious that some of them deviated from the prescribed methods, perhaps by not adequately dispersing the settled materials or by using 1/2-inch test tubes instead of 1-inch test tubes. In general, most of the questionable data appear to be too low. The most obviously defective turbidity data were deleted. Unreasonably high turbidity values were systematically deleted when field notes indicated that the water had been clear when sampled but the orange and yellow precipitates of iron compounds had formed before analysis.

SECTION 3

RESULTS

A tabulation of sites by site number, county, date of surface mining, latitude, longitude, surface drainage area, percentage of land disturbed by surface mining, and site name is given in Table 1. Site locations and watershed boundaries were drawn on U. S. Geological Survey 7 1/2 minute topographic maps which are reproduced in Figures 2 through 61. Field observations and analytical data are tabulated in Tables 4 through 88. An interpretive report, to be released later, will cover all nine states in the Appalachian study area.

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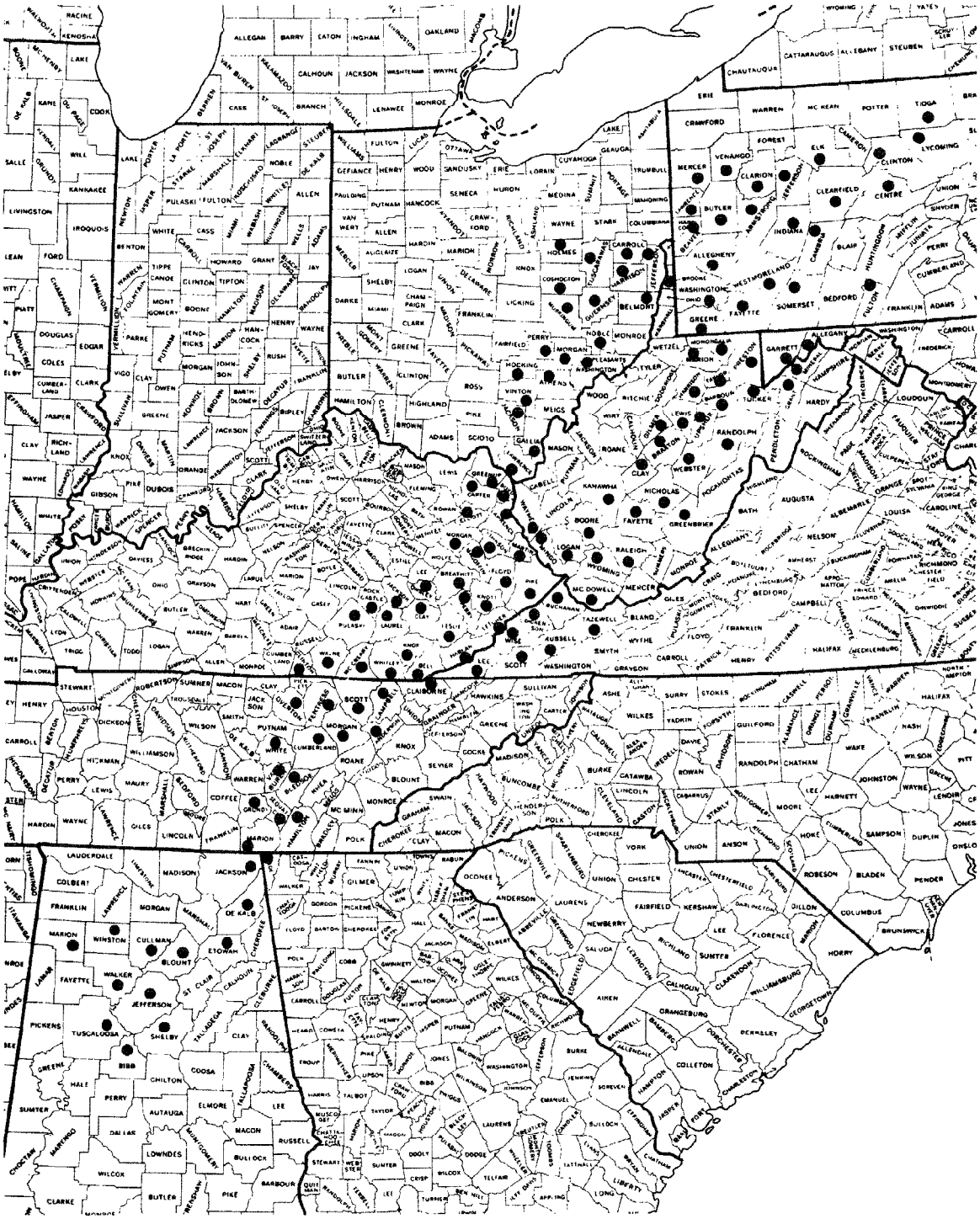

Figure 1. The study area. (Each dot marks one of the 136 Appalachian counties included in this study)

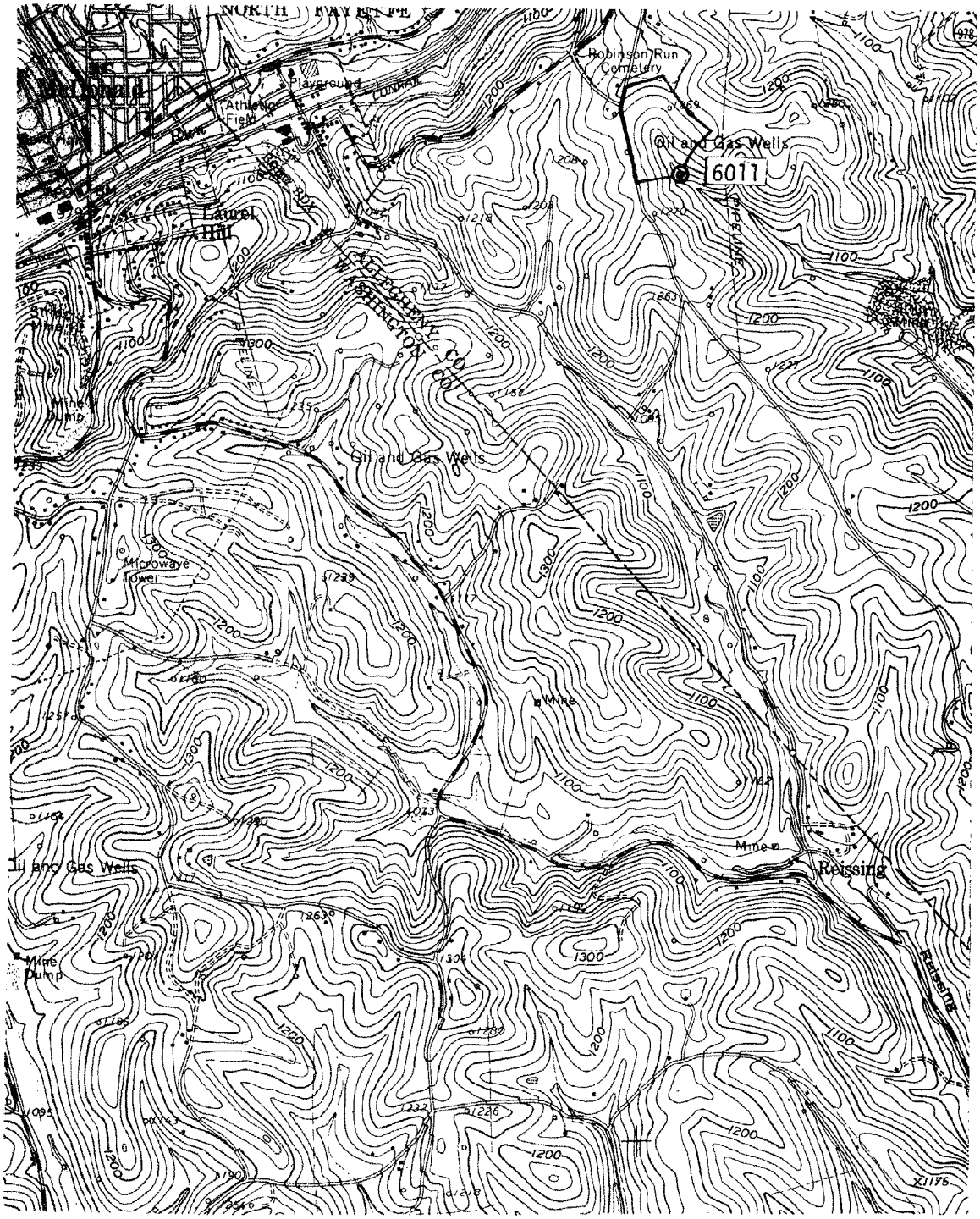

Figure 2. Location map for site 6011, Allegheny Co., Pennsylvania. Cannonsburg Quadrangle.

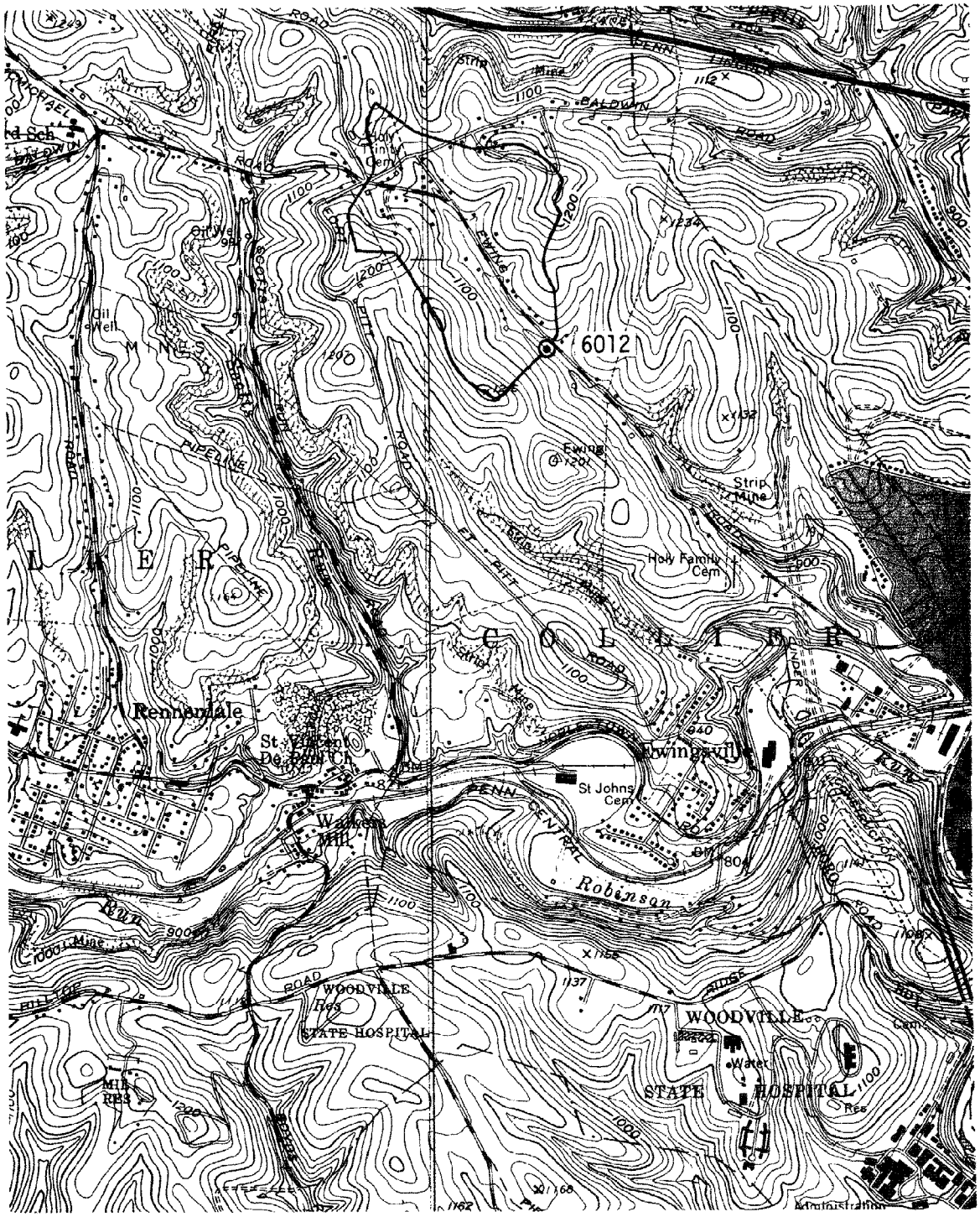

Figure 3. Location map for site 6012, Allegheny Co., Pennsylvania. Pittsburgh West and Oakdale Quadrangles.

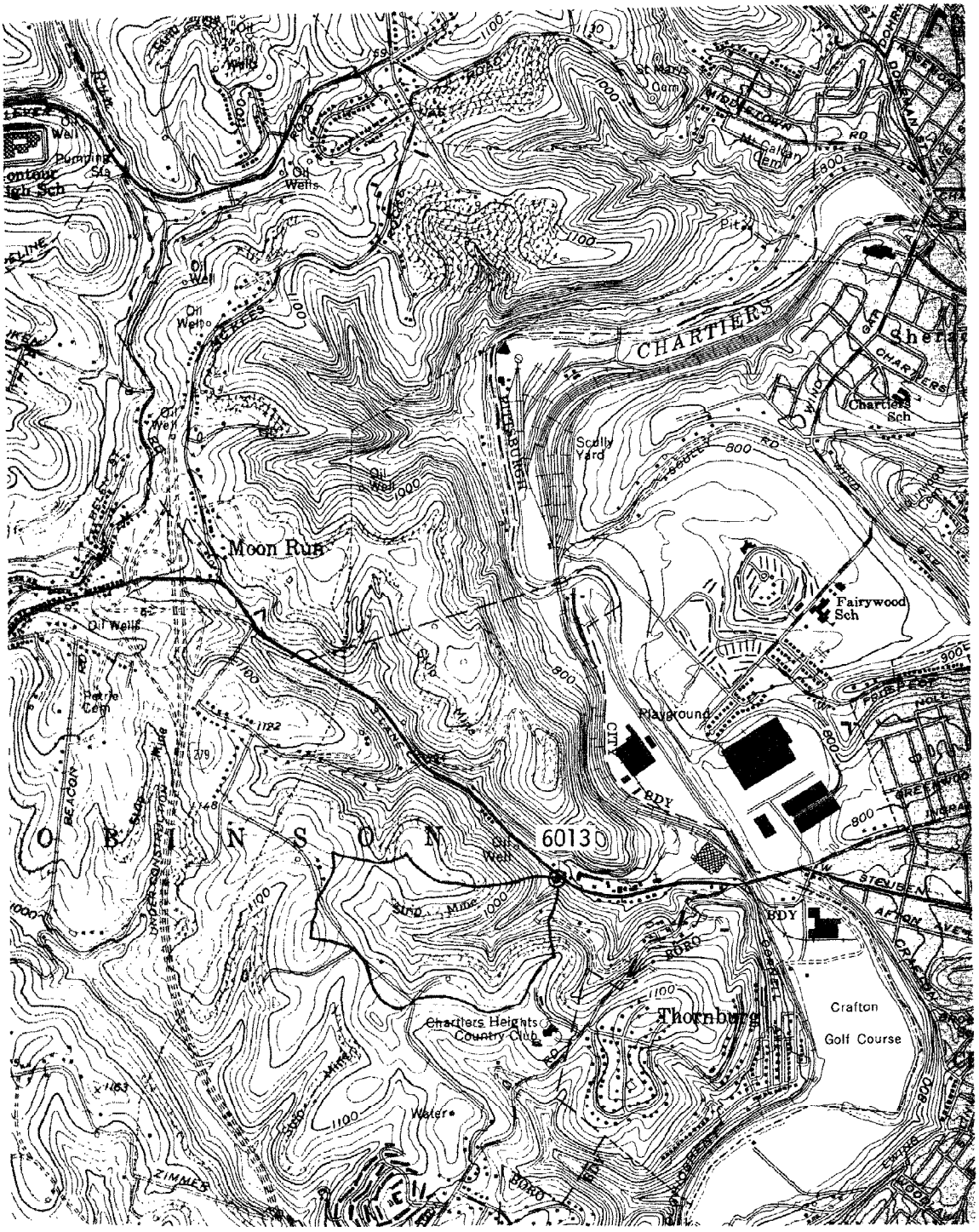

Figure 4. Location map for site 6013, Allegheny Co., Pennsylvania. Pittsburgh West Quadrangle.

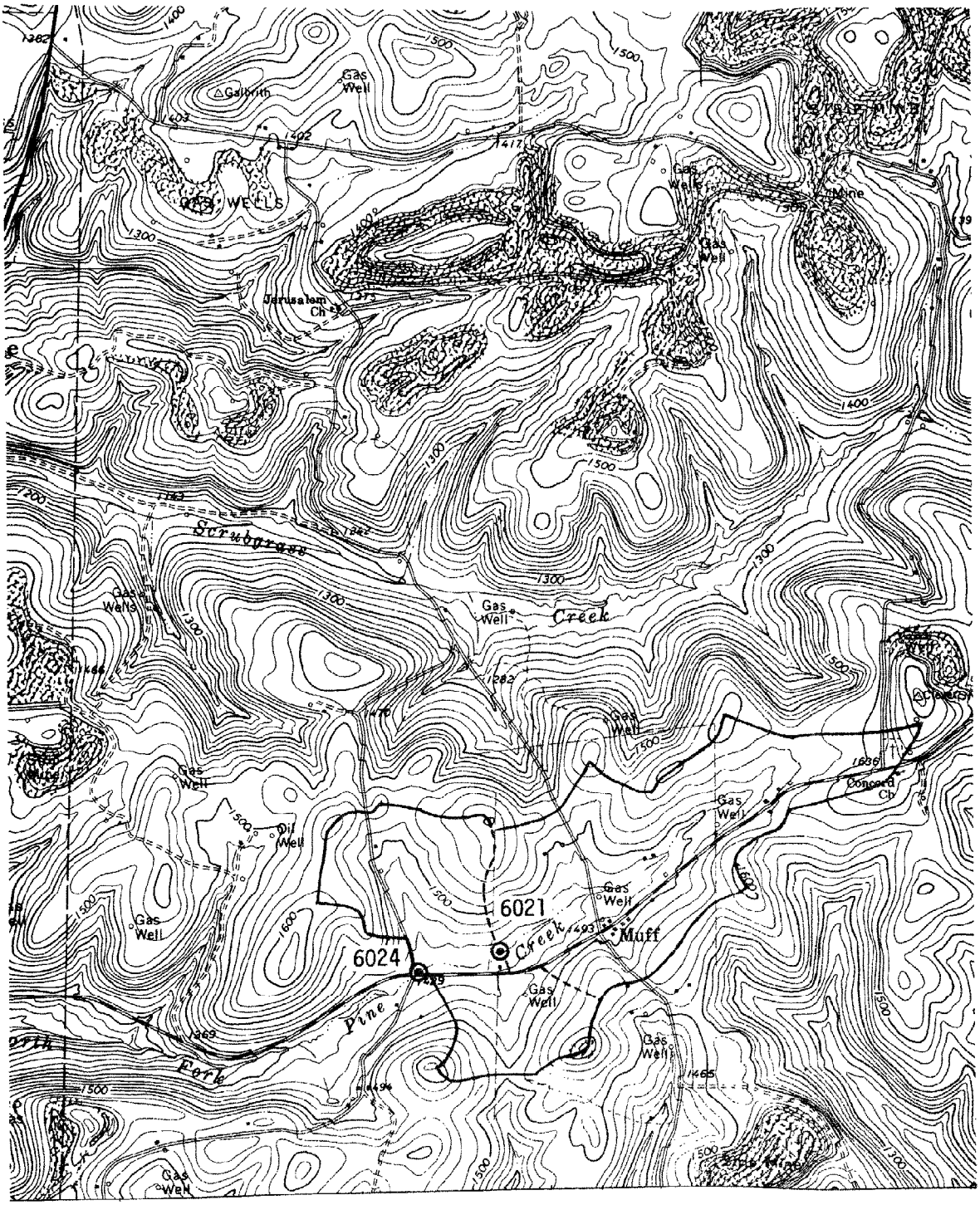

Figure 5. Location map for sites 6021 and 6024, Armstrong Co., Pennsylvania. Distant Quadrangle.

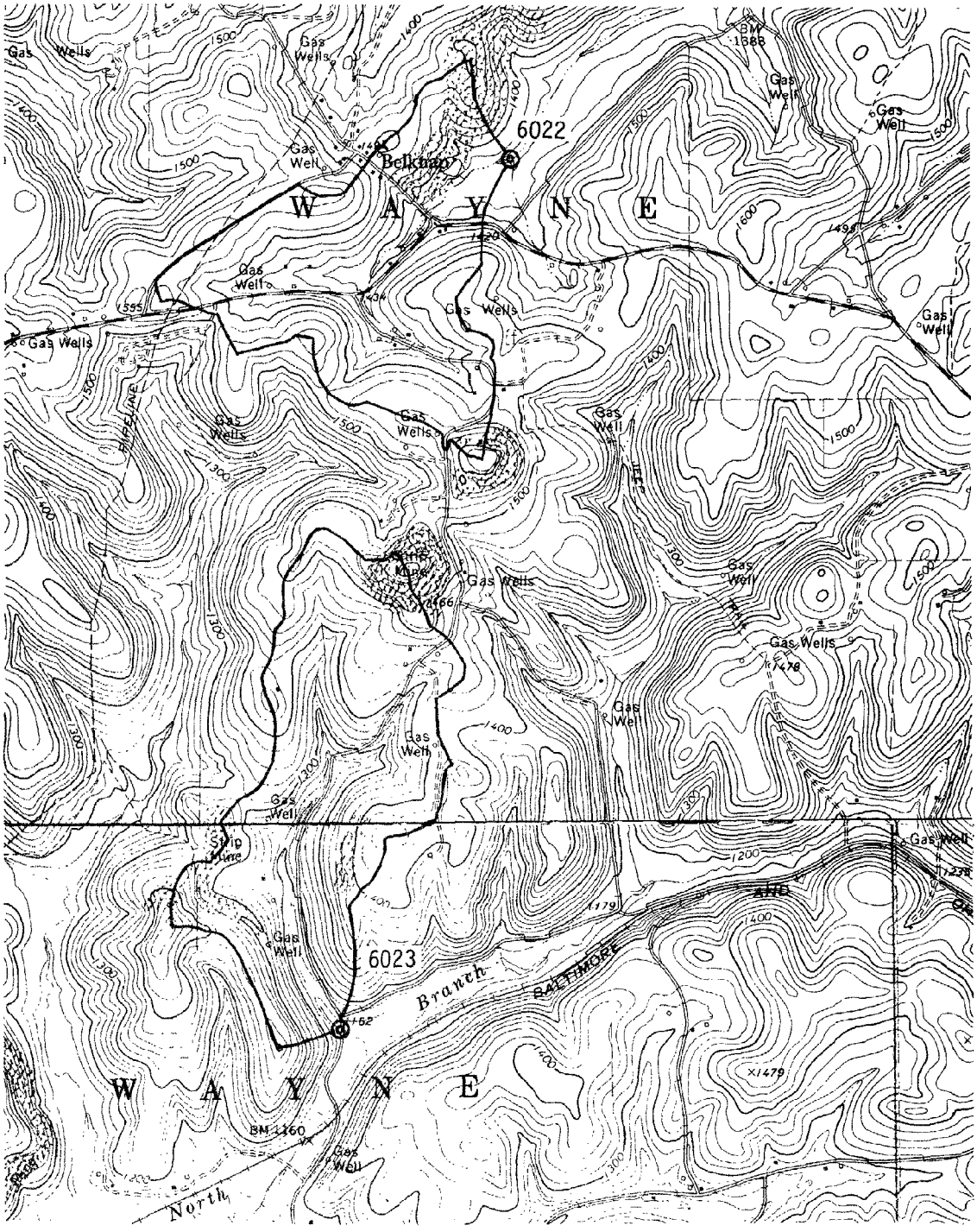

Figure 6. Location map for sites 6022 and 6023, Armstrong Co., Pennsylvania. Distant and Rural Valley Quadrangles.

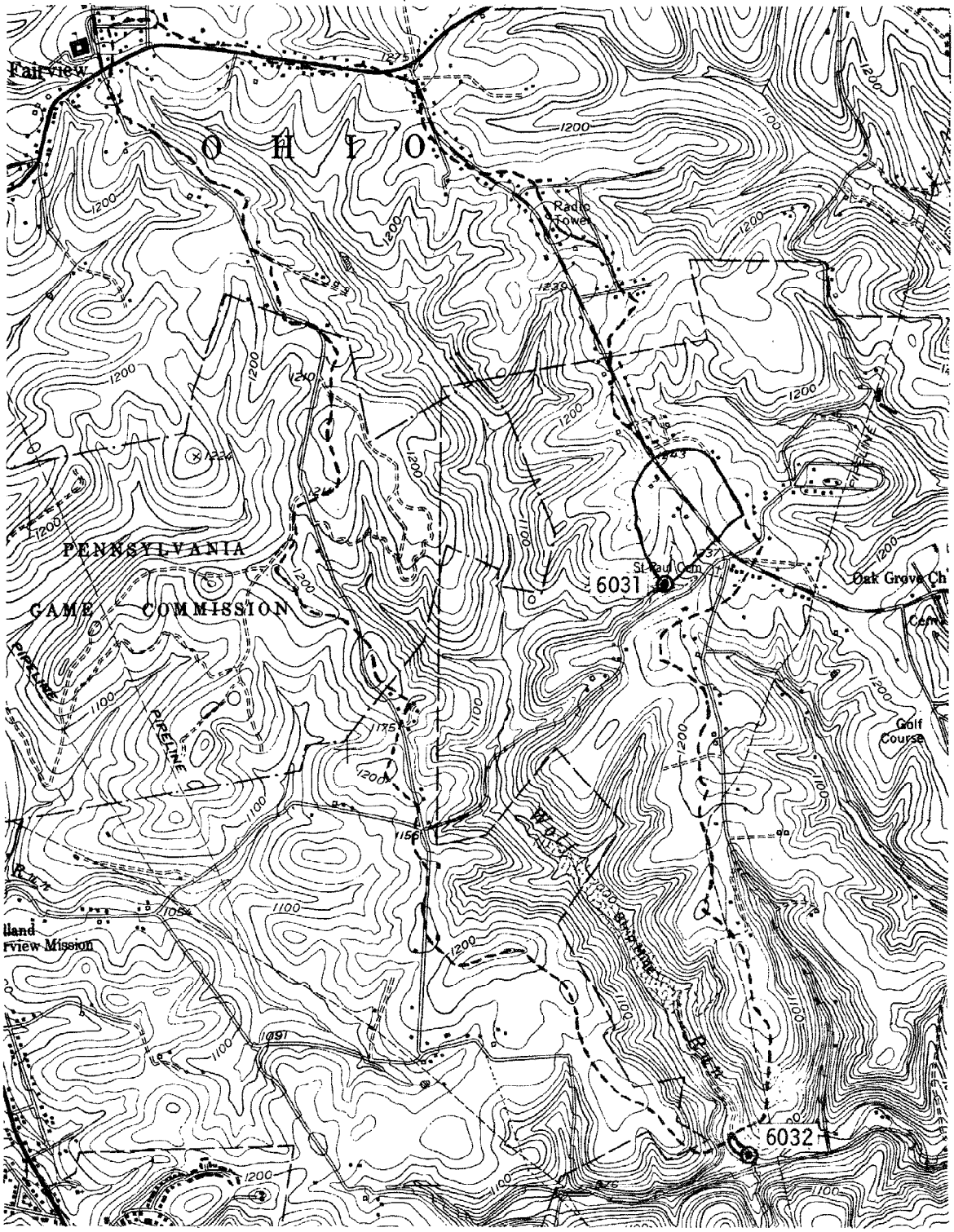

Figure 7. Location map for sites 6031 and 6032, Beaver Co., Pennsylvania. Midland Quadrangle.

Figure 8. Location map for site 6033, Beaver Co., Pennsylvania. New Galilee Quadrangle.

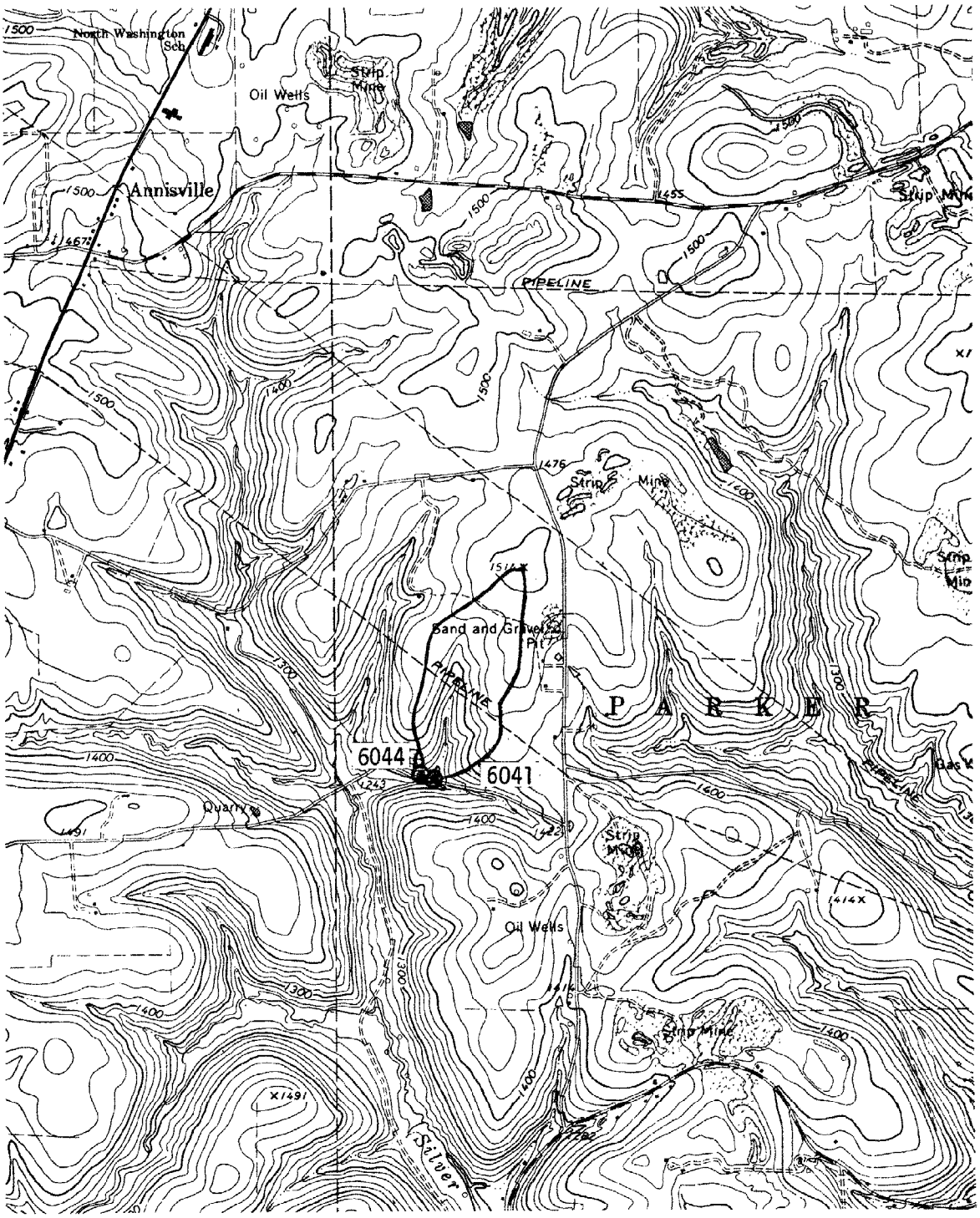

Figure 9. Location map for sites 6041 and 6044, Butler Co., Pennsylvania. Hilliards Quadrangle.

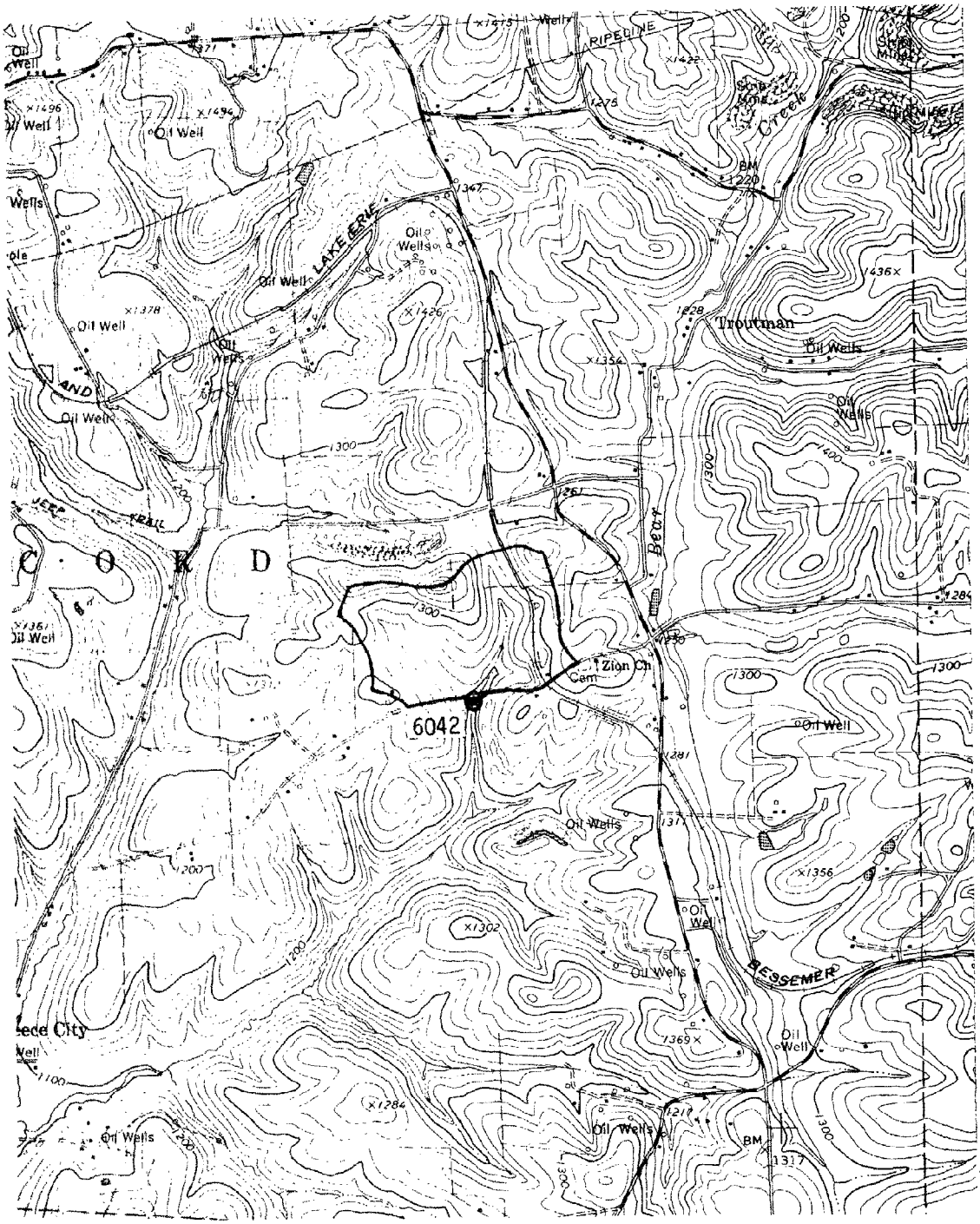

Figure 10. Location map for site 6042, Butler Co., Pennsylvania. East Butler Quadrangle.

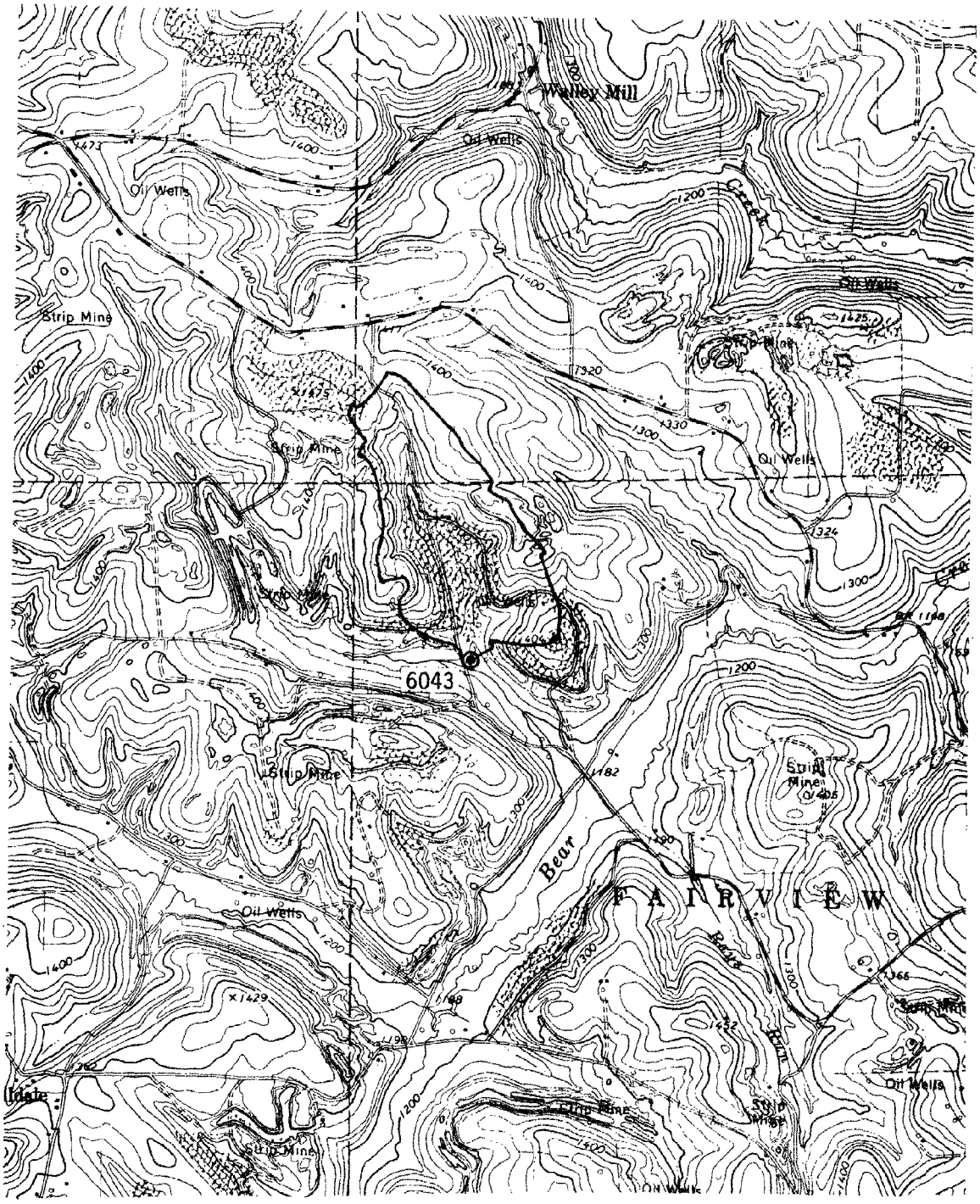

Figure 11. Location map for site 6043, Butler Co., Pennsylvania. Hilliards Quadrangle.

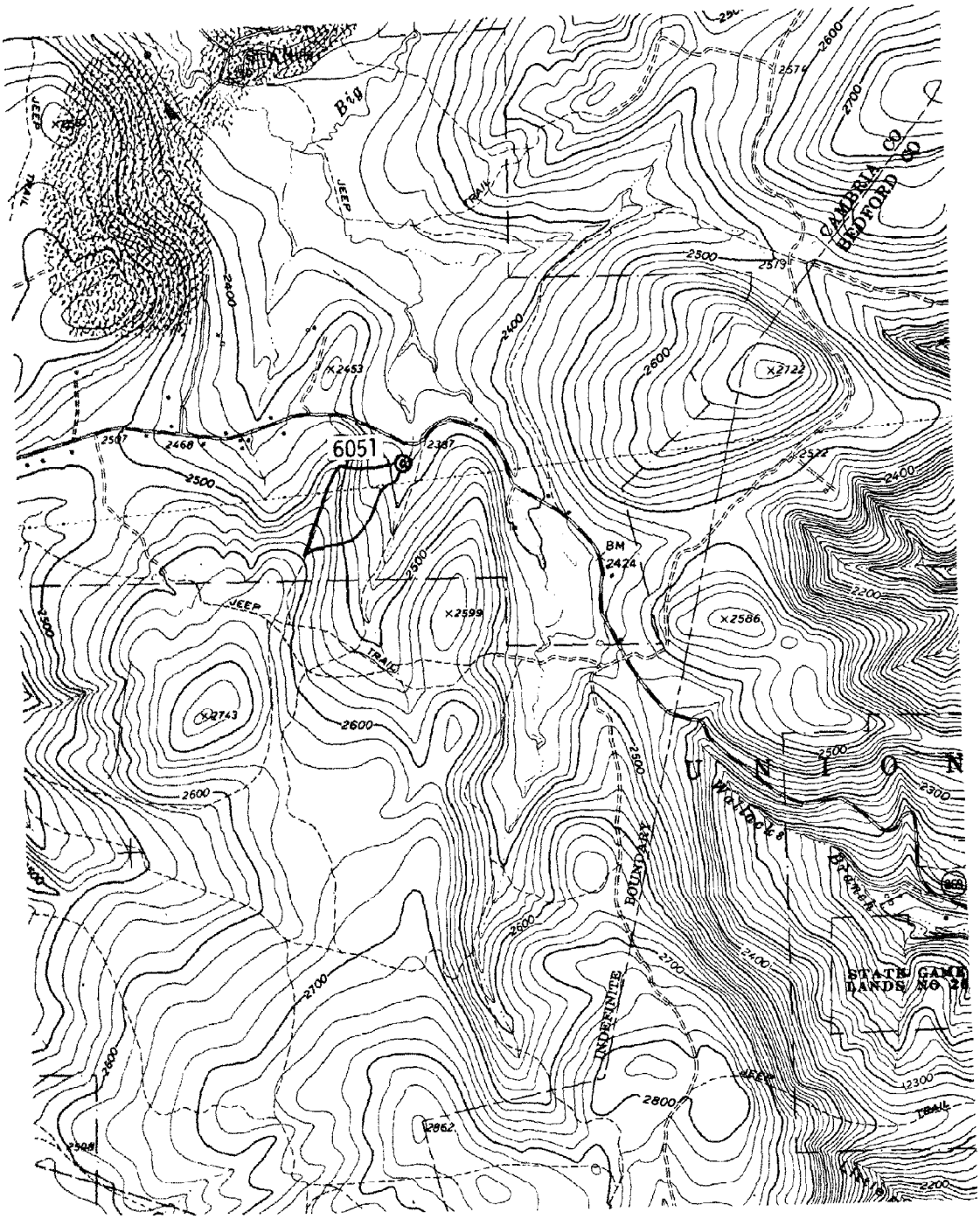

Figure 12. Location map for site 6051, Cambria Co., Pennsylvania. Beaverdale Quadrangle.

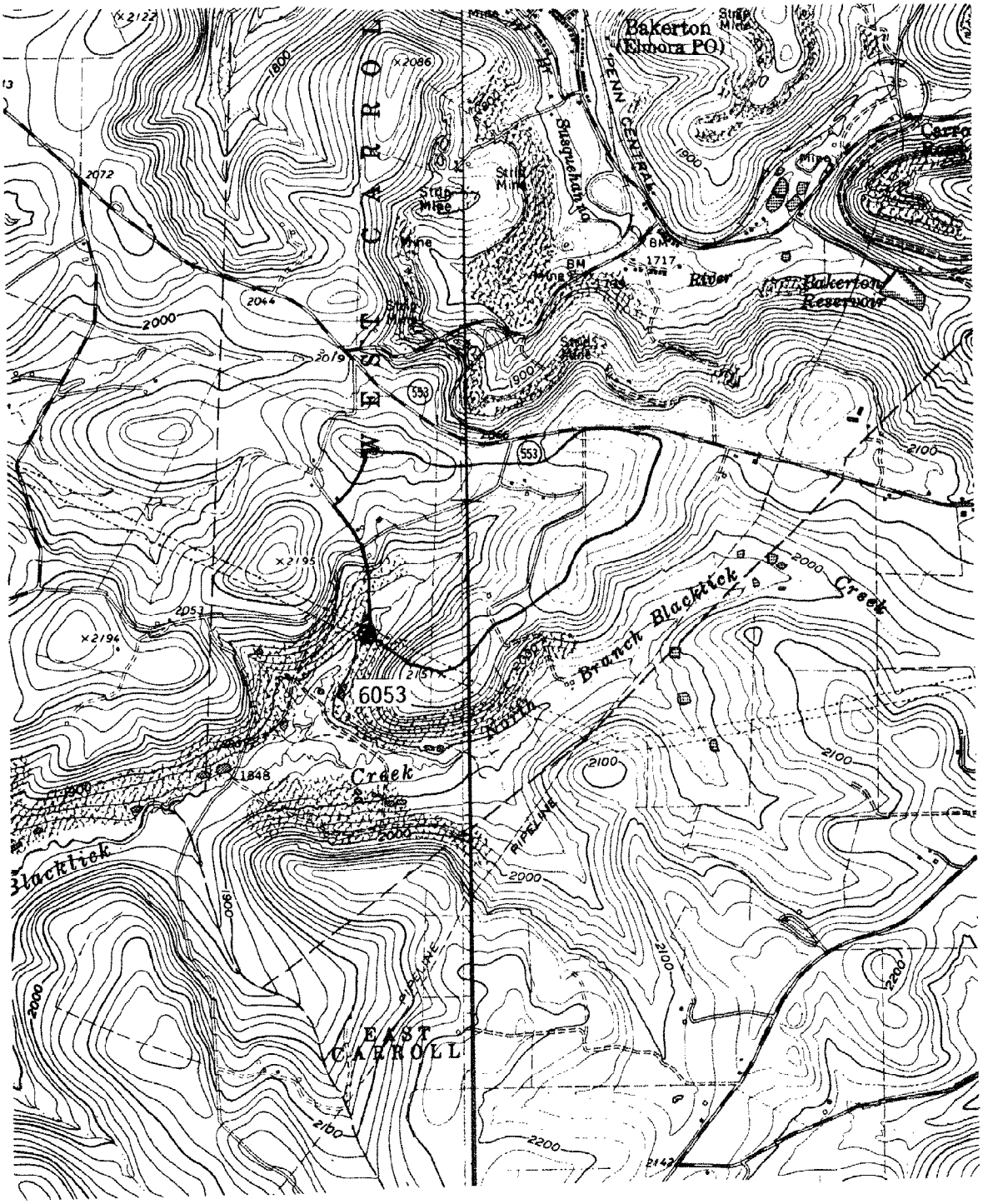

Figure 13. Location map for site 6053, Cambria Co., Pennsylvania. Colver and Carrolltown Quadrangles.

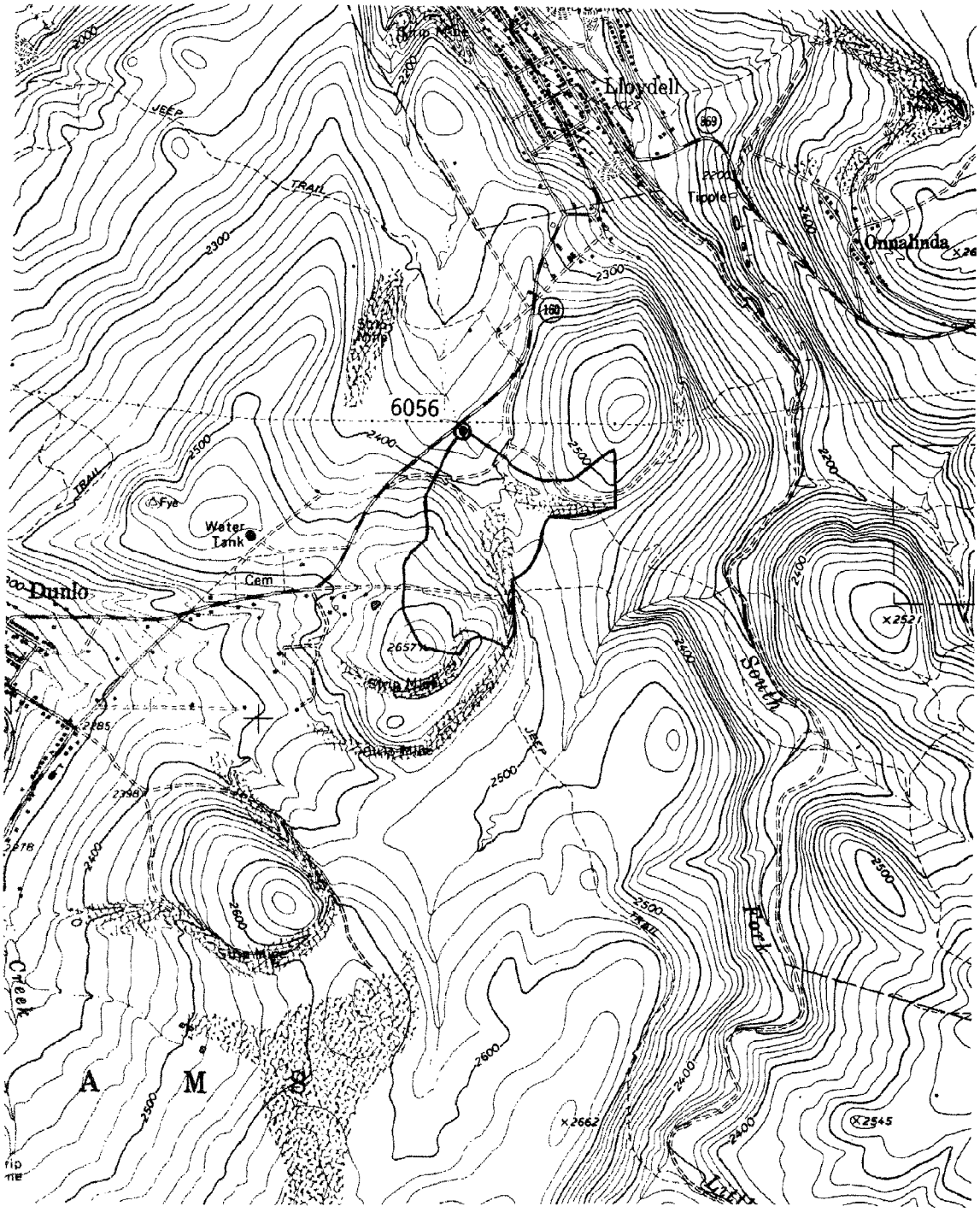

Figure 14. Location map for site 6056, Cambria Co., Pennsylvania. Beaverdale Quadrangle.

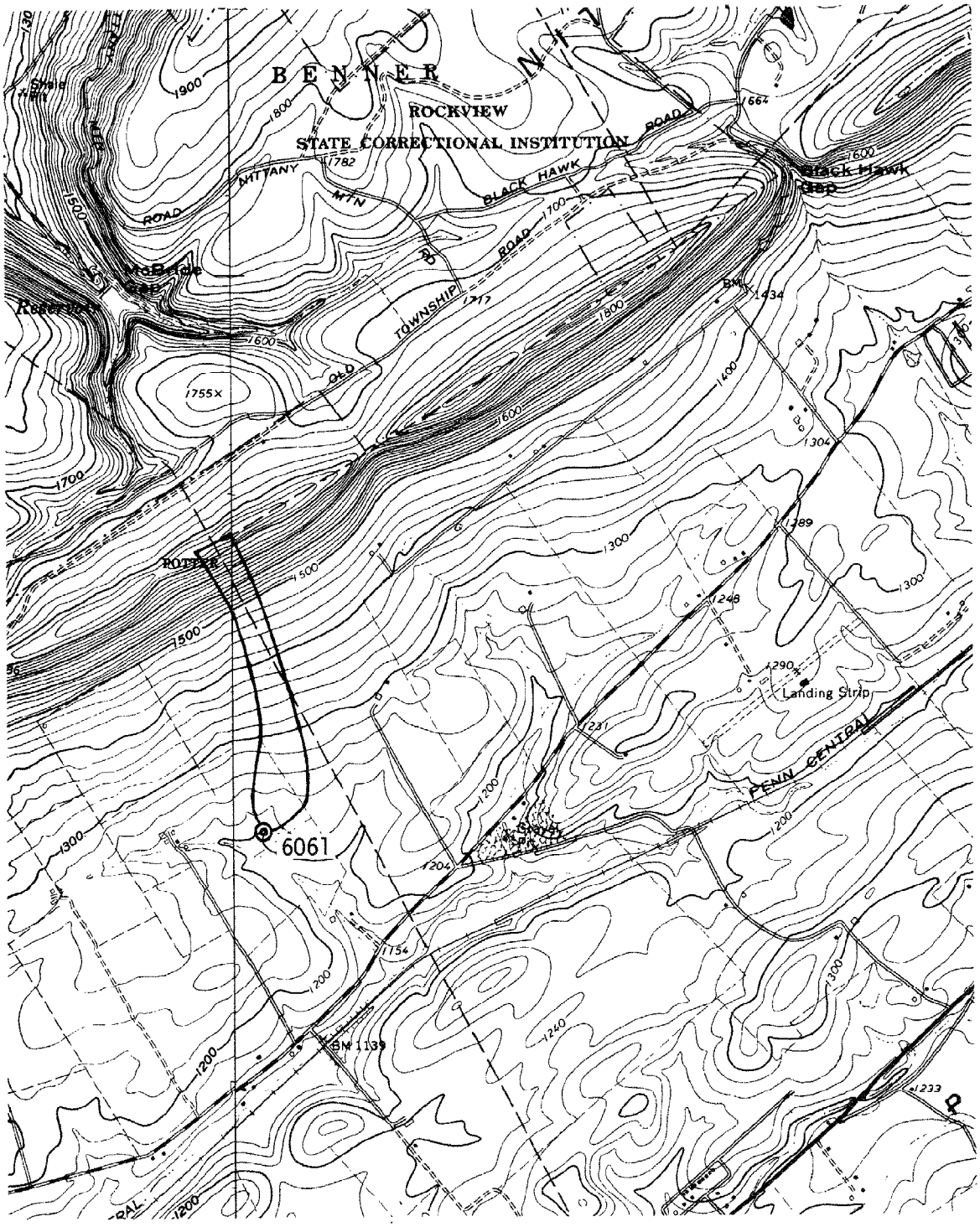

Figure 15. Location map for site 6061, Centre Co., Pennsylvania. Centre Hall and State College Quadrangles.

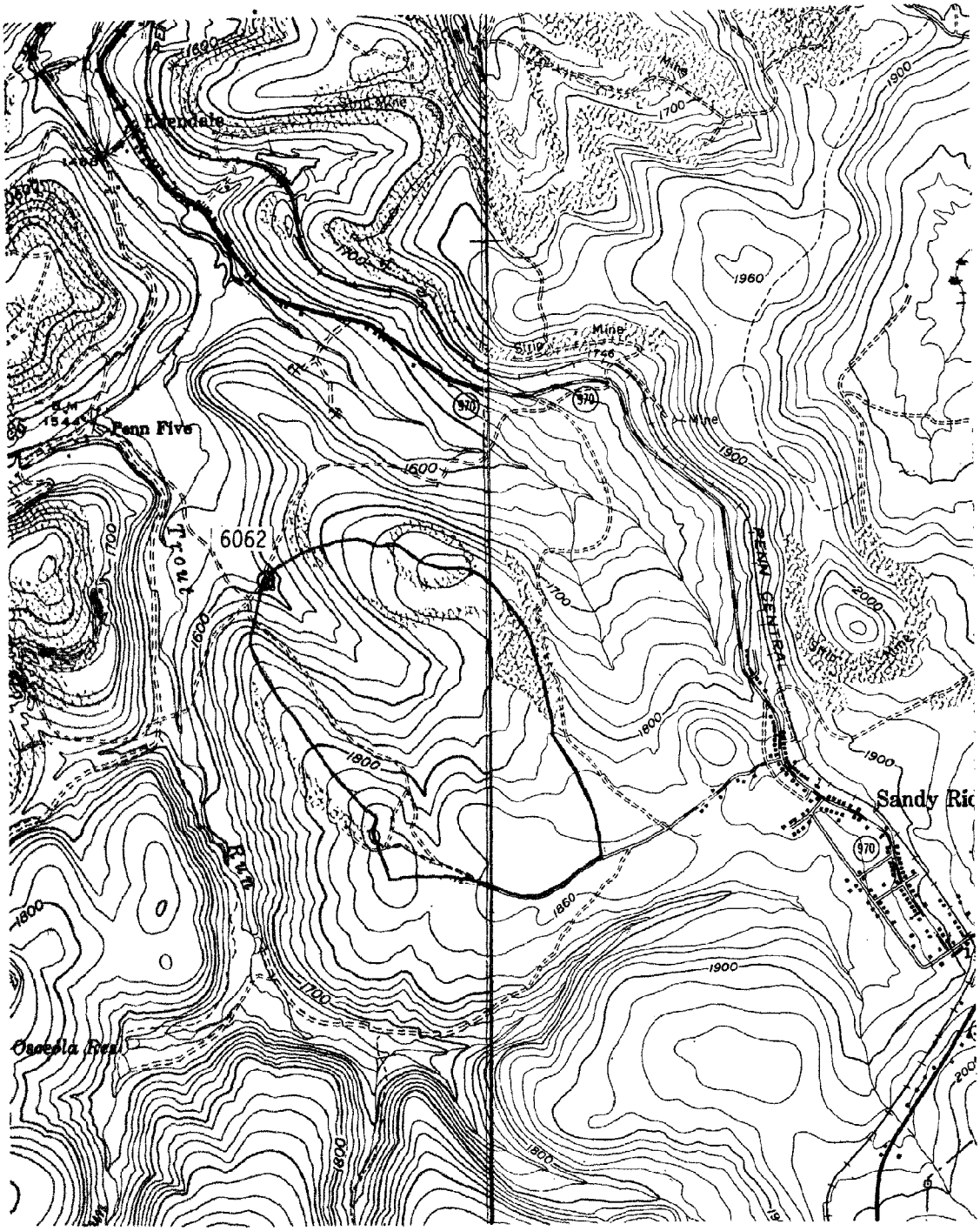

Figure 16. Location map for site 6062, Centre Co., Pennsylvania. Houtzdale and Sandy Ridge Quadrangle.

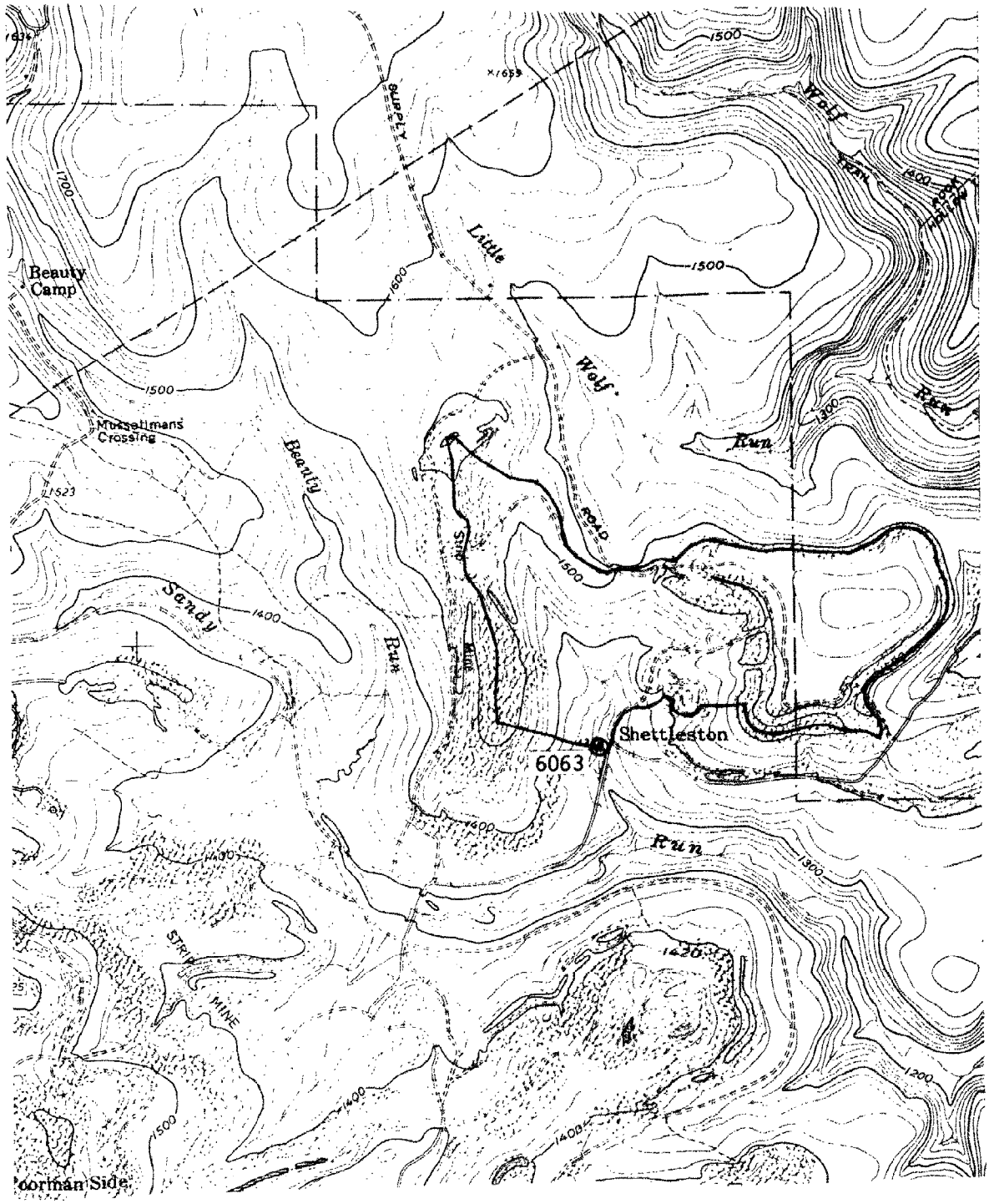

Figure 17. Location map for site 6063, Centre Co., Pennsylvania. Snow Shoe Quadrangle.

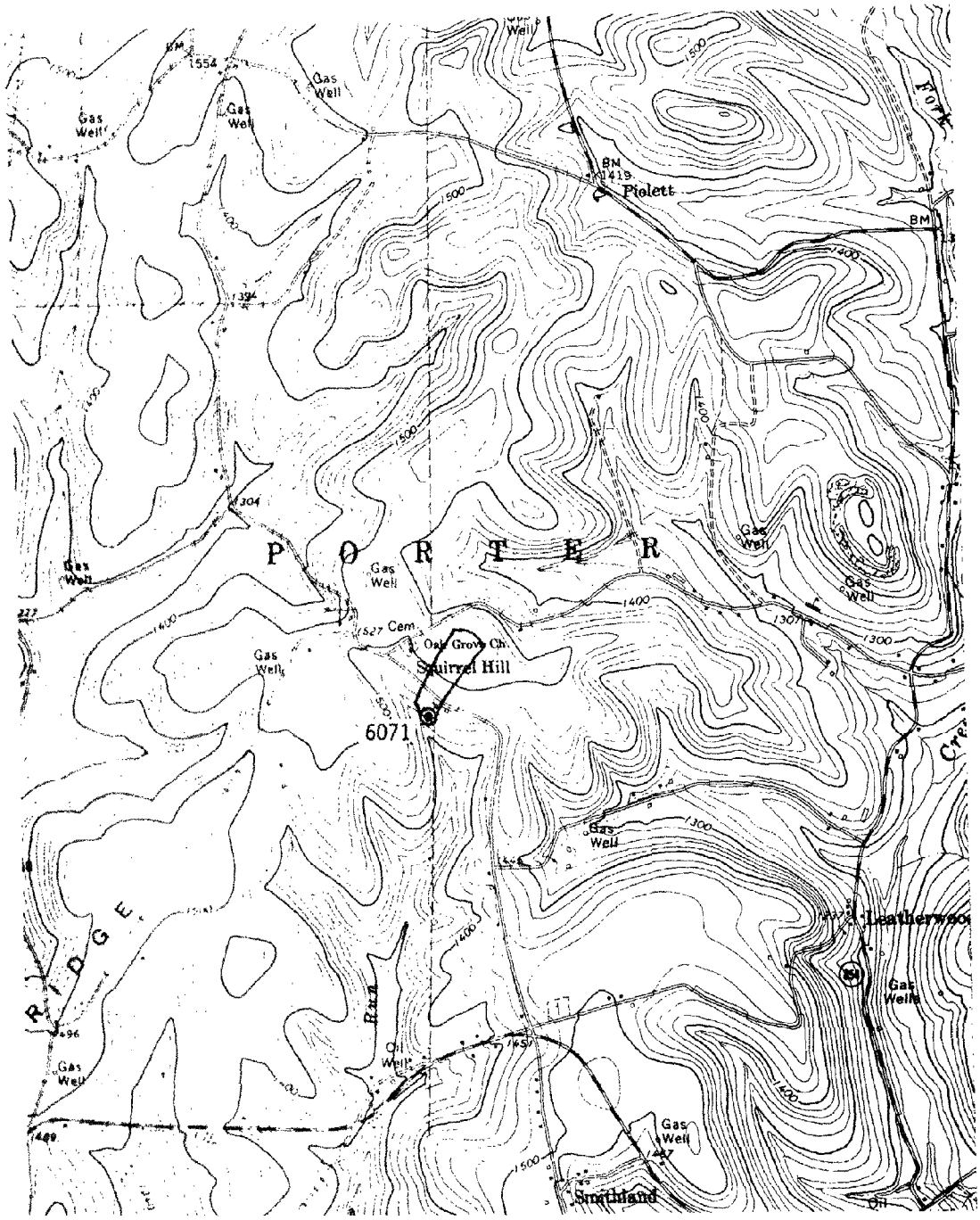

Figure 18. Location map for site 6071, Clarion Co., Pennsylvania. Sligo Quadrangle.

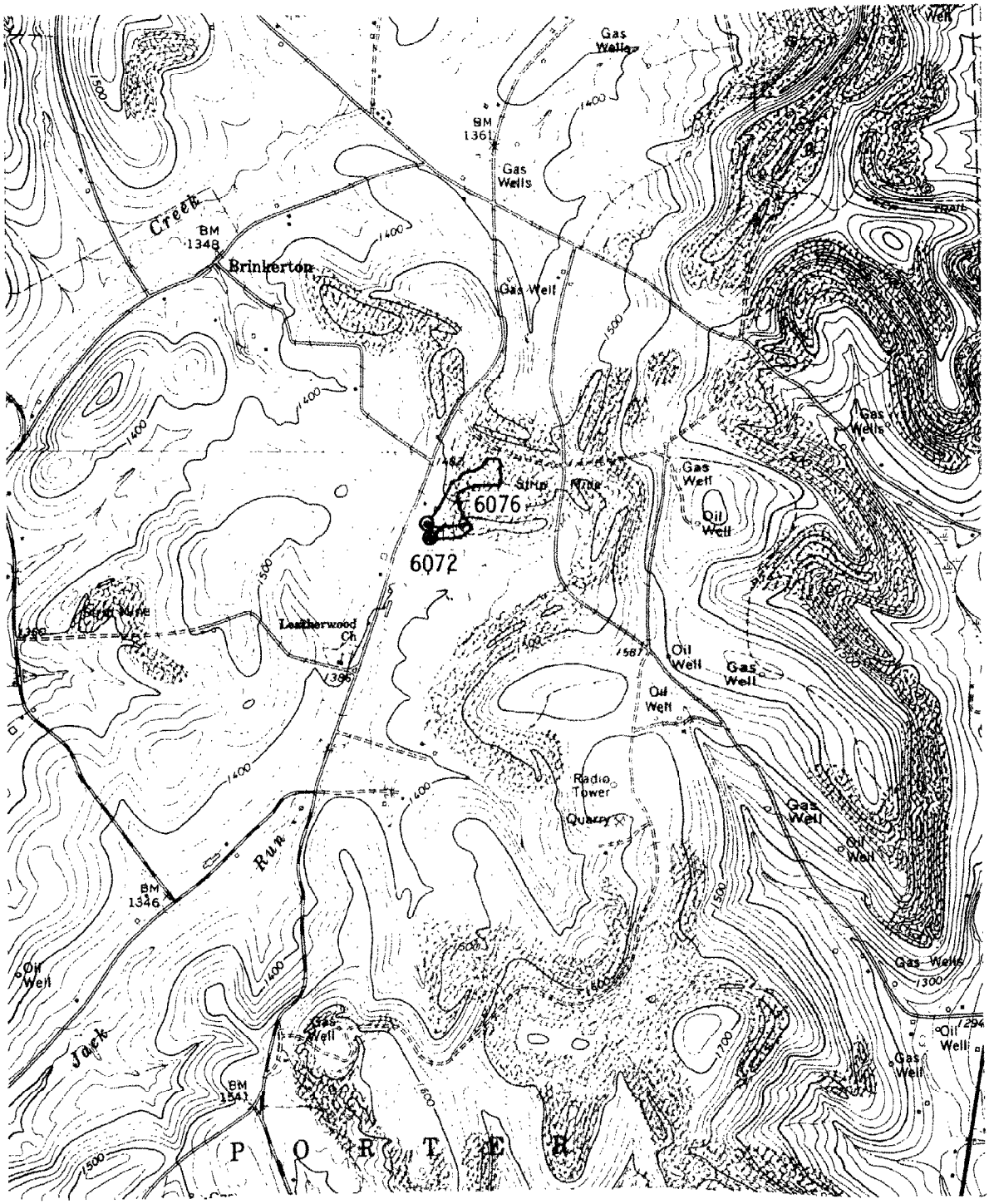

Figure 19. Location map for sites 6072 and 6076, Clarion Co., Pennsylvania. New Bethlehem Quadrangle.

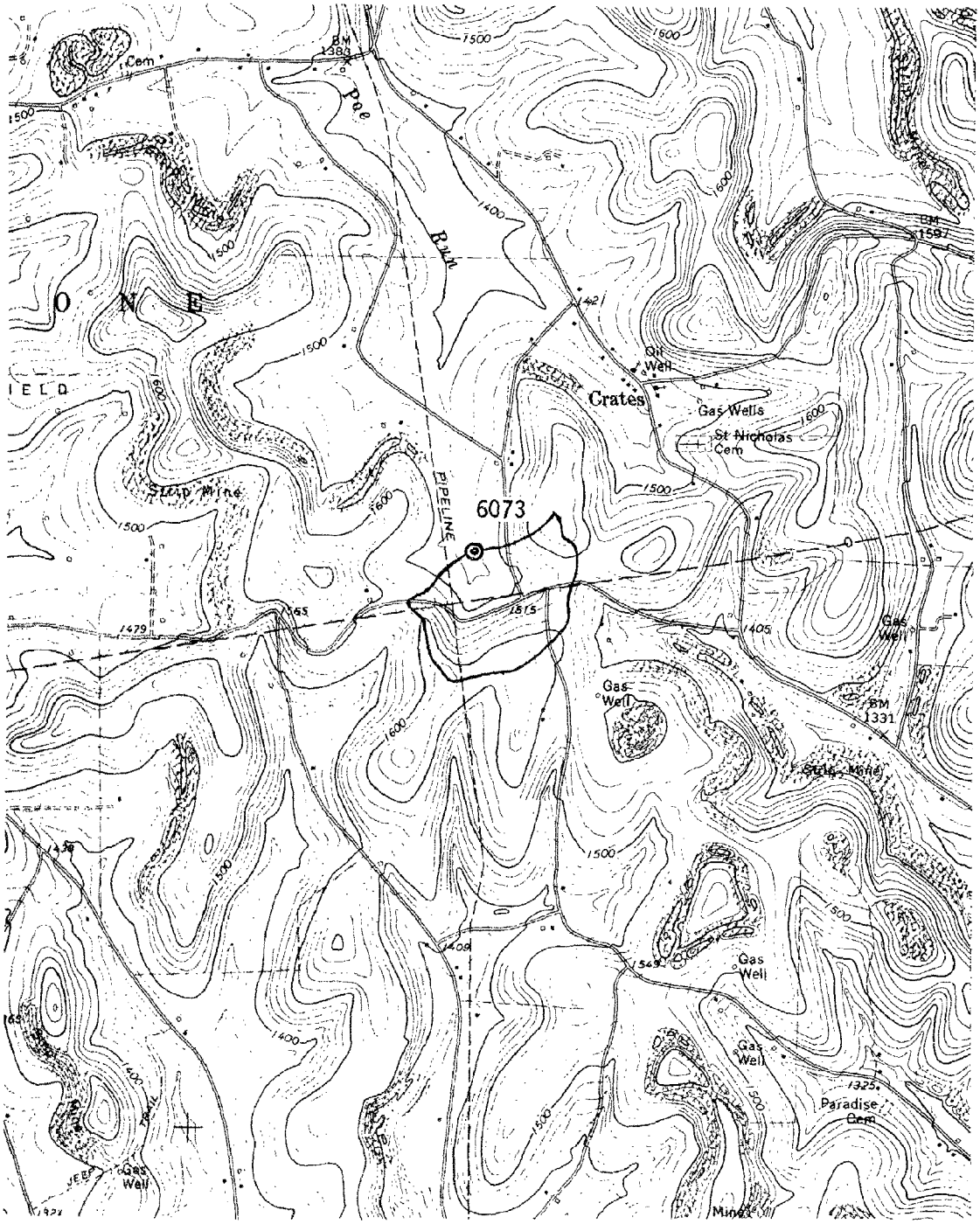

Figure 20. Location map for site 6073, Clarion Co. Pennsylvania. New Bethlehem Quadrangle.

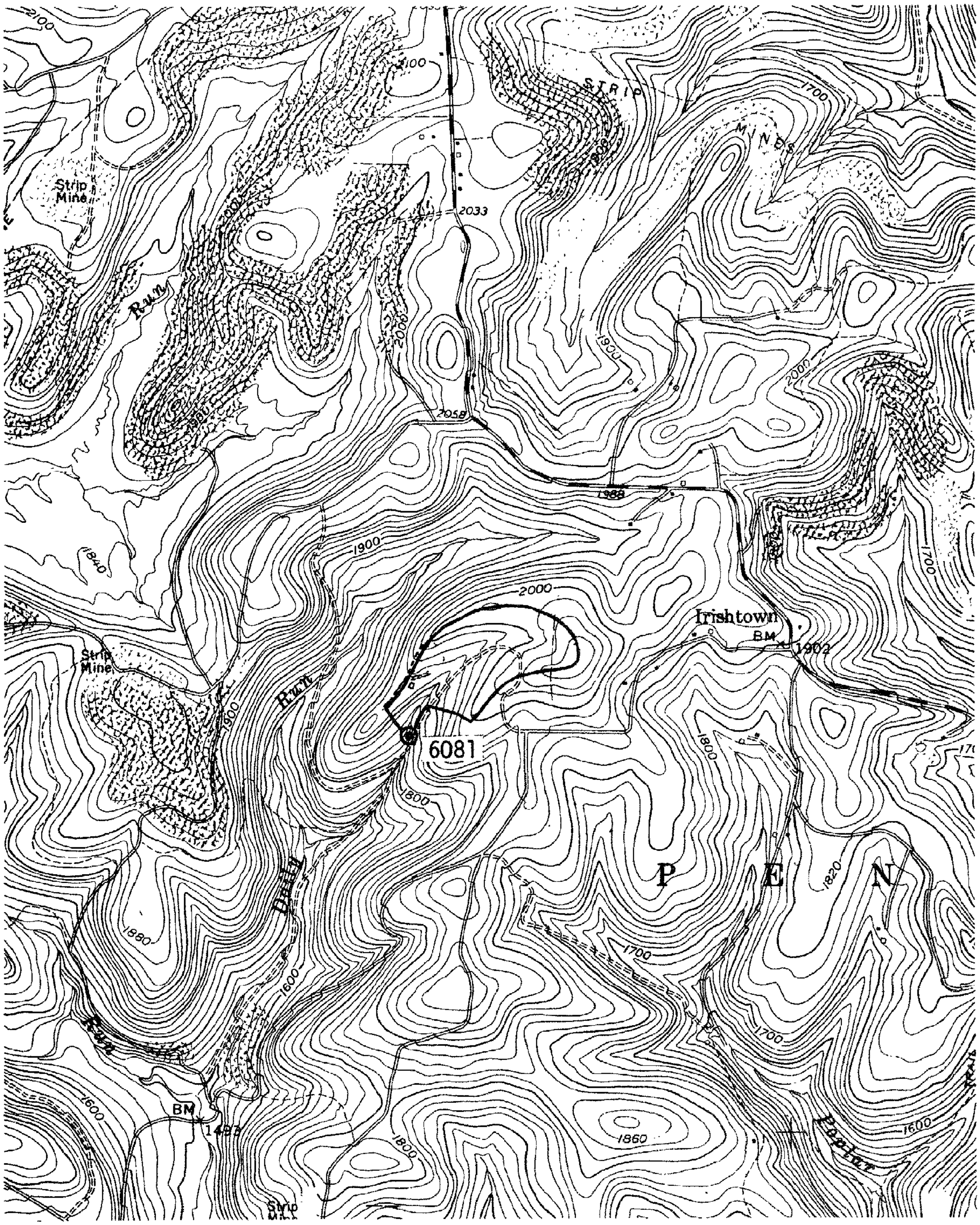

Figure 21. Location map for site 6081, Clearfield Co., Pennsylvania. Mahaffey Quadrangle.

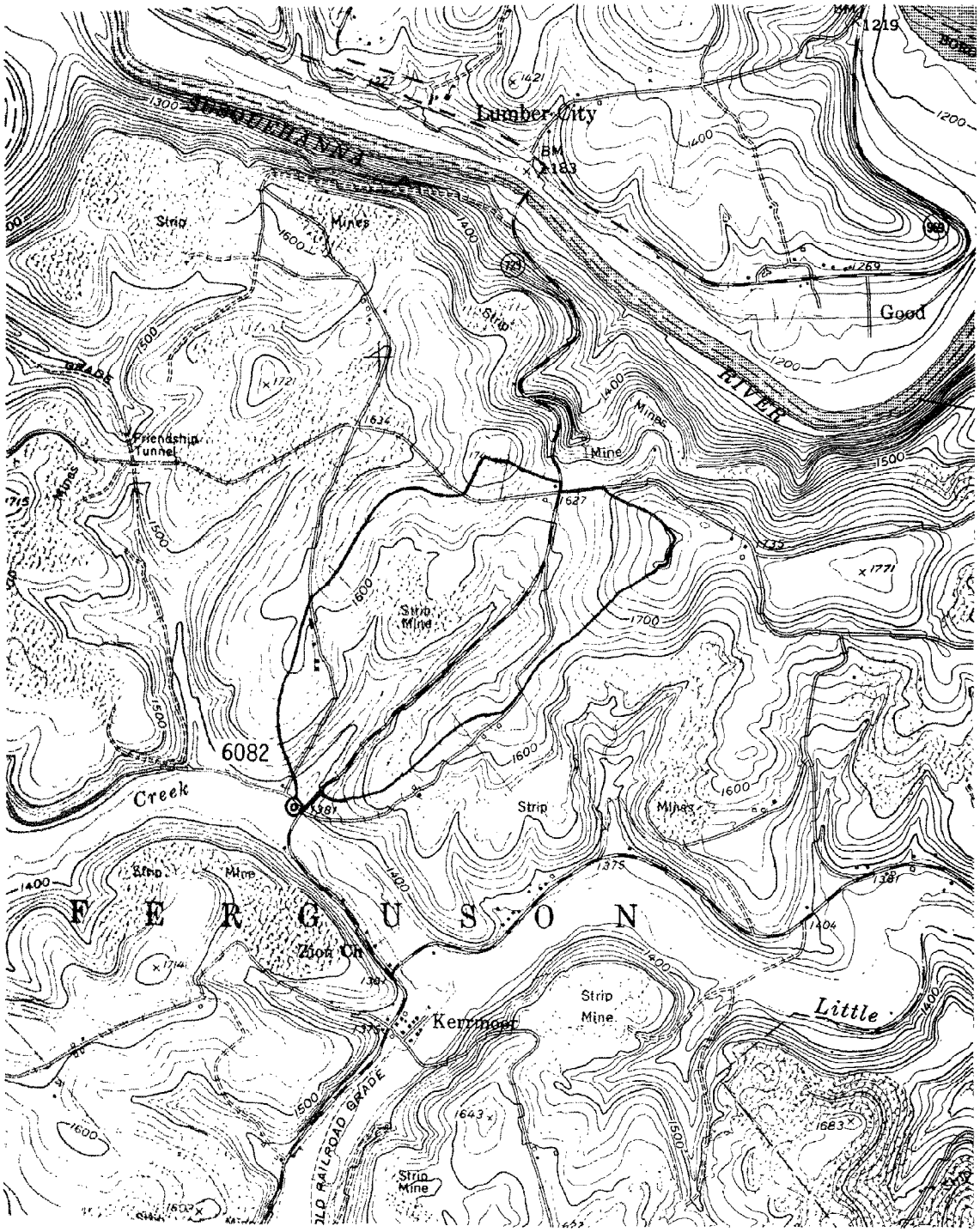

Figure 22. Location map for site 6082, Clearfield Co., Pennsylvania. Curwensville Quadrangle.

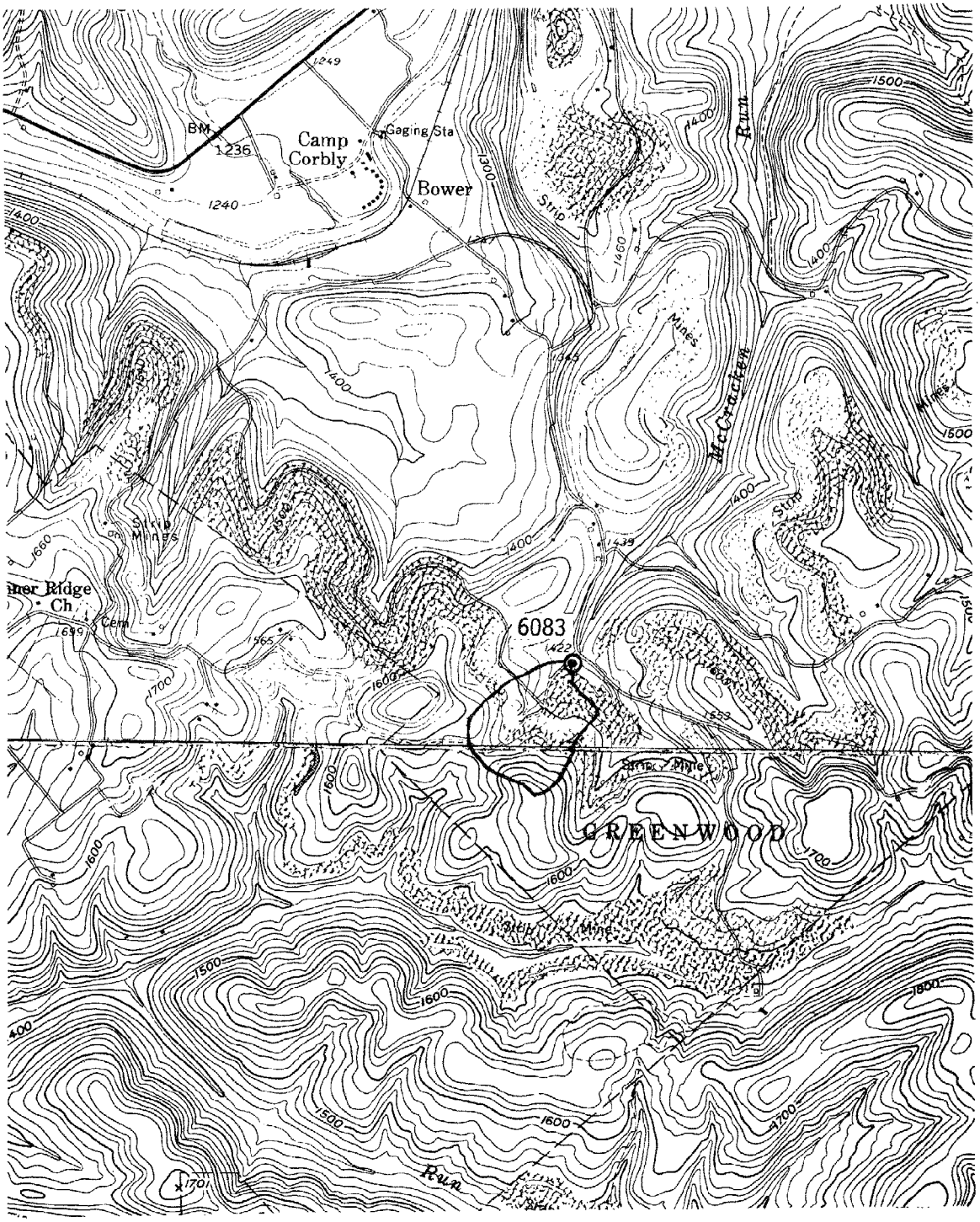

Figure 23. Location map for site 6083, Clearfield Co., Pennsylvania. Mahaffey and Westover Quadrangles.

Figure 24. Location map for site 6091, Clinton Co., Pennsylvania. Renovo West Quadrangle.

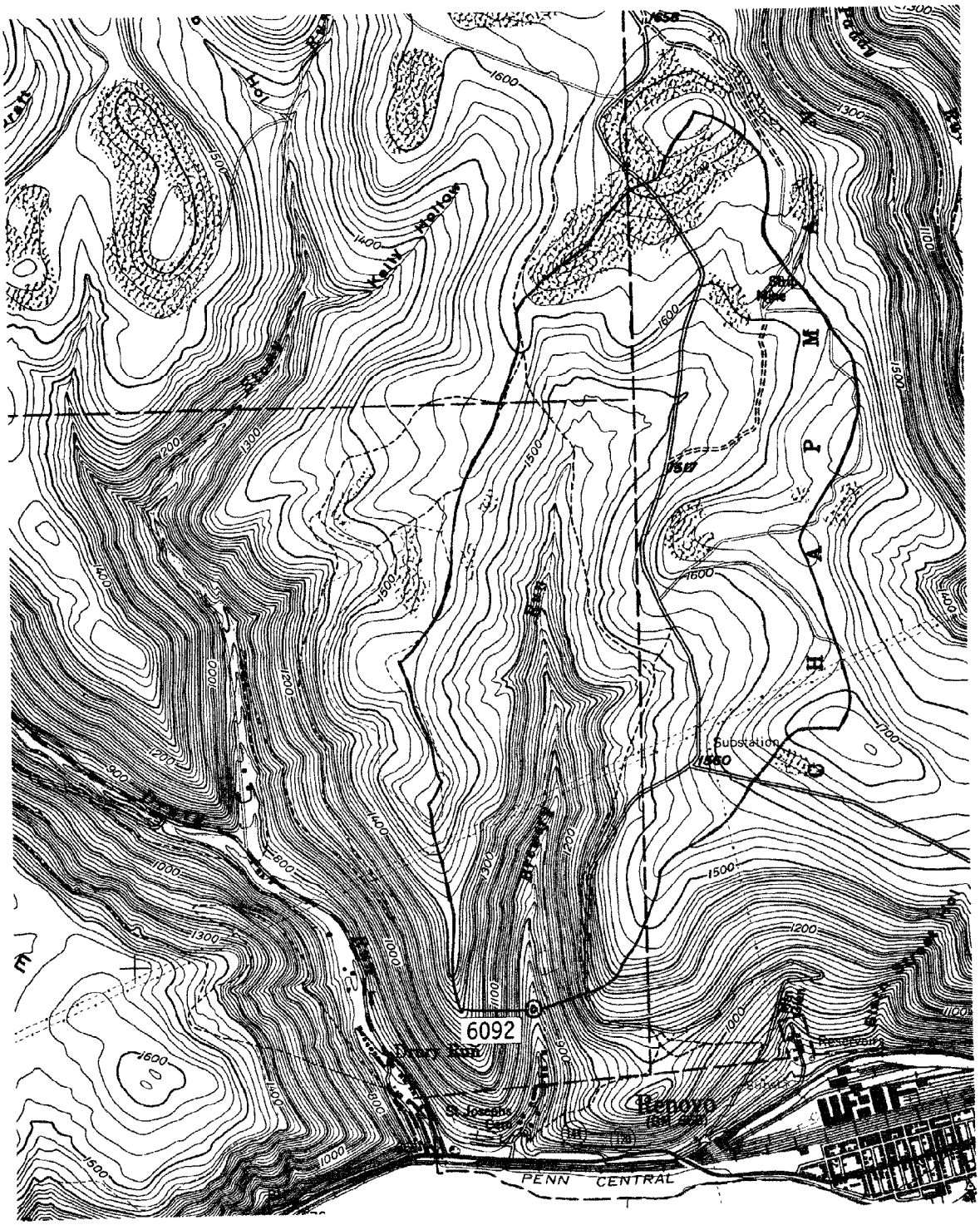

Figure 25. Location map for site 6092, Clinton Co., Pennsylvania. Renovo West Quadrangle.

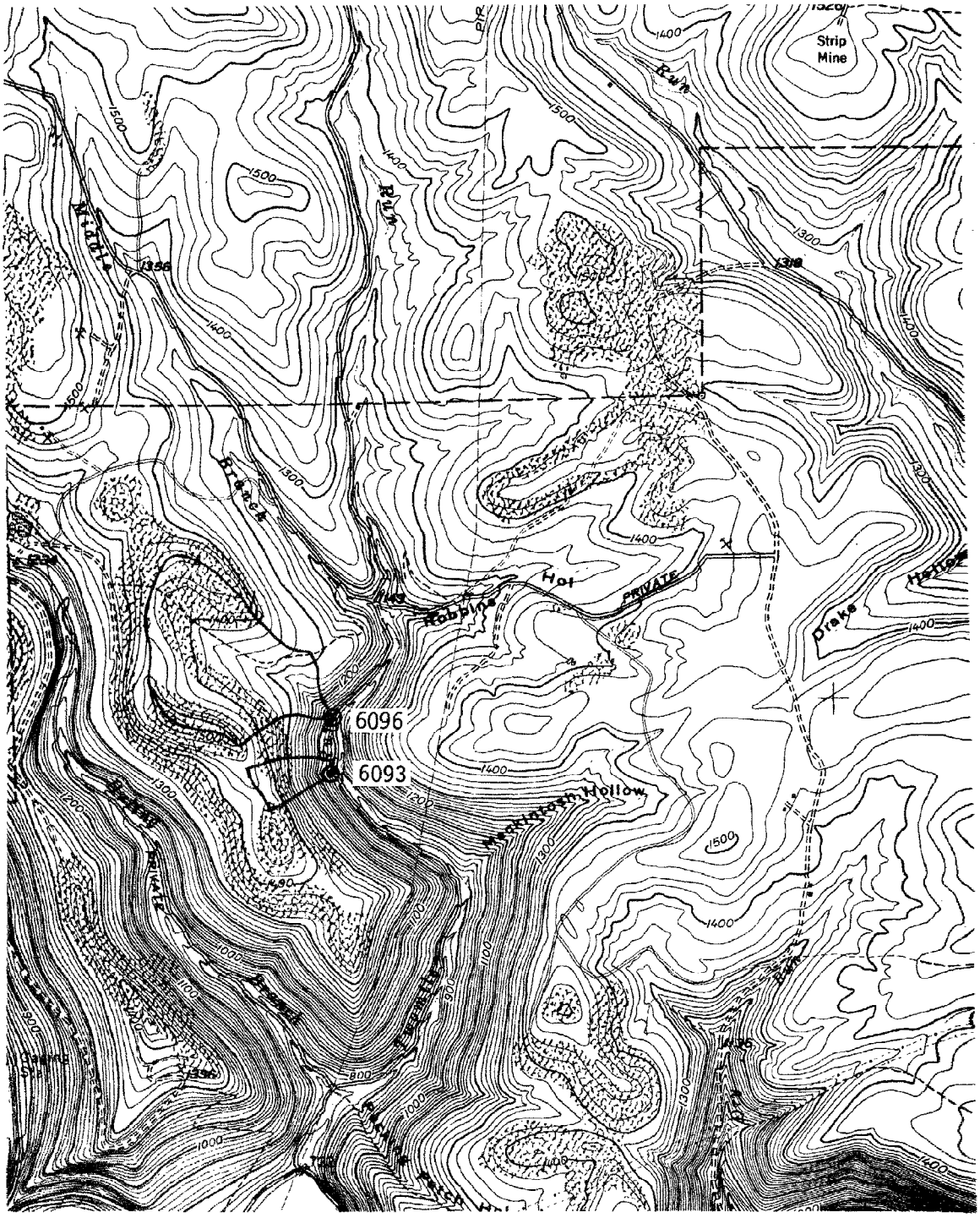

Figure 26. Location map for sites 6093 and 6096, Clinton Co., Pennsylvania Renovo West Quadrangle.

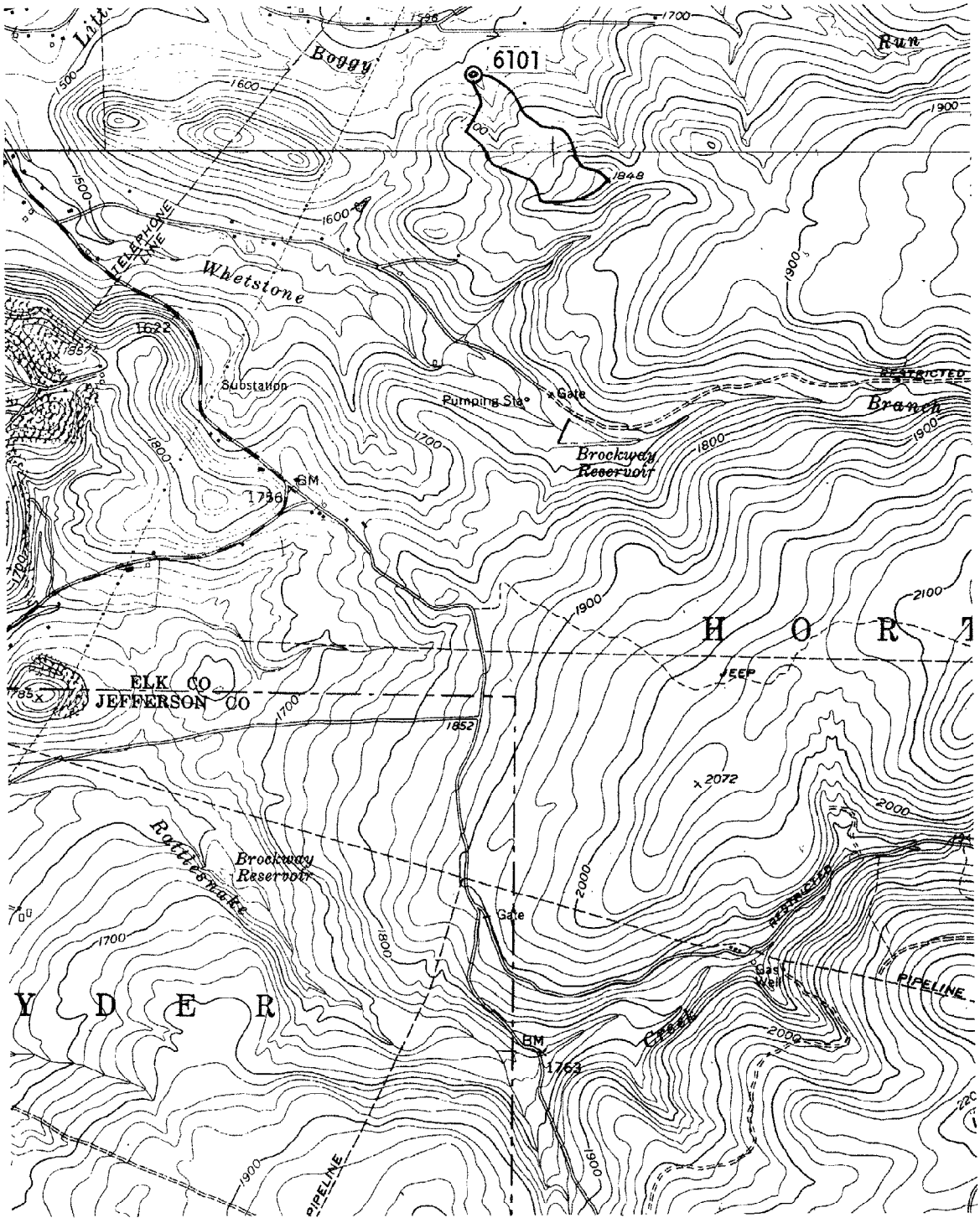

Figure 27. Location map for site 6101, Elk Co., Pennsylvania. Brandy Camp and Sabula Quadrangles.

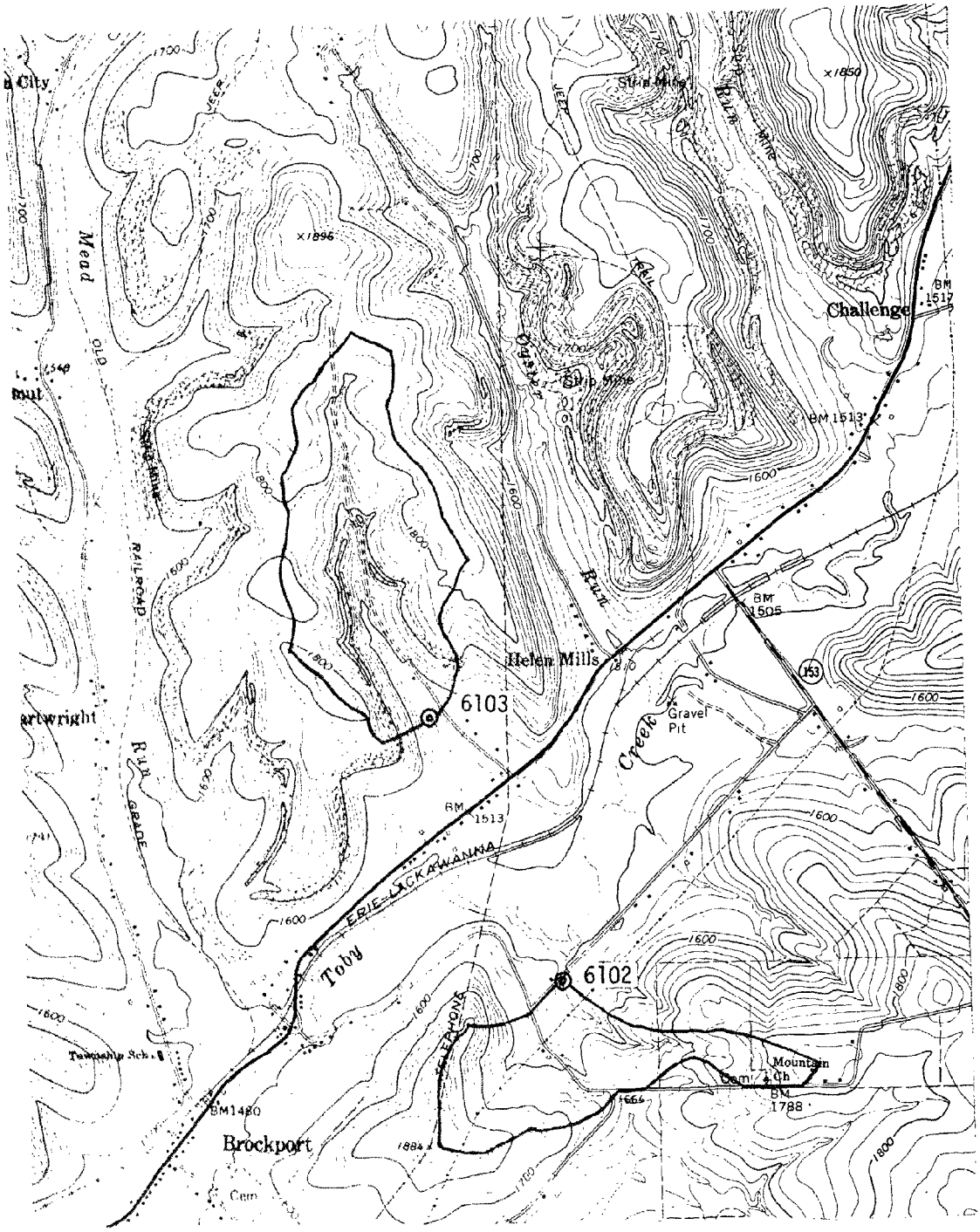

Figure 28. Location map for site 6102 and 6103, Elk Co., Pennsylvania. Brandy Camp Quadrangle.

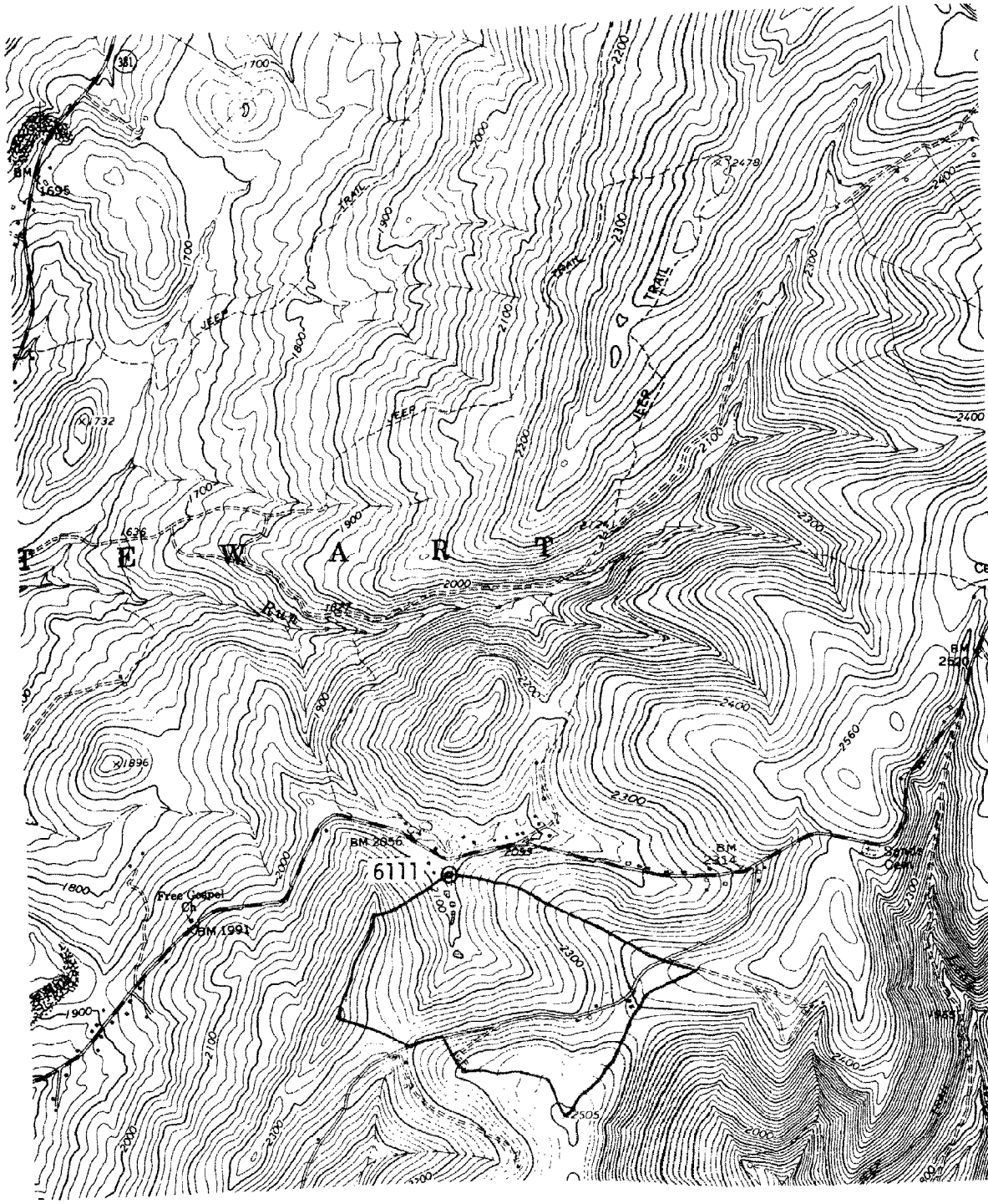

Figure 29. Location map for site 6111, Fayette Co., Pennsylvania. Mill Run Quadrangle.

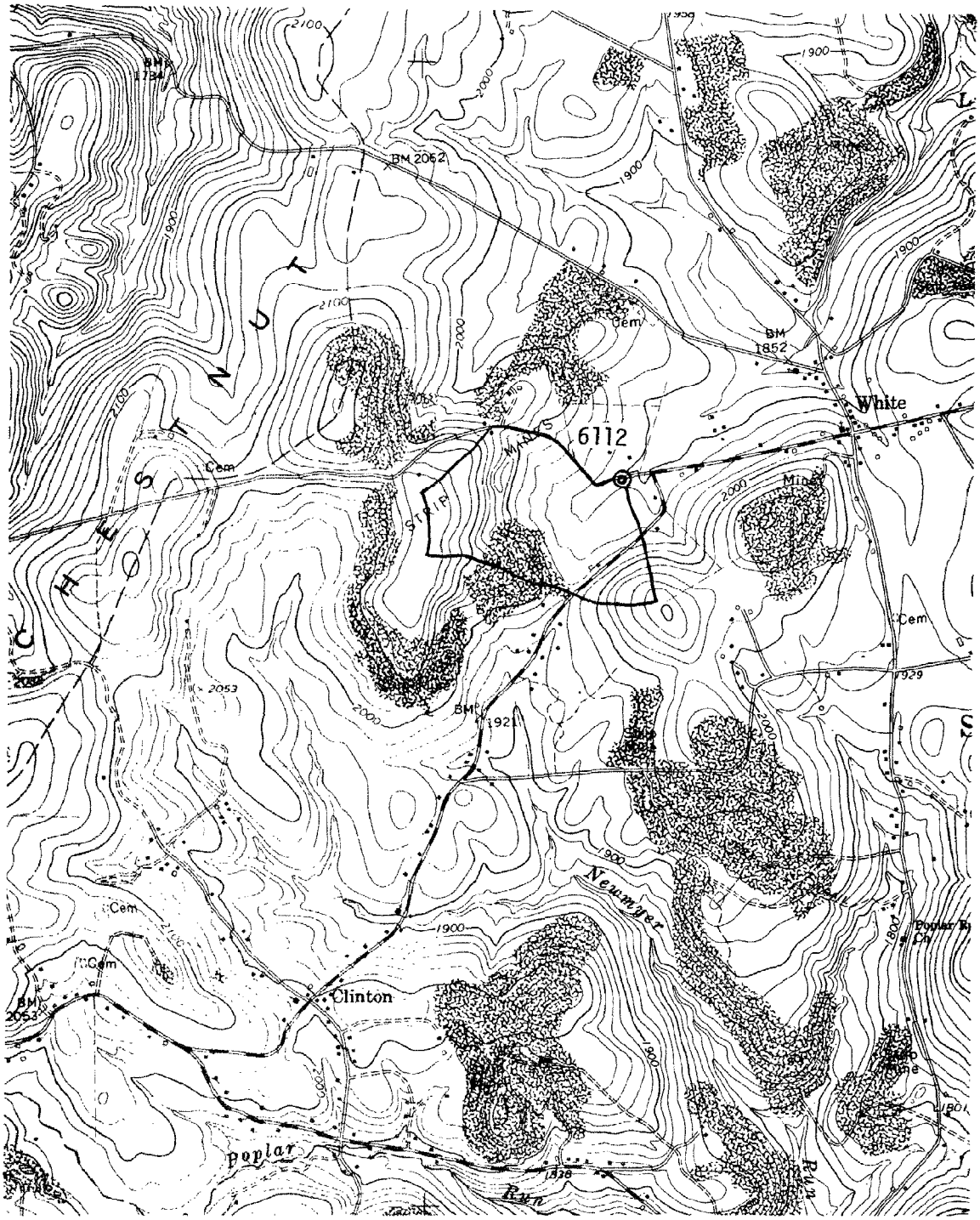

Figure 30. Location map for site 6112, Fayette Co., Pennsylvania. Donegal Quadrangle.

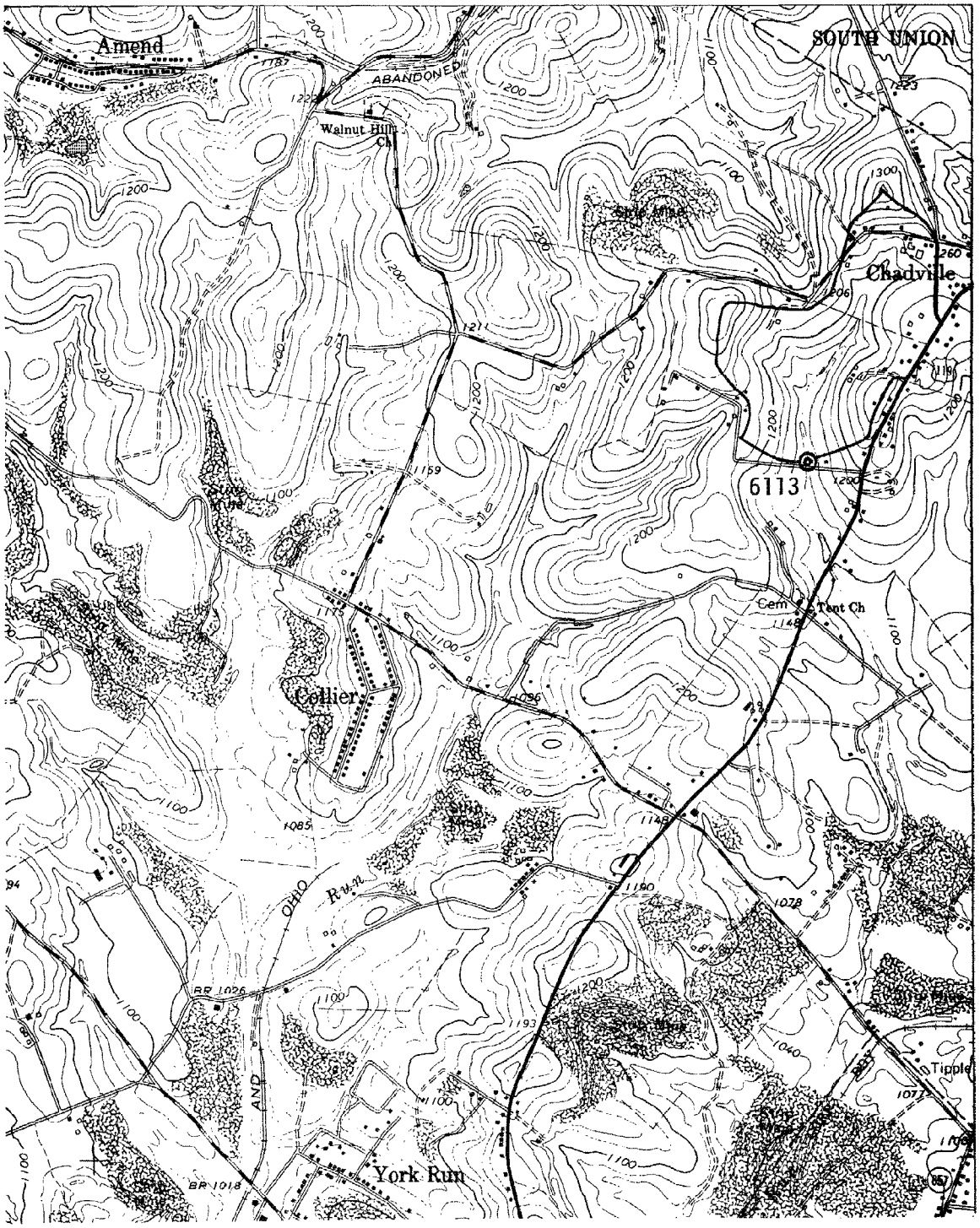

Figure 31. Location map for site 6113, Fayette Co., Pennsylvania. Smithfield Quadrangle.

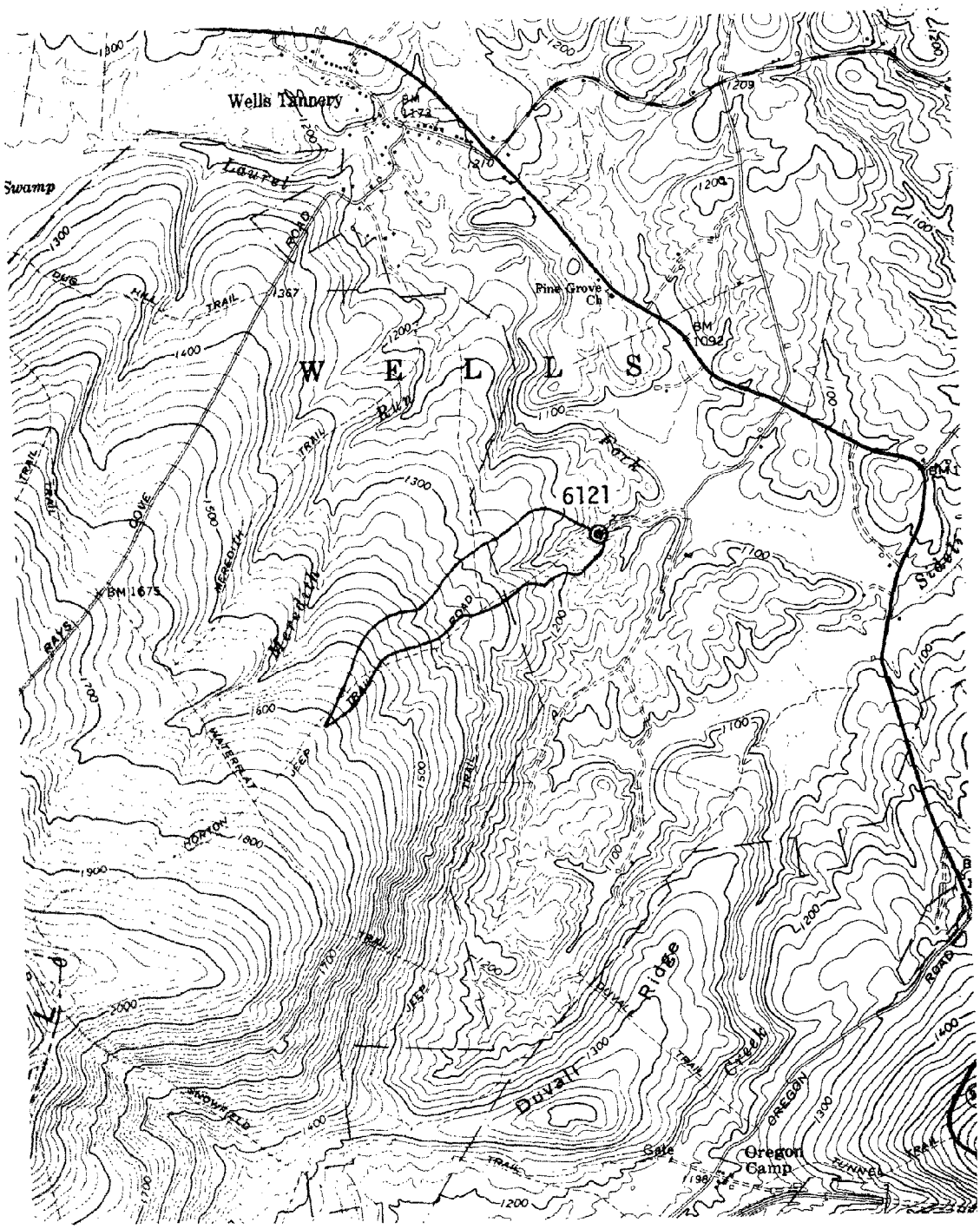

Figure 32. Location map for site 6121, Fulton Co., Pennsylvania. Wells Tannery Quadrangle.

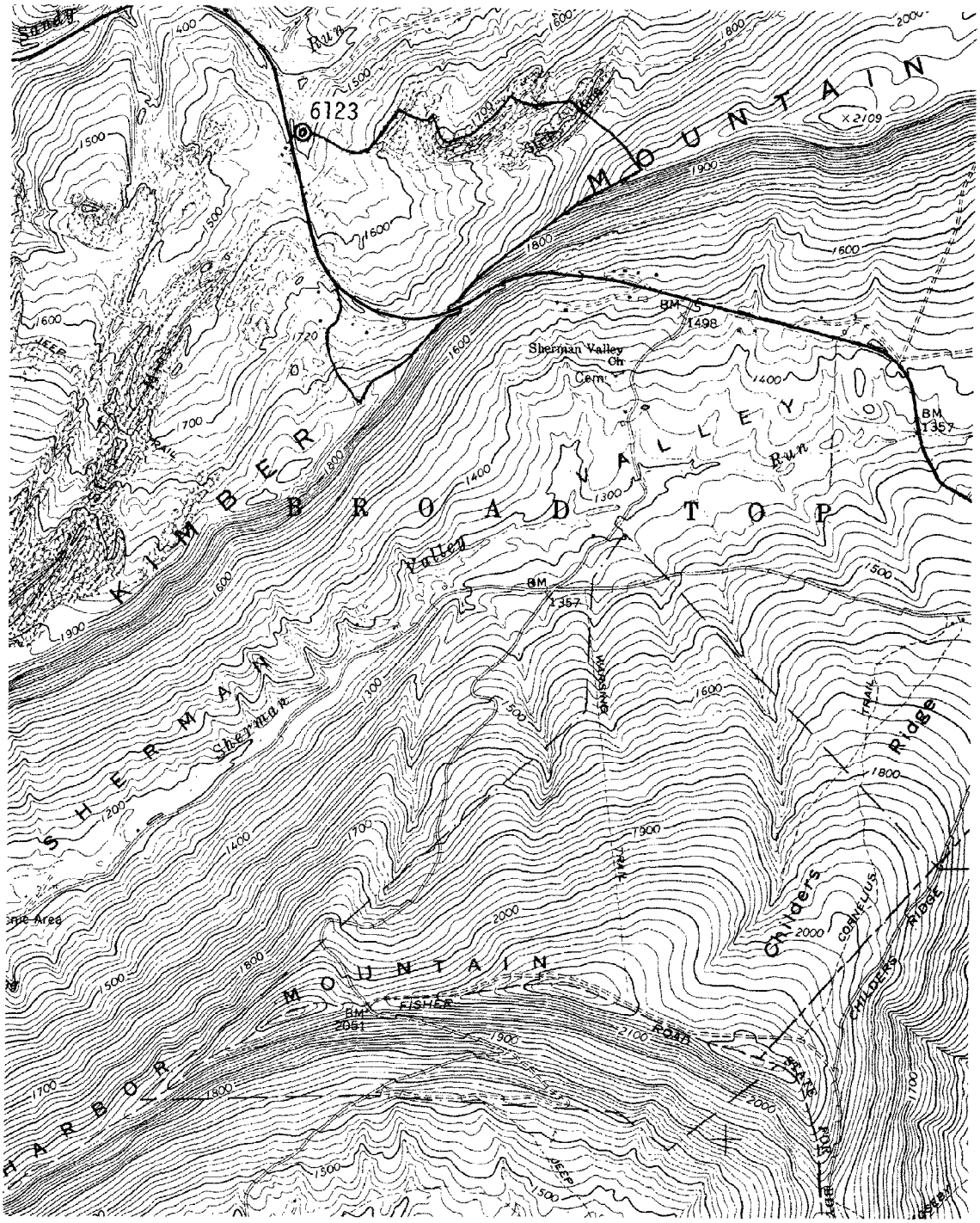

Figure 33. Location map for site 6123, Fulton Co., Pennsylvania. Wells Tannery Quadrangle.

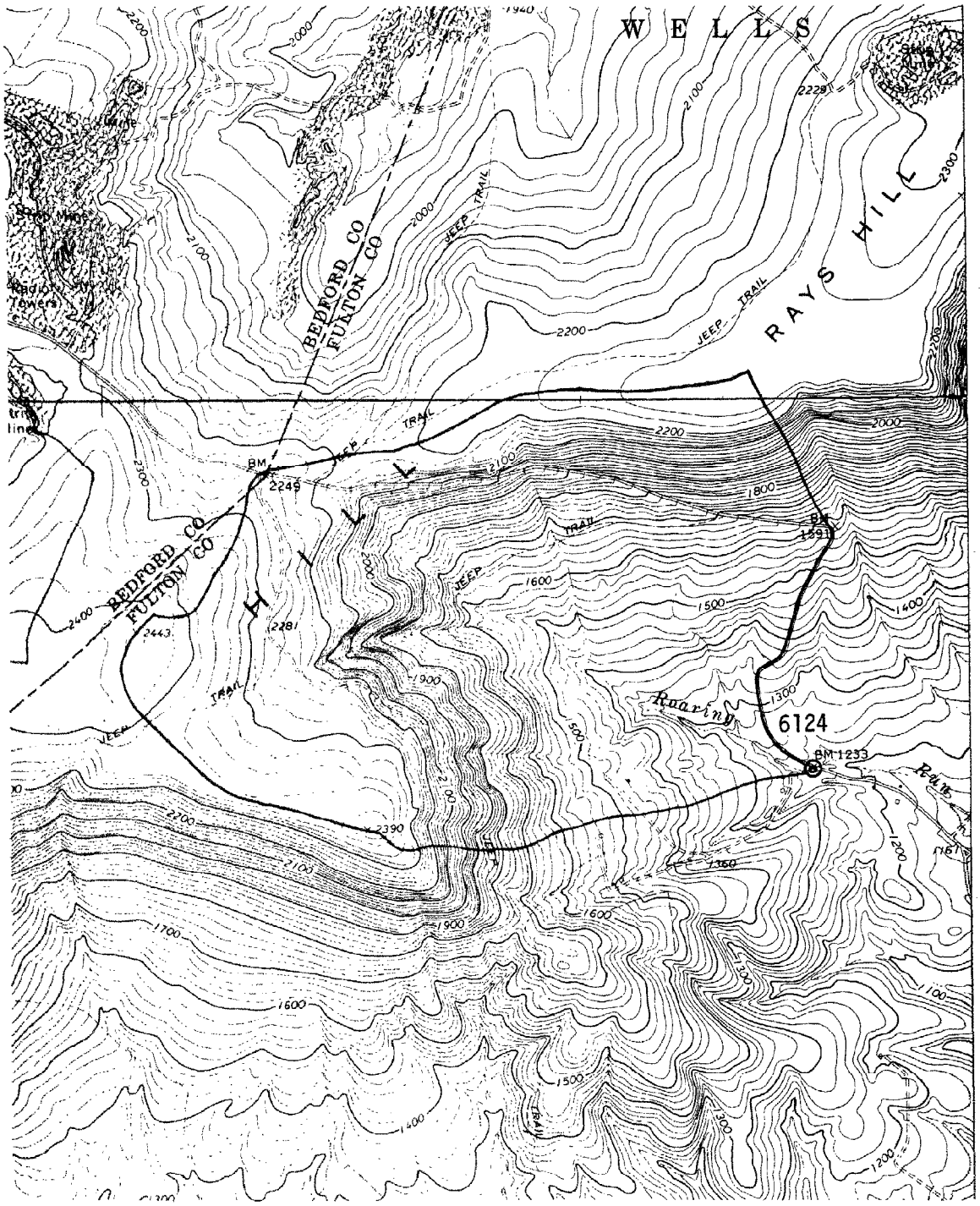

Figure 34. Location map for site 6124, Fulton Co., Pennsylvania. Wells Tannery and Saxton Quadrangles.

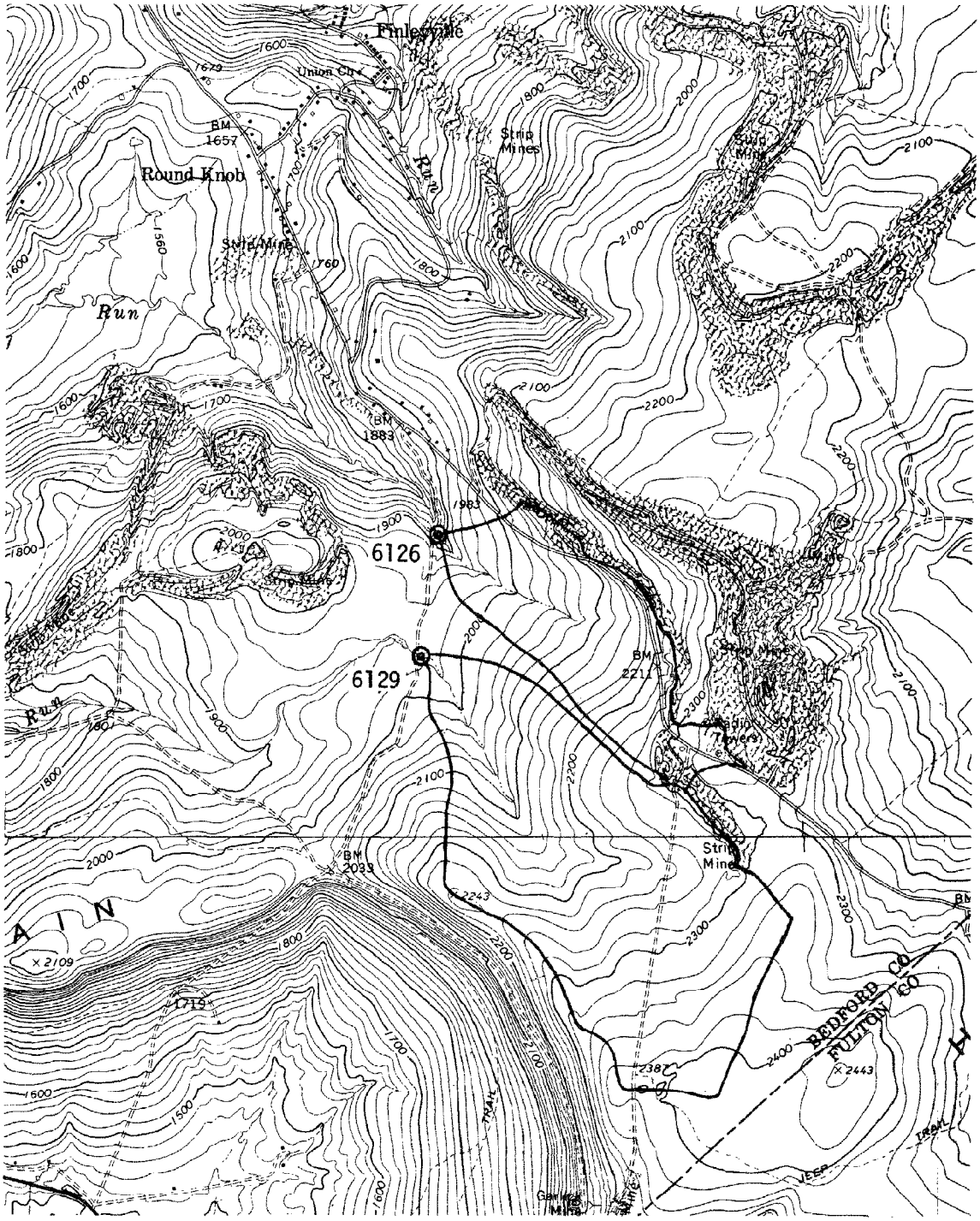

Figure 35. Location map for sites 6126 and 6129, Fulton Co., Pennsylvania. Saxton and Wells Tannery Quadrangles.

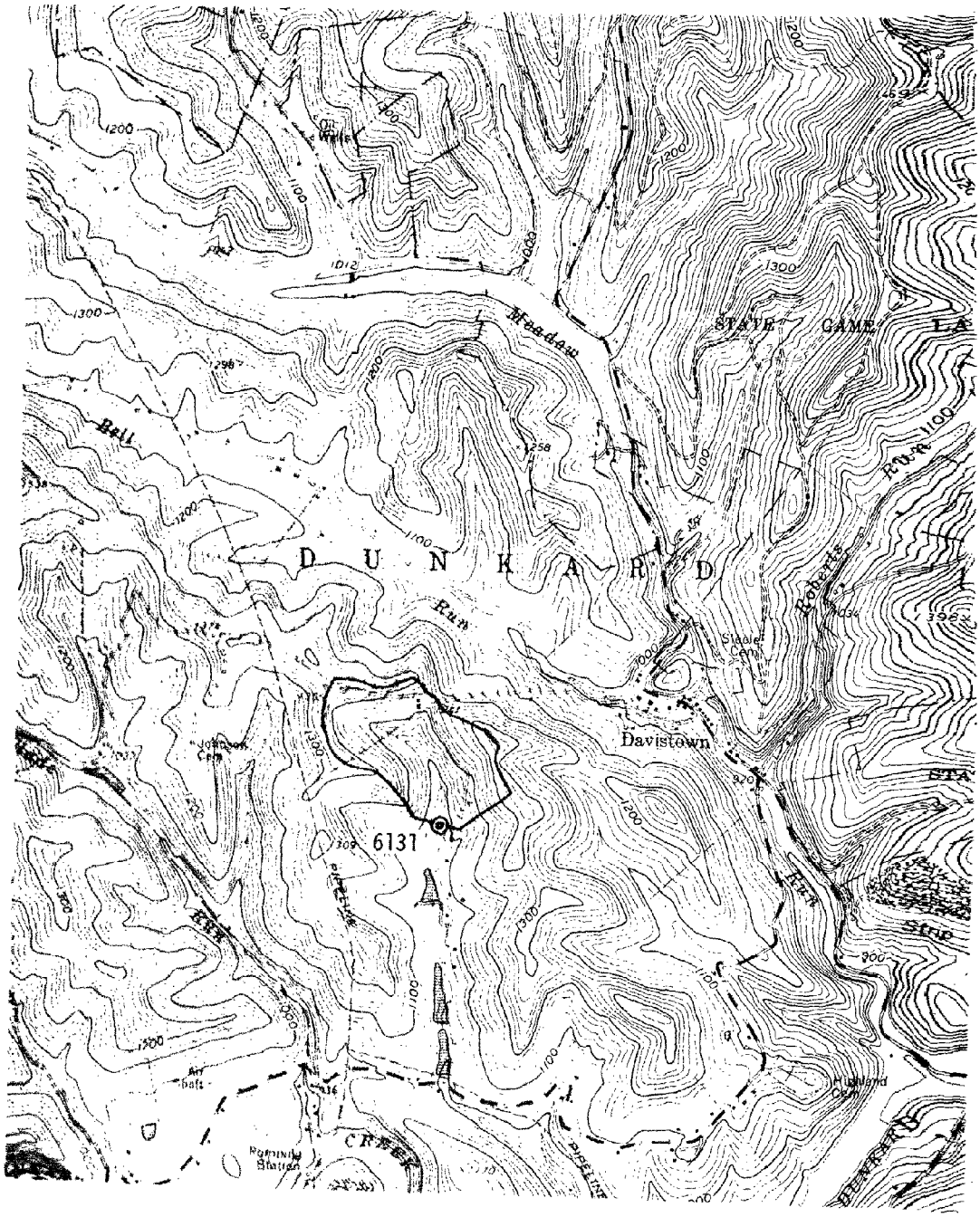

Figure 36. Location map for site 6131, Greene Co., Pennsylvania. Garards Fort Quadrangle.

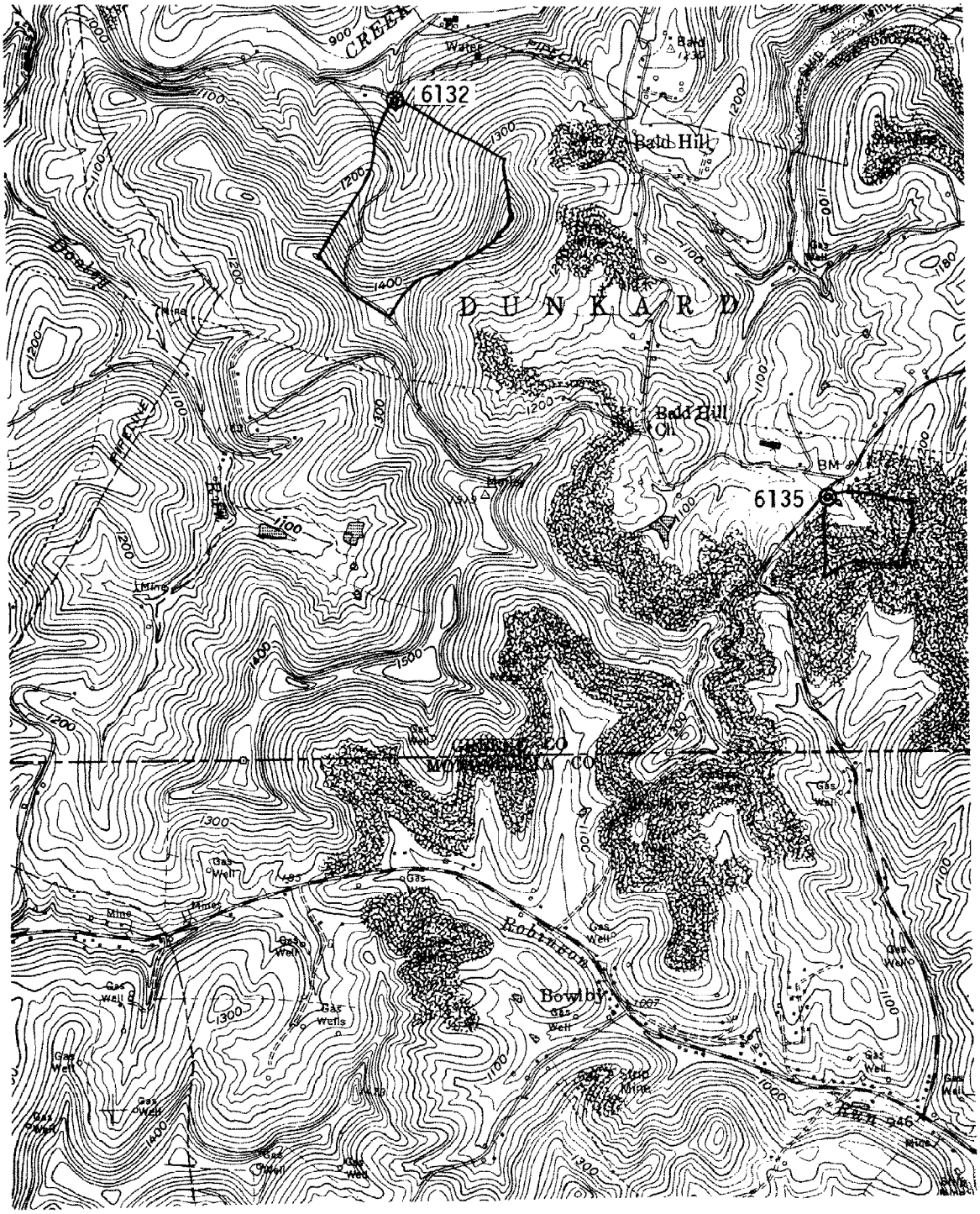

Figure 37. Location map for sites 6132 and 6135, Greene Co., Pennsylvania. Osage Quadrangle.

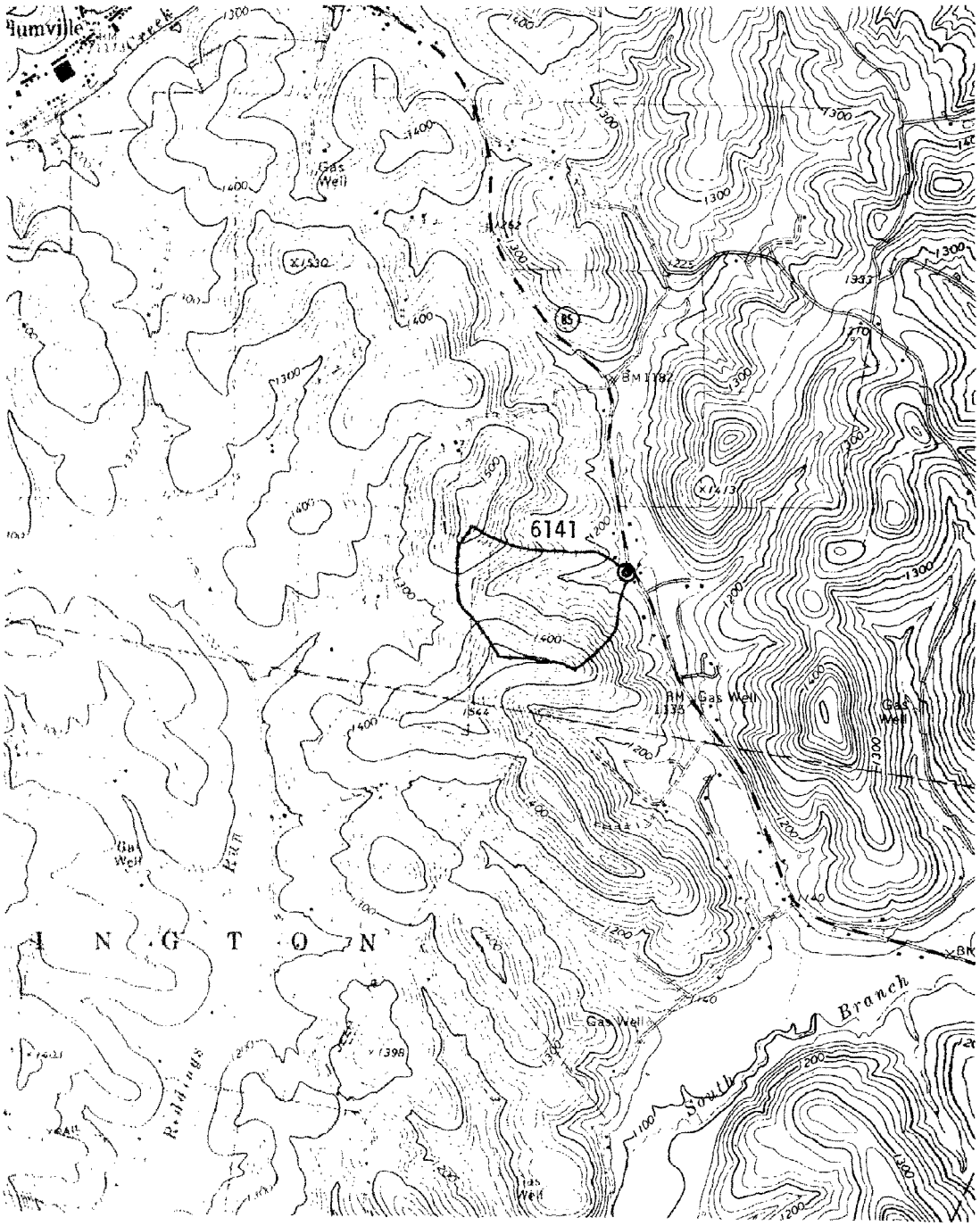

Figure 38. Location map for site 6141, Indiana Co., Pennsylvania. Plumville Quadrangle.

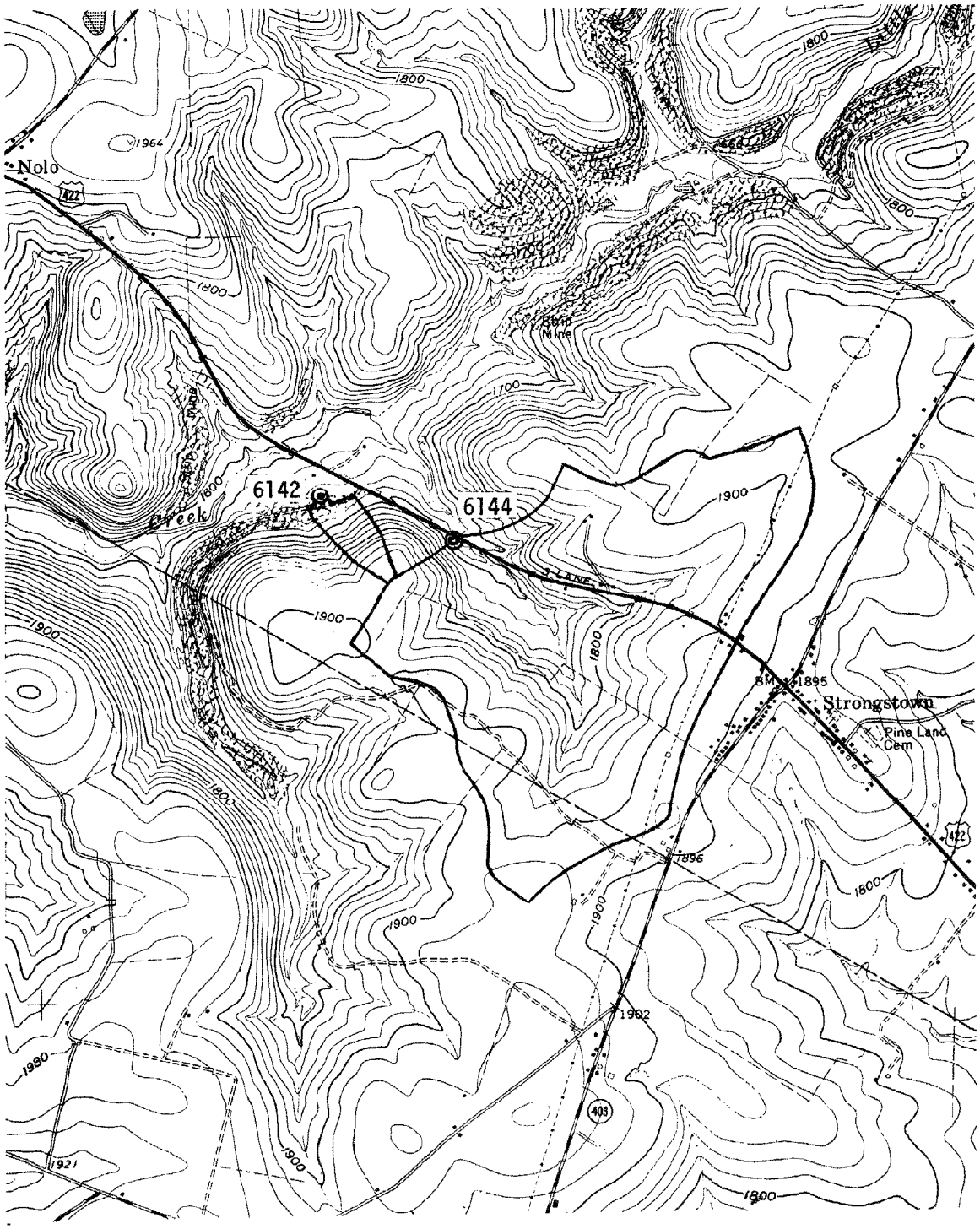

Figure 39. Location map for sites 6142 and 6144, Indiana Co., Pennsylvania. Strongstown Quadrangle.

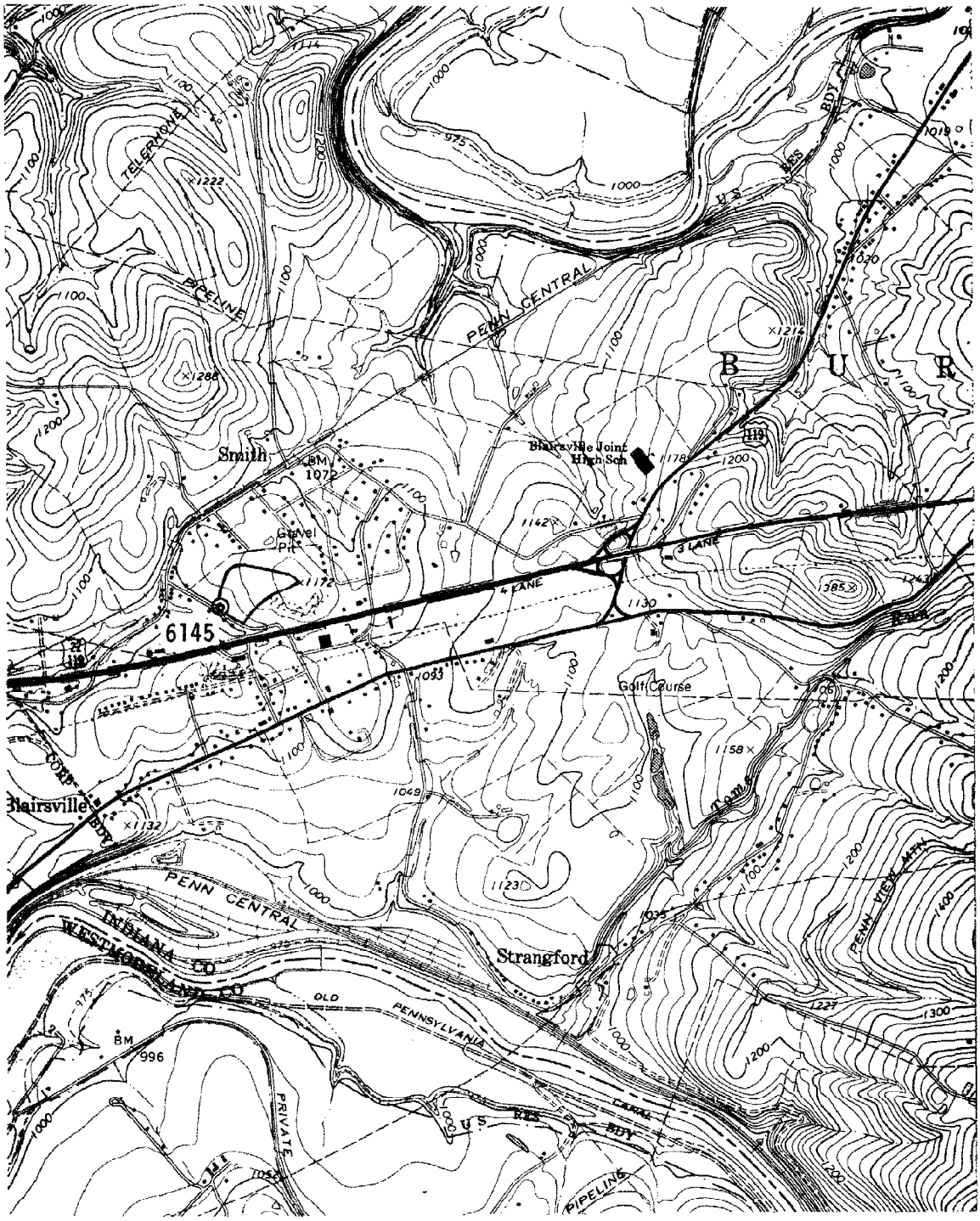

Figure 40. Location map for site 6145, Indiana Co., Pennsylvania. Bolivar Quadrangle.

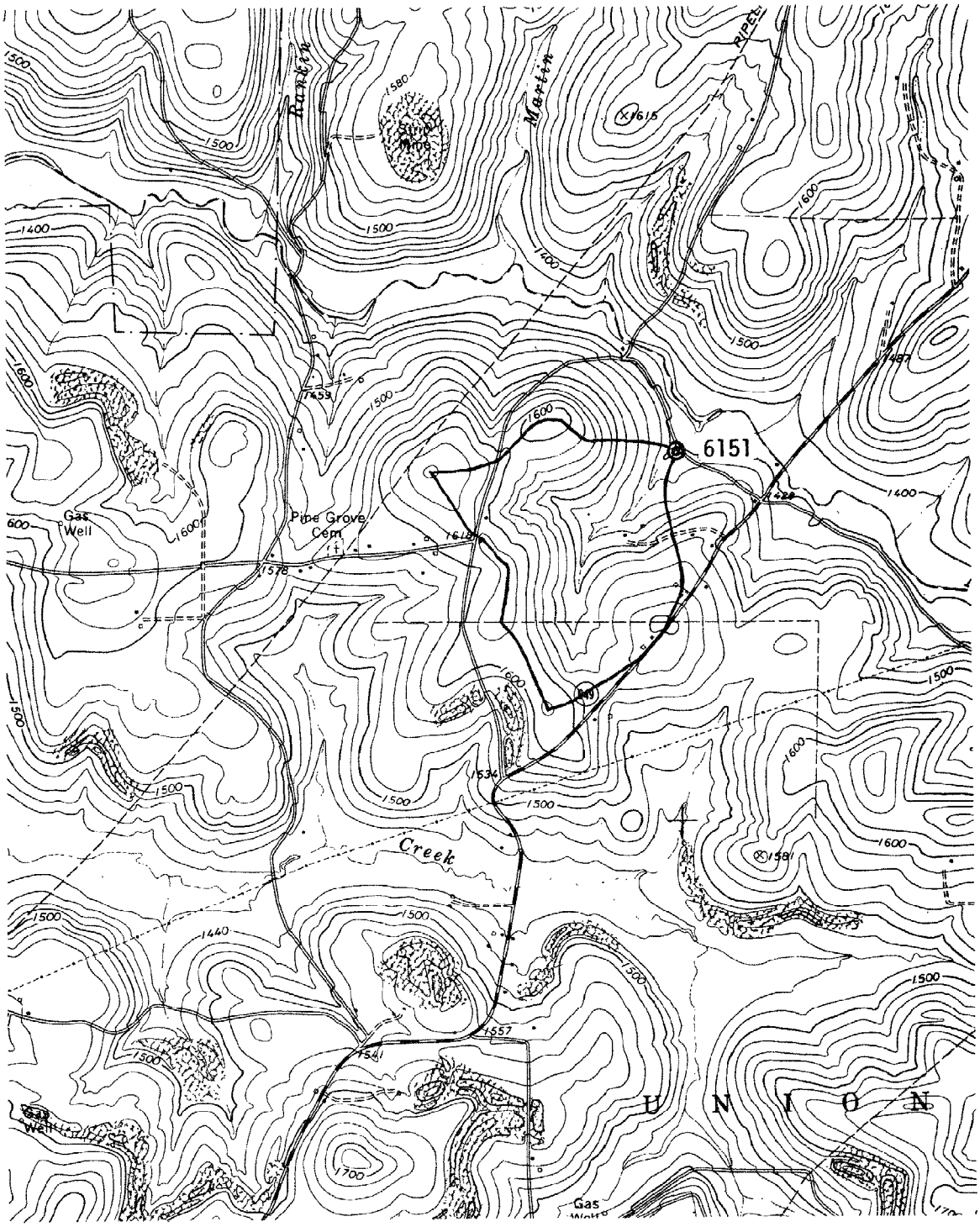

Figure 41. Location map for site 6151, Jefferson Co., Pennsylvania. Corsica Quadrangle.

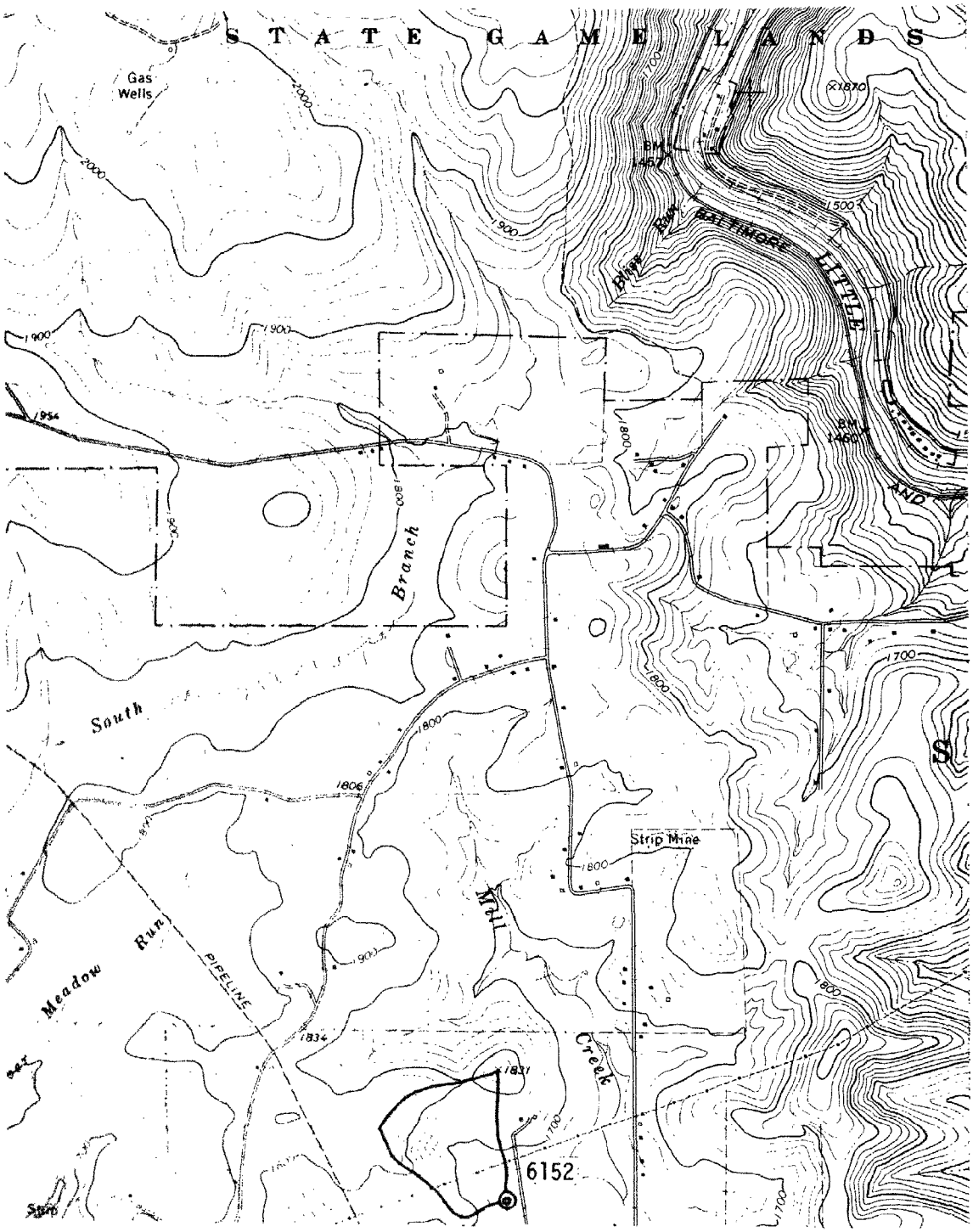

Figure 42. Location map for site 6152, Jefferson Co., Pennsylvania. Carman Quadrangle.

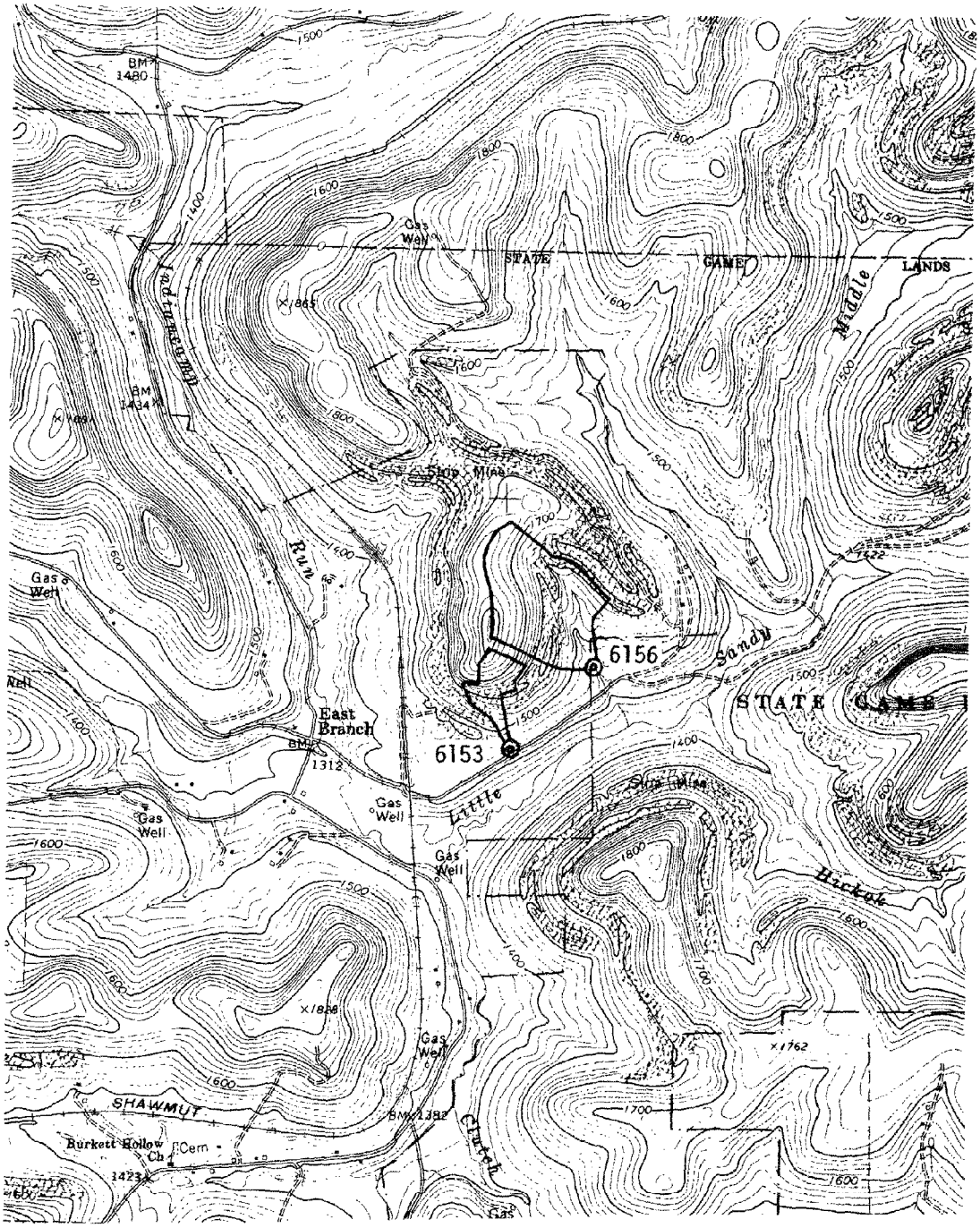

Figure 43. Location map for sites 6153 and 6156, Jefferson Co., Pennsylvania Coolspring Quadrangle.

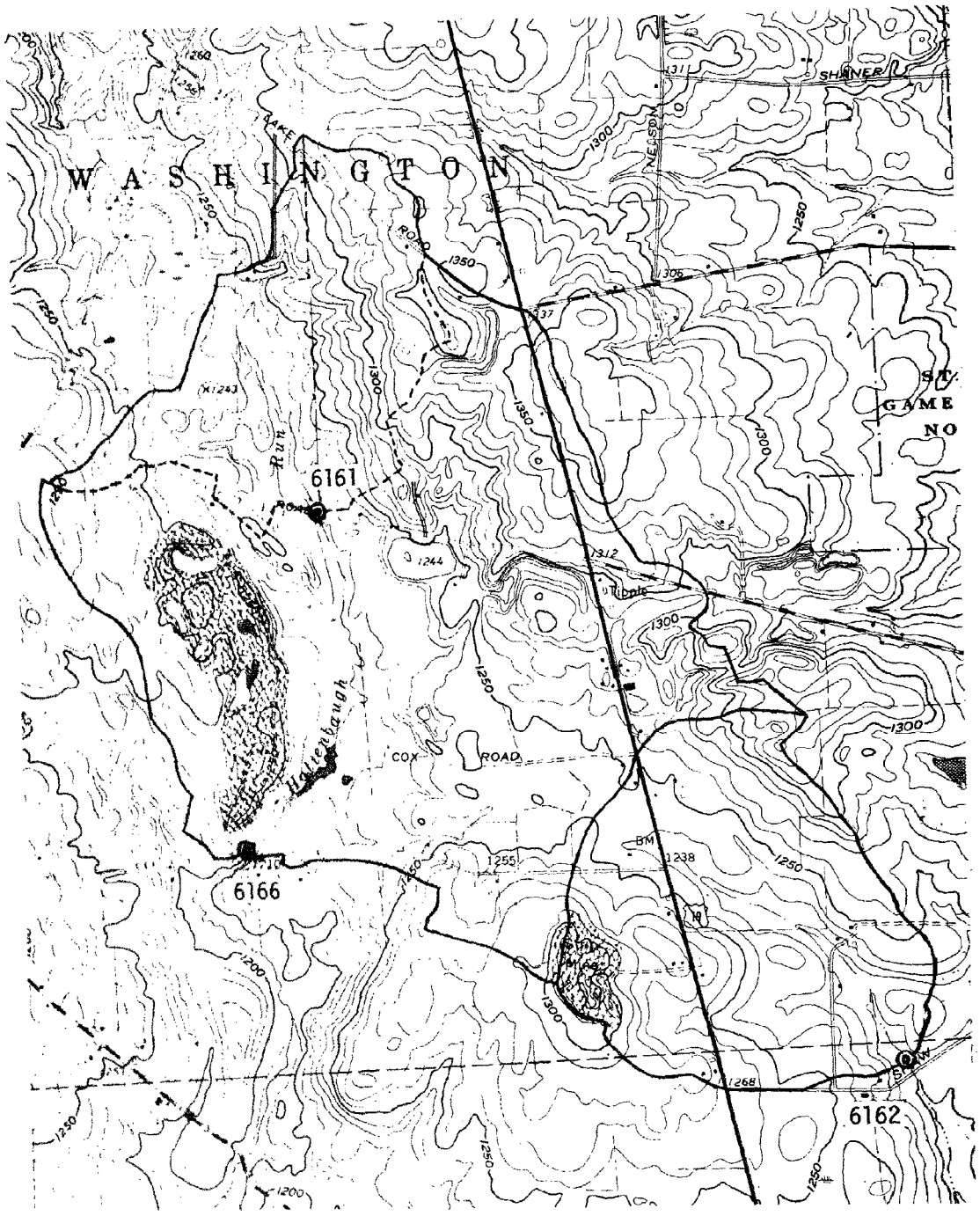

Figure 44. Location map for sites 6161, 6162 and 6166, Lawrence Co., Pennsylvania. Harlansburg Quadrangle.

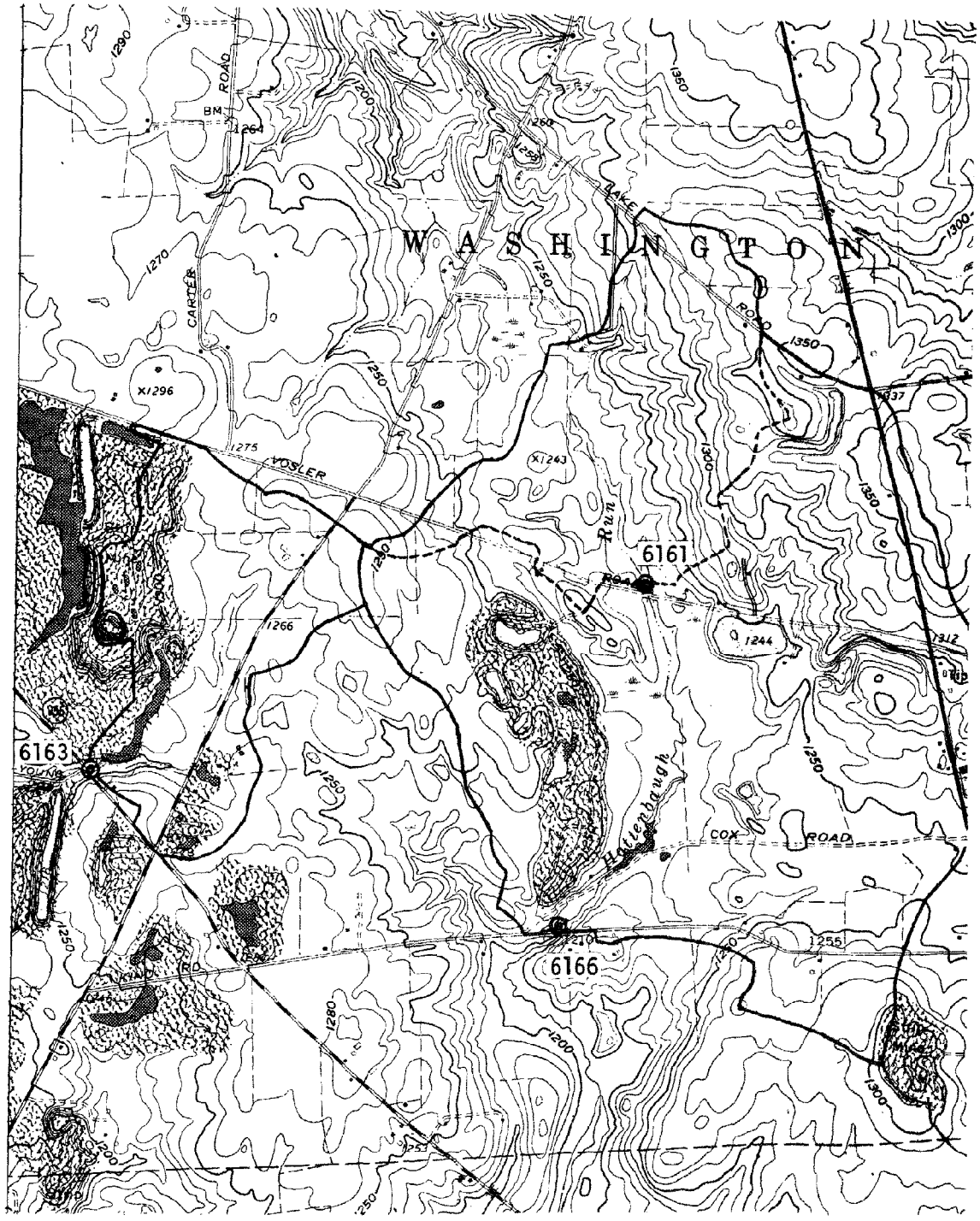

Figure 45. Location map for sites 6161, 6163 and 6166, Lawrence Co., Pennsylvania. Harlansburg Quadrangle.

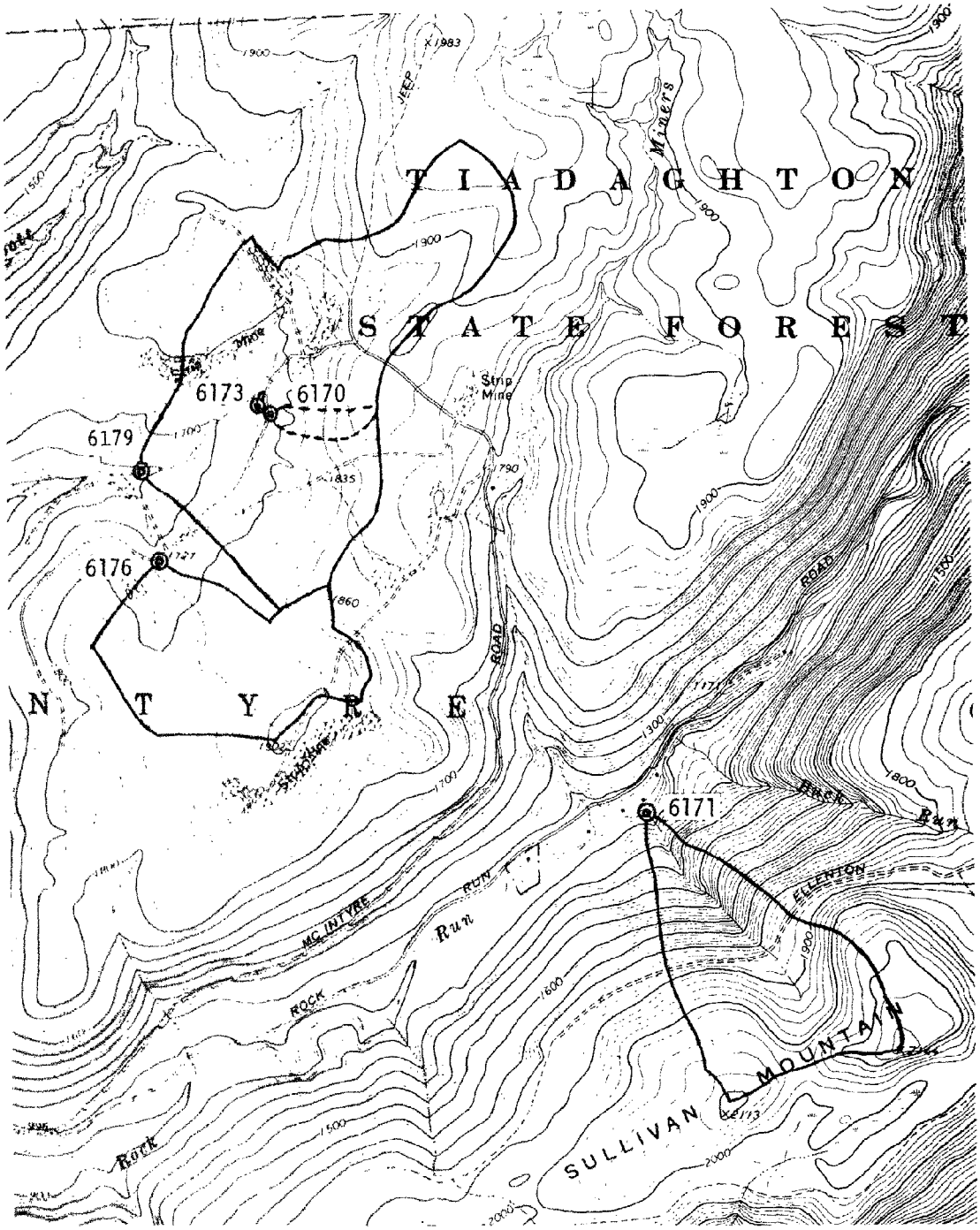

Figure 46. Location map for sites 6170, 6171, 6173, 6176, and 6179, Lycoming Co., Pennsylvania. Ralston Quadrangle.

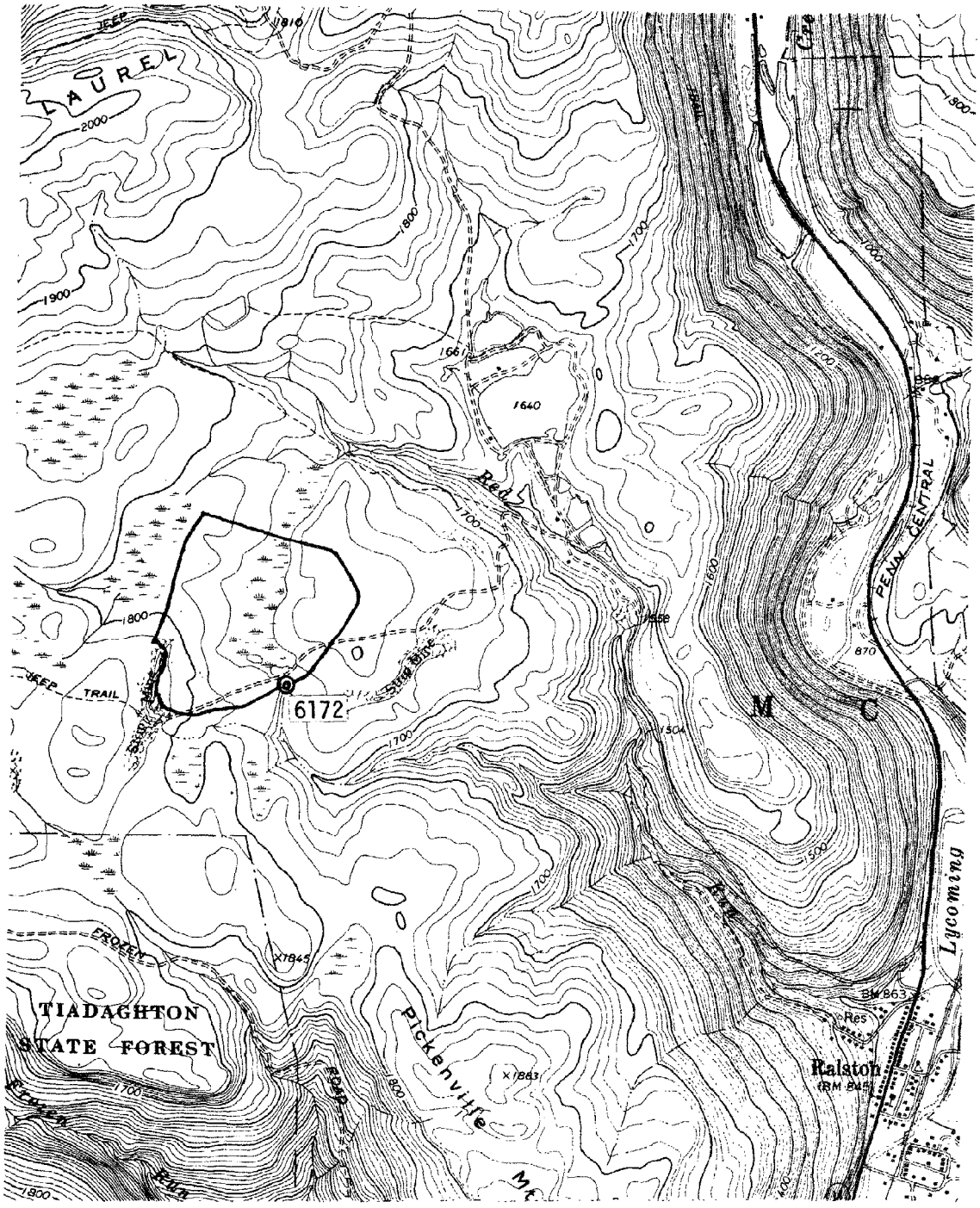

Figure 47. Location map for site 6172, Lycoming Co., Pennsylvania. Ralston Quadrangle.

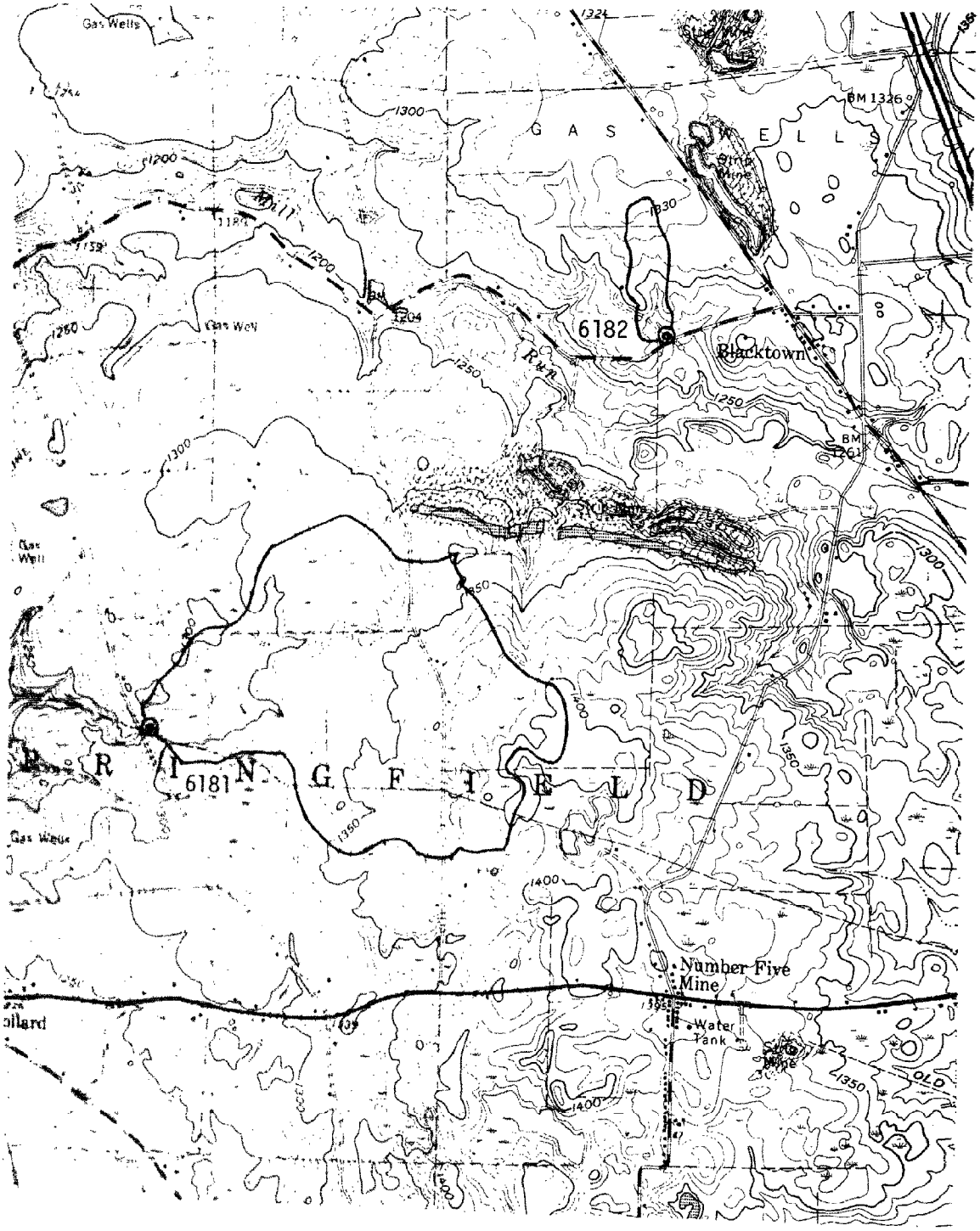

Figure 48. Location map for sites 6181 and 6182, Mercer Co., Pennsylvania. Mercer Quadrangle.

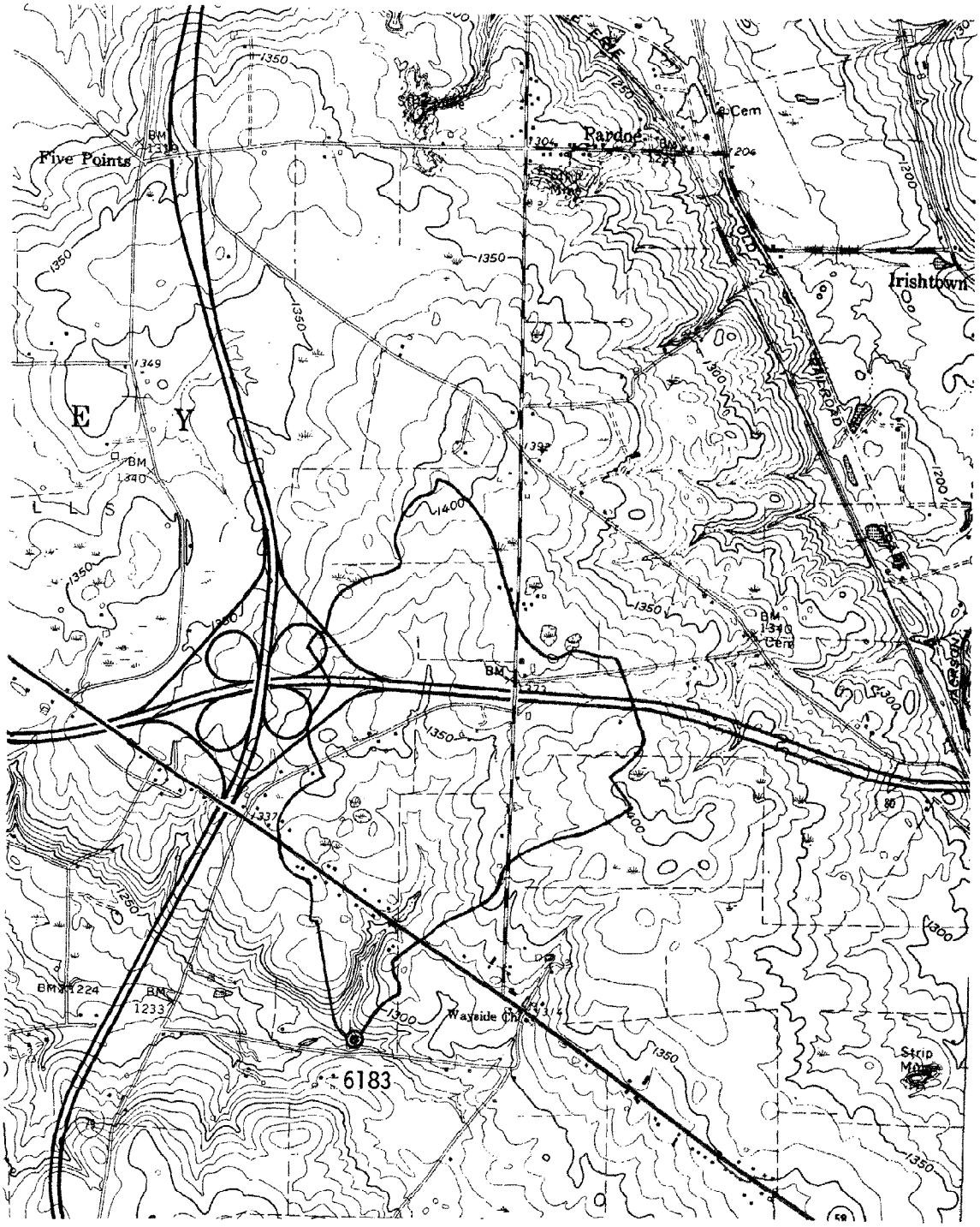

Figure 49. Location map for site 6183, Mercer Co., Pennsylvania. Mercer Quadrangle.

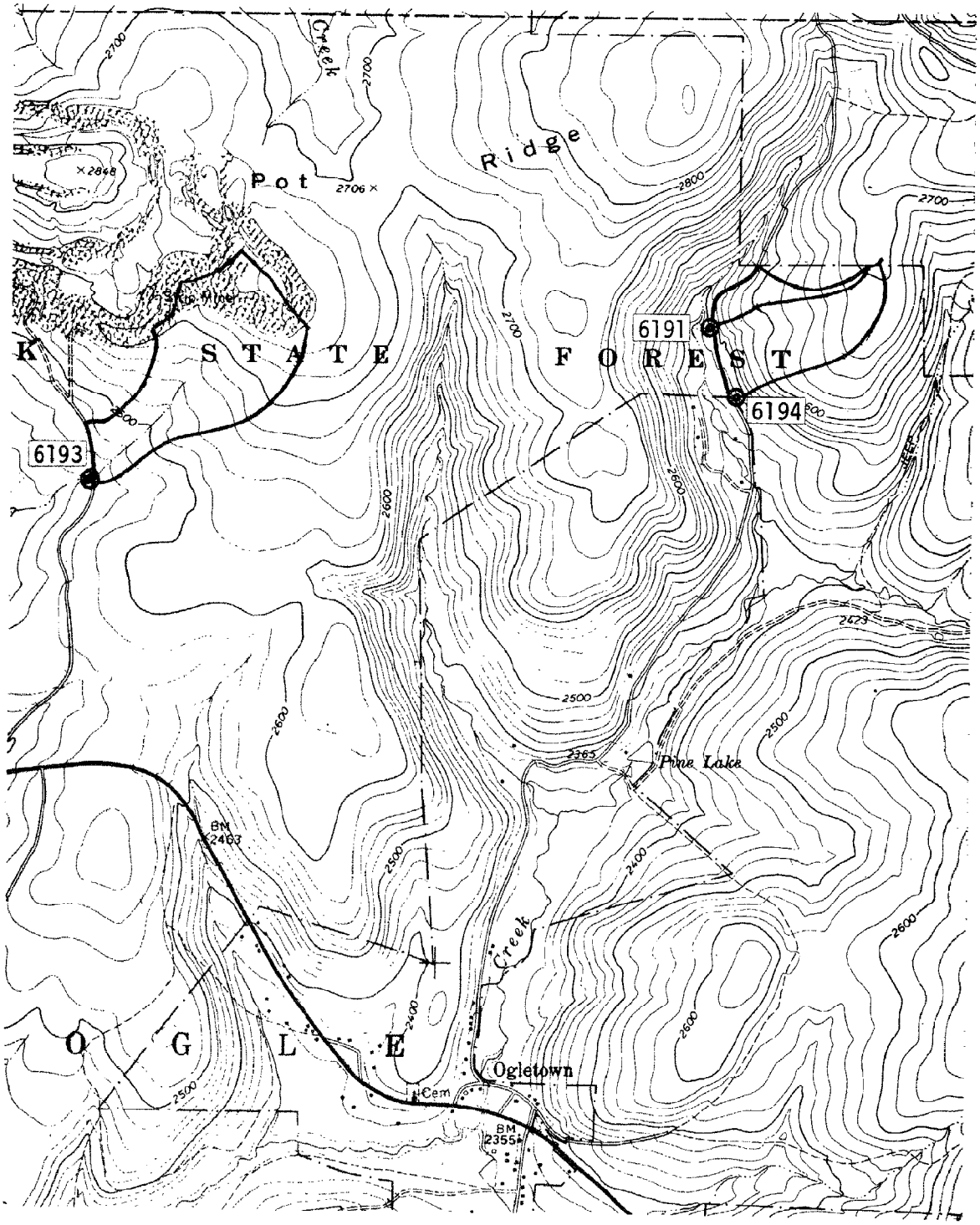

Figure 50. Location map for sites 6191, 6193 and 6194, Somerset Co., Pennsylvania. Ogletown Quadrangle.

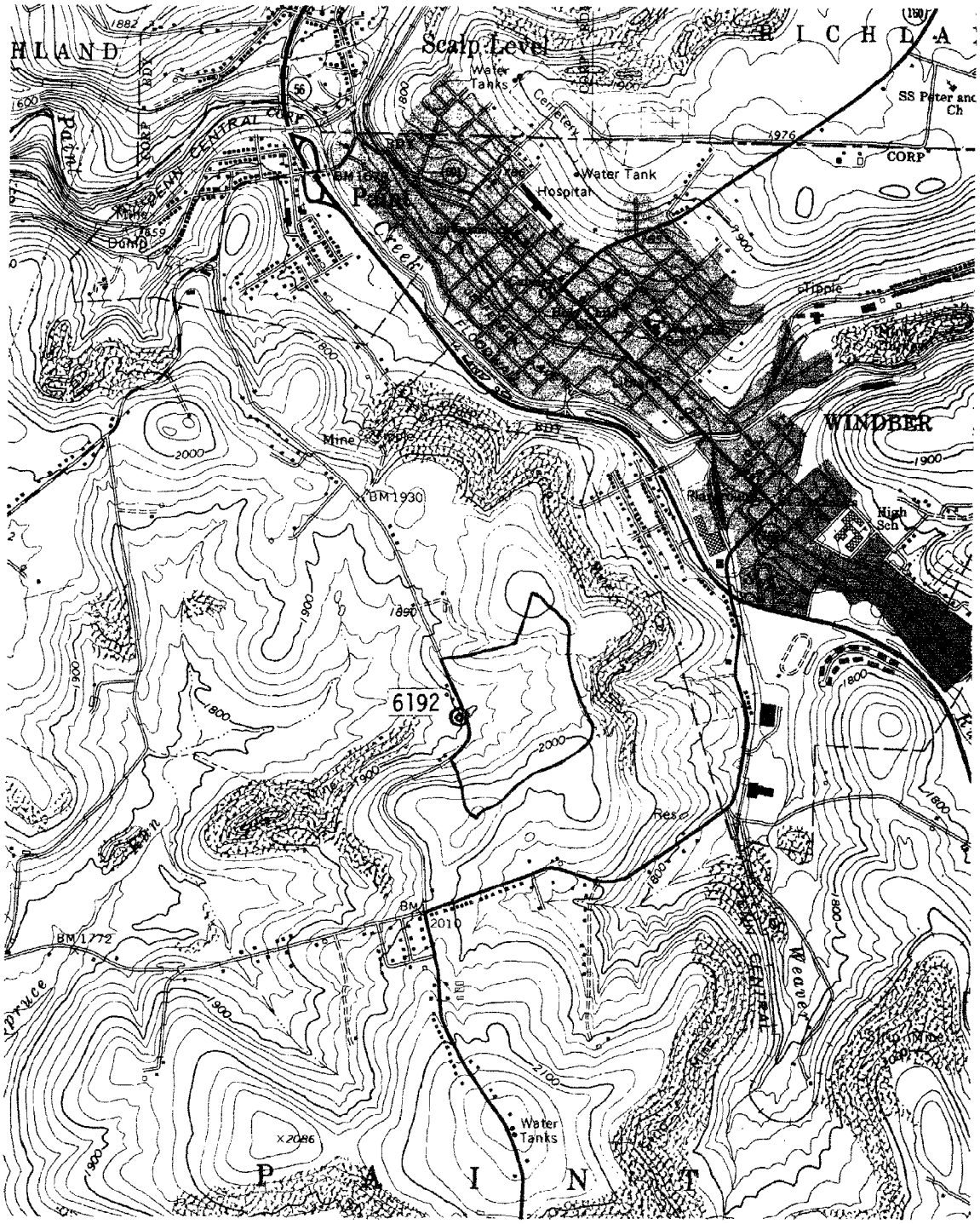

Figure 51. Location map for site 6192, Somerset Co., Pennsylvania. Windber Quadrangle.

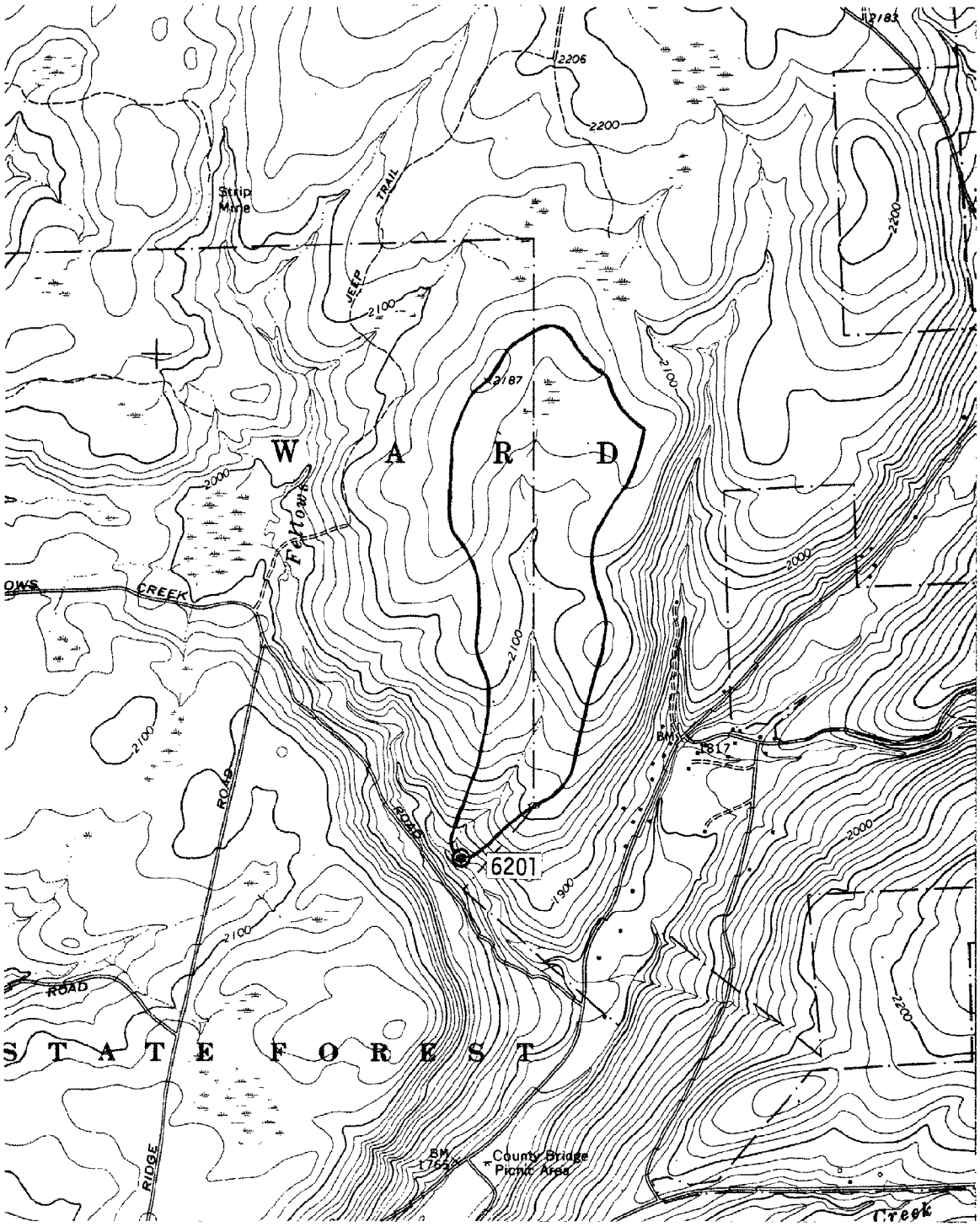

Figure 52. Location map for site 6201, Tioga Co., Pennsylvania. Gleason Quadrangle.

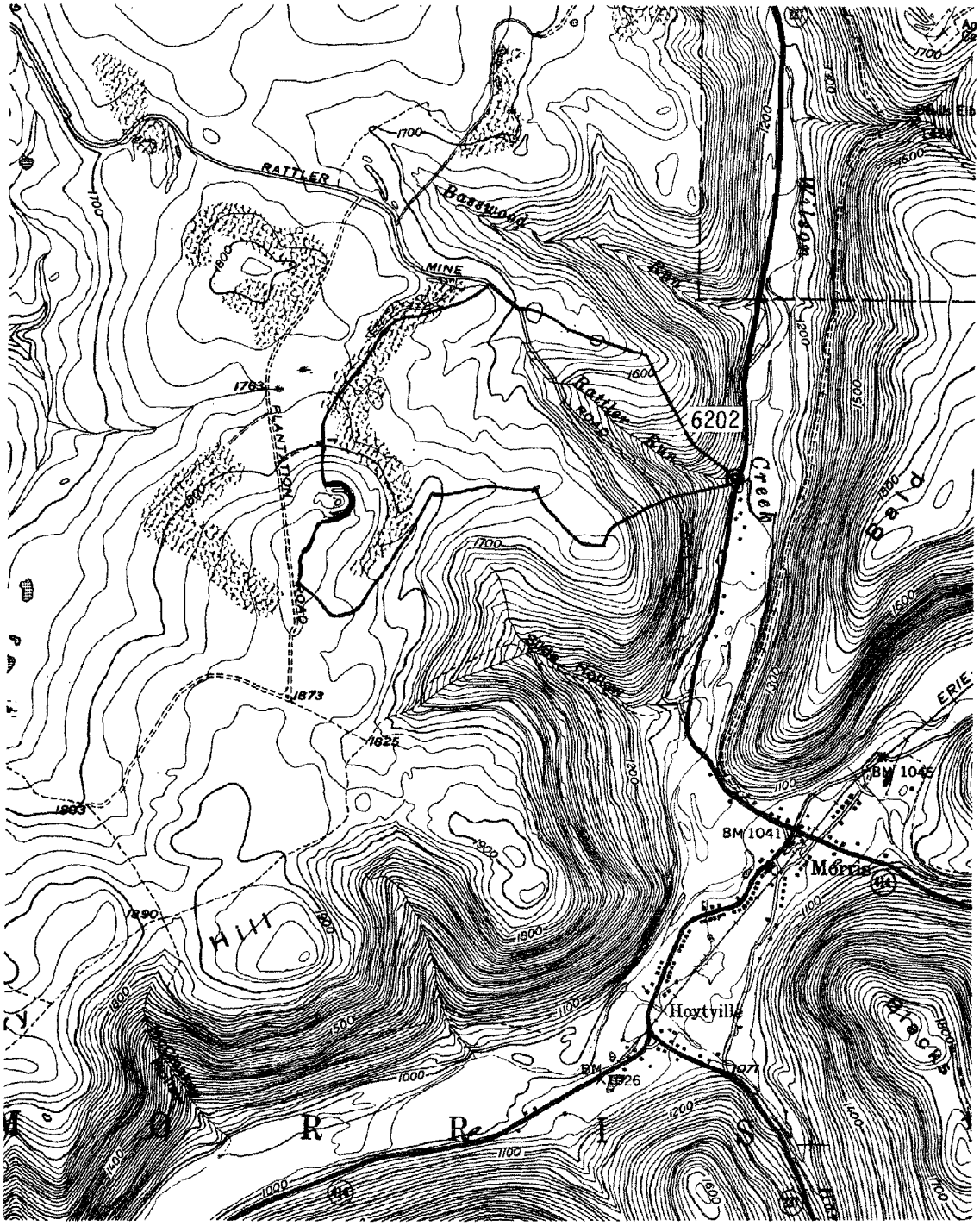

Figure 53. Location map for site 6202, Tioga Co., Pennsylvania. Morris Quadrangle.

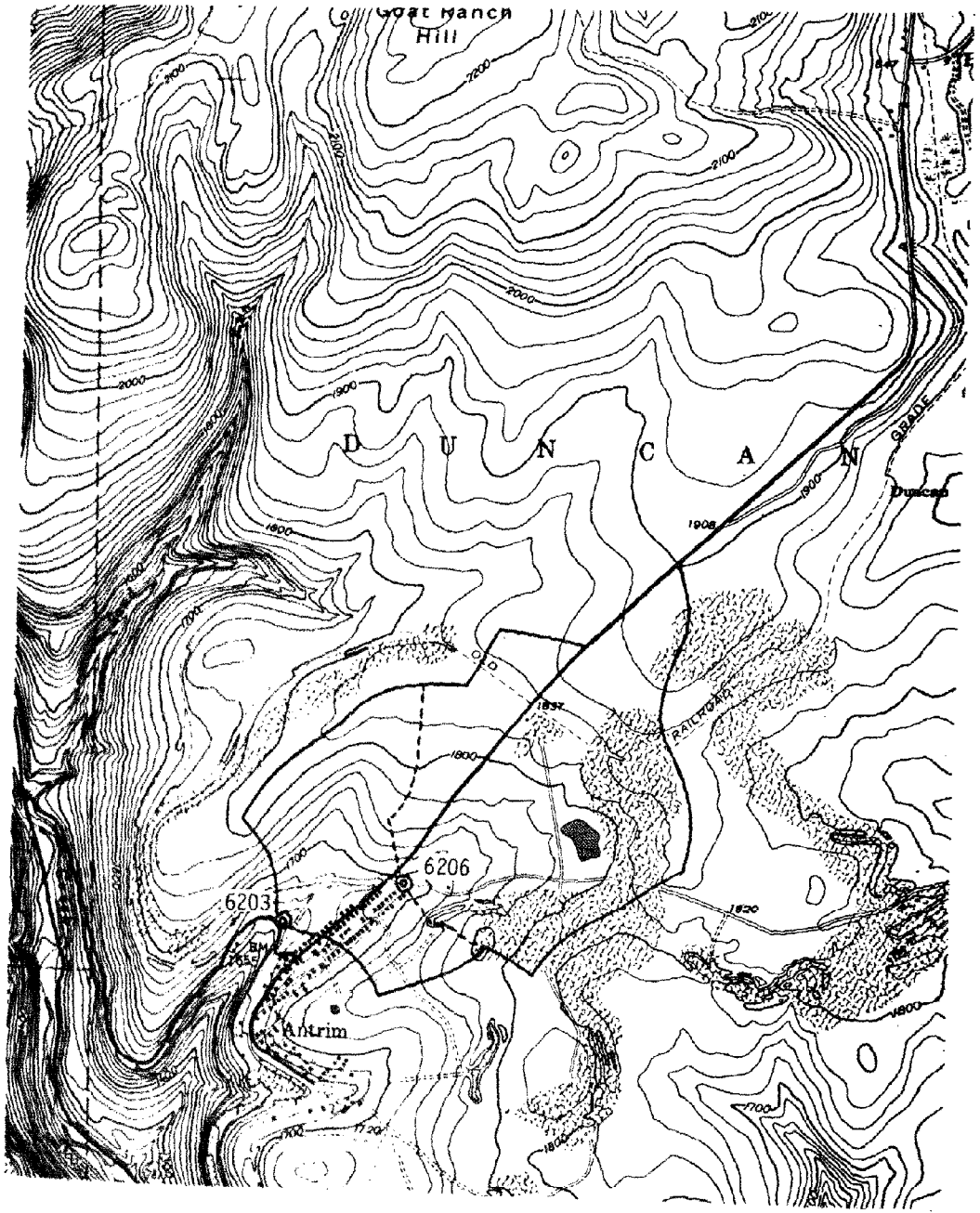

Figure 54. Location map for sites 6203 and 6206, Tioga Co., Pennsylvania. Antrim Quadrangle.

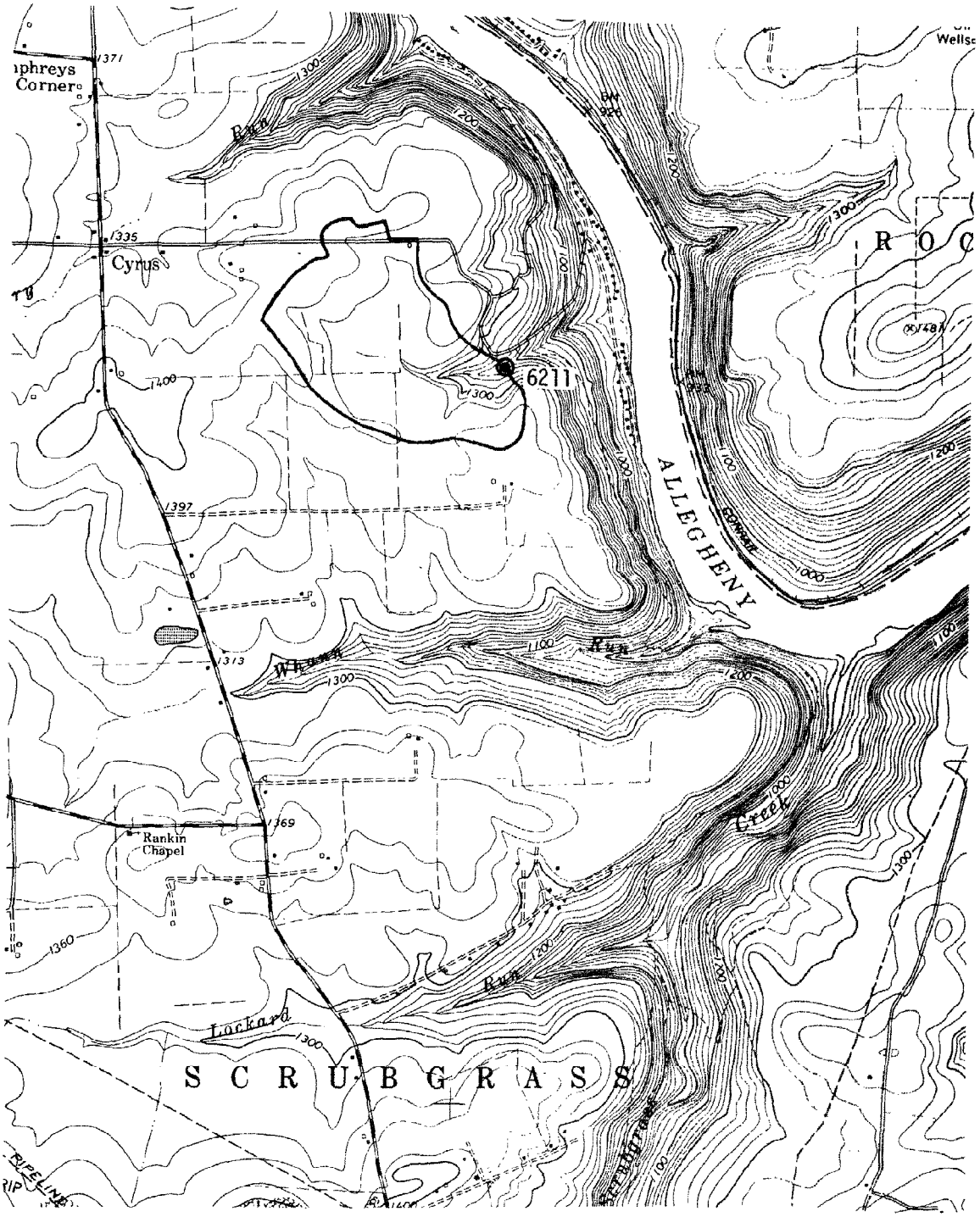

Figure 55. Location map for site 6211, Venango Co., Pennsylvania. Eau Claire Quadrangle.

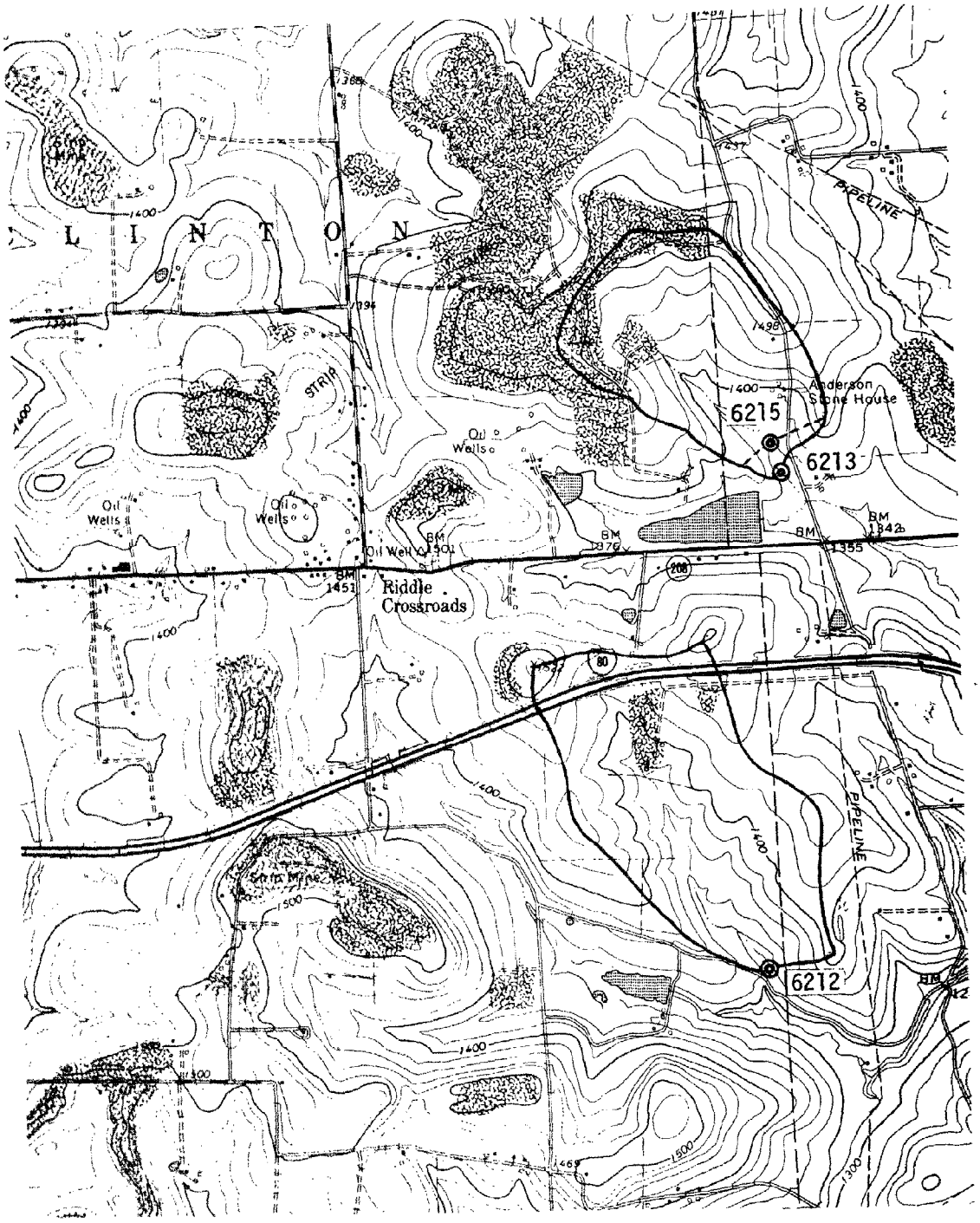

Figure 56. Location map for sites 6212, 6213 and 6215, Venango Co., Pennsylvania. Eau Claire Quadrangle.

Figure 57. Location map for sites 6221 and 6222, Washington Co., Pennsylvania. Hackett Quadrangle.

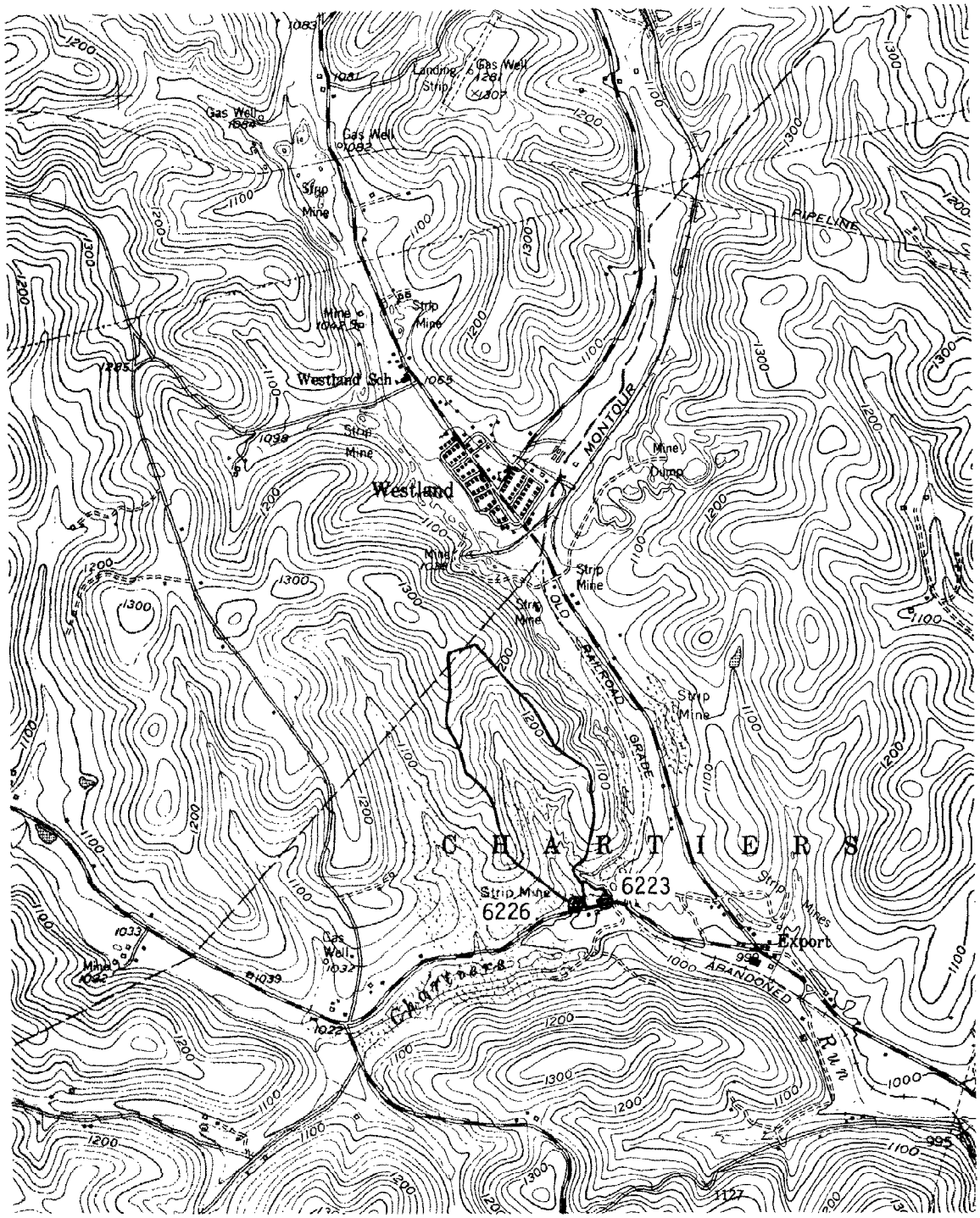

Figure 58. Location map for sites 6223 and 6226, Washington Co., Pennsylvania. Midway Quadrangle.

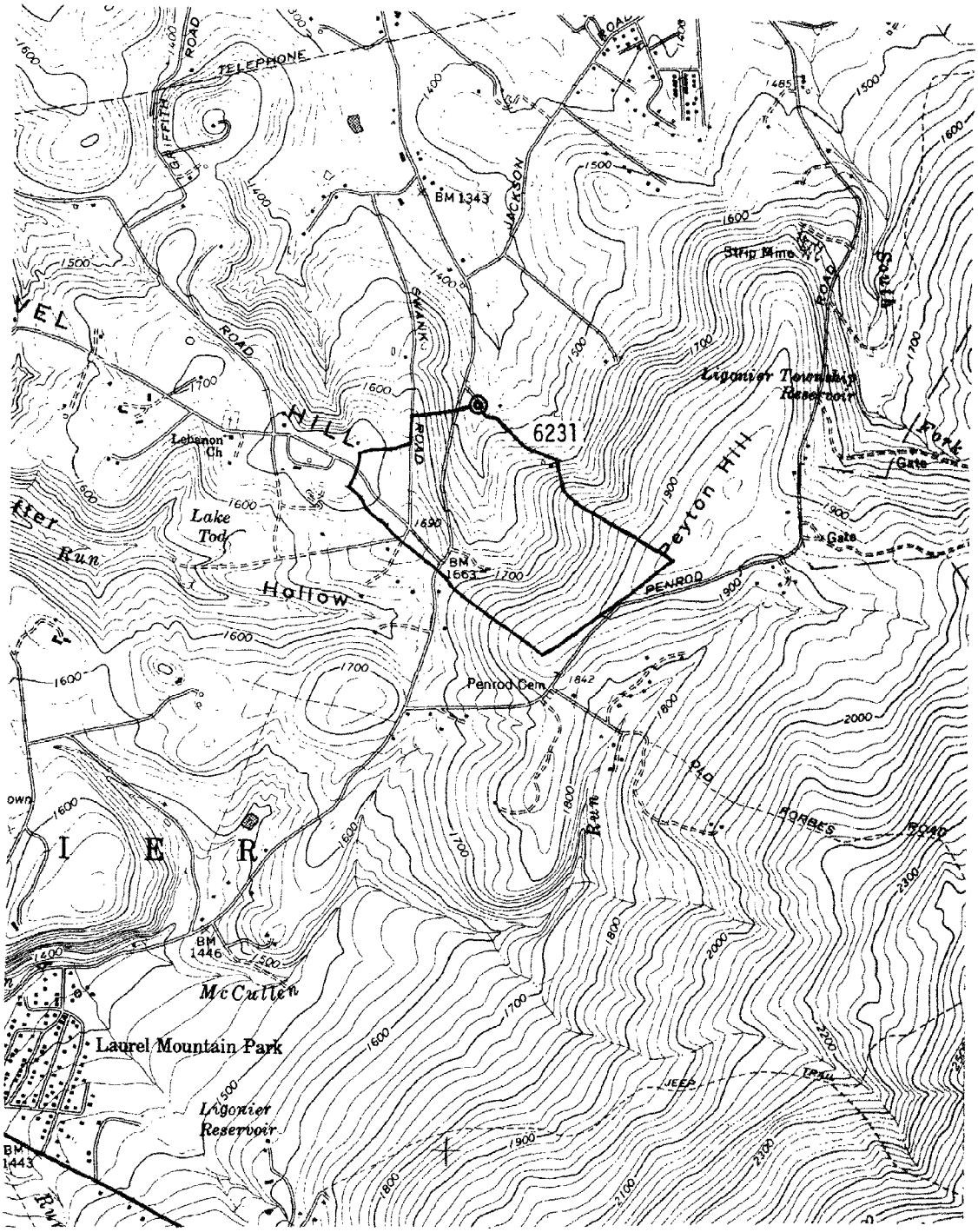

Figure 59. Location map for site 6231, Westmoreland Co., Pennsylvania. Ligonier Quadrangle.

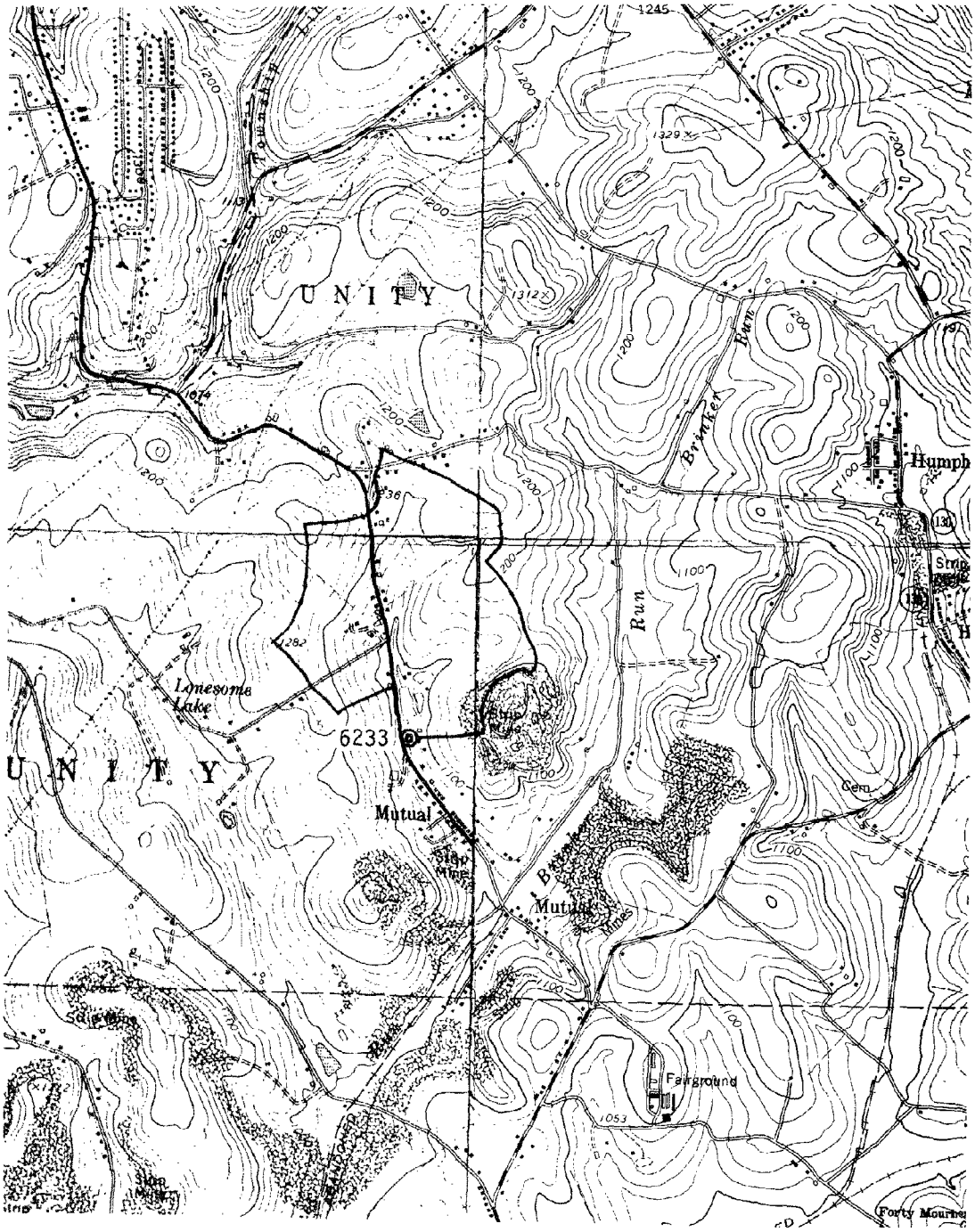

Figure 60. Location map for site 6233, Westmoreland Co., Pennsylvania. Mt. Pleasant, Greensburg, Mammoth, and Latrobe Quadrangles.

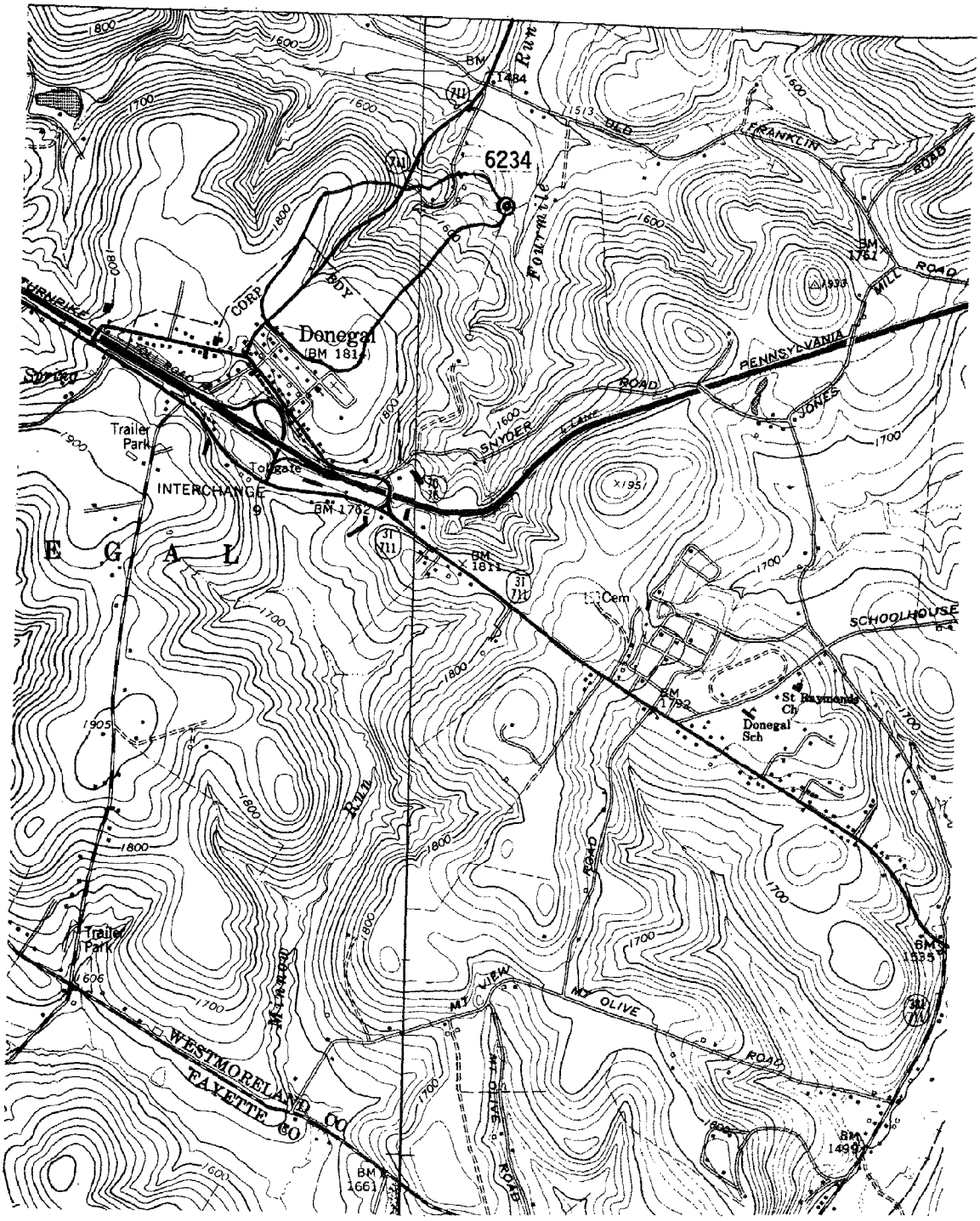

Figure 61. Location map for site 6234, Westmoreland Co., Pennsylvania. Seven Springs and Donegal Quadrangles.

TABLE 1. DESCRIPTIVE DATA FOR THE PENNSYLVANIA WATER QUALITY SITES

Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1]	Site Name
6011	Allegheny	Unmined	40°22'07"	80°12'24"	25	0	Fishing Run near McDonald.
6012	Allegheny	1975-1977	40 24 48	80 07 09	153	(10)	Tributary to Chartiers Creek near Carnegie.
6013	Allegheny	Before 1960	40 26 25	80 05 34	110	15	Tributary to Chartiers Creek at Thornburg.
6021	Armstrong	Unmined	40 53 02	79 20 37	237	0	North Fork Pine Creek at Muff.
6022	Armstrong	1960-1978	40 53 56	79 17 45	266	13	Camp Run at Belknap.
6023	Armstrong	1960-1962	40 52 03	79 18 15	306	9	Tributary to North Branch near Echo.
6024	Armstrong	Unmined	40 52 59	79 20 51	389	0	North Fork Pine Creek at Muff.
6031	Beaver	Unmined	40 40 21	80 26 32	42	0	Tributary to Wolf Run near Fairview.
6032	Beaver	1950-1979[2]	40 39 04	80 26 18	(1400)[2]	(2)[2]	Spring, tributary to Wolf Run near Midland.
6033	Beaver	1965-1972	40 50 26	80 26 07	586	30	Madden Run near Enon Valley.
6041	Butler	Unmined	41 03 49	79 46 51	62	0	Tributary to Silver Creek near Walley Mill.
6042	Butler	1976-1979	40 58 27	79 48 23	106	30	Tributary to Connoquenessing Creek near Troutman.
6043	Butler	1951-1964	41 01 20	79 46 46	142	60	Tributary to Bear Creek near Walley Mill.
6044	Butler	Unmined[3]	41 03 48	79 46 53	1	0	Spring, tributary to Silver Creek near Walley Mill.
6051	Cambria	Unmined[3]	40 18 22	78 39 08	20	0	Spring, tributary to Beaverdam Run near Onnalinda.
6053	Cambria	1970-1972	40 34 42	78 45 17	191	5	Tributary to Blacklick Creek near Bakerton.

TABLE 1. DESCRIPTIVE DATA FOR THE PENNSYLVANIA WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1/]	Site Name
6056	Cambria	Before 1959	40°18'08"	79°41'55"	97	25	Tributary to South Fork Little Conemaugh River at Loydell.
6061	Centre	Unmined[3/]	40 48 47	77 44 55	44	0	Spring, tributary to Cedar Run near Linden Hall.
6062	Centre	1955-1978	40 49 16	78 15 38	321	12	Tributary to Trout Run at Penn Five.
6063	Centre	1950-1971	41 04 45	77 53 37	341	41	Tributary to Sandy Run at Shettleston.
6071	Clarion	Unmined[3/]	41 02 15	79 24 44	12	0	Spring, tributary to Middle Run at Squirrel Hill.
6072	Clarion	1960-1978	41 04 01	79 20 59	2	100	Tributary to Jack Run at Brinkerton.
6073	Clarion	1971-1972	41 06 15	79 16 41	68	(15)	Poe Run at Crates.
6076	Clarion	Before 1967	41 04 03	79 20 59	8	95	Tributary to Jack Run at Brinkerton.
6081	Clearfield	Unmined	40 58 22	78 41 07	52	0	Tributary to Daily Run at Irishtown.
6082	Clearfield	1950-1977	40 54 01	78 35 13	313	36	Tributary to Watts Creek at Kerrmoor.
6083	Clearfield	1955-1971	40 52 41	78 40 04	44	50	Tributary to McCracken Run near Bower.
6091	Clinton	Unmined	41 16 09	77 46 33	122	0	Macks Hollow near Shintown.
6092	Clinton	1965-1979	41 19 53	77 46 19	1050	(10)	Brewery Run at Renovo.
6093	Clinton	1964-1969	41 19 50	77 51 29	11	30	Tributary to Two Mile Run near Westport.
6096	Clinton	1964-1969	41 19 57	77 51 29	91	57	Tributary to Two Mile Run near Westport.
6101	Elk	Unmined	41 15 10	78 42 44	32	0	Tributary to Boggy Run at Brockport.

TABLE 1. DESCRIPTIVE DATA FOR THE PENNSYLVANIA WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1/]	Site Name
6102	Elk	1975-1979	41°15'54"	78°42'28"	125	(50)	Tributary to Little Toby Creek at Helen Mills.
6103	Elk	Before 1968	41 16 28	78 42 52	214	13	Tributary to Little Toby Creek at Helen Mills.
6111	Fayette	Unmined	39 53 14	79 26 20	198	0	Tributary to Bear Run near Kaufmann.
6112	Fayette	1972-1977	40 04 05	79 26 55	109	27	Tributary to Little Champion Creek at White.
6113	Fayette	1970-1971	39 51 30	79 45 28	138	(30)	Muddy Run at Chadville.
6121	Fulton	Unmined	40 04 28	78 09 15	60	0	Tributary to Laurel Fork near Wells Tannery.
6123	Fulton	1951-1953	40 07 12	78 13 46	214	18	Tributary to Sandy Run near Langdondale.
6124	Fulton	Unmined	40 06 41	78 07 57	1000	0	Roaring Run near Emid.
6126	Fulton	Before 1967	40 08 09	78 11 02	138	13	Longs Run near Finleyville.
6129	Fulton	Before 1967	40 07 53	78 11 05	457	2	Sandy Run near Finleyville.
6131	Greene	Unmined	39 45 51	80 02 13	76	0	Tributary to Dunkard Creek at Davistown.
6132	Greene	1977-1978	39 44 43	80 01 40	99	60	Tributary to Dunkard Creek at Bald Hill.
6135	Greene	1971-1973	39 43 50	80 00 25	24	85	Tributary to Dunkard Creek at Bald Hill.
6141	Indiana	Unmined	40 46 25	79 09 16	68	0	Tributary to South Branch Plum Creek near Plumville.
6142	Indiana	1955-1977	40 33 36	78 56 41	15	45	Tributary to Little Yellow Creek near Nolo.
6144	Indiana	Unmined	40 33 30	78 56 18	465	0	Tributary to Little Yellow Creek at Strongstown.

TABLE 1. DESCRIPTIVE DATA FOR THE PENNSYLVANIA WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1]	Site Name
6145	Indiana	1970-1979[4]	40°26'36"	79°14'21"	11	100	Tributary to Conemaugh River at Smith.
6151	Jefferson	Unmined	41 13 18	79 10 01	176	0	Tributary to Mill Creek near Roseville.
6152	Jefferson	1977-1978	41 15 06	78 50 41	52	55	Tributary to Mill Creek near Sugar Hill.
6153	Jefferson	Before 1967	41 01 57	79 02 29	10	42	Tributary to Little Sandy Creek at East Branch.
6156	Jefferson	Before 1967	41 02 08	79 02 15	50	27	Tributary to Little Sandy Creek at East Branch.
6161	Lawrence	Unmined	41 04 17	80 13 08	326	0	Hottenbaugh Run near Drake.
6162	Lawrence	1955-1979	41 03 04	80 11 26	426	5	Tributary to Slippery Rock Creek near Harlansburg.
6163	Lawrence	1955-1969	41 03 53	70 14 46	274	35	Tributary to Hottenbaugh Run near Harlansburg.
6166	Lawrence	1964-1971	41 03 32	80 13 23	1370	10	Hottenbaugh Run near Harlansburg.
6170	Lycoming	Deep Mine[5]	41 31 48	76 55 58	11	0	Tributary to Lycoming Creek near Ralston.
6171	Lycoming	Unmined	41 30 56	76 54 51	151	0	Tributary to Rock Run near Ralston.
6172	Lycoming	1965-1977	41 31 11	76 59 08	124	(5)	Tributary to Red Run near Ralston.
6173	Lycoming	1958-1963	41 31 49	76 56 00	1[6]	100[6]	Tributary to Lycoming Creek near Ralston.
6176	Lycoming	1958-1963	41 31 30	76 56 19	138	6	Tributary to Lycoming Creek near Ralston.
6179	Lycoming	1958-1963[4]	41 31 41	76 56 22	311	6	Tributary to Lycoming Creek near Ralston.
6181	Mercer	Unmined	41 09 02	80 12 18	371	0	Tributary to Neshannock Creek at Schollard.

TABLE 1. DESCRIPTIVE DATA FOR THE PENNSYLVANIA WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1/]	Site Name
6182	Mercer	1976-1979	41°09'56"	80°10'46"	21	(80)	Tributary to Mill Run at Blacktown.
6183	Mercer	1964	41 11 07	80 09 18	438	(20)	Tributary to Pine Run near Blacktown.
6191	Somerset	Unmined	40 13 55	78 41 42	12	0	Tributary to Clear Shade Creek near Ogletown.
6192	Somerset	1976-1978	40 13 25	78 50 29	78	1	Spruce Run at Windber.
6193	Somerset	1961-1969	40 13 33	78 43 31	100	21	Babcock Creek near Ogletown.
6194	Somerset	Unmined	49 13 44	78 41 38	47	0	Tributary to Clear Shade Creek near Ogletown.
6201	Tioga	Unmined	41 41 24	76 56 36	251	0	Tributary to Fellows Creek near Gleason.
6202	Tioga	1965-1979	41 36 27	77 17 44	292	13	Rattler Run at Morris.
6203	Tioga	1955-1972	41 38 07	77 17 16	495	21	Tributary to Wilson Creek at Antrim.
6206	Tioga	1955-1972	41 38 13	77 16 54	338	31	Tributary to Wilson Creek at Antrim.
6211	Venango	Unmined	41 14 08	79 47 23	148	0	Tributary to Allegheny River at St. George.
6212	Venango	1976-1979	41 11 07	79 49 28	253	(50)	Tributary to Little Scrubgrass Creek at Eakin Corner.
6213	Venango	1968-1972	41 12 13	79 49 26	172	21	Tributary to North Fork Little Scrubgrass Creek near Riddle Crossroads.
6215	Venango	1968-1979[7/]	41 12 17	79 49 27	165	35[7/]	Tributary to North Fork Little Scrubgrass Creek near Riddle Crossroads.
6221	Washington	Unmined	40 10 31	80 03 39	66	0	Tributary to North Branch Pigeon Creek at Kammerer.

TABLE 1. DESCRIPTIVE DATA FOR THE PENNSYLVANIA WATER QUALITY SITES (Continued)

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1]	Site Name
6222	Washington	1974-1978	40°10'21"	80°03'01"	13	15	Tributary to North Branch Pigeon Creek at Kammerer.
6223	Washington	1964-1967	40 15 44	80 16 05	2	100	Tributary to Chartiers Run at Export.
6226	Washington	1964-1967	49 15 43	80 16 10	83	36	Tributary to Chartiers Run at Export.
6231	Westmoreland	Unmined	40 14 07	79 09 56	160	0	Tributary to Mill Creek near Waterford.
6233	Westmoreland	1966-1968	40 14 33	79 30 11	188	5	Tributary to Brinker Run at Mutual.
6234	Westmoreland	Unmined	40 07 05	79 22 15	104	0	Tributary to Fourmile Run at Donegal.

[1] The percentage of land disturbed by surface mining was generally not verified by field observations and so may be subject to considerable error. Percentages enclosed by parentheses are based on very scanty or questionable information and may be subject to larger errors.

[2] The surface drainage at site 6032 is unmined and measures about 1 acre; however, the stream heads up in an abandoned channel of Wolf Run, and its water is almost certainly the subsurface flow of Wolf Run, a watershed which is about 2 percent disturbed by surface mining.

[3] A spring discharging from a hillside is the source of water at this site.

[4] The watershed of site 6145 is now partly converted into a shopping center, but the remainder is mostly raw spoil. Most of the water sampled comes out of a drain pipe and its exact sources are unknown.

[5] Discharge at site 6170 is largely effluent from a deep mine.

[6] Discharge at site 6173 originates in a spring. This spring is undoubtedly fed by an underground flow from an area much larger than the 1 acre measured as contributing surface drainage to the site.

[7] Site 6215 was established when new mining was initiated on watershed 6213 in July 1978. The area of disturbance increased quickly from about 22 percent in July 1978 to perhaps 35 percent within the next year.

TABLE 2. TYPES OF WATER SAMPLES COLLECTED AT EACH SITE, VOLUME OF SAMPLE, TREATMENT OF SAMPLE, AND INCLUSIVE DATES OF COLLECTION

Sample Designation	Volume of Sample (ml)	Treatment/Inclusive Dates of Collection
F	100	Filtered (July 13, 1977 to October 4, 1979)
FA	100	Filtered, acidified with 0.5 ml 50% nitric acid (July 13, 1977 to October 4, 1979)
FN	50	Filtered, acidified with 0.25 ml 50% sulfuric acid (July 10, 1979 to September 28, 1979)
FP	50	Filtered, preserved with 0.25 ml 0.5% mercuric Chloride (July 10, 1979 to September 28, 1979)
KJ	100	Unfiltered, acidified with 0.5 ml 50% sulfuric acid (July 10, 1979 to September 28, 1979)
SA	100	Unfiltered, acidified with 0.5 ml 50% nitric acid (Collected July 13, 1977 to about June 1978)
SV	1000	Unfiltered, untreated, raw water (Collected May 3, 1979 to August 1, 1979)
U	100	Unfiltered, untreated, raw water (Collected July 13, 1977 to October 4, 1979)

TABLE 3. TABULATION OF ELEMENTS ANALYZED ON THE SPECTRASPAN III EMISSION SPECTROMETER

Element	Approximate detection limit Mg/l	Approximate deviation from the mean
Aluminum	0.2	± 10%
Barium*	0.5	
Beryllium*	0.01	± 0.01 mg/l
Boron	0.05	± 10%
Calcium	0.05	± 10%
Cobalt	0.1	± 20%
Copper	0.02	± 20%
Iron	0.05	± 10%
Lead	0.1	
Lithium*	0.05	± 25%
Magnesium	0.05	± 10%
Manganese	0.05	± 20%
Molybdenum*	0.25	
Nickel	0.03	± 10%
Potassium	0.1	± 10%
Silicon	0.1	± 20%
Sodium	0.05	± 10%
Strontium*	0.03	± 20%
Titanium	0.5	
Zinc	0.3	± 10%

*Analyzed about every third month

TABLE 4. WATER QUALITY FOR SITE 6011 ALLEGHENY COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PH
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 12 77	20	0.005			8	555	320		8.2		198	237	2		34	0.9					
10 14 77	10	0.003			4	685	414	4.47	8.0		181	218	1	67	72	0.9					
11 25 77	4	0.002	5			651	436	3.78	8.2		187	223	2	79	78	0.9					
3 23 78	8	0.3			4	515	325	3.87	7.4		155	188	0	38	65	1.5					
4 26 78	12	0.06			10	611	350	3.28	8.0		123	148	1	50	86	0.7					
5 31 78	27	0.1			7	8410	5220		7.7		152	183	1	3400	69	1.7					
6 28 78	19	0.25				16800	8560	5.53	7.5		116	141	1	5200	58	0.7					
8 2 78	21	0.1			10	31000	14300	15.0	7.3		104	126	0	8600	64	0.6					
9 13 78	18	0.01			30		38100	0.39	7.3		115	139	1	24000	96	0.9					
10 17 78	7	0.005			20	4330	2220	6.51	8.0		97	116	1	1200	67	0.4					
11 17 78	9	0.01			15	9600	5680	10.5	7.8		78	94	1	3200	80	0.9					
1 9 79	0	0.03	21		2	640	513	1.71	8.0		121	146	1	190	80	0.5					
2 28 79	4	0.08			5	16600	10600	19.0	7.5		114	138	1	6100	79	1.6					
3 28 79	3	0.03			10	32000	13700	41.1	7.5		100	121	1	7300	100	0.8					
5 3 79	12	0.02		0.60	20	628	474	2.42	8.3		149	177	2	63	150	0.3					
5 31 79	13	0.05	100		35	617	363	3.27	8.2		167	200	2	30	92	0.5					
7 10 79	22	0.02	123		40	633	348	4.68	8.5		201	235	5	37	56	0.7	0.1	0.12	1.90	0.15	0.00
10 3 79	15	0.04	77		85	574	342	3.76	8.3		168	200	3	29	73	1.2					

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 12 77	0.1	0.01			74	0.0	0.01	0.1	8.2		24	0.1		46	0.01	0.1	4.5		0.0	0.0
10 14 77	0.1	0.03	0.1	0.00	84	0.0	0.00	0.1	4.7	0.25	37	0.2	0.0	29	0.00	0.0	3.1	0.6	0.0	0.0
11 25 77	0.1	0.00	0.1	0.00	90	0.0	0.00	0.1	5.0	0.60	32	0.2	0.0	26	0.01	0.0	3.9	0.8	0.2	0.0
3 23 78	0.1	0.04			67	0.0	0.00	0.1	3.0		25	0.1		20	0.01	0.0	3.3		0.0	0.0
4 26 78	0.1	0.01	0.1	0.00	72	0.0	0.00	0.1	2.6	0.25	35	0.1	0.0	20	0.02	0.0	2.8	0.5	0.1	0.0
5 31 78	0.6	0.05			400	0.1	0.01	0.3	15		110	1.4		1100	0.07	0.3	4.7		0.4	0.0
6 28 78	1.0	0.09	1.6	0.00	820	0.2	0.00	0.6	32	3.5	200	2.4	0.2	2200	0.10	0.7	5.6	16	1.1	0.0
8 2 78	1.7	0.09			1800	0.1	0.00	0.5	32		280	4.4		3500	0.20	1.6	4.6		0.6	0.0
9 13 78	7.2	0.17	0.0	0.00	4100	0.1	0.03	1.1	70	0.01	630	13	0.0	9400	0.48	4.0	5.4	0.0	1.4	0.0
10 17 78	0.4	0.02	0.8	0.00	280	0.0	0.01	1.7	9.7	2.0	61	2.0	0.1	540	0.04	0.4	3.8	4.2	0.2	0.0
11 17 78	1.2	0.04	0.1	0.00	640	0.0	0.01	0.2	16	0.35	110	2.3	0.0	1500	0.10	0.7	2.8	0.6	0.5	0.0
1 9 79	0.2	0.00	0.3	0.00	85	0.0	0.00	0.1	3.0	0.80	28	0.1	0.0	38	0.02	0.2	3.7	0.8	0.1	0.0
2 28 79	1.9	0.06			1400	0.1	0.02	1.2	21		190	1.9		2700	0.16	1.2	3.4		1.2	0.0
3 28 79	2.4	0.10	6.0	0.00	2100	0.2	0.05	0.7	48	20	370	2.2	0.4	3600	0.22	1.4	1.9	43	3.0	0.1
5 3 79	0.2	0.01			90	0.0	0.00	0.1	2.7		33	0.1		42	0.01	0.1	2.2		0.2	0.0
5 31 79	0.2	0.00			74	0.0	0.03	0.1	3.1		29	0.4		22	0.01	0.1	4.0		0.1	0.3
7 10 79	0.2	0.03	0.1	0.00	71	0.0	0.02	0.1	4.5	0.55	23	0.4	0.0	22	0.02	0.1	4.3	0.8	0.0	0.0
10 3 79	0.2	0.03			73	0.0	0.02	0.1	4.1		24	0.3		21	0.01	0.1	4.8		0.1	0.0

TABLE 5. WATER QUALITY FOR SITE 6012 ALLEGHENY COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 12 77	20	0.08			20	985	555	2.56	8.3		150	178	2	78	160	0.4					
10 14 77	11	0.025	7		8	874	533	2.54	8.1		161	193	2	4.0	210	0.3					
11 25 77	5	0.007	2			780	564	2.17	8.2		142	169	2	64	190	0.2					
2 28 78	0	0.0001			8	1180	637	1.47	8.4		75	89	2	210	150	0.7					
3 23 78	9	0.4			10	1350	706	2.72	7.9		126	152	1	220	120	0.9					
4 26 78	15	0.01			15	952	568	1.81	8.3		101	120	2	130	170	0.1					
5 31 78	28	0.0000			8	892	568	1.78	8.1		148	177	2	95	180	1.3					
6 28 78	23	0.15	76*			821	479	3.05	8.0		166	200	1	65	110	0.5					
9 13 78	18	0.02	65*		20	890	523	2.43	8.5		171	200	4	100	120	0.9					
10 17 78	8	0.03	31*		10	814	507	2.37	8.5		177	207	4	58	150	0.5					
11 17 78	9	0.02				599	383	2.33	8.1		103	124	1	42	120	0.6					
1 9 79	0	0.008	7		3	1860	1060	2.46	8.1		117	140	1	450	120	1.2					
2 28 79	2	0.5	305		180	586	324	2.60	7.4		70	86	0	83	63	1.2					
3 28 79	4	0.01			40	1040	605	2.98	8.3		99	118	2	160	130	0.1					
5 3 79	12	0.001	67	0.35	20	789	438	1.87	8.1		121	146	1	80	130	0.0					
5 31 79	17	0.07	33	0.00	55	790	525	1.80	8.4		148	174	3	110	140	0.4					
7 10 79	23	0.02	9		30	711	440	1.86	8.5	-130	137	160	3	34	160	0.7	0.0	0.05	1.65	0.25	0.04
10 3 79	15	0.06	29		40	710	472	2.42	8.5		166	195	4	68	120	0.3					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 12 77	0.1	0.16			91	0.0	0.01	0.1	8.1		19	0.2		95	0.01	0.1	7.6		0.0	0.0
10 14 77	0.2	0.25	0.1	0.00	110	0.0	0.00	0.1	3.5	0.30	36	0.5	0.0	61	0.00	0.0	6.1	0.5	0.0	0.1
11 25 77	0.1	0.10	0.1	0.00	100	0.0	0.01	0.1	5.7	0.75	28	0.8	0.0	68	0.01	0.0	6.4	0.8	0.1	0.0
2 28 78	0.1	0.10			82	0.0	0.00	0.1	4.5		29	0.7		94	0.03	0.0	5.3		0.1	0.1
3 23 78	0.2	0.13			96	0.0	0.00	0.1	7.9		21	1.0		140	0.02	0.0	7.0		0.1	0.0
4 26 78	0.1	0.11	0.0	0.00	79	0.0	0.00	0.1	5.3	0.25	26	0.3	0.0	89	0.03	0.0	3.4	0.4	0.1	0.0
5 31 78	0.2	0.16			75	0.0	0.00	0.1	7.6		21	0.0		86	0.01	0.0	4.3		0.1	0.0
6 28 78	0.1	0.18	0.1	0.00	73	0.0	0.01	0.1	7.6	0.25	21	0.1	0.0	80	0.00	0.1	7.8	0.4	0.1	0.0
9 13 78	0.1	0.19			85	0.1	0.02	0.1	5.8		21	0.1		67	0.01	0.1	6.7		0.2	0.2
10 17 78	0.2	0.15	0.1	0.00	93	0.0	0.01	0.1	6.7	0.60	20	0.1	0.0	55	0.02	0.1	8.5	0.6	0.0	0.0
11 17 78	0.3	0.10			71	0.0	0.01	0.2	8.2		14	0.2		49	0.00	0.1	6.0		0.0	0.0
1 9 79	0.3	0.08	0.1	0.00	120	0.0	0.00	0.3	7.1	0.85	25	0.9	0.1	240	0.04	0.2	6.2	0.8	0.1	0.0
2 28 79	0.3	0.04			53	0.0	0.00	0.3	4.5		8.3	0.2		56	0.01	0.1	4.0		0.0	0.0
3 28 79	1.0	0.08			100	0.0	0.01	1.0	6.1		20	0.6		130	0.03	0.1	4.1		0.1	0.0
5 3 79	0.2	0.12			66	0.1	0.01	0.2	4.5		21	0.4		53	0.05	0.2	3.8		0.8	0.0
5 31 79	0.2	0.11			81	0.0	0.00	0.1	10		17	0.2		61	0.01	0.1	6.0		0.1	0.1
7 10 79	0.2	0.16	0.1	0.00	80	0.0	0.01	0.1	7.2	0.65	16	0.1	0.1	41	0.01	0.1	6.3	0.5	0.0	0.0
10 3 79	0.5	0.17			81	0.0	0.02	0.1	8.8		13	0.2		60	0.04	0.1	8.8		0.1	0.0

TABLE 6. WATER QUALITY FOR SITE 6013 ALLEGHENY COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
8 25 77	15	0.15			0	1600	1190	0.72	4.5		0	0	0	6.2	900	0.6					
10 14 77	10	0.025	1		0	1640	1470	0.97	4.6		0	0	0	7.0	1000	0.6					
11 25 77	7	0.09	7			1800	1590	0.82	4.3		0	0	0	7.5	1200	0.5					
1 17 78	1	0.1			0	1260	1010	0.97	4.6		0	0	0	7.4	710	0.8					
2 28 78	1	0.06	2		4	1460	1220	0.91	4.4		0	0	0	3.1	880	0.2					
3 23 78	7	1.0			20	851	624	1.03	6.1		9	11	0	6.8	420	1.4					
4 26 78	11	0.4			5	1270	1020	0.90	4.9		0	0	0	8.3	740	0.6					
5 31 78		0.9			0	1150	867	0.84	4.9		0	0	0	8.1	630	0.9					
6 28 78	18	0.5	42#			1240	869	0.94	4.8		0	0	0	20	600	0.6					
8 2 78	20	0.3	26#		0	1550	1290	0.90	4.6		0	0	0	28	910	0.5					
9 13 78	17	0.04	14		0	1490	1330	1.11	4.6		0	0	0	8.7	900	0.9					
10 17 78	8	0.06	33#		0	1490	1300	0.87	4.6		0	0	0	7.8	940	0.9					
11 17 78	9	0.06	5		0	1570	1410	0.99	4.4	50	0	0	0	8.8	990	0.3					
1 9 79	0	0.09	11		3	1010	843	0.96	5.8		0	0	0	7.0	600						
2 28 79	3	0.4	36		40	832	648	1.07	6.8	-6	11	14	0	7.0	430	1.6					
3 28 79	4	0.4			20	1310	1160	0.96	4.8		0	0	0	7.1	820	0.9					
5 3 79	11	0.1	21	0.00	75	1420	999	0.90	4.6	38	0	0	0	7.6	720	0.9					
5 31 79	12	0.4	38	0.00		1180	921	1.08	5.9	7	1	1	0	7.0	630	0.8					
7 10 79	20	0.05	30		70	1630	991	1.08	4.5	47	0	0	0	9.4	670	0.4	0.0	0.04	0.65	0.15	0.01
10 3 79	14	0.2	17		40	1100	875	1.10	5.7	3	0	0	0	6.3	600	0.6					

Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 25 77	5.7	0.01			190	0.2		0.2	3.5		45	3.6		10	0.15	0.3	9.5		0.1	0.2
10 14 77	16	0.12	0.0	0.00	280	0.1	0.00	0.2	1.0	0.75	81	6.7	0.1	10	0.14	0.1	11	1.0	0.1	0.2
11 25 77	17	0.04	0.0	0.00	290	0.1	0.01	0.1	3.4	2.0	67	4.4	0.0	12	0.21	0.1	12	1.7	0.2	0.2
1 17 78	8.3	0.02			190	0.1	0.01	0.1	2.8		54	3.1		9.4	0.16	0.1	8.0		0.2	0.1
2 28 78	9.5	0.09			220	0.1	0.01	0.1	2.5		64	4.0		10	0.16	0.1	8.7		0.2	0.2
3 23 78	0.4	0.03			130	0.1	0.00	0.2	2.5		30	2.0		6.7	0.08	0.0	5.8		0.0	0.1
4 26 78	2.6	0.04	0.0	0.00	190	0.1	0.00	0.1	2.4	0.60	53	3.0	0.1	8.9	0.14	0.1	8.4	0.6	0.2	0.1
5 31 78	2.3	0.06			150	0.1	0.01	0.2	2.9		41	2.0		8.7	0.14	0.1	8.9		0.1	0.1
6 28 78	3.5	0.07	0.0	0.00	160	0.1	0.01	0.2	3.2	0.60	48	2.6	0.0	8.7	0.15	0.1	9.8	0.7	0.2	0.1
8 2 78	5.6	0.09			240	0.1	0.01	0.2	3.4		62	3.5		11	0.19	0.3	12		0.2	0.2
9 13 78	6.2	0.09			300	0.2	0.02	0.2	3.5		64	3.8		14	0.19	0.3	12		0.6	0.2
10 17 78	6.6	0.06	0.0	0.00	240	0.1	0.01	0.1	3.6	2.0	56	3.3	0.1	8.7	0.15	0.2	10	1.2	0.2	0.2
11 17 78	7.8	0.06			300	0.1	0.01	0.1	3.3		64	4.1		9.8	0.20	0.3	11		0.2	0.2
1 9 79	0.7	0.03	0.0	0.00	170	0.1	0.01	0.2	2.1	1.0	38	1.9	0.1	7.0	0.11	0.3	4.7	0.4	0.3	0.2
2 28 79	0.2	0.04			140	0.0	0.00	0.3	2.0		34	1.4		5.0	0.07	0.1	4.4		0.1	0.1
3 28 79	4.7	0.04	0.0	0.00	240	0.1	0.02	0.1	2.5	1.0	51	3.1	0.0	9.7	0.22	0.2	7.6	0.7	0.3	0.2
5 3 79	5.6	0.05			180	0.1	0.01	0.2	2.4		54	2.8		8.2	0.23	0.2	8.0		0.4	0.3
5 31 79	0.9	0.06			180	0.1	0.03	0.6	4.1		56	3.1		12	0.20	0.2	8.9		0.2	0.2
7 10 79	6.5	0.07	0.0	0.01	200	0.1	0.01	0.2	3.2	1.5	59	3.6	0.1	9.3	0.25	0.3	11	1.1	0.3	0.2
10 3 79	0.4	0.10			200	0.0	0.00	0.3	2.3		45	2.4		5.7	0.11	0.2	6.6		0.2	0.2

TABLE 7. WATER QUALITY FOR SITE 6021 ARMSTRONG COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 24 77	17	1.0			10	114	60	1.67	6.3		13	16	0	4.4	22	0.7					
10 18 77	11	1.0	5		20	151	106	1.27	7.5		25	30	0	6.7	22	7.0					
11 29 77	5	0.5	7			130	84	1.56	7.1		13	16	0	6.5	28	2.6					
6 8 78	16	2.0	86*			168	101	1.38	7.1		16	20	0	12	28	4.0					
7 7 78	16	2.0	36*		20	145	80	1.72	7.4		17	21	0	6.1	25	2.5					
8 4 78	19	0.7	34*		15	173	104	1.77	7.3		22	27	0	16	25	2.8					
9 26 78	14	0.1	64*		190	289	203	3.62	7.3		95	116	0	16	29	3.5					
10 19 78	10	0.4	34*		35	154	92	1.55	7.2		15	18	0	7.2	29	3.2					
11 15 78	6	0.07	17		45	170	93	2.48	7.3	-24	34	41	0	8.5	22	1.2					
3 3 79	3	0.8	2460		2000	117	80	1.25	6.8		20	24	0	7.9	30	0.7					
4 4 79		0.9			3	141	87	1.44	7.0	-1	9	11	0	10	30	2.6					
5 5 79	11	0.2	10	0.00	25	136	86	1.47	7.3	-7	12	15	0	9.2	30	2.0					
6 2 79	15	0.2	9		25	154	86	1.33	7.2	-7	15	18	0	12	26	2.3					
7 12 79	23	0.07	13		35	179	106	2.10	7.6	-18	25	30	0	13	24	3.4	0.5	0.05	1.25	0.10	0.00
10 2 79	15	0.25	12		30	157	100	1.12	7.3	-10	14	17	0	11	29	4.5					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 24 77	0.0	0.01			8.0	0.1		0.7	2.1		4.3	0.2		2.8	0.02	0.1	2.3		0.0	0.1
10 18 77	0.0	0.00	0.0	0.00	11	0.0	0.00	1.2	3.4	0.04	5.7	0.5	0.0	3.8	0.00	0.0	2.3	0.0	0.0	0.0
11 29 77	0.0	0.00			11	0.0	0.00	0.9	3.1		5.8	0.4		3.9	0.01	0.0	2.5		0.1	0.0
6 8 78	0.1	0.02			13	0.0	0.00	0.3	4.6		5.4	0.2		5.4	0.00	0.0	2.3		0.0	0.0
7 7 78	0.0	0.01	0.0	0.00	11	0.0	0.00	0.2	3.0	0.06	6.1	0.3	0.0	2.8	0.00	0.0	2.3	0.0	0.0	0.0
8 4 78	0.1	0.03			15	0.0	0.01	0.3	4.7		6.3	0.1		4.4	0.02	0.1	3.0		0.1	0.0
9 26 78	0.2	0.06			25	0.0	0.01	12	21		11	2.9		5.4	0.02	0.0	3.9		0.0	0.1
10 19 78	0.0	0.01	0.0	0.00	12	0.0	0.00	0.8	4.6	0.10	6.3	0.0	0.0	3.1	0.02	0.0	2.9	0.0	0.0	0.0
11 15 78	0.1	0.01			13	0.0	0.01	0.7	6.2		6.2	1.1		3.6	0.02	0.0	3.2		0.0	0.0
3 3 79	0.2	0.00			9.9	0.0	0.01	0.2	5.6		2.8	0.3		4.3	0.01	0.0	2.0		0.0	0.0
4 4 79	0.1	0.00	0.0	0.00	12	0.0	0.00	0.2	2.5	0.05	6.2	0.1	0.0	4.2	0.02	0.0	2.1	0.0	0.0	0.0
5 5 79	0.1	0.01			12	0.0	0.00	0.2	2.6		5.6	0.2		4.9	0.01	0.0	2.1		0.0	0.2
6 2 79	0.1	0.01			11	0.0	0.01	0.2	2.4		5.2	0.2		4.2	0.01	0.0	2.2		0.0	0.2
7 12 79	0.2	0.02	0.0	0.00	16	0.0	0.00	0.6	3.1	0.20	6.4	0.2	0.1	5.4	0.00	0.0	2.7	0.1	0.0	0.0
10 2 79	0.0	0.01			12	0.0	0.00	0.1	3.7		5.1	0.2		5.0	0.00	0.0	2.8		0.0	0.0

TABLE 8. WATER QUALITY FOR SITE 6022 ARMSTRONG COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UN/CM	MG/L			MILLIGRAMS PER LITER											
8 24 77	18	1.5			30	421	249	1.29	6.4		20	24	0	3.0	150	0.4					
10 18 77	10	0.9	6		8	233	134	1.17	6.7		25	31	0	4.5	58	4.0					
11 29 77	3	1.0	5			206	120	1.45	7.5		21	26	0	8.5	46	2.8					
1 21 78	1	0.2			8	430	294	1.34	7.5		25	30	0	5.2	170	1.8					
3 2 78	2	0.3			10	604	383	1.31	7.4		39	47	0	14	220	1.5					
3 29 78	8	2.5			4	278	156	1.10	7.4		20	24	0	5.5	81	2.3					
4 28 78	14	1.0			6	556	377	1.24	7.8		42	51	0	5.2	220	1.3					
6 8 78	16	1.5				379	232	1.30	7.6		38	46	0	6.1	120	2.1					
7 7 78	17	1.5	42%		8	445	281	1.51	8.0		52	62	0	4.3	150	1.6					
8 4 78	20	1.5	37%		8	235	133	1.47	7.6		35	43	0	4.5	61	0.4					
9 26 78	15	0.2	79%		10	391	258	1.23	7.7		56	68	0	5.0	140	1.5					
10 19 78	9	0.8	42%		10	192	122	1.10	7.7		20	25	0	4.3	55	2.9					
11 15 78	8	0.06	1		7	400	251	1.34	8.2		22	26	0	5.6	140	1.4					
1 17 79	0	0.6	11		15	391	229	1.35	7.3	-22	24	29	0	5.0	120	1.9					
3 3 79	4	1.0	1050		500	216	138	1.27	6.8		9	11	0	7.2	74	1.0					
4 4 79	4	0.8	18		7	307	215	1.31	7.4	-17	20	24	0	4.6	120	1.7					
5 5 79	9	0.15	14	0.00	15	586	470	1.36	7.6	-40	48	58	0	6.3	280	1.1					
6 2 79	16	0.2	17	0.00	30	397	278	1.01	7.9	-28	39	47	0	12	160	1.7					
7 12 79	24	0.07	97		110	735	387	1.57	8.0	-70	78	94	1	8.3	200	0.8	0.2	0.12	1.55	0.10	0.00
10 2 79	15	0.15	0		20	206	134	1.34	7.7	-31	34	41	0	6.1	46	4.5					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 24 77	0.1	0.01			48	0.0	0.01	0.4	2.9		19	3.2		3.4	0.05	0.0	2.6		0.0	0.0
10 18 77	0.1	0.00	0.0	0.00	24	0.0	0.00	0.3	1.2	0.08	6.0	0.7	0.0	2.5	0.00	0.0	1.3	0.1	0.0	0.0
11 29 77	0.1	0.00			20	0.0	0.00	0.5	2.2		6.1	0.8		5.9	0.01	0.0	2.3		0.1	0.0
1 21 78	0.1	0.00	0.0	0.00	62	0.0	0.00	0.1	2.3	0.35	20	2.0	0.0	3.4	0.02	0.0	2.7	0.1	0.0	0.0
3 2 78	0.1	0.03			84	0.0	0.00	1.2	2.5		22	2.2		7.1	0.02	0.0	2.6		0.0	0.0
3 29 78	0.1	0.00	0.0	0.00	26	0.0	0.00	0.4	2.2	0.08	8.1	0.8	0.0	3.1	0.01	0.0	2.7	0.1	0.0	0.0
4 28 78	0.1	0.01	0.0	0.00	82	0.0	0.00	0.6	2.1	0.25	22	1.7	0.0	3.1	0.04	0.0	1.9	0.1	0.1	0.0
6 8 78	0.2	0.01	0.0	0.00	48	0.0	0.00	0.5	3.5	0.20	11	1.3	0.0	4.3	0.02	0.0	2.6	0.1	0.1	0.0
7 7 78	0.1	0.01	0.0	0.00	65	0.0	0.00	0.6	2.6	0.25	17	1.2	0.0	2.7	0.00	0.0	1.9	0.1	0.0	0.0
8 4 78	0.1	0.02			27	0.0	0.00	0.1	2.2		7.2	0.0		1.3	0.02	0.1	2.9		0.1	0.0
9 26 78	0.1	0.01			52	0.0	0.01	0.7	2.8		12	1.3		2.7	0.01	0.1	2.7		0.0	0.0
10 19 78	0.1	0.02	0.0	0.00	19	0.0	0.00	0.3	2.4	0.10	5.9	0.4	0.0	1.8	0.03	0.1	3.1	0.0	0.0	0.0
11 15 78	0.2	0.00			60	0.0	0.01	0.8	2.9		11	1.5		3.5	0.03	0.1	3.0		0.1	0.0
1 17 79	0.1	0.00			54	0.0	0.01	0.6	1.8		11	0.9		3.1	0.02	0.1	2.3		0.0	0.0
3 3 79	0.2	0.00			28	0.0	0.01	0.1	3.2		6.4	0.6		5.2	0.02	0.0	1.7		0.0	0.0
4 4 79	0.1	0.00			51	0.0	0.00	0.4	1.8		10	0.7		2.7	0.00	0.0	1.8		0.0	0.0
5 5 79	0.2	0.01			110	0.0	0.00	0.8	2.1		26	1.9		3.8	0.02	0.1	2.0		0.1	0.2
6 2 79	0.1	0.01			53	0.0	0.01	0.5	2.1		12	1.1		3.0	0.01	0.0	2.2		0.0	0.1
7 12 79	0.4	0.02	0.0	0.00	94	0.1	0.00	1.1	2.9	0.55	21	2.1	0.0	4.2	0.06	0.3	2.4	0.2	0.3	0.0
10 2 79	0.0	0.00			21	0.1	0.00	0.3	4.0		5.4	0.4		4.4	0.03	0.0	2.9		0.0	0.0

TABLE 9. WATER QUALITY FOR SITE 6023 ARMSTRONG COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 24 77	18	0.9			0	261	132	1.42	6.7		23	28	0	1.3	72	0.2					
10 18 77	10	1.5	3		8	206	117	1.22	6.5		23	28	0	2.0	64	0.7					
11 29 77	3	1.5	8			217	131	1.10	7.5		10	12	0	2.0	80	0.6					
1 21 78	0	0.1			4	224	135	1.36	7.4		20	24	0	1.7	72	0.7					
3 2 78	0	0.25	1		4	239	125	1.30	7.2		21	26	0	2.3	66	0.8					
3 29 78	7	3			4	180	100	1.38	7.4		13	16	0	2.1	52	1.0					
4 28 78	14	1.5			7	181	112	1.25	7.3		20	24	0	1.6	61	0.3					
6 8 78	16	1.5				207	111	1.37	7.4		25	31	0	1.9	54	0.6					
7 7 78	16	1.5	38%		20	188	104	1.43	7.7		28	34	0	1.5	50	0.5					
8 4 78	19	0.7	42%		10	508	325	1.59	8.0		61	73	0	7.9	160	1.0					
9 26 78	14	0.1	54%		10	217	142	1.28	7.7		31	38	0	5.9	70	0.6					
10 19 78	9	0.4	11		7	177	113	1.25	7.7		25	30	0	1.7	56	0.9					
11 15 78	8	0.1	12		4	249	150	1.40	6.9	-29	28	34	0	2.1	78	0.4					
1 17 79	0	0.3	3		4	143	82	1.29	7.1	-9	11	13	0	1.5	42	0.8					
3 3 79	3	3	37		15	110	67	1.47	6.9	-3	8	10	0	1.6	32	0.7					
4 4 79	4	1.5			3	129	84	1.38	7.1	-4	11	13	0	1.7	43	0.7					
5 5 79	9	0.2	5	0.00	1	173	125	1.42	7.1	-15	14	17	0	1.6	68	0.5					
6 2 79	16	0.4	6	0.00	5	194	113	1.18	7.6	-17	27	33	0	2.0	59	0.4					
7 12 79	23	0.07	27	0.01	30	269	156	1.63	8.0	-37	43	52	0	2.5	71	0.5	0.0	0.05	1.50	0.10	0.00
10 2 79	16	0.2	1		8	194	109	1.25	7.6	-24	25	30	0	2.0	54	0.8					

% Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 24 77	0.0	0.00			27	0.0	0.00	0.1	2.2		8.2	0.1		1.9	0.01	0.0	2.6		0.0	0.0
10 18 77	0.1	0.00	0.0	0.00	24	0.0	0.00	0.1	0.5	0.09	5.9	0.1	0.0	1.4	0.00	0.0	1.0	0.1	0.0	0.0
11 29 77	0.0	0.00			25	0.0	0.00	0.1	1.8		6.6	0.2		1.7	0.01	0.0	2.5		0.1	0.0
1 21 78	0.1	0.00	0.0	0.00	26	0.0	0.00	0.1	1.8	0.20	9.1	0.4	0.0	1.5	0.01	0.0	3.0	0.1	0.0	0.0
3 2 78	0.0	0.00			24	0.0	0.00	0.0	1.7		7.5	0.1		1.6	0.01	0.0	2.5		0.0	0.0
3 29 78	0.1	0.03	0.0	0.00	18	0.1	0.01	0.1	1.9	0.01	7.6	0.2	0.0	1.4	0.06	0.1	2.0	0.0	0.7	0.0
4 28 78	0.0	0.01	0.0	0.00	20	0.0	0.00	0.1	1.7	0.08	6.7	0.1	0.0	1.4	0.02	0.0	2.3	0.0	0.1	0.0
6 8 78	0.1	0.01	0.0	0.00	20	0.0	0.00	0.1	1.9	0.09	6.3	0.1	0.0	1.5	0.01	0.0	2.8	0.0	0.1	0.0
7 7 78	0.0	0.00	0.0	0.00	20	0.0	0.00	0.0	1.7	0.10	6.0	0.0	0.0	1.2	0.00	0.0	1.9	0.1	0.0	0.0
8 4 78	0.2	0.03			79	0.0	0.01	0.8	3.8		17	2.0		4.3	0.03	0.1	3.0		0.1	0.0
9 26 78	0.0	0.01			28	0.0	0.00	0.1	2.0		6.5	0.0		1.3	0.01	0.0	3.0		0.0	0.0
10 19 78	0.1	0.00	0.0	0.01	20	0.0	0.00	0.0	2.3	0.15	5.5	0.1	0.0	1.3	0.01	0.0	3.4	0.0	0.0	0.0
11 15 78	0.1	0.00			34	0.0	0.00	0.0	2.0		6.7	0.0		1.5	0.01	0.0	3.0		0.0	0.0
1 17 79	0.0	0.00			16	0.0	0.02	0.0	1.6		4.0	0.1		1.3	0.04	0.0	2.8		0.0	0.1
3 3 79	0.1	0.00			13	0.0	0.00	0.0	1.7		4.2	0.1		1.0	0.01	0.0	2.6		0.0	0.0
4 4 79	0.1	0.00			16	0.0	0.00	0.0	1.6		5.1	0.1		1.1	0.02	0.0	2.7		0.0	0.0
5 5 79	0.1	0.00			30	0.1	0.03	0.1	1.5		6.1	0.3		1.3	0.05	0.1	2.6		0.0	0.1
6 2 79	0.1	0.01			20	0.1	0.02	0.0	1.6		5.7	0.0		1.1	0.02	0.1	2.7		0.0	0.1
7 12 79	0.2	0.02	0.0	0.00	32	0.0	0.02	0.3	2.8	0.25	9.4	0.1	0.0	1.5	0.03	0.1	3.1	0.1	0.0	0.0
10 2 79	0.1	0.00			20	0.0	0.00	0.1	2.4		4.8	0.0		1.4	0.00	0.0	2.9		0.0	0.0

TABLE 10. WATER QUALITY FOR SITE 6024 ARMSTRONG COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
1 21 78	2	0.3			10	139	73	1.82	6.9		11	13	0	7.5	22	1.9					
3 2 78	0	0.6			15	167	85	1.43	6.6		14	17	0	16	25	1.6					
3 29 78	8	3			4	133	87	2.16	7.2		9	11	0	7.7	26	2.4					
4 28 78	11	0.8			7	125	75	1.46	7.0		10	12	0	7.6	27	1.9					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
1 21 78	0.1	0.00	0.0	0.00	9.7	0.1	0.01	0.2	2.3	0.10	5.8	0.2	0.0	4.2	0.03	0.1	2.6	0.1	0.1	0.0
3 2 78	0.0	0.00			10	0.0	0.00	0.1	2.0		5.3	0.3		6.5	0.00	0.0	2.2		0.0	0.0
3 29 78	0.1	0.00	0.0	0.00	13	0.0	0.00	0.3	1.9	0.00	6.8	0.2	0.0	7.3	0.01	0.0	3.7	0.0	0.0	0.0
4 28 78	0.0	0.01	0.0	0.00	9.8	0.0	0.00	0.2	1.8	0.04	5.7	0.3	0.0	3.8	0.03	0.0	1.8	0.0	0.1	0.0

TABLE 11. WATER QUALITY FOR SITE 6031 BEAVER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			---------- MILLIGRAMS PER LITER ----------											
8 15 77	19	0.04			20	537	209		7.3		24	29	0		76	2.6					
10 17 77	7	0.01	6		4	510	265	1.43	6.7		17	21	0	58	84	3.0					
11 25 77	7	0.06	11			390	274	1.21	7.4		15	18	0	66	90	3.3					
1 17 78	0	0.1			40	421	239	1.63	7.0		10	12	0	54	73	3.3					
2 28 78	0	0.15			4	500	276	1.83	7.1		10	12	0	77	76	2.1					
3 28 78	7	0.5			10	511	295	1.80	7.1		20	24	0	86	70	3.3					
4 26 78	13	0.15			20	480	271	1.19	6.9		9	11	0	72	88	2.6					
6 1 78		0.3			0	432	232	1.00	6.8		11	13	0	58	74	3.4					
6 28 78	16	0.9	89*		0	422	235	1.52	6.9		40	49	0	52	75	3.0					
8 2 78	19	0.08	34*		6	450	270	1.51	7.3		18	22	0	75	73	1.6					
9 15 78	15	0.04			20	418	273	1.67	7.4		18	22	0	53	85	3.5					
10 17 78	11	0.5	52*		55	353	215	1.08	7.3		13	16	0	30	84	4.6					
11 17 78	8	0.04				386	224	1.36	7.1	-14	17	21	0	40	82	1.8					
1 9 79	0	0.05	11		15	334	224	0.96	7.1		10	12	0	50	78	3.4					
2 28 79	2	0.3	55		25	378	228	1.45	6.8		12	15	0	58	66	2.6					
3 29 79	10	0.09			10	498	280	1.30	7.0		10	12	0	73	87	2.6					
5 3 79	12	0.1	47	0.20	25	402	232	1.11	7.2	-5	13	16	0	51	85	1.7					
5 31 79	13	0.09	42		40	373	205	1.12	7.1	-1	12	15	0	31	87	2.1					
7 10 79	23	0.04	83		80	457	270	1.26	7.3	-12	22	27	0	65	86	1.5	0.3	0.01	1.45	0.25	0.02
10 3 79	13	0.25	74		50	362	221	1.26	7.2	-8	15	18	0	47	72	2.9					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	---------- MILLIGRAMS PER LITER ----------																			
8 15 77	0.0	0.05			31	0.0	0.01	0.0	6.1		12	0.0		46	0.02	0.1	5.7		0.0	0.0
10 17 77	0.0	0.07	0.7	0.00	27	0.0	0.00	0.0	5.4	0.10	16	0.0	0.0	36	0.00	0.0	6.2	0.2	0.1	0.0
11 25 77	0.0	0.09			31	0.0	0.00	0.0	4.5		17	0.0		30	0.00	0.0	6.0		0.0	0.0
1 17 78	0.1	0.05	0.0	0.00	27	0.0	0.00	0.1	4.3	0.20	20	0.0	0.0	26	0.02	0.1	5.9	0.2	0.1	0.0
2 28 78	0.0	0.00			27	0.0	0.00	0.0	4.6		23	0.0		42	0.01	0.0	5.2		0.0	0.0
3 28 78	0.1	0.04	0.0	0.00	29	0.0	0.00	0.1	4.3	0.07	21	0.0	0.0	46	0.00	0.0	5.6	0.1	0.0	0.0
4 26 78	0.1	0.06	0.1	0.00	28	0.0	0.00	0.1	4.3	0.10	20	0.0	0.0	28	0.02	0.0	6.0	0.1	0.1	0.0
6 1 78	0.0	0.05			23	0.0	0.01	0.1	4.1		12	0.0		27	0.01	0.0	5.1		0.0	0.0
6 28 78	0.1	0.07	0.0	0.00	23	0.0	0.01	0.1	4.9	0.08	16	0.0	0.0	35	0.00	0.0	5.2	0.1	0.1	0.0
8 2 78	0.1	0.12			34	0.0	0.00	0.1	4.5		15	0.0		36	0.03	0.1	6.8		0.1	0.0
9 15 78	0.1	0.12			32	0.0	0.01	0.0	5.2		14	0.0		40	0.00	0.0	7.5		0.0	0.0
10 17 78	0.1	0.06			22	0.0	0.00	0.0	4.0		10	0.0		22	0.01	0.0	6.2		0.0	0.0
11 17 78	0.1	0.08			29	0.0	0.00	0.1	4.7		10	0.0		27	0.01	0.0	5.8		0.0	0.0
1 9 79	0.1	0.04	0.0	0.00	23	0.0	0.00	0.0	3.6	0.20	10	0.0	0.0	25	0.02	0.0	5.4	0.0	0.0	0.2
2 28 79	0.1	0.04			32	0.0	0.01	0.0	3.6		11	0.1		28	0.02	0.1	4.8		0.1	0.0
3 29 79	0.1	0.05	0.1	0.00	33	0.0	0.00	0.0	4.7	0.20	14	0.0	0.0	39	0.00	0.1	5.6	0.1	0.2	0.0
5 3 79	0.1	0.06			25	0.0	0.00	0.1	4.0		12	0.0		28	0.00	0.0	5.5		0.0	0.0
5 31 79	0.1	0.05			22	0.0	0.00	0.0	3.4		11	0.0		23	0.00	0.0	5.4		0.0	0.0
7 10 79	0.1	0.08	0.1	0.00	30	0.0	0.00	0.0	5.1	0.25	12	0.0	0.0	37	0.00	0.0	6.2	0.2	0.0	0.0
10 3 79	0.3	0.07			24	0.0	0.01	0.0	4.7		10	0.0		28	0.02	0.0	5.9		0.0	0.0

TABLE 12. WATER QUALITY FOR SITE 6032 BEAVER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
												MILLIGRAMS PER LITER									
8 15 77	19	0.05			45	463	267	2.32	7.7		61	74	0	18	100	0.4					
10 17 77	10	0.08	3		15	280	160	2.62	7.2		57	70	0	18	42	1.0					
11 25 77	9		27			457	286	1.72	7.7		55	67	0	29	120	1.0					
1 17 78	2	0.3			20	296	171	1.65	7.7		35	43	0	8.8	68	2.4					
2 28 78	5	0.15			4	351	198	1.66	7.7		44	54	0	15	78	1.8					
3 28 78	7	0.2			20	262	163	1.32	7.9		33	40	0	7.8	72	2.2					
4 26 78	13	0.25			35	293	179	1.40	7.7		39	47	0	8.4	80	1.7					
6 1 78		0.2			10	277	161	1.33	7.4		41	50	0	11	66	1.6					
6 28 78	17	0.2	79*			273	154	1.58	7.6		42	51	0	7.5	63	1.1					
8 2 78	18	0.1	31*		45	415	262	2.29	8.1		81	97	1	19	89	0.6					
9 14 78	16	0.03				402	275	1.44	8.3		77	92	1	12	130	0.6					
10 17 78	12	0.025	60*		40	303	198	1.80	8.1		44	53	0	7.8	76	2.9					
11 17 78	8	0.02	21		50	369	228	1.89	7.4	-63	61	74	0	10	92	0.8					
1 9 79	0	0.08	3		6	281	181	1.47	7.4		32	39	0	6.4	81	2.6					
2 28 79	4	0.04	16		55	214	148	1.60	6.8		22	27	0	4.5	63	2.6					
3 29 79	9	0.02			5	307	197	1.64	7.8	-40	42	51	0	7.8	85	2.0					
5 3 79	11	0.2	311	0.12	2000	273	170	1.93	8.0	-34	48	58	0	7.2	64	1.5					
5 31 79	18	0.03		0.75		266	166	1.75	7.8	-28	39	48	0	6.8	64	1.9					
7 10 79	22	0.03	281		360	396	222	1.81	8.3	-71	72	86	1	10	85	1.3	0.0	0.11	1.80	0.35	0.00
10 3 79		0.02				308	204	1.48	7.9	-37	45	54	0	7.9	85	3.3					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR											MILLIGRAMS PER LITER									
8 15 77	0.1	0.10			54	0.0	0.00	0.1	3.4		18	0.1		26	0.01	0.0	3.9		0.1	0.3
10 17 77	0.1	0.00			29	0.0	0.00	0.0	0.3		8.8	0.0		16	0.00	0.0	3.1		0.0	0.0
11 25 77	0.1	0.03			49	0.0	0.00	0.1	2.9		18	0.0		24	0.00	0.0	4.2		0.0	0.0
1 17 78	0.1	0.02	0.1	0.00	28	0.0	0.00	0.2	2.2	0.20	10	0.1	0.0	11	0.02	0.0	4.8	0.3	0.0	0.0
2 28 78	0.0	0.04			30	0.0	0.00	0.1	2.4		12	0.0		16	0.01	0.0	4.1		0.0	0.0
3 28 78	0.0	0.01	0.0	0.00	23	0.0	0.00	0.2	2.1	0.07	9.2	0.1	0.0	8.4	0.00	0.0	4.9	0.2	0.0	0.0
4 26 78	0.1	0.03	0.1	0.00	26	0.0	0.00	0.1	2.2	0.10	10	0.1	0.0	10	0.02	0.0	4.6	0.2	0.0	0.0
6 1 78	0.1	0.03			22	0.0	0.01	0.1	2.3		8.5	0.0		9.9	0.01	0.0	4.3		0.0	0.0
6 28 78	0.1	0.04	0.1	0.00	21	0.0	0.01	0.2	2.5	0.20	9.6	0.1	0.0	10.0	0.00	0.0	4.4	0.3	0.0	0.0
8 2 78	0.1	0.06			47	0.0	0.01	0.1	3.3		15	0.1		26	0.03	0.1	4.6		0.1	0.0
9 14 78	0.1	0.05			42	0.0	0.00	0.1	3.2		13	0.0		20	0.00	0.0	4.6		0.0	0.0
10 17 78	0.1	0.04	0.0	0.01	37	0.0	0.01	0.3	3.0	0.20	9.9	0.2	0.0	12	0.03	0.1	5.6	0.2	0.1	0.0
11 17 78	0.2	0.04			44	0.0	0.00	0.1	2.5		11	0.1		18	0.01	0.1	4.2		0.0	0.0
1 9 79	0.1	0.01	0.1	0.00	34	0.0	0.00	0.2	1.7	0.20	9.8	0.1	0.0	7.1	0.00	0.1	4.4	0.2	0.0	0.0
2 28 79	0.3	0.03			30	0.0	0.01	0.2	2.2		7.6	0.1		5.6	0.01	0.0	4.7		0.0	0.1
3 29 79	0.1	0.03	0.1	0.00	39	0.0	0.00	0.1	2.0	0.35	10	0.0	0.1	8.9	0.02	0.1	3.8	0.3	0.1	0.1
5 3 79	0.3	0.03			34	0.1	0.01	0.3	2.4		9.4	0.1		7.9	0.01	0.1	3.5		0.0	0.2
5 31 79	0.3	0.05			31	0.0	0.01	0.5	2.2		9.1	0.4		6.9	0.03	0.0	5.6		0.1	0.0
7 10 79	0.2	0.05	0.1	0.00	39	0.1	0.01	0.2	2.8	0.20	12	0.1	0.0	13	0.03	0.1	4.1	0.4	0.1	0.0
10 3 79	0.0	0.05			34	0.0		0.0	2.8		10	0.0		11	0.01	0.1	5.4		0.0	0.0

TABLE 13. WATER QUALITY FOR SITE 6033 BEAVER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 15 77	19	1.5			35	1270	1160	1.45	7.9		125	151	1	12	680	0.1					
10 17 77	8	1.5	133		20	1320	970	1.02	7.5		66	81	0	15	640	0.3					
11 28 77	4	1.5	6			1440	1150	1.26	8.0		92	110	1	28	700	0.1					
1 17 78	1	0.3			30	359	235	1.85	7.9		53	64	0	14	99	0.9					
2 28 78	4	1.0			80	1460	1090	1.40	8.1		54	65	1	16	670	0.3					
3 28 78	8	3			4	916	627	1.37	8.4		77	91	2	19	360	0.5					
4 26 78	16	5	19		10	1030	809	1.31	8.1		81	97	1	15	490	0.2					
6 1 78		9			10	1120	772	1.19	8.0		165	198	1	26	430	0.2					
6 28 78	27	7	120*			912	615	1.22	7.9		128	154	1	51	310	0.1					
8 2 78	20	1.0			15	1580	1300	1.40	7.9		160	192	1	17	770	0.3					
9 14 78	16	0.3	41*		20	1610	1480	0.98	8.2		108	128	2	15	1000	0.4					
10 17 78		0.7	31*		10	1330	1030	1.27	8.0		147	176	1	18	600	1.0					
11 17 78	8	0.7	269		70	1560	1350	1.33	8.0		114	137	1	16	830	0.1					
1 9 79	0	0.7	3		10	1030	925	1.01	7.6		70	84	0	15	610	1.5					
3 1 79	2	2.0	12		7	729	546	1.30	7.5	-70	70	86	0	22	310	1.3					
3 29 79	8	1.5			6	1170	890	1.32	8.2		114	136	2	17	530	0.2					
5 3 79	13	1.0	137	0.00	35	1750	1010	1.38	8.1		161	193	2	12	580	1.0					
5 31 79	18	1.5	87	0.00	70	905	628	1.55	8.2		125	149	2	14	330	0.5					
7 10 79	24	0.2	129		30	1140	826	1.22	8.3		145	172	3	13	480	0.4	0.0	0.50	1.55	0.25	0.01
10 3 79	14	1.0	34		30	1230	892	1.16	7.9		130	157	1	16	550	0.2					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 15 77	0.4	0.08			270	0.0	0.02	0.7	4.5		80	6.4		16	0.07	0.4	7.9		0.2	0.0
10 17 77	0.5	0.04	0.0	0.00	190	0.0	0.00	0.6		0.70	53	4.3	0.0	11	0.00	0.0	5.4	0.6	0.2	0.0
11 28 77	0.2	0.03			260	0.0	0.00	1.3	4.1		67	4.8		16	0.03	0.1	6.5		0.2	0.0
1 17 78	0.1	0.01	0.0	0.00	47	0.1	0.00	0.3	2.1	0.30	18	0.3	0.0	8.0	0.03	0.1	4.2	0.2	0.1	0.0
2 28 78	0.2	0.09			230	0.0	0.01	1.7	4.6		94	5.9		15	0.05	0.1	6.9		0.2	0.0
3 28 78	0.1	0.02	0.1	0.00	120	0.0	0.00	1.3	3.6	0.35	49	2.4	0.1	12	0.02	0.0	4.8	0.3	0.0	0.0
4 26 78	0.2	0.03	0.1	0.00	160	0.0	0.00	1.2	3.9	0.50	62	3.9	0.0	13	0.03	0.1	5.1	0.4	0.2	0.0
6 1 78	0.2	0.03			130	0.0	0.01	1.1	3.9		53	3.1		12	0.03	0.1	4.8		0.1	0.0
6 28 78	0.1	0.07	0.1	0.00	100	0.0	0.01	2.8	5.0	0.35	42	3.8	0.0	13	0.00	0.1	5.2	0.3	0.1	0.0
8 2 78	0.4	0.06			270	0.1	0.01	0.8	4.9		100	6.0		16	0.08	0.4	7.8		0.3	0.0
9 14 78	0.4	0.05			250	0.0	0.01	1.2	6.1		96	5.5		17	0.10	0.5	8.3		0.4	0.0
10 17 78	0.3	0.04	0.1	0.00	210	0.0	0.00	0.8	6.1	1.5	65	3.2	0.1	13	0.03	0.2	6.0	0.5	0.1	0.0
11 17 78	0.6	0.03			300	0.0	0.00	0.6	6.6		94	4.0		16	0.08	0.3	6.5		0.2	0.0
1 9 79	0.3	0.02	0.1	0.00	160	0.0	0.00	0.1	3.2	2.0	57	2.0	0.0	12	0.05	0.3	4.8	0.7	0.2	0.0
3 1 79	0.1	0.02			110	0.0	0.00	0.2	3.3		41	0.8		9.4	0.02	0.1	3.8		0.1	0.0
3 29 79	0.2	0.02	0.1	0.00	190	0.0	0.01	0.2	3.6	0.80	60	2.0	0.0	12	0.05	0.2	3.2	0.4	0.2	0.1
5 3 79	0.4	0.04			220	0.0	0.00	0.2	3.4		68	1.8		12	0.04	0.1	3.8		0.3	0.0
5 31 79	0.2	0.05			130	0.0	0.02	0.4	3.4		45	1.5		13	0.03	0.1	5.4		0.1	0.1
7 10 79	0.4	0.03	0.0	0.00	160	0.0	0.02	0.7	7.0	1.0	49	2.2	0.1	15	0.04	0.1	6.0	0.4	0.1	0.0
10 3 79	0.2	0.08			160	0.0	0.00	0.1	4.3		61	0.2		10	0.04	0.2	5.4		0.4	0.1

TABLE 14. WATER QUALITY FOR SITE 6041 BUTLER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 29 77	17	0.5			4	78	45	1.55	6.7		8	10	0	0.5	17	0.9					
10 18 77	9	0.25	3		0	62	36	1.54	6.3		7	8	0	1.2	16	0.1					
11 29 77	6	0.8	4			62	42	1.25	7.1		5	6	0	1.5	20	0.1					
6 8 78	12	1.5				67	40	1.45	6.8		6	7	0	1.6	17	0.2					
7 6 78	13	0.8	43*		4	59	40	1.22	6.9		6	7	0	1.3	20	0.1					
8 3 78	17	0.4	8		4	74	47	1.85	7.0		10	12	0	2.3	16	0.3					
9 15 78	15	0.01	27*		0	69	48	1.19	7.1		8	10	0	1.2	21	0.5					
10 18 78	10	0.2	34*		4	56	38	1.25	6.9		2	2	0	0.9	19	0.2					
11 16 78	7	0.02	2		4	65	40	1.51	6.4	-6	5	6	0	1.2	17	0.1					
1 10 79	0	0.1	12		1	55	41	1.41	6.0		3	4	0	1.1	19	0.2					
3 2 79	1	0.5	3		1	56	39	1.32	6.5		4	5	0	1.1	19	0.2					
4 3 79	7	0.8	9		15	58	41	1.05	6.2	1	1	1	0	1.2	22	0.2					
5 4 79	11	0.2	3	0.00	0	55	41	1.36	6.8	0	4	5	0	1.1	20	0.1					
6 1 79	12	0.2	7		0	60	46	1.22	6.4	3	5	6	0	1.1	23	0.2					
7 11 79	21	0.04	12		35	73	44	1.69	7.1	-6	10	12	0	1.0	17	0.1	0.2	0.03	0.40	0.15	0.01
10 2 79	14	0.015	20		15	67	44	1.55	7.1	0	8	10	0	1.3	18	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 29 77	0.0	0.00			5.7	0.0	0.00	0.0	1.3		3.0	0.0		1.5	0.01	0.0	3.4		0.0	0.0
10 18 77	0.0	0.00	0.1	0.00	5.0	0.0	0.00	0.0	0.6	0.02	2.7	0.0	0.0	1.0	0.00	0.0	2.4	0.0	0.0	0.0
11 29 77	0.0	0.00			5.1	0.0	0.00	0.0	1.1		2.9	0.0		1.1	0.01	0.0	3.1		0.0	0.0
6 8 78	0.0	0.01	0.1	0.00	4.9	0.0	0.00	0.0	1.2	0.00	2.9	0.0	0.0	1.2	0.01	0.0	3.2	0.0	0.1	0.0
7 6 78	0.0	0.01	0.1	0.00	5.2	0.0	0.00	0.0	1.2	0.04	2.7	0.0	0.0	0.9	0.00	0.0	2.3	0.0	0.0	0.0
8 3 78	0.0	0.02			7.0	0.0	0.01	0.1	1.4		3.3	0.1		1.1	0.03	0.1	3.9		0.2	0.0
9 15 78	0.0	0.01			5.9	0.0	0.00	0.0	1.3		2.7	0.0		0.9	0.00	0.0	3.8		0.0	0.0
10 18 78	0.0	0.01	0.0	0.00	5.1	0.0	0.00	0.1	1.3	0.10	2.4	0.0	0.0	0.8	0.01	0.0	3.1	0.2	0.0	0.0
11 16 78	0.0	0.01			6.0	0.0	0.00	0.0	1.0		2.6	0.0		1.1	0.01	0.0	3.3		0.0	0.0
1 10 79	0.0	0.00	0.1	0.00	5.6	0.0	0.00	0.0	1.2	0.25	2.9	0.0	0.0	1.0	0.01	0.0	3.3	0.4	0.0	0.0
3 2 79	0.0	0.00			5.4	0.0	0.01	0.0	1.0		2.9	0.0		0.9	0.01	0.0	2.5		0.0	0.0
4 3 79	0.0	0.01	0.0	0.00	4.7	0.1	0.02	0.0	1.2	0.10	2.7	0.0	0.0	0.8	0.04	0.1	2.9	0.1	0.0	0.1
5 4 79	0.0	0.00			6.1	0.0	0.01	0.0	1.1		2.9	0.0		0.9	0.00	0.0	2.8		0.0	0.1
6 1 79	0.0	0.01			6.2	0.0	0.02	0.0	1.2		3.1	0.0		0.8	0.00	0.0	3.2		0.0	0.1
7 11 79	0.0	0.01			6.3	0.0	0.01	0.0	1.2		3.1	0.0		0.8	0.00	0.0	3.5		0.0	0.0
10 2 79	0.0	0.01			6.2	0.0	0.01	0.0	1.5		2.8	0.0		1.0	0.01	0.0	3.4		0.0	0.0

TABLE 15. WATER QUALITY FOR SITE 6042 BUTLER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
8 29 77	16	0.04	0		25	240	132	1.73	6.9		34	42	0	3.9	56	0.6					
10 18 77	9	0.4	16		8	206	125	1.08	7.0		20	25	0	4.2	68	0.7					
11 29 77	5	0.4	3			169	103	1.47	7.3		16	19	0	3.7	50	0.4					
1 19 78	4	0.3			4	193	112	1.34	7.3		16	19	0	3.7	56	0.7					
2 28 78	4	0.5	26200		44000	683			8.1					67	140	0.1					
3 29 78	9	0.3			4	225	138	1.09	7.6		20	25	0	4.3	75	0.9					
4 27 78	14	0.4	13		7	382	237	1.36	7.7		40	49	0	6.2	130	0.5					
6 8 78	18	0.7				591	368	1.37	8.0		79	95	1	6.0	200	0.9					
7 6 78	14	1.0	74*		10	132	82	1.42	7.2		16	20	0	2.5	38	0.5					
8 3 78	16	0.2	11		10	189	113	2.11	7.7		39	47	0	6.7	37	0.5					
9 15 78	14	0.008	26*		10	210	133	1.62	7.6		47	57	0	5.1	52	0.6					
10 18 78	10	0.06	38*		15	179	114	1.30	7.7		21	26	0	3.1	54	0.9					
11 16 78	8	0.004	23		60	178	108	2.17	7.9		56	67	0	4.7	30	0.5					
1 10 79	0	0.07	37		3	214	130	1.65	7.0		26	32	0	4.7	58	0.6					
3 2 79	0	0.7	30		25	163	91	1.51	7.1	-7	11	14	0	3.5	43	0.6					
4 3 79	6	0.2	10		3	137	86	1.45	7.0		11	14	0	2.9	41	0.6					
5 4 79	11	0.15	5	0.00	1	327	180	1.60	7.9	-29	37	45	0	4.4	87	0.3					
6 1 79	14	0.2	1	0.00	5	271	159	1.63	7.9	-34	41	50	0	5.0	73	0.3					
7 11 79	23	0.04	96	0.35	75	394	249	1.68	8.4	-83	89	106	2	9.8	100	0.3	0.0	0.01	1.35	0.15	0.00
10 2 79	15	0.009	15		40	228	134	1.62	7.9	-36	43	52	0	4.4	55	0.6					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 29 77	0.0	0.00			24	0.0	0.00	0.4	2.1		7.6	0.8		6.2	0.00	0.0	3.7		0.0	0.0
10 18 77	0.0	0.00	0.1	0.00	19	0.0	0.00	0.3	0.9	0.20	6.6	0.3	0.0	3.9	0.00	0.0	2.7	0.3	0.0	0.0
11 29 77	0.0	0.00			18	0.0	0.00	0.4	1.6		6.6	0.3		4.1	0.01	0.0	3.1		0.0	0.0
1 19 78	0.1	0.00	0.0	0.00	18	0.0	0.00	0.3	1.6	0.15	7.4	0.2	0.0	3.8	0.02	0.0	3.9	0.2	0.1	0.0
2 28 78	0.1	0.05	0.1	0.00	83	0.0	0.00	0.1	5.1	0.35	22	0.2	0.0	49	0.01	0.0	4.5	0.6	0.0	0.0
3 29 78	0.0	0.00	0.0	0.00	20	0.0	0.00	0.1	1.7	0.20	8.1	0.1	0.0	4.1	0.01	0.0	3.6	0.3	0.0	0.0
4 27 78	0.1	0.02	0.0	0.00	37	0.0	0.00	0.1	2.2	0.25	21	0.1	0.0	6.8	0.01	0.0	3.2	0.3	0.0	0.0
6 8 78	0.1	0.03	0.0	0.00	66	0.0	0.01	0.2	3.9	0.10	26	0.5	0.0	8.0	0.03	0.1	3.2	0.1	0.3	0.0
7 6 78	0.0	0.02	0.1	0.00	13	0.0	0.00	0.3	1.4	0.08	4.9	0.2	0.0	2.8	0.00	0.0	3.0	0.1	0.0	0.0
8 3 78	0.1	0.03			20	0.0	0.01	0.1	1.9		7.6	0.1		4.1	0.03	0.1	4.4		0.2	0.0
9 15 78	0.1	0.02			22	0.0	0.00	0.4	1.9		7.2	0.2		4.0	0.00	0.0	4.4		0.0	0.0
10 18 78	0.1	0.02	0.0	0.00	18	0.0	0.00	0.1	2.0	0.10	6.1	0.0	0.0	3.1	0.01	0.0	4.5	0.1	0.0	0.0
11 16 78	0.1	0.01			17	0.0	0.00	0.1	1.6		5.5	0.1		3.9	0.01	0.0	4.1		0.0	0.0
1 10 79	0.1	0.00	0.1	0.00	24	0.0	0.00	0.2	1.7	0.15	8.8	0.1	0.0	4.4	0.01	0.1	3.9	0.1	0.1	0.0
3 2 79	0.1	0.01			17	0.0	0.00	0.0	1.4		5.8	0.1		3.2	0.01	0.0	3.2		0.0	0.0
4 3 79	0.1	0.01			15	0.0	0.00	0.1	1.6		5.4	0.1		3.5	0.01	0.0	3.3		0.0	0.1
5 4 79	0.1	0.01			39	0.0	0.01	0.2	1.8		10	0.2		4.9	0.03	0.0	3.8		0.1	0.1
6 1 79	0.1	0.02			32	0.0	0.00	0.1	1.7		9.8	0.2		4.6	0.01	0.0	3.2		0.0	0.1
7 11 79	0.2	0.04	0.1	0.00	43	0.0	0.05	0.5	2.8	0.25	16	0.3	0.0	8.4	0.04	0.1	4.4	0.2	0.1	0.0
10 2 79	0.1	0.02			24	0.0	0.01	0.1	2.2		7.0	0.1		4.5	0.00	0.1	4.0		0.0	0.0

TABLE 16. WATER QUALITY FOR SITE 6043 BUTLER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 29 77	19	0.25	0		30	711	503	1.15	7.1		69	84	0	0.5	320	0.7					
10 18 77	8	0.6	3		8	617	510	1.15	7.5		59	72	0	1.3	330	0.3					
11 29 77	5	0.7	6			710	498	1.34	8.0		56	67	0	1.5	310	0.1					
1 18 78	4	0.25			4	699	498	1.29	8.0		57	68	0	1.3	310	0.1					
2 28 78	4	0.6			20	680	441	1.28	7.7		47	57	0	1.6	280	0.1					
3 29 78	12	1.5			4	639	437	1.29	8.0		52	63	0	1.7	270	0.1					
4 27 78	13	0.7	25		10	666	480	1.25	7.9		54	65	0	1.5	310	0.1					
6 8 78	16	0.8				631	395	1.23	7.9		57	69	0	1.3	250	0.1					
7 6 78	17	1.0	72*		4	635	431	1.25	8.1		60	72	1	1.2	270	0.1					
8 3 78	18	0.8	14		10	713	522	1.40	8.0		78	94	1	2.3	310	0.3					
9 15 78	16	0.09	43*		1	644	425	1.26	8.3		75	90	1	1.4	250	0.2					
10 18 78	9	0.2	87*		10	604	451	1.09	8.1		48	57	0	1.6	300	0.1					
11 16 78	7	0.09	11		8	674	482	1.19	7.7		60	72	0	1.8	310	0.1					
1 10 79	0	0.25	7		1	651	449	1.22	7.8		57	68	0	1.5	280	0.1					
3 2 79	1	0.7	14		3	548	418	1.23	7.4	-37	43	52	0	0.6	270	0.1					
4 3 79	4	0.5	33		7	544	415	1.06	7.7		35	43	0	1.6	280	0.1					
5 4 79	9	0.4	4	0.00	3	668	471	1.31	7.6	-47	50	61	0	1.1	300	0.2					
6 1 79	13	0.5	6	0.00	10	607	453	1.21	8.0	-36	52	62	0	1.1	290	0.1					
7 11 79	23	0.04				683	485	1.19	8.2	-58	65	77	1	0.9	310	0.1	0.0	0.08	0.45	0.15	0.01
10 2 79	15	0.04	9		10	608	437	1.34	8.0	-62	68	82	1	1.7	260	0.3					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 29 77	0.0	0.00			82	0.0	0.00	0.1	3.8		41	0.8		5.0	0.01	0.0	2.8		0.0	0.0
10 18 77	0.1	0.00	0.0	0.00	82	0.0	0.00	0.2	3.6	0.20	45	1.1	0.0	3.5	0.01	0.0	2.9	0.3	0.0	0.0
11 29 77	0.1	0.02			91	0.0	0.00	0.2	2.7		48	1.1		3.8	0.02	0.0	3.1		0.1	0.0
1 18 78	0.2	0.00	0.0	0.00	85	0.0	0.00	0.2	3.2	0.40	48	0.4	0.0	3.4	0.04	0.1	3.2	4.0	0.1	0.0
2 28 78	0.1	0.00			71	0.0	0.00	0.2	3.6		45	0.8		4.1	0.02	0.0	3.3		0.1	0.0
3 29 78	0.1	0.00	0.0	0.00	73	0.0	0.00	0.1	3.0	0.20	43	0.2	0.0	3.2	0.02	0.0	2.8	0.2	0.1	0.0
4 27 78	0.1	0.02	0.0	0.00	80	0.0	0.00	0.1	3.1	0.25	46	0.4	0.0	3.5	0.02	0.0	3.0	0.3	0.1	0.0
6 8 78	0.1	0.02	0.0	0.00	62	0.1	0.01	0.2	2.6	0.30	37	0.7	0.0	3.2	0.04	0.1	2.9	0.2	0.4	0.0
7 6 78	0.1	0.02	0.0	0.00	73	0.0	0.00	0.1	2.9	0.25	39	0.7	0.0	2.9	0.00	0.0	3.2	0.3	0.1	0.0
8 3 78	0.2	0.04			97	0.1	0.01	0.1	3.4		49	1.5		3.6	0.05	0.2	3.4		0.2	0.0
9 15 78	0.1	0.03			70	0.0	0.01	0.2	3.3		36	2.0		3.3	0.03	0.1	3.6		0.1	0.0
10 18 78	0.2	0.02	0.0	0.00	73	0.0	0.00	0.2	2.9	0.35	36	1.4	0.0	2.6	0.04	0.1	3.4	0.2	0.1	0.0
11 16 78	0.2	0.02			85	0.0	0.00	0.2	2.6		39	1.5		3.1	0.03	0.1	3.0		0.1	0.0
1 10 79	0.2	0.00	0.0	0.00	79	0.0	0.00	0.2	2.5	0.45	38	0.5	0.0	2.5	0.02	0.1	2.9	0.2	0.1	0.0
3 2 79	0.2	0.01			77	0.0	0.00	0.1	2.8		34	0.3		2.5	0.04	0.1	3.3		0.1	0.0
4 3 79	0.1	0.01			65	0.0	0.00	0.1	2.2		34	0.2		2.2	0.04	0.1	2.4		0.3	0.1
5 4 79	0.1	0.02			89	0.0	0.00	0.1	2.5		43	0.5		2.7	0.02	0.0	2.4		0.1	0.1
6 1 79	0.1	0.02			79	0.0	0.01	0.1	2.6		39	0.4		2.7	0.00	0.1	2.5		0.1	0.0
7 11 79	0.1	0.02	0.0	0.00	84	0.0	0.00	0.1	2.6	0.35	40	1.4	0.0	3.0	0.01	0.1	3.0	0.3	0.1	0.0
10 2 79	0.1	0.03			79	0.0	0.00	0.1	3.1		38	2.0		3.0	0.02	0.1	3.3		0.1	0.0

TABLE 17. WATER QUALITY FOR SITE 6044 BUTLER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NKNO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
1 18 78	9				0	88	51	2.05	7.2	-2	14	17	0	1.6	17	0.2					
2 28 78	8				8	97	59	2.48	7.2		22	27	0	1.9	17	0.1					
3 29 78	9				4	73	46	1.49	7.7		9	11	0	1.9	19	0.2					
4 27 78	10		5		50	75	47	1.78	7.1		11	13	0	1.8	18	0.1					
10 2 79	11	0.007			35	111	62	3.02	7.7		29	35	0	2.1	15						

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
1 18 78	0.0	0.00	0.0	0.00	7.6	0.0	0.00	0.0	1.4	0.01	3.8	0.0	0.0	1.5	0.01	0.0	3.8	0.0	0.0	0.0
2 28 78	0.0	0.00			8.8	0.0	0.00	0.0	1.7		4.3	0.0		1.9	0.02	0.0	4.5		0.1	0.0
3 29 78	0.0	0.00	0.0	0.00	5.8	0.0	0.00	0.0	1.3	0.03	3.3	0.0	0.0	1.2	0.00	0.0	3.4	0.0	0.0	0.0
4 27 78	0.0	0.00	0.0	0.00	6.6	0.0	0.00	0.0	1.2	0.03	3.5	0.0	0.0	1.4	0.00	0.0	3.6	0.0	0.0	0.0
10 2 79	0.0	0.00			11	0.0	0.00	0.0	1.4		4.1	0.0		1.7	0.01	0.0	4.1		0.0	0.0

TABLE 18. WATER QUALITY FOR SITE 6051 CAMBRIA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 9 77	9	0.4			4	24	19	1.15	6.2		1	1	0	1.3	5	0.8					
10 31 77	9	0.4	14		0	34	26	0.71	5.1		0	0	0	1.3	11	0.7					
12 20 77	9	2.0			0	33	24	0.78	5.1		0	0	0	1.4	9	0.8					
2 1 78	8	0.7			4	27	19	1.01	5.3		0	0	0	1.0	5	0.9					
3 8 78	4	0.006			9	28	23	0.92	5.9		1	1	0	1.2	8	0.8					
4 5 78	7	2.0			4	24	17	1.38	5.4		0	0	0	1.3	6	0.1					
5 4 78	8	0.2			3	25	19	1.35	5.7		0	0	0	1.1	5	0.7					
6 13 78	10	1.0			4	25	22	0.68	5.6		0	0	0	1.2	4	1.5					
7 13 78	9	2.0	22*		0	23	21	0.92	5.6		0	0	0	1.0	8	0.7					
1 23 79	0	0.2	3		0	25	21	1.18	4.3		0	0	0	1.1	6	0.8					
3 13 79	7	0.3	4		0	24	18	0.87	5.4	4	0	0	0	1.2	5	0.8					
4 5 79	7	0.25	4		0	29	28	0.70	4.8		0	0	0	1.1	12	0.7					
5 9 79	9	0.3	8	0.00	0	31	23	0.55	5.1	6	0	0	0	0.9	7	1.5					
6 6 79	8	0.2	8		0	29	30	0.58	5.0	7	0	0	0	1.0	15	0.7					
7 31 79	22	0.25	1		8	26	20	0.85	5.5	11	0	0	0	1.3	7	0.7	0.3	0.36	0.40	0.10	0.01
9 26 79	8	0.09	4		0	24	21	0.91	5.7	19	0	0	0	1.2	7	0.8					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 9 77	0.1	0.00			1.5	0.0	0.00	0.0	0.8		1.0	0.0		0.7	0.01	0.0	2.0		0.0	0.1
10 31 77	0.2	0.00	0.0	0.00	2.0	0.0	0.01	0.7	0.9	0.03	1.2	0.2	0.0	0.7	0.01	0.0	2.1	0.0	0.0	0.0
12 20 77	0.1	0.00	0.0	0.00	1.8	0.1	0.00	0.1	0.9	0.04	1.2	0.0	0.0	0.6	0.02	0.1	2.3	0.0	0.3	0.0
2 1 78	0.1	0.00			1.6	0.0	0.00	0.0	0.7		1.0	0.0		0.5	0.00	0.0	2.0		0.0	0.0
3 8 78	0.1				1.8	0.0	0.00	0.0	0.8		1.4	0.0		0.6	0.01	0.0	2.2		0.0	0.0
4 5 78	0.1	0.00	0.0	0.00	1.6	0.0	0.00	0.0	0.9	0.02	1.1	0.0	0.0	0.6	0.01	0.0	2.1	0.0	0.0	0.0
5 4 78	0.1	0.00			1.7	0.0	0.00	0.0	0.9		1.2	0.0		0.6	0.01	0.0	2.3		0.1	0.0
6 13 78	0.1	0.00	0.1	0.00	1.7	0.0	0.00	0.0	0.8	0.01	0.9	0.0	0.0	0.5	0.01	0.0	2.6	0.0	0.0	0.0
7 13 78	0.1	0.00			2.1	0.0	0.00	0.0	0.8		1.1	0.0		0.5	0.00	0.0	2.0		0.0	0.0
1 23 79	0.1	0.00			2.0	0.0	0.01	0.0	1.2		1.1	0.1		0.6	0.03	0.0	2.2		0.0	0.0
3 13 79	0.1	0.00			1.7	0.0	0.00	0.0	0.7		0.8	0.0		0.4	0.00	0.0	1.9		0.0	0.1
4 5 79	0.2	0.01	0.1	0.00	2.1	0.0	0.00	1.6	0.9	0.07	1.3	0.3	0.0	0.5	0.04	0.0	2.1	0.0	0.1	0.1
5 9 79	0.1	0.00			1.9	0.0	0.00	0.3	0.8		0.9	0.1		0.5	0.01	0.0	1.9		0.1	0.0
6 6 79	0.2	0.01			2.4	0.0	0.00	1.0	0.8		1.2	0.3		0.4	0.00	0.0	2.3		0.0	0.3
7 31 79	0.1	0.01	0.0	0.00	1.6	0.0	0.00	0.0	0.8	0.01	1.0	0.0	0.0	0.5	0.03	0.1	2.1	0.0	0.1	0.0
9 26 79	0.1	0.00			2.0	0.0		0.0	0.7		1.0	0.1		0.4	0.01	0.0	2.2		0.0	0.1

TABLE 19. WATER QUALITY FOR SITE 6053 CAMBRIA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
														MILLIGRAMS PER LITER							
8 9 77	17	3			15	130	92	1.23	7.6		15	18	0	7.2	28	4.0					
10 31 77	10	0.4	17		10	185	107	2.12	7.8		34	42	0	6.9	31	2.3					
12 20 77	4	1.5			6	150	89	2.00	7.6		12	15	0	6.7	25	3.4					
2 1 78	1	0.4			10	157	90	1.68	7.4		16	19	0	5.6	29	3.4					
4 5 78	6	9			20	130	74	1.60	6.6		9	11	0	4.8	25	2.6					
5 4 78	6	0.5			7	163	91	1.96	7.5		25	31	0	6.0	28	2.2					
6 13 78	13	1.0			20	158	110	1.28	7.3		25	31	0	6.5	31	5.5					
7 13 78	17	0.7	63*		10	149	88	2.14	7.7		30	37	0	6.0	25	1.6					
8 10 78	18	1.0	23*		45	159	103	2.53	7.2		22	27	0	15	22	1.6					
9 27 78	11	0.1			50	161	95	2.40	7.8		37	45	0	7.5	24	1.4					
10 27 78	7	0.3	46*		15	172	101	1.56	7.3	-13	18	22	0	8.7	28	4.1					
11 14 78	9	0.06	9		15	173	87	1.94	7.2		25	30	0	7.9	26	1.3					
3 13 79	6	0.4	11		3	133	85	1.80	7.3		13	16	0	5.1	27	2.8					
4 5 79	7	0.25	9		5	145	93	1.43	7.2		11	14	0	5.8	31	4.0					
5 9 79	14	0.4	12	0.00	110	152	94	2.24	7.7	-23	29	35	0	5.7	29	1.3					
6 6 79	12	0.1	43	0.01	100	166	104	1.79	7.0	-18	30	36	0	7.2	31	3.0					
7 31 79	22	0.9	35	0.35	65	168	101	1.42	7.1	-11	15	18	0	9.5	28	4.4	1.4	0.24	1.04	0.10	0.01
9 26 79	13	0.05	0		10	179	110	1.61	7.7	-26	31	38	0	8.1	28	4.5					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR									MILLIGRAMS PER LITER											
8 9 77	0.0	0.00			14	0.0	0.01	0.1	3.3		3.8	0.1		2.8	0.01	0.0	3.0		0.0	0.0
10 31 77	0.1	0.00	0.0	0.00	21	0.0	0.01	0.1	3.2	0.09	5.9	0.1	0.0	2.2	0.01	0.0	2.7	0.1	0.0	0.0
12 20 77	0.1	0.00	0.1	0.00	17	0.1	0.00	0.2	2.4	0.10	6.1	0.1	0.0	1.7	0.02	0.1	3.0	0.1	0.3	0.0
2 1 78	0.0	0.02			16	0.0	0.00	0.2	2.0		5.7	0.1		1.9	0.01	0.0	2.5		0.0	0.0
4 5 78	0.1	0.00	0.0	0.00	12	0.0	0.00	0.1	2.9	0.05	4.7	0.1	0.0	1.6	0.02	0.0	2.4	0.0	0.1	0.0
5 4 78	0.1	0.00			17	0.0	0.00	0.1	2.6		5.8	0.1		1.7	0.01	0.0	2.6		0.1	0.0
6 13 78	0.1	0.01			16	0.0	0.00	0.2	3.4		5.3	0.1		1.7	0.01	0.0	2.8		0.0	0.0
7 13 78	0.0	0.01			16	0.0	0.00	0.1	3.2		5.4	0.1		1.5	0.00	0.0	2.6		0.1	0.0
8 10 78	0.1	0.02			17	0.0	0.01	0.4	11		5.7	0.2		2.8	0.03	0.1	3.6		0.1	0.0
9 27 78	0.0	0.01			17	0.0	0.00	0.2	5.0		5.6	0.2		1.7	0.01	0.1	2.7		0.1	0.0
10 27 78	0.1	0.01	0.1	0.01	16	0.0	0.01	0.2	6.4	0.10	5.0	0.2	0.0	1.9	0.01	0.0	2.8	0.0	0.0	0.0
11 14 78	0.1	0.00			16	0.0	0.00	0.4	4.6		4.9	0.2		1.6	0.01	0.0	2.7		0.0	0.0
3 13 79	0.1	0.00			16	0.0	0.02	0.1	3.1		4.6	0.1		2.5	0.03	0.0	2.7		0.0	0.1
4 5 79	0.1	0.01	0.1	0.00	16	0.0	0.00	0.1	2.5	0.20	5.0	0.1	0.0	1.6	0.02	0.0	2.3	0.1	0.0	0.1
5 9 79	0.1	0.00			21	0.0	0.00	0.2	3.1		5.2	0.1		1.7	0.00	0.0	2.2		0.0	0.3
6 6 79	0.1	0.00			19	0.0	0.01	0.1	3.2		5.5	0.0		2.0	0.00	0.0	2.7		0.0	0.2
7 31 79	0.1		0.0	0.00	16	0.1		0.1	3.9	0.15	5.3	0.1	0.0	1.9	0.00	0.0	3.2	0.1	0.0	0.0
9 26 79	0.0	0.00			18	0.0	0.00	0.3	3.9		5.0	0.1		1.8	0.00	0.0	2.8		0.0	0.0

TABLE 20. WATER QUALITY FOR SITE 6056 CAMBRIA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	KNO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 9 77	19	0.1			8	76	54	0.79	4.1		0	0	0	1.2	32	0.2					
10 31 77	8	0.1	19		2	99	58	0.80	4.2		0	0	0	1.9	36	0.0					
12 20 77	0	2.0			2	101	56	0.87	4.3		0	0	0	1.4	32	0.5					
2 1 78	1				6	99	50	0.84	3.9		0	0	0	1.1	30	0.3					
4 5 78	6	7			4	73	44	0.82	4.1		0	0	0	1.3	22	1.3					
5 4 78	6	0.05			3	80	46	0.88	4.4		0	0	0	1.1	27	0.2					
6 13 78	14	0.02			15	83	52	0.69	4.3		0	0	0	1.1	31	0.3					
8 10 78	17	0.6	154*		600	131	78	1.35	6.3		2	3	0	2.1	41	0.8					
9 27 78	12	0.0000	7		10	90	62	0.74	4.8		0	0	0	1.3	38	0.3					
10 27 78	8	0.04	51*		20	111	65	0.84	6.2		2	2	0	3.3	37	0.3					
12 4 78	4	0.15	10		3	93	51	0.94	4.2		0	0	0	2.1	28	0.4					
3 13 79	6	0.4	8		1	79	48	0.83	4.5	10	0	0	0	0.7	28	0.6					
4 5 79	7	0.8	7		1	75	48	0.76	4.5		0	0	0	1.1	29	0.5					
5 9 79	18	0.3	4	0.00		78	47	0.78	4.5	10	0	0	0	1.1	29	0.2					
6 6 79	18	0.04	4		5	81	53	0.79	3.9	13	0	0	0	0.8	33	0.2					
7 31 79	23	0.1	2		10	83	48	0.89	4.8	8	0	0	0	1.2	27	0.4	0.2	0.01	0.60	0.15	0.00
9 26 79	14	0.01	1		5	80	50	0.84	4.6	10	0	0	0	1.2	29	0.4					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 9 77	0.6	0.00			5.3	0.0	0.00	0.0	1.3		3.0	0.8		1.1	0.02	0.0	3.3		0.0	0.3
10 31 77	1.0	0.00	0.0	0.00	6.0	0.0	0.01	0.0	1.4	0.05	3.3	1.1	0.0	1.0	0.03	0.0	3.1	0.0	0.0	0.1
12 20 77	1.7	0.00	0.1	0.00	5.4	0.1	0.00	0.3	1.1	0.05	3.8	0.8	0.0	0.8	0.04	0.1	3.1	0.0	0.3	0.1
2 1 78	1.0	0.02			4.9	0.0	0.00	0.1	0.9		3.4	0.7		0.8	0.02	0.0	2.6		0.0	0.1
4 5 78	0.7	0.00	0.0	0.00	4.4	0.0	0.00	0.1	1.3	0.03	2.8	0.4	0.0	0.7	0.03	0.0	2.1	0.0	0.1	0.0
5 4 78	0.9	0.01			4.5	0.0	0.00	0.0	1.2		3.0	0.8		0.8	0.03	0.0	2.8		0.0	0.1
6 13 78	0.6	0.01	0.1	0.00	4.4	0.0	0.00	0.2	1.2	0.03	2.6	0.7	0.0	0.7	0.03	0.0	3.7	0.0	0.0	0.1
8 10 78	0.1	0.02			13	0.0	0.01	0.1	2.5		6.0	0.4		1.0	0.03	0.1	2.7		0.1	0.0
9 27 78	0.4	0.01			6.2	0.0	0.01	0.2	1.1		3.4	0.9		0.8	0.02	0.0	3.6		0.0	0.1
10 27 78	0.4	0.02	0.0	0.01	7.4	0.0	0.01	0.1	2.4	0.09	3.6	0.7	0.0	0.9	0.02	0.0	3.0	0.0	0.0	0.1
12 4 78	0.5	0.00			6.3	0.0	0.01	0.1	1.6		3.0	0.6		0.8	0.02	0.0	2.6		0.0	0.1
3 13 79	0.8	0.00			4.8	0.0	0.01	0.1	1.1		3.0	0.5		0.7	0.04	0.0	2.3		0.0	0.1
4 5 79	0.6	0.00	0.1	0.00	5.0	0.0	0.00	0.1	1.1	0.15	2.7	0.5	0.0	0.6	0.02	0.0	2.1	0.0	0.0	0.2
5 9 79	0.5	0.00			4.6	0.1	0.01	0.2	1.0		2.8	0.6		0.6	0.03	0.0	2.4		0.2	0.0
6 6 79	0.7	0.01			5.4	0.0	0.00	0.6	1.2		3.0	0.7		0.8	0.02	0.0	2.8		0.0	0.3
7 31 79	0.4	0.01	0.0	0.00	5.4	0.0	0.00	0.2	0.9	0.02	2.9	0.6	0.0	0.6	0.03	0.0	3.2	0.0	0.0	0.1
9 26 79	0.4	0.01			5.6	0.0	0.02	0.2	1.2		2.8	0.6		0.7	0.02	0.0	3.0		0.0	0.0

TABLE 21. WATER QUALITY FOR SITE 6061 CENTRE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
9 12 77	11	0.5			20	357	223	17.4	8.1		143	171	1	2.6	16	2.5					
10 19 77	11	1.5	6		0	265	142	7.54	7.9		116	141	1	2.6	14	3.0					
12 12 77	10	1.5			0	442	220	15.3	8.1		173	208	2	3.0	15	1.8					
4 3 78	9	1.5			4	308	188	13.7	8.0		139	168	1	2.8	15	1.4					
5 2 78	10	0.4			4	297	185	15.5	8.3		116	138	2	2.7	15	1.5					
6 9 78	11	0.8				260	188	15.7	8.1		134	160	1	2.9	14	1.7					
7 11 78	11	0.9	28*		4	297	188	13.4	8.2		128	153	1	2.5	17	1.0					
8 9 78	11	0.8	35*		0	317	178	13.7	8.2		134	161	2	3.4	13	1.5					
9 20 78	12	0.004	10		10	275	185	13.8	8.5		120	140	3	2.4	15	2.2					
10 26 78	10	0.03	33*		4	426	215	11.1	8.1		167	201	2	2.5	19	1.1					
12 4 78	10	0.008			0	365	216	14.6	8.2		172	206	2	2.5	15	1.1					
1 20 79	0	0.15	20		5	382	206	12.2	8.2		151	180	2	3.6	17	1.8					
3 6 79	1	1.5	3		6	240	141	9.18	8.0		95	115	1	1.9	16	1.1					
4 13 79	9	0.3	27		0	331	189	10.2	8.5		133	156	3	2.5	20	1.2					
5 8 79	12	0.5	87	0.06	15	383	245	4.95	8.2		156	186	2	2.6	49	1.2					
6 5 79	11	0.25	14		6	269	164	8.85	8.4		143	170	3	2.2	16	1.3					
7 29 79	21	0.15	109	0.25	85	411	226	7.80	8.5	-160	168	197	4	3.0	25	3.0	0.5	0.05	3.60	0.10	0.06
9 30 79	10	0.1	3		8	387	214	11.4	8.2		143	171	2	11	17	3.7					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 12 77	0.1	0.01			67	0.0	0.00	0.1	0.8		32	0.0		2.1	0.02	0.0	2.7		0.0	0.0
10 19 77	0.0	0.00	0.1	0.00	28	0.0	0.00	0.0	0.8	0.15	12	0.0	0.0	1.3	0.00	0.0		0.4	0.0	0.1
12 12 77	0.0	0.00	0.1	0.00	52	0.0	0.00	0.0	0.8	0.35	28	0.0	0.0	1.8	0.01	0.0	3.0	0.8	0.1	0.0
4 3 78	0.0	0.00	0.0	0.00	45	0.0	0.00	0.0	1.2	0.10	25	0.0	0.0	1.8	0.02	0.0	2.7	0.3	0.1	0.0
5 2 78	0.1	0.00			51	0.0	0.00	0.1	1.1		30	0.0		2.0	0.03	0.0	3.2		0.1	0.0
6 9 78	0.0	0.00	0.0	0.00	47	0.0	0.00	0.0	0.9	0.20	27	0.0	0.0	2.0	0.01	0.0	2.7	0.4	0.1	0.0
7 11 78	0.1	0.01	0.1	0.00	51	0.0	0.00	0.1	0.9	0.15	26	0.0	0.0	1.6	0.02	0.1	3.0	0.5	0.2	0.0
8 9 78	0.1	0.00			45	0.0	0.01	0.0	0.8		20	0.0		1.6	0.04	0.1	2.9		0.1	0.0
9 20 78	0.2	0.00	0.1	0.00	52	0.0	0.00	0.1	0.9	0.45	23	0.0	0.0	1.5	0.02	0.2	2.8	0.7	0.1	0.0
10 26 78	0.2	0.00	0.1	0.01	57	0.0	0.00	0.0	0.8	0.30	20	0.0	0.0	1.4	0.02	0.1	2.8	0.5	0.0	0.0
12 4 78	0.2	0.00			58	0.0	0.00	0.0	0.6		22	0.0		1.4	0.02	0.2	3.0		0.1	0.0
1 20 79	0.1	0.00			54	0.1	0.02	0.0	1.2		22	0.0		2.3	0.05	0.1	2.8		0.1	0.1
3 6 79	0.1	0.00			38	0.0	0.00	0.1	0.9		16	0.0		1.3	0.01	0.0	2.1		0.2	0.0
4 13 79	0.1	0.00	0.1	0.00	52	0.0	0.00	0.0	0.8	0.35	21	0.0	0.0	1.5	0.02	0.1	2.6	0.5	0.1	0.0
5 8 79	0.1	0.00			58	0.0	0.01	0.2	0.9		26	0.0		1.6	0.02	0.1	3.2		0.1	0.1
6 5 79	0.0	0.01			21	0.0	0.00	0.0	0.9		25	0.0		1.6	0.01	0.0	2.3		0.0	0.0
7 29 79	0.8	0.00	0.1	0.00	52	0.0	0.02	0.1	1.7	0.20	21	0.3	0.0	1.6	0.02	0.1	2.7	0.5	0.0	0.0
9 30 79	0.3	0.00			55	0.0	0.01	0.0	1.0		21	0.0		1.8	0.03	0.0	2.4		0.1	0.0

TABLE 22. WATER QUALITY FOR SITE 6062 CENTRE COUNTY, PENNSYLVANIA

DATE			WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
9	12	77	17	0.025			15	485	169	0.35	3.3			0	0	0.8	120	0.0					
10	26	77	12	3	3		0	128	55	0.53	3.9			0	0	1.2	35	0.1					
12	8	77	1	2.0			4	136	54	0.51	3.8			0	0	1.1	35	0.0					
5	23	78	13	4	46*		3	85	37	0.69	4.1			0	0	0.1	23	0.1					
7	11	78	16	0.5	51*		8	165	78	0.45	3.3			0	0	0.7	53	0.0					
8	8	78	21	0.15	5		0	221	68	0.38	3.4			0	0	1.6	44	0.1					
9	20	78	19	0.008	29*		2	220	88	0.31	3.5			0	0	2.2	54	1.1					
10	25	78	11	0.003	26*		7	219	85	0.41	3.6	43		0	0	1.1	57	0.0					
11	30	78	2	0.03	1		1	97	41	0.61	4.1			0	0	1.1	24	0.1					
3	7	79	0	0.9	3		5	100	40	0.50	3.6	21		0	0	0.6	26	0.0					
4	13	79	7	1.0	12		1	81	37	0.63	4.0	13		0	0	0.8	23	0.0					
5	8	79	12	0.6	2	0.00	5	110	47	0.54	4.0	20		0	0	0.5	32	0.0					
6	5	79	16	0.3	0	0.00	0	106	45	0.63	3.9	18		0	0	0.6	28	0.0					
7	30	79	22	0.25				83	36	0.57	4.1	12		0	0	1.1	21	0.0	0.0	0.11	0.40	0.00	0.00
10	1	79	14	0.3	0		5	95	43	0.51	3.9	16		0	0	0.9	28	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE			AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO	DA	YR	MILLIGRAMS PER LITER																			
9	12	77	7.3	0.02			5.3	0.1	0.02	4.0	0.9		7.3	1.6		0.8	0.10	0.0	8.1		0.1	0.1
10	26	77	1.9	0.00	0.1	0.00	2.5	0.0	0.02	0.4	1.5	0.05	2.7	0.5	0.0	1.0	0.03	0.0	3.5	0.0	0.0	0.1
12	8	77	2.6	0.00	0.2	0.00	2.3	0.0	0.00	0.5	0.8	0.09	2.8	0.3	0.0	0.7	0.02	0.0	3.5	0.0	0.0	0.0
5	23	78	0.8	0.01			2.2	0.0	0.00	0.3	1.1		2.2	0.3		0.6	0.04	0.0	2.5		0.2	0.1
7	11	78	2.8	0.01	0.1	0.00	3.3	0.0	0.01	1.7	0.9	0.04	3.7	0.6	0.0	0.5	0.03	0.1	4.9	0.0	0.1	0.1
8	8	78	1.8	0.00			2.6	0.0	0.01	2.2	0.8		2.7	0.6		0.6	0.03	0.0	4.7		0.0	0.1
9	20	78	2.2	0.00			3.2	0.0	0.03	1.6	1.3		3.2	1.1		0.8	0.06	0.0	5.8		0.1	0.1
10	25	78	3.1	0.00			3.7	0.0	0.01	2.2	1.2		3.3	1.0		0.6	0.03	0.0	5.3		0.0	0.1
11	30	78	1.0	0.00			2.2	0.1	0.02	0.2	1.0		2.2	0.4		0.8	0.05	0.0	3.2		0.1	0.1
3	7	79	1.0	0.00	0.0	0.01	2.1	0.0	0.00	1.5	0.8	0.20	1.7	0.4	0.0	0.4	0.02	0.0	2.2	0.0	0.1	0.1
4	13	79	1.0	0.00	0.1	0.00	2.2	0.0	0.00	0.2	0.9	0.00	2.2	0.3	0.0	0.5	0.04	0.0	2.5	0.0	0.1	0.1
5	8	79	1.4	0.00			2.4	0.0	0.00	0.2	0.9		2.6	0.3		0.6	0.01	0.0	2.8		0.0	0.1
6	5	79	1.5	0.00			2.4	0.0	0.00	0.4	0.9		2.5	0.3		0.8	0.02	0.0	3.3		0.0	0.2
7	30	79	0.7	0.00	0.1	0.00	2.1	0.0	0.00	0.3	0.7	0.02	1.7	0.4	0.0	0.5	0.01	0.0	3.2	0.0	0.0	0.0
10	1	79	1.1	0.00			2.1	0.0	0.00	0.3	0.8		2.0	0.4		0.5	0.03	0.0	3.5		0.0	0.0

TABLE 23. WATER QUALITY FOR SITE 6063 CENTRE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
9 12 77	17	0.8			15	2020	1720	0.53	3.0		0	0	0	0.5	1300	0.2					
10 26 77	13	4	23		8	1650	1210	0.29	3.1		0	0	0	0.6	950	0.2					
12 8 77	3	1.5			6	1240	1050	0.28	3.0		0	0	0	0.7	810	0.1					
3 7 78	1	0.4			20	1140	994	0.50	3.2		0	0	0	0.5	750	0.1					
4 3 78	4	5			4	958	751	0.38	3.0		0	0	0	0.6	560	0.2					
5 2 78	6	1.0	13		6	1010	716	0.47	3.2		0	0	0	0.7	530	0.3					
6 9 78	18	2.5				950	665	0.42	3.1		0	0	0	0.6	500	0.1					
7 11 78	15	0.8	86*		4	1430	1110	0.45	2.9		0	0	0	0.5	850	0.1					
8 9 78	18	4	11		5	1390	981	0.38	3.0		0	0	0	1.3	730	0.4					
9 20 78	15	0.15	15		20	1440	1100	0.41	3.0		0	0	0	0.6	850	0.1					
10 25 78	11	0.06	18*		9	1510	1190	0.46	3.2	560	0	0	0	0.7	910	0.1					
11 30 78	4	0.15	12		3	1230	964	0.45	3.3		0	0	0	0.6	740	0.1					
7 28 79	22	0.1	0	0.31	8	1470	926	0.45	3.0	370	0	0	0	0.9	710	0.1	0.1	0.20	0.85	0.05	0.01
9 27 79	16	0.15	0		5	1380	1160	0.38	3.1	590	0	0	0	1.2	900	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 12 77	97	0.05			110	1.2	0.21	18	2.8		100	33		2.2	0.97	0.2	18		0.2	2.2
10 26 77	92	0.00	0.0	0.02	36	0.6	0.19	6.3	2.2	0.30	47	16	0.0	1.4	0.64	0.0	24	0.1	0.1	1.1
12 8 77	100	0.00	0.0	0.02	27	0.4	0.13	7.3	1.4	0.35	41	14	0.0	1.0	0.45	0.0	20	0.2	0.0	0.8
3 7 78	66	0.08			54	0.5	0.13	8.1	2.0		61	18		1.4	0.50	0.1	14		0.2	1.0
4 3 78	76	0.00	0.0	0.01	26	0.3	0.11	4.4	1.6	0.20	38	9.6	0.0	0.9	0.37	0.0	13	0.1	0.0	0.7
5 2 78	56	0.00			34	0.4	0.12	6.0	1.9		41	11		1.1	0.43	0.0	15		0.1	0.8
6 9 78	51	0.00	0.0	0.01	29	0.4	0.11	5.9	1.9	0.15	34	9.7	0.0	1.1	0.41	0.0	15	0.1	0.2	0.8
7 11 78	64	0.01	0.0	0.02	65	0.5	0.12	16	2.2	0.25	57	16	0.0	1.3	0.60	0.1	16	0.2	0.2	1.1
8 9 78	81	0.00			42	0.4	0.16	10	2.0		44	15		1.0	0.56	0.1	23		0.1	1.0
9 20 78	62	0.00	0.0	0.02	49	0.5	0.15	10	2.1	0.50	58	17	0.0	1.8	0.59	0.3	22	0.2	0.4	1.2
10 25 78	69	0.00	0.0	0.03	69	0.6	0.16	12	2.4	0.40	62	21	0.1	1.5	0.62	0.1	18	0.2	0.1	1.8
11 30 78	59	0.00			54	0.5	0.10	6.6	1.9		50	18		1.5	0.51	0.2	15		0.3	1.0
7 28 79	52	0.00	0.0	0.02	50	0.5	0.24	10	2.3	0.25	49	15	0.0	1.5	0.53	0.1	15	0.1	0.2	0.9
9 27 79	74	0.06			53	0.5	0.23	7.9	1.7		54	19		1.1	0.55	0.1	20		0.3	1.3

TABLE 24. WATER QUALITY FOR SITE 6071 CLARION COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 26 77	14	0.03			20	218	97	1.59	6.9		8	10	0	28	24	0.6					
10 18 77	8	0.005	1		9	197	103	1.35	7.5		10	12	0	30	22	2.0					
11 30 77	9	0.02	9			169	107	1.16	7.3		7	8	0	31	26	1.8					
5 23 78	7	0.05	53#		2	164	76		6.8		7	8	0		32	1.8					
7 6 78	11	0.5	21#		4	162	86	1.31	6.4		5	6	0	19	28	1.1					
8 4 78	13	0.0000	33#		0	182	104	1.32	6.8		7	8	0	35	20	1.4					
9 15 78	13	0.0007			55	170	112	0.86	6.5		7	8	0	25	25	5.0					
10 19 78	12	0.004			10	170	96	1.24	7.1		7	9	0	19	28	2.5					
11 15 78	11	0.001	10		7	184	95	1.14	6.6		6	7	0	29	21	1.5					
1 17 79	2	0.004			3	156	88	1.57	7.0		4	5	0	19	25	1.5					
3 3 79	1	0.06	2		0	151	91	1.40	6.7	-1	7	8	0	14	32	1.8					
4 3 79	8	0.02	10		1	147	99	1.18	6.9		4	5	0	11	42	2.3					
5 5 79	11	0.001	12	0.06	30	161	100	1.73	7.0	-1	12	15	0	23	27	1.0					
6 2 79	11	0.01			9	159	85	1.03	7.0	2	8	10	0	18	27	1.5					
7 12 79	20	0.01		0.00	3	170	94	0.88	7.0	-2	7	9	0	20	32	1.8	0.9	0.00	1.20	0.45	0.02
10 2 79	13	0.003	26		8	168	96	1.10	6.9	-1	7	8	0	16	31	2.9					

Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 26 77	0.0	0.04			15	0.0	0.00	0.0	2.9		5.9	0.0		6.8	0.00	0.0	3.2		0.0	0.0
10 18 77	0.0		0.1	0.00	15	0.0	0.00	0.1	2.7	0.05	5.6	0.0	0.0	7.0	0.00	0.0	2.7	0.1	0.0	0.0
11 30 77	0.1	0.06			15	0.0	0.00	0.0	3.0		6.2	0.2		6.3	0.01	0.0	3.2		0.0	0.0
5 23 78	0.1	0.02			13	0.0	0.00	0.0	2.6		5.6	0.0		5.5	0.04	0.0	2.5		0.2	0.0
7 6 78	0.1	0.01	0.1	0.00	13	0.0	0.00	0.0	2.5	0.05	5.6	0.1	0.0	4.8	0.03	0.0	2.2	0.1	0.0	0.1
8 4 78	0.1	0.01			16	0.0	0.00	0.0	2.7		6.2	0.1		6.2	0.01	0.0	3.2		0.0	0.0
9 15 78	0.1	0.02			15	0.0	0.00	0.1	2.9		5.7	0.1		5.0	0.01	0.0	3.1		0.0	0.0
10 19 78	0.0	0.02	0.1	0.00	14	0.0	0.00	0.0	2.7	0.09	5.3	0.0	0.0	4.6	0.02	0.0	3.0	0.1	0.0	0.0
11 15 78	0.2	0.01			14	0.0	0.00	0.0	2.3		5.4	0.0		5.2	0.02	0.1	3.3		0.1	0.0
1 17 79	0.1	0.00			15	0.0	0.01	0.0	2.4		5.2	0.0		5.0	0.03	0.1	3.0		0.1	0.0
3 3 79	0.1	0.01			15	0.0	0.01	0.0	2.8		4.7	0.0		5.1	0.01	0.0	2.3		0.0	0.0
4 3 79	0.1	0.01	0.1	0.00	16	0.0	0.00	0.0	2.6	0.20	5.6	0.2	0.0	4.3	0.02	0.0	2.1	0.1	0.0	0.0
5 5 79	0.1	0.01			17	0.0	0.01	0.1	2.5		6.2	0.0		5.4	0.03	0.0	2.9		0.0	0.2
6 2 79	0.1	0.02			12	0.1	0.01	0.0	2.2		4.3	0.0		4.3	0.03	0.0	2.5		0.0	0.2
7 12 79	0.0	0.02	0.1	0.00	13	0.0	0.00	0.0	2.4	0.10	4.4	0.2	0.0	4.4	0.00	0.0	2.3	0.1	0.0	0.1
10 2 79	0.1	0.02			14	0.0	0.00	0.0	2.7		4.7	0.0		4.7	0.01	0.0	2.8		0.0	0.0

TABLE 25. WATER QUALITY FOR SITE 6072 CLARION COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 26 77	24	0.05			4	4520	4980	0.86	3.3			0	0	0	1.3	3700	0.4				
10 18 77	11	0.01	5		8	4630	4280	1.00	3.8			0	0	0	2.0	3100	0.2				
11 30 77	0	0.02	33			2950	2940	0.90	3.7			0	0	0	2.3	2200	0.1				
7 6 78	33	0.08	49*		8	4120	3410	1.02	3.1			0	0	0	2.0	2500	0.0				
8 4 78	21	0.09	19*		0	4440	4730	0.85	3.2			0	0	0	3.0	3600	0.0				
9 15 78	23	0.0004	32*		0	4010	4190	0.81	3.3			0	0	0	2.9	3200	0.3				
10 19 78	9	0.004	39*		9	3980	4250	0.79	3.5			0	0	0	3.3	3300	0.3				
11 15 78	5	0.001	17		6	4050	4380	0.77	3.3	410		0	0	0	2.9	3400	0.0				
10 2 79	12	0.0002	39		20	3200	3190	0.78	3.5	290		0	0	0	2.8	2500	0.1				

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 26 77	80	0.13			480	1.8	0.03	11	8.9		500	140		19	2.8	0.4	24		0.6	2.6
10 18 77	71	0.07	0.0	0.01	450	0.7	0.01	6.0	7.0	1.5	490	130	0.1	16	1.6	0.3	14	1.4	0.7	2.0
11 30 77	43	0.05	0.0	0.01	300	0.8	0.01	2.9	5.6	2.0	310	85	0.0	9.9	1.1	0.2	8.1	1.6	0.4	1.6
7 6 78	30	0.07	0.0	0.01	340	0.8	0.01	6.4	9.6	1.5	420	82	0.2	12	1.7	0.5	17	1.2	0.8	2.0
8 4 78	38	0.07			460	0.8	0.02	15	10		480	99		19	1.7	0.6	15		0.7	1.7
9 15 78	26	0.07			400	0.6	0.03	7.6	12		410	79		15	1.3	0.7	15		0.8	1.1
10 19 78	34	0.04	0.0	0.01	410	0.6	0.02	6.7	8.5	2.0	400	80	0.1	13	1.2	0.5	11	1.4	0.7	1.1
11 15 78	36	0.06			410	0.7	0.02	5.7	6.6		400	93		12	1.3	0.7	11		1.5	1.4
10 2 79	24	0.07			290	0.7	0.03	1.7	10		300	66		13	1.2	0.4	9.4		0.7	1.8

TABLE 26. WATER QUALITY FOR SITE 6073 CLARION COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 26 77	12	0.5			4	406	191	1.46	6.5		26	32	0	3.1	100	0.6					
10 18 77	10	0.2	5		8	301	179	1.21	7.3		24	29	0	4.2	89	4.0					
11 30 77	5	0.4	9			169	113	1.52	7.5		19	23	0	4.3	46	2.7					
1 19 78	4	0.1			8	287	159	1.29	7.5		21	26	0	3.6	79	2.7					
3 2 78	0	0.1			20	264	142	1.38	6.9		26	32	0	3.9	66	2.2					
3 30 78	7	1.5			0	179	112	1.16	7.2		25	31	0	4.4	49	2.5					
4 28 78	9	0.7	19			227	137	1.17	7.6		28	34	0	3.6	68	1.9					
5 23 78	11	1.0	54*		10	241	142	1.11	7.2		19	23	0	4.3	77	1.4					
7 6 78	16	0.5	29*		8	310	188	1.33	7.3		26	32	0	3.4	99	1.8					
8 4 78	16	0.1	24*		8	345	246	1.46	7.5		39	47	0	3.7	130	1.9					
9 15 78	17	0.01	69*		4	297	203	1.24	7.9		41	50	0	4.0	100	1.6					
10 19 78	10	0.2	26*		10	219	145	1.09	7.6		19	23	0	5.7	66	4.0					
11 15 78	4	0.05	11		5	343	219	1.11	6.9	-30	23	28	0	4.1	120	2.4					
3 3 79	3	0.8	1240		550	86	60	1.61	6.5	-3	17	21	0	2.5	21	1.1					
4 3 79	8	0.3	41		20	125	79	1.39	7.1		10	12	0	3.0	36	1.5					
5 5 79	12	0.15	16	0.00	15	243	151	1.06	7.5	-14	22	27	0	4.1	84	1.5					
6 2 79	16	0.09	9	0.00	35	227	139	1.12	7.5	-15	23	28	0	4.4	71	1.7					
7 12 79	20	0.08	38*	0.01	25	293	190	1.17	7.8	-20	30	37	0	2.6	100	1.7	0.3	0.02	0.70	0.15	0.01
10 2 79	12	0.1	17		25	210	143	1.11	7.5	-2	21	26	0	5.8	63	4.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 26 77	0.0	0.03			40	0.0	0.00	0.1	2.2		12	0.0		3.4	0.02	0.0	4.3		0.0	0.0
10 18 77	0.1	0.00	0.1	0.00	33	0.0	0.00	0.1	1.4	0.10	10	0.1	0.0	3.0	0.00	0.0	2.8	0.1	0.0	0.0
11 30 77	0.0	0.00	0.1	0.00	22	0.0	0.00	0.1	2.0	0.15	6.2	0.1	0.0	2.7	0.01	0.0	3.0	0.1	0.0	0.0
1 19 78	0.0	0.00			28	0.0	0.00	0.1	1.9		10	0.1		2.7	0.00	0.0	3.6		0.0	0.0
3 2 78	0.1	0.00			26	0.0	0.00	0.1	1.7		8.9	0.1		2.4	0.00	0.0	3.2		0.0	0.0
3 30 78	0.0	0.00	0.1	0.00	17	0.0	0.00	0.1	1.6	0.03	6.2	0.1	0.0	2.4	0.01	0.0	2.7	0.1	0.0	0.0
4 28 78	0.0	0.00	0.0	0.00	22	0.0	0.00	0.1	1.8	0.09	7.8	0.0	0.0	2.6	0.00	0.0	3.0	0.1	0.0	0.0
5 23 78	0.1	0.01			22	0.0	0.00	0.0	2.1		8.8	0.0		2.6	0.05	0.1	3.2		0.2	0.0
7 6 78	0.1	0.01	0.1	0.00	37	0.0	0.00	0.0	2.2	0.10	12	0.0	0.0	2.2	0.02	0.1	3.5	0.1	0.1	0.0
8 4 78	0.1	0.00			56	0.0	0.01	0.0	2.6		13	0.0		3.3	0.01	0.0	4.1		0.0	0.0
9 15 78	0.1	0.01			38	0.0	0.01	0.0	2.6		10	0.1		2.7	0.01	0.0	4.1		0.0	0.0
10 19 78	0.1	0.00	0.0	0.00	23	0.0	0.00	0.1	2.4	0.15	7.6	0.2	0.0	2.6	0.01	0.0	3.6	0.1	0.0	0.0
11 15 78	0.1	0.00			42	0.0	0.00	0.0	2.1		11	0.0		2.8	0.01	0.1	3.7		0.0	0.0
3 3 79	0.3	0.00			11	0.0	0.01	0.3	1.4		2.9	0.1		1.5	0.02	0.0	2.0		0.0	0.0
4 3 79	0.1	0.00			14	0.0	0.01	0.0	1.8		4.6	0.0		1.9	0.01	0.0	2.4		0.0	0.0
5 5 79	0.0	0.00			25	0.0	0.00	0.0	1.7		8.3	0.0		1.9	0.01	0.0	2.9		0.0	0.0
6 2 79	0.1	0.01			22	0.0	0.00	0.0	1.7		8.0	0.2		2.3	0.01	0.0	3.2		0.0	0.1
7 12 79	0.0	0.01	0.1	0.00	37	0.0	0.00	0.1	1.7	0.45	9.1	0.1	0.1	1.9	0.01	0.1	3.8	0.1	0.0	0.0
10 2 79	0.1	0.01			23	0.0	0.01	0.0	2.5		7.2	0.1		2.9	0.01	0.1	3.6		0.0	

TABLE 27. WATER QUALITY FOR SITE 6076 CLARION COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
1 19 78	9	0.2			0	4220	4920	0.89	7.3		20	24	0	4.9	3700	0.0					
3 2 78	7	0.15			150	3890	4140	0.89	6.7		37	45	0	5.0	3100	0.0					
3 30 78	12	0.3			8	4430	5380	0.86	6.8		46	56	0	4.6	4100	0.0					
4 28 78	17	0.25				4320	4670	0.84	7.7		36	43	0	4.7	3600	0.1					
5 23 78	16	0.3			45	4300	4250	1.02	7.6		39	48	0	1.6	3100	0.2					
3 3 79	2	0.7	1420		2100	1860	1660	1.01	5.0	74	0	0	0	1.9	1200	0.3					
4 3 79	9	0.15	129		130	3760	3870	0.90	6.9		11	13	0	3.0	2900	0.0					
5 5 79	22	0.09	58	0.05	280	4800	4130	1.05	7.0	100	39	48	0	4.1	3000	0.3					
6 2 79	18	0.1	35	0.02	170	3870	3150	1.02	7.7	89	43	52	0	5.1	2300	0.1					
7 12 79	23	0.03	41	0.01	180	4390	4040	0.77	6.7	-9	7	9	0	5.1	3100	0.1	0.0	0.15	1.15	0.05	0.01
10 2 79	17	0.02			7	4040	3500	1.05	7.7		40	48	0	5.2	2500						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
1 19 78	1.1	0.06			460	0.5	0.01	24	13		540	120		21	0.72	0.4	6.0		1.0	0.3
3 2 78	0.6				450	0.5	0.01	16	15		410	120		18	0.65	0.3	6.6		0.9	0.3
3 30 78	1.7	0.06	0.0	0.01	470	0.5	0.01	24	16	1.0	590	120	0.2	20	0.83	0.2	7.0	1.2	1.2	0.4
4 28 78	0.6	0.07	0.0	0.00	400	0.4	0.01	19	11	1.0	500	110	1.3	20	0.63	0.2	5.8	1.3	1.1	0.2
5 23 78	0.7	0.09			400	0.4	0.01	30	13		550	110		19	0.79	0.3	6.2		1.6	0.2
3 3 79	0.9	0.03	0.0	0.00	200	0.2	0.01	4.9	5.0	0.75	180	38	0.0	6.0	0.29	0.2	3.4	0.5	0.5	0.2
4 3 79	0.6	0.06			460	0.3	0.00	10	7.9		370	79		15	0.56	0.5	4.1		1.7	0.3
5 5 79	0.9	0.08			550	0.3	0.01	9.3	11		450	84		16	0.62	0.4	4.5		1.6	0.4
6 2 79	0.4	0.09			340	0.3	0.01	5.8	7.8		380	65		11	0.45	0.5	4.4		0.8	0.3
7 12 79	0.6	0.09	0.0	0.00	390	0.3	0.00	5.5	9.9	3.5	370	74	0.2	15	0.51	0.6	5.7	1.3	1.2	0.2
10 2 79	0.6	0.07			470	0.2	0.01	9.4	11		370	72		18	0.44	0.4	3.4		1.0	0.1

TABLE 28. WATER QUALITY FOR SITE 6081 CLEARFIELD COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
9 9 77	16	0.004			10	57	26	2.00	6.1		4	5	0	0.7	9	0.2					
10 26 77	10	0.06	26		0	43	30	1.43	6.8		6	7	0	1.0	12	0.1					
12 7 77	4	0.15			4	41	28	1.03	6.4		2	2	0	0.5	14	0.1					
5 23 78	10	0.2	55*		10	39	30	1.05	6.6		3	4	0	1.2	14	0.3					
7 11 78	14	0.01	73*		20	35	25	1.23	6.7		4	5	0	1.1	11	0.1					
8 8 78	17	0.04	42*		20	38	28	1.71	6.6		5	6	0	1.1	9	0.2					
9 19 78	16	0.002				41	29	1.30	6.7		4	5	0	0.3	12	0.1					
10 25 78	2	0.003				41	28	1.40	6.8	-3	5	6	0	0.6	11	0.1					
11 29 78	0	0.025	17		1	39	24	1.44	6.0		2	3	0	0.8	10	0.1					
3 5 79	0	0.25	64		10	40	25	1.34	6.2	2	3	4	0	0.7	11	0.2					
4 5 79	4	0.02	17		5	38	27	1.18	6.3		1	1	0	1.0	13	0.1					
5 6 79	9	0.02	66	0.35	15	38	30	1.40	6.2	2	5	6	0	1.0	13	0.1					
6 3 79	16	0.05	74		45	61	35	1.46	6.7	4	7	8	0	1.4	13	0.1					
7 27 79	22	0.003	32		30	42	28	1.44	6.7	0	6	7	0	1.2	10	0.1	0.0	0.01	0.45	0.20	0.01
10 1 79	13	0.02	57		30	41	30	1.47	6.8	0	4	5	0	1.0	12	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 9 77	0.0				4.8	0.0	0.00	0.0	0.9		1.6	0.0		0.6	0.06	0.1	1.8		0.1	0.1
10 26 77	0.0	0.00	0.0	0.00	4.3	0.0	0.01	0.0	1.4	0.05	1.4	0.0	0.0	0.7	0.02	0.0	2.4	0.0	0.0	0.0
12 7 77	0.0	0.00	0.0	0.00	3.8	0.0	0.01	0.0	0.9	0.02	1.1	0.0	0.0	0.5	0.00	0.0	2.2	0.0	0.0	0.0
5 23 78	0.0	0.01			3.7	0.0	0.00	0.1	1.2		1.4	0.0		0.6	0.04	0.0	2.1		0.2	0.0
7 11 78	0.0	0.01	0.0	0.00	3.7	0.0	0.00	0.0	1.1	0.03	1.1	0.0	0.0	0.3	0.00	0.1	1.6	0.0	0.1	0.0
8 8 78	0.0	0.00			4.6	0.0	0.01	0.0	1.4		1.1	0.0		0.6	0.01	0.0	2.9		0.0	0.0
9 19 78	0.0	0.00			4.2	0.0	0.01	0.0	1.4		1.0	0.0		0.5	0.01	0.0	2.7		0.0	0.1
10 25 78	0.1	0.00	0.0	0.00	4.3	0.0	0.01	0.2	1.3	0.02	1.0	0.1	0.0	0.6	0.00	0.0	2.4	0.0	0.0	0.0
11 29 78	0.0	0.00			4.1	0.0	0.00	0.0	0.9		0.9	0.0		0.5	0.01	0.0	2.4		0.0	0.3
3 5 79	0.0	0.00	0.0	0.00	4.2	0.0	0.00	0.0	0.9	0.10	1.0	0.0	0.0	0.4	0.01	0.0	1.7	0.0	0.0	0.0
4 5 79	0.0	0.00	0.1	0.00	4.5	0.0	0.01	0.0	0.9	0.06	1.1	0.0	0.0	0.5	0.01	0.0	2.1	0.0	0.0	0.1
5 6 79	0.0	0.00			5.2	0.0	0.01	0.0	0.9		1.3	0.0		0.5	0.00	0.0	1.9		0.0	0.0
6 3 79	0.1	0.02			5.3	0.1		0.1	1.3		1.3	0.0		0.7	0.00	0.1	3.2		0.2	0.0
7 27 79	0.0	0.01	0.0	0.00	4.2	0.0	0.00	0.1	1.0	0.03	1.0	0.0	0.0	0.4	0.01	0.0	2.6	0.0	0.0	0.0
10 1 79	0.0	0.01			5.0	0.0	0.00	0.0	1.0		1.4	0.0		0.4	0.02	0.0	2.8		0.1	0.1

TABLE 29. WATER QUALITY FOR SITE 6082 CLEARFIELD COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
9 9 77	18	0.2			10	472	244	2.10	7.9		75	90	0	6.6	94	2.8					
10 26 77	12	2.5	12		4	299	179	1.62	6.8		37	45	0	7.5	77	2.4					
12 7 77	0	1.5			4	265	150	1.64	7.0		32	39	0	9.6	58	2.7					
1 23 78	0	0.2			8	304	166	1.52	7.8		39	48	0	7.7	73	1.8					
3 3 78	0	0.3			15	333	176	1.70	7.2		39	47	0	22	65	1.3					
3 31 78	6	8			0	256	150	1.31	7.5		27	33	0	9.9	65	2.6					
5 1 78	9	1.0	10			288	172	1.50	7.9		56	67	0	9.2	71	1.4					
5 23 78	12	4	25*		9	304	169	1.31	7.6		34	41	0	6.9	79	2.7					
7 11 78	17	0.4	57*		10	330	193	1.61	8.0		50	60	0	6.7	86	1.1					
8 8 78	18	2.0	24*		30	262	196	1.92	7.7		42	51	0	16	70	2.8					
9 19 78	17	1.0	67*		25	260	139		7.7		35	43	0		55	2.2					
10 25 78	3	0.25	33*		9	347	204	1.95	8.0	-58	55	66	0	9.0	82	1.7					
11 29 78	3	0.5	10		3	278	157	1.89	7.4		34	42	0	12	60	1.6					
1 19 79	0	0.15	21		4	345	203	1.47	7.6	-35	34	42	0	14	84	4.2					
3 5 79	0	7	151		85	158	96	1.50	7.1		14	17	0	12	35	1.4					
4 5 79	6	0.7	11		8	264	161	1.74	7.5		25	31	0	12	67	2.1					
5 6 79	14	0.2	12	0.00	10	297	196	1.62	7.9	-35	39	47	0	11	90	1.1					
6 3 79	18	0.6	2	0.00	3	292	190	1.51	7.6	-36	41	50	0	11	84	1.7					
7 27 79	23	0.08	4		15	333	185	1.76	8.0	-40	49	59	0	15	72	1.0	0.3	0.06	0.70	0.05	0.01
10 1 79	18	1.0	1		10	263	161	1.76	7.8	-31	37	45	0	10	60	2.9					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 9 77	0.1	0.00			53	0.1	0.00	0.0	2.5		19	0.7		6.0	0.08	0.1	2.3		0.1	0.1
10 26 77	0.1	0.02	0.0	0.00	33	0.0	0.00	0.2	2.5	0.15	12	0.3	0.0	6.9	0.01	0.0	2.8	0.1	0.0	0.1
12 7 77	0.1	0.00	1.0	0.00	25	0.0	0.00	0.2	2.1	0.15	11	0.2	0.0	5.9	0.00	0.0	2.5	0.2	0.0	0.1
1 23 78	0.0	0.00			28	0.0	0.00	0.2	2.0		12	0.1		5.6	0.00	0.0	2.9		0.0	0.0
3 3 78	0.2	0.00			29	0.0	0.00	0.2	2.2		13	0.2		10	0.01	0.0	2.4		0.0	0.0
3 31 78	0.0	0.00	0.1	0.00	22	0.0	0.00	0.1	2.1	0.25	9.9	0.1	0.0	6.8	0.01	0.0	2.6	0.4	0.1	0.0
5 1 78	0.1	0.00			25	0.0	0.00	0.1	2.3		11	0.2		7.3	0.01	0.0	2.3		0.1	0.0
5 23 78	0.1	0.00			26	0.0	0.00	0.1	2.6		11	0.1		5.8	0.01	0.0	2.6		0.1	0.0
7 11 78	0.0	0.01	0.1	0.00	37	0.0	0.00	0.2	2.4	0.10	13	0.2	0.0	5.2	0.00	0.0	3.2	0.2	0.0	0.0
8 8 78	0.1	0.01			41	0.0	0.01	0.1	4.3		11	0.3		9.5	0.01	0.0	2.9		0.0	0.0
9 19 78	0.1	0.01			28	0.0	0.01	0.2	3.7		8.2	0.2		6.6	0.02	0.1	2.7		0.0	0.0
10 25 78	0.1	0.01	0.1	0.00	44	0.0	0.01	0.2	2.3	0.15	14	0.3	0.0	5.8	0.01	0.1	2.4	0.1	0.0	0.0
11 29 78	0.1	0.00			33	0.0	0.00	0.2	2.6		9.1	0.2		7.8	0.01	0.0	2.4		0.0	0.2
1 19 79	0.1	0.00			38	0.1	0.02	0.1	2.6		11	0.1		8.7	0.04	0.0	2.5		0.0	0.1
3 5 79	0.2	0.00			15	0.0	0.01	0.1	2.7		4.8	0.1		6.9	0.03	0.0	2.0		0.0	0.0
4 5 79	0.1	0.00			34	0.0	0.00	0.1	2.7		10.0	0.1		7.1	0.01	0.0	2.0		0.0	0.1
5 6 79	0.1	0.00			42	0.0	0.00	0.2	2.5		12	0.2		7.0	0.00	0.0	1.8		0.1	0.0
6 3 79	0.1	0.00			37	0.0	0.00	0.1	2.7		11	0.1		6.6	0.00	0.0	2.4		0.0	0.0
7 27 79	0.1	0.00	0.0	0.00	36	0.0	0.02	0.1	3.5	0.30	10	0.2	0.0	9.1	0.01	0.0	2.2	0.1	0.0	0.0
10 1 79	0.1	0.01			31	0.0	0.01	0.1	3.1		9.3	0.1		6.4	0.00	0.0	2.7		0.0	0.0

TABLE 30. WATER QUALITY FOR SITE 6083 CLEARFIELD COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	XNO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
9 9 77	18	0.03			0	305	207	0.88	6.8		5	6	0	0.7	150	0.1					
10 26 77	14	0.2	16		0	338	182	1.33	6.8		24	29	0	1.0	110	0.1					
12 7 77	6	0.4			4	233	140	1.06	6.9		16	20	0	1.2	87	0.2					
1 23 78	2	0.09			0	260	157	1.00	7.4		17	21	0	1.1	99	0.6					
3 3 78	3	0.1			10	291	169	1.08	6.2		4	5	0	0.7	110	0.1					
3 31 78	8	1.5			0	191	117	1.01	7.1		7	9	0	0.9	76	0.2					
5 1 78	12	0.8				249	144	1.22	7.5		23	28	0	1.0	84	0.2					
5 23 78		2.0	25*		8	186	102	1.22	7.0		10	12	0	0.8	61	0.1					
7 11 78	21	0.25	56*		4	270	162	1.09	7.1		8	10	0	0.8	110	0.0					
8 8 78	20	0.1	48*		10	262	183	1.09	6.6		3	4	0	1.1	120	0.0					
9 19 78	17	0.15	45*		10	278	165	1.34	7.7		32	39	0	0.5	93						
10 25 78	6	0.03	21*		0	313	176	1.06	7.5	-12	19	23	0	0.8	110	0.0					
11 29 78	0	0.4	4		1	280	158	1.50	7.7		33	40	0	0.6	83	0.1					
1 19 79	0	0.3	4		2	230	127	1.44	7.2	-13	15	18	0	0.8	71	0.1					
3 5 79	0	0.7	27		10	217	126	1.05	6.7		4	5	0	0.7	82	0.2					
4 5 79	6	0.4	5		1	173	105	1.20	7.0		9	11	0	0.7	64	0.1					
5 6 79	10	0.09	3	0.00	5	222	143	1.47	7.6		17	21	0	0.6	81	0.0					
6 3 79	16	0.15	5	0.00	5	190	113	1.22	6.8	-8	14	17	0	0.7	68	0.0					
7 27 79	22	0.1	58		45	267	154	1.27	7.6	-18	22	27	0	0.9	89	0.1	0.0	0.02	0.45	0.05	0.00
10 1 79	13	0.4	17		20	223	138	1.11	7.4	-10	21	26	0	0.9	83	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 9 77	0.1				32	0.0	0.00	0.1	2.1		12	0.4		1.9	0.00	0.0	3.3		0.0	0.1
10 26 77	0.1		0.0	0.00	36	0.0	0.00	0.1	1.9	0.15	12	0.2	0.0	2.0	0.02	0.0	3.4	0.1	0.0	0.1
12 7 77	0.1	0.00	0.2	0.00	23	0.0	0.00	0.0	1.4	0.15	8.7	0.1	0.0	1.3	0.01	0.0	2.8	0.1	0.0	0.0
1 23 78	0.0	0.00			23	0.0	0.00	0.0	1.4		11	0.0		1.5	0.00	0.0	3.2		0.0	0.0
3 3 78	0.0	0.00			27	0.0	0.00	0.1	1.9		13	0.3		1.3	0.02	0.0	3.9		0.0	0.1
3 31 78	0.0	0.00	0.0	0.00	18	0.0	0.00	0.0	1.4	0.06	7.8	0.0	0.0	1.3	0.02	0.0	2.8	0.0	0.1	0.0
5 1 78	0.1	0.00			24	0.0	0.00	0.1	1.6		10	0.1		1.5	0.02	0.0	3.0		0.1	0.0
5 23 78	0.0	0.00			18	0.0	0.00	0.1	1.5		7.3	0.0		1.4	0.01	0.0	2.7		0.0	0.0
7 11 78	0.0	0.01	0.0	0.00	28	0.0	0.00	0.2	1.9	0.10	11	0.2	0.0	1.1	0.02	0.0	3.3	0.1	0.0	0.0
8 8 78	0.1	0.00			34	0.0	0.01	0.2	2.4		12	0.6		1.6	0.05	0.0	4.2		0.0	0.0
9 19 78	0.1	0.01			32	0.0	0.01	0.1	1.9		9.4	0.2		1.5	0.04	0.1	3.3		0.1	0.1
10 25 78	0.1	0.02	0.0	0.00	31	0.0	0.00	0.1	1.4	0.20	11	0.2	0.0	1.2	0.04	0.1	3.1	0.1	0.2	0.0
11 29 78	0.1	0.00			35	0.0	0.00	0.1	1.2		9.3	0.1		1.2	0.02	0.1	3.0		0.1	0.2
1 19 79	0.1	0.00			28	0.0	0.01	0.0	1.6		7.7	0.0		1.5	0.04	0.0	2.9		0.1	0.1
3 5 79	0.1	0.00			22	0.0	0.00	0.1	1.4		8.2	0.1		1.0	0.02	0.0	3.0		0.0	0.0
4 5 79	0.1	0.00			19	0.0	0.00	0.0	1.3		7.2	0.0		1.1	0.01	0.0	2.4		0.0	0.1
5 6 79	0.1	0.00			34	0.0	0.00	0.0	1.3		8.9	0.1		1.2	0.00	0.0	2.2		0.0	0.1
6 3 79	0.1	0.00			21	0.0	0.00	0.1	1.4		7.6	0.0		1.3	0.01	0.0	2.4		0.0	0.0
7 27 79	0.1	0.00	0.0	0.00	31	0.0	0.01	0.1	1.6	0.20	9.2	0.1	0.0	1.3	0.01	0.0	2.9	0.1	0.0	0.0
10 1 79	0.0	0.00			23	0.0	0.01	0.0	1.5		8.4	0.1		1.3	0.01	0.0	2.9		0.0	0.0

TABLE 31. WATER QUALITY FOR SITE 6091 CLINTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
9 14 77	14	0.02			4	149	73	4.42	7.4		31	38	0	8.1	12	0.5					
10 27 77	10	0.6	20		0	49	30	1.29	7.0		6	7	0	0.8	13	0.2					
12 8 77	5	1.0			4	36	27	1.23	7.0		2	3	0	1.0	13	0.0					
1 24 78	4	0.09			0	39	27	1.34	6.8		5	6	0	0.8	11	0.1					
3 6 78	1	0.1	1		4	44	28	1.42	6.0		5	6	0	1.6	11	0.1					
3 31 78	7	6			0	33	26	1.46	6.8		5	6	0	0.7	10	0.1					
5 1 78	7	0.9				34	25	1.59	6.9		5	6	0	0.9	9	0.1					
6 9 78	11	1.0			8	41	29	1.55	6.8		6	7	0	1.3	10	0.3					
7 10 78	14	0.1	46*		0	44	29	2.47	8.9		8	9	0	1.7	7	0.2					
8 7 78	17	0.03	28*		3	57	38	2.32	7.0		9	11	0	2.6	10	0.5					
9 19 78	14	0.1	12		20	54	35	1.67	6.8		7	9	0	1.4	12	0.7					
10 25 78	8	0.01	51*		0	51	29	1.69	7.1	-1	7	8	0	1.4	10	0.1					
11 30 78	3	0.1	4		1	36	26	1.56	6.0		4	5	0	0.7	9	0.3					
4 12 79	7	1.0	4		15	34	24	1.42	6.5	0	2	3	0	1.0	10	0.1					
5 7 79	9	0.3	18	0.00	3	46	34	1.51	6.8	0	6	7	0	1.7	13	0.2					
6 4 79	13	0.2	0	0.00	6	41	30	1.59	6.5	0	8	10	0	0.9	11	0.2					
7 28 79	22	0.02	3		15	60	37	1.55	6.7	1	8	10	0	3.7	12	0.4	0.2	0.28	0.45	0.10	0.01
9 27 79	11	0.07			5	41	30	1.62	6.9	-2	7	8	0	1.1	11	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 14 77	0.0	0.00			17	0.0	0.00	0.0	1.2		2.9	0.0		5.4	0.00	0.0	2.4		0.0	0.1
10 27 77	0.0		0.0	0.00	4.0	0.0	0.00	0.0	0.9	0.05	1.4	0.0	0.0	0.9	0.01	0.0	2.3	0.0	0.0	0.0
12 8 77	0.0	0.00	0.0	0.00	4.0	0.0	0.00	0.0	0.8	0.06	1.3	0.0	0.0	0.5	0.00	0.0	2.2	0.0	0.0	0.0
1 24 78	0.0	0.00			3.5	0.0	0.00	0.0	0.6		1.4	0.0		0.8	0.00	0.0	2.6		0.0	0.0
3 6 78	0.0	0.00			3.8	0.0	0.00	0.0	0.8		1.4	0.0		1.2	0.00	0.0	2.0		0.0	0.0
3 31 78	0.0	0.00	0.0	0.00	3.4	0.0	0.00	0.0	0.9	0.02	1.4	0.0	0.0	0.8	0.01	0.0	2.2	0.0	0.1	0.0
5 1 78	0.0	0.00			3.3	0.0	0.00	0.0	0.9		1.3	0.0		0.9	0.00	0.0	2.2		0.1	0.0
6 9 78	0.1	0.00			4.0	0.0	0.00	0.0	1.0		1.3	0.0		0.8	0.02	0.0	2.9		0.0	0.0
7 10 78	0.0	0.00	0.0	0.00	4.4	0.0	0.00	0.0	1.0	0.02	1.5	0.0	0.0	1.1	0.00	0.0	3.0	0.0	0.0	0.0
8 7 78	0.0	0.00			6.6	0.0	0.01	0.0	1.4		1.6	0.0		2.3	0.00	0.0	2.8		0.0	0.0
9 19 78	0.0	0.00	0.0	0.00	5.8	0.0	0.00	0.0	1.0	0.04	1.6	0.0	0.2	1.1	0.00	0.0	2.3	0.0	0.0	0.0
10 25 78	0.1	0.00	0.0	0.00	4.4	0.0	0.01	0.0	0.8	0.07	1.2	0.0	0.0	1.2	0.00	0.0	2.3	0.0	0.0	0.0
11 30 78	0.1	0.00			3.7	0.0	0.01	0.0	0.8		1.1	0.0		0.9	0.03	0.0	2.4		0.1	0.2
4 12 79	0.0	0.00	0.0	0.00	3.8	0.0	0.00	0.0	0.8	0.09	1.3	0.0	0.0	0.7	0.01	0.0	1.9	0.0	0.0	0.0
5 7 79	0.0	0.01			6.0	0.0	0.00	0.0	0.8		1.5	0.0		1.0	0.01	0.0	2.2		0.0	0.0
6 4 79	0.0	0.00			4.6	0.0	0.01	0.0	0.8		1.4	0.0		0.9	0.00	0.0	2.2		0.0	0.0
7 28 79	0.0	0.00			5.8	0.0	0.00	0.0	0.9		1.6	0.0		1.4	0.00	0.0	2.4		0.0	0.0
9 27 79	0.1	0.01			4.6	0.0	0.01	0.0	0.8		1.6	0.0		0.8	0.02	0.0	2.7		0.0	0.1

TABLE 32. WATER QUALITY FOR SITE 6092 CLINTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
9 14 77	15	0.4			4	78	44	1.13	6.5		1	1	0	0.8	25	0.1					
10 27 77	12	1.5	13		0	82	46	1.14	6.5		3	4	0	0.7	25	0.1					
12 8 77	2	6			0	76	48	0.88	6.5		2	2	0	0.9	29	0.1					
3 31 78	6	10			0	58	37	1.15	5.4		0	0	0	0.6	21	0.1					
5 1 78	6	20				66	44	1.14	5.9		3	4	0	0.7	25	0.1					
6 9 78	12	15				60	35	1.27	5.1		0	0	0	0.6	19	0.2					
7 10 78	15	3	19*		4	67	45	0.98	6.1		1	1	0	0.7	25	0.2					
8 7 78	17	4	22*		2	76	48	1.01	5.8		1	1	0	0.8	28	0.2					
9 19 78	15	15	22*		20	56	37	1.01	5.7		1	1	0	0.8	21	0.2					
10 25 78	0	0.8	33*		0	71	46	0.99	6.3	2	2	2	0	0.9	27	0.1					
11 30 78	3	0.8	3		0	67	38	1.17	5.8		0	0	0	0.6	21	0.2					
1 22 79	0	4	1		0	64	38	1.12	5.3		0	0	0	1.2	21	0.2					
4 12 79	6	0.03	6		0	59	43	0.89	5.3	4	0	0	0	0.9	27	0.1					
5 7 79	12	1.5	3	0.00	20	64	46	1.09	5.9	6	2	2	0	0.7	27	0.1					
6 4 79	14	0.15	6	0.00	0	62	41	1.13	5.8	2	0	0	0	0.3	24	0.1					
7 28 79	22	0.1	0		5	70	42	1.07	6.0	3	1	1	0	0.9	22	0.2	0.2	0.00	0.40	0.10	0.00
9 27 79	12	0.3	0		0	68	47	1.03	6.3	4	1	1	0	0.9	27	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 14 77	0.1	0.00			5.5	0.0	0.00	0.0	1.4		2.8	0.0		1.6	0.00	0.0	2.7		0.0	0.0
10 27 77	0.1	0.01	0.0	0.00	5.9	0.0	0.00	0.0	1.3	0.05	3.0	0.0	0.0	1.0	0.02	0.0	3.0	0.0	0.0	0.0
12 8 77	0.1	0.00	0.1	0.00	5.1	0.0	0.00	0.0	0.9	0.07	3.1	0.1	0.0	0.7	0.01	0.0	2.8	0.0	0.2	0.0
3 31 78	0.2	0.00	0.0	0.00	4.4	0.0	0.00	0.0	1.3	0.03	2.9	0.1	0.0	0.7	0.02	0.0	2.6	0.0	0.1	0.0
5 1 78	0.1	0.00			5.2	0.0	0.00	0.0	1.3		3.3	0.0		1.0	0.01	0.0	2.6		0.1	0.0
6 9 78	0.1	0.00	0.0	0.00	4.7	0.0	0.00	0.0	1.3	0.01	2.8	0.1	0.0	0.8	0.01	0.0	2.1	0.0	0.0	0.0
7 10 78	0.0	0.00	0.0	0.00	4.9	0.0	0.01	0.0	1.3	0.03	2.8	0.0	0.0	1.0	0.00	0.0	3.6	0.0	0.0	0.0
8 7 78	0.0	0.01			6.2	0.0	0.00	0.0	1.2		2.9	0.0		0.8	0.01	0.0	3.1		0.0	0.0
9 19 78	0.1	0.00	0.0	0.00	4.9	0.0	0.00	0.0	1.0	0.05	2.1	0.2	0.0	0.5	0.00	0.0	2.5	0.0	0.0	0.0
10 25 78	0.1	0.00	0.0	0.00	5.8	0.0	0.00	0.1	1.3	0.05	2.6	0.0	0.0	1.2	0.00	0.0	2.8	0.0	0.0	0.0
11 30 78	0.0	0.00			5.4	0.0	0.00	0.0	1.0		2.4	0.0		0.9	0.01	0.0	2.8		0.0	0.0
1 22 79	0.1	0.00			5.4	0.0	0.01	0.0	0.9		2.6	0.0		0.6	0.01	0.0	2.4		0.0	0.0
4 12 79	0.1	0.00	0.0	0.00	5.2	0.0	0.00	0.0	1.1	0.15	2.6	0.1	0.0	0.6	0.02	0.0	2.3	0.0	0.0	0.0
5 7 79	0.1	0.00			6.2	0.0	0.00	0.0	1.1		3.1	0.0		0.8	0.00	0.0	2.6		0.0	0.1
6 4 79	0.0	0.01			5.6	0.0	0.02	0.0	1.2		2.9	0.0		0.7	0.00	0.0	2.8		0.0	0.1
7 28 79	0.0	0.00	0.0	0.00	5.2	0.0	0.00	0.1	1.1	0.03	2.4	0.0	0.0	1.2	0.01	0.0	3.3	0.0	0.1	0.0
9 27 79	0.0	0.01			6.0	0.0	0.00	0.0	1.1		3.0	0.0		0.9	0.03	0.0	3.2		0.1	0.1

TABLE 33. WATER QUALITY FOR SITE 6093 CLINTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	---------- MILLIGRAMS PER LITER ----------													
9 14 77	15	0.07			4	979	786	0.85	3.4		0	0	0	0.3	560	0.0					
10 27 77	10	0.3	14		0	843	561	0.87	3.5		0	0	0	0.7	400	0.1					
12 8 77	5	0.7			2	788	615	0.81	3.4		0	0	0	0.5	440	0.2					
3 31 78	6	0.4			0	587	407	1.01	3.8		0	0	0	0.4	280	0.3					
5 1 78	7	0.6				846	659	0.87	3.8		0	0	0	0.4	470	0.2					
6 9 78	11	2.0			0	698	498	0.73	3.5		0	0	0	0.6	370	0.3					
7 10 78	15	0.6	38*		4	979	678	0.72	3.4		0	0	0	0.2	510	0.1					
8 7 78	16	0.2	14		3	1060	734	0.82	3.4		0	0	0	0.6	530	0.1					
9 19 78	15	0.06	19*		15	852	582	0.80	3.7		0	0	0	0.7	420	0.1					
10 25 78	9	0.003	22*		2	1070	790	0.73	3.8	90	0	0	0	0.5	590	0.1					
11 30 78	4	0.03	1		1	1030	671	0.82	3.4		0	0	0	0.5	480	0.1					
1 22 79	0	0.1	3		0	773	574	0.86	3.6	72	0	0	0	0.4	410	0.2					
4 12 79	7	0.4	6		3	647	436	0.96	3.6	52	0	0	0	0.3	300	0.1					
5 7 79	12	0.15	2	0.00	20	788	606	0.81	2.8	70	0	0	0	0.3	440	0.1					
6 4 79	15	0.1	28	0.00	25	829	583	0.79	3.5	66	0	0	0	0.3	430	0.1					
7 28 79	22	0.15			8	1060	651	0.82	3.4	72	0	0	0	0.6	470	0.0	0.0	0.03	0.35	0.00	0.00
9 27 79	12	0.009	3		5	925	725	0.78	3.6	63	0	0	0	0.6	530	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	---------- MILLIGRAMS PER LITER ----------																			
9 14 77	8.7	0.00			100	0.3	0.00	1.7	4.3		57	18		2.6	0.36	0.0	13		0.1	0.5
10 27 77	6.8		0.0	0.01	68	0.2	0.02	0.6	3.6	0.20	45	10	0.0	1.7	0.36	0.1	11	0.2	0.0	0.5
12 8 77	10	0.00	0.0	0.01	66	0.2	0.02	0.6	3.1	0.40	50	11	0.0	1.4	0.35	0.1	11	0.3	0.5	0.5
3 31 78	6.8	0.00	0.0	0.01	47	0.2	0.01	0.3	3.5	0.15	41	6.6	0.0	1.1	0.35	0.0	9.1	0.1	0.1	0.5
5 1 78	12	0.00			73	0.3	0.02	0.4	4.0		57	12		1.5	0.50	0.0	12		0.2	0.8
6 9 78	7.6	0.00			50	0.2	0.02	0.4	3.2		36	7.8		1.0	0.33	0.0	9.9		0.0	0.5
7 10 78	7.8	0.00	0.0	0.01	67	0.2	0.02	1.1	3.2	0.30	51	11	0.0	1.2	0.44	0.0	12	0.2	0.1	0.7
8 7 78	8.7	0.01			88	0.3	0.03	1.9	4.0		54	14		1.7	0.48	0.1	14		0.2	0.7
9 19 78	6.6	0.00	0.0	0.01	70	0.2	0.02	0.4	3.7	0.25	41	11	0.0	1.4	0.40	0.1	11	0.3	0.1	0.6
10 25 78	7.6	0.01			91	0.3	0.03	0.3	3.5		52	14		1.9	0.46	0.1	13		0.2	0.7
11 30 78	8.5	0.00			85	0.3	0.02	0.9	3.3		47	13		1.7	0.42	0.1	12		0.2	0.7
1 22 79	9.3	0.00			77	0.2	0.03	0.7	4.0		40	10		2.1	0.37	0.1	9.9		0.1	0.5
4 12 79	7.2	0.00	0.0	0.00	57	0.1	0.01	0.2	2.5	0.30	38	7.0	0.0	0.9	0.28	0.0	7.5	0.2	0.1	0.5
5 7 79	8.3	0.01			70	0.2	0.03	0.4	3.7		46	9.9		1.3	0.40	0.1	11		0.1	0.7
6 4 79	7.3	0.00			67	0.2	0.03	0.4	3.0		44	8.3		1.3	0.22	0.1	10		0.1	0.5
7 28 79	7.8	0.00	0.0	0.01	79	0.2	0.04	1.1	3.3	0.40	48	12	0.0	1.6	0.41	0.1	12	0.2	0.1	0.6
9 27 79	9.5	0.01			81	0.3	0.00	0.3	3.8		54	15		1.5	0.45	0.1	13		0.2	0.6

TABLE 34, WATER QUALITY FOR SITE 6096 CLINTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			---------- MILLIGRAMS PER LITER ----------											
9 27 79		0.0002				1900	1220	0.69	2.9		0	0	0	0.4	870						

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	---------- MILLIGRAMS PER LITER ----------																			
9 27 79	36	0.01			150	1.1	0.05		3.7		58	43		2.8	0.66	0.1	23		0.2	1.1

TABLE 35. WATER QUALITY FOR SITE 6101 ELK COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
9 10 77	18	0.015			10	121	64	4.57	7.0		40	49	0	0.4	12	0.0					
10 19 77	8	0.15	6		4	81	51		6.7		24	29	0		14	0.1					
11 30 77	5	0.4	8			91	49	2.89	7.1		20	25	0	1.0	14	0.1					
3 30 78	7	0.5			0	61	38	2.10	7.3		12	15	0	0.6	13	0.1					
5 1 78	9	0.4				84	52	2.61	7.6		30	37	0	0.7	14	0.0					
6 9 78	13	0.5				76	46	3.16	7.2		23	28	0	0.6	12	0.1					
7 7 78	19	0.015	44*		10	100	61	3.78	7.7		40	49	0	0.4	12	0.1					
8 8 78	17	0.2	32*		35	83	49	3.00	7.4		25	30	0	0.7	12	0.1					
9 18 78	19	0.008	62*		15	115	64	3.03	7.7		37	45	0	0.4	15	0.1					
10 24 78		0.04	37*		4	95	55	2.44	7.6	-27	28	34	0	0.7	16	0.1					
11 29 78	2	0.025	49		15	84	46	2.39	7.1		20	25	0	0.8	14	0.0					
1 18 79	0	0.03	11		5	73	42	2.58	7.3		16	20	0	1.4	12	0.1					
3 4 79	0	2.0	288		130	45	29	2.29	6.9		9	11	0	0.8	10	0.0					
4 4 79	5	0.15	4		3	68	43	1.88	7.2		15	18	0	0.7	16	0.1					
5 6 79	13	0.04	14	0.00	10	78	52	2.43	7.5	-18	23	28	0	0.5	16	0.1					
6 3 79	16	0.04	10		10	86	53	2.65	7.7	-19	30	36	0	0.6	14	0.0					
7 27 79	23	0.01	14		20	122	65	4.35	7.8	-42	46	56	0	0.6	12	0.0	0.1	0.16	0.50	0.00	0.00
10 1 79	15	0.03	1		8	89	53	2.81	7.4	-22	26	32	0	0.7	14	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 10 77	0.0	0.00			19	0.0	0.00	0.0	0.9		2.1	0.1		0.8	0.00	0.0	2.3		0.0	0.0
10 19 77	0.0	0.00	0.0	0.00	15	0.0	0.00	0.1	0.9	0.05	1.4	0.0	0.0	0.5	0.00	0.0	2.3	0.0	0.0	0.0
11 30 77	0.0	0.00	0.0	0.00	14	0.0	0.00	0.0	0.5	0.15	1.5	0.0	0.0	0.6	0.00	0.0	2.2	0.0	0.0	0.0
3 30 78	0.0	0.00	0.0	0.00	8.6	0.0	0.00	0.1	0.8	0.03	1.4	0.0	0.0	0.6	0.02	0.0	2.4	0.0	0.0	0.0
5 1 78	0.0	0.00			12	0.0	0.00	0.1	0.4		1.8	0.0		0.5	0.00	0.0	2.1		0.0	0.0
6 9 78	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	0.8	0.00	1.8	0.0	0.0	0.6	0.01	0.0	1.9	0.0	0.0	0.1
7 7 78	0.0	0.01	0.0	0.00	15	0.0	0.00	0.1	0.8	0.05	1.9	0.0	0.0	0.5	0.00	0.1	3.0	0.0	0.0	0.0
8 8 78	0.0	0.02			12	0.0	0.00	0.1	0.7		1.4	0.0		0.4	0.02	0.1	2.7		0.1	0.0
9 18 78	0.0	0.01			16	0.0	0.01	0.2	1.1		1.8	0.2		0.7	0.01	0.1	2.8		0.0	0.0
10 24 78	0.0	0.00	0.0	0.00	13	0.0	0.00	0.1	0.7	0.08	1.4	0.1	0.1	0.5	0.00	0.0	2.4	0.0	0.0	0.0
11 29 78	0.0	0.00			12	0.0	0.00	0.1	0.6		1.2	0.0		0.6	0.01	0.0	2.2		0.0	0.4
1 18 79	0.1	0.00			11	0.0	0.01	0.1	0.8		1.2	0.0		0.6	0.01	0.0	2.0		0.0	0.0
3 4 79	0.1	0.00			7.4	0.0	0.01	0.1	0.7		1.0	0.0		0.4	0.00	0.0	1.3		0.0	0.0
4 4 79	0.0	0.00	0.1	0.00	11	0.0	0.00	0.0	0.4	0.15	1.1	0.0	0.0	0.5	0.01	0.0	1.8	0.1	0.0	0.0
5 6 79	0.1	0.00			13	0.0	0.00	0.1	0.6		1.7	0.0		0.6	0.01	0.0	2.1		0.0	0.2
6 3 79	0.1	0.00			13	0.0	0.01	0.1	0.6		1.3	0.1		0.4	0.00	0.0	2.2		0.0	0.2
7 27 79	0.0	0.01	0.0	0.00	17	0.0	0.00	0.2	0.3	0.09	2.0	0.5	0.0	0.7	0.00	0.0	1.8	0.0	0.0	0.0
10 1 79	0.0	0.00			14	0.0	0.01	0.1	0.7		1.4	0.1		0.5	0.01	0.0	2.6		0.0	0.0

TABLE 36. WATER QUALITY FOR SITE 6102 ELK COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
9 10 77	17	0.08			10	326	200	1.61	7.5		57	69	0	1.3	96	0.1					
10 19 77	8	0.4	4		8	343	214	1.63	6.9		48	59	0	0.4	110	0.3					
11 30 77	5	0.8	33			260	177	1.72	7.7		56	68	0	2.8	78	0.3					
1 23 78	2	0.3			15	484	292	1.54	7.9		43	52	0	5.3	160	0.6					
3 3 78	1	0.08			25	375	218	1.48	7.0		34	42	0	5.0	120	0.4					
3 30 78	8	1.0			190	398	276	1.38	7.9		30	36	0	2.8	160	0.5					
5 1 78	9	0.25				530	367	1.26	7.9		61	73	0	4.0	220	0.2					
6 9 78	14	1.0				593	367	1.23	7.5		33	40	0	2.8	230	0.2					
7 7 78	19	0.4	72*		4	697	489	1.04	7.7		34	42	0	2.0	330	0.1					
8 8 78	17	1.0	91*		65	629	416	1.14	7.6		29	35	0	3.1	270	0.2					
9 18 78	17	0.15				610	475	1.27	7.6		32	39	0	7.3	290	0.3					
10 24 78	8	0.07	38*		7	529	375	1.12	7.9	-48	54	65	0	2.2	230	0.2					
11 29 78	2	0.09	29		15	403	234	1.61	8.0		48	58	0	2.0	120	0.1					
1 18 79	0	0.2	6		9	938	748	1.12	7.6	-26	30	37	0	0.9	510	0.3					
3 4 79	0	8	182*		900	234	151	1.10	7.0		7	9	0	0.6	98	0.3					
4 4 79	4	0.5			8	556	399	1.35	7.7		33	40	0	0.9	250	0.1					
5 6 79	9	0.15	22	0.00	20	821	657	1.16	7.1	-15	23	28	0	1.2	440	0.3					
6 3 79	18	0.07	33	0.00	20	694	506	0.96	7.8	-24	14	17	0	1.2	360	0.1					
7 27 79	23	0.1	0		15	762	542	1.14	7.7	-28	37	45	0	2.2	360	0.1	0.1	0.02	0.55	0.05	0.00
10 1 79	15	0.25	22		35	655	524	1.09	7.9	-46	54	65	0	1.5	340	0.2					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 10 77	0.0	0.00			51	0.0	0.00	0.1	2.2		7.3	0.6		1.9	0.00	0.0	2.4		0.0	0.1
10 19 77	0.0	0.00	0.1	0.00	57	0.0	0.00	0.2	1.7	0.15	9.3	0.7	0.0	1.6	0.00	0.0	1.4	0.2	0.0	0.0
11 30 77	0.0	0.00	0.1	0.00	44	0.0	0.00	0.2	2.2	0.25	7.0	0.4	0.0	1.8	0.01	0.0	2.3	0.2	0.0	0.0
1 23 78	0.1	0.00			71	0.0	0.00	0.2	2.1		19	0.4		1.7	0.01	0.0	2.6		0.0	0.0
3 3 78	0.2				53	0.0	0.00	0.2	2.2		12	0.2		1.9	0.00	0.0	2.4		0.0	0.0
3 30 78	0.1	0.00	0.1	0.00	58	0.0	0.00	0.2	2.3	0.20	21	1.0	0.0	1.8	0.05	0.0	2.8	0.2	0.1	0.0
5 1 78	0.1	0.00			72	0.0	0.00	0.1	2.4		26	0.3		2.4	0.01	0.0	2.3		0.0	0.0
6 9 78	0.1	0.00			71	0.0	0.00	0.2	2.8		28	1.6		2.7	0.05	0.0	2.4		0.0	0.0
7 7 78	0.1	0.02	0.1	0.00	92	0.0	0.00	0.1	2.6	0.25	30	1.0	0.0	2.0	0.03	0.1	2.4	0.2	0.1	0.0
8 8 78	0.1	0.01			80	0.0	0.00	0.2	3.7		28	2.9		2.8	0.06	0.1	3.6		0.1	0.1
9 18 78	0.4	0.00			98	0.0	0.01	0.4	5.6		33	3.6		4.1	0.09	0.2	4.0		0.2	0.0
10 24 78	0.2	0.01	0.1	0.00	77	0.0	0.00	0.3	2.3	0.35	19	1.0	0.0	1.7	0.03	0.1	2.6	0.2	0.1	0.0
11 29 78	0.1	0.00			58	0.0	0.01	0.2	1.8		13	0.7		1.6	0.03	0.1	2.5		0.1	0.1
1 18 79	0.2	0.00			150	0.0	0.01	0.2	2.8		48	6.7		2.4	0.13	0.2	3.3		0.3	0.1
3 4 79	0.2	0.01			30	0.0	0.00	0.2	1.6		8.4	2.0		0.7	0.03	0.0	1.4		0.0	0.0
4 4 79	0.1	0.01			87	0.0	0.01	0.1	2.2		30	3.8		1.8	0.07	0.1	2.5		0.1	0.1
5 6 79	0.2	0.01			140	0.0	0.00	0.1	2.3		47	3.6		2.0	0.08	0.1	2.6		0.1	0.1
6 3 79	0.2	0.01			92	0.0	0.01	0.1	2.0		30	2.6		1.9	0.07	0.1	2.8		0.1	0.3
7 27 79	0.2	0.02	0.1	0.00	110	0.0	0.01	0.1	3.5	0.40	33	2.6	0.1	2.6	0.00	0.1	2.5	0.2	0.1	0.0
10 1 79	0.1	0.02			99	0.0	0.00	0.2	2.9		33	5.9		1.9	0.08	0.1	2.8		0.1	0.0

TABLE 37. WATER QUALITY FOR SITE 6103 ELK COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
10 19 77	7	0.6	23		10	188	104	1.57	7.0		26	32	0	2.0	50	0.1					
11 30 77	5	1.0	6			151	84	1.73	7.4		24	29	0	1.2	37	0.2					
1 23 78	0	0.1			10	188	100	1.59	7.6		27	33	0	0.8	48	0.1					
3 3 78	0	0.1			10	236	138	1.67	7.1		49	60	0	1.2	61	0.2					
3 30 78	7	3			0	89	56	1.32	7.2		9	11	0	0.8	29	0.1					
5 1 78	8	1.0				164	94	1.42	7.7		25	31	0	0.9	47	0.1					
6 9 78	13	4				141	77	1.61	7.2		21	26	0	0.8	36	0.2					
7 7 78	19	0.4	16*		4	283	173	1.73	8.0		52	62	0	0.7	82	0.1					
8 8 78	16	2.0	39*		15	179	101	1.61	7.6		29	35	0	0.9	46	0.2					
9 18 78	17	0.15	110*		60	196	114		7.6		35	43	0		54	0.1					
10 24 78	6	0.15	38*		9	243	147	1.61	7.8	-38	43	53	0	1.0	69	0.1					
11 29 78	1	0.2	8		7	162	87	1.51	7.5		25	30	0	1.0	40	0.1					
1 18 79	0	0.3	8		4	148	88	1.72	7.0		18	22	0	1.4	41	0.2					
3 4 79	0	2.5			140	78	49	1.48	6.8		7	9	0	0.8	24	0.3					
4 4 79	6	0.2	48		20	119	70	1.28	7.0	-12	13	16	0	1.2	36	0.3					
5 6 79	10	0.4	7	0.00	15	145	93	1.47	7.7	-18	25	30	0	0.8	46	0.2					
6 3 79	16	0.3	26	0.01	20	141	84	1.49	7.5	-16	25	30	0	0.9	39	0.1					
7 27 79	22	0.02				269	151	1.80	7.8	-46	49	60	0	1.0	66	0.2	0.3	0.04	0.70	0.05	0.01
10 1 79	14	0.4	30		20	159	92	1.31	7.6	-24	27	33	0	0.9	45	0.2					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 19 77	0.0	0.00	0.0	0.00	22	0.0	0.00	0.1	0.9	0.08	6.4	0.1	0.0	1.6	0.00	0.0	2.2	0.1	0.0	0.0
11 30 77	0.0	0.00	0.0	0.00	17	0.0	0.00	0.1	1.1	0.15	5.0	0.1	0.0	1.5	0.00	0.0	2.5	0.1	0.0	0.0
1 23 78	0.0	0.00			20	0.0	0.00	0.0	1.1		6.6	0.1		1.4	0.00	0.0	2.8		0.0	0.0
3 3 78	0.1	0.01			26	0.0	0.05	0.1	1.3		9.6	0.1		1.6	0.01	0.0	2.5		0.2	0.0
3 30 78	0.0	0.00	0.0	0.00	9.6	0.0	0.00	0.0	0.9	0.06	3.4	0.0	0.0	1.0	0.00	0.0	2.4	0.0	0.0	0.0
5 1 78	0.0	0.00			17	0.0	0.00	0.0	1.1		6.0	0.0		1.4	0.00	0.0	2.4		0.0	0.1
6 9 78	0.0	0.00			15	0.0	0.00	0.0	1.5		5.0	0.0		1.3	0.01	0.0	2.2		0.0	0.0
7 7 78	0.0	0.01	0.0	0.00	40	0.0	0.00	0.1	1.6	0.10	10	0.0	0.0	1.5	0.00	0.0	2.3	0.1	0.1	0.0
8 8 78	0.0	0.01			20	0.0	0.00	0.1	1.4		6.4	0.1		1.1	0.01	0.0	3.2		0.0	0.0
9 18 78	0.1	0.00	0.0	0.00	22	0.0	0.00	0.1	1.7	0.20	6.9	0.2	0.0	1.3	0.02	0.0	2.8	0.1	0.1	0.0
10 24 78	0.1	0.01	0.0	0.01	32	0.0	0.00	0.1	1.5	0.40	8.1	0.1	0.3	1.5	0.01	0.0	2.8	0.0	0.0	0.0
11 29 78	0.0	0.00			16	0.0	0.01	0.0	1.1		4.9	0.1		1.4	0.02	0.0	2.8		0.0	0.2
1 18 79	0.1	0.00			19	0.0	0.01	0.1	1.2		5.7	0.1		1.2	0.03	0.1	2.9		0.0	0.0
3 4 79	0.1	0.00			9.5	0.0	0.01	0.1	1.0		2.9	0.1		0.9	0.01	0.0	2.0		0.0	0.0
4 4 79	0.0	0.00			13	0.0	0.00	0.0	0.9		4.0	0.0		1.0	0.00	0.0	2.1		0.0	0.0
5 6 79	0.0	0.01			18	0.0	0.01	0.0	1.1		5.6	0.0		1.2	0.01	0.0	2.0		0.0	0.0
6 3 79	0.1	0.00			16	0.0	0.01	0.2	1.1		4.6	0.0		1.1	0.00	0.0	2.4		0.0	0.0
7 27 79	0.1		0.0	0.00	34	0.1		0.1	1.8	0.20	8.7	0.1	0.0	1.6	0.01	0.1	3.3	0.1	0.0	0.0
10 1 79	0.0	0.00			16	0.0	0.00	0.1	1.3		4.4	0.1		1.2	0.00	0.0	2.8		0.0	0.0

TABLE 38. WATER QUALITY FOR SITE 6111 FAYETTE COUNTY, PENNSYLVANIA

DATE			WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO	DA	YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
7	14	77	24	0.08			80	57	30	1.73	6.3		11	14	0	1.5	9	0.0					
8	23	77	21	0.5			60	55	31	2.31	6.5		7	9	0	1.2	7	0.3					
11	1	77	10	0.3	26		45	40	30	1.36	6.8		7	8	0	1.4	12	0.0					
12	21	77	3	1.0			6	40	28	1.17	6.0		2	3	0	1.9	9	0.7					
2	3	78	2	0.5			4	30	28	1.05	6.2		4	5	0	3.2	8	0.6					
3	9	78	1	0.15			15	39	30	1.28	6.6		7	8	0	1.5	9	0.5					
4	6	78	7	2.0	41		4	34	22	1.21	6.2		1	1	0	1.5	8	0.7					
5	9	78	15	2.5	378		15	31	26	1.37	6.5		3	4	0	1.1	10	0.4					
6	14	78	18	0.5			65	32	27	1.20	6.6		5	6	0	1.3	9	0.6					
7	12	78	22	4	86*		30	30	24	1.27	6.5		2	3	0	1.2	8	0.4					
8	22	78	23	0.008	43*		75	35	31	1.63	6.8		7	8	0	0.9	10	0.3					
9	28	78	15	0.1	57*		60	35	30	1.17	6.7		7	8	0	1.5	10	0.3					
10	30	78	10	0.007			80	55	40	1.54	6.6	1	13	16	0	2.6	9	0.1					
12	5	78	5	1.5	11		3	35	25	1.11	5.6		0	0	0	1.2	9	0.6					
1	4	79	0	1.0			5	30	24	1.53	5.8		1	1	0	0.1	9	0.2					
3	14	79	6	0.15	2		2	31	25	0.81	6.7	2	2	2	0	1.3	10	0.7					
4	11	79	6	0.5	20		7	46	26	1.26	6.6	1	2	3	0	1.4	9	0.6					
5	10	79	18	0.1	4	0.00	55	32	27	1.29	6.9	2	4	5	0	1.2	10	0.4					
6	7	79	19	0.2	8		20	33	26	1.16	6.3	4	5	6	0	1.4	8	0.5					
8	1	79	23	0.07	18			38	28	2.01	6.9	-2	9	11	0	1.7	7	0.1	0.1	0.26	0.75	0.10	0.01
9	25	79	16	0.15	25		25	34	25	1.18	6.8	1	5	6	0	1.4	8	0.4					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE			AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO	DA	YR	MILLIGRAMS PER LITER																			
7	14	77	0.1	0.01			3.1	0.0	0.01	1.3	1.3		1.4	0.6		1.4	0.01	0.0	1.7		0.0	0.1
8	23	77	0.0				3.5	0.0	0.00	1.8	1.0		1.7	0.3		1.5	0.02	0.0	3.0		0.0	0.1
11	1	77	0.0	0.00	0.0	0.00	3.2	0.0	0.00	1.0	1.1	0.00	1.4	0.2	0.1	1.4	0.00	0.0	2.4	0.0	0.0	0.0
12	21	77	0.1	0.00	0.0	0.00	2.7	0.1	0.00	0.4	1.0	0.04	1.5	0.1	0.0	1.0	0.02	0.1	2.5	0.0	0.4	0.0
2	3	78	0.0	0.02			2.6	0.0	0.00	0.3	0.8		1.4	0.1		1.0	0.00	0.0	2.5		0.0	0.0
3	9	78	0.1	0.01			2.8	0.0	0.00	0.6	0.8		1.5	0.3		1.0	0.00	0.0	2.6		0.0	0.0
4	6	78	0.0	0.00	0.0	0.00	2.4	0.0	0.00	0.1	0.9	0.02	1.2	0.1	0.0	1.0	0.00	0.0	1.6	0.0	0.0	0.0
5	9	78	0.0	0.00			2.7	0.0	0.03	0.4	1.2		1.3	0.1		1.3	0.00	0.0	1.9		0.0	0.0
6	14	78	0.0	0.00			2.9	0.0	0.00	0.5	0.9		1.3	0.3		1.0	0.00	0.0	1.6		0.0	0.0
7	12	78	0.0	0.01	0.0	0.00	2.6	0.0	0.00	0.5	0.9	0.01	1.2	0.1	0.0	0.8	0.00	0.0	2.3	0.0	0.1	0.0
8	22	78	0.1	0.00			3.6	0.0	0.02	1.5	1.4		1.3	0.2		1.5	0.02	0.0	2.5		0.0	0.1
9	28	78	0.0	0.01			3.0	0.0	0.01	1.2	0.9		1.1	0.2		1.0	0.01	0.0	2.5		0.0	0.0
10	30	78	0.1	0.01			3.5	0.0	0.00	6.2	1.8		1.1	1.6		1.5	0.00	0.0	2.0		0.0	0.0
12	5	78	0.1	0.00			2.8	0.0	0.00	0.2	1.1		1.0	0.1		0.9	0.02	0.0	2.5		0.1	0.0
1	4	79	0.1	0.00	0.0	0.00	3.1	0.0	0.00	0.1	1.1	0.02	1.0	0.1	0.0	1.1	0.02	0.0	2.8	0.0	0.0	0.0
3	14	79	0.0	0.00			2.5	0.0	0.00	0.1	0.7		0.9	0.1		0.7	0.00	0.0	2.2		0.0	0.0
4	11	79	0.0	0.00	0.1	0.00	2.9	0.0	0.00	0.2	0.8	0.03	1.3	0.1	0.0	0.9	0.00	0.0	2.2	0.0	0.0	0.1
5	10	79	0.1	0.00			3.0	0.1	0.02	0.3	0.8		1.4	0.1		0.8	0.02	0.1	2.1		0.2	0.0
6	7	79	0.0	0.00			2.7	0.0	0.01	0.4	0.8		1.0	0.1		0.8	0.00	0.0	2.3		0.0	0.1
8	1	79	0.0	0.01	0.0	0.00	3.0	0.0	0.00	1.9	1.0	0.02	1.5	0.4	0.0	1.0	0.03	0.1	2.1	0.0	0.2	0.0
9	25	79	0.1	0.00			2.4	0.0	0.00	0.5	0.8		1.1	0.2		0.8	0.00	0.0	2.2		0.0	0.0

TABLE 39. WATER QUALITY FOR SITE 6112 FAYETTE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
NO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
7 14 77	20	0.1			35	208	103	1.27	6.9		10	12	0	4.0	54	0.1					
8 23 77	18	0.04			35	203	113	1.58	6.4		12	15	0	4.8	52	0.1					
11 1 77	11	0.1	12		20	178	101	1.22	6.8		7	8	0	3.5	55	0.2					
12 21 77	3	1.0			6	176	91	1.08	6.1		4	5	0	3.5	49	0.9					
2 3 78	2	0.15			4	168	101	0.94	5.5		0	0	0	2.2	63	0.8					
3 9 78	1	0.25			20	164	90	1.17	6.3		4	5	0	2.9	50	0.5					
4 6 78	6	1.5	35		20	133	82	0.90	6.7		3	4	0	2.6	49	0.9					
5 9 78	14	1.5	47*		60	132	85	1.07	6.7		8	10	0	4.2	43	1.0					
6 14 78	14	0.7			8	159	99	0.99	6.7		9	11	0	2.2	57	0.9					
7 12 78	17	0.4	97*		15	154	91	1.04	7.1		8	10	0	2.4	52	0.4					
8 22 78	19	0.015	33*		30	182	104	1.18	7.0		10	12	0	2.2	58	0.3					
9 28 78	13	0.1	48*		35	162	97	1.27	7.2		18	22	0	3.6	47	0.4					
10 30 78	9	0.06	16		7	146	87	1.00	7.2		11	14	0	3.6	45	0.5					
12 5 78	4	0.2	25		5	124	66	1.21	6.7		5	6	0	2.4	33	0.7					
1 4 79	0	0.2	16		1	134	93	1.18	6.1		2	3	0	2.1	50	1.2					
3 14 79	4	0.2	22		15	144	85	1.43	6.9	-2	11	13	0	3.3	40	0.9					
4 11 79	6	0.5	16		30	106	68	1.19	6.7	-1	4	5	0	1.8	36	0.7					
5 10 79	22	0.25	18	0.00	70	134	88	0.97	6.8	1	6	7	0	1.7	53	0.4					
6 7 79	19	0.25	6	0.00	8	151	95	1.15	6.3	-2	9	11	0	1.8	52	0.6					
8 1 79	23	0.4	43		85	141	82	1.46	7.2	-12	15	18	0	3.5	37	0.3	0.1	0.03	0.60	0.05	0.01
9 25 79	14	0.09	3		10	147	86	1.10	7.0	5	7	9	0	2.0	48	0.4					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
NO DA YR	MILLIGRAMS PER LITER																			
7 14 77	0.1	0.01			22	0.0	0.01	0.1	2.2		3.8	0.2		2.6	0.02	0.1	3.4		0.0	0.1
8 23 77	0.0				21	0.0	0.01	0.1	7.9		4.2	0.2		5.6	0.03	0.0	4.2		0.0	0.0
11 1 77	0.1	0.00	0.0	0.00	20	0.0	0.00	0.1	1.6	0.10	4.3	0.4	0.0	2.8	0.02	0.0	3.8	0.1	0.0	0.1
12 21 77	0.1	0.00	0.1	0.00	17	0.1	0.00	0.4	1.1	0.10	3.8	0.2	0.0	1.8	0.03	0.1	3.1	0.1	0.4	0.0
2 3 78	0.2	0.03			18	0.0	0.00	0.3	1.1		4.5	0.2		1.6	0.02	0.0	3.0		0.0	0.0
3 9 78	0.2	0.01			18	0.0	0.00	0.4	1.1		4.3	0.3		1.5	0.02	0.0	3.1		0.1	0.0
4 6 78	0.1	0.00	0.0	0.00	14	0.0	0.00	0.1	1.2	0.08	3.4	0.3	0.0	1.4	0.02	0.0	2.0	0.0	0.1	0.0
5 9 78	0.1	0.01			16	0.0	0.00	0.1	1.4		3.0	0.2		1.8	0.01	0.0	2.5		0.0	0.0
6 14 78	0.1	0.00			18	0.0	0.00	0.2	1.2		4.0	0.2		1.4	0.02	0.0	2.5		0.0	0.0
7 12 78	0.1	0.02	0.0	0.00	16	0.0	0.01	0.1	1.4	0.07	3.7	0.2	0.0	1.4	0.00	0.1	3.3	0.1	0.1	0.0
8 22 78	0.1	0.01			21	0.0	0.01	0.1	1.5		4.2	0.1		1.8	0.02	0.0	4.0		0.0	0.0
9 28 78	0.1	0.02			18	0.0	0.00	0.1	1.6		3.5	0.2		2.5	0.02	0.1	3.6		0.1	0.0
10 30 78	0.1	0.02			15	0.0	0.00	0.3	1.6		2.9	0.2		1.6	0.02	0.0	3.2		0.1	0.0
12 5 78	0.1	0.00			13	0.0	0.01	0.1	1.1		2.5	0.2		1.2	0.03	0.0	2.9		0.0	0.0
1 4 79	0.2	0.00	0.0	0.00	19	0.0	0.01	0.2	1.8	0.20	3.8	0.2	0.0	1.9	0.03	0.0	3.0	0.1	0.1	0.0
3 14 79	0.1	0.00			18	0.0	0.01	0.2	1.7		3.6	0.2		2.1	0.03	0.0	2.6		0.0	0.1
4 11 79	0.1	0.00	0.1	0.00	14	0.0	0.00	0.1	1.2	0.04	2.8	0.1	0.0	1.4	0.02	0.0	2.2	0.0	0.0	0.1
5 10 79	0.1	0.01			15	0.1	0.01	0.2	0.8		3.9	0.2		1.0	0.04	0.2	2.6		0.4	0.0
6 7 79	0.1	0.01			18	0.0	0.00	0.1	1.1		4.2	0.2		1.3	0.02	0.0	3.2		0.0	0.1
8 1 79	0.1		0.0	0.00	17	0.0		0.2	1.6	0.15	3.0	0.2	0.0	1.8	0.00	0.0	3.3	0.0	0.0	0.1
9 25 79	0.1	0.01			17	0.0	0.01	0.2	1.4		3.2	0.2		1.4	0.04	0.0	3.2		0.1	0.1

TABLE 40. WATER QUALITY FOR SITE 6113 FAYETTE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NNO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
												MILLIGRAMS PER LITER									
7 14 77	23	0.25				825	628	1.55	7.9		152	183	1	15	320	0.0					
8 23 77	18	0.4			190	957	773	1.66	7.2		148	181	0	17	400	0.0					
11 1 77	13	0.6	450		320	812	684	1.51	7.1		184	225	0	18	340	0.2					
12 21 77	6	0.6			20	871	686	1.62	7.9		197	237	1	16	330	0.7					
2 3 78	6	0.4			10	976	700	1.66	7.8		140	169	1	16	360	0.9					
3 9 78	6	0.25			20	979	652	1.79	8.0		106	127	1	18	330	0.5					
4 6 78	10	3	47		70	652	421	1.60	8.1		79	94	1	8.7	220	0.6					
5 9 78	17	0.7	42*		55	807	609	1.64	8.0		123	148	1	9.5	320	0.4					
6 14 78	17	0.8			35	997	808	1.37	7.8		123	149	1	10	470	0.7					
7 12 78	20	0.7			20	962	660	1.43	8.0		120	144	1	9.6	370	0.4					
8 22 78	18	0.15	75*		10	878	721	1.51	8.1		107	128	1	9.7	400	0.2					
9 28 78	14	0.05				1100	848	1.79	8.0		184	221	2	12	420	0.3					
10 30 78	11	0.06	18		20	995	616	1.41	8.1		63	76	1	12	360	0.4					
12 5 78	7	0.15			40	696	463	1.76	7.9		153	185	1	8.8	200	0.8					
1 4 79	0	0.4	6		8	784	600	1.63	7.9		130	157	1	8.4	300	1.1					
3 14 79	6	0.2			5	1130	949	1.71	8.0		204	245	2	8.4	490	0.5					
4 11 79	9	0.8	88		10	758	658	1.38	7.9		112	135	1	7.7	370	0.8					
5 10 79	20	0.4	182	0.00	190	941	853	1.41	7.9		147	177	1	11	490	0.1					
6 7 79	20	0.3	82		50	888	555	1.58	7.8		111	135	1	12	290	0.5					
8 1 79	23	0.15		0.06	40	1220	806	1.23	8.0		116	139	1	12	480	0.7	0.1	0.25	0.50	0.00	0.00
9 25 79	15	0.08	25		20	836	616	1.48	7.9		93	112	1	11	340	0.8					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
										MILLIGRAMS PER LITER										
7 14 77	0.2	0.03			120	0.0	0.03	0.1	4.8		49	0.4		15	0.03	0.2	4.8		0.1	0.0
8 23 77	0.1	0.07			170	0.0	0.01	0.1	3.8		59	0.5		18	0.03	0.1	6.4		0.1	0.0
11 1 77	0.2	0.00	0.1	0.00	130	0.0	0.00	0.1	3.0	0.50	45	0.6	0.0	17	0.03	0.1	5.1	1.6	0.1	0.0
12 21 77	0.3	0.02	0.1	0.00	140	0.1	0.00	0.4	2.9	0.80	48	0.8	0.0	12	0.06	0.1	5.6	1.7	0.7	0.0
2 3 78	0.1	0.06			160	0.0	0.00	0.1	2.8		53	0.5		12	0.02	0.0	6.1		0.1	0.0
3 9 78	0.2	0.04			150	0.0	0.00	0.1	3.3		58	0.7		15	0.02	0.1	5.2		0.2	0.0
4 6 78	0.2	0.01	0.1	0.00	88	0.0	0.00	0.1	2.8	0.40	33	1.6	0.0	9.0	0.04	0.0	3.9	0.6	0.1	0.0
5 9 78	0.2	0.01			130	0.0	0.00	0.1	2.9		47	0.8		13	0.02	0.1	5.2		0.1	0.0
6 14 78	0.2	0.02			160	0.0	0.00	0.1	3.0		59	0.5		15	0.03	0.1	5.4		0.1	0.0
7 12 78	0.2	0.03	0.1	0.00	130	0.1	0.01	0.1	3.1	0.50	51	0.2	0.1	13	0.00	0.2	5.4	1.6	0.2	0.0
8 22 78	0.2	0.02			150	0.0	0.01	0.1	3.3		54	0.2		17	0.05	0.2	6.4		0.2	0.3
9 28 78	0.2	0.02			200	0.0	0.01	0.1	4.1		64	0.3		20	0.03	0.2	6.4		0.0	0.0
10 30 78	0.2	0.04			130	0.0	0.00	0.1	3.7		44	0.5		12	0.04	0.2	4.9		0.2	0.0
12 5 78	0.2	0.02			100	0.0	0.00	0.2	3.4		27	0.5		9.9	0.02	0.1	4.9		0.1	0.0
1 4 79	0.3	0.01	0.1	0.00	140	0.0	0.00	0.1	2.7	0.85	37	0.4	0.0	8.8	0.04	0.2	5.2	0.9	0.1	0.0
3 14 79	0.2	0.03			230	0.0	0.01	0.1	3.2		66	0.7		15	0.05	0.0	5.7		0.2	0.1
4 11 79	0.2	0.02	0.5	0.00	140	0.0	0.00	0.1	3.1	0.35	40	0.5	0.1	11	0.02	0.1	4.0	0.1	0.1	0.1
5 10 79	0.3	0.02			180	0.1	0.01	0.2	2.6		64	0.2		11	0.05	0.2	4.4		0.4	0.0
6 7 79	0.1	0.03			100	0.0	0.00	0.0	2.8		51	0.0		12	0.02	0.1	5.1		0.1	0.0
8 1 79	0.2	0.04	0.1	0.00	150	0.0	0.01	0.1	3.5	0.80	52	0.2	0.0	17	0.02	0.1	5.4	1.0	0.2	0.0
9 25 79	0.1	0.04			140	0.0	0.00	0.1	3.8		42	0.4		12	0.02	0.1	4.7		0.2	0.0

TABLE 41. WATER QUALITY FOR SITE 6121 FULTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
7 15 77					35	18	14	1.79	6.2		2	2	0	1.3	4	0.0					
11 2 77	13	0.04	19		4	24	19	0.85	6.0	4	1	1	0	1.4	9	0.0					
12 21 77	7	4			4	29	22	0.84	5.8		0	0	0	1.5	10	0.0					
2 2 78	1	0.7			8	29	18	1.09	4.9		0	0	0	0.7	9	0.0					
3 7 78	6	0.7			0	25	17	0.60	5.5		0	0	0	1.1	9	0.0					
4 4 78	9	1.5			4	25	18	1.00	5.0		0	0	0	0.7	9	0.0					
5 3 78	10	0.8			0	22	18	1.03	5.2		0	0	0	0.9	8	0.1					
6 14 78	16	1.5			4	22	18	0.82	6.2		2	2	0	1.0	9	0.1					
7 12 78	15	0.5	31*		4	20	19	0.96	6.4		2	2	0	0.7	9	0.0					
8 9 78	19	0.2	28*		0	21	18	1.12	6.0		2	2	0	0.9	6	0.0					
9 27 78	16	0.0002				24	23	0.85	6.2		2	3	0	0.8	10	0.1					
10 27 78		0.0001	60*		7	37	25	1.01	6.4	4	2	2	0	2.3	9	0.2					
3 7 79	1	1.5	10		1	25	17	0.97	4.9	4	0	0	0	0.6	8	0.0					
4 13 79	8	0.25	5		3	22	20	0.81	5.1	6	0	0	0	0.7	10	0.0					
5 8 79	14	0.25	3	0.00	1	21	19	0.97	5.5	6	0	0	0	0.5	10	0.1					
6 5 79	21	0.3	5	0.00	0	21	19	0.84	5.2	7	0	0	0	0.7	9	0.0					
7 31 79	21	0.2	4		8	24	20	0.86	6.0	2	1	1	0	1.1	9	0.0	0.2	0.02	0.40	0.10	0.01
9 27 79	13	0.15	9		5	21	17	1.17	5.6	7	0	0	0	0.9	7	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 15 77	0.0	0.00			0.5	0.0	0.01	0.0	1.2		0.9	0.0		0.8	0.02	0.1	2.1		0.0	0.0
11 2 77	0.0	0.00	0.0	0.00	1.1	0.0	0.00	0.0	0.8	0.00	1.0	0.0	0.0	0.9	0.00	0.0	2.1	0.0	0.0	0.1
12 21 77	0.1	0.00	0.1	0.00	1.0	0.0	0.00	0.1	1.0	0.02	1.4	0.0	0.0	0.8	0.01	0.0	2.6	0.0	0.1	0.0
2 2 78	0.0	0.03			1.0	0.0	0.00	0.0	0.9		1.3	0.0		0.8	0.00	0.0	2.1		0.0	0.0
3 7 78	0.2	0.01			0.1	0.0	0.00	0.1	0.1		1.3	0.1		0.7	0.00	0.0	2.0		0.1	0.0
4 4 78	0.1	0.00	0.0	0.00	0.9	0.0	0.00	0.0	0.9	0.01	1.2	0.0	0.0	0.8	0.00	0.0	2.1	0.0	0.0	0.0
5 3 78	0.0	0.00			1.0	0.0	0.00	0.0	1.0		1.2	0.0		0.8	0.00	0.0	1.9		0.0	0.0
6 14 78	0.0	0.00			1.0	0.0	0.00	0.0	1.0		1.0	0.0		0.7	0.01	0.0	1.2		0.0	0.0
7 12 78	0.0	0.00	0.0	0.00	1.2	0.0	0.00	0.0	0.9	0.02	1.0	0.0	0.0	0.6	0.01	0.1	1.9	0.0	0.1	0.0
8 9 78	0.1	0.00			1.0	0.0	0.00	0.3	1.0		0.9	0.1		0.6	0.01	0.0	2.8		0.0	0.0
9 27 78	0.0	0.01			1.3	0.0	0.01	0.2	1.3		0.9	0.2		0.9	0.01	0.0	2.6		0.0	0.0
10 27 78	0.0	0.00	0.1	0.01	1.9	0.0	0.01	0.2	1.6	0.08	1.1	0.2	0.0	1.0	0.01	0.0	2.6	0.0	0.0	0.0
3 7 79	0.1	0.00	0.0	0.00	1.1	0.0	0.00	0.0	1.0	0.03	0.9	0.1	0.0	0.6	0.01	0.0	2.0	0.0	0.0	0.0
4 13 79	0.0	0.00	0.0	0.00	1.0	0.0	0.00	0.0	0.9	0.02	1.2	0.0	0.0	0.7	0.01	0.0	2.1	0.0	0.0	0.0
5 8 79	0.1	0.00			1.1	0.0	0.00	0.0	0.8		1.3	0.0		0.7	0.00	0.0	1.9		0.0	0.2
6 5 79	0.1	0.01			1.1	0.0	0.00	0.1	0.9		0.9	0.1		0.5	0.00	0.0	2.6		0.0	0.2
7 31 79	0.0	0.01	0.0	0.00	1.0	0.0	0.00	0.0	0.8	0.01	1.2	0.0	0.0	0.6	0.03	0.1	2.6	0.0	0.2	0.0
9 27 79	0.0	0.00			1.1	0.0	0.00	0.0	0.8		1.1	0.0		0.5	0.00	0.0	2.8		0.0	0.0

TABLE 42. WATER QUALITY FOR SITE 6123 FULTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			---------- MILLIGRAMS PER LITER ----------											
11 2 77	10	0.15	17		8	115	83	0.92	4.8			0	0	0	6.0	47	0.1				
12 21 77	3	3			6	137	67	0.94	4.4			0	0	0	5.1	37	0.0				
2 2 78	2	0.7			6	98	59	0.90	4.2			0	0	0	4.2	33	0.2				
3 7 78	2	0.15			6	94	54	0.83	4.5			0	0	0	4.8	29	0.2				
4 4 78	6	3			4	96	56	0.91	4.4			0	0	0	4.6	30	0.2				
5 3 78	8	1.5			0	93	55	0.91	4.7			0	0	0	4.7	29	0.1				
6 14 78	16	0.25			8	96	60	0.78	4.5			0	0	0	4.2	34	0.2				
7 12 78	14	0.6	28*		4	100	58	0.92	4.6			0	0	0	4.2	32	0.0				
8 9 78	17	0.4	32*		4	96	55	0.95	4.5			0	0	0	4.5	27	0.1				
9 27 78	14	0.001	72*		10	107	62	0.90	4.9			0	0	0	5.1	32	0.1				
10 27 78	9	0.007	35*		4	95	58	0.90	5.6	6		0	0	0	3.4	31	0.2				
12 4 78	6	0.25	38		3	95	52	0.90	4.4			0	0	0	4.4	26	0.5				
1 3 79	0	0.25	17		3	121	81	0.98	4.4			0	0	0	6.2	44	0.5				
3 7 79	2	5	5		2	96	60	0.90	4.5	8		0	0	0	4.9	32	0.3				
4 13 79	6	0.4	11		30	100	59	0.96	4.6	9		0	0	0	5.1	32	0.1				
5 8 79	21	0.5	2	0.00	1	96	58	0.99	4.7	9		0	0	0	5.2	30	0.1				
6 5 79	21	0.4	1	0.00	0	96	64	0.79	4.4	8		0	0	0	5.6	36	0.1				
7 31 79	22	0.5	3		8	110	61	0.76	4.6	12		0	0	0	6.7	32	0.0	0.1	0.22	0.45	0.00	0.00
9 27 79	13	0.2	2		8	92	49	0.67	4.5	10		0	0	0	5.2	26	0.0		0.00		0.00	0.03

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	---------- MILLIGRAMS PER LITER ----------																			
11 2 77	0.8		0.1	0.00	12	0.0	0.00	0.0	0.8	0.02	3.0	0.0	0.0	4.4	0.01	0.0	3.7	0.1	0.0	0.1
12 21 77	1.3	0.00	0.1	0.00	8.7	0.0	0.00	0.0	1.2	0.09	3.2	0.6	0.0	3.1	0.01	0.0	3.1	0.1	0.0	0.1
2 2 78	0.8	0.00			7.0	0.0	0.00	0.0	1.0		3.1	0.5		3.0	0.02	0.0	2.3		0.1	0.1
3 7 78	0.7	0.01			6.0	0.0	0.00	0.0	0.9		2.6	0.4		2.8	0.01	0.0	2.7		0.0	0.0
4 4 78	1.2	0.00	0.1	0.00	6.4	0.0	0.00	0.0	1.4	0.05	2.7	0.4	0.0	3.0	0.02	0.0	2.7	0.0	0.0	0.0
5 3 78	0.8	0.00			6.0	0.0	0.00	0.0	1.3		2.6	0.4		3.2	0.01	0.0	3.0		0.0	0.0
6 14 78	0.7	0.00			6.5	0.0	0.02	0.0	1.2		2.6	0.6		2.8	0.03	0.0	3.2		0.0	0.1
7 12 78	0.6	0.00	0.1	0.00	7.8	0.0	0.00	0.0	1.0	0.04	2.6	0.6	0.0	2.5	0.02	0.0	3.1	0.0	0.0	0.1
8 9 78	0.4	0.01			7.1	0.0	0.00	0.0	0.9		2.2	0.7		2.4	0.03	0.0	4.2		0.0	0.1
9 27 78	0.3	0.01			8.3	0.0	0.00	0.1	1.2		2.5	0.6		2.5	0.03	0.0	4.0		0.0	0.2
10 27 78	0.3	0.00	0.1	0.00	7.6	0.0	0.01	0.0	1.4	0.05	2.2	0.5	0.0	2.1	0.03	0.0	3.6	0.0	0.0	0.1
12 4 78	0.5	0.00			6.8	0.0	0.00	0.0	1.0		2.1	0.3		2.4	0.02	0.0	2.9		0.0	0.0
1 3 79	0.5	0.01	0.1	0.00	12	0.1	0.01	0.0	1.1	0.15	3.8	0.5	0.0	4.0	0.02	0.0	3.1	0.1	0.1	0.2
3 7 79	0.9	0.00	0.0	0.00	7.9	0.0	0.00	0.0	1.4	0.25	2.5	0.5	0.0	2.8	0.03	0.0	2.4	0.0	0.0	0.1
4 13 79	0.8	0.00	0.1	0.00	7.5	0.0	0.00	0.0	1.2	0.03	2.8	0.4	0.0	3.3	0.03	0.0	2.5	0.0	0.0	0.1
5 8 79	0.7	0.00			7.6	0.0	0.03	0.0	1.2		2.8	0.4		3.3	0.01	0.0	2.7		0.0	0.2
6 5 79	0.7	0.01			7.1	0.0	0.00	0.0	1.1		2.6	0.4		3.5	0.03	0.0	3.2		0.0	0.2
7 31 79	0.6	0.01	0.1	0.00	7.3	0.0	0.00	0.0	0.7	0.03	2.2	0.6	0.0	3.2	0.02	0.0	3.4	0.0	0.0	0.1
9 27 79	0.6	0.00			5.0	0.0	0.00	0.0	0.6		1.9	0.6		2.0	0.03	0.0	3.2		0.0	0.1

TABLE 43. WATER QUALITY FOR SITE 6124 FULTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			---------- MILLIGRAMS PER LITER ----------											
7 15 77					10	65	39	2.01	6.5		10	12	0	3.1	10	0.4					

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	---------- MILLIGRAMS PER LITER ----------																			
7 15 77	0.0	0.00			4.6	0.0	0.00	0.0	1.2		1.8	0.0		3.0	0.00	0.0	3.7		0.0	0.0

TABLE 44. WATER QUALITY FOR SITE 6126 FULTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
11 2 77	10	1.5	5		4	55	36	0.85	4.7		0	0	0	1.1	21	0.0					
12 21 77	4	7			6	74	48	0.72	4.3		0	0	0	6.0	22	0.3					
2 2 78	2	1.0			4	67	39	0.86	4.0		0	0	0	3.9	20	0.1					
3 7 78	2	0.25			3	81	46	0.81	4.3		0	0	0	4.6	23	0.2					
4 4 78	7	1.5			0	76	44	0.79	4.2		0	0	0	5.8	21	0.2					
5 3 78	10	0.4			0	83	44	0.94	4.5		0	0	0	5.3	21	0.1					
6 14 78	14	0.9			10	65	35	0.82	4.4		0	0	0	3.6	17	0.3					
7 12 78	15	0.2	21*		4	72	43	0.82	4.4		0	0	0	4.4	22	0.1					
8 9 78	17	0.2	48*		10	77	42	0.76	4.3		0	0	0	5.2	19	0.1					
9 27 78		0.01			15	71	41	0.59	4.6		0	0	0	3.7	22	0.1					
12 4 78	6	0.15	16		1	84	42	0.85	4.3		0	0	0	5.9	17	0.6					
1 3 79	0	0.7	8		2	69	42	0.86	4.1		0	0	0	4.1	21	0.3					
3 7 79	3	1.0	10		2	70	41	0.70	4.2	9	0	0	0	4.4	21	0.2					
4 13 79	8	0.3	7		0	79	46	0.83	4.4	10	0	0	0	5.7	22	0.1					
5 8 79	14	0.4	4	0.00	1	79	48	0.80	4.3	10	0	0	0	5.1	25	0.1					
6 5 79	18	0.2		0.12	10	66	44	0.80	4.2	14	0	0	0	5.2	21	0.1					
7 31 79	22	0.4	6		8	94	49	0.68	4.4	10	0	0	0	7.6	22	0.1	0.0	0.08	0.55	0.20	0.00
9 27 79	13	0.2	1		5	69	38	0.82	4.5	8	0	0	0	4.3	18	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
11 2 77	0.6	0.02	0.2	0.00	2.7	0.0	0.00	0.1	1.0	0.00	2.1	0.4	0.0	1.5	0.01	0.0	2.4	0.0	0.0	0.0
12 21 77	1.0	0.00	0.1	0.00	3.6	0.0	0.00	0.1	0.9	0.05	2.5	0.6	0.0	2.8	0.03	0.0	2.8	0.0	0.1	0.1
2 2 78	0.7	0.02			3.1	0.0	0.00	0.0	0.8		2.3	0.4		2.6	0.02	0.0	1.9		0.1	0.0
3 7 78	1.2	0.01			3.5	0.0	0.00	0.1	1.0		2.6	0.6		2.7	0.03	0.0	2.6		0.2	0.1
4 4 78	1.2	0.00	0.1	0.00	3.2	0.0	0.00	0.0	1.0	0.04	2.2	0.5	0.0	3.5	0.02	0.0	2.3	0.0	0.0	0.0
5 3 78	0.9	0.00			3.7	0.0	0.00	0.0	1.0		2.5	0.5		3.5	0.02	0.0	2.5		0.0	0.0
6 14 78	0.6	0.00			2.7	0.0	0.00	0.0	1.0		1.8	0.4		2.4	0.03	0.0	1.8		0.0	0.0
7 12 78	0.6	0.00	0.0	0.00	3.8	0.0	0.00	0.0	0.9	0.03	2.1	0.5	0.0	2.6	0.03	0.1	2.5	0.0	0.1	0.0
8 9 78	0.6	0.00			3.3	0.0	0.01	0.0	0.7		1.8	0.6		2.6	0.03	0.0	3.5		0.0	0.1
9 27 78	0.5	0.01			3.2	0.0	0.00	0.0	0.7		1.6	0.8		1.8	0.03	0.0	2.9		0.0	0.1
12 4 78	0.7	0.00			3.7	0.0	0.01	0.0	1.3		2.0	0.6		2.9	0.03	0.0	2.5		0.0	0.1
1 3 79	0.9	0.00	0.0	0.00	3.8	0.0	0.00	0.0	1.1	0.08	2.2	0.6	0.0	2.5	0.01	0.0	2.3	0.0	0.0	0.0
3 7 79	0.8	0.00	0.0	0.00	3.3	0.0	0.00	0.0	1.0	0.20	1.9	0.5	0.0	2.2	0.03	0.0	1.9	0.0	0.0	0.1
4 13 79	0.8	0.00	0.1	0.00	3.8	0.0	0.01	0.0	0.9	0.02	2.2	0.5	0.0	3.6	0.05	0.0	2.4	0.0	0.0	0.1
5 8 79	0.8	0.00			4.2	0.0	0.00	0.0	1.0		2.4	0.5		3.3	0.01	0.0	2.4		0.0	0.2
6 5 79	0.7	0.00			3.7	0.0	0.01	0.1	0.9		2.1	0.4		2.9	0.02	0.0	2.8		0.0	0.2
7 31 79	0.7	0.00	0.0	0.00	3.9	0.0	0.00	0.0	0.8	0.01	2.0	0.6	0.0	3.7	0.03	0.0	3.1	0.0	0.0	0.1
9 27 79	0.6	0.00			3.2	0.0	0.01	0.0	0.8		1.6	0.5		2.7	0.03	0.0	2.8		0.0	0.0

TABLE 45. WATER QUALITY FOR SITE 6129 FULTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER									
7 15 77					10	80	43	0.81	4.3		0	0	0	4.2	21	0.1				

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI
MO DA YR	MILLIGRAMS PER LITER																		
7 15 77	0.7	0.00			3.2	0.0	0.01	0.0	1.0		2.2	0.8		2.6	0.05	0.2	3.0		0.0

TABLE 46. WATER QUALITY FOR SITE 6131 GREENE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
NO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			------	------	------	------	MILLIGRAMS PER LITER	------	------	------	------	------	------	------
8 8 77	20	0.01			20	477	307	3.11	8.2		143	171	2	6.4	86	0.2					
10 14 77	10	0.04	5		8	425	278	3.25	7.4		134	163	0	6.2	74	0.2					
11 23 77	11	0.1	6			364	239	2.64	7.9		102	124	1	5.8	74	0.3					
2 3 78	2	0.05			4	309	158	2.05	7.8		48	58	0	4.9	60	0.7					
3 9 78	2	0.15			8	322	176	2.53	7.7		76	92	0	7.0	54	0.5					
4 6 78	9	1.5	40		40	261	132	2.64	7.8		52	64	0	6.0	38	0.7					
5 9 78	13	2.0	39*		65	267	162	1.71	7.7		50	61	0	5.7	66	0.4					
5 30 78	17	0.06			0	317	179	2.00	7.8		80	97	0	5.4	61	0.3					
8 22 78	18	0.004	28*		4	357	230	2.96	8.1		119	143	1	4.5	63	0.0					
9 28 78	19	0.0001	66*		15	397	228	2.97	8.1		131	158	1	4.4	60	0.0					
10 30 78	11	0.005	6		4	306	179	2.31	7.9	-73	75	90	0	5.5	57	0.7					
12 5 78	6	0.09	7		5	222	124	1.97	7.7		34	42	0	3.9	44	1.7					
3 15 79	0	0.1	8		2	286	180	2.53	7.9	-62	73	88	0	4.3	56	0.9					
4 10 79	7	0.15	15		25	231	141	1.93	7.7	-42	43	52	0	3.8	53	0.9					
5 10 79	20	0.08	10	0.00	50	301	209	2.01	8.1	-71	74	89	1	5.4	79	0.3					
6 7 79	22	0.03	6		10	331	224	2.05	8.3	-87	89	105	1	3.9	84	0.1					
8 1 79	24	0.01	84		90	363	210	2.53	8.3	-87	98	116	1	4.7	65	0.0	0.0	0.03	0.40	0.00	0.00
9 25 79	15	0.009	4		8	261	165	2.33	7.9	-58	66	80	0	4.5	54	0.5					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
NO DA YR	------	------	------	------	------	------	------	------	------	MILLIGRAMS PER LITER	------	------	------	------	------	------	------	------	------	------
8 8 77	0.1	0.03			51	0.0	0.00	0.1	3.1		11	0.5		52	0.00	0.0	5.1		0.0	0.2
10 14 77	0.0	0.00	0.1	0.00	40	0.0	0.00	0.2	1.7	0.15	11	0.8	0.0	52	0.00	0.0	4.1	0.2	0.0	0.1
11 23 77	0.1	0.00	0.1	0.00	35	0.0	0.00	0.2	2.2	0.20	10	0.4	0.0	37	0.01	0.0	4.5	0.2	0.1	0.0
2 3 78	0.0	0.01			24	0.0	0.00	0.1	1.5		8.0	0.0		21	0.01	0.0	3.3		0.1	0.0
3 9 78	0.0	0.02			24	0.0	0.00	0.0	1.4		7.9	0.0		27	0.00	0.0	3.2		0.0	0.0
4 6 78	0.1	0.03	0.0	0.00	21	0.0	0.00	0.0	1.8	0.10	7.2	0.0	0.0	15	0.02	0.0	3.8	0.1	0.2	0.0
5 9 78	0.1	0.05			25	0.0	0.00	0.0	1.9		7.7	0.0		14	0.01	0.0	4.5		0.0	0.0
5 30 78	0.1	0.02	0.1	0.00	21	0.0	0.01	0.1	2.1	0.15	6.9	0.0	0.0	24	0.01	0.0	3.8	0.1	0.1	0.0
8 22 78	0.1	0.03			32	0.0	0.01	0.1	2.5		8.8	0.4		37	0.02	0.1	4.8		0.0	0.2
9 28 78	0.0	0.04			34	0.0	0.00	0.0	2.1		8.4	0.1		31	0.01	0.0	3.8		0.0	0.0
10 30 78	0.1	0.03			25	0.0	0.00	0.0	2.0		7.1	0.1		24	0.01	0.0	4.3		0.0	0.0
12 5 78	0.1	0.02			22	0.0	0.00	0.1	2.0		6.1	0.0		8.9	0.01	0.0	4.0		0.0	0.0
3 15 79	0.1	0.01			30	0.0	0.02	0.1	1.9		6.5	0.0		25	0.03	0.0	3.8		0.0	0.1
4 10 79	0.1	0.02	0.1	0.00	23	0.0	0.01	0.0	1.9	0.15	6.7	0.0	0.0	13	0.02	0.0	4.0	0.1	0.0	0.1
5 10 79	0.1	0.04			37	0.0	0.00	0.1	1.8		7.8	0.0		23	0.00	0.0	4.3		0.0	0.1
6 7 79	0.1	0.03			34	0.0	0.00	0.1	1.9		7.8	0.1		30	0.01	0.0	3.9		0.1	0.2
8 1 79	0.1	0.02	0.1	0.00	29	0.1		0.1	2.6	0.35	7.3	0.0	0.0	33	0.00	0.0	4.5	0.2	0.0	0.0
9 25 79	0.2	0.04			25	0.0	0.00	0.0	2.2		7.0	0.1		20	0.02	0.0	4.4		0.0	0.0

TABLE 47. WATER QUALITY FOR SITE 6132 GREENE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 8 77	18	0.02			140	468	329	2.04	8.0		119	143	1	7.3	120	0.1					
10 14 77	11	0.04	40		35	480	361	2.46	7.6		148	179	0	7.3	120	0.8					
11 23 77	10	0.2	17			468	317	2.47	8.2		125	150	2	6.2	110	0.5					
2 3 78	4	0.6			15	618	382	1.91	8.0		98	117	1	8.5	170	0.8					
3 9 78	7	0.5	96		60	576	358	2.62	8.1		139	167	1	12	120	0.4					
4 6 78	10	3	56		260	355	203	1.32	7.8		44	54	0	4.3	100	1.4					
5 9 78	15	2.5	387*		330	354	221	1.68	7.8		80	96	0	3.6	93	0.9					
5 30 78	19	0.25			0	637	389	1.55	8.0		142	171	1	8.6	170	0.8					
8 22 78	17	0.02	21*		3	620	450	2.02	8.0		143	173	1	18	170	1.6					
9 28 78	16	0.008	112*		15	648	417	2.15	8.1		175	210	2	7.4	150	0.6					
10 30 78	12	0.01	80		30	627	417	1.98	8.5		179	209	4	6.1	160	0.3					
12 5 78	6	0.1	56		60	382	216	1.85	8.1		59	71	1	3.1	93	0.7					
3 15 79	0	0.2	35		20	682	505	1.52	7.6	-70	80	97	0	7.7	270	0.7					
4 10 79	9	0.25	66		55	475	317	1.42	7.9	-48	53	64	0	4.1	170	0.8					
5 10 79	22	0.25		0.90		682	490	1.40	8.0	-50	61	74	1	6.8	280	0.3					
6 7 79	21	0.05	65		50	697	458	1.50	8.5		119	139	3	7.5	230	0.3					
8 1 79	24	0.01	32		45	753	473	1.69	8.4		129	152	3	8.0	220	0.4	0.1	0.11	0.45	0.00	0.01
9 25 79	16	0.025	6		8	613	451	1.57	8.4	-120	129	152	3	5.9	220	0.4					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 8 77	0.1	0.00			49	0.0	0.00	1.7	5.3		18	9.3		33	0.00	0.0	4.4		0.0	0.2
10 14 77	0.1	0.00	0.1	0.00	75	0.0	0.00	0.2	3.2	0.25	20	5.0	0.0	26	0.00	0.0	4.2	0.5	0.0	0.1
11 23 77	0.1	0.00	0.1	0.00	66	0.0	0.00	0.1	3.2	0.45	19	3.3	0.0	20	0.02	0.0	4.3	0.5	0.1	0.0
2 3 78	0.1	0.00			71	0.0	0.00	0.4	3.2		29	4.3		24	0.05	0.0	4.1		0.2	0.0
3 9 78	0.0	0.03			66	0.0	0.00	0.2	3.1		23	3.0		37	0.01	0.0	3.9		0.0	0.0
4 6 78	0.2	0.01	0.0	0.00	31	0.1	0.00	0.2	2.5	0.15	12	3.8	0.0	9.3	0.06	0.0	2.7	0.2	0.2	0.0
5 9 78	0.1	0.02			39	0.0	0.00	0.0	2.4		12	1.5		11	0.03	0.0	3.3		0.0	0.0
5 30 78	0.1	0.02	0.1	0.00	58	0.0	0.02	0.2	3.7	0.35	22	2.6	0.0	24	0.04	0.0	3.6	0.5	0.1	0.0
8 22 78	0.1	0.02			88	0.0	0.01	0.1	3.8		22	2.5		39	0.04	0.1	3.9		0.1	0.1
9 28 78	0.1	0.03			84	0.0	0.00	0.2	4.0		19	3.7		28	0.02	0.1	3.6		0.0	0.0
10 30 78	0.1	0.03			78	0.0	0.00	0.1	2.8		19	4.3		29	0.02	0.1	3.7		0.1	0.0
12 5 78	0.1	0.02			43	0.1	0.01	0.3	2.2		13	2.6		11	0.06	0.1	4.5		0.1	0.0
3 15 79	0.2	0.02			97	0.1	0.00	0.5	2.8		35	6.8		24	0.12	0.2	4.1		0.2	0.1
4 10 79	0.2	0.01	0.1	0.00	56	0.1	0.00	0.3	2.1	0.35	23	1.8	0.0	12	0.08	0.1	3.4	0.3	0.1	0.2
5 10 79	0.2	0.05			91	0.0	0.00	0.1	6.8		30	5.1		23	0.06	0.1	5.0		0.1	0.1
6 7 79	0.2	0.02			78	0.1	0.02	0.0	3.7		28	3.7		26	0.00	0.1	4.7		0.1	0.0
8 1 79	0.2	0.03	0.1	0.00	88	0.0	0.02	0.1	4.0	0.35	29	3.0	0.0	28	0.03	0.1	4.1	0.4	0.1	0.0
9 25 79	0.1	0.03			81	0.0	0.00	0.2	3.6		27	3.3		23	0.03	0.1	4.5		0.1	0.0

TABLE 48. WATER QUALITY FOR SITE 6135 GREENE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 8 77	21	0.006			100	707	490	1.49	7.5		73	89	0	8.2	270	0.7					
10 14 77	10	0.1	10		20	589	382	1.51	7.6		68	83	0	1.7	210	0.1					
11 23 77	11	0.02	3			602	406	1.62	7.9		97	117	1	3.5	210	0.1					
3 9 78	4	0.04			20	576	364	1.76	7.9		79	95	0	8.8	180	0.4					
4 6 78	11	0.1	24		15	688	455	1.23	8.1		75	89	1	3.6	270	0.2					
5 9 78	18	0.05	14		20	719	508	1.29	8.1		79	94	1	2.5	310	0.2					
5 30 78	20	0.15			5	747	493	1.06	7.8		69	83	0	1.8	320	0.0					
8 22 78	18	0.02	51*		8	1100	904	1.26	8.0		152	183	1	4.1	540	0.4					
9 28 78	15	0.005			45	1580	1010	1.48	8.1		189	226	2	4.5	570	0.3					
10 30 78	12	0.01	61		55	737	556	1.17	7.9	-69	73	88	0	2.6	350	0.1					
12 5 78	6	0.02	15		7	612	399	1.37	8.0		60	72	0	2.6	230	0.2					
1 15 79	0	0.3	2		0	859	589	1.38	8.5		129	150	3	2.6	310	5.1					
3 15 79	0	0.08	25		0	915	682	1.29	8.1		63	76	1	2.4	430	0.2					
4 10 79	9	0.01	9		3	845	643	1.29	7.9	-56	63	76	0	1.8	400	0.1					
5 10 79	23	0.03	18	0.00	9	904	690	1.23	7.8	-71	76	92	0	1.6	440	0.0					
6 7 79	22	0.01	24		25	876	663	1.25	8.3		101	119	2	2.3	400	0.0					
8 1 79	24	0.06	1		20	726	479	1.22	8.1	-70	77	92	1	2.1	290	0.0	0.0	0.02	0.50	0.00	0.01
9 25 79	17	0.015	32		40	640	473	1.22	8.1	-58	66	79	1	1.7	290	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 8 77	0.2	0.00			100	0.0	0.00	0.1	4.0		31	0.5		20	0.00	0.0	5.0		0.0	0.1
10 14 77	0.1	0.00	0.1	0.00	80	0.0	0.00	0.1	2.3	0.20	28	0.1	0.0	8.9	0.00	0.0	2.8	0.3	0.0	0.2
11 23 77	0.1	0.00	0.1	0.00	84	0.0	0.00	0.1	2.4	0.45	31	0.3	0.0	9.2	0.03	0.0	3.5	0.4	0.2	0.0
3 9 78	0.1	0.03			75	0.0	0.00	0.0	2.2		31	0.2		12	0.00	0.0	3.3		0.0	0.0
4 6 78	0.1	0.02	0.0	0.00	77	0.0	0.00	0.3	2.5	0.35	35	0.3	0.0	8.8	0.03	0.1	2.8	0.3	0.3	0.0
5 9 78	0.1	0.01			93	0.0	0.01	0.1	2.9		38	0.2		11	0.02	0.0	2.6		0.1	0.0
5 30 78	0.1	0.01	0.1	0.00	76	0.0	0.02	0.1	3.3	0.40	34	0.5	0.0	9.6	0.03	0.1	2.6	0.4	0.2	0.0
8 22 78	0.2	0.01			180	0.0	0.01	0.2	2.9		57	0.7		18	0.06	0.2	4.3		0.1	0.3
9 28 78	0.2	0.03			220	0.0	0.00	0.2	2.5		69	0.9		14	0.04	0.2	4.1		0.2	0.0
10 30 78	0.2	0.02			100	0.0	0.02	0.2	3.2		33	0.2		12	0.05	0.1	3.1		0.1	0.0
12 5 78	0.2	0.00			81	0.0	0.01	0.2	3.0		27	0.3		7.8	0.04	0.2	3.1		0.2	0.0
1 15 79	0.2	0.03			88	0.0	0.00	0.0	1.6		34	0.1		46	0.03	0.1	3.9		0.1	0.0
3 15 79	0.2	0.01			140	0.0	0.01	0.1	2.6		49	0.3		11	0.02	0.1	2.6		0.2	0.1
4 10 79	0.2	0.02	0.1	0.00	130	0.0	0.01	0.1	2.6	0.65	45	0.2	0.0	11	0.02	0.1	2.2	0.4	0.2	0.2
5 10 79	0.2	0.03			140	0.0	0.00	0.2	2.7		44	0.5		11	0.03	0.2	2.0		0.3	0.1
6 7 79	0.2	0.03			120	0.0	0.01	0.3	2.5		44	0.6		17	0.03	0.1	3.1		0.1	0.0
8 1 79	0.2	0.04	0.0	0.00	87	0.0	0.02	0.3	3.0	0.30	32	0.5	0.0	9.6	0.01	0.1	3.1	0.2	0.1	0.0
9 25 79	0.2	0.03			87	0.0	0.02	0.4	3.4		31	0.6		10	0.05	0.1	3.5		0.1	0.0

TABLE 49. WATER QUALITY FOR SITE 6141 INDIANA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
											MILLIGRAMS PER LITER										
8 10 77	17	0.04			55	129	68	1.50	7.4		11	13	0	7.4	24	0.5					
10 31 77	9	0.06	23		10	187	91	2.37	6.6		24	29	0	10	24	0.8					
12 20 77	4	0.4			8	111	60	1.71	6.4		7	8	0	6.5	23	0.0					
2 1 78	2	0.25			15	116	75	1.51	7.0		21	26	0	6.4	26	0.7					
3 8 78	1	0.08			25	137	75	1.57	6.7		16	19	0	12	24	0.5					
4 5 78	7	2.5			4	94	60	1.32	6.8		7	8	0	4.6	24	1.1					
5 4 78	7	0.5			8	116	73	1.69	7.3		25	30	0	7.2	24	0.3					
6 13 78	16	0.1			30	120	84	1.38	7.5		20	24	0	6.1	33	0.7					
7 13 78	19	0.08	31*		4	107	74	1.19	7.2		15	18	0	5.7	32	0.3					
8 23 78	17	0.009	24*		25	130	77	1.22	7.0		14	17	0	5.1	33	0.2					
9 26 78	15	0.06	44*		15	130	77	1.66	7.4		24	29	0	7.2	25	0.4					
10 24 78	8	0.015	37*		7	125	77	1.67	7.5	-19	23	28	0	6.8	27	0.1					
11 15 78	0	0.01	9		15	128	69	1.65	6.8	-21	18	22	0	7.0	23	0.3					
1 17 79	1	0.6	7		5	108	62	1.31	7.0		6	7	0	5.4	25	0.9					
3 3 79	2	0.3	94		20	93	60	1.51	6.7		6	7	0	3.7	24	1.3					
4 4 79	4	0.6	16		15	103	62	1.49	6.9		8	10	0	4.7	25	0.9					
5 9 79	21	0.09	16	0.00		105	63	1.68	7.2	-8	14	17	0	4.7	25	0.4					
6 6 79	13	0.06	25		45	113	69	1.93	6.3	-11	19	23	0	5.0	22	0.7					
7 12 79	23	0.03	48*		100	154	91	2.38	7.7	-26	32	39	0	7.0	25	0.6	0.2	0.51	3.90	3.25	0.44
10 2 79	15	0.25	61		60	111	72	1.67	7.3	-6	15	18	0	4.7	25	0.8					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 10 77	0.0	0.03			9.2	0.0	0.00	0.1	1.2		3.6	0.1		5.1	0.00	0.0	3.7		0.0	0.0
10 31 77	0.1		0.0	0.00	12	0.0	0.02	0.3	2.1	0.04	5.0	0.3	0.0	11	0.02	0.0	3.8	0.1	0.0	0.0
12 20 77	0.0	0.00	0.0	0.00	8.8	0.0	0.00	0.1	1.0	0.03	4.3	0.0	0.0	4.2	0.01	0.0	3.5	0.1	0.1	0.0
2 1 78	0.1	0.00			9.0	0.0	0.00	0.5	1.3		4.5	0.1		4.8	0.01	0.0	2.8		0.1	0.0
3 8 78	0.1	0.00			9.7	0.0	0.00	0.1	1.0		4.6	0.1		6.1	0.00	0.0	2.9		0.1	0.0
4 5 78	0.0	0.00	0.0	0.00	7.7	0.0	0.00	0.0	0.9	0.06	3.8	0.0	0.0	3.4	0.00	0.0	3.0	0.1	0.0	0.0
5 4 78	0.1	0.00			9.1	0.0	0.00	0.1	1.2		4.5	0.0		5.1	0.00	0.0	2.6		0.0	0.0
6 13 78	0.2	0.01			10	0.0	0.00	1.5	1.5		5.0	0.4		5.2	0.01	0.0	2.8		0.0	0.0
7 13 78	0.0	0.02	0.0	0.00	8.9	0.0	0.00	0.2	1.2	0.04	3.8	0.1	0.0	4.4	0.00	0.0	3.3	0.0	0.0	0.0
8 23 78	0.2	0.02			9.2	0.0	0.00	3.6	1.2		4.2	0.5		3.8	0.01	0.0	3.4		0.0	0.0
9 26 78	0.0	0.04			10	0.0	0.00	0.2	1.7		4.0	0.2		4.7	0.01	0.0	3.9		0.0	0.0
10 24 78	0.0	0.02	0.0	0.00	11	0.0	0.00	0.1	1.5	0.05	4.2	0.1	0.0	4.8	0.01	0.0	3.8	0.1	0.0	0.0
11 15 78	0.1	0.02			9.7	0.0	0.00	0.1	1.2		4.0	0.1		4.1	0.01	0.0	3.4		0.1	0.1
1 17 79	0.1	0.00			9.2	0.0	0.00	0.2	0.9		3.7	0.1		2.7	0.03	0.0	3.1		0.0	0.0
3 3 79	0.1	0.01			9.2	0.0	0.01	0.1	1.2		3.7	0.1		3.2	0.01	0.0	2.7		0.0	0.0
4 4 79	0.0	0.01	0.0	0.00	9.4	0.0	0.00	0.0	1.0	0.10	3.8	0.0	0.0	3.6	0.01	0.0	2.8	0.1	0.0	0.0
5 9 79	0.1	0.00			9.9	0.1	0.01	0.1	1.0		4.5	0.0		3.2	0.02	0.1	2.2		0.2	0.2
6 6 79	0.1	0.01			10	0.0	0.00	0.1	1.2		4.2	0.1		4.2	0.00	0.0	3.4		0.0	0.2
7 12 79	0.1	0.04	0.0	0.00	11	0.0	0.01	0.3	1.7	0.15	4.3	0.2	0.0	12	0.00	0.0	3.8	0.1	0.0	0.0
10 2 79	0.1	0.02			10	0.0	0.01	0.1	1.5		4.1	0.1		4.1	0.02	0.0	4.1		0.0	0.0

TABLE 50. WATER QUALITY FOR SITE 6142 INDIANA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 10 77	22	1.5			120	81	55	1.66	7.3		15	18	0	3.2	22	0.3					
10 31 77	10	0.015	6		4	238	95	3.42	7.2		56	68	0	1.5	25	0.0					
12 20 77	0	0.04			4	122	82	1.26	6.8		20	25	0	2.3	42	0.0					
4 5 78	8	0.6			8	175	97	1.83	7.6		44	54	0	2.6	38	0.1					
5 4 78	7	0.01			30	200	98	3.43	8.1		68	82	1	1.6	23	0.0					
6 13 78	12	0.02			20	163	90	2.53	7.6		52	63	0	0.9	28	0.3					
7 13 78	24	0.02	43*		20	95	57	2.77	7.6		32	39	0	1.0	15	0.0					
8 23 78	24	0.002	41*		20	144	74	2.80	7.6		50	61	0	1.3	19	0.1					
9 26 78	23	0.0000	10		15	475	310	1.03	7.1		11	14	0	0.8	210	0.1					
10 24 78	8	0.001	39*		0	481	330	1.26	8.1	-67	66	80	1	2.7	190	0.0					
11 14 78	10	0.01	14		15	412	253	1.36	7.4	-74	56	68	0	2.6	140	0.1					
3 13 79	7	0.1	33		45	243	106	2.26	7.8	-18	25	30	0	2.6	44	0.1					
4 5 79	6	0.1	5		3	188	114	2.28	7.9	-52	51	61	0	1.3	42	0.0					
5 9 79	18	0.015	29	0.00	25	191	117	2.16	7.8	-52	55	67	0	0.4	44	0.0					
6 6 79	17	0.01	9	0.00	20	143	76	4.46	7.5	-49	53	65	0	0.5	16	0.1					
9 26 79	15	0.0000	0		10	410	280	0.95	7.5	-18	26	32	0	0.5	190	0.0	0.0	0.05	0.00	0.00	0.03

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 10 77	0.1	0.02			11	0.0	0.00	0.1	3.6		2.3	0.1		0.7	0.00	0.0	1.1		0.0	0.0
10 31 77	0.1		0.0	0.00	26	0.0	0.00	0.0	1.0	0.09	5.0	0.0	0.0	1.2	0.02	0.0	1.0	0.1	0.0	0.0
12 20 77	0.1	0.00	0.0	0.00	15	0.1	0.00	0.1	1.2	0.08	3.9	0.0	0.0	0.9	0.02	0.1	1.5	0.1	0.3	0.1
4 5 78	0.1	0.00	0.0	0.00	20	0.0	0.00	0.1	1.6	0.10	5.4	0.2	0.0	1.0	0.00	0.0	0.7	0.1	0.0	0.0
5 4 78	0.0	0.00			23	0.0	0.00	0.0	1.4		5.7	0.0		1.2	0.00	0.0	0.3		0.0	0.0
6 13 78	0.1	0.00			20	0.0	0.00	0.1	1.3		5.0	0.2		1.0	0.01	0.0	0.4		0.0	0.0
7 13 78	0.0	0.01	0.0	0.00	12	0.0	0.00	0.0	0.7	0.05	2.9	0.0	0.0	0.7	0.01	0.0	2.6	0.0	0.0	0.0
8 23 78	0.0	0.01			16	0.0	0.00	0.2	0.7		3.6	0.1		0.7	0.01	0.1	0.4		0.0	0.0
9 26 78	0.2	0.02			69	0.0	0.00	2.2	1.7		12	0.4		1.1	0.02	0.1	1.3		0.0	0.0
10 24 78	0.2	0.01	0.1	0.00	75	0.0	0.01	0.6	1.6	0.35	15	0.2	0.0	1.6	0.02	0.1	1.0	0.2	0.1	0.0
11 14 78	0.2	0.01			61	0.0	0.00	0.1	2.0		10	0.0		1.4	0.01	0.1	1.2		0.0	0.0
3 13 79	0.1	0.01			32	0.0	0.01	0.1	1.3		5.7	0.1		1.2	0.01	0.0	1.6		0.0	0.4
4 5 79	0.1	0.01			30	0.0	0.00	0.0	1.1		5.6	0.0		1.0	0.01	0.0	1.3		0.0	0.1
5 9 79	0.1	0.02			31	0.0	0.00	0.1	0.7		4.9	0.0		0.6	0.00	0.0	0.4		0.0	0.2
6 6 79	0.1	0.01			21	0.0	0.00	0.1	0.4		4.4	0.0		0.8	0.00	0.0	0.3		0.0	0.2
9 26 79	0.1	0.01			58	0.0	0.00	1.2	1.6		9.1	0.3		1.4	0.00	0.0	1.9		0.0	0.1

TABLE 51. WATER QUALITY FOR SITE 6144 INDIANA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			---------- MILLIGRAMS PER LITER ----------											
1 16 79	0	0.2	14		2	32	21	0.82	5.0	5	0	0	0	1.6	10	0.2					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	---------- MILLIGRAMS PER LITER ----------																			
1 16 79	0.1	0.00			2.3	0.0	0.00	0.0	0.6		1.0	0.0		0.5	0.01	0.0	2.1		0.0	0.0

TABLE 52. WATER QUALITY FOR SITE 6145 INDIANA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
												MILLIGRAMS PER LITER									
8 10 77	23	0.25			300	1910	1770	0.50	2.7		0	0	0	2.3	1200	0.4					
10 31 77	8	0.05				5600	7130	0.34	2.6		0	0	0	2.5	5000	0.0					
12 20 77	1	0.6			45	3230	3000	0.43	2.5		0	0	0	4.8	2100	0.1					
2 1 78	1	0.02			10	4260	5270	0.38	2.4		0	0	0	2.7	3800	0.0					
3 8 78	4	0.3				7130	9350	0.33	2.8		0	0	0	2.5	6400	0.0					
4 5 78	14	0.9			30	4900	5920	0.38	2.4		0	0	0	3.6	4200	0.0					
5 4 78	10	0.9			30	9120	10900	0.33	2.3		0	0	0	2.3	7700	0.0					
6 13 78	16	0.15				6090	9440	0.32	2.4		0	0	0	2.5	6700	0.0					
7 13 78	19	0.25				9140	10200		2.3		0	0	0		7100	0.0					
8 23 78	17	0.02				6730	8500	0.37	2.6		0	0	0	1.6	5800	0.0					
9 26 78	18	0.008				5910	7790	0.32	2.5		0	0	0	3.3	5400	0.0					
10 24 78	9	0.015				5530	6920	0.39	2.4	2000	0	0	0	4.7	5000	0.0					
11 14 78	13	0.004				5360	7200	0.42	2.4	1900	0	0	0	5.3	4800	0.0					
1 15 79	0	0.15				3180	2860	0.41	2.8	900	0	0	0	4.7	2000	0.1					
3 13 79	6	0.03				4850	5420	0.48	2.7	1500	0	0	0	2.6	3700	0.0					
4 5 79	6	0.07				5430	7340	0.35	2.4		0	0	0	2.2	5300	0.0					
5 9 79	26	0.01		2.5		5500	7410	0.42	2.4	2100	0	0	0	2.4	5100	0.0					
6 6 79	18	0.02		4.0		4890	4140	0.53	2.4	2700	0	0	0	2.7	3100	0.0					
7 12 79	26	0.003	30*			6380	7770	0.42	2.4	3000	0	0	0	2.4	5300	0.0	0.0	0.45	2.15	0.40	0.04
9 26 79	19	0.008				6110	7100	0.45	2.4	2200	0	0	0	3.4	4800	0.0					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR											MILLIGRAMS PER LITER									
8 10 77	42	0.09			120	1.0	0.07	180	3.2		79	51		5.8	1.1	0.5	12		0.6	2.2
10 31 77	110	0.33	0.0	0.05	340	2.7	0.12	1200	3.0	0.95	230	130	0.2	7.9	3.3	0.5	32	0.8	2.5	5.7
12 20 77	75	0.07	0.0	0.02	160	2.4	0.06	430	2.5	0.85	120	78	0.0	5.6	1.3	0.2	18	0.6	1.1	2.7
2 1 78	85	0.16			240	1.7	0.10	760	2.2		220	140		6.8	2.2	0.2	19		0.9	4.2
3 8 78	180	0.18			350	3.0	0.14	1800	2.2		330	210		7.2	3.9	0.2	20		1.8	6.3
4 5 78	110	0.12	0.0	0.04	260	2.0	0.12	820	2.5	0.75	250	200	0.4	6.4	2.5	0.2	20	0.6	0.9	4.7
5 4 78	210	0.21			390	4.1	0.15	1800	3.2		400	270		7.7	4.7	0.4	28		2.6	7.8
6 13 78	160	0.17			320	3.3	0.14	1700	3.3		330	210		7.1	3.9	0.4	23		2.6	6.7
7 13 78	110	0.23	0.0	0.05	400	3.4	0.13	1800	3.3	0.75	440	240	0.4	6.1	4.1	1.2	23	0.6	3.4	8.3
8 23 78	99	0.31			340	2.5	0.11	1600	3.7		330	210		5.8	3.7	1.1	20		3.1	6.1
9 26 78	67	0.29			290	2.0	0.12	1600	4.7		260	150		6.5	3.0	0.6	23		2.0	5.3
10 24 78	100	0.27			330	2.6	0.10	910	3.3		290	170		6.6	3.2	0.5	19		2.2	5.4
11 14 78	110	0.33			320	2.7	0.11	1300	3.5		310	220		7.1	3.5	1.0	23		2.4	5.4
1 15 79	34	0.06			160	0.8	0.05	390	2.7		110	59		4.5	1.1	0.3	16		0.9	2.3
3 13 79	100	0.13			280	2.8	0.13	830	2.6		270	170		5.4	3.4	0.5	17		1.4	4.1
4 5 79	98	0.12			330	2.3	0.10	1100	2.8		270	170		5.9	2.8	0.6	12		5.2	5.1
5 9 79	97	0.19			350	2.5	0.14	1300	3.6		330	190		7.3	3.1	0.6	17		2.4	5.6
6 6 79	68	0.10			280	2.2	0.14	300	2.1		240	130		4.3	2.0	0.3	13		1.1	4.0
7 12 79	82	0.22	0.0	0.03	360	2.7	0.08	1400	4.5	1.5	330	220	0.4	8.2	3.3	0.9	20	0.9	2.8	6.0
9 26 79	73	0.32			380	2.8	0.08	1400	6.1		310	87		8.3	3.6	0.6	18		3.1	5.2

TABLE 53. WATER QUALITY FOR SITE 6151 JEFFERSON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
9 8 77	17	0.25			20	37	30	1.29	7.1		1	1	0	2.2	12	0.3					
10 19 77	8	1.5	2		8	38	32	1.06	7.5		2	3	0	2.3	13	0.6					
11 30 77	5	1.5	73*		150	51	36	1.15	7.8		1	1	0	3.7	14	0.6					
3 2 78	1	0.25			10	56	29	1.26	5.5		0	0	0	2.0	14	0.0					
3 30 78	4	8			4	52	31	1.20	4.9		0	0	0	2.1	15	0.1					
4 28 78	8	2.0	9		3	50	29	1.26	4.8		0	0	0	1.9	13	0.1					
6 9 78	11	1.5				47	29	1.21	5.4		0	0	0	2.1	13	0.4					
7 7 78	14	1.5	52*		4	46	33	1.29	5.8		0	0	0	2.2	14	0.3					
8 4 78	16	0.4	34*		10	44	32	0.94	5.9		1	1	0	2.3	15	0.2					
9 18 78	15	0.15	107*		30	50	32	1.13	5.4		0	0	0	2.4	14	0.4					
10 24 78	6	0.5	36*		4	52	27	1.49	6.4	8	2	2	0	2.8	10	0.0					
11 15 78	2	0.08	1		4	45	30	1.06	5.3	3	0	0	0	2.0	13	0.3					
1 18 79	0	0.7			2	46	33	1.11	5.4	3	0	0	0	2.1	14	0.5					
3 4 79	1	2.5	83		25	45	31	1.05	5.2	4	0	0	0	2.0	15	0.4					
4 4 79	6	1.0			2	46	34	0.97	5.3	9	0	0	0	2.0	17	0.4					
5 6 79	6	0.3	6	0.00	15	44	34	1.05	5.7	5	1	1	0	1.6	16	0.4					
6 3 79	12	0.15	41		5	59	37	1.00	5.8	6	1	1	0	1.9	19	0.3					
7 27 79	20	0.2	13		15	51	32	1.03	6.1	11	0	0	0	1.9	14	0.4	0.0	0.22	0.00	0.00	0.02
10 1 79	11	0.9	14		20	47	28	0.88	6.0	4	1	1	0	1.9	13	0.4					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 8 77	0.1	0.00			2.6	0.0	0.00	0.1	1.2		2.1	0.1		1.6	0.00	0.0	2.6		0.0	0.0
10 19 77	0.1	0.00	0.1	0.00	2.9	0.0	0.00	0.0	0.8	0.02	2.2	0.1	0.0	1.4	0.00	0.0	2.1	0.0	0.0	0.1
11 30 77	0.1	0.00	0.1	0.00	3.3	0.1	0.00	0.1	1.3	0.06	2.5	0.1	0.0	1.6	0.03	0.0	2.6	0.0	0.3	0.0
3 2 78	0.0	0.00			2.7	0.0	0.00	0.2	1.2		2.4	0.0		1.2	0.00	0.0	2.4		0.1	0.0
3 30 78	0.1	0.00	0.1	0.00	3.0	0.0	0.00	0.1	1.0	0.10	2.6	0.1	0.0	1.2	0.01	0.0	2.2	0.0	0.0	0.0
4 28 78	0.1	0.00			2.7	0.0	0.00	0.1	1.2		2.4	0.0		1.2	0.01	0.0	2.5		0.0	0.0
6 9 78	0.1	0.00			2.7	0.0	0.00	0.0	1.1		2.2	0.1		1.4	0.01	0.0	2.3		0.0	0.0
7 7 78	0.1	0.01	0.1	0.00	3.8	0.0	0.00	0.2	1.2	0.02	2.4	0.0	0.0	1.3	0.01	0.1	2.9	0.0	0.0	0.0
8 4 78	0.0	0.01			2.7	0.0	0.00	0.1	1.4		1.8	0.1		1.1	0.01	0.0	3.1		0.0	0.0
9 18 78	0.1	0.02	0.1	0.00	3.0	0.0	0.01	0.2	1.9	0.02	1.9	0.2	0.0	1.5	0.01	0.0	2.5	0.0	0.0	0.0
10 24 78	0.0	0.01	0.0	0.00	3.0	0.0	0.00	0.0	1.2	0.02	1.9	0.0	0.0	1.5	0.01	0.0	2.7	0.0	0.0	0.0
11 15 78	0.1	0.01			2.8	0.0	0.00	0.1	1.1		1.9	0.1		1.2	0.00	0.0	2.6		0.0	0.0
1 18 79	0.1	0.00			3.3	0.0	0.01	0.0	1.3		2.1	0.0		1.3	0.04	0.0	3.0		0.0	0.0
3 4 79	0.2	0.00			3.3	0.0	0.00	0.1	1.1		2.0	0.1		1.3	0.01	0.0	1.8		0.0	0.0
4 4 79	0.1	0.00	0.1	0.00	3.2	0.0	0.00	0.0	1.0	0.05	2.3	0.0	0.0	1.1	0.02	0.0	2.4	0.0	0.0	0.0
5 6 79	0.1	0.00			3.2	0.0	0.00	0.0	1.1		2.4	0.0		1.2	0.01	0.0	2.6		0.0	0.3
6 3 79	0.1	0.01			3.6	0.0	0.01	0.1	1.1		2.5	0.2		1.0	0.01	0.0	2.6		0.0	0.2
7 27 79	0.1	0.01			3.4	0.0	0.00	0.1	1.2		1.7	0.1		1.1	0.00	0.0	2.8		0.0	0.1
10 1 79	0.1	0.00			2.2	0.0	0.00	0.0	0.9		1.7	0.1		0.9	0.01	0.0	2.5		0.0	0.0

TABLE 54. WATER QUALITY FOR SITE 6152 JEFFERSON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UH/CM	MG/L				MILLIGRAMS PER LITER										
9 9 77	19	0.015			10	129	64	5.18	7.4		43	52	0	0.4	11	0.0					
10 19 77	8	0.2	9		8	82	42	2.28	7.2		18	22	0	1.1	14	0.1					
11 30 77	2	0.8	132*		270	98	66	2.28	7.4		29	35	0	1.6	19	0.8					
3 30 78	8	0.3			4	89	56	1.42	7.0		11	13	0	1.2	27	0.2					
4 28 78	17	0.4	58		5	96	54	2.14	7.6		23	28	0	0.6	19	0.0					
6 9 78	15	0.4				111	58	5.41	7.4		43	52	0	0.5	9	0.0					
7 7 78	35	0.02	61*		15	114	67	7.27	7.8		54	66	0	0.3	8	0.0					
8 4 78	27	0.1	42*		10	135	73	4.41	7.8		49	60	0	1.1	14	0.0					
9 18 78	16	0.15	53*		15	142	79	1.68	7.5		24	29	0	1.2	34	0.0					
10 24 78	6	0.02	54*		3	194	106	1.33	7.4	-18	20	25	0	0.4	58	0.0					
11 29 78	0	0.03	3		1	168	86	1.27	7.3		13	16	0	1.5	47	0.1					
3 4 79	0	4	40		80	187	98	1.32	7.0	0	7	9	0	0.7	58	0.6					
4 4 79	3	0.3	3		2	381	249	1.05	7.1		9	11	0	1.0	170	0.3					
5 6 79	9	0.02	20	0.06	9	249	186	1.21	7.4	-18	20	25	0	0.3	120	0.1					
6 3 79	13	0.01	5	0.00	3	310	211	1.35	7.5	-11	21	26	0	0.2	130	0.0					
7 27 79	24	0.06	15		70	222	116	2.06	8.0	-47	52	63	0	0.6	44	0.0	0.0	0.11	0.75	0.05	0.00
10 1 79	14	0.025	55		160	209	138	2.82	8.1	-60	69	83	1	1.3	38	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 9 77	0.0	0.00			16	0.0	0.00	0.1	0.6		3.9	1.8		1.7	0.00	0.0	1.6		0.0	0.0
10 19 77	0.0	0.00	0.1	0.00	8.6	0.0	0.00	0.0	0.4	0.03	2.5	0.2	0.0	0.9	0.00	0.0	1.5	0.0	0.0	0.1
11 30 77	0.0	0.00	0.0	0.00	12	0.0	0.00	0.0	2.2	0.10	4.0	0.0	0.0	1.3	0.02	0.0	2.4	0.1	0.0	0.0
3 30 78	0.1	0.00	0.0	0.00	9.1	0.0	0.00	0.1	1.7	0.15	3.5	0.0	0.0	1.3	0.00	0.0	2.0	0.0	0.0	0.0
4 28 78	0.1	0.00			10	0.0	0.00	0.1	1.2		3.6	0.1		1.2	0.00	0.0	1.9		0.0	0.0
6 9 78	0.0	0.00			14	0.0	0.00	0.1	0.1		4.4	0.1		0.7	0.00	0.0	1.4		0.0	0.1
7 7 78	0.1	0.02	0.0	0.00	16	0.1	0.00	0.1	0.5	0.05	4.9	0.5	0.0	0.8	0.02		1.2	0.0	0.2	0.0
8 4 78	0.1	0.01			17	0.0	0.00	0.2	0.8		4.8	0.6		1.3	0.01	0.0	1.5		0.0	0.0
9 18 78	0.1	0.01			15	0.0	0.01	0.4	3.2		4.2	0.2		1.5	0.01	0.0	1.9		0.0	0.0
10 24 78	0.1	0.01			21	0.0	0.00	0.4	1.4		6.1	0.3		1.4	0.01	0.0	2.2		0.1	0.0
11 29 78	0.0	0.00			16	0.0	0.01	0.1	1.8		4.9	0.1		1.3	0.03	0.0	2.2		0.1	0.1
3 4 79	0.1	0.00	0.0	0.00	19	0.0	0.01	0.1	1.7	0.09	7.3	0.1	0.0	0.9	0.01	0.0	1.4	0.0	0.0	0.0
4 4 79	0.1	0.01	0.1	0.00	44	0.0	0.00	0.0	2.2	0.20	17	0.0	0.0	1.6	0.01	0.0	2.6	0.1	0.1	0.0
5 6 79	0.1	0.01			40	0.0	0.00	0.1	0.5		10	0.3		1.3	0.01	0.0	1.8		0.0	0.2
6 3 79	0.1	0.01			43	0.0	0.01	0.2	0.1		19	0.3		1.2	0.02	0.0	1.0		0.0	0.2
7 27 79	0.1	0.00	0.0	0.00	24	0.0		1.1	0.9	0.30	7.6	2.5	0.0	1.4	0.01	0.0	1.3	0.1	0.0	0.0
10 1 79	0.1	0.01			31	0.0		3.3	1.5		7.5	7.0		1.5	0.02	0.1	2.3		0.0	0.0

TABLE 55. WATER QUALITY FOR SITE 6153 JEFFERSON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	OR P
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
9 8 77	15	0.05			10	385	257	1.17	5.4		0	0	0	0.8	170	0.2					
10 19 77	8	0.04	2		0	343	247	0.94	4.9		0	0	0	1.3	170	0.2					
11 30 77	4	0.2	72*		4	365	253	1.01	5.3		0	0	0	1.9	170	0.2					
3 2 78	1	0.09			10	406	255	1.03	5.2		0	0	0	0.8	180	0.1					
3 30 78	10	0.25			4	399	281	1.07	5.2		0	0	0	1.1	190	0.2					
4 28 78	13	0.15			10	367	226	1.02	5.2		0	0	0	1.1	160	0.1					
6 9 78	12	0.15				374	221	1.20	5.1		0	0	0	1.1	150	0.1					
7 7 78	16	0.08	51*		4	379	261	1.14	5.4		0	0	0	1.0	170	0.1					
8 4 78	18	0.1	30*		8	421	289	1.01	4.9		0	0	0	1.3	200	0.1					
9 15 78	17	0.04				228	124	1.00	5.5		0	0	0	1.3	81	0.1					
10 24 78	7	0.002	21*		3	423	314	0.91	5.1	7	0	0	0	1.3	220	0.0					
11 15 78	4	0.002	45		20	454	348	1.12	4.8	7	0	0	0	1.1	240	0.0					
1 18 79	0	0.09	8		3	397	251	1.18	5.1		0	0	0	0.9	160	0.3					
3 4 79	6	0.3				171	86	1.21	5.8	7	0	0	0	1.1	51	0.4					
4 4 79	6	0.09	31		10	339	228	1.22	5.2		0	0	0	1.1	150	0.3					
5 6 79	9	0.05	21	0.35	5	405	323	1.13	4.9	10	0	0	0	0.8	220	0.4					
6 3 79	14	0.02	14	0.01	15	387	277	1.09	5.0	8	0	0	0	1.3	190	0.1					
7 27 79	21	0.01	5		15	470	300	1.02	5.1	4	0	0	0	1.4	210	0.3	0.0	0.06	0.00	0.00	0.0
10 1 79	15	0.003	10		15	401	287	1.03	4.9	9	0	0	0	1.2	200	0.2			0.00	0.00	0.0

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 8 77	0.4	0.00			47	0.0	0.00	0.0	2.5		21	0.9		1.5	0.00	0.0	5.5		0.0	0.
10 19 77	0.3	0.00	0.1	0.00	38	0.0	0.00	0.0	1.4	0.15	18	0.6	0.1	1.0	0.02	0.0	4.8	0.2	0.0	0.
11 30 77	0.4	0.00	0.0	0.00	38	0.0	0.00	0.0	2.6	0.30	21	0.4	0.0	1.0	0.07	0.0	5.7	0.3	0.1	0.
3 2 78	0.5	0.02			36	0.0	0.01	0.1	2.6		23	0.4		1.3	0.08	0.0	5.7		0.2	0.
3 30 78	0.4	0.00	0.0	0.00	42	0.0	0.00	0.0	2.7	0.25	25	1.6	0.1	1.4	0.10	0.0	6.4	0.2	0.0	0.
4 28 78	0.4	0.02			30	0.0	0.00	0.0	2.5		21	0.4		1.2	0.05	0.0	6.1		0.0	0.
6 9 78	0.3	0.01			38	0.0	0.00	0.0	2.4		20	0.4		1.4	0.07	0.0	5.1		0.0	0.
7 7 78	0.3	0.03	0.0	0.00	44	0.1	0.00	0.1	2.3	0.15	23	0.2	0.0	1.0	0.07		5.8	0.2	0.3	0.
8 4 78	0.4	0.02			49	0.0	0.01	0.0	2.7		20	0.3		1.2	0.08	0.1	6.8		0.1	0.
9 15 78	0.2	0.01	0.0	0.00	20	0.0	0.01	0.1	2.0	0.08	8.2	0.3	0.0	0.8	0.02	0.0	4.3	0.1	0.0	0.
10 24 78	0.4	0.02	0.0	0.00	51	0.0	0.00	0.0	2.3	0.25	19	0.4	0.0	1.3	0.08	0.0	6.0	0.2	0.1	0.
11 15 78	0.7	0.02			67	0.0	0.01	0.1	2.6		25	0.6		1.6	0.11	0.1	6.7		0.2	0.
1 18 79	0.4	0.00			48	0.0	0.01	0.0	2.3		19	0.7		1.1	0.10	0.1	5.9		0.1	0.
3 4 79	0.2	0.01			16	0.0	0.00	0.1	1.4		6.1	0.3		0.7	0.04	0.0	3.2		0.1	0.
4 4 79	0.3	0.01			43	0.0	0.00	0.0	1.8		20	0.6		0.9	0.07	0.0	4.3		0.0	0.
5 6 79	0.4	0.02			62	0.0	0.01	0.0	2.1		24	0.4		1.1	0.08	0.0	4.8		0.1	0.
6 3 79	0.4	0.02			50	0.0	0.02	0.1	2.4		21	0.3		1.3	0.09	0.1	6.1		0.1	0.
7 27 79	0.3	0.02	0.0	0.00	53	0.0	0.00	0.0	2.1	0.15	21	0.4	0.0	1.0	0.02	0.0	5.2	0.2	0.1	0.
10 1 79	0.4	0.01			49	0.0			2.8		21	0.5		1.4	0.09	0.1	5.8		0.1	0.

TABLE 56. WATER QUALITY FOR SITE 6156 JEFFERSON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
10 1 79		0.02			25	382	197	1.10	4.7		0	0	0	2.1	130						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 1 79	0.8	0.01			29	0.0	0.00		2.1		17	2.6		1.7	0.10	0.0	5.2		0.0	0.1

TABLE 57. WATER QUALITY FOR SITE 6161 LAWRENCE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
NO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 15 77	19	1.5			55	306	139	7.82	6.9		86	105	0	6.5	16	0.4					
10 17 77	8	1.5	17		25	301	158	3.10	7.0		80	97	0	7.0	40	0.2					
11 28 77	3	3	57*		10	260	166	2.51	8.0		72	87	1	7.3	50	0.9					
3 1 78	1	0.6			10	288	148	3.30	7.8		88	106	0	6.1	34	0.2					
3 28 78	8	3			8	242	128	1.89	7.9		45	54	0	8.3	45	1.2					
4 27 78	10	1.5			10	254	126	2.81	8.0		72	87	1	5.5	35	0.0					
6 1 78		0.6			50	294	147	9.43	8.0		126	152	1	4.4	12	0.3					
6 29 78	19	1.0	66*			253	126	4.33	8.0		80	97	1	7.2	21	0.1					
8 3 78	18	0.4	52*		45	314	182	8.59	8.3		136	162	2	5.0	19	0.4					
9 14 78	18	0.03	19*		30	332	192	7.08	8.5		143	168	3	6.1	23	0.3					
10 17 78	8	1.0	28*		25	230	139	2.58	7.9		47	56	0	6.4	42	1.2					
11 16 78	7	0.4	14		30	343	214	7.66	7.6	-130	143	173	0	8.3	27	0.1					
1 11 79	0	0.4	6		5	270	161	3.20	7.8		69	83	0	6.0	42	1.3					
3 1 79	1	1.5	3		6	187	114	2.61	7.1		39	47	0	6.3	33	1.4					
3 29 79	9	2.0			10	216	143	2.54	7.9	-46	61	74	0	6.2	46	0.4					
5 4 79	12	0.4	6	0.00	15	251	128	3.40	8.1	-81	84	102	1	4.3	29	0.2					
6 1 79	14	0.2	16		40	273	162	2.43	8.1	-70	76	92	1	8.5	47	0.9					
7 11 79	21	0.2	11		85	299	182	6.50	8.4	-110	125	148	2	6.0	23	0.8	0.0	0.88	5.55	0.55	0.09
10 3 79	14	0.08	0		90	321	199	3.68	8.2	-69	99	119	1	8.4	45	0.3					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
NO DA YR	MILLIGRAMS PER LITER																			
8 15 77	0.0	0.00			38	0.0	0.00	1.1	4.0		7.7	0.9		4.2	0.00	0.0	3.3		0.0	0.0
10 17 77	0.1	0.03	0.0	0.00	37	0.0	0.00	0.8	4.0	0.15	8.2	0.2	0.0	4.4	0.01	0.0	2.8	0.1	0.0	0.0
11 28 77	0.1	0.00	0.0	0.00	38	0.0	0.00	0.4	3.2	0.20	9.3	0.1	0.0	3.4	0.00	0.0	2.8	0.1	0.1	0.0
3 1 78	0.0	0.01			30	0.0	0.01	0.4	2.8		9.2	0.5		4.1	0.00	0.0	3.6		0.1	0.0
3 28 78	0.0	0.00	0.0	0.00	25	0.0	0.00	0.1	3.4	0.08	6.8	0.0	0.1	4.1	0.00	0.0	1.4	0.1	0.0	0.0
4 27 78	0.0	0.02	0.0	0.00	26	0.0	0.00	0.2	1.7	0.10	8.3	0.1	0.0	3.8	0.00	0.0	0.6	0.1	0.0	0.0
6 1 78	0.1	0.01			30	0.0	0.02	1.0	1.8		9.7	1.2		3.4	0.03	0.1	2.5		0.2	0.0
6 29 78	0.1	0.02	0.0	0.00	24	0.0	0.02	1.1	5.1	0.10	7.4	0.8	0.0	3.6	0.00	0.0	2.7	0.1	0.0	0.0
8 3 78	0.1	0.03			46	0.0	0.01	0.8	2.4		12	0.6		4.1	0.02	0.1	3.6		0.1	0.0
9 14 78	0.1	0.03			44	0.0	0.01	0.7	4.4		13	0.4		4.8	0.04	0.2	3.4		0.3	0.0
10 17 78	0.1	0.02	0.0	0.00	37	0.0	0.00	0.2	4.3	0.15	5.8	0.0	0.0	2.6	0.01	0.1	3.0	0.1	0.1	0.0
11 16 78	0.2	0.01			60	0.0	0.00	0.4	7.4		14	0.2		5.2	0.02	0.1	2.5		0.1	0.0
1 11 79	0.1	0.00	0.0	0.00	42	0.0	0.01	0.2	2.8	0.25	8.6	0.1	0.0	3.2	0.03	0.2	3.6	0.1	0.2	0.1
3 1 79	0.1	0.01			29	0.0	0.01	0.2	3.0		4.8	0.1		3.2	0.00	0.0	2.5		0.0	0.0
3 29 79	0.1	0.02	0.1	0.00	37	0.0	0.01	0.1	2.0	0.20	7.4	0.0	0.0	2.5	0.03	0.1	1.2	0.1	0.1	0.1
5 4 79	0.1	0.03			26	0.0	0.01	0.4	1.7		8.7	0.1		2.9	0.00	0.1	1.1		0.0	0.1
6 1 79	0.1	0.02			38	0.0	0.00	0.2	2.0		7.4	0.1		3.2	0.00	0.0	2.4		0.0	0.0
7 11 79	0.1	0.01	0.1	0.00	44	0.0	0.00	0.8	4.2	0.35	9.7	2.0	0.0	4.1	0.02	0.1	4.1	0.1	0.1	0.1
10 3 79	0.1	0.04			49	0.0	0.01	0.7	8.9		10	1.2		4.6	0.01	0.1	4.6		0.0	0.0

TABLE 58. WATER QUALITY FOR SITE 6162 LAWRENCE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L	MILLIGRAMS PER LITER													
8 15 77	15	1.5			15	470	282	1.92	7.4		64	78	0	16	80	13					
10 17 77	9	3	13		20	397	255	2.03	7.4		71	87	0	19	74	7.0					
11 28 77	5	2.0	102#		40	390	279	2.33	7.3		77	94	0	22	83	6.0					
1 18 78	6	0.8			80	408	239	2.43	8.2		72	86	1	17	66	5.5					
3 1 78	4	2.0			20	453	264	2.41	7.4		87	106	0	20	76	4.9					
3 28 78	11	4			4	389	226	2.39	8.0		69	83	1	15	69	4.4					
4 27 78	10	3			5	422	248	2.28	8.3		82	98	1	18	75	4.5					
6 1 78		2.5			5	427	238	1.65	7.9		82	99	0	17	72	6.4					
6 29 78	14	3	59#			433	268	1.74	8.0		80	97	1	50	70	4.0					
8 3 78	14	2.5	26#		8	481	282	2.50	8.2		100	120	1	24	74	5.2					
9 14 78	16	0.8	18#		4	515	312	1.78	8.0		108	130	1	21	110	4.7					
10 17 78	12	0.7	57#		65	418	263	2.43	8.3		79	94	1	18	77	5.0					
11 16 78	9	0.3	28		40	481	285	2.19	8.2		66	79	1	19	110						
1 11 79	0	0.4			180	372	253	2.72	8.2		74	88	1	20	64	6.1					
3 1 79	2	0.4	20		30	276	179	2.32	7.1	-39	44	54	0	36	34	4.1					
3 29 79	7	2.0			20	384	222	2.72	8.1		74	89	1	18	58	3.8					
5 4 79	8	1.5	9	0.00	9	422	217	1.64	8.1	-79	79	95	1	15	70	4.2					
6 1 79	13	3	19	0.00	15	416	231	2.20	8.3	-78	91	108	1	17	62	4.9					
7 11 79	22	0.5	35#		35	499	292	2.47	8.4		99	117	2	19	86	4.3	1.4	0.06	0.70	0.40	0.01
10 3 79	12	0.3	45		65	530	346	2.07	8.3	-100	110	131	2	24	120	4.5					

Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 15 77	0.0	0.00			54	0.0	0.00	0.2	2.4		17	0.1		9.8	0.01	0.0	3.2		0.0	0.0
10 17 77	0.1	0.00	0.1	0.00	55	0.0	0.00	0.2	2.2	0.15	12	0.1	0.0	9.2	0.00	0.0	3.9	0.1	0.0	0.0
11 28 77	0.0	0.00	0.1	0.00	61	0.0	0.00	0.3	2.7	0.35	19	0.1	0.0	8.2	0.00	0.0	4.6	0.2	0.0	0.0
1 18 78	0.0	0.00			53	0.0	0.00	0.2	2.4		14	0.1		8.1	0.00	0.0	4.8		0.0	0.0
3 1 78	0.1	0.01			53	0.0	0.00	0.3	2.4		20	0.1		9.2	0.01	0.0	3.8		0.1	0.0
3 28 78	0.1	0.00	0.0	0.00	46	0.0	0.00	0.2	2.5	0.15	17	0.1	0.0	9.0	0.01	0.0	3.0	0.1	0.0	0.0
4 27 78	0.1	0.01	0.1	0.00	50	0.0	0.00	0.1	2.1	0.20	18	0.1	0.0	8.6	0.01	0.0	2.8	0.1	0.0	0.0
6 1 78	0.1	0.01			40	0.0	0.02	0.1	2.4		12	0.1		8.1	0.03	0.1	3.3		0.1	0.0
6 29 78	0.1	0.01	0.1	0.00	45	0.0	0.02	0.2	2.4	0.15	18	0.1	0.0	9.2	0.00	0.1	3.1	0.1	0.0	0.0
8 3 78	0.1	0.02			61	0.0	0.01	0.1	2.7		17	0.1		9.3	0.03	0.1	4.4		0.1	0.0
9 14 78	0.2	0.03			58	0.0	0.01	0.2	2.9		17	0.0		10	0.04	0.2	4.8		0.3	0.0
10 17 78	0.2	0.02	0.0	0.00	63	0.0	0.00	0.3	3.7	0.30	15	0.1	0.0	6.8	0.03	0.1	4.4	0.1	0.1	0.0
11 16 78	0.2	0.02			73	0.0	0.00	0.1	2.4		17	0.1		8.9	0.03	0.1	4.8		0.1	0.0
1 11 79	0.3	0.00	0.1	0.00	61	0.0	0.01	0.6	2.5	0.45	14	0.2	0.0	7.5	0.01	0.1	4.5	0.1	0.0	0.1
3 1 79	0.1	0.00			40	0.0	0.00	0.3	2.8		8.1	0.1		5.2	0.02	0.1	3.3		0.0	0.0
3 29 79	0.1	0.01	0.1	0.00	55	0.0	0.00	0.2	2.1	0.30	12	0.1	0.0	7.3	0.02	0.1	2.6	0.1	0.2	0.0
5 4 79	0.1	0.02			36	0.0	0.01	0.2	2.1		11	0.1		7.5	0.01	0.1	3.6		0.0	0.1
6 1 79	0.2	0.03			45	0.1	0.01	0.4	1.6		14	0.2		5.3	0.04	0.1	3.7		0.2	0.0
7 11 79	0.2	0.02	0.1	0.00	68	0.0	0.03	0.2	3.2	0.40	16	0.1	0.0	10	0.05	0.2	4.6	0.2	0.1	0.0
10 3 79	0.1	0.02			72	0.0	0.01	0.1	3.7		21	0.0		12	0.02	0.1	4.5		0.1	0.0

TABLE 59. WATER QUALITY FOR SITE 6163 LAWRENCE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
10 17 77	9	1.5	105		15	1220	1050	1.20	7.7		151	183	1	17	640	0.2					
11 28 77	3	0.9	78*		10	1010	800	1.49	8.3		93	111	2	24	450	0.5					
1 18 78	1	0.8			10	1480	1150	1.30	8.2		112	133	2	9.1	730	0.3					
3 1 78	2	0.5			8	1510	1130	1.21	7.6		113	137	0	14	730	0.3					
3 28 78	10	2.0			8	940	684	1.28	8.3		119	141	2	22	390	0.8					
4 27 78	11	1.5			0	1330	984	1.25	8.2		93	111	1	16	620	0.1					
6 1 78		1.5			0	1800	1470	1.12	7.9		208	250	2	9.3	950	0.6					
6 29 78	20	1.5	60*			1020	704	1.13	8.3		132	156	2	17	430	0.5					
8 3 78	21	0.5	156*		5	1740	1590	1.11	7.9		96	115	1	14	1100	0.0					
9 14 78	19	0.02	23*		0	1770	1750	1.04	8.0		189	227	2	11	1200	0.2					
10 17 78	10	0.9	16*		15	660	480	1.23	8.2		91	109	1	9.4	280	0.4					
11 16 78	8	0.1	172		5	1480	1220	1.16	7.8		125	150	1	12	800	0.0					
1 11 79	0	0.15	3		4	1240	909	1.30	7.9		134	162	1	12	540	0.4					
3 1 79	1	0.5	6		15	581	380	1.56	7.8		66	80	0	12	200	0.6					
3 29 79	3	2.5			45	661	458	1.64	8.3		91	108	1	18	230	0.4					
5 4 79	11	0.4	143	0.00	10	1240	624	1.40	8.1		130	156	1	18	340	0.3					
6 1 79	14	0.7	104	0.00	45	1180	837	1.31	8.2		123	146	2	12	500	1.2					
7 11 79	22	0.1	33*		7	1860	1520	0.99	8.0		118	141	1	8.9	1100	0.1	0.0	0.03	0.35	0.35	0.05
10 3 79	14	0.1	7		10	1440	1230	1.19	8.1		112	134	1	21	790	0.7					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 17 77	0.2	0.03	0.1	0.00	200	0.0	0.00	0.1	3.8	0.60	74	0.3	0.0	13	0.02	0.0	2.2	0.4	0.1	0.1
11 28 77	0.2	0.01	0.1	0.00	170	0.0	0.00	0.2	4.1	0.95	71	0.2	0.0	12	0.02	0.1	3.0	0.4	0.1	0.0
1 18 78	0.2	0.02			220	0.0	0.00	0.2	5.0		100	0.2		12	0.03	0.0	3.2		0.0	0.0
3 1 78	0.3	0.02			200	0.0	0.01	0.2	6.1		99	0.3		15	0.03	0.1	2.7		0.3	0.0
3 28 78	0.2	0.00			120	0.0	0.00	0.2	4.5		55	0.1		15	0.02	0.0	2.2		0.0	0.0
4 27 78	0.2	0.03	0.0	0.00	170	0.0	0.00	0.1	4.8	0.65	89	0.2	0.0	14	0.04	0.1	1.6	0.4	0.2	0.0
6 1 78	0.3	0.05			230	0.0	0.00	0.1	6.1		130	0.2		14	0.04	0.2	2.0		0.3	0.0
6 29 78	0.2	0.02	0.0	0.00	99	0.1	0.02	0.3	4.4	0.40	61	0.2	0.0	9.7	0.00	0.1	1.6	0.3	0.2	0.0
8 3 78	0.3	0.05			270	0.0	0.01	0.2	8.3		140	0.7		18	0.09	0.3	3.3		0.3	0.0
9 14 78	0.4	0.06			280	0.0	0.01	0.2	8.4		140	0.6		15	0.07	0.4	3.4		0.3	0.0
10 17 78	0.2	0.02	0.0	0.00	91	0.0	0.00	0.1	3.8	0.50	30	0.1	0.0	5.7	0.02	0.1	2.8	0.2	0.0	0.0
11 16 78	0.3	0.03			230	0.0	0.01	0.1	5.0		92	0.3		12	0.08	0.2	2.8		0.2	0.0
1 11 79	0.3	0.01	0.0	0.00	180	0.0	0.00	0.2	4.2	1.0	69	0.2	0.0	10	0.03	0.2	2.7	0.3	0.1	0.0
3 1 79	0.2	0.02			79	0.0	0.00	0.2	2.8		32	0.1		5.8	0.03	0.1	2.1		0.1	0.0
3 29 79	0.2	0.01			100	0.0	0.01	0.1	2.8		35	0.1		10	0.02	0.1	1.7		0.1	0.1
5 4 79	0.2	0.04			120	0.0	0.01	0.1	4.4		48	0.2		11	0.03	0.2	2.0		0.2	0.1
6 1 79	0.3	0.03			160	0.1		0.2	5.3		64	0.2		12	0.04	0.1	2.4		0.2	0.1
7 11 79	0.3	0.04	0.0	0.00	220	0.0	0.00	0.2	6.8	1.5	130	0.4	0.1	14	0.09	0.3	3.0	0.5	0.6	0.0
10 3 79	0.2	0.09			240	0.0	0.00	0.2	5.4		92	0.5		13	0.03	0.2	2.6		0.4	0.1

TABLE 60. WATER QUALITY FOR SITE 6166 LAWRENCE COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
8 15 77	17	1.0			25	588	327	2.79	8.0		143	172	1	9.7	100	0.3					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 15 77	0.1	0.02			77	0.0	0.00	0.2	2.7		26	0.2		8.4	0.01	0.0	4.9		0.0	0.1

TABLE 61. WATER QUALITY FOR SITE 6170 LYCOMING COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
5 2 78	10	3			3	412	130	0.38	3.1		0	0	0	0.4	99	0.1					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
5 2 78	3.6	0.00	0.0	0.00	6.0	0.0	0.03	1.9	0.9	0.05	5.4	0.6	0.0	1.0	0.07	0.0	4.5	0.0	0.0	0.1

TABLE 62. WATER QUALITY FOR SITE 6171 LYCOMING COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	SNO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
9 13 77	14	0.2			15	35	22	0.98	5.9		0	0	0	0.6	10	0.6					
10 27 77	17	6	18		8	40	26	1.27	5.5		0	0	0	1.1	11	0.5					
5 2 78	8	0.8			0	30	22	1.16	5.9		1	1	0	0.7	9	0.5					
6 12 78	14	2.0				29	20	0.90	5.1		0	0	0	0.8	10	0.5					
7 10 78	16	0.4	39*		4	28	21	0.99	5.5		0	0	0	0.6	10	0.4					
8 7 78	17	1.5	36*		5	30	22	0.79	5.3		0	0	0	0.7	9	0.7					
9 20 78	13	0.07	24*		0	29	22		5.5		0	0	0		10	0.5					
10 26 78	8	0.25	24*		4	32	23	1.06	4.9	5	0	0	0	0.9	10	0.5					
12 1 78	0	0.15	8		0	29	22	1.05	4.9		0	0	0	0.4	10	0.5					
4 12 79	3	0.4	3		0	29	23	0.96	5.4	5	0	0	0	0.9	10	0.6					
5 7 79	9	0.06	4	0.00	1	29	24	0.97	5.8	5	1	1	0	0.4	12	0.3					
7 30 79	21	0.25	5		8	40	24	1.03	6.0	8	1	1	0	0.9	10	0.4	0.1	0.01	0.40	0.10	0.00
9 28 79	11	0.15	15		0	27	21	0.95	5.9	4	0	0	0	0.9	9	0.5					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 13 77	0.1	0.00			2.2	0.0	0.00	0.0	0.6		1.1	0.0		1.0	0.00	0.0	1.8		0.0	0.0
10 27 77	0.1	0.02	0.0	0.00	3.4	0.0	0.01	0.1	1.0	0.02	1.4	0.0	0.0	1.0	0.01	0.0	2.0	0.0	0.0	0.1
5 2 78	0.1	0.00	0.0	0.00	2.4	0.0	0.00	0.0	0.8	0.02	1.3	0.0	0.0	0.6	0.01	0.0	1.9	0.0	0.0	0.0
6 12 78	0.1	0.00			2.2	0.0	0.00	0.0	0.6		1.2	0.0		0.6	0.00	0.0	1.3		0.0	0.0
7 10 78	0.0	0.00	0.0	0.00	2.4	0.0	0.00	0.0	0.5	0.02	1.1	0.0	0.0	0.5	0.00	0.0	1.9	0.0	0.0	0.0
8 7 78	0.0	0.01			2.1	0.0	0.01	0.0	0.6		0.9	0.0		0.6	0.03	0.1	2.3		0.1	0.0
9 20 78	0.0	0.00			2.6	0.0	0.01	0.0	0.6		1.1	0.0		0.6	0.01	0.0	2.1		0.0	0.1
10 26 78	0.1	0.00	0.0	0.01	2.7	0.0	0.01	0.1	0.8	0.09	1.0	0.0	0.1	0.8	0.01	0.0	1.9	0.0	0.0	0.0
12 1 78	0.1	0.01			2.6	0.0	0.00	0.0	0.6		1.1	0.0		0.5	0.02	0.1	2.0		0.1	0.1
4 12 79	0.0	0.00	0.1	0.00	2.7	0.0	0.00	0.0	0.6	0.04	1.2	0.0	0.0	0.5	0.00	0.0	1.7	0.0	0.0	0.2
5 7 79	0.0	0.00			2.7	0.0	0.00	0.0	0.6		1.4	0.0		0.5	0.00	0.0	1.7		0.0	0.1
7 30 79	0.0	0.01	0.0	0.00	2.4	0.0	0.00	0.1	0.5	0.03	1.4	0.0	0.0	0.7	0.03	0.1	2.2	0.0	0.1	0.0
9 28 79	0.0	0.00			2.2	0.0	0.00	0.0	0.6		1.1	0.0		0.5	0.01	0.0	1.9		0.0	0.0

TABLE 63. WATER QUALITY FOR SITE 6172 LYCOMING COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
9 13 77	15	0.09			30	77	39	0.71	4.0		0	0	0	1.2	24	0.0					
10 27 77	11	2.5	18		20	133	53	0.76	4.1		0	0	0	1.3	33	0.1					
12 14 77	1	1.0			10	117	50	0.76	4.0		0	0	0	1.1	30	0.1					
5 2 78	12	1.0			15	142	68	0.68	4.1		0	0	0	0.9	48	0.1					
6 12 78	19	2.0				78	35	0.73	4.0		0	0	0	1.0	23	0.0					
7 10 78	22	0.5	27*		10	178	85	0.69	3.9		0	0	0	1.3	60	0.0					
8 7 78	20	5	24*		40	51	26	0.58	3.9		0	0	0	1.0	15	0.1					
9 20 78	15	2.0	17*		40	70	27	0.59	3.8		0	0	0	0.9	16	0.0					
10 26 78	7	0.3	21*		15	103	49	0.54	4.1	17	0	0	0	1.5	32	0.1					
12 1 78	0	0.25	9		7	80	37	0.59	3.8		0	0	0	1.0	22	0.2					
9 28 79	11	0.6	4		25	70	43	0.70	4.1	18	0	0	0	1.4	27	0.0		0.13	0.00	0.00	0.03

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 13 77	0.8	0.00			2.9	0.0	0.00	0.6	0.5		2.0	1.1		1.8	0.00	0.0	1.6		0.0	0.0
10 27 77	1.3	0.00	0.0	0.00	4.4	0.0	0.03	0.4	0.6	0.02	3.4	1.3	0.0	1.1	0.04	0.0	2.3	0.0	0.0	0.1
12 14 77	1.8	0.00	0.0	0.00	3.3	0.0	0.00	0.4	0.4	0.03	3.6	1.5	0.0	1.0	0.04	0.0	2.7	0.0	0.1	0.1
5 2 78	1.8	0.00	0.0	0.00	4.6	0.1	0.02	0.3	0.9	0.03	5.0	2.1	0.0	1.0	0.08	0.0	1.3	0.0	0.0	0.1
6 12 78	0.9	0.00			2.7	0.0	0.01	0.4	0.2		2.4	0.9		0.8	0.04	0.0	1.1		0.0	0.1
7 10 78	1.4	0.01	0.0	0.00	6.3	0.1	0.01	0.7	0.4	0.03	6.4	2.7	0.0	0.9	0.00	0.0	2.0	0.0	0.1	0.2
8 7 78	0.5	0.01			1.8	0.0	0.01	0.7	0.2		1.1	0.6		0.7	0.05	0.1	1.8		0.2	0.0
9 20 78	0.5	0.00	0.0	0.00	2.0	0.0	0.02	0.6	0.2	0.04	1.1	0.7	0.0	0.6	0.02	0.0	1.8	0.0	0.0	0.1
10 26 78	0.9	0.00	0.0	0.01	3.1	0.0	0.01	0.4	0.5	0.09	2.5	1.2	0.1	1.0	0.05	0.0	2.3	0.0	0.1	0.1
12 1 78	0.8	0.00			2.5	0.0	0.01	0.3	0.4		1.8	1.0		0.8	0.03	0.0	2.6		0.0	0.1
9 28 79	0.8	0.00			3.0	0.0	0.03	0.4	0.7		2.8	1.6		0.8	0.04	0.0	2.0		0.0	0.1

TABLE 64. WATER QUALITY FOR SITE 6173 LYCOMING COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER										
9 13 77	14	0.07			8	370	156	0.49	3.2		0	0	0.4	120	0.0					
10 27 77	11	0.15	10		0	535	173	0.39	3.2		0	0	0.4	130	0.1					
6 12 78	15	0.25				402	111	0.42	3.1		0	0	0.6	84	0.0					
7 10 78	15	0.09	21*		4	424	131	0.42	3.2		0	0	0.4	99	0.0					
8 7 78	16	0.3	19*		0	406	111	0.43	3.0		0	0	0.6	80	0.0					
9 20 78	12	0.02	10		10	640	125	0.44	4.0		0	0	0.5	83	0.0					
10 26 78	9	0.05	19*		4	399	139	0.45	3.4	68	0	0	0.5	100	0.0					
12 1 78	5	0.02	11		1	450	147	0.45	3.2		0	0	0.3	110	0.0					
4 12 79	7	0.09	4		1	482	136	0.33	3.3	79	0	0	0.7	110	0.0					
5 7 79	11	0.09	1	0.00	0	478	168	0.30	3.1	80	0	0	0.3	140	0.0					
6 4 79	15	0.05	2	0.00	0	459	171	0.33	3.1	70	0	0	0.4	130	0.1					
9 28 79	11	0.04	7		5	286	164	0.35	3.2	65	0	0	0.7	130	0.0		0.03	0.00	0.00	0.03

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 13 77	4.7	0.00			9.2	0.0	0.02	0.8	1.0		7.8	1.2		1.5	0.09	0.0	6.2		0.0	0.2
10 27 77	5.8		0.0	0.00	8.6	0.1	0.05	1.9	1.0	0.05	6.9	1.0	0.0	1.1	0.11	0.0	6.7	0.0	0.0	0.1
6 12 78	4.2	0.00			5.8	0.1	0.04	0.7	0.9		4.8	0.6		1.1	0.08	0.0	3.8		0.1	0.1
7 10 78	3.4	0.00	0.0	0.00	6.9	0.0	0.02	0.7	0.8	0.04	5.9	0.7	0.0	0.8	0.00	0.0	5.2	0.0	0.0	0.1
8 7 78	2.3	0.01			5.2	0.1	0.03	0.9	1.0		4.9	0.8		0.9	0.10	0.1	5.8		0.2	0.1
9 20 78	6.5	0.00	0.0	0.00	6.6	0.0	0.04	5.6	0.8	0.08	4.8	0.7	0.0	0.8	0.08	0.0	6.8	0.0	0.0	0.2
10 26 78	4.0	0.00			7.9	0.0	0.02	0.5	0.8		6.5	0.9		0.9	0.09	0.0	5.8		0.0	0.2
12 1 78	5.9	0.00			7.9	0.1	0.03	0.8	0.8		6.8	0.9		1.0	0.12	0.0	6.7		0.1	0.2
4 12 79	5.1	0.00	0.1	0.00	5.3	0.1	0.03	1.5	0.8	0.06	5.2	0.6	0.0	0.8	0.10	0.1	4.3	0.0	0.2	0.2
5 7 79	5.8	0.00			6.8	0.0	0.04	1.1	0.8		5.6	0.7		0.8	0.08	0.0	4.6		0.0	0.2
6 4 79	6.3	0.01			7.2	0.0	0.02	0.9	0.8		6.3	0.8		0.9	0.09	0.0	5.4		0.1	0.2
9 28 79	6.0	0.00			6.9	0.1		0.9	1.4		6.0	0.8		1.3	0.12	0.0	5.8		0.0	0.0

TABLE 65. WATER QUALITY FOR SITE 6176 LYCOMING COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
9 28 79	11	0.002			10	958	296	0.25	2.6		0	0	0	0.4	230	0.0					

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 28 79	13	0.03			10	0.1	0.05	13	1.2		7.6	1.2		1.0	0.15	0.1	6.5		0.0	0.2

TABLE 66. WATER QUALITY FOR SITE 6179 LYCOMING COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
9 28 79	11	0.3			4	419	137	0.44	3.2		0	0	0	0.6	100						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 28 79	5.9	0.00			7.4	0.0	0.02		0.9		6.0	1.0		1.0	0.10	0.0	5.8		0.0	0.1

TABLE 67. WATER QUALITY FOR SITE 6181 MERCER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
10 17 77	7	0.2	4		15	95	52	1.67	7.6		11	14	0	2.0	21	0.2					
11 28 77	2	1.0	68*		10	93	57	1.44	7.2		7	8	0	2.0	26	0.2					
1 19 78	1	0.5			0	99	55	1.56	7.0		7	9	0	2.1	24	0.1					
3 1 78	1	0.6			7	101	58	1.42	7.2		11	13	0	3.4	24	0.2					
3 28 78	8	1.5			8	77	52	1.23	6.7		7	8	0	2.5	24	0.3					
4 27 78	11	0.5			10	88	52	1.30	7.0		8	10	0	2.6	26	0.1					
6 1 78		1.5			20	87	51	1.97	6.9		16	20	0	2.2	17	0.5					
6 29 78	18	0.8	60*			84	45	2.29	7.2		16	19	0	2.0	14	0.2					
8 3 78	20	0.04	37*		30	102	60	1.59	7.1		16	19	0	2.1	24	0.1					
9 14 78	18	0.01	22*		0	112	71	1.30	7.3		15	18	0	2.8	32	0.2					
10 18 78	5	0.4	27*		9	83	54	1.15	7.0		5	6	0	1.5	27	0.1					
11 16 78	6	0.05	3		65	95	59	1.38	6.9	-7	11	13	0	3.0	26	0.0					
1 11 79	0	0.25	4		5	85	58	1.23	6.4		7	8	0	2.6	26	0.3					
3 1 79	2	2.5	15		7	72	44	1.53	5.7		2	3	0	2.1	20	0.3					
3 29 79	8	1.5			10	82	68	1.32	6.7	-3	5	6	0	2.7	36	0.1					
5 4 79	10	0.3	13	0.00	10	78	47	1.32	7.0	-3	5	6	0	1.8	24	0.1					
6 1 79	15	1.0	25			86	51	1.42	7.3	-5	13	16	0	2.1	21	0.2					
7 11 79	21	0.04	27*		30	112	68	1.76	7.4	-20	21	26	0	2.7	25	0.2	0.3	0.01	1.40	0.05	0.01
10 3 79	13	0.06	4		15	98	55	1.25	7.2	-3	11	14	0	2.4	25	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 17 77	0.0	0.00	0.1	0.00	10.0	0.0	0.00	0.1	0.8	0.04	2.5	0.0	0.0	1.8	0.00	0.0	2.8	0.0	0.0	0.1
11 28 77	0.0	0.00			10	0.0	0.03	0.1	1.2		2.9	0.0		1.7	0.00	0.0	3.7		0.0	0.0
1 19 78	0.1	0.00	0.0	0.00	9.7	0.0	0.00	0.2	0.9	0.04	3.1	0.1	0.0	1.9	0.00	0.0	3.8	0.0	0.0	0.0
3 1 78	0.1	0.00			9.0	0.0	0.01	0.2	1.1		3.1	0.0		2.2	0.01	0.0	3.3		0.1	0.0
3 28 78	0.1	0.00	0.0	0.00	7.8	0.0	0.00	0.1	1.0	0.06	2.6	0.1	0.0	1.8	0.00	0.0	2.8	0.0	0.0	0.0
4 27 78	0.0	0.01			9.1	0.0	0.00	0.1	0.6		2.6	0.0		2.1	0.00	0.0	1.5		0.0	0.0
6 1 78	0.1	0.03			9.0	0.0	0.00	0.2	0.8		2.9	0.0		1.9	0.01	0.0	2.2		0.1	0.0
6 29 78	0.1	0.01			7.9	0.1	0.02	0.3	1.0		3.0	0.0		1.9	0.00	0.1	1.7		0.0	0.0
8 3 78	0.0	0.04			10	0.0	0.01	0.1	1.0		2.8	0.2		1.7	0.04	0.1	3.7		0.1	0.0
9 14 78	0.0	0.03			12	0.0	0.02	0.1	1.3		3.1	0.0		1.7	0.00	0.0	3.6		0.0	0.0
10 18 78	0.1	0.01	0.0	0.02	8.7	0.0	0.00	0.2	1.3	0.15	2.2	0.1	0.0	1.4	0.00	0.0	3.4	0.0	0.0	0.0
11 16 78	0.1	0.02			10	0.0	0.00	0.0	1.2		2.6	0.0		1.7	0.01	0.0	3.6		0.0	0.0
1 11 79	0.1	0.00	0.0	0.00	9.5	0.0	0.00	0.2	1.1	0.08	2.5	0.1	0.0	1.6	0.02	0.1	3.8	0.0	0.1	0.1
3 1 79	0.1	0.01			8.4	0.0	0.00	0.1	0.9		2.4	0.2		1.5	0.00	0.0	2.9		0.0	0.0
3 29 79	0.2	0.02			14	0.0	0.01	0.1	1.0		3.1	0.2		2.4	0.02	0.0	2.3		0.0	0.1
5 4 79	0.1	0.01			8.7	0.0	0.00	0.1	0.6		2.5	0.1		1.7	0.00	0.0	1.6		0.1	0.1
6 1 79	0.1	0.02			8.6	0.1	0.02	0.2	0.7		2.2	0.0		1.6	0.01	0.0	2.4		0.0	0.1
7 11 79	0.0	0.02	0.0	0.00	13	0.0	0.00	0.1	0.9	0.10	3.5	0.0	0.0	1.7	0.00	0.0	3.2	0.0	0.0	0.0
10 3 79	0.1	0.02			8.6	0.0	0.00	0.1	1.1		2.4	0.0		1.5	0.01	0.0	3.2		0.0	0.0

TABLE 68. WATER QUALITY FOR SITE 6182 MERCER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
1 19 78	2	0.007			50	264	138	1.56	7.6		29	35	0	18	53	0.2					
3 28 78	8	0.01			4	616	428	1.06	7.4		21	26	0	22	270	0.4					
3 1 79	2	0.09	1460		2600	162	88	1.62	7.1		20	25	0	1.6	41	0.8					
3 29 79	7	0.07			550	383	250	1.44	7.3	-13	20	25	0	2.5	140	1.7					

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
1 19 78	0.0	0.00	0.0	0.00	25	0.0	0.00	0.0	0.9	0.10	5.0	0.0	0.0	12	0.00	0.0	2.9	0.1	0.0	0.0
3 28 78	0.1	0.01	0.0	0.00	80	0.0	0.00	0.1	2.1	0.25	26	0.3	0.0	8.3	0.01	0.0	2.8	0.2	0.0	0.0
3 1 79	0.2	0.01			21	0.0	0.00	0.2	0.9		4.3	0.1		1.0	0.01	0.0	1.0		0.0	0.0
3 29 79	0.3	0.02	0.1	0.00	69	0.0	0.01	0.2	1.4	0.30	11	0.1	0.0	1.8	0.01	0.1	1.1	0.1	0.1	0.1

TABLE 69. WATER QUALITY FOR SITE 6183 MERCER COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
10 17 77	7	0.6	6		8	569	398	1.29	6.8		48	58	0	17	220	0.2					
11 28 77	4	2.0	31*		8	351	246	1.40	8.0		38	45	0	62	75	0.4					
1 19 78	2	0.09			0	682	420	1.46	7.8		39	48	0	38	210	0.3					
3 1 78	1	0.15				1070	630	1.74	8.0		51	61	0	180	180	0.4					
3 28 78	8	2.5			8	574	328	1.59	7.6		29	35	0	87	96	0.7					
4 27 78	12	2.5			7	739	460	1.42	7.9		47	56	0	72	200	0.1					
6 1 78		0.8			3	1280	928	0.92	7.8		64	77	0	27	630	0.4					
6 29 78	18	1.0	64*			1270	859	0.95	7.9		62	75	0	43	560	0.2					
8 3 78	19	1.5	91*		90	1220	868	0.99	7.8		48	58	0	28	580	0.5					
9 14 78	17	0.004	28*		0	1480	1130	1.00	8.0		71	86	1	22	770	0.3					
10 18 78	10	0.25	26*		15	403	270	1.59	7.7		36	44	0	39	110	0.0					
11 16 78	6	0.08	3		8	636	435	1.25	7.8	-55	59	71	0	37	220	0.0					
1 11 79	0	0.1	9		3	537	383	1.54	7.6	-44	48	58	0	29	180	0.6					
3 1 79	2	0.9	11		9	347	201	1.30	7.2	-19	24	29	0	11	100	0.7					
3 29 79	4	0.2			20	427	243	1.91	7.6		28	34	0	60	67	0.4					
5 4 79	10	0.8	14	0.00	15	592	336	1.26	8.0	-50	48	57	0	67	130	0.2					
6 1 79	13	0.0001	16	0.35	0	575	374	1.51	8.0	-44	53	64	0	27	180	0.5					
7 11 79	23	0.25	71*		25	1260	762	1.28	8.4	-56	69	81	2	42	430	0.5	0.2	0.04	0.85	0.45	0.01
10 3 79	13	0.03	17		30	769	534	1.11	8.0	-52	62	75	1	53	280	0.2					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
10 17 77	0.1	0.00	0.0	0.00	70	0.0	0.00	0.2	2.0	0.25	23	1.9	0.0	25	0.00	0.0	2.8	0.2	0.0	0.1
11 28 77	0.0	0.00			40	0.0	0.00	0.2	2.8		11	0.4		24	0.00	0.0	3.1		0.0	0.0
1 19 78	0.2	0.00	0.0	0.00	76	0.0	0.00	0.6	2.7	0.40	31	2.4	0.0	24	0.02	0.0	3.6	0.2	0.0	0.0
3 1 78	0.2	0.01			77	0.0	0.01	0.5	4.0		30	2.0		120	0.03	0.1	3.2		0.3	0.0
3 28 78	0.1	0.02	0.0	0.00	44	0.0	0.00	0.3	3.2	0.15	11	1.2	0.0	56	0.03	0.1	3.2	0.1	0.5	0.0
4 27 78	0.1	0.02			68	0.0	0.00	0.2	2.9		23	2.0		58	0.02	0.0	2.5		0.0	0.0
6 1 78	0.2	0.03			140	0.0	0.00	0.1	3.3		61	4.3		16	0.04	0.1	4.3		0.2	0.0
6 29 78	0.2	0.02			110	0.1	0.03	0.1	4.7		61	3.0		37	0.00	0.2	3.0		0.2	0.0
8 3 78	0.2	0.04			140	0.1	0.01	0.1	4.1		59	1.8		20	0.00	0.2	4.0		0.3	0.0
9 14 78	0.3	0.04			190	0.0	0.01	0.2	4.2		78	1.6		12	0.06	0.3	5.1		0.2	0.0
10 18 78	0.1	0.01	0.2	0.00	40	0.0	0.01	0.3	3.6	0.20	8.1	0.4	0.0	42	0.02	0.0	3.8	0.1	0.0	0.0
11 16 78	0.2	0.02			80	0.0	0.00	0.1	2.6		23	0.8		23	0.03	0.1	3.4		0.0	0.0
1 11 79	0.2	0.01	0.0	0.00	76	0.0	0.01	0.5	2.6	0.60	21	1.6	0.0	27	0.03	0.1	3.7	0.2	0.0	0.0
3 1 79	0.2	0.01			30	0.0	0.00	0.1	2.1		5.2	0.2		26	0.02	0.0	2.6		0.0	0.0
3 29 79	0.2	0.01	0.1	0.00	38	0.0	0.01	0.2	2.8	0.20	6.5	0.3	0.0	44	0.01	0.0	2.4	0.1	0.0	0.0
5 4 79	0.2	0.04			46	0.1	0.01	0.3	1.9		18	0.8		36	0.05	0.3	2.0		0.8	0.1
6 1 79	0.2	0.03			67	0.0	0.00	0.3	2.9		23	1.5		29	0.00	0.1	2.9		0.1	0.1
7 11 79	0.3	0.03	0.0	0.00	130	0.0	0.01	0.2	4.2	0.85	53	2.2	0.0	37	0.05	0.2	4.4	0.4	0.2	0.0
10 3 79	0.5	0.04			87	0.0	0.02	0.1	4.3		26	0.8		34	0.04	0.1	3.4		0.1	0.0

TABLE 70. WATER QUALITY FOR SITE 6191 SOMERSET COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
7 19 77	12	0.07			10	55	30	1.79	6.8		7	9	0	1.2	9	0.6					
8 16 77	11	0.5			10	49	25	2.15	7.8		7	9	0	1.1	6	0.8					
10 28 77	12	0.25	22		0	56	30	1.88	7.0		6	7	0	1.1	9	0.6					
12 15 77	8	0.6			2	56	26	1.60	6.3		5	6	0	1.2	8	0.5					
6 13 78	10	0.3			8	41	30	0.77	6.9		2	2	0	1.2	15	0.6					
7 12 78	8	1.5	40*		4	36	26	1.24	6.5		4	5	0	1.1	10	0.6					
8 10 78	11	0.3	19*		0	43	27	2.34	6.9		7	9	0	1.6	6	0.7					
9 27 78	11	0.02	71*		15	52	31	2.00	7.0		11	13	0	1.2	9	0.2					
10 27 78	10	0.01	58*		7	68	39	2.87	7.3	-10	19	23	0	1.5	7	0.7					
12 4 78	2	0.02	36		30	56	34	2.52	6.8		11	14	0	1.0	8	0.6					
1 23 79	0	0.15	4		0	35	23	1.33	5.9		2	2	0	1.5	8	0.7					
3 13 79	7	0.8	22		4	34	25	0.94	6.4	0	2	2	0	1.2	10	0.7					
4 5 79	4	0.6	6		1	32	24	1.16	6.3	0	2	2	0	1.2	9	0.6					
5 8 79	14	0.2	3	0.00	1	34	28	1.26	6.7	3	2	3	0	0.9	12	0.5					
6 5 79	9	0.09	2		0	34	25	1.24	6.2	4	4	5	0	1.2	8	0.7					
7 31 79	21	0.4	4		8	37	25	1.37	6.5	-1	3	4	0	0.1	9	0.7	0.3	0.03	0.35	0.10	0.00
9 26 79	8	0.15	26		5	35	23	1.35	6.8	2	5	6	0	1.2	7	0.7					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 19 77	0.0	0.01			5.7	0.0	0.00	0.0	0.8		1.0	0.0		0.7	0.00	0.0	2.0		0.0	0.0
8 16 77	0.0	0.01			5.0	0.0	0.00	0.0	0.6		0.8	0.0		0.6	0.00	0.0	1.5		0.0	0.2
10 28 77	0.0		0.0	0.00	5.6	0.0	0.01	0.0	1.3	0.02	1.0	0.0	0.0	1.1	0.02	0.0	2.1	0.0	0.0	0.0
12 15 77	0.0	0.00	0.0	0.00	4.4	0.0	0.00	0.1	0.6	0.04	1.0	0.0	0.0	0.5	0.02	0.1	1.8	0.0	0.2	0.0
6 13 78	0.0	0.00			4.2	0.0	0.00	0.1	0.6		0.9	0.0		0.5	0.04	0.0	1.6		0.0	0.0
7 12 78	0.0	0.00	0.0	0.00	4.5	0.0	0.00	0.0	0.6	0.02	0.9	0.0	0.0	0.4	0.00	0.0	1.7	0.0	0.0	0.0
8 10 78	0.0	0.00			5.6	0.0	0.00	0.0	0.7		0.7	0.0		0.5	0.01	0.0	2.0		0.0	0.0
9 27 78	0.0	0.00			6.7	0.0	0.00	0.0	0.7		0.7	0.0		0.5	0.00	0.0	2.0		0.0	0.0
10 27 78	0.0	0.01	0.1	0.01	8.2	0.0	0.00	0.0	1.0	0.09	0.8	0.0	0.0	0.7	0.01	0.0	2.1	0.0	0.0	0.1
12 4 78	0.1	0.00			7.5	0.0	0.00	0.0	0.9		1.0	0.0		0.5	0.03	0.0	2.2		0.1	0.0
1 23 79	0.0	0.00			4.4	0.0	0.00	0.0	0.6		0.6	0.0		0.4	0.00	0.0	1.7		0.0	0.0
3 13 79	0.0	0.01			3.7	0.0	0.00	0.0	0.6		0.8	0.0		0.3	0.02	0.1	1.7		0.0	0.0
4 5 79	0.0	0.00	0.1	0.01	4.0	0.0	0.01	0.0	0.8	0.25	0.7	0.0	0.0	0.5	0.02	0.0	1.8	0.0	0.1	0.1
5 8 79	0.1	0.01			5.2	0.0	0.00	0.0	0.7		1.0	0.0		0.5	0.01	0.0	1.7		0.1	0.2
6 5 79	0.0	0.00			4.1	0.0	0.01	0.0	0.7		0.7	0.0		0.4	0.00	0.0	1.8		0.0	0.1
7 31 79	0.0	0.01	0.0	0.00	3.9	0.0	0.00	0.0	0.7	0.02	0.9	0.0	0.0	0.4	0.03	0.1	1.9	0.0	0.2	0.0
9 26 79	0.0	0.00			3.6	0.0	0.00	0.0	0.6		0.8	0.0		0.4	0.00	0.0	1.7		0.0	0.0

TABLE 71. WATER QUALITY FOR SITE 6192 SOMERSET COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
7 13 77	23	0.01			45	481	316	1.49	7.7		78	94	0	28	130	0.2					
8 16 77	22	0.03			30	323	158	6.41	8.0		98	118	1	8.2	21	0.2					
10 28 77	13	0.015	13		8	255	126	3.06	6.9		54	66	0	5.6	34	0.0					
12 15 77	3	1.0	11		10	186	93	1.65	6.9		17	21	0	16	28	0.9					
2 2 78	2	0.05			4	165	90	2.58	7.5		43	53	0	5.5	24	0.3					
4 4 78	14	0.25			8	145	78	2.35	7.7		28	34	0	5.9	24	0.4					
6 13 78	15	0.007				260	144	3.11	7.9		81	98	0	9.7	32	0.3					
7 12 78	14	0.02	55*		20	191	113	4.64	8.1		76	92	1	6.2	18	0.0					
8 10 78	19	0.01	48*		45	428	263	1.95	7.9		62	75	0	22	94	0.8					
9 27 78	14	0.0000	50*		110	355	207	2.54	8.2		90	108	1	16	56	0.1					
10 27 78	9	0.0005	47*		25	286	160	2.11	7.7	-46	42	51	0	12	55	0.3					
12 4 78	4	0.05	15		20	195	109	2.93	7.5		33	40	0	13	26	0.2					
1 23 79	0	0.0000			65	259	142	2.46	7.8		39	48	0	28	31	0.8					
3 13 79	7	0.25	54		35	116	72	1.92	7.3	-15	16	20	0	9.2	20	0.8					
4 5 79		1.0	10		10	146	88	2.07	7.5		24	29	0	6.3	29	1.2					
5 8 79	14		26	0.00	80	185	127	2.42	8.1	-47	49	59	0	7.2	40	0.2					
6 5 79	23	0.03	76	0.55	90	163	95	3.43	7.2	-40	50	61	0	5.5	21	0.5					
7 31 79	22	0.1	25		45	161	87	2.84	7.8	-37	36	44	0	6.3	20	0.6	0.3	0.08	0.65	0.05	0.01
9 26 79	15	0.002	62		85	176	101	2.96	7.9	-45	52	62	0	6.7	22	0.3					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 13 77	0.1	0.11			52	0.0	0.00	0.1	9.7		11	0.1		23	0.01	0.1	7.6		0.0	0.0
8 16 77	0.0	0.00			40	0.0	0.00	0.1	4.0		8.4	0.1		5.4	0.01	0.0	5.0		0.0	0.0
10 28 77	0.1	0.04	0.0	0.00	29	0.0	0.01	0.1	3.8	0.10	7.1	0.1	0.2	5.1	0.02	0.0	3.8	0.1	0.0	0.0
12 15 77	0.1	0.00	0.0	0.00	15	0.0	0.00	0.1	3.4	0.10	3.9	0.0	0.0	7.3	0.01	0.0	2.4	0.1	0.0	0.0
2 2 78	0.0	0.02			16	0.0	0.00	0.1	2.1		5.3	0.0		2.9	0.01	0.0	3.1		0.0	0.0
4 4 78	0.1	0.01	0.0	0.00	15	0.0	0.00	0.2	2.2	0.06	5.3	0.1	0.0	2.6	0.01	0.0	1.6	0.0	0.2	0.0
6 13 78	0.1	0.03			25	0.0	0.01	0.2	3.1		7.1	0.1		9.9	0.01	0.0	3.2		0.0	0.0
7 12 78	0.0	0.01	0.0	0.00	23	0.0	0.00	0.2	2.4	0.08	6.6	0.4	0.0	3.5	0.00	0.0	3.0	0.1	0.0	0.0
8 10 78	0.1	0.10			51	0.0	0.01	0.1	7.7		10	0.0		20	0.01	0.1	7.1		0.0	0.0
9 27 78	0.1	0.04			42	0.0	0.00	0.0	7.8		8.4	0.1		9.8	0.01	0.1	5.4		0.0	0.0
10 27 78	0.2	0.05	0.1	0.01	36	0.0	0.01	0.2	7.4	0.20	5.9	0.0	0.1	7.1	0.02	0.1	4.1	0.1	0.1	0.0
12 4 78	0.1	0.01			21	0.0	0.01	0.2	13		4.1	0.0		6.2	0.02	0.1	2.0		0.1	0.0
1 23 79	0.1	0.00			22	0.0	0.01	0.0	2.8		4.9	0.0		19	0.01	0.0	3.0		0.0	0.1
3 13 79	0.1	0.00			12	0.0	0.02	0.1	2.7		3.0	0.0		5.0	0.02	0.0	2.5		0.0	0.0
4 5 79	0.1	0.00	0.1	0.00	18	0.0	0.04	0.1	2.6	0.10	4.9	0.0	0.0	2.9	0.01	0.0	2.0	0.1	0.0	0.1
5 8 79	0.1	0.01			29	0.1	0.01	0.1	2.3		6.1	0.0		4.8	0.01	0.1	3.0		0.2	0.2
6 5 79	0.1	0.01			21	0.0	0.01	0.1	1.9		5.7	0.0		2.8	0.00	0.0	2.3		0.0	0.2
7 31 79	0.1	0.02	0.0	0.00	18	0.0	0.00	0.2	2.9	0.09	4.6	0.1	0.1	1.9	0.00	0.0	3.5	0.0	0.0	0.0
9 26 79	0.1	0.01			19	0.0	0.00	0.2	4.8		4.5	0.1		3.4	0.00	0.0	3.2		0.0	0.0

TABLE 72. WATER QUALITY FOR SITE 6193 SOMERSET COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
7 19 77	19	0.003			40	143	76	1.35	7.3		20	24	0	1.4	36	0.0					
8 16 77	19	0.06			55	147	76	0.94	6.7		2	2	0	1.1	48	0.1					
10 28 77	12	0.4	19		8	170	76	0.60	4.2		0	0	0	1.4	50	0.1					
12 15 77	3	1.5	0		8	97	42	0.42	4.1		0	0	0	1.1	27	0.4					
2 2 78	2	0.15			0	107	50	0.63	3.8		0	0	0	1.0	32	0.2					
3 9 78	1	0.1			8	98	50	0.57	4.5		0	0	0	1.7	32	0.1					
4 4 78	4	3			10	72	30	0.53	4.0		0	0	0	0.7	18	0.5					
5 3 78	13	0.5	14		15	109	62	0.61	4.6		0	0	0	0.9	42	0.2					
6 13 78	13	0.06			25	88	52	0.67	4.8		0	0	0	1.3	36	0.1					
7 12 78	12	0.4	448		8	82	54	0.78	4.7		0	0	0	1.1	35	0.0					
8 10 78	17	0.5	39%		60	89	59	0.79	5.1		0	0	0	2.0	34	0.1					
9 27 78	14	0.002	27%		45	106	66	1.03	6.9		7	9	0	1.4	38	0.0					
10 27 78	9	0.15	33%		10	108	59	0.52	4.5	20	0	0	0	1.5	40	0.2					
12 4 78	5	2.0	25		5	101	47	0.43	3.9		0	0	0	1.5	29	0.4					
1 23 79	0	0.08	10		4	105	54	0.57	4.0		0	0	0	1.9	34	0.3					
3 13 79	8	0.3	12		5	46	32	0.70	4.7	10	0	0	0	1.2	17	0.4					
4 5 79	5	0.2	7		3	48	27	0.47	4.3	10	0	0	0	1.0	15	0.2					
5 8 79	13	0.2	26	0.00	50	43	30	1.07	5.9	5	1	1	0	0.9	16	0.2					
6 5 79	21	0.07	23	0.01	30	42	28	0.96	5.0	6	0	0	0	0.8	15	0.1					
7 31 79	22	0.09	4		20	46	27	0.63	4.6	9	0	0	0	1.1	15	0.1	0.0	0.04	0.50	0.10	0.00
9 26 79	14	0.04	8		20	80	55	0.75	4.5	16	0	0	0	1.1	35	0.1					

% Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 19 77	0.2	0.02			15	0.0	0.00	0.8	1.1		3.0	0.2		0.9	0.02	0.1	2.4		0.0	0.0
8 16 77	0.3	0.00			13	0.0	0.00	1.7	0.6		3.4	0.6		0.8	0.02	0.0	2.4		0.0	0.1
10 28 77	3.7	0.02	0.0	0.00	6.4	0.1	0.01	0.6	0.9	0.03	3.6	0.9	0.0	0.7	0.05	0.0	3.0	0.0	0.0	0.2
12 15 77	3.1	0.00	0.0	0.00	2.4	0.0	0.00	0.1	0.6	0.04	1.6	0.4	0.0	0.6	0.03	0.0	1.6	0.0	0.0	0.1
2 2 78	2.6	0.01			3.8	0.0	0.00	0.3	0.5		2.8	0.5		0.7	0.03	0.0	2.1		0.0	0.1
3 9 78	2.2	0.00			3.8	0.0	0.00	0.4	0.5		2.5	0.6		0.6	0.03	0.0	2.1		0.0	0.1
4 4 78	1.9	0.00	0.0	0.00	2.1	0.0	0.00	0.2	0.5	0.01	1.4	0.5	0.0	0.4	0.02	0.0	1.2	0.0	0.2	0.1
5 3 78	2.3				5.8	0.0	0.01	0.3	0.5		3.0	0.6		0.7	0.02	0.0	2.3		0.0	0.1
6 13 78	1.1	0.00			5.9	0.0	0.01	0.6	0.6		2.5	0.4		0.6	0.02	0.0	1.2		0.0	0.1
7 12 78	0.9	0.01	0.0	0.00	6.8	0.0	0.00	0.8	0.4	0.03	2.7	0.5	0.0	0.6	0.00	0.0	2.2	0.0	0.1	0.1
8 10 78	0.4	0.01			8.6	0.0	0.01	4.4	0.7		1.9	0.3		0.6	0.02	0.0	2.4		0.0	0.0
9 27 78	0.1	0.01			12	0.0	0.01	0.8	0.7		2.4	0.3		0.7	0.01	0.0	2.2		0.0	0.0
10 27 78	2.2	0.01			6.0	0.0	0.00	0.2	0.6		1.9	0.5		0.4	0.02	0.0	2.1		0.0	0.2
12 4 78	3.1	0.00			3.6	0.0	0.01	0.1	0.7		1.4	0.4		0.5	0.04	0.0	2.1		0.1	0.1
1 23 79	2.5	0.00			4.8	0.0	0.00	0.2	0.5		2.5	0.6		0.5	0.03	0.0	2.2		0.1	0.1
3 13 79	1.3	0.00			3.8	0.0	0.01	0.1	0.8		0.9	0.2		0.5	0.02	0.0	2.0		0.0	0.1
4 5 79	1.2	0.00	0.1	0.00	2.3	1.0	0.01	0.1	0.5	0.09	0.5	0.2	0.0	0.4	0.03	0.1	1.6	0.0	0.0	0.1
5 8 79	0.4	0.00			5.8	0.0	0.00	0.1	0.5		0.8	0.2		0.6	0.00	0.0	1.7		0.0	0.3
6 5 79	0.1	0.00			4.9	0.0	0.00	0.0	0.3		0.7	0.2		0.6	0.00	0.0	2.0		0.0	0.0
7 31 79	0.9	0.01	0.0	0.00	3.3	0.0	0.00	0.1	0.2	0.02	0.5	0.2	0.0	0.4	0.01	0.0	1.9	0.0	0.1	0.1
9 26 79	1.3	0.01			6.7	0.0	0.00	0.7	0.4		2.5	0.6		0.6	0.03	0.0	2.5		0.0	0.1

TABLE 73. WATER QUALITY FOR SITE 6194 SOMERSET COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
4 4 78	7	4			8	38	30	0.94	6.1		4	5	0	2.6	10	1.1					
5 3 78	11	0.25			5	39	26	1.17	6.7		3	4	0	1.6	9	0.9					
9 26 79		0.06			20	39			6.7		3	4	0	0.7	8						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
4 4 78	0.1	0.00	0.0	0.00	4.1	0.0	0.00	0.1	0.7	0.05	1.2	0.0	0.0	0.5	0.01	0.0	1.6	0.0	0.1	0.0
5 3 78	0.0	0.00			4.2	0.0	0.00	0.0	0.7		0.8	0.0		0.6	0.01	0.0	1.8		0.0	0.0
9 26 79																				

TABLE 74. WATER QUALITY FOR SITE 6201 TIOGA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	*NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			----------	----------	----------	MILLIGRAMS PER LITER	----------	----------	----------	----------	----------	----------	----------	----------
9 16 77	13	0.0000			15	37	22	0.80	4.4		0	0	0	0.8	11	0.3					
10 27 77	9	2.0	18		4	70	28	0.70	4.4		0	0	0	0.7	16	0.1					
12 14 77	4	2.5	0		4	69	27	0.50	4.2		0	0	0	0.7	17	0.2					
5 24 78	12	15	22*		10	42	24	0.50	4.3		0	0	0	0.5	16	0.1					
7 10 78	16	0.0000	24*		4	38	23	0.60	4.5		0	0	0	0.6	14	0.1					
8 7 78	17	4	28*		0	45	21	0.43	4.0		0	0	0	1.3	11	0.0					
9 20 78	15	0.7	11		15	44	22	0.47	4.0		0	0	0	0.7	13	0.0					
10 26 78	9	0.08	19*		4	56	28	0.50	4.3	13	0	0	0	1.1	16	0.0					
12 1 78	1	0.15	1		0	52	25	0.59	4.2		0	0	0	0.6	14	0.1					
4 12 79	3	0.4	3		0	46	22	0.63	4.2	10	0	0	0	0.6	13	0.1					
5 7 79	12	0.02	3	0.00	25	47	27	0.57	4.1	9	0	0	0	1.0	17	0.0					
6 4 79	14	0.09	1	0.00	0	42	25	0.58	4.0	10	0	0	0	0.4	16	0.0					
9 28 79	11	0.02	2		0	47	25	0.52	4.3	13	0	0	0	0.8	14	0.1		0.01	0.00	0.00	0.03

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	----------	----------	----------	----------	----------	----------	----------	----------	MILLIGRAMS PER LITER	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------
9 16 77	0.4	0.00			1.9	0.0	0.00	0.0	0.4		0.9	0.4		1.0	0.00	0.0	1.8		0.0	0.1
10 27 77	0.9	0.01	0.0	0.00	2.3	0.0	0.01	0.0	0.8	0.06	1.2	0.6	0.0	0.5	0.02	0.0	1.8	0.0	0.0	0.1
12 14 77	1.0	0.00	0.0	0.00	1.6	0.0	0.00	0.0	0.6	0.02	1.1	0.4	0.0	0.5	0.02	0.0	1.5	0.0	0.0	0.1
5 24 78	0.6	0.00			1.5	0.0	0.00	0.0	0.6		1.0	0.3		0.5	0.01	0.0	1.1		0.0	0.1
7 10 78	0.5	0.01	0.0	0.00	1.9	0.0	0.00	0.0	0.4	0.01	0.9	0.5	0.0	0.4	0.00	0.0	1.7	0.0	0.0	0.1
8 7 78	0.4	0.00			1.2	0.0	0.01	0.0	0.2		0.6	0.5		0.4	0.02	0.0	2.1		0.0	0.1
9 20 78	0.5	0.00	0.0	0.00	1.4	0.0	0.01	0.1	0.2	0.04	0.6	0.5	0.0	0.4	0.01	0.0	1.8	0.0	0.0	0.1
10 26 78	0.6	0.00	0.1	0.01	1.8	0.0	0.00	0.0	0.5	0.09	0.9	0.6	0.1	0.6	0.03	0.0	2.0	0.0	0.1	0.1
12 1 78	0.9	0.00			1.7	0.0	0.00	0.0	0.4		1.0	0.5		0.5	0.03	0.0	2.2		0.1	0.1
4 12 79	0.7	0.00	0.1	0.00	1.7	0.0	0.00	0.0	0.5	0.06	1.0	0.3	0.0	0.4	0.01	0.0	1.2	0.0	0.0	0.2
5 7 79	0.9	0.00			1.8	0.0	0.01	0.4	0.5		1.2	0.4		0.5	0.01	0.0	1.6		0.1	0.1
6 4 79	0.7	0.00			1.8	0.0	0.02	0.0	0.4		1.1	0.4		0.4	0.00	0.0	1.6		0.0	0.1
9 28 79	0.6	0.01			1.6	0.0	0.01	0.0	0.3		1.0	0.7		0.4	0.03	0.0	2.3		0.0	0.2

TABLE 75. WATER QUALITY FOR SITE 6202 TIOGA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
9 16 77	13	0.01			10	69	38	2.07	6.6		7	9	0	2.1	13	0.3					
10 27 77	10	1.0	17		0	51	34	1.38	6.1		8	10	0	1.0	13	0.1					
12 9 77	1	2.0	1		4	38	26	1.07	6.3		2	2	0	0.8	13	0.1					
1 24 78	2	0.8			0	47	26	1.52	6.4		3	4	0	1.2	11	0.0					
3 1 78	0	0.9			4	50	31	1.48	6.3		3	4	0	3.7	12	0.1					
4 3 78	2	6			4	36	26	1.28	6.1		2	3	0	1.9	11	0.1					
5 2 78	7	5			3	43	29	1.34	6.8		3	4	0	2.2	11	0.2					
6 12 78	13	4				43	24	1.73	6.4		3	4	0	1.8	9	0.0					
7 10 78	19	0.03	31*		4	136	94	1.01	5.8		2	2	0	7.2	46	0.2					
8 7 78	18	6	26*		15	106	69	1.25	6.6		3	4	0	6.3	28	0.5					
9 20 78	15	0.06	19*		10	57	35	1.23	6.6		4	5	0	3.3	15	0.1					
10 26 78	9	0.09	34*		4	56	34	1.35	6.8	-2	6	7	0	2.7	14	0.0					
12 1 78	1	0.15	42		1	47	27	1.45	6.2		2	3	0	2.2	11	0.1					
3 6 79	0	0.7	39		10	48	33	0.99	5.2	3	0	0	0	0.9	19	0.2					
4 12 79	8	1.5	4		0	46	32	1.16	6.1	3	2	2	0	1.8	16	0.1					
5 7 79	12	0.3	21	0.00	1	48	33	1.46	6.8	3	5	6	0	1.1	15	0.0					
6 4 79	16	0.1	6	0.00	0	52	33	1.05	6.0	-1	5	6	0	2.2	15	0.1					
7 30 79	22	0.04	0		5	70	42	1.45	6.8	-3	8	10	0	4.3	15	0.1	0.1	0.03	0.45	0.10	0.00
9 28 79	11	0.04	21		55	67	43	1.51	7.0	-1	7	9	0	3.3	17	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 16 77	0.0	0.00			7.0	0.0	0.00	0.0	1.1		2.3	0.0		1.9	0.00	0.0	2.3		0.0	0.0
10 27 77	0.0	0.00	0.0	0.00	4.3	0.0	0.01	0.0	1.0	0.10	1.5	0.0	0.0	1.1	0.02	0.0	2.7	0.0	0.0	0.1
12 9 77	0.0	0.00	0.0	0.00	3.0	0.0	0.00	0.0	0.9	0.10	1.3	0.0	0.0	1.0	0.03	0.0	1.9	0.0	0.0	0.1
1 24 78	0.0	0.00			3.5	0.0	0.00	0.0	0.7		1.6	0.0		1.3	0.00	0.0	2.0		0.0	0.0
3 1 78	0.0	0.01			4.2	0.0	0.00	0.1	0.7		1.9	0.0		1.9	0.01	0.0	2.2		0.0	0.0
4 3 78	0.1	0.00	0.0	0.00	3.0	0.0	0.00	0.1	0.7	0.03	1.6	0.1	0.0	1.3	0.02	0.0	1.8	0.0	0.1	0.0
5 2 78	0.0	0.00			3.8	0.0	0.02	0.1	0.9		1.3	0.0		1.7	0.02	0.0	2.2		0.1	0.0
6 12 78	0.0	0.00			3.6	0.0	0.00	0.0	0.8		1.4	0.0		1.6	0.00	0.0	1.7		0.0	0.0
7 10 78	0.2	0.03	0.0	0.00	10	0.0	0.00	0.0	3.3	0.04	4.0	0.2	0.0	6.1	0.00	0.1	6.8	0.0	0.1	0.0
8 7 78	0.1	0.02			8.2	0.0	0.01	0.1	2.6		2.4	0.5		6.0	0.02	0.0	4.9		0.0	0.0
9 20 78	0.0	0.00	0.0	0.00	5.5	0.0	0.00	0.0	0.7	0.09	1.7	0.0	0.0	1.2	0.00	0.0	2.3	0.0	0.0	0.0
10 26 78	0.0	0.00	0.0	0.00	5.3	0.0	0.00	0.0	0.8	0.05	1.5	0.0	0.0	1.1	0.02	0.1	2.3	0.0	0.1	0.0
12 1 78	0.0	0.00			4.4	0.0	0.01	0.0	0.6		1.3	0.0		1.2	0.02	0.0	2.3		0.0	0.0
3 6 79	0.2	0.00	0.0	0.00	4.2	0.0	0.00	0.1	0.8	0.20	2.0	0.2	0.0	0.8	0.01	0.0	1.6	0.0	0.0	0.1
4 12 79	0.1	0.00	0.1	0.00	4.4	0.0	0.00	0.0	0.8	0.15	1.8	0.0	0.0	1.1	0.01	0.0	1.9	0.0	0.0	0.0
5 7 79	0.0	0.00			5.2	0.0	0.03	0.0	0.8		2.0	0.0		1.2	0.00	0.0	2.1		0.0	0.1
6 4 79	0.0	0.00			4.2	0.1	0.01	0.0	0.8		1.4	0.0		1.0	0.00	0.1	2.3		0.0	0.1
7 30 79	0.0	0.00	0.0	0.00	6.4	0.0	0.00	0.0	0.9	0.04	2.0	0.0	0.0	1.5	0.01	0.0	2.6	0.0	0.1	0.0
9 28 79		0.02			7.0	0.0	0.00	0.0	1.0		2.4	0.0		1.2	0.02	0.0	2.8		0.1	0.1

TABLE 76. WATER QUALITY FOR SITE 6203 TIOGA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
9 16 77	14	0.3			4	132	80	1.44	6.7		5	6	0	8.9	32	0.3					
10 27 77	10	1.5	9		0	112	68	1.07	5.5		0	0	0	4.5	34	0.1					
12 9 77	2	1.5	6		0	94	53	1.05	5.3		0	0	0	2.0	29	0.1					
1 24 78	2	0.06			0	125	67	1.10	4.9		0	0	0	8.4	30	0.1					
3 1 78	1	0.7			7	133	95	1.42	5.0		0	0	0	13	34	0.2					
4 3 78	2	4			4	72	44	1.10	4.8		0	0	0	6.4	18	0.2					
5 2 78	10	1.5			0	126	76	1.07	5.4		0	0	0	10	33	0.2					
6 12 78	10	1.5				106	66	1.06	5.4		0	0	0	7.4	31	0.1					
7 10 78	16	0.07	28*		4	56	38	1.71	6.7		7	9	0	3.7	13	0.1					
8 7 78	17	3	27*		55	56	33	1.27	6.4		2	2	0	5.5	11	0.2					
9 20 78	15	0.07	48*		20	133	86	1.06	6.6		3	4	0	8.8	37	0.4					
10 26 78	9	0.07	23*		4	150	92	0.86	6.5	2	2	3	0	12	42	0.1					
12 1 78	4	0.1	23		3	149	82	1.27	6.2		2	2	0	9.8	34	0.1					
3 6 79	0	0.6	17		10	68	43	1.01	4.9		0	0	0	6.1	18	0.2					
4 12 79	7	1.5	14		5	107	62	1.18	5.8		0	0	0	10	25	0.3					
5 7 79	17	0.4	10	0.00	1	120	73	1.03	4.8	10	0	0	0	8.9	35	0.1					
6 4 79	17	0.06	1	0.00	0	130	88	0.90	5.2	5	0	0	0	10	43	0.2					
7 30 79	22	0.09	0		5	153	91	0.87	6.0	3	1	1	0	16	39	0.1	0.0	0.02	0.50	0.00	0.01
9 28 79	12	0.2	147		75	161	85	0.82	6.9	2	7	8	0	18	31	0.2					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 16 77	0.1	0.02			9.7	0.0	0.00	0.1	2.8		3.3	0.3		9.1	0.00	0.0	4.5		0.0	0.0
10 27 77	0.8	0.01	0.0	0.00	7.6	0.0	0.02	0.2	2.0	0.15	3.0	0.7	0.0	5.0	0.04	0.0	4.5	0.0	0.0	0.1
12 9 77	0.4	0.00	0.1	0.00	5.6	0.0	0.00	0.0	1.8	0.02	2.4	0.5	0.0	4.1	0.04	0.0	3.0	0.0	0.0	0.1
1 24 78	0.5	0.00			7.2	0.0	0.00	0.1	1.7		3.2	0.5		6.1	0.01	0.0	4.0		0.0	0.1
3 1 78	0.8				11	0.0	0.01	0.7	2.5		5.7	0.9		7.0	0.03	0.0	9.0		0.0	0.1
4 3 78	0.5	0.00	0.0	0.00	4.3	0.0	0.00	0.1	1.3	0.02	1.8	0.5	0.0	4.9	0.01	0.0	2.2	0.0	0.0	0.0
5 2 78	0.4	0.01			7.8	0.0	0.01	0.1	2.5		2.8	0.4		8.0	0.02	0.0	4.4		0.0	0.0
6 12 78	0.3	0.00			6.7	0.0	0.01	0.2	2.3		2.7	0.4		6.4	0.00	0.0	4.0		0.0	0.0
7 10 78	0.0	0.01	0.0	0.00	6.5	0.0	0.00	0.1	0.9	0.03	2.1	0.0	0.0	1.5	0.00	0.0	2.4	0.0	0.0	0.0
8 7 78	0.0	0.00			5.0	0.0	0.01	0.0	0.9		1.7	0.0		1.3	0.02	0.0	2.6		0.0	0.0
9 20 78	0.1	0.01	0.0	0.00	9.6	0.0	0.00	0.2	3.0	0.15	2.9	0.4	0.0	7.2	0.00	0.0	5.9	0.0	0.0	0.0
10 26 78	0.2	0.03			10.0	0.0	0.01	0.1	2.5		3.3	0.3		6.7	0.02	0.1	5.8		0.1	0.0
12 1 78	0.2	0.01			9.8	0.0	0.01	0.1	2.5		3.2	0.4		8.6	0.03	0.0	5.5		0.1	0.0
3 6 79	0.4	0.00			4.6	0.0	0.00	0.1	1.3		1.6	0.4		4.0	0.01	0.0	2.3		0.0	0.0
4 12 79	0.2	0.00	0.2	0.00	7.4	0.0	0.00	0.1	1.7	0.04	2.4	0.3	0.0	7.2	0.01	0.0	2.6	0.0	0.0	0.2
5 7 79	0.4	0.02			8.4	0.0	0.02	0.2	1.9		3.3	0.5		6.1	0.01	0.0	3.9		0.1	0.1
6 4 79	0.3	0.01			8.8	0.0	0.01	0.2	2.4		3.3	0.4		7.7	0.01	0.0	5.1		0.0	0.1
7 30 79	0.2	0.02	0.0	0.00	9.0	0.0	0.00	0.2	2.4	0.08	3.0	0.4	0.0	9.3	0.00	0.0	5.2	0.0	0.0	0.0
9 28 79	0.1	0.02			8.5	0.0	0.00	0.1	2.7		2.8	0.2		7.3	0.02	0.0	4.5		0.0	0.1

TABLE 77. WATER QUALITY FOR SITE 4206 TIOGA COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
												MILLIGRAMS PER LITER									
9 28 79		0.15			30	92			5.5		0	0	0	5.5	20	0.5					

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR												MILLIGRAMS PER LITER								
9 28 79																				

TABLE 78. WATER QUALITY FOR SITE 6211 VENANGO COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L							MILLIGRAMS PER LITER							
9 7 77	16	0.015			8	44	31	1.17	6.1		1	1	0	1.1	13	0.2					
10 18 77	8	0.2	21		8	48	27	1.13	6.0		1	1	0	1.1	14	0.0					
11 29 77	2	1.0	54*		4	57	40	1.08	5.7		0	0	0	1.7	21	0.1					
1 19 78	2	0.4			0	60	36	1.13	5.7		0	0	0	1.1	19	0.0					
3 1 78	0	0.25			4	53	33	1.27	5.9		1	1	0	1.4	16	0.1					
3 29 78	5	1.5			4	52	33	1.17	5.4		0	0	0	1.3	17	0.1					
4 27 78	10	1.5			7	50	33	0.93	5.8		0	0	0	1.5	18	0.1					
6 8 78	14	1.0				49	31	1.27	5.3		0	0	0	0.6	16	0.1					
7 6 78	15	0.7	41*		20	42	31	1.17	5.1		0	0	0	1.1	14	0.1					
8 3 78	17	0.5	15		15	44	31	1.14	5.8		0	0	0	1.8	13	0.2					
9 15 78	16	2.0	31*		6	53	40	0.89	5.9		0	0	0	1.3	21	0.2					
10 18 78	7	0.01			9	55	41	1.02	5.9		1	1	0	1.8	21	0.1					
11 16 78	5	0.07	10		5	54	36	0.97	6.0	2	1	1	0	1.6	18	0.1					
1 10 79	0	0.3	6		0	51	39	1.00	5.7		0	0	0	1.3	21	0.1					
3 2 79	1	0.9	3		4	54	35	1.17	5.7		2	3	0	1.3	17	0.2					
4 3 79	7	0.5	12		6	52	38	0.99	5.4	3	0	0	0	1.3	20	0.1					
5 4 79	10	0.3	12	0.00	15	49	33	1.04	5.8	8	0	0	0	1.0	18	0.1					
6 1 79	12	0.8	18		15	48	34	0.84	5.6	6	0	0	0	1.5	19	0.0					
7 11 79	21	0.03	34*		20	52	37	1.03	6.2		1	1	0	0.5	19	0.1	0.2	0.00	0.55	0.10	0.01
10 3 79	13	0.03	8		10	60	40	1.05	5.8	5	0	0	0	1.3	20	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 7 77	0.1	0.00			3.1	0.0	0.00	0.0	0.9		1.5	0.1		1.3	0.00	0.0	3.7		0.0	0.1
10 18 77	0.1	0.00	0.1	0.00	3.6	0.0	0.00	0.0	0.4	0.02	1.4	0.0	0.0	1.0	0.00	0.0	2.4	0.0	0.0	0.1
11 29 77	0.1	0.00			5.2	0.0	0.00	0.0	0.9		2.4	0.0		1.2	0.00	0.0	3.4		0.0	0.0
1 19 78	0.1	0.00	0.0	0.00	4.4	0.0	0.00	0.0	0.8	0.00	2.4	0.1	0.0	1.2	0.00	0.0	3.2	0.0	0.0	0.0
3 1 78	0.1	0.01			3.9	0.0	0.00	0.0	0.7		2.3	0.0		1.2	0.01	0.0	3.3		0.0	0.0
3 29 78	0.1	0.00	0.1	0.00	4.0	0.0	0.00	0.1	0.9	0.02	2.1	0.1	0.0	1.2	0.01	0.0	2.7	0.0	0.0	0.0
4 27 78	0.1	0.00			3.7	0.0	0.00	0.0	0.7		1.6	0.0		1.4	0.01	0.0	2.7		0.0	0.0
6 8 78	0.1	0.00			3.8	0.0	0.01	0.1	1.0		2.0	0.0		1.3	0.00	0.0	2.9		0.0	0.0
7 6 78	0.1	0.02	0.0	0.00	3.7	0.0	0.00	0.0	0.8	0.02	1.7	0.0	0.0	1.0	0.00	0.1	3.5	0.0	0.0	0.0
8 3 78	0.1	0.01			3.7	0.0	0.01	0.0	0.9		1.5	0.1		1.1	0.02	0.0	3.8		0.0	0.0
9 15 78	0.1	0.02			4.9	0.0	0.00	0.1	1.0		1.6	0.2		0.8	0.00	0.0	3.7		0.0	0.0
10 18 78	0.1	0.01	0.0	0.00	5.7	0.0	0.00	0.2	1.0	0.04	1.9	0.2	0.0	1.0	0.01	0.0	3.3	0.0	0.1	0.0
11 16 78	0.0	0.01			4.2	0.0	0.00	0.0	0.8		1.6	0.0		1.2	0.01	0.0	3.6		0.1	0.0
1 10 79	0.1	0.00	0.0	0.00	4.9	0.0	0.00	0.1	0.7	0.03	2.0	0.1	0.0	1.2	0.01	0.0	3.1	0.0	0.1	0.0
3 2 79	0.1	0.00			4.9	0.0	0.00	0.1	0.8		2.0	0.3		1.0	0.01	0.0	2.2		0.0	0.0
4 3 79	0.2	0.01	0.2	0.00	5.0	0.1	0.01	0.1	0.9	0.15	1.8	0.2	0.0	1.1	0.04	0.1	2.9	0.0	0.1	0.1
5 4 79	0.1	0.00			4.1	0.0	0.00	0.1	0.6		2.0	0.1		0.9	0.02	0.2	2.5		0.5	0.1
6 1 79	0.1	0.01			3.8	0.0	0.02	0.0	0.8		1.4	0.0		1.0	0.00	0.0	3.1		0.0	0.1
7 11 79	0.1	0.01	0.0	0.00	4.2	0.0	0.01	0.0	1.0	0.08	1.9	0.1	0.0	0.9	0.02	0.0	3.6	0.0	0.0	0.0
10 3 79	0.0	0.01			5.0	0.0	0.01	0.0	1.0		2.1	0.1		0.9	0.02	0.1	4.0		0.1	0.1

TABLE 79. WATER QUALITY FOR SITE 6212 VENANGO COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
9 7 77	18	0.15			15	273	171	2.35	7.3		52	64	0	16	51	1.1					
10 18 77	8	0.2	24		4	367	236	1.23	6.9		48	58	0	23	99	3.0					
11 29 77	2	0.7	54*		8	338	259	1.33	7.4		31	38	0	19	120	3.0					
1 19 78	1	0.6			200	484	291	1.26	7.2		21	26	0	13	130	9.2					
3 1 78	1	0.3			25	455	279	1.32	6.5		22	27	0	16	140	2.9					
3 29 78	9	1.5			0	633	450	1.01	6.6		10	12	0	21	270	4.5					
4 27 78	15	1.5			20	568	369	1.02	7.5		22	27	0	17	200	5.8					
6 8 78	16	1.5				818	547	1.05	7.2		19	23	0	27	320	4.8					
7 6 78	16	0.7	43*		8	883	644	0.96	7.5		26	32	0	21	400	6.9					
8 3 78	19	0.9	12		0	1310	960	0.99	6.7		5	6	0	24	620	7.2					
9 15 78	17	0.8	34*		30	1200	1120	0.89	4.1		0	0	0	20	760	3.2					
10 18 78	7	0.6			240	1950	1490	0.76	3.2		0	0	0	25	1000	6.7					
11 16 78	6	0.6	22		20	1280	1100	1.05	7.1		16	19	0	19	720	3.8					
1 10 79	0	0.2	11		70	1760	1600	0.85	3.3		0	0	0	24	1100	6.2					
3 2 79	2	3	277		170	1980	1570	0.85	3.6	170	0	0	0	30	1000	7.1					
4 3 79	8	0.05	77		60	1590	1190	0.79	3.2		0	0	0	42	800	6.0					
5 4 79	10	0.1	64	0.08		2540	2260	0.85	3.6	150	0	0	0	24	1600	1.1					
6 1 79	16	0.04	89	0.25	40	1880	1480	0.83	4.7	20	0	0	0	21	1000	8.3					
7 11 79	21	1.0	18*	0.00	90	2500	2030	0.91	3.9	90	0	0	0	26	1400	4.9	0.6	1.30	5.05	0.10	0.02
10 3 79	14	0.25	15		20	2350	2250	1.06	7.8	-45	49	59	0	33	1500	4.9					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 7 77	0.1	0.00			48	0.0	0.00	0.0	1.5		3.7	0.1		6.3	0.00	0.0	3.5		0.0	0.0
10 18 77	0.1	0.00	0.1	0.00	57	0.0	0.00	0.0	1.1	0.20	4.0	0.0	0.1	4.8	0.00	0.0	2.0	0.1	0.0	0.1
11 29 77	0.1	0.00			65	0.0	0.00	0.1	2.2		5.8	0.2		7.2	0.00	0.0	3.0		0.0	0.0
1 19 78	0.1	0.00	0.1	0.00	69	0.0	0.00	0.0	3.3	0.25	7.7	1.1	0.0	6.2	0.02	0.0	2.9	0.2	0.0	0.0
3 1 78	0.1	0.02			69	0.0	0.00	0.1	2.6		9.0	0.8		6.7	0.02	0.0	3.3		0.1	0.0
3 29 78	0.1	0.00	0.1	0.00	91	0.0	0.00	0.2	3.6	0.30	18	3.8	0.1	8.4	0.07	0.0	3.8	0.1	0.1	0.1
4 27 78	0.1	0.01			79	0.0	0.00	0.1	3.0		10	0.8		8.2	0.02	0.0	3.2		0.0	0.0
6 8 78	0.1	0.00			120	0.0	0.00	0.0	3.6		19	2.0		15	0.04	0.0	3.5		0.0	0.0
7 6 78	0.1	0.02	0.1	0.00	140	0.0	0.00	0.0	3.7	0.35	20	1.2	0.0	9.1	0.00	0.2	3.4	0.2	0.1	0.0
8 3 78	0.3	0.01			210	0.1	0.01	0.1	5.1		32	5.7		12	0.16	0.2	5.3		0.1	0.1
9 15 78	5.8	0.02			220	0.4	0.02	2.3	6.7		36	20		20	0.44	0.2	6.6		0.1	0.6
10 18 78	3.5	0.04			270	0.4	0.02	68	6.5		38	18		12	0.47	0.4	7.1		0.2	0.9
11 16 78	0.5	0.02			280	0.2	0.01	0.1	4.2		27	9.5		11	0.15	0.3	3.5		0.2	0.1
1 10 79	9.9	0.01			320	0.6	0.04	19	5.8		45	21		18	0.55	0.4	6.3		0.3	0.4
3 2 79	7.3	0.03			290	0.5	0.02	63	4.5		53	23		15	0.57	0.2	6.2		0.3	0.9
4 3 79	4.3	0.00			200	0.4	0.02	23	5.4		44	14		18	0.43	0.1	4.5		0.4	0.6
5 4 79	6.0	0.04			460	0.9	0.02	25	7.4		65	36		16	0.74	0.3	7.5		0.3	1.0
6 1 79	0.5	0.02			310	0.2	0.01	0.3	5.8		35	11		9.8	0.22	0.2	3.8		0.2	0.3
7 11 79	6.3	0.03	0.0	0.00	430	0.7	0.01	3.0	6.0	2.5	61	34	0.1	12	0.64	0.3	7.7	0.7	0.3	0.7
10 3 79	0.7	0.02			570	0.1	0.01	0.1	7.1		57	11		18	0.14	0.4	2.9		0.6	0.0

TABLE 80. WATER QUALITY FOR SITE 6213 VENANGO COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID- ITY	ALKA- LINITY	HCO3	CO3	CL	SO4	NO3 AS N	&NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L					MILLIGRAMS PER LITER									
9 7 77	19	0.1			0	342	238	1.44	7.2		48	58	0	4.0	120	0.1					
10 18 77	8	0.3	26		10	265	177	2.42	7.1		80	97	0	4.0	57	0.7					
11 29 77	4	0.5	56*		30	377	270	1.43	7.3		60	73	0	3.9	140	0.7					
1 19 78	2	0.7			10	637	437	1.16	5.8		3	4	0	2.8	290	0.5					
3 1 78	2	0.5			10	327	182	2.17	7.6		60	73	0	4.6	70	0.5					
3 29 78	9	1.0			10	541	383	1.11	5.1		0	0	0	3.4	260	0.8					
4 27 78	17	0.5			7	457	298	1.28	7.9		40	48	0	3.9	170	0.7					
6 8 78	16	0.4				634	391	1.23	7.2		27	33	0	2.5	250	0.3					
7 6 78	17	0.4	21*		10	325	193	3.01	8.1		90	108	1	4.1	54	0.7					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
9 7 77	0.1	0.00			50	0.0	0.00	0.0	2.5		12	5.6		5.1	0.00	0.0	3.5		0.0	0.0
10 18 77	0.1	0.00	0.1	0.00	49	0.0	0.00	0.1	1.1	0.15	5.2	0.7	0.0	3.2	0.02	0.0	2.7	0.1	0.0	0.0
11 29 77	0.2	0.00			58	0.1	0.00	0.1	1.9		14	3.7		3.3	0.09	0.0	3.5		0.0	0.0
1 19 78	1.6	0.00	0.1	0.00	67	0.2	0.01	0.3	1.8	0.25	44	9.1	0.0	3.2	0.27	0.0	5.0	0.2	0.1	0.3
3 1 78	0.1	0.03			51	0.0	0.00	0.2	1.4		7.4	1.1		3.2	0.03	0.0	2.2		0.1	0.0
3 29 78	1.6	0.00	0.1	0.00	55	0.1	0.00	0.3	1.9	0.20	38	9.2	0.0	2.9	0.24	0.0	5.3	0.1	0.2	0.3
4 27 78	0.1	0.01			51	0.0	0.00	0.2	1.4		24	4.1		4.9	0.12	0.0	2.9		0.0	0.1
6 8 78	0.2	0.00			65	0.1	0.00	0.3	1.2		36	9.1		3.6	0.20	0.0	4.2		0.0	0.2
7 6 78	0.1	0.01	0.1	0.00	60	0.0	0.00	0.1	1.2	0.15	4.7	0.3	0.0	3.6	0.00	0.1	3.1	0.1	0.1	0.0

TABLE 81. WATER QUALITY FOR SITE 6215 VENANGO COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 3 78	15	1.5	11		15	326	191	3.28	8.2		97	116	1	5.5	49	0.4					
9 15 78	17	0.2	21*		15	721	502	0.92	4.7		0	0	0	3.0	350	1.4					
10 18 78	7	0.5	22*		50	686	543	0.87	4.7		0	0	0	2.8	390	0.7					
11 16 78	8	0.07	8		15	324	198	2.73	8.0	-50	75	91	1	4.2	64	0.6					
1 10 79	0	0.2	3		45	759	610	0.94	4.3		0	0	0	2.6	420	0.6					
3 2 79	2	0.7	88		65	401	287	0.87	4.7	17	0	0	0	1.7	200	1.0					
4 3 79	9	0.5	38		25	446	338	0.98	5.5	4	0	0	0	2.5	240	0.6					
5 4 79	9	0.4	27	0.00	80	686	498	0.98	4.6	31	0	0	0	2.3	350	0.7					
6 1 79	14	0.3	142	1.1	70	557	397	0.93	7.1	-2	2	2	0	3.6	280	0.6					
7 11 79	23	0.006	36*	0.01	90	502	338	1.29	8.2	-62	70	84	1	3.9	180	0.4	0.1	0.11	0.40	0.10	0.01
10 3 79	13	0.003	12		15	333	220	2.70	8.2	-82	93	112	1	4.4	70	0.5					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 3 78	0.1	0.01			59	0.0	0.01	0.1	1.7		4.4	0.3		3.5	0.02	0.1	3.7		0.0	0.0
9 15 78	2.3	0.02			68	0.1	0.01	0.6	3.9		40	12		4.5	0.20	0.1	4.7		0.0	0.2
10 18 78	6.7	0.01	0.1	0.00	71	0.2	0.01	0.4	2.3	0.40	41	10.0	0.0	2.6	0.27	0.1	6.4	0.2	0.1	0.3
11 16 78	0.1	0.00			65	0.0	0.00	0.1	1.3		3.9	0.2		3.9	0.00	0.0	3.4		0.0	0.0
1 10 79	17	0.01	0.1	0.00	83	0.2	0.03	1.0	2.2	0.55	48	11	0.0	3.7	0.42	0.2	8.4	0.1	0.2	0.5
3 2 79	4.8	0.00			40	0.1	0.01	0.4	2.8		19	4.6		1.8	0.16	0.0	3.8		0.1	0.2
4 3 79	1.7	0.00			52	0.1	0.00	0.6	1.9		27	0.0		2.4	0.17	0.0	3.8		0.1	0.3
5 4 79	4.9	0.01			77	0.2	0.01	0.4	1.6		39	8.9		2.5	0.25	0.1	4.4		0.3	0.4
6 1 79	0.5	0.01			60	0.1	0.00	0.2	2.8		29	7.3		3.1	0.19	0.1	4.0		0.1	0.3
7 11 79	0.2	0.00	0.1	0.00	73	0.1	0.00	0.2	1.5	0.35	15	4.9	0.0	3.4	0.07	0.1	3.6	0.1	0.0	0.1
10 3 79	0.1	0.02			68	0.0	0.00	0.2	1.2		6.0	0.9		3.4	0.01	0.1	3.6		0.0	0.0

TABLE 82. WATER QUALITY FOR SITE 6221 WASHINGTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
8 17 77	24	0.007			45	368	191	3.80	7.9		102	123	1	4.1	45	0.2					
10 14 77	10	0.04	85		50	343	159	2.75	7.0		70	86	0	3.7	47	0.4					
11 23 77	11	0.09	92*		45	247	158	1.71	7.9		43	52	0	3.6	68	0.0					
1 17 78	3	0.08			8	233	128	2.10	7.6		39	47	0	4.1	45	1.1					
2 23 78	1	0.1			4	261	139	2.14	7.9		57	69	0	5.2	45	0.8					
3 23 78	8	0.6			40	201	117	1.85	6.9		36	44	0	4.7	42	1.2					
4 26 78	10	0.3			45	238	139	1.94	8.1		61	73	1	4.3	48	0.6					
5 31 78	22	0.4				254	145	2.17	7.8		72	87	0	3.1	42	1.9					
6 28 78	17	0.15	84*			251	144	1.88	7.8		60	72	0	3.0	49	2.0					
8 2 78	17	0.05	17*		30	306	178	4.00	8.2		99	119	1	4.8	37	0.7					
9 13 78	16	0.15	50*		45	205	127	1.43	7.3		30	37	0	4.9	48	2.3					
10 16 78	10	0.1	111*		95	270	175	1.99	8.1		48	58	0	6.3	63	1.6					
11 14 78	10	0.01	32		60	290	176	2.87	7.5	-88	80	97	0	4.2	49	0.6					
1 24 79	2	0.9	42		45	150	102	1.24	7.2		16	20	0	4.7	32	5.0					
2 28 79	1	0.5	22		10	199	119	1.67	7.0	-15	25	30	0	4.0	37	4.7					
3 28 79	4	0.1			40	223	138	2.01	7.9	-42	46	55	0	3.5	46	2.3					
5 3 79	12	0.06	78	0.12	140	260	146	2.37	8.1		52	62	0	3.5	45	2.4					
5 31 79	14	0.5	15	0.00	45	204	129	1.46	7.8	-27	38	46	0	2.5	45	3.9					
7 10 79	20	0.02	71*		180	303	173	3.06	8.3	-84	85	102	1	4.1	45	1.0	0.4	0.09	1.15	0.30	0.01
10 4 79	13	0.25	15		60	236	140	2.07	7.7	-20	35	43	0	14	45	0.6					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 17 77	0.1	0.00			47	0.0	0.00	0.1	4.0		11	0.6		6.9	0.01	0.0	4.6		0.0	0.0
10 14 77	0.1	0.00	0.1	0.00	35	0.0	0.00	0.1	3.7	0.10	8.7	0.9	0.0	6.0	0.01	0.0	4.4	0.1	0.0	0.0
11 23 77	0.1	0.00			31	0.0	0.00	0.2	4.2		8.0	0.4		4.8	0.01	0.0	5.2		0.0	0.0
1 17 78	0.0	0.00	0.0	0.00	24	0.0	0.00	0.1	3.8	0.08	7.6	0.1	0.0	5.1	0.01	0.0	4.8	0.1	0.0	0.0
2 23 78	0.0	0.00			24	0.0	0.00	0.0	3.2		8.2	0.2		5.6	0.00	0.0	4.5		0.0	0.0
3 23 78	0.1	0.00			21	0.0	0.00	0.1	3.0		6.1	0.1		4.7	0.01	0.0	4.4		0.0	0.0
4 26 78	0.1	0.01	0.0	0.00	23	0.0	0.00	0.0	1.9	0.10	7.9	0.3	0.0	5.3	0.01	0.1	4.0	0.1	0.1	0.0
5 31 78	0.1	0.01			24	0.0	0.00	0.1	1.5		8.1	0.3		5.0	0.01	0.1	4.1		0.0	0.0
6 28 78	0.1	0.02			21	0.1	0.03	0.2	4.9		8.9	0.4		5.9	0.00	0.1	2.8		0.0	0.0
8 2 78	0.1	0.01			42	0.0	0.02	0.1	2.0		10	0.2		6.4	0.03	0.1	5.7		0.0	0.0
9 13 78	0.1	0.03	0.0	0.00	20	0.0	0.00	0.2	5.2	0.01	5.4	0.2	0.0	3.6	0.00	0.0	5.4	0.0	0.0	0.0
10 16 78	0.2	0.02			37	0.0	0.00	0.6	7.4		8.2	0.5		4.7	0.02	0.1	5.3		0.1	0.1
11 14 78	0.1	0.01			41	0.0	0.01	0.2	3.0		8.7	0.5		6.0	0.02	0.0	5.7		0.0	0.0
1 24 79	0.2	0.00			15	0.0	0.01	0.1	3.8		3.8	0.0		3.1	0.02	0.0	3.4		0.0	0.0
2 28 79	0.1	0.00			21	0.0	0.01	0.1	2.5		5.6	0.1		3.9	0.01	0.0	4.4		0.0	0.0
3 28 79	0.1	0.00	0.1	0.00	28	0.0	0.02	0.1	2.2	0.10	6.9	0.2	0.0	4.3	0.02	0.0	4.0	0.1	0.0	0.0
5 3 79	0.1	0.01			34	0.0	0.01	0.2	1.6		7.0	0.2		4.4	0.01	0.0	4.2		0.1	0.0
5 31 79	0.1	0.02			21	0.0	0.00	0.2	1.6		6.0	0.3		3.7	0.00	0.0	4.4		0.0	0.2
7 10 79	0.1	0.01	0.1	0.00	40	0.0	0.00	0.4	2.4	0.25	9.2	0.4	0.0	5.1	0.00	0.1	4.9	0.1	0.0	0.0
10 4 79	0.1	0.03			31	0.0	0.00	0.0	2.9		6.5	0.0		5.2	0.01	0.0	5.2		0.0	0.0

TABLE 83. WATER QUALITY FOR SITE 6222 WASHINGTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 17 77	22	0.0000			140	1470	1220	0.97	7.2		16	19	0	2.3	850	0.1					
10 14 77	13	0.025	77		120	1510	1110	1.07	7.4		74	90	0	2.7	730	0.1					
11 23 77	10	0.01	33*		6	1140	990	1.14	7.8		71	86	0	5.6	640	0.1					
1 17 78	2	0.0000			2	1260	908	1.20	7.9		67	81	1	4.0	580	0.3					
2 23 78	1	0.02			4	993	750	1.17	8.2		81	97	1	8.0	470	0.5					
3 23 78	7	0.1			30	777	570	1.04	6.1		6	7	0	3.9	390	0.7					
4 26 78	10	0.04			45	1120	738	1.19	8.0		52	62	0	4.4	470	0.2					
5 31 78	18	0.08			7	1150	767	1.01	7.9		75	91	1	3.2	510	0.1					
6 28 78	21	0.15				2340	1660	0.50	2.7		0	0	0	1.4	1300	0.1					
8 2 78	20	0.008	51*		140	1490	1260	1.00	8.2		92	109	1	3.5	840	0.1					
9 13 78	18	0.002	69*		60	1790	1380	0.65	3.2		0	0	0	3.6	1000	0.2					
10 16 78	8	0.4	66*		40	2330	1380	0.47	2.7		0	0	0	1.7	980	0.2					
11 14 78	11	0.002	41		130	1580	1580	0.85	7.2		15	18	0	2.7	1100	0.0					
1 24 79	2	1.5	1480		1600	946	442	0.74	3.2		0	0	0	1.1	300	0.3					
2 28 79	0	0.02	26		40	1140	893	1.00	4.4	40	0	0	0	1.7	630	0.7					
3 28 79	3	0.02			40	1300	1060	1.06	7.9	-41	48	58	0	2.7	720	0.1					
5 3 79	11	0.01		0.35		1330	1010	0.98	8.1	-54	78	93	1	2.3	690	0.2					
5 31 79	14	0.03		0.05		1260	990	1.02	4.3		0	0	0	2.4	680	0.1					
7 10 79	18	0.009				2300	1670	0.70	2.8	380	0	0	0	1.2	1200	0.2	0.0	0.24	1.05	1.55	
10 4 79	13	0.01				1250	1010	0.94	4.0	69	0	0	0	1.8	700	0.1					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 17 77	0.6	0.00			220	0.2	0.00	9.9	4.1		63	26		14	0.27	0.1	6.6		0.1	0.4
10 14 77	0.3	0.00	0.1	0.00	220	0.1	0.00	7.4	2.5	0.55	61	22	0.0	12	0.10	0.1	5.6	0.7	0.1	0.1
11 23 77	0.2	0.03			190	0.0	0.00	1.8	2.8		63	12		12	0.08	0.1	6.4		0.1	0.1
1 17 78	0.3	0.01	0.0	0.00	180	0.0	0.00	4.0	2.3	0.65	64	9.5	0.0	13	0.07	0.1	5.5	0.8	0.2	0.1
2 23 78	0.3	0.00			130	0.0	0.00	3.2	2.1		52	5.5		15	0.04	0.0	4.6		0.0	0.0
3 23 78	1.0	0.04			110	0.1	0.01	1.3	2.1		33	6.1		6.5	0.10	0.0	6.6		0.0	0.1
4 26 78	0.2	0.02	0.1	0.00	140	0.1	0.01	3.5	2.3	0.50	53	7.2	0.0	11	0.07	0.2	5.6	0.5	0.3	0.1
5 31 78	0.2	0.03			130	0.1	0.01	3.1	2.5		47	11		11	0.05	0.1	5.3		0.2	0.0
6 28 78	55	0.04			140	0.7	0.30	75	4.0		72	20		8.2	0.91	0.3	8.8		0.5	1.2
8 2 78	0.4	0.04			220	0.1	0.02	8.7	3.5		72	21		19	0.10	0.3	7.5		0.2	0.0
9 13 78	30	0.04			170	0.4	0.15	18	3.5		59	22		7.0	0.55	0.3	16		0.2	0.9
10 16 78	52	0.03	0.0	0.02	110	0.4	0.27	150	2.6	0.70	47	15	0.1	1.7	0.63	0.2	6.6	0.2	0.2	1.7
11 14 78	1.1	0.02			270	0.2	0.02	7.5	2.9		73	42		16	0.17	0.3	6.7		0.3	0.2
1 24 79	8.0	0.00			63	0.1	0.06	25	1.5		18	3.8		1.5	0.15	0.1	7.4		0.2	0.3
2 28 79	6.3	0.02			170	0.1	0.03	1.8	1.7		52	8.6		5.9	0.18	0.1	6.3		0.2	0.3
3 28 79	0.4	0.02	0.0	0.00	210	0.0	0.01	0.7	1.9	1.0	59	6.6	0.0	13	0.08	0.2	4.3	0.7	0.3	0.1
5 3 79	0.3	0.04			170	0.1	0.01	2.1	1.6		60	4.6		11	0.09	0.4	4.7		1.0	0.1
5 31 79	7.6	0.02			170	0.2	0.06	6.0	2.8		64	16		13	0.26	0.2	13		0.2	0.6
7 10 79	36	0.04	0.0	0.01	250	0.2	0.18	71	1.9	1.5	61	14	0.0	6.0	0.37	0.2	4.9	0.5	0.3	0.7
10 4 79	11	0.04			180	0.2	0.00	4.3	2.1		54	16		8.2	0.35	0.0	12		0.0	1.1

TABLE 84. WATER QUALITY FOR SITE 6223 WASHINGTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	MEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
8 12 77	20	0.0000			20	2060	1700	0.90	7.1		17	21	0	3.3	1200	0.1					
10 14 77	17	0.0015	36		8	1990	1600	0.84	6.8		25	31	0	2.3	1200	0.0					
11 25 77	4	0.01			4	1690	1630	1.03	7.3		33	40	0	2.7	1100	0.0					
1 17 78	1	0.005			20	1660	1510	0.83	6.0		4	5	0	12	1100	0.1					
2 23 78	1	0.05			3	1590	1240	0.95	5.8		3	4	0	4.5	900	0.1					
3 23 78	9	0.02			10	1560	1220	1.04	6.9		23	28	0	12	830	0.1					
4 26 78	9	0.03			5	1640	1360	0.90	6.4		2	2	0	3.2	1000	0.1					
5 31 78	27	0.025			7	1610	1250	0.80	6.6		7	8	0	1.4	940	0.0					
6 28 78	22	0.03	36*			1660	1210	0.81	6.3		2	2	0	1.8	920	0.0					
8 2 78	22	0.005	11		5	1890	1800	1.03	7.1		11	13	0	3.0	1300	0.0					
9 13 78	19	0.0007				1930	1750	0.87	7.3		12	15	0	9.0	1300	0.2					
10 16 78	10	0.002	89*		35	1570	1360	0.92	7.2		11	14	0	4.1	980	0.3					
11 17 78	11	0.001	42		30	1580	1460	0.89	7.1	22	16	19	0	8.7	1100	0.0					
2 28 79	1	0.05	59		8	1340	1200	0.88	6.9	-18	22	27	0	4.2	870	0.1					
3 28 79	7	0.01			15	1780	1590	0.95	7.2	17	19	23	0	3.5	1100	0.2					
5 3 79	12	0.01	10	0.00	3	1730	1460	1.03	7.1	32	8	10	0	2.3	1000	0.1					
5 31 79	15	0.003		0.80		1550	1150	1.12	7.0	25	12	15	0	2.2	790	0.0					
7 10 79	21	0.003	60*		1	1820	1550	0.86	7.3	25	12	15	0	2.6	1100	0.1	0.0	0.06	1.45	0.15	0.02
10 4 79	14	0.001	29			1800	1620	0.93	7.0	8	9	11	0	2.4	1200	0.8					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
8 12 77	0.3	0.04			270	0.2	0.00	0.9	6.5		110	30		19	0.18	0.1	7.1		0.1	0.3
10 14 77	0.6	0.04	0.0	0.00	250	0.1	0.00	0.1	4.8	0.65	95	22	0.0	12	0.14	0.1	9.3	1.5	0.1	0.1
11 25 77	0.5	0.07			270	0.1	0.00	0.2	5.8		130	23		12	0.17	0.1	10		0.2	0.2
1 17 78	0.9	0.05	0.0	0.00	200	0.2	0.00	0.4	4.8	0.75	110	24	0.0	18	0.19	0.1	8.7	1.7	0.2	0.2
2 23 78	1.2	0.05			180	0.2	0.00	0.1	4.8		100	24		12	0.19	0.1	8.2		0.2	0.1
3 23 78	0.6	0.09			200	0.2	0.00	0.3	5.4		89	27		18	0.15	0.1	8.8		0.1	0.1
4 26 78	1.0	0.07	0.0	0.00	190	0.2	0.00	0.2	4.3	0.65	110	26	0.0	12	0.18	0.1	9.7	1.3	0.3	0.2
5 31 78	0.4	0.09			160	0.2	0.01	0.1	3.9		86	22		11	0.15	0.2	7.7		0.2	0.1
6 28 78	0.6	0.07			140	0.3	0.04	0.5	5.3		98	24		12	0.16	0.3	4.4		0.3	0.1
8 2 78	0.4	0.10			310	0.2	0.02	0.2	6.6		130	42		19	0.23	0.3	9.4		0.3	0.1
9 13 78	0.6	0.10	0.0	0.00	260	0.2	0.01	0.8	7.9	1.5	120	34	0.1	12	0.17	0.4	9.0	2.0	0.3	0.1
10 16 78	0.6	0.08			210	0.1	0.01	0.5	5.6		94	20		8.2	0.14	0.3	8.0		0.3	0.1
11 17 78	0.5	0.09			230	0.2	0.01	0.2	6.9		93	22		12	0.20	0.2	9.3		0.3	0.1
2 28 79	0.4	0.07	0.0	0.00	180	0.1	0.00	0.1	3.6	0.75	78	14	0.0	7.4	0.13	0.2	7.6	1.0	0.3	0.2
3 28 79	0.6	0.08			260	0.2	0.00	0.1	4.8		110	22		9.9	0.19	0.2	8.9		0.5	0.2
5 3 79	0.7	0.07			250	0.2	0.00	0.2	3.9		110	26		8.9	0.21	0.3	8.4		0.3	0.2
5 31 79	0.6	0.09			210	0.2	0.01	0.2	4.2		91	21		9.7	0.16	0.2	9.3		0.3	0.4
7 10 79	0.3	0.10	0.1	0.00	240	0.1	0.00	0.1	4.8	1.0	99	26	0.2	10	0.15	0.2	8.5	1.2	0.3	0.1
10 4 79	0.4	0.09			270	0.2	0.00	0.1	5.3		110	28		9.4	0.18	0.3	8.4		0.7	0.1

TABLE 85. WATER QUALITY FOR SITE 6226 WASHINGTON COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L														
9 26 79	0	0.007			7	577	345	1.63	8.3		102	122	2	0.8	180						

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR																				
9 26 79	0.1	0.01			62	0.0	0.00	0.0	2.7		34	0.0		3.1	0.01	0.0	0.7		0.1	0.0

TABLE 86. WATER QUALITY FOR SITE 6231 WESTMORELAND COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
7 18 77	19	0.1			20	81	44	1.92	7.2		11	13	0	4.3	13	0.1					
8 23 77	15	0.04			20	113	61	2.79	7.4		24	29	0	4.8	16	0.0					
11 1 77	9	0.06	11		8	95	53	3.16	7.5		19	23	0	4.2	13	0.0					
12 21 77	6	1.5	4		4	92	43	1.85	6.6		4	5	0	9.3	11	0.2					
2 3 78	2	0.4			0	66	42	1.74	6.9		11	13	0	4.7	13	0.1					
3 8 78	1	0.4			0	79	45	1.96	7.3		10	12	0	5.7	14	0.1					
4 5 78	8	1.5			4	64	44	1.46	6.6		6	7	0	5.9	15	0.2					
5 4 78	7	0.5			10	73	44	1.88	7.2		10	12	0	5.4	14	0.1					
6 14 78	12	0.25			4	74	47	1.51	6.8		11	14	0	4.8	15	0.2					
7 13 78	17	0.5	33%		8	76	53	1.50	7.1		10	12	0	4.7	19	0.2					
9 26 78	14	0.0001	33%		4	365	202	9.61	8.2		153	183	2	5.6	19	0.1					
10 30 78	7	0.0002	29%		7	307	184	7.47	8.3		133	158	2	4.9	22	0.1					
12 5 78	0	0.03	6		1	80	47	2.23	6.7		9	11	0	5.0	14	0.1					
1 24 79	1	0.6	14		15	77	53	2.43	6.5		19	23	0	7.4	12	0.2					
3 14 79	6	0.3	17		4	69	41	1.92	6.9	-5	7	9	0	5.0	13	0.2					
4 11 79	8	0.2	4		1	62	41	1.43	6.7	-2	5	6	0	4.2	16	0.2					
5 10 79	14	0.01	16	0.00		73	58	1.27	7.4	-5	15	18	0	4.0	23	0.1					
6 7 79	13	0.0015	8		5	75	48	2.20	7.1	-9	14	17	0	4.4	14	0.2					
8 1 79	22	0.03	0		8	91	58	2.71	7.3	-13	30	36	0	4.5	13	0.1	0.0	0.02	0.55	0.15	0.00
9 26 79	17	0.1	0		5	68	44	2.06	7.3	-10	13	16	0	3.3	13	0.1					

% Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 18 77	0.0	0.01			5.8	0.0	0.00	0.0	1.5		2.3	0.0		3.0	0.01	0.1	3.2		0.0	0.0
8 23 77	0.0	0.03			11	0.0	0.00	0.0	1.1		3.4	0.1		3.6	0.02	0.0	3.2		0.0	0.0
11 1 77	0.0	0.01	0.0	0.00	10	0.0	0.00	0.1	1.2	0.15	3.2	0.0	0.0	3.2	0.00	0.0	2.9	0.0	0.0	0.0
12 21 77	0.0	0.00	0.1	0.00	5.7	0.0	0.00	0.0	1.3	0.05	2.3	0.0	0.0	4.4	0.03	0.0	2.5	0.0	0.0	0.1
2 3 78	0.0	0.01			5.3	0.0	0.00	0.1	0.8		2.5	0.0		3.1	0.01	0.0	2.4		0.0	0.0
3 8 78	0.1	0.03			6.4	0.0	0.00	0.2	0.9		3.0	0.1		3.0	0.01	0.0	2.6		0.1	0.0
4 5 78	0.0	0.00	0.0	0.00	5.4	0.0	0.00	0.1	0.9	0.02	2.6	0.0	0.0	3.1	0.01	0.0	2.7	0.0	0.1	0.0
5 4 78	0.0	0.00			6.2	0.0	0.00	0.0	0.9		2.7	0.0		3.0	0.01	0.0	2.5		0.1	0.0
6 14 78	0.0	0.00	0.0	0.00	5.7	0.0	0.01	0.0	1.0	0.02	2.3	0.0	0.0	2.7	0.01	0.0	3.6	0.0	0.0	0.0
7 13 78	0.2	0.01	0.0	0.00	7.4	0.0	0.00	1.5	0.9	0.03	2.8	0.2	0.0	2.7	0.00	0.0	2.9	0.0	0.0	0.0
9 26 78	0.1	0.01			65	0.0	0.00	0.1	2.0		7.3	0.1		3.1	0.01	0.1	3.0		0.0	0.0
10 30 78	0.1	0.01	0.1	0.00	57	0.0	0.02	0.1	2.9	0.60	5.1	0.0	0.0	4.6	0.01	0.1	2.8	0.1	0.0	0.0
12 5 78	0.0	0.00			8.9	0.0	0.01	0.0	1.1		2.1	0.0		3.4	0.01	0.0	3.1		0.0	0.0
1 24 79	0.1	0.00			8.1	0.0	0.01	0.0	1.1		1.7	0.0		5.3	0.02	0.0	2.3		0.0	0.0
3 14 79	0.0	0.00			6.5	0.0	0.01	0.0	0.9		2.2	0.0		3.2	0.01	0.0	2.3		0.0	0.0
4 11 79	0.0	0.00	0.1	0.00	5.7	0.0	0.00	0.0	0.8	0.01	2.2	0.0	0.0	2.6	0.02	0.0	2.4	0.0	0.0	0.1
5 10 79	0.2	0.00			8.2	0.0	0.00	1.4	0.8		2.4	0.3		2.3	0.01	0.0	2.5		0.1	0.1
6 7 79	0.0	0.01			8.4	0.0	0.01	0.0	1.0		2.6	0.0		2.4	0.00	0.0	2.8		0.0	0.0
8 1 79	0.0	0.01			10	0.0	0.00	0.0	1.0		2.3	0.0		2.6	0.00	0.0	2.9		0.0	0.0
9 26 79	0.0	0.00			7.9	0.0	0.01	0.0	0.8		2.0	0.0		2.0	0.00	0.0	3.0		0.0	0.0

TABLE 87. WATER QUALITY FOR SITE 6233 WESTMORELAND COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	%NO3 AS N	NH3 AS N	TOT N	TOT P	OR PH
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L				MILLIGRAMS PER LITER										
7 18 77	26	0.04			20	377			8.2		123	147	1	23		0.3					
8 23 77	17	0.06			10	479	218	7.01	7.4		107	130	0	33	24	0.0					
11 1 77	12	0.09	10		30	362	222	3.52	7.6		111	134	0	19	47	0.9					
12 21 77	6	2.5	9		6	325	182	1.66	7.5		49	60	0	15	42	9.3					
2 3 78	2	0.4			4	316	157	2.28	7.7		43	52	0	23	37	3.2					
3 8 78	2	0.25			10	410	206	2.91	7.6		72	88	0	38	39	2.1					
4 5 78	12	2.5			10	280	147	1.87	7.7		36	44	0	24	39	2.6					
5 4 78	10	0.9			15	332	184	2.10	8.3		83	99	1	21	48	1.5					
6 14 78	16	0.6			15	348	182	2.57	8.0		90	109	1	24	31	4.3					
7 13 78	20	0.7	23*		10	340	194	3.87	8.2		93	112	1	20	37	1.0					
8 22 78	20	0.005	62*		15	391	215	5.50	8.3		124	147	2	20	31	0.5					
9 26 78	13	0.01	47*		25	400	222	6.07	8.4		138	163	2	21	28	0.4					
10 30 78	8	0.03	37*		15	408	221	3.87	8.3		123	146	2	25	36	1.5					
11 14 78	13	0.01	6		25	401	228	5.29	8.4		131	155	2	23	33	0.7					
1 4 79	0	0.7	13		8	233	132	1.98	7.3		33	40	0	13	34	4.3					
3 14 79	4	0.2	21		9	340	189	2.65	7.5	-49	48	58	0	42	34	3.0					
4 11 79	7	0.4	45		25	245	138	2.11	7.7		35	43	0	13	42	2.2					
5 10 79	22	0.4	2	0.00	9	286	180	3.08	8.1	-57	71	86	1	21	42	1.3					
6 7 79	13	0.15	4		8	313	161	3.05	8.2	-68	71	85	1	19	32	2.2					
8 1 79	23	0.04	10		20	367	205	6.03	8.3	-110	121	144	2	19	27	0.9	0.2	0.02	0.70	0.00	0.0
9 26 79	14	0.1	16		8	316	182	3.26	8.1	-66	75	90	1	19	37	2.9					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CO	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 18 77	0.1	0.05			42	0.0	0.01	0.1	5.6		10	0.1		15	0.02	0.2	3.6		0.0	0.
8 23 77	0.0	0.07			52	0.0	0.01	0.1	4.2		12	0.1		18	0.03	0.1	4.2		0.1	0.
11 1 77	0.0				54	0.0	0.00	0.1	2.9		9.5	0.1		11	0.00	0.0	3.4		0.0	0.
12 21 77	0.0		0.1	0.00	27	0.0	0.00	0.1	3.8	0.30	8.4	0.1	0.0	8.5	0.01	0.0	2.9	0.2	0.0	0.
2 3 78	0.0	0.02			28	0.0	0.00	0.1	2.8		8.8	0.1		11	0.01	0.0	3.2		0.0	0.
3 8 78	0.3	0.04			36	0.0	0.00	1.3	3.3		11	0.4		18	0.01	0.0	2.9		0.1	0.
4 5 78	0.1	0.01	0.0	0.00	24	0.0	0.00	0.4	2.6	0.15	8.2	0.2	0.0	9.3	0.00	0.0	2.7	0.1	0.0	0.
5 4 78	0.4	0.01			30	0.0	0.00	2.6	2.8		9.7	0.5		10	0.01	0.0	1.4		0.1	0.
6 14 78	0.1	0.01	0.1	0.00	28	0.0	0.01	0.0	3.7	0.20	8.6	0.1	0.0	10	0.02	0.1	1.3	0.1	0.1	0.
7 13 78	0.1	0.03	0.1	0.00	47	0.0	0.00	0.1	3.6	0.15	9.6	0.0	0.1	8.6	0.00	0.1	3.3	0.1	0.0	0.
8 22 78	0.1	0.02			52	0.0	0.01	0.1	3.8		11	0.1		12	0.03	0.1	4.2		0.1	0.
9 26 78	0.1	0.03			54	0.0	0.00	0.0	3.7		11	0.1		10.0	0.01	0.1	4.0		0.1	0.
10 30 78	0.2	0.03	0.1	0.01	51	0.0	0.00	0.1	3.1	0.30	9.0	0.1	0.0	7.7	0.01	0.1	3.5	0.1	0.0	0.
11 14 78	0.2	0.01			59	0.0	0.00	0.1	3.1		10	0.2		9.7	0.01	0.1	3.3		0.0	0.
1 4 79	0.1	0.00	0.0	0.00	24	0.0	0.00	0.0	2.9	0.20	6.8	0.0	0.0	6.0	0.02	0.1	3.0	0.0	0.1	0.
3 14 79	0.1	0.02			36	0.0	0.01	0.1	2.7		7.7	0.1		18	0.01	0.0	2.9		0.0	0.
4 11 79	0.1	0.01	0.1	0.00	29	0.0	0.01	0.1	2.8	0.15	6.9	0.0	0.0	6.9	0.02	0.1	2.4	0.1	0.0	0.
5 10 79	0.1	0.01			47	0.0	0.02	0.2	2.2		8.2	0.1		7.5	0.00	0.0	1.8		0.0	0.
6 7 79	0.1	0.02			31	0.0	0.02	0.0	2.6		9.5	0.0		8.5	0.02	0.1	2.5		0.1	0.
8 1 79	0.1	0.03			53	0.0	0.03	0.1	2.9		10	0.1		9.6	0.02	0.0	3.3		0.0	0.
9 26 79	0.1	0.03			41	0.0	0.00	0.0	3.6		9.2	0.1		8.5	0.01	0.0	3.1		0.0	0.

TABLE 88. WATER QUALITY FOR SITE 6234 WESTMORELAND COUNTY, PENNSYLVANIA

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HCO3	CO3	CL	SO4	NO3 AS N	NO3 AS N	NH3 AS N	TOT N	TOT P	ORTH PO4
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
7 18 77	26	0.08			20	233	117	2.93	7.5		40	49	0	25	19	0.6					
8 23 77	16	0.3			40	261	122	3.58	7.2		41	50	0	23	22	0.1					
11 1 77	9	0.2	25		4	255	133	2.35	6.9		32	39	0	36	21	1.7					
12 21 77	4	1.0	28		4	310	166	1.35	6.6		13	16	0	41	20	9.6					
2 3 78	1	0.15			6	246	121	2.02	7.0		11	14	0	32	21	3.4					
3 8 78	1	0.15			15	369	206	2.04	6.7		19	23	0	87	20	2.6					
4 5 78	10	2.0			4	195	109	1.65	7.0		14	17	0	27	20	3.5					
5 4 78	8	0.4			10	232	120	2.42	7.6		27	33	0	27	20	2.9					
6 14 78	14	0.15			10	224	128	1.85	7.5		37	45	0	24	21	4.2					
7 13 78	21	0.5	39*		8	196	121	1.64	7.6		33	40	0	18	34	1.6					
8 22 78	21	0.009	33*		7	218	123	2.40	7.9		43	52	0	22	23	1.7					
9 26 78	12	0.08	46*		8	212	110	2.69	7.8		43	52	0	16	22	1.1					
10 30 78	8	0.2	11		10	191	100	2.18	7.5	-25	27	33	0	14	23	2.2					
12 5 78	4	0.7	15		8	167	88	1.90	7.2		16	19	0	11	24	2.0					
1 24 79	2	0.8			15	567	328	1.78	7.1		11	13	0	160	23	1.9					
3 14 79	2	0.3	0		7	225	120	1.88	7.2	-14	15	18	0	33	25	1.8					
4 11 79	8	0.4	20		65	156	90	1.82	7.4	-12	16	20	0	13	25	1.8					
5 10 79	20	0.3	24	0.00	40	193	112	2.41	7.7	-28	32	39	0	20	24	1.1					
6 7 79	18	0.09	15	0.00	20	183	105	2.34	7.7	-28	31	38	0	16	25	1.3					
8 1 79	23	0.5	19		30	151	84	2.05	7.7	-14	23	28	0	9.9	22	1.5	0.2	0.00	1.65	0.05	0.00
9 25 79	15	0.09	4		15	156	87	1.88	7.6	-23	26	32	0	9.9	23	1.5					

* Suspended Solids values followed by an asterisk are believed to be 5 to 80 mg/l too high (most are 20 to 40 mg/l too high).

DATE	AL	B	BA	BE	CA	CD	CU	FE	K	LI	MG	MN	MO	NA	NI	PB	SI	SR	TI	ZN
MO DA YR	MILLIGRAMS PER LITER																			
7 18 77	0.0	0.02			19	0.0	0.00	0.2	3.3		4.2	0.1		13	0.02	0.2	2.8		0.0	0.2
8 23 77	0.0	0.06			24	0.0	0.00	0.1	2.4		5.0	0.1		15	0.03	0.0	3.0		0.0	0.0
11 1 77	0.0	0.00	0.0	0.00	23	0.0	0.00	0.1	2.2	0.09	4.8	0.1	0.0	14	0.00	0.0	2.4	0.1	0.0	0.0
12 21 77	0.0		0.2	0.00	20	0.0	0.00	0.1	1.8	0.20	4.9	0.1	0.0	22	0.01	0.0	2.1	0.1	0.0	0.1
2 3 78	0.0	0.02			17	0.0	0.00	0.1	1.4		4.4	0.0		18	0.01	0.0	2.1		0.0	0.0
3 8 78	0.1	0.04			24	0.0	0.00	0.4	1.9		6.4	0.2		39	0.01	0.0	2.4		0.1	0.0
4 5 78	0.0	0.00	0.0	0.00	14	0.0	0.00	0.1	1.4	0.09	4.1	0.1	0.0	14	0.00	0.0	2.2	0.0	0.0	0.0
5 4 78	0.1	0.00			17	0.0	0.00	0.1	1.5		4.7	0.1		16	0.01	0.0	2.1		0.1	0.0
6 14 78	0.1	0.00	0.0	0.00	16	0.0	0.01	0.0	1.8	0.09	4.2	0.0	0.0	13	0.02	0.1	3.0	0.1	0.1	0.0
7 13 78	0.0	0.02	0.0	0.00	19	0.0	0.00	0.2	1.7	0.07	4.2	0.0	0.0	10	0.00	0.0	2.5	0.0	0.1	0.0
8 22 78	0.0	0.01			20	0.0	0.01	0.1	2.0		4.0	0.0		12	0.03	0.1	2.9		0.0	0.0
9 26 78	0.0	0.02			20	0.0	0.00	0.0	1.6		4.2	0.0		8.8	0.01	0.0	2.6		0.0	0.0
10 30 78	0.1	0.01			18	0.0	0.01	0.0	1.7		3.6	0.0		8.3	0.00	0.0	2.4		0.0	0.0
12 5 78	0.1	0.00			14	0.0	0.01	0.0	1.4		3.0	0.1		9.8	0.02	0.0	2.4		0.0	0.0
1 24 79	0.1	0.01			41	0.0	0.00	0.1	2.4		5.9	0.0		70	0.01	0.0	2.4		0.1	0.0
3 14 79	0.1	0.00			17	0.0	0.01	0.0	1.7		3.8	0.0		18	0.01	0.0	2.2		0.0	0.0
4 11 79	0.1	0.00	0.1	0.00	14	0.0	0.00	0.0	1.4	0.10	3.1	0.0	0.0	10	0.01	0.0	2.0	0.0	0.0	0.1
5 10 79	0.1	0.01			21	0.0	0.00	0.1	1.7		3.9	0.0		11	0.00	0.0	2.7		0.0	0.1
6 7 79	0.1	0.01			18	0.0	0.00	0.1	1.5		3.9	0.0		11	0.00	0.0	2.5		0.0	0.0
8 1 79	0.1	0.02			14	0.0	0.00	0.1	1.4		3.1	0.0		7.1	0.02	0.0	2.5		0.1	0.0
9 25 79	0.0	0.01			15	0.0	0.00	0.0	1.7		2.6	0.0		6.3	0.00	0.0	2.5		0.0	0.1

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