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Stream Water Quality in the Coal Region of Tennessee

Kenneth L. Dver

in cooperation with Industrial Environmental Research
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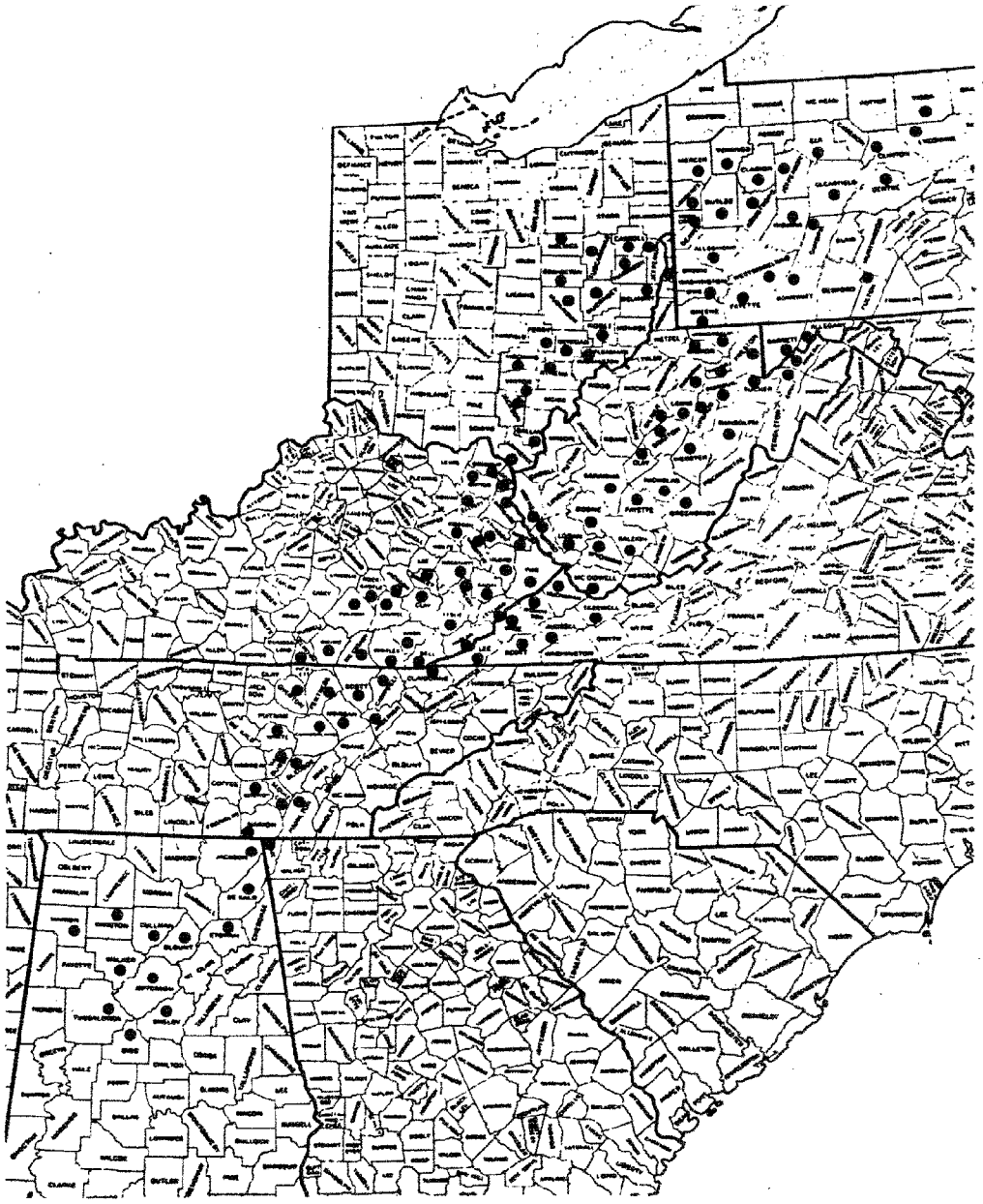

STREAM WATER QUALITY IN THE COAL REGION OF TENNESSEE

by

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This study was conducted
in cooperation with
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ABSTRACT

This report is a compilation of water quality data for 69 small streams sampled in 15 counties of Tennessee where coal is surface-mined. Seventeen of these streams drain unmined watersheds; 51 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 Tennessee. 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 June 7, 1977 to December 11, 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 waterhseds 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 69 small watersheds in Tennessee. Most streams were sampled at approximate monthly intervals from June 1977 through August 1979, as part of a study of the effects of surface mining on water quality in Appalachia. Seventeen of these sampled watersheds were unmined; 51 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 Tennessee Valley Authority and the Tennessee Department of Conservation, Division of Surface Mining and Land Reclamation is gratefully acknowledged. Personnel from these agencies 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 June 1977, 69 water sampling sites were established in the 15 counties of Tennessee in which surface mining for coal was practiced. Most of these were sampled at approximately monthly intervals until August 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 Tennessee, 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 7012 the 7 indicates Tennessee, the 01 indicates Anderson 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 June 26 and September 13, 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--

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 40. Field observations and analytical data are tabulated in Tables 4 through 72. An interpretive report, to be released later, will cover all nine states in the Appalachian study area.

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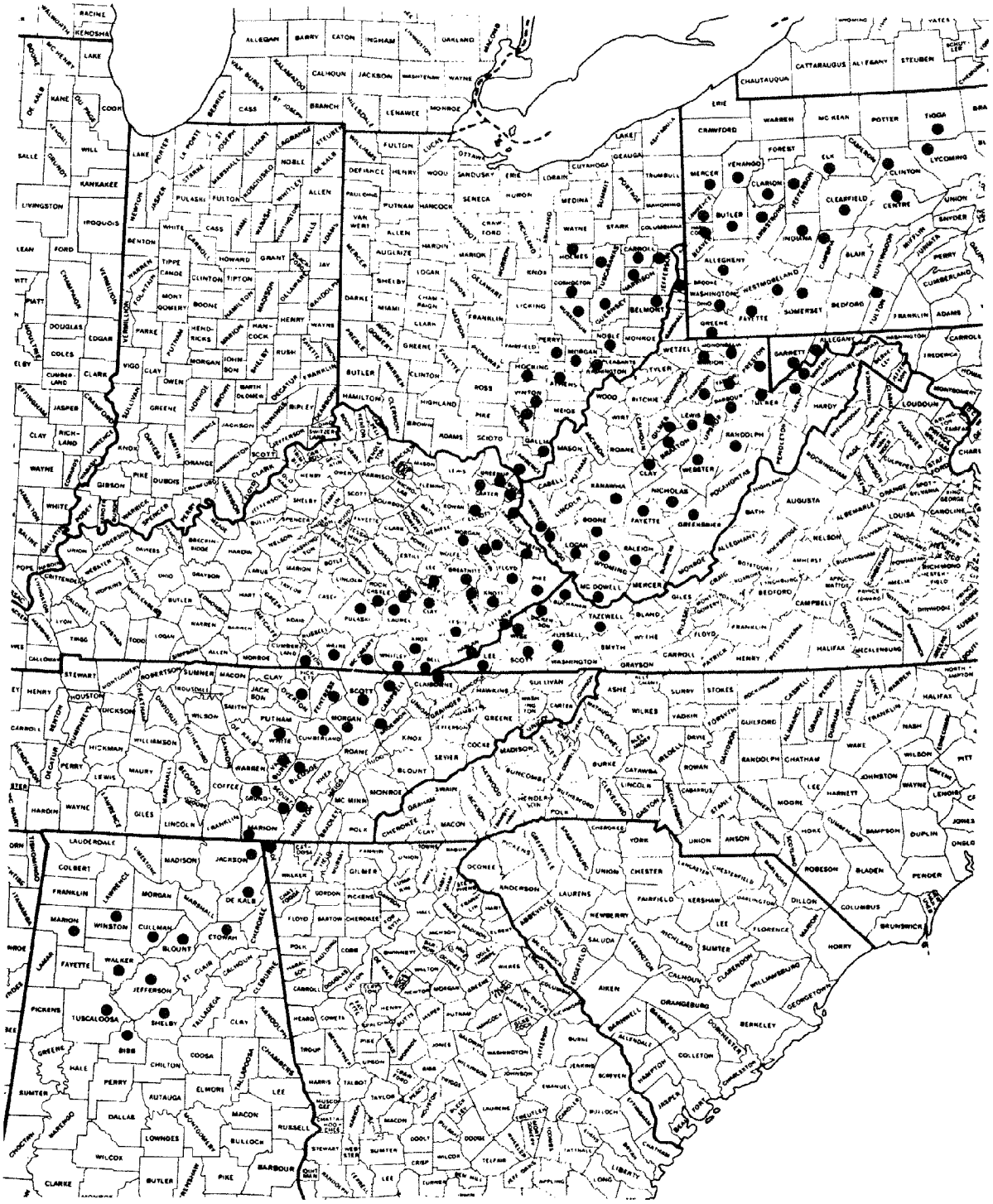

Figure 1. The study area. (Each dot marks one of the 136 Appalachian counties included in this study)

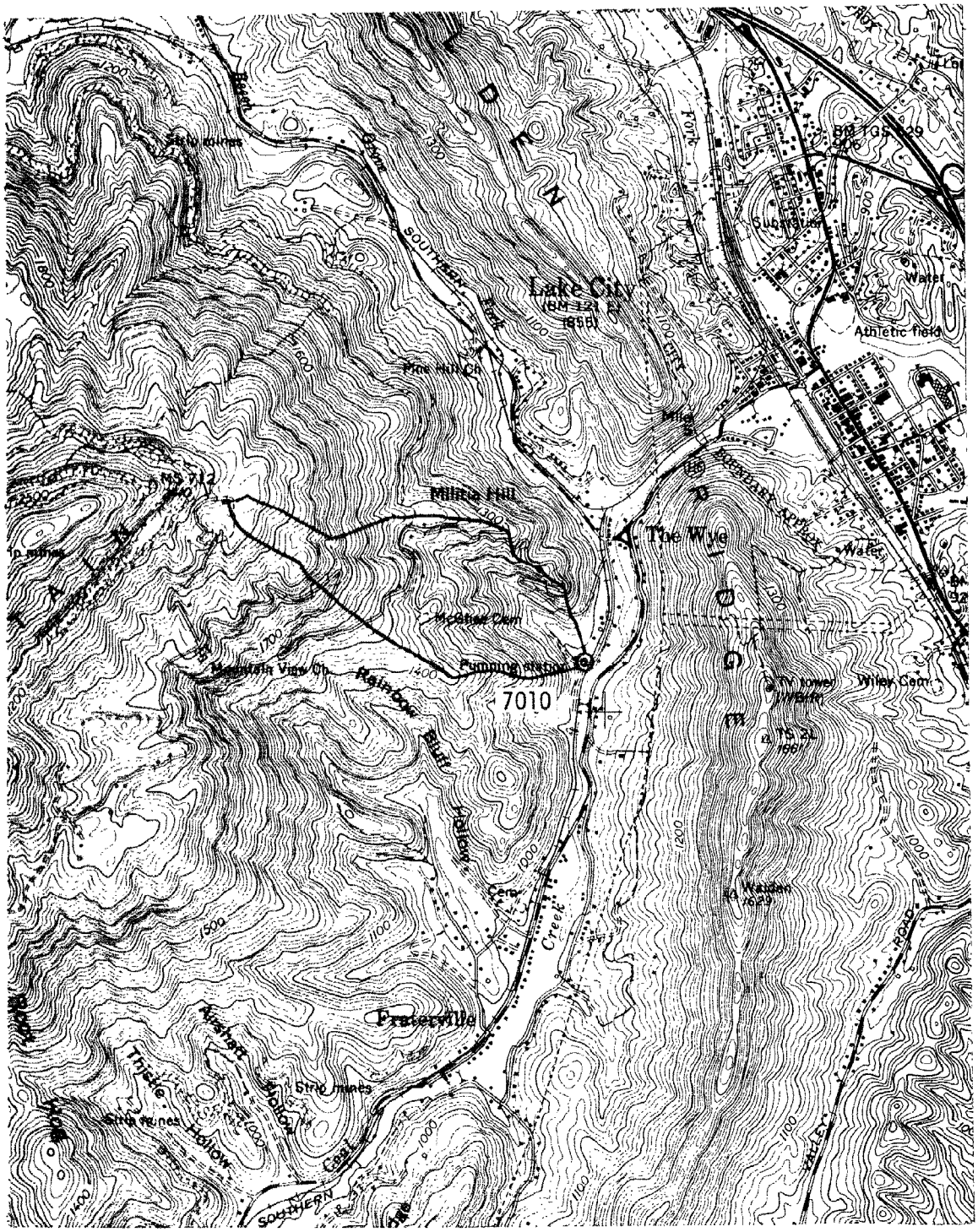

Figure 2. Location map for site 7010, Anderson Co., Tennessee. Lake City Quadrangle.

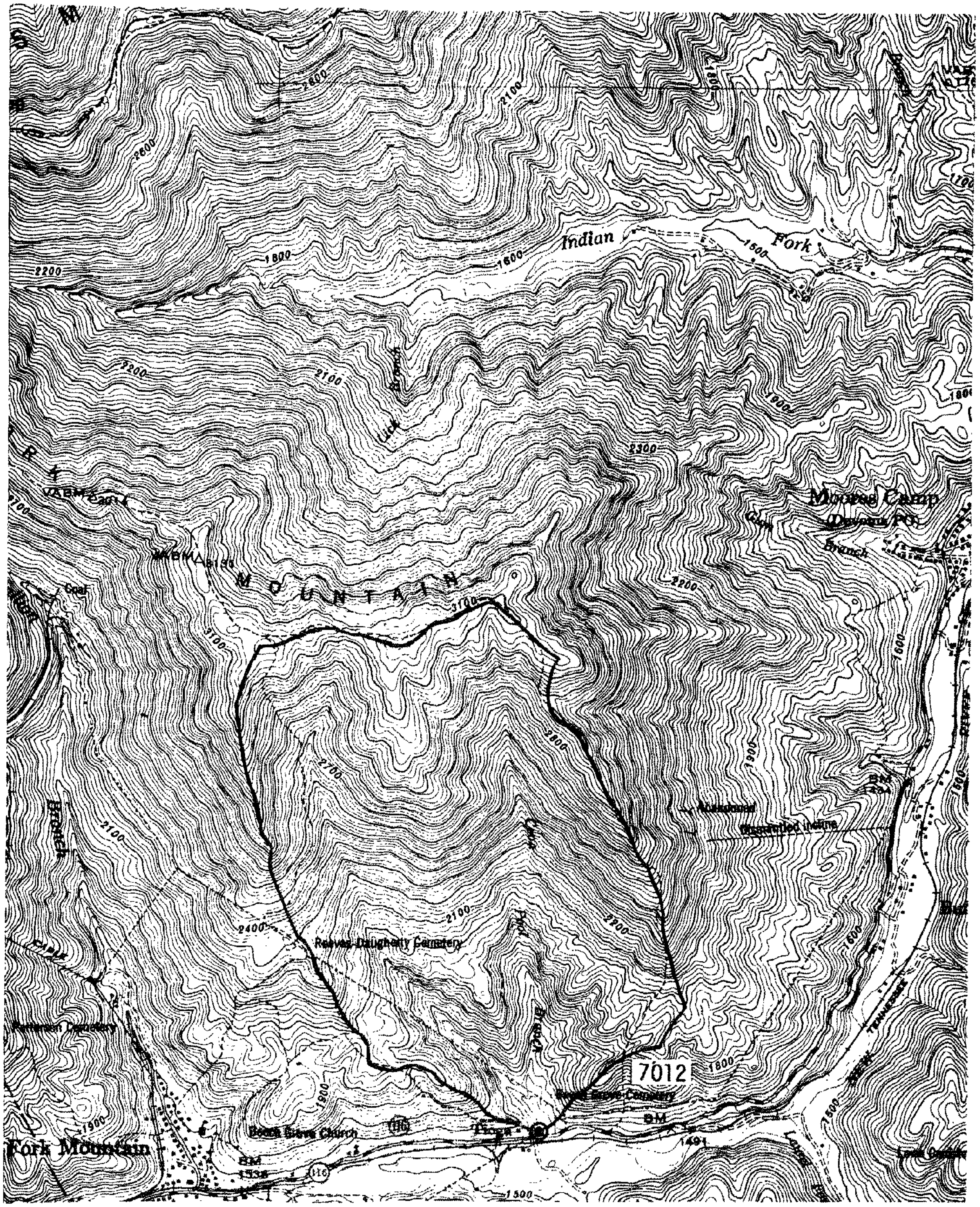

Figure 3. Location map for site 7012, Anderson Co., Tennessee. Fork Mountain Quadrangle.

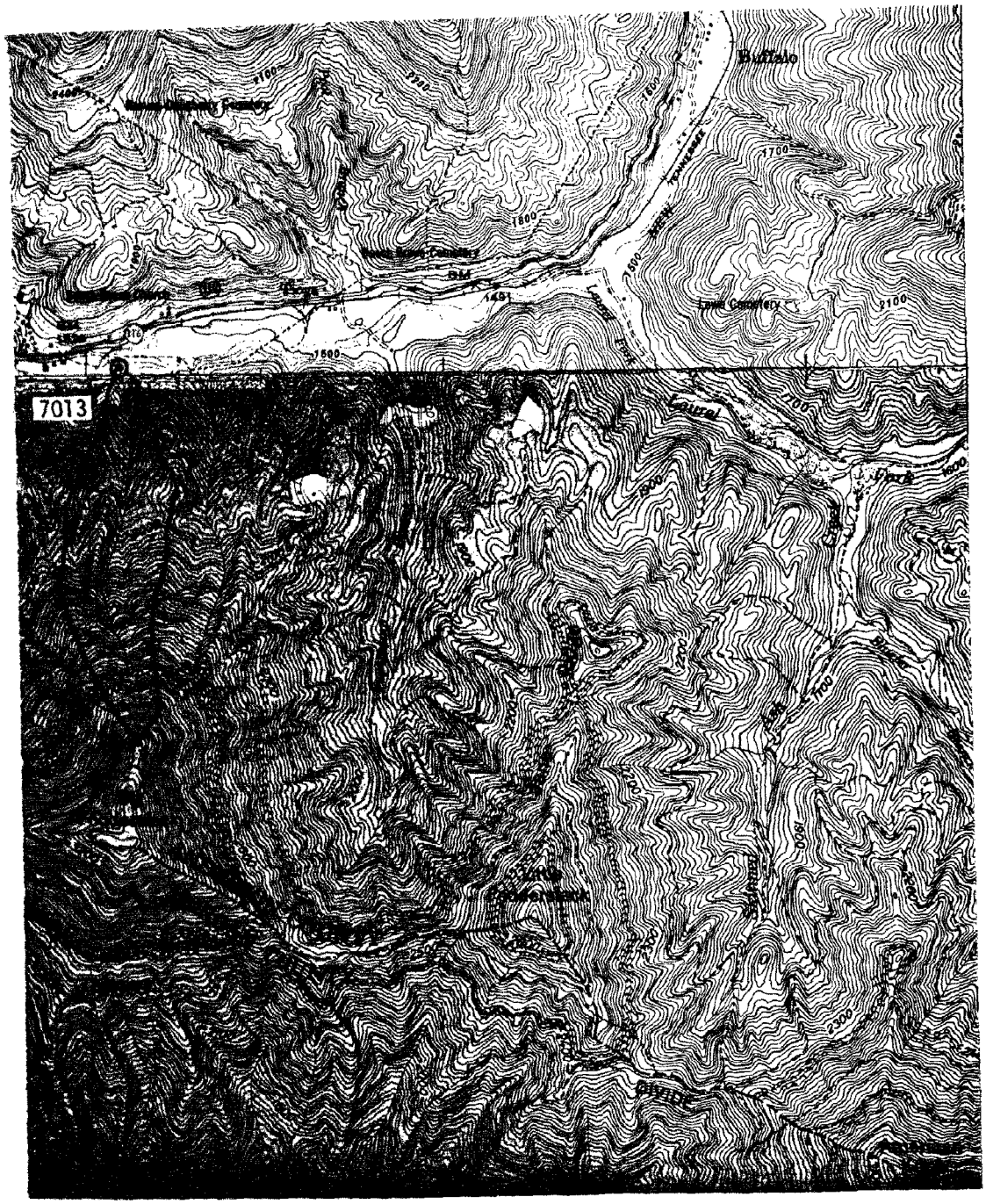

Figure 4. Location map for site 7013, Anderson Co., Tennessee. Petros and Fork Mountain Quadrangles.

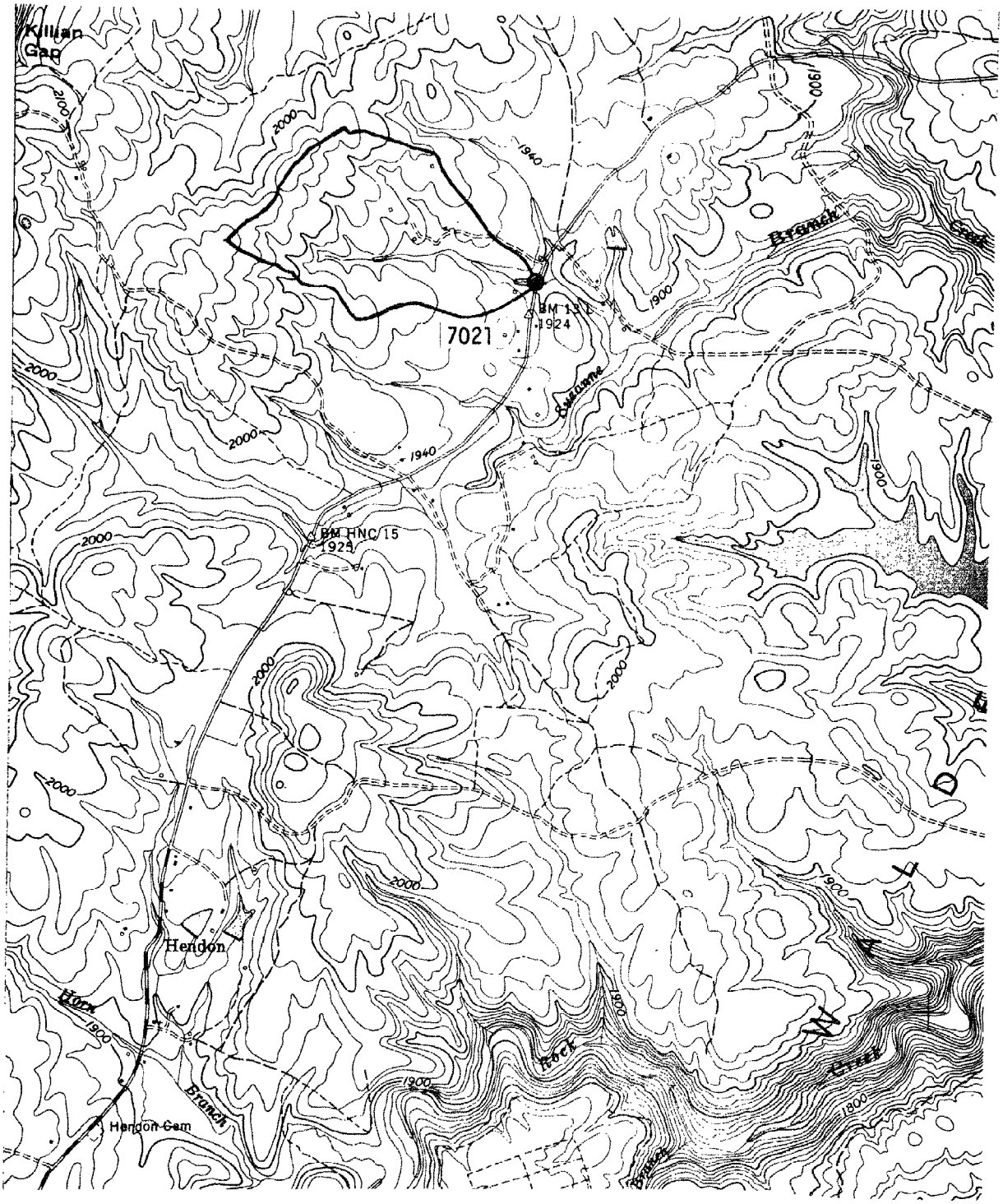

Figure 5. Location map for site 7021, Bledsoe Co., Tennessee. Brayton Quadrangle.

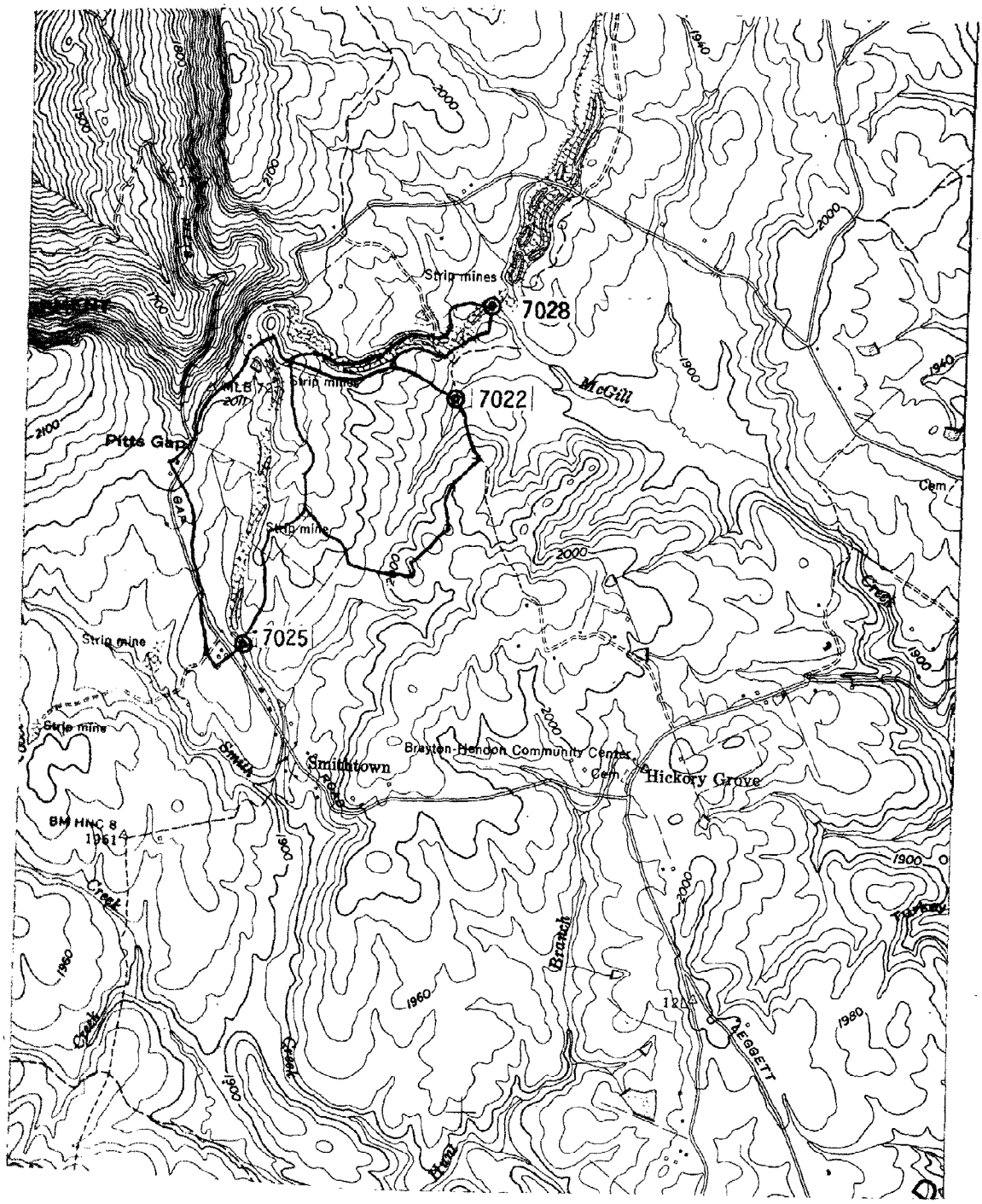

Figure 6. Location map for sites 7022, 7025 and 7028, Bledsoe Co., Tennessee. Brayton Quadrangle.

Figure 7. Location map for sites 7031 and 7032, Campbell Co., Tennessee. La Follette Quadrangle.

Figure 8. Location map for site 7033, Campbell Co., Tennessee. Jellico East Quadrangle.

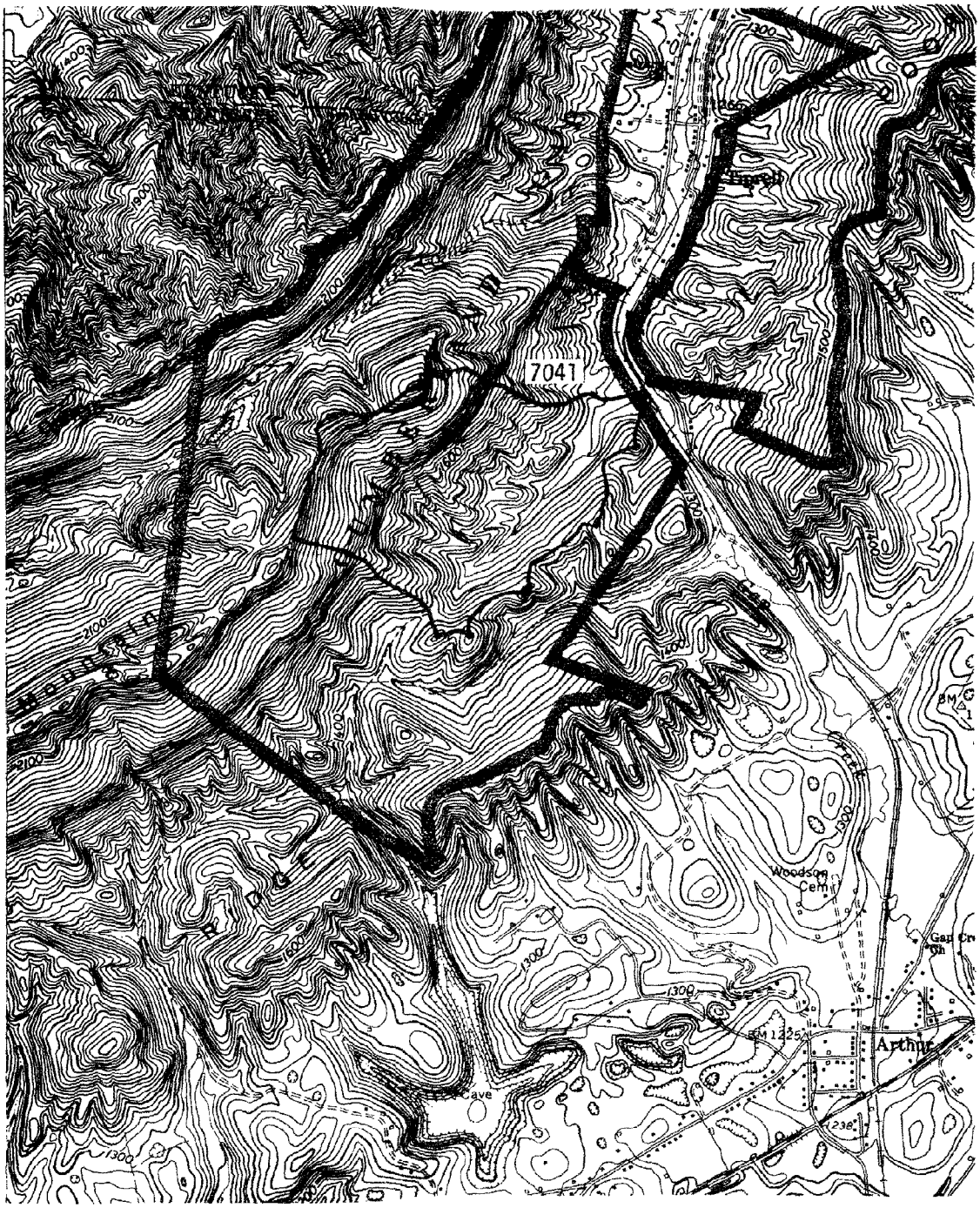

Figure 9. Location map for site 7041, Claiborne Co., Tennessee. Middlesboro South Quadrangle.

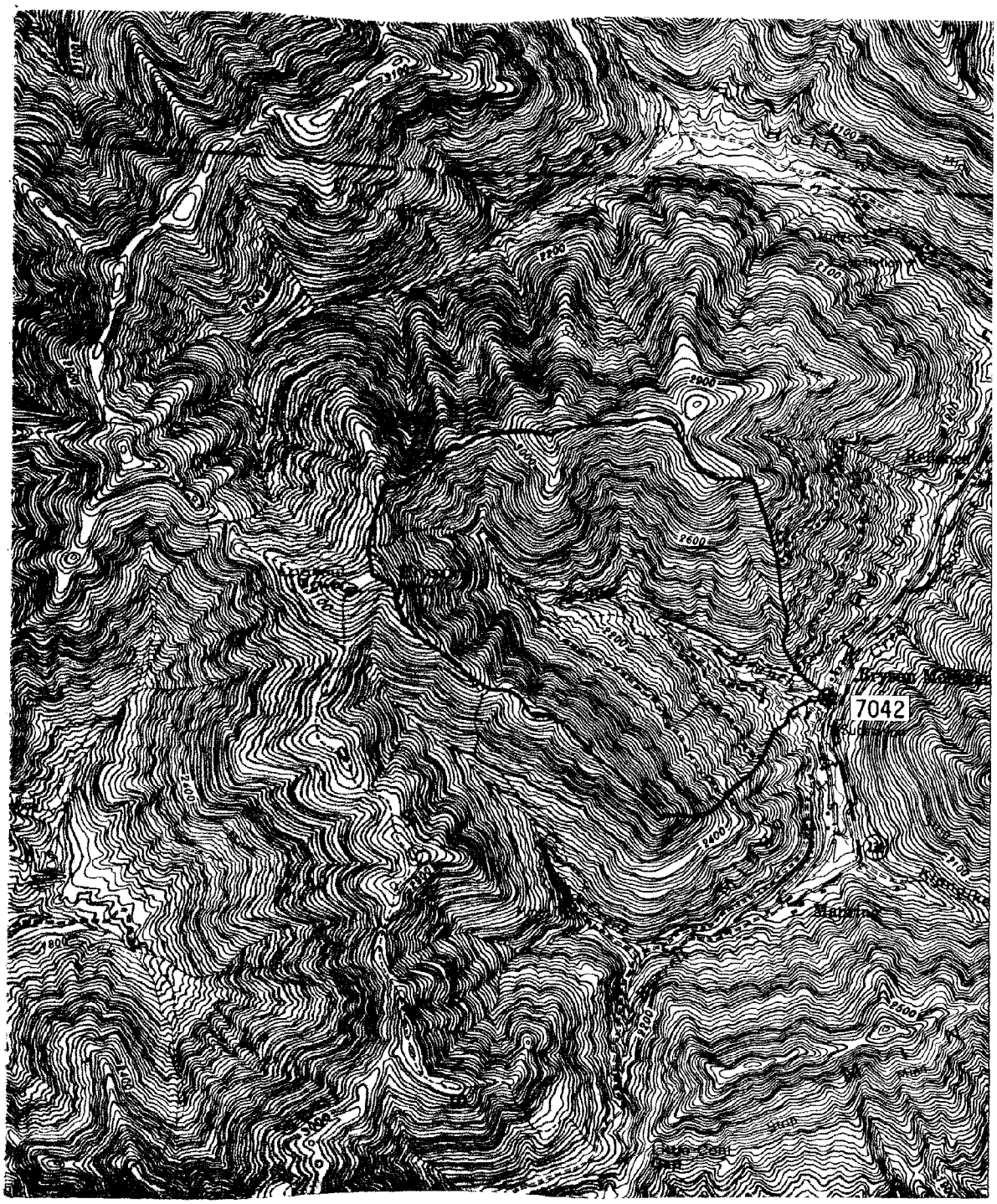

Figure 10. Location map for site 7042, Claiborne Co., Tennessee. Fork Ridge Quadrangle.

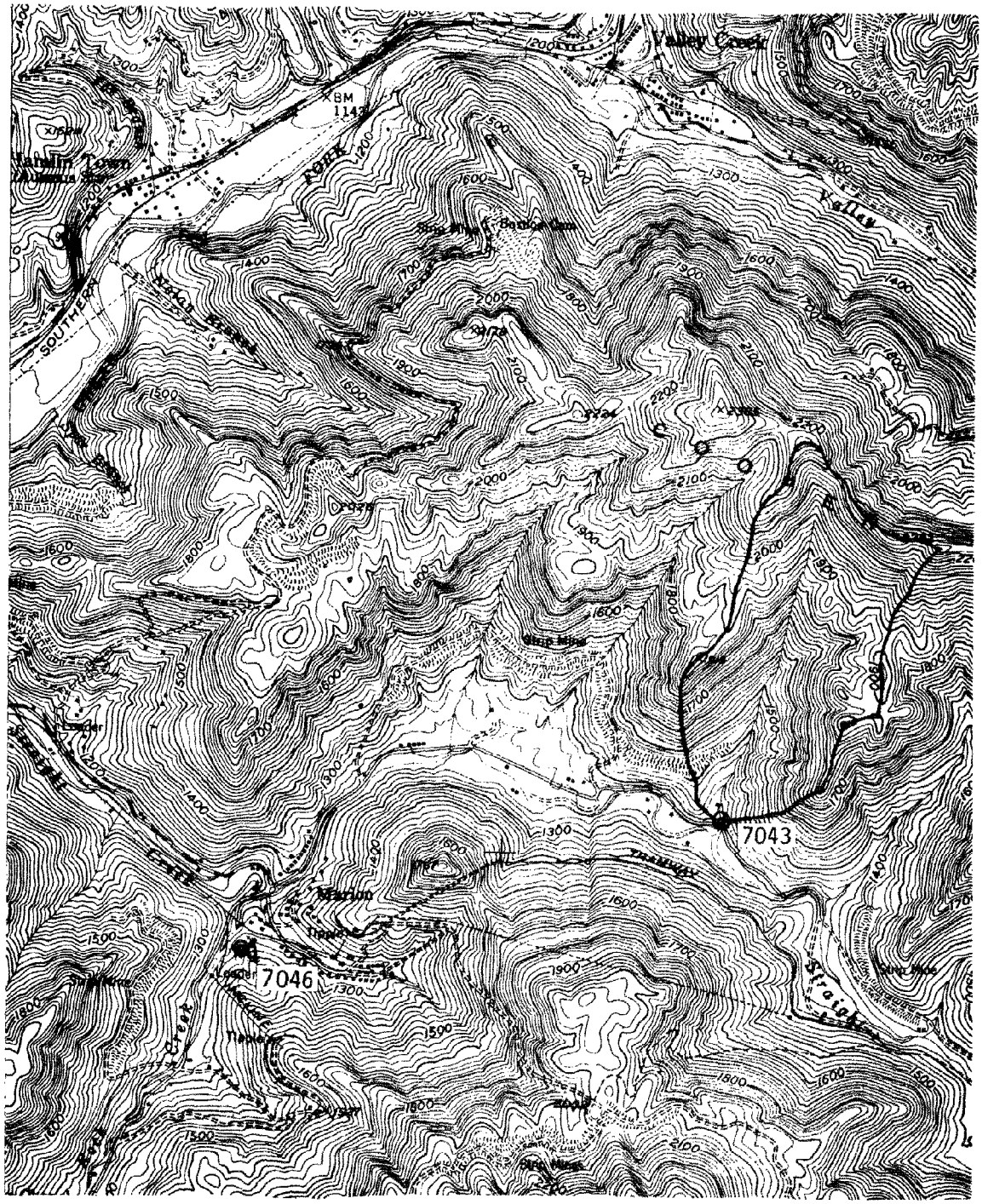

Figure 11. Location map sites 7043 and 7046, Claiborne Co., Tennessee. Eagan Quadrangle.

Figure 14. Location map for site 7061, Fentress Co., Tennessee. Grimsley Quadrangle.

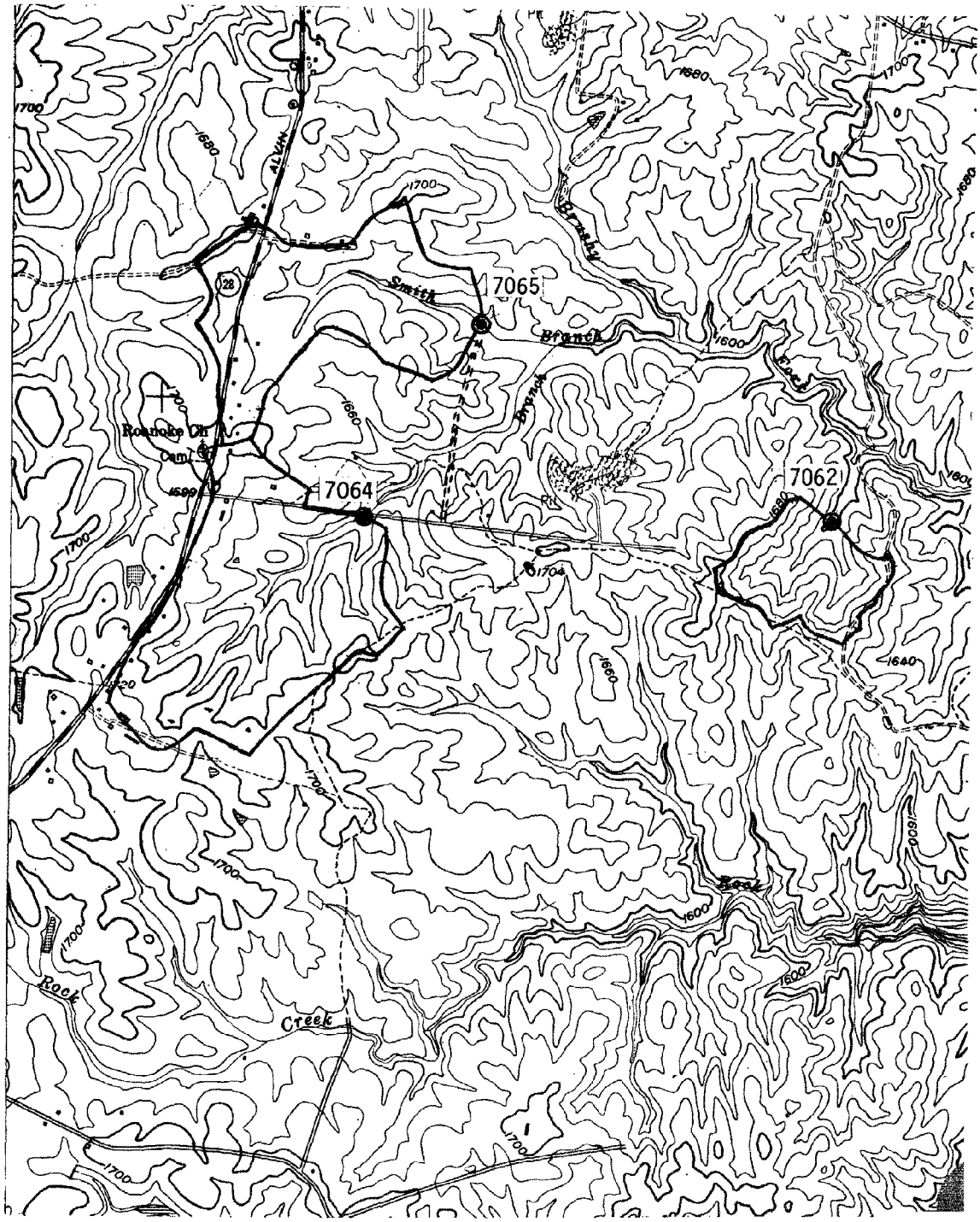

Figure 15. Location map for sites 7062, 7064, and 7065, Fentress Co., Tennessee. Grimsley Quadrangle.

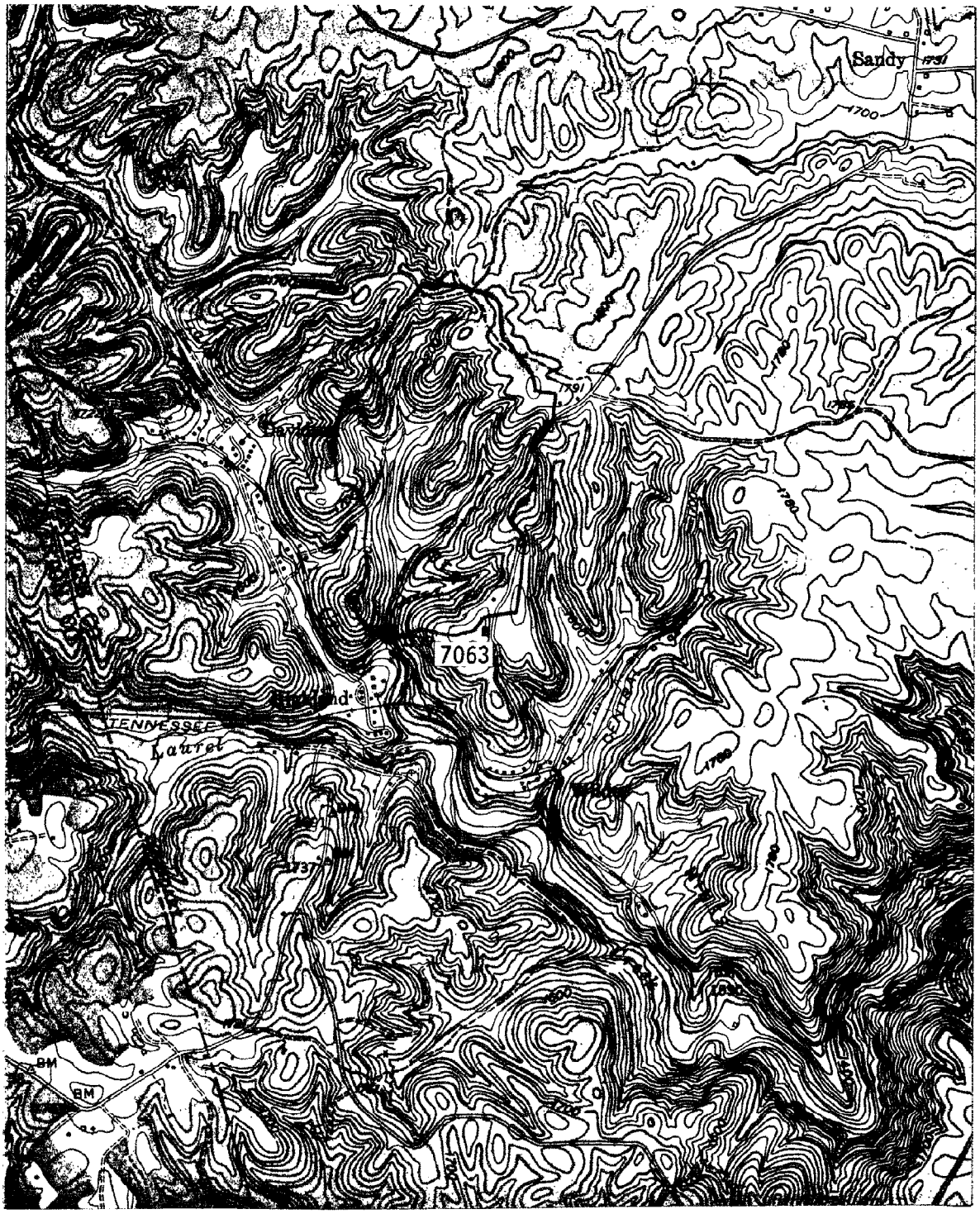

Figure 16. Location map for site 7063, Fentress Co., Tennessee. Wilder Quadrangle.

Figure 17. Location map for sites 7070, 7072, 7075, and 7078, Grundy Co., Tennessee. Tracy City Quadrangle.

Figure 18. Location map for site 7071, Grundy Co., Tennessee. Tracy City Quadrangle.

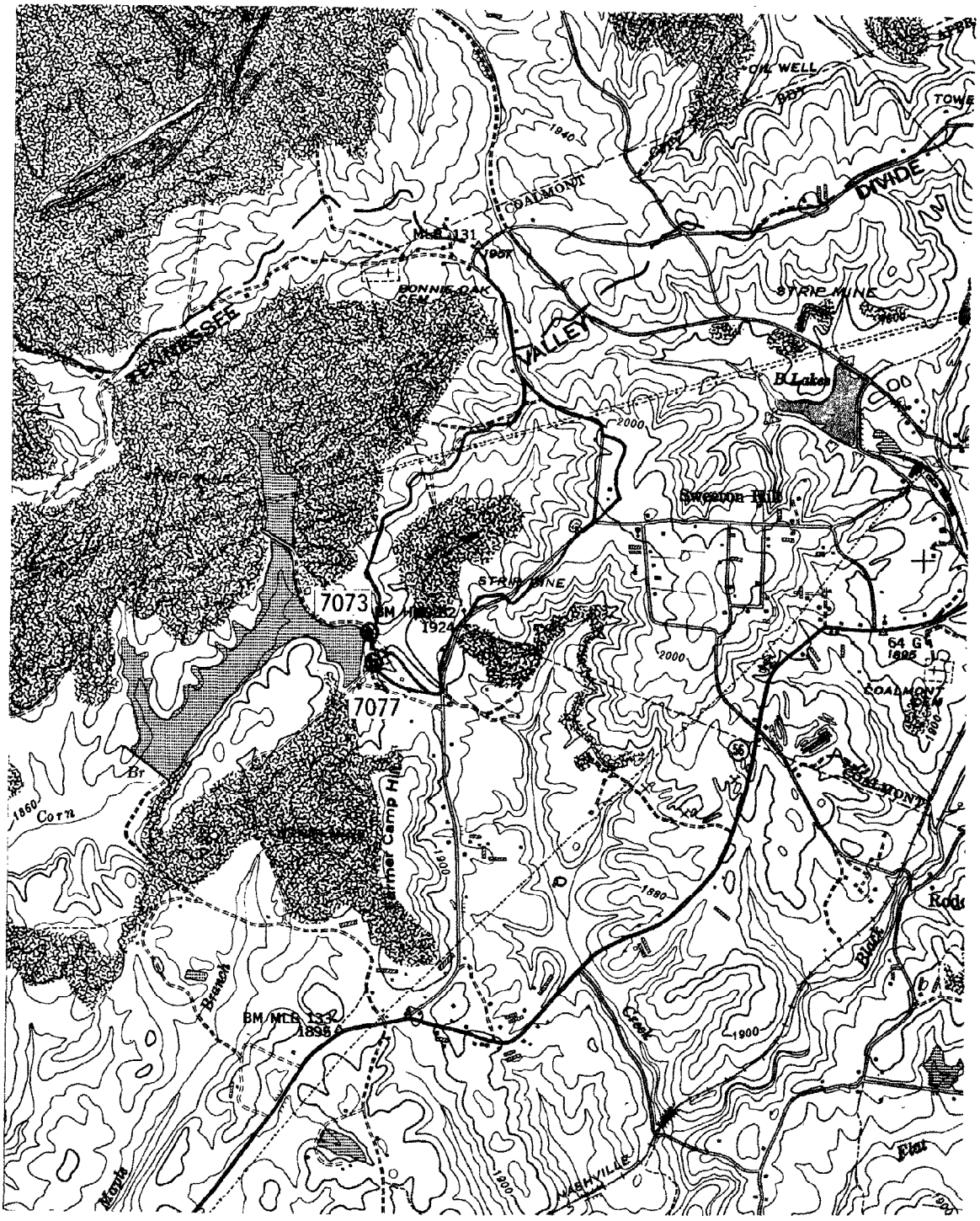

Figure 19. Location map for sites 7073 and 7077, Grundy Co., Tennessee. Tracy City Quadrangle.

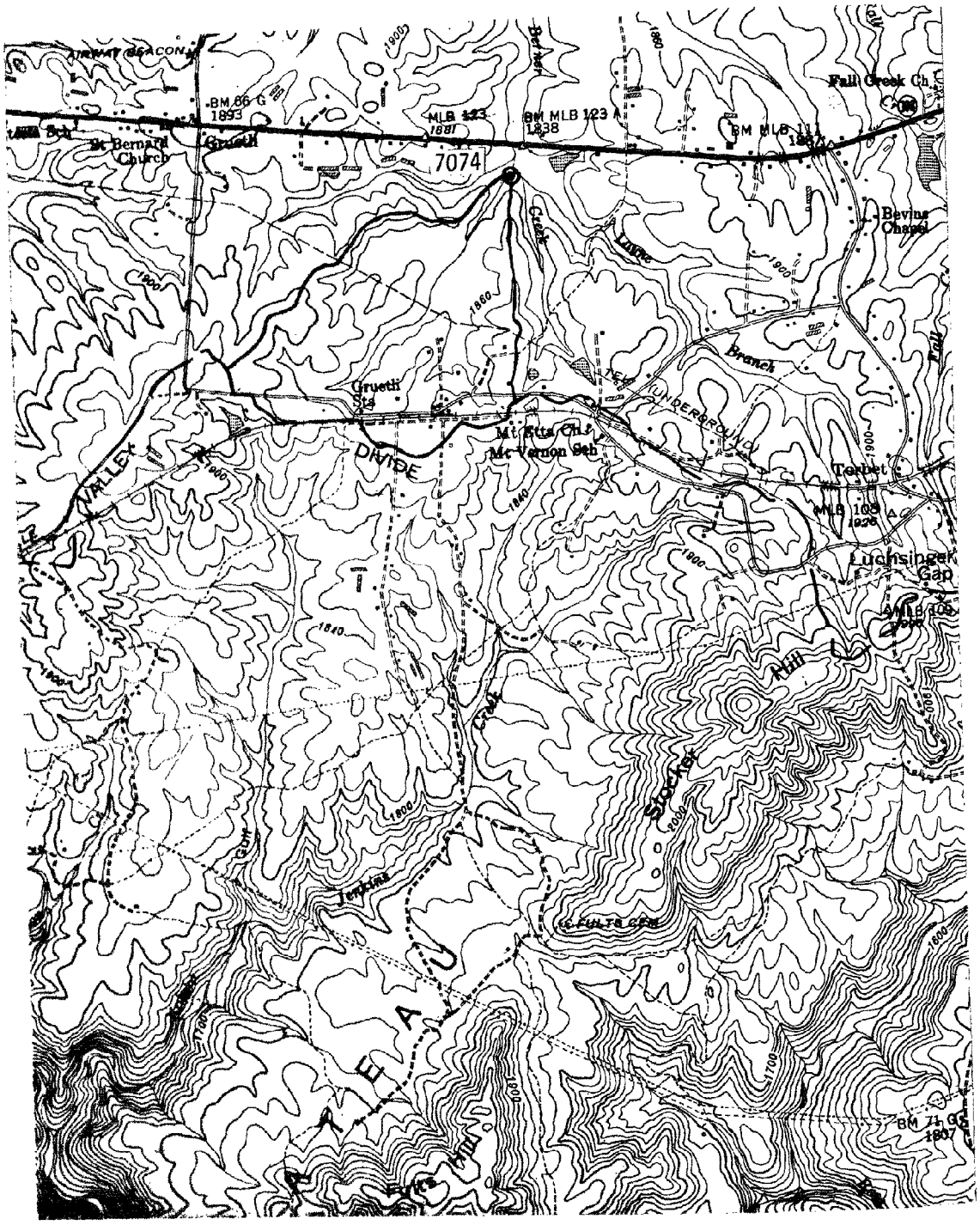

Figure 20. Location map for site 7074, Grundy Co., Tennessee. Tracy City Quadrangle.

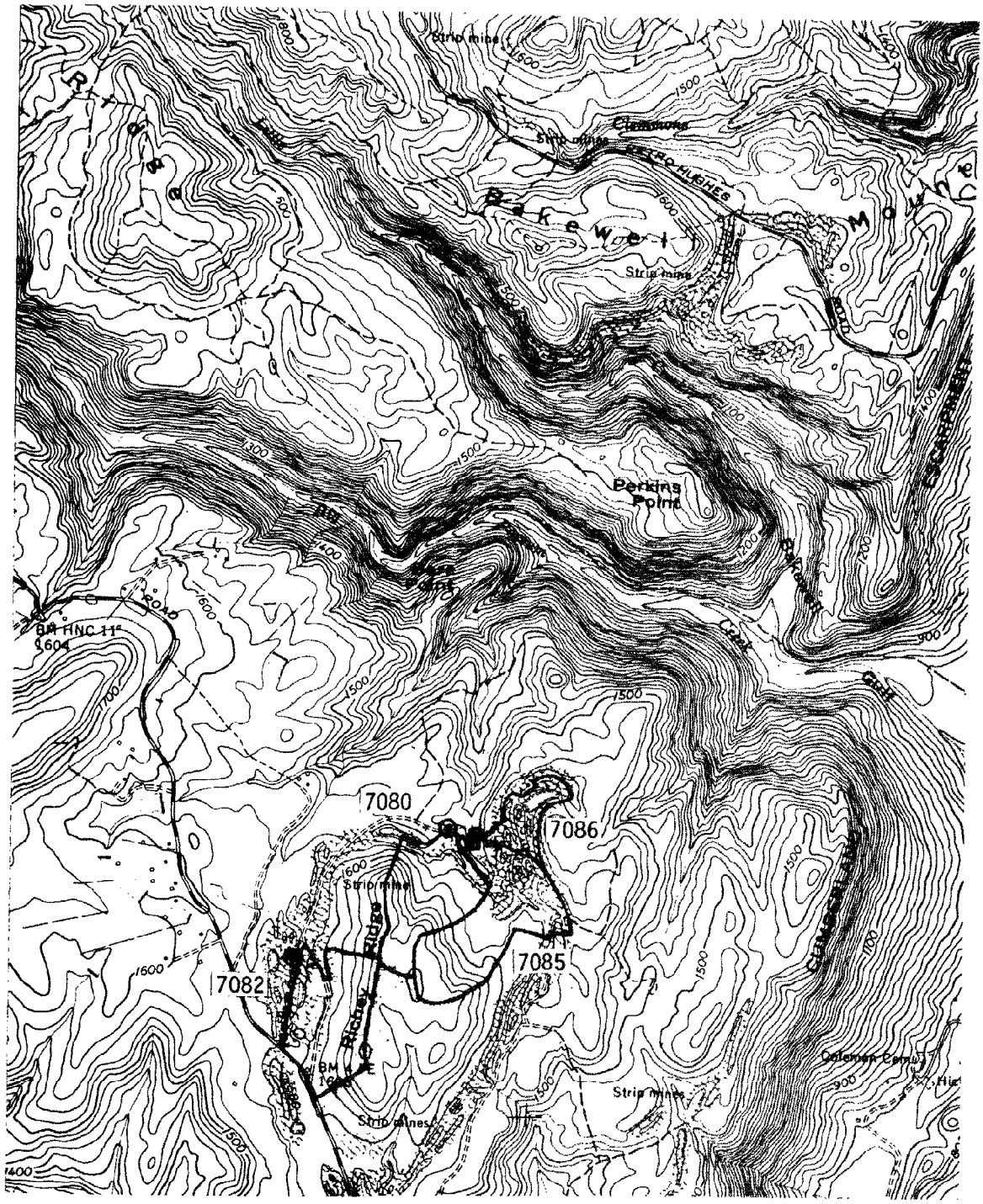

Figure 21. Location map for sites 7080, 7082, 7085, and 7086, Hamilton Co., Tennessee. Soddy Quadrangle.

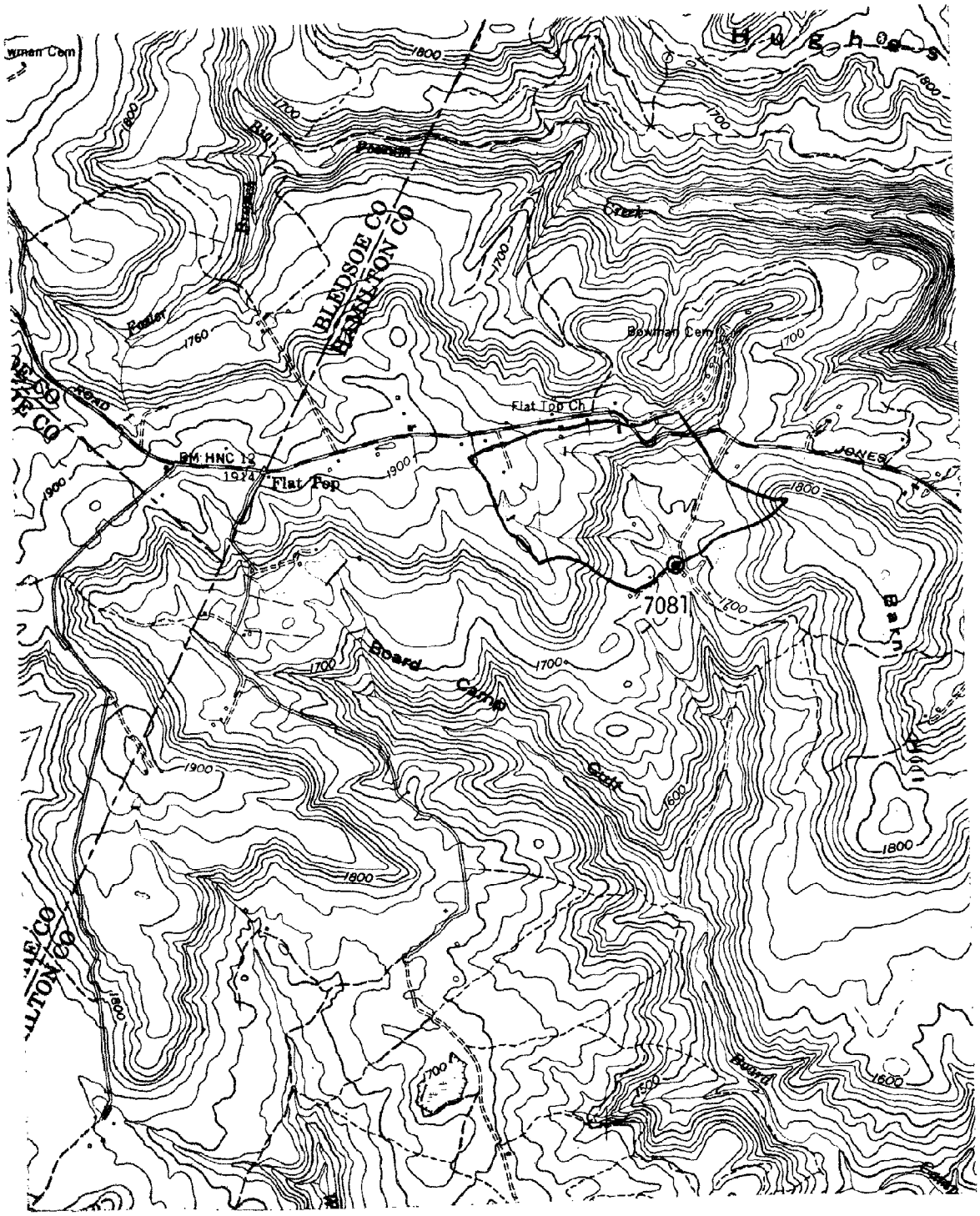

Figure 22. Location map for site 7081, Hamilton Co., Tennessee. Soddy Quadrangle.

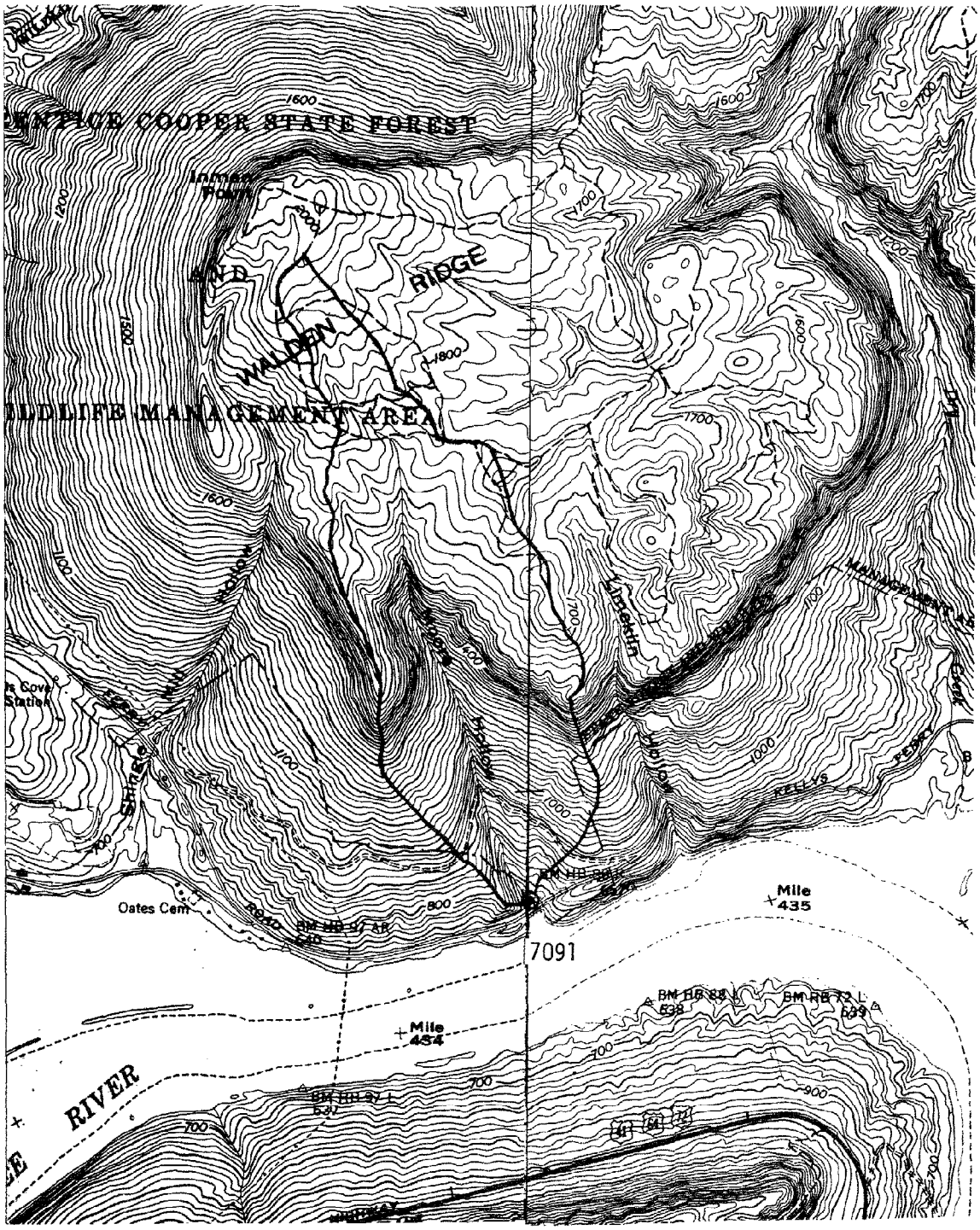

Figure 23. Location map for site 7091, Marion Co., Tennessee. Wauhatchie and Sequatchie Quadrangles.

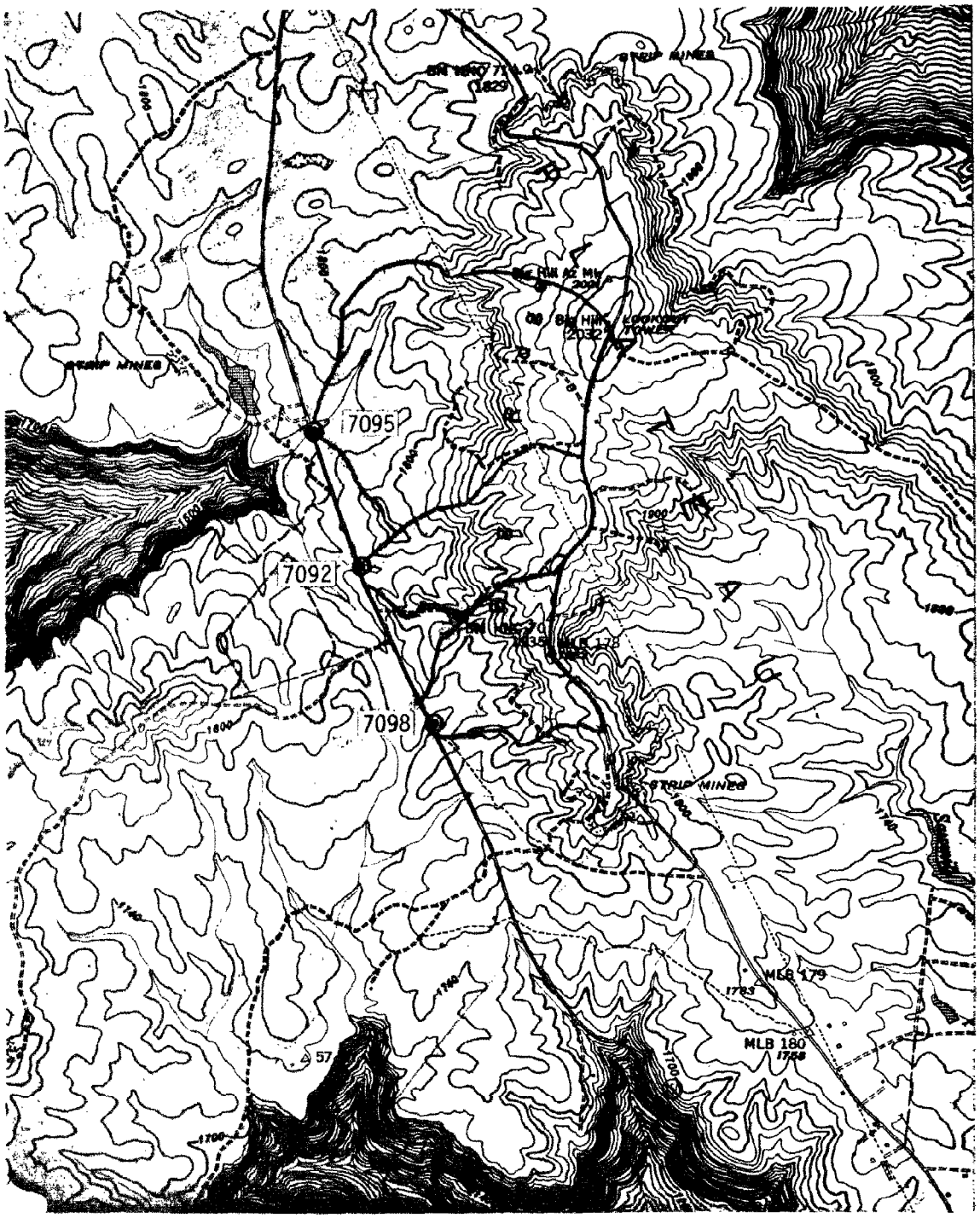

Figure 24. Location map for sites 7092, 7095, and 7098, Marion Co., Tennessee. White City Quadrangle.

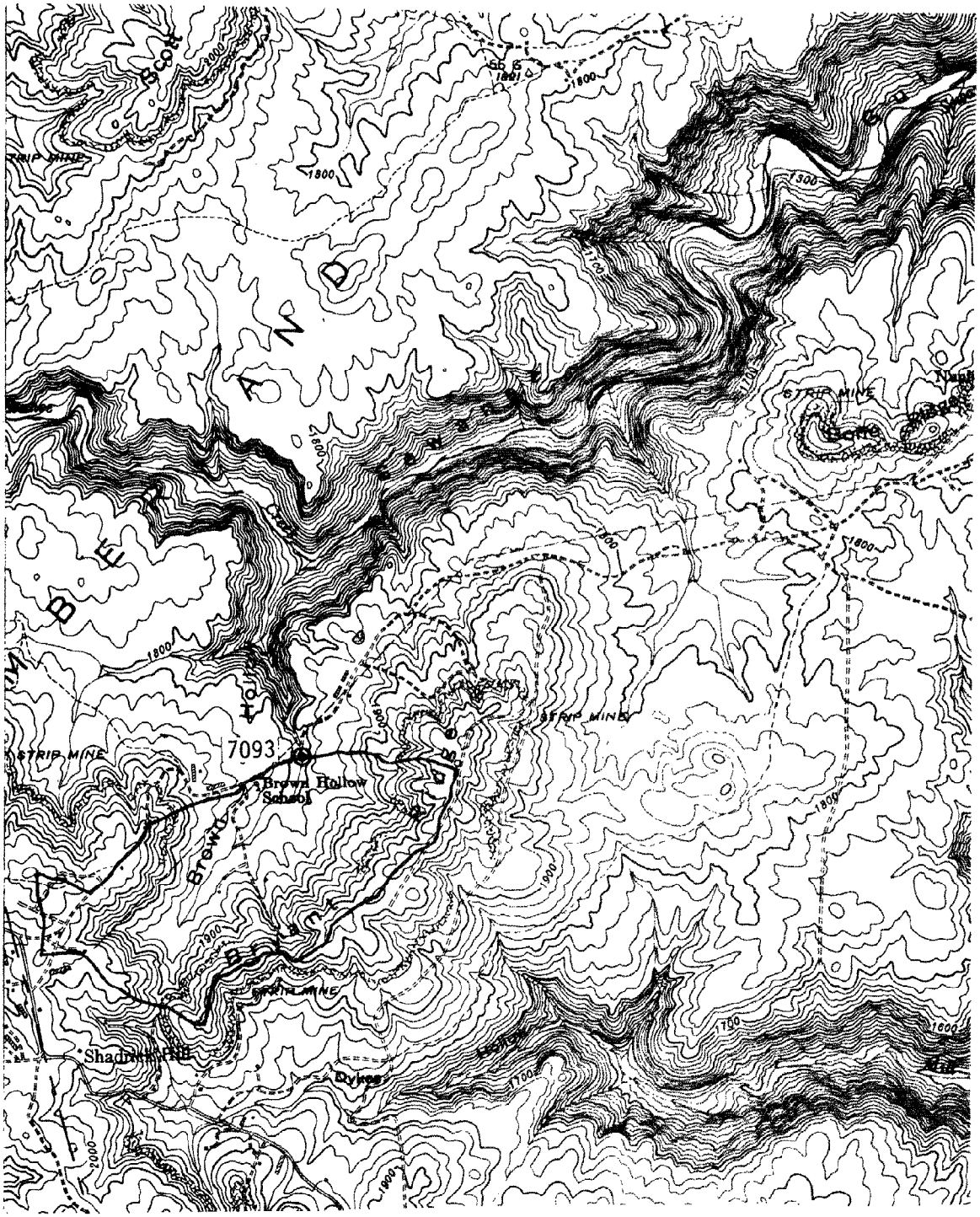

Figure 25. Location map for site 7093, Marion Co., Tennessee. Tracy City Quadrangle.

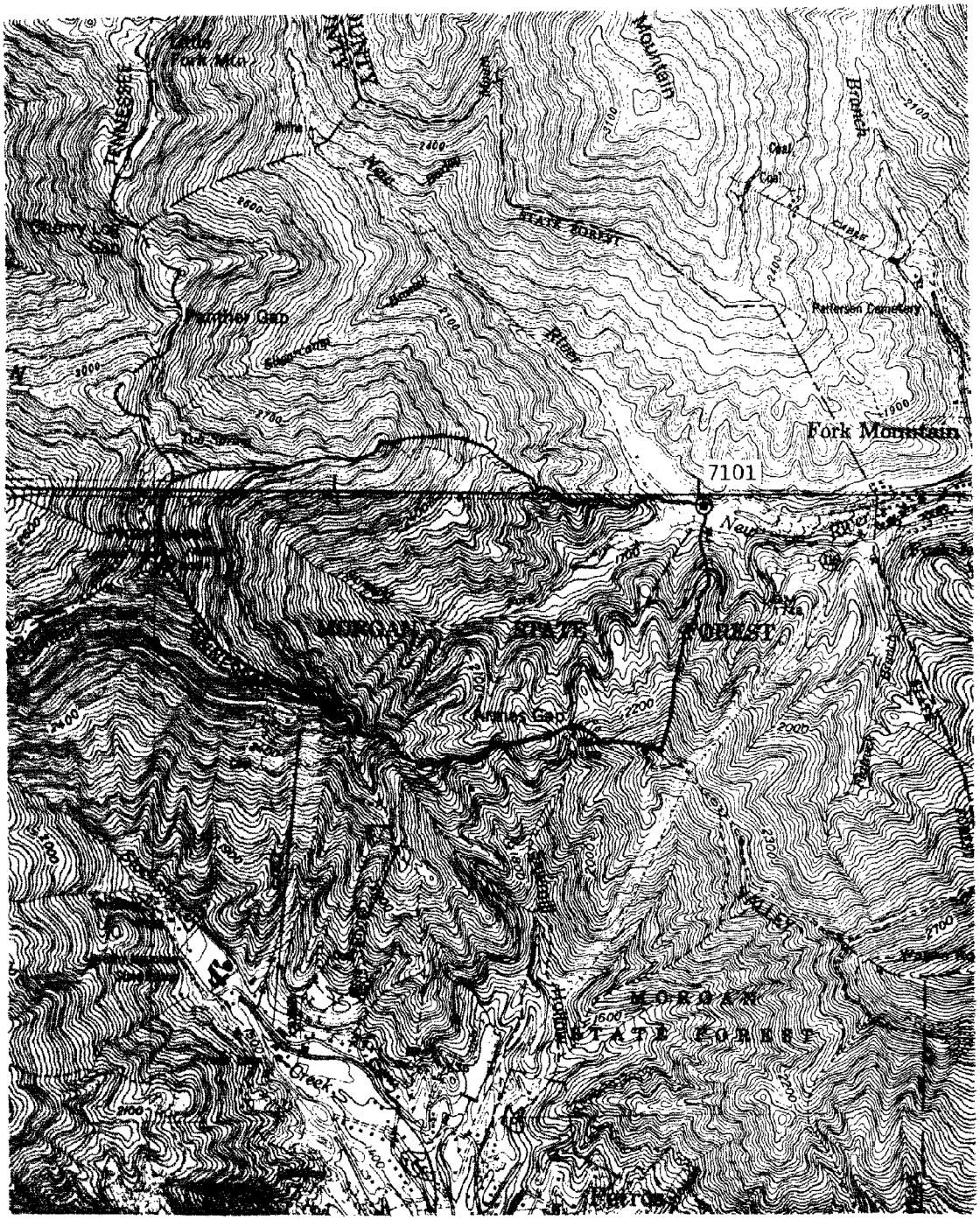

Figure 26. Location map for site 7101, Morgan Co., Tennessee. Petros and Fork Mountain Quadrangles.

Figure 27. Location map for site 7102, Morgan Co., Tennessee. Petros Quadrangle.

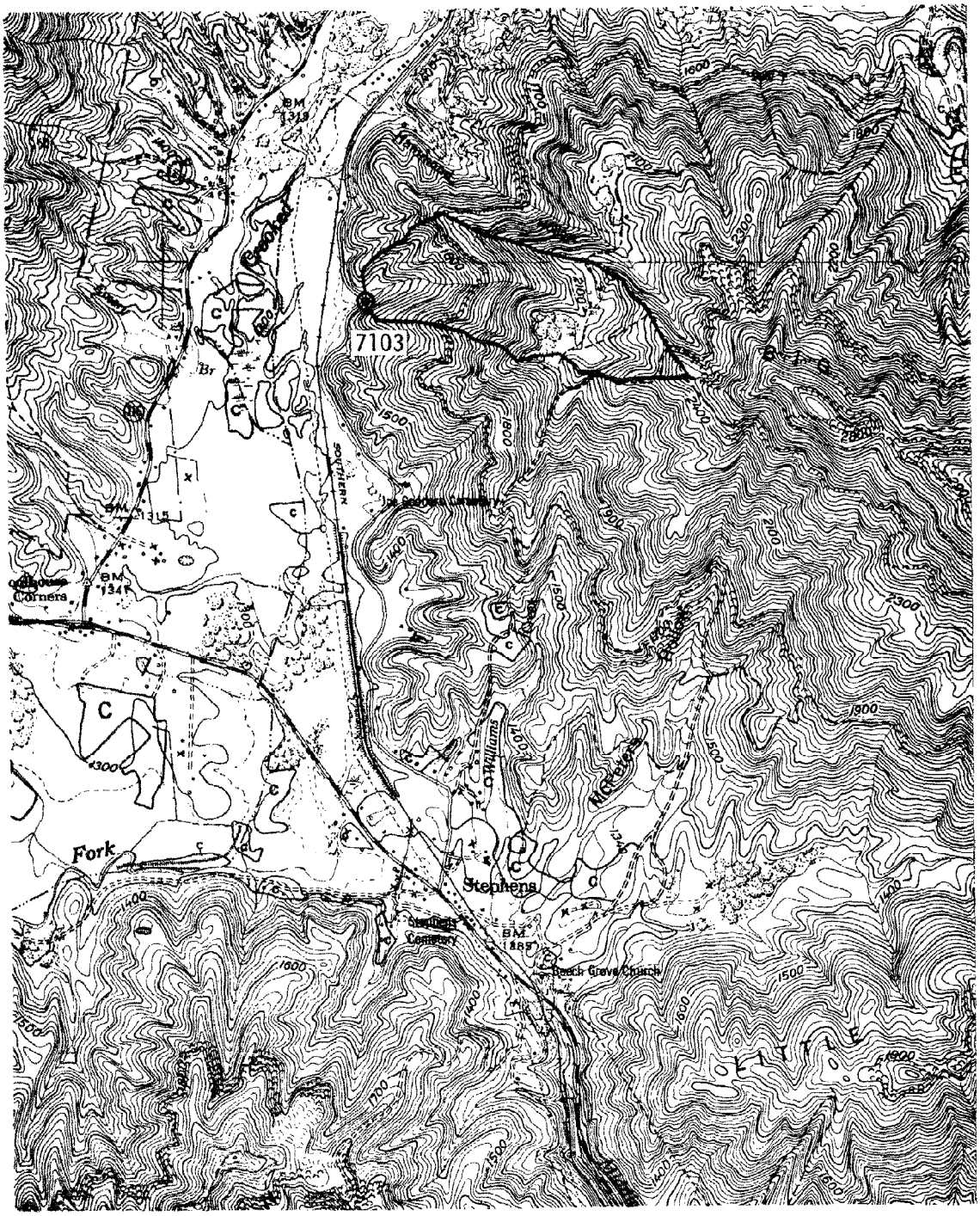

Figure 28. Location map for site 7103, Morgan Co., Tennessee. Petros Quadrangle.

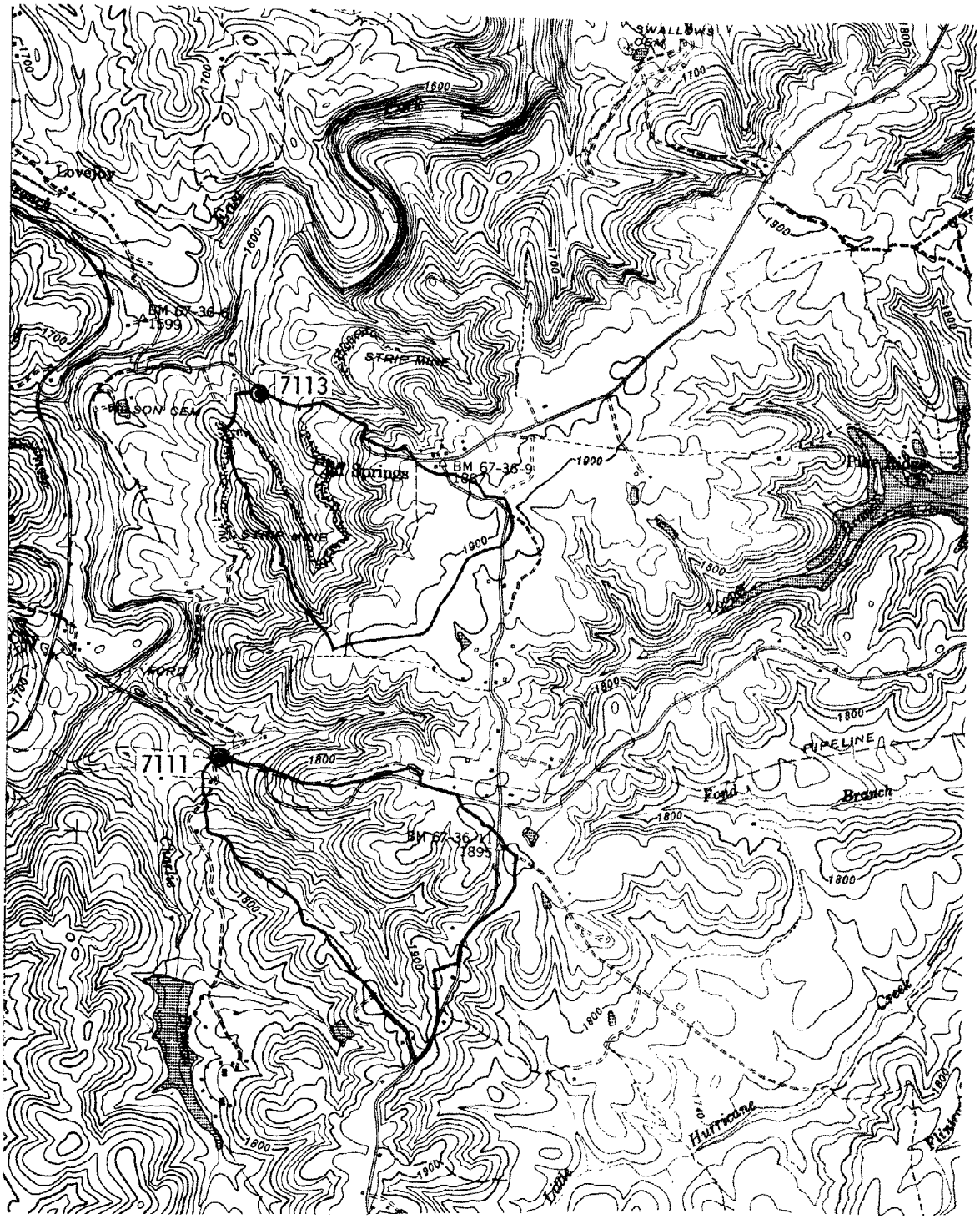

Figure 29. Location map for sites 7111 and 7113, Overton Co., Tennessee. Obey City Quadrangle.

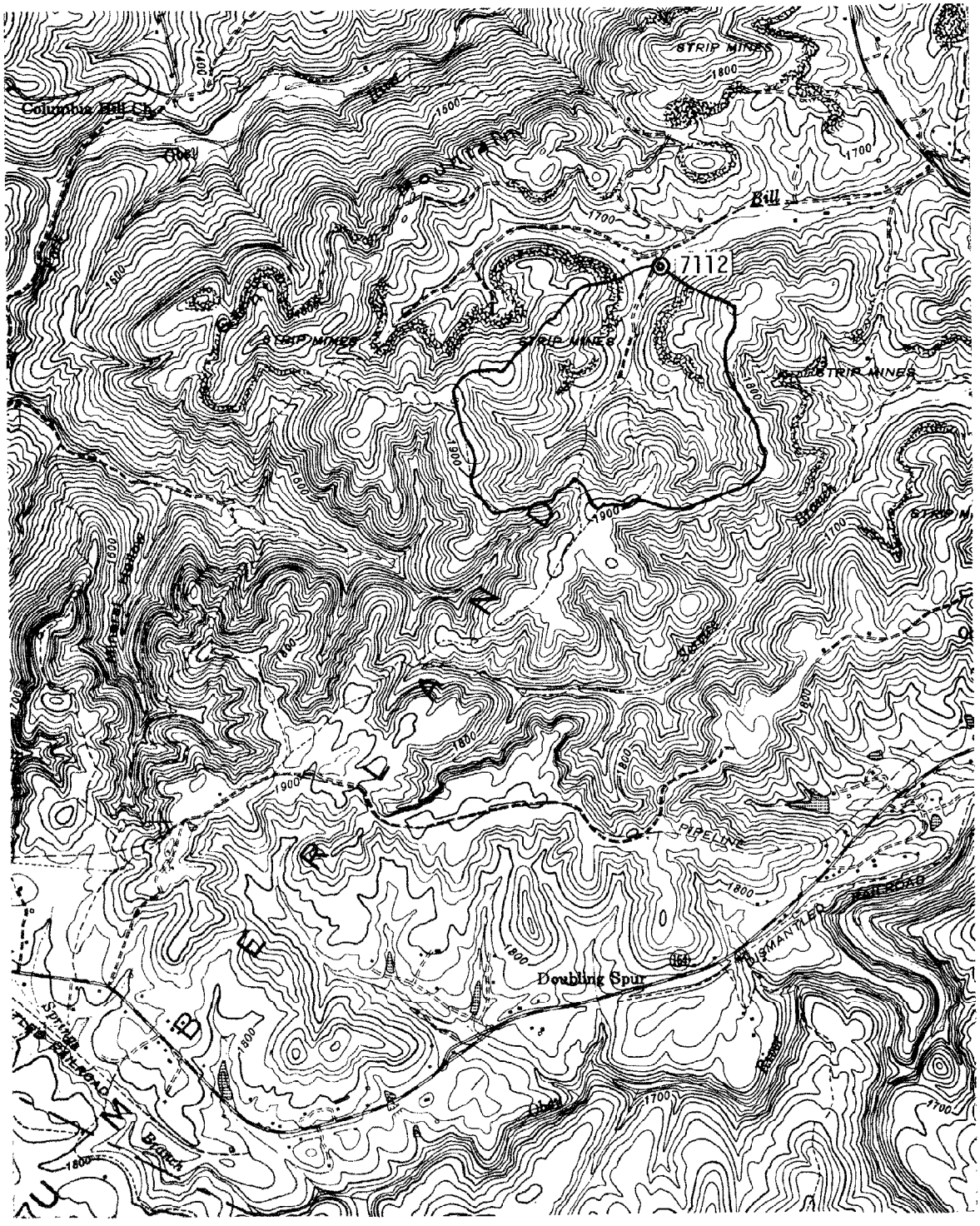

Figure 30. Location map for site 7112, Overton Co., Tennessee. Obey City Quadrangle.

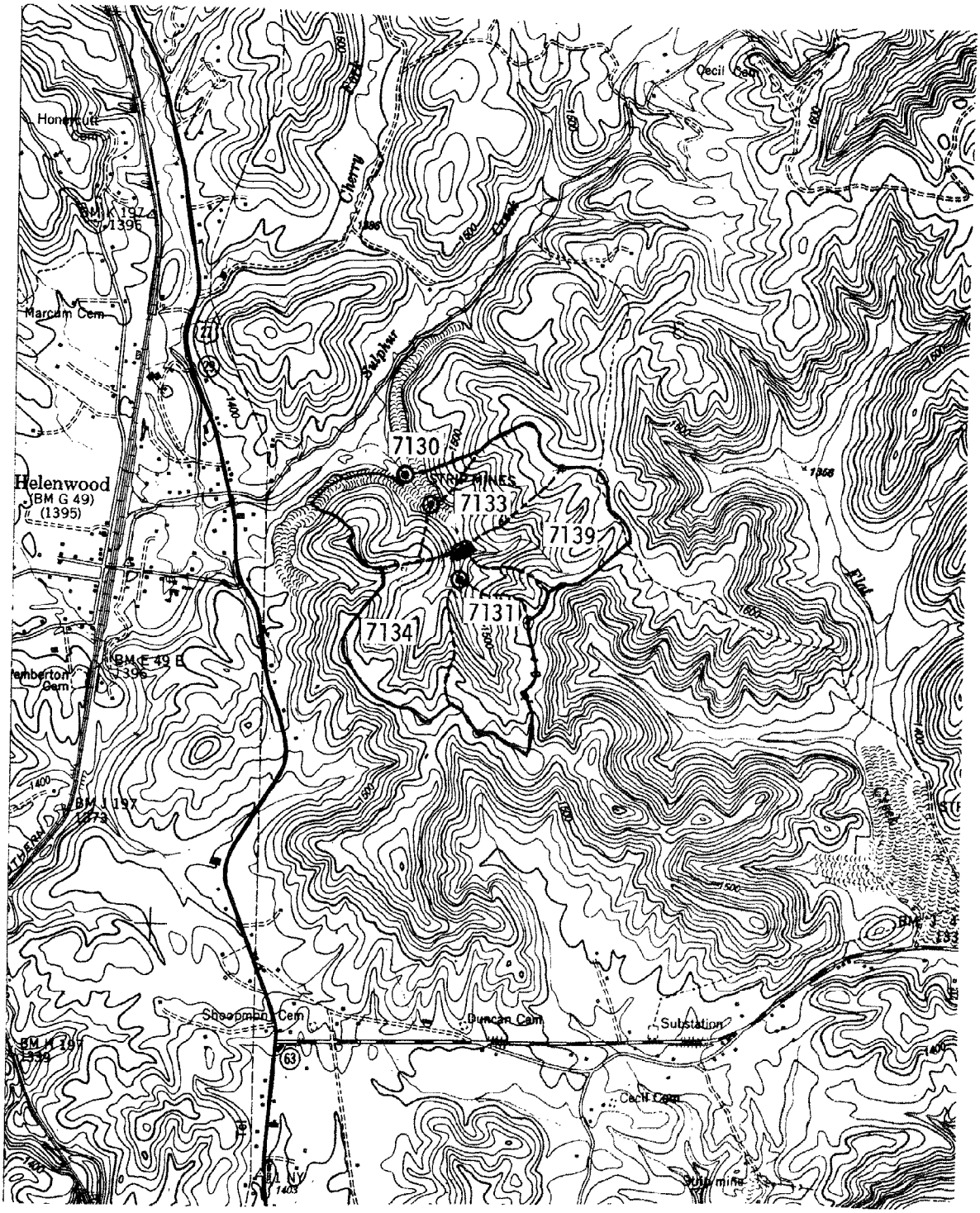

Figure 31. Location map for sites 7130, 7131, 7133, 7134, and 7139, Scott Co., Tennessee. Oneida South Quadrangle.

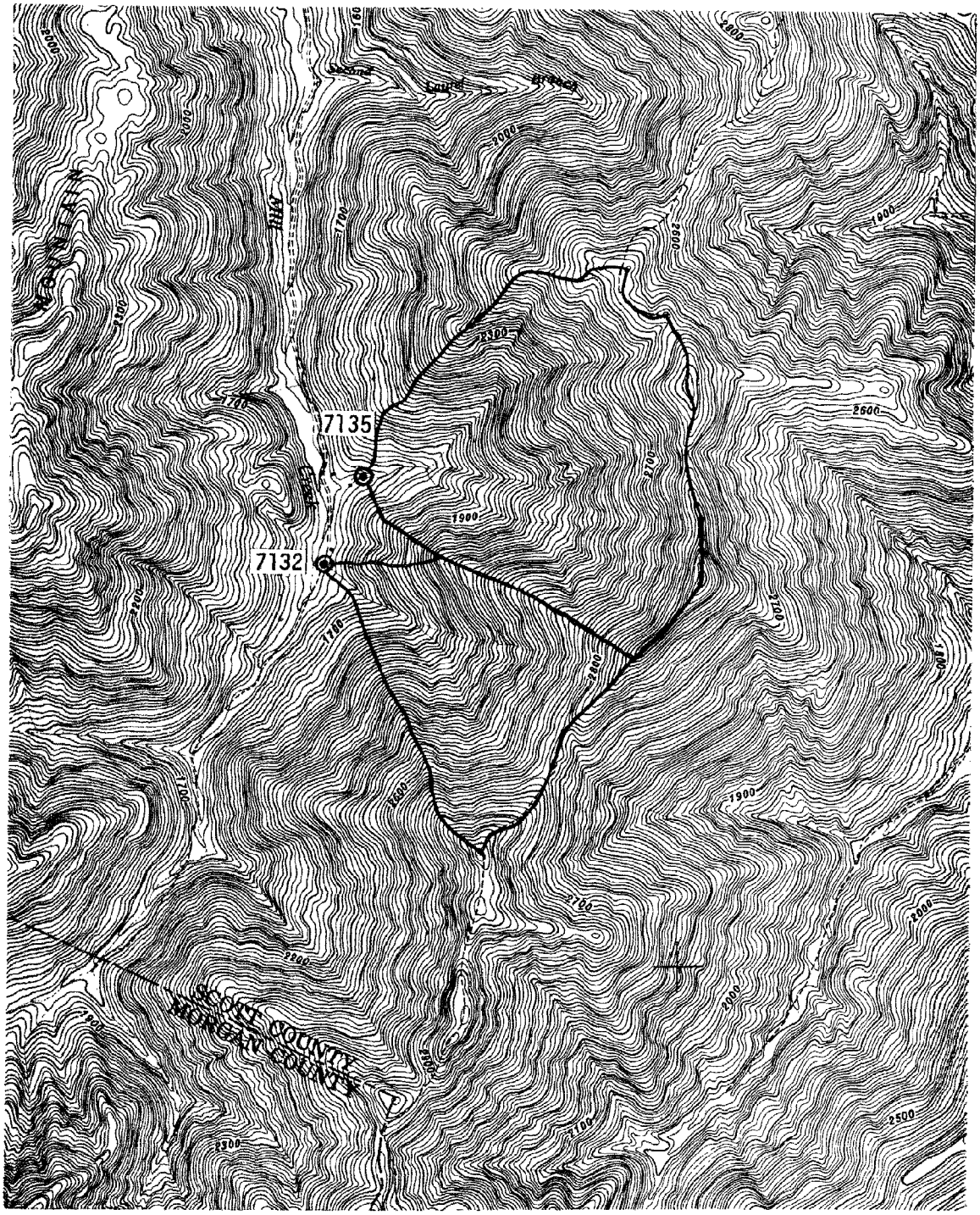

Figure 32. Location map for site 7132 and 7135, Scott Co., Tennessee. Fork Mountain Quadrangle.

Figure 33. Location map for site 7136, Scott Co., Tennessee. Robbins Quadrangle.

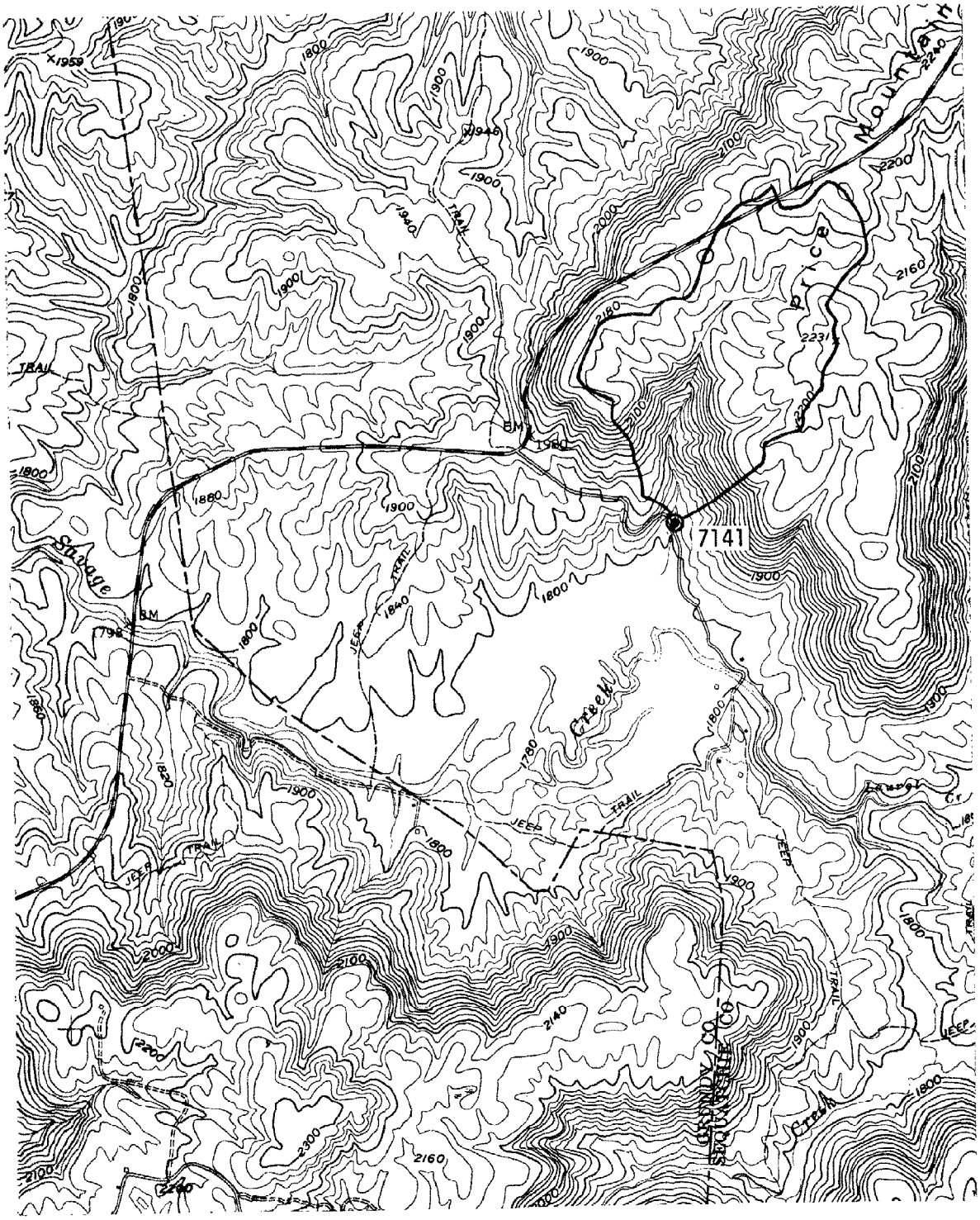

Figure 34. Location map for site 7141, Sequatchie Co., Tennessee. Collins Quadrangle.

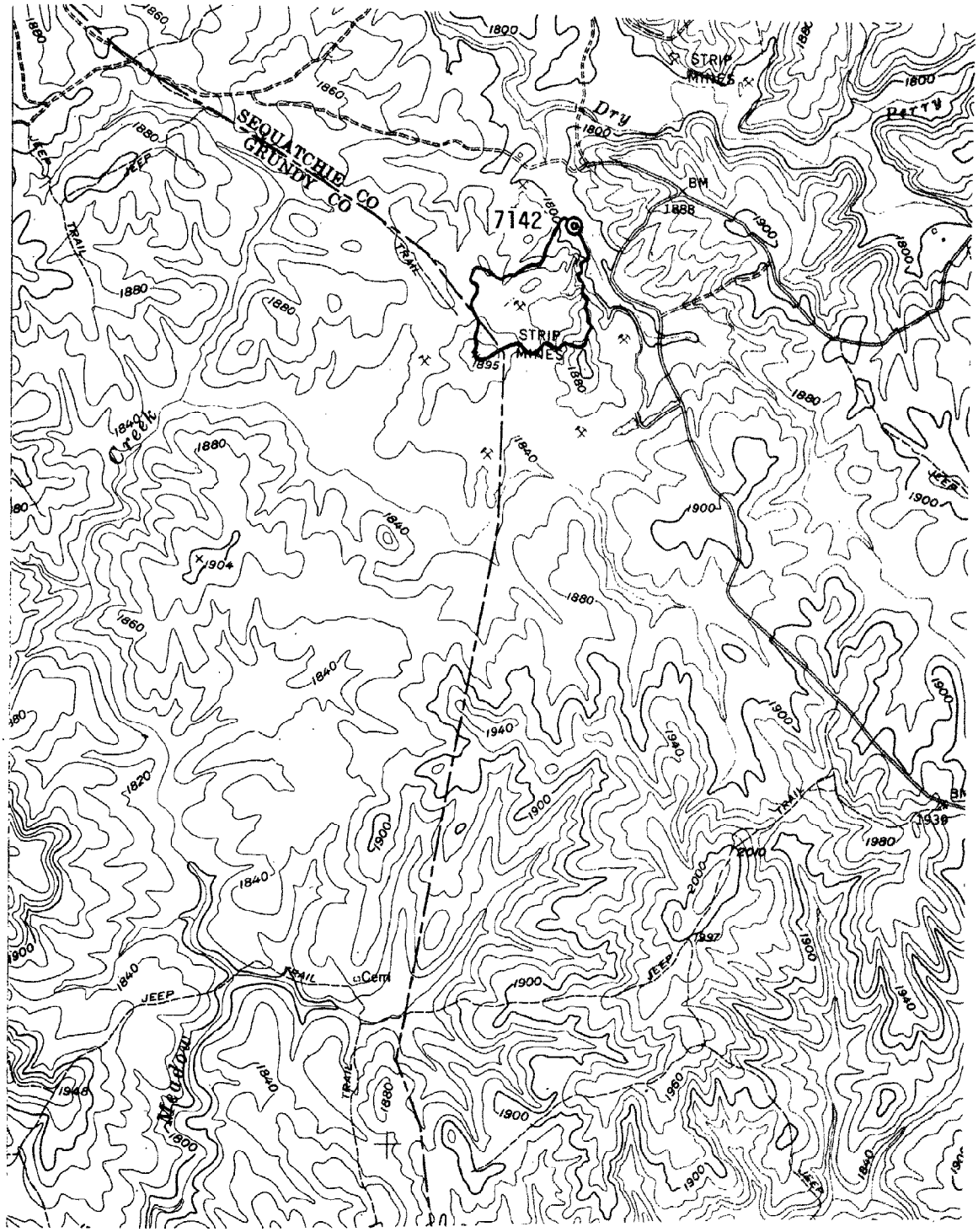

Figure 35. Location map for site 7142, Sequatchie Co., Tennessee. Collins Quadrangle.

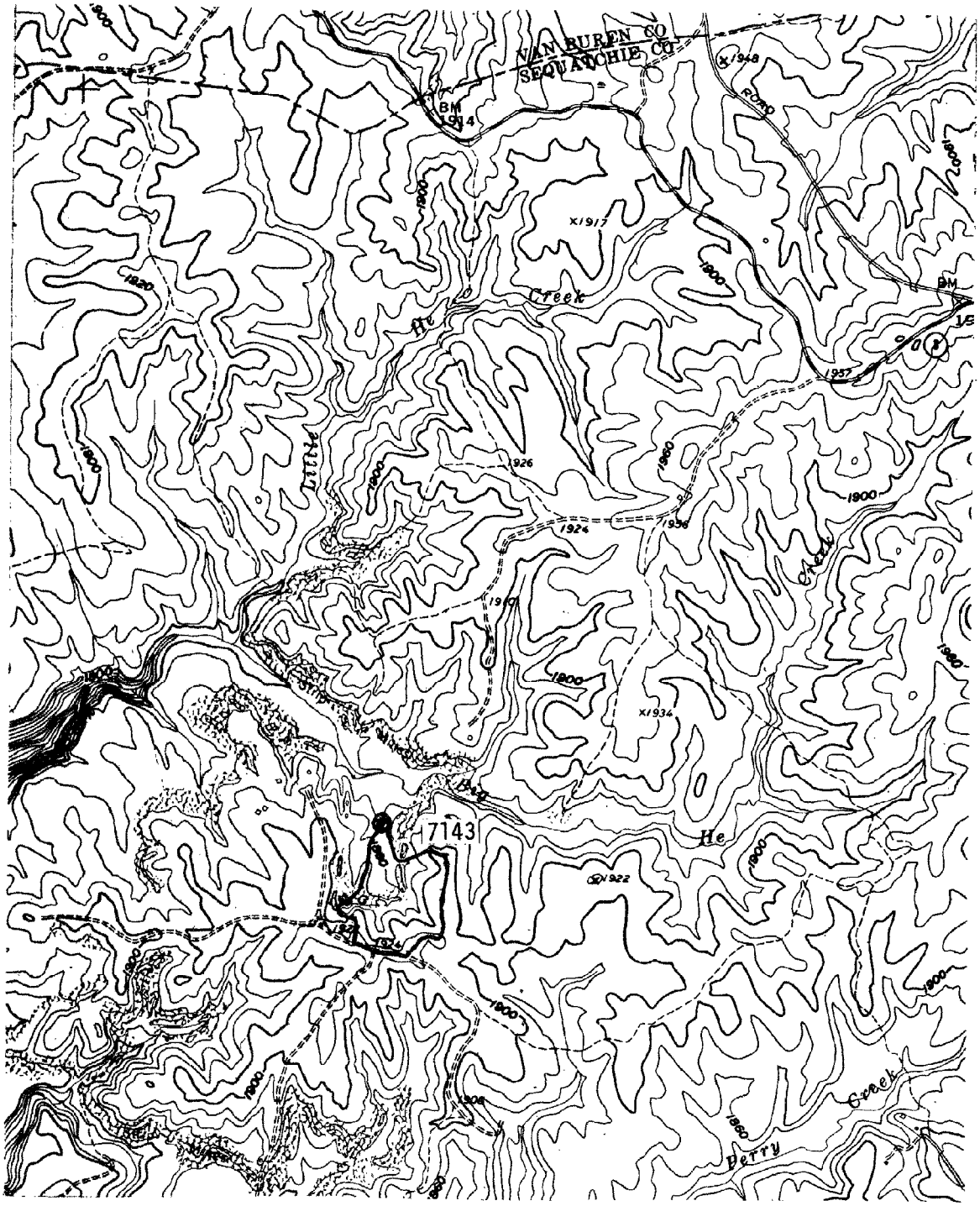

Figure 36. Location map for site 7143, Sequatchie Co., Tennessee. Curtistown Quadrangle.

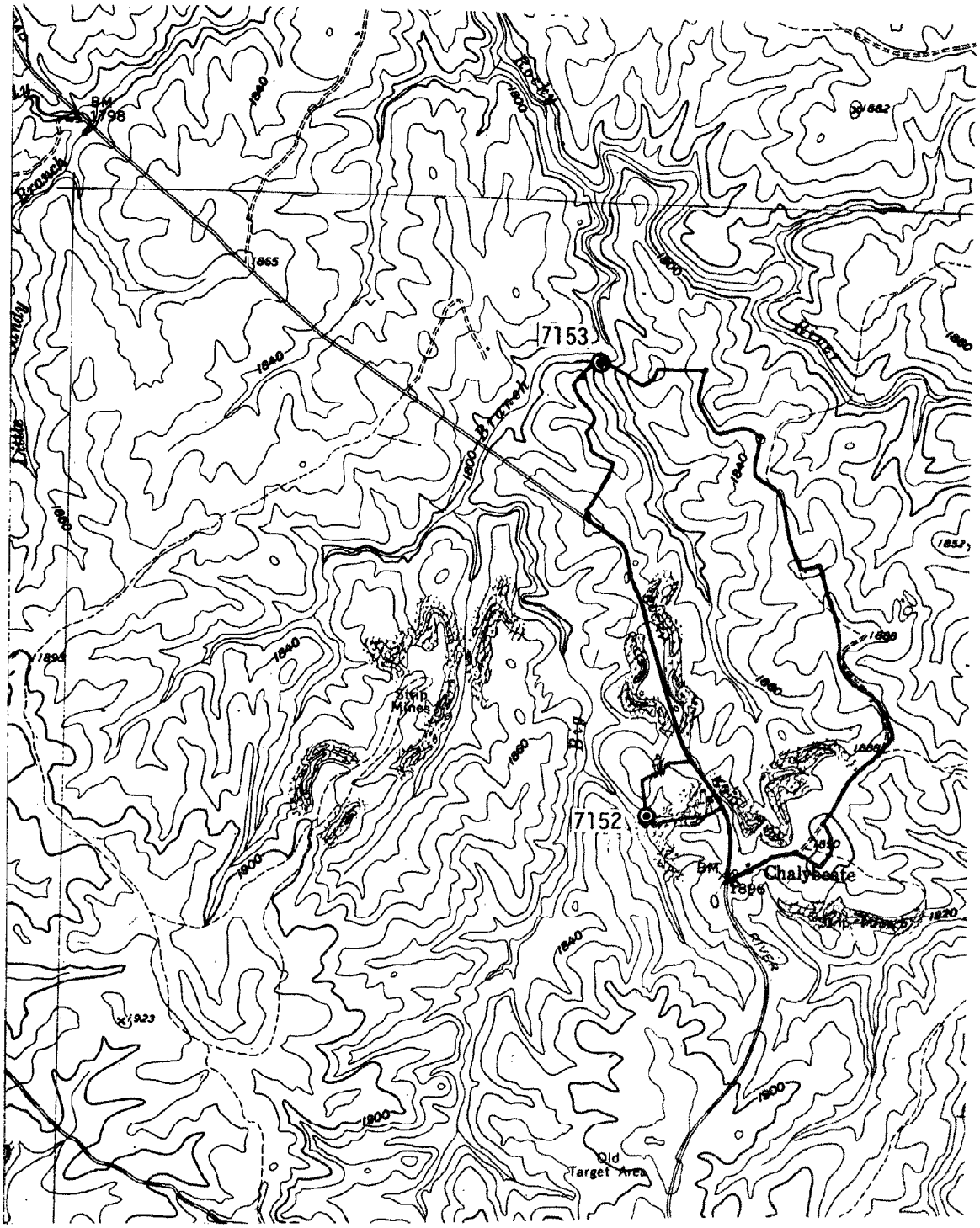

Figure 37. Location map for sites 7152 and 7153, Van Buren Co., Tennessee. Curtistown Quadrangle.

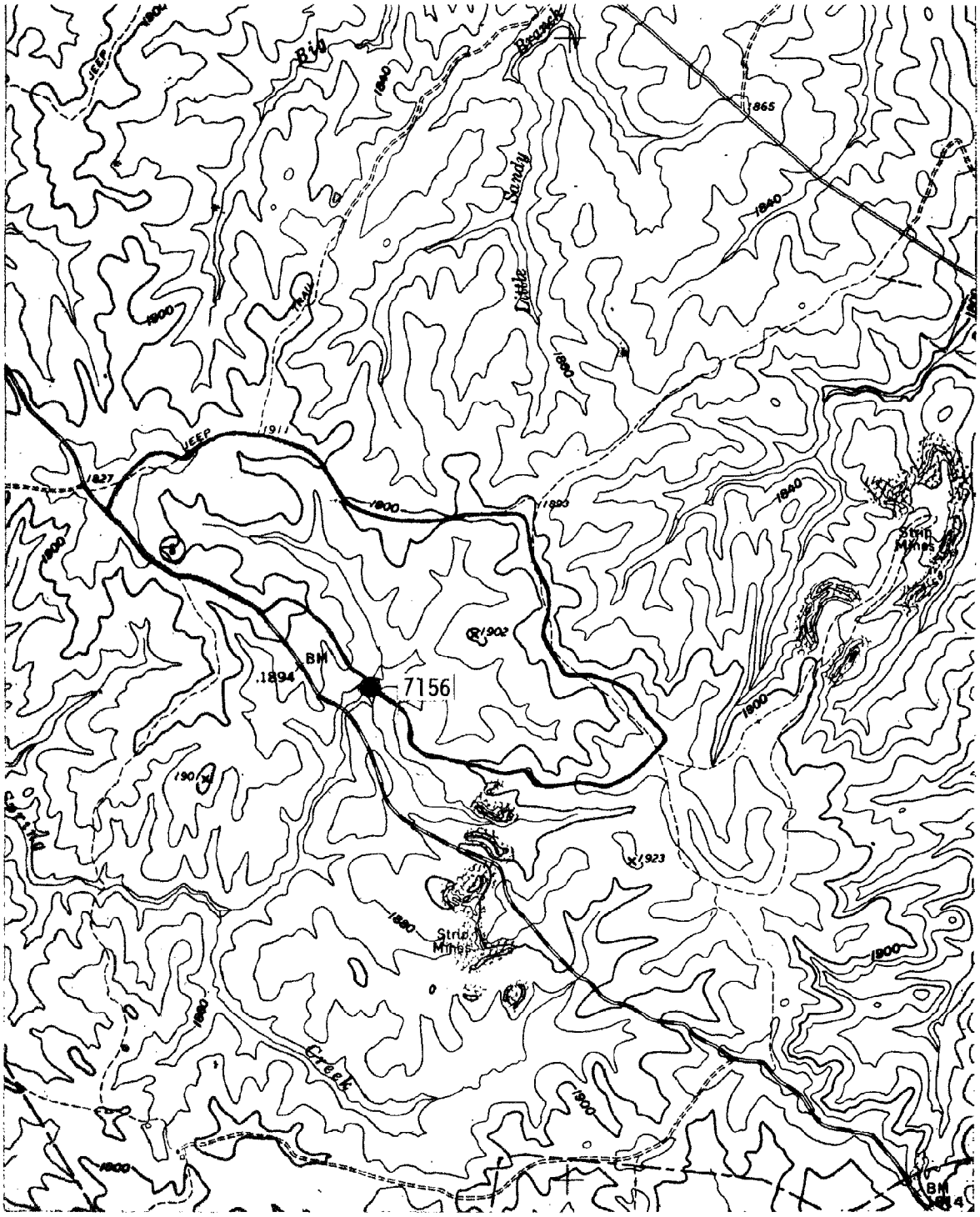

Figure 38. Location map for site 7156, Van Buren Co., Tennessee. Curtistown Quadrangle.

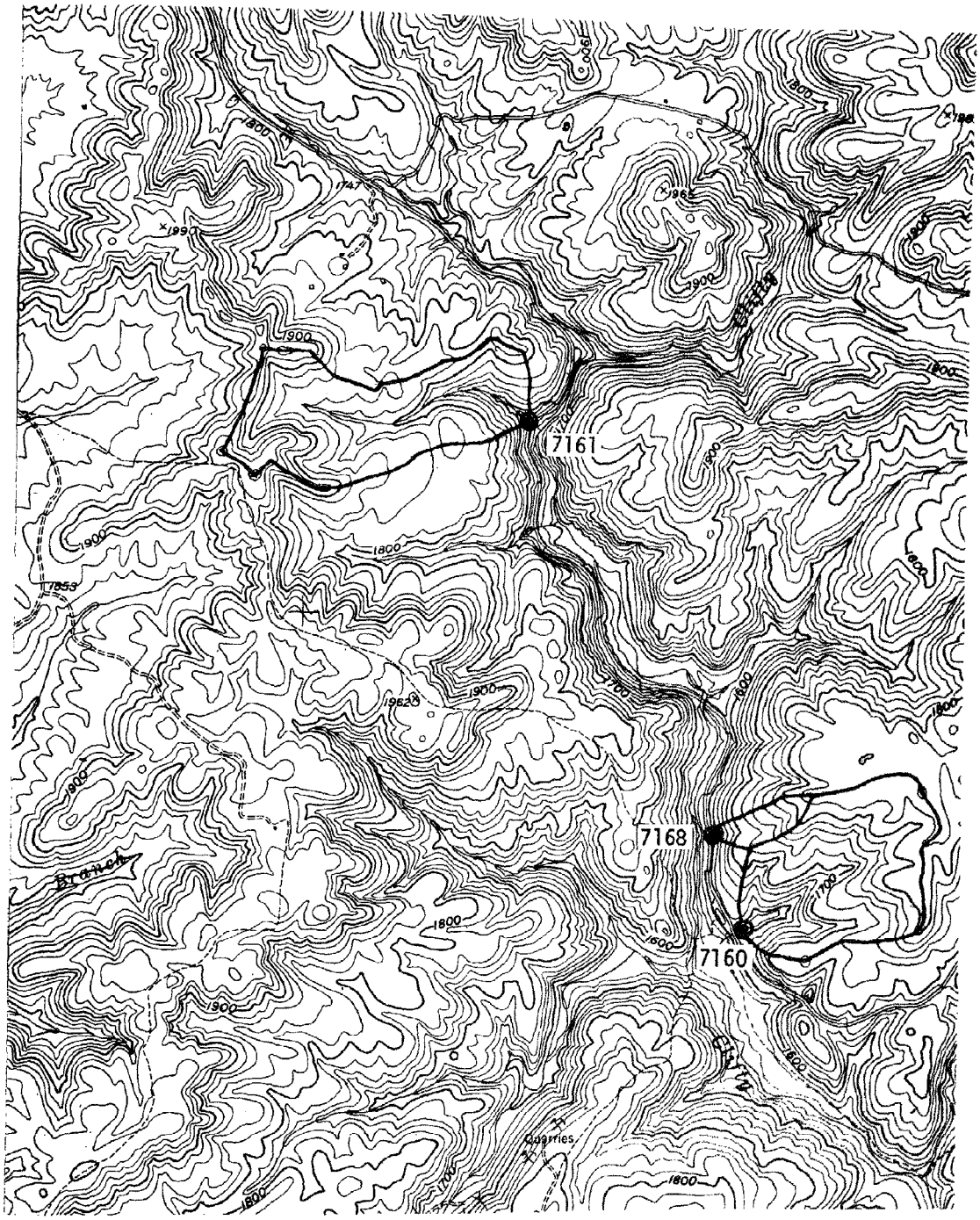

Figure 39. Location map for sites 7160, 7161, and 7168, White Co., Tennessee. De Rossett Quadrangle.

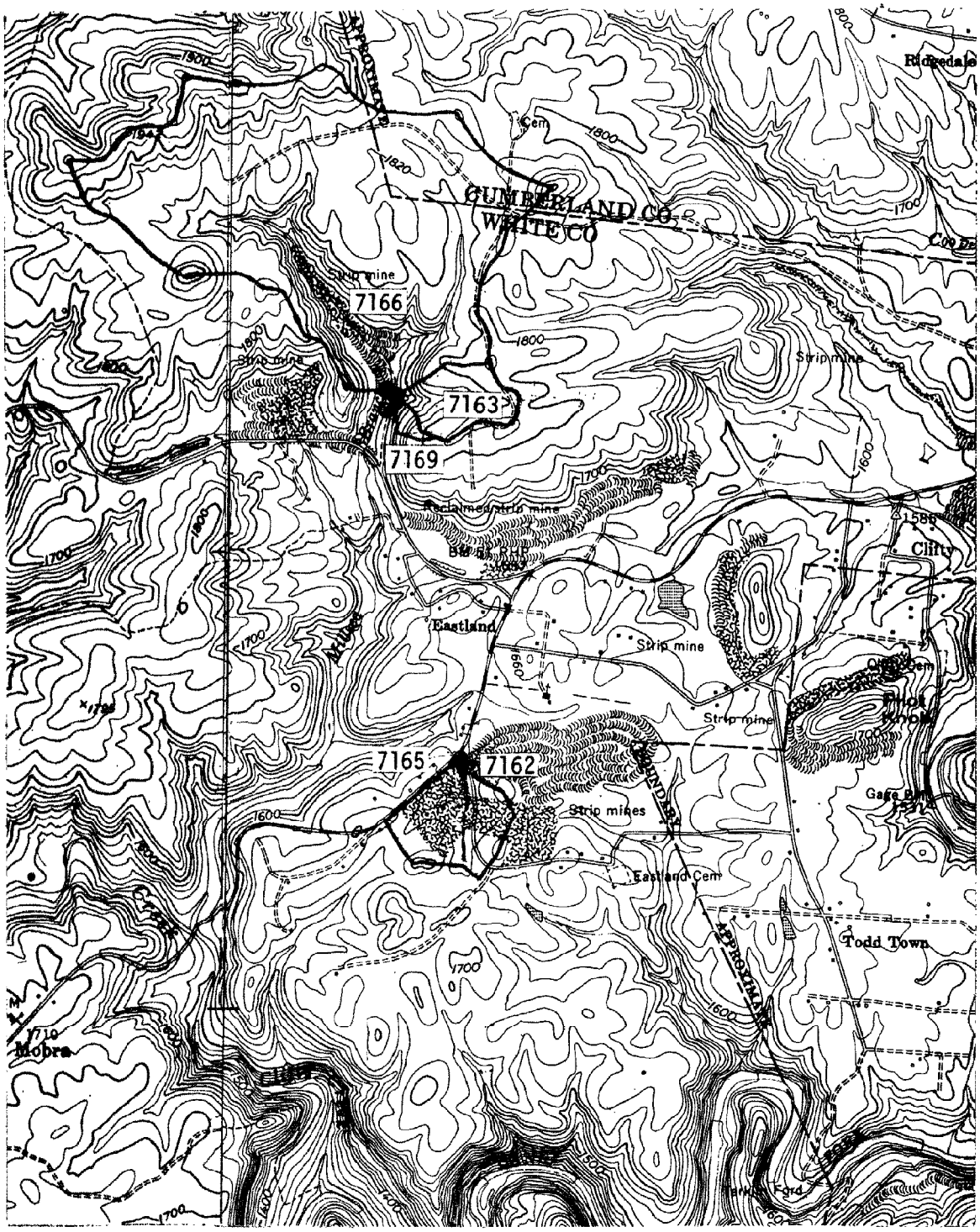

Figure 40. Location map for sites 7162, 7163, 7165, 7166, and 7169, White Co., Tennessee. Pleasant Hill Quadrangle.

TABLE 1. DESCRIPTIVE DATA FOR THE TENNESSEE WATER QUALITY SITES

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1]	Site Name
7010	Anderson	Deep Mine[2]	36°12'36"	84°10'03"	138	0	Tributary to Coal Creek at The Wye.
7012	Anderson	1970-1976	36 07 41	84 24 16	640	21	Coon Pool Branch at Tioga.
7013	Anderson	Before 1967	36 07 32	84 24 55	114	12	Tributary to New River at Fork Mountain.
7021	Bledsoe	Unmined	35 26 37	85 13 32	148	0	Tributary to Suzanne Branch near Smithtown.
7022	Bledsoe	1975-1979	35 29 06	85 12 36	121	65	Tributary to McGill Creek at Pitts Gap.
7025	Bledsoe	1962-1978	35 28 31	85 13 10	113	60	Tributary to Smith Creek at Smithtown.
7028	Bledsoe	1962-1978	35 29 18	84 12 30	17	100	Tributary to McGill Creek near Pitts Gap.
7031	Campbell	Unmined	36 27 43	84 02 33	221	0	Tributary to Davis Creek at Russell Fork.
7032	Campbell	1968-1977	36 29 15	84 02 25	337	37	Granny Branch at Westbourne.
7033	Campbell	Before 1951[2]	36 31 01	84 01 26	30	20	Tributary to White Oak Creek near White Oak.
7041	Claiborne	Unmined[3]	36 34 20	83 40 51	229	0	Tributary to Gap Creek at Tiprell.
7042	Claiborne	1975-1977[2]	36 33 55	83 48 46	486	22	Sugar Branch at Bryson.
7043	Claiborne	1950-1965	36 32 35	83 54 23	222	18	Tributary to Straight Creek near Marion.
7046	Claiborne	Before 1972	36 32 17	83 55 42	1	(100)	Tributary to Rock Creek at Marion.
7051	Cumberland	Unmined	35 55 27	85 12 46	211	0	Tributary to West Fork Creek near Clifty.
7052	Cumberland	1970-1976	35 53 15	85 11 29	350	11	Sapp Branch at Erasmus.

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

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1]	Site Name
7053	Cumberland	Before 1952	35°53'13"	85°12'26"	108	33	Tributary to Caney Fork near Clifty.
7055	Cumberland	1970-1976	35 53 14	85 11 32	116	12	Tributary to Sapp Branch at Erasmus.
7061	Fentress	Unmined	36 19 20	84 52 52	113	0	Barger Branch near Allardt.
7062	Fentress	1976-1978	36 19 44	84 55 40	62	58	Tributary to Brushy Fork near Allardt.
7063	Fentress	Before 1951[2]	36 16 17	85 05 51	227	15	Tributary to Little Laurel Creek at Highland.
7064	Fentress	Unmined	36 19 45	84 56 56	213	0	Blackenhouse Branch near Grimsley.
7065	Fentress	1976-1978	36 20 10	84 56 38	147	14	Smith Branch near Grimsley.
7070	Grundy	1960-1976	35 17 28	85 43 28	772	7	Holy Water Creek near Hobbs Hill.
7071	Grundy	Unmined	35 22 21	85 41 31	104	0	Tributary to Ranger Creek near Dogtown.
7072	Grundy	1960-1976	35 17 29	85 43 30	244	4	Copper Branch near Hobbs Hill.
7073	Grundy	Before 1972	35 19 49	85 44 00	157	26	Tributary to Corn Branch near Sweeton Hill.
7074	Grundy	Unmined	35 22 06	85 38 44	215	0	Tributary to Berner Creek at Gruetli.
7075	Grundy	1960-1976	35 17 27	85 43 32	183	13	Tributary to Holy Water Creek near Hobbs Hill.
7077	Grundy	Unmined	35 19 46	85 44 00	4	0	Tributary to Corn Branch near Sweeton Hill.
7078	Grundy	1960-1976	35 17 27	85 43 26	106	19	Tributary to Holy Water Creek near Hobbs Hill.
7080	Hamilton	Before 1970[2]	35 20 38	85 10 14	38	20	Tributary to Big Possum Creek near Bakewell.

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

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1/]	Site Name
7081	Hamilton	Unmined	35°21'14"	85°12'18"	138	0	Tributary to Board Camp Creek at Flat Top.
7082	Hamilton	1957-1978	35 20 22	85 10 39	43	43	Tributary to Big Possum Creek near Bakewell.
7085	Hamilton	1957-1978	35 20 37	85 10 10	52	47	Tributary to Big Possum Creek near Bakewell.
7086	Hamilton	1957-1960	35 20 37	85 10 10	14	75	Tributary to Big Possum Creek near Bakewell.
7091	Marion	Unmined	35 04 45	85 30 00	386	0	Moore Hollow near Mineral Springs.
7092	Marion	1974-1979	35 08 57	85 40 00	92	34	Tributary to Denny Cove near Sequatchie.
7093	Marion	Before 1970	35 16 44	85 41 28	248	7	Brown Hollow near Shadrick Hill.
7095	Marion	1976-1979	35 09 15	85 40 08	226	17	Tributary to Denny Cove near Comfort.
7098	Marion	1976-1979	35 08 36	85 39 48	77	18	Tributary to North Fork Pryor Cove Branch near Sequatchie.
7101	Morgan	Unmined[4/]	36 07 29	84 26 00	529	0	Straight Fork New River at Fork Mountain.
7102	Morgan	1950-1978	36 02 19	84 23 50	84	45	Tributary to Geise Creek near Coalfield.
7103	Morgan	1960-1972	36 04 55	84 26 57	122	7	Tributary to Crooked Fork at Petros.
7111	Overton	Unmined	36 10 11	85 09 38	197	0	Tributary to East Fork Obey River at Obey City.
7112	Overton	1965-1975	36 11 13	85 11 08	220	(10)	South Fork Bill Branch near Lovejoy.

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

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1/]	Site Name
7113	Overton	1950-1959[5/]	36°10'58"	85°09'33"	178	13	Tributary to East Fork Obey River at Cliff Springs.
7130	Scott	Before 1952[2/]	36 26 00	84 31 50	245	6	Tributary to Sulphur Creek at Helenwood.
7131	Scott	Unmined	36 25 46	84 31 40	49	0	Tributary to Sulphur Creek at Helenwood.
7132	Scott	1970-1978	36 13 23	84 28 28	188	35	Tributary to Mill Creek near Lone Mountain.
7133	Scott	Before 1951	36 25 56	84 31 45	207	2	Tributary to Sulphur Creek at Helenwood.
7134	Scott	Unmined	36 25 50	84 31 40	116	0	Tributary to Sulphur Creek at Helenwood.
7135	Scott	1970-1978	36 13 35	84 28 22	363	8	Tributary to Mill Creek near Lone Mountain.
7136	Scott	Before 1951	36 20 31	84 33 44	599	13	Pemberton Branch near Robbins.
7139	Scott	Before 1972	36 25 50	84 31 40	51	2	Tributary to Sulphur Creek at Helenwood.
7141	Sequatchie	Unmined	35 26 05	85 30 50	217	0	Tributary to Savage Creek near Barkertown.
7142	Sequatchie	1950-1973	35 29 30	85 32 00	43	40	Tributary to Dry Creek near Cagle.
7143	Sequatchie	1948-1969	35 30 53	85 31 39	38	42	Tributary to Big He Creek near Chalybeate.
7152	Van Buren	1948-1974	35 33 39	85 30 55	15	35	Tributary to Big Branch near Chalybeate.
7153	Van Buren	1948-1972	35 34 39	85 31 03	340	10	Tributary to Big Branch near Chalybeate.
7156	Van Buren	1955-1970	35 33 35	85 33 02	357	6	Tributary to Spring Creek near Curtistown.
7160	White	Before 1972	35 54 19	85 16 16	112	9	Tributary to Clifty Creek near Eastland.

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

Site Number	County	Approximate Date of Surf. Min.	Latitude	Longitude	Acres	Percent Disturbed[1]	Site Name
7161	White	Unmined	35°55'25"	85°16'53"	118	0	Tributary to Clifty Creek near Clarktown.
7162	White	1969-1976	35 53 32	85 14 21	15	44	Tributary to Millsea Branch at Eastland.
7163	White	1950-1959	35 54 21	85 14 33	25	5	Tributary to Millsea Branch at Eastland.
7165	White	1969-1976	35 53 33	85 14 21	37	48	Tributary to Millsea Branch at Eastland.
7166	White	1950-1959	35 54 21	85 14 34	358	5	Tributary to Millsea Branch at Eastland.
7168	White	After 1970	35 54 31	85 16 21	10	25	Tributary to Clifty Creek near Eastland.
7169	White	1950-1959	35 54 18	85 14 34	3	50	Tributary to Millsea Branch at Eastland.

[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] A major portion of the stream flow is effluent from an underground mine.

[3] About the year 1900 iron was mined from the ridge in the southern portion of watershed 7041, but little or no effect on water quality is evident today.

[4] A few acres of disturbed alluvium are shown for watershed 7101 on the U. S. Geological Survey 7 1/2 minute topographic map revised in 1974. Any surface mining which may have taken place on this watershed was probably for sand and/or gravel.

[5] At least one underground mine is on watershed 7113 but it may not be contributing to the stream flow.

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 (June 7, 1977 to December 11, 1979)
FA	100	Filtered, acidified with 0.5 ml 50% nitric acid (June 7, 1977 to December 11, 1979)
FN	50	Filtered, acidified with 0.25 ml 50% sulfuric acid (June 26, 1979 to September 13, 1979)
FP	50	Filtered, preserved with 0.25 ml 0.5% mercuric chloride (June 26, 1979 to September 13, 1979)
KJ	100	Unfiltered, acidified with 0.5 ml 50% sulfuric acid (June 26, 1979 to September 13, 1979)
SA	100	Unfiltered, acidified with 0.5 ml 50% nitric acid (Collected June 7, 1977 to about June 1978)
SV	1000	Unfiltered, untreated, raw water (Collected April 18, 1979 to August 17, 1979)
U	100	Unfiltered, untreated, raw water (Collected June 7, 1977 to December 11, 1979)

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

Element	Approximate detection limit Mg/1	Approximate deviation from the mean
Aluminum	0.2	± 10%
Barium*	0.5	
Beryllium*	0.01	± 0.01 mg/1
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 7010 ANDERSON COUNTY, TENNESSEE

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 14 77	8	0.09			20	672	467	2.85	8.0		217	262	2	5.0	140	0.2					
11 10 77	14	0.25	3		25	463	328	3.97	8.6		174	202	5	4.0	74	0.3					
12 8 77	11	6	80*		4	482	266	2.24	8.4		118	140	2	2.8	90	0.6					
1 6 78	12	8			6	705	354	2.72	8.3		157	187	2	3.1	110	0.4					
2 13 78	13	5			4	546	336	2.54	8.5		159	187	4	2.6	110	0.3					
3 22 78	14	1.0			2	462	314	2.93	8.4		132	156	2	2.4	94	0.3					
4 28 78	17	0.25	35*		9	472	309	2.37	8.3		137	163	2	2.9	100	0.3					
5 26 78	19	0.4			7	491	315	2.77	8.2		149	178	2	2.5	93	0.8					
6 23 78	18	0.6	24*			552	350	3.55	7.9		154	186	1	2.0	93	0.2					
7 31 78	11	0.3	7		4	609	420	3.23	8.5		190	223	5	3.6	120	0.2					
9 19 78	15	0.3	22*		7	625	376	3.29	8.7		220	252	8	4.8	91	0.3					
10 26 78	15	0.1	12		0	704	417	3.25	8.5		252	295	6	7.4	98	0.2					
11 22 78	13	0.2	14		6	725	375	3.47	8.4	-230	261	308	5	9.1	76	0.2					
1 9 79	8	0.25	7		0	399	291	2.61	8.3		109	130	2	3.4	96	0.5					
2 26 79	10	1.0	13		4	366	240	2.33	8.1		102	122	1	2.4	81	0.4					
4 5 79	13	0.3			0	451	304	2.15	8.4	-110	131	155	2	2.1	110	0.5					
5 10 79	14	0.3	9	0.00	7	473	319	2.24	7.9	-140	150	181	1	2.0	110	0.6					
5 31 79	16	1.5	2610		3400	229	135	3.01	8.1	-66	75	90	1	1.2	35	0.2					
6 28 79	15	0.4	11		0	581	402	2.61	8.1	-160	184	220	2	2.7	130	0.1	0.0	0.02	1.25	0.05	0.00
7 23 79	16	0.15			25	500	274	2.20	8.2	-120	128	153	1	1.9	94	0.1	0.0	0.09	0.50	0.00	0.00

* 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 14 77	0.1		0.0	0.00	22	0.0	0.00	0.1	3.3	0.06	12	0.1	0.0	140	0.01	0.0	4.7	0.1	0.1	0.0
11 10 77	0.0	0.11			21	0.0	0.00	0.1	2.0		9.4	0.2		100	0.00	0.0	4.4		0.0	0.0
12 8 77	0.1	0.06			14	0.0	0.00	0.1	2.8		11	0.2		60	0.02	0.1	4.9		0.5	0.0
1 6 78	0.1	0.07	0.0	0.00	14	0.0	0.00	0.1	3.2	0.15	10	0.2	0.0	110	0.02	0.0	4.9	0.1	0.1	0.0
2 13 78	0.0	0.01			10	0.0	0.00	0.0	2.6		7.4	0.1		100	0.00	0.0	3.7		0.0	0.0
3 22 78	0.0	0.09			12	0.0	0.00	0.1	3.1		9.4	0.1		100	0.01	0.0	5.0		0.0	0.0
4 28 78	0.1	0.09	0.0	0.00	12	0.0	0.00	0.1	2.7	0.06	8.5	0.2	0.0	87	0.00	0.0	4.4	0.0	0.0	0.0
5 26 78	0.1	0.08			13	0.0	0.00	0.1	2.9		9.3	0.3		91	0.00	0.0	4.4		0.0	0.0
6 23 78	0.0	0.09	0.0	0.00	13	0.0	0.00	0.1	3.1	0.06	9.7	0.1	0.0	130	0.00	0.0	4.5	0.0	0.0	0.0
7 31 78	0.0	0.10			19	0.0	0.02	0.0	4.0		11	0.1		140	0.02	0.0	5.5		0.0	0.0
9 19 78	0.1	0.10			19	0.0	0.00	0.1	3.6		12	0.1		100	0.02	0.0	5.2		0.0	0.0
10 26 78	0.0	0.09	0.0	0.00	16	0.0	0.00	0.1	3.9	0.15	10	0.1	0.2	120	0.00	0.0	4.9	0.1	0.0	0.0
11 22 78	0.1	0.11			18	0.0	0.00	0.1	3.4		11	0.1		88	0.02	0.0	5.3		0.1	0.0
1 9 79	0.1	0.06			17	0.0	0.01	0.1	2.5		10	0.1		83	0.04	0.1	5.1		0.2	0.1
2 26 79	0.1	0.05			14	0.0	0.00	0.1	2.3		7.4	0.1		61	0.01	0.0	4.2		0.0	0.2
4 5 79	0.4	0.06	0.0	0.00	17	0.0	0.01	2.6	3.5	0.20	10	1.2	0.0	69	0.04	0.0	4.7	0.1	0.1	0.0
5 10 79	0.1	0.08			14	0.0	0.00	0.1	2.4		8.6	0.1		83	0.01	0.0	4.4		0.0	0.1
5 31 79	0.2	0.02			18	0.1	0.01	0.1	1.7		4.0	0.0		23	0.03	0.1	2.8		0.1	0.0
6 28 79	0.1	0.08			18	0.1	0.00	0.1	3.2		11	0.1		120	0.05	0.2	3.7		0.3	0.0
7 23 79	0.1	0.06			14	0.0	0.01	0.0	2.2		7.7	0.1		68	0.00	0.0	4.0		0.0	0.0

TABLE 5. WATER QUALITY FOR SITE 7012 ANDERSON COUNTY, TENNESSEE

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	21	0.04			40	1050	798	0.83	3.8		0	0	0	1.4	600	0.4					
8 15 77	21	0.15			110	824	554	0.93	4.2		0	0	0	1.4	400	0.4					
9 16 77	19	4			850	337	198	1.10	6.3		3	4	0	0.7	140	0.2					
10 14 77	8	0.15			80	454	306	1.17	7.2		12	15	0	1.4	200	0.3					
11 10 77	12	1.5	18		95	347	236		6.9		9	11	0		160	0.3					
12 8 77	3	2.0	89*		20	340	226	1.13	7.3		7	8	0	0.7	150	0.4					
1 6 78	4	0.8			390	491	279	1.18	6.2		20	24	0	2.0	180	0.5					
2 14 78	2	0.5			3	458	294	1.23	7.0		8	10	0	1.2	190	0.4					
3 22 78	12	2.0			25	369	275	1.13	7.1		11	14	0	1.2	180	0.5					
4 28 78	19	0.4	38*		15	318	198	1.04	7.0		8	10	0	1.8	130	0.3					
5 26 78	18	0.4				481	309	1.05	7.0		14	17	0	1.7	210	1.0					
6 22 78	21	0.2				613	373	1.21	7.0		13	16	0	1.0	250	0.6					
8 1 78	23	0.25	11		20	814	570	1.02	7.3		17	21	0	2.0	400	0.7					
9 18 78	24	0.03	11		10	897	656	0.97	7.3		11	14	0	1.2	470	0.4					
10 26 78	15	0.02	22*		0	1070	899	0.91	6.0	4	1	1	0	1.4	660	0.4					
11 22 78	9	0.01	2		9	976	722	1.09	4.6	14	0	0	0	1.7	500	0.2					
1 9 79	1	0.09	86		75	271	190	1.16	7.1	-3	9	11	0	1.3	120	0.3					
2 26 79	2	0.5	193		220	218	143	0.94	7.0		9	11	0	1.5	94	0.3					
4 4 79	12	1.0			110	231	153	1.22	7.0		7	9	0	0.9	95	0.1					
5 7 79	18	0.5	46	0.12	140	290	197	1.27	6.8	-2	8	10	0	0.9	120	0.3					
5 30 79	16	0.09	38	0.30	110	351	247	1.03	6.7	7	7	8	0	0.9	170	0.1					
6 28 79	19	0.01	28		50	718	541	0.99	7.1	0	7	9	0	0.9	380	0.2	0.0	0.04	0.55	0.05	0.00
7 23 79	20	1.0	60*	0.01	75	218	146	1.05	7.2	-4	12	15	0	0.8	94	0.1	0.0	0.02	0.25	0.10	0.01

* 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	5.9	0.07			99	0.3	0.01	1.4	6.0		61	3.4		7.4	0.21	0.1	4.5		0.1	0.1
8 15 77	4.1	0.02			83	0.0	0.00	1.4	4.4		40	2.6		5.9	0.12	0.0	4.3		0.0	0.2
9 16 77	0.1	0.00			29	0.0	0.00	0.1	2.7		18	0.9		2.9	0.00	0.0	2.8		0.0	0.1
10 14 77	0.1	0.02	0.0	0.00	55	0.0	0.00	1.7	2.4	0.10	24	1.5	0.0	3.7	0.05	0.0	3.6	0.1	0.1	0.0
11 10 77	0.1				36	0.0	0.00	0.3	1.4		18	1.1		3.1	0.20	0.0	3.4		0.0	0.1
12 8 77	0.1	0.01			32	0.0	0.00	2.6	2.3		22	0.9		2.6	0.04	0.0	3.2		0.2	0.0
1 6 78	0.1	0.00	0.0	0.00	42	0.0	0.00	0.8	2.6	0.25	27	1.0	0.0	2.7	0.05	0.1	3.2	0.1	0.1	0.0
2 14 78	0.2	0.03			50	0.0	0.01	1.2	2.7		28	1.1		3.2	0.04	0.0	2.9		0.1	0.0
3 22 78	0.1	0.00			42	0.0	0.00	0.6	2.4		25	1.1		2.9	0.04	0.0	3.0		0.0	0.0
4 28 78	0.1	0.01	0.0	0.00	25	0.0	0.00	0.4	2.0	0.10	19	0.8	0.0	2.8	0.01	0.0	2.8	0.0	0.1	0.0
5 26 78	0.1	0.01			51	0.0	0.00	0.3	2.8		23	1.1		3.0	0.03	0.0	2.5		0.0	0.0
6 22 78	0.1	0.01	0.0	0.00	67	0.0	0.01	0.2	3.9	0.20	31	1.0	0.0	5.1	0.02	0.0	3.0	0.1	0.0	0.0
8 1 78	0.1	0.03			99	0.0	0.00	0.5	4.6		39	0.8		4.9	0.04	0.1	4.2		0.1	0.0
9 18 78	0.2	0.03			110	0.0	0.00	0.6	5.2		46	1.2		6.0	0.09	0.2	5.7		0.1	0.0
10 26 78	0.4	0.04	0.0	0.00	150	0.0	0.00	0.7	4.8	0.70	58	2.4	0.0	7.0	0.14	0.1	6.6	0.2	0.1	0.1
11 22 78	1.4	0.02			130	0.0	0.01	2.9	4.0		54	3.2		7.4	0.14	0.2	5.8		0.1	0.1
1 9 79	0.4	0.00			38	0.0	0.01	1.0	1.9		11	0.6		2.3	0.03	0.0	2.7		0.0	0.1
2 26 79	0.2	0.01			20	0.0	0.00	0.6	1.4		8.9	0.4		3.0	0.01	0.0	2.4		0.0	0.3
4 4 79	0.2	0.00	0.0	0.00	31	0.0	0.02	0.4	1.6	0.20	9.8	0.4	0.0	2.0	0.04	0.1	2.8	0.0	0.1	0.0
5 7 79	0.1	0.01			37	0.0	0.01	0.0	2.1		16	0.6		2.3	0.04	0.1	3.3		0.1	0.0
5 30 79	0.2	0.01			43	0.0	0.00	0.9	1.8		16	0.8		2.3	0.04	0.1	3.1		0.0	0.1
6 28 79	0.3	0.02			94	0.1	0.01	1.3	2.9		37	1.5		4.1	0.09	0.2	4.6		0.3	0.0
7 23 79	0.1	0.01	0.0	0.00	22	0.1	0.03	0.1	1.9	0.15	10	0.4	0.0	1.8	0.00	0.0	3.2	0.0	0.0	0.0

TABLE 6. WATER QUALITY FOR SITE 7013 ANDERSON COUNTY, TENNESSEE

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 21 77	18	0.06			15	277	172	1.41	7.5		38	46	0	1.2	93	0.0					
10 14 77	8	0.2			20	420	256	1.47	7.8		43	52	0	1.3	140	0.1					
11 10 77	10	1.5	16		20	295	196	1.35	7.1		39	47	0	1.1	110	0.1					
12 8 77	3	0.4			4	304	165	1.64	7.8		30	37	0	0.5	86	0.2					
1 6 78	2	0.7			30	529	279	1.45	7.7		50	61	0	1.5	160	0.3					
2 14 78	1	0.08			4	463	275	1.53	7.9		48	58	0	1.1	150	0.3					
3 22 78	8	0.15			4	346	237	1.44	7.7		42	51	0	1.0	130	0.3					
4 28 78	18	1.5	37*		9	335	193	1.45	7.8		37	45	0	1.9	110	0.2					
5 26 78	18	0.015			0	450	253	1.36	7.6		13	16	0	1.1	160	0.3					
6 22 78	22	0.03	65*			582	395	1.53	7.8		54	65	0	0.6	220	0.2					
8 1 78	21	0.07	96*		50	919	620	1.27	7.7		67	81	0	1.5	380	0.4					
9 18 78	21	0.001	51*		15	1050	760	1.03	8.2		67	80	1	1.3	510	0.2					
10 26 78	13	0.0006	43*		10	1330	952	1.16	7.7	-59	71	86	0	1.6	620	0.0					
11 22 78	9	0.002	27		30	1050	820	1.05	7.9	-60	58	70	0	1.7	550	0.1					
1 9 79	1	0.08	17		2	177	104	1.47	7.4	-18	20	24	0	0.9	54	0.3					
2 26 79	2	0.1	138		160	173	102	1.42	7.4	-21	20	24	0	3.8	49	0.5					
4 4 79	11	0.07			15	245	162	1.62	7.6		34	41	0	0.8	83	0.1					
5 7 79	16	0.03	19	0.00	20	290	186	1.45	7.4	-32	36	44	0	0.8	100	0.5					
5 30 79	16	0.006	23		20	336	223	1.48	7.8	-39	44	54	0	0.6	120	0.2					
6 28 79	19	0.01	14		8	538	379	1.43	8.2	-54	59	71	1	0.8	220	0.2	0.0	0.00	0.95	0.10	0.00
7 23 79	18	0.15	49*		20	233	127	1.52	7.7	-24	32	39	0	0.6	64	0.0	0.1	0.00	1.30	0.20	0.01

* 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 21 77	0.1	0.00			33	0.0	0.00	0.0	1.6		11	0.2		3.0	0.00	0.0	2.6		0.0	0.0
10 14 77	0.1	0.06	0.0	0.00	39	0.0	0.00	0.1	2.0	0.08	17	0.0	0.0	23	0.01	0.0	2.1	0.1	0.0	0.0
11 10 77	0.0	0.00			30	0.0	0.00	0.1	0.8		11	0.0		16	0.00	0.0	2.1		0.0	0.0
12 8 77	0.0	0.01			27	0.0	0.00	0.1	1.7		12	0.0		13	0.01	0.0	2.2		0.2	0.0
1 6 78	0.1	0.00	0.0	0.00	40	0.0	0.00	0.1	1.9	0.07	24	0.0	0.0	18	0.01	0.1	1.8	0.1	0.1	0.0
2 14 78	0.1	0.04			36	0.0	0.00	0.0	2.0		27	0.0		21	0.01	0.0	1.8		0.0	0.0
3 22 78	0.1	0.02			31	0.0	0.01	0.1	2.4		21	0.0		17	0.02	0.0	2.0		0.0	0.0
4 28 78	0.0	0.02	0.0	0.00	24	0.0	0.00	0.0	1.7	0.10	16	0.0	0.0	15	0.00	0.0	2.0	0.0	0.0	0.0
5 26 78	0.1	0.02			41	0.0	0.01	0.2	2.5		19	0.0		19	0.00	0.0	1.4		0.0	0.0
6 22 78	0.1	0.03	0.0	0.00	54	0.1	0.01	0.1	3.9	0.15	33	0.0	0.0	39	0.02	0.1	2.4	0.1	0.4	0.0
8 1 78	0.1	0.04			93	0.0	0.01	0.1	4.7		37	0.0		54	0.02	0.1	2.7		0.1	0.0
9 18 78	0.2	0.04			97	0.0	0.00	0.1	5.2		40	0.0		60	0.04	0.2	2.9		0.1	0.0
10 26 78	0.2	0.03			140	0.0	0.01	0.0	4.4		51	0.0		91	0.03	0.1	2.1		0.2	0.0
11 22 78	0.3	0.03			120	0.0	0.00	0.1	3.3		42	0.0		59	0.04	0.2	1.9		0.1	0.0
1 9 79	0.1	0.00			16	0.0	0.00	0.1	1.1		6.3	0.0		8.0	0.00	0.0	1.8		0.0	0.0
2 26 79	0.2	0.01			16	0.0	0.00	0.3	1.3		6.4	0.1		5.6	0.02	0.0	2.0		0.1	0.3
4 4 79	0.1	0.00	0.0	0.00	31	0.0	0.01	0.1	1.8	0.10	9.4	0.0	0.0	10	0.02	0.0	2.1	0.0	0.1	0.0
5 7 79	0.1	0.01			34	0.0	0.01	0.0	1.7		11	0.0		11	0.02	0.0	1.9		0.0	0.0
5 30 79	0.1	0.01			37	0.0	0.01	0.1	2.0		14	0.0		17	0.01	0.0	2.2		0.0	0.1
6 28 79	0.1	0.03			64	0.0	0.00	0.1	2.8		25	0.0		27	0.01	0.0	2.0		0.1	0.0
7 23 79	0.1	0.01	0.0	0.00	20	0.0	0.00	0.0	1.4	0.10	8.2	0.0	0.0	8.1	0.02	0.0	2.2	0.0	0.0	0.0

TABLE 7. WATER QUALITY FOR SITE 7021 BLEDSOE COUNTY, TENNESSEE

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 ----------											
6 16 77	18	0.025			20		22	2.29	7.5		7	9	0	1.7	5	0.1					
8 16 77	21	0.0015			90	284	159	3.25	8.0		77	93	1	0.8	46	0.3					
9 22 77	18	0.03			10	26	25	1.60	7.4		5	6	0	0.7	7	0.9					
10 13 77	13	0.1			8	19	16	1.65	6.9		2	3	0	1.0	2	0.6					
11 10 77	12	0.4	9		20	18	19	1.13	5.7		1	1	0	0.9	8	0.0					
12 7 77	8	0.4	82*		4	17	22	0.91	5.6		0	0	0	0.3	12	0.0					
1 5 78	3	0.2			10	26	23	0.67	5.6		0	0	0	1.1	13	0.0					
2 16 78	6	0.1			3		17	0.98	4.7		0	0	0	1.0	7	0.1					
3 28 78	10	0.04			0		19	0.55	4.8		0	0	0	2.4	8	0.3					
4 27 78	17	0.09	43*		15	19	24	0.97	6.4		2	2	0	1.2	12	0.1					
5 25 78	20	0.2			0	23	28	1.12	6.1		2	3	0	0.8	13	0.2					
6 22 78	20	0.04	73*			25	19	2.08	6.6		4	5	0	0.9	5	0.1					
8 3 78	25	0.03	75*		70	82	59	1.56	7.3		20	24	0	2.0	21	0.6					
9 13 78	19	0.0000	37*		7	67	40	6.52	7.3		22	27	0	2.6	4	0.3					
11 21 78	12	0.0002	3		2	85	48	3.04	7.0	-22	20	24	0	2.4	11	0.3					
1 5 79	8	0.04			3	27	25	0.47	5.7		0	0	0	1.2	10	1.2					
2 21 79	5	0.2	34		6	32	31	0.94	6.5		5	6	0	1.6	9	1.6					
3 28 79	10	0.02	8		2	24	29	0.91	6.0	2	1	1	0	1.0	16	0.3					
4 27 79	15	0.08	2	0.00	5	20	19	1.43	6.1	3	2	2	0	0.8	7	0.2					
5 28 79	13	0.03	57		15	24	23	1.04	6.2	6	2	2	0	1.0	9	0.3					
6 20 79	17	0.001	5		20	30	24	1.97	6.7	1	6	7	0	1.8	7	0.1					
7 20 79	19	0.001	187*	2.1	150	114	56	2.43	7.7	-20	24	29	0	1.5	17	0.0	0.0	0.05	0.85	0.30	0.01
8 11 79	20	0.001	9	0.01	20	49	28	2.78	7.3	5	10	12	0	4.7	4	0.0	0.2	0.05	0.00	0.00	0.00

* 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 ----------																			
6 16 77	0.0	0.01			3.6	0.0	0.00	0.1	0.6		0.9	0.1		0.6	0.00	0.0	2.1		0.0	0.0
8 16 77	0.1	0.00			54	0.0	0.00	0.1	2.2		4.3	0.0		0.9	0.01	0.0	1.0		0.0	0.1
9 22 77	0.1	0.00			4.0	0.0	0.00	0.0	0.5		0.8	0.0		0.8	0.00	0.0	2.0		0.0	0.0
10 13 77	0.0	0.04	0.0	0.00	1.6	0.0	0.00	0.0	0.4	0.00	0.4	0.0	0.0	0.7	0.00	0.0	2.1	0.0	0.0	0.0
11 10 77	0.1	0.00			2.2	0.0	0.00	0.3	0.5		0.8	0.2		0.8	0.00	0.0	2.1		0.0	0.0
12 7 77	0.1	0.00			1.5	0.0	0.00	0.5	0.6		1.2	0.3		0.8	0.02	0.1	2.4		0.3	0.0
1 5 78	0.1	0.00	0.0	0.00	1.1	0.0	0.00	0.4	0.5	0.00	1.4	0.3	0.0	0.6	0.02	0.0	1.8	0.0	0.0	0.0
2 16 78	0.1	0.04			1.4	0.1	0.00	0.2	0.7		0.8	0.1		0.6	0.02	0.1	1.9		0.3	0.0
3 28 78	0.1	0.02			1.0	0.0	0.01	0.1	0.7		0.9	0.1		0.8	0.02	0.0	1.9		0.0	0.0
4 27 78	0.1	0.00	0.0	0.00	1.9	0.0	0.00	0.2	0.8	0.02	1.5	0.3	0.0	0.8	0.00	0.0	1.8	0.0	0.0	0.0
5 25 78	0.1	0.00			3.0	0.0	0.00	0.3	0.8		1.6	0.4		0.9	0.01	0.0	2.0		0.0	0.0
6 22 78	0.1	0.01	0.0	0.00	2.5	0.0	0.00	0.1	1.1	0.02	0.9	0.1	0.0	1.0	0.00	0.1	1.8	0.0	0.4	0.0
8 3 78		0.00			11	0.0	0.02		1.7		1.9	0.2		1.2	0.01	0.0	2.9		0.0	0.1
9 13 78	0.0	0.01			8.9	0.0	0.00	0.2	1.4		1.2	0.2		1.1	0.01	0.0	2.6		0.0	0.0
11 21 78	0.1	0.00			12	0.0	0.01	0.1	1.3		1.4	0.2		1.3	0.00	0.0	2.3		0.0	0.0
1 5 79	0.1	0.00	0.0	0.00	2.0	0.0	0.01	0.1	0.8	0.00	0.7	0.0	0.0	0.9	0.02	0.1	1.7	0.0	0.1	0.1
2 21 79	0.2	0.00			3.4	0.0	0.02	0.1	1.0		1.2	0.0		1.0	0.01	0.0	1.5		0.0	0.2
3 28 79	0.2	0.00			3.0	0.0	0.01	0.4	0.8		1.7	0.5		0.8	0.01	0.0	1.7		0.0	0.0
4 27 79	0.0	0.00	0.0	0.00	2.1	0.0	0.00	0.0	0.8	0.04	0.6	0.0	0.0	1.3	0.00	0.0	1.9	0.0	0.0	0.0
5 28 79	0.1	0.00			2.4	0.0	0.01	0.1	0.8		0.8	0.1		0.9	0.03	0.0	2.4		0.1	0.1
6 20 79	0.0	0.00			4.2	0.0	0.00	0.1	0.9		1.0	0.1		0.7	0.00	0.0	2.2		0.0	0.0
7 20 79	0.1	0.01	0.0	0.00	14	0.0	0.00	0.1	1.8	0.06	1.2	0.0	0.0	0.7	0.01	0.0	2.2	0.0	0.0	0.1
8 11 79	0.1	0.01			4.2	0.0	0.02	0.2	1.1		0.9	0.2		1.2	0.01	0.1	2.3		0.2	0.0

TABLE 8. WATER QUALITY FOR SITE 7022 BLEDSOE COUNTY, TENNESSEE

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 ----------												
6 16 77	19	0.1			4	432	330	0.74	3.1		0	0	0	1.2	240	0.0					
7 15 77	26	0.0000			75	2460	1970	0.70	2.9		0	0	0	1.6	1500	0.0					
8 16 77					4	1280	819	0.53	2.9		0	0	0	1.4	580	0.0					
9 22 77	20	0.3			25	2980	2420	0.73	2.9		0	0	0	0.9	1700	0.1					
10 13 77	12	0.5			35	2030	1790	0.74	2.6		0	0	0	6.1	1200	2.8					
11 10 77	10	0.4	77		80	978	668	0.69	2.9		0	0	0	1.6	480	0.6					
12 7 77	6	4	107*		65	2110	1380	0.74	2.9		0	0	0	1.3	990	0.8					
1 5 78	2	3			50	2990	2040	0.78	2.6		0	0	0	2.2	1500	1.2					
2 16 78	7	0.1			6	2540	2050	0.71	2.8		0	0	0	5.4	1400	0.2					
6 22 78	25	0.015	22*			1010	624	0.86	3.1		0	0	0	8.4	440	0.1					
8 3 78	29	0.03	23*		4	2610	1960	0.84	3.0		0	0	0	4.3	1400	1.5					
9 13 78	23	0.003	27*		10	2540	2050	0.77	3.1		0	0	0	4.8	1500	0.5					
10 26 78	14	0.005	19*		4	2770	1960	0.97	3.2	150	0	0	0	6.3	1400	0.1					
11 21 78	10	0.4	14		10	2420	2030	1.01	6.9	13	11	13	0	5.8	1400	1.7					
4 17 79	19	0.4	13		35	429	237	0.95	3.6	23	0	0	0	1.2	170	0.3					
4 27 79	20	0.02	27	0.00	55	407	271	0.81	3.7	37	0	0	0	1.1	190	0.2					
5 28 79	17	0.02	28	0.04	75	814	531	0.81	3.4	78	0	0	0	1.6	380	0.3					
6 20 79	23	0.008	108*		35	2570	2140	0.65	3.0	260	0	0	0	2.8	1600	0.4					
7 20 79	22	0.01	56*		10	2800	2150	0.67	2.7	330	0	0	0	2.5	1600	0.0	0.2	1.10	2.30	0.25	0.03
8 11 79	25	0.015	28		55	3110	2170	0.75	2.8	360	0	0	0	3.6	1600	0.0	0.0	1.30	2.25	0.00	0.02

* 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 ----------																			
6 16 77	5.2	0.01			25	0.1	0.02	6.5	2.4		29	8.9		1.9	0.19	0.0	2.9		0.0	0.2
7 15 77	6.6	0.03			140	0.7	0.02	100	19		160	48		6.4	1.2	0.1	6.4		0.2	0.6
8 16 77	4.5	0.02			47	0.3	0.01	91	5.2		45	20		7.0	0.36	0.1	5.0		0.2	0.2
9 22 77	28	0.08			180	1.5		150	20		200	65		6.6	2.1	0.1	11		0.3	2.6
10 13 77	3.4		0.1	0.01	140	0.7	0.01	160	14	0.30	140	42	0.0	5.7	1.2	0.1	6.5	0.2	0.6	0.6
11 10 77	4.4	0.00			53	0.3	0.04	39	4.6		50	18		2.8	0.53	0.0	4.3		0.1	0.4
12 7 77	8.8	0.03			94	0.7	0.07	84	15		120	40		4.7	1.7	0.1	6.7		0.6	1.0
1 5 78	12	0.02	0.1	0.01	140	1.5	0.08	120	16	0.55	200	57	0.0	5.5	2.2	0.2	7.4	0.4	0.5	1.3
2 16 78	40	0.10			130	1.2	0.05	130	6.1		180	94		6.4	1.6	0.2	6.4		0.7	0.6
6 22 78	11	0.02	0.1	0.00	52	0.4	0.01	9.8	5.9	0.15	63	22	0.0	3.7	0.59	0.2	4.2	0.1	0.8	0.3
8 3 78	5.2	0.03			150	0.7	0.02	33	17		160	54		91	1.2	0.3	7.1		0.3	0.6
9 13 78	4.9	0.03			140	0.5	0.01	24	13		150	48		130	0.85	0.2	4.7		0.3	0.3
10 26 78	2.3	0.03	0.0	0.00	160	0.3	0.01	18	12	0.80	130	37	0.1	200	0.52	0.3	3.0	0.2	0.4	0.2
11 21 78	0.9	0.03			170	0.1	0.01	4.0	14		130	24		240	0.26	0.4	1.6		0.7	0.0
4 17 79	0.8	0.00			19	0.1	0.01	3.9	2.0		25	7.4		7.0	0.16	0.0	1.9		0.1	0.0
4 27 79	2.1	0.00	0.0	0.00	22	0.1	0.01	5.3	1.9	0.10	23	8.1	0.0	5.8	0.15	0.0	2.4	0.0	0.0	0.1
5 28 79	5.5	0.01			51	0.2	0.01	9.4	3.2		45	17		4.6	0.39	0.1	3.5		0.2	0.3
6 20 79	20	0.03	0.1	0.01	160	1.2	0.05	25	13	0.80	160	68	0.1	13	1.8	0.4	10	0.3	0.6	1.3
7 20 79	12	0.03	0.1	0.00	160	1.0	0.02	46	9.7	0.80	160	67	0.1	20	1.4	0.3	7.8	0.4	0.6	0.7
8 11 79	11	0.05			180	0.9	0.01	61	11		180	64		22	1.5	0.3	7.3		0.6	0.6

TABLE 9. WATER QUALITY FOR SITE 7025 BLEDSOE COUNTY, TENNESSEE

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										
6 16 77	22	0.025			4	2310	1300	0.61	2.6		0	0	0	2.7	1000	0.0					
7 15 77	30	0.03			85	2400	1560	0.60	2.9		0	0	0	2.9	1200	0.0					
8 16 77	25	0.08			30	1990	1200	0.69	2.9		0	0	0	2.6	900	0.0					
9 22 77	19	0.2			25	2000	1470	0.74	2.9		0	0	0	2.7	1000	0.0					
10 13 77	12	0.2			30	1680	1150	0.81	2.7		0	0	0	4.3	810	0.3					
11 10 77	11	0.8	59		30	1610	951	0.71	2.9		0	0	0	4.1	690	0.2					
12 7 77	3	1.5	79*		4	1520	899	0.75	3.0		0	0	0	2.9	640	0.2					
1 5 78	2	0.9			10	1820	1180	0.58	2.7		0	0	0	3.7	900	0.1					
2 16 78	6	1.0			4	1440	1050	0.65	2.9		0	0	0	3.3	790	0.1					
3 28 78	8	0.09			2	1850	1130	0.73	2.7		0	0	0	3.0	820	0.1					
4 27 78	16	0.3	27*		20	1600	887	0.67	2.8		0	0	0	3.0	650	0.3					
5 25 78	20	0.2			5	1790	1030	0.63	2.7		0	0	0	2.6	790	0.3					
6 22 78	23	0.4	28*			2170	1310	0.88	2.8		0	0	0	2.9	920	0.0					
8 3 78	27	0.15	62*		40	1470	800	0.74	3.0		0	0	0	3.2	590	0.4					
9 13 78	22	0.006	34*		8	2220	1310	0.76	2.8		0	0	0	2.3	950	0.0					
10 26 78	13	0.009	19*		4	2130	1420	0.62	2.8		0	0	0	3.0	1100	0.5					
11 21 78	10	0.004	23		4	1560	885	0.68	2.8	260	0	0	0	2.9	650	0.0					
1 5 79	1	0.2	24		3	1210	856	0.69	3.0	140	0	0	0	3.0	620	0.9					
2 21 79	5	0.25	11		25	435	280	0.91	3.6	22	0	0	0	3.6	200	0.5					
3 28 79	13	0.04	21		4	1260	903	0.79	3.1	170	0	0	0	3.0	670	0.1					
4 27 79	22	0.06	44	0.00	9	1260	784	0.75	3.0	170	0	0	0	2.9	580	0.2					
5 28 79	17	0.04	24		60	875	506	0.73	3.3	90	0	0	0	3.5	370	0.5					
6 20 79	22	0.005	46		20	2230	1050	0.84	2.8	300	0	0	0	3.2	750	0.0					
7 20 79	22	0.02	31*		10	1670	1030	0.58	2.8	210	0	0	0	2.8	790	0.1	0.0	1.30	4.00	0.20	0.05
8 11 79	23	0.006	17		90	1800	907	0.74	2.8	200	0	0	0	3.5	670	0.2	0.2	1.00	1.80	0.00	0.02

* 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																			
6 16 77	11	0.02			81	0.5	0.01	37	8.9		100	38		8.7	0.87	0.1	5.3		0.1	0.6
7 15 77	14	0.03			97	0.6	0.02	42	23		110	43		10	0.86	0.2	7.5		0.2	0.6
8 16 77	9.7	0.01			85	0.3	0.01	36	7.6		99	36		8.3	0.50	0.1	5.7		0.1	0.3
9 22 77	6.7	0.03			110	0.7	0.02	89	12		120	52		6.6	1.1	0.1	6.4		0.2	0.9
10 13 77	4.3		0.0	0.00	91	0.5	0.01	56	7.4	0.20	110	41	0.0	5.7	0.78	0.1	5.4	0.2	0.4	0.5
11 10 77	4.4	0.00			76	0.3	0.00	49	6.4		74	31		5.4	0.58	0.0	4.2		0.0	0.4
12 7 77	6.0	0.00			62	0.3	0.00	45	5.8		82	35		3.5	0.57	0.0	4.4		0.1	0.5
1 5 78	8.0	0.00	0.0	0.00	68	0.4	0.01	57	6.9	0.15	87	36	0.0	5.0	0.71	0.1	4.0	0.2	0.3	0.4
2 16 78	8.3	0.07			67	0.4	0.01	48	5.8		85	35		4.7	0.60	0.0	3.7		0.1	0.2
3 28 78	7.6	0.02			75	0.4	0.01	51	6.9		100	44		4.9	0.72	0.1	4.2		0.2	0.5
4 27 78	8.8	0.02	0.0	0.00	61	0.3	0.01	46	5.6	0.25	69	29	0.0	5.8	0.50	0.0	3.0	0.1	0.1	0.2
5 25 78	4.8	0.01			72	0.4	0.01	23	6.9		79	32		5.4	0.59	0.1	4.3		0.2	0.3
6 22 78	8.0	0.03	0.0	0.00	90	0.7	0.01	55	9.5	0.30	150	53	0.0	7.1	1.2	0.1	5.9	0.2	0.6	0.6
8 3 78	5.2	0.02			61	0.2	0.01	20	6.8		70	26		4.8	0.38	0.1	4.9		0.2	0.2
9 13 78	7.4	0.04			94	0.4	0.01	55	10		120	44		6.9	0.67	0.2	7.2		0.3	0.3
10 26 78	10	0.02			97	0.2	0.01	73	7.8		100	37		6.2	0.45	0.2	6.3		0.3	0.3
11 21 78	6.8	0.02			67	0.2	0.01	37	4.3		68	29		5.0	0.27	0.2	4.5		0.4	0.2
1 5 79	6.1	0.01	0.0	0.00	64	0.3	0.02	38	6.4	0.45	69	26	0.0	4.3	0.44	0.2	3.4	0.1	0.2	0.3
2 21 79	1.3	0.00	0.1	0.00	33	0.0	0.01	4.6	2.2	0.15	25	6.7	0.0	2.0	0.09	0.0	1.8	0.1	0.0	0.2
3 28 79	6.4	0.03			74	0.2	0.01	23	4.4		84	31		3.2	0.42	0.1	2.9		0.4	0.2
4 27 79	4.8	0.02	0.0	0.00	64	0.3	0.01	15	4.7	0.50	69	26	0.0	4.2	0.39	0.2	3.0	0.1	0.4	0.2
5 28 79	2.7	0.00			44	0.1	0.01	8.5	3.7		41	16		3.2	0.20	0.0	2.2		0.1	0.1
6 20 79	4.6	0.03			78	0.4	0.01	34	8.4		110	40		5.3	0.72	0.3	6.2		0.5	0.5
7 20 79	7.5	0.02	0.0	0.00	73	0.2	0.03	29	7.1	0.35	68	29	0.0	6.0	0.41	0.1	5.4	0.1	0.2	0.2
8 11 79	4.9	0.02			76	0.2	0.01	18	5.7		77	34		4.8	0.34	0.1	4.6		0.3	0.2

TABLE 10. WATER QUALITY FOR SITE 7028 BLEDSOE COUNTY, TENNESSEE

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 17 79	21	0.04			15	2620	2130	0.59	2.6	520	0	0	0	3.3	1500	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																			
4 17 79	20	0.04	0.0	0.01	130	0.8	0.03	190	6.4	0.25	150	71	0.2	5.2	1.2	0.3	5.4	0.2	1.2	1.2

TABLE 11. WATER QUALITY FOR SITE 7031 CAMPBELL COUNTY, TENNESSEE

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 2 77	19	0.01			4	19			6.5		3	4	0	0.5		0.0					
10 7 77	12	0.04			55	28	24	1.16	6.1		2	2	0	0.6	9	0.2					
11 4 77	14	0.2	28		0	26	21	1.21	6.3		1	1	0	0.5	9	0.0					
12 8 77	7	0.5	77*		40	26	15	1.06	5.8		0	0	0	0.4	7	0.0					
12 30 77	2	0.6	0		4	24	19		5.5		0	0	0		10	0.0					
2 9 78	0	1.0			0	21	20	1.12	5.7		0	0	0	0.5	9	0.0					
3 31 78	9	0.8			10	21	22	1.17	5.3		0	0	0	0.8	10	0.2					
4 20 78	8	1.0	37*		7	20	14	1.02	6.0		1	1	0	0.7	5	0.3					
5 22 78	19	0.25	22*		7	22	22	0.97	6.2		2	2	0	0.7	10	0.1					
6 19 78	17	0.1					17	1.44	6.0		1	1	0	0.4	7	0.2					
7 31 78	20	0.05	25*		3	18	22	0.99	6.0		0	0	0	0.7	10	0.1					
9 20 78	19	0.007	19*		7	18	17	1.14	5.8		0	0	0	0.6	5	0.2					
10 27 78	10	0.003	20*		7	20	20	0.99	6.2	2	1	1	0	0.6	8	0.0					
11 29 78	6	0.1	3		3	18	18	1.01	5.3		0	0	0	0.4	8	0.0					
1 9 79	1	0.25	1		0	18	17	0.98			0	0	0	0.7	8	0.0					
3 2 79	5	0.15	2		3	19	18	0.96	5.0		0	0	0	0.4	9	0.0					
4 2 79	11	0.06			1	29	19		6.7	3	3	4	0		9	0.0					
5 10 79	14	0.05	3	0.00	3	24	18	0.75	5.1	5	0	0	0	0.5	9	0.0					
5 31 79	12	5	20		10	22	19	0.91	4.8	10	0	0	0	0.4	9	0.0					
6 28 79	17	0.01	6		6	18	19	1.04	6.1	6	1	1	0	0.6	8	0.0	0.0	0.01	1.05	0.10	0.00
7 23 79	18	0.09	7		5	20	18	0.91	5.7	5	0	0	0	0.5	8	0.0	0.0	0.00	0.35	0.10	0.01
8 16 79	16	0.008	9	0.01	5	20	16	1.20	6.2	3	1	1	0	0.9	5	0.0	0.0	0.03	0.00	0.00	0.01

* 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 2 77	0.0	0.00			1.0	0.0	0.01	0.0	0.8		0.9	0.0		0.8	0.00	0.0	2.4		0.0	0.0
10 7 77	0.0		0.0	0.00	1.9	0.1	0.00	0.1	0.9	0.00	1.1	0.0	0.0	1.1	0.03	0.0	3.2	0.0	0.0	0.0
11 4 77	0.0	0.00			2.0	0.0	0.01	0.0	0.8		1.1	0.0		1.0	0.00	0.0	2.5		0.0	0.0
12 8 77	0.0	0.00			0.9	0.0	0.00	0.0	0.5		0.9	0.0		0.6	0.00	0.0	2.0		0.0	0.0
12 30 77	0.1		0.1	0.00	1.1	0.0	0.00	0.0	0.6	0.15	1.0	0.0	0.1	0.6	0.00	0.0	2.1	0.0	0.0	0.0
2 9 78	0.2	0.00			1.3	0.0	0.00	0.3	0.9		1.4	0.0		0.8	0.02	0.0	2.5		0.0	0.0
3 31 78	0.1	0.00	0.0	0.00	1.7	0.0	0.01	0.1	1.0	0.03	1.3	0.1	0.0	1.4	0.03	0.0	2.2	0.0	0.2	0.0
4 20 78	0.0	0.00	0.0	0.00	0.8	0.0	0.00	0.0	0.6	0.02	0.8	0.0	0.0	0.6	0.00	0.0	1.5	0.0	0.0	0.0
5 22 78	0.0	0.00			1.6	0.0	0.00	0.0	0.8		1.2	0.0		1.0	0.00	0.0	2.2		0.0	0.0
6 19 78	0.0	0.00			1.2	0.0	0.00	0.0	0.6		1.1	0.0		1.4	0.00	0.0	2.0		0.0	0.0
7 31 78	0.0	0.00			1.6	0.0	0.01	0.1	0.7		1.0	0.0		1.2	0.01	0.0	3.1		0.0	0.0
9 20 78	0.0	0.00			1.1	0.0	0.00	0.0	0.7		0.7	0.0		0.7	0.01	0.0	3.2		0.0	0.0
10 27 78	0.0	0.00	0.0	0.00	1.2	0.0	0.00	0.0	0.8	0.05	0.7	0.0	0.0	1.2	0.00	0.0	2.9	0.0	0.0	0.0
11 29 78	0.0	0.01			1.3	0.0	0.01	0.0	0.9		0.8	0.0		0.8	0.01	0.0	2.3		0.0	0.0
1 9 79	0.1	0.00			1.1	0.0	0.01	0.0	0.8		1.1	0.0		0.6	0.04	0.0	2.1		0.1	0.1
3 2 79	0.1	0.00			1.2	0.0	0.00	0.0	0.7		1.1	0.0		0.6	0.01	0.0	2.1		0.0	0.4
4 2 79	0.1	0.01	0.0	0.00	1.2	0.0	0.01	0.0	0.6	0.10	0.9	0.0	0.0	0.6	0.01	0.0	2.0	0.0	0.0	0.1
5 10 79	0.0	0.00			1.1	0.0	0.01	0.0	0.8		0.7	0.0		0.6	0.01	0.0	2.4		0.0	0.0
5 31 79	0.2	0.01			1.4	0.0	0.00	0.1	0.9		0.8	0.0		0.4	0.05	0.1	2.4		0.2	0.2
6 28 79	0.0	0.00			1.5	0.0	0.00	0.0	0.6		0.9	0.0		0.7	0.00	0.0	2.7		0.0	0.0
7 23 79	0.0	0.01			1.1	0.0	0.00	0.0	0.5		0.9	0.0		0.5	0.01	0.0	2.8		0.0	0.1
8 16 79	0.0	0.00			1.1	0.0	0.01	0.0	0.6		0.7	0.0		0.8	0.00	0.0	3.0		0.0	0.0

TABLE 12. WATER QUALITY FOR SITE 7032 CAMPBELL COUNTY, TENNESSEE

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 2 77	21	0.04			10	451	258	1.81	7.3		85	104	0	0.7	120	0.3					
10 7 77	15	0.01	17		80	686	490	1.93	7.5		133	161	0	1.1	230	0.2					
11 4 77	16	0.2	36		0	391	214	2.05	7.3		58	71	0	0.8	96	0.2					
12 8 77	4	0.4	93*		40	296	167	1.78	7.3		41	50	0	0.5	82	0.3					
12 30 77	3	0.4	6		4	359	200		7.8		48	58	0		110	0.4					
2 9 78	2	0.7			50	466	307	1.59	8.0		83	100	1	0.7	160	0.6					
3 31 78	17	0.6			75	353	197	2.11	7.8		57	68	0	1.2	86	0.5					
4 20 78	8	0.25	45*		35	365	220	1.87	8.2		72	86	1	2.0	99	0.2					
5 22 78	20	0.09	42*		20	429	251	2.10	8.1		92	110	1	1.1	100	0.4					
6 19 78	19	1.0	10500*			291	178	1.70	7.2		56	68	0	0.8	77	0.8					
7 31 78	22	0.1	34*		10	540	323	2.00	8.3		110	131	2	0.9	140	0.3					
9 20 78	22	0.02	45*		4	579	391	1.49	8.0		119	143	1	1.0	200	0.2					
10 27 78	10	0.02	21*		10	587	401	1.56	8.2	-120	117	140	1	1.4	200	0.1					
11 29 78	5	0.06	2430		3900	236	119	1.46	7.2		19	23	0	0.6	65	0.4					
1 9 79	2	0.1	43		60	305	187	1.65	7.9		48	57	0	0.2	93	0.4					
3 2 79	14	0.04	25		15	343	226	1.66	7.9	-58	55	66	0	0.8	110	0.6					
4 2 79	16	0.3			65	271	151	1.72	7.8	-31	43	52	0	1.1	71	0.3					
5 10 79	18	0.02	12	0.00	25	449	269	1.87	7.6	-82	84	101	0	1.0	120	0.6					
5 31 79	15	3	1770	1.8	4300	133	82	1.30	7.2	-10	19	23	0	0.5	44	0.2					
6 28 79	20	0.07	16	0.02	4	618	356	1.94	8.6	-94	124	143	4	0.9	160	0.5	0.0	0.01	0.65	0.00	0.00
7 23 79	17	0.01	0	0.01	8	473	295	1.58	8.3	-57	83	98	1	0.6	150	0.4	0.0	0.01	0.65	0.00	0.01
8 16 79	17	0.015	2		10	686	352	1.93	8.2	-100	124	148	2	1.0	160	0.1	0.2	0.06	0.00	0.05	0.01

* 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 2 77	0.1	0.00			34	0.0	0.02	0.2	4.8		20	0.0		24	0.00	0.0	2.0		0.0	0.0
10 7 77	0.1		0.0	0.00	61	0.0	0.00	0.2	5.3	0.15	38	0.8	0.0	67	0.01	0.0	3.0	0.1	0.0	0.0
11 4 77	0.1	0.00			30	0.0	0.01	0.2	4.2		21	0.2		18	0.01	0.0	3.1		0.1	0.0
12 8 77	0.0	0.00			20	0.0	0.00	0.2	3.0		18	0.2		11	0.01	0.0	3.0		0.0	0.0
12 30 77	0.0		0.1	0.00	21	0.0	0.00	0.1	3.0	0.15	20	0.2	0.1	13	0.01	0.0	2.6	0.1	0.0	0.0
2 9 78	0.1	0.00			32	0.0	0.00	0.1	4.7		31	0.1		24	0.02	0.0	2.7		0.1	0.0
3 31 78	0.1	0.01	0.0	0.00	23	0.0	0.00	0.1	3.7	0.10	23	0.2	0.0	17	0.01	0.0	2.9	0.0	0.2	0.0
4 20 78	0.0	0.05	0.0	0.00	23	0.0	0.00	0.2	3.3	0.10	23	0.1	0.0	18	0.01	0.0	3.0	0.0	0.1	0.0
5 22 78	0.1	0.01			29	0.0	0.01	0.1	5.0		25	0.1		23	0.01	0.0	2.9		0.1	0.0
6 19 78		0.00			22	0.0	0.00		4.3		12	0.0		13	0.00	0.0	5.2		0.0	0.0
7 31 78	0.1	0.02			42	0.0	0.01	0.1	5.5		26	0.1		34	0.02	0.1	3.1		0.1	0.0
9 20 78	0.1	0.03			46	0.0	0.01	0.1	5.9		27	0.0		34	0.02	0.1	2.8		0.1	0.0
10 27 78	0.1	0.02	0.0	0.00	51	0.0	0.01	0.1	5.1	0.50	27	0.0	0.0	38	0.02	0.1	2.6	0.1	0.1	0.0
11 29 78		0.00			16	0.0	0.01		3.2		11	0.3		5.4	0.02	0.1	1.9		0.1	0.0
1 9 79	0.1	0.00			27	0.0	0.00	0.1	2.7		17	0.1		9.7	0.02	0.0	3.1		0.0	0.2
3 2 79	0.1	0.01			34	0.0	0.00	0.1	2.8		22	0.1		9.8	0.01	0.0	2.8		0.1	0.4
4 2 79	0.2	0.00	0.0	0.00	19	0.0	0.02	0.2	2.8	0.15	15	0.1	0.0	8.0	0.03	0.1	2.6	0.0	0.1	0.0
5 10 79	0.1	0.03			39	0.0	0.00	0.0	4.1		23	0.0		21	0.01	0.0	2.6		0.1	0.0
5 31 79	0.0	0.00			9.7	0.0	0.01	0.0	2.2		7.0	0.1		2.4	0.02	0.0	2.1		0.0	0.0
6 28 79	0.1	0.02			50	0.1	0.02	0.1	5.4		30	0.0		31	0.03	0.1	2.3		0.0	0.0
7 23 79	0.1	0.02			37	0.0	0.00	0.1	4.2		26	0.0		21	0.04	0.1	2.4		0.3	0.0
8 16 79	0.1	0.01			46	0.0		0.0	4.9		31	0.0		32	0.03	0.1	2.0		0.1	0.0

TABLE 13. WATER QUALITY FOR SITE 7033 CAMPBELL COUNTY, TENNESSEE

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 1 77	18	0.025			4	635	447	2.19	7.4		126	153	0	0.8	190	1.8					
10 7 77	16	0.009			45	658	499	2.12	7.9		152	184	1	1.6	220	0.9					
11 4 77	14	0.04	92		0	676			7.8					1.0	190	0.8					
12 8 77	10	0.25	96*		15	480	306	2.22	8.1		120	145	1	0.7	120	1.4					
12 30 77	8	0.07	6		15	588	408		8.2		142	169	2		170	1.0					
2 13 78	3	0.15	123		190	222	121	1.64	7.6		30	36	0	1.4	58	0.4					
3 23 78	14	0.09			4	409	260	2.00	8.1		102	122	1	1.2	110	0.4					
4 20 78	9	0.05	48*		20	480	293	2.16	8.2		117	140	1	1.3	120	0.1					
5 22 78	20	0.025	40*		9	512	335	2.41	8.2		139	167	2	1.1	130	0.7					
6 19 78	20	0.03				573	336	2.54	8.1		147	176	1	0.8	120	0.3					
7 31 78	21	0.02	48*		15	677	443	2.21	8.2		135	162	2	1.0	190	0.4					
9 20 78			17*		7	690	453	2.06	8.2		165	197	2	0.8	190	0.4					
10 27 78	11	0.0004			15	762	503	1.88	8.3		156	185	3	2.0	230	0.2					
11 29 78	6	0.03	157		310	299	167	2.44	7.7		65	79	0	0.8	62	0.1					
1 9 79	5	0.02	25		3	417	258	2.14	8.2		105	125	1	0.6	100	0.3					
3 2 79	8	0.015			15	409	272	2.32	8.2	-86	104	124	1	0.9	110	0.6					
3 12 79		0.1			4	427	230	2.23	8.0		111	133	1	0.8	84	0.4					
4 3 79	15	0.01			5	366	257	2.18	8.2	-72	93	111	1	1.1	110	0.3					
5 10 79	16	0.0005	42	0.25	10	480	298	2.49	8.0		147	177	1	1.0	100	0.3					
5 31 79	16	0.02	178		240	159	90	1.66	7.6	-21	29	35	0	0.8	39	0.4					
6 28 79	20	0.0003	53		0	498	329	2.10	8.4		153	181	3	0.7	130	0.2	0.0	0.00	0.55	0.00	0.00
7 23 79	24	0.01	2		8	472	249	2.69	8.5	-110	116	137	3	0.7	86	0.1	0.0	0.00	0.65	0.00	0.00
8 16 79	21	0.0006	10		15	636	322	2.68	8.2		167	200	2	0.7	110	0.4	0.0	0.09	0.20	0.05	0.01

* 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 1 77	0.2	0.05			76	0.0	0.01	0.7	5.8		39	0.4		40	0.02	0.0	3.9		0.1	0.0
10 7 77	0.1		0.0	0.00	78	0.0	0.00	0.3	5.3	0.15	39	0.6	0.0	55	0.01	0.0	3.6	0.1	0.0	0.0
11 4 77	0.1	0.00			77	0.0	0.02	0.2	5.5		34	0.3		60	0.02	0.1	3.7		0.1	0.0
12 8 77	0.1	0.00			49	0.0	0.01	0.1	3.8		27	0.1		20	0.02	0.0	3.3		0.1	0.0
12 30 77	0.1	0.01	0.1	0.00	71	0.0	0.00	0.0	5.1	0.50	40	0.0	0.0	26	0.02	0.0	3.9	0.2	0.1	0.0
2 13 78	0.1	0.06			16	0.0	0.01		2.8		12	1.0		5.3	0.01	0.0	2.4		0.0	0.0
3 23 78	0.1	0.02			33	0.0	0.00	0.1	4.0		26	0.1		19	0.02	0.0	1.2		0.1	0.0
4 20 78	0.0	0.05	0.0	0.00	44	0.0	0.00	0.1	3.2	0.15	29	0.2	0.0	18	0.01	0.0	3.2	0.1	0.2	0.0
5 22 78	0.1	0.01			55	0.0	0.01	0.1	4.7		30	0.2		24	0.02	0.0	3.1		0.1	0.0
6 19 78	0.0	0.00			57	0.0	0.00	0.1	4.6		30	0.3		26	0.00	0.0	2.4		0.0	0.0
7 31 78	0.1	0.02			64	0.0	0.02	0.1	5.7		29	0.3		66	0.03	0.1	3.8		0.1	0.0
9 20 78	0.2	0.03			67	0.0	0.01	0.1	5.5		31	0.2		50	0.02	0.1	3.6		0.1	0.0
10 27 78	0.2	0.01	0.0	0.00	74	0.0	0.00	0.1	4.8	0.55	32	0.1	0.0	60	0.03	0.1	2.2	0.2	0.1	0.0
11 29 78	0.2	0.00			28	0.0	0.00	0.2	3.1		11	0.1		18	0.01	0.0	1.8		0.0	0.0
1 9 79	0.1	0.00			47	0.0	0.00	0.1	2.8		21	0.0		12	0.02	0.1	2.8		0.1	0.1
3 2 79	0.2	0.01			52	0.0	0.00	0.2	3.1		23	0.0		16	0.02	0.0	2.9		0.1	0.4
3 12 79	0.2	0.00			40	0.0	0.00	0.0	2.6		18	0.0		10	0.04	0.1	2.5		0.1	0.0
4 3 79	0.2	0.00	0.0	0.00	45	0.0	0.01	0.2	2.8	0.25	26	0.4	0.0	10	0.04	0.1	2.8	0.1	0.2	0.0
5 10 79	0.1	0.01			51	0.0	0.01	0.0	3.6		24	0.0		20	0.01	0.0	2.9		0.1	0.0
5 31 79	0.2	0.00			12	0.1	0.01	0.3	1.9		7.3	0.1		3.4	0.03	0.1	2.2		0.1	0.0
6 28 79	0.2	0.01			55	0.1	0.00	0.1	3.7		23	0.2		20	0.03	0.1	2.6		0.1	0.0
7 23 79	0.1	0.01			46	0.0	0.00	0.1	3.2		24	0.2		13	0.01	0.0	2.5		0.0	0.0
8 16 79	0.1	0.00			51	0.0		0.2	3.4		27	0.6		26	0.03	0.1	2.3		0.1	0.0

TABLE 14. WATER QUALITY FOR SITE 7041 CLAIBORNE COUNTY, TENNESSEE

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	20	0.02			40	110	64	3.29	7.6		35	43	0	0.8	16	0.1					
9 23 77	19	0.02			8	152	72	4.14	6.9		39	47	0	0.8	15	0.1					
10 27 77	14	0.6			25	115	60	2.64	7.4		30	36	0	0.7	18	0.0					
11 22 77	10	10	103*		60	81	52	2.74	7.5		26	32	0	0.9	13	0.1					
12 22 77	4	0.3	2		15	104	55		8.1		20	25	0		20	0.0					
2 2 78	1	0.6			8	90	51	2.63	7.3		21	26	0	0.6	16	0.0					
3 17 78	5	0.5			4	85	49	2.75	7.3		22	27	0	0.9	14	0.1					
4 11 78	11	0.1	61		25	111	62	2.52	7.6		29	35	0	1.1	18	0.1					
5 11 78	23	0.1	20*		25	91	57	2.69	7.7		30	36	0	0.5	15	0.1					
6 8 78	17	0.6			75	93	51	3.72	7.2		27	33	0	0.5	11	0.1					
7 17 78	24	0.001	94*		55	125	72	2.88	7.9		35	43	0	1.1	20	0.1					
8 9 78	20	0.02	31*		25	116	67	3.58	7.7		39	48	0	0.6	14	0.1					
11 30 78	8	0.03	15		20	116	67	2.38	7.5		32	39	0	0.8	20	0.0					
1 25 79	2	0.03	3		6	66	40	2.48	6.9		13	16	0	1.5	12	0.0					
3 8 79	6	0.02	12		7	69	39	3.71	7.1	-15	16	19	0	0.6	9	0.0					
4 21 79	16	0.01	11		40	90	58	2.48	7.7	-20	25	30	0	0.8	18	0.1					
5 11 79	15	0.002	14	0.00	25	91	59	2.74	7.7		25	31	0	0.7	17	0.1					
6 6 79	18	0.01	22		30	97	58	2.80	7.7	-21	27	33	0	1.0	16	0.1					
6 29 79	16	0.0001	13		30	117	77	5.98	7.7		48	59	0	1.0	12	0.0	0.0	0.03	1.10	0.05	0.00
7 29 79	18	0.015	14		20	125	68	3.92	7.9	-32	39	48	0	0.6	14	0.0	0.0	0.02	0.40	0.00	0.00
12 10 79	4	0.07			10	103	60	3.28	7.2	-25	32	39	0	0.5	15	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 26 77	0.0	0.00			14	0.0	0.00	0.2	1.8		3.7	0.2		1.7	0.01	0.0	1.9		0.0	0.0
9 23 77	0.0	0.00			16	0.0	0.00	0.1	2.0		4.8	0.3		1.9	0.00	0.0	3.5		0.0	0.0
10 27 77	0.0	0.01	0.0	0.00	11	0.0	0.00	0.1	1.4	0.06	4.0	0.0	0.0	1.5	0.00	0.0	3.0	0.0	0.0	0.0
11 22 77	0.1	0.00			9.5	0.0	0.00	0.2	1.5		2.9	0.0		0.9	0.00	0.0	2.9		0.0	0.1
12 22 77	0.0	0.00	0.0	0.00	10.0	0.0	0.00	0.1	1.2	0.04	3.9	0.0	0.0	1.2	0.01	0.0	2.8	0.0	0.0	0.0
2 2 78	0.0	0.00			9.8	0.0	0.00	0.0	1.0		3.6	0.0		1.3	0.00	0.0	2.7		0.0	0.0
3 17 78	0.0	0.00			8.8	0.0	0.01	0.1	1.5		3.3	0.0		1.3	0.01	0.0	2.7		0.0	0.0
4 11 78	0.1	0.01	0.0	0.00	11	0.0	0.00	0.2	1.7	0.06	4.1	0.0	0.0	1.4	0.02	0.0	3.0	0.0	0.2	0.0
5 11 78	0.0	0.01			10	0.0	0.00	0.1	1.2		3.5	0.0		1.2	0.00	0.0	3.1		0.0	0.0
6 8 78	0.2	0.00			10	0.0	0.01	0.2	1.7		3.3	0.0		1.2	0.01	0.0	2.9		0.0	0.0
7 17 78	0.1	0.00	0.0	0.00	14	0.0	0.01	0.3	2.4	0.08	4.5	0.2	0.0	1.9	0.01	0.1	2.6	0.0	0.2	0.0
8 9 78	0.1	0.00			12	0.0	0.01	0.3	1.8		4.5	0.0		1.3	0.02	0.0	3.7		0.0	0.0
11 30 78	0.4	0.00			12	0.0	0.01	0.3	1.6		4.0	0.0		1.2	0.01	0.0	3.5		0.0	0.0
1 25 79	0.1	0.00			8.0	0.0	0.01	0.1	1.1		2.3	0.0		0.8	0.02	0.0	2.7		0.0	0.3
3 8 79	0.1	0.00			8.8	0.0	0.01	0.1	1.4		2.8	0.0		1.0	0.01	0.0	2.7		0.1	0.0
4 21 79	0.1	0.00	0.0	0.00	11	0.0	0.01	0.1	1.6	0.07	3.6	0.0	0.0	1.2	0.01	0.0	3.2	0.0	0.0	0.0
5 11 79	0.1	0.00			12	0.1	0.02	0.1	1.5		3.5	0.0		1.2	0.03	0.0	3.3		0.0	0.0
6 6 79	0.1	0.00			11	0.0	0.01	0.2	1.6		3.5	0.0		1.1	0.00	0.0	3.2		0.0	0.0
6 29 79	0.1	0.01			21	0.0	0.00	0.7	1.5		4.5	0.5		1.2	0.00	0.0	2.7		0.0	0.0
7 29 79	0.1	0.00			14	0.0	0.01	0.1	2.0		4.3	0.1		1.5	0.01	0.0	3.5		0.0	0.0
12 10 79	0.0	0.00			12	0.0	0.01	0.1	1.4		4.1	0.0		1.4	0.01	0.1	2.7		0.0	0.0

TABLE 15. WATER QUALITY FOR SITE 7042 CLAIBORNE COUNTY, TENNESSEE

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 21 77	26	0.01			40	489	293	1.67	7.4		66	81	0	2.0	160	0.0					
8 24 77	20	0.04			55	441	241	1.76	7.7		52	64	0	0.6	120	0.2					
9 23 77	18	0.05			8	447	271	1.89	7.7		68	82	0	0.7	140	0.0					
10 26 77	13	2.5			40	308	173	1.82	7.3		43	52	0	0.7	85	0.2					
11 21 77	9	15	2680*		2700	286	167	1.37	8.0		31	38	0	0.9	94	0.0					
12 22 77	2	0.25	0		10	406	236		8.0		49	59	0		130	0.3					
2 2 78	2	1.0			15	359	201	1.72	7.8		46	56	0	0.6	110	0.3					
3 17 78	4	1.0			30	308	172	1.79	7.1		34	42	0	0.9	90	0.3					
4 11 78	11	0.1	38		20	407	241	1.49	8.0		61	74	0	1.8	130	0.3					
5 11 78	26	0.7	19*		45	285	175	1.58	7.9		48	58	0	1.4	89	0.3					
6 8 78	17	1.5	600*			340	196	1.37	7.4		48	59	0	0.4	110	0.5					
7 17 78	21	0.05	101*		55	439	265	1.73	8.3		73	87	1	0.8	130	0.2					
8 9 78	19	1.5	821*		1200	346	202	1.42	7.6		35	43	0	0.6	110	0.2					
9 20 78	23	0.0009	33*		25	449	287	1.26	7.9		64	77	0	1.0	170	0.0					
11 1 78	13	0.0001	13		4	457	266	1.44	7.7	-48	53	65	0	1.5	150	0.0					
11 30 78	7	0.01	24		30	452	311	1.62	8.0		78	94	1	1.0	160	0.1					
1 25 79	1	0.3	11		6	331	227	1.30	7.8		38	46	0	0.6	130	0.3					
3 8 79	5	0.25	48		2	311	209	1.66	7.9		41	50	0	0.6	110	0.3					
4 21 79	15	0.08	175		90	326	214	1.84	7.8	-51	53	64	0	0.7	110	0.3					
5 11 79	16	0.1	38	0.00	70	319	207	2.02	7.8	-50	58	70	0	0.7	98						
6 6 79	16	0.03	65	0.00	130	324	214	1.72	8.1	-47	56	67	1	0.9	110	0.3					
6 29 79	16	0.005	33		55	464	257	1.48	8.3	-66	68	81	1	0.5	140	0.2	0.0	0.22	0.45	0.05	0.00
7 29 79	19	0.3	65	0.20	70	326	178	2.13	7.9	-40	64	77	0	0.5	75	0.2	0.0	0.16	0.80	0.00	0.01
12 10 79	6	0.2			30	416	250	1.74	7.6	-59	66	81	0	0.6	130	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																			
7 21 77	0.1	0.03			51	0.1	0.00	0.2	5.5		31	0.6		5.3	0.05	0.0	1.3		0.0	0.0
8 24 77	0.1				48	0.0	0.00	0.1	3.0		24	0.1		3.7	0.01	0.0	2.0		0.0	0.0
9 23 77	0.1	0.00			51	0.0	0.00	0.0	3.3		30	0.1		4.6	0.00	0.0	2.2		0.0	0.0
10 26 77	0.3	0.01	0.0	0.00	29	0.0	0.00	0.1	2.3	0.10	20	0.3	0.0	2.1	0.01	0.0	2.9	0.1	0.0	0.0
11 21 77	0.1	0.00			30	0.0	0.00	0.1	2.5		13	0.6		1.5	0.01	0.0	2.5		0.0	0.1
12 22 77	0.1	0.00	0.0	0.00	35	0.0	0.00	0.0	2.4	0.15	29	0.1	0.1	2.9	0.02	0.0	2.1	0.1	0.0	0.0
2 2 78	0.1	0.00			31	0.0	0.00	0.0	1.9		26	0.0		2.7	0.00	0.0	2.0		0.0	0.0
3 17 78	0.2	0.03			26	0.0	0.01	0.0	2.3		23	0.2		2.2	0.02	0.0	2.3		0.1	0.0
4 11 78	0.1	0.01	0.0	0.00	33	0.1	0.00	0.2	2.7	0.15	27	0.1	0.0	3.2	0.03	0.1	1.9	0.1	0.3	0.0
5 11 78	0.1	0.01			25	0.0	0.00	0.1	2.0		19	0.1		2.1	0.01	0.0	2.2		0.0	0.0
6 8 78	0.2	0.00			26	0.0	0.01	0.1	3.0		20	0.4		2.2	0.00	0.0	1.7		0.0	0.0
7 17 78	0.1	0.01	0.0	0.00	47	0.0	0.01	0.1	3.3	0.20	28	0.0	0.1	3.7	0.01	0.1	1.5	0.1	0.2	0.0
8 9 78	0.1	0.01			33	0.0	0.01	0.0	3.0		19	0.0		2.0	0.03	0.1	3.4		0.1	0.0
9 20 78	0.1	0.02	0.0	0.00	44	0.0	0.00	0.1	3.7	0.20	24	0.0	0.0	4.1	0.03	0.1	2.5	0.1	0.1	0.0
11 1 78	0.1	0.01			48	0.0	0.01	0.1	2.8		23	0.1		4.2	0.03	0.1	2.3		0.1	0.0
11 30 78	0.3	0.00			60	0.0	0.01	0.1	3.4		28	0.2		2.8	0.03	0.1	2.6		0.1	0.0
1 25 79	0.2	0.00			39	0.0	0.01	0.0	2.0		19	0.2		2.0	0.03	0.0	2.6		0.0	0.2
3 8 79	0.3	0.01			39	0.0	0.01	0.2	2.0		22	0.1		2.0	0.02	0.0	2.1		0.0	0.0
4 21 79	0.1	0.01	0.0	0.00	42	0.0	0.01	0.0	2.5	0.20	22	0.0	0.0	2.5	0.01	0.1	2.1	0.1	0.1	0.0
5 11 79	0.2	0.01			39	0.0	0.01	0.2	2.3		23	0.0		2.3	0.03	0.1	2.7		0.1	0.1
6 6 79	0.1	0.01			39	0.0	0.01	0.1	2.5		22	0.0		2.6	0.01	0.0	2.3		0.0	0.0
6 29 79	0.1	0.01			44	0.1	0.02	0.1	2.6		24	0.0		1.7	0.03	0.1	2.4		0.0	0.0
7 29 79	0.2	0.00			35	0.2		0.0	2.8		18	0.0		2.2	0.01	0.1	2.4		0.0	0.0
12 10 79	0.1	0.00			46	0.0	0.01	0.0	2.3		26	0.0		3.2	0.01	0.1	2.0		0.1	0.0

TABLE 16. WATER QUALITY FOR SITE 7043 CLAIBORNE COUNTY, TENNESSEE

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 21 77	22	0.015			10	333	209	1.17	4.7		0	0	0	0.6	140	0.1					
8 26 77	21	0.04			8	279	152	1.20	5.9		2	2	0	0.5	96	0.1					
9 23 77	19	0.05			4	248	167	1.18	5.2		0	0	0	0.4	110	0.0					
10 26 77	14	0.4			30	163	94	1.10	7.0		4	5	0	0.7	57	0.1					
11 21 77	12	0.9	74*		45	143	83	1.13	7.1		4	5	0	1.0	49	0.2					
12 30 77	4	0.15	4		6	167	114		6.4		1	1	0		78	0.1					
3 8 79	7	0.09	1		10	138	85	1.02	5.0		0	0	0	1.2	52	0.2					
4 21 79	16	0.05	40		35	145	97	0.93	5.5	3	0	0	0	1.1	63	0.2					
5 10 79	17	0.03	12	0.00	40	121	91	0.91	5.1	10	0	0	0	0.4	60	0.2					
6 6 79	18	0.01	9		20	156	93	1.00	4.5	7	0	0	0	1.3	58	0.2					
6 28 79	20	0.015	6		0	216	154	1.02	5.2	9	0	0	0	0.8	100	0.1	0.0	0.00	0.95	0.05	0.00
7 23 79	21	0.02	25*		10	176	94	1.20	6.4	2	3	4	0	0.4	55	0.0	0.0	0.06	0.35	0.05	0.01
8 16 79	21	0.002	0		5	271	167	1.12	5.2	7	0	0	0	0.5	110	0.0	0.1	0.02	0.35	0.00	0.00

* 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 21 77	0.5	0.03			15	0.2	0.01	0.2	3.3		26	0.8		9.4	0.16	0.5	6.0		0.5	0.2
8 26 77	0.7	0.03			13	0.0	0.00	0.1	2.4		18	1.1		6.6	0.08	0.0	6.1		0.0	0.2
9 23 77	0.8	0.00			13	0.0	0.01	0.0	2.4		20	1.5		6.2	0.00	0.0	6.6		0.0	0.2
10 26 77	0.1	0.01	0.0	0.00	7.6	0.0	0.00	0.1	1.7	0.05	9.1	0.6	0.0	3.6	0.04	0.0	4.9	0.0	0.0	0.1
11 21 77	0.0	0.00			7.3	0.0	0.00	0.0	1.7		8.3	0.4		2.4	0.03	0.0	4.1		0.0	0.1
12 30 77	0.4	0.00	0.0	0.00	7.8	0.0	0.00	0.1	1.7	0.06	10	0.7	0.0	3.3	0.05	0.0	4.8	0.0	0.1	0.1
3 8 79	0.6	0.00			7.0	0.0	0.02	0.1	1.8		7.9	0.5		2.6	0.07	0.0	4.5		0.0	0.1
4 21 79	0.4	0.00	0.0	0.00	7.2	0.0	0.01	0.1	1.6	0.05	9.0	0.6	0.0	2.9	0.04	0.0	4.5	0.0	0.0	0.1
5 10 79	0.1	0.00			6.7	0.1	0.01	0.1	1.5		8.3	0.5		2.5	0.05	0.1	4.4		0.1	0.2
6 6 79	0.2	0.00			7.6	0.0	0.01	0.1	1.7		8.5	0.6		2.9	0.04	0.0	5.2		0.0	0.1
6 28 79	0.6	0.01			11	0.0	0.00	0.1	1.9		17	1.0		4.3	0.06	0.0	6.0		0.0	0.2
7 23 79	0.1	0.00	0.0	0.00	9.0	0.0	0.01	0.1	1.8	0.30	9.0	0.6	0.0	3.6	0.04	0.0	5.3	0.1	0.0	0.2
8 16 79	0.4	0.02			13	0.0	0.01	0.0	1.8		20	0.9		5.3	0.06	0.0	6.2		0.0	0.1

TABLE 17. WATER QUALITY FOR SITE 7046 CLAIBORNE COUNTY, TENNESSEE

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 ----------												
3 23 78	15	0.005			4	474	307	1.20	6.0		4	5	0	1.3	200	0.3					
4 20 78	9	0.03	30*		20	362	234	1.47	7.8		44	54	0	1.3	120	0.1					
5 22 78	22	0.005	37*		35	292	219	1.26	7.5		34	42	0	1.9	120	0.1					
6 19 78	20	0.001				322	209	2.20	7.8		70	85	0	0.7	78	0.1					
7 31 78	32	0.001	29*		6	326	212	2.25	8.0		72	87	1	0.8	76	0.1					
9 20 78	27	0.0009	20*		7	322	196	2.23	8.2		78	93	1	1.7	67	0.1					
11 1 78	14	0.0002	36		30	322	215	2.23	8.2	-78	83	99	1	0.8	74	0.1					
11 29 78	5	0.001	6		25	276	174	1.91	7.9		60	72	0	0.9	73	0.2					
1 25 79	0	0.03	21		7	294	195	1.31	7.6		31	38	0	0.5	110	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 ----------																			
3 23 78	0.4	0.03			17	0.1	0.01	0.3	4.0		26	5.1		44	0.09	0.0	3.2		0.1	0.1
4 20 78	0.1		0.0	0.00	7.2	0.0	0.00	0.1	2.5	0.04	12	0.4	0.0	55	0.01	0.0	2.1	0.0	0.1	0.0
5 22 78	0.1	0.01			8.8	0.0	0.01	0.1	3.5		8.3	0.2		45	0.02	0.0	4.7		0.1	0.0
6 19 78	0.1	0.01			12	0.0	0.00	0.1	2.8		8.8	0.2		50	0.00	0.0	6.5		0.0	0.0
7 31 78	0.0	0.02			14	0.0	0.02	0.1	2.9		10.0	0.4		45	0.03	0.1	8.8		0.1	0.0
9 20 78	0.1	0.02	0.1	0.00	15	0.0	0.00	0.5	2.8	0.09	10	0.8	0.0	34	0.02	0.1	7.4	0.1	0.1	0.0
11 1 78	0.1	0.02			13	0.1	0.02	0.7	2.6		8.4	0.4		48	0.04	0.1	7.5		0.1	0.0
11 29 78	0.1	0.00			34	0.0	0.01	0.2	2.9		9.0	0.2		9.6	0.01	0.0	3.5		0.0	0.0
1 25 79	0.1	0.00			9.0	0.0	0.02	0.1	2.1		11	0.3		37	0.01	0.0	3.3		0.0	0.3

TABLE 18. WATER QUALITY FOR SITE 7051 CUMBERLAND COUNTY, TENNESSEE

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	17	0.006			10	17	18	0.67	6.0		2	2	0	0.4	6	0.5					
8 9 77	25	0.0006			10	24	19	1.48	5.8		3	4	0	0.5	7	0.1					
9 14 77	17	0.008			4	23	18	0.96	5.8		1	1	0	0.6	8	0.0					
10 11 77	13	0.15			15	29	19	0.86	5.4		0	0	0	0.8	10	0.0					
11 7 77	14	0.06	17		25	22	15	0.93	5.2		0	0	0	0.8	7	0.0					
12 5 77	10	1.0	81*		4	15	12	0.94	5.3		0	0	0	0.2	6	0.1					
1 3 78	2	0.08			8	16	14	0.95	5.5		0	0	0	0.9	7	0.0					
2 14 78	3	0.4			6	23	16	0.97	5.1		0	0	0	0.6	9	0.0					
3 21 78	7	0.7			4	29	16	0.76	4.7		0	0	0	1.0	7	0.5					
4 26 78	9	0.5	24*		10	18	17	0.73	5.2		0	0	0	0.8	8	0.1					
5 23 78	19	0.2	27*		2	22	20	1.21	5.6		1	1	0	1.0	8	0.2					
6 20 78	15	0.4				19	17	1.01	5.1		0	0	0	0.6	8	0.1					
8 1 78	19	0.05	19*		4	20	19	1.24	5.1		0	0	0	0.6	9	0.0					
9 13 78	20	0.002	34*		6	21	18	0.79	5.1		0	0	0	0.9	9	0.0					
11 29 78	6	0.03	5		1	21	15	0.97	4.7		0	0	0	0.9	7	0.0					
1 4 79	10	0.15	19		3	18	16	0.75	5.2	3	0	0	0	0.7	8	0.2					
2 27 79	4	0.04	17*		4	24	17	1.47	6.5		2	2	0	0.8	7	0.1					
3 28 79	9	0.1	14		1	19	17	1.05	5.0	4	0	0	0	0.9	8	0.0					
4 26 79	14	0.04	2	0.00	0	21	17	0.87	4.8	6	0	0	0	0.5	9	0.0					
5 29 79	13	0.01	23		8	18	18	0.77	4.8	9	0	0	0	0.5	9	0.0					
6 27 79	15	0.0003	10		5	20	19	0.93	5.5	7	0	0	0	0.9	10	0.0	0.0		1.00	0.10	0.00
7 21 79	17	0.02	22*		5	18	14	0.75	5.1		0	0	0	0.8	7	0.0	0.0	0.00	0.50	0.10	0.00
8 17 79	14	0.0006	3		5	22	17	0.97	5.2	5	0	0	0	0.6	8	0.0	0.0	0.02	0.40	0.05	0.01
9 14 79	17	0.025	4		20	20	15	0.97	5.5	6	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 13 77	0.1	0.01			0.8	0.0	0.00	0.1	0.8		0.5	0.1		0.6	0.01	0.1	2.4		0.0	0.1
8 9 77	0.2	0.00			2.3	0.0	0.01	0.2	1.1		0.8	0.1		0.6	0.03	0.1	1.6		0.0	0.0
9 14 77	0.1	0.00			1.6	0.0	0.00	0.0	0.8		0.7	0.0		0.6	0.00	0.0	2.2		0.0	0.0
10 11 77	0.1		0.0	0.00	2.0	0.0	0.00	0.1	0.5	0.00	0.7	0.0	0.0	0.7	0.01	0.1	1.9	0.0	0.1	0.0
11 7 77	0.0	0.00			1.7	0.0	0.00	0.0	0.4		0.4	0.0		0.8	0.00	0.0	1.8		0.0	0.0
12 5 77	0.1	0.00			1.1	0.0	0.00	0.0	0.4		0.5	0.0		0.4	0.01	0.0	1.4		0.0	0.0
1 3 78	0.0	0.00	0.0	0.00	1.3	0.0	0.00	0.1	0.4	0.00	0.7	0.0	0.0	0.6	0.00	0.0	1.7	0.0	0.0	0.0
2 14 78	0.2	0.01			1.7	0.0	0.00	0.0	0.4		0.9	0.0		0.8	0.01	0.0	1.1		0.0	0.0
3 21 78	0.2	0.00			1.7	0.0	0.02	0.0	0.6		0.6	0.0		0.6	0.02	0.0	1.0		0.0	0.1
4 26 78	0.1		0.0	0.00	1.3	0.0	0.00	0.1	0.5	0.02	0.6	0.0	0.0	0.6	0.00	0.0	1.7	0.0	0.2	0.0
5 23 78	0.1	0.00			2.6	0.0	0.01	0.1	0.9		0.7	0.0		0.9	0.02	0.1	1.6		0.2	0.0
6 20 78	0.1	0.00			1.9	0.0	0.00	0.1	0.4		0.7	0.1		0.7	0.02	0.0	1.7		0.1	0.0
8 1 78	0.1	0.01			2.6	0.0	0.01	0.0	0.6		0.9	0.1		0.7	0.01	0.0	1.8		0.0	0.0
9 13 78	0.1	0.00			1.6	0.0	0.01	0.1	0.8		0.6	0.1		0.6	0.01	0.0	2.0		0.0	0.0
11 29 78	0.1	0.01			1.4	0.0	0.00	0.1	0.8		0.6	0.1		0.6	0.02	0.1	1.8		0.1	0.0
1 4 79	0.2	0.00	0.0	0.00	1.4	0.0	0.02	0.0	0.6	0.09	0.4	0.0	0.1	0.9	0.00	0.0	1.4	0.0	0.0	0.1
2 27 79	0.0	0.00			2.3	0.0	0.00	0.0	0.5		0.9	0.0		0.9	0.00	0.0	1.5		0.0	0.0
3 28 79	0.2	0.00			2.1	0.0	0.03	0.1	0.7		0.5	0.0		0.9	0.02	0.0	1.4		0.1	0.0
4 26 79	0.1	0.00	0.0	0.00	1.7	0.0	0.00	0.1	0.6	0.02	0.7	0.1	0.0	0.6	0.01	0.0	1.7	0.0	0.0	0.0
5 29 79	0.1	0.01			1.5	0.0	0.00	0.0	0.7		0.5	0.1		0.7	0.05	0.1	2.0		0.2	0.1
6 27 79	0.1	0.00			2.4	0.0	0.00	0.0	0.6		0.6	0.1		0.6	0.00	0.0	1.8		0.0	0.0
7 21 79	0.1	0.00	0.0	0.00	1.2	0.0	0.00	0.0	0.3	0.02	0.6	0.0	0.0	0.3	0.00	0.0	1.6	0.0	0.0	0.0
8 17 79	0.1	0.01			1.8	0.0	0.00	0.0	0.5		0.7	0.1		0.5	0.01	0.0	2.0		0.0	0.1
9 14 79	0.1	0.00			1.5	0.0	0.00	0.0	0.8		0.6	0.1		0.4	0.00	0.0	1.8		0.0	0.0

TABLE 19. WATER QUALITY FOR SITE 7052 CUMBERLAND COUNTY, TENNESSEE

DATE	WATER TEMP	EST DISCH	SUSP SOL	SETT MATTER	TURB	SPEC COND	DIS SOLID	NEUT RATIO	LAB PH	ACID-ITY	ALKA-LINITY	HC03	C03	CL	S04	NO3 AS N	NNO3 AS N	NH3 AS N	TOT N	TOT P	ORTH P04
MO DA YR	DEG C	CFS	MG/L	ML/L	JTU	UM/CM	MG/L			MILLIGRAMS PER LITER											
7 13 77	22	0.009			15	198	141	1.24	7.0		20	25	0	2.0	82	0.1					
8 9 77	22	0.0000			10	511	353	1.59	7.5		66	81	0	0.6	190	0.2					
9 14 77	20	0.0015			40	216	129	1.06	6.8		7	8	0	0.7	84	0.1					
10 11 77	12	0.05			30	266	170	1.80	7.1		39	48	0	1.7	85	0.0					
11 7 77	14	0.08	12		30	187	132	1.40	7.2		30	37	0	1.2	71	0.0					
12 5 77	10	0.8	19*		15	105	59	1.52	6.8		14	17	0	1.0	28	0.1					
1 3 78	0	0.06			10	235	131	1.32	7.4		31	38	0	1.2	71	0.1					
2 14 78	2	0.6			4	89	46	1.35	6.9		7	9	0	1.3	24	0.1					
3 21 78	8	0.3			75	132	70	1.33	7.0		14	17	0	1.1	36	0.3					
4 26 78	8	0.3	30*		15	92	57	1.31	7.1		10	12	0	1.9	28	0.0					
5 23 78	20	0.05	23*		7	132	74	1.38	7.0		19	23	0	1.2	37	0.1					
6 20 78						176	102	1.73	7.4		30	36	0	1.3	46	0.3					
8 1 78	24	0.05	9		6	98	56	1.39	7.0		8	10	0	0.8	29	0.1					
9 13 78	21	0.002	10		15	188	118	1.27	7.7		26	32	0	1.4	63	0.0					
10 25 78	12	0.001	18*		25	252	162	2.21	8.1		61	73	1	1.6	63	0.0					
11 29 78	5	0.02	3		3	80	42	1.65	6.9		7	9	0	1.2	17	0.3					
1 4 79	0	0.09	1		3	77	48	1.32	6.9	-2	7	9	0	0.9	24	0.3					
2 28 79	4	0.08	5		2	68	49	1.51	6.9		10	12	0	1.0	22	0.4					
3 28 79	13	0.03	12		5	73	51	1.21	6.6	-6	7	9	0	0.8	27	0.1					
4 26 79	16	0.1	21	0.00	10	98	60	1.51	7.0	-8	11	13	0	0.8	30	0.1					
5 29 79	15	0.06	3		10	66	40	1.37	7.2	-1	5	6	0	0.6	20	0.2					
6 27 79	19	0.001	10		10	164	98	1.85	7.5	-18	28	34	0	1.1	43	0.1	0.0	0.04	1.30	0.10	0.01
7 21 79	20	0.02			15	139	73	1.34	7.5	-16	19	23	0	0.4	35	0.1	0.2	0.05	0.85	0.40	0.01
8 17 79	17	0.0003	4	0.00	8	197	101	1.71	7.7	-22	26	32	0	0.8	48	0.1	0.0	0.01	0.40	0.00	0.00
9 14 79	18	0.1	23		40	191	109	1.55	7.7	-21	30	37	0	1.2	53	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 13 77	0.0	0.01			21	0.0	0.00	0.1	4.0		11	0.6		3.1	0.01	0.1	2.0		0.0	0.0
8 9 77	0.1	0.01			82	0.0	0.01	0.1	3.7		25	0.0		4.5	0.03	0.2	2.0		0.0	0.0
9 14 77	0.2	0.02			18	0.0	0.00	0.1	3.1		9.8	0.6		2.0	0.01	0.0	2.3		0.0	0.0
10 11 77	0.1		0.0	0.00	27	0.0	0.00	0.2	3.1	0.05	21	1.1	0.0	2.0	0.03	0.1	2.2	0.1	0.1	0.0
11 7 77	0.1	0.00			20	0.0	0.00	0.1	2.8		11	0.6		2.2	0.00	0.0	2.1		0.0	0.0
12 5 77	0.1	0.00			8.8	0.0	0.00	0.2	1.3		5.2	0.7		0.8	0.01	0.0	1.9		0.0	0.0
1 3 78	0.1	0.00	0.0	0.00	18	0.0	0.00	0.1	2.3	0.00	12	1.2	0.0	1.5	0.02	0.0	2.1	0.1	0.0	0.0
2 14 78	0.0	0.03			6.4	0.0	0.00	0.4	0.8		4.0	0.6		0.8	0.00	0.0	1.5		0.0	0.0
3 21 78	0.1	0.00			9.6	0.0	0.02	0.2	1.7		5.8	1.0		1.2	0.03	0.0	1.4		0.0	0.0
4 26 78	0.1	0.04	0.0	0.00	7.4	0.0	0.00	0.3	1.2	0.04	4.6	0.5	0.0	1.0	0.01	0.0	2.3	0.0	0.2	0.0
5 23 78	0.1	0.01			11	0.0	0.00	0.1	1.7		5.7	0.6		1.0	0.01	0.0	2.1		0.0	0.0
6 20 78	0.2	0.00			18	0.0	0.00	0.2	2.9		8.2	0.9		1.6	0.00	0.0	1.8		0.0	0.0
8 1 78	0.0	0.01			9.2	0.0	0.00	0.1	1.4		4.0	0.4		0.9	0.01	0.0	2.6		0.0	0.0
9 13 78	0.1	0.01			19	0.0	0.01	0.3	3.2		7.2	0.4		1.4	0.01	0.0	2.6		0.0	0.0
10 25 78	0.2	0.01			40	0.0	0.00	0.5	3.3		9.6	0.2		1.4	0.02	0.1	2.6		0.1	0.0
11 29 78	0.1	0.00			6.6	0.0	0.01	0.1	1.2		3.0	0.3		1.0	0.02	0.0	2.2		0.1	0.0
1 4 79	0.1	0.00	0.1	0.00	7.2	0.0	0.00	0.2	1.1	0.08	3.5	0.4	0.0	0.9	0.01	0.0	1.9	0.0	0.0	0.1
2 28 79	0.1	0.00			7.4	0.0	0.01	0.2	1.2		3.6	0.4		1.2	0.01	0.0	1.8		0.0	0.3
3 28 79	0.1	0.00			7.4	0.0	0.02	0.1	1.2		3.3	0.4		1.0	0.01	0.0	1.9		0.0	0.0
4 26 79	0.2	0.00	0.0	0.00	9.5	0.0	0.01	0.3	1.5	0.15	4.9	0.6	0.0	1.0	0.02	0.0	1.9	0.0	0.0	0.0
5 29 79	0.1	0.00			6.1	0.0	0.01	0.1	1.1		2.7	0.4		0.9	0.01	0.0	2.2		0.0	0.0
6 27 79	0.0	0.01			21	0.0	0.00	0.1	1.6		6.7	0.4		1.1	0.00	0.0	2.1		0.1	0.0
7 21 79	0.1	0.00	0.0	0.00	12	0.0	0.02	0.2	1.8	0.10	3.8	0.7	0.0	0.9	0.02	0.0	2.5	0.1	0.0	0.0
8 17 79	0.1	0.01			21	0.0	0.00	0.0	1.8		7.0	0.1		1.3	0.02	0.0	2.2		0.0	0.0
9 14 79	0.1	0.01			21	0.0	0.00	0.1	2.6		7.3	0.7		1.2	0.00	0.0	1.9		0.0	0.0

TABLE 20. WATER QUALITY FOR SITE 7053 CUMBERLAND COUNTY, TENNESSEE

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	23	0.005			65	483	319	1.08	7.2		12	15	0	1.4	220	0.6					
9 14 77	20	0.015			0	689	384	1.62	7.4		68	83	0	0.7	210	0.0					
10 11 77	14	0.25			50	364	240	1.28	7.0		22	27	0	1.1	150	0.1					
11 7 77	15	0.15	10		20	270	211	0.98	7.0		16	20	0	0.8	140	0.0					
12 5 77	11	0.9	24*		15	187	101	0.99	6.9		13	16	0	1.1	62	0.1					
1 3 78	2	0.8			15	352	185	1.15	6.7		8	10	0	1.0	120	0.1					
2 14 78	2	0.1			4	255	144	1.04	7.1		11	14	0	0.9	93	0.1					
3 21 78	8	0.2			30	252	121	1.23	6.5		11	13	0	1.2	71	0.5					
4 26 78	9	0.1	29*		20	198	113	1.06	7.3		16	19	0	1.1	66	0.4					
5 23 78	21	0.03	27*		8	340	199	1.10	7.0		14	17	0	1.1	130	0.2					
6 20 78	22	0.15				372	211	1.62	7.6		47	57	0	0.9	110	0.2					
8 1 78	24	0.05	17*		3	501	293	1.24	7.6		22	27	0	0.7	190	0.1					
9 13 78	20	0.0009	31*		20	521	329	1.33	8.0		50	60	0	1.0	190	0.1					
10 25 78	10	0.001	26*		0	561	389	1.20	8.2		57	69	1	1.0	240	0.1					
11 29 78	5	0.015	3		1	228	121	1.24	7.5		21	26	0	0.7	68	0.2					
1 4 79	2	0.1	5		25	325	206	1.14	6.4	2	2	2	0	0.8	140	0.3					
2 28 79	4	0.009	9		10	223	122	1.26	6.7	0	10	12	0	0.8	72	0.2					
3 28 79	12	0.01	22		15	191	128	1.06	7.0	-5	10	12	0	1.2	80	0.4					
4 26 79	15	0.007	54	0.03	10	254	173	1.26	6.8	-9	10	12	0	0.7	110	0.1					
5 29 79	17	0.01	15		35	230	139	1.11	7.3	-9	20	25	0	0.5	84	0.1					
6 27 79	16	0.003	10		5	491	285	1.50	8.1	-36	43	52	0	1.0	160	0.1	0.0	0.01	0.85	0.05	0.00
7 21 79	19	0.002	12		15	348	237	1.29	7.7	-21	31	38	0	0.4	140	0.1	0.2	0.04	0.85	0.35	0.02
8 17 79	15	0.003	0		15	515	307	1.56	8.1	-48	53	64	1	0.6	170	0.1	0.0	0.03	1.00	0.00	0.00
9 14 79	17	0.015	13		20	572	384	1.23	7.9	-36	48	58	0	0.9	240	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 9 77	0.2	0.01			45	0.0	0.01	0.2	8.0		30	0.6		3.0	0.03	0.2			0.0	0.0
9 14 77	0.1	0.02			90	0.0	0.00	0.1	3.5		28	0.1		4.9	0.00	0.0	2.7		0.0	0.0
10 11 77	0.1		0.0	0.00	37	0.1	0.00	0.7	2.0	0.10	24	5.1	0.1	1.9	0.06	0.1	3.0	0.1	0.1	0.0
11 7 77	0.0	0.00			32	0.0	0.00	0.0	2.0		14	2.6		2.3	0.02	0.0	2.8		0.0	0.0
12 5 77	0.1	0.00			14	0.0	0.00	0.2	1.1		7.0	2.2		0.8	0.02	0.0	2.2		0.1	0.1
1 3 78	0.1	0.00	0.0	0.00	22	0.0	0.01	1.1	3.4	0.08	20	3.9	0.0	1.6	0.05	0.0	2.7	0.1	0.0	0.0
2 14 78	0.1	0.04			20	0.0	0.00	1.0	1.4		11	2.6		1.5	0.03	0.0	2.0		0.0	0.0
3 21 78	0.1	0.00			17	0.1	0.02	0.2	2.1		11	3.0		1.7	0.07	0.0	1.8		0.0	0.1
4 26 78	0.0	0.01	0.0	0.00	16	0.0	0.00	1.1	1.3	0.08	7.6	1.8	0.0	1.4	0.02	0.0	2.4	0.1	0.0	0.0
5 23 78	0.1	0.01			26	0.0	0.00	0.2	2.2		19	4.0		1.8	0.04	0.0	2.2		0.1	0.0
6 20 78	0.2	0.00			40	0.0	0.00	0.1	2.3		19	3.3		1.9	0.02	0.0	2.2		0.0	0.0
8 1 78	0.1	0.02			52	0.0	0.01	0.0	3.3		24	3.3		2.5	0.04	0.1	3.4		0.1	0.0
9 13 78	0.1	0.02			66	0.0	0.01	0.1	3.7		23	0.9		3.4	0.02	0.1	3.1		0.0	0.0
10 25 78	0.2	0.01	0.0	0.02	75	0.0	0.00	0.1	4.0	0.45	24	0.0	0.0	4.3	0.01	0.1	3.0	0.2	0.0	0.0
11 29 78	0.0	0.00			21	0.0	0.00	0.1	1.4		8.0	1.0		1.5	0.02	0.0	2.4		0.0	0.0
1 4 79	0.5	0.00	0.1	0.00	30	0.0	0.01	1.0	2.0	0.35	20	4.7	0.0	1.6	0.07	0.2	2.6	0.1	0.2	0.1
2 28 79	0.2	0.01			18	0.0	0.01	0.8	1.8		11	3.2		1.8	0.06	0.0	2.3		0.1	0.4
3 28 79	0.1	0.00			18	0.0	0.01	0.6	1.7		10.0	3.0		1.2	0.05	0.0	2.2		0.0	0.0
4 26 79	0.1	0.00	0.0	0.00	30	0.0	0.00	0.4	1.8	0.15	15	3.2	0.0	1.5	0.03	0.0	2.0	0.0	0.0	0.0
5 29 79	0.1	0.00			20	0.0	0.00	0.5	1.6		10	2.4		1.6	0.03	0.0	2.3		0.0	0.1
6 27 79	0.1	0.01			59	0.0	0.00	0.1	2.8		24	0.9		2.5	0.02	0.1	2.7		0.1	0.0
7 21 79	0.1	0.01	0.0	0.00	40	0.0	0.01	0.2	2.4	0.15	21	2.6	0.0	1.7	0.04	0.0	3.0	0.1	0.1	0.0
8 17 79	0.1	0.02			68	0.1		0.0	3.0		23	0.1		3.4	0.02	0.1	2.6		0.0	0.0
9 14 79	0.2	0.01			71	0.0	0.00	0.1	3.1		30	2.1		2.4	0.00	0.0	2.4		0.0	0.0

TABLE 21. WATER QUALITY FOR SITE 7055 CUMBERLAND COUNTY, TENNESSEE

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 79	18	0.15			20	259	130	1.69	7.7		45	55	0	1.7	59	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																			
9 14 79	0.1	0.02			22	0.0	0.00	0.0	3.8		10	0.0		1.4	0.00	0.0	1.7		0.0	0.0

TABLE 22. WATER QUALITY FOR SITE 7061 FENTRESS COUNTY, TENNESSEE

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									
6 20 77	18	0.025			10		15	1.27	6.6		4	5	0	0.7	5	0.0					
7 13 77	24	0.009			30	15	13	2.72	6.4		4	5	0	0.5	2	0.1					
8 8 77	22	0.0002			40	17	17	1.14	7.2		3	4	0	0.8	6	0.0					
9 13 77	19	0.004			35	23	20	1.19	6.5		2	2	0	0.5	7	0.0					
10 11 77	14	0.15			20	34	23	2.73	7.0		7	9	0	1.1	5	0.0					
11 7 77	16	0.15	13		35	20	20	1.23	6.7		4	5	0	0.8	7	0.1					
12 5 77	11	1.0	18*		10	22	15	1.04	7.0		2	3	0	0.8	6	0.0					
12 29 77	4	0.09	2		2	17	23	0.85	6.6		2	2	0	1.0	11	0.1					
2 8 78	1	0.3			4	18	14	1.51	6.1		2	2	0	0.6	5	0.0					
3 21 78	9	0.15			4	25	18	0.95	6.7		4	5	0	1.8	6	0.2					
4 25 78	14	0.06	37*		15	14	18	0.72	6.3		1	1	0	1.2	7	0.3					
5 23 78	20	0.04	42*		8	16	16	1.32	6.3		2	2	0	0.9	5	0.1					
6 20 78	19	0.04				14	15	1.39	6.0		1	1	0	0.6	6	0.0					
7 20 78	19	0.05	81*		15	15	16	2.03	6.7		3	4	0	0.7	4	0.0					
9 14 78	19	0.004	22*		15	14	15	1.19	6.3		2	2	0	0.9	4	0.0					
10 24 78	11	0.001	46*		35	21	20	1.20	6.5		3	4	0	1.0	6	0.0					
11 28 78	10	0.025	5		7	17	16	1.43	6.0		2	2	0	0.6	5	0.0					
1 3 79	4	0.07	5		5	17	16	1.58	5.7	1	4	5	0	0.7	4	0.2					
3 1 79	6	0.006	5		0	23	20	0.99	6.0		1	1	0	0.8	9	0.1					
4 4 79	13	0.04			10	24	18		6.1	8	1	1	0		9	0.0					
5 8 79	15	0.008	21	0.00	30	24	20	0.65	6.1	6	1	1	0	1.0	10	0.0					
5 30 79	14	0.008	57		20	21	19	0.60	4.6	10	0	0	0	0.6	10	0.0					
6 26 79	17	0.003	19		25	21	17	0.77	6.3	6	2	2	0	1.1	6	0.0	0.0	0.11	2.50	0.40	0.00
7 22 79	18	0.08	24*		15	18	18	1.03	6.3	2	2	2	0	0.5	7	0.0	0.0	0.01	0.50	0.20	0.01

* 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																			
6 20 77	0.1	0.00			1.0	0.0	0.01	0.0	0.6		0.6	0.0		0.7	0.00	0.1	1.8		0.0	0.0
7 13 77	0.1	0.00			1.0	0.0	0.00	0.3	0.6		0.5	0.0		0.6	0.01	0.0	2.2		0.0	0.0
8 8 77	0.1	0.00			1.0	0.0	0.01	0.4	1.2		0.5	0.1		0.9	0.03	0.2	1.9		0.0	0.0
9 13 77	0.2	0.03			1.5	0.0	0.00	0.3	0.6		0.8	0.1		0.7	0.00	0.0	3.6		0.0	0.1
10 11 77	0.1	0.01	0.0	0.00	3.0	0.0	0.00	0.1	0.8	0.01	1.2	0.0	0.0	1.5	0.02	0.0	2.4	0.0	0.0	0.0
11 7 77	0.1	0.00			2.4	0.0	0.00	0.1	0.4		0.6	0.0		0.8	0.00	0.0	2.2		0.0	0.0
12 5 77	0.1	0.00			1.5	0.0	0.00	0.0	0.4		0.6	0.0		0.5	0.00	0.0	1.7		0.0	0.1
12 29 77	0.1	0.00	0.0	0.00	1.7	0.0	0.00	0.1	0.9	0.03	0.9	0.0	0.0	1.1	0.01	0.0	2.1	0.0	0.1	0.0
2 8 78	0.0	0.00			1.4	0.0	0.00	0.0	0.3		0.8	0.0		0.9	0.00	0.0	1.8		0.0	0.0
3 21 78	0.2	0.00			1.7	0.0	0.01	0.1	0.1		0.7	0.0		0.9	0.00	0.0	1.4		0.0	0.0
4 25 78	0.1	0.01	0.0	0.00	1.4	0.0	0.00	0.1	0.5	0.01	0.5	0.0	0.0	0.7	0.00	0.0	2.1	0.0	0.1	0.0
5 23 78	0.1	0.00			1.6	0.0	0.01	0.1	0.6		0.7	0.0		0.7	0.00	0.0	2.2		0.0	0.0
6 20 78	0.1	0.00			1.4	0.0	0.00	0.1	0.5		0.7	0.0		0.8	0.00	0.0	2.4		0.0	0.0
7 20 78	0.1	0.00	0.0	0.00	1.6	0.0	0.00	0.1	0.8	0.03	0.8	0.0	0.0	0.8	0.00	0.1	2.0	0.0	0.1	0.0
9 14 78	0.1	0.00			1.0	0.0	0.01	0.1	0.6		0.4	0.0		0.6	0.01	0.0	3.1		0.0	0.0
10 24 78	0.2	0.00	0.0	0.00	1.3	0.0	0.00	0.5	1.7	0.01	0.5	0.1	0.0	0.5	0.01	0.0	3.1	0.0	0.1	0.0
11 28 78	0.1	0.00			1.8	0.0	0.01	0.1	0.5		0.5	0.0		0.7	0.01	0.0	2.3		0.0	0.0
1 3 79	0.1	0.00	0.0	0.00	1.5	0.0	0.00	0.0	0.6	0.10	0.8	0.0	0.0	0.6	0.00	0.0	1.8	0.0	0.0	0.0
3 1 79	0.1	0.00			2.1	0.0	0.00	0.1	0.5		0.9	0.0		0.7	0.01	0.0	1.8		0.0	0.4
4 4 79	0.3	0.00	0.0	0.00	1.6	0.0	0.01	0.4	0.6	0.10	0.9	0.1	0.0	0.6	0.02	0.0	1.8	0.0	0.0	0.0
5 8 79	0.2	0.00			1.3	0.0	0.01	0.1	0.8		0.5	0.0		0.7	0.00	0.0	2.3		0.0	0.0
5 30 79	0.1	0.00			1.2	0.0	0.00	0.1	0.6		0.4	0.0		0.5	0.03	0.0	2.4		0.1	0.1
6 26 79	0.1	0.00			1.0	0.0	0.00	0.2	0.5		0.5	0.0		0.6	0.00	0.0	2.7		0.0	0.0
7 22 79	0.2	0.01	0.0	0.00	1.7	0.0	0.00	0.2	0.6	0.00	0.5	0.1	0.0	0.5	0.01	0.0	2.6	0.0	0.0	0.1

TABLE 23. WATER QUALITY FOR SITE 7062 FENTRESS COUNTY, TENNESSEE

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											
6 20 77	18	0.02			90	36	28	0.65	6.4		3	4	0	1.5	9	1.2					
7 13 77	22	0.009			160	47	28	0.99	6.8		4	5	0	0.8	12	0.1					
8 8 77	27	0.02			55	81	42	6.24	7.3		26	32	0	1.9	5	0.1					
9 13 77	22	0.003			120	30	23	3.40	6.8		6	7	0	1.4	4	0.0					
10 11 77	15	0.04			80	35	28	1.42	6.6		6	7	0	2.6	8	0.0					
11 7 77	16	0.15	67		45	38	30	1.08	6.6		1	1	0	5.5	9	0.1					
12 5 77	11	0.4	197*		260	38	25	0.87	6.3		2	2	0	4.4	9	0.1					
12 29 77	5	0.03	0		2	31	25	0.77	5.4		0	0	0	3.0	10	0.0					
9 20 78			13		40	62	54	0.79	6.5	4	3	4	0	4.6	14	2.9					
10 3 78	19	0.01	63*		50	26	24	1.32	6.6		3	4	0	2.0	6	0.4					
10 24 78	12	0.001	29*		45	25	26	1.31	6.9		2	3	0	2.2	5	0.9					
11 28 78	9	0.02	7		3	37	25	0.98	5.5		0	0	0	2.3	9	0.2					
1 3 79	2	0.015	8		8	41	31	0.99	6.1	5	1	1	0	1.4	15	0.2					
3 1 79	6	0.01	31		2	49	32	1.15	6.2		2	3	0	1.4	14	0.1					
4 4 79	12	0.05			260	67	44	1.22	6.7	1	4	5	0	1.8	22	0.1					
5 8 79	25	0.015	17	0.00	60	55	32	1.29	7.0	6	7	8	0	1.4	13	0.0					
5 30 79	18	0.008	17		50	40	28	0.98	6.2	10	2	3	0	1.7	12	0.1					
6 26 79	23	0.001	30		55	37	29	1.21	6.9	1	4	5	0	2.5	10	0.1	0.0	0.12	1.25	0.10	0.03
7 22 79	20	0.01	35*		40	54	40	1.09	6.9		5	6	0	0.9	19	0.0	0.1	0.13	0.55	0.10	0.01

* 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																			
6 20 77	0.1	0.01			1.7	0.0	0.00	0.2	1.1		1.2	0.2		0.8	0.00	0.0	2.5		0.0	0.0
7 13 77	0.0	0.00			2.8	0.0	0.00	0.2	1.0		1.1	0.1		0.8	0.01	0.0	2.4		0.0	0.1
8 8 77	0.0	0.00			8.8	0.0	0.02	0.4	2.5		1.8	0.2		1.4	0.03	0.2	1.5		0.0	0.1
9 13 77	0.1	0.03			3.2	0.0	0.00	0.2	1.1		1.3	0.3		0.9	0.00	0.0	3.0		0.0	0.1
10 11 77	0.1	0.00	0.0	0.00	2.5	0.0	0.01	1.4	1.4	0.01	1.4	0.5	0.0	1.1	0.02	0.0	2.5	0.0	0.1	0.0
11 7 77	0.2	0.02			2.6	0.0	0.00	0.9	1.7		1.7	0.7		1.2	0.01	0.0	2.4		0.0	0.0
12 5 77	0.1	0.00			2.3	0.0	0.00	0.4	1.6		1.4	0.5		0.6	0.01	0.0	1.7		0.0	0.1
12 29 77	0.2	0.00	0.0	0.00	1.3	0.0	0.00	1.2	1.2	0.02	1.4	0.3	0.0	0.9	0.02	0.0	2.1	0.0	0.1	0.0
9 20 78	0.0	0.00			5.5	0.0	0.00	0.9	3.2		1.4	0.7		2.1	0.00	0.0	3.3		0.0	0.0
10 3 78	0.1	0.01	0.0	0.00	2.0	0.0	0.01	0.8	1.5	0.06	0.8	0.5	0.0	0.9	0.02	0.0	2.8	0.0	0.0	0.0
10 24 78	0.1	0.00			2.4	0.0	0.00	0.7	1.6		1.0	0.6		0.7	0.01	0.0	2.5		0.1	0.1
11 28 78	0.1	0.00			2.1	0.0	0.00	0.8	1.3		1.2	0.8		0.8	0.03	0.0	2.5		0.1	0.0
1 3 79	0.2	0.00	0.1	0.00	2.9	0.0	0.01	1.1	1.6	0.07	1.5	0.7	0.0	1.2	0.01	0.0	2.0	0.0	0.0	0.1
3 1 79	0.2	0.00	0.7	0.00	3.4	0.0	0.00	1.0	1.4	0.10	1.8	0.9	0.0	0.8	0.01	0.0	1.8	0.0	0.1	
4 4 79	0.3	0.01	0.0	0.00	6.5	0.0	0.06	0.3	2.0	0.15	2.2	0.7	0.0	1.4	0.03	0.0	1.5	0.0	0.1	0.1
5 8 79	0.1	0.00			3.3	0.0	0.01	1.0	1.3		1.7	1.0		1.0	0.01	0.0	1.9		0.0	0.1
5 30 79	0.1	0.00			2.3	0.0	0.00	1.0	1.2		1.4	1.0		0.9	0.01	0.0	2.3		0.0	0.0
6 26 79	0.0	0.01			2.8	0.0	0.01	1.0	1.2		1.5	1.0		0.8	0.01	0.0	2.4		0.0	0.0
7 22 79	0.2	0.00	0.0	0.00	4.0	0.0	0.01	1.5	1.7	0.06	2.2	0.2	0.0	0.9	0.02	0.0	2.7	0.0	0.0	0.0

TABLE 24. WATER QUALITY FOR SITE 7063 FENTRESS COUNTY, TENNESSEE

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											
6 20 77	27	0.09			4	1440	736	0.39	2.5		0	0	0	0.8	560	0.0					
7 13 77		0.05				2030	1300	0.43	2.5		0	0	0	0.4	880	0.0					
8 8 77	29	0.09			15	1850	1080	0.42	2.7		0	0	0	0.8	840	0.0					
9 13 77	24	0.2			20	2130	1150	0.51	2.7		0	0	0	0.5	810	1.2					
10 11 77	16	0.25			10	1510	788	0.40	3.0		0	0	0	0.8	560	0.0					
11 7 77	17	0.2			25	1570	712	0.46	2.8		0	0	0	0.7	530	0.0					
12 5 77	12	2.0	47*		45	786	400	0.35	2.9		0	0	0	0.6	300	0.0					
12 29 77	5	3	77		2	1950	1290	0.34	2.3		0	0	0	0.4	960	0.0					
2 8 78	6	0.4			4	1520	846	0.55	2.7		0	0	0	0.4	580	0.1					
3 21 78	13	0.8			4	1570	692	0.48	2.6		0	0	0	0.8	510	0.0					
4 25 78	16	0.15	45*		20	1450	823	0.41	2.7		0	0	0	0.8	550	0.0					
5 23 78	20	0.15	34*		8	1650	762	0.45	2.6		0	0	0	0.8	560	0.1					
6 20 78	24	0.6				1440	755	0.52	2.7		0	0	0	0.6	550	0.0					
7 20 78	26	0.3	81*		4	1620	823	0.49	2.8		0	0	0	0.6	600	0.0					
9 14 78	21	0.01	15		8	1460	764	0.45	2.7		0	0	0	0.8	570	0.1					
10 24 78	12	0.02	21*		2	1660	894	0.46	2.8		0	0	0	1.1	650	1.3					
11 28 78	9	0.07	5		1	1190	592	0.49	2.9		0	0	0	0.5	430	0.0					
1 3 79	3	0.2	24		3	1160	509	0.49	2.8	270	0	0	0	0.2	360	0.2					
3 1 79	8	0.07	43		3	1130	614	0.48	2.9	230	0	0	0	0.7	450	0.1					
4 4 79	10	0.9			80	679	355	0.46	3.0	150	0	0	0	0.5	270	0.0					
5 8 79	19	0.7	56	0.00	40	989	546	0.71	3.2		0	0	0	0.4	370	0.0					
5 30 79	12	0.4	55		25	1260	708	0.59	2.8	260	0	0	0	0.3	510	0.2					
6 26 79	25	0.03	54		10	1480	743	0.51	2.8	320	0	0	0	0.6	550	0.0	0.0	0.39	1.50	0.25	0.01
7 22 79	22	0.05	37*		6	1140	552	0.46	2.8	180	0	0	0	0.6	420	0.0	0.0	0.24	0.35	0.15	0.01

* 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																			
6 20 77	18	0.03			41	0.1	0.02	40	3.8		28	4.8		3.7	0.17	0.0	14		0.1	0.3
7 13 77	34	0.06			71	0.1	0.01	190	6.5		47	5.4		6.6	0.31	0.1	28		0.3	0.4
8 8 77	29	0.04			68	0.1	0.03	57	7.2		42	6.2		6.7	0.28	0.3	6.4		0.2	0.4
9 13 77	31	0.07			82	0.1	0.01	100	6.2		50	8.4		6.9	0.24	0.0	21		0.1	0.4
10 11 77	43	0.05	0.0	0.01	40	0.1	0.03	67	4.0	0.15	29	4.8	0.0	4.4	0.24	0.0	14	0.2	0.1	0.3
11 7 77	19	0.01			46	0.1	0.01	43	3.8		30	5.3		4.8	0.18	0.0	14		0.1	0.3
12 5 77	12	0.00			21	0.0	0.01	29	1.8		12	4.0		1.7	0.10	0.0	7.8		0.0	0.2
12 29 77	31	0.04	0.0	0.00	61	0.1	0.01	140	5.3	0.40	41	5.5	0.0	5.0	0.24	0.0	18	0.4	0.2	0.4
2 8 78	21	0.03			61	0.1	0.01	88	5.0		40	5.3		4.9	0.20	0.0	18		0.1	0.3
3 21 78	12	0.03			48	0.1	0.03	53	4.2		30	4.2		4.0	0.18	0.1	10		0.2	0.3
4 25 78	18	0.05	0.0	0.01	45	0.1	0.01	140	4.0	0.20	26	4.7	0.0	4.2	0.17	0.1	15	0.2	0.7	0.2
5 23 78	19	0.04			50	0.1	0.02	53	5.0		30	4.1		5.0	0.19	0.0	14		0.0	0.2
6 20 78	18	0.04			56	0.1	0.01	50	5.4		34	5.0		5.0	0.18	0.0	16		0.0	0.3
7 20 78	15	0.03	0.0	0.01	57	0.1	0.02	63	5.9	0.25	36	5.4	0.1	4.7	0.20	0.2	16	0.3	0.3	0.3
9 14 78	17	0.04			50	0.1	0.02	39	5.8		30	6.7		5.1	0.21	0.1	18		0.1	0.3
10 24 78	21	0.03	0.0	0.01	64	0.1	0.01	60	6.4	0.40	34	6.6	0.1	5.2	0.19	0.1	16	0.3	0.1	0.3
11 28 78	16	0.02			42	0.1	0.01	33	3.4		25	6.2		3.5	0.20	0.2	13		0.2	0.2
1 3 79	14	0.00	0.0	0.00	36	0.1	0.03	48	2.4	0.30	21	3.6	0.0	2.5	0.17	0.1	10	0.2	0.1	0.3
3 1 79	14	0.03			45	0.1	0.02	50	2.9		25	4.2		2.6	0.19	0.1	10		0.2	0.6
4 4 79	8.6	0.00	0.0	0.00	18	0.1	0.02	20	1.8	0.10	19	2.9	0.0	1.6	0.12	0.0	6.5	0.1	0.1	0.2
5 8 79	15	0.03			52	0.1	0.01	46	3.2		32	4.8		3.1	0.18	0.0	9.0		0.0	0.4
5 30 79	16	0.02			59	0.1	0.01	49	4.2		37	5.6		3.7	0.20	0.1	11		0.2	0.4
6 26 79	14	0.06			59	0.1	0.01	41	5.3		31	5.0		4.7	0.19	0.1	16		0.2	0.3
7 22 79	10.0	0.02	0.0	0.00	35	0.1	0.05	22	3.0	0.15	26	4.3	0.1	2.5	0.15	0.1	10	0.1	0.1	0.2

TABLE 25. WATER QUALITY FOR SITE 7064 FENTRESS COUNTY, TENNESSEE

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										
12 11 79	8	0.4			7	45	25	1.10	8.6		4	5	0	4.5	7	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																			
12 11 79	0.0	0.00			2.8	0.0	0.00	0.0	1.3		1.0	0.0		1.2	0.04	0.1	1.8		0.1	0.0

TABLE 26. WATER QUALITY FOR SITE 7065 FENTRESS COUNTY, TENNESSEE

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										
3 21 78	10	0.15			2	72	37	1.47	6.3		2	3	0	9.9	9	0.2					
4 25 78	17	0.15	55*		20	62	32	2.55	6.4		14	17	0	0.9	8	0.1					
5 23 78	19	0.05	53*		2	59	34	1.91	6.6		2	3	0	8.7	7	0.1					
6 20 78	20	0.03				23	23	1.03	6.4		3	4	0	1.5	8	0.1					
7 20 78	20	0.1	98*		45	31	23	1.01	6.3		2	2	0	2.5	8	0.1					
9 14 78	19	0.007	26*		20	84	54	1.98	6.8		14	17	0	4.6	8	2.3					

* 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																			
3 21 78	0.1	0.00			3.5	0.1	0.03	0.0	1.7		1.0	0.1		6.3	0.05	0.1	1.3		0.0	0.0
4 25 78	0.1	0.03	0.0	0.00	2.6	0.0	0.00	0.2	1.1	0.03	0.7	0.0	0.0	5.2	0.00	0.0	1.8	0.0	0.4	0.0
5 23 78	0.1	0.00			3.3	0.0	0.00	0.1	1.2		0.9	0.0		6.3	0.00	0.0	2.0		0.0	0.0
6 20 78	0.2	0.00			1.6	0.0	0.00	1.1	1.0		1.0	0.3		0.9	0.00	0.0	2.5		0.0	0.0
7 20 78	0.1	0.00	0.0	0.00	1.5	0.0	0.00	0.8	1.7	0.03	1.2	0.5	0.0	0.8	0.00	0.0	2.1	0.0	0.1	0.0
9 14 78	0.1	0.01			5.9	0.0	0.01	1.3	4.3		1.4	0.4		2.6	0.01	0.0	3.2		0.0	0.0

TABLE 27. WATER QUALITY FOR SITE 7070 GRUNDY COUNTY, TENNESSEE

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 18 79	16	6			3	136	89	1.07	7.1		12	15	0	1.2	52	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																			
4 18 79	0.0	0.00			11	0.0	0.00	0.0	1.7		6.2	0.0		2.0	0.01	0.0	3.2		0.0	0.0

TABLE 28. WATER QUALITY FOR SITE 7071 GRUNDY COUNTY, TENNESSEE

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 NO2 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 27 78	10	0.1	54*		15	14	11	0.59	4.9		0	0	0	1.1	4	0.1					
5 25 78	19	0.08			0	12	13	0.67	4.7		0	0	0	0.5	6	0.2					
6 21 78	25	0.005	103*			16	14	0.76	4.8		0	0	0	2.1	4	0.1					
11 20 78	9	0.0001	30		20	16	13	1.18	5.1	3	0	0	0	1.0	4	0.0					
12 28 78	3	0.01	1		3	13	14	0.76	4.9	3	0	0	0	0.8	5	0.2					
2 22 79	6	0.4	41		9	14	13	0.89	5.3	5	0	0	0	0.9	5	0.2					
3 27 79	7	0.03	15		8	12	13	0.83	5.0	4	0	0	0	0.7	5	0.1					
4 25 79	15	0.005	44	0.00	20	12	13	0.74	4.8	6	0	0	0	0.4	5	0.1					
5 28 79	13	0.003	17		20	12	12	0.67	4.9	9	0	0	0	0.6	5	0.0					
6 21 79	16	0.0001	5	2.0		27	18	0.69	5.4	12	0	0	0	1.6	6	0.2					
7 19 79	22	0.0000	56*		35	14	16	0.70	5.8	12	0	0	0	1.1	7	0.0	0.0	0.02	1.00	0.15	0.00
8 10 79	20	0.0008	25		15	13	14	0.84	6.1	3	1	1	0	0.7	5	0.0	0.1	0.08	0.00	0.00	0.01
9 13 79	18	0.02	8		20	14	12	1.05	5.2	5	0	0	0	0.9	4	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																			
4 27 78	0.1	0.01	0.0	0.00	0.6	0.0	0.01	0.2	0.3	0.00	0.4	0.0	0.1	0.5	0.00	0.0	1.4	0.0	0.1	0.0
5 25 78	0.1	0.00	0.0	0.00	0.6	0.0	0.00	0.1	0.5	0.01	0.4	0.1	0.1	0.7	0.00	0.0	1.6	0.0	0.0	0.0
6 21 78	0.1	0.00			0.5	0.1	0.01	0.2	1.0		0.6	0.1		0.8	0.00	0.0	1.8		0.2	0.0
11 20 78	0.1	0.00			0.7	0.0	0.00	0.0	0.8		0.4	0.1		0.8	0.00	0.0	2.2		0.0	0.0
12 28 78	0.1	0.00	0.0	0.00	0.7	0.0	0.00	0.1	0.6	0.03	0.5	0.0	0.0	0.7	0.01	0.0	1.9	0.0	0.0	0.0
2 22 79	0.1	0.00			0.8	0.0	0.00	0.1	0.5		0.7	0.1		0.6	0.01	0.0	1.5		0.0	0.1
3 27 79	0.1	0.00			0.7	0.0	0.00	0.2	0.6		0.4	0.1		0.8	0.01	0.0	1.7		0.0	0.0
4 25 79	0.1	0.00	0.0	0.00	0.6	0.0	0.00	0.2	0.5	0.01	0.4	0.1	0.0	0.5	0.01	0.0	1.9	0.0	0.0	0.1
5 28 79	0.1	0.00			0.6	0.0	0.00	0.2	0.3		0.4	0.1		0.5	0.00	0.0	1.7		0.1	0.1
6 21 79	0.1	0.01			1.0	0.0	0.00	0.1	0.9		0.5	0.2		0.9	0.00	0.0	2.4		0.0	0.0
7 19 79	0.1	0.00	0.0	0.00	0.8	0.0	0.00	0.3	0.7	0.01	0.5	0.3	0.0	0.7	0.00	0.0	2.2	0.0	0.0	0.0
8 10 79	0.1	0.00			0.8	0.0	0.01	0.2	0.5		0.4	0.2		0.8	0.00	0.0	2.3		0.0	0.0
9 13 79	0.0	0.00			0.7	0.0	0.00	0.2	0.5		0.5	0.0		0.6	0.00	0.0	2.2		0.0	0.0

TABLE 29. WATER QUALITY FOR SITE 7072 GRUNDY COUNTY, TENNESSEE

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 11 77		0.004			4	256	136	1.40	6.9		26	32	0	1.7	74	0.1					
9 15 77	21	0.015			120	21	14	1.56	7.1		2	2	0	0.8	4	0.1					
10 13 77	12	0.25			8	22	17	0.89	6.0		1	1	0	0.7	7	0.0					
11 8 77	15	1.0	59		30	15	13	0.84	5.7		0	0	0	0.8	4	0.1					
12 7 77	6	0.4	28*		8	15	14	0.66	5.3		0	0	0	0.8	6	0.1					
1 4 78	4	0.4			10	19	14	1.18	6.0		2	2	0	0.7	4	0.1					
2 15 78	2	0.25			0	12	12	0.91	4.7		0	0	0	1.1	4	0.1					
3 29 78	11	0.25			0	119	67	1.15	6.9		9	11	0	1.0	38	0.2					
4 27 78	11	0.15	45*		20	53	33	1.38	6.7		4	5	0	0.9	16	0.1					
5 25 78	19	0.1			0	142	84	1.34	6.8		16	19	0	0.9	42	0.6					
6 21 78	26	0.02	45*			13	14	1.50	6.2		2	2	0	0.5	4	0.1					
12 28 78	3	0.04	5		5	12	15	1.17	5.1	1	0	0	0	0.1	5	0.2					
2 22 79	6	0.08	2		4	47	31	1.27	6.7		4	5	0	1.2	14	0.3					
3 27 79	5	0.09			1	81	54	1.12	6.6	0	5	6	0	1.9	30	0.1					
4 18 79	15	0.5		0.00	10	17	11	0.77	5.4		0	0	0	0.8	4	0.0					
4 25 79	15	0.01	13	0.00	10	11	14	1.12	5.4		0	0	0	0.4	5	0.0					
5 28 79	14	0.03	7		15	13	12	1.00	5.6	8	0	0	0	0.6	4	0.0					
6 21 79	19	0.01	29	0.30		25	18	1.65	6.0		3	4	0	1.6	4	0.2					
7 19 79	20	0.0000	69*		65	23	19	1.21	6.6	0	4	5	0	1.6	6	0.1	0.3	0.31	1.25	0.20	0.01
8 10 79	21	0.0000	20		220	23	19	1.99	6.8	1	7	8	0	1.1	4	0.0	0.1	0.14	0.45	0.00	0.01
9 13 79	18	0.0000	20		110	37	25	1.33	6.1	12	2	3	0	1.6	10	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 11 77	0.0	0.00			22	0.0	0.01	0.0	2.6		9.5	0.0		6.2	0.00	0.0	2.2		0.0	0.0
9 15 77	0.2	0.02			0.9	0.0	0.00	0.1	1.2		0.7	0.0		0.7	0.01	0.0	1.8		0.0	0.0
10 13 77	0.1	0.00	0.0	0.00	0.8	0.0	0.01	0.1	0.8	0.00	0.6	0.0	0.0	0.8	0.02	0.0	2.6	0.0	0.0	0.0
11 8 77	0.1	0.00			1.1	0.0	0.00	0.1	0.7		0.0	0.0		0.8	0.00	0.0	2.3		0.0	0.0
12 7 77	0.0	0.00			0.6	0.0	0.00	0.0	0.4		0.6	0.0		0.5	0.00	0.0	2.1		0.0	0.0
1 4 78	0.1	0.00	0.0	0.00	0.6	0.1	0.01	0.0	0.8	0.00	0.6	0.0	0.0	0.6	0.03	0.1	2.0	0.0	0.0	0.0
2 15 78	0.2	0.00			0.5	0.0	0.00	0.1	0.4		0.6	0.0		0.6	0.00	0.0	1.8		0.0	0.0
3 29 78	0.1	0.00			8.0	0.1	0.02	0.0	1.6		5.0	0.2		2.2	0.06	0.2	2.3		0.1	0.0
4 27 78	0.1	0.00	0.0	0.00	3.8	0.0	0.00	0.0	0.9	0.03	2.6	0.1	0.0	1.2	0.00	0.0	2.4	0.0	0.0	0.0
5 25 78	0.1	0.01	0.0	0.00	11	0.0	0.00	0.1	1.8	0.07	6.0	0.1	0.0	3.0	0.01	0.0	3.2	0.1	0.1	0.0
6 21 78	0.1	0.00	0.0	0.00	0.8	0.0	0.00	0.3	0.6	0.01	0.8	0.1	0.0	0.8	0.00	0.0	2.3	0.0	0.1	0.0
12 28 78	0.1	0.00	0.0	0.00	0.6	0.0	0.01	0.0	0.9	0.02	0.7	0.0	0.0	0.8	0.03	0.1	2.5	0.0	0.1	0.0
2 22 79	0.1	0.00			5.0	0.0	0.01	0.1	0.8		1.4	0.0		0.8	0.01	0.0	1.8		0.0	0.1
3 27 79	0.1	0.01			6.6	0.0	0.01	0.1	1.2		4.0	0.1		1.3	0.01	0.0	2.5		0.0	0.0
4 18 79	0.1	0.00			0.5	0.0	0.00	0.0	0.5		0.4	0.0		0.4	0.00	0.0	2.1		0.0	0.0
4 25 79	0.1	0.00	0.0	0.00	0.7	0.0	0.00	0.1	0.6	0.03	0.7	0.0	0.0	0.6	0.02	0.0	2.3	0.0	0.0	0.1
5 28 79	0.1	0.00			0.6	0.0	0.00	0.0	0.5		0.4	0.0		0.5	0.01	0.0	2.2		0.0	0.1
6 21 79	0.0	0.00			1.2	0.0	0.00	0.0	1.3		0.8	0.0		1.0	0.00	0.0	2.4		0.0	0.0
7 19 79	0.1	0.00	0.0	0.00	1.4	0.0	0.00	0.9	1.3	0.05	0.7	0.2	0.0	0.8	0.00	0.0	1.4	0.0	0.0	0.0
8 10 79	0.1	0.00			1.4	0.0	0.01	0.7	0.8		1.0	0.0		0.7	0.01	0.0	2.5		0.0	0.0
9 13 79	0.2	0.03			2.0	0.0	0.00	0.4	2.9		1.5	0.0		0.8	0.02	0.0	1.9		0.0	0.0

TABLE 30. WATER QUALITY FOR SITE 7073 GRUNDY COUNTY, TENNESSEE

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											
6 22 77	24	0.4			8	95	49	1.61	7.4		17	21	0	1.3	21	0.0					
7 14 77	26	0.15			30	104	52	1.79	6.8		22	27	0	1.5	19	0.4					
8 11 77		0.1			30	112	55	2.12	7.2		26	32	0	1.4	19	0.1					
9 15 77	26	0.2			30	88	43	2.19	6.7		16	20	0	0.7	15	0.1					
10 13 77	10	0.6			4	101	52	2.35	6.5		17	21	0	1.7	17	0.2					
11 8 77	16	4	51		30	60	47	2.03	6.2		12	15	0	1.7	17	0.3					
12 6 77	6	1.5	17*		4	58	40	1.79	6.4		10	12	0	0.8	17	0.2					
1 4 78	3	1.0			10	98	50	1.48	6.9		11	13	0	1.8	21	0.4					
2 15 78	6	0.025			4	79	48	1.34	6.6		7	9	0	1.4	23	0.3					
3 29 78	18	0.3			6	75	43	1.73	6.9		10	12	0	1.8	17	0.2					
4 27 78	10	0.6	55*		15	72	40	1.71	7.2		10	12	0	0.8	18	0.0					
5 25 78	19	0.1			0	75	44	1.66	6.7		14	17	0	0.9	20	0.1					
6 21 78			24*			88	48	2.15	7.1		17	21	0	1.2	17	0.1					
8 2 78	25	0.03	32*		1	100	62	2.29	7.6		26	32	0	1.6	20	0.1					
9 7 78	21	0.0002	35*		5	188	112	3.49	7.8		70	85	0	2.1	23	0.1					
10 19 78	12	0.003	13		4	135	85	2.11	7.8		38	46	0	1.4	28	0.1					
11 20 78	10	0.01	8		3	110	61	1.23	6.9	-12	14	17	0	1.5	31	0.0					
12 28 78	0	0.006	1		5	99	66	1.43	7.1	-10	11	14	0	1.5	31	0.5					
4 25 79	17	0.005	18	0.00	10	69	43	1.61	6.9	-6	8	10	0	1.0	21	0.0					
5 28 79	14	0.008	16		25	65	44	1.45	7.0	0	11	13	0	0.9	20	0.1					
6 21 79	20	0.006	12	0.01	50	80	50	1.83	7.3	-10	18	22	0	1.8	19	0.1					
7 19 79	22	0.002	36*		25	94	61	1.91	7.5		24	29	0	5.9	18	0.1	0.1	0.05	1.10	0.00	0.01
8 10 79	23	0.0007	1		25	100	46	2.08	7.4	-11	18	22	0	1.5	16	0.0	0.1	0.11	0.00	0.00	0.00

* 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																			
6 22 77	0.0	0.00			4.6	0.0	0.01	0.3	2.0		4.8	0.4		1.5	0.00	0.0	1.2		0.0	0.0
7 14 77	0.0	0.00			5.9	0.0	0.01	0.2	2.0		4.8	0.2		0.9	0.01	0.1	1.1		0.0	0.0
8 11 77	0.0	0.00			6.1	0.0	0.01	0.5	2.1		5.2	0.2		2.2	0.00	0.0	1.0		0.0	0.0
9 15 77	0.0	0.01			4.6	0.0	0.00	0.4	1.7		4.6	0.3		1.5	0.02	0.0	1.6		0.0	0.0
10 13 77	0.0	0.02	0.0	0.00	6.4	0.0	0.01	0.3	2.6	0.01	5.2	0.2	0.0	2.2	0.03	0.0	2.4	0.0	0.0	0.0
11 8 77	0.1	0.00			5.9	0.0	0.00	0.3	2.1		4.4	0.1		1.8	0.01	0.0	2.2		0.0	0.0
12 6 77	0.0	0.00			4.6	0.0	0.00	0.4	1.6		4.1	0.1		1.2	0.00	0.0	1.7		0.0	0.0
1 4 78	0.2	0.00	0.0	0.00	5.6	0.1	0.02	0.6	2.2	0.00	4.1	0.6	0.0	1.3	0.06	0.1	1.7	0.0	0.0	0.0
2 15 78	0.1	0.04			4.8	0.0	0.00	1.0	1.7		4.5	0.3		1.4	0.01	0.0	1.5		0.0	0.0
3 29 78	0.1	0.02			4.7	0.0	0.01	0.8	1.6		4.3	0.2		1.4	0.01	0.0	1.7		0.0	0.0
4 27 78	0.0	0.00	0.0	0.00	4.5	0.0	0.00	0.5	1.6	0.01	4.0	0.2	0.2	1.4	0.00	0.0	1.4	0.0	0.0	0.0
5 25 78	0.0	0.00	0.0	0.00	5.0	0.0	0.00	0.3	1.6	0.04	4.3	0.4	0.0	1.5	0.00	0.0	1.0	0.0	0.0	0.0
6 21 78	0.0	0.01	0.0	0.00	5.6	0.0	0.00	0.4	1.9	0.04	5.0	0.3	0.0	1.7	0.01	0.0	1.6	0.0	0.0	0.0
8 2 78	0.0	0.01			8.1	0.0	0.00	1.1	2.4		5.8	0.7		1.7	0.02	0.0	1.8		0.0	0.0
9 7 78	0.0	0.01			17	0.0	0.01	0.3	3.6		8.3	4.1		2.8	0.02	0.0	3.4		0.0	0.0
10 19 78	0.0	0.01	0.0	0.00	12	0.0	0.00	3.0	2.7	0.08	7.0	1.0	0.0	1.6	0.02	0.1	2.0	0.0	0.1	0.0
11 20 78	0.0	0.01			6.1	0.0	0.00	1.0	2.2		5.0	0.4		1.5	0.02	0.0	1.9		0.0	0.0
12 28 78	0.1	0.00			7.2	0.1	0.01	0.3	2.7		5.9	0.3		1.9	0.05	0.1	2.6		0.1	0.0
4 25 79	0.0	0.00	0.0	0.00	5.5	0.0	0.01	0.2	1.6	0.03	4.4	0.2	0.0	1.3	0.02	0.0	1.3	0.0	0.0	0.1
5 28 79	0.1	0.00			5.3	0.0	0.01	0.2	1.6		3.6	0.1		1.0	0.02	0.0	1.8		0.0	0.7
6 21 79	0.0	0.01			6.3	0.0	0.01	0.3	2.0		4.3	0.3		1.4	0.01	0.0	1.7		0.0	0.0
7 19 79	0.0	0.01	0.0	0.00	6.8	0.0	0.00	1.1	1.7	0.06	5.4	1.0	0.0	1.3	0.01	0.0	2.3	0.0	0.0	0.0
8 10 79	0.0	0.02			5.8	0.0	0.00	0.7	1.5		4.1	0.5		1.2	0.01	0.0	2.1		0.0	0.0

TABLE 31. WATER QUALITY FOR SITE 7074 GRUNDY COUNTY, TENNESSEE

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 ----------												
6 22 77	18	0.1			35	33	29	1.19	6.4		3	4	0	3.7	5	1.4				
7 14 77	22	0.007			35	59	30	8.33	6.8		14	17	0	3.2	2	0.3				
8 11 77	20	0.0000			40	58	32	4.40	7.0		14	17	0	3.2	4	0.2				
9 15 77	20	0.1			10	46	27	1.53	7.4		4	5	0	2.7	7	0.6				
10 13 77	12	0.1			8	51	37	2.31	6.6		6	7	0	3.7	5	2.0				
11 8 77	16	0.5	60		30	65	52	0.83	6.6		4	5	0	4.3	8	4.7				
12 7 77	5	0.4	17*		8	58	38	1.09	5.6		0	0	0	4.0	9	2.5				
1 4 78	4	0.2			10	57	33	1.47	6.4		3	4	0	3.8	5	2.0				
9 13 79	18	0.004	7		15	31	24	2.43	6.9	2	7	8	0	3.9	4	0.0			1.75	0.10	

* 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 ----------																			
6 22 77	0.1	0.01			2.0	0.0	0.01	0.1	1.8		1.0	0.0		2.4	0.00	0.0	2.2		0.0	0.0
7 14 77	0.0	0.00			4.9	0.0	0.01	0.5	1.1		1.2	0.1		1.9	0.01	0.1	2.2		0.0	0.0
8 11 77	0.1	0.00			4.9	0.0	0.01	0.7	1.0		1.4	0.1		2.1	0.00	0.0	2.5		0.0	0.0
9 15 77	0.1	0.03			2.6	0.0	0.00	0.1	1.5		0.9	0.0		2.2	0.01	0.0	2.3		0.0	0.0
10 13 77	0.1	0.00	0.0	0.00	3.9	0.0	0.01	0.1	2.0	0.01	1.4	0.0	0.0	3.4	0.02	0.0	2.2	0.0	0.0	0.0
11 8 77	0.1	0.00			5.1	0.0	0.00	0.1	2.2		1.6	0.0		3.5	0.00	0.0	1.8		0.0	0.0
12 7 77	0.1	0.00			4.3	0.0	0.00	0.0	1.8		1.7	0.0		2.4	0.00	0.0	1.7		0.0	0.0
1 4 78	0.1	0.00	0.0	0.00	3.0	0.0	0.01	0.0	1.7	0.00	1.5	0.0	0.0	2.3	0.03	0.1	2.0	0.0	0.0	0.0
9 13 79	0.1	0.00			2.2	0.0	0.00	0.1	1.4		1.2	0.1		1.7	0.04	0.2	2.3		0.2	0.0

TABLE 32. WATER QUALITY FOR SITE 7075 GRUNDY COUNTY, TENNESSEE

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 18 79	14	0.4			3	107	68	0.96	5.3		0	0	0	0.8	45	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																			
4 18 79	0.0	0.00			6.0	0.0	0.00	0.0	1.7		6.4	0.0		1.2	0.03	0.0	2.9		0.0	0.0

TABLE 33. WATER QUALITY FOR SITE 7077 GRUNDY COUNTY, TENNESSEE

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									
2 22 79	8	0.002	3		5	163	99	3.05	7.4		20	25	0	12	13	5.6					
3 27 79	7	0.0004			20	159	99	3.84	7.4	-29	27	33	0	12	13	4.1					

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																			
2 22 79	0.2	0.01			19	0.0	0.01	0.1	5.5		3.0	0.0		5.7	0.01	0.0	1.5		0.0	0.2
3 27 79	0.1	0.00			21	0.0	0.01	0.1	5.3		3.0	0.1		5.6	0.02	0.1	2.0		0.0	0.0

TABLE 34. WATER QUALITY FOR SITE 707B GRUNDY COUNTY, TENNESSEE

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 18 79	15	0.15			6	33	18	0.87	5.2		0	0	0	0.9	8	0.0					
6 21 79	17	0.0001	78	1.9	270	38	24	1.11	6.7	5	7	8	0	1.5	8	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																			
4 18 79		0.00			0.9	0.0	0.00		0.6		1.1	0.0		0.7	0.01	0.0	2.4		0.0	0.0
6 21 79	0.2	0.00			1.8	0.0		0.4	1.5		1.0	0.5		1.0	0.01	0.0	1.7		0.0	0.0

TABLE 35. WATER QUALITY FOR SITE 7080 HAMILTON COUNTY, TENNESSEE

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										
6 23 77	24	0.02			4	1480	874	0.40	2.5			0	0	0	1.0	660	0.0				
7 15 77	32	0.01			40	1570	840	0.48	2.7			0	0	0	1.0	610	0.0				
8 12 77		0.04			4	1550	929	0.47	2.8			0	0	0	0.8	680	0.0				
9 16 77	21	0.7			420	300	175	0.40	3.2			0	0	0	0.4	130	0.1				
10 13 77	13	0.04			55	1040	689	0.42	2.7			0	0	0	0.9	510	0.0				
11 10 77	11	0.25			20	643	443	0.46	3.0			0	0	0	0.6	320	0.1				
12 7 77	6	0.2	12		10	712	490	0.49	3.0			0	0	0	0.7	350	0.1				
1 5 78	4	0.08			6	1170	522	0.38	2.7			0	0	0	0.9	400	0.0				
2 16 78	9	0.7			8	1180	617	0.50	2.8			0	0	0	0.6	450	0.2				
3 28 78	17	0.06			6	1190	677	0.39	2.6			0	0	0	1.2	520	0.1				
4 27 78	15	0.15	54*		10	1360	661	0.50	2.7			0	0	0	2.1	470	0.2				
5 25 78	21	0.1			0	1650	850	0.41	2.6			0	0	0	0.3	650	0.0				
6 22 78	18	0.07				1800	1050	0.42	2.7			0	0	0	0.4	780	0.1				
8 3 78	25	0.08	14		0	2430	1670	0.36	2.7			0	0	0	1.0	1200	0.0				
9 8 78	20	0.07	19*		8	2270	1370	0.41	2.6			0	0	0	0.7	1000	0.0				
10 25 78	15	0.01	29*		10	2490	1870	0.40	2.7			0	0	0	1.5	1300	0.2				
11 21 78	11	0.015	10		5	2560	1990	0.40	2.6	1000		0	0	0	1.0	1500	0.0				
1 5 79	10	0.07			10	1700	1100	0.35	2.7	640		0	0	0	0.5	830	0.6				
2 21 79	6	0.15	173		130	974	527	0.55	3.0	210		0	0	0	1.0	390	0.7				
3 27 79	10	0.07	47		4	1350	835	0.58	2.8	300		0	0	0	0.9	620	0.7				
4 17 79	16	1.0			6	1400	838	0.53	2.7			0	0	0	0.7	660	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																			
6 23 77	20	0.03			47	0.2	0.01	52	4.1		36	14		2.4	0.36	0.0	14		0.1	0.5
7 15 77	19	0.03			48	0.3	0.02	64	4.9		42	13		2.7	0.34	0.3	13		0.4	0.4
8 12 77	29	0.03			61	0.3	0.02	55	5.0		41	15		3.1	0.44	0.0	17		0.1	0.6
9 16 77	9.3	0.03			11	0.0	0.00		1.2		6.4	1.9		0.7	0.12	0.0	4.7		0.0	0.4
10 13 77	22		0.0	0.01	42	0.2	0.02	36	2.6	0.15	27	10	0.0	2.1	0.35	0.0	14	0.1	0.1	0.5
11 10 77	19	0.00			25	0.1	0.02	22	1.8		22	5.7		1.6	0.24	0.0	10		0.0	0.4
12 7 77	26	0.00			28	0.1	0.01	27	1.6		26	7.7		1.1	0.25	0.0	10		0.1	0.4
1 5 78	22	0.00	0.0	0.00	25	0.2	0.04	22	2.5	0.09	22	6.5	0.0	1.3	0.29	0.0	6.1	0.2	0.1	0.3
2 16 78	24	0.05			41	0.1	0.05	35	1.0		31	4.4		1.6	0.23	0.0	12		0.2	0.2
3 28 78	20	0.03			35	0.2	0.05	35	1.5		30	4.3		1.8	0.25	0.1	11		0.3	0.4
4 27 78	23	0.02	0.0	0.01	47	0.1	0.04	42	1.0	0.15	31	4.6	0.0	1.5	0.23	0.0	14	0.2	0.2	0.4
5 25 78	29	0.01			54	0.1	0.05	42	1.0		33	5.4		1.6	0.28	0.0	14		0.1	0.5
6 22 78	38	0.01	0.0	0.01	62	0.2	0.07	55	1.1	0.30	43	6.4	0.0	2.1	0.41	0.0	26	0.3	0.1	0.6
8 3 78	48	0.05			96	0.2	0.09	150	1.0		54	8.5		2.2	0.55	0.2	30		0.4	0.9
9 8 78	46	0.03			90	0.2	0.10	110	1.1		48	7.7		2.4	0.47	0.1	24		0.2	0.7
10 25 78	65	0.03	0.0	0.01	120	0.2	0.09	190	1.2	0.60	62	9.8	0.0	2.3	0.57	0.2	33	0.5	0.2	1.0
11 21 78	61	0.06			130	0.3	0.09	170	0.8		69	12		2.1	0.58	0.3	36		1.5	1.2
1 5 79	44	0.02	0.0	0.01	63	0.2	0.12	85	0.9	0.60	35	6.4	0.0	1.8	0.46	0.2	14	0.3	0.3	0.7
2 21 79	15	0.01	0.0	0.00	43	0.2	0.05	18	1.2	0.25	28	6.5	0.0	1.5	0.32	0.0	7.5	0.1	0.1	0.5
3 27 79	24	0.01			79	0.4	0.09	32	1.1		42	15		1.8	0.77	0.1	8.9		0.2	0.7
4 17 79	19	0.00			75	0.4	0.09		1.5		41	12		2.0	0.72	0.1	11		0.2	0.8

TABLE 36. WATER QUALITY FOR SITE 7081 HAMILTON COUNTY, TENNESSEE

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											
6 23 77	18	0.01			40	21	16	1.82	6.5		2	2	0	1.7	3	0.2					
7 15 77	24	0.001			65	27	21	1.34	6.0		4	5	0	1.3	4	0.4					
8 12 77		0.009			20	55	27	3.90	6.9		14	17	0	1.1	5	0.1					
9 16 77	20	1.5			15	31	21	2.03	6.7		7	8	0	1.7	5	0.1					
10 13 77	13	0.15			8	25	18	1.89	5.8		2	3	0	2.4	4	0.0					
11 10 77	13	0.08	59		20	27	25	0.89	5.8		2	2	0	2.4	11	0.1					
12 7 77	7	0.3	17*		8	25	22	0.87	6.2		2	2	0	2.1	9	0.1					
1 5 78	6	0.15			8	29	20	0.87	6.1		2	2	0	2.5	7	0.1					
2 16 78	5	0.01			15	17	18	0.67	4.5		0	0	0	1.3	9	0.2					
3 28 78	12	0.25			4	34	19	1.00	4.7		0	0	0	1.9	8	0.2					
4 27 78	14	0.3	63*		20	22	19	0.90	6.2		1	1	0	2.5	7	0.2					
5 25 78	20	0.05			0	21	22	1.03	6.1		2	2	0	1.2	10	0.1					
6 22 78	20	0.025	43*			44	20	0.76	4.7		0	0	0	3.6	5	0.1					
8 3 78	27	0.0000	132*			176	89	4.42	7.9		53	64	0	2.7	14	0.1					
9 8 78	22	0.002	40*		25	34	29	1.49	7.1		8	10	0	1.4	9	0.1					
10 25 78	13	0.0001	34*		20	67	48	3.51	7.7		29	35	0	1.5	9	0.0					
11 21 78	10	0.0004	6		4	55	35	2.98	6.7	-14	16	19	0	1.4	8	0.1					
1 5 79	4	0.15			3	33	25	1.21	6.7	2	3	4	0	1.6	9	0.4					
2 21 79	5	0.1	11		7	24	22	0.94	5.8		0	0	0	1.8	10	0.3					
3 27 79	8	0.03			2	45	22	1.04	4.0	44	0	0	0	1.7	10	0.1					
4 27 79	16	0.02	16	0.00	8	22	20	1.09	5.9	3	1	1	0	1.3	8	0.1					
5 28 79	15	0.02	22		20	44	29	0.78	5.4	6	0	0	0	1.6	16	0.0					
6 20 79	18	0.002	21		30	26	24	1.16	6.6	2	3	4	0	1.9	9	0.0					
7 20 79	22	0.002	41*		45	56	32	1.26	6.7		5	6	0	1.6	13	0.1	0.3	0.19	1.15	0.15	0.01
8 11 79	22	0.02	35		25	61	40	1.35	7.2	-4	7	9	0	1.7	18	0.1	0.0	0.16	0.20	0.00	0.01

* 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																			
6 23 77	0.0	0.00			0.8	0.0	0.01	0.1	1.0		0.8	0.1		1.1	0.00	0.1	2.4		0.0	0.0
7 15 77	0.0	0.00			0.8	0.0	0.00	0.6	0.8		0.8	0.5		1.2	0.01	0.1	3.0		0.0	0.0
8 12 77	0.1	0.00			5.2	0.0	0.01	0.1	0.9		1.4	0.0		1.1	0.00	0.0	1.7		0.0	0.0
9 16 77	0.1	0.00			2.2	0.0	0.00	0.1	1.1		0.8	0.0		1.3	0.01	0.0	2.1		0.0	0.0
10 13 77	0.1	0.03	0.0	0.00	1.7	0.0	0.00	0.2	0.6	0.00	0.7	0.1	0.0	1.6	0.00	0.0	2.4	0.0	0.0	0.0
11 10 77	0.1	0.00			1.8	0.0	0.00	0.1	0.9		1.0	0.1		1.8	0.01	0.0	2.3		0.0	0.0
12 7 77	0.1	0.00			1.7	0.0	0.00	0.1	0.7		1.0	0.1		1.3	0.00	0.0	2.0		0.0	0.0
1 5 78	0.1	0.00	0.0	0.00	1.2	0.1	0.02	0.0	1.0	0.00	0.8	0.0	0.0	1.2	0.04	0.1	1.9	0.0	0.0	0.0
2 16 78	0.1	0.02			1.0	0.0	0.00	0.1	0.5		0.8	0.0		1.1	0.01	0.0	1.8		0.1	0.0
3 28 78	0.1	0.01			1.6	0.0	0.00	0.1	0.6		0.9	0.0		1.3	0.01	0.0	1.9		0.0	0.0
4 27 78	0.1	0.00	0.0	0.00	1.3	0.0	0.00	0.0	0.9	0.00	0.8	0.0	0.0	1.3	0.00	0.0	2.0	0.0	0.0	0.0
5 25 78	0.3	0.00			1.9	0.0	0.00	0.4	0.7		1.2	0.1		1.3	0.00	0.0	1.6		0.0	0.0
6 22 78	0.1	0.01	0.0	0.00	1.5	0.0	0.00	0.1	0.7	0.01	0.7	0.1	0.0	1.0	0.01	0.0	2.7	0.0	0.0	0.0
8 3 78		0.02			17	0.0	0.01		2.5		3.9	0.3		1.6	0.02	0.1	6.6		0.3	0.0
9 8 78	0.1	0.00			3.5	0.0	0.01	0.2	0.9		1.0	0.1		1.2	0.01	0.0	2.9		0.0	0.0
10 25 78	0.2	0.00			8.8	0.0	0.00	0.8	2.0		2.4	0.4		1.1	0.02	0.0	1.9		0.1	0.0
11 21 78	0.1	0.00			6.8	0.0	0.00	0.3	1.0		1.6	0.2		0.9	0.00	0.0	2.4		0.0	0.0
1 5 79	0.1	0.00	0.0	0.00	3.4	0.0	0.00	0.2	0.7	0.05	0.9	0.0	0.0	1.2	0.00	0.0	1.8	0.0	0.0	0.1
2 21 79	0.2	0.00			2.1	0.0	0.01	0.1	0.7		1.1	0.0		1.3	0.00	0.0	1.6		0.0	0.1
3 27 79	0.1	0.00			2.5	0.0	0.01	0.1	0.8		0.8	0.1		1.2	0.02	0.0	1.9		0.1	0.0
4 27 79	0.1	0.00	0.0	0.00	1.6	0.0	0.00	0.1	0.7	0.00	0.8	0.0	0.0	1.4	0.01	0.0	2.1	0.0	0.0	0.0
5 28 79	0.5	0.00			2.8	0.0	0.01	0.6	0.7		1.1	0.3		1.1	0.02	0.0	2.3		0.0	0.0
6 20 79	0.2	0.00			2.4	0.0	0.01	0.3	0.8		1.0	0.1		1.1	0.00	0.0	2.4		0.0	0.0
7 20 79	0.1	0.00	0.0	0.00	4.5	0.0		0.3	0.8	0.07	1.3	0.2	0.0	1.0	0.01	0.0	2.4	0.0	0.0	0.0
8 11 79	0.0	0.03			7.4	0.1	0.01	0.3	1.0		1.3	0.1		1.3	0.06	0.2	1.4		0.4	0.0

TABLE 37. WATER QUALITY FOR SITE 7082 HAMILTON COUNTY, TENNESSEE

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											
6 23 77	20	0.06			180	242	132	0.57	3.1		0	0	0	2.5	90	0.0					
7 15 77	26	0.01			15	266	139	0.58	3.4		0	0	0	1.9	100	0.2					
8 12 77		0.2			10	1140	577	0.51	2.9		0	0	0	2.2	440	0.3					
9 16 77	21	1.0			75	94	49	0.96	4.5		0	0	0	1.2	28	0.1					
10 13 77	12	0.15			20	728	464	0.60	3.6		0	0	0	2.4	330	0.1					
11 10 77	4	3	73		65	218	160	0.84	4.0		0	0	0	3.0	100	0.9					
12 7 77	6	0.6	20*		10	366	254	0.89	3.5		0	0	0	1.8	170	1.2					
1 5 78	2	0.3			10	310	142	0.64	3.4		0	0	0	2.0	94	1.0					
2 16 78	5	0.04			6	696	402	1.01	3.7		0	0	0	1.5	250	2.5					
3 28 78	11	0.05			4	554	327	0.73	3.3		0	0	0	1.5	230	1.0					
4 27 78	15	1.0	91*		95	653	372	0.67	3.3		0	0	0	2.0	270	0.8					
5 25 78	21	0.04			0	651	413	0.74	3.4		0	0	0	0.8	280	6.4					
6 22 78		0.0000				1760	1310	0.69	3.1		0	0	0	1.8	980	2.0					
8 3 78	32	0.0000	9		0	2310	2050	0.55	3.2		0	0	0	1.5	1600	0.3					
9 8 78	26	0.003			8	1150	703	0.65	3.1		0	0	0	1.1	530	0.2					
11 21 78	10	0.0001	14		20	3580	3360	0.59	2.8	1100	0	0	0	2.2	2500	0.0					
1 5 79	4	0.025	24		3	1160	660	0.75	3.1	140	0	0	0	1.1	460	1.6					
2 21 79	4	0.1	41		80	715	489	0.82	3.5	67	0	0	0	1.4	350	0.8					
3 27 79	10	0.002			20	627	397	0.89	3.5	53	0	0	0	1.1	280	0.4					
4 27 79	16	0.0001	38	0.05	120	619	419	0.85	3.3	71	0	0	0	0.6	300	0.1					
5 28 79	16	0.0000			10	1780	1370	0.53	3.1	360	0	0	0	1.5	1000	0.0					
6 20 79	23	0.0001			10	2150	1160	0.58	2.7	360	0	0	0	2.2	850	0.0					
7 20 79	23	0.0000			8	4950	3940	0.57	2.7	1400	0	0	0	5.8	2900	0.2	0.3	0.35	2.40	0.45	0.11
8 11 79		0.0000	10	0.01	15	919	617	0.84	3.4	70	0	0	0	1.5	450	0.0	0.0	0.06	0.50	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																			
6 23 77	1.0	0.00			8.6	0.1	0.01	7.8	2.1		6.8	3.2		2.1	0.00	0.1	3.1		0.0	0.1
7 15 77	2.9	0.00			10	0.1	0.01	0.6	1.5		7.7	5.1		2.0	0.08	0.2	2.7		0.0	0.1
8 12 77	13	0.00			42	0.5	0.10	18	4.7		30	12		3.0	0.69	0.1	4.0		0.0	0.7
9 16 77	2.2	0.02			6.0	0.0	0.00	0.3	1.3		2.6	0.7		1.2	0.04	0.0	2.0		0.0	0.1
10 13 77	5.2	0.05	0.0	0.00	34	0.1	0.02	29	3.0	0.09	28	11	0.0	3.3	0.23	0.0	7.7	0.1	0.1	0.2
11 10 77	1.1	0.00			18	0.1	0.00	3.4	4.0		9.8	4.2		2.7	0.15	0.0	3.4		0.0	0.1
12 7 77	3.0	0.00			23	0.2	0.01	6.4	3.0		23	10		2.0	0.31	0.0	3.9		0.0	0.2
1 5 78	2.3	0.00	0.0	0.00	11	0.2	0.03	4.8	3.1	0.00	8.0	4.3	0.0	1.8	0.17	0.1	2.5	0.1	0.1	0.1
2 16 78	1.8	0.05			44	0.2	0.01	17	6.8		36	13		2.8	0.26	0.0	7.0		0.1	0.1
3 28 78	2.0	0.02			26	0.2	0.02	7.6	4.6		26	8.7		2.5	0.28	0.0	5.1		0.1	0.2
4 27 78	2.6	0.01	0.0	0.00	31	0.3	0.03	6.8	5.4	0.10	25	12	0.0	2.2	0.38	0.0	5.0	0.1	0.1	0.3
5 25 78	2.0	0.01			44	0.2	0.01	1.4	8.0		27	11		2.9	0.36	0.0	4.6		0.0	0.2
6 22 78	23	0.04	0.0	0.01	140	1.0	0.08	2.1	12	0.40	82	46	0.1	5.9	1.4	0.2	0.7	0.4	0.2	1.4
8 3 78	56	0.03			160	1.0	0.27	89	5.0		110	49		2.6	2.0	0.3	6.8		0.3	0.3
9 8 78	7.7	0.02			70	0.4	0.04	5.3	7.6		41	21		3.6	0.64	0.1	5.5		0.1	0.4
11 21 78	150	0.06			290	1.8	0.53	100	5.2		190	89		5.6	2.7	0.4	12		0.7	4.9
1 5 79	5.4	0.02			69	0.3	0.03	24	5.7		44	21		3.1	0.62	0.2	6.3		0.3	0.4
2 21 79	4.3	0.01	0.0	0.00	54	0.2	0.04	7.7	4.1	0.25	37	17	0.0	2.8	0.43	0.0	3.1	0.1	0.1	0.4
3 27 79	2.1	0.01			48	0.2	0.02	9.2	3.2		32	13		1.7	0.30	0.1	3.7		0.2	0.2
4 27 79	4.2	0.01	0.0	0.00	49	0.1	0.01	7.2	3.2	0.30	33	13	0.0	1.7	0.29	0.0	3.6	0.1	0.0	0.3
5 28 79	14	0.02			96	0.5	0.03	110	5.5		73	35		4.3	0.69	0.2	8.8		0.4	1.4
6 20 79	7.6	0.04			83	0.4	0.01	83	5.7		71	31		3.8	0.58	0.2	10		0.6	0.9
7 20 79	150	0.08	0.0	0.04	330	2.9	1.2	140	4.9	1.5	220	54	0.1	10	2.5	0.6	33	0.8	1.1	3.9
8 11 79	5.4	0.01			78	0.3	0.14	1.9	7.0		44	20		3.4	0.55	0.1	4.1		0.2	0.2

TABLE 38. WATER QUALITY FOR SITE 7085 HAMILTON COUNTY, TENNESSEE

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 17 79	24	0.2			10	1470	986	0.43	2.7		0	0	0	0.6	790	0.0					
4 27 79	23	0.002	45	0.00	25	1340	989	0.51	2.8	400	0	0	0	0.6	730	0.0					
5 28 79	16	0.003				1490	945	0.42	2.8	400	0	0	0	0.8	720	0.2					
6 20 79	22	0.015	54		10	1760	816	0.63	2.7	450	0	0	0	1.1	560	0.0					
7 20 79	21	0.02	70*	1.2	8	1850	1110	0.46	2.9	390	0	0	0	0.7	830	0.1	0.1	0.48	1.60	0.20	0.02
8 11 79	23	0.008	0	0.02	15	2110	883	0.50	2.7	390	0	0	0	1.2	650	0.0	0.2	0.34	1.00	0.00	0.02

* 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																			
4 17 79	33	0.00			68	0.4	0.04		3.0		42	15		2.0	0.68	0.1	15		0.2	0.9
4 27 79	34	0.02	0.0	0.00	73	0.4	0.03	43	3.1	0.30	48	19	0.1	2.3	0.64	0.1	13	0.1	0.4	0.9
5 28 79	27	0.01			59	0.3	0.03	42	2.6		39	17		1.8	0.59	0.1	14		0.2	0.8
6 20 79	28	0.03			71	0.4	0.01	42	3.7		45	20		2.4	0.66	0.1	17		0.2	1.0
7 20 79	26	0.02	0.0	0.01	74	0.4	0.02	64	4.8	0.40	49	21	0.0	3.0	0.69	0.1	16	0.2	0.3	0.9
8 11 79	22	0.04			66	0.3	0.02	43	3.4		40	18		2.2	0.58	0.1	14		0.2	0.8

TABLE 39. WATER QUALITY FOR SITE 7086 HAMILTON COUNTY, TENNESSEE

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 17 79	21	0.08			3	1000	657	0.25	2.9		0	0	0	0.5	520	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																			
4 17 79	39	0.00			24	0.2	0.05		1.6		18	6.3		1.0	0.49	0.1	20		0.1	1.0

TABLE 40. WATER QUALITY FOR SITE 7091 MARION COUNTY, TENNESSEE

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 16 77	26	0.0008			25	150	84	7.46	7.4		59	72	0	0.8	10	0.1					
9 16 77	19	0.02			25	307	153	13.4	7.6		119	144	0	1.1	12	0.0					
10 13 77	16	0.01			20	187	96	12.3	7.3		73	89	0	1.8	7	0.0					
11 9 77	16	0.6	58		30	154	97	9.04	6.5		75	92	0	1.7	9	0.1					
12 7 77	8	0.1	23*		10	174	120	4.57	7.9		89	107	0	1.7	20	0.0					
1 5 78	10	0.02			0	318	152	12.9	8.1		130	156	1	2.0	10	0.1					
2 15 78	1	0.7			8	22	18	1.07	6.1		2	2	0	1.3	7	0.1					
3 30 78	13	0.04			8	277	154	12.2	8.3		128	152	2	2.6	11	0.1					
4 27 78	15	0.06	47*		20	285	160	11.3	8.3		132	157	2	2.6	13	0.1					
5 25 78		0.0001	46*		0	241	148	10.9	8.0		106	127	1	1.6	14	0.0					
2 22 79	10	0.008	32		2	236	135	13.0	8.1		93	112	1	1.6	11	0.1					
3 26 79	11	0.01			3	184	111	9.00	8.1	-91	84	102	1	1.9	11	0.0					
4 24 79	17	0.004	26	0.00	15	238	141	12.7	8.1		102	123	1	1.6	12	0.0					
5 28 79	15	0.05	3		10	167	100	11.6	8.1	-70	74	89	1	1.7	8	0.0					
6 21 79	17	0.003	23	0.50	7	333	171	14.6	8.2		134	161	2	2.5	12	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 16 77	0.1	0.02			25	0.0	0.01	0.1	2.9		3.0	0.1		0.6	0.01	0.1	<2.7		0.0	0.0
9 16 77	0.1	0.04			53	0.0	0.00	0.1	1.0		6.0	0.0		1.7	0.00	0.0	3.1		0.0	0.2
10 13 77	0.1		0.0	0.00	29	0.0	0.00	0.1	0.8	0.06	3.8	0.0	0.0	1.7	0.01	0.0	3.5	0.1	0.0	0.0
11 9 77	0.0	0.00			27	0.0	0.00	0.0	0.9		3.9	0.0		1.8	0.00	0.0	3.4		0.0	0.0
12 7 77	0.0	0.00			31	0.0	0.00	0.0	0.6		4.6	0.0		1.2	0.00	0.0	3.3		0.0	0.0
1 5 78	0.1	0.00	0.0	0.00	46	0.0	0.00	0.0	0.6	0.25	5.9	0.0	0.0	1.6	0.02	0.0	3.3	0.2	0.0	0.0
2 15 78	0.1	0.02			1.2	0.0	0.00	0.1	0.7		1.0	0.0		1.1	0.01	0.0	1.8		0.1	0.0
3 30 78	0.1	0.02			45	0.1	0.01	0.1	1.1		7.0	0.0		1.9	0.03	0.1	3.3		0.2	0.0
4 27 78	0.1	0.00	0.0	0.00	48	0.0	0.00	0.2	0.9	0.10	6.9	0.0	0.0	1.7	0.00	0.0	3.6	0.2	0.0	0.0
5 25 78	0.1	0.00			50	0.0	0.00	0.0	0.7		6.9	0.0		1.8	0.00	0.0	4.1		0.0	0.0
2 22 79	0.1	0.00			52	0.0	0.00	0.0	0.6		5.2	0.0		1.2	0.00	0.0	2.8		0.0	0.1
3 26 79	0.1	0.00	0.0	0.00	34	0.0	0.01	0.0	0.8	0.15	4.2	0.0	0.0	1.3	0.02	0.1	3.0	0.0	0.0	0.0
4 24 79	0.1	0.00	0.0	0.00	50	0.0	0.02	0.0	1.1	0.35	5.8	0.0	0.0	1.8	0.02	0.0	3.4	0.2	0.0	0.0
5 28 79	0.1	0.01			33	0.0	0.00	0.0	0.7		3.4	0.0		1.2	0.00	0.0	3.2		0.0	0.0
6 21 79	0.1	0.01			59	0.0	0.00	0.0	1.1		6.9	0.0		1.6	0.01	0.0	3.5		0.0	0.0

TABLE 41. WATER QUALITY FOR SITE 7092 MARION COUNTY, TENNESSEE

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							
6 22 77	22	0.06			4	771	392	0.74	3.0		0	0	0	1.3	280	0.0					
7 15 77	21	0.015			150	407	251	0.62	4.4		0	0	0	2.2	180	0.0					
8 11 77		0.06			95	682	330	0.74	3.3		0	0	0	1.3	230	0.0					
9 15 77	21	0.2			35	638	389	0.94	3.4		0	0	0	0.5	260	0.1					
10 13 77	12	0.3			4	448	239	0.74	4.1		0	0	0	1.2	160	1.6					
11 8 77	17	0.6	68		35	515	375	0.57	3.3		0	0	0	1.2	280	0.4					
12 6 77	8	0.6	24*		10	366	253	0.60	3.4		0	0	0	1.0	180	0.7					
1 4 78	4	0.4			4	484	260	0.76	3.4		0	0	0	1.1	180	0.7					
4 18 79	13	0.5			30	345	196	0.69	3.7		0	0	0	1.5	140	0.4					
4 24 79	18	0.02	32	0.00	8	431	280	0.94	3.6	42	0	0	0	1.8	190	0.4					
5 28 79	15	0.03	38	0.65	40	256	152	0.74	3.9	24	0	0	0	1.2	100	0.2					
6 21 79	20	0.03	14		50	430	242	0.80	3.7	44	0	0	0	2.5	170	0.2					
7 19 79	20	0.015	38*	0.01	50	609	386	0.74	3.5	52	0	0	0	2.0	280	0.1	0.1	0.23	0.75	0.30	0.01
8 10 79	23	0.04	6	0.11	65	561	315	0.85	3.5	40	0	0	0	2.6	220	0.0	0.1	0.29	0.20	0.00	0.01

* 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																			
6 22 77	7.6	0.00			40	0.1	0.00	10	1.8		26	7.8		3.8	0.07	0.0	6.7		0.0	0.1
7 15 77	0.1	0.01			26	0.0	0.01	23	1.2		9.2	3.4		5.3	0.02	0.1	2.4		0.1	0.0
8 11 77	3.6	0.02			33	0.1	0.01	17	1.6		21	6.8		4.3	0.07	0.2	4.8		0.1	0.1
9 15 77	9.2	0.03			50	0.2	0.01	9.5	1.7		30	10		3.6	0.11	0.0	6.0		0.1	0.2
10 13 77	4.6		0.1	0.00	27	0.1	0.02	2.6	2.9	0.07	14	4.5	0.0	2.6	0.11	0.0	4.5	0.1	0.0	0.1
11 8 77	17	0.00			30	0.1	0.04	8.7	1.8		21	4.0		2.1	0.21	0.0	4.1		0.0	0.2
12 6 77	8.0	0.00			22	0.1	0.02	6.9	1.7		13	5.7		2.7	0.10	0.0	4.1		0.1	0.1
1 4 78	4.9	0.00	0.0	0.00	23	0.0	0.00	9.5	1.6	0.15	20	5.2	0.0	2.8	0.07	0.0	4.2	0.1	0.0	0.1
4 18 79	1.4	0.00			18	0.1	0.01		2.0		13	6.0		2.0	0.13	0.0	3.6		0.0	0.1
4 24 79	2.2	0.00	0.0	0.00	35	0.2	0.01	2.2	2.4	0.25	23	11	0.0	3.0	0.15	0.0	3.5	0.1	0.0	0.1
5 28 79	0.9	0.01			15	0.1	0.01	3.3	1.8		9.2	6.6		1.9	0.09	0.0	2.9		0.0	0.1
6 21 79	1.7	0.01			26	0.1	0.01	0.2	3.0		17	11		3.5	0.13	0.0	4.2		0.0	0.1
7 19 79	2.2	0.01	0.1	0.00	43	0.2	0.01	3.0	2.6	0.30	24	16	0.0	4.2	0.05	0.1	4.5	0.1	0.2	0.1
8 10 79	1.6	0.02			37	0.1	0.00	3.3	2.5		23	14		3.9	0.07	0.1	4.1		0.0	0.1

TABLE 42. WATER QUALITY FOR SITE 7093 MARION COUNTY, TENNESSEE

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											
6 22 77	19	0.08			4	60	38	1.33	6.9		8	10	0	1.0	16	0.1					
7 15 77	20	0.04			50	69	44	2.97	6.9		20	24	0	1.5	9	0.8					
8 11 77	19	0.002			50	98	58	3.31	6.7		29	35	0	1.1	14	0.1					
9 15 77	20	0.2			30	64	39	1.64	6.9		7	8	0	1.7	15	0.2					
10 13 77	12	0.4			8	62	42	1.25	6.7		4	5	0	1.0	20	0.2					
11 8 77	16	2.5	71		20	50	40	1.00	6.4		2	3	0	1.0	21	0.2					
12 6 77	6	0.8	19*		8	44	38	1.02	5.8		2	3	0	0.8	20	0.1					
1 4 78	5	0.5			0	52	34	1.23	6.4		3	4	0	0.9	17	0.1					
2 15 78	6	0.5			8	44	31	1.50	6.5		2	3	0	0.9	13	0.2					
3 29 78	12	0.15			4	51	33	1.38	6.2		2	3	0	0.9	16	0.1					
4 27 78	10	0.25	53*		10	44	28	1.32	6.4		2	3	0	2.3	11	0.1					
5 25 78	18	0.08			0	54	41	1.17	6.3		4	5	0	0.8	20	0.2					
6 21 78	21	0.03	29*			59	37	2.00	6.8		10	12	0	0.9	12	0.2					
8 2 78	25	0.0000	15		0	151	84	11.3	7.7		62	76	0	4.0	5	0.0					
10 19 78	10	0.0001	14		4	90	56	1.57	7.3		13	16	0	1.1	24	0.0					
11 20 78	10	0.0002	4		4	98	56	1.92	7.2	-22	21	26	0	1.8	18	0.1					
12 28 78	4	0.015	1		3	46	37	1.17	6.3	-1	2	2	0	0.6	18	0.6					
2 22 79	7	0.06	3		4	38	28	0.96	6.0	2	1	1	0	1.9	13	0.3					
3 26 79	9	0.03			1	62	34	1.14	6.2	1	2	2	0	1.1	17	0.2					
4 24 79	17	0.01	6	0.00	4	56	48	1.07	6.1	1	2	2	0	0.5	28	0.1					
5 28 79	12	0.02	15		15	56	39	1.12	6.3	3	2	3	0	0.5	20	0.1					
6 21 79	17	0.02	36	0.01	40	66	47	1.42	7.1		11	13	0	1.3	20	0.1					
7 19 79	18	0.0002	30*		20	66	42	1.99	7.2	-9	12	15	0	1.2	15	0.1	0.0	0.01	0.75	0.00	0.01
8 10 79	20	0.003	4		20	62	36	2.00	7.3	1	9	11	0	1.2	12	0.0	0.0	0.02	0.00	0.00	0.00

* 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																			
6 22 77	0.0	0.00			3.6	0.0	0.06	0.1	1.5		2.3	0.0		1.4	0.00	0.0	3.2		0.0	0.0
7 15 77	0.0	0.00			7.0	0.0	0.01	0.1	1.4		2.4	0.0		1.7	0.01	0.0	2.4		0.0	0.0
8 11 77	0.1	0.00			12	0.0	0.01	0.1	1.8		3.2	0.1		1.8	0.01	0.1	3.2		0.0	0.0
9 15 77	0.1	0.00			5.5	0.0	0.00	0.1	1.5		2.3	0.0		1.7	0.00	0.0	2.7		0.0	0.0
10 13 77	0.1	0.00	0.0	0.00	4.9	0.0	0.01	0.1	1.6	0.00	2.5	0.1	0.0	1.7	0.02	0.0	3.3	0.0	0.0	0.0
11 8 77	0.2	0.00			3.4	0.0	0.00	0.1	1.4		2.6	0.0		1.4	0.00	0.0	2.9		0.0	0.0
12 6 77	0.1	0.00			3.5	0.0	0.00	0.1	1.0		2.7	0.1		0.9	0.01	0.0	3.0		0.1	0.0
1 4 78	0.0	0.00	0.0	0.00	3.2	0.0	0.00	0.1	1.0	0.03	2.7	0.1	0.0	1.2	0.00	0.0	2.7	0.0	0.0	0.0
2 15 78	0.1				2.8	0.2	0.01	0.2	1.5		2.6	0.0		1.0	0.04	0.1	2.6		0.5	0.0
3 29 78	0.1	0.01			3.4	0.0	0.03	0.1	1.4		2.7	0.1		1.4	0.02	0.0	2.4		0.0	0.0
4 27 78	0.1	0.00	0.0	0.00	2.5	0.0	0.00	0.1	1.1	0.01	2.1	0.0	0.0	1.1	0.00	0.0	2.7	0.0	0.0	0.0
5 25 78	0.0	0.00	0.0	0.00	3.9	0.0	0.00	0.1	1.4	0.04	2.8	0.0	0.0	1.2	0.02	0.0	3.6	0.0	0.0	0.0
6 21 78	0.0	0.00			5.3	0.0	0.01	0.1	1.3		2.4	0.0		1.4	0.00	0.0	3.0		0.0	0.0
8 2 78	0.1	0.01			20	0.0	0.01	2.5	1.9		2.7	0.2		3.0	0.02	0.1	3.2		0.0	0.0
10 19 78	0.1	0.00	0.0	0.00	9.4	0.0	0.00	0.4	1.5	0.05	2.7	0.1	0.1	1.8	0.01	0.0	3.1	0.0	0.0	0.0
11 20 78	0.1	0.01			10	0.0	0.00	0.3	1.6		2.2	0.1		1.8	0.01	0.0	3.1		0.0	0.0
12 28 78	0.1	0.00			4.0	0.0	0.01	0.0	1.5		2.2	0.0		1.6	0.03	0.1	2.7		0.1	0.0
2 22 79	0.1	0.00			2.8	0.0	0.00	0.0	0.9		1.6	0.0		0.8	0.01	0.0	2.2		0.0	0.2
3 26 79	0.1	0.00			3.7	0.0	0.01	0.1	1.2		2.2	0.0		1.0	0.02	0.1	2.6		0.1	0.0
4 24 79	0.1	0.00	0.0	0.00	5.5	0.0	0.01	0.1	1.2	0.10	3.5	0.5	0.0	1.2	0.01	0.0	2.8	0.0	0.0	0.0
5 28 79	0.1	0.00			4.2	0.0	0.00	0.1	1.4		2.5	0.1		1.1	0.01	0.0	3.1		0.0	0.1
6 21 79	0.0	0.01			6.0	0.0	0.02	0.0	1.6		2.7	0.0		1.3	0.01	0.0	3.4		0.0	0.0
7 19 79	0.0	0.00	0.0	0.00	6.8	0.0	0.00	0.3	1.3	0.04	2.7	0.1	0.0	1.5	0.00	0.0	2.5	0.0	0.0	0.1
8 10 79	0.1	0.00			5.3	0.0	0.04	0.2	1.4		2.1	0.1		1.6	0.00	0.0	3.2		0.0	0.0

TABLE 43. WATER QUALITY FOR SITE 7095 MARION COUNTY, TENNESSEE

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										
2 15 78	6	0.4			8	102	61	0.81	4.7		0	0	0	2.9	35	0.1					
3 29 78	11	0.4			0	113	64	0.70	4.4		0	0	0	1.5	41	0.2					
4 27 78	7	0.5	49*		15	117	61	0.71	4.5		0	0	0	1.7	39	0.1					
5 25 78	18	0.1			0	104	64	0.72	4.5		0	0	0	0.8	41	0.1					
6 21 78	21	0.2	41*			105	56	0.68	4.0		0	0	0	0.7	38	0.0					
8 2 78	22	0.04	15		4	153	87	0.60	4.1		0	0	0	1.3	58	0.0					
9 7 78	23	0.0001	20*		0	151	92	0.62	4.5		0	0	0	1.3	62	0.0					
10 19 78	10	0.0001	26*		3	159	92	0.68	4.6		0	0	0	1.1	61	0.0					
11 20 78	12	0.003	6		3	163	84	0.61	4.1	24	0	0	0	1.2	57	0.0					
12 28 78	6	0.04	1		0	150	105	0.54	4.3		0	0	0	1.0	73	0.3					
2 22 79	5	1.0	6		1	147	97	0.84	4.4	30	0	0	0	1.0	62	0.2					
3 26 79	9	0.2			0	111	72	0.67	4.6	22	0	0	0	1.5	47	0.0					
4 18 79	12	0.6			0	120	74	0.60	4.2		0	0	0	0.9	51	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																			
2 15 78	2.0				5.3	0.2	0.01	0.2	1.2		3.8	1.0		1.7	0.05	0.1	3.1		0.4	0.0
3 29 78	2.2	0.01			5.3	0.0	0.00	0.1	0.9		3.8	1.2		1.2	0.03	0.0	2.9		0.1	0.0
4 27 78	1.9	0.00	0.0	0.00	5.2	0.0	0.00	0.1	0.7	0.01	3.2	1.0	0.0	1.8	0.01	0.0	3.1	0.0	0.0	0.0
5 25 78	2.3	0.00	0.0	0.00	5.4	0.0	0.00	0.0	0.9	0.04	3.5	1.1	0.0	1.6	0.04	0.0	2.8	0.0	0.0	0.0
6 21 78	1.9	0.00			4.3	0.0	0.01	0.2	0.9		3.0	0.9		1.5	0.02	0.0	2.3		0.0	0.0
8 2 78	2.7	0.01			6.0	0.1	0.02	0.2	1.3		4.4	1.9		1.7	0.08	0.0	3.9		0.0	0.1
9 7 78	2.6	0.00			7.0	0.1	0.02	0.2	0.9		4.5	2.2		1.9	0.06	0.0	4.3		0.0	0.0
10 19 78	3.1	0.00	0.0	0.00	7.6	0.0	0.00	0.3	0.8	0.07	5.2	3.2	0.0	1.5	0.05	0.0	3.5	0.0	0.0	0.0
11 20 78	2.8	0.01			6.3	0.0	0.00	0.0	1.0		4.4	2.4		1.4	0.05	0.0	3.6		0.0	0.1
12 28 78	4.8	0.00			7.8	0.1	0.01	0.0	1.0		4.9	1.9		1.4	0.07	0.1	3.4		0.1	0.1
2 22 79	4.3	0.00			9.8	0.0	0.02	0.1	1.2		6.0	1.5		2.7	0.05	0.0	3.2		0.0	
3 26 79	3.7	0.00			5.8	0.0	0.02	0.1	0.9		4.0	1.3		1.3	0.06	0.1	3.2		0.0	0.1
4 18 79	2.4	0.00			5.8	0.0	0.00	0.0	0.9		3.7	1.3		0.9	0.04	0.0	3.4		0.0	0.0

TABLE 44. WATER QUALITY FOR SITE 7098 MARION COUNTY, TENNESSEE

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														
1 4 79	5	0.08	1		0	467	272	0.94	3.7	72	0	0	0	1.0	180	0.5					
4 18 79	13	0.3			0	401	224	0.72	3.6		0	0	0	1.0	160	0.1					

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 4 79	11	0.01	0.1	0.00	25	0.1	0.02	0.3	2.3	0.20	27	3.4	0.0	3.5	0.11	0.1	4.9	0.1	0.1	0.2
4 18 79	4.2	0.01			20	0.0	0.01	0.1	2.0		17	2.1		2.2	0.07	0.0	4.9		0.0	0.1

TABLE 45. WATER QUALITY FOR SITE 7101 MORGAN COUNTY, TENNESSEE

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										
6 7 77	16	0.15			4	183	131	3.47	8.1		76	92	1	5.5	28	0.2					
7 18 77	22	0.015			20	285	135	4.59	7.8		82	99	0	8.1	25	0.1					
8 15 77	21	0.15			15	213	114	2.54	7.6		53	65	0	6.6	32	0.2					
9 16 77	19	7			55	154	77	2.70	6.8		28	34	0	4.5	23	0.1					
10 14 77	8	0.4			4	182	97	2.78	6.8		39	47	0	4.4	28	0.1					
11 10 77	13	2.5	23		20	148	83	2.35	6.5		38	46	0	4.4	25	0.1					
12 8 77	4	4	21*		10	110	70	2.40	6.7		26	32	0	3.9	22	0.2					
1 6 78	3	1.5			8	152	65	4.69	7.4		37	45	0	4.7	10	0.3					
2 14 78	1	1.5			0	172	93	2.56	7.9		40	49	0	6.8	26	0.4					
3 22 78	9	6			6	172	87	2.63	7.5		34	41	0	8.7	23	0.3					
4 28 78	16	3	32*		15	151	85	2.58	7.5		33	40	0	6.9	24	0.2					
5 26 78	18	0.9			0	182	112	2.05	7.3		43	52	0	2.9	41	0.6					
6 22 78	23	0.1	46*			182	100	2.49	7.5		60	73	0	3.7	27	0.2					
8 1 78	21	0.07	42*		4	228	131	3.71	8.1		73	88	1	5.6	28	0.2					
9 18 78	24	0.008	21*		10	238	143	4.31	7.8		75	91	0	7.3	28	0.1					
10 26 78	16	0.0003	31*		4	226	131	3.18	7.2	-68	64	78	0	8.1	31	0.0					
11 22 78	8	0.008	5		3	231	133	2.88	7.5	-68	65	79	0	7.8	34	0.1					
1 9 79	1	0.8			3	112	72	2.18	7.3	-27	23	28	0	3.8	24	0.2					
2 26 79	3	0.05			110	120	88	1.10	7.2		16	20	0	5.0	44	0.4					
4 4 79	10	1.5			9	121	74	2.41	7.4	-18	23	28	0	6.3	22	0.2					
5 7 79	17	0.15	6	0.00	9	143	93	2.25	7.7	-31	36	44	0	4.8	31	0.2					
5 30 79	14	0.07	28	5.0	20	156	92	2.45	7.7	-31	45	55	0	5.4	25	0.1					
6 28 79	15	0.05	12		5	202	112	3.13	8.1	-54	57	68	0	6.0	28	0.2	0.0	0.01	0.85	0.10	0.00
7 23 79	17	0.5	8	0.01	20	132	73	2.90	7.8	-26	31	38	0	3.3	20	0.1	0.0	0.00	0.35	0.00	0.01

* 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																			
6 7 77	0.0	0.01			16	0.0	0.06	0.0	2.0		5.9	0.0		20	0.00	0.0	2.9		0.0	0.0
7 18 77	0.2	0.04			20	0.2	0.01	0.2	3.0		7.5	0.0		21	0.09	0.0			0.0	0.0
8 15 77	0.1	0.02			17	0.0	0.01	0.0	2.1		5.9	0.1		12	0.02	0.2	2.1		0.0	0.0
9 16 77	0.1	0.00			13	0.0	0.00	0.1	1.5		4.3	0.0		8.5	0.00	0.0	2.2		0.0	0.0
10 14 77	0.0	0.00	0.0	0.00	17	0.0	0.01	0.1	1.9	0.03	5.3	0.0	0.0	11	0.02	0.0	2.4	0.0	0.0	0.0
11 10 77	0.0	0.00			11	0.0	0.00	0.0	1.4		4.2	0.0		8.9	0.00	0.0	2.2		0.0	0.0
12 8 77	0.0	0.00			11	0.0	0.00	0.1	0.9		4.5	0.0		5.7	0.00	0.0	2.2		0.1	0.0
1 6 78	0.1	0.00	0.0	0.00	9.7	0.1	0.04	0.0	1.8	0.00	3.8	0.0	0.0	7.7	0.07	0.2	1.4	0.0	0.0	0.0
2 14 78	0.0	0.03			14	0.0	0.00	0.0	1.3		5.1	0.0		10	0.00	0.0	1.8		0.0	0.0
3 22 78	0.1	0.02			13	0.0	0.01	0.0	1.5		5.2	0.0		10	0.02	0.0	1.8		0.1	0.0
4 28 78	0.0	0.00	0.0	0.00	12	0.0	0.01	0.1	1.7	0.03	5.1	0.0	0.1	9.3	0.00	0.0	2.0	0.0	0.0	0.0
5 26 78	0.0	0.01			13	0.0	0.00	0.1	1.8		6.2	0.0		15	0.02	0.0	1.8		0.0	0.0
6 22 78	0.1	0.00	0.0	0.00	11	0.0	0.02	0.1	1.9	0.06	4.3	0.1	0.0	13	0.00	0.0	1.3	0.0	0.0	0.0
8 1 78	0.0	0.02			17	0.0	0.02	0.1	2.2		6.4	0.2		20	0.04	0.1	3.1		0.1	0.0
9 18 78	0.0	0.02			20	0.0	0.02	0.0	2.4		6.5	0.1		26	0.02	0.0	3.3		0.0	0.0
10 26 78	0.1	0.02	0.0	0.00	17	0.0	0.01	0.1	2.0	0.15	5.4	0.0	0.0	22	0.01	0.0	2.9	0.0	0.0	0.0
11 22 78	0.1	0.01			18	0.0	0.00	0.0	1.9		5.8	0.1		20	0.01	0.0	2.8		0.0	0.0
1 9 79	0.1	0.00			12	0.0	0.01	0.1	1.2		3.8	0.0		6.6	0.02	0.0	2.5		0.0	0.1
2 26 79	0.5	0.00			11	0.0	0.00	0.3	1.1		4.6	0.0		5.1	0.00	0.0	2.5		0.0	0.0
4 4 79	0.1	0.00	0.0	0.00	13	0.0	0.01	0.1	1.2	0.07	4.3	0.0	0.0	6.4	0.01	0.0	2.2	0.0	0.0	0.0
5 7 79	0.1	0.01			15	0.0	0.00	0.1	1.5		5.7	0.2		7.7	0.01	0.0	2.2		0.0	0.1
5 30 79	0.1	0.01			14	0.0	0.01	0.0	1.5		4.6	0.0		8.1	0.01	0.0	2.4		0.0	0.1
6 28 79	0.0	0.02			1[illegible]	0.0	0.00	0.0	1.6		6.5	0.0		12	0.00	0.0	2.4		0.0	0.0
7 23 79	0.1	0.01			13	0.0	0.01	0.0	1.6		4.4	0.0		5.3	0.02	0.0	2.8		0.1	0.0

TABLE 46. WATER QUALITY FOR SITE 7102 MORGAN COUNTY, TENNESSEE

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 22 77	17	0.025			10	902	655	1.00	3.5		0	0	0	1.0	450	0.1					
10 14 77	8	0.04			40	896	611	0.89	3.5		0	0	0	1.3	420	1.6					
11 10 77	12	0.25	24		50	746	568	1.02	3.7		0	0	0	1.4	390	0.8					
12 8 77	3	0.2	27*		10	1000	777	0.93	3.8		0	0	0	1.6	530	7.8					
1 6 78	2	0.06			2	905	665	1.01	3.4		0	0	0	1.4	460	1.5					
2 14 78	3	0.05			0	975	699	0.97	4.2		0	0	0	1.2	490	2.3					
3 22 78	9	0.025			20	897	605	0.99	3.9		0	0	0	1.3	420	1.5					
4 28 78	18	0.03	35*		20	896	663	0.95	3.7		0	0	0	1.8	470	0.6					
5 26 78	20	0.02			0	1000	752	1.09	3.9		0	0	0	2.1	490	8.0					
6 22 78	19	0.025	28*			920	774	0.83	3.9		0	0	0	0.8	490	19					
8 1 78	21	0.02	21*		10	1280	872	1.01	3.8		0	0	0	1.5	610	2.0					
9 15 78	20	0.008	32*		8	1080	739	1.10	4.1		0	0	0	1.7	500	2.9					
10 26 78	14	0.001	15		3	900	705	0.90	4.0		0	0	0	1.2	510	0.0					
11 22 78	8	0.01	3		4	1220	935	0.95	4.6	38	0	0	0	2.3	650	7.4					
1 9 79	1	0.2	13		25	1270	1120	0.86	5.0	10	0	0	0	1.9	730	26					
2 26 79	4	0.07	172		130	1030	815	0.93	6.2	6	2	2	0	1.7	560	10					
3 29 79	10	0.01	23		5	1040	864	0.98	4.4	27	0	0	0	1.5	610	2.6					
5 7 79	21	0.007	8	0.00	30	982	779	1.02	4.6	18	0	0	0	1.5	550	0.5					
5 30 79	17	0.01	17		25	965	761	0.97	5.8	23	1	1	0	1.1	540	4.6					
6 28 79	19	0.003	5		25	1220	957	0.93	5.1	16	0	0	0	1.1	690	3.8	0.7	0.11	0.95	0.20	0.01
7 23 79	22	0.05	9		15	1130	747	1.05	7.6	-21	25	31	0	1.0	510	4.6	0.5	0.09	0.40	0.10	0.01

* 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 22 77	4.7	0.04			66	0.2	0.02	2.3	4.5		68	22		9.5	0.16	0.1	12		0.1	0.2
10 14 77	4.5	0.00	0.0	0.00	62	0.2	0.02	5.2	4.7	0.15	53	16	0.0	10	0.26	0.0	9.1	0.1	0.1	0.2
11 10 77	3.9	0.04			61	0.2	0.01	2.9	4.1		58	16		8.6	0.18	0.0	9.6		0.1	0.2
12 8 77	4.4	0.00			77	0.2	0.01	6.8	3.6		81	14		7.1	0.26	0.0	7.9		0.1	0.2
1 6 78	6.3	0.02	0.0	0.00	75	0.2	0.03	6.0	4.2	0.15	68	16	0.0	7.0	0.27	0.1	8.1	0.2	0.1	0.2
2 14 78	5.3	0.04			72	0.2	0.01	3.1	3.9		73	16		8.0	0.27	0.0	7.4		0.0	0.2
3 22 78	4.1	0.02			57	0.2	0.02	4.0	4.4		67	16		8.8	0.24	0.0	7.0		0.1	0.2
4 28 78	4.3	0.00	0.0	0.00	61	0.2	0.01	1.5	4.3	0.10	71	20	0.0	10	0.21	0.0	7.9	0.1	0.0	0.1
5 26 78	2.7	0.01			79	0.2	0.01	1.6	4.8		88	16		11	0.24	0.0	8.5		0.2	0.2
6 22 78	2.9	0.01	0.0	0.00	75	0.2	0.02	0.6	4.6	0.20	68	16	0.0	11	0.20	0.1	7.5	0.1	0.2	0.2
8 1 78	1.8	0.02			100	0.2	0.02	4.8	6.3		85	16		17	0.27	0.1	8.1		0.2	0.2
9 15 78	1.1	0.02			85	0.2	0.03	0.6	7.3		77	18		20	0.18	0.1	8.9		0.1	0.1
10 26 78	0.8	0.01	0.0	0.00	70	0.1	0.01	2.0	5.4	0.35	64	18	0.0	16	0.10	0.1	6.8	0.1	0.1	0.0
11 22 78	0.6	0.02			110	0.1	0.01	3.1	4.5		86	19		15	0.21	0.2	6.6		0.2	0.1
1 9 79	1.2	0.00			120	0.1	0.01	4.0	6.5		99	11		16	0.25	0.2	5.8		0.3	0.2
2 26 79	0.4	0.02			98	0.1	0.03	0.8	4.4		76	7.6		8.7	0.22	0.1	5.1		0.3	0.4
3 29 79	2.2	0.01			110	0.2	0.01	2.2	5.0		82	13		11	0.28	0.1	7.0		0.3	0.2
5 7 79	0.8	0.01			97	0.1	0.01	1.2	5.4		78	13		12	0.23	0.0	6.5		0.0	0.2
5 30 79	0.2	0.01			89	0.1	0.00	1.3	4.0		75	11		9.5	0.19	0.1	5.8		0.2	0.2
6 28 79	0.6	0.02			100	0.2	0.01	1.7	5.6		94	15		15	0.21	0.2	7.7		0.3	0.1
7 23 79	0.3	0.02	0.0	0.00	91	0.1	0.01	0.7	5.1	0.45	78	6.7	0.0	9.7	0.15	0.1	5.5	0.1	0.2	0.0

TABLE 47. WATER QUALITY FOR SITE 7103 MORGAN COUNTY, TENNESSEE

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											
6 16 77	18	0.008			20	61	49	1.16	6.9		2	3	0	1.0	24	0.1					
7 18 77		0.0003			110	73	53	1.22	5.6		4	5	0	1.1	26	0.2					
8 15 77	21	0.04			30	68	49	1.36	6.2		7	8	0	0.8	23	0.0					
9 16 77	20	0.4			150	77	45	1.18	6.6		4	5	0	0.6	23	0.0					
10 14 77	11	0.04			10	95	52	1.19	6.3		1	1	0	0.9	28	0.1					
11 10 77	13	0.1	64		30	73	48	1.39	6.5		3	4	0	1.1	23	0.0					
12 8 77	6	0.15	21*		4	54	42	1.24	6.0		3	4	0	1.1	20	0.2					
1 6 78	4	0.04			8	69	45	1.22	6.3		3	4	0	1.5	22	0.2					
2 14 78	2	0.1			0	72	48	1.23	6.6		3	4	0	0.8	25	0.2					
3 22 78	8	0.04			4	71	42	1.35	6.6		4	5	0	1.0	20	0.2					
4 28 78	15	0.1	55*		15	66	43	1.42	6.8		4	5	0	1.2	20	0.1					
5 26 78	18	0.03			0	71	59	1.23	6.6		5	6	0	1.4	30	0.1					
6 22 78	20	0.001	63*			65	49	1.56	6.5		8	10	0	0.6	21	0.1					
1 9 79	2	0.1	6		1	57	41	1.06	5.8		1	1	0	0.9	23	0.0					
2 26 79	4	0.3	7		8	54	41	1.13	6.2		2	2	0	0.9	22	0.1					
3 29 79	8	0.02	6		15	77	54	0.96	6.1	3	1	1	0	0.9	31	0.0					
5 7 79	15	0.004	10	0.05	35	69	47	1.31	7.0	0	7	9	0	1.5	21	0.2					
5 30 79	15	0.001	5		15	65	46	1.25	6.7	2	5	6	0	0.9	22	0.0					
7 23 79	18	0.06	35*	1.2	25	58	40	1.27	6.6	2	4	5	0	0.5	19	0.0	0.1	0.01	0.50	0.15	0.01

* 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																			
6 16 77	0.0	0.00			2.8	0.0	0.01	0.0	1.6		3.6	0.0		3.4	0.00	0.0	4.7		0.0	0.0
7 18 77	0.1	0.00			3.6	0.0	0.00	0.1	1.8		3.5	0.0		4.1	0.02	0.0	4.7		0.0	0.0
8 15 77	0.0	0.00			3.3	0.0	0.00	0.0	1.4		3.8	0.0		3.7	0.00	0.0	4.2		0.0	0.1
9 16 77	0.0	0.00			3.2	0.0	0.00	0.0	1.3		2.9	0.0		3.4	0.00	0.0	3.4		0.0	0.2
10 14 77	0.0	0.00	0.0	0.00	4.4	0.0	0.00	0.1	1.2	0.01	4.0	0.1	0.0	3.7	0.01	0.0	3.8	0.0	0.0	0.0
11 10 77	0.0	0.00			4.1	0.0	0.00	0.1	1.1		3.8	0.1		3.6	0.00	0.0	4.4		0.0	0.0
12 8 77	0.0	0.00			3.3	0.0	0.00	0.0	0.9		3.5	0.0		2.3	0.00	0.0	3.6		0.0	0.0
1 6 78	0.0	0.00	0.0	0.00	3.5	0.0	0.00	0.1	0.9	0.00	3.8	0.0	0.0	2.7	0.01	0.0	3.2	0.0	0.0	0.0
2 14 78	0.1	0.03			4.0	0.0	0.00	0.0	1.1		4.1	0.2		2.7	0.01	0.0	3.4		0.0	0.0
3 22 78	0.1	0.01			3.0	0.0	0.01	0.0	1.2		3.6	0.0		2.9	0.02	0.0	3.2		0.0	0.0
4 28 78	0.1	0.00	0.0	0.00	3.4	0.0	0.00	0.1	1.1	0.03	3.5	0.0	0.0	3.2	0.00	0.0	3.8	0.0	0.0	0.0
5 26 78	0.0	0.00			5.0	0.0	0.00	0.1	1.4		4.7	0.2		3.2	0.02	0.0	4.7		0.0	0.0
6 22 78	0.0	0.01	0.0	0.00	4.1	0.0	0.00	0.1	1.4	0.02	4.0	0.0	0.0	3.3	0.00	0.0	4.2	0.0	0.0	0.0
1 9 79	0.0	0.00			3.4	0.0	0.00	0.0	1.0		3.2	0.0		1.8	0.02	0.0	3.4		0.0	0.1
2 26 79	0.1	0.00			3.5	0.0	0.02	0.1	1.0		3.0	0.0		2.1	0.01	0.0	3.0		0.0	0.4
3 29 79	0.1	0.01			3.8	0.0	0.01	0.3	1.4		3.3	0.0		3.4	0.04	0.0	4.0		0.1	0.0
5 7 79	0.0	0.00			4.1	0.0	0.00	0.0	1.1		3.4	0.0		2.5	0.00	0.0	3.8		0.0	0.0
5 30 79	0.0	0.00			3.5	0.0	0.01	0.0	1.2		3.2	0.0		2.9	0.01	0.0	4.1		0.0	0.0
7 23 79	0.2	0.00	0.0	0.00	3.1	0.0	0.01	0.1	1.1	0.01	2.9	0.0	0.0	1.8	0.01	0.0	4.2	0.0	0.0	0.0

TABLE 48. WATER QUALITY FOR SITE 7111 OVERTON COUNTY, TENNESSEE

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 11 77	14	0.4			8	60	37	4.45	7.1		19	23	0	1.0	7	0.0					
11 7 77	14	1.5	30		25	53	33	4.84	6.9		15	18	0	1.1	5	0.1					
12 5 77	10	0.5	20*		4	38	31	1.94	6.4		11	14	0	1.2	10	0.0					
1 3 78	1	0.3			8	45	29	3.22	6.9		14	17	0	1.6	5	0.1					
2 8 78	1	0.1			0	50	27	5.30	7.0		14	17	0	0.7	4	0.0					
3 21 78	10	0.15			6	55	26	2.92	6.8		9	11	0	1.0	6	0.1					
4 25 78	17	0.05	65*		8	59	41	2.17	7.3		18	22	0	2.8	10	0.2					
5 23 78	19	0.06	52*		15	83	41	5.35	6.9		24	29	0	1.4	5	0.3					
6 20 78	21	0.02				114	72	4.18	7.6		48	58	0	0.9	13	0.0					
7 20 78	23	0.02	103*		10	134	75	16.5	7.6		60	73	0	0.9	4	0.0					
9 14 78	19	0.02	19*		15	82	62	5.73	6.8		35	43	0	0.2	7	2.0					
10 24 78	14	0.001	38*		10	190	116	10.8	8.3		87	104	1	1.1	10	0.0					
11 28 78	9	0.01	7		5	51	31	5.30	7.3		19	23	0	0.9	4	0.0					
1 3 79	3	0.7	1		6	37	24	2.93	6.9	-5	9	11	0	0.7	5	0.2					
2 28 79	7	0.05	26		3	50	34	3.96	7.3		16	20	0	0.8	6	0.2					
4 4 79	11	0.1			300	95	62	3.70	7.6	-26	30	37	0	1.2	13	0.1					
5 8 79	14	0.04	3	0.20	7	55	40	5.03	7.5		21	26	0	0.9	7	0.1					
5 30 79	13	0.01	20		10	53	36	5.04	7.4	-9	20	24	0	0.8	6	0.1					
6 26 79	19	0.01	2		9	107	67	11.6	8.0	-35	49	59	0	1.3	5	0.1	0.0	0.00	1.10	0.10	0.02
7 22 79	17	0.08	27*		8	46	34	3.34	7.3	-14	16	19	0	1.0	7	0.1	0.0	0.00	0.60	0.00	0.01
12 11 79	8	0.1			8	45	32	5.85	7.0	-11	20	24	0	0.9	4	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																			
10 11 77	0.1	0.00	0.0	0.00	9.3	0.0	0.00	0.1	0.7	0.03	1.5	0.0	0.0	1.2	0.01	0.0	2.2	0.0	0.0	0.0
11 7 77	0.0	0.00			7.8	0.0	0.00	0.1	0.6		1.4	0.0		1.3	0.01	0.0	2.6		0.0	0.0
12 5 77	0.1	0.00			5.7	0.0	0.00	0.2	0.6		1.2	0.0		0.8	0.00	0.0	2.2		0.0	0.0
1 3 78	0.1	0.00	0.0	0.00	5.2	0.0	0.00	0.1	0.5	0.01	1.2	0.0	0.0	0.8	0.02	0.1	2.3	0.0	0.1	0.0
2 8 78	0.0	0.00			6.2	0.0	0.00	0.1	0.6		1.3	0.0		0.8	0.01	0.0	2.0		0.0	0.0
3 21 78	0.0	0.01			5.2	0.0	0.00	0.1	0.6		1.2	0.0		0.9	0.01	0.0	2.1		0.0	0.0
4 25 78	0.4	0.00	0.0	0.00	7.2	0.0	0.00	0.4	0.6	0.03	1.7	0.1	0.0	1.1	0.01	0.0	2.2	0.0	0.1	0.0
5 23 78	0.1	0.00			9.7	0.0	0.00	0.1	0.9		1.4	0.0		0.9	0.00	0.0	2.4		0.0	0.0
6 20 78	0.4	0.00			18	0.0	0.00	0.6	0.8		2.6	0.2		1.3	0.00	0.0	2.8		0.0	0.0
7 20 78	0.1	0.00	0.0	0.00	23	0.0	0.00	0.3	0.8	0.15	2.4	0.0	0.0	1.0	0.01	0.0	2.8	0.1	0.0	0.0
9 14 78	0.1	0.00			16	0.0	0.00	0.2	0.7		1.4	0.0		0.7	0.00	0.0	2.9		0.0	0.0
10 24 78	0.2	0.00	0.0	0.00	41	0.0	0.00	0.2	1.6	0.20	2.8	0.0	0.0	1.0	0.02	0.1	2.5	0.1	0.1	0.0
11 28 78	0.1	0.00			7.0	0.0	0.01	0.0	0.6		1.0	0.0		0.9	0.01	0.0	2.5		0.0	0.0
1 3 79	0.0	0.00	0.0	0.00	4.7	0.0	0.02	0.1	0.6	0.10	0.8	0.0	0.0	0.8	0.00	0.0	2.1	0.0	0.0	0.0
2 28 79	0.1	0.00			7.5	0.0	0.05	0.3	0.8		1.5	0.0		1.2	0.02	0.0	2.1		0.0	0.4
4 4 79	0.5	0.00	2.9	0.00	14	0.0	0.01	0.2	0.9	0.30	3.0	0.2	0.0	1.3	0.02	0.0	2.5	0.1	0.0	0.0
5 8 79	0.1	0.00			12	0.0	0.01	0.1	0.6		1.4	0.0		0.8	0.00	0.0	2.2		0.0	0.0
5 30 79	0.1	0.00			9.1	0.0	0.00	0.1	0.7		1.1	0.0		1.1	0.00	0.0	2.4		0.0	0.0
6 26 79	0.1	0.00			21	0.0	0.01	0.2	0.8		1.7	0.1		0.9	0.01	0.0	2.5		0.0	0.0
7 22 79	0.1	0.00	0.0	0.00	7.0	0.0	0.00	0.0	0.5	0.04	1.3	0.0	0.0	0.9	0.00	0.0	2.9	0.0	0.0	0.1
12 11 79	0.0	0.00			7.5	0.0	0.00	0.1	0.5		1.3	0.0		0.8	0.00	0.0	2.1		0.0	0.0

TABLE 49. WATER QUALITY FOR SITE 7112 OVERTON COUNTY, TENNESSEE

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	29	0.01			60	1700	985	0.36	2.8		0	0	0	4.8	760	0.0					
9 14 77	20	0.015			130	2060	1090	0.48	2.8		0	0	0	2.2	790	0.0					
10 11 77	16	0.2			10	630	319	0.40	2.9		0	0	0	1.5	230	0.1					
11 7 77	16	1.5	82		50	692	284	0.36	3.1		0	0	0	1.3	200	0.1					
12 5 77	12	1.5	25*		20	585	321	0.29	3.0		0	0	0	0.9	230	0.1					
1 3 78	0	0.04			8	769	340	0.37	3.3		0	0	0	1.0	250	0.0					
2 8 78	1	0.3			10	682	335	0.53	3.2		0	0	0	0.5	240	0.0					
3 21 78	11	0.3			4	632	260	0.35	3.0		0	0	0	1.0	190	0.4					
4 25 78	17	0.25	57*		10	791	341	0.34	2.9		0	0	0	2.8	250	0.1					
5 23 78	20	0.06	40*		15	814	347	0.40	2.9		0	0	0	0.8	250	0.2					
6 20 78	22	0.1				1400	787	0.53	2.8		0	0	0	0.8	560	0.1					
7 20 78	26	0.025	105*		4	1570	995	0.50	2.8		0	0	0	0.7	730	0.0					
9 14 78	23	0.009	15		8	976	621	0.42	3.1		0	0	0	0.9	460	0.1					
10 24 78	13	0.0002	11		3	1850	1490	0.40	2.8		0	0	0	1.1	1100	0.0					
11 28 78	9	0.02	7		1	831	359	0.37	3.1		0	0	0	0.5	260	0.0					
1 3 79	3	0.1	12		10	642	237	0.34	3.0	150	0	0	0	0.4	170	0.0					
2 28 79	8	0.04	20		8	612	272	0.32	3.1	130	0	0	0	1.0	200	0.2					
4 4 79	12	0.02			35	461	182	0.36	3.3		0	0	0	0.6	130	0.0					
5 8 79	14	0.005	12	0.00	25	560	237	0.45	3.1	120	0	0	0	0.5	170	0.3					
5 30 79	16	0.006	46		8	772	347	0.36	3.1	68	0	0	0	0.5	260	0.2					
6 26 79	23	0.0006	45		5	1160	507	0.59	3.0	230	0	0	0	0.7	350	0.1	0.0	0.24	0.45	0.25	0.01
7 22 79	21	0.006	30*		5	835	352	0.36	2.9	160	0	0	0	0.8	260	0.0	0.0	0.14	0.45	0.10	0.01
12 11 79	9	0.25			20	706	372	0.44	3.3		0	0	0	0.5	280	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																			
8 15 77	42	0.01			54	0.5	0.13	51	6.5		34	16		2.0	0.60	0.1	6.9		0.1	0.8
9 14 77	55				83	0.5	0.12	60	5.3		43	21		2.1	0.50	0.1	12		0.1	1.0
10 11 77	18	0.00	0.0	0.00	20	0.2	0.02	13	1.7	0.10	10	6.0	0.0	1.7	0.17	0.0	8.6	0.1	0.0	0.2
11 7 77	16	0.00			16	0.1	0.02	13	1.6		8.1	4.3		1.5	0.12	0.0	7.6		0.1	0.2
12 5 77	21	0.00			13	0.1	0.02	20	1.4		8.4	4.4		1.0	0.13	0.0	6.6		0.0	0.2
1 3 78	25	0.00	0.0	0.00	18	0.2	0.01	9.0	1.5	0.08	11	7.1	0.0	1.4	0.17	0.1	8.5	0.1	0.1	0.2
2 8 78	20	0.00			19	0.2	0.01	6.8	1.9		19	6.5		1.4	0.16	0.0	8.9		0.1	0.2
3 21 78	12	0.01			13	0.1	0.02	9.0	1.5		8.5	4.2		1.4	0.12	0.0	6.3		0.0	0.2
4 25 78	16	0.01	0.0	0.00	18	0.2	0.02	11	1.7	0.07	11	5.3	0.0	1.5	0.15	0.1	8.6	0.1	0.3	0.2
5 23 78	18	0.01			20	0.2	0.02	8.6	2.2		12	6.7		1.8	0.19	0.0	10		0.0	0.2
6 20 78	32	0.01			57	0.3	0.02	35	3.5		39	12		3.2	0.43	0.1	18		0.2	0.7
7 20 78	38	0.02	0.0	0.01	72	0.4	0.02	35	4.3	0.35	46	16	0.1	3.6	0.58	0.3	23	0.4	0.3	0.9
9 14 78	24	0.01			41	0.3	0.03	11	3.2		23	13		3.0	0.32	0.1	16		0.0	0.4
10 24 78	57	0.01	0.0	0.01	96	0.5	0.02	81	6.4	0.60	50	19	0.1	6.0	0.78	0.1	22	0.6	0.2	1.1
11 28 78	17	0.00			19	0.2	0.02	16	1.6		12	9.0		1.4	0.19	0.1	8.4		0.2	0.2
1 3 79	11	0.00	0.0	0.00	12	0.1	0.02	15	1.2	0.20	6.7	3.7	0.0	1.2	0.10	0.0	6.2	0.3	0.1	0.2
2 28 79	12	0.01			13	0.1	0.03	12	1.3		8.0	4.4		1.3	0.13	0.0	5.9		0.0	0.5
4 4 79	8.4	0.00	0.0	0.00	9.0	0.1	0.02	9.3	1.2	0.05	5.7	2.3	0.0	1.3	0.08	0.0	4.5	0.0	0.0	0.1
5 8 79	12	0.00			16	0.1	0.02	6.4	1.9		8.5	4.2		1.4	0.14	0.1	8.2		0.1	0.2
5 30 79	13	0.00			19	0.1	0.01	12	1.7		11	5.4		1.3	0.17	0.0	8.6		0.0	0.3
6 26 79	18	0.01			40	0.2	0.02	20	3.1		26	9.2		2.3	0.34	0.1	15		0.1	0.5
7 22 79	13	0.00	0.0	0.00	19	0.2	0.02	14	1.7	0.10	11	6.3	0.0	1.5	0.16	0.0	9.4	0.1	0.1	0.2
12 11 79	17	0.01			20	0.2	0.00	11	1.6		18	6.9		1.5	0.17	0.1	9.1		0.1	0.2

TABLE 50. WATER QUALITY FOR SITE 7113 OVERTON COUNTY, TENNESSEE

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	28	0.09			15	1990	1080	0.48	2.8		0	0	0	1.1	820	0.0					
9 14 77	20	0.03			45	1910	1320	0.76	2.8		0	0	0	0.9	890	0.0					
10 11 77	16	0.4			4	959	430	0.46	2.8		0	0	0	2.5	320	0.1					
11 7 77	16	0.8			30	779	332	0.47	3.1		0	0	0	2.4	240	0.1					
12 5 77	11	3	13		4	748	429	0.45	2.9		0	0	0	2.4	310	0.2					
1 3 78	1	0.4			8	1470	587	0.34	3.2		0	0	0	1.9	440	0.1					
2 8 78	1	0.1			0	1340	702	0.58	2.8		0	0	0	1.0	500	0.1					
3 21 78	11	0.15			2	1060	566	0.47	2.7		0	0	0	1.4	420	0.2					
4 25 78	17	0.25	33*		10	1500	833	0.47	2.7		0	0	0	2.7	630	0.1					
5 23 78	20	0.07	39*		2	1420	615	0.64	3.0		0	0	0	1.4	430	0.2					
6 20 78	23	0.25				1590	919	0.57	2.7		0	0	0	1.1	670	0.1					
7 20 78	27	0.02	78*		4	1790	985	0.51	2.7		0	0	0	1.0	730	0.1					
9 14 78	21	0.04	23*		6	1260	774	0.47	2.8		0	0	0	1.3	580	0.0					
10 24 78	16	0.002	18*		3	2010	1340	0.43	2.8		0	0	0	1.2	990	0.5					
11 28 78		0.09	7		1	995	491	0.37	2.6		0	0	0	1.4	380	0.0					
1 3 79	2	0.06	36		5	978	446	0.34	2.8		0	0	0	1.0	340	0.2					
2 28 79	7	0.015			3	1000	481	0.37	2.9	230	0	0	0	1.1	360	0.4					
4 4 79	13	0.1			10	761	341	0.41	3.1	53	0	0	0	1.2	250	0.2					
5 8 79	15	0.03	2	0.00	10	932	491	0.55	2.8	290	0	0	0	0.9	360	0.2					
5 30 79	15	0.01			10	1150	596	0.39	2.9	260	0	0	0	0.8	460	0.1					
6 26 79	22	0.03			15	1760	839	0.48	2.7	450	0	0	0	1.1	620	0.2	0.0	0.12	0.95	0.30	0.01
7 22 79	20	0.08	45*		25	771	296	0.33	2.9	120	0	0	0	1.1	220	0.2	0.0	0.09	0.30	0.15	0.02
12 11 79	10	0.3			240	1250	717	0.40	3.0	340	0	0	0	1.0	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																			
8 15 77	39	0.01			48	0.3	0.03	42	3.6		64	12		8.7	0.43	0.1	17		0.1	0.7
9 14 77	39				96	0.4	0.03	41	2.7		110	25		7.1	0.53	0.2	49		0.3	0.9
10 11 77	10	0.00	0.0	0.01	24	0.1	0.02	21	1.8	0.10	22	3.7	0.0	3.0	0.16	0.0	7.9	0.1	0.1	0.2
11 7 77	10	0.00			22	0.1	0.01	16	2.0		14	3.9		3.1	0.13	0.0	7.7		0.0	0.2
12 5 77	19	0.00			20	0.1	0.02	33	1.4		22	3.8		2.1	0.14	0.0	7.4		0.0	0.2
1 3 78	28	0.00	0.0	0.01	29	0.2	0.03	44	1.6	0.15	18	3.5	0.0	3.6	0.23	0.2	8.5	0.2	0.2	0.3
2 8 78	24	0.00			43	0.2	0.03	53	2.2		44	7.7		4.2	0.30	0.1	11		0.2	0.4
3 21 78	18	0.03			27	0.1	0.02	34	1.5		32	5.4		3.2	0.20	0.0	8.3		0.1	0.3
4 25 78	26	0.01	0.0	0.01	48	0.2	0.02	34	2.1	0.10	44	9.8	0.0	4.6	0.29	0.0	12	0.2	0.1	0.5
5 23 78	24	0.03			42	0.2	0.03	32	2.2		43	7.7		3.6	0.31	0.1	12		0.4	0.4
6 20 78	30	0.02			57	0.2	0.02	45	2.8		58	12		5.8	0.38	0.0	16		0.2	0.5
7 20 78	26	0.02	0.0	0.01	58	0.2	0.03	57	3.2	0.25	55	11	0.1	6.0	0.37	0.3	17	0.2	0.3	0.5
9 14 78	23	0.02			46	0.2	0.04	41	3.3		37	8.6		5.7	0.27	0.1	13		0.1	0.3
10 24 78	47	0.02	0.0	0.02	70	0.3	0.04	110	4.0	0.45	60	14	0.1	7.4	0.47	0.1	18	0.4	0.2	0.6
11 28 78	15	0.00			21	0.1	0.02	26	1.9		20	5.2		3.2	0.18	0.1	8.2		0.2	0.2
1 3 79	12	0.01			19	0.1	0.03	37	1.2		16	3.3		1.8	0.16	0.0	7.2		0.1	0.3
2 28 79	14	0.02			20	0.1	0.03	40	1.2		21	4.2		1.9	0.19	0.1	6.8		0.2	0.7
4 4 79	10	0.00	0.0	0.00	14	0.1	0.02	26	1.4	0.10	17	3.2	0.0	1.7	0.13	0.0	5.0	0.1	0.0	0.2
5 8 79	19	0.01			34	0.2	0.04	18	2.4		27	5.1		3.0	0.26	0.1	9.8		0.1	0.3
5 30 79	16	0.01			30	0.1	0.03	33	1.6		25	5.4		2.6	0.24	0.0	9.0		0.1	0.4
6 26 79	24	0.02			49	0.2	0.04	54	2.7		42	9.2		5.8	0.40	0.1	15		0.4	0.6
7 22 79	6.8	0.00	0.0	0.00	12	0.1	0.02	20	1.6	0.10	10	2.4	0.1	1.8	0.12	0.1	5.7	0.0	0.1	0.1
12 11 79	21	0.03			32	0.2	0.03	66	2.0		31	5.8		4.7	0.26	0.1	11		0.2	0.4

TABLE 51. WATER QUALITY FOR SITE 7130 SCOTT COUNTY, TENNESSEE

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							
6 8 77	14	0.09			4	1270	680	0.51	2.6		0	0	0	0.7	500	0.0					
7 12 77	16	0.025			20	769	385	0.78	3.3		0	0	0	0.5	250	0.2					
8 5 77	16	0.03			10	795	407	0.67	3.1		0	0	0	0.6	290	0.0					
9 13 77	16	0.015			0	822	533	1.03	3.2		0	0	0	0.5	320	0.1					
10 7 77	15	0.04	1		15	700	489	0.77	3.1		0	0	0	0.7	330	0.0					
11 4 77	16	0.06	19		0	731	451	0.83	3.3		0	0	0	0.5	310	0.0					
12 2 77	12	0.15	73*		4	533	394	0.68	3.3		0	0	0	1.5	280	0.2					
12 30 77	10	0.2	0		2	669	467	0.72	3.2		0	0	0	0.6	320	0.1					
2 9 78	8	0.15			0	1400	825	0.60	2.8		0	0	0	0.5	560	0.0					
3 23 78	13	0.05			6	1210	745	0.48	2.7		0	0	0	0.7	540	0.0					
11 28 78		0.3	12		65	282	145	0.58	3.3	42	0	0	0	0.6	100	0.0					
3 13 79	10	1.0	1		9	456	212	0.66	3.5	72	0	0	0	0.3	140	0.0					
5 9 79	18	0.006	20	0.25	0	499	260	0.68	3.2	250	0	0	0	0.7	180	0.1					
6 7 79	22	0.01	18		65	803	485	0.59	3.0	130	0	0	0	0.7	350	0.0					
6 26 79	14	0.007	25		7	1020	487	0.73	3.0	170	0	0	0	0.8	330	0.1	0.0	0.20	0.60	0.15	0.02
7 23 79	18	0.02	29*		50	185	109	0.59	3.6	30	0	0	0	0.4	73	0.0	0.0	0.07	1.20	0.30	0.01

* 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										
6 8 77	18	0.04			47	0.1	0.01	20	2.8		32	4.7		6.6	0.23	0.1	20		0.1	0.3
7 12 77	8.3	0.05			32	0.1	0.00	11	3.1		26	2.8		6.0	0.15	0.1	22		0.1	0.2
8 5 77	10	0.07			33	0.3	0.03	14	3.8		25	3.3		6.4	0.26	0.0	7.9		0.0	0.1
9 13 77	7.4				64	0.2	0.02	5.6	2.8		42	4.5		5.5	0.21	0.2	36		0.3	0.3
10 7 77	7.9	0.04	0.0	0.00	51	0.1	0.00	9.2	3.2	0.15	29	3.2	0.0	7.8	0.16	0.0	21	0.2	0.1	0.2
11 4 77	7.4	0.02			54	0.1	0.01	4.4	3.0		27	3.0		6.6	0.14	0.0	17		0.0	0.2
12 2 77	10	0.01			35	0.0	0.00	4.2	2.2		25	2.8		3.6	0.13	0.0	14		0.0	0.2
12 30 77	10	0.00	0.0	0.00	44	0.0	0.00	5.4	3.1	0.25	29	3.0	0.0	5.6	0.13	0.0	19	0.3	0.0	0.2
2 9 78	36	0.03			59	0.2	0.03	45	2.7		47	3.0		5.0	0.40	0.1	29		0.2	0.6
3 23 78	28	0.05			45	0.1	0.04	35	2.1		36	2.7		4.8	0.31	0.1	19		0.2	0.5
11 28 78	3.4	0.01			11	0.0	0.01	2.0	1.0		6.5	1.4		2.8	0.06	0.0	6.5		0.0	0.1
3 13 79	7.0	0.01			19	0.0	0.01	9.7	1.4		10	1.7		2.6	0.12	0.0	7.7		0.1	0.1
5 9 79	7.3	0.01			19	0.0	0.01	8.4	1.5		18	1.9		3.2	0.10	0.0	8.4		0.1	0.2
6 7 79	11	0.03			42	0.1	0.03	19	2.2		24	3.0		4.8	0.17	0.0	12		0.1	0.3
6 26 79	13	0.04			47	0.1	0.00	17	2.8		28	4.5		6.5	0.22	0.0	17		0.1	0.4
7 23 79	2.0	0.00	0.0	0.00	8.0	0.0	0.02	3.3	1.1	0.06	4.9	1.0	0.0	1.8	0.05	0.0	5.9	0.0	0.0	0.0

TABLE 52. WATER QUALITY FOR SITE 7131 SCOTT COUNTY, TENNESSEE

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 29 78	9	0.15	14		25	19	20	1.39	6.6		2	3	0	0.8	6	0.0					
3 13 79	9	0.09	8		5	14	17	1.42	6.2	0	2	2	0	0.3	5	0.0					
5 9 79	15	0.001	9	0.12	40	22	20	1.27	6.2	6	2	3	0	0.6	6	0.2					
6 7 79	18	0.0004			0	17	22	1.04	6.5	1	2	2	0	0.6	8	0.1					
7 23 79	17	0.02	24*		20	21	22	1.01	6.6	2	2	3	0	0.4	8	0.0	0.2	0.02	0.25	0.15	0.01

* 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 29 78	0.1	0.00			1.0	0.0	0.00	0.1	0.9		0.8	0.0		1.1	0.01	0.0	3.6		0.0	0.0
3 13 79	0.0	0.00			0.7	0.0	0.00	0.0	0.5		1.0	0.0		0.9	0.01	0.0	3.2		0.0	0.0
5 9 79	0.0	0.00			0.8	0.0	0.00	0.1	0.6		1.0	0.0		1.0	0.00	0.0	3.4		0.0	0.1
6 7 79	0.1	0.00			0.9	0.0	0.01	0.0	0.7		1.0	0.0		1.1	0.00	0.0	3.9		0.0	0.0
7 23 79	0.0	0.00	0.0	0.00	0.8	0.0	0.01	0.1	0.8	0.07	1.0	0.0	0.0	0.9	0.02	0.0	4.0	0.0	0.0	0.0

TABLE 53. WATER QUALITY FOR SITE 7132 SCOTT COUNTY, TENNESSEE

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										
6 17 77	19	0.04			70	366	187	1.81	8.1		69	83	1	1.4	82	0.1					
7 12 77	22	0.07			8	407	186	2.30	7.9		92	111	1	1.4	65	0.7					
8 5 77	21	0.02			20	413	221	2.49	7.9		113	137	1	1.6	76	0.2					
9 2 77	21	0.01			30	421	222	3.15	7.4		105	128	0	1.5	70	0.1					
10 7 77	11	0.04			8	392	213	1.68	7.0		68	83	0	2.1	100	0.0					
11 4 77	17	0.1	14		4	425	252	1.69	6.7		54	66	0	1.1	130	0.1					
12 2 77	7	0.9	84*		10	312	219	1.30	7.9		32	39	0	1.7	130	0.0					
12 30 77	0	0.4	124		75	313	178	1.64	6.9		43	52	0	1.0	92	0.4					
2 9 78	0	0.7			20	269	149	1.63	7.7		42	51	0	1.0	73	0.2					
3 23 78	9	0.25			25	282	170	1.15	7.7		34	42	0	1.1	99	0.3					
4 25 78	15	0.25	96*		10	296	160	1.32	7.7		45	55	0	3.1	82	0.2					
5 23 78	20	0.06	58*		30	296	166	1.38	7.7		47	57	0	1.2	87	0.2					
6 20 78	18	0.09				285	158	2.02	7.8		71	86	0	0.9	63	0.1					
7 19 78	21	0.08	94*		45	362	222	2.53	8.3		81	97	1	1.1	86	0.2					
9 19 78	21	0.002	25*		4	372	221	2.36	8.5		120	141	3	1.8	74	0.2					
10 23 78	13	0.001	17*		4	382	215	2.69	8.3		81	97	1	1.7	79	0.1					
11 28 78	8	0.2	4		1	265	156	1.43	6.8		16	20	0	2.0	87	0.1					
1 3 79	0	0.5	51		20	315	188	1.52	7.6	-30	28	34	0	0.9	100	0.5					
3 13 79		0.4	4		5	292	197	1.61	7.7		31	38	0	0.8	110	0.3					
4 16 79	12	0.4	38		6	283	165	1.42	7.7	-38	34	41	0	1.0	90	0.2					
5 9 79	15	0.03	65	0.06	65	293	174	1.70	7.4	-45	48	58	0	1.0	85	0.3					
6 7 79	20	0.01	14		30	307	212	1.70	8.1		52	63	0	1.1	110	0.1					
6 26 79	16	0.007	9		0	329	199	1.95	8.3	-66	75	90	1	1.1	85	0.1	0.0	0.00	1.10	0.05	0.00
7 22 79	20	0.05	101*	2.9	300	361	228	1.38	7.8		38	46	0	0.4	130	0.2	0.2	0.15	1.45	0.55	0.01

* 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																			
6 17 77	0.1	0.00			38	0.0	0.01	0.1	2.7		12	0.0		3.9	0.00	0.1	2.2		0.0	0.0
7 12 77	0.1	0.01			39	0.0	0.00	0.1	2.7		12	0.0		3.9	0.01	0.1	1.5		0.0	0.0
8 5 77	0.2	0.02			45	0.1	0.01	0.2	3.0		18	0.1		4.5	0.07	0.3	1.1		0.5	0.0
9 2 77	0.1	0.03			57	0.0	0.00	0.1	2.7		19	0.0		4.8	0.01	0.0	1.6		0.0	0.0
10 7 77	0.1	0.01	0.0	0.00	40	0.0	0.02	0.0	2.3	0.15	17	0.0	0.0	4.2	0.03	0.0	1.5	0.1	0.0	0.0
11 4 77	0.1	0.00			56	0.0	0.00	0.1	2.4		20	0.0		3.7	0.00	0.0	1.8		0.0	0.0
12 2 77	0.1	0.00			36	0.0	0.00	0.1	1.8		20	0.5		1.7	0.01	0.0	2.2		0.0	0.0
12 30 77	0.1	0.00	0.1	0.00	30	0.0	0.00	0.1	1.8	0.15	19	0.0	0.0	2.6	0.02	0.0	1.9	0.1	0.1	0.0
2 9 78	0.0	0.00			27	0.0	0.00	0.1	2.1		12	0.0		2.9	0.02	0.0	1.8		0.1	0.0
3 23 78	0.7	0.01			26	0.0	0.01	0.7	1.8		12	0.2		2.4	0.02	0.0	2.0		0.0	0.1
4 25 78	0.2	0.00	0.0	0.00	26	0.0	0.00	0.2	1.6	0.06	11	0.1	0.0	2.5	0.01	0.0	2.6	0.1	0.0	0.0
5 23 78	0.1	0.00			28	0.0	0.00	0.1	2.0		12	0.0		2.7	0.01	0.0	2.0		0.0	0.0
6 20 78	0.1	0.00			29	0.0	0.00	0.0	2.3		12	0.0		3.0	0.00	0.0	1.6		0.0	0.0
7 19 78	0.1	0.02	0.0	0.00	49	0.1	0.01	0.2	2.9	0.20	24	0.0	0.1	2.8	0.03	0.4	1.9	0.1	0.4	0.0
9 19 78	0.1	0.01			47	0.0	0.00	0.0	2.8		14	0.0		3.5	0.02	0.1	1.8		0.0	0.0
10 23 78	0.1	0.00			58	0.0	0.00	0.1	3.0		16	0.0		4.5	0.02	0.1	1.7		0.0	0.0
11 28 78	0.2	0.00			21	0.0	0.01	0.0	2.1		16	1.2		6.1	0.06	0.1	4.7		0.1	0.0
1 3 79	0.1	0.00	0.0	0.00	40	0.0	0.01	0.1	2.1	0.40	15	0.2	0.0	2.1	0.01	0.0	2.1	0.1	0.0	0.0
3 13 79	0.1	0.00			41	0.0	0.00	0.0	1.6		19	0.1		1.8	0.01	0.0	1.7		0.0	0.0
4 16 79	0.1	0.00			32	0.0	0.00	0.0	1.6		12	0.1		1.7	0.01	0.0	2.0		0.0	0.0
5 9 79	0.1	0.01			38	0.0	0.00	0.0	2.0		12	0.0		2.2	0.01	0.0	1.7		0.0	0.0
6 7 79	0.4	0.01			43	0.0	0.01	0.8	2.1		19	0.0		2.1	0.03	0.1	2.5		0.1	0.0
6 26 79	0.1	0.01			44	0.0	0.02	0.1	2.5		14	0.0		3.0	0.02	0.0	1.6		0.1	0.0
7 22 79	0.3	0.00	0.0	0.00	42	0.1		0.3	2.6	0.15	19	0.1	0.0	1.9	0.05	0.1	2.4	0.1	0.1	0.0

TABLE 54. WATER QUALITY FOR SITE 7133 SCOTT COUNTY, TENNESSEE

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 25 78	15	0.25	84*		55	40	27	1.15	6.4		1	1	0	0.6	13	0.1					
5 23 78	17	0.15	46*		4	56	42	0.92	6.1		1	1	0	0.7	23	0.1					
6 20 78	18	0.06				70	43	1.14	5.7		0	0	0	0.6	22	0.0					
7 19 78	27	0.04	46*		8	66	43	1.02	5.1		0	0	0	0.9	22	0.1					
9 20 78	20	0.007	42*		30	62	48	0.96	6.8		3	4	0	1.0	24	0.2					
10 23 78	13	0.007	29*		3	79	56	0.96	6.1		1	1	0	1.1	32	0.0					
11 28 78	9	0.04	9		1	32	30	1.37	6.7		3	4	0	1.1	10	0.1					
1 3 79	4	0.03	1		5	28	28	0.88	5.4	6	0	0	0	0.2	14	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																			
4 25 78	0.1	0.00	0.0	0.00	1.7	0.0	0.00	0.6	0.7	0.02	1.9	0.5	0.0	1.5	0.02	0.0	2.5	0.0	0.0	0.0
5 23 78	0.1	0.00			3.1	0.0	0.00	0.9	0.9		2.5	0.6		2.0	0.01	0.0	3.5		0.0	0.0
6 20 78	0.1	0.00			3.3	0.0	0.01	0.9	1.3		3.1	0.9		2.2	0.01	0.0	3.6		0.0	0.0
7 19 78	0.1	0.01	0.0	0.00	3.3	0.0	0.01	0.6	1.2	0.01	2.8	0.8	0.0	1.9	0.03	0.0	4.0	0.0	0.0	0.0
9 20 78	0.1	0.00			4.1	0.0	0.01	0.7	1.5		2.5	0.6		1.9	0.01	0.0	4.1		0.0	0.0
10 23 78	0.1	0.00	0.0	0.00	5.1	0.0	0.00	0.3	1.4	0.03	3.7	0.7	0.1	1.9	0.02	0.0	3.8	0.0	0.0	0.0
11 28 78	0.1	0.00			1.9	0.1	0.01	0.3	1.2		1.5	0.2		1.8	0.03	0.0	4.4		0.2	0.0
1 3 79	0.2	0.00	0.0	0.00	1.6	0.0	0.02	0.4	0.9	0.08	1.2	0.2	0.0	1.7	0.00	0.0	3.1	0.0	0.0	0.0

TABLE 55. WATER QUALITY FOR SITE 7134 SCOTT COUNTY, TENNESSEE

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 3 79	16	0.001	8		8	23	24	3.06	7.5	0	10	12	0	0.8	3	0.2	0.0	0.11	1.00	0.10	0.00

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 3 79	0.0	0.00	0.0	0.00	1.4	0.0	0.00	0.1	0.9	0.09	1.3	0.0	0.0	1.2	0.00	0.0	3.8	0.0	0.0	0.0

TABLE 56. WATER QUALITY FOR SITE 7135 SCOTT COUNTY, TENNESSEE

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 6 79	11	0.08			15	120	76	1.36	7.3		16	19	0	1.0	40	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																			
4 6 79	0.1	0.01	0.0	0.00	13	0.0	0.01	0.1	1.0	0.09	4.9	0.0	0.0	1.1	0.02	0.0	2.3	0.0	0.1	0.0

TABLE 57. WATER QUALITY FOR SITE 7136 SCOTT COUNTY, TENNESSEE

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							
2 9 78	1	1.0			2	287	177	1.26	6.2		3	4	0	1.4	110	0.1					
3 23 78	14	0.15			8	191	115	1.11	6.8		7	8	0	1.9	70	0.2					
4 25 78	16	0.25	55*		10	212	118	1.01	7.1		12	15	0	4.9	70	0.1					
5 23 78	18	0.15	45*		5	190	119	1.16	7.1		18	22	0	1.7	66	0.3					
6 20 78	19	0.09				253	152	1.26	7.2		30	37	0	1.8	84	0.3					
7 19 78	20	0.09	92*		20	160	99	1.86	6.9		20	25	0	1.3	42	0.4					
9 19 78						224	137	1.62	8.0		48	57	0	2.0	60	0.1					
10 23 78	16	0.009	25*		10	290	170	1.48	8.0		42	50	0	2.1	87	0.0					
11 28 78	7	0.009	23		65	496	375	1.15	7.7		43	52	0	1.5	240	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																			
2 9 78	0.5	0.00			18	0.0	0.00	0.2	2.0		23	1.7		4.4	0.07	0.1	4.1		0.1	0.1
3 23 78	0.7	0.02			12	0.0	0.01	0.2	1.8		10	1.0		3.9	0.04	0.0	3.8		0.1	0.0
4 25 78	0.1	0.00	0.0	0.00	12	0.0	0.00	0.1	1.5	0.04	9.6	0.8	0.0	4.0	0.03	0.0	3.4	0.1	0.0	0.0
5 23 78	0.1	0.00			14	0.0	0.00	0.1	2.0		9.2	0.5		4.2	0.02	0.0	4.1		0.0	0.0
6 20 78	0.1	0.01			19	0.0	0.00	0.0	2.3		12	0.9		5.7	0.02	0.0	3.4		0.0	0.0
7 19 78	0.2	0.03	0.0	0.00	9.6	0.1	0.01	0.6	2.3	0.06	8.2	0.0	0.0	10	0.03	0.4	4.5	0.0	0.3	0.0
9 19 78	0.1	0.01			21	0.0	0.00	0.1	2.7		9.6	0.0		4.6	0.01	0.0	3.9		0.0	0.0
10 23 78	0.2	0.01	0.0	0.00	26	0.0	0.00	0.1	2.4	0.15	14	0.6	0.0	6.0	0.03	0.0	3.5	0.1	0.0	0.0
11 28 78	0.2	0.01			71	0.0	0.02	0.1	3.0		25	0.6		2.0	0.04	0.0	3.0		0.1	0.0

TABLE 58. WATER QUALITY FOR SITE 7139 SCOTT COUNTY, TENNESSEE

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 3 79	2	0.3	14		15	152	67	1.29	6.1		2	3	0	1.3	36	0.4					

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 3 79	0.1	0.00	0.1	0.00	7.8	0.0	0.01	0.1	2.8	0.15	6.2	0.2	0.0	1.6	0.03	0.0	3.0	0.1	0.1	0.0

TABLE 59. WATER QUALITY FOR SITE 7141 SEQUATCHIE COUNTY, TENNESSEE

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											
6 21 77	18	0.15			10	20	14	1.43	5.8		2	3	0	0.8	4	0.0					
7 14 77	21	0.007			4	23	13	4.16	6.3		3	4	0	0.9	3						
8 10 77	21	0.0002			20	38	22	2.74	5.8		7	9	0	1.3	4	0.0					
9 15 77	20	0.1			20	24	16	1.80	6.2		2	2	0	1.3	4	0.1					
10 12 77	13	0.2			8	23	15	1.64	5.9		3	4	0	1.0	4	0.0					
11 8 77	16	3	40		30	25	27	1.15	6.4		5	6	0	1.0	11	0.1					
12 6 77	4	0.9	35*		0	16	19	0.89	6.0		1	1	0	1.3	8	0.1					
1 4 78	2	0.25			0	16	19	1.06	6.2		2	3	0	1.1	8	0.1					
2 15 78	3	0.25			2	17	12	1.43	5.3		0	0	0	1.4	3	0.1					
3 30 78	10	0.5			8	18	30	1.17	6.4		1	1	0	1.4	15	0.1					
4 26 78	7	0.2	56*		2	24	12	0.97	5.9		0	0	0	1.3	5	0.1					
5 24 78	17	0.015			0	17	24	1.34	6.0		2	2	0	0.7	10	0.4					
6 21 78	20	0.009	29*			28	14	2.59	6.2		2	2	0	0.9	3	0.2					
11 20 78	11	0.001	7		2	33	23	1.30	5.9	-2	2	2	0	1.5	9	0.1					
12 28 78	4	0.01	1		3	16	15	0.87	5.5	7	0	0	0	1.2	6	0.0					
2 23 79	7	0.2	5		1	18	19	0.66	5.7		0	0	0	1.2	9	0.1					
4 3 79	13	0.7			3	23	31	1.03	6.5	0	2	3	0	1.7	15	0.0					
4 27 79	12	0.3	1	0.00	3		16	1.14	5.3	5	0	0	0	0.9	6	0.1					
5 29 79	14	0.06	13		8	29	27	1.09	5.7	8	1	1	0	0.7	14	0.0					
6 27 79	19	0.0009	10		55	45	32	3.38	7.4	-5	14	17	0	1.4	7	0.0	0.0	0.36	1.00	0.10	0.00
7 20 79	19	0.07	18*		10	27	19	0.97	5.9	3	0	0	0	0.7	8	0.0	0.2	0.01	0.40	0.20	0.01
8 14 79	20	0.001	2		45	22	29	1.05	6.7	12	2	2	0	2.0	13	0.1	0.0	0.15	0.70	0.30	0.05

* 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																			
6 21 77	0.0	0.00			0.3	0.0	0.00	0.0	0.8		0.7	0.0		1.1	0.00	0.1	2.0		0.0	0.0
7 14 77	0.0	0.00			0.4	0.0	0.01	0.0	1.1		0.7	0.0		1.0	0.00	0.1	1.9		0.0	0.0
8 10 77	0.0	0.00			1.0	0.0	0.01	0.0	1.6		1.2	0.2		1.7	0.00	0.1	2.7		0.0	0.0
9 15 77	0.1	0.01			1.2	0.0	0.00	0.1	1.0		0.8	0.1		1.1	0.01	0.0	2.1		0.0	0.0
10 12 77	0.0	0.01	0.0	0.00	0.8	0.0	0.00	0.0	0.7	0.00	0.7	0.0	0.0	1.0	0.01	0.0	2.2	0.0	0.0	0.0
11 8 77	0.1	0.00			2.4	0.0	0.00	0.2	1.0		1.2	0.2		1.2	0.02	0.0	2.7		0.1	0.0
12 6 77	0.0	0.00			1.2	0.0	0.00	0.1	0.6		1.1	0.2		0.8	0.00	0.0	2.0		0.0	0.0
1 4 78	0.0	0.00	0.0	0.00	1.3	0.0		0.2	0.6	0.00	1.3	0.2	0.0	0.8	0.00	0.0	1.8	0.0	0.0	0.0
2 15 78	0.0				0.7	0.0	0.00	0.0	0.9		0.6	0.0		0.8	0.01	0.0	2.0		0.0	0.0
3 30 78	0.1	0.00	0.0	0.00	2.7	0.0	0.01	0.4	0.9	0.00	2.5	0.9	0.0	1.2	0.00	0.0	1.7	0.0	0.0	0.0
4 26 78	0.0	0.00	0.0	0.00	0.7	0.0	0.00	0.0	0.6	0.00	0.7	0.0	0.0	0.8	0.02	0.0	1.2	0.0	0.0	0.0
5 24 78	0.0	0.00			2.2	0.0	0.00	0.2	0.9		1.8	0.2		1.1	0.01	0.0	2.0		0.0	0.0
6 21 78	0.0	0.01	0.0	0.00	0.9	0.0	0.00	0.0	0.9	0.01	0.9	0.0	0.0	1.0	0.00	0.0	2.3	0.0	0.1	0.0
11 20 78	0.0	0.00			3.0	0.0	0.00	0.0	0.8		1.0	0.0		0.9	0.00	0.0	2.4		0.0	0.0
12 28 78	0.0	0.00	0.0	0.00	0.9	0.0	0.01	0.0	0.7	0.04	0.6	0.0	0.0	0.8	0.00	0.0	1.9	0.0	0.0	0.0
2 23 79	0.0	0.01			1.0	0.0	0.00	0.0	0.6		0.8	0.0		0.8	0.01	0.0	2.1		0.0	0.2
4 3 79	0.1	0.01	0.0	0.00	3.4	0.0	0.01	0.3	0.8	0.15	1.8	0.5	0.0	1.0	0.02	0.0	1.8	0.0	0.1	0.0
4 27 79	0.0	0.00	0.0	0.00	1.0	0.0	0.00	0.1	0.8	0.02	0.8	0.0	0.0	0.8	0.02	0.0	2.3	0.0	0.0	0.1
5 29 79	0.0	0.00			2.4	0.0	0.00	0.2	0.9		1.7	0.4		1.1	0.02	0.0	2.4		0.1	0.1
6 27 79	0.0	0.00			6.7	0.0	0.00	0.1	0.8		1.5	0.2		0.8	0.00	0.0	2.6		0.0	0.0
7 20 79	0.1	0.01	0.0	0.00	1.7	0.0	0.00	0.1	0.8	0.02	0.6	0.1	0.0	0.6	0.02	0.0	2.7	0.0	0.0	0.1
8 14 79	0.0	0.00			2.5	0.0	0.00	0.1	1.0		1.6	0.4		1.4	0.00	0.0	2.7		0.0	0.0

TABLE 60. WATER QUALITY FOR SITE 7142 SEQUATCHIE COUNTY, TENNESSEE

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 15 77	24	0.1			120	784	597	0.94	6.8		16	19	0	0.7	410	0.0					
10 12 77	16	0.1	29		150	803	597	1.07	6.3		11	14	0	0.8	400	0.0					
11 8 77	19	0.2	94		35	820	848	0.82	6.4		5	6	0	0.7	610	0.1					
12 6 77	7	0.2	28*		0	987	807	0.94	4.5		0	0	0	1.3	570	0.0					
1 4 78	4	0.05			15	1230	787	0.97	5.2		0	0	0	1.0	540	0.0					
2 15 78	3	0.03			0	832	469	1.14	7.3		20	24	0	1.7	310	0.1					
3 30 78	14	0.1			8	1050	866	0.87	4.7		0	0	0	1.5	610	0.0					
4 26 78	9	0.03	55*		3	1070	857	0.81	4.6		0	0	0	1.3	630	0.0					
5 24 78	18	0.1			0	1230	977	1.01	6.7		11	14	0	1.2	690	0.4					
6 21 78	24	0.06	43*			903	680	1.11	6.4		28	34	0	0.6	450	0.0					
8 2 78	26	0.1	27*		35	1030	752	0.98	6.1		1	1	0	1.3	530	0.1					
9 7 78	23	0.01	15		8	1010	802	0.87	6.1		3	4	0	1.1	580	0.0					
10 19 78	16	0.002	22*		10	991	828	0.78	6.1		1	1	0	4.6	600	0.2					
11 20 78	13	0.02	2		3	1040	879	0.86	6.8	42	7	9	0	1.3	640	0.1					
12 28 78	4	0.006	34		110	915	641	0.93	7.4	13	12	15	0	1.0	450	0.1					
2 23 79	12	0.25	52		220	1200	971	0.86	4.8	66	0	0	0	1.9	690	0.1					
4 3 79	18	0.06			110	943	774	1.01	4.9	52	0	0	0	1.1	530	0.1					
4 26 79	17	0.02	46	0.00	65	1020	862	0.82	3.9	52	0	0	0	0.6	630	0.0					
5 29 79	21	0.01	37	0.00	210	974	681	0.80	5.3	42	0	0	0	1.0	500	0.0					
6 27 79	27	0.008	21		170	979	766	0.83	5.4	35	0	0	0	0.9	560	0.0	0.0	0.23	1.05	0.35	0.01
7 20 79	23	0.015	81*		110	877	612	0.90	4.5	24	0	0	0	0.9	440	0.1	0.0	0.21	0.75	0.20	0.02
8 14 79	22	0.01	12		140	1050	645	0.95	6.8	55	3	4	0	1.2	460	0.0	0.0	0.27	1.45	0.00	0.01

* 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 15 77	0.1	0.05			73	0.2	0.00	15	9.7		48	19		5.3	0.20	0.0	3.0		0.1	0.1
10 12 77	0.2		0.0	0.00	76	0.2	0.00	12	11	0.25	56	20	0.0	5.6	0.20	0.1	3.4	0.2	0.1	0.0
11 8 77	0.1	0.02			90	0.2	0.00	24	12		66	26		6.0	0.24	0.1	4.0		0.2	0.1
12 6 77	0.2	0.01			89	0.2	0.00	21	10		76	27		4.7	0.27	0.0	3.6		0.1	0.1
1 4 78	0.2	0.02	0.0	0.00	89	0.2	0.00	24	10	0.40	75	29	0.0	5.1	0.28	0.1	3.5	0.4	0.2	0.0
2 15 78	0.1	0.04			64	0.1	0.01	5.4	5.3		47	16		4.1	0.12	0.0	2.2		0.0	0.1
3 30 78	0.4	0.01	0.0	0.00	87	0.2	0.01	23	10	0.35	77	40	0.0	5.4	0.30	0.0	3.4	0.3	0.1	0.1
4 26 78	0.2	0.00	0.0	0.00	89	0.2	0.00	17	7.8	0.20	71	28	0.0	4.8	0.28	0.0	2.0	0.3	0.2	0.1
5 24 78	0.3	0.02			130	0.2	0.01	15	8.2		90	20		6.8	0.26	0.1	3.9		0.3	0.1
6 21 78	0.2	0.03	0.0	0.00	79	0.2	0.00	17	13	0.25	71	23	0.0	5.0	0.26	0.0	3.1	0.2	0.2	0.1
8 2 78	0.1	0.03			94	0.2	0.01	9.2	11		68	24		5.3	0.27	0.1	3.5		0.1	0.0
9 7 78	0.2	0.04			90	0.2	0.03	5.5	14		66	26		8.0	0.22	0.1	3.3		0.1	0.0
10 19 78	0.1	0.04	0.0	0.00	89	0.1	0.00	27	10	0.45	61	23	0.1	4.0	0.17	0.2	2.8	0.2	0.1	0.0
11 20 78	0.3	0.05			110	0.2	0.00	9.3	8.3		70	25		4.3	0.25	0.2	3.2		0.2	0.0
12 28 78	0.2	0.03	0.0	0.00	75	0.2	0.00	10	9.5	0.35	55	21	0.0	4.4	0.23	0.2	3.0	0.2	0.2	0.1
2 23 79	0.3	0.03			110	0.2	0.01	34	9.0		78	30		4.8	0.34	0.2	3.5		0.4	0.3
4 3 79	0.3	0.02	0.0	0.00	110	0.2	0.02	25	9.6	0.45	66	24	0.0	5.6	0.32	0.1	3.3	0.3	0.4	0.1
4 26 79	0.2	0.03	0.0	0.00	94	0.2	0.01	20	8.0	0.65	70	25	0.1	4.4	0.28	0.2	3.1	0.2	0.5	0.1
5 29 79	0.1	0.03			71	0.2	0.01	16	7.6		54	20		3.9	0.25	0.2	2.9		0.2	0.1
6 27 79	0.1	0.04			84	0.2	0.00	11	9.6		62	23		4.9	0.24	0.1	3.5		0.3	0.0
7 20 79	0.1	0.03	0.0	0.00	70	0.2	0.00	7.6	8.6	0.45	53	19	0.0	4.0	0.20	0.1	3.1	0.2	0.2	0.0
8 14 79	0.2	0.04			82	0.1	0.00	6.5	8.0		56	22		3.9	0.20	0.1	2.6		0.3	0.0

TABLE 61. WATER QUALITY FOR SITE 7143 SEQUATCHIE COUNTY, TENNESSEE

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	0.015			30	1220	728	0.68	3.0		0	0	0	1.2	540	0.0					
9 15 77	21	0.025			0	967	533	0.67	3.6		0	0	0	0.4	390	0.0					
10 12 77	15	0.02			20	728	473	0.69	3.2		0	0	0	0.7	350	0.0					
11 8 77	18	0.1	32		25	692	354	0.87	3.4		0	0	0	0.5	250	0.0					
12 6 77	6	0.15	29*		4	622	435	0.72	3.2		0	0	0	1.0	310	0.0					
1 4 78	0	0.006			4	842	459	0.77	3.5		0	0	0	0.8	320	0.0					
2 15 78	2	0.06			0	677	413	0.56	3.4		0	0	0	0.6	310	0.1					
3 30 78	14	0.04			4	1130	701	0.68	3.0		0	0	0	1.0	510	0.1					
5 24 78	17	0.04	3910*			553	338	0.76	3.7		0	0	0	0.8	250	0.5					
6 21 78	22	0.02	25*			944	467	0.89	3.1		0	0	0	0.5	320	0.0					
12 29 78	0	0.0001	49		45	904	595	0.57	3.5	230	0	0	0	1.0	450	0.1					
2 23 79	11	0.003	461		650	601	438	0.67	3.6	98	0	0	0	0.7	320	0.1					
4 3 79	16	0.03			0	691	486	0.73	3.5	90	0	0	0	0.7	360	0.0					
4 26 79	20	0.003	29	0.00	7	875	627	0.76	3.3	130	0	0	0	0.7	450	0.0					
6 27 79	23	0.0000	37		20	1120	599	0.90	3.3	120	0	0	0	1.1	410	0.0	0.0	0.12	0.75	0.15	0.02
7 21 79	24	0.001	16*		7	1180	681	0.66	3.0	140	0	0	0	0.7	510	0.0	0.2	0.07	0.25	0.10	0.02
8 10 79	35	0.0000	6		20	1480	808	0.64	2.9	300	0	0	0	1.6	600	0.0	0.2	0.09	1.60	0.05	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																			
8 10 77	6.2	0.01			58	0.2	0.01	10	5.5		55	27		4.6	0.32	0.1	5.5		0.1	0.4
9 15 77	12	0.00			40	0.2	0.02	8.2	6.1		38	24		3.2	0.44	0.0	5.4		0.1	0.5
10 12 77	6.9	0.02	0.0	0.00	35	0.2	0.02	4.9	5.1	0.15	37	20	0.0	2.8	0.37	0.1	5.2	0.1	0.1	0.4
11 8 77	6.0	0.00			29	0.2	0.02	3.4	4.9		34	16		2.4	0.32	0.1	5.0		0.1	0.3
12 6 77	10	0.00			30	0.2	0.01	6.2	3.4		37	19		1.8	0.37	0.0	4.7		0.0	0.4
1 4 78	12	0.00	0.0	0.00	32	0.2	0.02	9.0	3.9	0.15	42	22	0.0	2.2	0.41	0.1	4.8	0.1	0.1	0.4
2 15 78	9.1	0.03			22	0.1	0.01	12	2.6		29	16		1.4	0.32	0.0	3.7		0.0	0.3
3 30 78	13	0.00	0.0	0.00	48	0.3	0.02	9.5	4.9	0.15	56	43	0.0	2.7	0.54	0.0	4.4	0.1	0.0	0.5
5 24 78	6.4	0.00			30	0.1	0.02	0.7	2.0		29	11		1.6	0.24	0.0	2.9		0.0	0.4
6 21 78	7.4	0.01	0.0	0.00	33	0.2	0.01	7.0	6.4	0.15	50	24	0.0	2.6	0.50	0.0	4.9	0.1	0.1	0.4
12 29 78	19	0.01	0.0	0.00	37	0.3	0.02	0.7	4.8	0.15	40	27	0.0	2.4	0.48	0.2	5.8	0.1	0.2	0.7
2 23 79	10	0.00			37	0.2	0.03	3.2	3.6		30	17		1.8	0.40	0.1	4.6		0.1	0.7
4 3 79	8.8	0.01	0.0	0.00	42	0.2	0.03	2.7	3.5	0.30	39	19	0.0	1.8	0.42	0.1	4.0	0.1	0.1	0.5
4 26 79	17	0.00			57	0.3	0.03	3.0	5.4		49	28		2.7	0.67	0.0	5.2		0.0	0.8
6 27 79	7.6	0.02			76	0.2	0.02	7.4	7.4		44	25		2.8	0.48	0.1	6.0		0.2	0.5
7 21 79	9.2	0.02	0.0	0.00	53	0.3	0.03	7.6	6.3	0.20	49	28	0.1	2.5	0.54	0.1	6.4	0.0	0.2	0.4
8 10 79	14	0.03			67	0.3	0.01	4.4	9.2		52	34		3.2	0.61	0.1	11		0.2	0.7

TABLE 62. WATER QUALITY FOR SITE 7152 VAN BUREN COUNTY, TENNESSEE

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	16	0.05			120	564	355	0.92	4.1		0	0	0	1.3	230	0.0					
8 10 77	17	0.15			100	667	356	0.83	3.3		0	0	0	1.3	240	0.0					
9 15 77	18	0.8			140	304	168	0.80	4.3		0	0	0	0.8	110	0.1					
10 12 77	11	0.4			100	144	84	0.82	4.6		0	0	0	0.7	52	0.0					
11 8 77	16	1.0	38		50	107	65	0.79	4.9		0	0	0	0.6	42	0.0					
12 6 77	7	2.0	29*		4	195	117	0.75	3.8		0	0	0	2.3	71	0.0					
1 4 78	2	0.6			0	481	216	0.79	3.7		0	0	0	1.3	140	0.0					
2 15 78	3	0.06			2	127	66	1.05	4.6		0	0	0	0.9	40	0.1					
3 30 78	10	0.01	29		4	127	73	0.93	4.4		0	0	0	1.0	46	0.1					
4 26 78	7	0.02	45*		8	95	53	1.10	4.5		0	0	0	0.9	30	0.0					
5 24 78	16	0.008			5	125	77	0.90	4.8		0	0	0	0.6	49	0.1					
6 21 78	24	0.02	34*			123	78	0.91	4.7		0	0	0	0.7	48	0.0					
8 2 78	17	0.0000	19*		3	271	195	0.85	4.8		0	0	0	1.3	120						
11 20 78	11	0.0002	10		4	373	263	0.98	4.1	39	0	0	0	1.6	170	0.0					
12 29 78	4	0.002	1		1	117	62	1.01	4.5	4	0	0	0	0.7	40	0.1					
2 23 79	8	0.004	8		2	91	59	0.96	5.1	7	0	0	0	0.9	38	0.2					
4 3 79	15	0.01			8	85	51	0.99	5.2	6	0	0	0	0.7	32	0.0					
4 26 79	16	0.04	27	1.0		414	325	0.79	3.7	53	0	0	0	1.0	220	0.0					
5 29 79	14	0.004	16		15	88	57	0.88	4.8	11	0	0	0	0.9	37	0.0					
6 27 79	18	0.0001	43			317	173	1.03	4.9	28	0	0	0	1.5	120	0.0	0.0	0.30	1.65	0.10	0.00
7 21 79	18	0.002	22*		15	85	51	0.97	4.6	4	0	0	0	0.5	31	0.0	0.2	0.03	1.00	0.25	0.01
8 14 79	14	0.01				772	476	0.66	3.3	83	0	0	0	1.3	330	0.1	0.1	0.41	1.95	0.65	0.01

* 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	0.02			33	0.1	0.01	32	6.7		30	9.9		3.8	0.13	0.0	3.5		0.2	0.0
8 10 77	0.1	0.01			31	0.1	0.01	34	7.1		27	8.3		4.2	0.00	0.2	2.0		0.1	0.0
9 15 77	0.1	0.00			17	0.0	0.00	17	2.8		9.5	3.9		2.4	0.05	0.0	2.7		0.0	0.0
10 12 77	0.1	0.00	0.0	0.00	8.0	0.0	0.00	7.4	1.8	0.02	4.8	1.8	0.0	1.5	0.05	0.1	2.5	0.0	0.0	0.0
11 8 77	0.1	0.00			6.5	0.0	0.01	4.2	1.2		3.6	1.4		1.0	0.03	0.0	2.0		0.0	0.0
12 6 77	0.1	0.00			9.6	0.1	0.00	14	1.8		7.2	4.4		1.3	0.05	0.0	2.2		0.0	0.0
1 4 78	0.2	0.00	0.0	0.00	16	0.1	0.01	26	3.5	0.07	16	7.0	0.0	2.1	0.10	0.1	2.6	0.1	0.0	0.0
2 15 78	0.2				7.0	0.0	0.00	2.2	1.3		5.9	1.0		1.1	0.03	0.0	2.4		0.0	0.0
3 30 78	0.3	0.00	0.0	0.00	6.6	0.0	0.01	2.5	1.5	0.04	6.0	1.5	0.0	1.3	0.03	0.0	2.4	0.1	0.1	0.0
4 26 78	0.2	0.00	0.0	0.00	5.3	0.0	0.00	2.0	1.1	0.01	4.4	1.0	0.0	1.1	0.01	0.0	3.2	0.0	0.0	0.0
5 24 78	0.2	0.00			7.0	0.1	0.00	4.2	1.6		5.9	1.4		1.4	0.04	0.0	2.5		0.1	0.0
6 21 78	0.1	0.00	0.0	0.00	6.9	0.0	0.00	5.6	1.6	0.03	6.0	1.6	0.0	1.4	0.02	0.0	2.5	0.0	0.0	0.0
8 2 78	0.0	0.00			16	0.0	0.01	31	3.2		12	3.9		2.4	0.03	0.0	3.1		0.0	0.0
11 20 78	0.4	0.01			32	0.1	0.01	14	3.9		22	5.3		2.6	0.07	0.1	3.6		0.1	0.1
12 29 78	0.2	0.00	0.0	0.00	7.0	0.0	0.00	0.7	1.4	0.01	5.3	0.6	0.0	1.0	0.03	0.1	2.4	0.0	0.1	0.0
2 23 79	0.3	0.00			7.1	0.0	0.01	0.4	1.2		4.4	0.4		1.0	0.03	0.0	2.2		0.0	0.3
4 3 79	0.2	0.01	0.0	0.00	6.5	0.0	0.01	0.3	1.0	0.06	3.6	0.4	0.0	0.7	0.02	0.0	2.6	0.0	0.1	0.0
4 26 79	0.3	0.01	0.0	0.00	30	0.1	0.00	30	3.7	0.15	23	11	0.0	2.3	0.14	0.0	2.4	0.1	0.1	0.1
5 29 79	0.2	0.00			6.3	0.0	0.00	1.1	1.0		3.9	0.8		0.8	0.02	0.0	2.3		0.0	0.5
6 27 79	0.1	0.01			18	0.0	0.00	0.1	3.0		19	5.0		2.0	0.04	0.0	2.4		0.1	0.0
7 21 79	0.2	0.00	0.0	0.00	5.6	0.0	0.00	1.4	0.9	0.25	3.8	0.9	0.0	0.7	0.02	0.0	2.6	0.1	0.0	0.0
8 14 79	0.2	0.03			42	0.1	0.00	46	5.6		26	12		3.1	0.15	0.0	3.6		0.0	0.1

TABLE 63. WATER QUALITY FOR SITE 7153 VAN BUREN COUNTY, TENNESSEE

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							
6 15 77	16	0.15			8	360	180	0.95	3.7		0	0	0	0.8	120	0.1					
7 14 77	22	0.015			0	345	163	0.79	3.8		0	0	0	1.5	120	0.0					
8 10 77	20	0.07			25	398	187	1.03	3.8		0	0	0	0.9	130	0.1					
9 15 77	19	3			15	97	61	0.82	4.4		1	1	0	0.8	39	0.3					
10 12 77	12	0.8			4	80	53	0.93	4.8		0	0	0	0.8	33	0.1					
11 8 77	14	1.5	26		4	85	47	0.85	4.9		0	0	0	0.9	31	0.1					
12 6 77	7	2.0	20*		0	76	52	0.96	4.5		0	0	0	0.8	32	0.1					
1 4 78	0	0.6			0	157	88	0.92	4.5		0	0	0	1.0	58	0.1					
2 15 78	2	1.0			0	164	76	0.99	4.3		0	0	0	0.7	49	0.1					
3 30 78	8	0.08	5		0	201	109	0.90	4.1		0	0	0	0.8	74	0.1					
4 26 78	9	0.9	60*		0	123	61	1.01	4.1		0	0	0	0.6	39	0.0					
5 24 78	17	0.1			4	150	79	0.86	4.1		0	0	0	0.5	50	0.2					
6 21 78	22	0.15				248	124	0.92	3.9		0	0	0	0.8	84	0.1					
8 2 78	17	0.009	15		6	322	171	0.88	3.7		0	0	0	1.0	120	0.2					
10 25 78	12	0.0006	26*		7	292	175	0.84	4.0		0	0	0	1.3	120	0.2					
11 20 78	10	0.007	8		2	265	156	0.65	3.2	15	0	0	0	1.2	110	0.1					
12 29 78	1	0.02	1		1	115	64	0.68	4.1	11	0	0	0	0.7	45	0.1					
2 23 79	7	0.5	4		3	109	56	0.98	4.1	10	0	0	0	0.8	35	0.2					
4 3 79	13	0.2			3	37	26	0.86	4.8	6	0	0	0	0.7	15	0.0					
4 26 79	15	0.03	17	0.00	4	103	66	0.94	4.5	6	0	0	0	0.5	44	0.0					
5 29 79	15	0.06	11		5	103	61	0.87	5.8	13	1	1	0	1.0	39	0.2					
6 21 79			2	0.00	20	199	127	1.01	6.8	2	9	11	0	1.6	81	0.1					
7 21 79	17	0.2	54*		10	50	33	0.96	6.4	4	1	1	0	0.6	19	0.0	0.2	0.56	0.75	0.15	0.01
8 14 79	16	0.01	19		75	226	130	1.01	7.3	4	12	15	0	1.5	77	1.3	0.3	0.60	3.20	0.40	0.01

* 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																			
6 15 77	0.6	0.00			17	0.1	0.00	0.7	3.6		18	4.9		2.3	0.03	0.2	2.8		0.2	0.0
7 14 77	0.6	0.00			15	0.0	0.01	0.9	3.2		12	4.5		2.4	0.05	0.1	2.5		0.0	0.0
8 10 77	0.8	0.00			18	0.0	0.01	1.0	3.8		20	5.2		2.8	0.02	0.0	2.8		0.0	0.0
9 15 77	0.3	0.00			5.5	0.0	0.00	0.5	1.7		4.0	0.9		1.4	0.02	0.0	2.3		0.0	0.1
10 12 77	0.2	0.00	0.0	0.00	4.7	0.1	0.01	0.4	1.4	0.01	4.1	1.1	0.0	1.3	0.05	0.1	2.4	0.0	0.1	0.0
11 8 77	0.1	0.00			4.5	0.0	0.01	0.2	1.2		3.4	0.8		1.0	0.03	0.0	1.8		0.0	0.0
12 6 77	0.2	0.00			5.0	0.0	0.00	0.6	0.9		4.5	1.9		0.7	0.03	0.0	2.1		0.0	0.1
1 4 78	0.2	0.00	0.0	0.00	8.2	0.0	0.00	1.8	1.5	0.04	7.8	2.8	0.0	1.2	0.04	0.0	2.2	0.0	0.1	0.0
2 15 78	0.2				7.5	0.0	0.00	1.1	1.6		7.0	2.1		1.1	0.05	0.0	2.2		0.0	0.0
3 30 78	0.4	0.00	0.0	0.00	10	0.1	0.00	0.4	2.2	0.06	9.5	4.0	0.0	1.6	0.06	0.0	2.4	0.0	0.1	0.0
4 26 78	0.4	0.00	0.0	0.00	6.1	0.0	0.01	0.7	1.3	0.02	5.4	1.7	0.0	1.1	0.02	0.0	2.0	0.0	0.0	0.0
5 24 78	0.2	0.00			7.0	0.1	0.00	4.0	1.7		5.9	1.4		1.3	0.04	0.0	2.2		0.2	0.0
6 21 78	0.4	0.00	0.1	0.00	12	0.0	0.00	0.6	2.3	0.07	11	4.2	0.0	1.7	0.07	0.0	2.9	0.0	0.1	0.0
8 2 78	0.8	0.00			16	0.0	0.02	1.3	3.4		14	4.7		2.4	0.06	0.0	3.5		0.0	0.0
10 25 78	0.6	0.00	0.1	0.00	15	0.0	0.01	2.6	5.0	0.10	14	5.0	0.0	2.2	0.06	0.0	3.6	0.0	0.0	0.0
11 20 78	0.7	0.01			13	0.0	0.01	0.7	2.4		9.8	3.5		2.2	0.05	0.0	3.4		0.1	0.0
12 29 78	0.3	0.00	0.0	0.00	5.2	0.0	0.00	0.3	1.2	0.01	4.0	1.0	0.0	0.9	0.03	0.0	2.2	0.0	0.1	0.0
2 23 79	0.3	0.00			5.9	0.0	0.00	0.9	1.1		4.7	1.3		0.9	0.04	0.0	1.9		0.0	0.2
4 3 79	0.2	0.00	0.0	0.00	2.0	0.0	0.01	0.2	0.7	0.01	1.8	0.3	0.0	0.6	0.02	0.0	1.8	0.0	0.0	0.0
4 26 79	0.1	0.00	0.0	0.00	6.7	0.0	0.00	0.6	1.4	0.03	5.4	1.5	0.0	1.0	0.03	0.0	2.1	0.0	0.0	0.0
5 29 79	0.0	0.00			6.0	0.0	0.00	0.2	1.2		4.7	1.7		0.9	0.02	0.0	1.9		0.0	0.0
6 21 79	0.1	0.01			13	0.1	0.03	0.1	3.3		11	3.0		1.8	0.04	0.1	2.7		0.0	0.0
7 21 79	0.1	0.00	0.0	0.00	2.8	0.0	0.02	0.3	0.9	0.08	2.5	0.6	0.0	0.6	0.02	0.0	2.3	0.0	0.0	0.0
8 14 79	0.0	0.01			15	0.0	0.00	0.9	3.3		10	2.0		1.6	0.00	0.0	2.4		0.0	0.0

TABLE 64. WATER QUALITY FOR SITE 7156 VAN BUREN COUNTY, TENNESSEE

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										
6 15 77	16	0.015			15	51	23	0.72	4.0		0	0	0	1.5	12	0.0					
7 14 77	20	0.0025			120	125	62	0.58	4.0		0	0	0	8.8	30	0.0					
8 10 77	21	0.1			35	540	281	0.80	3.5		0	0	0	0.8	200	0.0					
9 15 77	19	2.5			20	150	89	0.77	4.2		0	0	0	0.5	61	0.0					
10 12 77	12	1.0			15	72	44	0.75	4.5		0	0	0	0.9	27	0.0					
11 8 77	16	2.0	15		15	60	38	0.81	4.3		0	0	0	0.7	24	0.0					
12 6 77	8	2.5	24*		4	86	49	0.62	4.1		0	0	0	4.0	30	0.1					
1 4 78	1	1.0			0	101	51	0.89	4.5		0	0	0	0.8	32	0.0					
2 15 78	2	0.9			3	119	54	0.84	4.5		0	0	0	0.8	35	0.1					
3 30 78	10	0.5			8	120	52	0.92	4.0		0	0	0	0.9	33	0.0					
4 26 78	8	0.4	48*		10	98	49	0.85	4.1		0	0	0	1.0	30	0.0					
5 24 78	18	0.1			15	150	72	0.84	3.9		0	0	0	1.3	48	0.1					
6 21 78	20	0.25	38*			162	91	0.87	3.7		0	0	0	0.8	60	0.1					
11 20 78	10	0.0008	4		7	494	257	0.80	3.3	56	0	0	0	0.9	180	0.1					
12 29 78	3	0.1	1		1	96	49	0.77	4.2	10	0	0	0	0.6	31	0.1					
2 23 79	9	0.25	6		0	81	29	0.99	4.3	9	0	0	0	1.5	16	0.3					
4 3 79	15	0.01			3	15	16	0.60	4.7		0	0	0	0.8	7	0.1					
4 26 79	15	0.07	8	0.00	8	117	71	0.71	4.0		0	0	0	0.8	50	0.0					
5 29 79	15	0.09	4		10	81	45	0.69	4.1	14	0	0	0	0.7	30	0.0					
6 27 79	17	0.003	4		10	317	194	0.87	3.7	30	0	0	0	0.9	140	0.0	0.0	0.05	1.04	0.15	0.01
7 21 79	19	0.02	46*		8	133	62	0.71	4.0	12	0	0	0	0.6	42	0.0	0.0	0.01	1.00	0.40	0.01
8 14 79	17	0.004	0		15	159	77	0.70	4.0	290	0	0	0	1.1	50	0.1	0.0	0.30	1.10	0.55	0.01

* 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																			
6 15 77	0.2	0.00			0.7	0.1	0.00	0.6	0.8		1.7	0.4		0.7	0.00	0.2	1.9		0.2	0.0
7 14 77	0.4	0.00			2.6	0.0	0.01	4.0	1.0		3.0	0.8		4.8	0.02	0.1	3.1		0.1	0.0
8 10 77	4.3	0.00			17	0.1	0.01	1.6	2.6		29	8.9		2.6	0.00	0.1	3.8		0.1	0.1
9 15 77	1.5	0.00			6.1	0.0	0.00	0.7	1.1		7.3	2.8		1.4	0.03	0.0	2.6		0.0	0.1
10 12 77	0.5	0.00	0.0	0.00	2.5	0.0	0.01	0.5	0.8	0.01	3.1	1.0	0.0	1.1	0.03	0.0	2.8	0.0	0.0	0.0
11 8 77	0.4	0.00			2.6	0.0	0.02	0.3	0.8		2.8	0.9		1.0	0.02	0.0	2.0		0.0	0.0
12 6 77	0.5	0.00			2.8	0.0	0.00	0.3	0.6		3.8	1.5		0.8	0.01	0.0	1.9		0.0	0.0
1 4 78	0.7	0.00	0.0	0.00	3.3	0.0	0.00	0.4	0.8	0.02	4.9	1.8	0.0	0.9	0.04	0.1	2.4	0.0	0.0	0.0
2 15 78	0.6	0.03			3.5	0.0	0.00	0.4	0.7		5.0	1.7		0.8	0.02	0.0	2.2		0.0	0.0
3 30 78	0.6	0.01			3.5	0.1	0.01	0.4	1.0		5.0	1.8		1.0	0.04	0.1	2.0		0.1	0.0
4 26 78	0.5	0.00	0.0	0.00	2.9	0.0	0.00	0.3	0.7	0.01	4.2	1.6	0.0	1.0	0.01	0.0	3.3	0.0	0.0	0.0
5 24 78	0.7	0.00			5.2	0.0	0.00	0.6	1.2		5.8	2.0		2.5	0.03	0.0	2.0		0.0	0.0
6 21 78	1.2	0.00	0.0	0.00	6.2	0.1	0.00	1.2	1.4	0.02	8.7	2.9	0.0	1.2	0.03	-0.0	3.1	0.0	0.1	0.0
11 20 78	4.3	0.01			18	0.1	0.00	0.3	2.3		25	9.7		1.7	0.12	0.0	4.9		0.1	0.1
12 29 78	0.8	0.00	0.0	0.00	3.1	0.0	0.00	0.2	0.7	0.00	3.9	1.4	0.0	0.8	0.03	0.1	2.4	0.0	0.1	0.0
2 23 79	0.1	0.00			3.6	0.0	0.01	0.0	0.6		1.8	0.1		1.0	0.01	0.0	1.6		0.0	0.4
4 3 79	0.2	0.00	0.0	0.00	0.6	0.0	0.01	0.1	0.4	0.07	0.5	0.0	0.0	0.7	0.01	0.0	2.4	0.0	0.0	0.0
4 26 79	0.9	0.00	0.0	0.00	4.6	0.0	0.00	0.2	0.9	0.02	5.6	2.0	0.0	1.0	0.04	0.0	2.2	0.0	0.0	0.0
5 29 79	0.4	0.00			2.7	0.0	0.01	0.2	0.6		3.2	1.1		0.8	0.02	0.0	2.3		0.0	0.0
6 27 79	3.8	0.01			12	0.1	0.02	1.5	1.5		21	6.2		1.3	0.08	0.1	4.1		0.1	0.0
7 21 79	0.7	0.00	0.0	0.00	4.0	0.0	0.01	0.6	0.8	0.25	4.6	1.7	0.0	0.9	0.03	0.0	2.8	0.0	0.0	0.0
8 14 79	0.9	0.01			4.9	0.0	0.00	0.7	0.9		5.4	2.1		1.4	0.02	0.0	3.7		0.0	0.1

TABLE 65. WATER QUALITY FOR SITE 7160 WHITE COUNTY, TENNESSEE

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 79	17	0.0008				147	79	0.84	4.7		0	0	0	0.6	52	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 13 79	1.4	0.00			8.6	0.0	0.00		0.9		5.1	1.9		1.0	0.04	0.0	3.8		0.0	0.0

TABLE 66. WATER QUALITY FOR SITE 7161 WHITE COUNTY, TENNESSEE

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										
6 14 77	16	0.009			10	24	16	1.84	6.8		5	6	0	0.5	4	0.2					
7 13 77	20	0.01			55	25	15	1.97	6.3		4	5	0	0.5	3	0.4					
8 9 77	20	0.02			120	30	19	1.93	5.9		4	5	0	0.7	8	0.1					
9 14 77	18	0.01			20	26	23	1.76	6.7		3	4	0	0.4	5	0.7					
10 12 77	13	0.2			20	16	15	1.26	6.1		1	1	0	0.5	5	0.1					
11 8 77	14	0.4	48		40	14	15	1.45	5.9		2	3	0	0.5	4	0.1					
12 6 77	8	0.5	30*		15	12	13	1.40	5.9		2	2	0	0.6	4	0.1					
1 3 78	1	0.09			2	15	15	1.10	6.4		2	3	0	0.9	5	0.1					
2 14 78	3	0.2			0	15	16	1.62	6.2		2	2	0	0.5	5	0.1					
3 21 78	8	0.3	15		45	28	15	1.35	5.6		0	0	0	0.7	5	0.2					
4 26 78	8	0.6	68*		65	14	19	0.93	6.2		1	1	0	0.6	7	0.1					
5 23 78	19	0.09	45*		20	16	14	1.55	6.5		2	3	0	0.7	4	0.2					
6 21 78	18	0.15				16	16	1.24	6.4		2	3	0	0.7	5	0.1					
8 1 78	19	0.06	17*		25	18	26	1.18	6.1		2	2	0	0.4	12	0.1					
9 14 78	17	0.0004	27*		10	24	22	1.45	6.8		4	5	0	0.8	7	0.0					
10 25 78	12	0.0003	39*		7	30	22	1.63	7.0		2	3	0	0.9	8	0.0					
11 29 78	4	0.2	5		7	12	13	1.31	5.3		0	0	0	0.4	4	0.1					
1 4 79	4	0.15	20		7	13	14	0.81	5.7	1	0	0	0	0.2	6	0.3					
2 28 79	8	0.15	26		15	19	18	0.78	6.3		2	2	0	0.7	8	0.1					
3 28 79	9	0.1			30	25	15	0.65	4.4	6	0	0	0	0.5	7	0.1					
4 26 79	14	0.04		0.11	15	18	13	1.19	6.0	3	0	0	0	0.2	5	0.0					
5 29 79	15	0.009	15		15	18	13	1.00	5.7	5	1	1	0	1.1	4	0.1					
6 27 79	16	0.0003	27		25	21	19	1.49	6.7	3	3	4	0	0.9	6	0.1	0.0	0.01	2.60	0.40	0.00
7 21 79	18	0.07		1.6	15	22	15	0.79	5.5	6	0	0	0	0.9	6	0.0	0.2	0.33	0.70	0.25	0.01
8 17 79	16	0.0003	7		15	17	23	1.19	6.5	4	2	2	0	0.5	10	0.1	0.0	0.01	0.35	0.05	0.01
9 13 79	17	0.0009	6		25	30	24	1.41	7.0	0	5	6	0	0.9	9	0.0					
12 11 79	6	0.05			10	12	14	0.69	5.8		0	0	0	0.5	7	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																			
6 14 77	0.0	0.00			0.8	0.1	0.00	0.0	1.2		0.9	0.0		0.9	0.00	0.2	1.5		0.1	0.0
7 13 77	0.1	0.00			1.0	0.0	0.00	0.0	1.0		0.8	0.0		0.7	0.01	0.1	1.9		0.0	0.0
8 9 77	0.2	0.00			3.0	0.0	0.02	0.2	1.3		1.1	0.1		1.4	0.00	0.1			0.0	0.0
9 14 77	0.1				1.9	0.1	0.01	0.0	0.9		1.3	0.1		0.8	0.03	0.1	3.1		0.1	0.1
10 12 77	0.1	0.00	0.0	0.00	1.1	0.1	0.01	0.1	0.8	0.00	0.7	0.0	0.0	0.7	0.04	0.1	2.3	0.0	0.1	0.0
11 8 77	0.1	0.00			0.9	0.0	0.00	0.1	0.6		0.6	0.0		0.8	0.00	0.0	2.3		0.0	0.0
12 6 77	0.1	0.00			1.0	0.0	0.00	0.0	0.6		0.6	0.0		0.6	0.01	0.0	2.0		0.0	0.1
1 3 78	0.1	0.00	0.0	0.00	1.0	0.0	0.00	0.1	0.6	0.00	0.8	0.0	0.0	0.6	0.00	0.0	1.9	0.0	0.0	0.0
2 14 78	0.0				1.6	0.0	0.01	0.0	1.0		0.7	0.0		0.9	0.02	0.0	1.9		0.0	0.0
3 21 78	0.4	0.01			1.1	0.0	0.01	0.2	0.8		0.7	0.1		0.7	0.01	0.0	2.0		0.0	0.0
4 26 78	0.2	0.00	0.0	0.00	1.1	0.0	0.00	0.0	0.6	0.01	0.8	0.0	0.0	0.6	0.01	0.0	3.1	0.0	0.0	0.0
5 23 78	0.0	0.00			1.0	0.0	0.00	0.0	0.7		0.6	0.0		0.6	0.00	0.0	2.1		0.0	0.0
6 21 78	0.1	0.00	0.0	0.00	1.3	0.0	0.00	0.1	0.7	0.03	0.7	0.0	0.0	0.6	0.00	0.0	2.1	0.0	0.0	0.0
8 1 78	0.0	0.00			2.3	0.0	0.01	0.4	1.5		1.3	0.2		1.1	0.01	0.0	2.6		0.0	0.0
9 14 78	0.0	0.00			1.7	0.0	0.03	0.0	1.3		0.8	0.0		1.2	0.01	0.0	2.7		0.0	0.0
10 25 78	0.1	0.00	0.0	0.00	2.6	0.0	0.00	0.1	1.6	0.02	1.2	0.0	0.0	1.1	0.01	0.0	2.3	0.0	0.1	0.0
11 29 78	0.1	0.01			1.0	0.0	0.01	0.1	0.7		0.5	0.0		0.6	0.01	0.0	2.2		0.1	0.0
1 4 79	0.1	0.00	0.0	0.00	0.9	0.0	0.01	0.0	0.7	0.08	0.4	0.0	0.0	0.6	0.00	0.0	1.9	0.0	0.0	0.1
2 28 79	0.1	0.00			1.2	0.0	0.00	0.1	0.5		0.7	0.0		0.6	0.01	0.0	2.0		0.0	0.4
3 28 79	0.1	0.00			0.9	0.0	0.01	0.1	0.6		0.4	0.0		0.5	0.01	0.0	1.8		0.0	0.0
4 26 79	0.1	0.00			0.9	0.0	0.00	0.1	0.7		0.6	0.0		0.6	0.02	0.0	1.9		0.1	0.0
5 29 79	0.0	0.00			1.0	0.0	0.00	0.1	0.6		0.5	0.0		0.5	0.00	0.0	2.0		0.0	0.1
6 27 79	0.0	0.00			2.0	0.0	0.00	0.1	0.8		1.0	0.0		0.7	0.00	0.0	2.3		0.0	0.0
7 21 79	0.2	0.01	0.0	0.00	1.0	0.0	0.00	0.1	0.6	0.00	0.4	0.0	0.0	0.3	0.01	0.0	2.7	0.0	0.0	0.1
8 17 79	0.0	0.00			2.0	0.0	0.00	0.2	0.7		1.5	0.2		0.7	0.01	0.0	2.8		0.0	0.0
9 13 79	0.1	0.00			2.4	0.0	0.00	0.1	1.1		1.4	0.0		1.0	0.00	0.0	2.2		0.0	0.0
12 11 79	0.1	0.00			0.8	0.0	0.00	0.0	0.4		0.6	0.0		0.5	0.00	0.0	1.9		0.0	0.0

TABLE 67. WATER QUALITY FOR SITE 7162 WHITE COUNTY, TENNESSEE

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	23	0.02			25	1140	743	0.53	3.1		0	0	0	1.0	560	0.1					
9 14 77	20	0.1			20	511	338	0.75	3.6		0	0	0	1.4	230	0.1					
10 12 77	9	0.7	15		8	375	234	0.49	3.7		0	0	0	0.8	160	0.2					
11 8 77	16	1.0	46		55	154	103	0.63	3.8		0	0	0	2.2	66	0.4					
12 6 77	0	2.5	26*		4	130	97	0.52	4.0		0	0	0	1.7	64	0.5					
1 3 78	1	0.7			10	406	229	0.45	3.9		0	0	0	1.9	150	1.0					
2 14 78	1	0.02			2	242	135	1.16	7.3		17	21	0	2.4	76	0.3					
3 21 78	9	0.03	23		4	537	457	0.49	2.7		0	0	0	1.9	340	0.1					
4 26 78	9	0.1	58*		10	1340	784	0.73	3.0		0	0	0	1.0	590	0.4					
5 23 78	20	0.04	21*		2	1270	875	0.81	3.2		0	0	0	1.2	630	0.1					
6 21 78	20	0.09				1090	695	0.98	3.3		0	0	0	1.1	480	0.1					
8 1 78	32	0.03	17*		0	1250	948	0.79	3.5		0	0	0	0.9	680	0.0					
9 13 78	23	0.002	26*		8	1030	895	0.81	5.2		0	0	0	1.3	660	0.0					
10 25 78	15	0.004	11		1	1090	970	0.80	4.9		0	0	0	1.1	710	0.0					
11 29 78	6	0.005	75		190	713	470	1.16	7.6		35	43	0	0.8	310	0.0					
1 4 79	1	0.03	5		95	449	358	0.89	4.4		0	0	0	1.5	250	0.0					
2 27 79	7	0.008			20	1490	1090	0.80	3.6	210	0	0	0	0.6	770	0.1					
4 26 79	20	0.005	32	0.03		526	409	0.88	5.6	10	0	0	0	0.9	300	0.0					
5 29 79	22	0.003				1100	627	0.66	3.2	110	0	0	0	0.7	470	0.1					
6 27 79	22	0.003	36			1040	838	0.81	5.6	31	0	0	0	0.9	620	0.0	0.0	0.11	0.75	0.15	0.01
7 21 79	21	0.008				830	675	0.89	7.6	-4	24	29	0	1.1	480	0.0	0.1	0.07	0.25	0.10	0.01
8 17 79	21	0.002	42			1130	812	0.99	4.9	35	0	0	0	1.0	560	0.0	0.0	0.12	0.70	0.00	0.00
9 13 79	20	0.009	54			1160	856	0.92	5.0	33	0	0	0	2.2	600	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 9 77	25	0.01			46	0.3	0.03	16	21		38	17		3.8	0.24	0.1	8.3		0.1	0.5
9 14 77	17				32	0.2	0.03	5.9	2.2		23	9.9		1.6	0.24	0.1	6.0		0.1	0.3
10 12 77	7.0	0.01	0.0	0.00	17	0.0	0.01	13	1.8	0.07	8.8	2.4	0.0	1.8	0.09	0.0	9.1	0.1	0.1	0.1
11 8 77	2.8	0.00			9.4	0.0	0.00	2.9	1.5		4.7	1.8		1.5	0.05	0.0	3.9		0.0	0.1
12 6 77	4.0	0.00			7.3	0.0	0.00	2.1	1.0		4.4	2.3		0.7	0.05	0.0	3.3		0.0	0.1
1 3 78	12	0.00	0.0	0.00	14	0.1	0.00	11	1.7	0.07	9.1	4.0	0.0	1.2	0.10	0.0	6.8	0.1	0.1	0.1
2 14 78	0.5	0.02			30	0.0	0.00	0.1	1.5		4.0	0.9		1.2	0.02	0.0	2.8		0.0	0.0
3 21 78	17	0.03			55	0.0	0.02	1.0	3.1		7.5	1.0		1.9	0.06	0.0	12		0.0	0.1
4 26 78	8.7	0.02	0.0	0.00	73	0.2	0.04	7.2	5.6	0.15	62	19	0.0	3.2	0.31	0.0	4.7	0.2	0.2	0.2
5 23 78	1.9	0.02			85	0.1	0.01	31	11		73	21		4.4	0.25	0.0	4.3		0.0	0.1
6 21 78	4.4	0.02	0.0	0.00	77	0.2	0.03	21	8.2	0.30	68	21	0.0	3.8	0.34	0.0	3.8	0.2	0.2	0.3
8 1 78	0.4	0.03			97	0.2	0.02	42	12		72	21		5.2	0.25	0.1	4.8		0.1	0.1
9 13 78	0.2	0.02			98	0.1	0.03	25	15		66	17		7.8	0.14	0.1	3.8		0.1	0.0
10 25 78	0.2	0.03	0.0	0.00	110	0.1	0.01	38	11	0.45	74	20	0.0	4.4	0.15	0.2	3.9	0.2	0.2	0.0
11 29 78	0.3	0.00			78	0.1	0.01	1.8	5.4		40	8.6		2.3	0.10	0.2	2.3		0.2	0.0
1 4 79	0.3	0.00	0.0	0.00	42	0.0	0.00	11	3.6	0.15	30	7.6	0.0	1.9	0.08	0.1	2.3	0.0	0.1	0.1
2 27 79	9.9	0.02			120	0.2	0.04	61	5.9		82	28		2.9	0.36	0.2	5.1		0.4	0.6
4 26 79	0.2	0.01	0.0	0.00	48	0.1	0.00	7.5	3.5	0.35	35	8.4	0.1	1.8	0.11	0.1	2.3	0.1	0.3	0.1
5 29 79	3.7	0.03			52	0.2	0.03	19	7.2		44	14		2.7	0.25	0.1	4.3		0.1	0.8
6 27 79	0.2	0.03			94	0.1	0.00	24	9.2		65	17		4.0	0.14	0.2	3.5		0.3	0.0
7 21 79	0.1	0.02	0.0	0.00	81	0.1	0.02	12	8.3	0.30	55	13	0.1	3.4	0.07	0.1	2.4	0.1	0.2	0.0
8 17 79	0.2	0.03			100	0.1	0.03	36	13		70	19		5.3	0.13	0.1	3.4		0.2	0.0
9 13 79	0.3	0.04			110	0.0	0.00	41	11		69	17		4.2	0.12	0.2	3.2		0.6	0.0

TABLE 68. WATER QUALITY FOR SITE 7163 WHITE COUNTY, TENNESSEE

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									
6 21 78	19	0.2				492	178	0.63	3.3		0	0	0	0.5	120	0.1					
8 1 78	24	0.015	11		3	768	317	0.48	2.9		0	0	0	0.4	240	0.0					
9 13 78	20	0.002	30*		5	758	345	0.63	3.2		0	0	0	0.7	250	0.0					
10 25 78	11	0.005	13		2	954	435	0.51	3.0		0	0	0	1.2	320	0.0					
11 29 78	6	0.003	7		5	854	363	0.60	2.8		0	0	0	0.5	260	0.0					
1 4 79	7	0.03	4		1	466	162	0.67	3.2	76	0	0	0	0.2	110	0.3					
6 27 79	19	0.003	2		4	510	248	0.57	3.2	76	0	0	0	0.3	180	0.0	0.0	0.00	0.00	0.10	0.01
9 13 79	19	0.02	38		10	781	321	0.57	3.0	94	0	0	0	0.7	240	0.0					
12 11 79	7	0.02			20	380	221	0.55	3.4	70	0	0	0	0.5	160	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																			
6 21 78	7.0	0.01	0.0	0.00	15	0.0	0.01	3.4	1.4	0.10	9.7	2.4	0.0	1.1	0.04	0.0	5.9	0.9	0.0	0.1
8 1 78	5.2	0.01			22	0.0	0.02	3.5	2.2		15	1.5		1.4	0.06	0.0	11		0.1	0.1
9 13 78	7.5	0.01			33	0.1	0.03	4.5	3.3		17	1.8		2.2	0.07	0.0	13		0.0	0.1
10 25 78	11	0.01	0.0	0.00	30	0.0	0.01	12	2.8	0.20	22	2.1	0.0	1.6	0.07	0.0	14	0.2	0.0	0.1
11 29 78	10	0.01			33	0.0	0.01	9.4	2.3		18	2.1		1.4	0.08	0.0	13		0.1	0.1
1 4 79	5.0	0.01	0.0	0.00	16	0.0	0.03	4.6	1.7	0.15	8.0	0.7	0.0	1.4	0.06	0.1	5.8	0.1	0.1	0.1
6 27 79	5.8	0.00			21	0.0	0.01	2.5	2.0		12	1.3		1.4	0.06	0.0	9.4		0.0	0.1
9 13 79	6.1	0.01			24	0.0	0.00	3.7	2.3		19	1.6		1.2	0.04	0.0	9.8		0.0	0.1
12 11 79	6.2	0.01			19	0.0	0.00	3.0	1.6		10	1.1		1.2	0.05	0.1	8.2		0.0	0.1

TABLE 69. WATER QUALITY FOR SITE 7165 WHITE COUNTY, TENNESSEE

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 4 79	1	0.001	0		45	1760	1190	0.80	2.7		0	0	0	1.0	830	0.1					
9 13 79	21	0.02			30	1950	996	0.70	2.6		0	0	0	1.7	750	1.1					

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 4 79	8.6	0.03	0.0	0.00	110	0.3	0.04	90	8.7	0.50	95	31	0.0	3.7	0.43	0.2	5.3	0.2	0.4	0.3
9 13 79	11	0.04			94	0.2	0.10	11			72	26		4.4	0.31	0.1	6.8		0.2	0.2

TABLE 70. WATER QUALITY FOR SITE 7166 WHITE COUNTY, TENNESSEE

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							
6 14 77	17	0.05			0	880	459	0.52	2.8		0	0	0	0.3	340	0.0					
7 13 77	17	0.03			15	1000	557	0.55	3.0		0	0	0	0.6	410	0.0					
8 9 77	24	0.015			15	738	365	0.49	3.2		0	0	0	0.5	270	0.1					
9 14 77	17	0.06			0	1120	668	0.69	3.0		0	0	0	0.4	450	0.3					
10 12 77	10	0.25			4	434	215	0.51	3.6		0	0	0	0.7	160	0.1					
11 8 77	16	0.25	23		40	360	215	0.55	3.3		0	0	0	0.4	150	0.1					
12 6 77	7	0.8	25*		4	226	109	0.60	3.4		0	0	0	0.5	74	0.1					
1 3 78	0	0.4			4	514	210	0.52	3.5		0	0	0	0.6	150	0.1					
9 13 79	17	0.04	8		10	1020	524	0.61	3.1	150	0	0	0	0.9	380	0.0					
12 11 79	8	0.1			10	660	307	0.52	3.2	110	0	0	0	0.4	220	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																			
6 14 77	15	0.01			36	0.1	0.03	2.5	2.4		22	4.6		2.3	0.03	0.0	15		0.0	0.2
7 13 77	19	0.03			48	0.1	0.02	2.0	2.3		26	5.9		2.8	0.11	0.1	18		0.1	0.1
8 9 77	13	0.02			24	0.1	0.03	0.6	3.1		17	6.0		1.9	0.00	0.2	11		0.0	0.2
9 14 77	26				69	0.2	0.03	3.7	2.1		34	8.9		3.2	0.16	0.1	31		0.1	0.2
10 12 77	6.7	0.01	0.0	0.00	18	0.0	0.01	3.0	1.3	0.08	8.4	2.1	0.0	1.5	0.05	0.1	8.2	0.1	0.0	0.1
11 8 77	6.3	0.00			18	0.0	0.00	2.8	1.6		9.7	2.4		1.5	0.06	0.0	8.4		0.0	0.1
12 6 77	3.8	0.00			9.2	0.0	0.00	1.8	0.9		5.3	1.2		0.8	0.03	0.0	4.6		0.0	0.0
1 3 78	9.6	0.00	0.0	0.00	17	0.0	0.01	3.5	1.2	0.06	9.0	2.4	0.0	1.2	0.05	0.0	7.2	0.1	0.0	0.1
9 13 79	18	0.03			52	0.0	0.02	4.0	2.3		25	6.1		2.4	0.10	0.1	16		0.1	0.1
12 11 79	11	0.01			29	0.0	0.01	4.0	1.4		11	2.8		1.4	0.07	0.1	9.0		0.0	0.1

TABLE 71. WATER QUALITY FOR SITE 7168 WHITE COUNTY, TENNESSEE

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									
2 14 78	1	0.7			0	43	28	1.48	6.6		3	4	0	2.3	9	0.7					
3 21 78	8	0.25	184		150	67	44	1.36	4.9		0	0	0	2.3	20	0.7					
4 26 78	8	0.03				34	23	1.21	5.0		0	0	0	0.7	11	0.1					
5 23 78	19	0.0025	30*		15	21	15	1.31	6.3		2	2	0	0.9	5	0.1					
2 28 79	5	0.015	4		0	32	25	0.82	5.0	6	0	0	0	0.9	14	0.0					
4 26 79	12	0.001	13	0.06	5	29	22	0.96	5.3	4	0	0	0	0.8	11	0.0					
5 29 79	13	0.002			50	22	19	0.96	5.8	6	1	1	0	0.5	9	0.0					
7 21 79	18	0.4				17	15	1.16	6.5		1	1	0	0.4	5	0.0	0.1	0.10			0.01
12 11 79	6	0.002			10	20	19	0.61	6.0		1	1	0	0.5	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									
2 14 78	0.1	0.02			4.4	0.0	0.00	0.1	1.0		1.3	0.1		0.9	0.00	0.0	1.6		0.0	0.0
3 21 78	0.2	0.01			7.1	0.0	0.01	0.3	1.4		3.0	0.5		1.4	0.02	0.0	2.0		0.0	0.0
4 26 78	0.2	0.00	0.0	0.00	1.7	0.0	0.00	0.2	1.2	0.01	2.0	0.3	0.0	0.8	0.03	0.0	1.9	0.0	0.0	0.0
5 23 78	0.0	0.00			1.0	0.0	0.00	0.0	0.8		0.9	0.0		0.8	0.00	0.0	1.9		0.0	0.0
2 28 79	0.1	0.00			1.9	0.0	0.00	0.3	0.7		1.6	0.3		0.6	0.01	0.0	1.9		0.0	0.5
4 26 79	0.1	0.00			1.3	0.0	0.00	0.0	0.9		1.5	0.1		0.8	0.01	0.0	2.4		0.0	0.0
5 29 79	0.0	0.00			1.0	0.0	0.01	0.0	0.8		1.1	0.1		0.9	0.01	0.0	2.2		0.0	0.0
7 21 79	0.1	0.00	0.0	0.00	0.9	0.0	0.00	0.1	0.7	0.03	0.7	0.0	0.0	0.5	0.03	0.1	2.3	0.0	0.1	0.0
12 11 79	0.0	0.00			0.8	0.0	0.00	0.0	0.8		0.9	0.0		0.5	0.04	0.1	2.2		0.1	0.0

TABLE 72. WATER QUALITY FOR SITE 7169 WHITE COUNTY, TENNESSEE

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									
12 11 79	5	0.004			4	395	220	0.66	3.4		0	0	0	0.4	160	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									
12 11 79	5.1	0.00			20	0.0	0.01		1.8		13	1.8		1.2	0.07	0.0	8.6		0.1	0.1

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