Hartsville Nuclear Plant
Primary Water Quality Monitoring Report

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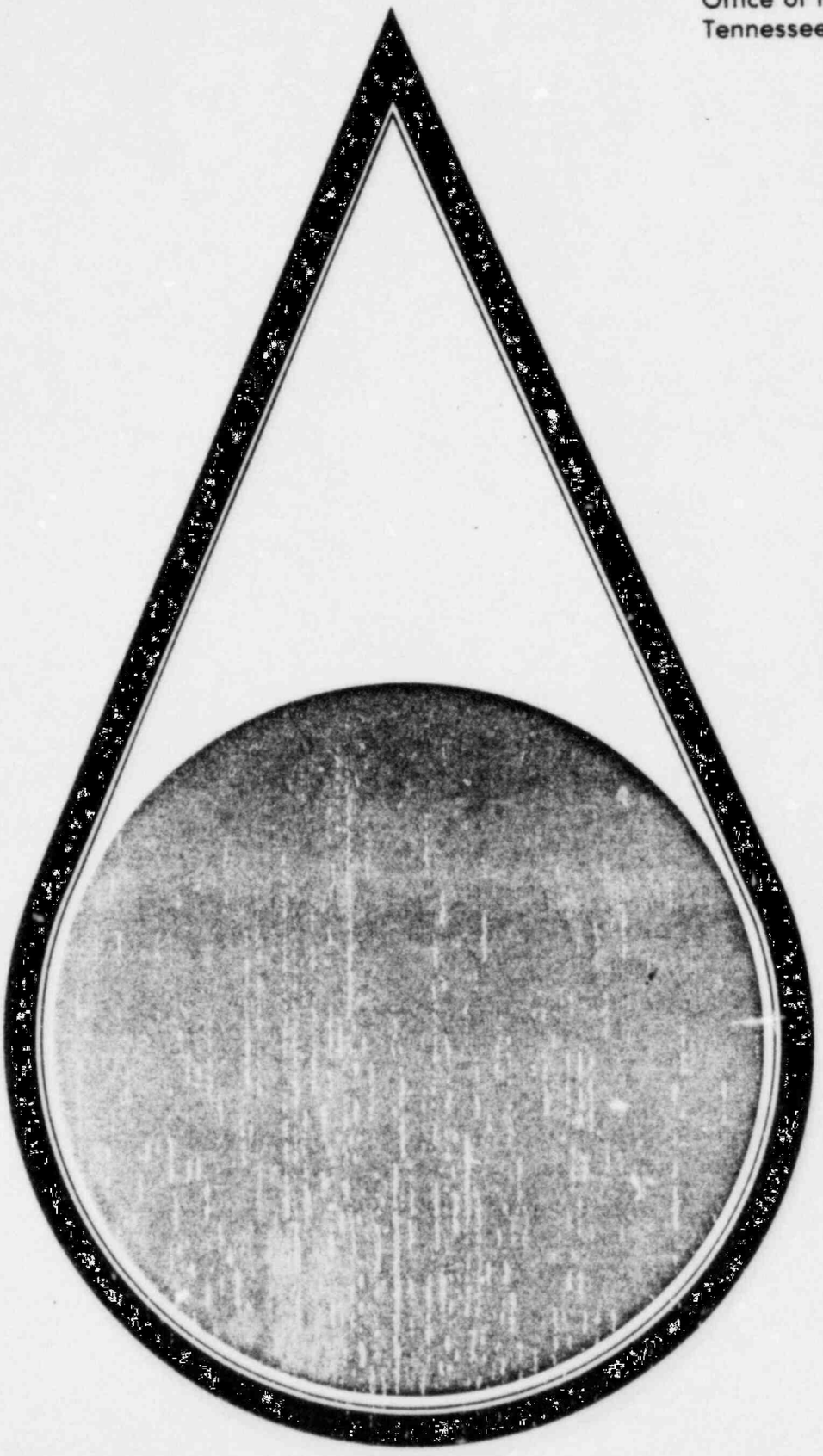
August 1980

TECHNICAL REPORT SERIES

HARTSVILLE NUCLEAR PLANT: PRIMARY WATER QUALITY MONITORING REPORT

TECHNICAL REPORT NO.
WR(70)-50-10-80.1
September 1980
Division of Water Resources
Office of Natural Resources
Tennessee Valley Authority



The Hartsville Nuclear Plant Primary Water Quality Monitoring Report has been prepared to meet the requirements of NPDES Permit No. TN0027740 Part III.D.

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service water systems, discharges water back into the Cumberland River at river mile 284.6 through an anchored diffuser pipe.

The land near the plant site is considered rural farm land with moderately rolling hills. Most sections of the river still retain a marginal fringe of riparian vegetation composed primarily of hardwoods. The Cumberland River upstream from the plant site drains approximately 28,257 square kilometers (10,910 square miles). Most of the land around the plant site is of a thin bedded laminated sandy limestone considered to be part of the Hermitage Formation and underlain by Carters limestone.

B. Description of Old Hickory Reservoir in the Vicinity of Hartsville Nuclear Plant

The section of the Cumberland River on which the plant is located is part of the backwaters of Old Hickory Reservoir.

> "The water elevation within Old Hickory Reservoir normally varies from elevation 442 (MSL) in the winter to 445 (MSL) in the summer. At normal maximum pool (El. 445) the reservoir impounds a volume of 518×10^6 cubic meters (420,000 acre-feet) with a surface area of 9105 hectares (22,500 acres). Water depths range from 18.3 meters (60 feet) at Old Hickory Dam to about 9.1 meters (30 feet) at the Hartsville site and to smaller depths further upstream. Stream widths vary from 0.8 to 1.6 kilometers (0.5 to 1 mile) near Old Hickory Dam to less than 300 meters (1,000 feet) at the Hartsville site and upstream from that point."[3]

HARTSVILLE NUCLEAR PLANT PRIMARY WATER QUALITY MONITORING REPORT

I. INTRODUCTION

A. Generic Description of Hartsville Nuclear Plant

The Tennessee Valley Authority (TVA) initiated construction of the Hartsville Nuclear Power Plant following the issuance of a limited work authorization by the Nuclear Regulatory Commission (NRC) in April of 1976.[1] The plant is located on the Cumberland River at approximate river mile 285 in Smith and Trousdale Counties, Tennessee, five miles southeast of Hartsville, Tennessee, on the north bank of Old Hickory Reservoir. The Hartsville facility consists of two twin-unit plants, (4 reactor vessels), each of which will employ identical boiling water reactors. The plant site encompasses 1,940 acres, of which about 300 to 350 acres will be used for the plant and related facilities.[2] Water is supplied to the plants by one mid-river intake located in the Cumberland River, at river mile 285.1.

The four-unit plant will have a net generating capacity of 5140 MW_e. The waste heat is rejected to the atmosphere through the plants' cooling system, which consists of four closed-cycle natural draft, wet only, hyperbolic cooling towers and four closed-cycle spray ponds. The plants' discharge system, which receives blowdown water from the cooling and essential

C. Purpose of the Monitoring Program

Primary water quality monitoring was previously a requirement of the Aquatic Monitoring Program (construction monitoring) contained in the Limited Work Authorization[1] and subsequently the construction permit[5] for Hartsville Nuclear Plant. Monitoring of the primary water quality for the Cumberland River in the vicinity of the Hartsville Nuclear Plant was conducted during plant construction from 1976 to 1979. The purpose of this in-stream monitoring program was to collect data that could be used to assess the general water quality of the river so as to provide continuity between the preconstruction and preoperational monitoring programs. This water quality information was compared with preconstruction baseline data collected in 1974 and 1975 by the Tennessee Technological University (TTU).

A review of the results of the monitoring program during the NPDES permitting process for Hartsville Nuclear Plant revealed that the program was no longer necessary. Thus, the primary water quality monitoring program was discontinued as provided for in Part III.D. of NPDES Permit No. TN0027740.

In summary, this report provides (1) a concise assessment of general water quality, and (2) a comparison of TVA water quality data collected in 1976-1979 to the baseline data collected in 1974-1975 by TTU prior to active construction (contained in Environmental Report, Revision 6, Appendix M)[6].

The flow conditions and characteristics of this section of the reservoir are generally characterized as riverine. However, flow past the site is controlled by releases from Old Hickory Dam (downstream) and from Cordell Hull and Center Hill dams (upstream). Center Hill Dam is about 50 miles upstream of the Hartsville site and it impounds the Caney Fork River at Caney Fork River Mile (CFRM) 26.6. The Caney Fork River is tributary to the Cumberland River at Cumberland River Mile (CuRM) 309.2, near Carthage, Tennessee. Cordell Hull Dam is about 29 miles upstream of the Hartsville site at CuRM 313.5. The dams controlling releases into and out of Old Hickory Reservoir are operated for power generation, flood control, navigation, and recreation. Except for flood or high flow periods, the hydrological conditions and river surface area are controlled by turbine releases which are scheduled primarily for peaking electrical power. Thus, river flows at the Hartsville site are extremely transient and can exhibit periods of flow reversal.

Old Hickory Reservoir is "partially stratified," (i.e. little seasonal stratification in the upstream reaches and a well developed seasonal thermocline downstream near Old Hickory Dam). When flow in the reservoir is unsteady, the upstream extent of the stratification will vary, depending upon the flow direction and magnitude. A weakly stratified condition at the Hartsville site during low or reverse flow periods will probably disappear during high flow periods.[4]

Table 1

SUMMARY OF PRIMARY AND BASELINE WATER QUALITY MONITORING PROGRAMS
HARTSVILLE NUCLEAR PLANT

Stream	Mile	Horizontal Location[1]	Sampling Depth(s)[2] (meters)	Maximum Depth (Meters)	Frequency	Period of Record	Agency[3]	List of Analyses-Refer To
Cumberland River	262.9	20%	S,M,B[4]	16	monthly	Jan.'74-Dec.'75	T.T.U.	Table 6
Cumberland River	278.6	80%	S,M,B[4]	15	monthly	Jan.'74-Dec.'75	T.T.U.	Table 6
		50%	0.3, 5[5]	11	monthly/quarterly[6]	Feb.'76-Oct.'79	T.V.A.	Table 4
Cumberland River	282.0	50%	0.3, 5[5]	10	monthly/quarterly[6]	Feb.'76-Oct.'79	T.V.A.	Table 3
Cumberland River	284.5	75%	S,M,B[4]	13	monthly	Feb.'74-Dec.'75	T.T.U.	Table 5
		50%	0.3, 5[5]	9	monthly/quarterly[6]	Feb.'76-Oct.'79	T.V.A.	Table 3
Cumberland River	285.0	70%	S,M.B[4]	13	monthly	Jan.'74-Dec.'75	T.T.U.	Table 7
Cumberland River	292.6	33%	S,M,B[4]	15	monthly	Jan.'74-Dec.'75	T.T.U.	Table 5
		50%	0.3, 5[5]	8	monthly/quarterly[6]	Feb.'76-Oct.'79	T.V.A.	Table 4
Dixon Creek	0.3	50%	S,M,B[4]	6	monthly	Jan.'74-Dec.'75	T.T.U.	Table 7

1. Percent distance from right bank looking upstream.
2. S, M, B represents surface, mid-depth, and bottom.
3. T.T.U. - Tennessee Technological University
   T.V.A. - Tennessee Valley Authority
4. In Situ measurements were also made for temperature and dissolved oxygen at 5-foot intervals.
5. In Situ measurements were also made for temperature, dissolved oxygen, pH, and conductivity at 1.5 meters (5 feet) and at regular intervals from the surface to the bottom to describe a vertical profile of the station.
6. T.V.A. sampled monthly from February 1976, to December 1977, and quarterly from February 1978, to October 1979.

II. MONITORING PROGRAM DESCRIPTION

A. Overview

This evaluation is based on data obtained at six locations on the Cumberland River and one location on Dixon Creek located between CuRM's 262.9 and 292.6. Samples were collected from 1974 through 1979, and analyzed for a wide variety of water quality characteristics.

TVA's primary water quality sampling program at the Hartsville Nuclear Plant site was initiated in February 1976, and was continued through 1979. Baseline data from 1974 to 1975 were collected and analyzed by TTU prior to construction activity at the plant site. Data from 1976 to 1979 were collected during construction activities. Water quality surveys were conducted monthly before 1978 and quarterly in 1978 and 1979. Table 1 and Figure 1 summarize these water quality sampling activities.

Data used in this evaluation were placed into EPA's Water Quality File (STORET) and are also available from TVA's Water Quality Branch. A tabulation of the raw data collected as part of the Hartsville baseline and primary water quality sampling programs is presented in Appendix A. Baseline data collected during 1974 and 1975 by TTU are listed in Section A.1 and primary water quality data collected from 1976 to 1979 by TVA are listed in Section A.2.

B. Sampling Locations and Sample Analyses

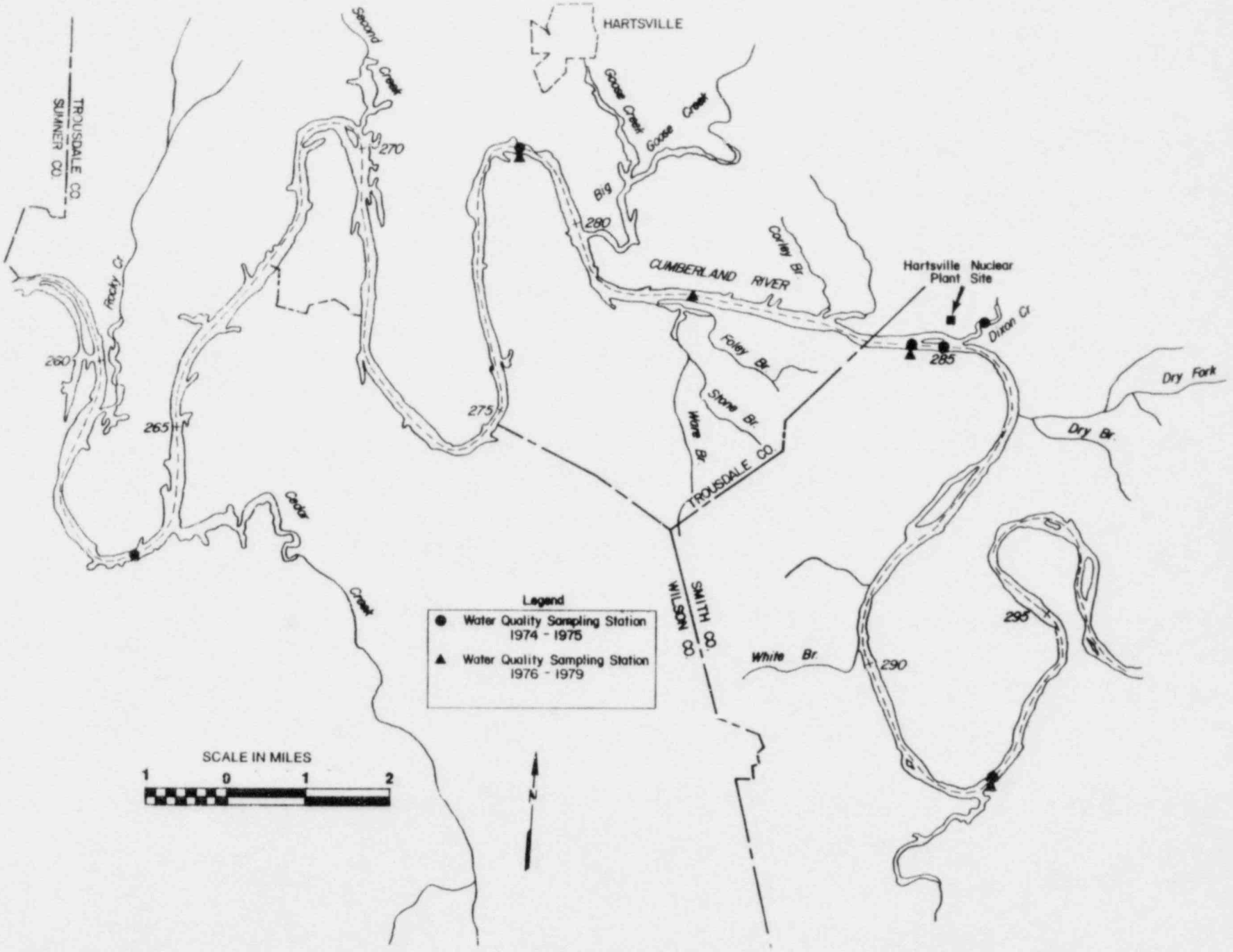
As shown in table 1 and figure 1, TTU sampled at six locations: Cumberland River Miles (CuRM's) 262.9, 278.6, 284.5, 285.0, 292.6, and Dixon Creek Mile (DCM) 0.3; and TVA sampled at four locations: CuRM's 278.6, 282.0, 284.5, and 292.6. Of these sampling locations, three were common throughout the program (1974-1979): CuRM's 278.6 (downstream station); 284.5 (plant site station); and 292.6 (upstream control).

Appendix B is a summary of water quality parameters measured by both TTU and TVA and includes references to analytical methods and procedures. TTU performed analyses for 37 water quality characteristics and TVA performed analyses for 49 water quality characteristics. Of these water quality characteristics which were measured, 36 parameters were common to both agencies.

The 36 water quality measurements which were made by both agencies at CuRM's 278.6, 284.5, and 292.6 (i.e. all data common by virtue of the same sampling locations and the same laboratory analyses to TTU and TVA) were subjected to an analysis of variance which is presented in Section III.B.

FIGURE 1

HARTSVILLE NUCLEAR PLANT WATER QUALITY MONITORING LOCATIONS AND SITE VICINITY MAP



creeks which flow into the river in the vicinity of the site. Of these, only Dixon Creek has an appreciable average natural flow estimated to be 0.57 m^3/s (20.2 cfs) with a minimum of 0.0014 m^3/s (0.05 cfs) and 3-day, 20-year flow of 0.0028 m^3/s (0.1 cfs).

As mentioned in Section I.B., the flows in Old Hickory Reservoir past the Hartsville site are controlled by releases from Old Hickory, Cordell Hull, and Center Hill Dams, which in turn are scheduled to meet peak hydroelectric demands. This unsteady operation normally results in hourly variations of river flow within the reservoir such that the flow at any time during a day may be quite different than the daily average flow. These transient flows significantly affect the distribution of chemical and physical water quality characteristics within the reservoir, in particular, temperature and dissolved oxygen. Old Hickory, being a run of the river reservoir and periodically receiving high volume inflow from Cordell Hull, has a short storage time of eleven days, and experiences weak stratification in the upper reaches of the reservoir during the summer months.[4]

III. RESULTS AND DISCUSSION

A. General assessment of water quality

Water quality in Old Hickory Reservoir in the vicinity of the Hartsville Nuclear Plant (CuRM 285) is good. The Cumberland River from mile 245.0 to 307.2 is classified (based on existing water quality conditions) by the State of Tennessee as an "effluent limited" stream, not presently violating stream standards and with no significant sources of pollution.[7] An effluent limited stream is one which will meet stream standards after application of secondary treatment for municipalities and best practicable treatment for industries. The Cumberland River from mile 216.2 (Old Hickory Dam) to mile 309.2 (confluence of the Caney Fork River) has been classified by the State of Tennessee as suitable for all water uses (i.e. domestic, industrial, fishing and aquatic life, recreation, irrigation, livestock watering and wildlife, and navigation).[7]

1. Streamflow

The mean annual flow of the Cumberland River at Carthage, Tennessee, CuRM 308.2, a point just downstream of the confluence of the Caney Fork River is 496 m^3/s (17,530 cfs)[8]. The 7-day, 10-year flow (the minimum average flow for 7 consecutive days that is expected to occur a year in 10 years) is 91 m^3/s (3,200 cfs) and the 3-day, 20-year flow is 68 m^3/s (2,400 cfs). There are several

Table 2

SUMMARY OF TEMPERATURE DATA
OLD HICKORY RESERVOIR, HARTSVILLE NUCLEAR PLANT, 1974-1979

Location (CuRM)	Temperature (°C) Minimum	Mean	Maximum	Maximum at 1.5 meters	Total Number of Observations	Vertical Difference (°C) (Surface to Bottom) Minimum	Median	Maximum
262.9	7.8	15.9	28.0	26.1	242	-0.1	0.2	5.0
278.6	3.5	15.3	28.0	25.5	460	-0.5	0.1	4.6
282.0	3.5	14.8	26.0	24.0	232	-0.5	0.0	3.0
284.5	3.5	14.8	26.0	24.0	357	-0.3	0.1	3.5
285.0	8.0	15.1	23.5	23.0	207	-0.3	0.0	1.4
292.6	3.2	14.6	24.5	24.0	386	-0.5	0.0	3.0
Dixon Creek 0.3	7.5	15.1	25.0	23.1	97	-0.1	0.6	5.1
All Locations	3.2	15.1	28.0	26.1	1,981	-0.5	0.1	5.1

SUMMARY OF DISSOLVED OXYGEN DATA
OLD HICKORY RESERVOIR, HARTSVILLE NUCLEAR PLANT, 1974-1979

Location (CuRM)	Dissolved Oxygen (mg/l) Minimum	Mean	Maximum	Minimum at 1.5 meters	Total Number of Observations	Vertical Difference (mg/l) (Surface to Bottom) Minimum	Median	Maximum
262.9	5.6	8.9	12.2	6.4	245	-0.1	0.1	5.1
278.6	5.5	9.0	13.7	5.9	462	-0.6	0.0	3.1
282.0	5.5	8.9	13.5	6.2	232	-0.2	0.1	1.0
284.5	4.6	9.0	13.4	4.9	359	-1.0	0.1	1.5
285.0	4.3	8.9	11.9	4.4	201	-1.1	-0.1	0.7
292.6	5.4	9.0	13.8	5.4	378	-2.8	0.1	1.0
Dixon Creek 0.3	2.8	8.1	11.8	2.8	84	-1.8	0.1	4.0
All Locations	2.8	8.9	13.8	2.8	1,961	-2.8	0.1	5.1

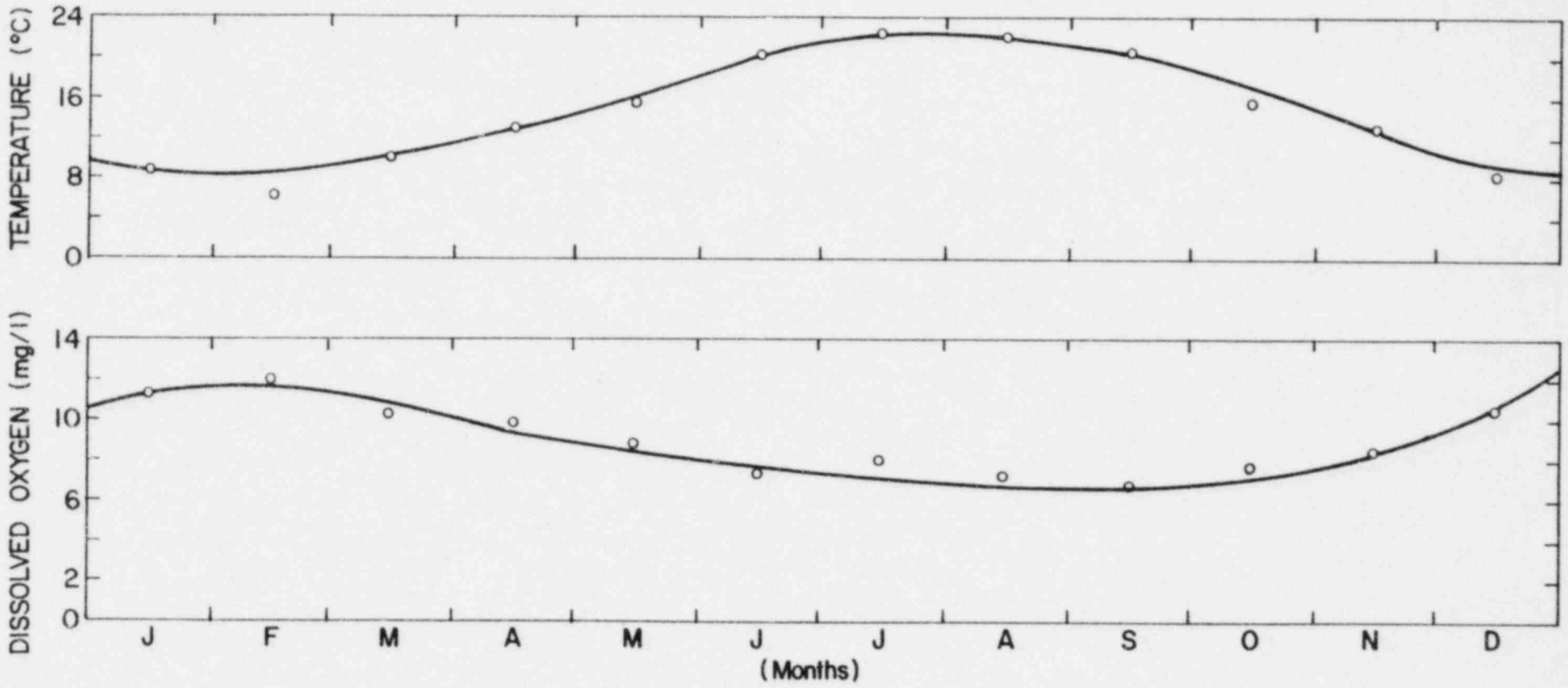
2. Temperature and Dissolved Oxygen

The magnitude of temperature and dissolved oxygen stratification in Old Hickory Reservoir in the vicinity of the plant site can be determined from table 2. Downstream reservoir locations (CuRM's 262.9 and 278.6) have greater differences between surface and bottom measurements than upstream riverine locations, (CuRM's 285.0 and 292.6); hence, a greater degree of thermal and oxygenetic stratification. When flow in the reservoir is unsteady, the degree of stratification in this upstream portion of the reservoir can vary or dissipate depending upon the magnitude, duration, and direction of flow. Because of this condition, although periods of maximum stratification do tend to occur during the late summer, they are not always observed in a given month in successive years, and stratification is often a transient observation.

Upstream summer inflows from the hypolimnion of Center Hill and Cordell Hull reservoirs at temperatures below equilibrium temperature can flow through the reservoir beneath the stratified surface layers without undergoing significant temperature changes, often carrying with it low concentrations of dissolved oxygen. Table 2 shows that at two upstream locations, CuRM's 284.5 and 285.0 (close to the inflows from Cordell Hull and Center Hill

FIGURE 2

AVERAGE MONTHLY TEMPERATURE AND DISSOLVED OXYGEN CONCENTRATIONS OF THE CUMBERLAND RIVER AT THE 1.5 METER DEPTH IN THE VICINITY OF HARTSVILLE NUCLEAR PLANT (CuRM'S 278.6, 284.5 and 292.6), 1974-1979.



Dams), dissolved oxygen concentrations were observed to fall below the State of Tennessee criteria of 5 mg/l at 1.5 meters or mid-depth, whichever is less[9]. Both of these observations were on August 14, 1975, during a sustained low flow regime of several days. The lowest observed dissolved oxygen concentrations at CuRM 292.6, 5.4 mg/l, were also observed on this date. At CuRM 285.0, on August 14, 1975, the water was unstratified being 23.0°C at the surface and bottom and 4.4 mg/l in dissolved oxygen concentrations at the surface and bottom; conditions were very similar at CuRM 284.5. At no other time were concentrations of dissolved oxygen in the Cumberland River observed to fall below the 5 mg/l State of Tennessee criteria during the 6 years of sampling activity, 1974-1979.

At no time did maximum temperatures, also measured at the 1.5 meters depth or mid-depth, whichever is less, exceed the State of Tennessee criteria of 30.5°C.[9] The maximum observed temperature at the 5-foot depth was 26.1°C at the downstream most sampling location. The temperature data in table 2 show the effect of the water warming as it moves downstream into the more lacustrine portion of Old Hickory Reservoir, as well as the greater degree of vertical stratification. Figure 2 summarizes mean monthly

Table 3

Summary of TVA Water Quality Data
Cumberland River, 1976-1979

Parameter	Cumberland River Mile 284.5				Cumberland River Mile 282.0				Criteria Concentration
	No. of Samples	Mean	Max	Min	No. of Samples	Mean	Max	Min	
Temperature	188	14.3	24.0	3.5	232	14.8	26.0	3.5	
Turbidity (JTU)	58	10.22	35.0	1.3	100	14.8	50.0	1.6	
Color (PCU)	58	7.0	15.0	2.0	58	7.1	16.0	2.0	15[b]
Apparent Color (PCU)	58	23.2	70.0	6.0	58	22.8	75.0	7.0	
Conductivity @ 25°C (μmhos/cm)	183	168.4	230.0	110.0	227	168.3	210.0	110.0	
Dissolved Oxygen (mg/l)	188	9.1	13.4	5.9	232	8.9	13.5	5.5	
BOD_5 (mg/l)	32	1.2	2.8	<1.0	32	1.2	2.9	<1.0	
COD (mg/l)	34	5.4	10.0	2.0	34	5.1	12.0	1.0	
pH (standard units)	184	7.5	9.6	5.6	228	7.4	9.8	5.5	6.5-8.5[b]
Total Alkalinity as $CaCO_3$ (mg/l)	58	53.6	80.0	9.0	58	53.2	71.0	9.0	
Suspended Solids (mg/l)	58	9.4	30.0	1.0	100	15.3	110.0	1.0	
Dissolved Solids (mg/l)	34	101.2	140.0	80.0	34	98.5	150.0	70.0	500[b]
Organic Nitrogen (mg/l)	58	0.1	0.48	<0.01	58	0.09	0.33	<0.01	
NH_3+NH_4-N (mg/l)	58	0.03	0.19	<0.01	58	0.03	0.22	<0.01	
NO_2+NO_3-N (mg/l)	58	0.36	0.91	0.15	58	0.36	0.65	0.19	10.0[a]
Phosphorus, total (mg/l)	58	0.39	0.24	0.02	58	0.04	.15	0.02	
Phosphorus, dissolved (mg/l)	58	0.07	0.95	<0.01	58	0.05	.78	<0.01	
Total Organic Carbon (mg/l)	56	2.3	11.0	1.0	56	2.0	6.2	1.0	
Calcium (mg/l)	58	22.5	35.0	16.0	58	22.2	34.0	16.0	
Magnesium (mg/l)	58	4.6	5.9	3.2	58	4.6	6.4	3.5	
Hardness, as $CaCO_3$ (mg/l)	58	74.8	110.0	59.0	58	74.3	110.0	56.0	
Sodium (mg/l)	32	2.8	4.9	1.1	32	2.8	4.1	1.2	
Potassium (mg/l)	32	1.3	2.8	0.6	32	1.2	2.0	0.65	
Chloride (mg/l)	58	3.5	6.0	2.0	58	3.7	7.0	2.0	250[b]
Sulfate (mg/l)	32	22.3	30.0	10.0	32	21.8	32.0	14.0	250[b]
Silica, dissolved (mg/l)	32	3.8	4.8	3.0	31	3.8	4.9	2.3	
Aluminum (μg/l)	32	705.6	4000.0	<200.0	32	1008.4	15000.0	<200.0	
Arsenic (μg/l)	32	2.6	5.0	<2.0	32	2.6	5.0	<2.0	50[a]
Barium (μg/l)	32	150.9	740.0	<100.0	32	159.4	660.0	<100.0	1000[a]
Beryllium (μg/l)	32	10.0	10.0	<10.0	32	<10.0	<10.0	<10.0	11[c]
Boron (μg/l)	32	92.5	520.0	<10.0	32	76.9	360.0	<10.0	750[c]
Cadmium (μg/l)	32	1.1	3.0	<1.0	32	<1.0	<1.0	<1.0	10[a]
Chromium (μg/l)	32	5.5	13.0	<5.0	32	<5.0	<5.0	<5.0	50[a]
Copper (μg/l)	32	20.2	90.0	<10.0	32	23.4	90.0	<10.0	1000[b]
Iron, total (μg/l)	58	913.9	18000.0	110.0	58	1733.3	66000.0	110.0	300,[b] 1000[c]
Iron, dissolved (μg/l)	57	57.9	160.0	<50.0	58	54.0	110.0	<50.0	
Iron, ferrous (μg/l)	5	46.0	80.0	20.0	5	38	50.0	20.0	
Lead (μg/l)	32	10.2	17.0	<10.0	32	<10.0	<10.0	<10.0	50[a]
Lithium (μg/l)	31	10.3	20.0	<10.0	32	11.6	60.0	<10.0	
Manganese, total (μg/l)	38	57.1	420.0	<10.0	38	84.7	1400.0	<20.0	50,[b] 100[c]
Manganese, dissolved (μg/l)	37	12.4	50.0	<10.0	38	11.8	40.0	<10.0	
Mercury, (μg/l)	32	0.36	5.1	<0.20	32	0.23	0.80	<0.20	2[a]
Nickel, (μg/l)	32	34.1	50.0	<10.0	32	36.2	130.0	<10.0	
Selenium, (μg/l)	32	1.1	2.0	<1.0	32	1.1	2.0	<1.0	10[a]
Titanium, (μg/l)	32	<943.8	<1000.0	<100.0	32	<943.7	<1000.0	<100.0	
Silver (μg/l)	32	<10.0	<10.0	<10.0	32	<10.0	<10.0	<10.0	50[a]
Zinc (μg/l)	32	41.6	270.0	<10.0	32	31.2	320.0	<10.0	5000[b]
Total Coliforms (No./100 ml)	16	516.3	3100	<10.0	16	735.0	2900.0	10.0	
Fecal Coliforms (No./100 ml)	17	161.8	1330.0	<10.0	17	207.6	1670.0	<10.0	

a. National Primary Drinking Water Standards, 1975 (finished water).
b. National Secondary Drinking Water Standards, 1977 (finished water).
c. USEPA Quality Criteria for Water, 1976 (raw water).

temperature and dissolved oxygen data collected at the 1.5 meter (5-foot) depth over the 6-year sampling period (1974-1979) at CuRM's 278.6 (downstream), 284.5 (plant site), and 292.6 (upstream).

3. Chemical and Sanitary

The water quality data collected at the seven sampling locations shown in table 1 from 1974-1979 are summarized in tables 3 through 7. Water quality is often markedly different in Dixon Creek than it is in the Cumberland River. The following discussion limits itself to an evaluation of water quality data collected in the Cumberland River, per se, unless specifically noted otherwise as being Dixon Creek.

The pH of the water ranged from 5.5 S.U. to 9.9 S.U., occasionally falling outside of the range recommended by the State of Tennessee needed to support fish and other aquatic life (6.5 S.U. to 8.5 S.U.)[9]. The river has a moderately high to high buffering capacity with a bicarbonate alkalinity averaging about 52 mg/l, which would explain why no significant problems have been identified relating to the wide variability of the pH of the river water. In general, the surface waters of the lower Cumberland River basin have a natural capability of

Table 5

Summary of TTU Water Quality Data
Cumberland River, 1974-1975

Parameter	Cumberland River Mile 284.5				Cumberland River Mile 292.6				Criteria Concentration
	No. of Samples	Mean	Max	Min	No. of Samples	Mean	Max	Min	
Temperature (°C)	169	15.4	26.0	8.0	200	14.9	24.5	7.9	
Turbidity (JTU)	36	13.5	45.0	4.4	36	13.2	45.0	5.0	
Conductivity @ 25°C (μmhos/cm)	69	142.2	180.0	109.0	72	14.4	200.0	105.0	
Dissolved Oxygen (mg/l)	171	8.6	11.8	4.6	192	8.9	12.0	5.4	
BOD_5 (mg/l)	68	1.1	3.2	<1.0	72	1.1	1.8	<1.0	
COD (mg/l)	69	10.1	23.0	2.0	72	9.8	19.0	1.0	
pH (standard units)	81	7.2	8.2	6.1	87	7.1	8.1	6.1	6.5-8.5[b]
Total Alkalinity as $CaCO_3$ (mg/l)	69	52.1	72.0	37.0	72	50.2	66.0	29.0	
Suspended Solids (mg/l)	69	17.6	73.0	2.0	70	15.1	110.0	1.0	
Dissolved Solids (mg/l)	69	84.2	120.0	30.0	70	85.6	120.0	30.0	500[b]
Organic Nitrogen (mg/l)	68	0.2	1.4	<0.01	72	0.2	2.2	<0.01	
NH_3+NH_4 (mg/l)	69	0.05	0.28	<0.01	72	0.06	0.6	<0.01	
NO_2+NO_3 (mg/l)	69	0.32	0.9	0.04	72	0.3	0.8	0.04	10.0[a]
Phosphorus, total (mg/l)	69	0.09	0.48	0.01	72	0.08	0.36	0.02	
Phosphorus, dissolved (mg/l)	69	0.04	0.13	<0.01	71	0.04	0.14	<0.01	
Calcium (mg/l)	39	22.1	50.0	6.0	39	23.4	55.0	6.0	
Magnesium (mg/l)	36	3.8	4.9	2.7	36	3.8	4.9	2.5	
Hardness, as $CaCO_3$ (mg/l)	36	64.8	120.0	30.0	36	67.7	130.0	26.0	
Sodium (mg/l)	69	2.2	3.4	1.3	70	2.2	3.4	1.2	
Potassium (mg/l)	39	1.1	1.5	0.8	38	1.2	1.5	0.8	
Chloride (mg/l)	36	3.7	8.0	3.0	35	3.4	5.0	2.0	250[b]
Sulfate (mg/l)	69	17.1	38.0	10.0	71	16.2	25.0	10.0	250[b]
Silica, total (mg/l)	36	2.5	4.5	0.5	36	2.3	4.2	0.5	
Boron (μg/l)	68	104.8	200.0	<100.0	72	102.2	160.0	<100.0	750[c]
Cadmium (μg/l)	67	2.7	14.0	<1.0	71	3.1	21.0	<1.0	10[a]
Chromium (μg/l)	69	6.0	18.0	<5.0	71	6.3	28.0	<5.0	50[a]
Copper (μg/l)	69	53.0	150.0	<10.0	71	68.4	250.0	<10.0	1000[b]
Iron, total (μg/l)	36	833.0	2500.0	200.0	36	779.4	2900.0	240.0	300,[b] 1000[c]
Iron, dissolved (μg/l)	38	329.2	1400.0	<50.0	37	290.5	1000.0	<50.0	
Lead (μg/l)	69	30.8	130.0	<10.0	71	33.2	140.0	<6.0	50[a]
Manganese, total (μg/l)	70	89.1	180.0	30.0	72	89.2	150.0	<10.0	50,[b] 100[c]
Manganese, dissolved (μg/l)	36	35.8	150.0	<10.0	36	35.8	120.0	<10.0	
Nickel, (μg/l)	69	103.0	1600.0	<40.0	70	66.8	300.0	<40.0	
Zinc (μg/l)	69	93.9	600.0	<10.0	71	95.4	600.0	<10.0	5000[c]
Total Coliforms (No./100 ml)	22	105.3	424.0	<1.0	23	89.2	335.0	<1.0	
Fecal Coliforms (No./100 ml)	22	30.8	275.0	<1.0	23	25.8	120.0	<1.0	

a. National Primary Drinking Water Standards, 1975 (finished water).
b. National Secondary Drinking Water Standards, 1977 (finished water).
c. USEPA Quality Criteria for Water, 1976 (raw water).

Table 4

Summary of TVA Water Quality Data
Cumberland River, 1976-1979

Parameter	Cumberland River Mile 278.6 No. of Samples	Mean	Max	Min	Cumberland River Mile 292.6 No. of Samples	Mean	Max	Min	Criteria Concentration
Temperature	250	14.9	26.5	3.5	186	14.3	23.1	3.2	
Turbidity (JTU)	101	14.8	70.0	1.4	64	10.9	35.0	1.6	
Color (PCU)	59	7.3	15.0	1.0	64	7.3	15.0	2.0	15[b]
Apparent Color (PCU)	59	26.4	140.0	5.0	64	23.3	70.0	7.0	
Conductivity @ 25°C (μmhos/cm)	247	169.7	210.0	110.0	181	166.6	200.0	110.0	
Dissolved Oxygen (mg/l)	250	8.9	13.5	5.9	186	9.0	13.8	5.8	
BOD_5 (mg/l)	32	1.2	2.2	<1.0	34	1.3	3.5	<1.0	
COD (mg/l)	35	6.2	13.0	2.0	37	5.5	9.0	2.0	
pH (standard units)	245	7.4	9.9	6.0	182	7.4	8.6	5.7	6.5-8.5[b]
Total Alkalinity as $CaCO_3$ (mg/l)	59	53.7	71.0	10.0	64	53.0	13.0	10.0	
Suspended Solids (mg/l)	101	16.1	140.0	1.0	64	10.2	28.0	1.0	
Dissolved Solids (mg/l)	34	102.1	180.0	70.0	37	100.0	150.0	80.0	500[b]
Organic Nitrogen (mg/l)	59	0.09	0.28	0.02	63	0.10	0.67	<0.01	
NH_3+NH_4-N (mg/l)	59	0.02	0.12	<0.01	63	0.03	0.15	<0.01	
NO_2+NO_3-N (mg/l)	59	0.35	0.47	0.19	63	0.35	0.56	0.190	10.0[a]
Phosphorus, total (mg/l)	59	0.04	0.18	<0.01	63	0.03	0.18	0.010	
Phosphorus, dissolved (mg/l)	57	0.04	.76	<0.01	64	0.05	0.74	<0.010	
Total Organic Carbon (mg/l)	57	1.9	4.2	0.90	61	2.3	11.0	0.20	
Calcium (mg/l)	59	22.6	36.0	16.0	64	21.8	32.0	16.0	
Magnesium (mg/l)	59	4.6	6.3	3.5	64	4.5	6.2	3.5	
Hardness, as $CaCO_3$ (mg/l)	59	75.3	110.0	55.0	64	73.2	110.0	56.0	
Sodium (mg/l)	32	2.9	4.3	1.0	34	3.1	4.5	1.4	
Potassium (mg/l)	32	1.2	2.3	.6	34	1.3	1.9	0.72	
Chloride (mg/l)	59	3.6	6.0	2.0	64	3.5	.60	2.0	250[b]
Sulfate (mg/l)	32	23.2	32.0	14.0	34	22.2	32.0	10.0	250[b]
Silica, dissolved (mg/l)	32	3.9	5.0	2.8	34	3.9	4.9	3.3	
Aluminum (μg/l)	32	615.6	3100.0	<200.0	34	640.6	3400.0	<200.0	
Arsenic (μg/l)	32	2.9	13.0	<2.0	34	2.7	5.0	<2.0	50[a]
Barium (μg/l)	32	151.6	690.0	<100.0	34	169.1	1000.0	<100.0	1000[a]
Beryllium (μg/l)	32	<10.0	<10.0	<10.0	34	<10.0	<10.0	<10.0	11[c]
Boron (μg/l)	32	75.9	230.0	<10.0	34	89.4	400.0	<10.0	750[c]
Cadmium (μg/l)	32	1.1	3.0	<1.0	34	1.0	2.0	<1.0	10[a]
Chromium (μg/l)	32	<5.0	<5.0	<5.0	34	5.3	10.0	<5.0	50[a]
Copper (μg/l)	32	24.4	110.0	<10.0	34	27.4	140.0	<10.0	1000[b]
Iron, total (μg/l)	59	842.2	11000.0	80.0	64	719.1	11000.0	120.0	300,[b] 1000[c]
Iron, dissolved (μg/l)	58	53.3	110.0	<50.0	64	58.8	130.0	<40.0	
Iron, ferrous (μg/l)	6	33.3	40.0	20.0	7	40.0	50.0	20.0	
Lead (μg/l)	32	10.6	31.0	<10.0	34	10.1	14.0	<10.0	50[a]
Lithium (μg/l)	32	<10.0	<10.0	<10.0	34	10.3	20.0	<10.0	
Manganese, total (μg/l)	38	63.4	450.0	10.0	43	56.5	320.0	<10.0	50,[b] 100[c]
Manganese, dissolved (μg/l)	38	13.2	60.0	<10.0	43	14.2	80.0	<10.0	
Mercury, (μg/l)	32	0.20	0.30	0.30	34	0.33	4.1	<0.20	2[a]
Nickel, (μg/l)	32	35.3	70.0	<10.0	34	35.8	80.0	<10.0	
Selenium, (μg/l)	32	1.1	2.0	<1.0	34	1.1	<2.0	<1.0	10[a]
Titanium, (μg/l)	32	<943.8	<1000.0	<100.0	34	<947.0	<1000.0	<100.0	
Silver (μg/l)	32	<10.0	<10.0	<10.0	34	<10.0	<10.0	<10.0	50[a]
Zinc (μg/l)	32	194.7	5600.0	<10.0	34	36.8	340.0	<10.0	5000[b]
Total Coliforms (No./100 ml)	16	748.8	4100.0	<10.0	17	961.8	5300.0	<10.0	
Fecal Coliforms (No./100 ml)	17	161.8	1496.0	<10.0	18	266.7	1630.0	<10.0	

a. National Primary Drinking Water Standards, 1975 (finished water).
b. National Secondary Drinking Water Standards, 1977 (finished water).
c. USEPA Quality Criteria for Water, 1976 (raw water).

Table 7

Summary of TTU Water Quality Data
Cumberland River, 1974-1975

Parameter	Cumberland River Mile 285.0				Dixon Creek Mile 0.3				Criteria Concentration
	No. of Samples	Mean	Max	Min	No. of Samples	Mean	Max	Min	
Temperature (^{o}C)	207	15.1	23.5	8.0	97	15.1	25.0	7.5	
Turbidity (JTU)	36	13.1	45.0	3.5	35	24.0	150.0	2.0	
Conductivity @ 25^{o}C (μmhos/cm)	72	146.6	190.0	95.0	66	291.0	430	110.0	
Dissolved Oxygen (mg/l)	201	8.9	11.9	4.3	84	8.11	11.8	2.8	
BOD_5 (mg/l)	72	1.2	5.0	<1.0	65	1.7	8.2	<1.0	
COD (mg/l)	72	10.0	23.0	2.0	65	12.4	32.0	3.0	
pH (standard units)	88	7.2	8.0	6.3	69	7.5	8.6	6.7	6.5-8.5[b]
Total Alkalinity as $CaCO_3$ (mg/l)	72	50.6	68.0	36.0	66	139.1	380.0	60.0	
Suspended Solids (mg/l)	72	14.9	39.0	1.0	63	30.0	200.0	1.0	
Dissolved Solids (mg/l)	72	88.6	200.0	40.0	63	177.0	370.0	50.0	500[b]
Organic Nitrogen (mg/l)	72	0.2	1.10	<0.01	65	0.3	2.4	<0.02	
NH_3+NH_4-N (mg/l)	72	0.05	0.28	<0.01	65	0.08	0.36	<0.01	
NO_2+NO_3-N (mg/l)	72	0.28	0.63	0.04	65	0.63	1.9	0.12	10.0[a]
Phosphorus, total (mg/l)	72	0.09	0.27	0.01	65	0.24	0.53	0.06	
Phosphorus, dissolved (mg/l)	72	0.05	0.33	<0.01	65	0.13	0.32	<0.01	
Calcium (mg/l)	39	22.8	55.0	5.0	38	66.5	160.0	16.0	
Magnesium (mg/l)	36	3.8	4.9	2.8	35	4.8	7.0	3.1	
Hardness, as $CaCO_3$ (mg/l)	36	66.2	120.0	29.0	35	182	420.0	55.0	
Sodium (mg/l)	72	2.2	3.6	1.2	65	2.2	3.5	1.2	
Potassium (mg/l)	39	1.1	1.5	0.7	38	1.6	3.4	0.70	
Chloride (mg/l)	38	3.6	6.0	2.0	34	4.0	6.0	3.0	250[b]
Sulfate (mg/l)	72	16.6	30.0	10.0	64	18.0	34.0	6.0	250[b]
Silica, total (mg/l)	36	2.7	4.6	0.7	35	2.7	5.0	0.7	
Boron (μg/l)	72	103.3	200.0	<100.0	66	121.0	320.0	<100	750[c]
Cadmium (μg/l)	72	2.8	16.0	<1.0	63	3.1	16.0	<1.0	10[a]
Chromium (μg/l)	72	5.7	15.0	<5.0	65	6.4	40.0	<5.0	50[a]
Copper (μg/l)	72	63.3	200.0	<10.0	65	60.6	370.0	<10.0	1000[b]
Iron, total (μg/l)	36	812.5	2400.0	280.0	35	1527.7	5000.0	400.0	300,[b] 1000[c]
Iron, dissolved (μg/l)	39	234.4	680.0	<20.0	37	327	1000.0	<40.0	
Lead (μg/l)	72	30.0	120.0	<10.0	65	33.2	120.0	<10.0	50[a]
Manganese, total (μg/l)	72	85.5	220.0	25.0	65	269.3	1800.0	50.0	50,[b] 100[c]
Manganese, dissolved (μg/l)	39	32.8	150.0	<10.0	35	174.3	440.0	30.0	
Nickel, (μg/l)	72	73.2	500.0	<30.0	64	71.5	420.0	<20.0	
Zinc (μg/l)	72	91.7	270.0	<10.0	65	79.3	320.0	<0.40	5000[b]
Total Coliforms (No./100 ml)	22	152.9	473.0	<5.0	22	388.0	<1900.0	<8.0	
Fecal Coliforms (No./100 ml)	22	36.5	252.0	<1.0	21	165	<1000.0	<1.0	

a. National Primary Drinking Water Standards, 1975 (finished water).
b. National Secondary Drinking Water Standards, 1977 (finished water).
c. USEPA Quality Criteria for Water, 1976 (raw water).

Table 6

Summary of TTU Water Quality Data
Cumberland River, 1974-1975

Parameter	Cumberland River Mile 262.9				Cumberland River Mile 278.6				Criteria Concentration
	No. of Samples	Mean	Max	Min	No. of Samples	Mean	Max	Min	
Temperature (^{o}C)	242	15.9	28.0	7.8	210	15.7	28.0	7.9	
Turbidity (JTU)	36	14.1	45.0	4.0	36	13.7	45.0	5.0	
Conductivity @ 25^{o}C (μmhos/cm)	72	146.7	180.0	95.0	72	149.6	190.0	95.0	
Dissolved Oxygen (mg/l)	245	8.9	12.2	5.6	212	9.1	13.7	5.5	
BOD_5 (mg/l)	72	1.2	3.0	<1.0	72	1.1	2.3	<1.0	
COD (mg/l)	72	10.7	27.0	2.0	72	9.6	20.0	2.0	
pH (standard units)	101	7.2	8.8	6.2	92	7.3	9.1	6.4	6.5-8.5[b]
Total Alkalinity as $CaCO_3$ (mg/l)	75	52.2	70.0	40.0	72	52.6	80.0	40.0	
Suspended Solids (mg/l)	71	18.1	60.0	4.0	71	17.7	110.0	1.0	
Dissolved Solids (mg/l)	71	90.0	130.0	50.0	72	91.8	270.0	50.0	500[b]
Organic Nitrogen (mg/l)	72	0.30	3.6	0.01	72	0.25	2.8	<0.01	
NH_3+NH_4-N (mg/l)	72	0.06	.28	0.01	72	0.47	0.28	<0.01	
NO_2^3+NO_3^4 (mg/l)	72	0.33	1.0	0.05	72	0.33	1.4	0.04	10.0[a]
Phosphorus, total (mg/l)	72	0.10	0.42	0.01	72	0.1	0.35	<0.01	
Phosphorus, dissolved (mg/l)	72	0.05	0.13	<0.01	72	0.05	0.19	<0.01	
Calcium (mg/l)	39	23.2	50.0	6.0	39	22.8	55.0	6.0	
Magnesium (mg/l)	36	3.7	5.0	2.3	36	3.7	4.7	2.6	
Hardness, as $CaCO_3$ (mg/l)	36	68.3	130.0	26.0	36	66.0	120.0	31.0	
Sodium (mg/l)	72	2.2	3.2	1.1	72	2.2	3.5	1.2	
Potassium (mg/l)	39	1.2	1.9	0.70	39	1.2	1.5	0.8	
Chloride (mg/l)	35	3.4	5.0	3.0	36	3.6	6.0	3.0	250[b]
Sulfate (mg/l)	71	16.8	26.0	10.0	72	16.8	26.0	12.0	250[b]
Silica, total (mg/l)	36	2.4	4.5	0.5	36	2.6	4.5	1.0	
Boron (μg/l)	72	104.3	220.0	<100.0	72	104.4	200.0	<100.0	750[c]
Cadmium (μg/l)	72	2.4	16.0	<1.0	72	2.4	12.0	<1.0	10[a]
Chromium (μg/l)	72	7.0	78.0	<5.0	72	6.5	35.0	<5.0	50[a]
Copper (μg/l)	72	54.7	250.0	<0.6	72	58.7	200.0	<10.0	1000[b]
Iron, total (μg/l)	36	949.2	4900.0	200.0	36	842.5	2200.0	160.0	300,[b] 1000[c]
Iron, dissolved (μg/l)	35	293.1	750.0	<50.0	36	274.2	1100.0	<50.0	
Lead (μg/l)	72	35.3	240.0	<10.0	72	28.6	160.0	<10.0	50[a]
Manganese, total (μg/l)	72	98.6	740.0	40.0	72	81.3	170.0	20.0	50,[b] 100[c]
Manganese, dissolved (μg/l)	33	29.7	140.0	<10.0	33	28.5	170.0	<10.0	
Nickel, (μg/l)	71	87.2	88.0	<10.0	72	74.6	500.0	<20.0	
Zinc (μg/l)	72	95.8	550.0	<10.0	72	99.9	510.0	<10.0	5000[c]
Total Coliforms (No./100 ml)	22	88.7	346.0	<5.0	23	118.2	340.0	<10.0	
Fecal Coliforms (No./100 ml)	22	21.1	74.0	<1.0	23	39.3	200.0	<1.0	

a. National Primary Drinking Water Standards, 1975 (finished water).
b. National Secondary Drinking Water Standards, 1977 (finished water).
c. USEPA Quality Criteria for Water, 1976 (raw water).

standards were observed during different surveys at various river stations (less than 3 percent of over 2,100 analyses). Sporadic short-term high metal concentrations (spikes) such as those identified above, are periodically observed in many water quality monitoring programs. In summary, the quality of water in the upper reach of Old Hickory Reservoir on the Cumberland River is acceptable when compared to the National Primary Drinking Water Standards.

Except for total iron and manganese, the concentrations of analyzed secondary (esthetically undesirable) constituents (Cl, SO_4, Cu, Zn) were less than those concentrations identified by EPA[11] for finished drinking water. Dissolved iron and manganese concentrations were well below the Secondary Drinking Water Standards and indicated that approximately 84 percent and 71 percent of the total iron and manganese concentrations were in the particulate form and could be easily removed by conventional water treatment practices.

Phosphorous and nitrogen concentrations in the river were similar to those that have been measured in other rivers and mainstem impoundments in the Tennessee Valley region.

supporting a wide variety of fish and other aquatic life, and provide for the growth and propagation of these species.[7]

The Cumberland River is considered to be moderately hard with hardness values averaging about 71 mg/l as $CaCO_3$. Normally, apparent color and concentrations of suspended solids were low except after periods of heavy rainfall with values ranging from 5 PCU to 140 PCU and 1 mg/l to 140 mg/l, respectively. Turbidity levels ranged from 1.3 JTU to 70 JTU. Dissolved solids concentrations were low, averaging 91 mg/l. Concentrations for hardness, color, suspended solids, turbidity, and dissolved solids in Dixon Creek averaged about 85-95 percent higher than in the Cumberland River.

Mean concentrations of analyzed primary (i.e., the ingestion of "high" levels of these contaminants has been shown to cause, or has been implicated in the cause of, certain types of health problems) trace metals (Ag, As, Ba, Cd, Cr, Hg, Pb, and Se) were less than those identified by EPA[10] for finished drinking water. Concentrations of cadmium, chromium, lead, and mercury, above primary

B. Comparison of Results to Baseline Data

Primary water quality (TVA) data summaries are presented in tables 3 and 4 and pre-construction baseline (TTU) data summaries are presented in tables 5, 6, and 7. As presented in cable 1, TTU sampled monthly at 6 locations from 1974-1975 and TVA sampled monthly or quarterly at 4 locations from 1976-1979. This section presents the results of an analysis of variance (ANOVA) and Duncan's Multiple Range Test performed on these data. The data were analyzed for time effects (i.e., baseline vs. primary differences) for location effects (i.e., upstream vs. downstream) and for time-location interaction effects (i.e., baseline upstream vs. primary downstream).

To perform this analysis with a reasonable degree of confidence, as many as possible extreanous sources of variation within the data set had to be eliminated. For example, (except for in situ measurements of temperature, dissolved oxygen, pH, and conductivity), primary (TVA) water quality measurements were made at 0.3 and 5 meters (1 and 16 feet) with no bottom samples collected; however, baseline pre-construction (TTU) water quality measurements were made at surface, mid-depth, and bottom. Therefore, to eliminate a

Old Hickory Reservoir was studied in 1973 by EPA and was described as being a eutrophic reservoir, phosphorous limited in the spring and nitrogen limited in the fall.[12]

Five-day BOD values were normally less than 3 mg/l, COD values were generally less than 20 mg/l, and TOC values were generally less than 4 mg/l at the sampling locations near the site. The data taken in the vicinity of the site indicates that the sanitary-chemical quality of the water is good.

Measured concentrations of fecal and total coliform bacteria were normally very low. Moderately high fecal and total coliform densities ranging up to 5,300 colonies per 100 ml and 1670 colonies per 100 ml, respectively, have been measured. The source of coliform organisms is not known, but most probably would be agricultural/rural/livestock runoff from the drainage area upstream of the site.

A comparison of the remaining data in tables 3 through 7 to EPA's Quality Criteria for Water (1976)[13] indicates that concentrations of beryllium, boron, and other trace contaminants (not included in the National Primary and Secondary Standards) are well below the listed EPA criteria.

Table 8

WATER QUALITY PARAMETERS COMMON TO
BASELINE AND PRIMARY WATER QUALITY MONITORING
HARTSVILLE NUCLEAR PLANT (1974-1979)

Temperature
Dissolved Oxygen
Ph
Conductivity
Alkalinity (total)
Alkalinity (phenol)
Turbidity
BOD_5
COD
Suspended Solids
Dissolved Solids

Organic Nitrogen
Ammonia Nitrogen
Nitrate & Nitrite Nitrogen
Phosphorus (total)
Phosphorus (dissolved)
Calcium
Magnesium
Hardness
Sodium
Potassium
Chloride
Sulfate

Boron
Cadmium
Chromium
Copper
Iron (total)
Iron (dissolved)
Lead
Manganese (total)
Manganese (dissolved)
Nickel
Zinc
Coliforms (total)
Coliforms (fecal)

difference that might be caused by bottom or near-bottom samples (often bottom samples are higher in turbidity, suspended solids, total phosphate, metals, etc.) collected during pre-construction and not during construction all data were restricted to the upper 5 meters in this analysis. Also, as previously mentioned in Section II.B., data were restricted to those sampling locations and water quality characteristics which were common to both baseline and primary water quality monitoring activities, i.e., 36 parameters, table 8, at an upstream (CuRM 292.6), plant site (CuRM 284.5), and downstream location (CuRM 278.6).

1. Interaction Effects

   First and most importantly, no statistically significant interaction effects ($\alpha \leq 0.05$) were found for any of the 36 parameters between time and location. That is to say, there was no statistical evidence to show that for any given parameter there was a significant difference between an upstream baseline (pre-construction) station and a downstream primary (post-construction) station.

Big Goose Creek, Corley Branch, and/or agricultural runoff) and not the plant itself. (Special construction effects monitoring reports[14,15] have documented very high concentrations of turbidity and suspended solids concentrations from tributary streams on Corley Branch and an unnamed tributary at CuRM 284.8).

3. Time effects

The results of the analyses indicated that for a large number of water quality characteristics there was a significant difference between baseline (1974-1975) and primary water quality (1976-1979) data ($\alpha \leq 0.05$) at all sampling stations. These results are summarized in table 9. In general, several patterns are evident (illustrative plots of all 36 water quality characteristics at CuRM 284.5 are given in Appendix C):

a. Dissolved solids, conductivity, hardness, sodium, potassium, magnesium, and sulfate values are all higher during primary monitoring than baseline monitoring;

b. Most nutrient data (organic nitrogen, ammonia nitrogen, and total phosphorous) were lower during primary monitoring;

2. Location Effects

The results of the analyses showed that with the exception of turbidity and suspended solids there were no statistically significant differences ($\alpha \leq 0.05$) between the 3 sampling locations during the 6-year sampling program. For both turbidity and suspended solids measurements, the downstream station had higher concentrations than the two upstream locations ($\alpha = 0.03$ for turbidity and 0.04 for suspended solids); but there was no statistical difference between the two upstream locations at the 0.05 level.

Turbidity and suspended solids concentrations averaged 14.5 JTU and 16.7 mg/l, respectively, at the downstream location, CuRM 278.6; and averaged about 11.0 JTU and 11.4 mg/l, respectively, at the two upstream locations, CuRM's 284.5 and 292.6. Because there was no statistical difference between the upstream control station (CuRM 292.6) and the plant site station (CuRM 284.5); the difference between the downstream station (CuRM 278.6) and two upstream stations (CuRM 292.6 and CuRM 284.5) is felt to be due to an event below the plant site (e.g.

c. There was no statistical difference between baseline and primary water quality measurements for turbidity and suspended solids;

d. Nitrate plus nitrite nitrogen and coliform data were higher during primary monitoring; and

e. Metals and trace metals values are significantly lower during the primary monitoring than the baseline monitoring.

These time trends were observed at all sampling stations (not just downstream or upstream locations). They could be due to differences in field collection techniques and laboratory analytical techniques between TTU and TVA. For example, plots of cadmium, lead, nickel and dissolved iron with time (figures C.25, C.30, C.33, and C.29) at the plant site station (CuRM 284.5) all strongly suggest sample contamination problems during 1974 and 1975. Also, on occasion, higher than usual detection limit values were reported by TTU for metal analyses which in themselves could account for some of the differences between the baseline and primary data.

Table 9

Analysis of Variance - Summary
Cumberland River Miles 278.6, 284.5, and 292.6
Hartsville Nuclear Plant Water Quality Monitoring

Parameters	Baseline (TTU) (1974-1975)	Primary (TVA) (1976-1979)	F Value (α = 0.05)
Temperature, °C	15.3	14.5	6.03[a]
Dissolved Oxygen, mg/l	8.95	8.98	-
pH	7.21	7.44	43.64[c]
Alkalinity (total), as $CaCO_3$, mg/l	51.6	53.4	-
Alkalinity (Phenol), as $CaCO_3$, mg/l	0.0	0.0	-
Conductivity, µmphos/cm	145.3	168.4	183.27[c]
Turbidity, JTU	12.5	12.5	-
BOD_5, mg/l	1.16	1.21	-
COD, mg/l	9.6	5.7	92.80[c]
Suspended Solids, mg/l	15.2	12.7	-
Dissolved Solids, mg/l	88.3	100.2	13.59[c]
Organic Nitrogen, mg/l	0.252	0.104	21.68[c]
Ammonia Nitrogen, mg/l	0.056	0.031	13.78[c]
Nitrate & Nitrite Nitrogen, mg/l	0.311	0.353	8.84[b]
Phosphorus (total), mg/l	0.080	0.040	57.80[c]
Phosphorus (dissolved), mg/l	0.043	0.060	-
Calcium, mg/l	22.7	22.3	-
Magnesium, mg/l	3.8	4.6	95.65[c]
Hardness, mg/l	65.8	74.4	9.87[b]
Sodium, mg/l	2.2	2.9	53.08[c]
Potassium, mg/l	1.1	1.3	4.77[a]
Chloride, mg/l	3.5	3.5	-
Sulfate, mg/l	16.6	22.6	80.64[c]
Boron, µg/l	102	86.0	4.37[a]
Cadmium, µg/l	2.9	1.1	30.67[c]
Chromium, µg/l	6.3	5.3	5.97[a]
Copper, µg/l	60.8	26.0	37.19[c]
Iron (total), µg/l	768	821	-
Iron (dissolved), µg/l	334	56.7	161.54[c]
Lead, µg/l	30.7	10.3	46.39[c]
Manganese (total), µg/l	82.7	58.9	13.09[c]
Manganese (dissolved), µg/l	32.8	13.3	35.14[c]
Nickel, µg/l	91.6	35.1	10.34[b]
Zinc, µg/l	93.9	89.9	-
Coliforms (total), no./100 ml	104	746	18.31[c]
Coliforms (fecal), no./100 ml	32	198	11.14[b]

[a] Significant at the 0.05 level.
[b] Significant at the 0.01 level.
[c] Significant at the 0.001 level.

V. REFERENCES

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3. Tennessee Valley Authority, Environmental Report, Hartsville Nuclear Plant, Volume 4, Appendix B1.

4. Tennessee Division of Water Quality Control, Water Quality Management Plan for Hydrologic Modifications, Construction Activities and Urban Runoff, November 1978

5. Tennessee Valley Authority, Construction Permit for Hartsville Nuclear Plant, 1976

6. Tennessee Valley Authority, Environmental Report, Hartsville Nuclear Plant, Volume 4, Revision 6, Appendix M.

7. Tennessee Division of Water Quality Control, Water Quality Management Plan for the Lower Cumberland River Basin, February 25, 1977

8. USGS Gage at Carthage, Tennessee (1922-1978)

9. Tennessee Water Quality Control Board, General Water Quality Criteria for the Definition and Control of Pollution in the Waters of Tennessee, October 1977

10. U.S. Environmental Protection Agency, National Interim Primary Drinking Water Regulations. C.F.R., Title 40, Part 141, V. 40, No. 248, December 1975

11. U.S. Environmental Protection Agency, Proposed National Secondary Drinking Water Regulations. C.F.R., Title 40, Part 143, V. 42, No. 62, March 1977

12. U.S. Environmental Protection Agency, Report on Cheatham, Old Hickory, and J. Percy Priest Reservoirs, "National Eutrophication Survey, Working Paper No. 444, December 1976

13. U.S. Environmental Protection Agency. Quality Criteria for Water. EPA-440/9-76-023, July 1976

14. Tennessee Valley Authority, Hartsville Nuclear Plant, Special Construction Effects Monitoring Study, Report for the First Year of Construction, August 1977

15. Tennessee Valley Authority, Hartsville Nuclear Plants, Special Construction Effects Study, Report for the Second Year of Construction, January 1979

Increases in dissolved solids and decreases in nutrients, besides being possibly attributable to differences in laboratories, might also be due to changes in reservoir operations. Impoundments, generally speaking, increase the concentrations of dissolved constituents in a river and also act as nutrient traps. Although Cordell Hull Dam was closed in 1967, the reservoir was kept at a low level until January through March 1973, when it was filled to normal capacity, previous to commercial operation of the turbines at Cordell Hull in late summer and fall of 1973.[4] The filling and aging of Cordell Hull reservoir may have resulted in a time trend of increasing dissolved solids concentrations and a decrease in nutrient concentrations from 1973 through the present. Plots of these water quality characteristics at CRM 284.5 are shown in figures C.6, C.11-13, C.15, C.18-21, and C.22.

to differences in agency collection and analysis procedures and/or impoundment and reservoir effects from the closure and operation of Cordell Hull Dam.

In conclusion, the Cumberland River in the vicinity of the Hartsville Nuclear Plant site, is suitable for all State of Tennessee water use classifications, meets applicable stream standards, and has no significant sources of pollution.

APPENDIX A

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740718	0812			5	33	23.5			9.80			
740718	0814			10	33	23.1			10.10			
740718	0816			15	33	23.0			9.80			
740718	0820			20	33	23.0		150	8.90	1.2	10.0	8.10
740718	0822			25	33	22.9			9.70			
740718	0825			30	33	22.9			9.80			
740718	0830			35	33	22.9			9.70			
740718	0835			40	33	22.9		150	9.60	1.8	9.0	8.10
740814	0800			1	33	24.0		150	5.70	1.0K	10.0	7.00
740814	0802			5	33	24.0			5.50			
740814	0805			10	33	24.0			5.50			
740814	0810			15	33	24.0			5.50			
740814	0815			20	33	24.0		150	5.50	1.0K	12.0	6.90
740814	0817			25	33	24.0			5.50			
740814	0820			30	33	23.5			5.40			
740814	0825			35	33	23.0			5.40			
740814	0830			40	33	23.0		200	5.40	1.1	11.0	7.00
740921	0700			1	33	19.2		170	7.10	1.0K	14.0	7.20
740921	0705			5	33	19.2			6.90			
740921	0710			10	33	19.2			7.00			
740921	0715			15	33	19.2		170	6.80	1.0K	12.0	7.00
740921	0720			20	33	19.2			6.80			
740921	0725			25	33	19.2			6.90			
740921	0730			30	33	19.2		180	6.90	1.0K	12.0	6.90
741018	0630			1	33	16.0		170	8.60	1.0K	10.0	7.00
741018	0633			5	33	16.0			8.40			
741018	0636			10	33	16.0			8.40			
741018	0640			15	33	16.0		170	8.40	1.0K	10.0	7.10
741018	0642			20	33	16.0			8.40			
741018	0644			25	33	16.0			8.40			
741018	0646			30	33	16.0			8.40			
741018	0650			35	33	16.0		170	8.30	1.0K	11.0	7.20
741116	0630			1	33	12.2		180	8.80	1.0K	6.0	6.80
741116	0632			5	33	12.4			8.80			
741116	0635			10	33	12.4			8.80			
741116	0637			15	33	12.4			8.80			
741116	0640			20	33	12.4		180	8.80	1.0K	8.0	6.90
741116	0642			25	33	12.4			8.80			
741116	0645			30	33	12.4			8.80			
741116	0650			35	33	12.4		180	8.60	1.0K	7.0	6.90
741205	0900			1	33	8.5		170	10.20	1.0K	10.0	6.50
741205	0902			5	33	8.5			10.10			
741205	0905			10	33	8.5			10.20			
741205	0910			15	33	8.5		170	9.90	1.0K	12.0	7.00
741205	0912			20	33	8.5			10.10			
741205	0915			25	33	8.5			9.70			
741205	0917			30	33	8.5			10.20			
741205	0920			35	33	8.5		170	10.10	1.0K	12.0	6.70
750125	0800			1	33	8.1	12	140	11.10	1.0K	9.4	7.30
750125	0802			5	33	8.1			11.10			
750125	0805			10	33	8.1			11.20			
750125	0807			15	33	8.0			11.20			
750125	0810			20	33	8.0			11.20			
750125	0815			25	33	8.0	10	150	11.20	1.0K	10.0	7.40
750125	0817			30	33	8.0			11.10			

APPENDIX A.1

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
750814	0715			15	33	23.5	9	120	5.40	1.0K	7.0	6.50
750814	0720			20	33	23.0			5.50			
750814	0725			25	33	23.5			5.50			
750814	0735			30	33	23.5	9	110	5.60	1.0K	7.0	6.60
750918	0650			1	33	23.0	6	105	6.00	1.0	11.0	6.50
750918	0652			5	33	23.0			6.10			
750918	0653			10	33	23.0			6.20			
750918	0655			15	33	23.0	6	105	6.30	1.1	11.0	6.70
750918	0657			20	33	22.5			6.60			
750918	0700			25	33	22.5			6.60			
750918	0705			30	33	22.0	6	105	6.80	1.1	13.0	6.50
751016	0820			1	33	16.5	7	130	6.50	1.0K	10.0	7.50
751016	0821			2	33	16.5			6.50			7.50
751016	0822			5	33	16.5			6.50			7.50
751016	0823			10	33	16.5			6.50			7.50
751016	0825			15	33	16.5	5	130	6.50	1.0K	12.0	7.50
751016	0826			20	33	16.5			6.50			7.40
751016	0827			25	33	16.5			6.60			7.40
751016	0830			30	33	16.5	6	130	6.60	1.0K	16.0	7.40
751113	0800			1	33	14.8	9	150	7.40	1.0	4.0	7.40
751113	0801			2	33	14.8			7.40			7.40
751113	0802			5	33	14.8			7.40			7.40
751113	0803			10	33	14.8			7.50			7.40
751113	0805			15	33	14.8	8	150	7.50	1.0	6.0	7.40
751113	0806			20	33	14.8			7.50			7.40
751113	0807			25	33	14.7			7.50			7.40
751113	0810			30	33	14.7	8	150	7.60	1.0	6.0	7.40
751216	0755			1	30	11.6	6	140	9.30	1.6	1.0	7.90
751216	0800			2	30	11.6			9.30			7.90
751216	0805			5	30	11.6			9.30			7.90
751216	0810			10	30	11.6	5	140	9.30	1.3	1.0	7.90
751216	0815			15	30	11.6			9.30			7.90
751216	0820			20	30	11.6			9.30			7.90
751216	0825			25	30	11.6			9.40			7.90
751216	0830			30	30	11.6	6	140	9.60	1.5	2.0	7.90
740131												
NUMBER				200		200	36	72	192	72	72	87
MAXIMUM				50		24.5	45	200	12.00	1.8	19.0	8.10
MINIMUM				1		7.9	5	105	5.40	1.0K	1.0	6.10
SUM				3513		2970.4	475	10365	1712.28	79.1	702.7	620.30
SUM SQ.				91473		95810.7	10517	1528775	15980.09	90.1	7655.0	4491.11
MEAN				18		14.9	13	144	8.92	1.1	9.8	7.13
VARIANCE				150		28.6	121	516	3.72	0.0	11.2	0.22
STD.DEV.				12		5.3	11	23	1.93	0.2	3.4	0.46
STD.ERR.				1		0.4	2	3	0.14	0.0	0.4	0.05
COEF VAR				70		36.0	83	16	21.61	19.4	34.3	6.51
LOG MEAN				11		13.9	11	142	8.70	1.1	8.9	7.11
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 MSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740131	1100			1	50	9.6		180	11.50	1.0K	10.0	7.30
740131	1105			5	50	9.6			11.60			
740131	1107			10	50	8.9			11.60			
740131	1110			15	50	8.9			11.50			
740131	1115			20	50	8.9		180	11.50	.8	9.0	7.30
740131	1118			25	50	8.9			11.60			
740131	1122			30	50	8.9			11.60			
740131	1126			35	50	8.9			11.70			
740131	1130			40	50	8.9		180	11.60	1.0K	14.0	7.30
740131	1132			45	50	8.9						
740221	1045			1	30	8.3		160	12.00	1.6	8.0	7.20
740221	1050			5	30	8.1			11.50			
740221	1055			12	30	8.0		160	11.60	1.5	8.0	6.80
740221	1056			15	30	8.0			11.40			
740221	1058			20	30	7.9			11.70			
740221	1100			25	30	7.9		160	11.80	1.0K	7.0	6.50
740314	0930			1	33	11.0		150	7.60	1.5	6.0	7.00
740314	0932			2	33	11.0						
740314	0934			5	33	11.0			7.60			
740314	0936			10	33	11.0			8.00			
740314	0940			15	33	11.0			8.20			
740314	0945			20	33	11.0		140	7.20	1.0	5.0	7.10
740314	0947			25	33	11.0			10.10			
740314	0950			30	33	11.0			10.30			
740314	0955			35	33	11.0			10.20			
740314	1000			40	33	11.0		140	10.40	1.3	5.0	7.10
740420	0745			1	33	12.3		140	10.00	1.0K	11.0	7.00
740420	0747			2	33	12.3						
740420	0750			5	33	12.2			10.10			
740420	0755			10	33	12.2			10.00			
740420	0800			15	33	12.5		150	9.90	1.0K	9.0	6.90
740420	0805			20	33	12.5			10.00			
740420	0810			25	33	12.5			9.90			
740420	0815			30	33	12.3		150	9.80	1.0K	10.0	6.90
740420	0816			33	33	12.5						
740518	0700			1	33	16.0		130	8.70	1.1	13.0	6.60
740518	0702			2	33	16.0						
740518	0705			5	33	16.0			8.50			
740518	0710			10	33	16.0			8.80			
740518	0715			15	33	16.0		130	8.70	1.2	14.0	6.80
740518	0717			20	33	16.0			8.90			
740518	0720			25	33	16.0			8.80			
740518	0725			30	33	16.0			8.80			
740518	0730			33	33	16.0		140	8.80	1.0K	12.0	6.60
740518	0731			35	33	16.0						
740613	0700			1	33	18.0		140	8.60	1.0	7.0	6.90
740613	0702			2	33	18.0						
740613	0705			5	33	18.0			8.60			
740613	0707			10	33	18.0			8.70			
740613	0710			15	33	18.0		150	8.40	1.1	8.0	6.90
740613	0712			20	33	18.0			8.60			
740613	0715			25	33	18.0			8.40			
740613	0720			30	33	18.0		150	8.60	1.6	10.0	7.00
740613	0721			32	33	18.0						
740718	0810			1	33	24.5		140	9.90	1.7	10.0	8.10

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LPIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
750718	0645			1	51.0	0	11	0.040	0.03			0.19
750718	0655			15	50.0	0	10	0.200	0.01			0.22
750718	0705			30	49.0	0	16	0.100	0.04			0.22
750814	0705			1	47.0	0	10	0.290	0.03			0.43
750814	0715			15	48.0	0	10	0.120	0.01K			0.31
750814	0735			30	48.0	0	13	0.060	0.04			0.42
750918	0650			1	52.0	0	3	0.260	0.04			0.25
750918	0655			15	54.0	0	3	0.330	0.07			0.24
750918	0705			30	54.0	0	5	0.300	0.05			0.33
751016	0820			1	58.0	0	7	0.370	0.06			0.30
751016	0825			15	58.0	0	6	0.470	0.01			0.29
751016	0830			30	57.0	0	9	0.300	0.03			0.33
751113	0800			1	56.0	0	17	0.330	0.06			0.29
751113	0805			15	56.0	0	15	0.300	0.13			0.24
751113	0810			30	56.0	0	17	0.240	0.01K			0.29
751216	0755			1	46.0	0	8	0.130	0.04			0.35
751216	0810			10	45.0	0	8	0.300	0.04			0.38
751216	0830			30	45.0	0	4	0.180	0.01K			0.45
740131												
NUMBER				200	72	72	70	72	72	6	6	72
MAXIMUM				50	66.0	0	110	2.200	0.60	0.010K	0.420	0.79
MINIMUM				1	29.0	0	1	0.010K	0.01K	0.010K	0.350	0.04
SUM				3513	3615.0	0	1057	17.090	4.03	0.060	2.290	22.11
SUM SQ.				91473	185721.0	0	29761	15.535	0.80	0.001	0.877	8.16
MEAN				18	50.2	0	15	0.237	0.06	0.010	0.382	0.31
VARIANCE				150	59.4	0	200	0.162	0.01	0.000	0.001	0.02
STD.DEV.				12	7.7	0	14	0.402	0.09	0.000	0.024	0.14
STD.ERR.				1	0.9	0	2	0.047	0.01	0.000	0.010	0.02
COEF VAR				70	15.4	0	94	169.396	161.25	0.000	6.294	45.23
LOG MEAN				11	49.6	0	12	0.111	0.03	0.010	0.381	0.27
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
740131	1100			1	0.040	0.02			1.30			10
740131	1115			20	0.020	0.01K			1.30			14
740131	1130			40	0.060	0.02			1.50			15
740221	1045			1	0.050	0.05			1.20			15
740221	1055			12	0.050	0.04			1.20			14
740221	1100			25	0.050	0.02			1.20			14
740314	0930			1	0.360	0.10			1.60			17
740314	0945			20	0.270	0.09			1.60			18
740314	1000			40	0.310	0.07			1.60			19
740420	0745			1	0.030	0.03			2.40			15
740420	0800			15	0.040	0.04			2.50			17
740420	0815			30	0.040	0.03			2.50			17
740518	0700			1	0.040	0.04			2.10			14
740518	0715			15	0.040	0.04			2.10			15
740518	0730			33	0.040	0.03			2.10			15
740613	0700			1	0.030	0.03			2.80			17
740613	0710			15	0.030	0.03			2.80			17

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600049 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
750125	0820			35	33	8.0			11.10			
750125	0825			40	33	8.0	10	160	11.10	1.0R	11.0	7.40
750222	0800			1	33	8.1	5	140	11.00	1.0R	6.3	7.40
750222	0805			5	33	8.0			11.10			
750222	0810			10	33	8.0			11.20			
750222	0815			15	33	8.0	11	140	11.10	1.0R	7.0	7.40
750222	0817			20	33	8.0			11.20			
750222	0820			25	33	8.0	12	140	11.10	1.0R	8.0	
750222	0825			30	33	8.0			11.10			
750222	0830			35	33	8.0			11.20			7.40
750328	0730			1	33	9.3	21	130	11.40	1.0R	13.0	7.20
750328	0735			5	33	9.3			11.60			
750328	0737			10	33	9.3			11.50			
750328	0740			15	33	9.2			11.60			
750328	0745			20	33	9.2	24	140	11.70	1.0R	12.0	7.20
750328	0747			25	33	9.2			11.70			
750328	0750			30	33	9.2			11.60			
750328	0752			35	33	9.2			11.80			
750328	0755			40	33	9.2	23	140	11.90	1.0R	11.0	7.40
750328	0757			45	33	9.2			11.80			
750425	0730			1	33	12.0	45	120	10.30	1.0R	19.0	6.50
750425	0732			5	33	12.0			10.20			
750425	0735			10	33	12.0			10.20			
750425	0737			15	33	11.9			10.40			
750425	0740			20	33	11.9			10.20			
750425	0745			25	33	11.8	45	120	10.40	1.0R	15.0	6.70
750425	0747			30	33	11.8			10.30			
750425	0750			35	33	11.8			10.40			
750425	0755			40	33	11.7			10.20			
750425	0757			45	33	11.7	45	120	10.20	1.0R	18.0	7.10
750425	0800			50	33	11.7			10.20			
750523	0730			1	33	16.5	17	130	9.30	1.0R	9.0	6.90
750523	0732			5	33	16.4			9.40			
750523	0735			10	33	16.5			9.60			
750523	0740			15	33	16.1	19	130	9.60	1.0R	11.0	6.50
750523	0742			20	33	16.1			9.40			
750523	0745			25	33	16.1			9.30			
750523	0750			30	33	16.0	19	130	9.30	1.0R	13.0	6.50
750620	0800			1	33	20.0	11	110	7.90	1.0R	9.0	6.20
750620	0802			5	33	19.9			8.20			
750620	0806			10	33	19.9			8.00			
750620	0810			15	33	19.9	9	110	8.10	1.0R	10.0	6.30
750620	0812			20	33	19.9			8.10			
750620	0815			25	33	19.9			8.00			
750620	0820			30	33	19.9	11	110	7.80	1.0R	10.0	6.10
750718	0645			1	33	23.0	7	110	6.60	1.0R	11.0	6.60
750718	0647			5	33	23.0			6.70			
750718	0650			10	33	23.0			6.70			
750718	0655			15	33	23.0	7	110	6.50	1.0R	10.0	6.80
750718	0657			20	33	23.0			6.40			
750718	0700			25	33	23.0			6.30			
750718	0705			30	33	23.0	10	110	5.90	1.0R	11.0	6.70
750814	0705			1	33	23.5	8	120	5.50	1.0R	10.0	6.80
750814	0707			5	33	23.0			5.40			
750814	0710			10	33	23.0			5.50			

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 6C0044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
740131												
NUMBER				200	72	71	39	38	70	38	35	71
MAXIMUM				50	0.360	0.14	55.0	4.90	3.40	1.50	5	25
MINIMUM				1	0.020	0.01K	6.0	2.50	1.20	0.80	2	10
SUM				3513	6.170	3.17	913.0	136.90	157.50	44.20	120	1154
SUM SQ.				91473	0.849	0.20	29709.0	533.53	374.27	53.48	429	19436
MEAN				18	0.086	0.04	23.4	3.80	2.25	1.16	3	16
VARIANCE				150	0.005	0.00	219.4	0.37	0.29	0.06	0	10
STD.DEV.				12	0.067	0.03	14.8	0.61	0.54	0.24	1	3
STD.ERR.				1	0.008	0.00	2.4	0.10	0.06	0.04	0	0
COEF VAR				70	78.412	65.67	63.3	15.98	23.87	20.33	20	19
LOG MEAN				11	0.070	0.04	18.8	3.75	2.18	1.14	3	16
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BERON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740131	1100			1		100K	1.00K	5.00K	150.00			40.00
740131	1115			20		100K	1.00K	5.00K	180.00			24.00
740131	1130			40		100K	1.00K	5.00K	180.00			36.00
740221	1045			1		100K	1.00K	5.00K	100.00			18.00
740221	1055			12		110	1.00K	5.00K	200.00			23.00
740221	1100			25		100K	1.00K	5.00K	200.00			28.00
740314	0930			1		100K	1.00K	5.00K	70.00			31.00
740314	0945			20		100K	1.00K	5.00K	60.00			42.00
740314	1000			40		100K	1.00	5.00K	50.00			36.00
740420	0745			1		100K	2.00	16.00	70.00			19.00
740420	0800			15		100K	3.00	28.00	90.00			22.00
740420	0815			30		100	3.00	17.00	50.00			20.00
740518	0700			1		100K	14.00	5.00K	120.00			110.00
740518	0715			15		100K	21.00	10.00	120.00			90.00
740518	0730			33		100K	14.00	5.00K	140.00			130.00
740613	0700			1		100	9.00	5.00K	140.00			140.00
740613	0710			15		160	5.00	5.00K	100.00			100.00
740613	0720			30		120	1.00	5.00K	120.00			100.00
740718	0810			1		120	1.00	5.00K	20.00			10.00K
740718	0820			20		150	1.00	5.00	25.00			11.00
740718	0835			40		100K	1.00	5.00K	20.00			13.00
740814	0800			1		100K	1.00K	5.00K	250.00			10.00K
740814	0815			20		100K	1.00	5.00K	200.00			11.00
740814	0830			40		100K	1.00	5.00	180.00			10.00
740921	0700			1		100K	5.00	10.00	10.00K			10.00K
740921	0715			15		100K	2.00	5.00K	10.00K			10.00K
740921	0730			30		100K	2.00	5.00K	10.00K			10.00K
741018	0630			1		100K	2.00	10.00	40.00			50.00K
741018	0640			15		100K	2.00	10.00	40.00			50.00K
741018	0650			35		100K						
741116	0630			1		100K	2.00	10.00K	20.00			20.00K
741116	0640			20		100K	2.00	10.00	30.00			20.00K
741116	0650			35		100K	1.00	10.00	30.00			20.00K
741205	0900			1		100K	2.00	5.00K	20.00		500	20.00K
741205	0910			15		100K	1.00K	5.00K	30.00		1000	[illegible]

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
740131	1100			1	48.0	0	25	0.300	0.02	0.010K	0.350	0.39
740131	1115			20	45.0	0	33	0.100	0.02	0.010K	0.370	0.37
740131	1130			40	46.0	0	28	0.100	0.02	0.010K	0.370	0.37
740221	1045			1	37.0	0	16	0.140	0.02	0.010K	0.420	0.42
740221	1055			12	36.0	0	27	0.120	0.02	0.010K	0.390	0.39
740221	1100			25	34.0	0	29	0.140	0.01	0.010K	0.390	0.39
740314	0930			1	48.0	0	21	0.070	0.04			0.79
740314	0945			20	48.0	0	18	0.050	0.04			0.45
740314	1000			40	47.0	0	26	0.060	0.05			0.38
740420	0745			1	43.0	0	13	0.030	0.01			0.38
740420	0800			15	42.0	0	10	0.030	0.02			0.50
740420	0815			30	43.0	0	12	0.030	0.02			0.56
740518	0700			1	41.0	0	9	0.010	0.01			0.39
740518	0715			15	42.0	0	10	0.040	0.02			0.37
740518	0730			33	43.0	0	7	0.040	0.04			0.42
740613	0700			1	47.0	0	16	0.020	0.01			0.49
740613	0710			15	48.0	0	15	0.030	0.01			0.51
740613	0720			30	50.0	0	21	0.030	0.03			0.52
740718	0810			1	46.0	0	5	0.130	0.29			0.29
740718	0820			20	49.0	0	9	0.130	0.25			0.35
740718	0835			40	57.0	0	11	0.150	0.19			0.33
740814	0800			1	46.0	0	4	0.200	0.10			0.15
740814	0815			20	47.0	0	5	0.240	0.08			0.10
740814	0830			40	66.0	0	16	0.270	0.12			0.13
740921	0700			1	64.0	0	11	0.220	0.03			0.10
740921	0715			15	64.0	0	8	1.000	0.01K			0.08
740921	0730			30	64.0	0	12	0.220	0.01K			0.10
741018	0630			1	61.0	0	8	0.020	0.03			0.31
741018	0640			15	57.0	0	7	0.030	0.02			0.27
741018	0650			35	57.0	0	13	0.020	0.02			0.25
741116	0630			1	56.0	0	9	0.010	0.01K			0.18
741116	0640			20	56.0	0		0.010	0.01K			0.18
741116	0650			35	57.0	0	16	0.010K	0.01			0.17
741205	0900			1	58.0	0	9	0.030	0.01K			0.26
741205	0910			15	59.0	0	7	0.040	0.01K			0.26
741205	0920			35	60.0	0	9	0.060	0.01K			0.30
750125	0800			1	60.0	0	25	0.250	0.01K			0.14
750125	0815			25	60.0	0	12	0.230	0.01K			0.18
750125	0825			40	61.0	0	14	0.200	0.01K			0.18
750222	0800			1	55.0	0	2	2.200	0.22			0.40
750222	0815			15	50.0	0	8	2.000	0.60			0.44
750222	0820			25			1	1.800	0.28			0.47
750222	0830			35	51.0	0						
750328	0730			1	48.0	0	28	0.340	0.01K			0.13
750328	0745			20	49.0	0		0.380	0.01K			0.22
750328	0755			40	49.0	0	110	0.380	0.01K			0.56
750425	0730			1	29.0	0	37	0.100	0.10			0.28
750425	0745			25	36.0	0	32	0.150	0.09			0.34
750425	0757			45	37.0	0	31	0.100	0.10			0.32
750523	0730			1	53.0	0	17	0.070	0.06			0.31
750523	0740			15	49.0	0	21	0.110	0.09			0.31
750523	0750			30	50.0	0	20	0.230	0.07			0.31
750620	0800			1	44.0	0	10	0.020	0.01K			0.05
750620	0810			15	45.0	0	10	0.020	0.01K			0.04
750620	0820			30	45.0	0	12	0.060	0.01K			0.04

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
740131	1100			1	120.00		70.00	150.00	30	10		100
740131	1115			20	100.00		50.00K	140.00				90
740131	1130			40	110.00		60.00	150.00				120
740221	1045			1	100.00		100.00	150.00				30
740221	1055			12	90.00		160.00	280.00				50
740221	1100			25	100.00		300.00	260.00				90
740314	0930			1	100.00		80.00	350.00	10K	10K		70
740314	0945			20	100.00		130.00	230.00				50
740314	1000			40	80.00		60.00	130.00				70
740420	0745			1	90.00		90.00	100.00	335	120		70
740420	0800			15	60.00		80.00	80.00				70
740420	0815			30	60.00		70.00	160.00				70
740518	0700			1	55.00		50.00K	170.00	34	1K		70
740518	0715			15	100.00		50.00	190.00				60
740518	0730			33	110.00		50.00K	230.00				90
740613	0700			1	150.00		40.00	170.00	70	1K		80
740613	0710			15	60.00		50.00	170.00				90
740613	0720			30	120.00		50.00	120.00				80
740718	0810			1	37.00		50.00K	15.00	12	1		80
740718	0820			20	140.00		50.00K	20.00				80
740718	0835			40	150.00		50.00K	40.00				70
740814	0800			1	40.00		130.00	60.00	1K	83R		100
740814	0815			20	80.00		50.00K	80.00				60
740814	0830			40	80.00		70.00	40.00				80
740921	0700			1	100.00		50.00K	100.00	130	10		100
740921	0715			15	90.00		50.00K	10.00K				100
740921	0730			30	100.00		50.00K	40.00				100
741018	0630			1	100.00		50.00K	10.00	12	1K		120
741018	0640			15	120.00		50.00K	20.00				120
741018	0650			35	140.00							60
741116	0630			1	120.00		50.00K	80.00	85	10		50
741116	0640			20	100.00		50.00K	90.00				110
741116	0650			35	140.00		50.00K	80.00				50
741205	0900			1	70.00		50.00K	10.00K	80	1K		60
741205	0910			15	110.00		50.00K	40.00				70
741205	0920			35	120.00		50.00K	10.00				60
750125	0800			1	60.00	20.0	50.00K	60.00	29	8	85	100
750125	0815			25	70.00	10.0	50.00K	70.00			85	100
750125	0825			40	60.00	10.0K	50.00K	70.00			85	90
750222	0800			1	120.00	100.0	50.00K	30.00	48	1K	63	120
750222	0815			15	150.00	100.0	50.00K	600.00			63	90
750222	0820			25	140.00	120.0	50.00K	80.00			63	110
750328	0730			1	120.00	100.0	60.00	120.00	110	35	56	90
750328	0745			20	100.00	120.0R		60.00			56	
750328	0755			40	100.00	20.0	100.00	50.00			56	80
750425	0730			1	90.00	70.0	140.00	220.00	133	47	30	90
750425	0745			25	80.00	20.0	120.00	170.00			29	90
750425	0757			45	100.00	40.0	90.00	150.00			29	90
750523	0730			1	50.00	40.0	90.00	40.00	130	45	48	100
750523	0740			15	60.00	30.0	80.00	40.00			53	90
750523	0750			30	50.00	40.0	70.00	20.00			52	90
750620	0800			1	10.00	10.0K	50.00K	80.00	60	20	26	80
750620	0810			15	10.00K	10.0K	50.00K	30.00			31	80
750620	0820			30	10.00	10.0K	50.00K	20.00			31	30
750718	0645			1	60.00	10.0K	60.00	40.00	83	36	37	110

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
740613	0720			30	0.040	0.03			2.60			20
740718	0810			1	0.080	0.02			3.00			16
740718	0820			20	0.120	0.08			2.90			15
740718	0835			40	0.340	0.04			3.00			15
740814	0800			1	0.050	0.02			2.50			16
740814	0815			20	0.040	0.03			2.50			17
740814	0830			40	0.080	0.08			2.50			17
740921	0700			1	0.050	0.03			2.80			15
740921	0715			15	0.140	0.03			2.80			16
740921	0730			30	0.120	0.04			2.10			16
741018	0630			1	0.090	0.01			2.60			20
741018	0640			15	0.080	0.128			2.50			18
741018	0650			35	0.090	0.09						18
741116	0830			1	0.080	0.05			2.10			20
741116	0840			20	0.100	0.09			2.10			
741116	0850			35	0.080	0.07			2.10			19
741205	0900			1	0.100	0.07	55.0		2.30	0.90		20
741205	0910			15	0.080	0.01	55.0		2.40	0.90		21
741205	0920			35	0.080	0.08	50.0		2.20	0.80		20
750125	0800			1	0.120	0.09	26.0	4.90	2.50	1.30	4	20
750125	0815			25	0.120	0.09	26.0	4.90	2.50	1.40	5	18
750125	0825			40	0.120	0.09	26.0	4.90	2.50	1.40	4	18
750222	0800			1	0.050	0.03	18.0	4.30	2.40	1.50	4	17
750222	0815			15	0.050	0.03	18.0	4.30	2.40	1.40	4	17
750222	0820			25	0.050	0.03	18.0	4.30	2.40	1.30		16
750328	0730			1	0.150	0.05	16.0	3.90	2.10	1.40	4	18
750328	0745			20	0.170	0.05	16.0	3.90	2.10	1.50	4	19
750328	0755			40	0.140	0.03	16.0	3.90	2.00	1.40	4	18
750425	0730			1	0.080	0.02	6.0	3.70	1.60	1.40	5	21
750425	0745			25	0.030	0.02	6.0	3.50	1.80	1.40	4	25
750425	0757			45	0.040	0.02	6.0	3.30	1.60	1.20	4	24
750523	0730			1	0.050	0.03	13.0	3.80	1.70	1.10	4	13
750523	0745			15	0.100	0.05	14.0	4.30	1.90	1.40	3	14
750523	0750			30	0.150	0.14	14.0	4.20	1.80	1.30	3	13
750620	0800			1	0.120	0.02	6.0	2.80	2.40	1.10	2	12
750620	0810			15	0.050	0.03	6.0	4.00	2.60	1.10	3	12
750620	0830			30	0.080	0.03	6.0	3.90	1.30	1.10	3	13
750718	0645			1	0.050		9.0	3.50			4	19
750718	0655			15	0.050	0.05	9.0	3.60	2.60	0.90	3	18
750718	0705			30	0.100	0.09	11.0	3.50	2.60	0.90	4	17
750814	0705			1	0.110	0.04	13.0	3.60	2.70	0.90	3	18
750814	0715			15	0.080	0.03	13.0	3.60	2.50	0.80	3	18
750814	0735			30	0.110	0.09	14.0	3.60	2.70	0.90	3	18
750918	0650			1	0.050	0.04	24.0	3.30	2.90	0.90	3	18
750918	0655			15	0.050	0.05	25.0	3.20	2.70	0.90	3	17
750918	0705			30	0.060	0.05	26.0	3.20	2.40	0.80	3	15
751016	0820			1	0.060	0.03	34.0	3.50	1.70	0.90	3	14
751016	0825			15	0.070	0.04	34.0	3.60	1.70	1.00	3	13
751016	0830			30	0.090	0.06	34.0	3.80	1.70	1.00	3	12
751113	0800			1	0.040	0.01	40.0	2.80	3.40	1.20	4	12
751113	0805			15	0.050	0.01	41.0	2.50	3.40	1.30	3	12
751113	0810			30	0.070	0.01	47.0	3.00	3.40	1.20	3	12
751216	0755			1	0.040	0.01	40.0	4.50	2.10	1.50	2	10
751216	0810			10	0.050	0.02	41.0	4.60	2.40	1.40	3	11
751216	0830			30	0.030	0.01	41.0	4.70	2.20	1.40	3	10

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600043 CUMBERLAND RIVER 285.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740131	1330			1	50	9.2		180	11.50	1.0K	10.0	7.20
740131	1333			5	50	9.2			11.70			
740131	1336			10	50	9.2			11.80			
740131	1340			15	50	9.2			11.90			
740131	1345			20	50	9.2		180	11.90	1.0K	10.0	7.20
740131	1348			25	50	9.1			11.80			
740131	1351			30	50	9.2			11.80			
740131	1355			35	50	9.2			11.90			
740131	1400			40	50	9.1		180	11.80	1.0K	10.0	7.30
740221	1315			1	70	8.0		170	11.00	1.1	8.0	7.00
740221	1318			5	70	8.0			10.70			
740221	1321			10	70	8.0			11.00			
740221	1325			15	70	8.0		170	11.10	1.0K	7.0	6.70
740221	1326			20	70	8.0			11.30			
740221	1328			25	70	8.0			10.00			
740221	1330			30	70	8.0		170	11.20	1.0K	7.0	6.90
740314	1110			1	70	11.4		150	10.10	1.4	5.0	6.90
740314	1112			2	70	11.0						
740314	1115			5	70	11.1			10.10			
740314	1117			10	70	11.2			10.40			
740314	1120			15	70	11.3			10.30			
740314	1125			20	70	11.1		140	10.80	1.3	7.0	7.00
740314	1127			25	70	11.2			10.30			
740314	1130			30	70	11.1			10.20			
740314	1132			35	70	11.1			10.00			
740314	1135			40	70	11.1		140	10.50	1.3	2.0	6.90
740420	0945			1	70	13.0		140	9.90	1.0K	11.0	6.90
740420	0947			2	70	13.0						
740420	0950			5	70	12.9			9.70			
740420	0952			10	70	12.9			9.80			
740420	0955			15	70	12.9			10.00			
740420	1000			20	70	12.9		140	9.80	1.0K	8.0	6.90
740420	1005			25	70	12.9			10.00			
740420	1010			30	70	12.9			9.90			
740420	1015			35	70	12.9		140	9.90	1.1	7.0	7.00
740420	1016			38	70	12.9						
740518	1045			1	70	16.5		140	8.80	1.4	12.0	7.00
740518	1046			2	70	16.6						
740518	1047			5	70	16.6			8.80			
740518	1048			10	70	16.5			8.80			
740518	1049			15	70	16.6			8.80			
740518	1050			20	70	16.6		140	8.90	1.5	10.0	6.80
740518	1051			25	70	16.7			8.90			
740518	1052			30	70	16.7			8.70			
740518	1053			35	70	16.8			8.90			
740518	1055			40	70	16.8		140	8.80	1.0K	11.0	6.80
740613	0815			1	70	20.0		190	9.00	2.0	13.0	7.40
740613	0816			2	70	20.0						
740613	0817			5	70	19.5			8.70			
740613	0818			10	70	19.3			8.50			
740613	0820			15	70	19.0		170	8.60	1.2	8.0	7.20
740613	0822			20	70	19.0			8.60			
740613	0824			25	70	19.0			8.60			
740613	0827			30	70	19.0			8.40			
740613	0830			35	70	18.9		160	8.40	1.0K	14.0	7.40

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 820049 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
741205	0920			35		100K	1.00K	5.00K	10.00		500	20.00K
750125	0800			1	1.1	100K	1.00K	5.00K	30.00	350.00	50	50.00K
750125	0815			25	1.2	100K	1.00K	5.00K	30.00	430.00	50K	50.00K
750125	0825			40	1.1	100K	1.00K	5.00K	20.00	420.00	50K	50.00K
750222	0800			1	2.0	100K	12.00	5.00K	10.00K	1100.00	520	20.00
750222	0815			15	4.2	100K	7.00	5.00K	200.00	1000.00	520	10.00
750222	0820			25	4.2	100K	10.00	5.00K	30.00	1200.00	380	20.00
750328	0730			1	1.9	100K	6.00	5.00K	40.00	1200.00	430	20.00
750328	0745			20	1.7	100K	4.00	5.00K	40.00	1700.00	360	20.00
750328	0755			40	2.0	100K	5.00	5.00K	50.00	1400.00	180	30.00
750425	0730			1	3.0	100K	2.00	5.00K	200.00	2900.00	460	130.00
750425	0745			25	1.9	100K	5.00	5.00K	120.00	2700.00	210	90.00
750425	0757			45	3.0	100K	5.00	5.00K	90.00	2200.00	350	80.00
750523	0730			1	1.3	100K	2.00	5.00K	70.00	1000.00	780	25.00
750523	0740			15	1.3	100K	2.00	5.00K	50.00	840.00	620	15.00
750523	0750			30	2.4	100K	2.00	5.00K	50.00	880.00	780	32.00
750620	0800			1	3.3	100K	5.00K	5.00K	50.00	300.00	250	88.00
750620	0810			15	3.5	100K	5.00K	5.00K	20.00	250.00	180	10.00K
750620	0820			30	3.6	100K	5.00K	5.00K	30.00	390.00	140	15.00
750718	0645			1	1.6	100K	2.00	7.00	80.00	530.00		6.00
750718	0655			15	1.0	100K	2.00	5.00K	70.00	380.00	220	12.00
750718	0705			30	1.0	100K	2.00	6.00	60.00	270.00		18.00
750814	0705			1	2.8	100K	8.00	5.00	40.00	480.00	190	10.00K
750814	0715			15	3.2	100K	1.00	6.00	40.00	440.00	320	10.00K
750814	0735			30	3.2	100K	2.00	9.00	40.00	520.00	160	10.00K
750918	0650			1	2.3	100K	2.00	5.00K	10.00	400.00	120	10.00K
750918	0655			15	1.3	100K	1.00	9.00	40.00	320.00	120	12.00
750918	0705			30	1.7	00K	1.00	5.00	10.00K	400.00	70	10.00K
751016	0820			1	0.5	100K	3.00	5.00K	60.00	800.00	300	10.00K
751016	0825			15	1.0	100K	2.00	5.00K	70.00	600.00	240	10.00K
751016	0830			30	3.2	100K	2.00	5.00K	70.00	480.00	120	10.00
751113	0800			1	4.0	100K	1.00K	5.00K	10.00K	320.00	200	10.00K
751113	0805			15	4.1	100K	1.00K	5.00K	20.00	400.00	50K	11.00
751113	0810			30	3.9	100K	1.00K	5.00K	20.00	240.00	50K	10.00K
751216	0755			1	2.2	100K	1.00K	5.00K	10.00K	420.00	80	20.00
751216	0810			10	1.8	100K	1.00K	5.00K	10.00K	320.00	80	50.00
751216	0830			30	1.8	100K	1.00K	5.00K	10.00K	480.00	120	50.00
740131												
NUMBER				200	36	72	71	71	71	36	37	71
MAXIMUM				50	4.2	160	21.00	28.00	250.00	2900.00	1000	140.00
MINIMUM				1	0.5	100K	1.00K	5.00K	10.00K	240.00	50K	6.00K
SUM				3513	83.3	7360	223.00	448.00	4855.00	28060.00	10750	2358.00
SUM SQ.				91473	234.1	759000	1657.00	3712.00	556925.00	3.742E+07	5113900	154098.00
MEAN				18	2.3	102	3.14	6.31	68.38	779.44	291	33.21
VARIANCE				150	1.2	94	13.67	12.65	3784.89	999337.13	55299	1082.66
STD.DEV.				12	1.1	10	3.70	3.56	61.52	666.59	235	32.90
STD.ERR.				1	0.2	1	0.44	0.42	7.30	111.10	39	3.90
COEF VAR				70	47.0	9	117.70	56.36	89.97	85.52	81	99.07
LOG MEAN				11	2.0	102	2.08	5.82	45.26	603.06	207	23.04
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600043 CUMBERLAND RIVER 285.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTNY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
750123	0922			25	70	8.1			11.10			
750125	0925			30	70	8.1			11.10			
750125	0927			35	70	8.1			11.10			
750125	0930			40	70	8.1	7	150	11.10	1.0K	11.0	7.30
750125	0931			45	70	8.1			11.10			
750222	0930			1	70	8.0	13	140	10.90	1.0K	6.0	7.30
750222	0932			5	70	8.0			11.10			
750222	0935			10	70	8.0			11.10			
750222	0940			15	70	8.0	13	140	11.20	1.0K	9.0	7.40
750222	0942			20	70	8.0			11.10			
750222	0945			25	70	8.0			11.00			
750222	0947			30	70	8.0			11.10			
750222	0950			35	70	8.0	12	140	11.10	1.0K	7.0	7.30
750328	0930			1	70	9.2	24	130	11.90	1.0K	17.0	7.10
750328	0932			5	70	9.2			11.60			
750328	0935			10	70	9.2			11.70			
750328	0937			15	70	9.2			11.80			
750328	0940			20	70	9.2	23	130	11.70	1.0K	19.0	7.10
750328	0942			25	70	9.2			11.80			
750328	0945			30	70	9.2			11.90			
750328	0947			35	70	9.2			11.80			
750328	0950			40	70	9.2	24	140	11.70	1.0K	20.0	7.10
750328	0952			45	70	9.2			11.80			
750425	0900			1	70	12.0	45	120	10.20	1.0K	16.0	6.70
750425	0902			5	70	12.0			10.30			
750425	0905			10	70	12.0			10.40			
750425	0907			15	70	12.0			10.20			
750425	0910			20	70	12.0	45	120	10.30	1.0K	17.0	6.70
750425	0912			25	70	12.0			10.40			
750425	0915			30	70	12.0			10.40			
750425	0917			35	70	12.0			10.30			
750425	0920			40	70	12.0	45	120	10.40	1.0K	17.0	6.70
750523	1025			1	50	17.0	18	140	9.20	1.0K	11.0	6.40
750523	1027			2	50	17.0			9.30			
750523	1030			5	50	16.8			9.30			
750523	1032			10	50	16.5			9.40			
750523	1035			15	50	16.5	18	140	9.30	1.0K	10.0	6.60
750523	1037			20	50	16.3			9.20			
750523	1040			25	50	16.1			9.40			
750523	1045			30	50	16.0	18	140	9.40	1.0K	11.0	6.70
750620	0935			1	70	21.6	11	120	7.90	1.0K	7.0	6.30
750620	0937			5	70	20.0			7.70			
750620	0940			10	70	20.0			7.80			
750620	0945			15	70	20.0	10	120	7.70	1.0K	9.0	6.40
750620	0947			20	70	20.0			7.70			
750620	0950			25	70	20.0			7.70			
750620	0952			30	70	20.0			7.70			
750620	0955			35	70	20.0	11	120	7.70	1.0K	10.0	6.30
750718	0840			1	70	23.0	7	120	6.50	1.0K	10.0	6.90
750718	0842			5	70	22.9			6.20			
750718	0845			10	70	22.7			6.30			
750718	0850			15	70	22.5	8	120	6.50	1.0K	10.0	6.70
750718	0852			20	70	22.7			6.30			
750718	0855			25	70	22.7			6.10			
750718	0857			30	70	22.7			6.10			

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600099 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
750718	0655			15	60.00	10.0K	80.00	40.00			37	80
750718	0705			30	90.00	10.0	80.00	30.00			42	90
750814	0705			1	110.00	60.0	50.00K	60.00	170	33	47	50
750814	0715			15	120.00	50.0	50.00K	50.00			47	70
750814	0735			30	130.00	40.0	50.00K	80.00			50	60
750918	0650			1	80.00	10.0K	50.00K	40.00	35	8	74	90
750918	0655			15	80.00	10.0	50.00K	40.00			76	90
750918	0705			30	90.00	10.0K	50.00K	80.00			78	100
751016	0820			1	40.00	10.0	50.00K	40.00	99	24	99	100
751016	0825			15	60.00	10.0	50.00K	40.00			100	100
751016	0830			30	10.00	10.0	50.00K	60.00			100	80
751113	0800			1	120.00	60.0	50.00K	60.00	93	32	110	100
751113	0805			15	110.00	50.0	60.00	60.00			110	100
751113	0810			30	80.00	30.0	50.00K	100.00			130	100
751216	0755			1	90.00	10.0	60.00	20.00	263	56	120	100
751216	0810			10	90.00	20.0	50.00K	20.00			120	90
751216	0830			30	80.00	10.0	50.00K	30.00			120	100
740131												
NUMBER				200	72	36	70	71	23	23	36	70
MAXIMUM				50	150.00	120.0	300.00	600.00	335	120	130	120
MINIMUM				1	10.00K	10.0K	40.00K	10.00K	1K	1K	26	30
SUM				3513	6422.00	1290.0	4680.00	6775.00	2052	593	2438	6010
SUM SQ.				91473	654094.00	87300.0	410000.00	1.270E+06	328162	34803	198844	544300
MEAN				18	89.19	35.8	66.86	95.42	89	26	68	86
VARIANCE				150	1144.90	1173.6	1407.38	8913.39	6595	887	964	410
STD DEV.				12	33.84	34.3	37.51	94.41	81	30	31	20
STD.ERR.				1	3.99	5.7	4.48	11.20	17	6	5	2
COEF VAR				70	37.94	95.6	56.11	98.94	91	116	46	24
LOG MEAN				11	78.95	23.8	61.50	64.77	54	11	61	83
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600043 CUMBERLAND RIVER 285.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICRDMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740131												
NUMBER				207		207	36	72	201	72	72	88
MAXIMUM				45		23.5	45	190	11.90	5.0	23.0	8.00
MINIMUM				1		8.0	4	95	4.30	1.0K	2.0	6.30
SUM				3696		3120.4	472	10555	1783.48	83.2	723.0	630.89
SUM SQ.				96578		52775.5	10554	1582175	16610.68	114.4	8413.0	4541.67
MEAN				18		15.1	13	147	8.87	1.2	10.0	7.17
VARIANCE				148		27.9	125	491	3.93	0.3	16.2	0.21
STD.DEV.				12		5.3	11	22	1.98	0.5	4.0	0.46
STD.ERR.				1		0.4	2	3	0.14	0.1	0.5	0.05
COEF VAR				68		35.0	85	15	22.34	43.9	40.1	6.46
LOG MEAN				12		14.1	10	145	8.63	1.1	9.1	7.15
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
740131	1330			1	46.0	0	31	0.080	0.02	0.010K	0.370	0.37
740131	1345			20	46.0	0	39	0.120	0.02	0.010K	0.370	0.37
740131	1400			40	47.0	0	38	0.040	0.06	0.010K	0.370	0.37
740221	1315			1	42.0	0	26	1.100	0.11	0.010K	0.490	0.49
740221	1325			15	40.0	0	30	0.190	0.02	0.010K	0.420	0.42
740221	1330			30	41.0	0	25	0.140	0.02	0.010K	0.420	0.42
740314	1110			1	47.0	0	20	0.060	0.05			0.43
740314	1125			20	48.0	0	23	0.060	0.04			0.36
740314	1135			40	48.0	0	16	0.060	0.05			0.40
740420	0945			1	42.0	0	14	0.030	0.03			0.21
740420	1000			20	44.0	0	17	0.040	0.04			0.30
740420	1015			35	45.0	0	13	0.040	0.05			0.41
740518	1045			1	43.0	0	9	0.040	0.01			0.31
740518	1050			20	43.0	0	9	0.040	0.02			0.32
740518	1055			40	39.0	0	9	0.020	0.05			0.29
740613	0815			1	55.0	0	11	0.040	0.05			0.34
740613	0820			15	57.0	0	13	0.040	0.05			0.41
740613	0830			35	50.0	0	22	0.040	0.06			0.39
740718	1100			1	47.0	0	5	0.140	0.21			0.30
740718	1115			20	48.0	0	7	0.110	0.18			0.24
740718	1130			35	49.0	0	11	0.090	0.24			0.19
740814	1010			1	53.0	0	4	0.190	0.08			0.14
740814	1025			20	53.0	0	6	0.170	0.17			0.20
740814	1045			35	53.0	0	16	0.210	0.09			0.30
740921	0845			1	64.0	0	8	1.000	0.01K			0.08
740921	0900			20	64.0	0	11	0.970	0.01K			0.13
740921	0915			37	64.0	0	16	0.850	0.01K			0.10
741018	0820			1	58.0	0	8	0.020K	0.02K			0.27
741018	0830			20	58.0	0	9	0.020K	0.02			0.20
741018	0840			35	59.0	0	8	0.020K	0.02K			0.21
741116	0815			1	57.0	0	8	0.010K	0.01			0.18
741116	0825			20	56.0	0	19	0.020	0.01K			0.16
741116	0835			35	55.0	0	11	0.010	0.01			0.19
741205	1100			1	68.0	0	9	0.070	0.01K			0.37
741205	1110			20	68.0	0	9	0.030	0.01K			0.37

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STATION - 600063 CUMBERLAND RIVER 285.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740613	0831			36	70	18.5						
740718	1100			1	70	23.4		150	9.30	1.0	9.0	8.00
740718	1102			5	70	23.0			9.10			
740718	1105			10	70	22.8			9.30			
740718	1110			15	70	22.5			8.60			
740718	1115			20	70	22.5		160	8.80	1.1	11.0	7.80
740718	1120			25	70	22.5			9.10			
740718	1125			30	70	22.5			8.90			
740718	1130			35	70	22.4		160	8.90	1.2	14.0	7.80
740814	1010			1	70	23.5		150	6.60	1.3	10.0	7.00
740814	1012			5	70	23.0			6.40			
740814	1015			10	70	23.0			6.10			
740814	1020			15	70	22.5			6.00			
740814	1025			20	70	22.1		160	6.10	1.5	10.0	7.10
740814	1030			25	70	22.1			6.00			
740814	1035			30	70	22.1			6.00			
740814	1045			35	70	22.1		160	5.90	5.0	12.0	6.90
740921	0845			1	70	21.1		150	6.90	1.0K	10.0	6.90
740921	0847			5	70	21.1			6.90			
740921	0850			10	70	21.1			6.90			
740921	0855			15	70	21.1			6.90			
740921	0900			20	70	21.1		150	6.80	1.0K	14.0	7.10
740921	0902			25	70	21.1			6.80			
740921	0905			30	70	21.1			7.10			
740921	0910			35	70	21.2			6.80			
740921	0915			37	70	21.2		150	6.80	1.0K	10.0	7.00
741018	0820			1	70	15.8		170	8.40	1.0K	9.0	6.90
741018	0822			5	70	15.8			8.40			
741018	0824			10	70	15.8			8.20			
741018	0826			15	70	15.8			8.40			
741018	0830			20	70	15.8		170	8.30	1.0K	8.0	6.90
741018	0832			25	70	15.8			8.30			
741018	0835			30	70	15.8			8.50			
741018	0840			35	70	15.8		170	8.50	1.0K	10.0	6.90
741116	0815			1	70	12.1		180	8.60	1.0K	7.0	6.90
741116	0817			5	70	12.1			8.80			
741116	0820			10	70	12.1			8.60			
741116	0822			15	70	12.1			8.60			
741116	0825			20	70	12.1		180	8.70	1.0K	7.0	7.00
741116	0827			25	70	12.1			8.80			
741116	0830			30	70	12.1			8.80			
741116	0835			35	70	12.1		180	8.80	1.0K	7.0	6.80
741205	1100			1	70	9.0		180	9.40	1.0K	11.0	7.20
741205	1102			5	70	9.0			10.40			
741205	1105			10	70	9.0			10.20			
741205	1107			15	70	9.0			10.00			
741205	1110			20	70	9.0		180	10.30	1.0K	13.0	6.90
741205	1112			25	70	9.0			10.40			
741205	1115			30	70	9.0			10.30			
741205	1120			35	70	9.0		180	10.50	1.0K	9.0	7.40
750125	0910			1	70	8.1	6	140	11.40	1.0K	11.0	7.30
750125	0912			5	70	8.1			11.20			
750125	0915			10	70	8.1			11.20			
750125	0917			15	70	8.1			11.20			
750125	0920			20	70	8.1	6	150	11.20	1.0K	12.0	7.30

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
740131	1330			1	0.080	0.01R			1.30			16
740131	1345			20	0.060	0.01R			1.30			14
740131	1400			40	0.090	0.01R			1.20			14
740221	1315			1	0.080	0.01			1.20			10
740221	1325			15	0.080	0.02			1.20			14
740221	1330			30	0.060	0.05			1.40			14
740314	1110			1	0.270	0.09			1.60			19
740314	1125			20	0.270	0.09			1.60			18
740314	1135			40	0.270	0.15			1.60			19
740420	0945			1	0.020	0.01			2.40			16
740420	1000			20	0.020	0.02			2.40			15
740420	1015			35	0.050	0.04			2.40			16
740518	1045			1	0.010	0.01			2.00			15
740518	1050			20	0.020	0.02			2.00			15
740518	1055			40	0.020	0.02			2.20			16
740613	0815			1	0.030	0.01			2.70			15
740613	0820			15	0.040	0.04			2.70			15
740613	0830			35	0.050	0.04			2.70			19
740718	1100			1	0.190	0.21R			2.90			19
740718	1115			20	0.100	0.30R			2.80			16
740718	1130			35	0.150	0.33R			2.80			17
740814	1010			1	0.070	0.04			2.00			17
740814	1025			20	0.050	0.04			2.00			16
740814	1045			35	0.080	0.05			2.00			14
740921	0845			1	0.080	0.03			2.90			15
740921	0900			20	0.080	0.02			2.30			16
740921	0915			37	0.140	0.03			2.80			16
741018	0820			1	0.080	0.07			2.40			18
741018	0830			20	0.100	0.05			2.40			18
741018	0840			35	0.150	0.08			2.50			18
741116	0815			1	0.100	0.05			1.90			17
741116	0825			20	0.100	0.06			1.80			20
741116	0835			35	0.100	0.05			1.90			19
741205	1100			1	0.120	0.03	55.0		2.10	0.90	5	20
741205	1110			20	0.080	0.08	55.0		2.10	0.90	4	18
741205	1120			35	0.260	0.06	52.0		2.10	0.90	6	18
750125	0910			1	0.170	0.09	22.0	4.90	2.50	1.40	5	20
750125	0920			20	0.140	0.09	21.0	4.90	2.50	1.30	5	19
750125	0930			40	0.140	0.09	21.0	4.90	2.50	1.40	5	18
750222	0930			1	0.050	0.01R	18.0	4.30	2.30	1.30	5	16
750222	0940			15	0.030	0.01R	17.0	4.50	2.60	1.30		17
750222	0950			35	0.140	0.05	19.0	4.10	2.30	1.50	6	17
750328	0930			1	0.180	0.12	16.0	3.90	2.00	1.50	4	18
750328	0940			20	0.140	0.07	16.0	3.90	2.00	1.30	4	19
750328	0950			40	0.120	0.05	16.0	3.90	2.00	1.30	4	25
750425	0900			1	0.060	0.02	8.0	3.60	1.80	1.40	4	23
750425	0910			20	0.010	0.01	7.0	3.60	1.60	1.40	4	24
750425	0920			40	0.120	0.01	7.0	3.30	1.50	1.20	4	30
750523	1025			1	0.100	0.05	12.0	3.70	1.70	1.10	3	14
750523	1035			15	0.100	0.05	14.0	4.00	1.80	1.20	3	14
750523	1045			30	0.050	0.05	13.0	4.10	1.70	1.20	4	14
750620	0935			1	0.150	0.03	5.0	4.00	2.70	1.10	3	13
750620	0945			15	0.050	0.03	6.0	4.10	2.70	1.10	3	12
750620	0955			35	0.050	0.03	6.0	3.90	2.70	1.10	2	12
750718	0840			1	0.020	0.01	9.0	3.50	2.40	0.90	3	11

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTNY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
750718	0900			35	70	22.5	9	120	6.10	1.0K	10.0	6.70
750814	0830			1	70	23.0	7	120	4.40	1.0K	9.0	6.80
750814	0832			5	70	22.8			4.40			
750814	0835			10	70	22.8			4.40			
750814	0840			15	70	22.9	8	120	4.40	1.0K	9.0	6.50
750814	0842			20	70	22.9			4.30			
750814	0845			25	70	22.9			4.40			
750814	0850			30	70	23.0			4.60			
750814	0855			33	70	23.0	9	120	4.40	1.0K	14.0	6.50
750918	0830			1	70	22.2	4	95	6.70	1.3	9.0	6.40
750918	0832			5	70	22.2			6.70			
750918	0833			10	70	22.2			6.80			
750918	0835			15	70	22.2	4	95	6.80	1.2	11.0	6.40
750918	0837			20	70	22.2			6.80			
750918	0840			25	70	22.0			6.80			
750918	0842			30	70	22.0			6.80			
750918	0845			32	70	22.0	5	95	6.80	1.2	10.0	6.40
751016	0955			1	70	17.0	5	140	6.00	1.0K	23.0	7.60
751016	0956			2	70	17.0			6.00			7.60
751016	0957			5	70	17.0			6.00			7.60
751016	0958			10	70	17.0			6.00			7.60
751016	1000			15	70	17.0	6	140	6.00	1.0K	11.0	7.60
751016	1001			20	70	17.0			6.10			7.60
751016	1002			25	70	17.0			6.10			7.60
751016	1005			30	70	17.0	6	140	6.10	1.0K	15.0	7.60
751113	0845			1	70	14.5	7	150	7.60	1.0	2.0	7.60
751113	0846			2	70	14.5			7.60			7.60
751113	0847			5	70	14.8			7.60			7.60
751113	0848			10	70	14.8			7.60			7.60
751113	0850			15	70	14.8	9	160	7.60	1.0K	4.0	7.60
751113	0852			20	70	14.8			7.50			7.60
751113	0855			25	70	14.8			7.50			7.60
751113	0857			30	70	14.8	9	150	7.50	1.0	8.0	7.50
751216	0925			1	70	11.3	7	150	9.40	1.7	3.0	7.90
751216	0930			2	70	11.4			9.40			7.90
751216	0935			5	70	11.3			9.40			7.90
751216	0940			10	70	11.2			9.40			7.90
751216	0945			15	70	11.2	7	150	9.30	2.0	2.0	7.90
751216	0950			20	70	11.1			9.30			7.90
751216	0955			25	70	11.0			9.30			8.00
751216	1000			30	70	11.0			9.40			8.00
751216	1005			35	70	11.4	7	150	9.60	1.4	2.0	7.90

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BERON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740718	1100			1		100K	1.00	5.00K	20.00			10.00
740718	1115			20		100K	1.00K	5.00K	15.00			10.00K
740718	1130			35		100K	1.00	5.00K	30.00			10.00K
740814	1010			1		100	1.00	5.00K	190.00			10.00
740814	1025			20		100K	2.00	5.00K	140.00			12.00
740814	1045			35		100K	1.00	5.00K	90.00			10.00
740921	0845			1		100K	3.00	5.00K	10.00K			10.00K
740921	0900			20		100K	4.00	5.00K	10.00K			10.00K
740921	0915			37		100K	2.00	5.00K	10.00K			10.00K
741018	0820			1		100K	2.00	15.00	50.00			50.00K
741018	0830			20		100K	2.00	10.00	40.00			50.00K
741018	0840			35		100K	1.00	10.00K	80.00			50.00K
741116	0815			1		100K	1.00	10.00K	20.00			20.00K
741116	0825			20		100K	2.00	10.00K	20.00			20.00K
741116	0835			35		100K	1.00K	10.00K	40.00			20.00K
741205	1100			1		100K	7.00	5.00K	10.00		20	20.00K
741205	1110			20		100K	1.00K	5.00K	10.00K		20	20.00K
741205	1120			35		100K	2.00	5.00K	10.00K		40	20.00K
750125	0910			1	1.2	100K	1.00K	5.00K	30.00	400.00	50K	50.00K
750125	0920			20	1.3	100K	1.00K	5.00K	30.00	440.00	50K	50.00K
750125	0930			40	1.2	100K	1.00K	5.00K	40.00	650.00	50K	50.00K
750222	0930			1	4.6	100K	7.00	5.00K	30.00	1400.00	250	20.00
750222	0940			15	4.4	100K	8.00	5.00K	40.00	1600.00	600	20.00
750222	0950			35	4.4	100K	7.00	5.00K	40.00	2000.00	680	20.00
750328	0930			1	2.1	100K	3.00	5.00K	50.00	1300.00	250	20.00
750328	0940			20	2.6	100K	3.00	5.00K	60.00	970.00	220	20.00
750328	0950			40	2.2	100K	8.00	5.00K	40.00	2000.00	240	20.00
750425	0900			1	2.0	100K	3.00	5.00K	90.00	2100.00	370	60.00
750425	0910			20	2.8	100K	2.00	5.00K	90.00	2400.00	220	60.00
750425	0920			40	1.9	100K	6.00	5.00K	80.00	2100.00	240	50.00
750523	1025			1	2.2	100K	3.00	5.00K	70.00	900.00	620	48.00
750523	1035			15	1.7	100K	2.00	5.00K	50.00	1100.00	620	30.00
750523	1045			30	0.7	100K	4.00	5.00K	70.00	1100.00	570	46.00
750620	0935			1	3.2	100K	5.00K	5.00K	20.00	460.00	160	16.00
750620	0945			15	3.4	100K	5.00K	5.00K	20.00	280.00	210	26.00
750620	0955			35	3.4	100K	5.00K	5.00K	20.00	420.00	410	10.00K
750718	0840			1	2.3	100K	2.00	7.00	60.00	370.00	180	16.00
750718	0850			15	4.0	100K	1.00	6.00	60.00	440.00	200	12.00
750718	0900			35	2.5	100K	3.00	5.00	70.00	350.00	220	14.00
750814	0830			1	3.2	100K	2.00	6.00	30.00	440.00	180	10.00K
750814	0840			15	3.3	100K	1.00	5.00K	40.00	480.00	250	10.00K
750814	0855			33	3.2	100K	1.00	8.00	50.00	420.00	160	10.00K
750918	0830			1	1.5	100K	1.00K	5.00	20.00	360.00	210	10.00K
750918	0835			15	2.3	100K	2.00	6.00	10.00K	520.00	210	10.00K
750918	0845			32	3.0	100K	1.00K	7.00	10.00	440.00	300	10.00K
751016	0955			1	3.2	100K	3.00	5.00K	50.00	520.00	160	10.00
751016	1000			15	3.5	100K	2.00	5.00K	110.00	360.00	160	20.00
751016	1005			30	3.5	100K	2.00	5.00K	60.00	720.00	160	20.00
751113	0845			1	3.9	100K	1.00K	5.00K	10.00	720.00	120	10.00K
751113	0850			15	3.9	100K	1.00K	5.00K	10.00K	360.00	200	10.00K
751113	0857			30	3.9	100K	1.00K	5.00K	10.00K	360.00	300	10.00K
751216	0925			1	1.2	100K	1.00K	5.00K	10.00K	320.00	80	20.00
751216	0945			15	2.0	100K	1.00K	5.00K	10.00K	560.00	80	50.00
751216	1005			35	1.2	100K	1.00K	5.00K	10.00K	440.00	80	100.00

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600043 CUMBERLAND RIVER 285.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N MG/L	00610 NH3+NH4- N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
741205	1120			35	68.0	0	9	0.020	0.01K			0.04
750125	0910			1	60.0	0	15	0.220	0.01K			0.23
750125	0920			20	61.0	0	13	0.250	0.01K			0.18
750125	0930			40	60.0	0	12	0.200	0.01K			0.17
750222	0930			1	51.0	0	2	0.070	0.03			0.63
750222	0940			15	50.0	0	25	0.850	0.28			0.43
750222	0950			35	51.0	0	1	0.600	0.24			0.43
750328	0930			1	49.0	0	27	0.300	0.01K			0.13
750328	0940			20	48.0	0	32	0.380	0.01K			0.22
750328	0950			40	51.0	0	29	0.340	0.01K			0.44
750425	0900			1	36.0	0	28	0.380	0.10			0.29
750425	0910			20	36.0	0	31	0.320	0.14			0.30
750425	0920			40	36.0	0	32	0.160	0.12			0.40
750523	1025			1	51.0	0	16	0.060	0.07			0.34
750523	1035			15	55.0	0	19	0.340	0.08			0.29
750523	1045			30	51.0	0	20	0.300	0.03			0.31
750620	0935			1	41.0	0	8	0.050	0.01K			0.04
750620	0945			15	45.0	0	10	0.030	0.01K			0.05
750620	0955			35	42.0	0	9	0.030	0.01			0.05
750718	0840			1	48.0	0	8	0.150	0.01K			0.05
750718	0850			15	47.0	0	10	0.160	0.03			0.27
750718	0900			35	44.0	0	13	0.210	0.04			0.24
750814	0830			1	45.0	0	3	0.190	0.06			0.32
750814	0840			15	44.0	0	13	0.190	0.06			0.32
750814	0855			33	44.0	0	12	0.200	0.10			0.35
750918	0830			1	50.0	0	2	0.250	0.03			0.34
750918	0835			15	49.0	0	9	0.300	0.08			0.30
750918	0845			32	49.0	0	7	0.200	0.03			0.24
751016	0955			1	56.0	0	7	0.270	0.01			0.26
751016	1000			15	56.0	0	13	0.400	0.13			0.29
751016	1005			30	56.0	0	10	0.260	0.01			0.30
751113	0845			1	59.0	0	16	0.370	0.08			0.33
751113	0850			15	56.0	0	24	0.300	0.03			0.34
751113	0857			30	56.0	0	29	0.300	0.09			0.29
751216	0925			1	57.0	0	13	0.210	0.04			0.35
751216	0945			15	47.0	0	13	0.150	0.06			0.32
751216	1005			35	45.0	0	9	0.180	0.01K			0.33
740131												
NUMBER				207	72	72	72	72	72	6	6	72
MAXIMUM				45	68.0	0	39	1.100	0.28	0.010K	0.490	0.63
MINIMUM				1	36.0	0	1	0.010K	0.01K	0.010K	0.370	0.04
SUM				3696	3647.0	0	1079	15.300	3.95	0.060	2.440	20.45
SUM SQ.				96578	188947.0	0	21917	7.319	0.48	0.001	1.004	6.78
MEAN				18	50.7	0	15	0.212	0.05	0.010	0.407	0.28
VARIANCE				148	59.4	0	81	0.057	0.00	0.000	0.002	0.01
STD.DEV.				12	7.7	0	9	0.239	0.06	0.000	0.048	0.12
STD.ERR.				1	0.9	0	1	0.028	0.01	0.000	0.019	0.01
COEF VAR				68	15.2	0	60	112.642	110.98	0.000	11.708	41.10
LOG MEAN				12	50.1	0	12	0.119	0.03	0.010	0.404	0.25
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600043 CUMBERLAND RIVER 285.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
741205	1120			35	100.00	10.0	50.00K	10.00K				90
750125	0910			1	60.00	20.0	50.00K	80.00	13	7	75	100
750125	0920			20	60.00	20.0	50.00K	160.00			73	100
750125	0930			40	190.00	20.0	50.00K	100.00			73	80
750222	0930			1	90.00	90.0R	50.00K	50.00	55	4	63	100
750222	0940			15	90.00	20.0	50.00K	40.00			61	200
750222	0950			35	220.00	150.0	50.00K	90.00			64	160
750326	0930			1	170.00	100.0	80.00	110.00	130	10	56	100
750328	0940			20	100.00	30.0	80.00	60.00			56	90
750328	0950			40	90.00	30.0	60.00	60.00			56	90
750425	0900			1	100.00	80.0	60.00	190.00	433	35	35	90
750425	0910			20	100.00	50.0	50.00	180.00			32	90
750425	0920			40	90.00	40.0	60.00	140.00			31	90
750523	1025			1	60.00	60.0	120.00	30.00	430	35	45	90
750523	1035			15	70.00	50.0	110.00	20.00			51	90
750523	1045			30	80.00	60.0	80.00	40.00			49	90
750620	0935			1	60.00	10.0K	50.00K	40.00	26	18	29	60
750620	0945			15	90.00	10.0	50.00K	50.00			32	80
750620	0955			35	90.00	10.0K	50.00K	30.00			31	70
750718	0840			1	50.00	10.0	60.00	30.00	99	24	38	90
750718	0850			15	60.00	20.0	60.00	30.00			36	80
750718	0900			35	60.00	10.0	60.00	30.00			36	80
750814	0830			1	100.00	60.0	50.00K	90.00	158	28	47	50
750814	0840			15	110.00	30.0	50.00K	60.00			47	40
750814	0855			33	110.00	40.0	50.00K	50.00			47	50
750918	0830			1	60.00	10.0	50.00K	100.00	50	20	71	80
750918	0835			15	60.00	10.0R	120.00	70.00			73	80
750918	0845			32	70.00	10.0R	50.00K	20.00			72	80
751016	0955			1	60.00	10.0	50.00K	60.00	98	26	98	100
751016	1000			15	100.00	10.0	80.00	100.00			100	90
751016	1005			30	100.00	10.0	80.00	60.00			98	90
751113	0845			1	90.00	40.0	50.00K	170.00	473	252	110	90
751113	0850			15	120.00	20.0	50.00K	50.00			120	100
751113	0857			30	85.00	40.0	80.00	140.00			120	90
751216	0925			1	70.00	20.0	50.00K	20.00	184	80	120	100
751216	0945			15	100.00	20.0	50.00K	20.00			120	100
751216	1005			35	80.00	10.0	50.00K	30.00			120	100
760131												
NUMBER				207	72	39	72	72	22	22		72
MAXIMUM				45	220.00	150.0	500.00	270.00	473	252		200
MINIMUM				1	25.00	10.0K	30.00K	10.00K	5K	1R		40
SUM				3696	6155.00	1280.0	5270.00	6600.00	3363	803	2385	6380
SUM SQ.				96578	613175.00	77200.0	689500.00	978600.00	559081	89583	190065	603800
MEAN				18	85.49	32.8	73.19	91.67	153	37	66	89
VARIANCE				198	1225.47	526.0	4278.39	5261.99	21191	2870	916	562
STD.DEV.				12	35.01	30.4	65.41	72.54	146	54	30	23
STD.ERR.				1	4.13	4.9	7.71	8.55	31	11	5	3
COEF VAR				68	40.95	92.7	89.36	79.13	95	147	46	26
LOG MEAN				12	79.51	23.7	62.79	62.41	89	18	60	86
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600043 CUMBERLAND RIVER 285.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
750718	0850			15	0.070	0.04	9.0	3.40	2.60	0.90	3	19
750718	0900			35	0.130	0.04	9.0	3.40	2.60	0.90	3	20
750814	0830			1	0.100	0.08	13.0	3.50	2.80	1.00	3	18
750814	0840			15	0.100	0.04	13.0	3.60	2.70	0.90	3	20
750814	0855			33	0.090	0.04	13.0	3.60	2.60	0.90	3	20
750918	0830			1	0.050	0.03	23.0	3.20	2.20	0.70	3	16
750918	0835			15	0.080	0.04	24.0	3.10	2.20	0.80	3	14
750918	0845			32	0.060	0.03	24.0	3.00	2.50	0.80	3	16
751016	0955			1	0.070	0.05	33.0	3.70	1.60	1.00	3	15
751016	1000			15	0.060	0.05	34.0	3.80	1.60	1.10	3	13
751016	1005			30	0.070	0.05	33.0	3.80	1.70	1.00	3	13
751113	0845			1	0.020	0.01	41.0	2.80	3.50	1.40	3	12
751113	0850			15	0.010	0.01	42.0	2.80	3.60	1.00	3	12
751113	0857			30	0.010	0.01	42.0	2.80	3.40	1.30	3	12
751216	0925			1	0.030	0.02	41.0	4.80	2.60	1.50	3	12
751216	0945			15	0.040	0.01	41.0	4.70	2.40	1.40	3	13
751216	1005			35	0.170	0.02	39.0	4.40	2.10	1.20	3	13
740131												
NUMBER				207	72	72	39	36	72	39	38	72
MAXIMUM				45	0.270	0.33	55.0	4.90	3.60	1.50	6	30
MINIMUM				1	0.010	0.01K	5.0	2.80	1.20	0.70	2	10
SUM				3696	6.530	3.67	889.0	137.50	159.60	44.50	137	1195
SUM SQ.				96578	0.868	0.42	28487.0	537.51	376.26	52.71	527	20631
MEAN				18	0.091	0.05	22.8	3.82	2.22	1.14	4	17
VARIANCE				148	0.004	0.00	216.4	0.35	0.29	0.05	1	11
STD.DEV.				12	0.062	0.06	14.7	0.59	0.54	0.23	1	3
STD.ERR.				1	0.007	0.01	2.4	0.10	0.06	0.04	0	0
COEF VAR				68	68.755	111.67	64.5	15.55	24.23	19.78	26	20
LOG MEAN				12	0.070	0.03	18.4	3.77	2.15	1.12	3	16
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740131	1330			1		100K	1.00K	5.00K	180.00			30.00
740131	1345			20		100K	1.00K	5.00K	200.00			22.00
740131	1400			40		100K	1.00K	5.00K	200.00			17.00
740221	1315			1		100K	1.00K	5.00K	200.00			20.00
740221	1325			15		100K	1.00K	5.00K	100.00			17.00
740221	1330			30		100K	1.00K	5.00K	80.00			19.00
740314	1110			1		100K	2.00	5.00K	60.00			29.00
740314	1125			20		100K	1.00K	5.00K	50.00			26.00
740314	1135			40		100K	1.00	5.00K	100.00			52.00
740420	0945			1		100K	3.00	10.00	60.00			26.00
740420	1000			20		100	2.00	5.00K	60.00			19.00
740420	1015			35		100K	3.00	5.00K	50.00			24.00
740518	1045			1		100K	16.00	5.00K	170.00			110.00
740518	1050			20		100K	10.00	5.00K	170.00			100.00
740518	1055			40		100K	9.00	5.00K	160.00			120.00
740613	0815			1		170	2.00	5.00K	160.00			70.00
740613	0820			15		200	7.00	5.00K	160.00			60.00
740613	0830			35		170	5.00	5.00K	100.00			70.00

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 6C0046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740814	1100			1	75	25.0		160	6.80	1.4	12.0	7.20
740814	1110			5	75	24.0			6.80			
740814	1115			10	75	23.5		150	6.40	1.2	12.0	7.40
740814	1120			15	75	23.0			6.20			
740814	1125			20	75	23.0			6.00			
740814	1130			25	75	23.0		150	6.00	1.0	12.0	7.20
740921	1215			1	75	21.4		150	6.90	1.0	12.0	7.20
740921	1217			5	75	21.4			6.80			
740921	1220			10	75	21.4			6.80			
740921	1225			15	75	21.4			6.70			
740921	1230			20	75	21.4		150	6.70	1.0	11.0	6.50
740921	1235			25	75	21.5			6.60			
740921	1245			35	75	21.5		150	7.90	1.0	10.0	7.10
741018	0925			1	75	15.5		170	8.60	1.0K	10.0	7.30
741018	0930			5	75	15.5			8.60			
741018	0932			10	75	15.5			8.50			
741018	0935			15	75	15.5		170	8.70	1.0K	10.0	7.10
741018	0937			20	75	15.5			8.40			
741018	0940			25	75	15.5			8.60			
741018	0945			30	75	15.5		170	8.60	1.0K	10.0	7.10
741116	0930			1	75	13.0		160	8.70	1.0K	9.0	7.10
741116	0932			5	75	13.0			8.80			
741116	0934			10	75	13.0			8.70			
741116	0936			15	75	13.0			8.60			
741116	0940			20	75	13.0		160	8.60	1.0K	10.0	7.00
741116	0942			25	75	13.0			8.70			
741116	0945			30	75	13.0			8.60			
741116	0950			35	75	13.0		160	8.80	1.0K	11.0	7.20
741205	1200			1	75	8.7		180	9.90	1.0K	10.0	7.20
741205	1202			5	75	8.7			10.00			
741205	1205			10	75	8.7			10.30			
741205	1210			15	75	8.7		180	10.20	1.0K	10.0	7.30
741205	1212			20	75	8.7			10.30			
741205	1215			25	75	8.7			10.30			
741205	1220			30	75	8.7		180	10.20	1.0K	10.0	7.20
750125	1100			1	75	8.1	6	140	11.00	1.0K	10.0	7.20
750125	1102			5	75	8.0			11.00			
750125	1105			10	75	8.0			11.10			
750125	1110			15	75	8.0			11.10			
750125	1115			20	75	8.0	6	150	11.10	1.0K	10.0	7.30
750125	1117			25	75	8.0			11.10			
750125	1120			30	75	8.0			11.10			
750125	1122			35	75	8.0			11.10			
750125	1125			40	75	8.0	5	150	11.10	1.0K	10.0	7.30
750125	1126			45	75	8.0			11.10			
750222	1050			1	75	8.0	5	150	11.00	1.0K	10.0	7.40
750222	1052			5	75	8.0			11.10			
750222	1055			10	75	8.0			11.00			
750222	1100			15	75	8.0	16	140	11.00	1.0K	9.0	7.40
750222	1102			20	75	8.0			11.10			
750222	1105			25	75	8.0			11.20			
750222	1110			30	75	8.0			11.20			
750222	1115			35	75	8.0	11	140	11.20	1.0K	8.0	7.40
750328	1120			1	75	10.1	24	120	11.60	1.0K	22.0	7.10
750328	1122			5	75	10.1			11.70			

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600043 CUMBERLAND RIVER 285.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BERON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740131												
NUMBER				207	36	72	72	72	72	36	39	72
MAXIMUM				45	4.6	200	16.00	15.00	200.00	2400.00	680	120.00
MINIMUM				1	0.7	100K	1.00K	5.00K	10.00K	280.00	20K	10.00K
SUM				3696	96.9	7440	203.00	410.00	4555.00	29250.00	9140	2161.00
SUM SQ.				96578	300.2	787800	1105.00	2570.00	505825.00	3.864E+07	3297600	110549.00
MEAN				18	2.7	103	2.82	5.69	63.26	812.50	234	30.01
VARIANCE				148	1.1	268	7.50	3.31	3065.61	367853.81	30409	643.51
STD.DEV.				12	1.1	16	2.74	1.82	55.37	606.51	174	25.37
STD.ERR.				1	0.2	2	0.32	0.21	6.53	101.08	28	2.99
COEF VAR				68	39.4	16	97.15	31.97	87.52	74.65	74	84.52
LOG MEAN				12	2.5	102	2.04	5.51	42.21	654.25	173	22.77
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE D155-18(C MG/L
740131	1330			1	110.00		50.00K	230.00	320	40		110
740131	1345			20	100.00		60.00	190.00				110
740131	1400			40	110.00		90.00	130.00				110
740221	1315			1	200.00		500.00	140.00				80
740221	1325			15	100.00		50.00	170.00				80
740221	1330			30	100.00		50.00	270.00				80
740314	1110			1	60.00		90.00	160.00	10K	10K		60
740314	1125			20	70.00		120.00	130.00				60
740314	1135			40	60.00		140.00	190.00				60
740420	0945			1	70.00		240.00	130.00	100	15		80
740420	1000			20	70.00		100.00	90.00				80
740420	1015			35	60.00		300.00	270.00				80
740518	1045			1	60.00		50.00K	230.00	47	10		80
740518	1050			20	50.00		60.00	220.00				70
740518	1055			40	100.00		50.00K	170.00				70
740613	0815			1	70.00		40.00	240.00	120	90		100
740613	0820			15	90.00		30.00	220.00				110
740613	0830			35	70.00		60.00	160.00				90
740718	1100			1	25.00		50.00K	40.00	5	6K		50
740718	1...			20	40.00		50.00K	20.00				70
740718	1130			35	75.00		50.00K	30.00				60
740814	1010			1	50.00		100.00	60.00	125	46		70
740814	1025			20	50.00		50.00	50.00				100
740814	1045			35	50.00		50.00	80.00				90
740921	0845			1	60.00		50.00K	10.00K	320	45		100
740921	0900			20	90.00		50.00K	10.00K				110
740921	0915			37	100.00		50.00K	10.00K				100
741018	0820			1	100.00		50.00K	20.00	70	9K		110
741018	0830			20	90.00		50.00K	10.00K				110
741018	0840			35	60.00		50.00K	20.00				110
741116	0815			1	100.00		50.00K	90.00				100
741116	0825			20	110.00		50.00K	80.00				100
741116	0835			35	130.00		50.00K	100.00				110
741205	1100			1	80.00	20.0	50.00K	10.00K	97	1K		70
741205	1110			20	100.00	20.0	50.00K	10.00K				80

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
751113	1012			5	50	14.7			7.60			7.50
751113	1015			10	50	14.7	8	150	7.60	1.0R	5.0	7.60
751113	1016			15	50	14.7			7.70			7.60
751113	1017			20	50	14.7			7.80			7.60
751113	1020			25	50	14.7	9	150	7.90	1.0	4.0	7.60
751216	1045			1	75	11.2	7	140	11.00	1.6	3.0	7.80
751216	1046			2	75	11.2			10.40			7.80
751216	1048			5	75	11.2			11.60			7.60
751216	1050			10	75	11.3	7	150	9.40	1.3	3.0	7.80
751216	1052			15	75	11.2			9.40			7.90
751216	1055			20	75	11.2			9.50			7.90
751216	1100			25	75	11.2	7	150	9.50	1.7	2.0	7.90
760221												
NUMBER				177		169	36	69	171	68	69	81
MAXIMUM				45		26.0	45	180	11.80	3.2	23.0	8.20
MINIMUM				1		8.0	4	100	4.60	1.0R	2.0	6.10
SUM				2801		2598.4	488	9810	1513.49	78.0	697.0	583.39
SUM SQ.				67935		44917.1	10838	1419700	13992.27	97.9	7983.0	4219.74
MEAN				16		15.4	14	142	8.85	1.1	10.1	7.20
VARIANCE				134		29.6	121	367	3.51	0.1	13.9	0.22
STD.DEV.				12		5.4	11	19	1.87	0.4	3.7	0.47
STD.ERR.				1		0.4	2	2	0.14	0.0	0.4	0.05
COEF VAR				73		35.4	81	13	21.17	31.0	36.9	6.57
LOG MEAN				10		14.4	11	141	8.69	1.1	9.4	7.19
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LEIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
760221	1405			1	45.0	0	32	0.140	0.02	0.010R	0.360	0.36
760221	1425			12	41.0	0	22	0.140	0.01	0.010R	0.430	0.41
760221	1440			25	42.0	0	25	0.140	0.01	0.010R	0.440	0.44
760314	1200			1	47.0	0	24	0.060	0.05			0.43
760314	1210			20	48.0	0	28	0.070	0.06			0.40
760314	1225			40	48.0	0	27	0.060	0.05			0.46
760420	1100			1	46.0	0	13	0.060	0.04			0.34
760420	1115			20	44.0	0	14	0.030	0.03			0.32
760420	1130			35	46.0	0	15	0.020	0.01			0.33
760518	1400			1	38.0	0	9	0.030	0.04			0.24
760518	1415			20	43.0	0	15	0.030	0.04			0.33
760518	1430			40	41.0	0	24	0.060	0.07			0.27
760613	1230			1	63.0	0	10	0.020	0.07			0.51
760613	1240			15	56.0	0	20	0.020	0.07			0.52
760613	1245			35	59.0	0	20	0.030	0.07			0.53
760718	1400			1	47.0	0	22	0.040	0.15			0.35
760718	1420			20	48.0	0	11	0.060	0.14			0.22
760718	1430			35			11	0.040	0.13			0.40
760718	1435			40	46.0	0						
760814	1100			1	56.0	0	4	0.210	0.08			0.10
760814	1115			10	57.0	0	4	0.180	0.08			0.32
760814	1130			25	57.0	0	73	0.170	0.06			0.20
760921	1215			1	64.0	0	12	0.200	0.03			0.12

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740221	1400			1	75	8.3		140	11.30	2.0	8.0	7.20
740221	1410			5	75	8.1			11.10			
740221	1415			12	75	8.0		130	11.10	3.2	8.0	6.70
740221	1420			15	75	8.0			11.20			
740221	1430			20	75	8.0			11.00			
740221	1440			25	75	8.0		170	10.40		6.0	6.80
740314	1200			1	75	11.1		150	10.10	1.1	4.0	7.10
740314	1202			2	75	11.0						
740314	1204			5	75	11.0			10.20			
740314	1206			10	75	11.0			10.50			
740314	1208			15	75	11.0			10.10			
740314	1210			20	75	11.0		140	10.30	1.2	5.0	6.90
740314	1212			25	75	11.0			9.90			
740314	1215			30	75	11.0			10.30			
740314	1220			35	75	11.0			10.10			
740314	1225			40	75	11.0		140	10.00	1.0	8.0	7.00
740420	1100			1	75	13.0		140	9.70	1.0	11.0	7.10
740420	1102			2	75	13.0						
740420	1105			5	75	13.0			9.80			
740420	1107			10	75	13.0			9.70			
740420	1110			15	75	12.9			9.70			
740420	1115			20	75	12.9		140	9.80	1.0X	10.0	7.10
740420	1120			25	75	12.9			9.70			
740420	1125			30	75	12.9			9.70			
740420	1130			35	75	12.9		140	10.10	1.0	9.0	7.30
740518	1400			1	75	16.9		140	7.30	1.2	13.0	6.90
740518	1402			2	75	16.9						
740518	1405			5	75	16.8			7.30			
740518	1407			10	75	16.8			8.50			
740518	1410			15	75	16.5			6.10			
740518	1415			20	75	16.5		140	6.80	1.0X	11.0	7.30
740518	1417			25	75	16.5			7.20			
740518	1420			30	75	16.5			7.70			
740518	1425			35	75	16.5			7.30			
740518	1430			40	75	16.5		140	6.70	1.0	12.0	7.40
740613	1230			1	75	19.0		180	8.60	2.0	11.0	7.80
740613	1232			2	75	19.0						
740613	1234			5	75	18.3			9.00			
740613	1236			10	75	18.0			8.70			
740613	1240			15	75	18.0		160	8.60	1.6	11.0	7.80
740613	1241			20	75	18.0			8.60			
740613	1242			25	75	18.0			8.40			
740613	1243			30	75	18.0			8.50			
740613	1245			35	75	18.0		160	8.40	1.2	11.0	7.80
740718	1400			1	75	26.0		150	9.60	1.3	11.0	8.20
740718	1401			2	75	25.2						
740718	1405			3	75	24.5						
740718	1408			5	75	23.6			9.30			
740718	1410			10	75	23.0			8.20			
740718	1415			15	75	23.0			9.60			
740718	1420			20	75	23.0		140	9.20	1.8	10.0	8.10
740718	1422			25	75	23.0			8.60			
740718	1425			30	75	23.0			8.70			
740718	1430			35	75	23.0		140	8.60	1.2	10.0	
740718	1435			40	75	23.0			9.40			7.9

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
740221												
NUMBER				177	69	69	69	68	69	3	3	69
MAXIMUM				45	72.0	C	73	1.400	0.28	0.010K	0.440	0.89
MINIMUM				1	37.0	C	2	0.010K	0.01K	0.010K	0.360	0.04
SUM				2801	3596.0	C	1219	13.446	3.63	0.030	1.210	22.07
SUM SQ.				67935	152366.0	C	31786	7.485	0.44	0.000	0.491	8.94
MEAN				16	52.1	C	18	0.198	0.05	0.010	0.403	0.32
VARIANCE				134	72.9	C	153	0.072	0.00	0.000	0.002	0.03
STD.DEV.				12	8.5	C	12	0.268	0.06	0.000	0.040	0.17
STD.ERR.				1	1.0	C	1	0.033	0.01	0.000	0.023	0.02
COEF VAR				73	16.4	C	70	135.832	114.17	0.076	10.022	52.00
LOG MEAN				10	51.4	C	14	0.104	0.03	0.010	0.402	0.28
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
740221	1400			1	0.040	0.02			1.40			
740221	1415			12	0.050	0.01			1.40			14
740221	1440			25	0.040	0.02			1.40			14
740314	1200			1	0.270	0.12			1.60			16
740314	1210			20	0.480	0.09			1.60			18
740314	1225			40	0.220	0.11			1.60			18
740420	1100			1	0.020	0.01			2.40			19
740420	1115			20	0.010	0.01			2.40			16
740420	1130			35	0.030	0.02			2.40			16
740518	1400			1	0.040	0.04			2.10			16
740518	1415			20	0.050	0.04			2.10			15
740518	1430			40	0.060	0.05			2.00			15
740613	1230			1	0.050	0.03			2.70			15
740613	1240			15	0.040	0.03			2.60			18
740613	1245			35	0.060	0.03			2.50			20
740718	1400			1	0.030	0.12K			2.90			22
740718	1420			20	0.230	0.03			2.90			16
740718	1430			35	0.110	0.08			2.90			16
740814	1100			1	0.060	0.03			2.10			16
740814	1115			10	0.070	0.06			2.10			17
740814	1130			25	0.060	0.03			2.00			15
740921	1215			1	0.080	0.01			2.90			15
740921	1230			20	0.070	0.03			3.00			16
740921	1245			35	0.090	0.04			2.60			16
741018	0925			1	0.150	0.10			2.90			16
741018	0935			15	0.190	0.13			2.50			20
741018	0945			30	0.230	0.09			2.40			19
741116	0930			1	0.110	0.06			1.80			18
741116	0940			20	0.100	0.03			1.80			20
741116	0950			35	0.140	0.10			1.80			17
741205	1200			1	0.090	0.08	45.0		2.00	0.90		19
741205	1210			15	0.110	0.10	50.0		2.00	1.00		20
741205	1220			30	0.080	0.08	50.0		2.00	0.90		20
750125	1100			1	0.120	0.01K	20.0	4.90	1.50	1.40	8	19
750125	1115			20	0.120	0.01K	20.0	4.90	2.50	1.30	4	18

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 MSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
750328	1125			10	75	10.0			11.70			
750328	1127			15	75	10.0			11.80			
750328	1130			20	75	10.0	24	130	11.70	1.0K	23.0	7.10
750328	1132			25	75	9.9			11.70			
750328	1135			30	75	9.8			11.80			
750328	1137			35	75	9.8			11.70			
750328	1140			40	75	9.8			11.30			
750328	1142			45	75	9.8	21	130	11.50	1.0K	21.0	7.00
750425	1030			1	75		45	120	10.00	1.0K	14.0	6.70
750425	1032			5	75				10.10			
750425	1035			10	75				10.20			
750425	1040			15	75		45	120	10.20	1.0K	16.0	6.60
750425	1042			20	75				10.20			
750425	1045			25	75				10.20			
750425	1047			30	75				10.20			
750425	1050			35	75		45	120	10.20	1.0K	15.0	6.60
750523	1100			1	75	17.0	16	140	9.40	1.0K	13.0	6.60
750523	1102			5	75	17.0			9.20			
750523	1105			10	75	17.0			9.30			
750523	1110			15	75	17.0	18	140	9.30	1.0K	10.0	6.50
750523	1112			20	75	17.0			9.20			
750523	1115			25	75	17.0	18	140	9.20	1.0K	14.0	6.50
750523	1117			28	75	17.0			9.30			
750620	1015			1	75	22.0	10	120	7.80	1.0K	8.0	6.50
750620	1020			5	75	21.0			7.80			
750620	1025			10	75	20.5	13	120	7.70	1.0K	8.0	6.10
750620	1027			15	75	20.5			7.70			
750620	1030			20	75	20.5			7.70			
750620	1035			25	75	20.5	12	120	7.70	1.0K	7.0	6.20
750718	0915			1	75	23.5	8	120	6.50	1.0	10.0	6.90
750718	0917			5	75	23.0			6.20			
750718	0920			10	75	23.0			6.20			
750718	0925			15	75	23.0	10	120	6.10	1.0K	10.0	6.80
750718	0930			20	75	23.0			6.00			
750718	0935			22	75	23.0	13	120	6.10	1.0K	11.0	6.70
750814	0920			1	75	23.0	8	130	5.20	1.0K	7.0	6.60
750814	0925			5	75	23.0			4.90			
750814	0930			10	75	23.0	12	120	4.80	1.0K	9.0	6.80
750814	0932			15	75	23.0			4.80			
750814	0935			20	75	22.9			4.60			
750814	0940			22	75	22.9	10	120	4.70	1.0K	8.0	6.80
750918	0900			1	75	21.9	4	100	6.90	1.2	11.0	6.30
750918	0902			5	75	21.9			7.00			
750918	0905			10	75	21.8	5	100	7.00	1.8	10.0	6.40
750918	0907			15	75	21.8			7.00			
750918	0910			20	75	21.8	7	100	6.90	1.0	10.0	6.40
751016	1012			1	75	16.2	6	120	6.00	1.0K	11.0	7.60
751016	1013			2	75	16.2			6.00			7.60
751016	1014			5	75	16.1			5.90			7.60
751016	1015			10	75	16.1	5	130	5.90	1.0K	11.0	7.60
751016	1016			15	75	16.1			5.80			7.60
751016	1018			20	75	16.1			5.80			7.60
751016	1020			25	75	16.0	6	130	5.90	1.0K	10.0	7.50
751113	1010			1	50	14.8	15	150	7.60	1.0	6.0	7.50
751113	1011			2	50	14.8			7.60			7.60

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740221	1400			1		100K	1.00K	5.00K	150.00			22.00
740221	1415			12		100K	1.00K	5.00K	100.00			25.00
740221	1440			25		100K	1.00K	5.00K	100.00			37.00
740314	1200			1		100K	1.00	5.00K	60.00			43.00
740314	1210			20		100K	1.00K	5.00K	80.00			23.00
740314	1225			40		100K	1.00K	5.00K	60.00			29.00
740420	1100			1		100K	2.00	5.00K	60.00			17.00
740420	1115			20		100K	2.00	14.00	50.00			43.00
740420	1130			35		100K	3.00	5.00K	50.00			21.00
740518	1400			1		100K	13.00	18.00	130.00			110.00
740518	1415			20		100K	14.00	5.00K	110.00			90.00
740518	1430			40		100K	9.00	5.00K	150.00			90.00
740613	1230			1		120	4.00	5.00K	80.00			130.00
740613	1240			15		200	3.00	5.00K	60.00			130.00
740613	1245			35		200	6.00	5.00K	90.00			130.00
740718	1400			1		100K	1.00	5.00K	20.00			10.00K
740718	1420			20		100K	1.00	5.00K	20.00			10.00K
740718	1430			35		150	1.00	5.00K	20.00			10.00K
740814	1100			1		120	1.00	5.00K	110.00			10.00K
740814	1115			10		100	1.00	5.00K	90.00			10.00
740814	1130			25		100K	1.00	5.00K	70.00			10.00K
740921	1215			1		130	1.00	5.00K	10.00K			10.00K
740921	1230			20		110	1.00	10.00	10.00K			10.00K
740921	1245			35		100K	5.00	5.00K	10.00K			10.00K
741018	0925			1		100K	2.00	10.00	60.00			50.00K
741018	0935			15		100K	2.00	10.00K	50.00			50.00K
741018	0945			30		100K	2.00	10.00K	80.00			50.00K
741116	0930			1		100K	1.00K	10.00K	20.00			20.00K
741116	0940			20		100K	1.00K	10.00	20.00			20.00K
741116	0950			35		100K		10.00K	10.00			20.00K
741205	1200			1		100K	1.00K	5.00K	10.00K		500	20.00K
741205	1210			15		100K	1.00K	5.00K	10.00K		200	20.00K
741205	1220			30		100K	1.00K	5.00K	10.00		700	20.00K
750125	1100			1	1.2	100K	1.00K	5.00K	80.00	410.00	50K	50.00K
750125	1115			20	1.1	100K	1.00K	5.00K	40.00	430.00	50K	50.00K
750125	1125			40	1.1	100K	1.00K	5.00K	30.00	500.00	50K	50.00K
750222	1050			1	2.1	100K	8.00	5.00K	10.00K	1000.00	480	20.00
750222	1100			15	4.4	100K	7.00	5.00K	60.00	1500.00	1100	30.00
750222	1115			35	4.5	100K	8.00	5.00K	40.00	1000.00	520	30.00
750328	1120			1	2.0	100K	6.00	5.00K	40.00	1600.00	1400	30.00
750328	1130			20	2.7	100K	3.00	5.00K	40.00	1500.00	400	20.00
750328	1142			45	2.3	100K	4.00	5.00K	40.00	1500.00	200	20.00
750425	1030			1	2.3	100K	2.00	5.00K	90.00	2300.00		20.00
750425	1040			15	1.7	100K	4.00	5.00K	110.00	2500.00	240	70.00
750425	1050			35	3.4	100K	3.00	5.00K	100.00	2200.00	200	60.00
750523	1100			1	0.9	100K	1.00	5.00K	130.00	840.00	780	41.00
750523	1110			15	1.0		6.00	5.00K	130.00	1300.00	830	15.00
750523	1115			25	1.0	100K	2.00	5.00K	90.00	1100.00	660	17.00
750620	1015			1	3.3	100K	5.00K	6.00	20.00	580.00	190	33.00
750620	1025			10	3.6	100K	5.00K	5.00K	50.00	600.00	290	24.00
750620	1035			25	3.7	100K	5.00K	5.00K	30.00	360.00	270	10.00K
750718	0915			1	1.0	100K	1.00	5.00K	40.00	280.00	100	12.00
750718	0925			15	2.3	100K	2.00	6.00	40.00	410.00	70	12.00
750718	0935			22	1.7	100K	2.00	6.00	60.00	680.00	180	17.00
750814	0920			1	3.3	100K	1.00	5.00K	40.00	500.00	200	10.00K

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 6C0046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LEIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N MG/L	00610 NH3+NH4- N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
740921	1230			20	72.0	C	17	0.140	0.01K			0.14
740921	1245			35	68.0	0	13	0.200	0.01K			0.10
741018	0925			1	58.0	C	7	0.020K	0.02			0.28
741018	0935			15	59.0	0	12	0.020K	0.02K			0.26
741018	0945			30	59.0	0	20	0.020	0.02K			0.28
741116	0930			1	57.0	C	10	0.020	0.01K			0.17
741116	0940			20	57.0	C	9	0.020	0.01K			0.17
741116	0950			35	56.0	C	21	0.030	0.01K			0.15
741205	1200			1	70.0	0	14	0.030	0.01K			0.34
741205	1210			15	71.0	0	8	0.010K	0.01K			0.30
741205	1220			30	72.0	0	13	0.010K	0.01K			0.42
750125	1100			1	59.0	0	16	0.220	0.01K			0.12
750125	1115			20	60.0	0	15	0.180	0.01K			0.10
750125	1125			40	60.0	0	14	0.230	0.01K			0.22
750222	1050			1	51.0	0	2	1.400	0.26			0.48
750222	1100			15	50.0	0	9	1.400	0.28			0.39
750222	1115			35	50.0	0	18	0.850	0.24			0.39
750328	1120			1	54.0	0	30	0.150	0.01K			0.87
750328	1130			20	48.0	0	29	0.250	0.01K			0.69
750328	1142			45	54.0	0	44	0.340	0.01K			0.69
750425	1030			1	38.0	0	65	0.260	0.14			0.33
750425	1040			15	38.0	C	32		0.10			0.42
750425	1050			35	37.0	0	34	0.140	0.10			0.29
750523	1100			1	57.0	0	15	0.220	0.03			0.29
750523	1110			15	52.0	C	17	0.200	0.18			0.29
750523	1115			25	52.0	C	21	0.060	0.07			0.28
750620	1015			1	44.0	0	8	0.050	0.01K			0.04
750620	1025			10	41.0	0	12	0.040	0.01			0.04
750620	1035			25	41.0	0	5	0.050	0.01K			0.06
750718	0915			1	44.0	0	9	0.100	0.02			0.25
750718	0925			15	45.0	0	15	0.130	0.05			0.22
750718	0935			22	45.0	0	20	0.090	0.04			0.22
750814	0920			1	46.0	0	8	0.250	0.01K			0.28
750814	0930			10	46.0	0	16	0.200	0.01K			0.29
750814	0940			22	45.0	0	14	0.300	0.01K			0.39
750918	0900			1	49.0	0	6	0.170	0.04			0.31
750918	0905			10	49.0	0	7	0.200	0.03			0.33
750918	0910			20	49.0	0	11	0.210	0.09			0.32
751016	1012			1	56.0	0	7	0.260	0.03			0.28
751016	1015			10	56.0	0	7	0.300	0.01K			0.31
751016	1020			25	56.0	0	7	0.270	0.02			0.26
751113	1010			1	56.0	0	31	0.330	0.09			0.29
751113	1015			10	56.0	0	32	0.410	0.03			0.34
751113	1020			25	57.0	0	22	0.330	0.01K			0.26
751216	1045			1	57.0	0	11	0.240	0.06			0.36
751216	1050			10	59.0	0	13	0.260	0.10			0.37
751216	1100			25	58.0	0	13	0.260	0.04			0.37

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 6C0C96 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
740921	1215			1	90.00		50.00K	40.00	230	20		100
740921	1230			20	120.00		50.00K	10.00K				100
740921	1245			35	100.00		50.00K	60.00				90
741018	0925			1	90.00		50.00K	10.00K	60	10		100
741018	0935			15	90.00		50.00K	10.00K				100
741018	0945			30	180.00		50.00K	20.00				100
741116	0930			1	130.00		50.00K	80.00	130	2		110
741116	0940			20	120.00		50.00K	90.00				110
741116	0950			35	150.00		50.00K	90.00				110
741205	1200			1	70.00		50.00K	20.00	73	1K		100
741205	1210			15	80.00		50.00K	10.00				90
741205	1220			30	100.00		50.00K	20.00				100
750125	1100			1	70.00	20.0	50.00K	140.00	6	4	70	70
750125	1115			20	70.00	20.0	50.00K	70.00			70	100
750125	1125			40	80.00	20.0	50.00K	80.00			70	90
750222	1050			1	120.00	100.0	50.00K	30.00	80	8	64	120
750222	1100			15	180.00	150.0	50.00K	80.00			59	100
750222	1110			30	140.00	100.0						
750222	1115			35	100.00	140.0K	50.00K	90.00			65	80
750328	1120			1	120.00	90.0	50.00K	60.00	90	7	55	100
750328	1130			20	120.00	60.0	50.00K	80.00			55	90
750328	1142			45	110.00	20.0	50.00K	60.00			55	90
750425	1030			1	140.00		90.00	260.00	228	22	37	80
750425	1040			15	150.00	40.0	100.00	320.00			36	80
750425	1050			35	150.00	130.0	140.00	150.00			33	90
750523	1100			1	60.00	50.0	150.00	40.00	228	22	39	100
750523	1110			15	70.00	10.0	140.00	40.00			44	100
750523	1115			25	80.00	10.0	160.00	40.00			49	90
750620	1015			1	60.00	10.0K	50.00K	40.00	21	11	31	90
750620	1025			10	60.00	10.0	50.00K	50.00			30	90
750620	1035			25	70.00	10.0K	50.00K	40.00			31	90
750718	0915			1	40.00	10.0	50.00K	30.00	60	30	39	80
750718	0925			15	40.00	20.0	50.00K	30.00			38	70
750718	0935			22	80.00	10.0K	50.00K	30.00			36	50
750814	0920			1	80.00	40.0	50.00K	60.00	185	26	47	50
750814	0930			10	90.00	20.0	50.00K	40.00			48	40
750814	0940			22	70.00	50.0	80.00	60.00			45	40
750918	0900			1	60.00	10.0	50.00K	50.00	12	5	70	80
750918	0905			10	70.00	10.0K	60.00	20.00			72	80
750918	0910			20	80.00	10.0	50.00K	40.00			70	80
751016	1012			1	60.00	10.0K	60.00	40.00	60	22	99	100
751016	1015			10	80.00	10.0K	50.00K	50.00			94	100
751016	1020			25	70.00	10.0K	80.00	70.00			100	90
751113	1010			1	90.00	20.0	50.00K	210.00	424	275	110	100
751113	1015			10	60.00	20.0	50.00K	70.00			110	100
751113	1020			25	100.00	20.0	50.00K	50.00			110	100
751216	1045			1	70.00	10.0	50.00K	20.00	43	6	120	100
751216	1050			10	80.00	10.0	50.00K	20.00			110	100
751216	1100			25	90.00	10.0K	50.00K	50.00			120	90

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 POTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
750125	1125			40	0.140	0.01K	20.0	4.90	2.50	1.30	4	20
750222	1050			1	0.050	0.01K	19.0	4.10	2.30	1.30	6	24
750222	1100			15	0.050	0.03	17.0	4.10	2.30	1.50	4	18
750222	1115			35	0.050	0.03	19.0	4.20	2.30	1.40	6	16
750328	1120			1	0.130	0.03	16.0	3.70	2.00	1.40	4	19
750328	1130			20	0.140	0.05	16.0	3.60	2.00	1.40	4	22
750328	1142			45	0.140	0.05	16.0	3.66	2.00	1.30	4	17
750425	1030			1	0.060	0.01	8.0	4.10	1.80	1.50	4	24
750425	1040			15	0.020	0.01	8.0	3.90	1.70	1.50	5	38
750425	1050			35	0.060	0.05	7.0	3.70	1.60	1.40	4	20
750523	1100			1	0.050	0.05	10.0	3.50	1.30	1.10	3	14
750523	1110			15	0.100	0.05	11.0	4.10	1.60	1.00	4	16
750523	1115			25	0.100	0.07	13.0	4.10	1.80	1.10	3	17
750620	1015			1	0.100	0.05	6.0	3.90	2.60	1.10	3	14
750620	1025			10	0.100	0.05	6.0	3.70	2.40	1.10	4	14
750620	1035			25	0.100	0.05	6.0	3.90	2.70	1.10	3	14
750718	0915			1	0.050	0.04	10.0	3.40	2.60	0.90	3	17
750718	0925			15	0.050	0.04	10.0	3.10	2.60	0.90	3	19
750718	0935			22	0.070	0.05	9.0	3.20	2.60	0.90	4	19
750814	0920			1	0.060	0.05	13.0	3.60	2.70	0.90	3	19
750814	0930			10	0.100	0.05	13.0	3.90	2.60	0.90	3	18
750814	0940			22	0.120	0.08	12.0	3.70	2.50	0.80	3	18
750916	0900			1	0.060	0.04	23.0	3.00	2.30	0.80	3	16
750918	0905			10	0.080	0.04	24.0	3.00	2.30	0.80	3	14
750918	0910			20	0.080	0.04	23.0	3.00	2.00	0.80	3	14
751016	1012			1	0.070	0.04	34.0	3.50	1.50	0.90	3	10
751016	1015			10	0.060	0.03	32.0	3.50	1.50	0.90	3	11
751016	1020			25	0.060	0.04	34.0	3.60	1.50	1.00	3	12
751113	1010			1	0.010	0.01	41.0	2.70	3.40	1.20	3	15
751113	1015			10	0.070	0.01	41.0	2.80	3.40	1.20	3	15
751113	1020			25	0.020	0.01	41.0	2.80	3.30	1.20	3	13
751216	1045			1	0.090	0.01	40.0	4.60	2.20	1.40	3	14
751216	1050			10	0.090	0.01	37.0	4.60	2.60	1.40	3	15
751216	1100			25	0.110	0.05	41.0	4.50	2.10	1.30	3	13
740221												
NUMBER				177	69	69	39	36	69	39	36	69
MAXIMUM				45	0.480	0.13	50.0	4.90	3.40	1.50	8	38
MINIMUM				1	0.010	0.01K	6.0	2.70	1.30	0.80	1	10
SUM				2801	6.340	3.09	861.0	135.40	152.90	44.20	132	1183
SUM SQ.				67935	0.924	0.20	28105.0	521.86	356.21	52.14	526	21245
MEAN				16	0.092	0.04	22.1	3.76	2.22	1.13	4	17
VARIANCE				134	0.005	0.00	186.8	0.36	0.26	0.05	1	14
STD.DEV.				12	0.071	0.03	13.7	0.60	0.51	0.23	1	4
STD.ERR.				1	0.009	0.00	2.2	0.10	0.06	0.04	0	0
COEF VAR				73	77.077	69.21	61.9	15.96	22.82	20.48	30	22
LOG MEAN				10	0.073	0.03	18.1	3.71	2.20	1.11	4	17
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 270.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740131	1500			1	80	9.2		180	11.70	1.0K	11.0	7.50
740131	1503			5	80	9.2			11.60			
740131	1506			10	80	9.2			11.90			
740131	1510			15	80	9.2			11.80			
740131	1515			20	80	9.2			11.60			
740131	1520			25	80	9.2		180	11.60	1.0K	11.0	7.50
740131	1525			30	80	9.2			11.60			
740131	1530			35	80	9.2			11.90			
740131	1533			40	80	9.2			11.70			
740131	1536			45	80	9.2			11.90			
740131	1540			50	80	9.2		180	11.70	1.0K	10.0	7.30
740221	1600			1	80	8.2		170	11.20	1.3	7.0	6.70
740221	1605			5	80	8.0			9.00			
740221	1610			10	80	8.0			10.60			
740221	1615			15	80	7.9		170	8.50	1.4	7.0	7.20
740221	1618			20	80	7.9						
740221	1621			25	80	7.9			8.80			
740221	1625			30	80	7.9			8.70			
740221	1630			35	80	7.9		170	9.00	1.2	8.0	6.80
740221	1632			36	80	7.9						
740314	1355			1	80	11.2		150	10.20	1.4	4.0	7.00
740314	1356			2	80	11.1						
740314	1357			5	80	11.1			10.00			
740314	1358			10	80	11.1			10.00			
740314	1359			15	80	11.1			10.10			
740314	1400			20	80	11.1		150	9.40	1.4	2.0	7.00
740314	1402			25	80	11.1			10.30			
740314	1404			30	80	11.1			10.00			
740314	1406			35	80	11.1			10.10			
740314	1410			40	80	11.1		150	10.20	1.2	4.0	7.00
740420	1320			1	80	13.2		150	9.70	1.0	9.0	6.90
740420	1322			2	80	13.1						
740420	1325			5	80	13.1			9.80			
740420	1327			10	80	13.1			10.00			
740420	1330			15	80	13.0			9.90			
740420	1335			20	80	13.0		150	9.80	1.0K	5.0	7.10
740420	1337			25	80	13.0			10.00			
740420	1340			30	80	13.0			9.80			
740420	1342			35	80	13.0			9.70			
740420	1350			40	80	13.0		150	10.00	1.0K	5.0	7.00
740518	1530			1	80	17.1		140	9.00	1.0K	12.0	7.60
740518	1532			2	80	17.1						
740518	1535			5	80	17.1			9.00			
740518	1537			10	80	17.0			8.90			
740518	1540			15	80	17.0			8.90			
740518	1545			20	80	17.0		140	9.00	1.0K	12.0	6.40
740518	1547			25	80	17.0			9.10			
740518	1550			30	80	17.0			8.90			
740518	1555			35	80	17.0			8.70			
740518	1600			40	80	17.0		150	9.00	1.0	9.0	7.20
740613	1415			1	80	20.0		190	8.00	1.4	10.0	7.80
740613	1417			2	80	19.5						
740613	1420			5	80	19.0			8.20			
740613	1425			15	80	19.0			8.30			
740613	1430			20	80	19.0		190	8.20	1.3	10.0	7.40

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BERON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
750819	0930			10	3.3	100K	2.00	5.00K	40.00	580.00	200	10.00K
750819	0940			22	3.3	100K	1.00	8.00	30.00	200.00	180	10.00K
750918	0900			1	2.8	100K	1.00K	9.00	10.00K	640.00	240	10.00K
750918	0905			10	2.6	100K	1.00	7.00	10.00	280.00	150	10.00K
750918	0910			20	2.3	100K	1.00	5.00K	20.00	360.00	180	10.00K
751016	1012			1	0.5	100K	2.00	5.00K	70.00	660.00	280	20.00
751016	1015			10	3.5	100K	2.00	5.00K	60.00	600.00	200	10.00
751016	1020			25	2.5	100K	2.00	5.00K	110.00	920.00	200	10.00
751113	1010			1	4.0	100K		5.00K	20.00	440.00	360	10.00K
751113	1015			10	3.6	100K	1.00K	5.00K	20.00	360.00	240	10.00K
751113	1020			25	3.6	100K	1.00K	5.00K	10.00K	640.00	240	11.00
751216	1045			1	3.0	100K	1.00K	5.00K	10.00K	380.00	160	50.00
751216	1050			10	1.5	100K	1.00K	5.00K	10.00K	440.00	120	50.00
751216	1100			25	2.4	100K	1.00K	5.00K	10.00K	400.00	120	20.00
760221												
NUMBER				177	36	68	42	69	69	36	38	69
MAXIMUM				45	4.5	200	14.00	40.00	150.00	2500.00	1400	130.00
MINIMUM				1	0.5	100K	1.00K	5.00K	10.00K	200.00	50K	10.00K
SUM				2801	89.5	7130	181.00	414.00	3660.00	29990.00	12510	2122.00
SUM SQ.				67935	269.0	770300	1001.00	2872.00	298000.00	3.755E+07	7380900	116034.00
MEAN				16	2.5	105	2.70	6.00	53.04	833.06	329	30.75
VARIANCE				134	1.2	339	7.76	5.71	1527.37	359056.75	88175	746.69
STD.DEV.				12	1.1	18	2.79	2.39	39.08	599.21	297	27.33
STD.ERR.				1	0.2	2	0.24	0.29	4.70	99.87	98	3.29
COEF VAR				73	43.8	18	103.10	39.81	73.68	71.93	90	68.85
LOG MEAN				10	2.2	104	1.90	5.71	38.32	673.29	239	22.74
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
740221	1400			1	140.00		1600.00	250.00				90
740221	1415			12	110.00		820.00	600.00				50
740221	1440			25	140.00		300.00	340.00				80
740314	1200			1	70.00		170.00	240.00	40	40		50
740314	1210			20	70.00		250.00	280.00				60
740314	1225			40	70.00		110.00	110.00				60
740420	1100			1	60.00		110.00	310.00	205	90		60
740420	1115			20	70.00		90.00	120.00				70
740420	1130			35	80.00		90.00	160.00				60
740518	1400			1	80.00		50.00K	90.00	35	10		90
740518	1415			20	60.00		50.00K	70.00				70
740518	1430			40	140.00		50.00K	300.00				100
740613	1230			1	120.00		50.00	80.00	70	10		110
740613	1240			15	80.00		50.00	50.00				100
740613	1245			35	100.00		40.00	150.00				120
740718	1400			1	40.00		50.00K	30.00	1R	1R		60
740718	1420			20	40.00		50.00K	50.00				30
740718	1430			35	30.00		50.00K	10.00K				30
740814	1100			1	50.00		50.00	30.00	35	55R		70
740814	1115			10	30.00		70.00	60.00				100
740814	1130			25	80.00		50.00K	40.00				60

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTNY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
741205	1530			30	80	9.5			10.30			
741205	1535			35	80	9.5		190	10.00	1.0K	8.0	7.40
750125	1315			1	80	8.8	7	150	11.20	1.0K	10.0	7.10
750125	1317			5	80	8.8			11.10			
750125	1320			10	80	8.8			11.10			
750125	1322			15	80	8.7			11.20			
750125	1325			20	80	8.7	6	150	11.10	1.0K	9.0	7.10
750125	1327			25	80	8.7			11.10			
750125	1330			30	80	8.7			11.10			
750125	1335			35	80	8.7			11.20			
750125	1340			40	80	8.7	6	160	11.10	1.0K	9.0	7.10
750222	1500			1	80	8.1	13	140	11.00	1.0K	8.0	7.30
750222	1502			5	80	8.1			11.00			
750222	1505			10	80	8.0			10.80			
750222	1510			15	80	8.0	15	140	10.90	1.0K	7.0	7.40
750222	1512			20	80	8.0			10.90			
750222	1515			25	80	8.0			11.00			
750222	1520			30	80	8.0			11.10			
750222	1525			35	80	8.0	16	160	11.00	1.0K	9.0	7.40
750328	1400			1	80	9.8	21	130	11.80	1.0K	20.0	6.80
750328	1402			5	80	9.8			12.00			
750328	1405			10	80	9.8			12.00			
750328	1407			15	80	9.7			12.00			
750328	1410			20	80	9.7			12.10			
750328	1412			25	80	9.7	22	120	12.10	1.0K	20.0	6.80
750328	1415			30	80	9.7			12.30			
750328	1417			35	80	9.7			12.30			
750328	1420			40	80	9.7			12.30			6.60
750328	1422			45	80	9.7			12.10			
750328	1425			50	80	9.7	23	130	12.20	1.0K	19.0	
750425	1410			1	80		45	120	10.10	1.0K	14.0	7.10
750425	1412			5	80				10.20			
750425	1415			10	80				10.00			
750425	1417			15	80				10.20			
750425	1420			20	80		45	120	10.60	1.0K	16.0	6.90
750425	1422			25	80				10.60			
750425	1425			30	80				10.40			
750425	1427			35	80				10.40			
750425	1430			40	80		45	120	10.40	1.0K	14.0	6.90
750425	1432			42	80				10.50			
750523	1500			1	80	18.2	17	130	9.00	1.0K	10.0	7.20
750523	1502			5	80	18.1			9.80			
750523	1505			10	80	18.1			9.70			
750523	1510			15	80	18.0	20	130	9.60	1.0K	14.0	6.90
750523	1512			20	80	17.8			9.70			
750523	1515			25	80	17.8			9.70			
750523	1520			30	80	17.8	18	130	9.60	1.0K	10.0	6.90
750620	1340			1	80	22.0	14	120	7.30	1.0K	9.0	7.00
750620	1342			5	80	22.0			7.80			
750620	1345			10	80	21.0			7.80			
750620	1350			15	80	21.0	14	120	7.80	1.0K	9.0	6.40
750620	1352			20	80	21.0			7.80			
750620	1355			25	80	21.0			7.70			
750620	1357			30	80	21.0			7.90			
750620	1400			35	80	21.0	15	120	7.70	1.0K	9.0	6.40

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 289.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
740221												
NUMBER				177	70	36	69	69	22	22	36	69
MAXIMUM				45	180.00	150.0	1600.00	600.00	924	275	120	120
MINIMUM				1	30.00	10.0K	40.00K	10.00K	1K	1K	30	30
SUM				2801	6240.00	1290.0	7110.00	6480.00	2316	677	2331	5810
SUM SQ.				67935	636400.00	104100.0	3.706E+06	1.352E+06	471844	92395	179631	520100
MEAN				16	89.14	35.8	103.04	93.91	105	31	65	84
VARIANCE				134	1161.58	1653.6	43727.37	10933.00	10859	3408	820	454
STD.DEV.				12	34.08	40.7	209.11	104.56	104	58	29	21
STD.ERR.				1	4.07	6.8	25.17	12.59	22	12	5	3
COEF VAR				73	38.23	113.5	202.93	111.34	99	190	44	25
LOG MEAN				10	82.84	22.2	67.45	59.88	58	12	59	81
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740131												
NUMBER				220		210	36	72	212	72	72	92
MAXIMUM				50		28.0	45	190	13.70	2.3	20.0	9.10
MINIMUM				1		7.9	5	95	5.50	1.0K	2.0	6.40
SUM				4255		3301.6	493	10770	1920.08	81.9	694.0	670.19
SUM SQ.				119853		58905.6	10928	1650650	18174.27	99.1	7592.0	4903.28
MEAN				19		15.7	14	150	9.06	1.1	9.6	7.28
VARIANCE				171		33.5	119	558	3.72	0.1	12.7	0.23
STD.DEV.				13		5.8	11	24	1.93	0.3	3.6	0.48
STD.ERR.				1		0.4	2	3	0.13	0.0	0.4	0.05
COEF VAR				68		36.8	80	16	21.28	25.4	37.0	6.61
LOG MEAN				13		14.6	11	146	8.84	1.1	8.9	7.27
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
740131	1500			1	48.0	0	43	0.190	0.02	0.010K	0.420	0.42
740131	1520			25	49.0	0	30	0.070	0.02	0.010K	0.370	0.37
740131	1540			50	48.0	0	35	0.070	0.02	0.010K	0.370	0.37
740221	1600			1	40.0	0	25	0.140	0.02	0.010K	0.450	0.45
740221	1615			15	46.0	0	26	0.190	0.02	0.010K	0.500	0.50
740221	1630			35	44.0	0	31	0.120	0.02	0.010K	0.500	0.50
740314	1355			1	48.0	0	16	0.080	0.05			0.39
740314	1400			20	48.0	0	20	0.060	0.05			0.38
740314	1410			40	49.0	0	20	0.060	0.04			0.42
740420	1320			1	44.0	0	16	0.030	0.05			0.35
740420	1335			20	45.0	0	12	0.030	0.04			0.38
740420	1350			40	45.0	0	15	0.040	0.04			0.40
740518	1530			1	49.0	0	12	0.040	0.02			0.32
740518	1545			20	45.0	0	14	0.040	0.06			0.43
740518	1600			40	45.0	0	12	0.040	0.06			0.47
740613	1415			1	46.0	0	21	0.050	0.03			0.30
740613	1430			20	45.0	0	23	0.050	0.03			0.33
740613	1445			35	45.0	0	25	0.060	0.04			0.41
740718	1600			1	34.0	4	7	0.140	0.14			0.22
740718	1615			20	38.0	2	8	0.090	0.09			0.27
740718	1630			40	59.0	0	11	0.060	0.13			0.29
740814	1320			1	52.0	0	4	0.180	0.05K			0.17
740814	1330			20	51.0	0	6	0.160	0.08			0.19
740814	1345			40	51.0	0	9	0.160	0.08			0.29
740921	1525			1	67.0	0	16	0.720	0.06			0.17
740921	1540			20	66.0	0	25	1.100	0.03			0.22
740921	1550			40	66.0	0	24	0.920	0.01			0.10
741018	1230			1	65.0	0	19	0.030	0.02K			0.26
741018	1240			20	64.0	0	12	0.020	0.02K			0.26
741018	1250			40	60.0	0	14	0.020K	0.02K			0.25
741116	1215			1	61.0	0	10	0.020	0.01			0.20
741116	1225			20	61.0	0	18	0.030	0.01			0.21
741116	1235			35	62.0	0	15	0.030	0.01			0.23
741205	1515			1	80.0	0		0.010K	0.01K			0.52
741205	1525			20	80.0	0	7	0.020	0.01K			0.43

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
									8.40			
740613	1435			25	80	19.0			8.10			
740613	1440			30	80	18.5		180	8.10	1.2	8.0	7.50
740613	1445			35	80	18.3						
740613	1446			38	80	18.0		160	13.30	2.3	12.0	9.10
740718	1600			1	80	26.0						
740718	1602			2	80	26.0			13.70			
740718	1604			5	80	25.0			11.30			
740718	1606			10	80	24.4			12.00			
740718	1610			15	80	24.0		170	10.50	1.8	10.0	8.40
740718	1615			20	80	23.6			10.50			
740718	1617			25	80	23.6			11.00			
740718	1620			30	80	23.6			12.60			
740718	1625			35	80	23.5		160	10.20	1.0K	12.0	8.20
740718	1630			40	80	23.4		160	7.20	1.7	13.0	7.20
740814	1320			1	80	25.5			7.80			
740814	1322			5	80	25.5			7.10			
740814	1324			10	80	25.2			6.80			
740814	1326			15	80	25.0		160	6.60	2.3	10.0	7.50
740814	1330			20	80	24.7			6.20			
740814	1332			25	80	24.5			6.20			
740814	1335			30	80	24.5			6.70			
740814	1340			35	80	24.5		160	6.10	1.2	11.0	7.40
740814	1345			40	80	24.5		170	7.50	1.0K	12.0	7.40
740921	1525			1	[illegible]	21.0			7.30			
740921	1527			5	80	21.2			7.40			
740921	1530			10	80	20.8			7.30			
740921	1535			15	80	20.8		170	7.40	1.0K	11.0	6.90
740921	1540			20	80	20.9			7.40			
740921	1542			25	80	20.9			7.30			
740921	1545			30	80	20.9			7.20			
740921	1547			35	80	20.9		170	7.10	1.0K	12.0	7.10
740921	1550			40	80	20.9		180	9.00	1.0K	10.0	7.60
741018	1230			1	80	16.0			9.00			
741018	1232			5	80	16.0			9.10			
741018	1235			10	80	15.9			9.30			
741018	1237			15	80	15.9		180	9.00	1.0K	9.0	7.50
741018	1240			20	80	15.7			9.00			
741018	1242			25	80	15.7			8.90			
741018	1245			30	80	15.7			9.00			
741018	1247			35	80	15.7		180	9.40	1.0K	12.0	7.40
741018	1250			40	80	15.7		170	8.70	1.0K	8.0	7.00
741116	1215			1	80	12.4			8.70			
741116	1217			5	80	12.4			8.80			
741116	1220			10	80	12.4			8.80			
741116	1222			15	80	12.3		170	8.90	1.0K	9.0	7.10
741116	1225			20	80	12.3			8.80			
741116	1227			25	80	12.2			8.90			
741116	1230			30	80	12.2		170	8.80	1.0K	9.0	7.50
741116	1235			35	80	12.2		180	9.90	1.0K	9.0	7.40
741205	1515			1	80	9.4			10.20			
741205	1517			5	80	9.5			10.10			
741205	1520			10	80	9.5			10.20			
741205	1522			15	80	9.5		190	10.10	1.0K	9.0	7.30
741205	1525			20	80	9.5			10.40			
741205	1527			25	80	9.5						

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 6C0042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
740131	1500			1	0.120	0.01K			1.20			13
740131	1520			25	0.020	0.02			1.20			13
740131	1540			50	0.010K	0.01K			1.20			15
740221	1600			1	0.050	0.04			1.40			16
740221	1615			15	0.050	0.02			1.40			16
740221	1630			35	0.060	0.06			1.40			17
740314	1355			1	0.250	0.09			1.60			19
740314	1400			20	0.350	0.12			1.60			19
740314	1410			40	0.250	0.14			1.40			18
740420	1320			1	0.040	0.04			2.30			14
740420	1335			20	0.040	0.04			2.30			15
740420	1350			40	0.050	0.04			2.20			15
740518	1530			1	0.030	0.02			2.00			15
740518	1545			20	0.030	0.03			2.00			14
740518	1600			40	0.040	0.04			1.90			15
740613	1415			1	0.040	0.03			2.60			19
740613	1430			20	0.040	0.04			2.60			18
740613	1445			35	0.040	0.04			2.60			20
740718	1600			1	0.240	0.12			3.00			16
740718	1615			20	0.190	0.12			2.80			14
740718	1630			40	0.190	0.19			2.90			16
740814	1320			1	0.080	0.05			2.40			17
740814	1330			20	0.090	0.03			2.50			25
740814	1345			40	0.080	0.01K			2.40			17
740921	1525			1	0.130	0.05			2.80			17
740921	1540			20	0.040	0.01			2.10			17
740921	1550			40	0.070	0.02			2.20			17
741018	1230			1	0.100	0.05			2.30			18
741018	1240			20	0.180	0.08			2.20			18
741018	1250			40	0.200	0.15			2.30			18
741116	1215			1	0.160	0.05			1.70			14
741116	1225			20	0.110	0.08			1.60			16
741116	1235			35	0.090	0.03			1.60			16
741205	1515			1	0.100	0.08	55.0		2.00	0.90		21
741205	1525			20	0.130	0.05	55.0		2.00	0.90		18
741205	1535			35	0.150	0.08	50.0		2.00	1.00		20
750125	1315			1	0.140	0.13	22.0	4.70	2.50	1.50	4	20
750125	1325			20	0.140	0.13	21.0	4.70	2.50	1.50	5	20
750125	1340			40	0.120	0.09	21.0	4.70	2.50	1.50	5	18
750222	1500			1	0.050	0.01K	18.0	4.30	2.30	1.50	5	16
750222	1510			15	0.050	0.03	17.0	4.30	2.30	1.40	5	17
750222	1525			35	0.050	0.01K	19.0	4.30	2.30	1.40	6	17
750328	1400			1	0.180	0.05	16.0	3.50	2.00	1.30	4	20
750328	1412			25	0.140	0.05	16.0	3.70	2.10	1.40	4	18
750328	1425			50	0.170	0.05	16.0	3.60	2.00	1.40	3	20
750425	1410			1	0.060	0.05	8.0	3.70	1.70	1.40	4	23
750425	1420			20	0.160	0.01	10.0	3.50	1.70	1.30	5	23
750425	1430			40	0.040	0.01	11.0	3.50	1.70	1.30	5	26
750523	1500			1	0.070	0.05	14.0	4.30	2.00	1.10	3	17
750523	1510			15	0.070	0.05	11.0	4.20	1.80	1.10	3	17
750523	1520			30	0.050	0.04	14.0	4.00	1.90	1.10	3	18
750620	1340			1	0.100	0.08	6.0	4.00	2.60	1.10	4	14
750620	1350			15	0.100	0.10	6.0	3.90	2.60	1.20	4	15
750620	1400			35	0.140	0.08	6.0	4.00	2.90	1.10	3	15
750718	1130			1	0.110	0.02	9.0	2.90	2.40	1.80	4	19

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
750718	1130			1	80	24.2	9	130	7.50	1.0K	10.0	7.20
750718	1132			5	80	23.6			7.90			
750718	1134			10	80	23.6			7.40			
750718	1136			15	80	23.6			7.30			
750718	1140			20	80	23.6	9	130	7.40	1.0K	10.0	6.60
750718	1142			25	80	23.6			7.20			
750718	1144			30	80	23.5			7.40			
750718	1146			35	80	23.5			7.10			
750718	1150			40	80	23.2	9	130	7.50	1.0K	14.0	6.70
750814	1145			1	80	25.1	7	130	6.70	1.0K	9.0	6.90
750814	1147			5	80	24.1			6.40			
750814	1150			10	80	24.0			5.80			
750814	1155			15	80	23.9	8	130	5.70	1.0K	9.0	6.60
750814	1157			20	80	23.9			5.60			
750814	1200			25	80	23.9			5.50			
750814	1205			30	80	23.9			5.50			
750814	1210			32	80	23.9	9	120	5.90	1.0K	11.0	6.70
750918	1130			1	80	23.2	5	95	5.90	1.2	10.0	6.50
750918	1131			5	80	23.2			5.90			
750918	1132			10	80	23.2			5.90			
750918	1133			15	80	23.2			5.90			
750918	1135			20	80	23.2	5	95	5.90	1.4	9.0	6.40
750918	1137			25	80	23.2			5.90			
750918	1139			30	80	23.2			5.90			
750918	1141			35	80	23.2			5.90			
750918	1145			37	80	23.2	6	100	5.90	1.0	10.0	6.40
751016	1145			1	80	16.4	7	130	6.10	1.0K	9.0	7.60
751016	1146			2	80	16.4			6.00			7.60
751016	1147			5	80	16.4			6.00			7.60
751016	1148			10	80	16.3			6.00			7.60
751016	1149			15	80	16.3			6.00			7.50
751016	1150			20	80	16.3	5	130	6.00	1.0K	5.0	7.50
751016	1151			25	80	16.3			5.90			7.50
751016	1152			30	80	16.3			5.90			7.50
751016	1153			35	80	16.2			5.90			7.50
751016	1155			40	80	16.3	5	130	5.90	1.0K	14.0	7.50
751113	1210			1	80	14.8	8	150	7.70	1.0	4.0	7.60
751113	1211			2	80	14.8			7.70			7.60
751113	1212			5	80	14.8			7.70			7.60
751113	1213			10	80	14.8			7.70			7.60
751113	1214			15	80	14.7			7.80			7.60
751113	1215			20	80	14.7	10	150	7.80	1.0	4.0	7.60
751113	1216			25	80	14.7			7.80			7.60
751113	1217			30	80	14.7			7.80			7.60
751113	1218			35	80	14.7			7.80			7.60
751113	1220			40	80	14.6	10	150	7.80	1.0	8.0	7.60
751216	1305			1	80	11.4	7	150	9.40	1.8	3.0	7.80
751216	1307			2	80	11.4			9.40			7.80
751216	1309			5	80	11.4			9.50			7.80
751216	1311			10	80	11.4			9.50			7.80
751216	1313			15	80	11.4	6	150	9.50	1.7	2.0	7.80
751216	1315			20	80	11.4			9.50			7.80
751216	1316			25	80	11.5			9.50			7.80
751216	1318			30	80	11.4			9.60			7.80
751216	1320			35	80	11.4	7	150	9.50	1.7	7.0	7.80

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740718	1600			1		100	1.00	35.00	20.00			
740718	1615			20		100	1.00	31.00	20.00			10.00K
740718	1630			40		200	1.00	15.00	15.00			10.00K
740814	1320			1		100K	1.00	5.00K	140.00			10.00K
740814	1330			20		100K	2.00	5.00	180.00			11.00
740814	1345			40		100	1.00K	5.00K	90.00			10.00K
740921	1525			1		100K	2.00	5.00K	30.00			10.00K
740921	1540			20		130	2.00	5.00K	10.00K			10.00K
740921	1550			40		150	5.30	5.00K	40.00			10.00K
741018	1230			1		100K	2.00	10.00K	70.00			10.00K
741018	1240			20		100K	2.00	10.00K	100.00			50.00K
741018	1250			40		100K	2.00	10.00	100.00			50.00K
741116	1215			1		100K	1.00	10.00	10.00			50.00K
741116	1225			20		100K	1.30K	10.00	20.00			20.00K
741116	1235			35		100K	2.30	10.00K	10.00			20.00K
741205	1515			1		100K	1.00	5.00K	10.00			20.00K
741205	1525			20		100K	2.00	5.00K	10.00K		200	20.00K
741205	1535			35		100K	1.00	5.00K	20.00		400	20.00K
750125	1315			1	1.3	100K	1.00K	5.00K	30.00	460.00	50K	50.00K
750125	1325			20	1.3	100K	1.00K	5.00K	30.00	240.00	50K	50.00K
750125	1340			40	1.2	100K	1.00K	5.00K	30.00	300.00	50K	50.00K
750222	1500			1	4.2	100K	6.00	5.00K	50.00	1100.00	480	30.00
750222	1510			15	4.5	100K	6.00	5.00K	40.00	1000.00	430	20.00
750222	1525			35	4.5	100K	7.00	5.00K	40.00	1500.00	620	20.00
750328	1400			1	2.5	100K	4.00	5.00K	40.00	1700.00		30.00
750328	1412			25	3.7	100K	5.00	5.00K	40.00	1700.00		30.00
750328	1425			50	2.7	100K	6.00	5.00K	40.00	1700.00		30.00
750425	1410			1	3.4	100K	1.00K	5.00K	100.00	2200.00	200	10.00
750425	1420			20	2.6	100K	2.00	5.00K	80.00	2200.00	220	50.00
750425	1430			40	2.3	100K	1.30	5.00K	50.00	2000.00	180	50.00
750523	1500			1	3.4	100K	2.00	5.00K	80.00	1300.00	1100	28.00
750523	1510			15	3.4	100K	2.30	5.00K	120.00	1300.00	740	57.00
750523	1520			30	3.2	100K	2.00	5.00K	60.00	1200.00	570	20.00
750620	1340			1	3.7	100K	5.00K	5.00K	20.00	450.00	270	13.00
750620	1350			15	3.3	100K	5.00K	5.00K	20.00	450.00	320	11.00
750620	1400			35	2.1	100K	5.00K	5.00K	20.00	300.00	280	10.00K
750718	1130			1	1.5	100K	2.00	5.00	70.00	280.00	140	12.00
750718	1140			20	1.7	100K	2.30	5.00K	90.00	320.00	210	16.00
750718	1150			40	1.0	100K	3.00	5.00K	60.00	410.00	180	16.00
750814	1145			1	3.0	100K	1.30	6.00	40.00	340.00	180	10.00K
750814	1155			15	2.7	100K	1.30	5.00K	50.00	160.00	80	10.00K
750814	1210			32	2.4	100K	1.30	6.00	50.00	720.00	220	12.00
750918	1130			1	1.7	100K	1.00	5.00K	10.00K	400.00	180	10.00K
750918	1135			20	2.3	100K	1.00	5.00	10.00K	440.00	120	10.00K
750918	1145			37	2.6	100K	1.00	7.00	10.00K	440.00	120	10.00K
751016	1145			1	2.3	100K	2.30	5.00K	60.00	720.00	200	20.00
751016	1150			20	2.6	100K	2.30	5.00K	50.00	500.00	200	10.00
751016	1155			40	2.9	100K	1.00	5.00K	50.00	1200.00	200	10.00
751113	1210			1	3.9	100K	1.30K	5.00K	10.00	920.00	280	15.00
751113	1215			20	3.6	100K	1.30K	5.00K	20.00	640.00	320	10.00K
751113	1220			40	3.6	100K	1.30K	5.00K	20.00	520.00	280	11.00
751216	1305			1	1.5	100K	1.00K	5.00K	10.00K	360.00	200	50.00
751216	1313			15	1.5	100K	1.00K	5.00K	10.00K	440.00	120	20.00
751216	1320			35	1.8	100K	1.00K	5.00K	10.00K	440.00	80	50.00

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STATION - 000042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LPTN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
741205	1535			35	80.0	C	6	0.140	0.01K			0.40
750125	1315			1	59.0	0	18	0.100	0.01K			0.15
750125	1325			20	59.0	0	16	0.170	0.01K			0.22
750125	1340			40	59.0	0	14	0.110	0.01K			0.29
750222	1500			1	49.0	0	14	1.400	0.28			0.43
750222	1510			15	49.0	0	1	2.400	0.22			0.42
750222	1525			35	50.0	0	7	2.800	0.26			0.46
750328	1400			1	47.0	0	110	0.270	0.01K			0.89
750328	1412			25	47.0	0	33	0.180	0.01K			0.61
750328	1420			40	48.0	0						
750328	1425			50			31	0.250	0.01K			0.44
750425	1410			1	42.0	0	25	0.110	0.07			0.27
750425	1420			20	42.0	0	34	0.010	0.06			0.36
750425	1430			40	42.0	0	22	0.140	0.11			0.30
750523	1500			1	56.0	0	20	0.170	0.06			0.30
750523	1510			15	50.0	0	20	0.300	0.08			0.30
750523	1520			30	51.0	0	19	0.300	0.08			0.33
750620	1340			1	43.0	0	13	0.020	0.01K			0.06
750620	1350			15	41.0	0	15	0.020	0.01K			0.07
750620	1400			35	41.0	C	16	0.040	0.01K			0.04
750718	1130			1	51.0	0	13	0.200	0.01K			0.24
750718	1140			20	47.0	0	13	0.150	0.03			0.28
750718	1150			40	45.0	0	14	0.100	0.01K			0.22
750814	1145			1	49.0	0	7	0.190	0.01K			0.20
750814	1155			15	48.0	0	10	0.300	0.01K			0.30
750814	1210			32	48.0	0	12	0.290	0.01K			0.27
750918	1130			1	50.0	0	8	0.230	0.05			0.28
750918	1135			20	50.0	C	8	0.190	0.05			0.29
750918	1145			37	50.0	0	5	0.170	0.01K			0.24
751016	1145			1	55.0	0	8	0.300	0.10			0.28
751016	1150			20	54.0	0	3	0.230	0.06			0.23
751016	1155			40	54.0	0	9	0.200	0.01			0.29
751113	1210			1	57.0	0	17	0.180	0.01K			0.32
751113	1215			20	56.0	0	26	0.380	0.09			1.40
751113	1220			40	61.0	0	30	0.260	0.06			0.29
751216	1305			1	58.0	0	13	0.210	0.04			0.35
751216	1313			15	56.0	0	12	0.210	0.04			0.39
751216	1320			35	59.0	0	15	0.240	0.04			0.35
760131												
NUMBER				220	72	72	71	72	72	6	6	72
MAXIMUM				50	80.0	4	110	2.800	0.28	0.010K	0.500	1.40
MINIMUM				1	40.0	0	1	0.010K	0.01K	0.010K	0.370	0.04
SUM				4255	3789.0	6	1256	18.030	3.37	0.060	2.610	24.03
SUM SQ.				119853	205043.0	20	35972	19.856	0.36	0.001	1.153	10.36
MEAN				19	52.6	0	18	0.250	0.05	0.010	0.435	0.33
VARIANCE				171	79.5	0	196	0.216	0.00	0.000	0.003	0.03
STD.DEV.				13	8.9	1	14	0.465	0.05	0.000	0.059	0.18
STD.ERR.				1	1.1	0	2	0.055	0.01	0.000	0.024	0.02
COEF VAR				68	16.9	629	79	185.623	114.35	0.000	13.542	54.43
LOG MEAN				13	51.9	0	14	0.116	0.03	0.010	0.432	0.30
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
741205	1535			35	90.00		50.00K	10.00K				110
750125	1315			1	60.00	10.0	50.00K	80.00	36	7	74	80
750125	1325			20	70.00	20.0	50.00K	60.00			72	90
750125	1340			40	80.00	10.0	50.00K	90.00			72	90
750222	1500			1	100.00	90.0	50.00K	100.00	34	1K	63	90
750222	1510			15	80.00	70.0	50.00K	120.00			60	140
750222	1525			35	170.00	170.0	50.00K	100.00			65	110
750328	1400			1	90.00		60.00	80.00	140	28	54	100
750328	1412			25	100.00		50.00K	60.00			55	80
750328	1425			50	110.00		50.00K	120.00			55	110
750425	1410			1	140.00	60.0	120.00	180.00	180	20	35	100
750425	1420			20	140.00	60.0	90.00	180.00			39	100
750425	1430			40	140.00	50.0	70.00	180.00			42	110
750523	1500			1	60.00	20.0	170.00	40.00	180	20	53	90
750523	1510			15	90.00	20.0	200.00	40.00			45	100
750523	1520			30	90.00	10.0K	100.00	20.00			51	100
750620	1340			1	40.00	10.0K	50.00K	60.00	50	19	31	80
750620	1350			15	80.00	10.0	50.00K	10.00K			31	80
750620	1400			35	40.00	10.0	50.00K	40.00			31	80
750718	1130			1	40.00	10.0	50.00K	20.00	68	28	34	80
750718	1140			20	40.00	20.0	50.00K	20.00			32	80
750718	1150			40	40.00	20.0	60.00	20.00			34	70
750814	1145			1	60.00	30.0	90.00	60.00	63	8	48	50
750814	1155			15	40.00	20.0	50.00K	40.00			46	50
750814	1210			32	70.00	40.0	90.00	50.00			48	50
750918	1130			1	60.00	20.0	50.00K	60.00	32	8	73	80
750918	1135			20	60.00	20.0	50.00K	40.00			68	80
750918	1145			37	60.00	10.0	90.00	40.00			73	90
751016	1145			1	60.00	40.0	40.00	60.00	105	18	100	70
751016	1150			20	60.00	10.0	50.00K	40.00			96	100
751016	1155			40	90.00	10.0	50.00K	50.00			96	90
751113	1210			1	140.00	10.0	60.00	50.00	321	187	110	270
751113	1215			20	120.00	10.0	60.00	510.00			110	100
751113	1220			40	80.00	20.0	50.00K	110.00			120	90
751216	1305			1	80.00	10.0	50.00K	20.00	234	112	120	90
751216	1313			15	90.00	10.0	50.00K	20.00			120	110
751216	1320			35	80.00	10.0K	50.00K	20.00			120	90
740131												
NUMBER				220	72	33	72	72	23	23	36	72
MAXIMUM				50	170.00	170.0	500.00	510.00	340	200	120	270
MINIMUM				1	20.00	10.0K	20.00K	10.00K	10K	1K	31	50
SUM				4255	6000.00	940.0	5370.00	7190.00	2718	903	2376	6610
SUM SQ.				119853	575200.00	60800.0	748500.00	1.533E+06	504374	108021	187006	663900
MEAN				19	83.33	28.5	74.58	99.86	118	39	66	92
VARIANCE				171	1059.16	1083.3	4901.23	11471.82	8326	3299	863	804
STD.DEV.				13	32.54	32.6	70.01	107.11	91	57	29	28
STD.ERR.				1	3.84	5.7	8.25	12.62	19	12	5	3
COEF VAR				68	39.05	114.5	93.87	107.26	77	146	44	31
LOG MEAN				13	76.91	19.6	61.64	61.32	87	16	60	89
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
750718	1140			20	0.050	0.03	8.0	2.90	2.50	0.80	4	17
750718	1150			40	0.100	0.02	9.0	2.90	2.60	0.80	3	18
750814	1145			1	0.090	0.06	13.0	3.70	2.60	0.90	3	19
750814	1155			15	0.100	0.06	13.0	3.40	2.60	0.80	3	18
750814	1210			32	0.120	0.06	13.0	3.70	2.70	0.90	3	20
750918	1130			1	0.040	0.03	24.0	3.20	2.40	0.80	3	16
750918	1135			20	0.070	0.03	22.0	3.20	2.40	0.90	3	16
750918	1145			37	0.070	0.04	24.0	3.10	2.30	0.90	3	16
751016	1145			1	0.090	0.05	34.0	3.60	1.00	0.90	3	12
751016	1150			20	0.080	0.05	33.0	3.40	1.50	0.80	3	12
751016	1155			40	0.080	0.02	33.0	3.40	1.40	0.90	3	12
751113	1210			1	0.020	0.01	40.0	2.80	3.40	1.40	3	13
751113	1215			20	0.030	0.01	41.0	2.70	3.50	1.40	3	13
751113	1220			40	0.050	0.05	42.0	2.60	3.50	1.40	3	13
751216	1305			1	0.050	0.03	39.0	4.50	2.10	1.40	3	14
751216	1313			15	0.070	0.02	40.0	4.60	2.10	1.30	3	13
751216	1320			35	0.030	0.01	42.0	4.70	2.20	1.40	3	12
760131												
NUMBER				220	72	72	39	36	72	39	36	72
MAXIMUM				50	0.350	0.19	55.0	4.70	3.50	1.50	6	26
MINIMUM				1	0.010K	0.01K	6.0	2.60	1.20	0.80	3	12
SUM				4255	6.920	3.70	891.0	134.20	156.90	44.90	131	1212
SUM SQ.				119853	0.963	0.30	28197.0	513.90	361.49	54.17	503	20993
MEAN				19	0.096	0.05	22.8	3.73	2.18	1.15	4	17
VARIANCE				171	0.004	0.00	206.3	0.39	0.28	0.07	1	9
STD.DEV.				13	0.065	0.04	14.4	0.62	0.53	0.26	1	3
STD.ERR.				1	0.008	0.00	2.3	0.10	0.06	0.04	0	0
COEF VAR				68	67.375	75.14	62.9	16.74	24.10	22.18	24	17
LOG MEAN				13	0.077	0.04	18.7	3.66	[illegible]	1.12	4	17
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740131	1500			1		100K	1.00K	5.00K	180.00			27.00
740131	1520			25		100K	1.00K	5.00K	150.00			21.00
740131	1540			50		100K	1.00K	5.00K	200.00			29.00
740221	1600			1		100K	1.00K	5.00K	130.00			26.00
740221	1615			15		100K	1.00K	5.00K	80.00			34.00
740221	1630			35		100K	1.00K	5.00K	110.00			41.00
740314	1355			1		100K	1.00K	5.00K	60.00			33.00
740314	1400			20		100K	1.00K	5.00K	50.00			42.00
740314	1410			40		100K	1.00K	5.00K	50.00			36.00
740420	1320			1		100	2.00	5.00K	70.00			16.00
740420	1335			20		100	2.00	6.00	60.00			20.00
740420	1350			40		100K	2.00	5.00	50.00			21.00
740518	1530			1		100K	12.00	5.00K	110.00			80.00
740518	1545			20		100K	11.00	5.00K	140.00			90.00
740518	1600			40		100K	11.00	5.00K	30.00			10.00
740613	1415			1		120	3.00	5.00K	130.00			60.00
740613	1430			20		170	2.00	11.00	80.00			100.00
740613	1445			35		150	4.00	5.00K	130.00			160.00

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740613	1642			2	20	20.0						
740613	1645			5	20	19.8			8.50			
740613	1647			10	20	19.8			8.40			
740613	1650			15	20	19.0			8.50			
740613	1655			20	20	19.0		150	8.30	1.3	12.0	7.80
740613	1657			25	20	19.0			8.30			
740613	1700			30	20	19.0			8.30			
740613	1705			35	20	19.0			8.30			
740613	1710			40	20	19.0		150	8.20	1.2	10.0	7.80
740718	1730			1	20	28.0		160	11.20	2.1	15.0	8.80
740718	1731			2	20	27.0						
740718	1733			5	20	26.1			11.80			
740718	1736			9	20	25.1						
740718	1738			10	20	24.8			8.00			
740718	1740			15	20	24.3			8.90			
740718	1745			20	20	23.8		150	7.50	1.0K	17.0	7.70
740718	1747			25	20	23.5			7.00			
740718	1750			30	20	23.4			6.70			
740718	1752			35	20	23.0			6.50			
740718	1755			40	20	23.0		150	7.10	1.0K	16.0	7.50
740814	1430			1	20	25.8		170	7.40	2.4	12.0	7.80
740814	1432			5	20	25.2			6.80			
740814	1435			10	20	24.8			5.80			
740814	1440			15	20	24.5			5.70			
740814	1445			20	20	24.2		160	5.60	1.3	12.0	7.30
740814	1447			25	20	24.0			5.60			
740814	1450			30	20	24.0			5.70			
740814	1455			35	20	24.0			5.60			
740814	1500			40	20	24.0		160	5.60	1.7	12.0	7.00
740921	1600			1	20	18.6		130	6.30	1.0K	10.0	6.80
740921	1602			5	20	18.0			6.40			
740921	1604			10	20	18.0			6.50			
740921	1606			15	20	17.9			6.30			
740921	1608			20	20	17.9			6.40			
740921	1610			23	20	17.9		130	6.30	1.0K	9.0	6.50
740921	1612			25	20	17.9			6.30			
740921	1615			30	20	18.0			6.40			
740921	1617			35	20	18.0			6.40			
740921	1620			40	20	18.0			6.40			
740921	1625			45	20	18.0		130	6.20	1.0K	12.0	7.10
741018	1345			1	20	16.5		180	8.90	1.0K	11.0	7.30
741018	1347			5	20	16.5			9.00			
741018	1350			10	20	16.5			8.90			
741018	1352			15	20	16.4			9.10			
741018	1355			20	20	16.4		180	9.10	1.0K	10.0	7.40
741018	1357			25	20	16.4			9.10			
741018	1400			30	20	16.3			8.70			
741018	1402			35	20	16.3			9.00			
741018	1405			40	20	16.2		180	9.00	1.0K	12.0	7.30
741116	1400			1	20	12.8		170	8.60	1.0K	9.0	7.00
741116	1402			5	20	12.8			8.60			
741116	1405			10	20	12.8			8.70			
741116	1407			15	20	12.8			8.70			
741116	1410			20	20	12.8		180	8.60	1.0K	9.0	6.80
741116	1412			25	20	12.8			8.60			

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600642 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740731												
NUMBER				220	36	72	72	72	72	36	36	72
MAXIMUM				50	4.5	200	12.00	35.00	200.00	2200.00	1100	160.00
MINIMUM				1	1.0	100K	1.00K	5.00K	10.00K	160.00	50K	10.00K
SUM				4255	96.6	7520	174.00	467.00	4225.00	30330.00	9870	2063.00
SUM SQ.				119853	282.2	805200	834.00	4739.00	403525.00	3.828E+07	4308700	104695.00
MEAN				19	2.6	104	2.42	6.49	58.68	842.50	274	28.65
VARIANCE				171	1.0	279	5.82	24.08	2191.55	363647.88	45791	642.03
STD.DEV.				13	1.0	17	2.41	4.91	46.81	603.03	214	25.34
STD.ERR.				1	0.2	2	0.28	0.58	5.52	100.51	36	2.99
COEF VAR				68	37.3	16	99.86	75.66	79.78	71.58	78	88.43
LOG MEAN				13	2.4	103	1.78	5.80	41.51	659.20	214	21.86
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
740131	1500			1	110.00		70.00	170.00	340	120		120
740131	1520			25	120.00		70.00	200.00				120
740131	1540			50	130.00		50.00	140.00				120
740221	1600			1	110.00		500.00	370.00				90
740221	1615			15	100.00		100.00	290.00				80
740221	1630			35	100.00		190.00	120.00				80
740314	1355			1	70.00		230.00	210.00	10K	10K		60
740314	1400			20	80.00		320.00	200.00				60
740314	1410			40	60.00		60.00	170.00				60
740420	1320			1	60.00		70.00	110.00	75	20		70
740420	1335			20	70.00		130.00	110.00				70
740420	1350			40	60.00		50.00	160.00				70
740518	1530			1	50.00		50.00K	70.00	40	1K		80
740518	1545			20	50.00		50.00K	190.00				80
740518	1600			40	50.00		50.00K	130.00				100
740813	1415			1	100.00		30.00	180.00	170	19		90
740813	1430			20	160.00		20.00	420.00				90
740813	1445			35	130.00		20.00	510.00				80
740718	1600			1	40.00		50.00K	40.00	67	200K		50
740718	1615			20	70.00		50.00	50.00				90
740718	1630			40	60.00		50.00K	40.00				50
740814	1320			1	50.00		50.00K	40.00	50	38		90
740814	1330			20	40.00		60.00	70.00				90
740814	1345			40	60.00		50.00	60.00				90
740921	1525			1	100.00		50.00K	10.00	200	17		100
740921	1540			20	100.00		50.00K	10.00K				100
740921	1550			40	100.00		50.00K	10.00				110
741018	1230			1	100.00		50.00K	10.00	130	16		100
741018	1240			20	90.00		50.00K	10.00K				100
741018	1250			40	120.00		50.00K	20.00				100
741116	1215			1	60.00		50.00K	90.00	130	5		110
741116	1225			20	120.00		50.00K	70.00				110
741116	1235			35	130.00		50.00K	80.00				120
741205	1515			1	90.00		50.00K	20.00	63	1K		100
741205	1525			20	20.00		50.00K	10.00K				100

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
750523	1610			15	20	18.0			9.60			
750523	1612			20	20	18.0			9.40			
750523	1615			25	20	18.0	18	120	9.40	1.0K	12.0	6.30
750523	1617			30	20	18.0			9.40			
750523	1620			40	20	17.8			9.50			
750523	1622			45	20	17.8			9.50			
750523	1625			50	20	17.8	18	120	9.50	1.0K	10.0	6.20
750620	1520			1	20	22.0	16	120	8.00	1.0K	10.0	6.30
750620	1525			5	20	22.0			7.90			
750620	1530			10	20	21.5			8.10			
750620	1535			15	20	21.5			7.80			
750620	1540			20	20	21.0			7.70			
750620	1545			25	20	21.0	18	120	7.80	1.0K	11.0	6.20
750620	1547			30	20	21.0			7.80			
750620	1550			35	20	21.0			8.00			
750620	1552			40	20	21.0			8.20			
750620	1555			45	20	21.0			7.80			
750620	1600			45	20	21.0	20	120	7.80	1.0K	10.0	6.20
750620	1600			50	20	21.0			8.00			6.20
750718	1315			1	20	25.0	8	140	8.90	1.0K	10.0	7.20
750718	1317			5	20	24.2			8.70			
750718	1319			10	20	24.0			8.20			
750718	1321			15	20	23.9			7.60			
750718	1323			20	20	23.5			7.30			
750718	1325			25	20	23.2	12	130	6.80	1.0K	10.0	7.30
750718	1327			30	20	23.1			6.90			
750718	1329			35	20	23.0			7.00			
750718	1331			40	20	23.0			7.00			
750718	1333			45	20	23.0			6.90			
750718	1335			50	20	22.8	15	130	6.80	1.0K	10.0	6.70
750814	1245			1	20	27.0	4	130	11.20	1.0K	11.0	8.20
750814	1247			5	20	26.0			10.70			
750814	1250			10	20	24.0			8.00			
750814	1255			15	20	24.8			7.00			
750814	1300			20	20	24.0	7	130	6.80	1.0K	9.0	6.70
750814	1305			25	20	24.0			6.20			
750814	1310			30	20	24.0			6.20			
750814	1315			35	20	24.0			6.20			
750814	1320			40	20	24.0			6.20			6.70
750814	1322			42	20	24.0	11	130	6.10	1.0K	10.0	6.70
750918	1215			1	20	22.9	5	95	6.80	1.0	11.0	6.40
750918	1217			5	20	22.9			6.60			
750918	1219			10	20	22.9			6.50			
750918	1221			15	20	22.9			6.50			
750918	1223			20	20	22.9			6.50			
750918	1225			25	20	22.9	7	95	6.50	1.0	13.0	6.50
750918	1227			30	20	22.9			6.60			
750918	1229			35	20	22.9			6.50			
750918	1231			40	20	22.9			6.60			
750918	1235			45	20	22.9			6.50			
750918	1245			50	20	22.9	9	95	6.40	1.2	11.0	6.50
751016	1250			1	20	17.8	6	140	7.00	1.0K	15.0	7.60
751016	1251			2	20	17.8			6.90			7.60
751016	1252			5	20	17.7			6.90			7.60
751016	1253			10	20	17.7			6.80			7.60

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600041 CUMBERLAND RIVER 282.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC R FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740131	1640			1	20	9.3		180	12.00	1.0R	13.0	7.30
740131	1643			5	20	9.2			12.10			
740131	1646			10	20	9.2			11.90			
740131	1649			15	20	9.2			11.70			
740131	1652			20	20	9.2			11.60			
740131	1655			25	20	9.2		180	11.70	1.0R	12.0	7.20
740131	1658			30	20	9.2			11.60			
740131	1701			35	20	9.2			11.70			
740131	1705			40	20	9.2			11.70			
740131	1710			45	20	9.2			11.70			
740131	1715			50	20	9.2		180	11.70	1.0R	16.0	7.10
740131	1717			54	20	9.2						
740221	1830			1	20	8.2		170	11.40	1.0	7.0	7.20
740221	1835			5	20	8.0			9.60			
740221	1840			10	20	8.0			9.80			
740221	1850			15	20	8.0			9.30			
740221	1900			20	20	8.0		170	10.00	1.8	7.0	6.80
740221	1903			25	20	7.9			10.10			
740221	1906			30	20	7.9			9.80			
740221	1910			35	20	7.9			9.50			
740221	1915			38	20	7.9		170	9.10	1.0R	11.0	7.20
740314	1500			1	20	11.5		150	10.10	1.5	6.0	6.80
740314	1502			2	20	11.5						
740314	1504			5	20	11.5			10.10			
740314	1506			10	20	11.5			10.20			
740314	1508			15	20	11.5			10.40			
740314	1510			20	20	11.5			10.00			
740314	1515			25	20	11.5		150	10.10	1.3	4.0	7.00
740314	1517			30	20	11.4			9.70			
740314	1520			35	20	11.4			9.80			
740314	1522			40	20	11.4			9.80			
740314	1525			45	20	11.4			9.90			
740314	1530			50	20	11.4		150	10.10	1.3	2.0	6.80
740420	1435			1	20	13.9		150	9.80	1.0R	8.0	7.10
740420	1437			2	20	13.5						
740420	1439			5	20	13.5			9.90			
740420	1441			10	20	13.5			9.90			
740420	1443			15	20	13.3			9.80			
740420	1445			20	20	13.3		150	9.70	1.0R	6.0	7.20
740420	1447			25	20	13.2			9.90			
740420	1450			30	20	13.2			10.00			
740420	1455			35	20	13.2			10.00			
740420	1500			40	20	13.2		150	9.80	1.6	8.0	7.10
740518	1800			1	20	17.2		150	9.00	1.0R	10.0	7.20
740518	1802			2	20	17.2						
740518	1805			5	20	17.1			8.90			
740518	1807			10	20	17.1			8.40			
740518	1810			15	20	17.1			9.20			
740518	1812			20	20	17.1			9.20			
740518	1815			25	20	17.1		150	9.20	1.0R	12.0	7.60
740518	1817			30	20	17.1			9.00			
740518	1820			35	20	17.1			9.10			
740518	1825			40	20	17.1			8.80			
740518	1830			45	20	17.1		150	8.80	1.0R	10.0	7.40
740613	1640			1	20	19.0		140	8.60	1.3	10.0	7.80

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LPTN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
740131	1640			1	48.0	0	41	0.160	0.02	0.010K	0.370	0.37
740131	1655			25	46.0	0	42	0.100	0.02	0.010K	0.390	0.39
740131	1715			50	47.0	0	35	0.130	0.02	0.010K	0.370	0.37
740221	1830			1	44.0	0	29	0.160	0.02	0.010K	0.450	0.45
740221	1.00			20	43.0	0	27	0.130	0.02	0.010K	0.420	0.42
740221	1915			38	45.0	0	31	0.130	0.02	0.010K	0.440	0.44
740314	1500			1	50.0	0	20	0.060	0.06			0.41
740314	1515			25	51.0	0	17	0.060	0.05			0.42
740314	1530			50	51.0	0	20	0.070	0.05			0.40
740420	1435			1	48.0	0	17	0.030	0.03			0.28
740420	1445			20	51.0	0	15	0.050	0.05			0.36
740420	1500			40	47.0	0	20	0.030	0.04			0.34
740518	1800			1	46.0	0	11	0.040	0.04			0.25
740518	1815			25	42.0	0	10	0.060	0.05			0.37
740518	1830			45	46.0	0	18	0.070	0.07			0.42
740613	1640			1	63.0	0	23	0.040	0.06			0.53
740613	1655			20	62.0	0	26	0.040	0.06			0.49
740613	1710			40	61.0	0	24	0.060	0.09			0.62
740718	1730			1	49.0	0	12	0.040	0.04			0.19
740718	1745			20	50.0	0	7	0.040	0.04			0.41
740718	1755			40	49.0	0	12	0.040	0.08			0.38
740814	1430			1	52.0	0	5	0.170	0.06			0.20
740814	1445			20	51.0	0	8	0.120	0.09			0.15
740814	1500			40	51.0	0	11	0.140	0.10			0.26
740921	1600			1	60.0	0	11	0.890	0.04			0.10
740921	1610			23	58.0	0	13	1.000	0.03			0.10
740921	1625			45	61.0	0	16	1.000	0.01K			0.15
741018	1345			1	62.0	0	10	0.030	0.02			0.27
741018	1355			20	63.0	0	11	0.030	0.02			0.23
741018	1405			40	62.0	0	13	0.020	0.02K			0.21
741116	1400			1	60.0	0	6	0.020	0.01K			0.20
741116	1410			20	59.0	0	6	0.030	0.01			0.23
741116	1420			40	59.0	0	7	0.020	0.01			0.23
741205	1630			1	70.0	0	9	0.020	0.01K			0.42
741205	1640			20	70.0	0	9	0.010K	0.03			0.41
741205	1650			35	70.0	0	10	0.030	0.01K			0.42
750125	1410			1	59.0	0	16	0.250	0.01K			0.19
750125	1430			25	59.0	0	52	0.220	0.05			0.26
750125	1440			40	59.0	0	55	0.160	0.05			0.20
750222	1620			1	50.0	0	4	3.300	0.27			0.43
750222	1630			20	50.0	0	4	3.600	0.22			0.37
750222	1645			45	50.0	0		3.300	0.28			0.42
750328	1530			1	47.0	0	26	0.160	0.01K			1.00
750328	1542			25	48.0	0	35	0.270	0.16			0.69
750328	1552			45	52.0	0	60	0.220	0.07			0.72
750425	1515			1	41.0	0	29	0.040	0.10			0.29
750425	1530			25	40.0	0	33	0.020	0.25			0.33
750425	1540			45	42.0	0	33	0.270	0.07			0.28
750523	1600			1	38.0	0	16	0.270	0.07			0.32
750523	1615			25	39.0	0	18	0.390	0.10			0.33
750523	1625			50	45.0	0	20	0.250	0.08			0.31
750620	1520			1	43.0	0	24	0.040	0.01K			0.05
750620	1545			25	41.0	0	23	0.030K	0.01K			0.05
750620	1600			45	41.0	0	24	0.020	0.01K			0.05
750620	1600			50	41.0	0						

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STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 MSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
741116	1415			30	20	12.8			8.60			
741116	1417			35	20	12.8			8.70			
741116	1420			40	20	12.8		180	8.70	1.0K	10.0	7.00
741205	1630			1	20	9.4		180	9.70	1.0K	9.0	7.30
741205	1632			5	20	9.4			9.50			
741205	1635			10	20	9.5			9.30			
741205	1637			15	20	9.5			9.40			
741205	1640			20	20	9.5		180	9.90	1.0K	6.0	7.30
741205	1642			25	20	9.5			9.90			
741205	1645			30	20	9.5			10.00			
741205	1650			35	20	9.5		180	9.90	1.0K	7.0	7.40
750125	1410			1	20	8.7	6	160	11.00	1.0K	9.0	7.10
750125	1412			5	20	8.7			11.10			
750125	1415			10	20	8.7			11.10			
750125	1420			15	20	8.7			11.20			
750125	1425			20	20	8.7			11.10			
750125	1430			25	20	8.7	5	160	11.20	1.0K	8.0	7.10
750125	1432			30	20	8.7			11.20			
750125	1435			35	20	8.7			11.10			
750125	1440			40	20	8.7	5	160	11.10	1.0K	7.0	7.10
750125	1441			46	20	8.7			11.10			
750222	1620			1	20	7.9	14	150	11.20	1.0K	9.0	7.30
750222	1622			5	20	7.9			11.10			
750222	1625			10	20	7.9			11.10			
750222	1627			15	20	7.8			11.00			
750222	1630			20	20	7.3	17	150	11.00	1.0K	10.0	7.30
750222	1632			25	20	7.8			11.10			
750222	1635			30	20	7.8			11.00			
750222	1640			35	20	7.8			11.00			
750222	1642			40	20	7.8			11.00			
750222	1645			45	20	7.8	15	160	11.00	1.0K	10.0	7.30
750328	1530			1	20	10.1	21	120	12.00	1.0K	23.0	6.90
750328	1532			5	20	10.1			12.00			
750328	1535			10	20	10.0			12.00			
750328	1537			15	20	10.0			11.90			
750328	1540			20	20	9.9			12.00			
750328	1542			25	20	9.8	24	120	12.00	1.0K	21.0	7.40
750328	1545			30	20	9.8			12.00			
750328	1547			35	20	9.8			12.10			
750328	1550			40	20	9.8			12.20			
750328	1552			45	20	9.8	21	120	12.10	1.0K	25.0	7.30
750328	1555			50	20	9.8			12.10			
750425	1515			1	20		45	120	10.40	1.0K	15.0	7.60
750425	1517			5	20				10.20			
750425	1520			10	20				10.20			
750425	1522			15	20				10.10			
750425	1525			20	20				10.10			
750425	1530			25	20		45	120	10.00	1.0K	27.0	6.90
750425	1532			30	20				10.00			
750425	1535			35	20				10.00			
750425	1537			40	20				10.10			
750425	1540			45	20		45	120	10.00	1.0K	15.0	6.70
750523	1600			1	20	18.2	18	120	9.40	1.0K	13.0	6.40
750523	1605			5	20	18.0			9.60			
750523	1607			10	20	18.0			9.50			

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STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
740613	1640			1	0.040	0.01			2.40			18
740613	1655			20	0.040	0.03			2.50			19
740613	1710			40	0.050	0.03			2.50			18
740718	1730			1	0.120	0.04			3.00			19
740718	1745			20	0.060	0.06			3.00			17
740718	1755			40	0.130	0.13			3.00			16
740814	1430			1	0.080	0.03			2.40			17
740814	1445			20	0.070	0.05			2.30			16
740814	1500			40	0.070	0.03			2.40			15
740921	1600			1	0.160	0.01			2.00			12
740921	1610			23	0.170	0.01			2.10			12
740921	1625			45	0.050	0.01			2.90			12
741018	1345			1	0.150	0.07			2.40			18
741018	1355			20	0.160	0.07			2.40			19
741018	1405			40	0.200	0.11			2.40			18
741116	1400			1	0.080	0.05			2.10			20
741116	1410			20	0.060	0.03			2.10			20
741116	1420			40	0.420	0.09			2.10			20
741205	1630			1	0.100	0.05	50.0		1.90	0.80		18
741205	1640			20	0.090	0.06	50.0		1.90	0.90		20
741205	1650			35	0.100	0.03	45.0		1.80	0.80		18
750125	1410			1	0.140	0.13	20.0	4.70	2.70	1.60	4	20
750125	1430			25	0.170	0.13	21.0	4.90	2.70	1.50	5	20
750125	1440			40	0.170	0.13	20.0	4.90	2.70	1.50	5	20
750222	1620			1	0.050	0.03K	19.0	4.40	2.40	1.20	4	17
750222	1630			20	0.050	0.01K	19.0	4.30	2.40	1.20	5	18
750222	1645			45	0.050	0.01K	19.0	4.50	2.60	1.90		
750328	1530			1	0.150	0.07	16.0	3.70	2.00	1.50	4	19
750328	1542			25	0.140	0.07	16.0	3.40	2.00	1.50	4	24
750328	1552			45	0.060	0.03	16.0	3.40	2.00	1.50	4	19
750425	1515			1	0.080	0.06	8.0	3.10	2.00	1.20	4	24
750425	1530			25	0.060	0.02	8.0	3.30	1.60	1.30	4	25
750425	1540			45	0.050	0.04	8.0	3.60	1.70	1.40	5	26
750523	1600			1	0.140	0.05	13.0	4.50	1.70	1.00	3	17
750523	1615			25	0.100	0.07	15.0	4.20	2.00	1.10	3	16
750523	1625			50	0.100	0.05	12.0	3.80	1.80	1.10	3	16
750620	1520			1	0.140	0.08	6.0	2.80	2.60	1.10	4	14
750620	1545			25	0.180	0.08	6.0	4.10	2.80	1.20	3	14
750620	1600			45	0.120	0.08	6.0	3.90	2.70	1.20	3	14
750718	1315			1	0.060	0.05	8.0	3.00	2.60	0.90	3	17
750718	1325			25	0.070	0.04	9.0	3.00	2.70	0.80	3	18
750718	1335			50	0.100	0.04	9.0	3.00	2.60	0.90	3	19
750814	1245			1	0.110	0.03	14.0	3.60	2.90	0.90	3	18
750814	1300			20	0.110	0.03	14.0	3.70	2.70	0.90	3	20
750814	1322			42	0.110	0.03	14.0	3.80	2.90	1.00	3	20
750918	1215			1	0.060	0.03	24.0	3.00	2.00	0.80	3	14
750918	1225			25	0.080	0.03	24.0	3.00	2.10	0.80	3	14
750918	1245			50	0.090	0.03	22.0	3.00	2.00	0.70	3	15
751016	1250			1	0.080	0.02	35.0	3.80	1.80	1.00	3	14
751016	1256			25	0.070	0.05	34.0	3.80	1.70	1.00	3	15
751016	1300			48	0.100	0.05	33.0	3.70	1.60	1.00	3	14
751113	1315			1	0.010	0.01	48.0	2.40	3.20	1.00	3	10
751113	1321			25	0.070	0.01	48.0	2.30	3.00	1.40	3	10
751113	1326			50	0.050	0.01	48.0	2.30	3.10	1.30	3	10
751216	1430			1	0.030	0.01	43.0	5.00	2.60	1.60	3	20

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 MSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
751016	1254			15	20	17.7			6.80			7.60
751016	1255			20	20	17.7			6.80			7.60
751016	1256			25	20	17.7	7	140	6.80	1.0K	9.0	7.60
751016	1257			30	20	17.7			6.80			7.60
751016	1258			35	20	17.6			6.80			7.60
751016	1259			40	20	17.6			6.80			7.60
751016	1300			48	20	17.8	8	140	6.80	1.0K	11.0	7.60
751016	1300			50	20	17.6			6.80			7.60
751113	1315			1	20	14.8	6	140	7.10	1.0	4.0	7.50
751113	1316			2	20	14.8			7.10			7.50
751113	1317			5	20	14.8			7.20			7.50
751113	1318			10	20	14.8			7.10			7.50
751113	1319			15	20	14.8			7.10			7.50
751113	1320			20	20	14.8			7.20			7.50
751113	1321			25	20	14.8	6	150	7.20	3.0	5.0	7.50
751113	1322			30	20	14.8			7.20			7.50
751113	1323			35	20	14.7			7.20			7.50
751113	1324			40	20	14.7			7.20			7.60
751113	1325			45	20	14.7			7.20			7.60
751113	1326			50	20	14.7	6	150	7.30	1.0K	7.0	7.60
751216	1430			1	20	11.2	6	150	9.50	1.4	6.0	7.80
751216	1431			2	20	11.1			9.50			7.80
751216	1432			5	20	11.1			9.60			7.80
751216	1434			10	20	11.0			9.60			7.80
751216	1436			15	20	11.0			9.60			7.80
751216	1440			20	20	11.0			9.60			7.80
751216	1441			25	20	11.0	6	150	9.60	1.8	6.0	7.80
751216	1442			30	20	11.0			9.60			7.80
751216	1449			35	20	11.0			9.60			7.80
751216	1452			40	20	11.0			9.60			7.80
751216	1455			45	20	11.0			9.70			7.80
751216	1500			50	20	11.0	6	160	9.60	1.6	10.0	7.80
760131												
NUMBER				252		242	36	72	245	72	72	101
MAXIMUM				54		28.0	45	180	12.20	3.0	27.0	8.80
MINIMUM				1		7.8	4	95	5.60	1.0K	2.0	6.20
SUM				5635		3851.7	507	10565	2173.38	82.8	773.0	735.09
SUM SQ.				182535		65094.1	11436	1585875	20071.16	104.2	9689.0	5374.29
MEAN				22		15.9	14	147	8.87	1.1	10.7	7.28
VARIANCE				225		32.3	123	502	3.24	0.1	19.6	0.24
STD.DEV.				15		5.7	11	22	1.80	0.4	4.4	0.49
STD.ERR.				1		0.4	2	3	0.12	0.0	0.5	0.05
COEF VAR				67		35.7	79	15	20.30	30.9	41.2	6.76
LOG MEAN				15		14.5	11	145	8.68	1.1	9.9	7.26
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
741205	1630			1		100K	1.00K	5.00K	20.00		500	20.00K
741205	1640			20		100K	1.00K	5.00K	10.00K		700	20.00K
741205	1650			35		100K	1.00K	5.00K	10.00		700	20.00K
750125	1410			1	1.1	100K	1.00K	5.00K	30.00	500.00	50K	50.00K
750125	1430			25	1.1	100K	1.00K	5.00K	20.00	590.00	50K	50.00K
750125	1440			40	1.1	100K	1.00K	5.00K	20.00	550.00	50K	50.00K
750222	1620			1	4.5	100K	6.00	5.00K	40.00	950.00	520	20.00
750222	1630			20	4.4	100K	1.00K	5.00K	30.00	1000.00	440	20.00
750222	1645			45	4.4	100K	7.00	5.00K	60.00	4900.00		30.00
750328	1530			1	1.7	100K	4.00	5.00K	50.00	1700.00		30.00
750328	1542			25	3.7	100K	6.00	5.00K	50.00	1700.00	320	50.00
750328	1552			45	1.0	100K	5.00	5.00K	60.00	1700.00	160	40.00
750425	1515			1	2.9	100K	4.00	5.00K	90.00	2800.00	320	60.00
750425	1530			25	1.9	100K	5.00	5.00K	70.00	2100.00		70.00
750425	1540			45	2.0	100K	5.00	8.00	100.00	2900.00	440	60.00
750523	1600			1	0.5	100K	2.00	8.00	80.00	1100.00	710	32.00
750523	1615			25	3.2	100K	1.00	5.00K	70.00	770.00	750	22.00
750523	1625			50	3.6	100K	2.00	5.00K	70.00	1300.00	580	23.00
750620	1520			1	3.3	100K	5.00K	5.00K	10.00	300.00	200	10.00K
750620	1545			25	2.9	100K	5.00K	5.00K	20.00	900.00	290	10.00K
750620	1600			45	3.6	100K	5.00K	5.00	10.00	550.00	150	20.00
750718	1315			1	3.2	100K	2.30	9.00	100.00	950.00	180	20.00
750718	1325			25	1.7	100K	2.30	6.00	60.00	330.00		18.00
750718	1335			50	1.0	100K	1.30	6.00	50.00	440.00	280	12.00
750814	1245			1	2.4	100K	3.00	8.00	30.00	240.00	180	10.00K
750814	1300			20	3.0	100K	2.30	5.00K	40.00	360.00	180	10.00K
750814	1322			42	3.2	100K	2.30	7.00	40.00	660.00	200	10.00K
750918	1215			1	2.0	100K	1.30	7.00	20.00	400.00	150	10.00K
750918	1225			25	2.0	100K	1.30	6.00	10.00	480.00	210	10.00K
750918	1245			50	2.0	100K	1.30	6.00	20.00	560.00	90	10.00K
751016	1250			1	1.2	100K	2.00	5.00K	60.00	520.00	240	10.00
751016	1256			25	1.5	100K	2.30	5.00K	50.00	600.00	260	10.00
751016	1300			48	1.5	100K	3.00	5.00K	50.00	680.00	280	10.00
751113	1315			1	3.9	100K	1.00K	5.00K	10.00	360.00	160	10.00K
751113	1321			25	3.6	100K	1.00K	5.00K	20.00	480.00	280	11.00
751113	1326			50	3.6	100K	1.00K	5.00K	10.00	400.00	280	11.00
751216	1430			1	1.2	100K	1.00K	5.00K	10.00K	360.00	80	50.00
751216	1445			25	1.2	100K	1.00K	5.00K	10.00K	200.00	120	50.00
751216	1500			50	0.9	100K	1.00K	5.00K	10.00K	440.00	160	20.00
740131												
NUMBER				252	36	72	72	72	72	36	35	72
MAXIMUM				54	4.5	220	16.00	78.00	250.00	4900.00	750	240.00
MINIMUM				1	0.5	100K	1.00K	5.00K	0.60K	200.00	50K	10.00K
SUM				5635	86.9	7510	177.00	504.00	3540.60	34170.00	10260	2545.00
SUM SQ.				182535	258.2	805500	917.00	9012.00	365000.31	8.182E+07	4397800	207495.00
MEAN				22	2.4	104	2.46	7.00	54.73	949.17	293	35.35
VARIANCE				225	1.4	312	6.79	77.24	2103.23	839579.75	40887	1655.44
STD.DEV.				15	1.2	18	2.61	8.79	45.86	916.29	202	40.69
STD.ERR.				1	0.2	2	0.31	1.04	5.40	152.71	34	4.80
COEF VAR				67	48.7	17	105.97	125.55	83.79	96.54	69	115.11
LOG MEAN				15	2.1	103	1.78	5.95	37.49	706.80	229	24.03
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600091 CUMBERLAND RIVER 262.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
750718	1315			1	51.0	0	9	0.100	0.03			0.18
750718	1325			25	47.0	0	15	0.200	0.01K			0.23
750718	1335			50	45.0	0	22	0.210	0.03			0.24
750814	1245			1	50.0	0	4	0.280	0.05			0.26
750814	1300			20	49.0	0	7	0.080	0.01			0.26
750814	1320			40	49.0	0						
750814	1322			42	49.0	0	17	0.200	0.01K			0.28
750918	1215			1	49.0	0	4	0.170	0.01K			0.33
750918	1225			25	49.0	0	16	0.200	0.07			0.32
750918	1245			50	49.0	0	15	0.170	0.09			0.32
751016	1250			1	57.0	0	7	0.300	0.02			0.26
751016	1256			25	56.0	0	10	0.270	0.06			0.31
751016	1300			48	56.0	0	7	0.170	0.12			0.32
751016	1300			50	56.0	0						
751113	1315			1	61.0	0	12	0.330	0.01K			0.31
751113	1321			25	60.0	0	19	0.380	0.06			0.34
751113	1326			50	58.0	0	17	0.330	0.09			0.31
751216	1430			1	56.0	0	11	0.260	0.02K			0.36
751216	1445			25	57.0	0	10	0.180	0.04			0.38
751216	1500			50	57.0	0	11	0.150	0.04			0.35
760131												
NUMBER				252	75	75	71	72	72	6	0	72
MAXIMUM				54	70.0	6	60	3.600	0.28	0.010K	0.450	1.60
MINIMUM				1	40.0	0	4	0.010K	0.01K	0.010K	0.370	0.05
SUM				5635	3916.0	12	1287	21.880	3.98	0.060	2.440	23.74
SUM SQ.				182535	208438.0	72	33569	39.398	0.46	0.001	0.998	9.64
MEAN				22	52.2	0	18	0.304	0.06	0.010	0.407	0.33
VARIANCE				225	53.7	1	146	0.461	0.00	0.000	0.001	0.03
STD.DEV.				15	7.3	1	12	0.679	0.06	0.000	0.035	0.16
STD.ERR.				1	0.8	0	1	0.080	0.01	0.000	0.014	0.02
COEF VAR				67	14.0	608	67	223.717	105.70	0.000	8.614	48.52
LOG MEAN				15	51.7	0	15	0.116	0.04	0.010	0.405	0.29
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS PG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
760131	1640			1	0.050	0.02			1.20			10
760131	1655			25	0.080	0.05			1.10			13
760131	1715			50	0.100	0.02			1.20			11
760221	1830			1	0.050	0.05			1.40			14
760221	1900			20	0.050	0.05			1.40			14
760221	1915			38	0.080	0.05			1.40			15
760314	1500			1	0.310	0.11			1.50			18
760314	1515			25	0.410	0.09			1.50			18
760315	1530			50	0.190	0.09			1.50			18
760420	1435			1	0.040	0.04			2.20			15
760420	1445			20	0.050	0.05			2.40			16
760420	1500			40	0.050	0.05			2.40			17
760518	1800			1	0.050	0.05			2.00			16
760518	1815			25	0.060	0.05			2.00			15
760518	1830			45	0.050R	0.06			2.00			15

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
750718	1325	25	70.00	20.0	50.00K	20.00			35	80
750718	1335	50	60.00	20.0	60.00	30.00			35	80
750814	1245	1	40.00	20.0	100.00	80.00	13	5	50	50
750814	1300	20	60.00	40.0	50.00K	50.00			50	50
750814	1322	42	100.00	20.0	50.00K	50.00			51	50
750918	1215	1	40.00	10.0	50.00K	20.00	125	52	72	80
750918	1225	25	60.00	20.0	100.00	20.00			72	80
750918	1245	50	80.00	20.0	80.00	60.00			67	80
751016	1250	1	60.00	10.0	80.00	50.00			100	80
751016	1256	25	80.00	10.0	50.00K	50.00			100	100
751016	1300	48	100.00	20.0	50.00K	50.00			98	100
751113	1315	1	80.00	20.0	50.00K	110.00	346	74	130	100
751113	1321	25	100.00	20.0	50.00K	70.00			130	90
751113	1326	50	120.00	10.0	50.00K	230.00			130	90
751216	1430	1	50.00	10.0	50.00K	20.00	81	65	130	120
751216	1445	25	40.00	10.0K	50.00K	20.00			130	110
751216	1500	50	60.00	20.0	50.00K	40.00			130	100
740131										
NUMBER		252	72	33	71	72	22	22	36	71
MAXIMUM		54	700.00	140.0	880.00	550.00	346	74	130	130
MINIMUM		1	40.00	10.0K	10.00K	10.00K	5K	1K	26	50
SUM		5635	7100.00	980.0	6190.00	6900.00	1952	464	2459	6390
SUM SQ.		182535	1.170E+06	60200.0	1.548E+06	1.246E+06	299830	19158	207811	599900
MEAN		22	98.61	29.7	87.18	95.83	89	21	68	90
VARIANCE		225	6617.77	971.8	14403.38	8235.92	6030	496	1139	354
STD.DEV.		15	81.35	31.2	120.01	90.75	78	21	34	19
STD.ERR.		1	9.59	5.4	14.24	10.70	17	5	6	2
COEF VAR		67	82.30	105.0	137.66	94.70	88	100	49	21
LOG MEAN		15	85.53	20.9	65.53	64.04	56	12	61	88
751216										

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
751216	1445			25	0.040	0.01	43.0	4.80	2.60	1.60	3	20
751216	1500			50	0.110	0.03	43.0	4.80	2.60	1.50	3	15
740131												
NUMBER				252	72	72	39	36	72	39	35	71
MAXIMUM				54	0.420	0.13	50.0	5.00	3.20	1.90	5	26
MINIMUM				1	0.010	0.01K	6.0	2.30	1.10	0.70	3	10
SUM				5635	7.320	3.48	906.0	133.50	159.90	45.60	121	1193
SUM SQ.				182535	1.128	0.24	29334.0	515.75	373.71	56.66	435	20863
MEAN				22	0.102	0.05	23.2	3.71	2.22	1.17	3	17
VARIANCE				225	0.005	0.00	218.1	0.59	0.26	0.09	0	12
STD.DEV.				15	0.073	0.03	14.8	0.77	0.51	0.30	1	3
STD.ERR.				1	0.009	0.00	2.4	0.13	0.06	0.05	0	0
COEF VAR				67	72.281	65.06	63.6	20.73	23.05	25.37	20	20
LOG MEAN				15	0.084	0.04	18.8	3.63	2.16	1.13	3	16
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
740131	1640			1		100K	1.00K	5.00K	150.00			20.00
740131	1655			25		100K	1.00K	5.00K	250.00			19.00
740131	1715			50		100K	1.00K	5.00K	100.00			19.00
740221	1830			1		100K	1.00K	5.00K	60.00			28.00
740221	1900			20		100K	1.00K	5.00K	50.00			31.00
740221	1915			38		100K	1.00K	5.00K	60.00			40.00
740314	1500			1		100K	1.00K	5.00K	50.00			40.00
740314	1515			25		100K	2.00	5.00K	0.60			22.00
740314	1530			50		100K	1.00K	5.00K	60.00			23.00
740420	1435			1		100	1.00	5.00K	60.00			26.00
740420	1445			20		120	4.00	5.00K	50.00			28.00
740420	1500			40		120	3.00	5.00K	60.00			18.00
740518	1800			1		100K	1.00K	5.00K	90.00			110.00
740518	1815			25		100K	13.00	5.00K	80.00			110.00
740518	1830			45		100K	16.00	5.00	100.00			140.00
740613	1640			1		170	4.00	5.00K	90.00			170.00
740613	1655			20		220	1.00	5.00K	70.00			140.00
740613	1710			40		150	3.00	8.00	160.00			240.00
740718	1730			1		100	1.00	20.00	20.00			10.00K
740718	1745			20		100	5.00	7.00	30.00			10.00K
740718	1755			40		100K	1.00	78.00	30.00			10.00K
740814	1430			1		100K	1.00	5.00K	110.00			10.00K
740814	1445			20		100	1.00K	5.00K	200.00			10.00K
740814	1500			40		100K	2.00	5.00	120.00			22.00
740921	1600			1		130	1.00	5.00K	20.00			10.00K
740921	1610			23		100K	1.00K	5.00K	20.00			10.00K
740921	1625			45		100K	3.00	5.00K	40.00			10.00K
741018	1345			1		100K	2.00	10.00K	60.00			50.00K
741018	1355			20		100K	2.00	10.00K	110.00			50.00K
741018	1405			40		100K	1.00	10.00	80.00			50.00K
741116	1400			1		100K	1.00	10.00K	10.00			20.00K
741116	1410			20		100K	1.00	10.00K	10.00			20.00K
741116	1420			40		100K	1.00	10.00K	10.00			20.00K

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
750222	1020			5	50	8.4			9.80			
750222	1025			10	50	8.4	14	360	9.60	1.0K	9.0	7.80
750222	1030			20	50	8.4	34	370		1.0K	10.0	7.90
750328	1030			1	50	13.3	22	150	11.80	3.6	23.0	7.60
750328	1032			2	50	13.3			11.80			
750328	1035			5	50	13.0			11.70			
750328	1037			10	50	12.6	21	220	11.50	1.6	21.0	7.40
750328	1038			12	50	12.3						
750328	1039			13	50	11.0						
750328	1040			15	50	10.8			9.60			
750328	1042			18	50	10.2	20	310	9.70	1.1	23.0	7.40
750425	0930			1	50	12.1	55	350	9.80	3.0	26.0	7.50
750425	0935			5	50	12.1			9.40			
750425	0940			10	50	12.0	70	360	9.30	2.4	26.0	7.60
750425	0945			15	50	12.0	75	360	9.20	2.0	32.0	7.90
750425	0947			17	50	12.0			9.20			
750523	1000			1	70	21.0	13	350	5.80	1.0K	10.0	7.50
750523	1005			5	70	17.8	20	260	6.50	1.0K	10.0	7.30
750523	1010			10	70	16.0	19	190	6.60	1.0K	11.0	6.70
750620	0915			1	50	22.0	17	320	5.20	1.0K	10.0	7.40
750620	0920			3	50		15	320	5.40	1.0K	10.0	7.50
750620	0925			6	50		20	260	4.70	1.0K	8.0	7.30
750718	0805			1	50	23.8			6.70			6.70
750718	0815			4	50	23.5	14	140	6.10	1.0K	14.0	7.40
750718	0825			9	50	23.2	20	170	3.90	1.0	16.0	7.30
750814	0900			1	50	24.5	7	170	7.50	1.0K	11.0	6.90
750814	0902			2	50	23.9						
750814	0905			4	50	23.1	8	130	5.40	1.0K	11.0	6.80
750814	0910			7	50	23.0	8	160	4.70	1.0K	9.0	6.80
750918	0840			1	50	22.1	5	110	5.70	1.6	11.0	6.70
750918	0845			4	50	21.8	9	120	5.60	1.6	11.0	6.70
750918	0850			7	50	21.8	9	120	4.80	1.0	11.0	6.70
751016	1036			1	50	18.6	5	380	3.70	1.2	12.0	7.60
751016	1038			2	50	18.5			3.30			7.60
751016	1040			5	50	17.1	5	240	2.80	1.6	12.0	7.50
751016	1042			9	50	16.3	2	170	3.90	1.0	27.0	7.50
751113	0940			1	50	14.2	5	410	8.10	1.6	4.0	8.00
751113	0942			2	50	14.3			8.10			8.00
751113	0945			5	50	14.2	6	410	8.30	1.0K	4.0	8.00
751113	0955			10	50	14.3	7	410	8.10	1.6	13.0	8.00
751216	1020			1	50	10.6	44	250	11.10	3.6	14.0	7.90
751216	1025			2	50	10.6			11.00			8.00
751216	1030			5	50	10.7	54	290	11.10	3.5	13.0	8.00
751216	1035			10	50	10.6	150	290	11.00	3.6	17.0	8.10

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600041 CUMBERLAND RIVER 262.9

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
740131	1640			1	110.00		50.00K	280.00	180	20		90
740131	1655			25	120.00		80.00	550.00				120
740131	1715			50	120.00		80.00	180.00				110
740221	1830			1	60.00		590.00	190.00				80
740221	1900			20	70.00		240.00	180.00				80
740221	1915			38	70.00		880.00	250.00				80
740314	1500			1	80.00		90.00	230.00	10K	10K		50
740314	1515			25	80.00		100.00	180.00				60
740314	1530			50	70.00		80.00	100.00				60
740420	1445			1	60.00		80.00	190.00	85	30		70
740420	1445			20	60.00		60.00	110.00				80
740420	1500			40	200.00		180.00	160.00				70
740518	1800			1	100.00		50.00	120.00	10	2		90
740518	1815			25	70.00		50.00K	120.00				90
740518	1830			45	70.00		50.00K	100.00				90
740613	1640			1	170.00		40.00	170.00	80	15		110
740613	1655			20	130.00		30.00	110.00				90
740613	1710			40	220.00		10.00	320.00				110
740716	1730			1	60.00		50.00K	40.00	5	2		70
740718	1745			20	40.00		50.00K	90.00				90
740718	1755			40	80.00		50.00K	60.00				70
740814	1430			1	40.00		50.00K	40.00	20	24R		90
740814	1445			20	50.00		50.00K	40.00				90
740814	1500			40	50.00		50.00	50.00				80
740921	1600			1	60.00		50.00K	10.00K	120	50		90
740921	1610			23	70.00		50.00K	30.00				100
740921	1625			45	90.00		50.00K	10.00K				90
741018	1345			1	80.00		50.00K	10.00K	32	5		110
741018	1355			20	80.00		50.00K	10.00K				100
741018	1405			40	100.00		50.00K	10.00K				100
741116	1400			1	80.00		50.00K	80.00	106	6		120
741116	1410			20	180.00		50.00K	90.00				130
741116	1420			40	100.00		50.00K	80.00				130
741205	1630			1	40.00		50.00K	40.00	87	1K		110
741205	1640			20	160.00		50.00K	20.00				100
741205	1650			35	90.00		50.00K	20.00				110
750125	1410			1	90.00	10.0	50.00K	80.00	90	12	69	100
750125	1430			25	160.00	10.0K	50.00K	120.00			73	110
750125	1440			40	80.00	10.0	50.00K	60.00			70	100
750222	1620			1	110.00	110.0	80.00	50.00	75	12	66	110
750222	1630			20	150.00	90.0	100.00	60.00			65	90
750222	1645			45	700.00		80.00	160.00			66	
750328	1530			1	120.00		60.00	90.00	110	34	55	90
750328	1542			25	100.00	60.0	60.00	100.00			55	90
750328	1552			45	120.00	60.0	50.00K	110.00			55	100
750425	1515			1	140.00	140.0	160.00	180.00	155	10	33	100
750425	1530			25	140.00			180.00			34	90
750425	1540			45	140.00	60.0	100.00	220.00			35	90
750523	1600			1	70.00	20.0	170.00	50.00	155	10	51	110
750523	1615			25	100.00	40.0	140.00	40.00			55	90
750523	1625			50	80.00	20.0	170.00	30.00			56	100
750620	1520			1	80.00	10.0K	50.00K	20.00	14	13	26	50
750620	1535			25	120.00	10.0K	50.00K	60.00			32	60
750620	1600			45	100.00	10.0	50.00K	30.00			31	80
750718	1315			1	50.00	20.0	60.00	20.00	53	12	32	80

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
750222	1030			20	180.0	0	50	1.800	0.27			1.60
750328	1030			1	70.0	0	37	0.380	0.01K			0.12
750328	1037			10	100.0	0	51	0.340	0.01K			0.67
750328	1042			18	150.0	0	33	0.180	0.01K			0.84
750425	0930			1	140.0	0	47	0.190	0.16			0.42
750425	0940			10	140.0	0	120	0.270	0.20			0.28
750425	0945			15	140.0	0	130	0.040	0.11			0.42
750523	1000			1	190.0	0	20	0.250	0.04			0.46
750523	1005			5	110.0	0	28	0.270	0.12			0.69
750523	1010			10	110.0	0	27	0.300	0.02			0.68
750620	0915			1	180.0	0	29	0.060	0.01			0.25
750620	0920			3	170.0	0	19	0.060	0.01			0.20
750620	0925			6	160.0	0	33	0.060	0.01			0.13
750718	0805			1	62.0	0						
750718	0815			4	81.0	0	20	0.650	0.01			0.29
750718	0825			9	110.0	0	35	0.210	0.05			0.46
750814	0900			1	84.0	0	10	0.270	0.01K			0.36
750814	0905			4	60.0	0	1	0.150	0.01K			0.35
750814	0910			7	64.0	0	28	0.350	0.01K			0.36
750918	0840			1	63.0	0	7	0.350	0.07			0.34
750918	0845			4	64.0	0	2	0.280	0.05			0.35
750918	0850			7	78.0	0	11	0.180	0.01K			0.34
751016	1030			1	190.0	0	6	0.400	0.01			0.55
751016	1040			5	190.0	0	20	0.340	0.10			0.48
751016	1042			9	100.0	0	9	0.130	0.01K			0.39
751113	0940			1	190.0	0	10	0.440	0.18			1.20
751113	0945			5	190.0	0	11	0.300	0.06			1.10
751113	0955			10	190.0	0	13	0.380	0.09			1.00
751216	1020			1	150.0	0	34	0.760	0.08			1.50
751216	1030			5	150.0	0	38	0.700	0.06			1.00
751216	1035			10	150.0	0	63	0.730	0.01K			1.40
740131												
NUMBER				99	66	66	63	65	65	2	2	65
MAXIMUM				20	380.0	6	200	2.400	0.36	0.010K	0.910	1.90
MINIMUM				1	60.0	0	1	0.020K	0.01K	0.010K	0.630	0.12
SUM				805	9180.0	8	1892	19.730	5.62	0.020	1.540	40.85
SUM SQ.				6069	1455030.0	90	137376	16.838	0.93	0.000	1.225	35.35
MEAN				8	139.1	0	30	0.309	0.08	0.010	0.770	0.63
VARIANCE				24	2741.2	1	1299	0.170	0.01	0.000	0.039	0.17
STD.DEV.				5	52.4	1	36	0.412	0.09	0.000	0.198	0.41
STD.ERR.				0	6.4	0	5	0.051	0.01	0.000	0.140	0.05
COEF VAR				81	37.6	639	120	135 646	119.56	0.000	25.713	65.00
LOG MEAN				4	129.6	0	18	0.165	0.04	0.010	0.757	0.51
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 6C0045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM AT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740131	1255			1	50	11.0			10.80			
740131	1257			5	50	11.5			10.80			
740131	1300			10	50	10.9		390	10.40	1.9	16.0	8.10
740131	1305			15	50	10.8			9.80			
740131	1310			20	50	10.7			8.90			
740221	1225			1	50	10.0			9.20			
740221	1230			5	50	9.3		430	9.00	1.9	8.0	7.40
740221	1232			10	50	9.1			8.00			
740314	1140			1	50	11.9		280	9.00			
740314	1142			2	50	11.9						
740314	1145			5	50	11.0		340	9.20	1.3	3.0	7.40
740314	1147			10	50	10.2			9.60			
740420	1030			1	50	15.1		370	7.90	1.3	8.0	7.90
740420	1035			2	50	15.0						
740420	1040			5	50	14.9		350	8.80	1.3	11.0	7.50
740420	1055			10	50	13.5		360	8.00	1.2	8.0	8.40
740518	1320			1	50	21.3		360	4.20	1.5	12.0	7.20
740518	1322			2	50	20.5						
740518	1330			4	50	19.7						
740518	1335			5	50	18.0		330	6.40	1.4	12.0	6.90
740518	1337			6	50	17.0						
740518	1350			10	50	17.0		280	5.10	8.2	19.0	6.80
740518	1351			12	50	16.2						
740613	1045			1	50	17.0		410	7.30	1.1	14.0	7.80
740613	1046			2	50	17.0						
740613	1050			5	50	16.8		380	7.10	1.8	13.0	7.80
740613	1100			10	50	16.5		380	7.20	1.7	14.0	7.80
740718	1015			1	50	24.0		280	11.60	4.2	12.0	8.60
740718	1025			5	50	23.3		270	8.70	2.9	13.0	8.40
740718	1023			7	50	22.8						
740718	1035			10	50	22.0						
740814	0945			1	50	25.0		320	7.60	3.9	14.0	8.20
740814	0947			3	50	24.0		200	7.60	4.8	10.0	7.40
740814	0948			4	50	23.0						
740814	0955			5	50	22.9						
740819	1005			10	50	22.1		220	6.30	3.2	12.0	7.40
740921	0940			1	50	21.5		320	5.50	2.3	8.0	7.40
740921	0955			5	50	21.0		290	6.60	1.0	12.0	7.30
740921	1010			10	50	21.0		350	6.50	1.0	11.0	7.60
741018	0855			1	50	14.6		340	6.40	1.0	11.0	7.70
741018	0905			5	50	14.1		210	8.10	1.0	10.0	7.60
741018	0915			10	50	13.5		360	6.60	1.0R	11.0	7.20
741116	0900			1	50	10.5		380	5.90	1.0R	13.0	7.30
741116	0910			5	50	10.5		190	8.90	1.0R	7.0	7.50
741116	0911			6	50	9.6		250	8.80	1.0R	7.0	7.40
741116	0920			10	50	8.6						
741205	1140			1	50	7.5		410	9.50	1.0R	6.0	7.90
741205	1150			5	50	7.5		200	8.80	1.0R	10.0	7.80
741205	1200			10	50	7.5		270	10.20	1.0R	11.0	7.80
750125	1030			1	50	8.9	9	320	10.60	1.0R	10.0	7.70
750125	1032			5	50	8.3			10.80			
750125	1035			10	50	8.3	17	330	10.70	1.0R	11.0	7.60
750125	1040			15	50	8.3			10.70			
750125	1045			18	50	8.3	38	330	10.70	1.0R	10.0	7.60
750222	1035			1	50	8.5	13	360	9.40	1.0R	10.0	7.90

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS PG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
750918	0850			7	0.090	0.05	32.0	3.50	2.50	0.90	3	16
751016	1036			1	0.310	0.22	160.0	6.00	2.40	2.00	4	19
751016	1040			5	0.260	0.21	160.0	5.30	2.40	1.90	4	19
751016	1042			9	0.200	0.12	83.0	3.90	1.60	1.10	3	14
751113	0940			1	0.070	0.05	130.0	4.00	3.50	1.60	3	17
751113	0945			5	0.070	0.05	140.0	3.80	3.50	1.60	3	18
751113	0955			10	0.060	0.02	140.0	4.00	3.40	1.60	3	18
751216	1020			1	0.340	0.14	130.0	5.90	2.20	2.70	4	23
751216	1030			5	0.340	0.04	140.0	6.00	1.90	2.60	4	22
751216	1035			10	0.360	0.14	140.0	6.00	1.90	2.50	4	24
760131												
NUMBER				99	65	65	38	35	65	38	34	64
MAXIMUM				20	0.530	0.32	160.0	7.00	3.50	3.40	6	34
MINIMUM				1	0.060	0.01K	16.0	3.10	1.20	0.70	3	6
SUM				605	15.480	8.52	2526.0	169.30	141.90	60.40	133	1126
SUM SQ.				6069	4.566	1.47	244248.0	860.05	329.37	109.44	537	20980
MEAN				6	0.238	0.13	66.5	4.84	2.18	1.59	4	18
VARIANCE				24	0.014	0.01	2063.1	1.21	0.31	0.36	1	19
STD.DEV.				5	0.117	0.07	45.4	1.10	0.55	0.60	1	4
STD.ERR.				0	0.015	0.01	7.4	0.19	0.07	0.10	0	1
COEF VAR				81	49.226	56.39	68.3	22.74	25.34	37.91	88	25
LOG MEAN				4	0.210	0.11	52.8	4.72	2.11	1.48	4	17
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BIRON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD Pb,TOT UG/L
760131	1300			10		100K	1.00K	5.00K	200.00			29.00
760221	1230			5		100K	1.00K	5.00K	60.00			21.00
760314	1145			5		100K	1.00K	5.00K	80.00			30.00
760420	1030			1		180	2.00	5.00K	60.00			23.00
760420	1040			5		150	2.00	5.00K	50.00			19.00
760420	1055			10		180	2.00	5.00	50.00			16.00
760518	1320			1		160	16.00	5.00K	70.00			11.00
760518	1335			5		100K	14.00	5.00K	140.00			120.00
760518	1350			10		120	12.00	5.00K	120.00			90.00
760613	1045			1		320	1.00K	5.00K	120.00			110.00
760613	1050			5		320	1.00K	5.00K	120.00			80.00
760613	1100			10		270	10.00	5.00K	110.00			90.00
760718	1015			1		200	1.00	5.00K	10.00			10.00K
760718	1025			5		150	1.00	5.00	50.00			10.00K
760718	1035			10		260	1.00	6.00	20.00			10.00K
760814	0945			1		120	1.00	5.00K	190.00			11.00
760814	0955			5		120	1.00	5.00K	160.00			14.00
760814	1005			10		120	1.00K	5.00K	150.00			10.00K
760921	0940			1		110	4.00	5.00K	20.00			10.00K
760921	0955			5		130	2.00	40.00	20.00			10.00K
760921	1010			10		130	1.00	5.00K	10.00K			10.00K
761018	0855			1		100K	2.00	10.00K	50.00			50.00K
761018	0905			5		100K		10.00	70.00			50.00K
761018	0915			10		100K	2.00	10.00	80.00			50.00K
761116	0900			1		100K	1.00	20.00	30.00			20.00K

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 800045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
740131												
NUMBER				99		97	35	66	84	65	65	69
MAXIMUM				20		25.0	150	430	11.80	8.2	32.0	8.60
MINIMUM				1		7.5	2	110	2.80	1.0K	3.0	6.70
SUM				605		1467.2	851	19230	681.39	107.7	806.0	520.20
SUM SQ.				6069		24959.6	48541	6095300	5971.74	278.0	11908.0	3935.06
MEAN				6		15.1	24	291	8.11	1.7	12.4	7.54
VARIANCE				24		28.8	819	7575	5.35	1.6	29.9	0.19
STD.DEV.				5		5.4	29	87	2.31	1.2	5.5	0.44
STD.ERR.				0		0.5	5	11	0.25	0.2	0.7	0.05
COEF VAR				81		35.5	118	30	28.52	75.3	44.1	5.86
LOG MEAN				4		14.2	16	276	7.73	1.4	11.4	7.53
751216												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEM-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00615 NO2-N TOTAL MG/L	00620 NO3-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
740131	1300			10	160.0	0	27	0.330	0.03	0.010K	0.630	0.63
740221	1230			5	380.0	0	40	0.170	0.03	0.010K	0.910	0.91
740314	1145			5	170.0	0	8	0.060	0.04			1.90
740420	1030			1	160.0	0	11	0.040	0.05			0.59
740420	1040			5	170.0	0	16	0.040	0.04			0.54
740420	1055			10	180.0	0	18	0.030	0.07			0.68
740518	1320			1	160.0	0	9	0.080	0.36			0.52
740518	1335			5	82.0	0	15	0.080	0.32			0.62
740518	1350			10	88.0	0	28	0.060	0.36			0.65
740613	1045			1	170.0	0	24	0.080	0.17			1.10
740613	1050			5	170.0	0	110	0.080	0.19			1.10
740613	1100			10	170.0	0	130	0.090	0.26			0.81
740718	1035			1	110.0	6	16	0.090	0.14			0.39
740718	1025			5	110.0	2	17	0.080	0.09			0.36
740718	1035			10	130.0	0	39	0.090	0.17			0.65
740814	0945			1	73.0	0	10	0.160	0.08			0.30
740814	0955			5	89.0	0	10	0.130	0.10			0.25
740814	1005			10	82.0	0	18	0.180	0.10			0.30
740921	0940			1	140.0	0	7	1.100	0.01K			0.28
740921	0955			5	150.0	0	13	0.280	0.01K			0.25
740921	1010			10	160.0	0	13	1.100	0.01K			0.27
741016	0855			1	80.0	0	6	0.020K	0.02K			0.12
741018	0905			5	130.0	0	6	0.030	0.03			0.16
741018	0915			10	160.0	0	17	0.020	0.03			0.58
741116	0900			1	71.0	0		0.030	0.01K			0.24
741116	0910			5	79.0	0	7	0.020	0.01K			0.24
741116	0920			10	180.0	0	20	0.200	0.01			0.84
741205	1140			1	190.0	0		0.060	0.01K			0.86
741205	1150			5	180.0	0	2	0.150	0.01K			1.20
741205	1200			10	180.0	0	40	0.040	0.01K			0.88
750125	1030			1	160.0	0	16	0.150	0.01K			0.95
750125	1035			10	160.0	0	50	0.230	0.01K			0.67
750125	1045			18	150.0	0	200	0.230	0.01K			1.00
750222	1015			1	170.0	0	6	2.400	0.14			1.60
750222	1025			10	180.0	0	1	1.000	0.28			0.18

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
740131	1300			10	160.00		60.00	140.00	370	280		230
740221	1230			5	340.00		100.00	190.00				220
740314	1145			5	260.00		300.00	300.00	10K	10R		190
740420	1030			1	360.00		420.00	120.00	340	160		180
740420	1040			5	350.00		80.00	110.00				60
740420	1055			10	400.00		100.00	130.00				160
740518	1320			1	380.00		50.00K	120.00	94	10		280
740518	1335			5	270.00		50.00K	130.00				120
740518	1350			10	350.00		50.00K	160.00				220
740613	1045			1	130.00		40.00	120.00	110	20		200
740613	1050			5	90.00		20.00	70.00				210
740613	1100			10	130.00		30.00	200.00				210
740718	1015			1	170.00		50.00K	40.00	8	10R		120
740718	1025			5	140.00		50.00K	0.40				110
740718	1035			10	150.00		50.00K	25.00				150
740814	0945			1	50.00		60.00	60.00	140	190R		120
740814	0955			5	110.00		50.00K	60.00				100
740814	1005			10	110.00		110.00	60.00				100
740921	0940			1	130.00		50.00K	20.00	1900	360		180
740921	0955			5	140.00		50.00K	10.00K				190
740921	1010			10	100.00		50.00K	40.00				190
741018	0855			1	110.00		50.00K	10.00	30	18		130
741018	0905			5	110.00		50.00K	10.00K				170
741018	0915			10	150.00		50.00K	20.00				210
741116	0900			1	80.00		50.00K	80.00	130	7		130
741116	0910			5	80.00		50.00K	90.00				250
741116	0920			10	200.00		50.00K	70.00				210
741205	1140			1	60.00		50.00K	10.00K	154	1R		220
741205	1150			5	80.00	50.0	50.00K	10.00K				180
741205	1200			10	140.00		50.00K	10.00K				200
750125	1030			1	70.00	30.0	50.00K	70.00	150	90	190	200
750125	1035			10	80.00	40.0	50.00K	60.00			180	200
750125	1045			18	75.00	30.0	50.00K	70.00			210	240
750222	1015			1	330.00	320.0R	50.00K	90.00	140	44	210	240
750222	1025			10	280.00	250.0	50.00K	60.00			210	370
750222	1030			20	1800.00	30.0	50.00K	160.00			170	200
750328	1030			1	500.00	440.0	50.00K	70.00	120		150	140
750328	1037			10	360.00	350.0		60.00			84	120
750328	1042			18	210.00	120.0	50.00K	60.00			100	240
750425	0930			1	990.00	240.0	180.00	180.00	1080	380	87	190
750425	0940			10	740.00		180.00	140.00			120	170
750425	0945			15	820.00	280.0	170.00	240.00			150	230
750523	1000			1	660.00	410.0	40.00	50.00	1080	380	94	160
750523	1005			5	310.00	60.0	80.00	40.00			100	150
750523	1010			10	300.00	60.0	80.00	40.00			96	150
750620	0915			1	350.00	300.0	50.00K	40.00	700	190	96	180
750620	0920			3	300.00	260.0	50.00K	60.00			78	200
750620	0925			6	430.00	310.0	50.00K	90.00			55	110
750718	0815			4	200.00	90.0	50.00K	60.00			79	100
750718	0825			9	490.00	300.0	50.00K	30.00			72	80
750814	0900			1	100.00	30.0	50.00K	40.00	160	29	65	70
750814	0905			4	110.00	40.0	50.00K	320.00			71	50
750814	0910			7	160.00	60.0	90.00	80.00			88	100
750918	0840			1	150.00	100.0	60.00	20.00	53	10	91	110
750918	0845			4	140.00	100.0	90.00	40.00				

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
740131	1300			10	0.330	0.17			1.20			13
740221	1230			5	0.180	0.16			1.40			16
740314	1145			5	0.530	0.22			1.50			18
740420	1030			1	0.200	0.15			2.10			15
740420	1040			5	0.200	0.19			2.10			16
740420	1055			10	0.300	0.23			2.10			17
740518	1320			1	0.250	0.20			2.20			15
740518	1335			5	0.250	0.25			2.10			14
740518	1350			10	0.400	0.32			2.20			15
740613	1045			1	0.080	0.06			2.00			16
740613	1050			5	0.100	0.06			2.00			16
740613	1100			10	0.170	0.09			2.00			17
740718	1015			1	0.210	0.08			2.90			18
740718	1025			5	0.190	0.12			2.70			13
740718	1035			10	0.150	0.21R			2.90			13
740814	0945			1	0.190	0.07			2.50			18
740814	0955			5	0.160	0.11			2.30			14
740814	1005			10	0.160	0.08			2.30			15
740921	0940			1	0.260	0.16			3.30			20
740921	0955			5	0.250	0.05			2.30			20
740921	1010			10	0.160	0.04			2.50			18
741018	0855			1	0.150	0.10			2.50			18
741018	0905			5	0.240	0.16			2.10			16
741018	0915			10	0.500	0.28			2.30			18
741116	0900			1	0.150	0.10			2.10			
741116	0910			5	0.110	0.09			2.00			19
741116	0920			10	0.380	0.21			1.60			20
741205	1140			1	0.220	0.22	85.0		1.20	0.70		19
741205	1150			5	0.190	0.18	90.0		1.30	0.70	4	20
741205	1200			10	0.450	0.16	95.0		1.30	0.90		20
750125	1030			1	0.280	0.25	66.0	5.00	1.50	1.40	5	20
750125	1035			10	0.200	0.17	62.0	5.00	1.50	1.40	5	20
750125	1045			18	0.180	0.15	62.0	5.10	1.50	3.40	6	33
750222	1015			1	0.200	0.12	72.0	6.20	2.00	1.20	4	18
750222	1025			10	0.200	0.12	72.0	6.20	2.00	1.10		18
750222	1030			20	0.200	0.01R	72.0	6.30	2.10	1.60		26
750328	1030			1	0.370	0.14	59.0	5.00	1.60	1.80	4	19
750328	1037			10	0.270	0.03	54.0	4.50	1.90	1.80	4	18
750328	1042			18	0.220	0.03	27.0	4.10	2.00	1.70	4	21
750425	0930			1	0.450	0.10	33.0	4.70	1.60	2.10	4	34
750425	0940			10	0.500	0.08	28.0	4.10	1.70	2.00	4	14
750425	0945			15	0.400	0.12	37.0	4.70	2.20	2.20	5	6
750523	1000			1	0.260	0.23	50.0	6.50	1.80	1.60	4	16
750523	1005			5	0.260	0.16	30.0	4.70	1.60	1.40	4	14
750523	1010			10	0.230	0.14	32.0	4.80	1.90	1.60	4	15
750620	0915			1	0.430	0.22	28.0	6.90	2.80	2.00	4	12
750620	0920			3	0.400	0.23	27.0	7.00	3.00	2.00	5	12
750620	0925			6	0.360	0.23	23.0	5.00	2.60	2.00	4	10
750718	0815			4	0.140	0.09	16.0	3.70	3.00	1.00	4	18
750718	0825			9	0.100	0.08	25.0	4.00	2.70	1.20	5	19
750814	0900			1	0.150	0.06	23.0	3.60	2.50	1.10	4	18
750814	0905			4	0.140	0.05	20.0	3.70	2.70	1.00	3	18
750814	0910			7	0.160	0.06	22.0	3.80	2.70	1.00	3	18
750918	0840			1	0.080	0.04	30.0	3.10	2.50	1.00	3	16
750918	0845			4	0.090	0.05	31.0	3.20	2.20	1.00	3	16

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 660045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00956 SILICA TOTAL MG/L	01022 BIRON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
741116	0910			5		100K		10.00	20.00			20.00K
741116	0920			10		100K	2.00	10.00	10.00			20.00K
741205	1140			1		100K	2.00	5.00K	20.00		700	20.00K
741205	1150			5		100K	3.00	5.00K	20.00		40	20.00K
741205	1200			10		100K	2.00	5.00K	10.00		400	20.00K
750125	1030			1	1.3	100K	1.00K	5.00K	30.00	480.00	50	50.00K
750125	1035			10	1.3	100K	1.00K	5.00K	30.00	680.00	50K	50.00K
750125	1045			18	2.7	100K	1.00K	5.00K	30.00	4000.00	50K	50.00K
750222	1015			1	4.4	100K	7.00	5.00K	50.00	1200.00	1000	20.00
750222	1025			10	4.4	100K	6.00	5.00K	40.00	1100.00	820	20.00
750222	1030			20	5.6	100K	8.00	5.00K	50.00	5000.00	580	30.00
750328	1030			1	1.3	100K	7.00	5.00K	40.00	1600.00	430	20.00
750328	1037			10	0.8	100K	9.00	5.00K	50.00	1900.00	480	20.00
750328	1042			18	0.8	100K	8.00	5.00K	40.00	3000.00	340	20.00
750425	0930			1	0.7	100K	3.00	5.00K	110.00	3800.00	180	70.00
750425	0940			10	1.6	100K	5.00	5.00K	80.00	3500.00		70.00
750425	0945			15	1.3	100K	5.00	5.00K	100.00	4300.00	160	70.00
750523	1000			1	2.0	100K	5.00	5.00K	130.00	1200.00	470	77.00
750523	1005			5	2.8	100K	3.00	5.00K	80.00	1300.00	580	43.00
750523	1010			10	1.0	100K	1.00K	5.00K	370.00	1300.00	520	15.00
750620	0915			1	2.4	100K	5.00K	5.00K	20.00	940.00	290	60.00
750620	0920			3	2.4	100K	5.00K	5.00	10.00	600.00	290	78.00
750620	0925			6	4.4	100K	5.00K	7.00	10.00	1000.00	230	20.00
750718	0805			1		100K						
750718	0815			4	1.4	100K	2.00	5.00	60.00	400.00	180	14.00
750718	0825			9	1.7	100K	2.00	6.00	60.00	910.00	280	14.00
750814	0900			1	3.3	100K	1.00	5.00K	40.00	400.00	180	10.00K
750814	0905			4	3.3	100K	1.00	5.00K	50.00	480.00	180	10.00K
750814	0910			7	3.3	100K	1.00	5.00K	40.00	560.00	280	10.00K
750918	0840			1	2.5	100K	1.00K	7.00	10.00	560.00	330	10.00K
750918	0845			4	3.0	100K	1.00	8.00	20.00	560.00	180	10.00K
750918	0850			7	3.0	100K	2.00	10.00	20.00	640.00	120	12.00
751016	1036			1	4.5	110	2.00	5.00K	70.00	640.00	240	10.00
751016	1040			5	5.0	110	2.00	5.00K	60.00	560.00	300	10.00
751016	1042			9	1.0	100K	2.00	6.00	40.00	720.00	570	20.00
751113	0940			1	4.9	130	1.00K	5.00K	20.00	1000.00	480	11.00
751113	0945			5	4.9	150	1.00K	5.00K	10.00K	760.00	280	10.00K
751113	0955			10	5.0	100K	1.00K	5.00K	20.00	1100.00	280	10.00K
751216	1020			1	3.3	100K	1.00K	5.00K	10.00	2100.00	120	80.00
751216	1030			5	1.8	100K	1.00K	5.00K	10.00K	2300.00	120	80.00
751216	1035			10	3.3	100K	1.00K	5.00K	10.00K	2700.00	50K	50.00
760131												
NUMBER				59	35	66	63	65	65	35	37	65
MAXIMUM				20	5.0	320	16.00	40.00	370.00	5000.00	1000	120.00
MINIMUM				1	0.7	100K	1.00K	5.00K	10.00K	400.00	40K	10.00K
SUM				605	95.8	7980	198.00	415.00	3940.00	53470.00	11830	2158.00
SUM SQ.				6069	331.9	1110200	1320.00	4145.00	432000.00	1.362E+06	5606300	123910.00
MEAN				6	2.7	121	3.14	6.38	60.62	1527.71	320	33.20
VARIANCE				24	2.0	2236	11.25	23.37	3643.37	1.602E+06	50664	816.63
STD.DEV.				5	1.4	47	3.35	4.83	60.36	1265.83	225	28.58
STD.ERR.				0	0.2	6	0.42	0.60	7.49	213.96	37	3.54
COEF VAR				81	52.3	39	106.74	75.71	99.58	82.86	70	86.07
LOG MEAN				4	2.3	115	2.11	5.77	40.62	1147.24	241	23.96
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600045 DIXON CREEK 0.3

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
750918	C850			7	260.00	180.0	90.00	80.00			100	110
751016	1036			1	340.00	300.0	50.00K	50.00	223	59	420	240
751016	1040			5	400.00	360.0	50.00K	20.00			420	220
751016	1042			9	360.00	320.0	60.00	60.00			220	150
751113	C940			1	120.00	80.0	50.00K	80.00	540	213	340	250
751113	C945			5	120.00	90.0	60.00	120.00			370	240
751113	0955			10	120.00	100.0	100.00	100.00			370	240
751216	1020			1	160.00	120.0	50.00K	20.00	1000L	1000L	350	220
751216	1030			5	160.00	130.0	50.00K	20.00			370	230
751216	1035			10	180.00	120.0	50.00K	20.00			370	220
760131												
NUMBER				99	65	35	64	65	22	21	35	63
MAXIMUM				20	1800.00	440.0	420.00	320.00	1900L	1000L	420	370
MINIMUM				1	50.00	30.0	20.00K	0.40K	8K	1K	55	50
SUM				605	17505.00	8100.0	4580.00	5155.40	8532	3461	6358	11150
SUM SQ.				6069	9.333E+06	1618000.0	561400.00	693925.13	8193754	1655501	1626506	2199100
MEAN				6	269.31	174.3	71.56	79.31	388	165	182	177
VARIANCE				24	72160.88	18260.5	3708.63	4453.61	232614	54255	13869	3641
STD.DEV.				5	268.63	127.5	60.90	66.74	482	233	118	60
STD.ERR.				0	33.32	21.6	7.61	8.28	103	51	20	8
COEF VAR				81	99.75	73.2	85.10	84.14	124	141	65	34
LOG MEAN				4	200.13	125.8	60.94	53.16	179	55	150	165
751216												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
761207	0900			16	50	7.5	2	160	10.50			7.70
761207	0905			26	50	7.8		170	10.50			7.70
761207	0910			36	50	7.8		170	10.50			7.70
761228	0839			1	50	5.5	3	180	12.40			8.10
761228	0841			3	50	5.5		180	12.00			8.20
761228	0843			5	50	5.5		180	11.90			8.00
761228	0845			10	50	5.5		180	11.70			8.00
761228	0847			16	50	5.5	4	180	11.60			8.00
761228	0849			26	50	5.5		180	11.60			8.00
761228	0851			36	50	5.5		180	11.50			8.00
760225												
NUMBER				65		65	20	62	65	8	11	65
MAXIMUM				36		22.3	21	190	13.50	1.3	9.0	8.20
MINIMUM				1		5.5	2	160	6.40	1.0R	3.0	7.20
SUM				816		1001.1	140	11070	581.70	8.8	62.0	490.70
SUM SQ.				18032		17556.5	1760	1979900	5494.51	9.8	394.0	3709.09
MEAN				13		15.4	7	179	8.95	1.1	5.6	7.55
VARIANCE				122		33.4	41	55	4.51	0.0	4.5	0.07
STD.DEV.				11		5.8	6	7	2.12	0.1	2.1	0.27
STD.ERR.				1		0.7	1	1	0.26	0.1	0.6	0.03
COEF VAR				88		37.5	92	4	23.74	12.9	37.4	3.60
LOG MEAN				7		14.1	5	178	8.72	1.1	5.3	7.54
761228												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
760225	0825			1	59.0	0	10	0.090	0.09	0.39	0.050	0.01
760225	0840			16	50.0	0	9	0.270	0.03	0.39	0.040	0.01
760428	0920			1	59.0	0	2	0.070	0.02	0.29	0.030	0.01
760428	0930			16	55.0	0	3	0.150	0.02	0.29	0.030	0.01
760525	0922			1	60.0	0	3	0.100	0.02	0.38	0.030	0.03
760525	0930			16	59.0	0	1R	0.070	0.02	0.38	0.030	0.02
760629	0822			1	65.0	0	17	0.120	0.04	0.39	0.050	0.01
760629	0830			16	60.0	0	17	0.150	0.04	0.40	0.050	0.01
760727	0820			1	42.0	0	6	0.080	0.03	0.32	0.030	0.02
760727	0829			16	47.0	0	8	0.070	0.03	0.31	0.030	
760824	0930			1	51.0	0	5	0.130	0.01	0.24	0.030	0.01
760824	0938			16	49.0	0	6	0.080	0.02	0.23	0.030	0.01
760921	0835			1	49.0	0	10	0.080	0.03	0.19	0.020	0.01R
760921	0841			16	48.0	0	10	0.090	0.02	0.41	0.020	0.01R
761027	0857			1	66.0	0	8	0.150	0.03	0.28	0.070	0.04
761027	0910			16	65.0	0	9	0.140	0.06	0.27	0.080	0.03
761207	0852			1	47.0	0	2	0.090	0.01	0.20	0.020	0.10R
761207	0900			16	45.0	0	3	0.090	0.01	0.20	0.020	0.01R
761228	0839			1	53.0	0	1	0.090	0.01	0.26	0.020	0.01
761228	0847			16	54.0	0	2	0.080	0.01	0.25	0.020	0.05R

APPENDIX A.2

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L
760225	0825			1	1.00K	5.00K	10.00K	1200.00	50K	10.00K	60.00
760225	0840			16	1.00K	5.00K	10.00K	1400.00	60	10.00K	90.00
760428	0920			1				360.00	50K		40.00
760428	0930			16				400.00	50K		60.00
760525	0922			1	1.00K	5.00K	10.00K	540.00	50K	10.00K	60.00
760525	0930			16	1.00K	5.00K	10.00K	470.00	50K	10.00K	20.00
760629	0822			1				880.00	50		40.00
760629	0830			16				1000.00	70		60.00
760727	0826			1				510.00	50K		40.00
760727	0829			16				430.00	50K		40.00
760824	0930			1	1.00K	5.00	50.00	5900.00	50K	10.00K	190.00
760824	0938			16	1.00K	5.00K	50.00	260.00	50K	10.00K	60.00
760921	0835			1				360.00			
760921	0841			16				250.00	50K		
761027	0857			1	1.00K	5.00K	70.00	11000.00	50K	31.00	450.00
761027	0910			16	1.00K	5.00K	30.00	640.00	50K	10.00K	60.00
761207	0852			1				160.00	50K		
761207	0900			16				100.00	50K		
761228	0839			1				170.00	90		
761228	0847			16				200.00	50K		
760225											
NUMBER				65	8	8	8	20	19	8	14
MAXIMUM				36	1.00K	5.00	70.00	11000.00	90	31.00	450.00
MINIMUM				1	1.00K	5.00K	10.00K	100.00	50K	10.00K	20.00
SUM				816	8.00	40.00	240.00	26230.00	1020	101.00	1270.00
SUM SQ.				18032	8.00	200.00	11200.00	1.630E+08	56600	1661.00	275100.00
MEAN				13	1.00	5.00	30.00	1311.50	54	12.63	90.71
VARIANCE				122	0.00	0.00	571.43	6.769E+06	202	55.13	12299.45
STD.DEV.				11	0.00	0.00	23.90	2601.67	10	7.42	110.90
STD.ERR.				1	0.00	0.00	8.45	581.75	2	2.62	29.64
COEF VAR				88	0.00	0.00	79.68	198.37	19	58.81	122.26
LOG MEAN				7	1.00	5.00	21.88	549.34	53	11.52	63.77
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
760225	0825			1	10.0K	50.00K	10.00K	90	90	68	100
760225	0840			16	10.0K	50.00K	20.00			68	100
760428	0920			1	10.0K					86	70
760428	0930			16	10.0K					82	180
760525	0922			1	10.0K	50.00K	20.00	10K	100K	67	90
760525	0930			16	20.0	50.00K	20.00			67	90
760629	0822			1	30.0					59	
760629	0830			16	20.0					84	
760727	0826			1	10.0K					59	
760727	0829			16	10.0K					57	
760824	0930			1	10.0K	50.00K	60.00	40	10	63	90
760824	0938			16	10.0K	50.00K	10.00	30	10	66	90
760921	0835			1						93	
760921	0841			16						76	
761027	0857			1	10.0K	70.00	5600.00		400	77	110

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
760225	0825			1	50	11.2	18	170	13.20	1.0R	4.0	8.00
760225	0827			3	50	11.5			13.30			8.00
760225	0830			5	50	11.6			13.40			8.00
760225	0835			10	50	11.5			13.50			8.00
760225	0840			16	50	11.5	18	160	13.50	1.0R	4.0	8.00
760428	0920			1	50	14.8	3	180	9.90		4.0	7.50
760428	0922			3	50	14.8		180	9.70			7.60
760428	0924			5	50	14.8		180	9.60			7.60
760428	0927			10	50	14.8		180	9.60			7.60
760428	0930			16	50	14.8	4	180	9.60		5.0	7.60
760428	0934			26	50	14.8		180	9.40			7.60
760525	0922			1	50	15.3	4	180	8.40	1.0R	6.0	7.60
760525	0924			5	50	15.2		180	8.40			7.60
760525	0927			10	50	15.0		180	8.40			7.60
760525	0930			16	50	14.8	4	180	8.40	1.0R	9.0	7.60
760525	0937			20	50	14.8		180	8.40			7.60
760629	0822			1	50	21.1	20	180	6.60			7.30
760629	0824			3	50	21.1		180	6.60			7.40
760629	0826			5	50	21.1		180	6.60			7.30
760629	0828			10	50	21.0		180	6.60			7.30
760629	0830			16	50	21.0	21	180	6.60			7.30
760629	0832			26	50	21.0		180	6.60			7.30
760629	0834			33	50	21.0		180	6.60			7.30
760727	0820			1	50	21.4	5	180	7.20			7.30
760727	0822			3	50	21.2		180	7.20			7.40
760727	0824			5	50	21.2		180	7.20			7.40
760727	0828			10	50	21.1		180	7.20			7.40
760727	0829			16	50	21.1	5	180	7.30			7.30
760727	0832			26	50	21.0		180	7.30			7.30
760727	0834			33	50	21.0		170	7.30			7.30
760824	0930			1	50	22.3	4	180	6.90	1.2	3.0	7.30
760824	0932			3	50	22.2		180	6.80			7.40
760824	0934			5	50	22.0		180	6.60			7.30
760824	0936			10	50	22.0		180	6.60			7.30
760824	0938			16	50	22.0	4	180	6.60	1.3	4.0	7.20
760824	0940			26	50	21.9		180	6.50			7.20
760824	0943			36	50	21.8		180	6.40			7.20
760921	0835			1	50	20.1	3	180	8.40		9.0	7.40
760921	0836			3	50	20.1		180	8.10			7.50
760921	0837			5	50	20.2		180	8.00			7.40
760921	0839			10	50	20.2		180	8.00			7.40
760921	0841			16	50	20.2	8	180	7.90			7.40
760921	0843			26	50	20.2		180	7.80			7.40
760921	0845			36	50	20.2		180	7.80			7.40
761027	0857			1	50	14.0	4	190	9.20	1.0R	7.0	7.40
761027	0859			3	50	14.0		190	8.70			7.40
761027	0901			5	50	14.0		190	8.40			7.40
761027	0905			10	50	14.0		190	8.20			7.30
761027	0910			16	50	14.0	5	190	8.10	1.3	7.0	7.30
761027	0915			26	50	14.2		190	8.00			7.30
761027	0922			31	50	14.2		190	7.80			7.40
761207	0852			1	50	7.3	4	160	11.00			7.80
761207	0854			3	50	7.3		160	10.70			7.70
761207	0856			5	50	7.3		160	10.70			7.70
761207	0858			10	50	7.5		160	10.70			7.70

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00339 COD MUD DRY WGT MG/KG	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
760225											
NUMBER				65	20	20	1	20	1	8	8
MAXIMUM				36	11	37		2.6		5.0	13
MINIMUM				1	1	5		1.2		3.5	2K
SUM				816	109	293		34.0		32.6	45
SUM SQ.				1803	789	5887		61.9		134.9	323
MEAN				13	5	15		1.7		4.1	6
VARIANCE				122	10	89		0.2		0.3	10
STD.DEV.				11	3	9		0.5		0.5	3
STD.ERR.				1	1	2		0.1		0.2	1
COEF VAR				88	59	63		27.9		13.3	56
LOG MEAN				7	4	13		1.6		4.0	5
761228											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 660042 CUMBERLAND RIVER 276.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
760225												
NUMBER				65	20	20	20	20	20	20	20	19
MAXIMUM				36	66.0	0	17	0.270	0.09	0.41	0.080	0.10
MINIMUM				1	42.0	0	1K	0.070	0.01	0.19	0.020	0.01K
SUM				816	1083.0	0	132	2.190	0.55	6.07	0.700	0.41
SUM SQ.				18032	59613.0	0	1306	0.262	0.02	1.95	0.030	0.02
MEAN				13	54.1	0	7	0.109	0.03	0.30	0.035	0.02
VARIANCE				122	51.0	0	23	0.002	0.00	0.01	0.000	0.00
STD.DEV.				11	7.1	0	5	0.047	0.02	0.07	0.017	0.02
STD.ERR.				1	1.6	0	1	0.011	0.00	0.02	0.004	0.01
COEF VAR				88	13.2	0	72	93.088	70.66	24.57	48.611	103.93
LOG MEAN				7	53.7	0	5	0.103	0.02	0.29	0.032	0.02
761228												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00916 CALCIUM CA-TOT MG/L	00927 MAGNESIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 POTASSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L
760225	0825			1	20.0	4.50	3.10	1.20	4	14	50
760225	0840			16	20.0	4.50	3.00	1.20	4	14	30
760428	0920			1	27.0	4.40			4		
760428	0930			16	26.0	4.20			3		
760525	0922			1	21.0	3.50	2.20	0.90	4	18	40
760525	0930			16	21.0	3.50	2.20	0.80	3	18	20
760629	0822			1	16.0	4.70			3		
760629	0830			16	26.0	4.60			3		
760727	0820			1	17.0	4.10			3		
760727	0829			16	16.0	4.10			3		
760824	0930			1	19.0	3.80	2.40	1.20	3	24	110
760824	0938			16	20.0	3.90	2.90	1.20	3	22	100
760921	0835			1	29.0	5.00			5		
760921	0841			16	23.0	4.60			4		
761027	0857			1	25.0	3.60	2.10	0.90	4	29	140
761027	0910			16	23.0	5.20	2.70	1.10	4	30	100
761207	0852			1	19.0	4.80			4		
761207	0900			16	21.0	4.70			5		
761228	0839			1	23.0	5.00			4		
761228	0847			16	23.0	5.10			4		
760225											
NUMBER				65	20	20	8	8	20	8	8
MAXIMUM				36	29.0	5.20	3.10	1.20	5	30	140
MINIMUM				1	16.0	3.50	2.10	0.80	3	14	20
SUM				816	435.0	87.80	20.60	8.50	74	169	590
SUM SQ.				18032	9709.0	390.82	54.16	9.23	282	3841	57100
MEAN				13	21.8	4.39	2.57	1.06	4	21	74
VARIANCE				122	13.0	0.28	0.16	0.03	0	39	1941
STD.DEV.				11	3.6	0.53	0.40	0.17	1	6	44
STD.ERR.				1	0.8	0.12	0.14	0.06	0	2	16
COEF VAR				88	16.6	12.12	15.50	15.86	18	29	60
LOG MEAN				7	21.5	4.36	2.55	1.05	4	20	61
761228											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01147 SELENIUM SE,TOT UG/L	01148 SELENIUM SEDMG/KG DRY WGT	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE	71900 MERCURY HG,TOTAL UG/L	71921 MERCURY SEDMG/KG DRY WGT	80111 NITROGEN DRY WGT MG/KG
760225	0825			1	2.00K		1000K		0.20K		
760225	0840			16	2.00K		1000K		0.20K		
760525	0922			1	2.00K		1000K		0.20K		
760525	0930			16	2.00K		1000K		0.20K		
760824	0930			1	1.00K		1000K		0.20K		
760824	0938			16	1.00K		1000K		0.20K		
760824	0945					1.00K		27000.00		0.10K	52.0
761027	0857			1	1.00K		1000K		0.20K		
761027	0910			16	1.00K		1000K		0.20K		
760225											
NUMBER				10	8	1	8	1	8	1	1
MAXIMUM				16	2.00K		1000K		0.20K		
MINIMUM				1	1.00K		1000K		0.20K		
SUM				85	12.00		8000		1.60		
SUM SQ.				1285	20.00		8000000		0.32		
MEAN				9	1.50		1000		0.20		
VARIANCE				63	0.29		0		0.00		
STD.DEV.				8	0.53		0		0.00		
STD.ERR.				3	0.19		0		0.00		
COEF VAR				93	35.63		0		0.08		
LOG MEAN				9	1.41		1000		0.20		
761027											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG PG/L	70300 RESIDUE DISS-180 C MG/L
761027	0910			16	10.0K	50.00K	50.00			79	110
761207	0852			1						67	
761207	0900			16						72	
761228	0839			1						78	
761228	0847			16						78	
760225											
NUMBER				65	14	8	8	4	5	20	10
MAXIMUM				36	30.0	70.00	5600.00	90	400	93	180
MINIMUM				1	10.0K	50.00K	10.00K	10K	10K	57	70
SUM				816	180.0	420.00	5790.00	170	610	1496	1030
SUM SQ.				18032	2800.0	22400.00	3.137E+07	10700	178300	106374	113900
MEAN				13	12.9	52.50	723.75	43	122	72	103
VARIANCE				122	37.4	50.00	3.882E+06	1158	25970	96	868
STD.DEV.				11	6.1	7.07	1970.39	34	161	10	29
STD.ERR.				1	1.6	2.50	696.64	17	72	2	9
COEF VAR				88	47.5	13.47	272.25	80	132	14	29
EDS MEAN				7	11.9	52.15	43.76	32	51	72	100
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	30339 COD MUD DRY WGT MG/KG	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS TOT UG/L
760225	0825			1	9	25		1.7		5.0	5K
760225	0840			16	8	26		1.7		4.8	5K
760428	0920			1	1	9		1.5			
760428	0930			16	1	9		2.6			
760525	0922			1	2	8		1.3		4.0	5K
760525	0930			16	2	10		1.2		4.0	5K
760629	0822			1	11	37		2.6			
760629	0830			16	11	34		2.6			
760727	0820			1	8	15		1.9R			
760727	0829			16	8	15		2.2R			
760824	0930			1	5	14		1.2		3.9	5K
760824	0938			16	3	14		1.3		3.8	5K
760824	0945						42000		9		
760921	0835			1	7	13		1.6			
760921	0841			16	7	13		1.5			
761027	0857			1	2	12		1.9		3.6	2K
761027	0910			16	2	12		1.7		3.5	13
761207	0852			1	5	5		1.3			
761207	0900			16	7	7		1.3			
761228	0839			1	5	7		1.5			
761228	0847			16	5	6		1.4			

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY T 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
770628	0940			10	50	20.4		60	7.00			7.20
770628	0950			16	50	19.5	12	160	7.00			7.10
770628	0951			16	50	19.6	14	160	7.00			7.10
770629	0945			1	25	24.5	15	170	6.80			7.20
770629	0950			1	50	22.5	13	170	7.00			7.20
770629	0953			1	75	23.5	12	170	6.80			7.20
770726	0720			2	50	24.5	10	140	7.00			7.50
770726	0722			3	50	24.5		140	7.00			7.40
770726	0724			5	50	24.5		140	7.00			7.40
770726	0726			10	50	23.5		140	7.00			7.40
770726	0730			16	50	23.5	13	140	7.00			7.30
770726	0732			23	50	23.5		140	7.00			7.30
770726	0735			30	50	21.5		140	7.00			7.20
770726	0739			36	50	21.5		140	7.00			7.20
770727	0900			1	25	22.0	17	140	7.20			7.20
770727	0904			1	50	21.5	17	140	7.20			7.20
770727	0906			1	75	21.5	17	140	7.20			7.20
770817	1435			1	25	21.0	11	140	6.40			7.10
770817	1438			1	50	20.5	10	140	6.40			7.20
770817	1440			1	75	20.5	10	140	6.40			7.10
770823	1337			1	25	25.6	11	140	8.30			7.80
770823	1340			1	50	26.5	5	140	9.30			8.20
770823	1343			1	75	27.5	5	140	10.20			8.40
770824	0830			2	50	24.3	5	160	7.40	2.2	8.0	7.60
770824	0832			3	50	24.3		160	7.30			7.40
770824	0835			5	50	24.1		160	7.20			7.40
770824	0837			10	50	24.1		160	7.10			7.40
770824	0840			16	50	24.1	4	170	7.10	2.2	9.0	7.30
770824	0842			26	50	24.1		170	7.10			7.30
770824	0845			36	50	24.1		170	7.00			7.30
770914	1620			1	25	21.5	12	150	7.70			7.30
770914	1623			1	50	21.5	11	150	7.80			7.50
770914	1625			1	75	21.5	10	150	7.90			7.40
770927	1536			1	25	20.5	37	170	5.90			7.20
770927	1540			1	50	20.6	32	170	6.00			7.30
770927	1544			1	75	20.6	34	170	6.00			6.30
770928	0930			1	50	19.4	17	200	7.10			6.30
770928	0932			3	50	19.4		200	6.90			6.00
770928	0934			5	50	19.2		200	6.90			6.10
770928	0936			10	50	19.1		200	6.80			6.20
770928	0938			16	50	19.1	17	200	6.80			6.30
770928	0940			23	50	19.1		200	6.80			6.40
770928	0942			30	50	19.1		200	6.70			6.50
770928	0944			33	50	19.1		200	6.70			6.60
771026	1247			1	25	15.5	16	150	6.80			7.00
771026	1250			1	50	15.5	12	150	6.80			7.00
771026	1252			1	75	15.5	14	150	6.80			7.00
771027	0842			2	50	15.6	11	160	6.60	1.0K	6.0	7.10
771027	0844			3	50	15.6		160	6.60			7.10
771027	0846			5	50	15.6		160	6.60			7.10
771027	0848			10	50	15.6		160	6.60			7.10

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600062 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01003 ARSENIC SED MG/KG DRY WGT	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SED MG/KG DRY WGT	01043 COPPER SED MG/KG DRY WGT	01047 FERROUS IRON UG/L	01052 LEAD SED MG/KG DRY WGT
760225	0825			1		100K	10.00K				40	
760225	0840			16		100K	10.00K				30	
760428	0920			1							30	
760428	0930			16							40	
760525	0922			1		100K	10.00K				40	
760525	0930			16		100K	10.00K				20K	
760824	0930			1		100K	10.00K					
760824	0938			16		100K	10.00K					
760824	0945				8.00			1.00K	19.00	30.00		26
761027	0857			1		100K	10.00K					
761027	0910			16		100K	10.00K					
760225												
NUMBER				10	1	8	8	1	1	1	6	1
MAXIMUM				16		100K	10.00K				40	
MINIMUM				1		100K	10.00K				20K	
SUM				85		800	80.00				200	
SUM SQ.				1285		80000	800.00				7000	
MEAN				9		100	10.00				33	
VARIANCE				63		0	0.00				67	
STD.DEV.				8		0	0.00				8	
STD.ERR.				3		0	0.00				3	
COEF VAR				93		0	0.00				24	
LOG MEAN				4		100	10.00				32	
761027												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01053 MN MUD DRY WGT MG/KG-MN	01068 NICKEL SED MG/KG DRY WGT	01077 SILVER AG,TOT UG/L	01093 ZINC SED MG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L
760225	0825			1			10K		790		10K
760225	0840			16			10K		1100		10K
760525	0922			1			10K		200		10K
760525	0930			16			10K		200		10K
760824	0930			1			10K		1400		10K
760824	0938			16			10		300		10K
760824	0945				1400	24.00		92.00		8300.00	
761027	0857			1			10K		3100		10K
761027	0910			16			10K		300		10K
760225											
NUMBER				10	1	1	8	1	8	1	8
MAXIMUM				16			10		3100		10K
MINIMUM				1			10K		200		10K
SUM				85			80		7290		80
SUM SQ.				1285			800		13454100		800
MEAN				9			10		911		10
VARIANCE				63			0		973613		0
STD.DEV.				8			0		986		0
STD.ERR.				3			0		349		0
COEF VAR				93			0		108		0
LOG MEAN				4			10		577		10
761027											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LEIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
770216	0942			1	67.0	0	3	0.040	0.02	0.30	0.030
770216	1000			16	70.0	0	3	0.020	0.04	0.30	0.030
770216	1020			1			4				
770216	1021			1			4				
770216	1030			1			4				
770314	1556			1			30				
770314	1559			1			27				
770314	1601			1			19				
770322	0905			1	64.0	0	19	0.100	0.02	0.36	0.050
770322	0920			16	60.0	0	17	0.110	0.01	0.36	0.050
770323	0925			1			11				
770323	0930			1			14				
770323	0951			1			18				
770404	1428			1			140				
770404	1432			1			120				
770404	1436			1			120				
770427	1444			1			18				
770427	1447			1			17				
770427	1448			1			18				
770428	0855			2	61.0	0	21	0.100	0.01K	0.38	0.030
770428	0905			16	64.0	0	23	0.060	0.02	0.38	0.030
770523	1506			1			14				
770523	1507			1			19				
770523	1510			1			7				
770524	0900			2	46.0	0	51	0.110	0.02	0.46	0.180
770524	0910			16	46.0	0	56	0.120	0.02	0.47	0.170
770628	0925			1	58.0	0	13	0.080	0.03	0.47	0.090
770628	0950			16	55.0	0	14	0.060	0.02	0.37	0.040
770628	0951			16	53.0	0	13	0.060	0.02	0.38	0.050
770629	0945			1			12				
770629	0950			1			11				
770629	0953			1			13				
770726	0720			2	44.0	0	4	0.100	0.03	0.28	0.020
770726	0730			16	45.0	0	7	0.110	0.02	0.28	0.020
770727	0900			1			6				
770727	0904			1			7				
770727	0906			1			7				
770817	1435			1			13				
770817	1438			1			13				
770817	1440			1			13				
770823	1337			1			11				
770823	1340			1			10				
770823	1343			1			9				
770824	0830			2	50.0	0	5	0.120	0.01	0.20	0.020
770824	0840			16	50.0	0	5	0.100	0.01	0.21	0.030
770914	1620			1			15				
770914	1623			1			10				
770914	1625			1			10				
770927	1536			1			36				
770927	1540			1			22				
770927	1544			1			29				

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STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
770216	0942			1	50	3.6	5	210	13.10	1.0K	5.0	8.00
770216	0945			3	50	3.6		210	12.90			8.00
770216	0950			5	50	3.6		210	12.90			7.90
770216	0955			10	50	3.6		210	12.90			7.90
770216	1000			16	50	3.6	7	210	12.90	1.0K	6.0	7.90
770216	1005			26	50	3.6		210	12.90			7.90
770216	1010			33	50	3.5		210	12.90			7.90
770216	1020			1	25	3.5	3	210	13.20			8.20
770216	1023			1	50	3.5	5	210	13.20			8.20
770216	1030			1	75	3.5	3	210	13.00			8.00
770314	1556			1	25	7.4	20	210	11.00			7.40
770314	1559			1	50	9.5	18	210	11.10			7.50
770314	1601			1	75	5.3	19	210	11.30			7.50
770322	0905			1	50	9.8	13	200	9.90			7.60
770322	0907			3	50	9.8		200	9.70			7.60
770322	0910			5	50	9.8		200	9.70			7.60
770322	0915			10	50	9.8		200	9.60			7.60
770322	0920			16	50	9.8	13	200	9.60			7.60
770322	0925			26	50	9.8		200	9.60			7.60
770322	0927			30	50	9.8		200	9.60			7.60
770323	0925			1	50	9.0	9	200	10.00			7.40
770323	0930			1	75	9.0	9	200	9.80			7.50
770323	0951			1	25	9.0	9	200	9.80			7.60
770404	1428			1	25	11.0	65	200	9.10			7.90
770404	1432			1	50	11.0	70	200	8.90			8.00
770404	1436			1	75	11.1	70	200	8.90			8.00
770427	1444			1	25	12.3	16	160	8.00			7.50
770427	1447			1	50	12.3	17	160	7.90			7.60
770427	1448			1	75	12.3	16	160	7.90			7.60
770428	0855			2	50	12.5	19	160	9.70			7.70
770428	0857			3	50	12.5		160	10.00			7.70
770428	0900			5	50	12.5		160	10.00			7.70
770428	0902			10	50	12.5		160	10.00			7.60
770428	0905			16	50	12.5	19	160	10.00			7.60
770428	0907			23	50	12.5		160	10.00			7.60
770428	0910			30	50	12.5		160	10.00			7.60
770428	0915			36	50	12.5		160	10.00			
770523	1504			1	25	21.0	25	150	8.60			7.40
770523	1507			1	50	21.0	24	160	8.80			7.50
770523	1510			1	75	22.5	24	160	8.90			7.50
770524	0900			2	50	18.0	60	160	7.70	1.4	5.0	7.30
770524	0902			3	50	17.5		160	7.70			7.30
770524	0904			5	50	17.5		160	7.70			7.30
770524	0906			10	50	17.5		160	7.70			7.30
770524	0910			16	50	17.5	60	160	7.70	1.2	3.0	7.30
770524	0912			23	50	17.5		160	7.60			7.30
770524	0915			30	50	17.5		160	7.60			7.30
770524	0920			36	50	17.5		160	7.60			7.30
770628	0925			1	50	21.2	13	170	7.10			7.20
770628	0930			3	50	20.5		160	7.00			7.20
770628	0935			5	50	20.5		160	6.90			7.20

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

S...3N - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
771027	0842			2	0.01	18.0	4.70	2.20	1.20	4	19
771027	0850			16	0.01	18.0	4.60	2.50	1.20	4	19
771129	0840			2	0.03	29.0	4.80			3	
771129	0850			16	0.03	32.0	5.00			3	
771222	0850			2	0.01	17.0	3.70			3	
771222	0905			16	0.01	23.0	4.50			2	
770216											
NUMBER				124	23	23	23	8	8	23	8
MAXIMUM				36	0.76	36.0	6.30	3.00	2.30	6	28
MINIMUM				1	0.01K	17.0	3.70	2.20	1.20	2	16
SUM				1211	2.24	557.0	108.20	24.30	12.50	92	168
SUM SQ.				27505	1.17	14319.0	518.26	75.61	21.05	382	3452
MEAN				10	0.10	24.2	4.70	3.04	1.56	4	21
VARIANCE				127	0.04	37.7	0.42	0.26	0.22	1	18
STD.DEV.				11	0.21	6.1	0.65	0.51	0.47	1	4
STD.ERR.				1	0.04	1.3	0.14	0.18	0.16	0	1
COEF VAR				116	213.33	25.4	13.78	16.69	29.81	20	20
LOG MEAN				4	0.03	23.5	4.66	3.00	1.51	4	21
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
770216	0942			1	110	1.00K	5.00K	40.00	390.00	50K	10.00K
770216	1000			16	140	1.00K	5.00K	10.00K	410.00	50K	10.00K
770322	0905			1					720.00	50K	
770322	0920			16					880.00	50K	
770428	0855			2					700.00	50K	
770428	0905			16					670.00	50K	
770529	0900			2	110	1.00K	5.00K	30.00	2000.00	50K	10.00K
770529	0910			16	230	1.00K	5.00K	10.00K	1900.00	50K	10.00K
770628	0925			1					740.00	50K	
770628	0950			16					620.00	50K	
770628	0951			16					1000.00	50K	
770726	0720			2					780.00	50K	
770726	0730			16					530.00	50K	
770824	0830			2	30	1.00K	5.00K	10.00K	260.00	50K	10.00K
770824	0840			16	90	1.00K	5.00	10.00K	80.00	50K	10.00K
770926	0930			1					340.00	70	
770926	0936			16					520.00	110	
771027	0842			2	60	1.00K	5.00K	10.00	430.00	50K	10.00K
771027	0850			16	60	1.00K	5.00K	20.00	530.00	50K	10.00K
771129	0840			2					760.00	50K	
771129	0850			16					110.00	50K	
771222	0850			2					430.00	50K	
771222	0905			16					510.00	50K	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
771027	0850			16	50	15.6	11	160	6.60	1.0	7.0	7.10
771027	0852			23	50	15.6		160	6.60			7.00
771027	0854			30	50	15.6		160	6.50			7.00
771128	1249			1	25	11.0	33	120	8.90			7.20
771128	1253			1	50	11.0	23	140	9.30			7.20
771128	1255			1	75	11.0	22	140	9.00			7.20
771129	0840			2	50	11.0	22	120	9.60			7.50
771129	0842			3	50	11.0		110	9.30			7.50
771129	0844			5	50	11.0		110	9.20			7.50
771129	0846			10	50	11.0		110	9.10			7.40
771129	0850			16	50	11.5	23	110	9.10			7.40
771129	0852			23	50	11.5		110	9.00			7.40
771129	0854			30	50	11.5		110	9.00			7.40
771129	0900			36	50	11.5		110	9.00			7.40
771222	0850			2	50	9.4	13	160	9.90			7.40
771222	0852			3	50	9.5		160	9.70			7.40
771222	0855			5	50	9.5		160	9.70			7.40
771222	0900			10	50	9.5		160	9.70			7.40
771222	0905			16	50	9.5	17	160	9.70			7.40
771222	0908			23	50	9.5		160	9.60			7.40
771222	0912			30	50	9.5		160	9.60			7.30
771222	0916			36	50	9.5		160	9.60			7.30
770216												
NUMBER				124		124	65	124	124	8	8	12.
MAXIMUM				36		28.5	70	210	13.20	2.2	9.0	8.40
MINIMUM				1		3.5	3	110	5.90	1.0R	3.0	6.0
SUM				1211		1904.0	1220	20550	1056.69	11.0	99.0	905.9
SUM SQ.				27505		33792.6	37978	3497700	9435.46	17.1	325.0	6887.95
MEAN				10		15.4	19	166	8.52	1.4	6.1	7.36
VARIANCE				127		37.1	236	748	3.50	0.3	3.6	0.17
STD.DEV.				11		6.1	15	27	1.87	0.5	1.9	0.41
STD.ERR.				1		0.5	2	2	0.17	0.2	0.7	0.04
COEF VAR				116		39.6	82	17	21.96	38.4	30.8	5.63
LOG MEAN				9		13.8	15	163	8.34	1.3	5.8	7.35
771222												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L
770216											
NUMBER				124	8	8	8	8	5	5	23
MAXIMUM				36	100.00	60.0	50.00K	40.00	2030	1490	110
MINIMUM				1	10.00K	10.0K	50.00K	10.00K	10K	10K	58
SUM				1211	410.00	150.0	400.00	160.00	2660	1570	1845
SUM SQ.				27505	27700.00	5100.0	20000.00	4200.00	4481200	2222900	154921
MEAN				10	51.25	18.8	50.00	20.00	532	314	80
VARIANCE				127	955.36	326.8	0.00	142.86	766520	432480	315
STD.DEV.				11	30.91	18.1	0.00	11.95	876	658	18
STD.ERR.				1	10.93	6.4	0.00	4.23	392	294	4
COEF VAR				116	60.31	96.4	0.00	59.76	165	209	22
LOG MEAN				4	41.62	14.4	50.00	17.07	66	38	28
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLDC DEPTH METERS	00680 T ORG C C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
770216	0942			1	140	5	10		1.6	2.8	2K
770216	1000			16	130	5	10		1.5	2.8	2K
770216	1020			1				0.30			
770216	1023			1				0.30			
770216	1030			1				0.30			
770314	1556			1				0.30			
770314	1559			1				0.30			
770314	1601			1				0.30			
770322	0905			1		7	15		2.0		
770322	0920			16		8	35		1.2		
770323	0925			1				0.30			
770323	0930			1				0.30			
770323	0951			1				0.30			
770404	1428			1				0.30			
770404	1432			1				0.30			
770404	1436			1				0.30			
770427	1444			1				0.30			
770427	1447			1				0.30			
770427	1448			1				0.30			
770428	0855			2		6	19		1.6		
770428	0905			16		5	45		2.4		
770523	1504			1				0.30			
770523	1507			1				0.30			
770523	1510			1				0.30			
770524	0900			2	110	10	140		4.2	3.7	2K
770524	0910			16	110	12	140		3.7	3.9	2K
770628	0925			1		11	37		2.3		
770628	0950			16		12	37		2.0		
770628	0951			16		11	35		1.6		
770629	0945			1				0.30			
770629	0950			1				0.30			

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PHTHLEIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
770928	0930			1	69.0	0	19	0.120	0.04	0.43	0.110
770928	0938			16	67.0	0	21	0.130	0.07	0.41	0.100
771026	1247			1			17				
771026	1250			1			6				
771026	1252			1			13				
771027	0842			2	48.0	0	9	0.040	0.02	0.35	0.030
771027	0850			16	49.0	0	10	0.040	0.02	0.35	0.030
771128	1249			1			27				
771128	1253			1			26				
771128	1255			1			24				
771129	0840			2	66.0	0	24	0.110	0.01	0.45	0.070
771129	0850			16	71.0	0	24	0.060	0.12	0.45	0.070
771222	0850			2	55.0	0	11	0.100	0.06	0.43	0.030
771222	0905			16	56.0	0	12	0.060	0.01	0.43	0.030
770216											
	NUMBER			124	23	23	65	23	23	23	23
	MAXIMUM			36	71.0	0	140	0.130	0.12	0.47	0.180
	MINIMUM			1	44.0	0	3	0.020	0.01K	0.20	0.020
	SUM			1211	1316.0	0	1348	1.950	0.65	8.50	1.310
	SUM SQ.			27505	77074.0	0	69944	0.186	0.03	3.28	0.120
	MEAN			10	57.2	0	21	0.085	0.03	0.37	0.057
	VARIANCE			127	80.7	0	656	0.001	0.00	0.01	0.002
	STD.DEV.			11	9.0	0	26	0.032	0.03	0.08	0.045
	STD.ERR.			1	1.9	0	3	0.007	0.01	0.02	0.009
	COEF VAR			116	15.7	0	124	37.950	89.68	21.20	79.483
	LOG MEAN			4	56.5	0	14	0.077	0.02	0.36	0.045
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
770216	0942			1	0.01	28.0	5.60	3.60	1.30	4	22
770216	1000			16	0.01	29.0	5.40	3.50	1.30	4	21
770322	0905			1	0.76R	32.0	6.20			4	
770322	0920			16	0.73R	34.0	6.30			4	
770428	0855			2	0.01	20.0	4.50			4	
770428	0905			16	0.01	22.0	4.30			4	
770529	0900			2	0.03	21.0	4.90	2.70	2.30	4	28
770529	0910			16	0.02	20.0	4.90	3.30	2.30	6	26
770628	0925			1	0.09	24.0	4.20			4	
770628	0950			16	0.09R	20.0	4.00			5	
770628	0951			16	0.15R	20.0	4.00			4	
770726	0720			2	0.04R	20.0	4.40			4	
770726	0730			16	0.01K	20.0	4.30			4	
770824	0830			2	0.01K	20.0	4.50	3.30	1.50	5	17
770824	0840			16	0.01	19.0	4.60	3.20	1.40	5	16
770928	0930			1	0.06	36.0	4.40			4	
770928	0938			16	0.08	35.0	4.40			4	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01007 BARIUM BA,TOT UG/L	01012 BERYLIUM BE,TOT UG/L	01077 SILVER AG,TOT UG/L	01105 ALUMINUM AL,TOT UG/L	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	71900 MERCURY HG,TOTAL UG/L
770216	0942			1	100K	10.00K	10.0K	300	10K	1.00K	1000K	0.20K
770216	1000			16	100K	10.00K	10.0K	400	10K	1.00K	1000K	0.20K
770524	0900			2	100K	10.00K	10.0K	1000	10K	1.00K	1000K	0.30
770524	0910			16	100K	10.00K	10.0K	1000	10K	1.00K	1000K	0.20K
770824	0830			2	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
770824	0840			16	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
771027	0842			2	100K	10.00K	10.0K	500	10K	1.00K	1000K	0.20K
771027	0850			16	100K	10.00K	10.0K	200	10K	1.00K	1000K	0.20K
770216												
NUMBER				8	8	8	8	8	8	8	8	8
MAXIMUM				16	100K	10.00K	10.0K	1000	10K	1.00K	1000K	0.30
MINIMUM				1	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
SUM				71	800	80.00	80.0	3900	80	8.00	8000	1.70
SUM SQ.				1037	80000	800.00	800.0	2670000	800	8.00	8000000	0.37
MEAN				9	100	10.00	10.0	488	10	1.00	1000	0.21
VARIANCE				58	0	0.00	0.0	109821	0	0.00	0	0.00
STD.DEV.				8	0	0.00	0.0	331	0	0.00	0	0.04
STD.ERR.				3	0	0.00	0.0	117	0	0.00	0	0.01
COEF VAR				86	0	0.00	0.0	68	0	0.00	0	16.64
LOG MEAN				5	100	10.00	10.0	405	10	1.00	1000	0.21
771027												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
770216											
NUMBER				124	8	8	8	8	23	23	8
MAXIMUM				36	230	1.00K	5.00	40.00	2000.00	110	10.00K
MINIMUM				1	30	1.00K	5.00K	10.00K	80.00	50K	10.00K
SUM				1211	830	8.00	40.00	140.00	15310.00	1230	80.00
SUM SQ.				27505	112900	8.00	200.00	3400.00	1.494E+07	69500	800.00
MEAN				10	104	1.00	5.00	17.50	665.65	53	10.00
VARIANCE				127	3827	0.00	0.00	135.71	616025.81	169	0.00
STD.DEV.				11	62	0.00	0.00	11.65	464.79	13	0.00
STD.ERR.				1	22	0.00	0.00	4.12	96.91	3	0.00
COEF VAR				116	60	0.00	0.00	66.57	69.82	24	0.00
LOG MEAN				4	89	1.00	5.00	14.88	533.34	53	10.00
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L
770216	0942			1	20.00	10.0	50.00K	10.00	10K	10K	93
770216	1000			16	10.00K	10.0K	50.00K	30.00	10K	10K	95
770322	0905			1							110
770322	0920			16							110
770428	0855			2							88
770428	0905			16							73
770524	0900			2	90.00	10.0K	50.00K	40.00	2030	1490	73
770524	0910			16	100.00	10.0K	50.00K	10.00K			70
770628	0925			1							77
770628	0950			16							66
770628	0951			16							86
770726	0720			2							68
770726	0730			16							68
770824	0830			2	50.00	10.0K	50.00K	20.00	10	10K	68
770824	0840			16	50.00	10.0	50.00K	10.00			66
770928	0930			1							110
770928	0938			16							110
771027	0842			2	40.00	30.0	50.00K	30.00	600	50	64
771027	0850			16	50.00	60.0K	50.00K	10.00K			64
771129	0840			2							92
771129	0850			16							100
771222	0850			2							58
771222	0905			16							76

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
780228	0940			2	47.0	0	8	0.080	0.01K	0.45	0.020	0.01
780228	0950			16	49.0	0	8	0.060	0.01	0.45	0.020	0.01K
780503	0912			2	57.0	0	23	0.080	0.02	0.40	0.010	
780503	0920			16	56.0	0	18	0.100	0.02	0.40	0.030	0.01K
780802	1251			1	51.0	0	3	0.100	0.04	0.32	0.020	0.01
780802	1255			16	48.0	0	5	0.080	0.06	0.32	0.020	0.01
781011	0936			2	49.0	0	5	0.080	0.01K	0.35	0.020	0.01
781011	0944			16	49.0	0	5	0.080	0.01K	0.35	0.020	0.01
780228												
NUMBER				30	8	8	8	8	8	8	8	7
MAXIMUM				36	57.0	0	23	0.100	0.06	0.45	0.030	0.01
MINIMUM				1	47.0	0	3	0.060	0.01K	0.32	0.010	0.01K
SUM				433	406.0	0	75	0.660	0.18	3.04	0.160	0.07
SUM SQ.				10277	20702.0	0	1065	0.056	0.01	1.17	0.003	0.00
MEAN				14	50.8	0	9	0.082	0.02	0.38	0.020	0.01
VARIANCE				139	13.9	0	52	0.000	0.00	0.00	0.000	0.00
STD.DEV.				12	3.7	0	7	0.013	0.02	0.05	0.005	0.00
STD.ERR.				2	1.3	0	3	0.005	0.01	0.02	0.002	0.00
COEF VAR				82	7.4	0	77	15.537	81.43	13.93	26.726	0.13
LOG MEAN				9	50.6	0		0.082	0.02	0.38	0.019	0.01
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L
780228	0940			2	16.0	3.80	1.10	0.64	3	32	200	1.00K
780228	0950			16	16.0	3.70	1.00	0.60	3	30	140	1.00K
780503	0912			2	23.0	4.70	3.50	1.30	4	22	50	1.00K
780503	0920			16	24.0	4.70	4.30	1.30	4	21	40	1.00K
780802	1251			1	25.0	4.70	4.00	0.76	3	30	10K	1.00K
780802	1255			16	25.0	4.60	3.80	0.85	3	32	10K	1.00K
781011	0936			2	19.0	4.30	3.20	1.30	3	25	50	1.00K
781011	0944			16	19.0	4.50	3.10	1.30	3	23	60	3.00
780228												
NUMBER				30	8	8	8	8	8	8	8	8
MAXIMUM				36	25.0	4.70	4.30	1.30	4	32	200	3.00
MINIMUM				1	16.0	3.70	1.00	0.60	3	21	10K	1.00K
SUM				433	167.0	35.00	24.00	8.05	26	215	560	10.00
SUM SQ.				10277	3589.0	154.30	83.24	8.83	86	5927	70000	16.00
MEAN				14	20.9	4.37	3.00	1.01	3	27	70	1.25
VARIANCE				139	14.7	0.17	1.61	0.10	0	21	4400	0.50
STD.DEV.				12	3.8	0.41	1.27	0.32	0	5	66	0.71
STD.ERR.				2	1.4	0.14	0.45	0.11	0	2	23	0.25
COEF VAR				82	18.4	9.37	42.24	32.08	14	17	95	56.57
LOG MEAN				9	20.6	4.36	2.66	0.96	3	27	45	1.15
781011												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLDC DEPTH METERS	00680 T ORG C C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
770629	0953			1				0.30			
770726	0720			2		6	35		1.6		
770726	0730			16		10	35		1.4		
770727	0900			1				0.30			
770727	0904			1				0.30			
770727	0906			1				0.30			
770817	1435			1				0.30			
770817	1438			1				0.30			
770817	1440			1				0.30			
770823	1337			1				0.30			
770823	1340			1				0.30			
770823	1343			1				0.30			
770824	0830			2	110	5	16		2.9	4.0	2K
770824	0840			16	110	6	20		3.6	3.9	2K
770914	1620			1				0.30			
770914	1623			1				0.30			
770914	1625			1				0.30			
770927	1536			1				0.30			
770927	1540			1				0.30			
770927	1544			1				0.30			
770928	0930			1		6	40		1.6		
770928	0938			16		5	38		2.0		
771026	1247			1				0.30			
771026	1250			1				0.30			
771026	1252			1				0.30			
771027	0842			2	100	10	28		2.1	4.0	2K
771027	0850			16	110	9	34		2.5	3.9	2K
771128	1249			1				0.30			
771128	1253			1				0.30			
771128	1255			1				0.30			
771129	0840			2		7	52				
771129	0850			16		8	38				
771222	0850			2		7	22		1.4		
771222	0905			16		12	24		0.9		
770216											
	NUMBER			124	6	23	23	42	21	8	8
	MAXIMUM			36	140	12	140	0.30	4.2	4.0	2K
	MINIMUM			1	100	5	10	0.30	0.9	2.8	2K
	SUM			1211	920	185	905	12.60	44.1	29.0	16
	SUM SQ.			27505	107000	1627	60497	3.78	107.6	107.0	32
	MEAN			10	115	8	39	0.30	2.1	3.8	2
	VARIANCE			127	171	6	1131	0.00	0.8	0.3	0
	STD.DEV.			11	13	3	34	0.00	0.9	0.5	0
	STD.ERR.			1	5	1	7	0.00	0.2	0.2	0
	COEF VAR			116	11	31	85	0.20	41.3	14.3	0
	LOG MEAN			4	114	8	31	0.30	2.0	3.6	2
771222											

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STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLOC DEPTH METERS
781011	0938			3								1.00
781011	0940			5								1.50
781011	0942			10								3.00
781011	0944			16	10.00			56	100	6	12	5.00
781011	0946			23								7.00
781011	0948			30								9.00
781011	0951			36								11.00
780228												
NUMBER				30	8	4	4	8	8	8	8	30
MAXIMUM				36	30.00	1500	100	82	100	11	32	11.00
MINIMUM				1	10.00K	160	10	55	80	6	9	0.30
SUM				433	130.00	3950	270	561	730	66	151	131.80
SUM SQ.				10277	2700.00	5149700	23700	40197	67300	568	3443	951.84
MEAN				14	16.25	988	68	70	91	8	19	4.39
VARIANCE				139	83.93	416358	1825	122	98	3	85	12.86
STD.DEV.				12	9.16	645	43	11	10	2	9	3.59
STD.ERR.				2	3.24	323	21	4	4	1	3	0.65
COEF VAR				82	56.38	65	63	16	11	22	49	81.61
LOG MEAN				9	14.35	730	49	69	91	8	17	2.79
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00339 COD MUD DRY WGT MG/KG	00603 TOTAL N MUD D WT MG/KG-N	00626 ORGAN. N MUD D WT MG/KG-N	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
780228	0940			2				1.4		4.3	2K
780228	0950			16				1.4		4.1	2K
780503	0912			2				1.5		4.0	2K
780503	0920			16				1.4		4.0	2K
780802	1251			1				1.9		3.5	2K
780802	1255			16				2.2		3.5	2K
780802	1258				59000	1100.00	1000		0		
781011	0936			2				1.0		3.6	2K
781011	0944			16				1.2		3.6	2K
780228											
NUMBER				30	1	1	1	8	1	8	8
MAXIMUM				36				2.2		4.3	2K
MINIMUM				1				1.0		3.5	2K
SUM				433				12.0		30.6	16
SUM SQ.				10277				19.0		117.7	32
MEAN				14				1.5		3.8	2
VARIANCE				139				0.1		0.1	0
STD.DEV.				12				0.4		0.3	0
STD.ERR.				2				0.1		0.1	0
COEF VAR				82				25.4		8.1	0
LOG MEAN				9				1.5		3.8	2
781011											

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STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
780228	0940			2	50	4.0	14	150	12.60	1.0K	11.0	7.60
780228	0942			3	50	4.0		150	12.60			7.60
780228	0944			5	50	4.0		150	12.60			7.60
780228	0946			10	50	4.0		150	12.60			7.60
780228	0950			16	50	4.0	15	150	12.70	1.0K	8.0	7.60
780228	0952			23	50	4.0		150	12.70			7.60
780228	0954			30	50	4.0		150	12.70			7.60
780228	0956			36	50	4.0		150	12.70			7.60
780503	0912			2	50	13.0	7	180	11.40	1.0	7.0	7.30
780503	0914			3	50	13.0		180	11.60			7.30
780503	0916			5	50	13.0		180	11.60			7.20
780503	0918			10	50	13.0		180	11.60			7.20
780503	0920			16	50	13.0	7	180	11.60	1.6	7.0	7.20
780503	0922			23	50	13.0		180	11.60			7.20
780503	0924			30	50	13.0		180	11.60			7.20
780503	0926			36	50	13.0		180	11.60			7.20
780802	1251			1	50	22.0	3	170	9.00	1.0K	8.0	6.70
780802	1252			3	50	21.5		160	9.00			
780802	1253			5	50	20.5		160	9.20			
780802	1254			10	50	20.0		160	9.10			
780802	1255			16	50	20.0	6	160	8.50	1.0K	7.0	6.60
780802	1256			23	50	19.5		160	8.30			
780802	1258				5							
781011	0936			2	50	17.0	1	170	7.90	1.0	3.0	7.30
781011	0938			3	50	17.0		170	7.90			7.30
781011	0940			5	50	17.0		170	7.80			7.30
781011	0942			10	50	17.0		170	7.80			7.30
781011	0944			16	50	17.0	2	180	7.80	1.1	3.0	7.30
781011	0946			23	50	17.0		180	7.80			7.30
781011	0948			30	50	17.0		180	7.80			7.30
781011	0951			36	50	17.0		180	7.80			7.30
780228												
	NUMBER			30		30	8	30	30	8	8	26
	MAXIMUM			36		22.0	15	180	12.70	1.6	11.0	7.60
	MINIMUM			1		4.0	1	150	7.80	1.0K	3.0	6.60
	SUM			433		395.5	55	5010	309.50	8.7	51.0	190.30
	SUM SQ.			10277		6338.8	566	841300	3312.53	9.8	381.0	1394.47
	MEAN			14		13.2	7	167	10.32	1.1	6.4	7.32
	VARIANCE			139		38.8	26	160	4.12	0.0	8.0	0.06
	STD.DEV.			12		6.2	5	13	2.03	0.2	2.8	0.25
	STD.ERR.			2		1.1	2	2	0.37	0.1	1.0	0.05
	COEF VAR			82		47.2	75	8	19.68	19.3	44.3	3.48
	LOG MEAN			9		11.2	5	167	10.12	1.1	5.8	7.31
781011												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01077 SILVER AG,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE
780228												
NUMBER				8	8	1	8	1	9	8	8	1
MAXIMUM				16	10K		610		10K	1.00K	1000	
MINIMUM				1	10K		200K		10K	1.00K	1000K	
SUM				71	80		2270		80	8.00	8000	
SUM SQ.				1037	800		623700		800	8.00	8000000	
MEAN				9	10		284		10	1.00	1000	
VARIANCE				58	0		25655		0	0.00	0	
STD.DEV.				8	0		160		0	0.00	0	
STD.ERR.				3	0		57		0	0.00	0	
COEF VAR				86	0		56		0	0.00	0	
LOG MEAN				9	10		255		10	1.00	1000	
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70318 RESIDUE TOTAL PERCENT	70322 RESIDUE TOT VOL PERCENT	70331 SUSP SED PARTSIZE %<.062MM	70332 SUSP SED PARTSIZE %<.125MM	70334 SUSP SED PARTSIZE %<.500MM	70336 SUSP SED PARTSIZE %<2.00MM	71900 MERCURY HG,TOTAL UG/L	71921 MERCURY SEDMG/KG DRY WGT
780228	0940			2							0.20K	
780228	0950			16							0.20K	
780503	0912			2							0.20K	
780503	0920			16							0.20K	
780802	1251			1							0.20K	
780802	1255			16							0.20K	
780802	1258				52.3	3.4	58	69	99	100		3.10K
781011	0936			1							0.20K	
781011	0944			16							0.20K	
780228												
NUMBER				3	1	1	1	1	1	1	8	1
MAXIMUM				16							0.20K	
MINIMUM				1							0.20K	
SUM				71							1.60	
SUM SQ.				1037							0.32	
MEAN				9							0.20	
VARIANCE				58							0.00	
STD.DEV.				8							0.00	
STD.ERR.				3							0.00	
COEF VAR				86							0.00	
LOG MEAN				5							0.20	
781011												

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STATION - 600942 CUMBERLAND RIVER 276.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L
780228	0940			2	5.00K	10.00	150	50K	10.00K	10.00	10.0	10.00K
780228	0950			16	5.00K	20.00	140.00	50K	10.00K	20.00	20.0	10.00K
780503	0912			2	5.00K	20.00	490.00	50K	10.00K	50.00	10.0K	10.00K
780503	0920			16	5.00K	20.00	360.00	50K	10.00K	50.00	10.0K	10.00K
780802	1251			1	5.00K	30.00	350.00	50K	10.00K	40.00	10.0K	10.00K
780802	1255			16	5.00	30.00	580.00	50K	10.00K	60.00	10.0K	20.00
781011	0936			2	5.00K	10.00K	350.00	50K	10.00K	30.00	10.0K	40.00
781011	0944			16	5.00K	10.00K	500.00	50K	10.00K	30.00	10.0K	40.00
780228												
NUMBER				30	8	8	8	8	8	8	8	6
MAXIMUM				36	5.00	30.00	580.00	50K	10.00K	60.00	20.0	40.00
MINIMUM				1	5.00K	10.00K	140.00	50K	10.00K	10.00	10.0K	10.00K
SUM				433	40.00	150.00	2920.00	400	80.00	290.00	90.0	150.00
SUM SQ.				10277	200.00	3300.00	1.243E+06	20000	800.00	12500.00	1100.0	4100.00
MEAN				14	5.00	18.75	365.00	50	10.00	36.25	11.3	18.75
VARIANCE				139	0.00	69.64	25342.86	0	0.00	283.93	12.5	163.93
STD.DEV.				12	0.00	8.35	159.19	0	0.00	16.85	3.5	13.56
STD.ERR.				2	0.00	2.95	56.28	0	0.00	5.96	1.2	4.79
COEF VAR				82	0.00	44.51	43.61	0	0.00	46.48	31.4	72.33
LOG MEAN				9	5.00	17.07	327.27	50	10.00	31.93	10.9	15.42
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00096 SAMPLDE DEPTH METERS
780228	0940			2	10.00K	790	60	56	80	11	31	0.50
780228	0942			3								1.00
780228	0944			5								1.50
780228	0946			10								3.00
780228	0950			16	10.00K			55	80	10	32	5.00
780228	0952			23								7.00
780228	0954			30								9.00
780228	0956			36								11.00
780503	0912			2	20.00	1500	100	77	100	9	22	0.50
780503	0914			3								1.00
780503	0916			5								1.50
780503	0918			10								3.00
780503	0920			16	30.00			79	100	9	22	5.00
780503	0922			23								7.00
780503	0924			30								9.00
780503	0926			36								11.00
780802	1251			1	30.00	1500	100	82	80	7	11	0.50
780802	1252			3								1.00
780802	1253			5								1.50
780802	1254			10								3.00
780802	1255			16	10.00			81	90	6	12	5.00
780802	1256			23								7.00
781011	0936			2	10.00K	160	10	65	100	8	9	0.50

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
790214	0946			1	7.50	53.0	0	11	0.120	0.01	0.46	0.040
790214	0947			3	7.50							
790214	0948			5	7.50							
790214	0950			10	7.50							
790214	0955			16	7.50	53.0	0	12	0.060	0.01	0.47	0.040
790214	0957			23	7.50							
790214	0959			30	7.50							
790510	0950			1	7.30	59.0	0	15	0.100	0.04	0.45	0.070
790510	0952			3	7.30							
790510	0954			5	7.30							
790510	0956			10	7.30							
790510	0958			16	7.30	61.0	0	20	0.280	0.02	0.45	0.070
790510	1000			23	7.20							
790510	1002			30	7.20							
790510	1004			36	7.20							
790809	0935			1	8.10	10.0	0	2	0.080	0.02	0.31	0.020
790809	0937			3	8.10							
790809	0939			5	8.00							
790809	0941			10	7.00							
790809	0943			16	6.80	10.0	0	2	0.090	0.01	0.31	0.020
790809	0945			23	8.80							
790809	0947			30	9.50							
790809	0949			36	9.30							
791017	0909			1	7.40	57.0	0	5	0.100	0.02	0.36	0.030
791017	0910			3	7.40							
791017	0911			5	7.40							
791017	0912			10	7.40							
791017	0913			16	7.40	58.0	0	6	0.110	0.01	0.34	0.030
791017	0914			23	7.40							
791017	0915			30	7.40							
791017	0916			36	7.40							
790214												
NUMBER				31	31	8	8	8	8	8	8	8
MAXIMUM				36	9.90	61.0	0	20	0.280	0.04	0.47	0.070
MINIMUM				1	6.80	10.0	0	2	0.060	0.01	0.31	0.020
SUM				460	235.80	361.0	0	73	0.940	0.14	3.15	0.320
SUM SQ.				11168	1806.20	19833.0	0	959	0.143	0.00	1.27	0.016
MEAN				15	7.61	45.1	0	9	0.117	0.02	0.39	0.040
VARIANCE				145	0.42	477.6	0	42	0.005	0.00	0.00	0.000
STD.DEV.				12	0.65	21.9	0	6	0.068	0.01	0.07	0.020
STD.ERR.				2	0.12	7.7	0	2	0.024	0.00	0.02	0.007
COEF VAR				81	8.52	48.4	0	71	58.035	59.15	17.85	50.003
LOG MEAN				9	7.58	36.8	0	7	0.106	0.02	0.39	0.036
791017												

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STATION - 600042 CUMBERLAND RIVER 278.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01003 ARSENIC SED MG/KG DRY WGT	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SED MG/KG DRY WGT	01043 COPPER SED MG/KG DRY WGT	01052 LEAD SED MG/KG DRY WGT	01053 MN MUD DRY WGT MG/KG-MN	01066 NICKEL SED MG/KG DRY WGT
780228	0940			2		100K	10.00K						
780228	0950			16		100K	10.00K						
780503	0912			2		100K	10.00K						
780503	0920			16		100K	10.00K						
780802	1251			1		100K	10.00K						
780802	1255			16		100K	10.00K						
780802	1258				4.00			1.00K	5.00K	16.00	23	1730	28.00
781011	0936			2		100K	10.00K						
781011	0944			16		110	10.00K						
780228													
NUMBER				8	1	8	8	1	1	1	1	1	-
MAXIMUM				16		110	10.00K						
MINIMUM				1		100K	10.00K						
SUM				71		810	80.00						
SUM SQ.				1037		82100	800.00						
MEAN				9		101	10.00						
VARIANCE				58		13	0.00						
STD.DEV.				8		4	0.00						
STD.ERR.				3		1	0.00						
COEF VAR				86		3	0.00						
LOG MEAN				5		101	10.00						
781011													

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01077 SILVER AG,TOT UG/L	01093 ZINC SED MG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE
780228	0940			2	10K		200K		10K	1.00K	1000K	
780228	0950			16	10K		200K		10K	1.00K	1000K	
780503	0912			2	10K		610		10K	1.00K	1000K	
780503	0920			16	10K		460		10K	1.00K	1000K	
780802	1251			1	10K		200K		10K	1.00K	1000	
780802	1255			16	10K		200K		10K	1.00K	1000	
780802	1258					80.00		14000.00				19000.00
781011	0936			2	10K		200K		10K	1.00K	1000K	
781011	0944			16	10K		200K		10K	1.00K	1000K	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SEDMG/KG DRY WGT	01034 CHROMIUM CR,TOT UG/L
790214	0946			1	100K	10.00K	150	1.00K			5.00K
790214	0955			16	100K	10.00K	140	1.00K			5.00K
790510	0950			1	380	10.00K	40	1.00K			5.00K
790510	0958			16	350	10.00K	80	1.00K			5.00K
790510	1010								1.00K	15.00	
790809	0935			1	620	10.00K	10K	1.00K			5.00K
790809	0943			16	650	10.00K	10K	1.00K			5.00K
791017	0909			1	100K	10.00K	10K	1.00K			5.00K
791017	0913			16	100K	10.00K	10K	1.00K			5.00K
790214											
	NUMBER			31	8	8	8	8	1	1	8
	MAXIMUM			36	650	10.00K	150	1.00K			5.00K
	MINIMUM			1	100K	10.00K	10K	1.00K			5.00K
	SUM			460	2440	80.00	450	8.00			40.00
	SUM SQ.			11168	1167400	800.00	50500	8.00			200.00
	MEAN			15	305	10.00	56	1.00			5.00
	VARIANCE			145	60457	0.00	3598	0.00			0.00
	STD.DEV.			12	246	0.00	60	0.00			0.00
	STD.ERR.			2	87	0.00	21	0.00			0.00
	COEF VAR			81	81	0.00	107	0.00			0.00
	LOG MEAN			9	221	10.00	30	1.00			5.00
791017											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00080 COLOR PT-CO UNITS	00095 CNDUCTVY AT 25C MICROMHC	00098 %SAMPLDC DEPTH METERS	00300 DO MG/L	00310 BOD 5 DAY MG/L
790214	0946			1	50	4.5	14	8	140	0.30	11.10	1.2
790214	0947			3	50	4.5			140	1.00	11.20	
790214	0948			5	50	4.5			140	1.50	11.20	
790214	0950			10	50	4.5			140	3.00	11.20	
790214	0955			16	50	4.5	15	9	140	5.00	11.20	1.2
790214	0957			23	50	4.5			140	7.00	11.20	
790214	0959			30	50	4.5			140	9.00	11.20	
790510	0950			1	50	14.0	18	15	200	0.30	7.50	1.3
790510	0952			3	50	14.0			200	1.00	7.50	
790510	0954			5	50	14.0			190	1.50	7.50	
790510	0956			10	50	14.0			200	[illegible]	7.50	
790510	0958			16	50	14.0	22	15	200	5.00	7.50	1.0K
790510	1000			23	50	14.0			200	7.00	7.50	
790510	1002			30	50	14.0			200	9.00	7.50	
790510	1004			36	50	14.0			200	11.00	7.50	
790510	1010				5							
790809	0935			1	50	20.5	2	5	170	0.30	8.70	1.0K
790809	0937			3	50	20.0			170	1.00	8.80	
790809	0939			5	50	20.0			170	1.50	8.90	
790809	0941			10	50	20.0			170	3.00	9.00	
790809	0943			16	50	20.0	3	6	170	5.00	9.10	1.0K
790809	0945			23	50	20.0			170	7.00	9.00	
790809	0947			30	50	20.0			170	9.00	9.00	
790809	0949			36	50	20.0			170	11.00	9.10	
791017	0909			1	50	15.5	3	5	170	0.30	8.60	1.0K
791017	0910			3	50	15.5			170	1.00	8.60	
791017	0911			5	50	15.5			170	1.50	8.60	
791017	0912			10	50	15.5			170	3.00	8.60	
791017	0913			16	50	15.5	2	8	170	5.00	8.50	1.0K
791017	0914			23	50	15.5			170	7.00	8.50	
791017	0915			30	50	15.5			170	9.00	8.50	
791017	0916			36	50	15.5			170	11.00	8.40	
790214												
	NUMBER			31		31	8	8	31	31	31	8
	MAXIMUM			36		20.5	22	15	200	11.00	11.20	1.3
	MINIMUM			1		4.5	2	5	140	0.30	7.50	1.0K
	SUM			460		428.0	78	71	5290	140.20	278.20	8.7
	SUM SQ.			11168		6852.0	1249	745	915700	1032.36	2549.96	9.6
	MEAN			15		13.8	10	9	171	4.52	8.97	1.1
	VARIANCE			145		31.4	71	16	433	13.28	1.78	0.0
	STD.DEV.			12		5.6	8	4	21	3.64	1.33	0.1
	STD.ERR.			2		1.0	3	1	4	0.65	0.24	0.0
	COEF VAR			81		40.6	86	46	12	80.57	14.86	11.5
	LOG MEAN			9		12.2	6	8	169	2.75	8.88	1.1
791017												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01077 SILVER AG,TOT UG/L	01092 ZINC ZN,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L
790214											
NUMBER				8	8	8	8	8	8	1	8
MAXIMUM				16	80.00	10.0K	50.00K	10.0K	40.00		2000.00
MINIMUM				1	30.00	10.0K	10.00K	10.0K	10.00K		200.00K
SUM				68	440.00	80.0	160.00	80.0	150.00		6240.00
SUM SQ.				1028	26800.00	800.0	5600.00	800.0	3700.00		8.660E+06
MEAN				9	55.00	10.0	20.00	10.0	18.75		780.00
VARIANCE				64	371.43	0.0	342.86	0.0	126.79		541828.56
STD.DEV.				8	19.27	0.0	18.52	0.0	11.26		736.09
STD.ERR.				3	6.81	0.0	6.55	0.0	3.98		260.25
COEF VAR				94	35.04	0.0	92.58	0.0	60.05		94.37
LOG MEAN				4	51.90	10.0	14.95	10.0	16.72		540.00
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE	31501 TOT COLI MFIMENDC /100ML	31616 FEC COLI MFM-FCBR /100ML
790214	0946			1	10K	1.00K	1000K			
790214	0955			16	10K	1.00K	1000K			
790510	0950			1	10K	1.00K	1000K		4100	100K
790510	0958			16	10K	1.00K	1000K			
790510	1010							22000.00		
790809	0935			1	10K	1.00K	100K		400	100K
790809	0943			16	10K	1.00K	100K			
791017	0909			1	10K	1.00K	1000K		700	100
791017	0913			16	10K	1.00K	1000K			
790214										
NUMBER				8	8	8	8	1	3	3
MAXIMUM				16	10K	1.00K	1000K		4100	100
MINIMUM				1	10K	1.00K	100K		400	100K
SUM				68	80	8.00	6200		5200	300
SUM SQ.				1028	800	8.00	6020000		17460000	30000
MEAN				9	10	1.00	775		1733	100
VARIANCE				64	0	0.00	173571		4223337	0
STD.DEV.				8	0	0.00	417		2055	0
STD.ERR.				3	0	0.00	147		1186	0
COEF VAR				94	0	0.00	54		119	0
LOG MEAN				4	10	1.00	562		1047	100
791017										

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	70300 RESIDUE DISS-180 C MG/L	00081 AP COLOR PT-CO UNITS	00335 COD LOWLEVEL MG/L	00666 PHOS-DIS MG/L P	00680 T ORG C C MG/L	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L
790214	0946			1	90	39	4.0	0.01	2.5	26.0	4.60
790214	0955			16	90	39	5.0	0.02	2.6	26.0	4.60
790510	0950			1	110	45	8.0	0.02	3.0	22.0	4.60
790510	0958			16	110	47	9.0	0.03	3.0	22.0	4.60
790809	0935			1	100	8	7.0	0.01	2.5	19.0	5.00
790809	0943			16	100	10	6.0	0.01K	2.7	20.0	5.00
791017	0909			1	100	8	13.0	0.01K	3.6	19.0	5.40
791017	0913			16	90	13	2.0	0.01K	2.5	19.0	5.20
790214											
NUMBER				31	8	8	8	8	8	8	8
MAXIMUM				36	110	47	13.0	0.03	3.6	26.0	5.40
MINIMUM				1	90	8	2.0	0.01K	2.5	19.0	4.60
SUM				460	790	205	54.0	0.12	22.4	173.0	39.00
SUM SQ.				11168	78500	7673	444.0	0.00	63.8	3803.0	190.84
MEAN				15	99	26	6.8	0.01	2.8	21.6	4.87
VARIANCE				145	70	316	11.4	0.00	0.1	8.8	0.10
STD.DEV.				12	8	18	3.4	0.01	0.4	3.0	0.32
STD.ERR.				2	3	6	1.2	0.00	0.1	1.1	0.11
COEF VAR				81	8	68	49.9	50.40	13.8	13.7	6.56
LOG MEAN				9	98	20	6.0	0.01	2.8	21.5	4.87
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L	01003 ARSENIC SEDMG/KG DRY WGT
790214	0946			1	4.10	1.40	3	24	4.0	2K	
790214	0955			16	3.80	1.10	3	23	3.4	2K	
790510	0950			1	2.10	1.30	2	22	4.3	2K	
790510	0958			16	2.10	1.40	2	22	4.3	2K	
790510	1010										7.50
790809	0935			1	2.60	1.20	3	27	3.3	2K	
790809	0943			16	2.60	1.20	3	26	3.9	2K	
791017	0909			1	2.90	1.40	2	24	4.1	2K	
791017	0913			16	3.10	1.50	2	24	4.2	2	
790214											
NUMBER				31	8	8	8	8	8	8	1
MAXIMUM				36	4.10	1.50	3	27	4.3	2	
MINIMUM				1	2.10	1.00	2	22	3.3	2K	
SUM				460	23.30	10.10	20	192	31.5	16	
SUM SQ.				11168	71.61	12.95	52	4630	125.1	32	
MEAN				15	2.91	1.26	3	24	3.9	2	
VARIANCE				145	0.54	0.03	0	3	0.2	0	
STD.DEV.				12	0.73	0.17	1	2	0.4	0	
STD.ERR.				2	0.26	0.06	0	1	0.1	0	
COEF VAR				81	25.13	13.35	21	7	9.9	0	
LOG MEAN				9	2.84	1.25	2	24	3.9	2	
791017											

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DATE	TIME	DATE	TIME	80208 TOT SED SIEVE %<2.00MM	00339 COD MUD DRY WGT MG/KG	01088 NICKEL SEDMG/KG DRY WGT	01108 AL MUD DRY WGT MG/KG-AL	00626 ORGAN. N MUD D WT MG/KG-N	00687 BM CRG CARBON GM/KG-C
790510	1010			100.0	38000	27.00	14000.00	770	0
790510									
NUMBER				1	1	1	1	1	1
MAXIMUM									
MINIMUM									
SUM									
SUM SQ.									
MEAN									
VARIANCE									
STD.DEV.									
STD.ERR.									
COEF VAR									
LOG MEAN									
790510									

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01042 COPPER CU,TOT UG/L	01043 COPPER SEDMG/KG DRY WGT	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01052 LEAD SEDMG/KG DRY WGT	01053 MN MUD DRY WGT MG/KG-MN
790214	0946			1	30.00		400.00	50K	10.00K		
790214	0955			16	10.00K		490.00	50K	10.00K		
790510	0950			1	10.00K		1300.00	50K	10.00K		
790510	0958			16	50.00		1500.00	90	10.00K		
790510	1010					17.00				16	3000
790809	0935			1	10.00K		170.00	50K	10.00K		
790809	0943			16	10.00K		290.00	50K	10.00K		
791017	0909			1	110.00		620.00	50K	10.00K		
791017	0913			16	20.00		460.00	50K	10.00K		
790214											
NUMBER				8	8	1	8	8	8	1	1
MAXIMUM				16	110.00		1500.00	90	10.00K		
MINIMUM				1	10.00K		170.00	50K	10.00K		
SUM				68	250.00		5230.00	440	80.00		
SUM SQ.				1028	16300.00		5.049E+06	25600	800.00		
MEAN				9	31.25		653.75	55	10.00		
VARIANCE				64	1212.50		232855.38	200	0.00		
STD.DEV.				8	34.82		482.55	14	0.00		
STD.ERR.				3	12.31		170.61	5	0.00		
COEF VAR				94	111.43		73.81	26	0.00		
LOG MEAN				4	20.64		520.34	54	10.00		
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01077 SILVER AG,TOT UG/L	01092 ZINC ZN,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L
790214	0946			1	40.00	10.0K	10.00K	10.0K	10.00K		200.00K
790214	0955			16	40.00	10.0K	10.00K	10.0K	10.00K		200.00
790510	0950			1	70.00	10.0K	10.00K	10.0K	20.00		2000.00
790510	0958			16	80.00	10.0K	10.00K	10.0K	30.00		1500.00
790510	1010									53.00	
790809	0935			1	30.00	10.0K	10.00K	10.0K	10.00K		560.00
790809	0943			16	40.00	10.0K	10.00K	10.0K	10.00K		580.00
791017	0909			1	70.00	10.0K	50.00K	10.0K	40.00		400.00
791017	0913			16	70.00	10.0K	50.00K	10.0K	20.00		400.00

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
761207	0930			26	50	7.5		180	11.60		
761228	0855			1	50	5.5	3	180	11.80		
761228	0857			3	50	5.5		180	11.70		
761228	0859			5	50	5.5		180	11.50		
761228	0901			10	50	5.5		180	11.50		
761228	0903			16	50	5.5	3	180	11.40		
761228	0905			26	50	5.5		180	11.40		
760225											
NUMBER				62		62	20	57	62	8	10
MAXIMUM				30		21.7	31	200	13.30	2.8	12.0
MINIMUM				1		5.5	3	160	6.20	1.0R	2.0
SUM				691		992.9	168	13270	561.00	10.2	56.0
SUM SQ.				13085		16299.2	2623	1855100	5409.66	15.7	404.0
MEAN				11		15.2	8	180	9.05	1.3	5.6
VARIANCE				88		32.1	69	84	5.47	0.4	10.0
STD.DEV.				9		5.7	8	9	2.34	0.6	3.2
STD.ERR.				1		0.7	2	1	0.30	0.2	1.0
COEF VAR				84		37.3	95	5	25.84	48.8	56.6
LOG MEAN				7		13.9	6	180	8.77	1.2	4.8
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
760225	0858			1	9.80	52.0	3	7	0.100	0.06	0.44
760225	0900			3	9.80						
760225	0902			5	9.70						
760225	0904			10	9.70						
760225	0906			16	9.70	51.0	0	7	0.090	0.22	0.38
760225	0908			26	9.70						
760225	0910			30	9.70						
760428	0940			1	7.60	51.0	0	3	0.060	0.04	0.28
760428	0942			3	7.60						
760428	0944			5	7.60						
760428	0946			10	7.60						
760428	0948			16	7.60	53.0	0	9	0.150	0.08	0.28
760428	0950			26	7.50						
760525	0950			1	7.50	56.0	0	1	0.100	0.04	0.29
760525	0952			5	7.50						
760525	0955			10	7.50						
760525	0958			16	7.50	55.0	0	3	0.070	0.04	0.32
760525	1000			20	7.50						
760629	0847			1	7.20	62.0	0	13	0.180	0.05	0.42
760629	0849			3	7.30						
760629	0851			5	7.30						
760629	0853			10	7.20						
760629	0855			16	7.20	60.0	0	15	0.170	0.04	0.42
760629	0857			26	7.20						
760629	0859			30	7.20						
760727	0840			1	7.30	45.0	0	6	0.060	0.03	0.32
760727	0842			3	7.30						
760727	0844			5	7.30						

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	46570 CAL HARD CA MG MG/L	71900 MERCURY HG,TOTAL UG/L	70322 RESIDUE TOT VOL PERCENT	80203 TOT SED SIEVE %<.062MM	80204 TOT SED SIEVE %<.125MM	80206 TOT SED SIEVE %<.500MM
790214	0946			1	84	0.20K				
790214	0955			16	84	0.20K				
790510	0950			1	74	0.20K				
790510	0958			16	74	0.20K				
790510	1010						6.2	85.3	90.9	100.0
790809	0935			1	68	0.20K				
790809	0943			16	70	0.20K				
791017	0909			1	70	0.20K				
791017	0913			16	69	0.20K				
790214										
NUMBER				8	8	8	1	1	1	1
MAXIMUM				16	84	0.20K				
MINIMUM				1	68	0.20K				
SUM				68	593	1.60				
SUM SQ.				1028	44245	0.32				
MEAN				9	74	0.20				
VARIANCE				64	42	0.00				
STD.DEV.				8	6	0.00				
STD.ERR.				3	2	0.00				
COEF VAR				94	9	0.08				
LOG MEAN				4	74	0.20				
791017										

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L
760225	0858			1	0.040	0.01	20.0	4.40	3.00	1.20	4
760225	0906			16	0.040	0.01	19.0	4.50	3.00	1.20	4
760428	0940			1	0.030	0.01	25.0	4.30			4
760428	0948			16	0.030	0.01	25.0	4.20			4
760525	0950			1	0.030	0.03	19.0	3.70	2.90	1.00	3
760525	0958			16	0.020	0.01	21.0	3.90	2.90	0.90	4
760629	0847			1	0.050	0.02	25.0	4.60			3
760629	0855			16	0.050	0.02	27.0	4.70			3
760727	0840			1	0.040	0.01	17.0	4.10			3
760727	0848			16	0.030	0.01	17.0	4.10			3
760824	0955			1	0.020	0.01K	22.0	4.30	2.60	1.10	3
760824	1003			16	0.030	0.02	21.0	3.50	2.00	1.00	3
760921	0852			1	0.020	0.01K	22.0	4.60			4
760921	0856			16	0.020	0.01K	23.0	4.60			5
761027	0928			1	0.130	0.07	25.0	4.30	2.30	1.20	4
761027	0940			16	0.150	0.08	24.0	4.30	2.80	2.00	4
761207	0918			1	0.030	0.02	19.0	4.70			5
761207	0927			16	0.020	0.02	22.0	4.60			5
761228	0855			1	0.020	0.01K	24.0	5.00			4
761228	0903			16	0.020	0.07K	22.0	4.90			4
760225											
NUMBER				62	20	20	20	20	8	8	20
MAXIMUM				30	0.150	0.08	27.0	5.00	3.00	2.00	5
MINIMUM				1	0.020	0.01K	17.0	3.50	2.00	0.90	3
SUM				691	0.820	0.46	439.0	87.30	21.50	9.60	76
SUM SQ.				13085	0.057	0.02	9789.0	383.81	58.71	12.34	298
MEAN				11	0.041	0.02	21.9	4.36	2.69	1.20	4
VARIANCE				88	0.001	0.00	8.1	0.14	0.13	0.12	0
STD.DEV.				9	0.035	0.02	2.8	0.38	0.36	0.34	1
STD.ERR.				1	0.008	0.01	0.6	0.09	0.13	0.12	0
COEF VAR				84	86.287	97.83	12.9	8.71	13.55	28.52	18
LOG MEAN				7	0.033	0.02	21.8	4.35	2.66	1.17	4
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00945 SULFATE SO4-TOT MG/L	01022 BERON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
760225	0858			1	14	30	1.00K	5.00K	10.00K	1400.00	50K
760225	0906			16	14	30	1.00K	5.00K	10.00K	1400.00	50K
760428	0940			1						320.00	50K
760428	0948			16						480.00	50K
760525	0950			1	18	40	1.00K	5.00K	10.00K	530.00	50K
760525	0958			16	18	20	1.00K	5.00K	10.00K	530.00	50K
760629	0847			1						1000.00	110
760629	0855			16						1100.00	50K
760727	0840			1						340.00	50K
760727	0848			16						540.00	50K
760824	0955			1	19	80	1.00K	5.00K	50.00	420.00	50K
760824	1003			16	16	70	1.00K	5.00K	90.00	66000.00	50K
760921	0852			1						180.00	50K
760921	0856			16						370.00	50K
761027	0928			1	32	110	1.00K	5.00K	10.00	700.00	50K

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
760225	0858			1	50	10.0	18	160	13.20	1.0K	3.0
760225	0900			3	50	9.7			13.00		
760225	0902			5	50	9.6			13.00		
760225	0904			10	50	9.8			13.10		
760225	0906			16	50	9.8	31	160	13.00	2.8	4.0
760225	0908			26	50	10.0			13.20		
760225	0910			30	50	10.0			13.30		
760428	0940			1	50	14.6	5	180	9.80		5.0
760428	0942			3	50	14.6		180	9.80		
760428	0944			5	50	14.6		180	9.60		
760428	0946			10	50	14.6		180	9.50		
760428	0948			16	50	14.6	5	180	9.40		5.0
760428	0950			26	50	14.6		180	9.40		
760525	0950			1	50	17.5	4	190	8.00	1.0K	12.0
760525	0952			5	50	17.0		190	7.70		
760525	0955			10	50	16.6		180	7.70		
760525	0958			16	50	16.6	5	190	7.70	1.0K	6.0
760525	1000			20	50	16.6		190	7.70		
760629	0847			1	50	21.0	20	180	6.30		
760629	0849			3	50	21.0		180	6.30		
760629	0851			5	50	20.9		180	6.30		
760629	0853			10	50	20.7		180	6.20		
760629	0855			16	50	20.7	21	180	6.20		
760629	0857			26	50	20.7		180	6.20		
760629	0859			30	50	20.6		180	6.30		
760727	0840			1	50	21.2	5	180	7.20		
760727	0842			3	50	21.0		170	7.20		
760727	0844			5	50	21.0		170	7.30		
760727	0846			10	50	21.0		170	7.30		
760727	0848			16	50	21.0	5	170	7.30		
760727	0850			26	50	21.0		170	7.30		
760727	0853			30	50	21.0		170	7.30		
760829	0955			1	50	21.7	4	180	7.40	1.2	2.0
760829	0957			3	50	21.5		180	7.50		
760829	0959			5	50	21.3		180	7.40		
760829	1001			10	50	20.5		180	7.00		
760829	1003			16	50	19.7	5	170	6.60	1.2	2.0
760829	1005			26	50	19.4		170	6.60		
760921	0852			1	50	20.5	3	180	7.90		
760921	0853			3	50	20.5		180	7.80		
760921	0854			5	50	20.5		180	7.50		
760921	0855			10	50	20.5		180	7.30		
760921	0856			16	50	20.5	3	180	7.20		
760921	0858			26	50	20.5		180	7.20		
761027	0928			1	50	14.0	14	200	9.00	1.0K	8.0
761027	0930			3	50	14.0		200	8.70		
761027	0932			5	50	14.0		200	8.30		
761027	0935			10	50	14.1		200	8.20		
761027	0940			16	50	14.1	8	200	8.00	1.0K	7.0
761027	0943			26	50	14.1		200	8.00		
761207	0918			1	50	7.2	4	170	12.40		
761207	0920			3	50	7.5		170	12.00		
761207	0922			5	50	7.5		170	12.00		
761207	0924			10	50	7.5		180	11.80		
761207	0927			16	50	7.5	3	180	11.70		

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00680 T ORG C C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
760225	0858			1	68	120	8	20	1.9	4.8	5K
760225	0906			16	66	90	8	23	1.9	4.9	5K
760428	0940			1	60	100	4	12	1.7		
760428	0948			16	80	90	2	12	1.7		
760525	0950			1	63	100	2	8	1.2	4.0	5K
760525	0958			16	68	100	2	8	1.4	3.8	5K
760629	0847			1	81		11	37	2.7		
760629	0855			16	87		12	35	2.7		
760727	0840			1	59		10	15	2.8R		
760727	0848			16	59		10	13	2.8R		
760824	0955			1	73	90	6	13	1.2	3.8	5K
760824	1003			16	67	80	3	13	1.1	3.7	5K
760921	0852			1	74		7	13	1.4		
760921	0856			16	76		7	13	1.5		
761027	0928			1	80	110	5	22	2.3	3.7	2K
761027	0940			16	78	110	5	28	2.6	3.7	2K
761207	0918			1	67		7	7	1.5		
761207	0927			16	74		5	8	1.5		
761228	0855			1	80		6	9	1.4		
761228	0903			16	75		4	7	1.3		
760225											
	NUMBER			62	20	10	20	20	20	8	8
	MAXIMUM			30	87	120	12	37	2.8	4.9	5K
	MINIMUM			1	59	80	2	7	1.1	3.7	2K
	SUM			691	1455	990	124	316	36.6	32.4	34
	SUM SQ.			13065	107009	99300	940	6520	73.7	133.0	158
	MEAN			11	73	99	6	16	1.8	4.0	4
	VARIANCE			88	61	143	9	80	0.4	0.3	2
	STD.DEV.			9	8	12	3	9	0.6	0.5	1
	STD.ERR.			1	2	4	1	2	0.1	0.2	0
	COEF VAR			84	11	12	48	57	32.6	12.5	33
	LOG MEAN			7	72	98	5	14	1.7	4.0	4
761228											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
760727	0846			10	7.30						
760727	0848			16	7.30	46.0	0	9	0.040	0.05	0.33
760727	0850			26	7.30						
760727	0853			30	7.30						
760824	0955			1	7.40	52.0	0	1	0.080	0.02	0.23
760824	0957			3	7.50						
760824	0959			5	7.40						
760824	1001			10	7.40						
760824	1003			16	7.30	51.0	0	6	0.060	0.02	0.26
760824	1005			26	7.20						
760921	0852			1	7.40	46.0	0	8	0.100	0.01	0.19
760921	0853			3	7.40						
760921	0854			5	7.40						
760921	0855			10	7.40						
760921	0856			16	7.30	47.0	0	8	0.100	0.01	0.55
760921	0858			26	7.30						
761027	0928			1	7.50	66.0	0	13	0.180	0.04	0.33
761027	0930			3	7.40						
761027	0932			5	7.40						
761027	0935			10	7.40						
761027	0940			16	7.40	67.0	0	13	0.330	0.05	0.33
761027	0943			26	7.40						
761207	0918			1	7.80	58.0	0	3	0.090	0.01	0.20
761207	0920			3	7.70						
761207	0922			5	7.70						
761207	0924			10	7.70						
761207	0927			16	7.70	57.0	0	5	0.100	0.01	0.20
761207	0930			26	7.70						
761228	0855			1	8.00	57.0	0	1K	0.070	0.01	0.25
761228	0857			3	7.90						
761228	0859			5	7.90						
761228	0901			10	7.90						
761228	0903			16	7.90	57.0	0	1	0.060	0.01	0.25
761228	0905			26	7.90						
760225											
NUMBER				62	62	20	20	20	20	20	20
MAXIMUM				30	9.80	67.0	0	15	0.330	0.22	0.55
MINIMUM				1	7.20	46.0	0	1K	0.040	0.01	0.19
SUM				691	479.50	1089.0	0	127	2.190	0.84	6.27
SUM SQ.				13085	3742.31	60097.0	0	1183	0.323	0.08	2.13
MEAN				11	7.73	54.4	0	6	0.109	0.04	0.31
VARIANCE				88	0.56	39.5	0	20	0.004	0.00	0.01
STD.DEV.				9	0.75	6.3	0	4	0.066	0.05	0.09
STD.ERR.				1	0.09	1.4	0	1	0.015	0.01	0.02
COEF VAR				84	9.65	11.5	0	70	60.613	110.49	29.42
LOG MEAN				7	7.70	54.1	0	5	0.096	0.03	0.30
761228											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600098 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JK T JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
770216	1056			1	50	3.6	6	190	12.80	1.0K	3.0	8.00
770216	1100			3	50	3.6		190	12.60			8.00
770216	1105			5	50	3.6		190	12.50			8.00
770216	1110			10	50	3.6		190	12.50			7.90
770216	1115			16	50	3.6	5	190	12.40	1.0K	6.0	7.90
770216	1120			26	50	3.6		190	12.40			7.80
[illegible]216	1350			1	25	3.8	4	180	13.50			8.00
[illegible]216	1354			1	50	3.5	4	180	13.10			7.80
[illegible]216	1357			1	75	3.5	6	180	12.90			7.60
[illegible]	1613			1	25	9.2	20	210	11.20			7.60
[illegible]	1615			1	50	9.1	17	210	11.20			7.60
[illegible]	1617			1	75	9.1	17	210	11.20			7.60
[illegible]	[illegible]50			1	50	9.5	12	200	9.70			7.60
[illegible]	[illegible]55			3	50	9.5		200	9.60			7.60
[illegible]	[illegible]00			5	50	9.5		200	9.60			7.60
770322	0855			10	50	9.5		200	9.60			7.60
770322	0900			16	50	9.5	11	200	9.60			7.60
770322	1005			26	50	9.5		200	9.60			7.60
770323	0950			1	25	9.0	9	200	10.00			7.40
770323	0953			1	50	9.0	10	200	9.90			7.60
770323	0955			1	75	9.0	9	200	9.90			7.60
770404	1441			1	25	11.1	50	190	8.80			7.90
770404	1446			1	50	11.2	45	200	8.90			7.70
770404	1450			1	75	11.1	50	190	8.90			7.80
770427	1457			1	25	12.3	16	160	7.80			7.40
770427	1455			1	50	12.4	17	160	7.80			7.50
770427	1500			1	75	12.4	17	160	7.80			7.50
770428	0945			2	50	12.5	18	160	9.90			7.60
770428	0947			3	50	12.5		160	10.00			7.60
770428	0950			5	50	12.5		160	10.00			7.60
770428	0952			10	50	12.5		160	10.00			7.60
770428	0955			16	50	12.5	20	160	10.00			7.60
770428	0957			23	50	12.5		160	10.00			7.60
770428	1000			30	50	12.5		160	10.00			7.60
770523	1520			1	25	22.5	45	150	8.30			7.50
770523	1523			1	50	20.5	45	150	8.10			7.40
770523	1526			1	75	21.0	50	150	8.10			7.40
770524	0938			2	50	17.5	40	160	7.70	1.0	4.0	7.30
770524	0940			3	50	17.3		160	7.80			7.30
770524	0942			5	50	17.3		160	7.80			7.30
770524	0944			10	50	17.1		160	7.80			7.30
770524	0948			16	50	17.1	50	160	7.80	1.0	4.0	7.20
770524	0950			23	50	17.1		160	7.80			7.20
770524	0952			30	50	17.1		160	7.80			7.20
770628	1012			1	50	23.5	11	170	6.80			7.20
770628	1015			3	50	21.5		160	6.20			7.10
770628	1020			5	50	21.5		160	6.20			7.00
770628	1025			10	50	21.0		160	6.20			7.00
770628	1030			16	50	20.5	16	160	6.20			7.00
770629	1008			1	25	22.5	13	180	7.10			7.20
770629	1010			1	50	22.5	12	180	7.20			7.20

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600098 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
761027	0940			16	30	90	1.00K	5.00K	60.00	750.00	50K
761207	0918			1						210.00	50K
761207	0927			16						180.00	50K
761228	0855			1						170.00	100
761228	0903			16						130.00	70
760225											
NUMBER				62	6	8	6	8	8	20	20
MAXIMUM				30	32	110	1.00K	5.00K	90.00	66000.00	110
MINIMUM				1	14	20	1.00K	5.00K	10.00K	130.00	50K
SUM				691	161	470	8.00	40.00	250.00	76550.00	1130
SUM SQ.				13085	3581	35300	8.00	200.00	14700.00	4.365E+09	69500
MEAN				11	20	59	1.00	5.00	31.25	3827.50	57
VARIANCE				88	49	1098	0.00	0.00	983.93	2.143E+08	298
STD.DEV.				9	7	33	0.00	0.00	31.37	14639.02	17
STD.ERR.				1	2	12	0.00	0.00	11.09	5273.38	4
COEF VAR				84	35	56	0.00	0.00	100.38	382.47	31
LOG MEAN				7	19	50	1.00	5.00	20.13	561.99	55
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML
760225	0858			1	10.00K	80.00	10.0K	50.00K	10.00	30	30
760225	0906			16	10.00K	80.00	10.0K	50.00K	10.00K		
760428	0940			1		50.00	10.0K				
760428	0948			16		70.00	10.0K				
760525	0950			1	10.00K	20.00	20.0	50.00K	10.00	10K	100K
760525	0958			16	10.00K	40.00	10.0	50.00K	30.00		
760629	0847			1		50.00	10.0K				
760629	0855			16		60.00	10.0				
760727	0840			1		40.00	10.0K				
760727	0848			16		70.00	10.0K				
760824	0955			1	10.00K	40.00	10.0K	50.00K	10.00	20	10K
760824	1003			16	10.00K	1400.00	10.0K	130.00	320.00	80	20
761027	0928			1	10.00K	50.00	10.0K	80.00	20.00		1670
761027	0940			16	10.00K	40.00	10.0K	50.00K	20.00		
760225											
NUMBER				62	6	14	14	6	8	4	5
MAXIMUM				30	10.00K	1400.00	20.0	130.00	320.00	80	1670
MINIMUM				1	10.00K	20.00	10.0K	50.00K	10.00K	10K	10K
SUM				691	80.00	2690.00	150.0	510.00	930.00	140	1830
SUM SQ.				13085	800.00	2.001E+06	1700.0	38300.00	104500.00	7800	2800300
MEAN				11	10.00	149.29	10.7	63.75	53.75	35	366
VARIANCE				88	0.00	129884.06	7.1	826.79	11426.79	967	532630
STD.DEV.				9	0.00	360.39	2.7	28.75	107.83	31	730
STD.ERR.				1	0.00	96.32	0.7	10.17	38.12	16	326
COEF VAR				84	0.00	241.41	24.9	45.10	200.61	89	199
LOG MEAN				7	10.00	63.37	10.5	59.75	21.04	26	63
761228											

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STATION - 600048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
771129	0927			5	50	11.5		110	9.00			7.50
771129	0930			10	50	11.5		110	9.00			7.50
771129	0935			16	50	11.5	21	110	9.00			7.50
771129	0937			23	50	11.5		110	8.90			7.40
771129	0940			30	50	11.5		110	8.90			7.40
771222	0933			2	50	9.4	15	160	9.80			7.50
771222	0935			3	50	9.4		160	9.80			7.40
771222	0937			5	50	9.5		160	9.70			7.40
771222	0940			10	50	9.5		160	9.70			7.40
771222	0945			16	50	9.5	16	160	9.70			7.40
771222	0948			23	50	9.5		160	9.60			7.40
771222	0952			30	50	9.5		160	9.60			7.30
770216												
NUMBER				114		114	64	114	114	8	8	114
MAXIMUM				30		26.0L	50	210	13.50	2.9	11.0	8.20
MINIMUM				1		3.5	4	110	5.50	1.0K	3.0	5.50
SUM				883		1758.2	1189	18570	957.49	10.8	46.0	834.29
SUM SQ.				16395		31394.4	32390	3086100	8447.17	18.0	308.0	6130.29
MEAN				8		15.4	19	163	8.40	1.3	5.8	7.32
VARIANCE				65		37.9	163	541	3.59	0.5	6.2	0.22
STD.DEV.				9		6.2	13	23	1.89	0.7	2.5	0.47
STD.ERR.				1		0.6	2	2	0.18	0.2	0.9	0.04
COEF VAR				119		39.9	69	14	22.54	51.9	43.4	6.38
LOG MEAN				4		13.8	15	161	8.20	1.2	5.3	7.30
771222												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CA CO3 MG/L	00415 PHEN-PH-LEIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
770216	1056			1	67.0	0	5	0.040	0.02	0.28	0.030
770216	1115			16	69.0	0	3	0.040	0.01	0.28	0.020
770216	1350			1			4				
770216	1354			1							
770216	1357			1			6				
770314	1613			1			30				
770314	1615			1			25				
770314	1617			1			26				
770322	0940			1	60.0	0	18	0.110	0.02	0.35	0.050
770322	1000			16	60.0	0	17	0.110	0.02	0.35	0.050
770323	0950			1			14				
770323	0953			1			18				
770323	0955			1			13				
770404	1441			1			100				
770404	1448			1			87				
770404	1450			1			110				
770427	1457			1			17				
770427	1459			1			13				
770427	1500			1			16				

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01042 FERROUS IRON UG/L	01077 SILVER AG,TOT UG/L	01105 ALUMINUM AL,TOT UG/L	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	71900 MERCURY HG,TOTAL UG/L
760225	0858			1	100K	10.00K	40	10K	3100	10K	2.00K	1000K	0.20K
760225	0906			16	100K	10.00K		10K	1000	10K	2.00K	1000K	0.20K
760428	0940			1			30						
760428	0948			16			20						
760525	0950			1	100K	10.00K	50	10K	200K	10K	2.00K	1000K	0.20K
760525	0958			16	100K	10.00K	50	10K	200	10K	2.00K	1000K	0.20K
760824	0955			1	100	10.00K		10K	300	10K	1.00K	1000K	0.20K
760824	1003			16	100K	10.00K		10K	15000	60	1.00K	1000K	0.20K
761027	0928			1	100K	10.00K		10K	500	10K	1.00K	1000K	0.20K
761027	0940			16	100K	10.00K		10K	600	10K	1.00K	1000K	0.50
760225													
	NUMBER			10	8	8	5	8	8	8	8	8	8
	MAXIMUM			16	100	10.00K	50	10K	15600	60	2.00K	1000K	0.50
	MINIMUM			1	100K	10.00K	20	10K	200K	10K	1.00K	1000K	0.20K
	SUM			85	800	80.00	190	80	19100	130	12.00	8000	1.90
	SUM SQ.			1285	80000	800.00	7900	800	2.28E+08	4300	20.00	8000000	0.53
	MEAN			9	100	10.00	38	10	2388	16	1.50	1000	0.24
	VARIANCE			63	0	0.00	170	0	26096000	313	0.29	0	0.01
	STD.DEV.			8	0	0.00	13	0	5108	18	0.53	0	0.11
	STD.ERR.			3	0	0.00	6	0	1806	6	0.19	0	0.04
	COEF VAR			93	0	0.00	34	0	214	109	35.63	0	44.66
	LOG MEAN			4	100	10.00	36	10	728	13	1.41	1000	0.22
761027													

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
770216											
NUMBER				114	22	22	64	22	22	22	22
MAXIMUM				30	71.0	0	110	0.280	0.09	0.47	0.110
MINIMUM				1	42.0	0	3	0.040	0.01	0.23	0.020
SUM				883	1219.0	0	1260	2.080	0.54	7.60	0.960
SUM SQ.				16395	69245.0	0	49762	0.261	0.02	2.73	0.057
MEAN				8	55.4	0	20	0.095	0.02	0.35	0.044
VARIANCE				85	81.0	0	396	0.003	0.00	0.00	0.001
STD.DEV.				9	9.0	0	20	0.055	0.02	0.07	0.027
STD.ERR.				1	1.9	0	2	0.012	0.00	0.01	0.006
COEF VAR				119	16.2	0	101	58.457	86.86	20.01	61.470
LOG MEAN				4	54.7	0	14	0.084	0.02	0.34	0.038

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
770216	1056			1	0.01	26.0	5.00	2.30	1.20	4	14
770216	1115			16	0.37R	27.0	5.20	2.20	1.10	4	17
770322	0940			1	0.78R	33.0	6.20			4	
770322	1000			16	0.73R	34.0	6.40			4	
770428	0945			2	0.01	21.0	4.20			4	
770428	0955			16	0.01	22.0	4.30			4	
770524	0938			2	0.01	18.0	4.90	3.80	2.00	5	29
770524	0948			16	0.03	18.0	4.80	3.70	2.00	7	29
770628	1012			1	0.05R	20.0	4.70			5	
770628	1030			16	0.13R	19.0	4.60			5	
770726	0754			2	0.09R	19.0	4.40			4	
770726	0805			16	0.01	20.0	4.60			4	
770824	0905			2	0.01	21.0	4.40	3.30	1.40	5	17
770824	0915			16	0.01	21.0	4.50	4.10	1.40	4	18
770928	1015			1	0.05	29.0	4.40			3	
770928	1023			16	0.05	31.0	4.40			4	
771027	0920			2	0.01K	17.0	4.70	2.70	1.10	4	20
771027	0930			16	0.01	17.0	4.90	2.60	1.30	4	21
771129	0923			2	0.02	25.0	5.10			3	
771129	0935			16	0.02	29.0	5.10			3	
771222	0933			2	0.01K	18.0	3.90			3	
771222	0945			16	0.01	16.0	3.80			3	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
770629	1012			1	75	22.0	13	180	6.90			7.20
770726	0754			2	50	21.5	10	140	7.00			7.20
770726	0756			3	50	21.5		140	6.80			7.20
770726	0758			5	50	21.5		140	7.00			7.20
770726	0800			10	50	21.5		140	7.00			7.20
770726	0805			16	50	21.5	12	140	6.80			7.20
770726	0808			23	50	21.5		140	6.80			7.20
770726	0812			30	50	21.5		140	6.80			7.20
770727	0912			1	25	21.5	17	140	7.00			7.10
770727	0914			1	50	21.5	16	140	7.10			7.10
770727	0916			1	75	21.5	16	140	7.10			7.20
770817	1448			1	25	22.0L	11	140	5.50			7.10
770817	1451			1	50	22.0	11	150	5.60			7.10
770817	1454			1	75	22.0	12	150	5.60			7.20
770823	1359			1	25	26.0	5	140	9.40			7.90
770823	1401			1	50	25.5	12	140	10.20			8.20
770823	1403			1	75	25.5	11	140	10.00			8.20
770824	0905			2	50	24.1	5	160	7.40	2.9	11.0	7.50
770824	0907			3	50	24.0		160	7.20			7.50
770824	0909			5	50	24.0		160	7.00			7.40
770824	0911			10	50	23.8		160	6.80			7.40
770824	0915			16	50	23.8	9	160	6.80	1.9	7.0	7.30
770824	0920			26	50	23.8		160	6.80			7.30
770914	1631			1	25	21.5	12	150	7.00			7.40
770914	1633			1	50	21.5	11	160	7.00			7.30
770914	1635			1	75	21.8	12	160	6.90			7.40
770927	1553			1	25	20.7	37	180	6.40			7.20
770927	1556			1	50	20.6	35	180	6.40			7.20
770927	1559			1	75	20.6	36	180	6.50			7.10
770928	1015			1	50	19.4	15	180	6.70			7.20
770928	1017			3	50	19.0		180	6.60			7.50
770928	1019			5	50	19.0		180	6.60			7.60
770928	1021			10	50	19.0		180	6.50			7.70
770928	1023			16	50	19.0	12	180	6.50			7.90
770928	1025			23	50	19.0		180	6.50			8.10
770928	1027			30	50	19.0		180	6.50			8.20
771026	1306			1	25	15.8	19	150	7.10			7.00
771026	1308			1	50	15.6	18	160	7.30			7.10
771026	1309			1	75	15.8	16	160	7.30			7.10
771027	0920			2	50	15.8	11	150	6.80	1.0K	6.0	7.10
771027	0922			3	50	15.6		150	6.70			7.10
771027	0925			5	50	15.6		150	6.70			7.10
771027	0927			10	50	15.6		150	6.70			7.00
771027	0930			16	50	15.6	11	150	6.70	1.0K	5.0	7.00
771027	0932			23	50	15.6		160	6.70			7.00
771027	0935			30	50	15.6		160	6.70			7.00
771128	1303			1	25	10.5	23	140	9.00			7.20
771128	1305			1	50	11.0	26	150	9.00			7.20
771128	1307			1	75	11.0	22	150	8.80			7.20
771129	0923			2	50	11.5	21	110	9.00			7.60
771129	0925			3	50	11.5		110	9.00			7.60

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
770216											
NUMBER				114	8	8	8	8	22	22	8
MAXIMUM				30	220	1.00K	5.00K	90.00	9500.00	80	10.00K
MINIMUM				1	60	1.00K	5.00K	10.00K	110.00	50K	10.00K
SUM				883	790	8.00	40.00	200.00	16610.00	1170	80.00
SUM SQ.				16395	97100	8.00	200.00	10400.00	2.287E+07	63900	800.00
MEAN				8	99	1.00	5.00	25.00	755.00	53	10.00
VARIANCE				85	2727	0.00	0.00	771.43	492064.25	80	0.00
STD.DEV.				9	52	0.00	0.00	27.77	701.47	9	0.00
STD.ERR.				1	18	0.00	0.00	9.82	149.55	2	0.00
COEF VAR				119	53	0.00	0.00	111.10	92.91	17	0.00
LOG MEAN				4	90	1.00	5.00	17.32	583.12	53	10.00
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L
770216	1056			1	20.00	10.0K	50.00K	20.00	10	10K	86
770216	1115			16	80.00	10.0K	50.00K	10.00K	10	10K	89
770322	0940			1							110
770322	1000			16							110
770428	0945			2							70
770428	0955			16							73
770524	0938			2	60.00	10.0K	50.00K	10.00K	2150	760	65
770524	0948			16	70.00	10.0K	50.00K	10.00			65
770628	1012			1							69
770628	1030			16							66
770726	0754			2							66
770726	0805			16							69
770824	0905			2	40.00	10.0K	50.00K	10.00	10K	10K	71
770824	0915			16	60.00	10.0K	50.00K	30.00			71
770928	1015			1							91
770928	1023			16							96
771027	0920			2	40.00	20.0	50.00K	40.00	960	180	62
771027	0930			16	40.00	40.0	50.00K	50.00			63
771129	0923			2							83
771129	0935			16							93
771222	0933			2							61
771222	0945			16							56

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LEIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
770428	0945			2	60.0	0	21	0.280	0.02	0.38	0.030
770428	0955			16	60.0	0	23	0.110	0.01	0.37	0.040
770523	1520			1			36				
770523	1523			1			23				
770523	1526			1			19				
770524	0938			2	43.0	0	33	0.090	0.01	0.42	0.110
770524	0948			16	43.0	0	37	0.120	0.01	0.42	0.110
770628	1012			1	47.0	0	3	0.090	0.01	0.32	0.030
770628	1030			16	50.0	0	13	0.050	0.04	0.30	0.030
770629	1008			1			11				
770629	1010			1			7				
770629	1012			1			10				
770726	0754			2	42.0	0	5	0.070	0.09	0.28	0.020
770726	0805			16	44.0	0	4	0.100	0.02	0.26	0.020
770727	0912			1			6				
770727	0914			1			7				
770727	0916			1			7				
770817	1448			1			20				
770817	1451			1			18				
770817	1454			1			21				
770823	1359			1			9				
770823	1401			1			8				
770823	1403			1			8				
770824	0905			2	52.0	0	5	0.090	0.02	0.23	0.030
770824	0915			16	52.0	0	7	0.210	0.08	0.24	0.030
770914	1631			1			11				
770914	1633			1			9				
770914	1635			1			11				
770927	1553			1			32				
770927	1556			1			30				
770927	1559			1			31				
770928	1015			1	63.0	0	17	0.060	0.04	0.33	0.060
770928	1023			16	63.0	0	13	0.100	0.02	0.34	0.060
771026	1306			1			18				
771026	1308			1			14				
771026	1309			1			13				
771027	0920			2	52.0	0	10	0.080	0.02	0.34	0.020
771027	0930			16	47.0	0	8	0.040	0.02	0.34	0.020
771128	1303			1			26				
771128	1305			1			28				
771128	1307			1			25				
771129	0923			2	66.0	0	23	0.070	0.02	0.46	0.070
771129	0935			16	71.0	0	24	0.080	0.02	0.47	0.070
771222	0933			2	54.0	0	12	0.070	0.01	0.42	0.030
771222	0945			16	54.0	0	14	0.070	0.01	0.42	0.030

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLDC DEPTH METERS	00680 T ORG C C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
770726	0754			2		9	35		1.6		
770726	0805			16		7	37		1.3		
770727	0912			1				0.30			
770727	0914			1				0.30			
770727	0916			1				0.30			
770817	1448			1				0.30			
770817	1451			1				0.30			
770817	1454			1				0.30			
770823	1359			1				0.30			
770823	1401			1				0.30			
770823	1403			1				0.30			
770824	0905			2	110	5	15		2.9	3.7	2K
770824	0915			16	110	6	17		6.2	3.7	2K
770914	1631			1				0.30			
770914	1633			1				0.30			
770914	1635			1				0.30			
770927	1553			1				0.30			
770927	1556			1				0.30			
770927	1559			1				0.30			
770928	1015			1		7	27		1.5		
770928	1023			16		6	32		1.4		
771026	1306			1				0.30			
771026	1308			1				0.30			
771026	1309			1				0.30			
771027	0920			2	80	7	28		2.5	3.8	2K
771027	0930			16	90	6	32		2.4	4.0	2K
771128	1303			1				0.30			
771128	1305			1				0.30			
771128	1307			1				0.30			
771129	0923			2		6	46				
771129	0935			16		6	46				
771222	0933			2		9	23		1.4		
771222	0945			16		7	24		1.0		
770216											
	NUMBER			114	8	22	22	42	20	8	8
	MAXIMUM			30	150	10	75	0.30	6.2	4.0	2
	MINIMUM			1	80	4	13	0.30	1.0	2.3	2K
	SUM			883	850	153	674	12.60	42.3	27.4	16
	SUM SQ.			16395	93300	1127	25644	3.76	119.1	96.8	32
	MEAN			8	106	7	31	0.30	2.1	3.4	2
	VARIANCE			85	427	3	238	0.00	1.6	0.4	0
	STD.DEV.			9	21	2	15	0.00	1.2	0.7	0
	STD.ERR.			1	7	0	3	0.00	0.3	0.2	0
	COEF VAR			119	19	25	50	0.20	59.1	19.0	0
	LOG MEAN			4	105	7	28	0.30	1.9	3.4	2
771222											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L
770216											
NUMBER				114	22	22	22	8	8	22	8
MAXIMUM				30	0.78	34.0	6.40	4.10	2.30	7	29
MINIMUM				1	0.01K	16.0	3.80	2.20	1.10	3	14
SUM				883	2.43	501.0	104.50	24.70	11.50	90	165
SUM SQ.				16395	1.31	12053.0	504.49	80.01	17.47	386	3621
MEAN				8	0.11	22.8	4.75	3.09	1.44	4	21
VARIANCE				65	0.05	30.7	0.39	0.54	0.13	1	31
STD.DEV.				9	0.22	5.5	0.62	0.73	0.37	1	6
STD.ERR.				1	0.05	1.2	0.13	0.26	0.13	0	2
COEF VAR				117	201.97	24.3	13.09	23.70	25.48	23	27
LOG MEAN				4	0.03	22.2	4.71	3.01	1.40	4	20
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L
770216	1056			1	80	1.00K	5.00K	90.00	920.00	50K	10.00K
770216	1115			16	90	1.00K	5.00K	10.00K	240.00	50K	10.00K
770322	0940			1					590.00	50K	
770322	1000			16					630.00	50K	
770428	0945			2					530.00	50K	
770428	0955			16					660.00	50K	
770524	0938			2	120	1.00K	5.00K	30.00	1600.00	50K	10.00K
770524	0948			16	220	1.00K	5.00K	30.00	1300.00	50K	10.00K
770628	1012			1					380.00	50K	
770628	1030			16					760.00	50K	
770726	0754			2					740.00	50K	
770726	0805			16					3500.00	50K	
770824	0905			2	80	1.00K	5.00K	10.00K	110.00	50K	10.00K
770824	0915			16	70	1.00K	5.00K	10.00K	290.00	50K	10.00K
770928	1015			1					310.00	80	
770928	1023			16					320.00	80	
771027	0920			2	60	1.00K	5.00K	10.00	490.00	60	10.00K
771027	0930			16	70	1.00K	5.00K	10.00	510.00	50K	10.00K
771129	0923			2					770.00	50K	
771129	0935			16					870.00	50K	
771222	0935			2					550.00	50K	
771222	0945			16					540.00	50K	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
780228	0925			2	50	4.0	13	150	12.40	1.0K	1.0	7.60
780228	0926			3	50	4.0		150	12.60			7.60
780228	0927			5	50	4.0		150	12.60			7.60
780228	0928			10	50	4.0		150	12.60			7.60
780228	0930			16	50	4.0	14	150	12.50	1.0K	5.0	7.60
780228	0932			23	50	4.0		150	12.60			7.60
780228	0935			30	50	4.0		150	12.60			7.60
780503	0852			2	50	12.5	6	160	11.90	1.2	4.0	7.30
780503	0854			3	50	12.5		160	11.90			7.30
780503	0856			5	50	12.5		160	11.90			7.20
780503	0858			10	50	12.5		160	11.90			7.20
780503	0900			16	50	12.5	6	160	11.90	1.2	4.0	7.20
780503	0902			23	50	12.5		160	11.90			7.20
780503	0904			30	50	12.5		160	11.90			7.20
780802	1224			1	50	20.0	5	180	8.70	1.0K	5.0	6.70
780802	1225			3	50	20.0		180	8.80			
780802	1226			5	50	20.0		180	8.75			
780802	1227			10	50	19.0		180	8.40			
780802	1228			16	50	17.5	4	170	8.10	1.0K	5.0	6.60
780802	1229			23	50	17.0		170	8.00			
780802	1230				5							
781011	0914			2	50	17.0	2	170	8.20	1.4	4.0	7.40
781011	0916			3	50	17.0		170	8.20			7.40
781011	0918			5	50	17.0		170	8.10			7.40
781011	0920			10	50	17.5		170	8.20			7.40
781011	0922			16	50	17.5	2	170	8.10	1.3	4.0	7.40
781011	0924			23	50	17.5		170	8.10			7.30
781011	0926			30	50	17.5		170	8.10			7.30
780228												
NUMBER				27		27	8	27	27	8	8	23
MAXIMUM				30		20.0	14	180	12.60	1.4	6.0	7.60
MINIMUM				1		4.0	2	150	8.00	1.0K	1.0	6.60
SUM				325		350.0	51	4420	279.05	9.1	30.0	158.70
SUM SQ.				6389		5454.0	478	726400	2991.61	10.5	130.0	1238.93
MEAN				12		13.0	6	164	10.34	1.1	3.8	7.33
VARIANCE				95		35.3	22	109	4.14	0.0	3.4	0.07
STD.DEV.				10		5.9	5	10	2.03	0.2	1.8	0.27
STD.ERR.				2		1.1	2	2	0.39	0.1	0.6	0.06
COEF VAR				81		45.8	73	6	19.68	14.0	48.9	3.62
LOG MEAN				8		11.1	5	163	10.14	1.1	3.1	7.33
781011												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L
770216											
NUMBER				114	8	8	8	8	5	5	22
MAXIMUM				30	80.00	40.0	50.00K	50.00	2150	760	110
MINIMUM				1	20.00	10.0K	50.00K	10.00K	10K	10K	56
SUM				883	410.00	120.0	400.00	180.00	3140	970	1685
SUM SQ.				16395	23700.00	2600.0	20000.00	5800.00	5544400	610300	134217
MEAN				8	51.25	15.0	50.00	22.50	628	194	77
VARIANCE				85	383.93	114.3	0.00	250.00	893120	105530	246
STD.DEV.				9	19.59	10.7	0.00	15.81	945	325	16
STD.ERR.				1	6.93	3.8	0.00	5.59	423	145	3
COEF VAR				119	38.23	71.3	0.00	70.27	150	167	20
LOG MEAN				4	47.47	13.0	50.00	18.19	73	42	75
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLOC DEPTH METERS	00680 T ORG C C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
770216	1056			1	100	7	13		1.4	2.3	2K
770216	1115			16	150	6	14		1.3	2.5	2K
770216	1350			1				0.30			
770216	1354			1				0.30			
770216	1357			1				0.30			
770314	1613			1				0.30			
770314	1615			1				0.30			
770314	1617			1				0.30			
770322	0940			1		10	35		1.6		
770322	1000			16		4	15		1.4		
770323	0950			1				0.30			
770323	0953			1				0.30			
770323	0955			1				0.30			
770404	1441			1				0.30			
770404	1448			1				0.30			
770404	1450			1				0.30			
770427	1457			1				0.30			
770427	1459			1				0.30			
770427	1500			1				0.30			
770428	0945			2		10	25		2.7		
770428	0955			16		10	20		1.2		
770523	1520			1				0.30			
770523	1523			1				0.30			
770523	1526			1				0.30			
770524	0938			2	100	5	60		3.7	3.9	2K
770524	0948			16	110	7	75		3.6	3.5	2
770628	1012			1		6	22		1.9		
770628	1030			16		5	33		1.3		
770629	1008			1				0.30			
770629	1010			1				0.30			
770629	1012			1				0.30			

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L
780228	0925			2	5.00K	30.00	130.00	50K	10.00K	30.00	20.0	10.00K
780228	0930			16	5.00K	20.00	160.00	50K	10.00K	30.00	20.0	10.00K
780503	0852			2	5.00K	20.00	350.00	50K	10.00K	40.00	10.0K	10.00K
780503	0900			16	5.00K	20.00	220.00	50K	10.00K	50.00K	10.0K	10.00K
780802	1224			1	5.00K	10.00	340.00	50K	10.00K	90.00	10.0	10.00K
780802	1228			16	5.00K	20.00	560.00	50K	10.00K	30.00	10.0K	10.00K
781011	0914			2	5.00K	10.00K	300.00	50K	10.00K	20.00	10.0K	10.00K
781011	0922			16	5.00K	10.00K	280.00	50K	10.00K	20.00	10.0K	20.00
780228												
NUMBER				27	8	8	8	8	8	5	8	8
MAXIMUM				30	5.00K	30.00	560.00	50K	10.00K	90.00	20.0	20.00
MINIMUM				1	5.00K	10.00K	130.00	50K	10.00K	20.00K	10.0K	10.00K
SUM				325	40.00	140.00	2340.00	400	80.00	320.00	100.0	90.00
SUM SQ.				6389	200.00	2800.00	811000.00	20000	800.00	16800.00	1400.0	1100.00
MEAN				12	5.00	17.50	292.50	50	10.00	40.00	12.5	11.25
VARIANCE				95	0.00	50.00	18078.57	0	0.00	571.43	21.4	12.50
STD.DEV.				10	0.00	7.07	134.46	0	0.00	23.90	4.6	3.54
STD.ERR.				2	0.00	2.50	47.54	0	0.00	8.45	1.6	1.25
COEF VAR				81	0.00	40.41	45.97	0	0.00	59.76	37.0	31.43
LOG MEAN				8	5.00	16.22	266.72	50	10.00	34.82	11.9	10.91
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLOC DEPTH METERS
780228	0925			2	10.00K	660	120	56	80	11	31	0.50
780228	0926			3								1.00
780228	0927			5								1.50
780228	0928			10								3.00
780228	0930			16	10.00K			62	80	11	32	5.00
780228	0932			23								7.00
780228	0935			30								9.00
780503	0852			2	20.00	1800	100K	74	100	7	18	0.50
780503	0854			3								1.00
780503	0856			5								1.50
780503	0858			10								3.00
780503	0900			16	20.00			74	100	7	21	5.00
780503	0902			23								7.00
780503	0904			30								9.00
780802	1224			1	10.00K	2900	100K	88	100	6	11	0.30
780802	1225			3								1.00
780802	1226			5								1.50
780802	1227			10								3.00
780802	1228			16	10.00K			89	70	7	9	5.00
780802	1229			23								7.00
781011	0914			2	20.00	220	10K	64	100	8	8	0.50
781011	0916			3								1.00
781011	0918			5								1.50

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01077 SILVER AG,TOT UG/L	01105 ALUMINUM AL,TOT UG/L	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	71900 MERCURY HG,TOTAL UG/L
770216	1056			1	100K	10.00K	10.0K	400	10K	1.00K	1000K	0.20K
770216	1115			16	100K	10.00K	10.0K	300	10K	1.00K	1000K	0.20K
770524	0938			2	100K	10.00K	10.0K	900	10K	1.00K	1000K	0.20K
770524	0948			16	100K	10.00K	10.0K	1000	10K	1.00K	1000K	0.80
770824	0905			2	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
770824	0915			16	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
771027	0920			2	100K	10.00K	10.0K	400	10K	1.00K	1000K	0.20K
771027	0930			16	100K	10.00K	10.0K	200	10K	1.00K	1000K	0.20K
770216												
NUMBER				6	6	6	6	6	6	3	6	6
MAXIMUM				16	100K	10.00K	10.0K	1000	10K	1.00K	1000K	0.80
MINIMUM				1	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
SUM				71	800	80.00	80.0	3600	60	8.00	6000	2.20
SUM SQ.				1037	80000	800.00	800.0	2340000	600	8.00	8000000	0.92
MEAN				9	100	10.00	10.0	450	10	1.00	1000	0.27
VARIANCE				58	0	0.00	0.0	102857	0	0.00	0	0.05
STD.DEV.				8	0	0.00	0.0	321	0	0.00	0	0.21
STD.ERR.				3	0	0.00	0.0	113	0	0.00	0	0.07
COEF VAR				66	0	0.00	0.0	71	0	0.00	0	77.14
LOG MEAN				5	100	10.00	10.0	369	10	1.00	1000	0.24
771027												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01003 ARSENIC SED MG/KG DRY WGT	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SED MG/KG DRY WGT	01043 COPPER SED MG/KG DRY WGT	01052 LEAD SED MG/KG DRY WGT	01053 MN MUD DRY WGT MG/KG-MN	01068 NICKEL SED MG/KG DRY WGT
780228	0925			2		100K	10.00K						
780228	0930			16		100K	10.00K						
780503	0852			2		100K	10.00K						
780503	0900			16		100K	10.00K						
780802	1224			1		100K	10.00K						
780802	1228			16		100K	10.00K						
780802	1230				6.60			1.00K	5.00K	13.00	10	1100	20.00
781011	0914			2		410	10.00K						
781011	0922			16		290	10.00K						
780228													
NUMBER				8	1	8	8	1	1	1	1	1	1
MAXIMUM				16		410	10.00K						
MINIMUM				1		100K	10.00K						
SUM				71		1300	80.00						
SUM SQ.				1037		312200	800.00						
MEAN				9		163	10.00						
VARIANCE				58		14421	0.00						
STD.DEV.				8		120	0.00						
STD.ERR.				3		42	0.00						
COEF VAR				86		74	0.00						
LOG MEAN				5		136	10.00						
781011													

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01077 SILVER AG,TOT UG/L	01093 ZINC SED MG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE
780228	0925			2	10K		650		10K	1.00K	1000K	
780228	0930			16	10K		200K		10K	1.00K	1000K	
780503	0852			2	10K		340		10K	1.00K	1000K	
780503	0900			16	10K		430		10K	1.00K	1000K	
780802	1224			1	10K		200K		10K	1.00K	1000K	
780802	1228			16	10K		200K		10K	1.00K	1000K	
780802	1230					66.00		11000.00				15000.00
781011	0914			2	10K		750		10K	1.00K	1000K	
781011	0922			16	10K		1300		10K	1.00K	1000K	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LEIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00535 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
780228	0925			2	49.0	0	8	0.080	0.01K	0.45	0.020	0.01
780228	0930			16	49.0	0	8	0.100	0.01K	0.45	0.020	0.01
780503	0852			2	54.0	0	20	0.140	0.03	0.41	0.030	0.01
780503	0900			16	53.0	0	21	0.060	0.06	0.42	0.030	0.01
780802	1224			1	60.0	0	4	0.010K	0.09	0.36	0.030	0.02
780802	1228			16	61.0	0	4	0.080	0.04	0.41	0.040	0.02
781011	0914			2	52.0	0	3	0.110	0.01K	0.30	0.020	0.01K
781011	0922			16	49.0	0	4	0.090	0.01K	0.31	0.020	0.01K
780228												
NUMBER				27	8	8	8	8	8	8	8	8
MAXIMUM				30	61.0	0	21	0.140	0.06	0.45	0.040	0.02
MINIMUM				1	49.0	0	3	0.010K	0.01K	0.30	0.020	0.01K
SUM				325	427.0	0	72	0.670	0.25	3.11	0.210	0.11
SUM SQ.				6389	22953.0	0	1026	0.066	0.01	1.23	0.006	0.00
MEAN				12	53.4	0	9	0.084	0.03	0.39	0.026	0.01
VARIANCE				95	23.1	0	54	0.001	0.00	0.00	0.000	0.00
STD.DEV.				10	4.8	0	7	0.038	0.03	0.06	0.007	0.01
STD.ERR.				2	1.7	0	3	0.013	0.01	0.02	0.003	0.00
COEF VAR				81	9.0	0	82	45.551	86.27	15.15	28.344	37.64
LOG MEAN				8	53.2	0	7	0.069	0.02	0.38	0.025	0.01
781011												

DATE	TIME	DATE	TIME	00C03 DEPTH FEET	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L
780228	0925			2	16.0	3.80	1.20	0.65	3	29	140	1.00K
780228	0930			16	18.0	4.10	1.40	0.74	3	27	360	1.00K
780503	0852			2	22.0	4.60	3.40	1.30	3	19	50	1.00K
780503	0900			16	22.0	4.70	3.50	1.20	3	19	20	1.00K
780802	1224			1	28.0	4.30	3.20	0.75	3	23	10K	1.00K
780802	1228			16	29.0	4.00	2.40	0.65	3	18	70	1.00K
781011	0914			2	18.0	4.60	3.10	1.20	3	23	50	1.00K
781011	0922			16	18.0	4.40	3.10	1.20	3	26	70	1.00K
780228												
NUMBER				27	8	8	8	8	8	8	8	8
MAXIMUM				30	29.0	4.70	3.50	1.30	3	29	360	1.00K
MINIMUM				1	16.0	3.80	1.20	0.65	3	18	10K	1.00K
SUM				325	171.0	34.50	21.30	7.69	24	184	770	8.00
SUM SQ.				6389	3821.0	149.51	62.43	7.97	72	4350	164500	8.00
MEAN				12	21.4	4.31	2.66	0.96	3	23	96	1.00
VARIANCE				95	23.7	0.10	0.82	0.09	0	17	12913	0.00
STD.DEV.				10	4.9	0.32	0.90	0.29	0	4	114	0.00
STD.ERR.				2	1.7	0.11	0.32	0.10	0	1	40	0.00
COEF VAR				81	22.8	7.48	33.95	29.77	0	18	118	0.00
LOG MEAN				8	20.9	4.30	2.49	0.92	3	23	58	1.00
781011												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00080 COLOR PT-CO UNITS	00095 CNDUCTVY AT 25C MICROMHO	00098 VSAMPLOC DEPTH METERS	00300 DO MG/L	00310 BOD 5 DAY MG/L
790214	0927			1	50	4.5	12	9	140	0.30	11.50	1.2
790214	0928			3	50	4.5			140	1.00	11.50	
790214	0929			5	50	4.5			140	1.50	11.50	
790214	0930			10	50	4.5			140	3.00	11.50	
790214	0935			16	50	4.5	12	11	140	5.00	11.50	1.4
790214	0936			23	50	4.5			140	7.00	11.50	
790214	0937			30	50	4.5			140	9.00	11.50	
790214	0938			33	50	4.5			140	10.00	11.50	
790510	0930			1	50	15.0	16	12	190	0.30	7.60	1.2
790510	0932			3	50	15.0			190	1.00	7.60	
790510	0934			5	50	15.0			190	1.50	7.60	
790510	0936			10	50	15.0			200	3.00	7.60	
790510	0938			16	50	14.0	19	16	200	5.00	7.70	1.0K
790510	0940			23	50	14.0			200	7.00	7.70	
790510	0942			30	50	14.0			200	9.00	7.70	
790510	0945				5							
790809	0920			1	50	20.5	2	6	180	0.30	9.00	1.0K
790809	0922			3	50	20.5			180	1.00	9.00	
790809	0924			5	50	20.5			180	1.50	9.10	
790809	0926			10	50	20.0			180	3.00	9.10	
790809	0928			16	50	20.0	3	5	180	5.00	9.20	1.0K
790809	0930			20	50	20.0			180	6.00	9.20	
790809	0932			23	50	20.0			180	7.00	9.20	
791017	0852			1	50	15.5	2	5	170	0.30	8.60	1.0K
791017	0853			3	50	15.5			170	1.00	8.60	
791017	0854			5	50	15.5			170	1.50	8.60	
791017	0855			10	50	15.5			170	3.00	8.50	
791017	0856			16	50	15.5	3	5	170	5.00	8.50	1.0K
791017	0857			23	50	15.5			170	7.00	8.50	
791017	0858			30	50	15.5			170	9.00	8.50	
790214												
NUMBER				29		29	8	8	29	29	29	8
MAXIMUM				33		20.5	19	16	200	10.00	11.50	1.4
MINIMUM				1		4.5	2	5	140	0.30	7.60	1.0K
SUM				375		388.0	69	64	4940	114.20	269.10	8.8
SUM SQ.				7869		6152.5	931	713	854200	724.36	2559.33	9.8
MEAN				13		13.4	9	9	170	3.94	9.28	1.1
VARIANCE				108		35.8	48	17	453	9.81	2.22	0.0
STD.DEV.				10		6.0	7	4	21	3.13	1.49	0.2
STD.ERR.				2		1.1	2	1	4	0.58	0.28	0.1
COEF VAR				80		44.7	80	48	13	79.53	16.07	13.7
LOG MEAN				8		11.6	6	8	169	2.46	9.17	1.1
791017												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00096 WSAMPLDC DEPTH METERS
781011	0920			10								3.00
781011	0922			16	20.00			63	100	7	8	5.00
781011	0924			23								7.00
781011	0926			30								9.00
780228												
NUMBER				27	8	4	4	8	8	8	8	27
MAXIMUM				30	20.00	2900	120	89	100	11	32	9.00
MINIMUM				1	10.00K	220	10K	56	70	6	8	0.30
SUM				325	120.00	5580	330	570	730	64	138	98.80
SUM SQ.				6389	2000.00	12134000	34500	41662	67700	538	3080	588.84
MEAN				12	15.00	1395	83	71	91	8	17	3.66
VARIANCE				95	28.57	1449966	2425	150	155	4	100	8.74
STD.DEV.				10	5.35	1204	49	12	12	2	10	2.96
STD.ERR.				2	1.89	602	25	4	4	1	4	0.57
COEF VAR				81	35.63	86	60	17	14	24	58	80.80
LOG MEAN				8	14.14	933	59	70	90	8	15	2.39
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00339 COD MUD DRY WGT MG/KG	00603 TOTAL N MUD D WT MG/KG-N	00626 ORGAN. N MUD D WT MG/KG-N	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
780228	0925			2				1.6		4.3	2K
780228	0930			16				1.4		4.1	2K
780503	0852			2				1.7		3.8	2K
780503	0900			16				1.5		3.9	2K
780802	1224			1				1.9		3.2	2K
780802	1228			16				1.7			2K
780802	1230				61000	560.00	550		0		
781011	0914			2				1.5		3.6	2
781011	0922			16				1.3		3.6	2K
780228											
NUMBER				27	1	1	1	8	1	7	8
MAXIMUM				30				1.9		4.3	2
MINIMUM				1				1.3		3.2	2K
SUM				325				12.6		26.5	16
SUM SQ.				6389				20.1		101.1	32
MEAN				12				1.6		3.8	2
VARIANCE				95				0.0		0.1	0
STD.DEV.				10				0.2		0.4	0
STD.ERR.				2				0.1		0.1	0
COEF VAR				81				12.1		9.6	0
LOG MEAN				8				1.6		3.8	2
781011											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	70300 RESIDUE DISS-180 C MG/L	00081 AP COLOR PT-CO UNITS	00335 COD LOW LEVEL MG/L	00666 PHOS-DIS MG/L P	00680 T ORG C C MG/L	00916 CALCIUM CA-TOT MG/L	00927 MAGNESIUM MG,TOT MG/L
790214	0927			1	90	38	4.0	0.01	3.6	26.0	4.50
790214	0935			16	90	38	4.0	0.02	2.5	27.0	4.50
790510	0930			1	110	45	7.0	0.01K	2.6	23.0	4.70
790510	0938			16	110	39	7.0	0.02	3.0	23.0	4.60
790809	0920			1	100	7	5.0	0.01	2.8	19.0	4.90
790809	0928			16	100	7	6.0	0.01	3.1	20.0	5.00
791017	0852			1	90	7	5.0	0.01	2.5	20.0	5.10
791017	0856			16	90	13	4.0	0.01K	2.5	19.0	5.20
790214											
NUMBER				29	8	8	8	8	8	8	8
MAXIMUM				33	110	45	7.0	0.02	3.6	27.0	5.20
MINIMUM				1	90	7	4.0	0.01K	2.5	19.0	4.50
SUM				375	780	194	42.0	0.10	22.6	177.0	38.50
SUM SQ.				7869	76600	4750	232.0	0.00	64.9	3985.0	185.81
MEAN				13	98	24	5.3	0.01	2.8	22.1	4.81
VARIANCE				108	79	292	1.6	0.00	0.2	9.8	0.08
STD.DEV.				10	9	17	1.3	0.00	0.4	3.1	0.27
STD.ERR.				2	3	6	0.5	0.00	0.1	1.1	0.10
COEF VAR				80	9	70	24.4	37.03	13.9	14.2	5.71
LOG MEAN				8	97	18	5.1	0.01	2.8	21.9	4.81
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L	01003 ARSENIC SEDMG/KG DRY WGT
790214	0927			1	4.10	0.95	3	24	3.6	2K	
790214	0935			16	4.00	1.10	3	24	3.6	2K	
790510	0930			1	2.10	1.20	3	20	4.3	2K	
790510	0938			16	2.10	1.30	3	22	4.3	2K	
790510	0945										5.20
790809	0920			1	2.40	1.20	3	29	3.7	2K	
790809	0928			16	2.70	1.20	2	28	3.5	2K	
791017	0852			1	2.90	1.40	5	22	4.1	2K	
791017	0856			16	2.90	1.40	2	22	4.1	2K	
790214											
NUMBER				29	8	8	8	8	8	8	1
MAXIMUM				33	4.10	1.40	5	29	4.3	2K	
MINIMUM				1	2.10	0.95	2	20	3.5	2K	
SUM				375	23.20	9.75	24	189	31.2	16	
SUM SQ.				7869	71.90	12.04	78	4521	122.5	32	
MEAN				13	2.90	1.22	3	24	3.9	2	
VARIANCE				108	0.30	0.02	1	8	0.1	0	
STD.DEV.				10	0.78	0.15	1	3	0.3	0	
STD.ERR.				2	0.27	0.05	0	1	0.1	0	
COEF VAR				80	26.77	12.39	31	12	8.6	0	
LOG MEAN				8	2.81	1.21	3	23	3.9	2	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01077 SILVER AG,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE
780228												
NUMBER				8	8	1	8	1	8	8	8	1
MAXIMUM				16	10K		1300		10K	1.00K	1000K	
MINIMUM				1	10K		200K		10K	1.00K	1000K	
SUM				71	80		4070		80	8.00	8000	
SUM SQ.				1037	800		3095500		800	8.00	8000000	
MEAN				9	10		509		10	1.00	1000	
VARIANCE				58	0		146413		0	0.00	0	
STD.DEV.				8	0		383		0	0.00	0	
STD.ERR.				3	0		135		0	0.00	0	
COEF VAR				86	0		75		0	0.00	0	
LOG MEAN				5	10		406		10	1.00	1000	
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70318 RESIDUE TOTAL PERCENT	70322 RESIDUE TOT VOL PERCENT	70331 SUSP SED PARTSIZE %<.062MM	70332 SUSP SED PARTSIZE %<.125MM	70334 SUSP SED PARTSIZE %<.500MM	70336 SUSP SED PARTSIZE %<2.00MM	71900 MERCURY HG,TOTAL UG/L	71921 MERCURY SEDMG/KG DRY WGT
780228	0925			2							0.20K	
780228	0930			16							0.20K	
780503	0852			2							0.20K	
780503	0900			16							0.20K	
780802	1224			1							0.20K	
780802	1228			16							0.20K	
780802	1230				54.0	3.4	46	54	99	100		0.10K
781011	0914			2							0.20K	
781011	0922			16							0.20K	
780228												
NUMBER				8	1	1	1	1	1	1	8	1
MAXIMUM				16							0.20K	
MINIMUM				1							0.20K	
SUM				71							1.60	
SUM SQ.				1037							0.32	
MEAN				9							0.20	
VARIANCE				58							0.00	
STD.DEV.				8							0.00	
STD.ERR.				3							0.00	
COEF VAR				86							0.08	
LOG MEAN				5							0.20	
781011												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01042 COPPER CU,TOT UG/L	01043 COPPER SEDMG/KG DRY WGT	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01052 LEAD SEDMG/KG DRY WGT	01053 MN MUD DRY WGT MG/KG-MN
790214	0927			1	10.00K		440.00	50K	10.00K		
790214	0935			16	10.00K		720.00	50K	10.00K		
790510	0930			1	10.00K		1300.00	50	10.00K		
790510	0938			16	20.00		1200.00	80	10.00K		
790510	0945					13.00				24	680
790809	0920			1	10.00K		210.00	50K	10.00K		
790809	0928			16	10.00K		240.00	50K	10.00K		
791017	0852			1	70.00		460.00	50K	10.00K		
791017	0856			16	20.00		460.00	50K	10.00K		
790214											
NUMBER				8	8	1	8	8	8	1	1
MAXIMUM				16	70.00		1300.00	80	10.00K		
MINIMUM				1	10.00K		210.00	50K	10.00K		
SUM				68	160.00		5030.00	430	80.00		
SUM SQ.				1028	62CC.00		4.367E+06	23900	800.00		
MEAN				9	20.00		628.75	54	10.00		
VARIANCE				64	428.57		172041.13	113	0.00		
STD.DEV.				8	2C.70		414.78	11	0.00		
STD.ERR.				3	7.32		146.65	4	0.00		
COEF VAR				94	103.51		65.97	20	0.00		
LOG MEAN				4	15.17		519.08	53	10.00		
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01077 SILVER AG,TOT UG/L	01092 ZINC ZN,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L
790214	0927			1	40.00	10.0K	10.00K	10.0K	10.00K		400.00
790214	0935			16	40.00	10.0K	10.00K	10.0K	20.00		400.00
790510	0930			1	60.00	10.0K	10.00K	10.0K	20.00		1400.00
790510	0938			16	70.00	10.0K	10.00K	10.0K	20.00		1400.00
790510	0945									62.00	
790809	0920			1	30.00	10.0K	10.00K	10.0K	10.00K		440.00
790809	0928			16	30.00	10.0K	10.00K	10.0K	10.00		560.00
791017	0852			1	60.00	10.0K	50.00K	10.0K	150.00		400.00
791017	0856			16	70.00	10.0	50.00K	10.0K	30.00		500.00

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LEIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
790214	0927			1	7.50	55.0	0	10	0.090	0.01	0.47	0.040
790214	0928			3	7.50							
790214	0929			5	7.50							
790214	0930			10	7.50							
790214	0935			16	7.50	55.0	0	11	0.090	0.01	0.48	0.040
790214	0936			23	7.50							
790214	0937			30	7.50							
790214	0938			33	7.50							
790510	0930			1	7.30	61.0	0	12	0.100	0.02	0.46	0.070
790510	0932			3	7.30							
790510	0934			5	7.30							
790510	0936			10	7.40							
790510	0938			16	7.40	58.0	0	19	0.140	0.04	0.46	0.070
790510	0940			23	7.20							
790510	0942			30	7.20							
790809	0920			1	7.60	11.0	0	2	0.090	0.01	0.30	0.020
790809	0922			3	7.60							
790809	0924			5	7.50							
790809	0926			10	6.90							
790809	0928			16	6.90	9.0	0	4	0.100	0.01	0.30	0.020
790809	0930			20	7.90							
790809	0932			23	7.90							
791017	0852			1	7.40	50.0	0	4	0.050	0.04	0.65	0.020
791017	0853			3	7.40							
791017	0854			5	7.40							
791017	0855			10	7.40							
791017	0856			16	7.40	53.0	0	7	0.080	0.05	0.62	0.040
791017	0857			23	7.40							
791017	0858			30	7.40							
790214												
NUMBER				29	29	8	8	8	8	8	8	8
MAXIMUM				33	7.90	61.0	0	19	0.140	0.05	0.65	0.070
MINIMUM				1	6.90	9.0	0	2	0.050	0.01	0.30	0.040
SUM				375	215.20	352.0	0	69	0.740	0.19	3.74	0.380
SUM SQ.				7869	1598.20	18646.0	0	811	0.073	0.01	1.86	0.019
MEAN				13	7.42	44.0	0	9	0.092	0.02	0.47	0.047
VARIANCE				108	0.05	451.1	0	31	0.001	0.00	0.02	0.000
STD.DEV.				10	0.21	21.2	0	6	0.025	0.02	0.13	0.012
STD.ERR.				2	0.04	7.5	0	2	0.009	0.01	0.04	0.008
COEF VAR				80	2.87	48.3	0	64	26.950	70.95	27.17	58.337
LOG MEAN				8	7.42	36.0	0	7	0.089	0.02	0.45	0.033
791017												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	46576 CAL HARD CA MG MG/L	71900 MERCURY HG,TOTAL UG/L	70322 RESIDUE TOT VOL PERCENT	80203 TOT SED SIEVE %<.062MM	80204 TOT SED SIEVE %<.125MM	80206 TOT SED SIEVE %<.500MM
790214	0927			1	83	0.20K				
790214	0935			16	86	0.20K				
790510	0930			1	77	0.20K				
790510	0938			16	76	0.20K				
790510	0945						5.1	48.2	64.6	99.3
790809	0920			1	68	0.20K				
790809	0928			16	70	0.20K				
791017	0852			1	71	0.20K				
791017	0856			16	69	0.20K				
790214										
	NUMBER			8	8	8	1	1	1	1
	MAXIMUM			16	86	0.20K				
	MINIMUM			1	68	0.20K				
	SUM			68	600	1.60				
	SUM SQ.			1028	45316	0.32				
	MEAN			9	75	0.20				
	VARIANCE			64	45	0.00				
	STD.DEV.			8	7	0.00				
	STD.ERR.			3	2	0.00				
	COEF VAR			94	9	0.08				
	LOG MEAN			4	75	0.20				
791017										

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SEDMG/KG DRY WGT	01034 CHROMIUM CR,TOT UG/L
790214	0927			1	100K	10.00K	140	1.00K			5.00
790214	0935			16	100K	10.00K	160	1.00K			5.00K
790510	0930			1	280	10.00K	50	1.00K			5.00K
790510	0938			16	230	10.00K	40	1.00K			5.00K
790510	0945								1.00K	15.00	
790809	0923			1	630	10.00K	10K	1.00K			5.00K
790809	0928			16	660	10.00K	10K	1.00K			5.00K
791017	0852			1	100K	10.00K	10K	1.00K			5.00K
791017	0856			16	100K	10.00K	10K	1.00K			5.00K
790214											
NUMBER				29	8	8	8	8	1	1	8
MAXIMUM				33	660	10.00K	160	1.00K			5.00
MINIMUM				1	100K	10.00K	10K	1.00K			5.00K
SUM				275	2200	80.00	430	8.00			40.00
SUM SQ.				7869	1003800	800.00	49700	8.00			200.00
MEAN				13	275	10.00	54	1.00			5.00
VARIANCE				108	56971	0.00	3798	0.00			0.00
STD.DEV.				10	239	0.00	62	0.00			0.00
STD.ERR.				2	84	0.00	22	0.00			0.00
COEF VAR				80	87	0.00	115	0.00			0.00
LOG MEAN				8	201	10.00	29	1.00			5.00
791017											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
760225	0915			1	50	8.5	18	160	13.10	1.0K	7.0	9.60
760225	0916			3	50	8.5			13.10			9.60
760225	0917			5	50	8.5			13.10			9.60
760225	0918			10	50	8.5			13.10			9.60
760225	0920			16	50	8.5	18	160	13.10	1.0K	4.0	9.60
760225	0922			26	50	8.3			13.10			9.60
760225	0924			30	50	8.3			13.20			9.60
760428	0955			1	50	14.0	4	160	10.00		6.0	7.60
760428	0957			3	50	14.0		180	9.90			7.60
760428	0959			5	50	14.0		180	9.80			7.60
760428	1001			10	50	14.0		180	9.60			7.60
760428	1003			16	50	14.0	3	180	9.60		5.0	7.60
760428	1006			26	50	14.0		180	9.60			7.60
760525	1006			1	50	16.5	4	180	8.30	1.0K	5.0	7.60
760525	1008			5	50	16.5		180	8.30			7.60
760525	1010			10	50	16.2		180	8.10			7.60
760525	1015			16	50	16.0	5	180	8.00	1.0K	7.0	7.60
760525	1017			20	50	16.5		180	8.00			7.60
760629	[illegible]			1	50	20.4	20	180	6.60			7.30
760629	[illegible]			3	50	20.4		180	6.60			7.40
760629	[illegible]			5	50	20.3		180	6.60			7.40
760629	0908			10	50	20.3		190	6.70			7.40
760629	0910			16	50	20.3	23	190	6.70			7.30
760629	0912			26	50	20.3		190	6.70			7.30
760727	0900			1	50	21.4	5	170	7.40			7.20
760727	0902			3	50	21.3		170	7.20			7.30
760727	0904			5	50	21.2		180	7.30			7.30
760727	0906			10	50	21.2		170	7.20			7.30
760727	0908			16	50	21.1	5	170	7.20			7.30
760727	0910			26	50	21.1		170	7.20			7.30
760824	1014			1	50	20.0	4	170	6.80	1.1	5.0	7.30
760824	1016			3	50	19.0		170	6.70			7.40
760824	1018			5	50	18.6		170	6.60			7.30
760824	1020			10	50	17.7		170	6.00			7.20
760824	1022			16	50	17.5	4	170	5.90	1.0K	2.0	7.20
760824	1024			26	50	17.5		170	5.90			7.20
760921	0906			1	50	20.8	5	180	7.80			7.40
760921	0908			3	50	20.7		180	7.70			7.40
760921	0909			5	50	20.7		180	7.60			7.40
760921	0910			10	50	20.8		180	7.50			7.40
760921	0911			16	50	20.8	5	180	7.30			7.40
760921	0912			26	50	20.8		180	7.30			7.40
761027	0947			1	50	13.6	15	230	8.90	1.2	10.0	7.50
761027	0949			3	50	13.9		230	8.50			7.50
761027	0951			5	50	13.9		230	8.20			7.40
761027	0953			10	50	13.9		220	8.10			7.40
761027	0955			16	50	13.9	10	230	8.00	1.0	10.0	7.40
761027	0959			26	50	13.9		230	7.90			7.40
761207	0934			1	50	7.0	3	180	12.30			7.70
761207	0936			3	50	7.3		180	12.00			7.70
761207	0938			5	50	7.3		180	11.80			7.70
761207	0940			10	50	7.3		180	11.60			7.70
761207	0942			16	50	7.3	3	180	11.60			7.70
761207	0945			23	50	7.3		180	11.50			7.70
761228	0910			1	50	5.5	4	180	11.80			8.00

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01077 SILVER AG,TOT UG/L	01092 ZINC ZN,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L
790214											
NUMBER				8	8	8	8	8	8	1	8
MAXIMUM				16	70.00	10.0	50.00K	10.0K	150.00		1400.00
MINIMUM				1	30.00	10.0K	10.00K	10.0K	10.00K		400.00
SUM				68	400.00	80.0	160.00	80.0	270.00		5500.00
SUM SQ.				1028	22000.00	800.0	5600.00	800.0	24900.00		5.157E+06
MEAN				9	50.00	10.0	20.00	10.0	33.75		687.50
VARIANCE				64	285.71	0.0	342.86	0.0	2255.36		196564.29
STD.DEV.				8	16.90	0.0	18.52	0.0	47.49		443.36
STD.ERR.				3	5.98	0.0	6.55	0.0	16.79		156.75
COEF VAR				94	33.81	0.0	92.58	0.0	140.71		64.49
LOG MEAN				4	47.38	10.0	14.95	10.0	20.87		593.78
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01132 LITHIUM LI-TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE	31501 TOT COLI MFIMENDC /100ML	31616 FEC COLI MFM-FCBR /100ML
790214	0927			1	10K	1.00K	1000K			
790214	0935			16	10K	1.00K	1000K			
790510	0930			1	10K	1.00K	1000K		2400	200
790510	0933			16	10K	1.00K	1000K			
790510	0945							16000.00		
790809	0920			1	10K	1.00K	100K		300	100
790809	0928			16	10K	1.00K	100K			
791017	0852			1	10K	1.00K	1000K		200	100
791017	0856			16	10K	1.00K	1000K			
790214										
NUMBER				8	8	8	8	1	8	8
MAXIMUM				16	10K	1.00K	1000K		2400	200
MINIMUM				1	10K	1.00K	100K		200	100
SUM				68	80	8.00	6200		2900	400
SUM SQ.				1028	800	8.00	6020000		5890000	60000
MEAN				9	10	1.00	775		967	133
VARIANCE				64	0	0.00	173571		1543334	3333
STD.DEV.				8	0	0.00	417		1242	58
STD.ERR.				3	0	0.00	147		717	33
COEF VAR				94	0	0.00	54		129	43
LOG MEAN				4	10	1.00	562		524	126
791017										

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600096 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P *	00666 PHOS-DIS MG/L P
760225												
NUMBER				60	20	18	20	20	20	20	20	20
MAXIMUM				30	80.0	0	18	0.480	0.19	0.43	0.240	0.95
MINIMUM				1	45.0	0	1	0.020	0.01	0.15	0.020	0.01K
SUM				628	1132.0	0	134	2.420	1.12	6.23	0.980	1.68
SUM SQ.				11138	65820.0	0	1418	0.488	0.11	2.08	0.130	0.98
MEAN				10	56.6	0	7	0.121	0.06	0.31	0.049	0.08
VARIANCE				77	92.0	0	27	0.010	0.00	0.01	0.004	0.04
STD.DEV.				9	9.6	0	5	0.101	0.05	0.09	0.066	0.21
STD.ERR.				1	2.1	0	1	0.023	0.01	0.02	0.015	0.05
COEF VAR				89	17.0	0	78	83.807	90.20	27.39	134.218	250.77
LOG MEAN				7	55.9	0	5	0.096	0.04	0.30	0.033	0.02
761228												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L
760225	0915			1	19.0	4.60	3.00	1.10	4	14	40
760225	0920			16	19.0	4.50	3.00	1.20	4	10	60
760428	0955			1	27.0	4.10			3		
760428	1003			16	27.0	4.10			3		
760525	1006			1	20.0	3.60	2.40	0.90	3	18	30
760525	1015			16	21.0	3.60	2.40	0.90	3	12	40
760629	0902			1	26.0	4.40			3		
760629	0910			16	28.0	4.60			3		
760727	0900			1	19.0	4.30			3		
760727	0908			16	18.0	4.20			3		
760824	1014			1	22.0	3.30	1.60	1.00	3	12	60
760824	1022			16	20.0	3.20	1.40	0.90	3	14	70
760921	0906			1	22.0	4.50			4		
760921	0911			16	22.0	4.50			4		
761027	0947			1	30.0	4.60	2.20	2.00	4	30	110
761027	0955			16	29.0	4.50	2.70	2.00	4	29	120
761207	0934			1	18.0	4.80			4		
761207	0942			16	20.0	4.80			4		
761228	0910			1	22.0	4.80			4		
761228	0918			16	24.0	4.80			3		
760225											
NUMBER				60	20	20	8	8	20	8	8
MAXIMUM				30	30.0	4.80	3.00	2.00	4	30	120
MINIMUM				1	18.0	3.20	1.40	0.90	3	10	30
SUM				628	459.0	85.80	18.70	10.00	69	139	530
SUM SQ.				11138	10819.0	372.80	46.17	14.06	243	2845	42700
MEAN				10	22.9	4.29	2.34	1.25	3	17	66
VARIANCE				77	15.6	0.25	0.35	0.23	0	61	1084
STD.DEV.				9	3.9	0.50	0.59	0.48	1	8	33
STD.ERR.				1	0.9	0.11	0.21	0.17	0	3	12
COEF VAR				89	16.9	11.62	25.35	38.01	15	45	50
LOG MEAN				7	22.6	4.26	2.26	1.18	3	16	60
761228											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - A00048 CUMBERLAND RIVER 282.0

DATE	TIME	DATE	TIME	80208 TOT SED SIEVE %<2.0MM	00339 COD MUD DRY WGT MG/KG	01068 NICKEL SEDMG/KG DRY WGT	01108 AL MUD DRY WGT MG/KG-AL	00626 ORGAN. N MUD D WT MG/KG-N	00687 BM ORG CARBON GM/KG-C
790510	0945			100.0	35000	22.00	16000.00	800	0
790510									
NUMBER				1	1	1	1	1	1
MAXIMUM									
MINIMUM									
SUM									
SUM SQ.									
MEAN									
VARIANCE									
STD.DEV.									
STD.ERR.									
COEF VAR									
LOG MEAN									
790510									

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01003 ARSENIC SEDMG/KG DRY WGT	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SEDMG/KG DRY WGT	01043 COPPER SEDMG/KG DRY WGT	01047 FERROUS IRON UG/L	01052 LEAD SEDMG/KG DRY WGT
760225	0915			1		100K	10.00K					
760225	0920			16		100K	10.00K				40	
760428	0955			1							50	
760	1003			16							40	
760525				1		100K	10.00K				20	
760525	1015			16		100K	10.00K				80	
760824	1014			1		100K	10.00K					
760824	1022			16		100	10.00K					
760824	1030				20.00			4.00K	22.00	28.00		19
761027	0947			1		100K	10.00K					
761027	0955			16		100K	10.00K					
760225												
NUMBER				10	1	8	8	1	1	1	5	1
MAXIMUM				16		100	10.00K				80	
MINIMUM				1		100K	10.00K				20	
SUM				85		600	80.00				230	
SUM SQ.				1285		80000	800.00				12500	
MEAN				9		100	10.00				46	
VARIANCE				63		0	0.00				480	
STD.DEV.				8		0	0.00				22	
STD.ERR.				3		0	0.00				10	
COEF VAR				93		0	0.00				48	
LOG MEAN				4		100	10.00				42	
761027												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01053 MN MUD DRY WGT MG/KG-MN	01068 NICKEL SEDMG/KG DRY WGT	01077 SILVER AG,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L
760225	0915			1			10K		1100		10K
760225	0920			16			10K		1100		10K
760525	1006			1			10K		200		10K
760525	1015			16			10K		200		10K
760824	1014			1			10K		600		10K
760824	1022			16			10K		3900		20
760824	1030				600	21.00		61.00		8700.00	
761027	0947			1			10K		700		10K
761027	0955			16			10K		600		10K
760225											
NUMBER				10	1	1	8	1	8	1	8
MAXIMUM				16			10K		3900		20
MINIMUM				1			10K		200		10K
SUM				85			80		8200		90
SUM SQ.				1285			800		18500000		1100
MEAN				9			10		1025		11
VARIANCE				63			0		1992192		13
STD.DEV.				8			0		1201		4
STD.ERR.				3			0		425		1
COEF VAR				93			0		117		31
LOG MEAN				4			10		667		11
761027											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
761228	0912			3	50	5.5		180	11.60			8.00
761228	0914			5	50	5.5		180	11.60			8.00
761228	0916			10	50	5.5		180	11.60			8.00
761228	0918			16	50	5.5	4	180	11.50			7.90
761228	0920			26	50	5.5		180	11.40			7.90
760225												
NUMBER				60		60	20	55	60	6	10	60
MAXIMUM				30		21.4	23	230	13.20	1.2	10.0	9.60
MINIMUM				1		5.5	3	180	5.90	1.0R	2.0	7.20
SUM				628		889.0	159	10070	547.40	8.3	61.0	965.10
SUM SQ.				11138		14471.4	2122	1859500	5319.36	8.6	429.0	3634.97
MEAN				10		14.5	8	183	9.12	1.0	6.1	7.75
VARIANCE				77		32.0	45	292	5.51	0.0	5.3	0.50
STD.DEV.				9		5.7	7	17	2.35	0.1	2.5	0.71
STD.ERR.				1		0.7	2	2	0.30	0.0	0.8	0.09
COEF VAR				89		39.0	85	9	25.79	7.2	41.2	9.15
LOG MEAN				7		13.2	6	182	8.89	1.0	5.6	7.72
761228												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
760225	0915			1	51.0		.	0.070	0.19	0.38	0.040	0.02
760225	0920			16	51.0		7	0.110	0.07	0.38	0.040	0.01
760428	0955			1	57.0	0	2	0.060	0.06	0.30	0.020	0.01
760428	1003			16	55.0	0	4	0.480	0.08	0.30	0.030	0.01
760525	1006			1	60.0	0	1	0.070	0.04	0.32	0.030	0.03
760525	1015			16	57.0	0	2	0.050	0.06	0.33	0.030	0.95R
760629	0902			1	62.0	0	14	0.160	0.05	0.42	0.040	0.17R
760629	0910			16	62.0	0	18	0.160	0.04	0.42	0.040	0.01
760727	0900			1	45.0	0	6	0.080	0.03	0.32	0.020	0.01
760727	0908			16	46.0	0	8	0.080	0.03	0.32	0.030	0.01
760829	1014			1	54.0	0	4	0.080	0.02	0.32	0.030	0.02
760829	1022			16	54.0	0	4	0.060	0.02	0.35	0.020	0.01
760921	0906			1	45.0	0	8	0.020	0.14	0.18	0.020	0.01R
760921	0911			16	45.0	0	9	0.180	0.15	0.15	0.020	0.01R
761027	0947			1	80.0	0	14	0.230	0.07	0.43	0.240	0.15
761027	0955			16	78.0	0	17	0.210	0.03	0.42	0.240	0.15
761207	0934			1	60.0	0	4	0.090	0.01	0.20	0.030	0.01
761207	0942			16	50.0	0	4	0.090	0.01	0.20	0.020	0.01
761228	0910			1	60.0	0	2	0.070	0.01	0.24	0.020	0.07R
761228	0918			16	60.0	0	1	0.070	0.01	0.25	0.020	0.01

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLE FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
770216	1135			1	50	3.5	3	190	13.40	1.0K	3.0
770216	1140			3	50	3.5		190	13.30		
770216	1145			5	50	3.5		190	13.00		
770216	1150			10	50	3.5		180	13.00		
770216	1155			16	50	3.5	3	180	13.00	1.0K	2.0
770216	1200			26	50	3.5		180	12.80		
770322	1015			1	50	9.0	8	200	9.90		
770322	1017			3	50	9.0		200	9.80		
770322	1020			5	50	9.0		200	9.80		
770322	1022			10	50	9.0		200	9.80		
770322	1025			16	50	9.0	9	200	9.70		
770322	1030			26	50	9.0		200	9.70		
770428	1013			2	50	12.5	19	160	9.90		
770428	1015			3	50	12.5		160	10.00		
770428	1017			5	50	12.5		160	10.00		
770428	1020			10	50	12.5		160	10.00		
770428	1025			16	50	12.5	19	160	10.00		
770428	1027			22	50	12.5		160	10.00		
770428	1030			30	50	12.5		160	10.00		
770524	1004			2	50	17.5	31	160	7.80	1.0	6.0
770524	1006			3	50	17.6		160	7.80		
770524	1008			5	50	17.3		160	7.80		
770524	1010			10	50	17.3		160	7.90		
770524	1015			16	50	17.1	35	160	7.90	1.0K	4.0
770524	1017			23	50	17.1		160	7.90		
770524	1019			30	50	17.1		160	7.90		
770626	1041			1	50	22.1	10	160	6.50		
770626	1053			3	50	22.0		160	6.40		
770626	1055			5	50	22.0		160	6.20		
770626	1100			10	50	22.0		160	6.00		
770626	1106			16	50	22.0	15	160	5.90		
770726	0820			2	50	21.5	8	140	7.20		
770726	0822			3	50	21.5		140	7.20		
770726	0824			5	50	21.5		140	7.20		
770726	0826			10	50	21.5		140	7.20		
770726	0830			16	50	21.5	9	150	7.20		
770726	0835			23	50	21.0		150	7.20		
770726	0840			30	50	21.3		150	7.20		
770824	0935			2	50	24.0	5	160	7.60	1.5	10.0
770824	0937			3	50	23.5		160	7.20		
770824	0939			5	50	23.5		160	7.00		
770824	0941			10	50	23.5		160	6.80		
770824	0945			16	50	23.5	5	160	6.80	1.7	9.0
770824	0950			26	50	23.5		160	6.60		
770928	1045			1	50	19.7	11	180	6.50		
770928	1047			3	50	19.5		180	6.40		
770928	1049			5	50	19.5		180	6.40		
770928	1051			10	50	19.5		180	6.40		
770928	1053			16	50	19.5	15	180	6.40		
770928	1055			23	50	19.5		180	6.40		
770928	1057			30	50	19.5		180	6.40		

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L
760225	0915			1	1.00K	5.00K	10.00K	1400.00		10.00K	80.00
760225	0920			16	1.00K	5.00K	10.00K	1400.00	50K	10.00K	80.00
760428	0955			1				290.00	90		30.00
760428	1003			16				180.00	50K		40.00
760525	1006			1	1.00K	13.00	10.00K	390.00	50K	10.00K	20.00
760525	1015			16	1.00K	5.00K	20.00	490.00	50K	10.00K	30.00
760629	0902			1				1000.00	50K		50.00
760629	0910			16				1200.00	140		60.00
760727	0900			1				330.00	50K		40.00
760727	0908			16				350.00	50K		50.00
760824	1014			1	1.00K	5.00K	80.00	1500.00	50K	10.00K	70.00
760824	1022			16	1.00K	5.00K	60.00	18000.00	50K	10.00K	420.00
760921	0906			1				210.00	50K		
760921	0911			16				300.00	50K		
761027	0947			1	1.00K	5.00K	40.00	900.00	50K	10.00K	40.00
761027	0955			16	1.00K	7.00	20.00	900.00	50K	10.00K	50.00
761207	0934			1				150.00	50K		
761207	0942			16				190.00	50K		
761228	0910			1				190.00	90		
761228	0918			16				190.00	50K		
760225											
NUMBER				60	8	8	8	20	19	8	14
MAXIMUM				30	1.00K	13.00	80.00	18000.00	140	10.00K	420.00
MINIMUM				1	1.00K	5.00K	10.00K	150.00	50K	10.00K	20.00
SUM				628	8.00	50.00	250.00	29560.00	1130	80.00	1060.00
SUM SQ.				11138	8.00	368.00	12700.00	3.352E+08	77700	800.00	212200.00
MEAN				10	1.00	6.25	31.25	1478.00	59	10.00	75.71
VARIANCE				77	0.00	7.93	698.21	1.534E+07	583	0.00	10149.45
STD.DEV.				9	0.00	2.82	26.42	3917.20	24	0.00	100.74
STD.ERR.				1	0.00	1.00	9.34	875.91	6	0.00	26.93
COEF VAR				84	0.00	45.05	84.56	265.03	41	0.00	133.06
LOG MEAN				7	1.00	5.88	22.94	536.07	56	10.00	53.62
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
760225	0915			1		50.00K	10.00	50	30	66	90
760225	0920			16	10.0K	50.00K	60.00			66	90
760428	0955			1	10.0K					84	90
760428	1003			16	10.0K					84	100
760525	1006			1	10.0	50.00K	40.00	10	100K	65	110
760525	1015			16	10.0K	50.00K	20.00			67	110
760629	0902			1	10.0					83	
760629	0910			16	10.0					89	
760727	0900			1	10.0K					65	
760727	0908			16	10.0K					62	
760824	1014			1	10.0K	50.00K	30.00	10K	10K	69	80
760824	1022			16	10.0K	50.00K	120.00	60	40	63	130
760921	0906			1						73	
760921	0911			16						73	
761027	0947			1	10.0K	50.00K	20.00		1330	94	130

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600048 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
770216	1135			1	7.80	58.0	0	3	0.010	0.01	0.25
770216	1140			3	7.80						
770216	1145			5	7.80						
770216	1150			10	7.80						
770216	1155			16	7.80	60.0	0	2	0.020	0.02	0.25
770216	1200			26	7.80						
770322	1015			1	7.60	64.0	0	8	0.090	0.03	0.34
770322	1017			3	7.60						
770322	1020			5	7.60						
770322	1022			10	7.60						
770322	1025			16	7.60	63.0	0	13	0.110	0.01	0.34
770322	1030			26	7.60						
770428	1013			2	7.60	61.0	0	19	0.080	0.02	0.36
770428	1015			3	7.60						
770428	1017			5	7.60						
770428	1020			10	7.60						
770428	1025			16	7.60	61.0	0	21	0.090	0.01K	0.36
770428	1027			23	7.60						
770428	1030			30	7.60						
770524	1004			2	7.40	42.0	0	19	0.090	0.01	0.40
770524	1006			3	7.30						
770524	1008			5	7.20						
770524	1010			10	7.20						
770524	1015			16	7.20	42.0	0	30	0.080	0.01	0.40
770524	1017			23	7.20						
770524	1019			30	7.20						
770628	1047			1	7.20	49.0	0	11	0.080	0.01	0.27
770628	1050			3	7.10						
770628	1055			5	7.00						
770628	1100			10	7.00						
770628	1106			16	7.00	47.0	0	15	0.060	0.02	0.27
770726	0820			2	7.30	43.0	0	2	0.120	0.05	0.29
770726	0822			3	7.20						
770726	0824			5	7.20						
770726	0826			10	7.20						
770726	0830			16	7.20	42.0	0	1	0.100	0.02	0.29
770726	0835			23	7.20						
770726	0840			30	7.20						
770824	0935			2	7.50	60.0	0	5	0.040	0.06	0.26
770824	0937			3	7.40						
770824	0939			5	7.40						
770824	0941			10	7.30						
770824	0945			16	7.30	59.0	0	5	0.070	0.02	0.27
770824	0950			26	7.20						
770928	1045			1	6.20	60.0	0	12	0.160	0.02	0.30
770928	1047			3	5.60						
770928	1049			5	5.70						
770928	1051			10	5.90						
770928	1053			16	6.00	60.0	0	17	0.120	0.02	0.31
770928	1055			23	6.10						
770928	1057			30	6.20						

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00339 COD MUD DRY WGT MG/KG	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
760225											
NUMBER				60	20	20	1	20	1	8	8
MAXIMUM				30	12	40		11.0		4.8	5K
MINIMUM				1	2	6		1.1		3.7	2K
SUM				628	129	342		94.0		33.5	34
SUM SQ.				11138	998	8130		185.7		141.5	158
MEAN				10	6	17		2.2		4.2	4
VARIANCE				77	12	120		4.7		0.2	2
STD.DEV.				9	3	11		2.2		0.4	1
STD.ERR.				1	1	2		0.5		0.1	0
COEF VAR				84	56	64		98.3		9.8	33
LOG MEAN				7	5	14		1.8		4.2	4
761228											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L
770216	1135			1	0.020	0.01	20.0	5.30	3.70	1.30	3
770216	1155			16	0.020	0.01K	22.0	5.40	3.60	1.40	3
770322	1015			1	0.040	0.75K	35.0	5.80			4
770322	1025			16	0.040	0.82K	34.0	5.90			4
770428	1013			2	0.030	0.01	21.0	4.50			4
770428	1025			16	0.030	0.01	21.0	4.60			4
770524	1004			2	0.060	0.01	18.0	4.80	3.20	1.20	5
770524	1012			16	0.060	0.02	19.0	4.80	3.10	1.70	4
770628	1047			1	0.030	0.04K	17.0	4.80			6
770628	1106			16	0.030	0.03	20.0	4.90			4
770726	0820			2	0.020	0.01	22.0	4.40			3
770726	0830			16	0.030	0.01	24.0	4.30			4
770824	0935			2	0.030	0.01	22.0	4.50	3.40	1.40	5
770824	0945			16	0.030	0.01K	22.0	4.50	3.40	1.50	5
770928	1045			1	0.060	0.04	27.0	4.60			4
770928	1053			16	0.060	0.05	25.0	4.60			4
771027	0953			2	0.020	0.01	16.0	4.60	3.60	1.30	4
771027	1005			16	0.020	0.01	16.0	5.20	3.40	1.60	4
771129	0957			2	0.070	0.03	28.0	5.10			3
771129	1005			16	0.070	0.02	31.0	5.30			3
771222	1001			2	0.030	0.01	20.0	4.20			3
771222	1015			16	0.030	0.01K	20.0	4.00			4
770216											
NUMBER				22	22	22	22	22	8	8	22
MAXIMUM				30	0.070	0.82	35.0	5.90	3.70	1.70	6
MINIMUM				1	0.020	0.01K	16.0	4.00	3.10	1.20	3
SUM				841	0.830	1.93	500.0	106.10	27.40	11.40	87
SUM SQ.				16353	0.037	1.24	11960.0	516.85	94.14	16.44	357
MEAN				12	0.038	0.09	22.7	4.82	3.42	1.42	4
VARIANCE				92	0.000	0.05	28.4	0.25	0.04	0.03	1
STD.DEV.				10	0.017	0.23	5.3	0.50	0.21	0.17	1
STD.ERR.				1	0.004	0.05	1.1	0.11	0.07	0.06	0
COEF VAR				82	45.494	257.93	23.4	10.28	6.00	11.71	20
LOG MEAN				8	0.034	0.02	22.2	4.80	3.42	1.42	4
771222											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 000096 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01147 SELENIUM SE,TOT UG/L	01148 SELENIUM SEDMG/KG DRY WGT	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE	71900 MERCURY HG,TOTAL UG/L	71921 MERCURY SEDMG/KG DRY WGT	80111 NITROGEN DRY WGT MG/KG
760225	0915			1	2.00K		1000K		0.20K		
760225	0920			16	2.00K		1000K		0.20K		
760525	1006			1	2.00K		1000K		0.20K		
760525	1015			16	2.00K		1000K		0.20K		
760829	1019			1	1.00K		1000K		0.20K		
760829	1022			16	1.00K		1000K		0.20K		
760829	1030					1.00K		18000.00		0.10K	64.0
761027	0947			1	1.00K		1000K		0.20K		
761027	0955			16	1.00K		1000K		0.20K		
760225											
	NUMBER			10	8	1	8	1	8	1	1
	MAXIMUM			16	2.00K		1000K		0.20K		
	MINIMUM			1	1.00K		1000K		0.20K		
	SUM			85	12.00		8000		1.60		
	SUM SQ.			1285	20.00		6000000		0.32		
	MEAN			9	1.50		1000		0.20		
	VARIANCE			63	0.29		0		0.00		
	STD.DEV.			8	0.53		0		0.00		
	STD.ERR.			3	0.19		0		0.00		
	COEF VAR			93	35.63		0		0.08		
	LOG MEAN			9	1.41		1000		0.20		
761027											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML
770216	1135			1	10.00K	30.00	30.0	50.00K	10.00K	10K	10K
770216	1155			16	10.00K	10.00K	10.0K	50.00K	20.00	10K	10K
770524	1004			2	10.00K	50.00	10.0K	50.00K	10.00K	1680	430
770524	1015			16	10.00K	60.00	10.0K	50.00K	40.00		
770824	0935			2	10.00K	40.00	10.0	50.00K	10.00	260	10
770824	0945			16	10.00K	50.00	10.0K	50.00K	10.00		
771027	0953			2	10.00K	50.00	30.0	50.00K	60.00	460	90
771027	1005			16	10.00K	50.00	50.0	50.00K	10.00K		
770216											
NUMBER				72	8	8	8	8	8	5	5
MAXIMUM				30	10.00K	60.00	50.0	50.00K	60.00	1680	430
MINIMUM				1	10.00K	10.00K	10.0K	50.00K	10.00K	10K	10K
SUM				841	80.00	340.00	160.0	400.00	170.00	2420	550
SUM SG.				16353	800.00	16200.00	4800.0	20000.00	6100.00	3101800	193300
MEAN				12	10.00	42.50	20.0	50.00	21.25	484	110
VARIANCE				92	0.00	250.00	228.6	0.00	355.36	482630	33200
STD.DEV.				10	0.00	15.81	15.1	0.00	18.85	695	182
STD.ERR.				1	0.00	5.59	5.3	0.00	6.66	311	81
COEF VAR				82	0.00	37.20	75.6	0.00	88.71	144	166
LOG MEAN				8	10.00	38.16	16.1	50.00	16.22	115	33
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00680 T ORG C C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
770216	1135			1	72	110	5	12	1.8	3.0	2K
770216	1155			16	77	110	5	10	1.7	3.0	2K
770322	1015			1	110		9	11	2.5		
770322	1025			16	110		8	14	1.5		
770428	1013			2	71		9	25	1.4		
770428	1025			16	71		5	20	1.8		
770524	1004			2	65	100	8	65	4.0	3.9	2K
770524	1015			16	67	100	7	70	3.0	3.9	3
770628	1047			1	62		6	25	1.7		
770628	1106			16	70		7	30	2.1		
770726	0820			2	73		9	33	1.8		
770726	0830			16	76		10	30	1.5		
770824	0935			2	73	110	5	22	4.8	4.0	2K
770824	0945			16	73	110	3	20	5.6	4.0	2K
770928	1045			1	86		5	25	1.4		
770928	1053			16	81		7	31	1.4		
771027	0953			2	59	100	10	36	2.1	4.1	2K
771027	1005			16	61	100	9	36	3.2	4.1	2K
771129	0957			2	91		6	44			
771129	1005			16	99		6	42			
771222	1001			2	67		7	27	1.4		
771222	1015			16	66		7	26	1.8		

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
771027	0953			2	50	15.6	16	160	7.30	1.1	6.0
771027	0955			3	50	15.6		160	7.20		
771027	0957			5	50	15.6		160	7.20		
771027	1000			10	50	15.6		160	7.20		
771027	1005			16	50	15.6	17	160	7.20	1.0K	6.0
771027	1007			23	50	15.6		160	7.20		
771027	1010			30	50	15.6		160	7.10		
771129	0957			2	50	11.5	22	110	9.00		
771129	0959			3	50	11.5		110	9.00		
771129	1001			5	50	11.5		110	9.00		
771129	1003			10	50	11.5		110	8.90		
771129	1005			16	50	11.5	23	110	8.90		
771129	1010			23	50	11.5		110	9.00		
771129	1015			30	50	11.5		110	9.00		
771222	1001			2	50	9.4	16	160	9.80		
771222	1003			3	50	9.4		160	9.80		
771222	1005			5	50	9.5		160	9.70		
771222	1010			10	50	9.5		160	9.60		
771222	1015			16	50	9.5	16	160	9.60		
771222	1017			23	50	9.5		160	9.60		
771222	1020			30	50	9.5		160	9.60		
770216											
NUMBER				72		72	22	72	72	8	8
MAXIMUM				30		24.0	35	200	13.40	1.7	10.0
MINIMUM				1		3.5	3	110	5.90	1.0K	2.0
SUM				841		1077.6	314	11590	611.30	9.3	46.0
SUM SQ.				16353		18639.5	5992	1901300	5450.89	11.3	318.0
MEAN				12		15.0	14	161	8.49	1.2	5.8
VARIANCE				92		35.4	72	502	3.67	0.1	7.6
STD.DEV.				10		5.9	8	22	1.92	0.3	2.8
STD.ERR.				1		0.7	2	3	0.23	0.1	1.0
COEF VAR				82		39.7	59	14	22.58	23.9	48.1
LOG MEAN				8		13.4	12	159	8.29	1.1	5.1
771222											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01077 SILVER AG,TOT UG/L	01105 ALUMINUM AL,TOT UG/L	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	71900 MERCURY HG,TOTAL UG/L
770216	1135			1	100K	10.00K	10.0K	400	10K	1.00K	1000K	0.20K
770216	1155			16	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
770524	1004			2	100K	10.00K	10.0K	900	10K	1.00K	1000K	0.20
770524	1015			16	100K	10.00K	10.0K	900	10K	1.00K	1000K	0.30
770824	0935			2	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
770824	0945			16	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
771027	0953			2	100K	10.00K	10.0K	300	10K	1.00K	1000K	5.10
771027	1005			16	100K	10.00K	10.0K	200	10K	1.00K	1000K	0.40
770216												
	NUMBER			6	8	8	8	8	8	8	8	8
	MAXIMUM			16	100K	10.00K	10.0K	900	10K	1.00K	1000K	5.10
	MINIMUM			1	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
	SUM			71	800	80.00	80.0	3300	80	8.00	8000	6.80
	SUM SQ.			1037	80000	800.00	800.0	2030000	800	8.00	8000000	28.46
	MEAN			9	100	10.00	10.0	413	10	1.00	1000	0.85
	VARIANCE			58	0	0.00	0.0	95536	0	0.00	0	2.93
	STD.DEV.			8	0	0.00	0.0	309	0	0.00	0	1.72
	STD.ERR.			3	0	0.00	0.0	109	0	0.00	0	0.61
	COEF VAR			86	0	0.00	0.0	75	0	0.00	0	202.21
	LOG MEAN			5	100	10.00	10.0	334	10	1.00	1000	0.34
771027												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
771027	0953			2	7.20	50.0	0	11	0.040	0.04	0.36
771027	0955			3	7.10						
771027	0957			5	7.10						
771027	1000			10	7.10						
771027	1005			16	7.10	51.0	0	13	0.110	0.07	0.39
771027	1007			23	7.10						
771027	1010			30	7.10						
771129	0957			2	7.60	67.0	0	23	0.080	0.07	0.47
771129	0959			3	7.60						
771129	1001			5	7.60						
771129	1003			10	7.50						
771129	1005			16	7.50	70.0	0	22	0.090	0.02	0.47
771129	1010			23	7.50						
771129	1015			30	7.40						
771222	1001			2	7.40	53.0	0	13	0.070	0.01	0.50
771222	1003			3	7.40						
771222	1005			5	7.40						
771222	1010			10	7.40						
771222	1015			16	7.40	52.0	0	13	0.090	0.01	0.42
771222	1017			23	7.30						
771222	1020			30	7.30						
770216											
NUMBER				22	22	22	22	22	22	22	22
MAXIMUM				30	7.80	70.0	0	30	0.160	0.07	0.50
MINIMUM				1	5.60	42.0	0	1	0.010	0.01K	0.25
SUM				841	522.00	1214.0	0	278	1.800	0.56	7.57
SUM SQ.				16353	3801.16	68506.0	0	4784	0.172	0.02	2.73
MEAN				12	7.25	55.2	0	13	0.082	0.03	0.34
VARIANCE				92	0.24	72.2	0	61	0.001	0.00	0.01
STD.DEV.				10	0.49	8.5	0	8	0.034	0.02	0.08
STD.ERR.				1	0.06	1.8	0	2	0.007	0.00	0.02
COEF VAR				82	6.89	15.4	0	62	41.771	77.37	22.07
LOG MEAN				8	7.23	54.5	0	9	0.072	0.02	0.34
771222											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
780228	0905			2	48.0	0	8	0.070	0.01	0.44	0.020	0.01
780228	0915			16	49.0	0	8	0.080	0.01K	0.44	0.020	0.01
780503	0835			2	51.0	0	14	0.080	0.03	0.41	0.030	0.01K
780503	0843			16	51.0	0	22	0.110	0.03	0.42	0.030	0.01K
780802	1152			1	48.0	0	3	0.130	0.03	0.31	0.040	0.02
780802	1156			16	53.0	0	5	0.010K	0.15	0.38	0.020	0.01
781011	0848			2	49.0	0	4	0.090	0.01K	0.34	0.020	0.01K
781011	0900			16	50.0	0	5	0.070	0.01K	0.34	0.020	0.01K
780228												
NUMBER				27	8	8	8	8	8	8	8	8
MAXIMUM				30	53.0	0	22	0.130	0.15	0.44	0.040	0.02
MINIMUM				1	48.0	0	3	0.010K	0.01K	0.31	0.020	0.01K
SUM				325	399.0	0	69	0.640	0.28	3.08	0.200	0.09
SUM SQ.				6389	19921.0	0	883	0.060	0.03	1.20	0.005	0.00
MEAN				12	49.9	0	9	0.080	0.03	0.38	0.025	0.01
VARIANCE				95	3.0	0	41	0.001	0.00	0.00	0.000	0.00
STD.DEV.				10	1.7	0	6	0.035	0.05	0.05	0.008	0.00
STD.ERR.				2	0.6	0	2	0.012	0.02	0.02	0.003	0.00
COEF VAR				81	3.5	0	74	43.814	135.74	13.03	30.237	31.43
LOG MEAN				8	49.8	0	7	0.067	0.02	0.38	0.024	0.01
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L
780228	0905			2	19.0	3.90	1.10	0.68	3	30	120	1.00K
780228	0915			16	19.0	4.20	1.40	0.71	3	30	520	1.00K
780503	0835			2	18.0	4.60	3.20	1.20	3	19	120	1.00K
780503	0843			16	21.0	4.60	3.10	1.20	3	18	100	1.00K
780802	1152			1	25.0	4.50	3.30	0.78	3	30	10K	1.00K
780802	1156			16	25.0	4.00	2.60	0.60	3	22	10K	1.00K
781011	0848			2	19.0	4.20	2.50	1.20	3	22	80	1.00K
781011	0900			16	19.0	4.30	2.60	1.20	4	23	80	1.00K
780228												
NUMBER				27	8	8	8	8	8	8	8	8
MAXIMUM				30	25.0	4.60	3.30	1.20	4	30	520	1.00K
MINIMUM				1	18.0	3.90	1.10	0.60	3	18	10K	1.00K
SUM				325	165.0	34.30	19.80	7.57	25	194	1040	8.00
SUM SQ.				6389	3459.0	147.55	53.68	7.69	79	4882	322200	8.00
MEAN				12	20.6	4.29	2.47	0.95	3	24	130	1.00
VARIANCE				95	8.0	0.07	0.67	0.08	0	25	26714	0.00
STD.DEV.				10	2.8	0.26	0.82	0.28	0	5	163	0.00
STD.ERR.				-	1.0	0.09	0.29	0.10	0	2	58	0.00
COEF VAR				81	13.7	6.16	33.02	29.13	11	21	126	0.00
LOG MEAN				8	20.5	4.28	2.32	0.91	3	24	68	1.00
781011												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600096 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
770216	1135			1	25	60	1.00K	5.00K	60.00	360.00	50K
770216	1155			16	28	80	1.00K	5.00K	90.00	410.00	50K
770322	1015			1						590.00	50K
770322	1025			16						590.00	50K
770428	1013			2						670.00	50K
770428	1025			16						810.00	50K
770524	1004			2	28	250	1.00K	5.00K	30.00	2000.00	50K
770524	1015			16	28	180	1.00K	5.00K	10.00	1400.00	50K
770628	1047			1						680.00	160
770628	1106			16						760.00	50K
770726	0820			2						610.00	50K
770726	0830			16						720.00	50K
770824	0935			2	15	100	1.00K	5.00K	10.00K	110.00	50K
770824	0945			16	18	120	1.00K	5.00K	10.00K	140.00	50K
770928	1045			1						240.00	70
770928	1053			16						380.00	50
771027	0953			2	30	130	1.00K	5.00K	20.00	740.00	50K
771027	1005			16	27	80	1.00K	5.00K	10.00	780.00	50K
771129	0957			2						610.00	50K
771129	1005			16						790.00	50K
771222	1001			2						490.00	50K
771222	1015			16						460.00	50K
770216											
NUMBER				72	8	8	8	8	8	22	22
MAXIMUM				30	30	250	1.00K	5.00K	90.00	2000.00	160
MINIMUM				1	15	60	1.00K	5.00K	10.00K	110.00	50K
SUM				841	199	1000	8.00	40.00	240.00	14320.00	1230
SUM SQ.				16353	5155	152600	8.00	200.00	13400.00	1.280E+07	80500
MEAN				12	25	125	1.00	5.00	30.00	650.91	56
VARIANCE				92	29	3943	0.00	0.00	885.71	165485.06	559
STD.DEV.				10	5	63	0.00	0.00	29.76	406.80	24
STD.ERR.				1	2	22	0.00	0.00	10.52	86.73	5
COEF VAR				82	22	50	0.00	0.00	99.20	62.50	42
LOG MEAN				8	24	113	1.00	5.00	20.60	543.93	54
771222											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLOC DEPTH METERS
781011	0855			10								3.00
781011	0900			16	40.00			65	100	7	7	5.00
781011	0905			23								7.00
781011	0907			30								9.00
780228												
NUMBER				27	8	4	4	8	8	8	8	27
MAXIMUM				30	270.00	900	100	81	100	12	32	9.00
MINIMUM				1	10.00K	180	10K	63	80	6	7	0.30
SUM				325	620.00	2010	290	555	720	63	134	98.80
SUM SQ.				6389	125200.00	1415300	26500	38871	65400	533	2936	586.84
MEAN				12	77.50	503	73	69	90	8	17	3.66
VARIANCE				95	11021.43	135092	1825	53	86	5	99	8.74
STD.DEV.				10	104.98	368	43	7	9	2	10	2.96
STD.ERR.				2	37.12	184	21	3	3	1	4	0.57
COEF VAR				81	135.46	73	59	10	10	29	59	80.80
LOG MEAN				8	34.27	392	53	69	90	8	14	2.39
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00339 COD MUD DRY WGT MG/KG	00603 TOTAL N MUD D WT MG/KG-N	00626 ORGAN. N MUD D WT MG/KG-N	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
780228	0905			2				2.5		4.2	2K
780228	0915			16				1.5		4.1	2K
780503	0835			2				2.0		4.0	2K
780503	0843			16				1.0		3.8	2K
780802	1152			1				1.9		3.5	2K
780802	1156			16				1.7		3.2	2K
780802	1159				21000	810.00	800		0		
781011	0848			2				1.4		3.1	2
781011	0900			16				1.4		3.1	2K
780228											
NUMBER				27	1	1	1	8	1	8	8
MAXIMUM				30				2.5		4.2	2
MINIMUM				1				1.0		3.1	2K
SUM				325				13.4		29.0	16
SUM SQ.				6389				23.9		106.6	32
MEAN				12				1.7		3.6	2
VARIANCE				95				0.2		0.2	0
STD.DEV.				10				0.5		0.5	0
STD.ERR.				2				0.2		0.2	0
COEF VAR				81				27.4		12.7	0
LOG MEAN				8				1.6		3.6	2
781011											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	T ORG C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
770216											
NUMBER				72	22	6	22	22	20	8	8
MAXIMUM				30	110	110	10	70	5.6	4.1	3
MINIMUM				1	59	100	3	10	1.3	3.0	2K
SUM				841	1682	840	153	654	46.2	30.0	17
SUM SG.				16353	133010	88400	1139	24444	134.7	114.0	37
MEAN				12	76	105	7	30	2.3	3.7	2
VARIANCE				92	210	29	4	238	1.5	0.2	0
STD.DEV.				10	14	5	2	15	1.2	0.5	0
STD.ERR.				1	3	2	0	3	0.3	0.2	0
COEF VAR				82	19	5	27	52	52.6	12.5	17
LOG MEAN				8	75	105	7	26	2.1	3.7	2
771222											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01077 SILVER AG,TOT UG/L	0109' ZINC SED'/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE
780228												
NUMBER				8	8	1	8	1	7	8	8	1
MAXIMUM				16	10K		480		10K	1.00K	1000K	
MINIMUM				1	10K		200K		10K	1.00K	1000K	
SUM				71	80		1990		70	8.00	8000	
SUM SQ.				1037	800		566500		700	8.00	8000000	
MEAN				9	10		249		10	1.00	1000	
VARIANCE				58	0		10213		0	0.00	0	
STD.DEV.				8	0		101		0	0.00	0	
STD.ERR.				3	0		36		0	0.00	0	
COEF VAR				86	0		41		0	0.00	0	
LOG MEAN				5	10		236		10	1.00	1000	
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70318 RESIDUE TOTAL PERCENT	70322 RESIDUE TOT VOL PERCENT	70331 SUSP SED PARTSIZE %<.062MM	70332 SUSP SED PARTSIZE %<.125MM	70334 SUSP SED PARTSIZE %<.500MM	70336 SUSP SED PARTSIZE %<2.00MM	71900 MERCURY HG,TOTAL UG/L	71921 MERCURY SEDMG/KG DRY WGT
780228	0905			2							0.20K	
780228	0915			16							0.20K	
780503	0835			2							0.20K	
780503	0843			16							0.20K	
780802	1152			1							0.20K	
780802	1156			16								0.10K
780802	1159				71.4	1.7	41	61	100	100		
781011	0848			2							0.20K	
781011	0900			16							0.20K	
780228												
NUMBER				8	1	1	1	1	1	1		1
MAXIMUM				16							0.20K	
MINIMUM				1							0.20K	
SUM				71							1.60	
SUM SQ.				1037							0.32	
MEAN				9							0.20	
VARIANCE				58							0.00	
STD.DEV.				8							0.00	
STD.ERR.				3							0.00	
COEF VAR				86							0.08	
LOG MEAN				5							0.20	
781011												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 H SAMPLDC B FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
780228	0905			2	50	4.0	14	150	12.40	1.0K	2.0	7.60
780228	0907			3	50	4.0		150	12.80			7.60
780228	0909			5	50	4.0		150	12.80			7.60
780228	0910			10	50	4.0		150	12.80			7.60
780228	0915			16	50	4.0	15	150	12.80	1.0K	2.0	7.60
780228	0916			23	50	4.0		150	12.80			7.60
780228	0917			30	50	4.0		150	12.80			7.60
780503	0835			2	50	12.5	7	160	11.60	1.4	4.0	7.30
780503	0837			3	50	12.5		160	11.80			7.30
780503	0839			5	50	12.5		160	11.90			7.30
780503	0841			10	50	12.5		160	11.90			7.20
780503	0843			16	50	12.5	8	160	11.90	1.2	6.0	7.20
780503	0845			23	50	12.0		160	11.90			7.20
780503	0847			30	50	12.0		160	11.90			7.20
780802	1152			1	50	21.0	3	160	8.30	1.0K	6.0	6.80
780802	1153			3	50	20.0		160	8.50			
780802	1154			5	50	19.5		160	8.50			
780802	1155			10	50	18.0		150	8.30			
780802	1156			16	50	17.5	5	150	8.10	1.0K	6.0	6.50
780802	1157			23	50	17.5		150	8.10			
780802	1159				95							
781011	0848			2	50	16.5	2	170	8.10	1.3	3.0	7.40
781011	0850			3	50	16.5		170	8.10			7.40
781011	0852			5	50	16.5		170	8.10			7.40
781011	0855			10	50	16.5		170	8.10			7.40
781011	0900			16	50	16.5	2	170	8.10	1.0	2.0	7.40
781011	0905			23	50	16.5		170	8.10			7.40
781011	0907			30	50	16.5		170	8.10			7.40
780228												
	NUMBER			27		27	8	27	27	8	8	23
	MAXIMUM			30		21.0	15	170	12.80	1.4	6.0	7.60
	MINIMUM			1		4.0	2	150	8.10	1.0K	2.0	6.50
	SUM			325		343.5	55	4290	278.60	9.9	31.0	188.80
	SUM SQ.			6389		5244.8	564	683300	2991.42	10.1	145.0	1240.66
	MEAN			12		12.7	7	159	10.32	1.1	3.9	7.34
	VARIANCE			95		33.6	27	64	4.49	0.0	3.6	0.08
	STD.DEV.			10		5.8	5	8	2.12	0.2	1.9	0.29
	STD.ERR.			2		1.1	2	2	0.41	0.1	0.7	0.06
	COEF VAR			81		45.6	75	5	20.53	14.8	48.6	3.94
	LOG MEAN			8		10.9	5	159	10.11	1.1	3.5	7.33
781011												

TENNESSEE VALLEY AUTHORITY - CIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
790214	0901			1	7.60	54.0	0	10	0.260	0.03	0.47	0.030
790214	0902			3	7.50							
790214	0903			5	7.50							
790214	0905			10	7.50							
790214	0908			16	7.50	55.0	0	10	0.120	0.02	0.48	0.040
790214	0909			23	7.50							
790214	0910			30	7.50							
790510	0855			1	7.40	60.0	0	14	0.080	0.02	0.46	0.060
790510	0857			3	7.40							
790510	0859			5	7.40							
790510	0901			10	7.40							
790510	0905			16	7.40	59.0	0	17	0.090	0.01	0.46	0.060
790510	0907			23	7.40							
790510	0909			30	7.40							
790809	0900			1	7.60	10.0	0	1K	0.080	0.01	0.31	0.020
790809	0902			3	7.60							
790809	0904			5	7.50							
790809	0906			10	7.50							
790809	0908			16	7.10	9.0	0	4	0.090	0.02	0.32	0.020
790809	0910			20	7.60							
790809	0912			23	8.10							
790809	0914			26	8.40							
791017	0832			1	7.40	59.0	0	3	0.070	0.03	0.65	0.020
791017	0833			3	7.40							
791017	0834			5	7.40							
791017	0835			10	7.40							
791017	0836			16	7.40	58.0	0	7	0.110	0.02	0.91	0.030
791017	0837			23	7.40							
791017	0838			30	7.40							
790214												
NUMBER				29	25	8	8	8	8	8	8	8
MAXIMUM				30	8.40	60.0	0	17	0.260	0.03	0.91	0.060
MINIMUM				1	7.10	9.0	0	1K	0.070	0.01	0.31	0.020
SUM				368	217.60	344.0	0	66	0.900	0.16	4.06	0.280
SUM SQ.				7456	1634.26	20048.0	0	760	0.128	0.00	2.32	0.012
MEAN				13	7.50	45.5	0	8	0.112	0.02	0.51	0.035
VARIANCE				100	0.05	458.0	0	31	0.004	0.00	0.04	0.000
STD.DEV.				10	0.23	22.3	0	6	0.062	0.01	0.19	0.017
STD.ERR.				2	0.04	7.9	0	2	0.022	0.00	0.07	0.006
COEF VAR				79	3.10	49.0	0	67	54.949	37.80	38.20	48.295
LOG MEAN				8	7.50	36.6	0	6	0.103	0.02	0.48	0.032
791017												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L
780228	0905			2	5.00K	10.00	140.00	50K	10.00K	10.00	10.0K	10.00K
780228	0915			16	5.00K	20.00	180.00	50K	10.00K	20.00	10.0	10.00K
780503	0835			2	5.00K	30.00	310.00	50K	10.00K	40.00	10.0K	10.00K
780503	0843			16	5.00K	40.00	210.00	150	10.00K	50.00	20.0	10.00K
780802	1152			1	5.00K	30.00	270.00	50K	10.00K	30.00	10.0	10.00K
780802	1156			16	5.00K	40.00	280.00	50K	10.00K	50.00	10.0K	10.00K
781011	0848			2	5.00K	80.00	240.00	50K	10.00K	30.00	10.0K	40.00
781011	0900			16	5.00K	20.00	270.00	50K	10.00K	30.00	10.0K	10.00K
780228												
NUMBER				27	8	8	8	8	8	8	8	8
MAXIMUM				30	5.00K	80.00	310.00	150	10.00K	50.00	20.0	40.00
MINIMUM				1	5.00K	10.00	140.00	50K	10.00K	10.00	10.0K	10.00K
SUM				325	40.00	270.00	1900.00	500	80.00	260.00	90.0	110.00
SUM SQ.				6389	200.00	12300.00	474000.00	40000	800.00	9800.00	1100.0	2300.00
MEAN				12	5.00	33.75	237.50	63	10.00	32.50	11.3	13.75
VARIANCE				95	0.00	455.36	3250.00	1250	0.00	192.86	12.5	112.50
STD.DEV.				10	0.00	21.34	57.01	35	0.00	13.89	3.5	10.61
STD.ERR.				2	0.00	7.54	20.16	13	0.00	4.91	1.2	3.75
COEF VAR				81	0.00	63.23	24.00	57	0.00	42.73	31.4	77.14
LOG MEAN				8	5.00	28.70	230.75	57	10.00	29.28	10.9	11.89
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	C0080 COLOR PT-CC UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLDE DEPTH METERS
780228	0905			2	10.00K	730	80	63	80	11	32	0.50
780228	0907			3								1.00
780228	0909			5								1.50
780228	0910			10								3.00
780228	0915			16	10.00K			65	90	12	32	5.00
780228	0916			23								7.00
780228	0917			30								9.00
780503	0835			2	270.00	900	100K	64	100	7	16	0.50
780503	0837			3								1.00
780503	0839			5								1.50
780503	0841			10								3.00
780503	0843			16	220.00			73	90	7	16	5.00
780503	0845			23								7.00
780503	0847			30								9.00
780802	1152			1	40.00	200	100	81	80	6	11	0.30
780802	1153			3								1.00
780802	1154			5								1.50
780802	1155			10								3.00
780802	1156			16	10.00K			79	80	6	12	5.00
780802	1157			23								7.00
781011	0848			2	20.00	180	10	65	100	7	8	0.50
781011	0850			3								1.00
781011	0852			5								1.50

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01CC7 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SEDMG/KG DRY WGT	01034 CHROMIUM CR,TOT UG/L
790214	0901			1	100K	10.00K	110	1.00K			5.00K
790214	0908			16	100K	10.00K	130	1.00K			5.00K
790510	0855			1	240	10.00K	40	1.00K			5.00K
790510	0905			16	400	10.00K	40	3.00			10.00
790510	0915								1.00K	15.00	
790809	0900			1	740	10.00K	30	1.00K			5.00K
790809	0908			16	650	10.00K	20	1.00K			5.00K
791017	0832			1	100K	10.00K	10K	1.00K			5.00K
791017	0836			16	100K	10.00K	10K	1.00K			5.00K
790214											
NUMBER				29	8	8	8	8	1	1	8
MAXIMUM				30	740	10.00K	130	3.00			10.00
MINIMUM				1	100K	10.00K	10K	1.00K			5.00K
SUM				368	2430	80.00	390	10.00			45.00
SUM SQ.				7456	1227700	800.00	33700	16.00			275.00
MEAN				13	304	10.00	49	1.25			5.63
VARIANCE				100	69941	0.00	2098	0.50			3.13
STD.DEV.				10	264	0.00	46	0.71			1.77
STD.ERR.				2	94	0.00	16	0.25			0.62
COEF VAR				79	87	0.00	94	56.57			31.43
LOG MEAN				8	215	10.00	33	1.15			5.45
791017											

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STATION - 600040 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01003 ARSENIC SED MG/KG DRY WGT	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SED MG/KG DRY WGT	01043 COPPER SED MG/KG DRY WGT	01052 LEAD SED MG/KG DRY WGT	01053 MN MUD DRY WGT MG/KG-MN	01068 NICKEL SED MG/KG DRY WGT
780228	0905			2		100K	10.00K						
780228	0915			16		100K	10.00K						
780503	0835			2		100K	10.00K						
780503	0843			16		100K	10.00K						
780802	1152			1		100K	10.00K						
780802	1156			16		100K	10.00K						
780802	1159				3.80			1.00K	5.00K	13.00	5K	650	18.00
781011	0848			2		100K	10.00K						
781011	0900			16		100K	10.00K						
780228													
	NUMBER			8	1	8	8	1	1	1	1	1	1
	MAXIMUM			16		100K	10.00K						
	MINIMUM			1		100K	10.00K						
	SUM			71		800	80.00						
	SUM SQ.			1037		80000	800.00						
	MEAN			9		100	10.00						
	VARIANCE			58		0	0.00						
	STD.DEV.			8		0	0.00						
	STD.ERR.			3		0	0.00						
	COEF VAR			86		0	0.00						
	LOG MEAN			5		100	10.00						
781011													

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01017 SILVER AG,TOT UG/L	01093 ZINC SED MG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE
780228	0905			2	10K		200K		10K	1.00K	1000K	
780228	0915			16	10K		200K		10K	1.00K	1000K	
780503	0835			2	10K		310		10K	1.00K	1000K	
780503	0843			16	10K		480		10K	1.00K	1000K	
780802	1152			1	10K		200K		10K	1.00K	1000K	
780802	1156			16	10K		200K			1.00K	1000K	
780802	1159					45.00		8700.00				10000.00
781011	0848			2	10K		200K		10K	1.00K	1000K	
781011	0900			16	10K		200K		10K	1.00K	1000K	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01077 SILVER AG,TOT UG/L	01092 ZINC ZN,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L
790214											
NUMBER				8	8	8	8	8	8	1	8
MAXIMUM				16	160.00	10.0K	30.00	10.0K	60.00		4000.00
MINIMUM				1	30.00	10.0K	10.00K	10.0K	10.00K		380.00
SUM				68	510.00	80.0	180.00	80.0	210.00		9090.00
SUM SQ.				1024	44900.00	800.0	6400.00	800.0	7500.00		2.165E+07
MEAN				9	63.75	10.0	22.50	10.0	26.25		1136.25
VARIANCE				64	1769.64	0.0	335.71	0.0	283.93		1.617E+06
STD.DEV.				8	42.07	0.0	18.32	0.0	16.85		1271.47
STD.ERR.				3	14.87	0.0	6.48	0.0	5.96		449.53
COEF VAR				94	65.99	0.0	81.43	0.0	64.19		111.90
LOG MEAN				4	55.38	10.0	17.15	10.0	22.13		778.16
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE	31501 TOT COLI MFIMENDC /100ML	31616 FEC COLI MFM-FCBR /100ML
790214	0901			1	10K	1.00K	1000K			
790214	0908			16	10K	1.00K	1000K			
790510	0855			1	10K	1.00K	1000K		3100	200
790510	0905			16	10K	1.00K	1000K			
790510	0915							22000.00		
790809	0900			1	10K	1.00K	100K		500	100
790809	0908			16	10K	1.00K	100K			
791017	0832			1	10K	1.00K	1000K		100	100K
791017	0836			16	10K	1.00K	1000K			
790214										
NUMBER				8	8	8	8	1	3	3
MAXIMUM				16	10K	1.00K	1000K		3100	200
MINIMUM				1	10K	1.00K	100K		100	100K
SUM				68	80	8.00	6200		3700	400
SUM SQ.				1028	800	8.00	6020000		9870000	60000
MEAN				9	10	1.00	775		1233	133
VARIANCE				64	0	0.00	173571		2653334	3333
STD.DEV.				8	0	0.00	417		1629	58
STD.ERR.				3	0	0.00	147		940	33
COEF VAR				94	0	0.00	54		132	43
LOG MEAN				4	10	1.00	562		537	126
791017										

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	QC002 HSAMPLQC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00080 COLOR PT-CO UNITS	00095 CNDUCTVY AT 25C MICROMHC	00098 VSAMPLQC DEPTH METERS	00300 DO MG/L	00310 BOD 5 DAY MG/L
790214	0901			1	50	4.5	11	8	140	0.30	11.50	2.8
790214	0902			3	50	4.5			140	1.00	11.40	
790214	0903			5	50	4.5			140	1.50	11.40	
790214	0905			10	50	4.5			140	3.00	11.40	
790214	0908			16	50	4.5	11	10	140	5.00	11.40	1.5
790214	0909			23	50	4.5			140	7.00	11.40	
790214	0910			30	50	4.5			140	9.00	11.40	
790510	0855			1	50	14.0	17	12	190	0.30	7.70	1.4
790510	0857			3	50	14.0			190	1.00	7.70	
790510	0859			5	50	14.0			190	1.50	7.70	
790510	0901			10	50	14.0			190	3.00	7.70	
790510	0905			16	50	14.0	18	15	190	5.00	7.80	1.3
790510	0907			23	50	14.0			190	7.00	7.70	
790510	0909			30	50	14.0			200	9.00	7.80	
790510	0915				55							
790809	0900			1	50	20.0	1	5	160	0.30	8.60	1.0K
790809	0902			3	50	20.0			170	1.00	8.60	
790809	0904			5	50	20.0			180	1.50	8.70	
790809	0906			10	50	20.0			170	3.00	8.80	
790809	0908			16	50	20.0	2	6	170	5.00	8.90	1.0K
790809	0910			20	50	20.0			170	6.00	9.10	
790809	0912			23	50	20.0			170	7.00	9.00	
790809	0914			26	50	20.0			170	8.00	9.00	
791017	0832			1	50	15.5	2	5	170	0.30	8.60	1.0K
791017	0833			3	50	15.5			170	1.00	8.50	
791017	0834			5	50	15.5			170	1.50	8.50	
791017	0835			10	50	15.5			170	3.00	8.50	
791017	0836			16	50	15.5	3	7	170	5.00	8.50	1.0K
791017	0837			23	50	15.5			170	7.00	8.50	
791017	0838			30	50	15.5			170	9.00	8.50	
790214												
NUMBER				29		29	8	8	29	29	29	8
MAXIMUM				30		20.0	18	15	200	9.00	11.50	2.8
MINIMUM				1		4.5	1	5	140	0.30	7.70	1.0K
SUM				368		398.0	65	68	4870	132.20	264.30	11.0
SUM SQ.				7456		6355.5	871	668	827500	688.36	2462.67	17.7
MEAN				13		13.7	8	9	168	3.87	9.11	1.4
VARIANCE				100		33.3	49	13	346	9.08	1.93	0.4
STD.DEV.				10		5.8	7	4	19	3.01	1.39	0.6
STD.ERR.				2		1.1	2	1	3	0.56	0.26	0.2
COEF VAR				79		42.1	87	42	11	77.89	15.22	44.3
LOG MEAN				8		12.0	5	8	167	2.44	9.02	1.3
791017												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	80208 TOT SED SIEVE %<2.00MM	00339 COD MUD DRY WGT MG/KG	01068 NICKEL SEDMG/KG DRY WGT	01108 AL MUD DRY WGT MG/KG-AL	00626 ORGAN. N MUD D WT MG/KG-N	00687 SM ORG CARBON GM/KG-C
790510	0915			100.0	38000	28.00	14000.00	1000	0
790510									
NUMBER				1	1	1	1	1	1
MAXIMUM									
MINIMUM									
SUM									
SUM SQ.									
MEAN									
VARIANCE									
STD.DEV.									
STD.ERR.									
COEF VAR									
LOG MEAN									
790510									

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70300 RESIDUE DISS-180 C MG/L	00081 AP COLOR PT-CO UNITS	00335 COD LOWLEVEL MG/L	00666 PHOS-DIS MG/L P	00680 T ORG C C MG/L	00916 CALCIUM CA-TOT MG/L	C0927 MGNSIUM MG,TOT MG/L
790214	0901			1	100	37	7.0	0.44R	3.7	26.0	4.40
790214	0908			16	90	37	5.0	0.01	2.6	26.0	4.40
790510	0855			1	110	50	7.0	0.02	2.7	23.0	4.60
790510	0905			16	110	43	8.0	0.01K	3.3	23.0	4.60
790809	0900			1	110	8	4.0	0.01	2.5	20.0	4.80
790809	0908			16	100	13	6.0	0.01K	3.7	20.0	4.80
791017	0832			1	90	19	5.0	0.01K	2.4	19.0	5.10
791017	0836			16	100	8	5.0	0.01	3.1	22.0	5.50
790214											
NUMBER				29	8	8	8	8	8	8	8
MAXIMUM				30	110	50	8.0	0.44	3.7	26.0	5.50
MINIMUM				1	90	8	4.0	0.01K	2.4	19.0	4.40
SUM				368	810	215	47.0	0.52	24.0	179.0	38.20
SUM SQ.				7456	82500	7745	289.0	0.19	73.9	4055.0	183.38
MEAN				13	101	27	5.9	0.06	3.0	22.4	4.77
VARIANCE				100	70	281	1.8	0.02	0.3	7.1	0.14
STD.DEV.				10	8	17	1.4	0.15	0.5	2.7	0.37
STD.ERR.				2	3	6	0.5	0.05	0.2	0.9	0.13
COEF VAR				79	8	62	23.1	233.17	17.5	11.9	7.82
LOG MEAN				8	101	22	5.7	0.02	3.0	22.2	4.76
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00929 SODIUM NA, TOT MG/L	00937 PTSSIUM K,TOT MG/L	C0940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L	C1003 ARSENIC SEDMG/KG DRY WGT
790214	0901			1	4.30	1.10	3	22	3.4	2K	
790214	0908			16	4.10	1.00	3	23	3.6	2K	
790510	0855			1	2.10	1.30	3	20	4.6	2K	
790510	0905			16	4.90	2.80	3	20	4.3	2K	
790510	0915										8.60
790809	0900			1	2.30	1.20	3	25	3.3	2K	
790809	0908			16	2.30	1.20	3	26	3.3	2K	
791017	0832			1	2.80	1.40	2	21	4.1	2K	
791017	0836			16	2.70	1.40	3	25	4.1	2K	
790214											
NUMBER				29	8	8	8	8	8	8	1
MAXIMUM				30	4.90	2.80	3	26	4.6	2K	
MINIMUM				1	2.10	1.00	2	20	3.3	2K	
SUM				368	25.50	11.40	23	183	30.7	32	
SUM SQ.				7456	89.43	18.54	67	4225	119.0	32	
MEAN				13	3.19	1.42	3	23	3.8	2	
VARIANCE				100	1.16	0.33	0	6	0.3	0	
STD.DEV.				10	1.08	0.57	0	2	0.5	0	
STD.ERR.				2	0.38	0.20	0	1	0.2	0	
COEF VAR				79	33.85	40.18	12	10	13.1	0	
LOG MEAN				8	3.04	1.35	3	23	3.8	2	
791017											

STATION - 600044 CUMBERLAND RIVER 792.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOW LEVEL MG/L	00400 PH SU
761207	1002			3	50	7.5		170	12.20			7.80
761207	1004			5	50	7.5		180	12.00			7.80
761207	1006			10	50	7.5		180	11.80			7.80
761207	1010			16	50	7.5	4	180	11.60			7.70
761207	1015			23	50	7.5		180	11.60			7.70
761228	0934			1	50	5.7	5	180	11.40			7.80
761228	0936			3	50	5.7		180	11.20			7.80
761228	0938			5	50	5.7		180	11.20			7.80
761228	0940			10	50	5.7		180	11.20			7.80
761228	0942			16	50	5.7	6	180	11.20			7.80
761228	0944			23	50	5.7		180	11.10			7.80
760225												
NUMBER				66		66	25	61	[illegible]	10	13	66
MAXIMUM				30		22.7	22	200	13.10	1.5	9.0	8.60
MINIMUM				1		5.7	2	160	6.00	1.0K	3.0	7.20
SUM				636		957.1	221	10930	595.80	11.0	75.0	501.70
SUM SQ.				10450		15831.2	3143	1963300	5691.88	12.4	495.0	3821.21
MEAN				10		14.5	9	179	9.03	1.1	5.8	7.60
VARIANCE				66		30.0	50	81	4.82	0.0	5.2	0.12
STD.DEV.				8		5.5	7	9	2.20	0.2	2.3	0.34
STD.ERR.				1		0.7	1	1	0.27	0.1	0.6	0.04
COEF VAR				85		37.8	80	5	24.33	16.0	39.5	4.50
LOG MEAN				6		13.3	7	179	8.78	1.1	5.3	7.59
761228												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LPIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
760225	0945			1	49.0		10	0.080	0.03	0.40	0.040	0.01
760225	0955			16	49.0		8	0.140	0.04	0.51	0.050	0.26R
760428	1030			1	57.0	0	1	0.070	0.04	0.34	0.020	0.01
760428	1031			1	58.0	0	2	0.090	0.02	0.35	0.020	0.01
760428	1040			16	53.0	0	2	0.070	0.02	0.36	0.020	0.02
760525	1032			1	53.0	0	3	0.150	0.05	0.26	0.030	0.02
760525	1033			1	52.0	0	2	0.130	0.05	0.26	0.030	0.02
760525	1040			16	52.0	0	2	0.060	0.08	0.33	0.030	0.05R
760629	0932			1	62.0	0	16	0.150	0.03	0.38	0.040	0.01
760629	0933			1	63.0	0	16	0.130	0.03	0.38	0.050	0.03
760629	0941			16	63.0	0	18	0.150	0.03	0.41	0.050	0.01
760727	0928			1	53.0	0	6	0.080	0.02	0.33	0.030	0.01
760727	0929			1	51.0	0	5	0.080	0.02	0.37	0.030	0.01
760727	0937			16	50.0	0	7	0.060	0.05	0.36	0.030	0.01
760824	1045			1	49.0	0	6	0.100	0.02	0.22	0.020	0.01
760824	1055			16	48.0	0	6	0.130	0.06	0.21	0.020	0.01
760921	0930			1	50.0	0	10	0.110	0.01	0.26	0.010	0.01K
760921	0935			16	51.0	0	8	0.[illegible]	0.02	0.28	0.010	0.01K
761027	1021			1	73.0	0	19	0.1[illegible]	.04	0.38	0.170	0.11
761027	1040			16	71.0	0	18	0.1[illegible]	.04	0.38	0.170	0.11
761027	1041			16	70.0	0	24	0.186	.04	0.37	0.180	0.58R
761207	1000			1	50.0	0	3	0.070	.01	0.19	0.030	0.03
761207	1010			16	66.0	0	3	0.110	01	0.19	0.030	0.01
761228	0934			1	58.0	0	2	0.070	.01	0.26	0.020	0.02

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STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01042 COPPER CU,TOT UG/L	01043 COPPER SEDMG/KG DRY WGT	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01052 LEAD SEDMG/KG DRY WGT	01053 MN MUD DRY WGT MG/KG-MN
790214	0901			1	10.00K		670.00	90	10.00K		
790214	0908			16	10.00K		470.00	50K	10.00K		
790510	0855			1	10.00		1300.00	50K	10.00K		
790510	0905			16	10.00K		3400.00	50	17.00		
790510	0915					17.00				12	1700
790809	0900			1	10.00K		210.00	50K	10.00K		
790809	0908			16	10.00K		300.00	50K	10.00K		
791017	0832			1	10.00K		360.00	50K	10.00K		
791017	0836			16	10.00K		520.00	50K	10.00K		
790214											
NUMBER				8	8	1	8	8	8	1	1
MAXIMUM				16	10.00		3400.00	90	17.00		
MINIMUM				1	10.00K		210.00	50K	10.00K		
SUM				68	80.00		7230.00	440	87.00		
SUM SQ.				1028	800.00		1.445E+07	25600	989.00		
MEAN				9	10.00		903.75	55	10.88		
VARIANCE				64	0.00		1.131E+06	200	6.13		
STD.DEV.				8	0.00		1063.67	14	2.47		
STD.ERR.				3	0.00		376.06	5	0.87		
COEF VAR				94	0.00		117.70	26	22.76		
LOG MEAN				4	10.00		598.28	54	10.69		
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01077 SILVER AG,TOT UG/L	01092 ZINC ZN,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L
790214	0901			1	40.00	10.0K	10.00K	10.0K	20.00		650.00
790214	0908			16	40.00	10.0K	10.00K	10.0K	10.00		540.00
790510	0855			1	60.00	10.0K	10.00K	10.0K	40.00		2000.00
790510	0905			16	160.00	10.0K	30.00	10.0K	60.00		4000.00
790510	0915									58.00	
790809	0900			1	30.00	10.0K	10.00K	10.0K	10.00K		420.00
790809	0908			16	40.00	10.0K	10.00K	10.0K	20.00		380.00
791017	0832			1	60.00	10.0K	50.00K	10.0K	20.00		600.00
791017	0836			16	80.00	10.0K	50.00K	10.0K	30.00		500.00

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STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L
760225											
NUMBER				66	25	25	10	10	25	10	10
MAXIMUM				30	28.0	5.00	4.40	1.90	5	32	120
MINIMUM				1	18.0	3.60	2.30	0.90	3	14	20
SUM				636	562.0	107.30	31.60	13.10	89	216	660
SUM SQ.				10450	12884.0	464.81	104.34	17.95	325	5110	51800
MEAN				10	22.5	4.29	3.16	1.31	4	22	66
VARIANCE				66	10.4	0.18	0.50	0.09	0	49	916
STD.DEV.				8	3.2	0.42	0.71	0.30	1	7	30
STD.ERR.				1	0.6	0.06	0.22	0.09	0	2	10
COEF VAR				69	14.4	9.84	22.34	22.60	16	33	46
LOG MEAN				6	22.3	4.27	3.09	1.28	4	21	59
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L
760225	0945			1	1.00K	5.00K	10.00K	1300.00	50K	10.00K	60.00
760225	0955			16	1.00K	5.00K	10.00K	1200.00	50K	10.00K	50.00
760428	1030			1				310.00	50K		40.00
760428	1031			1				290.00	50K		40.00
760428	1040			16				360.00	120		40.00
760525	1032			1	1.00K	5.00K	10.00K	520.00	50K	10.00K	60.00
760525	1033			1	1.00K	5.00K	10.00K	310.00	50K	10.00K	60.00
760525	1040			16	1.00K	5.00K	20.00	470.00	50K	10.00K	70.00
760629	0932			1				980.00	130		60.00
760629	0933			1				1000.00	120		60.00
760629	0941			16				950.00	120		60.00
760727	0928			1				340.00	50K		40.00
760727	0929			1				350.00	50K		40.00
760727	0937			16				350.00	50K		50.00
760824	1045			1	1.00K	5.00K	60.00	240.00	50K	10.00K	40.00
760824	1055			16	2.00	5.00K	140.00	11000.00	50K	11.00	320.00
760921	0930			1				290.00	50K		
760921	0935			16				280.00	50K		
761027	1021			1	1.00K	10.00	60.00	1000.00	50K	14.00	50.00
761027	1040			16	1.00K	8.00	30.00	1000.00	50K	10.00K	80.00
761027	1041			16	1.00K	7.00	110.00	1100.00	50K	10.00K	70.00
761207	1000			1				120.00	50K		
761207	1010			16				290.00	50K		
761228	0934			1				200.00	50K		
761228	0942			16				220.00	50K		

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STATION - 600046 CUMBERLAND RIVER 284.5

DATE	TIME	DATE	TIME	00003 DEPTH FEET	4657C CAL HARD CA MG MG/L	71900 MERCURY HG,TOTAL UG/L	70322 RESIDUE TOT VOL PERCENT	80203 TOT SED SIEVE %<.062MM	80204 TOT SED SIEVE %<.125MM	80206 TOT SED SIEVE %<.500MM
790214	0901			1	83	0.20K				
790214	0908			16	83	0.20K				
790510	0855			1	76	0.20K				
790510	0905			16	76	0.20K				
790510	0915						4.7	77.3	85.2	99.8
790809	0900			1	70	0.20K				
790809	0908			16	70	0.20K				
791017	0832			1	68	0.20K				
791017	0836			16	78	0.20K				
790214										
	NUMBER			8	8	8	1	1	1	1
	MAXIMUM			16	83	0.20K				
	MINIMUM			1	68	0.20K				
	SUM			68	604	1.60				
	SUM SQ.			1028	45838	0.32				
	MEAN			9	76	0.20				
	VARIANCE			64	34	0.00				
	STD.DEV.			8	6	0.00				
	STD.ERR.			3	2	0.00				
	COEF VAR			94	8	0.08				
	LOG MEAN			4	75	0.20				
791017										

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
760225											
NUMBER				66	19	10	10	5	6	25	13
MAXIMUM				30	10.0	50.00K	120.00	60	1600	88	130
MINIMUM				1	10.0K	50.00K	10.00	10K	10K	63	80
SUM				636	190.0	500.00	380.00	150	2480	1847	1260
SUM SQ.				10450	1900.0	25000.00	23800.00	7500	3063800	138381	125000
MEAN				10	10.0	50.00	38.00	30	413	74	97
VARIANCE				66	0.0	0.00	1040.00	750	407747	80	240
STD.DEV.				8	0.0	0.00	32.25	27	639	9	15
STD.ERR.				1	0.0	0.00	10.20	12	261	2	4
COEF VAR				85	0.0	0.00	84.87	91	154	12	16
LOG MEAN				6	10.0	50.00	29.80	20	94	73	96
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00339 COD MUD DRY WGT MG/KG	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
760225	0945			1	6	23		2.0		4.8	5K
760225	0955			16	8	23		2.2		4.8	5K
760428	1030			1	3	8		1.6			
760428	1031			1	3	8		1.6			
760428	1040			16	3	8		1.4			
760525	1032			1	4	12		1.8		3.7	5K
760525	1033			1	2	10		2.0		3.8	5K
760525	1040			16	2	10		1.6		3.9	5
760629	0932			1	10	33		2.6			
760629	0933			1	12	23		2.6			
760629	0941			16	10	33		2.3			
760727	0928			1	13	13		2.4K			
760727	0929			1	13	13		2.3K			
760727	0937			15	10	13		2.3K			
760824	1045			1	3	13		1.3		3.9	5K
760824	1055			16	3	14		2.7		4.0	5K
760824	1105						11000		1		
760921	0930			1	7	13		11.0			
760921	0935			16	7	13		1.2			
761027	1021			1	10	26		2.6		4.3	2K
761027	1040			16	6	33		2.3		4.2	2K
761027	1041			16	6	33		2.4		4.9	2K
761207	1000			1	3	7		1.1			
761207	1010			16	5	10		1.2			
761228	0934			1	5	8		1.6			
761228	0942			16	5	7		1.2			

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
760225	0945			1	50	8.4	18	180	12.90	1.0K	4.0	8.60
760225	0946			3	50	8.4			12.90			8.60
760225	0948			5	50	8.2			13.00			8.40
760225	0950			10	50	8.0			13.00			8.40
760225	0955			16	50	8.0	18	160	13.00	1.0K	8.0	8.40
760225	0957			26	50	8.0			13.10			8.40
760225	1000			30	50	8.0			13.10			8.30
760428	1030			1	50	13.0	3	170	10.30		3.0	7.60
760428	1031			1	50	13.0	4	170	9.80		3.0	7.60
760428	1033			3	50	13.0		170	10.10			7.60
760428	1035			5	50	13.0		170	10.00			7.60
760428	1037			10	50	13.0		170	9.90			7.60
760428	1040			16	50	13.0	3	170	9.80		5.0	7.60
760428	1044			23	50	12.9		180	9.70			7.60
760525	1032			1	50	17.3	4	180	7.90	1.0	6.0	7.60
760525	1033			1	50	17.3	4	180	7.90	1.0	6.0	7.60
760525	1035			5	50	16.3		180	7.80			7.60
760525	1036			9	50	15.5		180	7.80			7.60
760525	1037			10	50	14.8		180	7.60			7.60
760525	1040			16	50	14.4	3	180	7.90	1.0K	7.0	7.50
760525	1045			20	50	14.3		180	8.00			7.50
760629	0932			1	50	19.8	19	180	7.20			7.40
760629	0933			1	50	19.8	19	180	7.30			7.40
760629	0935			3	50	19.8		180	7.20			7.40
760629	0937			5	50	19.7		180	7.20			7.40
760629	0939			10	50	19.7		180	7.30			7.40
760629	0941			16	50	19.6	22	180	7.40			7.40
760629	0943			23	50	19.6		180	7.30			7.40
760727	0928			1	50	20.5	4	170	7.40			7.40
760727	0929			1	50	20.4	4	180	7.80			7.40
760727	0931			3	50	20.2		170	7.50			7.40
760727	0933			5	50	20.2		170	7.60			7.40
760727	0935			10	50	20.1		180	7.60			7.40
760727	0937			16	50	20.1	4	180	7.60			7.40
760727	0939			23	50	20.1		180	7.60			7.40
760824	1045			1	50	22.7	4	180	7.00	1.5	4.0	7.30
760824	1047			3	50	22.3		180	6.80			7.30
760824	1049			5	50	22.1		180	6.80			7.30
760824	1051			10	50	22.0		180	6.40			7.20
760824	1055			16	50	21.9	5	180	6.30	1.2	3.0	7.20
760824	1100			23	50	21.5		180	6.00			7.20
760921	0930			1	50	18.8	12	170	7.20			7.30
760921	0931			3	50	18.6		170	7.00			7.40
760921	0932			5	50	18.6		170	7.00			7.30
760921	0933			10	50	18.6		170	6.90			7.30
760921	0935			16	50	18.6	3	170	6.80			7.30
760921	0937			23	50	18.6		170	6.80			7.20
761027	1021			1	50	13.5	14	200	8.60	1.0K	9.0	7.50
761027	1025			3	50	13.6		200	8.20			7.50
761027	1030			5	50	13.6		200	8.10			7.50
761027	1035			10	50	13.6		200	8.00			7.50
761027	1040			16	50	13.8	16	200	7.90	1.0	9.0	7.40
761027	1041			16	50	13.8	21	200	7.80	1.3	8.0	7.40
761027	1050			23	50	13.8		200	7.80			7.40
761207	1000			1	50	7.4	2	170	12.40			7.80

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600099 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01003 ARSENIC SED MG/KG DRY WGT	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SED MG/KG DRY WGT	01043 COPPER SED MG/KG DRY WGT	01047 FERROUS IRON UG/L	01052 LEAD SED MG/KG DRY WGT
760225	0945			1		100K	10.00K				40	
760225	0955			16		100K	10.00K					
760428	1030			1							20	
760428	1031			1							40	
760428	1040			16							40	
760525	1032			1		100K	10.00K				40	
760525	1033			1		100K	10.00K				50	
760525	1040			16		100K	10.00K				50	
760824	1045			1		100K	10.00K					
760824	1055			16		100	10.00K					
760824	1105				12.00			1.00K	16.00	24.00		20
761027	1021			1		100K	10.00K					
761027	1040			16		100K	10.00K					
761027	1041			16		100K	10.00K					
760225												
NUMBER				13	1	10	10	1	1	1	7	1
MAXIMUM				16		100	10.00K				50	
MINIMUM				1		100K	10.00K				20	
SUM				103		1000	100.00				280	
SUM SQ.				1593		100000	1000.00				11800	
MEAN				8		100	10.00				40	
VARIANCE				61		0	0.00				100	
STD.DEV.				8		0	0.00				10	
STD.ERR.				2		0	0.00				4	
COEF VAR				98		0	0.00				25	
LOG MEAN				4		100	10.00				39	
761027												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01053 MN MUD DRY WGT MG/KG-MN	01068 NICKEL SED MG/KG DRY WGT	01077 SILVER AG,TOT UG/L	01093 ZINC SED MG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L
760225	0945			1			10K		1600		10K
760225	0955			16			10K		920		10K
760525	1032			1			10K		200K		10K
760525	1033			1			10K		200K		10K
760525	1040			16			10K		200K		10K
760824	1045			1			10K		300		10K
760824	1055			16			10K		3400		20
760824	1105				760	12.00		29.6.		4200.00	
761027	1021			1			10K		800		10K
761027	1040			16			10K		1600		10K
761027	1041			16			10K		700		10K

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
761228	C942			16	60.0	6	2	0.060	0.01	0.26	0.020	0.11R
760225												
NUMBER				66	25	23	25	25	25	25	25	25
MAXIMUM				30	73.0	0	24	0.180	0.08	0.51	0.180	0.58
MINIMUM				1	48.0	0	1	0.060	0.01	0.19	0.010	0.01K
SUM				636	1411.0	0	199	2.690	0.78	8.06	1.150	1.49
SUM SQ.				10450	81029.0	0	2659	0.323	0.03	2.75	0.111	0.45
MEAN				10	56.4	0	8	0.108	0.03	0.32	0.046	0.06
VARIANCE				66	58.0	0	45	0.001	0.00	0.01	0.002	0.01
STD.DEV.				8	7.6	0	7	0.038	0.02	0.08	0.049	0.12
STD.ERR.				1	1.5	0	1	0.008	0.00	0.02	0.010	0.02
COEF VAR				65	13.5	0	84	34.907	57.28	24.69	107.053	205.12
LOG MEAN				6	56.0	0	5	0.101	0.03	0.31	0.033	0.02
761228												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L
760225	C945			1	18.0	4.40	3.00	1.20	4	14	50
760225	C955			16	19.0	4.50	3.00	1.20	4	14	60
760428	1030			1	25.0	4.00			3		
760428	1031			1	25.0	4.00			3		
760428	1040			16	25.0	3.90			3		
760525	1032			1	20.0	3.80	3.20	1.60	4	14	40
760525	1033			1	20.0	3.90	3.00	1.00	4	22	40
760525	1040			16	20.0	3.60	2.30	0.90	4	18	20
760629	C932			1	28.0	4.40			3		
760629	C933			1	27.0	4.40			3		
760629	C941			16	26.0	4.40			3		
760727	C928			1	19.0	4.00			3		
760727	C929			1	19.0	4.00			3		
760727	C937			16	19.0	4.00			3		
760824	1045			1	20.0	3.90	2.50	1.20	3	23	70
760824	1055			16	20.0	3.90	2.40	1.20	3	19	80
760921	C930			1	23.0	4.10			4		
760921	C935			16	22.0	4.10			4		
761027	1021			1	27.0	5.00	3.60	1.40	4	32	120
761027	1040			16	26.0	5.00	4.00	1.50	4	30	80
761027	1041			16	27.0	5.00	4.40	1.90	4	30	100
761207	1000			1	19.0	4.70			5		
761207	1010			16	24.0	4.70			4		
761228	0934			1	22.0	4.80			3		
761228	C942			16	22.0	4.80			4		

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STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
770216	1220			1	50	3.2	6	180	13.80	1.0K	2.0
770216	1225			3	50	3.2		180	13.80		
770216	1230			5	50	3.2		180	13.40		
770216	1235			10	50	3.2		180	13.30		
770216	1240			16	50	3.2	5	180	13.00	1.0K	2.0
770216	1245			23	50	3.2		180	13.00		
770322	1046			1	50	9.0	9	200	10.20		
770322	1048			3	50	9.0		200	10.10		
770322	1050			5	50	9.0		200	10.00		
770322	1052			10	50	9.0		200	10.00		
770322	1055			16	50	9.0	10	200	9.90		
770322	1100			23	50	9.0		200	9.90		
770428	1049			2	50	12.5	20	160	10.00		
770428	1050			2	50	12.5	20	160	10.00		
770428	1052			3	50	12.5		160	10.00		
770428	1055			5	50	12.5		160	10.00		
770428	1057			10	50	12.5		160	10.00		
770428	1100			16	50	12.5	20	160	10.00		
770428	1102			23	50	12.5		160	10.00		
770428	1105			30	50	12.5		160	10.00		
770524	1047			2	50	17.3	32	160	7.70	1.7	6.0
770524	1049			3	50	17.3		160	7.80		
770524	1051			5	50	17.3		160	7.80		
770524	1053			10	50	17.1		160	7.80		
770524	1055			16	50	17.1	35	160	7.80	1.2	4.0
770524	1100			23	50	17.1		160	7.80		
770524	1102			26	50	17.1		160	7.80		
770628	1125			1	50	21.8	16	170	6.00		
770628	1130			3	50	21.5		170	5.90		
770628	1135			5	50	21.5		170	5.90		
770628	1140			10	50	21.0		170	5.80		
770628	1144			16	50	21.0	17	170	5.80		
770726	0900			2	50	21.3	10	140	7.10		
770726	0902			3	50	21.0		140	7.10		
770726	0904			5	50	21.0		140	7.00		
770726	0906			10	50	21.0		140	7.00		
770726	0910			16	50	21.0	10	140	7.00		
770726	0916			23	50	21.0		140	7.00		
770824	1015			2	50	23.1	9	160	6.90	2.7	8.0
770824	1017			3	50	23.0		160	6.70		
770824	1019			5	50	22.9		150	6.70		
770824	1021			10	50	22.9		150	6.30		
770824	1025			16	50	22.6	23	150	6.30	2.2	7.0
770824	1030			23	50	22.6		150	6.20		
770928	1133			1	50	19.5	10	180	6.70		
770928	1138			3	50	19.5		180	6.70		
770928	1140			5	50	19.5		180	6.70		
770928	1145			10	50	19.5		180	6.70		
770928	1150			16	50	19.4	13	180	6.60		
770928	1155			23	50	19.4		180	6.60		
771027	1033			2	50	15.5	13	160	7.30	1.0K	6.0

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L
760225											
NUMBER				66	10	10	10	25	25	10	19
MAXIMUM				30	2.00	10.00	140.00	11000.00	130	14.00	320.00
MINIMUM				1	1.00K	5.00K	10.00K	120.00	50K	10.00K	40.00
SUM				636	11.00	60.00	460.00	24470.00	1540	105.00	1290.00
SUM SQ.				10450	13.00	388.00	40600.00	1.319E+08	112600	1117.00	157300.00
MEAN				10	1.10	6.00	46.00	978.80	62	10.50	67.89
VARIANCE				66	0.10	3.11	2160.00	4.497E+06	739	1.61	3873.10
STD.DEV.				8	0.32	1.76	46.48	2120.50	27	1.27	62.23
STD.ERR.				1	0.10	0.56	14.70	424.10	5	0.40	14.28
COEF VAR				85	28.75	29.40	101.03	216.64	44	12.09	91.66
LOG MEAN				6	1.07	5.81	28.33	511.86	58	10.44	57.80
761228											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L
760225	0945			1	10.0K	50.00K	20.00	60	60	63	90
760225	0955			16	10.0K	50.00K	10.00			66	90
760428	1030			1	10.0K					79	80
760428	1031			1	10.0					79	80
760428	1040			16	10.0					78	80
760525	1032			1	10.0K	50.00K	20.00	10	700	66	100
760525	1033			1	10.0K	50.00K	20.00	10K	100K	66	100
760525	1040			16	10.0K	50.00K	40.00			65	100
760629	0932			1	10.0					88	
760629	0933			1	10.0					86	
760629	0941			16	10.0					83	
760727	0928			1	10.0K					64	
760727	0929			1	10.0K					64	
760727	0937			16	10.0K					64	
760824	1045			1	10.0K	50.00K	40.00	60	10K	66	90
760824	1055			16	10.0K	50.00K	120.00	10K	10K	66	90
760921	0930			1						74	
760921	0935									72	
761027	1021			1	10.0K	50.00K	60.00		1600	88	130
761027	1040			16	10.0K	50.00K	20.00			86	120
761027	1041			16	10.0K	50.00K	30.00			88	110
761207	1000			1						67	
761207	1010			16						79	
761228	0934			1						75	
761228	0942			16						75	

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00630 NO2&NO3 N- OTAL MG/L
770216	1220			1	8.20	62.0	0	3	0.010K	0.04	0.25
770216	1225			3	8.00						
770216	1230			5	8.00						
770216	1235			10	7.90						
770216	1240			16	7.80	58.0	0	4	0.010K	0.02	0.25
770216	1245			23	7.80						
770322	1046			1	7.70	58.0	0	15	0.100	0.02	0.33
770322	1048			3	7.70						
770322	1050			5	7.70						
770322	1052			10	7.70						
770322	1055			16	7.60	59.0	0	12	0.100	0.02	0.33
770322	1100			23	7.60						
770428	1049			2	7.60	60.0	0	20	0.100	0.01	0.36
770428	1050			2	7.70	62.0	0	21	0.130	0.01	0.56
770428	1052			3	7.60						
770428	1055			5	7.60						
770428	1057			10	7.60						
770428	1100			16	7.60	58.0	0	20	0.090	0.01	0.36
770428	1102			23	7.60						
770428	1105			30	7.60						
770524	1047			2	7.20	44.0	0	28	0.120	0.01	0.41
770524	1049			3	7.20						
770524	1051			5	7.20						
770524	1053			10	7.20						
770524	1055			16	7.20	43.0	0	28	0.090	0.01	0.41
770524	1100			23	7.20						
770524	1102			26	7.20						
770628	1125			1	7.00	48.0	0	15	0.050	0.04	0.35
770628	1130			3	7.00						
770628	1135			5	7.00						
770628	1140			10	7.00						
770628	1144			16	7.00	49.0	0	23	0.060	0.02	0.32
770726	0900			2	7.20	40.0	0	10	0.140	0.03	0.30
770726	0902			3	7.20						
770726	0904			5	7.20						
770726	0906			10	7.20						
770726	0910			16	7.20	40.0	0	6	0.090	0.05	0.28
770726	0916			23	7.20						
770824	1015			2	7.40	52.0	0	10	0.070	0.03	0.25
770824	1017			3	7.30						
770824	1019			5	7.30						
770824	1021			10	7.20						
770824	1025			16	7.20	52.0	0	5			
770824	1030			23	7.20						
770928	1133			1	6.40	63.0	0	10	0.130	0.07	0.28
770928	1136			3	5.70						
770928	1140			5	5.80						
770928	1145			10	5.90						
770928	1150			16	6.10	55.0	0	19	0.120	0.02	0.29
770928	1155			23	6.20						
771027	1033			2	7.20	50.0	0	12	0.040	0.02	0.35

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00339 COD MUD DRY WGT MG/KG	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
760225											
NUMBER				66	25	25	1	25	1	10	10
MAXIMUM				30	13	33		11.0		4.9	5
MINIMUM				1	2	7		1.1		3.7	2K
SUM				636	163	409		57.3		42.3	41
SUM SQ.				10450	1361	8735		216.7		180.8	187
MEAN				10	7	16		2.3		4.2	4
VARIANCE				66	12	85		3.6		0.2	2
STD.DEV.				8	4	9		1.9		0.5	1
STD.ERR.				1	1	2		0.4		0.1	0
COEF VAR				85	54	56		82.3		10.7	35
LOG MEAN				6	6	14		2.0		4.2	4
761228											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L
770216	1220			1	0.020	0.02	21.0	5.40	4.00	1.40	3
770216	1240			16	0.020	0.01	21.0	5.40	3.90	1.40	4
770322	1046			1	0.050	0.72R	31.0	6.10			4
770322	1055			16	0.040	0.74R	32.0	6.20			4
770428	1049			2	0.030	0.01	22.0	4.50			4
770428	1050			2	0.030	0.01	22.0	4.40			4
770428	1100			16	0.030	0.01	20.0	4.60			4
770524	1047			2	0.080	0.03	19.0	4.70	3.50	1.70	5
770524	1055			16	0.080	0.01	18.0	4.80	3.50	1.80	4
770628	1125			1	0.040	0.11R	20.0	4.80			4
770628	1144			16	0.040	0.12R	17.0	4.80			6
770726	0900			2	0.030	0.01	21.0	4.40			4
770726	0910			16	0.030	0.01	21.0	4.40			4
770824	1015			2	0.030	0.01	20.0	4.60	3.80	1.70	4
770824	1025			16		0.01	20.0	4.70	3.20	1.60	5
770928	1133			1	0.040	0.03	26.0	4.60			4
770928	1150			16	0.050	0.03	25.0	4.60			4
771027	1033			2	0.030	0.01	17.0	4.20	3.00	1.20	4
771027	1045			16	0.050	0.01	17.0	4.50	2.90	1.70	4
771129	1050			2	0.070	0.03	29.0	4.70			2
771129	1105			16	0.070	0.03	30.0	4.70			2
771222	1040			2	0.040	0.01	16.0	3.80			3
771222	1048			16	0.040	0.01	17.0	3.50			3
770216											
NUMBER				71	22	23	23	23	8	8	23
MAXIMUM				36	0.080	0.74	32.0	6.20	4.00	1.80	6
MINIMUM				1	0.020	0.01	16.0	3.50	2.90	1.20	2
SUM				776	0.940	1.99	502.0	108.40	27.60	12.50	89
SUM SQ.				14288	0.047	1.10	11456.0	519.00	97.60	19.83	361
MEAN				11	0.043	0.09	21.8	4.71	3.47	1.56	4
VARIANCE				83	0.000	0.04	22.7	0.37	0.17	0.04	1
STD.DEV.				9	0.018	0.21	4.8	0.61	0.41	0.21	1
STD.ERR.				1	0.004	0.04	1.0	0.13	0.15	0.07	0
COEF VAR				83	41.606	237.19	21.8	12.88	11.89	13.22	22
LOG MEAN				7	0.040	0.02	21.4	4.68	3.45	1.55	4
771222											

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01053 MN MUD DRY WGT MG/KG-MN	01068 NICKEL SEDMG/KG DRY WGT	01077 SILVER AG,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L
760225											
NUMBER				13	1	1	10	1	10	1	10
MAXIMUM				16			10K		3400		20
MINIMUM				1			10K		200K		10K
SUM				103			100		8720		110
SUM SQ.				1543			1000		15746400		1300
MEAN				8			10		672		11
VARIANCE				61			0		904729		10
STD.DEV.				8			0		951		3
STD.ERR.				2			0		301		1
COEF VAR				98			0		109		29
LOG MEAN				4			10		579		11
761027											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01147 SELENIUM SE,TOT UG/L	01148 SELENIUM SEDMG/KG DRY WGT	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE	71900 MERCURY HG,TOTAL UG/L	71921 MERCURY SEDMG/KG DRY WGT	80111 NITROGEN DRY WGT MG/KG
760225	0945			1	2.00K		1000K		0.20K		
760225	0955			16	2.00K		1000K		0.20K		
760525	1032			1	2.00K		1000K		0.20K		
760525	1033			1	2.00K		1000K		0.20K		
760525	1040			16	2.00K		1000K		0.20K		
760824	1045			1	1.00K		1000K		0.20K		
760824	1055			16	1.00K		1000K		0.20K		
760824	1105					1.00K		12000.00		0.10K	24.0
761027	1021			1	1.00K		1000K		0.20K		
761027	1040			16	1.00K		1000K		0.20K		
761027	1041			16	1.00K		1000K		0.20K		
760225											
NUMBER				13	10	1	10	1	10	1	1
MAXIMUM				16	2.00K		1000K		0.20K		
MINIMUM				1	1.00K		1000K		0.20K		
SUM				103	15.00		10000		2.00		
SUM SQ.				1543	25.00		10000000		0.40		
MEAN				8	1.50		1000		0.20		
VARIANCE				61	0.28		0		0.00		
STD.DEV.				8	0.53		0		0.00		
STD.ERR.				2	0.17		0		0.00		
COEF VAR				98	35.14		0		0.13		
LOG MEAN				4	1.41		1000		0.20		
761027											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 660044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML
770216	1220			1	10.00K	10.00K	10.0K	50.00K	10.00	10K	10K
770216	1240			16	10.00K	30.00	10.0	50.00K	10.00K	10K	10K
770524	1047			2	10.00K	60.00	10.0K	50.00K	10.00K	1970	1630
770524	1055			16	10.00K	60.00	10.0K	50.00K	10.00		
770824	1015			2	10.00K	60.00	10.0K	50.00K	10.00	670	10K
770824	1025			16	10.00K	80.00	10.0K	50.00K	30.00		
771027	1033			2	10.00K	50.00	80.0R	50.00K	10.00	1000	70
771027	1045			16	10.00K	60.00	30.0	50.00K	10.00K		
770216											
NUMBER				71	8	8	8	8	8	5	5
MAXIMUM				36	10.00K	80.00	80.0	50.00K	30.00	1970	1630
MINIMUM				1	10.00K	10.00K	10.0K	50.00K	10.00K	10K	10K
SUM				776	80.00	410.00	170.0	400.00	100.00	3660	1730
SUM SQ.				14288	800.00	24300.00	7900.0	20000.00	1600.00	5330000	2662100
MEAN				11	10.00	51.25	21.3	50.00	12.50	732	346
VARIANCE				83	0.00	469.64	612.5	0.00	50.00	662720	515880
STD.DEV.				9	0.00	21.67	24.7	0.00	7.07	814	718
STD.ERR.				1	0.00	7.66	8.7	0.00	2.50	364	321
COEF VAR				83	0.00	42.29	116.5	0.00	56.57	111	208
LOG MEAN				7	10.00	44.56	14.9	50.00	11.47	168	41
771222											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00680 T ORG C C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
770216	1220			1	75	150	6	13	1.7	3.5	2K
770216	1240			16	75	140	6	13	1.8	3.3	2K
770322	1046			1	100		6	17	1.2		
770322	1055			16	110		7	13	2.6		
770428	1049			2	73		7	25	1.9		
770428	1050			2	73		9	35	1.9		
770428	1100			16	69		8	27	1.8		
770524	1047			2	67	100	11	70	3.3	3.8	4K
770524	1055			16	65	110	12	69	3.2	3.9	2K
770628	1125			1	70		9	36	1.7		
770628	1144			16	62		6	35	1.9		
770726	0900			2	71		12	30	2.2		
770726	0910			16	71		10	40	1.5		
770824	1015			2	69	100	10	37	5.0	4.0	2K
770824	1025			16	69	100	7	34		4.1	2K
770928	1133			1	84		5	22	1.5		
770928	1150			16	81		5	18	1.8		
771027	1033			2	60	100	6	37	2.8	4.0	2K
771027	1045			16	61	100	6	34	2.2	4.0	2K
771129	1050			2	92		10	38			
771129	1105			16	94		8	44			
771222	1040			2	56		6	23	2.0		
771222	1048			16	57		8	22	2.5		

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 HSAMPLOC % FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L
771027	1035			3	50	15.5		160	7.10		
771027	1037			5	50	15.5		160	7.10		
771027	1040			10	50	15.6		160	7.10		
771027	1045			16	50	15.6	14	160	7.10	1.0K	7.0
771027	1047			23	50	15.6		160	7.10		
771027	1050			30	50	15.6		160	7.10		
771129	1050			2	50	11.5	18	110	8.70		
771129	1052			3	50	11.5		110	8.60		
771129	1055			5	50	11.5		110	8.60		
771129	1100			10	50	12.0		110	8.60		
771129	1105			16	50	12.0	19	110	8.60		
771129	1110			23	50	12.0		110	8.60		
771222	1040			2	50	9.5	11	160	9.70		
771222	1042			3	50	9.5		160	9.60		
771222	1044			5	50	9.5		160	9.60		
771222	1046			10	50	9.5		160	9.50		
771222	1048			16	50	9.5	15	160	9.50		
771222	1050			23	50	9.5		160	9.40		
771222	1052			30	50	9.6		160	9.40		
771222	1054			36	50	9.6		160	9.40		
770216											
NUMBER				71		71	23	71	71	8	8
MAXIMUM				36		23.1	35	200	13.80	2.7	8.0
MINIMUM				1		3.2	5	110	5.80	1.0K	2.0
SUM				776		1036.1	355	11430	603.29	11.8	42.0
SUM SQ.				14288		17460.8	6705	1872700	5418.57	20.5	258.0
MEAN				11		14.6	15	161	8.50	1.5	5.3
VARIANCE				83		33.4	56	466	4.18	0.4	5.4
STD.DEV.				9		5.8	8	22	2.04	0.7	2.3
STD.ERR.				1		0.7	2	3	0.24	0.2	0.8
COEF VAR				83		39.6	49	13	24.05	44.8	44.1
LOG MEAN				7		13.1	14	159	8.28	1.4	4.7
771222											

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01077 SILVER AG,TOT UG/L	01105 ALUMINUM AL,TOT UG/L	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	71900 MERCURY HG,TOTAL UG/L
770216	1220			1	100K	10.00K	10.0K	400	10K	1.00K	1000K	0.20K
770216	1240			16	100K	10.00K	10.0K	400	10K	1.00K	1000K	0.20K
770524	1047			2	100K	10.00K	10.0K	600	10K	1.00K	1000K	0.50
770524	1055			16	100K	10.00K	10.0K	1000	10K	1.00K	1000K	0.30
770824	1015			2	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
770824	1025			16	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
771027	1033			2	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
771027	1045			16	100K	10.00K	10.0K	200K	10K	1.00K	1000K	4.10
770216												0.20K
NUMBER				8	8	8	8	8	8	8	8	8
MAXIMUM				16	100K	10.00K	10.0K	1000	10K	1.00K	1000K	4.10
MINIMUM				1	100K	10.00K	10.0K	200K	10K	1.00K	1000K	0.20K
SUM				71	800	80.00	80.0	3200	80	8.00	8000	5.90
SUM SQ.				1037	80000	800.00	800.0	1840000	800	8.00	8000000	17.35
MEAN				9	100	10.00	10.0	400	10	1.00	1000	0.74
VARIANCE				58	0	0.00	0.0	80000	0	0.00	0	1.86
STD.DEV.				8	0	0.00	0.0	283	0	0.00	0	1.36
STD.ERR.				3	0	0.00	0.0	100	0	0.00	0	0.48
COEF VAR				86	0	0.00	0.0	71	0	0.00	0	184.77
LOG MEAN				5	100	10.00	10.0	334	10	1.00	1000	0.34
771027												

TENNESSEE VALLEY AUTHORITY - DIVISION OF WATER RESOURCES

STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L
771027	1035			3	7.10						
771027	1037			5	7.10						
771027	1040			10	7.10						
771027	1045			16	7.10	48.0	0	13	0.040	0.02	0.35
771027	1047			23	7.10						
771027	1050			30	7.10						
771129	1050			2	7.50	68.0	0	17	0.070	0.01	0.43
771129	1052			3	7.50						
771129	1055			5	7.40						
771129	1100			10	7.40						
771129	1105			16	7.40	73.0	0	20	0.090	0.01	0.43
771129	1110			23	7.40						
771222	1040			2	7.40	56.0	0	10	0.150	0.03	0.41
771222	1042			3	7.40						
771222	1044			5	7.30						
771222	1046			10	7.30						
771222	1048			16	7.30	55.0	0	6	0.060	0.04	0.41
771222	1050			23	7.30						
771222	1052			30	7.20						
771222	1054			36	7.30						
770216											
NUMBER				71	71	23	23	23	22	22	22
MAXIMUM				36	8.20	73.0	0	28	0.150	0.07	0.56
MINIMUM				1	5.70	40.0	0	3	0.010K	0.01	0.25
SUM				776	515.80	1253.0	0	329	1.860	0.54	7.71
SUM SQ.				14288	3762.60	69871.0	0	5845	0.190	0.02	2.82
MEAN				11	7.26	54.5	0	14	0.085	0.02	0.35
VARIANCE				83	0.22	73.2	0	52	0.002	0.00	0.01
STD.DEV.				9	0.47	8.6	0	7	0.039	0.02	0.08
STD.ERR.				1	0.06	1.8	0	2	0.008	0.00	0.02
COEF VAR				83	6.47	15.7	0	50	46.707	63.77	21.49
LOG MEAN				7	7.25	53.8	0	12	0.071	0.02	0.34
771222											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4- N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P	00666 PHOS-DIS MG/L P
780228	0830			2	46.0	0	8	0.180	0.06	0.44	0.020	0.01
780228	0845			16	46.0	0	9	0.130	0.06	0.44	0.020	0.02
780503	0804			2	51.0	0	13	0.100	0.02	0.40	0.020	0.01K
780503	0815			16	50.0	0	15	0.080	0.03	0.40	0.010	0.01
780802	1105			1	48.0	0	5	0.070	0.15	0.30	0.030	0.02
780802	1109			16	46.0	0	5	0.120	0.04	0.28	0.020	0.01
781011	0810			2	45.0	0	4	0.050	0.01	0.28	0.010	0.01
781011	0825			16	49.0	0	4	0.080	0.01K	0.28	0.010	0.01K
780228												
	NUMBER			26	8	8	8	8	8	8	8	8
	MAXIMUM			26	51.0	0	15	0.180	0.15	0.44	0.030	0.02
	MINIMUM			1	45.0	0	4	0.050	0.01K	0.28	0.010	0.01K
	SUM			287	381.0	0	63	0.810	0.38	2.82	0.140	0.10
	SUM SQ.			5041	18179.0	0	621	0.094	0.03	1.03	0.003	0.00
	MEAN			11	47.6	0	8	0.101	0.05	0.35	0.017	0.01
	VARIANCE			75	4.8	0	18	0.002	0.00	0.01	0.000	0.00
	STD.DEV.			9	2.2	0	4	0.041	0.05	0.07	0.007	0.00
	STD.ERR.			2	0.8	0	1	0.015	0.02	0.03	0.003	0.00
	COEF VAR			78	4.6	0	54	40.701	96.64	21.00	40.406	37.03
	LOG MEAN			7	47.6	0	7	0.094	0.03	0.35	0.016	0.01
781011												

DATE	TIME	DATE	TIME	00C03 DEPTH FEET	C0916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L
780228	0830			2	19.0	4.40	1.40	0.72	3	31	400	1.00K
780228	0845			16	19.0	4.30	1.40	0.73	3	31	300	1.00K
780503	0804			2	20.0	4.60	3.20	1.30	3	19	90	1.00K
780503	0815			16	17.0	4.60	3.00	1.20	3	19	120	1.00K
780802	1105			1	28.0	4.60	3.50	0.88	4	29	10K	1.00K
780802	1109			16	23.0	4.80	3.60	0.94	3	30	10K	1.00K
781011	0810			2	17.0	4.70	3.20	1.30	3	28	90	1.00K
781011	0825			16	18.0	4.80	3.30	1.40	3	27	70	1.00K
780228												
	NUMBER			26	8	8	8	8	8	8	8	8
	MAXIMUM			26	28.0	4.80	3.60	1.40	4	31	400	1.00K
	MINIMUM			1	17.0	4.30	1.40	0.72	3	19	10K	1.00K
	SUM			287	161.0	36.80	22.60	8.47	25	214	1050	8.00
	SUM SQ.			5041	3337.0	169.50	69.50	9.49	79	5898	280100	8.00
	MEAN			11	20.1	4.60	2.82	1.06	3	27	131	1.00
	VARIANCE			75	13.8	0.03	0.81	0.07	0	25	20327	0.00
	STD.DEV.			9	3.7	0.18	0.90	0.27	0	5	143	0.00
	STD.ERR.			2	1.3	0.06	0.32	0.10	0	2	50	0.00
	COEF VAR			78	18.5	3.86	31.82	25.78	11	19	109	0.00
	LOG MEAN			7	19.9	4.60	2.66	1.03	3	26	68	1.00
781011												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00945 SULFATE SO4-TOT MG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L
770216	1220			1	10	80	1.00K	5.00K	20.00	520.00	50K
770216	1240			16	10	90	1.00K	5.00K	50.00	820.00	50K
770322	1046			1						610.00	50K
770322	1055			16						520.00	50K
770428	1049			2						710.00	50K
770428	1050			2						720.00	50K
770428	1100			16						660.00	50K
770524	1047			2	29	160	1.00K	5.00K	20.00	860.00	50K
770524	1055			16	28	160	1.00K	5.00K	20.00	1000.00	50K
770628	1125			1						530.00	50K
770628	1144			16						1300.00	50K
770726	0900			2						800.00	50K
770726	0910			16						740.00	50K
770824	1015			2	20	90	1.00K	5.00K	10.00	260.00	50K
770824	1025			16	15	90	1.00K	5.00K	20.00	250.00	50K
770928	1133			1						260.00	90
770928	1150			16						370.00	40
771027	1033			2	21	100	1.00K	5.00K	10.00	680.00	70
771027	1045			16	22	80	1.00K	5.00K	10.00	720.00	50K
771129	1050			2						630.00	50K
771129	1105			16						650.00	50K
771222	1040			2						340.00	50K
771222	1048			16						250.00	50K
770216											
NUMBER				71	8	8	8	8	8	23	23
MAXIMUM				36	29	160	1.00K	5.00K	50.00	1300.00	90
MINIMUM				1	10	80	1.00K	5.00K	10.00	250.00	40K
SUM				776	155	850	8.00	40.00	160.00	14200.00	1200
SUM SQ.				14288	3375	98300	8.00	200.00	4400.00	1.325E+07	64600
MEAN				11	19	106	1.00	5.00	20.00	617.39	52
VARIANCE				83	53	1141	0.00	0.00	171.43	67611.44	91
STD.DEV.				9	7	34	0.00	0.00	13.09	260.02	10
STD.ERR.				1	3	12	0.00	0.00	4.63	54.22	2
COEF VAR				83	38	32	0.00	0.00	65.47	42.12	18
LOG MEAN				7	18	102	1.00	5.00	17.29	561.32	52
771222											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLOC DEPTH METERS
781011	0825			16	80.00							5.00
781011	0827			23				65	100	7	8	7.00
781011	0829			26								8.00
780228												
NUMBER				26	8	4	4	8	8	8	8	26
MAXIMUM				26	340.00	5300	70	89	100	10	36	8.00
MINIMUM				1	10.00K	140	20K	61	80	5	8	0.30
SUM				287	540.00	7440	290	554	740	59	149	87.80
SUM SQ.				5041	125200.00	30610000	25300	38982	69000	459	3641	473.84
MEAN				11	67.50	1860	73	69	93	7	19	3.38
VARIANCE				75	12678.57	5590400	1425	88	77	3	124	7.09
STD.DEV.				9	112.60	2364	38	9	9	2	11	2.66
STD.ERR.				2	39.81	1182	19	3	3	1	4	0.52
COEF VAR				78	166.81	127	52	14	10	25	60	78.87
LOG MEAN				7	29.98	864	61	69	92	7	16	4.25
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00339 COD MUD DRY WGT MG/KG	00603 TOTAL N MUD D WT MG/KG-N	00626 ORGAN. N MUD D WT MG/KG-N	00680 T ORG C C MG/L	00687 BM ORG CARBON GM/KG-C	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
780228	0830			2				1.5		4.1	2K
780228	0845			16				4.5		4.3	2K
780503	0804			2				0.6		3.9	2K
780503	0815			16				0.2K		3.9	2K
780802	1105			1				1.9		3.8	2K
780802	1109			16				2.1		3.5	2K
780802	1112				49000	810.00	800		0		
781011	0810			2				3.8		3.6	4
781011	0825			16				1.5		3.6	2
780228											
NUMBER				26	1	1	1	8	1	8	8
MAXIMUM				26				4.5		4.3	4
MINIMUM				1				0.2K		3.5	2K
SUM				287				16.1		30.7	18
SUM SQ.				5041				47.6		118.3	44
MEAN				11				2.0		3.8	2
VARIANCE				75				2.2		0.1	1
STD.DEV.				9				1.5		0.3	1
STD.ERR.				2				0.5		0.1	0
COEF VAR				78				73.2		7.1	31
LOG MEAN				7				1.4		3.8	2
781011											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	T ORG C C MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L
770216											
NUMBER				71	23	8	23	23	20	8	8
MAXIMUM				36	110	150	12	70	5.0	4.1	4K
MINIMUM				1	56	100	5	13	1.2	3.3	2K
SUM				776	1704	900	180	734	44.5	30.4	18
SUM SQ.				14288	130454	104200	1512	28448	112.9	116.1	44
MEAN				11	74	113	8	32	2.2	3.8	2
VARIANCE				83	191	421	5	228	0.7	0.1	1
STD.DEV.				9	14	21	2	15	0.9	0.3	1
STD.ERR.				1	3	7	0	3	0.2	0.1	0
COEF VAR				83	19	18	28	47	38.5	7.7	31
LOG MEAN				7	73	111	8	29	2.1	3.8	2
771222											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01077 SILVER AG,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE
780228												
NUMBER				8	8	1	8	1	8	8	8	1
MAXIMUM				16	10K		7200		10K	1.00K	1000K	
MINIMUM				1	10K		200K		10K	1.00K	1000K	
SUM				71	80		17790		90	8.00	8000	
SUM SQ.				1037	800		16285000		900	8.00	8000000	
MEAN				9	10		2349		10	1.00	1000	
VARIANCE				58	0		7222213		0	0.00	0	
STD.DEV.				8	0		2650		0	0.00	0	
STD.ERR.				3	0		1124		0	0.00	0	
COEF VAR				86	0		2100		0	0.00	0	
LOG MEAN				5	10		2273		10	1.00	1000	
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70318 RESIDUE TOTAL PERCENT	70322 RESIDUE TOT VOL PERCENT	70331 SUSP SED PARTSIZE %<.062MM	70332 SUSP SED PARTSIZE %<.125MM	70334 SUSP SED PARTSIZE %<.500MM	70336 SUSP SED PARTSIZE %<2.00MM	71900 MERCURY HG,TOTAL UG/L	71921 MERCURY SEDMG/KG DRY WGT
780228	0830			2							0.20K	
780228	0845			16							0.20K	
780503	0804			2							0.20K	
780503	0815			16							0.20K	
780802	1105			1							0.20K	
780802	1109			16							0.20K	
780802	1112				57.7	3.3	45	55	100	100		0.10K
781011	0810			2							0.20K	
781011	0825			16							0.20K	
780228												
NUMBER				8	1	1	1	1	1	1	8	1
MAXIMUM				16							0.20K	
MINIMUM				1							0.20K	
SUM				71							1.60	
SUM SQ.				1037							0.32	
MEAN				9							0.20	
VARIANCE				58							0.00	
STD.DEV.				8							0.00	
STD.ERR.				3							0.00	
COEF VAR				86							0.08	
LOG MEAN				5							0.20	
781011												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLOC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00095 CNDUCTVY AT 25C MICROMHO	00300 DO MG/L	00310 BOD 5 DAY MG/L	00335 COD LOWLEVEL MG/L	00400 PH SU
780228	0830			2	50	4.0	15	150	12.80	1.0K	3.0	7.60
780228	0832			3	50	4.0		150	12.80			7.60
780228	0835			5	50	4.0		150	12.80			7.60
780228	0840			10	50	4.0		150	12.80			7.60
780228	0845			16	50	4.0	15	150	12.80	1.0K	2.0	7.60
780228	0847			23	50	4.0		150	12.80			7.60
780503	0804			2	50	12.5	5	160	12.00	1.4	6.0	7.20
780503	0806			3	50	12.5		160	12.00			7.20
780503	0808			5	50	12.5		160	12.00			7.20
780503	0810			10	50	12.5		160	12.00			7.20
780503	0815			16	50	12.5	6	160	12.00	1.3	8.0	7.20
780503	0817			23	50	12.5		160	12.00			7.20
780503	0819			26	50	12.5		160	12.00			7.20
780802	1105			1	50	21.0	4	190	9.20	1.0	7.0	6.70
780802	1106			3	50	20.5		160	8.90			
780802	1107			5	50	20.0		160	9.10			
780802	1108			10	50	20.0		160	8.90			
780802	1109			16	50	20.0	6	160	8.60	1.2	8.0	6.50
780802	1110			23	50	19.5		160	8.50			
780802	1112				95							
781011	0810			2	50	18.0	2	170	7.80	1.2	4.0	7.30
781011	0812			3	50	18.0		170	7.80			7.30
781011	0815			5	50	18.0		170	7.80			7.30
781011	0820			10	50	18.0		170	7.80			7.30
781011	0825			16	50	18.0	2	170	7.80	1.2	8.0	7.30
781011	0827			23	50	18.0		170	7.80			7.30
781011	0829			26	50	17.5		170	7.80			7.20
780228												
NUMBER				26		26	8	26	26	8	8	22
MAXIMUM				26		21.0	15	190	12.80	1.4	8.0	7.60
MINIMUM				1		4.0	2	150	7.80	1.0K	2.0	6.50
SUM				287		358.0	55	4200	268.60	9.3	46.0	160.20
SUM SQ.				5041		5881.5	569	680600	2889.00	11.0	306.0	1168.16
MEAN				11		13.8	7	162	10.33	1.2	5.8	7.28
VARIANCE				75		38.1	27	86	4.57	0.0	5.9	0.08
STD.DEV.				9		6.2	5	9	2.14	0.2	2.4	0.28
STD.ERR.				2		1.2	2	2	0.42	0.1	0.9	0.06
COEF VAR				78		44.8	76	6	20.69	13.0	42.3	3.81
LOG MEAN				7		11.8	5	161	10.11	1.2	5.2	7.28
781011												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00400 PH SU	00410 T ALK CACO3 MG/L	00415 PHEN-PH-LFIN ALK MG/L	00530 RESIDUE TOT NFLT MG/L	00605 ORG N N MG/L	00610 NH3+NH4-N TOTAL MG/L	00630 NO2&NO3 N-TOTAL MG/L	00665 PHOS-TOT MG/L P
790214	0827			1	7.50	48.0	0	9	0.670	0.03	0.46	0.030
790214	0828			3	7.50							
790214	0829			5	7.50							
790214	0830			10	7.50							
790214	0835			16	7.40	49.0	0	10	0.640	0.06	0.45	0.030
790214	0837			23	7.40							
790510	0810			1	7.30	57.0	0	14	0.090	0.03	0.45	0.060
790510	0812			3	7.20							
790510	0814			5	7.30							
790510	0816			10	7.30							
790510	0818			16	7.30	55.0	0	15	0.080	0.02	0.45	0.070
790510	0820			23	7.30							
790809	0815			1	7.60	13.0	0	2	0.100	0.02	0.31	0.020
790809	0817			3	7.70							
790809	0819			5	7.70							
790809	0821			10	7.60							
790809	0825			16	7.60	10.0	0	4	0.090	0.01	0.31	0.020
791017	0757			1	7.40	57.0	0	4	0.060	0.03	0.55	0.020
791017	0758			3	7.40							
791017	0759			5	7.40							
791017	0800			10	7.40							
791017	0802			16	7.40	55.0	0	4	0.120	0.03	0.34	0.020
791017	0803			20	7.40							
790214												
NUMBER				23	23	8	8	8	8	8	8	8
MAXIMUM				23	7.70	59.0	0	15	0.670	0.06	0.55	0.070
MINIMUM				1	7.20	10.0	0	2	0.060	0.01	0.31	0.020
SUM				206	171.10	348.0	0	62	1.850	0.23	3.32	0.270
SUM SQ.				3022	1273.23	17978.0	0	654	0.909	0.01	1.43	0.012
MEAN				9	7.44	43.5	0	8	0.231	0.03	0.41	0.034
VARIANCE				53	0.02	405.7	0	25	0.069	0.00	0.01	0.000
STD.DEV.				7	0.13	20.1	0	5	0.262	0.01	0.09	0.020
STD.ERR.				2	0.03	7.1	0	2	0.093	0.01	0.03	0.007
COEF VAR				82	1.81	46.3	0	64	113.389	50.70	20.69	59.127
LOG MEAN				6	7.44	36.6	0	6	0.145	0.03	0.41	0.030
791017												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01034 CHROMIUM CR,TOT UG/L	01042 COPPER CU,TOT UG/L	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L
780228	0830			2	5.00K	10.00	150.00	50K	10.00K	20.00	10.0	10.00K
780228	0845			16	5.00K	20.00	170.00	50K	10.00K	20.00	20.0	10.00K
780503	0804			2	5.00K	20.00	160.00	50K	10.00K	50.00	10.0K	10.00K
780503	0815			16	5.00K	40.00	210.00	50K	10.00K	50.00	40.0	10.00K
780802	1105			1	5.00K	40.00	390.00	50K	10.00K	50.00	10.0K	80.00
780802	1109			16	5.00K	50.00	410.00	50K	10.00K	40.00	10.0K	10.00K
781011	0810			2	5.00K	10.00K	270.00	50K	10.00K	30.00	10.0K	10.00
781011	0825			16	5.00K	30.00	330.00	50K	10.00K	30.00	10.0K	20.00
780228												
NUMBER				26	8	8	8	8	8	8	8	8
MAXIMUM				26	5.00K	50.00	410.00	50K	10.00K	50.00	40.0	80.00
MINIMUM				1	5.00K	10.00K	150.00	50K	10.00K	20.00	10.0K	10.00K
SUM				287	40.00	220.00	2090.00	400	80.00	290.00	120.0	160.00
SUM SQ.				5041	200.00	7600.00	623100.00	20000	800.00	11700.00	2600.0	7400.00
MEAN				11	5.00	27.50	261.25	50	10.00	36.25	15.0	20.00
VARIANCE				75	0.00	221.43	11012.50	0	0.00	169.64	114.3	600.00
STD.DEV.				9	0.00	14.88	104.94	0	0.00	13.02	10.7	24.49
STD.ERR.				2	0.00	5.26	37.10	0	0.00	4.60	3.8	8.66
COEF VAR				78	0.00	54.11	40.17	0	0.00	35.93	71.3	122.47
LOG MEAN				7	5.00	23.59	243.12	50	10.00	34.03	13.3	14.14
781011												

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01092 ZINC ZN,TOT UG/L	31501 TOT COLI MFIMENDO /100ML	31616 FEC COLI MFM-FCBR /100ML	46570 CAL HARD CA MG MG/L	70300 RESIDUE DISS-180 C MG/L	00080 COLOR PT-CO UNITS	00081 AP COLOR PT-CO UNITS	00098 VSAMPLDC DEPTH METERS
780228	0830			2	10.00K	500	70	66	80	10	34	0.50
780228	0832			3								1.00
780228	0835			5								1.50
780228	0840			10								3.00
780228	0845			16	10.00K			65	80	10	36	5.00
780228	0847			23								7.00
780503	0804			2	20.00	1500	100K	69	100	8	22	0.50
780503	0806			3								1.00
780503	0808			5								1.50
780503	0810			10								3.00
780503	0815			16	340.00			61	100	7	17	5.00
780503	0817			23								7.00
780503	0819			26								8.00
780802	1105			1	30.00	5300	100K	89	90	6	12	0.30
780802	1106			3								1.00
780802	1107			5								1.50
780802	1108			10								3.00
780802	1109			16	40.00			77	90	6	12	5.00
780802	1110			23								7.00
781011	0810			2	10.00K	140	20	62	100	5	8	0.50
781011	0812			3								1.00
781011	0815			5								1.50
781011	0820			10								3.00

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STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01042 COPPER CU,TOT UG/L	01043 COPPER SEDMG/KG DRY WGT	01045 IRON FE,TOT UG/L	01046 IRON FE,DISS UG/L	01051 LEAD PB,TOT UG/L	01052 LEAD SEDMG/KG DRY WGT	01053 MN MUD DRY WGT MG/KG-MN
790214	0827			1	10.00K		530.00	60	10.00K		
790214	0835			16	10.00		620.00	70	10.00K		
790510	0810			1	10.00K		1300.00	120	10.00K		
790510	0818			16	10.00K		1400.00	120	10.00K		
790510	0825					6.70				18	690
790809	0815			1	20.00		190.00	60	10.00K		
790809	0825			16	10.00K		270.00	60	10.00K		
791017	0757			1	10.00K		530.00	80	10.00K		
791017	0802			16	10.00		420.00	50K	10.00K		
790214											
NUMBER				8	8	1	8	8	8	1	1
MAXIMUM				16	20.00		1400.00	120	10.00K		
MINIMUM				1	10.00K		190.00	50K	10.00K		
SUM				68	90.00		5260.00	620	80.00		
SUM SQ.				1028	1100.00		4.882E+06	53400	800.00		
MEAN				9	11.25		657.50	78	10.00		
VARIANCE				64	12.50		203307.13	764	0.00		
STD.DEV.				8	3.54		450.90	28	0.00		
STD.ERR.				3	1.25		159.42	10	0.00		
COEF VAR				94	31.43		68.58	36	0.00		
LOG MEAN				4	10.91		536.16	74	10.00		
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01077 SILVER AG,TOT UG/L	01092 ZINC ZN,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L
790214	0827			1	40.00	10.0K	10.00K	10.0K	10.00		400.00
790214	0835			16	40.00	10.0K	10.00K	10.0K	20.00		720.00
790510	0810			1	60.00	30.0	10.00K	10.0K	30.00		1900.00
790510	0818			16	60.00	10.0K	10.00K	10.0K	30.00		2000.00
790510	0825									30.00	
790809	0815			1	30.00	30.0	10.00K	10.0K	10.00K		400.00
790809	0825			16	30.00	10.0K	10.00K	10.0K	60.00		450.00
791017	0757			1	100.00	20.0	50.00K	10.0K	30.00		500.00
791017	0802			16	80.00	10.0	50.00K	10.0K	40.00		700.00

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01003 ARSENIC SEDMG/KG DRY WGT	01007 BARIUM BA,TOT UG/L	01012 BERYLIUM BE,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SEDMG/KG DRY WGT	01043 COPPER SEDMG/KG DRY WGT	01052 LEAD SEDMG/KG DRY WGT	01053 MN MUD DRY WGT MG/KG-MN	01068 NICKEL SEDMG/KG DRY WGT
780228	0830			2		100K	10.00K						
780228	0845			16		100K	10.00K						
780503	0804			2		100K	10.00K						
780503	0815			16		100K	10.00K						
780802	1105			1		100K	10.00K						
780802	1109			16		1000	10.00K						
780802	1112				6.50			1.00K	5.00K	11.00	12	990	17.00
781011	0810			2		100K	10.00K						
781011	0825			16		100K	10.00K						
780228													
	NUMBER			8	1	8	8	1	1	1	1	1	1
	MAXIMUM			16		1000	10.00K						
	MINIMUM			1		100K	10.00K						
	SUM			71		1700	80.00						
	SUM SQ.			1037		1070000	800.00						
	MEAN			9		213	10.00						
	VARIANCE			58		101250	0.00						
	STD.DEV.			8		318	0.00						
	STD.ERR.			3		112	0.00						
	COEF VAR			86		150	0.00						
	LOG MEAN			5		133	10.00						
781011													

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01077 SILVER AG,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01103 ALUMINUM AL,TOT UG/L	01108 AL MUD DRY WGT MG/KG-AL	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE
780228	0830			2	10K		380		10K	1.00K	1000K	
780228	0845			16	10K		200K		10K	1.00K	1000K	
780503	0804			2	10K		210		10K	1.00K	1000K	
780503	0815			16	10K		200		10K	1.00K	1000K	
780802	1105			1	10K		200K		10K	1.00K	1000K	
780802	1109			16	10K		200K		10K	1.00K	1000K	
780802	1112					68.00		8700.00				17000.00
781011	0810			2	10K		1200		10K	1.00K	1000K	
781011	0825			16	10K		200K		10K	1.00K	1000K	

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01007 BARIUM BA,TOT UG/L	01012 BERYLLIUM BE,TOT UG/L	01022 BORON B,TOT UG/L	01027 CADMIUM CD,TOT UG/L	01028 CD MUD DRY WGT MG/KG-CD	01029 CHROMIUM SEDMG/KG DRY WGT	01034 CHROMIUM CR,TOT UG/L
790214	0827			1	100K	10.00K	100	1.00K			5.00K
790214	0835			16	100K	10.00K	180	1.00K			5.00K
790510	0810			1	290	10.00K	50	1.00K			5.00K
790510	0818			16	230	10.00K	70	1.00K			5.00K
790510	0825								1.00K	10.00	
790809	0815			1	680	10.00K	40	1.00K			5.00K
790809	0825			16	650	10.00K	20	1.00K			5.00K
791017	0757			1	100K	10.00K	10K	1.00K			5.00K
791017	0802			16	100K	10.00K	10K	1.00K			5.00K
790214											
	NUMBER			23	8	8	8	8	1	1	8
	MAXIMUM			23	680	10.00K	180	1.00K			5.00K
	MINIMUM			1	100K	10.00K	10K	1.00K			5.00K
	SUM			206	2250	80.00	480	8.00			40.00
	SUM SQ.			3022	1061900	800.00	52000	8.00			200.00
	MEAN			9	281	10.00	60	1.00			5.00
	VARIANCE			53	61298	0.00	3314	0.00			0.00
	STD.DEV.			7	248	0.00	58	0.00			0.00
	STD.ERR.			2	88	0.00	20	0.00			0.00
	COEF VAR			82	88	0.00	96	0.00			0.00
	LOG MEAN			6	204	10.00	39	1.00			5.00
791017											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	00002 %SAMPLDC FROM RT BANK	00010 WATER TEMP CENT	00070 TURB JKSN JTU	00080 COLOR PT-CO UNITS	00095 CNDUCTVY AT 25C MICROMHC	00098 %SAMPLDC DEPTH METERS	00300 DO MG/L	00310 BOD 5 DAY MG/L
790214	0827			1	50	4.3	14	10	140	0.30	11.50	1.5
790214	0828			3	50	4.3			140	1.00	11.40	
790214	0829			5	50	4.3			140	1.50	11.40	
790214	0830			10	50	4.3			140	3.00	11.40	
790214	0835			16	50	4.3	14	9	140	5.00	11.40	1.5
790214	0837			23	50	4.3			140	7.00	11.40	
790510	0810			1	50	14.0	13	15	180	0.30	7.80	3.5
790510	0812			3	50	14.0			170	1.00	7.80	
790510	0814			5	50	14.0			170	1.50	7.80	
790510	0816			10	50	14.0			180	3.00	7.80	
790510	0818			16	50	14.0	17	12	190	5.00	7.80	1.9
790510	0820			23	50	14.0			180	7.00	7.90	
790510	0825				55							
790809	0815			1	50	20.0	2	6	110	0.30	8.90	1.0K
790809	0817			3	50	20.0			110	1.00	8.90	
790809	0819			5	50	20.0			120	1.50	9.00	
790809	0821			10	50	20.0			160	3.00	9.40	
790809	0825			16	50	20.0	3	5	170	5.00	9.50	1.0K
791017	0757			1	50	16.0	2	6	170	0.30	7.80	1.0K
791017	0758			3	50	16.0			170	1.00	7.80	
791017	0759			5	50	16.0			170	1.50	7.80	
791017	0800			10	50	16.0			170	3.00	7.80	
791017	0802			16	50	16.0	2	5	170	5.00	7.80	1.0K
791017	0803			20	50	16.0			170	6.00	7.80	
790214												
NUMBER				23		23	8	8	23	23	23	8
MAXIMUM				23		20.0	17	15	190	7.00	11.50	3.5
MINIMUM				1		4.3	2	5	110	0.30	7.80	1.0K
SUM				206		305.8	66	68	3600	63.20	207.90	11.9
SUM SQ.				3022		4822.9	868	672	575200	283.36	1931.73	22.7
MEAN				9		13.3	8	9	157	2.75	9.04	1.5
VARIANCE				53		36.4	46	13	533	4.99	2.39	0.7
STD.DEV.				7		5.9	7	4	23	2.23	1.54	0.8
STD.ERR.				2		1.2	2	1	5	0.47	0.32	0.3
COEF VAR				82		44.1	81	43	15	81.26	17.09	56.9
LOG MEAN				6		11.5	5	8	155	1.78	8.92	1.3
791017												

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	82208 TOT SED SIEVE %<2.00MM	00339 COD MUD DRY WGT MG/KG	01068 NICKEL SEDMG/KG DRY WGT	01108 AL MUD DRY WGT MG/KG-AL	00626 ORGAN. N MUD D WT MG/KG-N	00687 BM ORG CARBON GM/KG-C	01005 BARIUM BA,DISS UG/L
790214	0835			16							720
790510	0825				100.0	14000	14.00	4500.00	290	0	
790214											
NUMBER				1	1	1	1	1	1	1	1
MAXIMUM											
MINIMUM											
SUM											
SUM SQ.											
MEAN											
VARIANCE											
STD.DEV.											
STD.ERR.											
COEF VAR											
LOG MEAN											
790510											

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STATION - 600694 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	70300 RESIDUE DISS-180 C MG/L	00081 AP COLOR PT-CO UNITS	00335 COD LOW LEVEL MG/L	00666 PHOS-DIS MG/L P	00680 T ORG C C MG/L	00916 CALCIUM CA-TOT MG/L	00927 MGNSIUM MG,TOT MG/L
790214	0827			1	100	42	4.0	0.02	2.6	25.0	4.50
790214	0835			16	90	39	4.0	0.02	2.6	25.0	4.60
790510	0810			1	120	35	8.0	0.02	2.8	21.0	4.50
790510	0818			16	100	45	7.0	0.02	3.0	22.0	4.50
790809	0815			1	100	9	7.0	0.01K	2.4	20.0	4.80
790809	0825			16	100	10	5.0	0.01	2.5	20.0	4.80
791017	0757			1	100	15	3.0	0.01K	2.4	19.0	4.80
791017	0802			16	90	7	4.0	0.01K	4.0	19.0	4.80
790214											
NUMBER				23	8	8	8	8	8	8	8
MAXIMUM				23	120	45	8.0	0.02	4.0	25.0	4.80
MINIMUM				1	90	7	3.0	0.01K	2.4	19.0	4.50
SUM				206	800	202	42.0	0.12	22.3	171.0	37.30
SUM SQ.				3022	80600	6990	244.0	0.00	64.1	3697.0	174.07
MEAN				9	100	25	5.3	0.01	2.8	21.4	4.66
VARIANCE				53	86	270	3.4	0.00	0.3	6.0	0.02
STD.DEV.				7	9	16	1.8	0.01	0.5	2.4	0.15
STD.ERR.				2	3	6	0.6	0.00	0.2	0.9	0.05
COEF VAR				82	9	65	34.9	35.63	19.0	11.4	3.23
LOG MEAN				6	100	20	5.0	0.01	2.7	21.3	4.66
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	00929 SODIUM NA,TOT MG/L	00937 PTSSIUM K,TOT MG/L	00940 CHLORIDE CL MG/L	00945 SULFATE SO4-TOT MG/L	00955 SILICA DISOLVED MG/L	01002 ARSENIC AS,TOT UG/L	01003 ARSENIC SEDMG/KG DRY WGT
790214	0827			1	4.00	0.97	3	24	3.6	2	
790214	0835			16	4.50	1.00	3	24	3.8	2K	
790510	0810			1	2.00	1.20	3	20	4.3	2K	
790510	0818			16	1.90	1.20	3	20	4.3	2K	
790510	0825										3.90
790809	0815			1	2.10	1.10	2	24	3.3	2K	
790809	0825			16	2.10	1.20	3	23	3.3	2K	
791017	0757			1	2.90	1.40	2	18	4.0	2	
791017	0802			16	2.50	1.30	2	17	4.0	2K	
790214											
NUMBER				23	8	8	8	8	8	8	1
MAXIMUM				23	4.50	1.40	3	24	4.3	2	
MINIMUM				1	1.90	0.97	2	17	3.3	2K	
SUM				206	22.00	9.37	21	170	30.6	16	
SUM S				3022	67.34	11.12	57	3670	118.2	32	
MEA				9	2.75	1.17	3	21	3.8	2	
VA				53	0.98	0.02	0	8	0.2	0	
				7	0.95	0.14	1	3	0.4	0	
				2	0.35	0.05	0	1	0.1	0	
	AR			82	35.95	12.34	20	13	10.4	0	
LO	EAN			6	2.42	1.16	3	21	3.8	2	
791017											

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DATE	TIME	DATE	TIME	00003 DEPTH FEET	01055 MANGNESE MN UG/L	01056 MANGNESE MN,DISS UG/L	01067 NICKEL NI,TOTAL UG/L	01077 SILVER AG,TOT UG/L	01092 ZINC ZN,TOT UG/L	01093 ZINC SEDMG/KG DRY WGT	01105 ALUMINUM AL,TOT UG/L
790214											
NUMBER				8	8	8	8	8	8	1	8
MAXIMUM				16	100.00	30.0	50.00K	10.0K	60.00		2000.00
MINIMUM				1	30.00	10.0K	10.00K	10.0K	10.00K		400.00
SUM				68	440.00	130.0	160.00	80.0	230.00		7070.00
SUM SQ.				1028	28600.00	2700.0	5600.00	800.0	8500.00		9.391E+06
MEAN				9	55.00	16.3	20.00	10.0	28.75		883.75
VARIANCE				64	628.57	83.9	342.86	0.0	269.64		448969.69
STD.DEV.				8	25.07	9.2	18.52	0.0	16.42		670.05
STD.ERR.				3	8.86	3.2	6.55	0.0	5.81		236.90
COEF VAR				94	45.58	56.4	92.58	0.0	57.12		75.82
LOG MEAN				4	50.38	14.4	14.95	10.0	24.49		715.83
791017											

DATE	TIME	DATE	TIME	00003 DEPTH FEET	01132 LITHIUM LI,TOT UG/L	01147 SELENIUM SE,TOT UG/L	01152 TITANIUM TI,TOT UG/L	01170 FE MUD DRY WGT MG/KG-FE	31501 TOT COLI MFIMENDC /100ML	31616 FEC COLI MFM-FCBR /100ML
790214	0827			1	10K	1.00K	1000K			
790214	0835			16	10K	1.00K	1000K			
790510	0810			1	10K	1.00K	1000K		4700	100K
790510	0818			16	10K	1.00K	1000K			
790510	0825							14000.00		
790809	0815			1	10K	1.00K	100K		200	100
790809	0825			16	10K	1.00K	100K			
791017	0757			1	10K	1.00K	1000K		200	100
791017	0802			16	10K	1.00K	1000K			
790214										
NUMBER				8	8	8	8	1	3	3
MAXIMUM				16	10K	1.00K	1000K		4700	100
MINIMUM				1	10K	1.00K	100K		200	100K
SUM				68	60	8.00	6200		5100	360
SUM SQ.				1028	800	8.00	6020000		22170000	30000
MEAN				9	10	1.00	775		1700	100
VARIANCE				64	0	0.00	173571		6750000	0
STD.DEV.				8	0	0.00	417		2598	0
STD.ERR.				3	0	0.00	147		1500	0
COEF VAR				94	0	0.00	54		153	0
LOG MEAN				4	10	1.00	562		573	100
791017										

Parameter	STORET Code Number[1]	Method and Reference[2]	Preservation Techniques	Agency[3]	Detection Limits
Copper, µg/l	01042	Atomic Absorption EPA, pp. 81, 108	1+1, HNO_3 1 ml/8 oz.	TTU, TVA	10 µg/l
Hardness, total, mg/l	46570	Calculated from Ca and Mg values	None	TTU, TVA	N.A.
Iron, total, µg/l	01045	Atomic Absorption EPA, pp. 81, 110	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	50 µg/l
Iron, dissolved, µg/l	01046	Atomic Absorption EPA, pp, 81, 110	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	50 µg/l
Iron, ferrous, µg/l	01047	Colorimetric Standard Methods, p. 189	Hydrochloric Acid 5 ml/8 oz.	TVA	10 µg/l
Lead, µg/l	01051	Atomic Absorption EPA, pp. 81, 89, 112	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	10 µg/l
Magnesium, mg/l	00927	Atomic Absorption EPA, pp. 81, 114	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	0.1 mg/l
Manganese, total, µg/l	01055	Atomic Absorption EPA, pp. 81, 116	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	10 µg/l
Manganese, dissolved, µg/l	01056	Atomic Absorption EPA, pp. 81, 116	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	10 µg/l
Mercury, µg/l	71900	Flameless Atomic Absorption EPA, p. 118	1+1 HNO_3 1 ml/8 oz.	TVA	0.2 µg/l
Nickel, µg/l	01067	Atomic Absorption EPA, pp. 81, 89, 141	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	5 µg/l
Nitrogen, ammonia, mg/l	00610	Colorimetric EPA, p. 168	1+4 H_2SO_4, 4°C 1 ml/8 oz.	TTU, TVA	0.01 mg/l
Nitrogen, nitrate plus nitrite, mg/l	00630	Colorimetric, EPA, p. 207 (Prior to July 1974: Auto-Analyzer-Hydrazine Reduction - L. Kamphake, Water Research, p. 205)	1+4 H_2SO_4, 4°C 1 ml/8 oz.	TTU, TVA	0.01 mg/l
Nitrogen, organic, mg/l	00605	Calculated from kjeldahl nitrogen minus ammonia nitrogen, colorimetric-automated digestion and phenate, EPA, pp. 168, 182 (Prior to March 1973: Distillation and Nesslerization, Standard Methods, p. 244)	1+4 H_2SO_4, 4°C 1 ml/8 oz.	TTU, TVA	0.01 mg/l
Oxygen, dissolved, mg/l	00300	Electrode and/or Titrimetric EPA, pp. 51, 56	In Situ Determine immediately	TTU, TVA	0.01 mg/l

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STATION - 600044 CUMBERLAND RIVER 292.6

DATE	TIME	DATE	TIME	00003 DEPTH FEET	4657C CAL HARD CA MG MG/L	71900 MERCURY HG,TOTAL UG/L	70322 RESIDUE TOT VOL PERCENT	80203 TOT SED SIEVE %<.062MM	80204 TOT SED SIEVE %<.125MM	80206 TOT SED SIEVE %<.50MM
790214	0827			1	81	0.20K				
790214	0835			16	81	0.20K				
790510	0810			1	71	0.20K				
790510	0818			16	73	0.30				
790510	0825						1.5	17.3	22.4	99.8
790809	0815			1	70	0.20K				
790809	0825			16	70	0.20K				
791017	0757			1	67	0.20K				
791017	0802			16	67	0.20K				
790214										
NUMBER				8	8	8	1	1	1	1
MAXIMUM				16	81	0.30				
MINIMUM				1	67	0.20K				
SUM				68	580	1.70				
SUM SQ.				1028	42270	0.37				
MEAN				9	73	0.21				
VARIANCE				64	31	0.00				
STD.DEV.				8	6	0.04				
STD.ERR.				3	2	0.01				
COEF VAR				94	8	16.64				
LOG MEAN				4	72	0.21				
791017										

APPENDIX B

APPENDIX B

ANALYTICAL METHODS FOR CHEMICAL PARAMETERS
PRIMARY WATER QUALITY MONITORING - HARTSVILLE NUCLEAR PLANT

Parameter	STORET Code Number[1]	Method and Reference[2]	Preservation Techniques	Agency[3]	Detection Limits
Alkalinity, total mg/l as $CaCO_3$	00410	Potentiometric Titration Standard Methods, pp. 52, 370	None (field titration)	TTU, TVA	1 mg/l
Alkalinity, phenolphthalein, mg/l as $CaCO_3$	00415	Potentiometric Titration Standard Methods, pp. 52, 370	None (field titration)	TTU, TVA	1 mg/l
Aluminum, µg/l	01105	Atomic Absorption EPA, pp. 81, 92	1+1, HNO_3 1 ml/8 oz.	TVA	200 µg/l
Arsenic, µg/l	01002	Atomic Absorption, Gaseous Hydride EPA, pp. 81, 95 (Prior to Nov. 1976; SDDC - Colorimetric, Standard Methods, pp. 62, 65)	1+1, HNO_3 1 ml/8 oz.	TVA	2 µg/l
Barium, µg/l	01007	Atomic Absorption EPA, pp. 81, 95, 97	1+1, HNO_3 1 ml/8 oz.	TVA	100 µg/l
Beryllium, µg/l	01012	Atomic Absorption EPA, pp. 81, 99	1+1 HNO_3 1 ml/8 oz.	TVA	10 µg/l
Biochemical Oxygen Demand, (5-Day) mg/l	00310	DO depletion at 20°C for 5 days measured with YSI Model 54 RC Standard Methods, p. 489 and EPA, p. 11	Water sealed bottled, 4°C	TTU, TVA	1 mg/l
Boron, µg/l	01022	Colorimetric EPA, p. 13	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	100 µg/l
Cadmium, µg/l	01027	Atomic Absorption EPA, pp. 81, 89, 101	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	1 µg/l
Calcium, mg/l	00916	Atomic Absorption EPA, pp. 81, 103	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	1 mg/l
Carbon, total organic, mg/l	00680	Combustion - Infrared EPA, p. 236	1+4 H_2SO_4, 4°C 1 ml/8 oz.	TVA	0.2 mg/l
Chemical Oxygen Demand, mg/l	00335	Titrimetric - $K_2CR_2O_7$ reflux EPA, p. 20	1+4 H_2SO_4, 4°C 1 ml/8 oz.	TTU, TVA	1 mg/l
Chloride, mg/l	00940	Titrimetric EPA, p. 29	4°C	TTU, TVA	1 mg/l
Chromium, µg/l	01034	Atomic Absorption EPA, pp. 81, 89, 105	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	5 µg/l
Color, apparent, PCU	00081	Visual Comparison EPA, p. 36	4°C	TVA	5 PCU
Color, true, PCU	00080	Visual Comparison EPA, p. 36	4°C	TVA	5 PCU
Conductance, specific µmhos/cm at 25°C	00095	Wheatstone Bridge or Equivalent EPA, p. 275	None (In Situ)	TTU, TVA	0.5 µmhos/cm
Coliforms, Total, no./100 ml	31501	Membrane Filter Standard Methods, 909A, p. 928	4°C	TTU, TVA	1 colony/100 ml
Coliforms, Fecal, no./100 ml	31616	Membrane Filter Standard Methods, 909C, p. 937	4°C	TTU, TVA	1 colony/100 ml

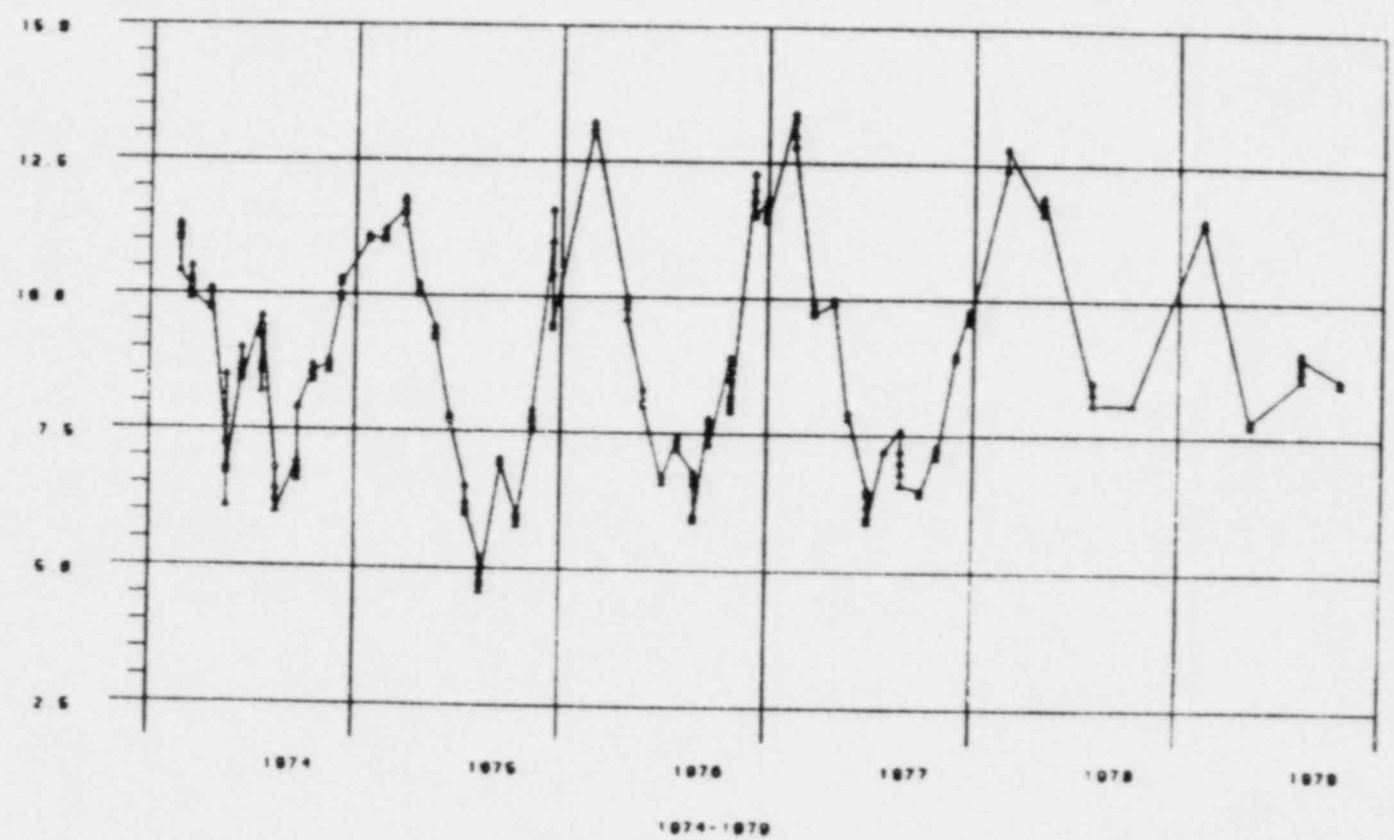
FIGURE C.2

STORET System

000010 0001
35 10 00.0 085 00 00.0 1

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 204.5
11ITVAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 007720 01140
MILES 053.00 50.30 204.50

	PARAMETER		NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
300	DO	MG/L	360	9.0	13.4	4.8	74/02/21	78/10/17



Parameter	STORET Code Number[1]	Method and Reference[2]	Preservation Techniques	Agency[3]	Detection Limits
pH, units	00400	Potentiometric EPA, p. 269	In Situ or determine immediately	TTU, TVA	Not applicable
Phosphorus, total, mg/l	00665	Colorimetric, EPA, pp. 249, 256 (with TVA modification) (Prior to March 1973: Manual Digestion - Stannous, Chloride Reduction, Standard Methods, p. 530 (with TVA modification))	1+4 H_2SO_4, 4°C 1 ml/8 oz.	TTU, TVA	0.01 mg/l
Phosphorus, Dissolved	00666	Colorimetric, EPA, p. 249 (with TVA modification) (Prior to March 1973: Manual Digestion - Stannous Chloride Reduction, Standard Methods, p. 530 (with TVA modification))	4°C	TTU, TVA	0.01 mg/l
Potassium, mg/l	00937	Atomic Absorption EPA, pp. 81, 143	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	0.1 mg/l
Residue, total filterable (dissolved solids), mg/l	70300	Gravimetric EPA, p. 266	4°C	TTU, TVA	10 mg/l
Residue, total nonfilterable (suspended solids), mg/l	00530	Gravimetric EPA, p. 268	4°C	TTU, TVA	1 mg/l
Selenium, µg/l	01147	Atomic Absorption EPA, p. 145	1+1 HNO_3 1 ml/8 oz.	TVA	2 µg/l
Silica, Total, mg/l	00956	Colorimetric EPA, p. 274	4°C	TTU	0.1 mg/l
Silica, dissolved, mg/l	00955	Colorimetric EPA, p. 274	4°C	TVA	0.1 mg/l
Silver, µg/l	01077	Atomic Absorption EPA, pp. 81, 146	1+1 HNO_3 1 ml/8 oz.	TVA	10 µg/l
Sodium, mg/l	00929	Atomic Absorption EPA, pp. 81, 147	4°C	TTU, TVA	0.1 mg/l
Sulfate, mg/l	00945	Turbidimetric EPA, p. 277	4°C	TTU, TVA	1 mg/l
Temperature, °C	00010	Thermistor, Thermometer	In Situ	TTU, TVA	0.1°C
Titanium, µg/l	01152	Atmoic Absorption EPA, pp. 81, 151	1+1 HNO_3 1 ml/8 oz.	TVA	1000 µg/l
Turbidity, JTU	00076	Nephelometric, EPA, p. 295	4°C	TTU, TVA	1 JTU
Zinc, µg/l	01092	Atomic Absorption EPA, pp. 81, 155	1+1 HNO_3 1 ml/8 oz.	TTU, TVA	10 µg/l

[1] STORET is the acronym for EPA's date storage and retrieval system on which all TVA data is entered.

[2] Reference abbreviations refer to the following: EPA--Methods for Chemical Analysis of Water and Wastes, 1974, Environmental Protection Agency, Water Quality Office, Cincinnati, Ohio; Standard Methods--Standard Methods for the Examination of Water and Wastewater, 14th ed., 1975, American Public Health Association, New York, NY.; Water Research--"Automated Analysis for Nitrate by Hydrazine Reduction," Water Research, 1, 205, 1967.

[3] Analysis performed by Tennessee Technological University (TTU), by Tennessee Valley Authority (TVA) or by both agencies (TTU, TVA).

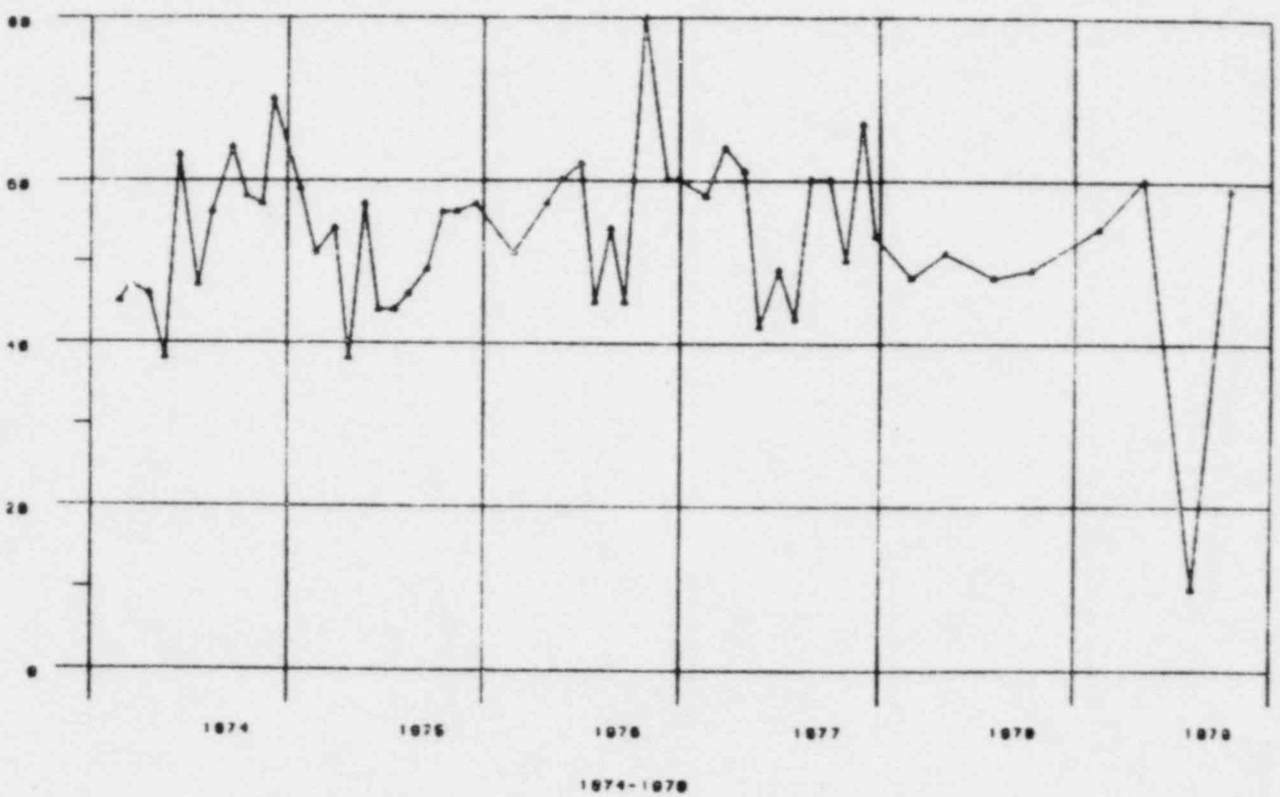
FIGURE C.4

STORET System

```
000040          0001
35 10 00 P 056 04 00 0  4

47     TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 204 5
131TVAC                              /TYPA/AMBNT/STREAM
                         DEPTH     0
 INDEX 1021500  607720  01140
 MILES  053 00   58 30 204.58

             PARAMETER                         NOBS    AVE     MAX     MIN  BEG-DATE  END-DATE
        410  T ALK      CACO3      MG/L        52      53      80      10   74/02/21  79/10/17
```



APPENDIX C

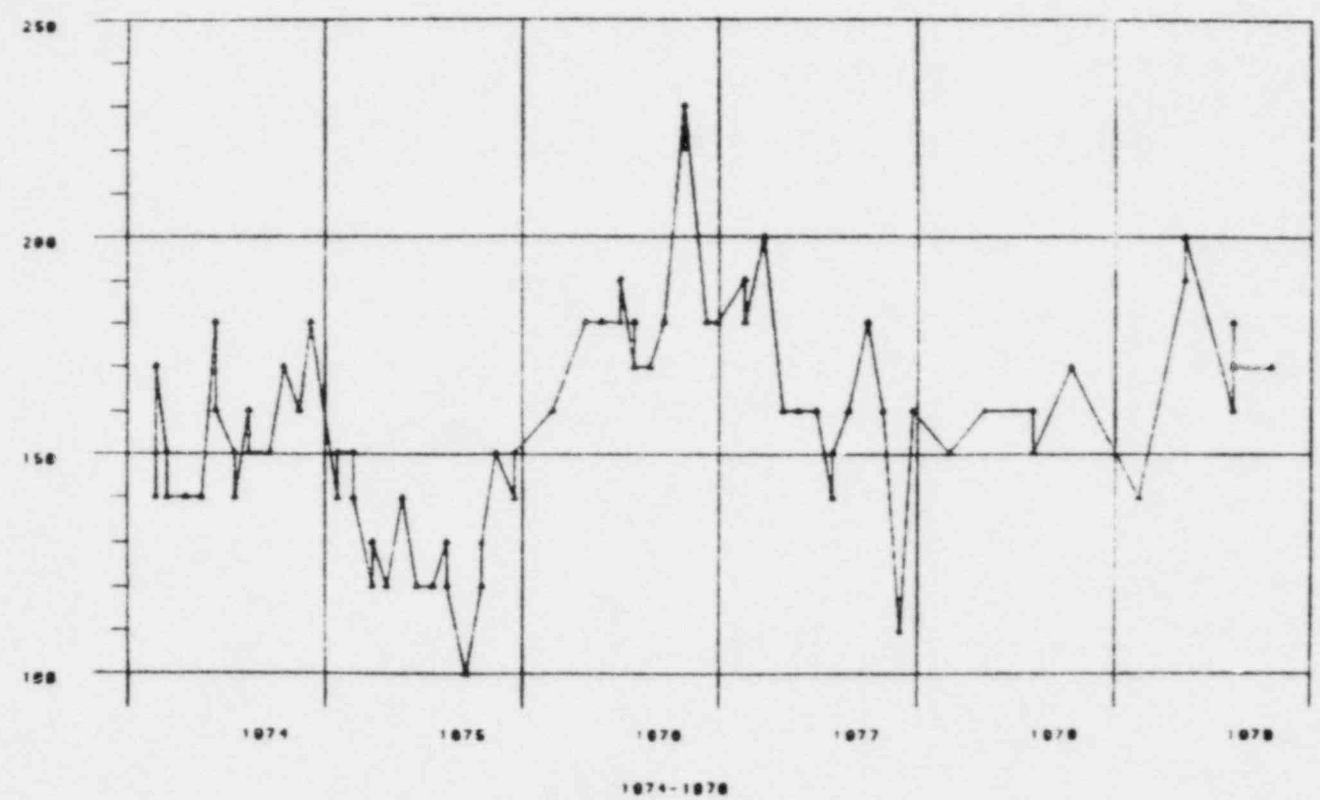
FIGURE C.6

STORET System

```
000040          0001
30 19 00 0 000 00 00 0  4

47     TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 204.5
1SITVAC                          /TYPA/AMBNT/STREAM
                    DEPTH     0
 INDEX 1021580  007720  01110
 MILES  953.00   58.20 204.50

            PARAMETER                     NOBS Y       MAX        MIN  BEG-DATE   END-DATE
   95 CNDUCTVY   AT 25C   MICROMHO        252       101        230      100  74/02/21   78/10/17
```



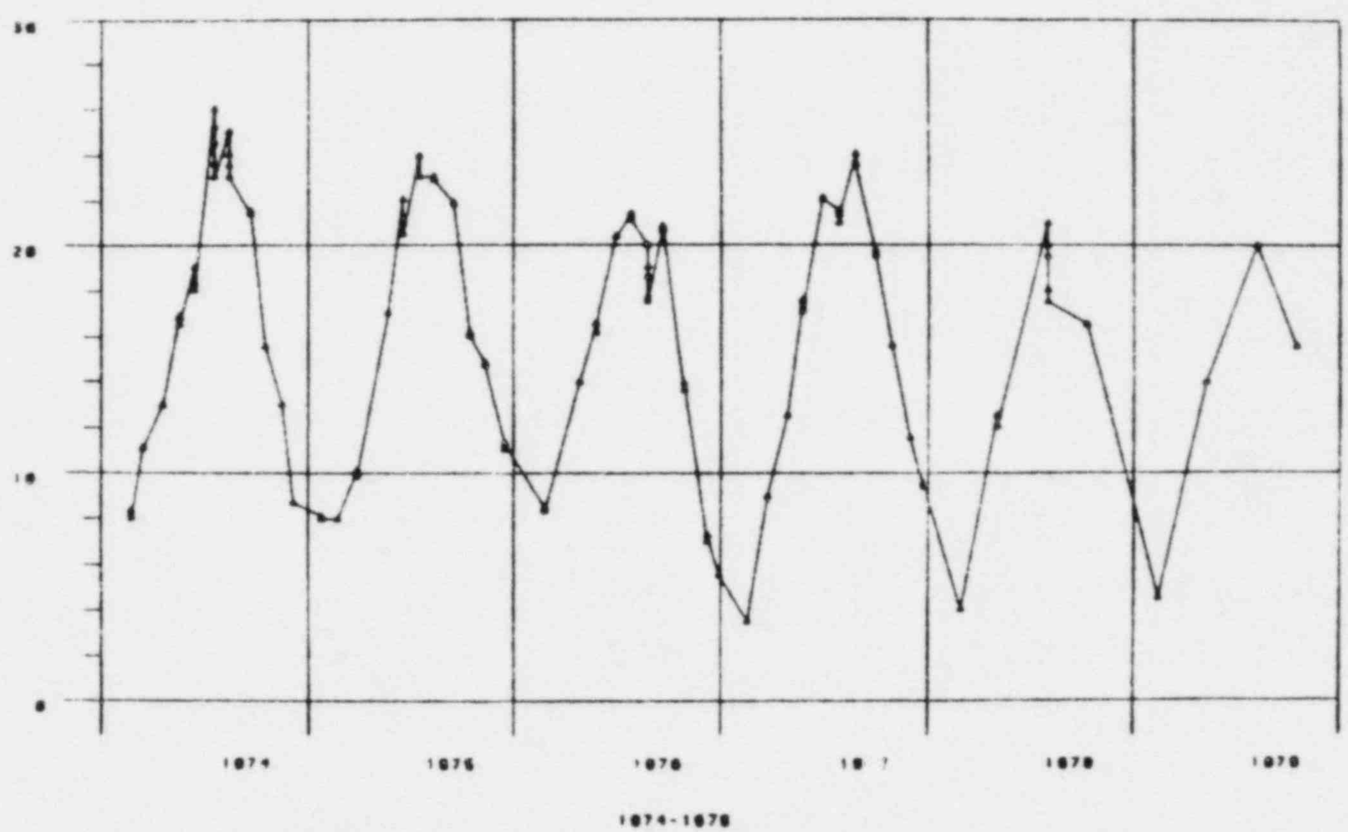
000015 0001
36 10 00.0 086 00 20.0 4

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 284.5
1119VAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 007720 01140
MILES 050.00 56.30 284.50

FIGURE C.1

STORET System

	PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
10	WATER	TEMP	CENT	357	14.0	26.0	3.5	74/02/21	78/10/17



600040 0001
38 16 00 0 086 00 02 0 4

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 204.5
1SITVAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 007720 01140
MILES 052.00 50 30 204.60

FIGURE C.10

STORET System

PARAMETER	NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
70300 RESIDUE DISS-180 C MG/L	72	93	146	40	74/02/21	79/10/17

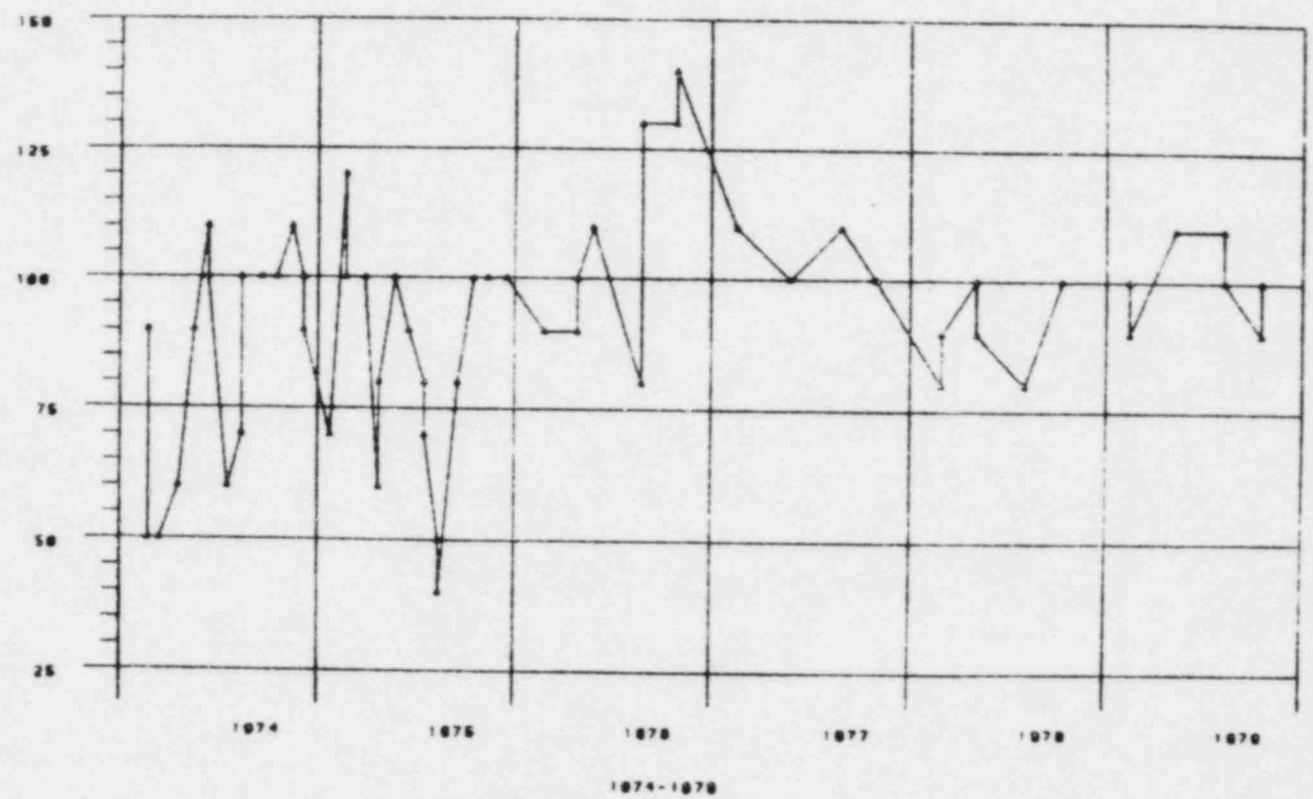


FIGURE C.3

STORET System

47 TENNESSEE
CUMBERLAND RIVER BASIN 052050
CUMBERLAND RIVER 284.5
1S1TVAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 036720 0311 40
MILES 956.00 58 38 284.50

	PARAMETER		NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
100	PH	SU	205	7.38	8.00	6.60	74/02/21	78/10/17

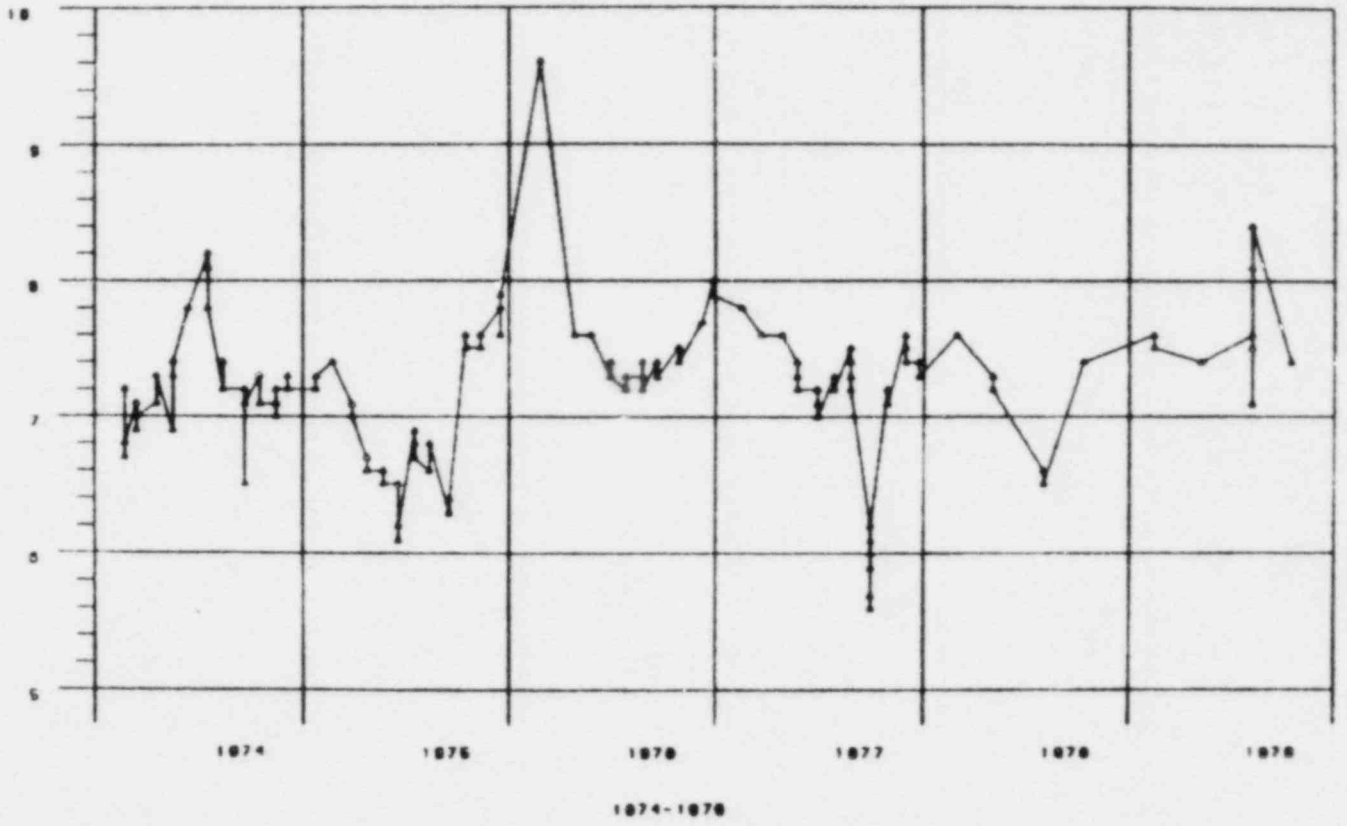


FIGURE C.12

000040 0201
30 10 00.0 088 00 00.0 4

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 284.5
131TVAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 E07720 01140
MILES 063.00 50.30 284.50

STORET System

PARAMETER		NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
610 NH3+NH4- N TOTAL	MG/L	98	0.045	0.280	0.010	74/02/21	78/10/17

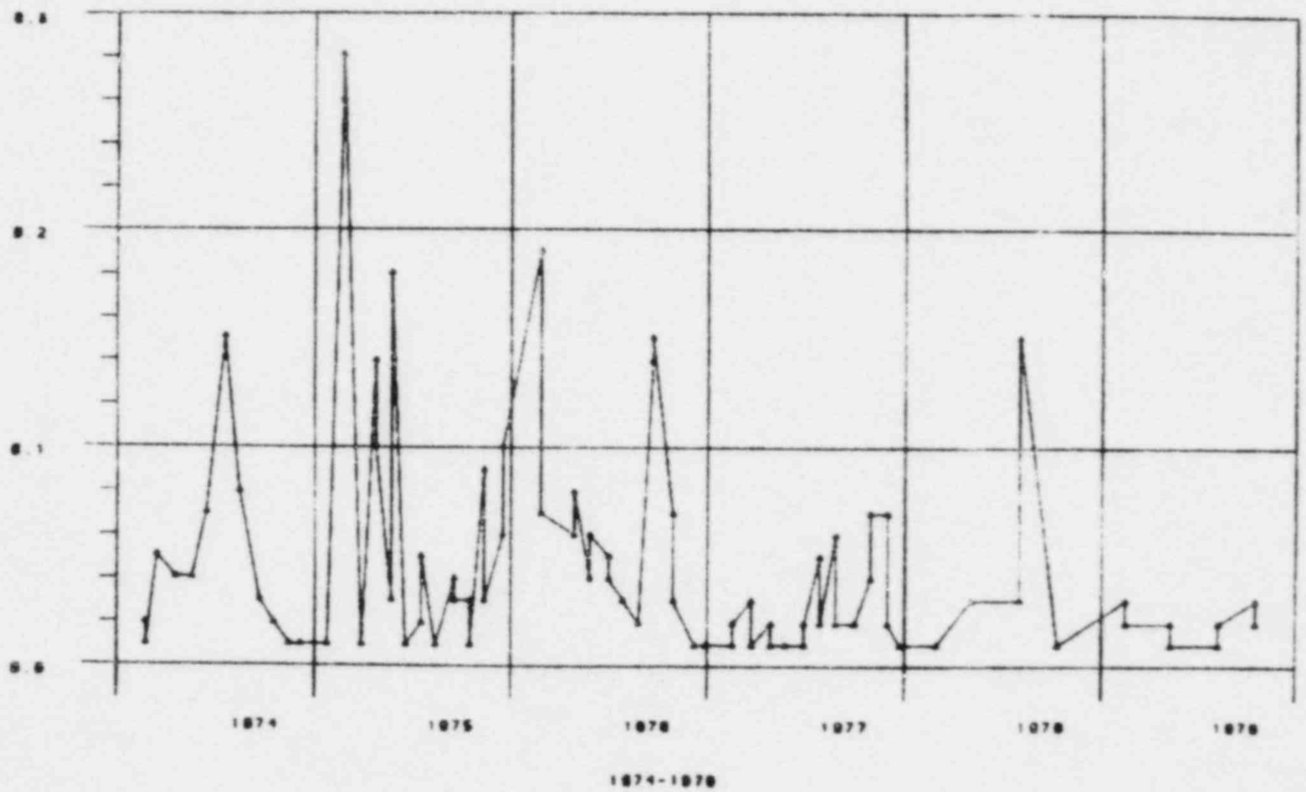


FIGURE C.5

STORET System

```
000040          0051
50 10 00 0 000 00 00 0  4

47     TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 204 5
1S1TVAC                          /TYPA/AMBNT/STREAM
                     DEPTH     0
 INDEX 1021500  087723  01140
 MILES  053 40   50 39 204 50

              PARAMETER                        NOBS      AVE       MAX       MIN  BEG-DATE   END-DATE
        415 PHEN-PH-  LFIN ALK    MG/L          04        0         0         0  74/02/21   78/10/17
```

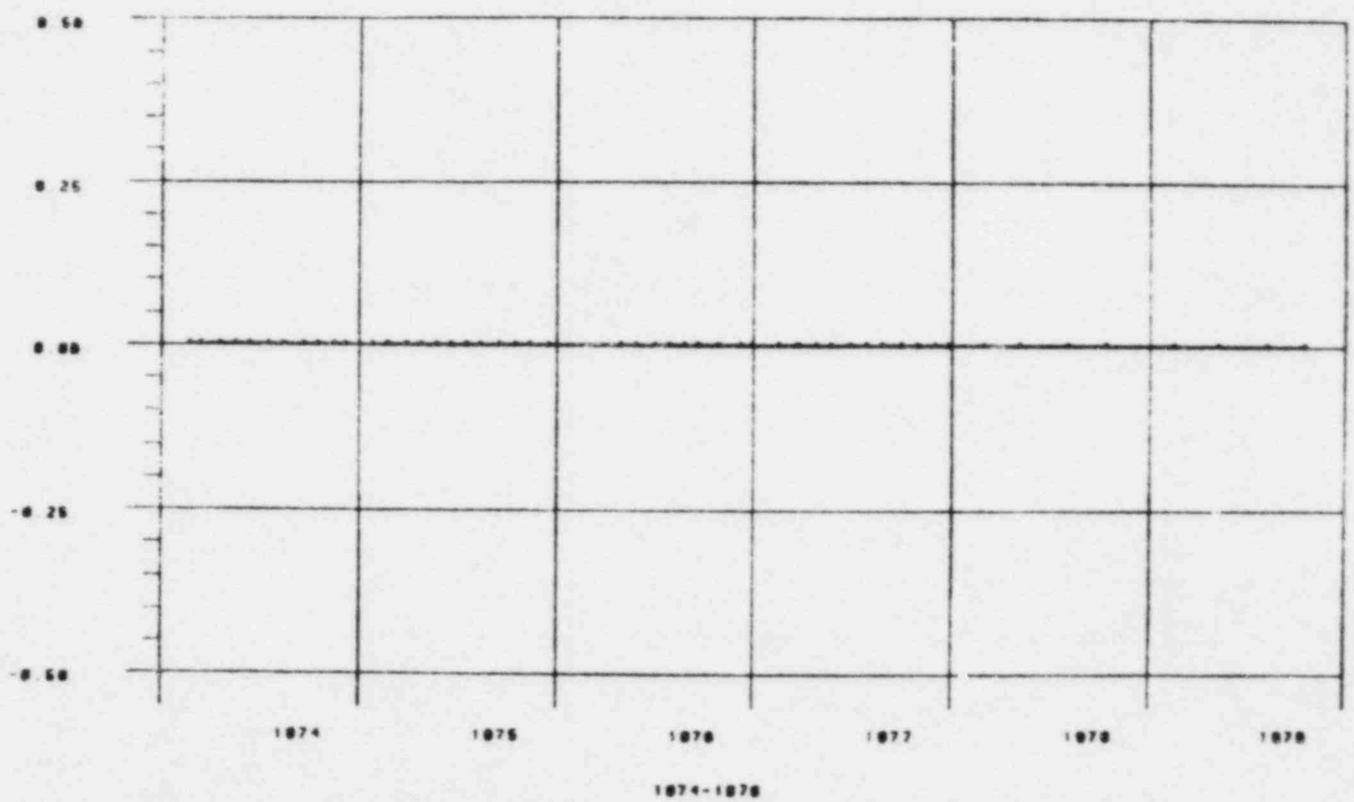


FIGURE C.14

STORET System

000040 0001
35 10 00.0 085 00 00.0 4

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 264.5
1EITVAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 007720 01140
MILES 055.00 58 30 284.50

PARAMETER		NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
665 PHOS-TOT	MG/L P	60	0.055	0.270	0.010	74/02/21	79/10/17

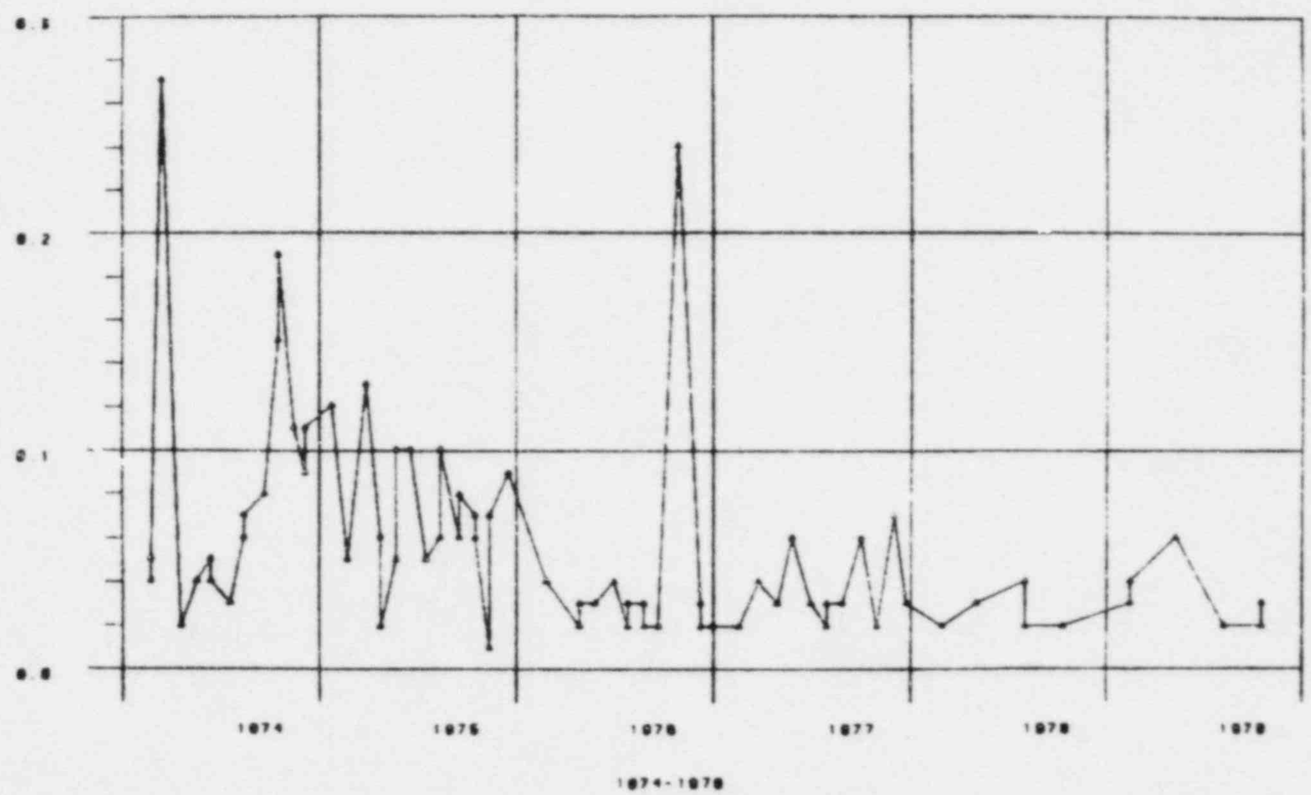
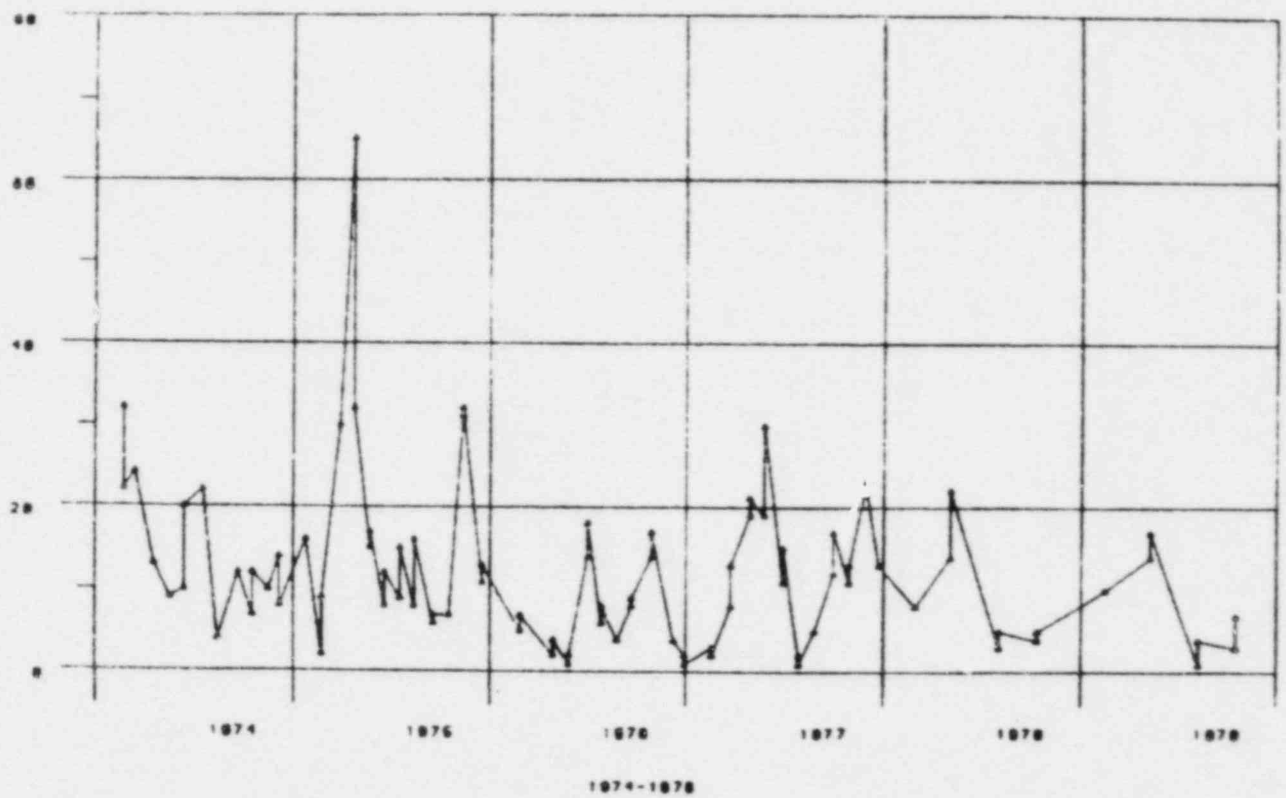


FIGURE C.2

```
 080048            0091                                                            STORET System
35 10 00.0 086 00 29.0  4

47      TENNESSEE
CUMBERLAND RIVER BASIN     052000
CUMBERLAND RIVER 284.5
131TVAC                          /TYPA/AMBNT/STREAM
                     DEPTH     0
 INDEX 1021500  287720  01140
 MILES  953.00    50.10 284.50

              PARAMETER                          NOBS      AVE       MAX       MIN  BEG-DATE   END-DATE
       530 RESIDUE    TOT NFLT     MG/L           78        12        65         1  74/02/21   79/10/17
```



000040 0001
30 10 00 0 000 00 65 0 4

FIGURE C.16

STORET System

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 204 5
131TVAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 037720 21140
MILES 953 60 50 30 284.50

	PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
335	COD	LOWLEVEL	MG/L	77	7.8	22.0	2.0	74/02/21	79/10/17

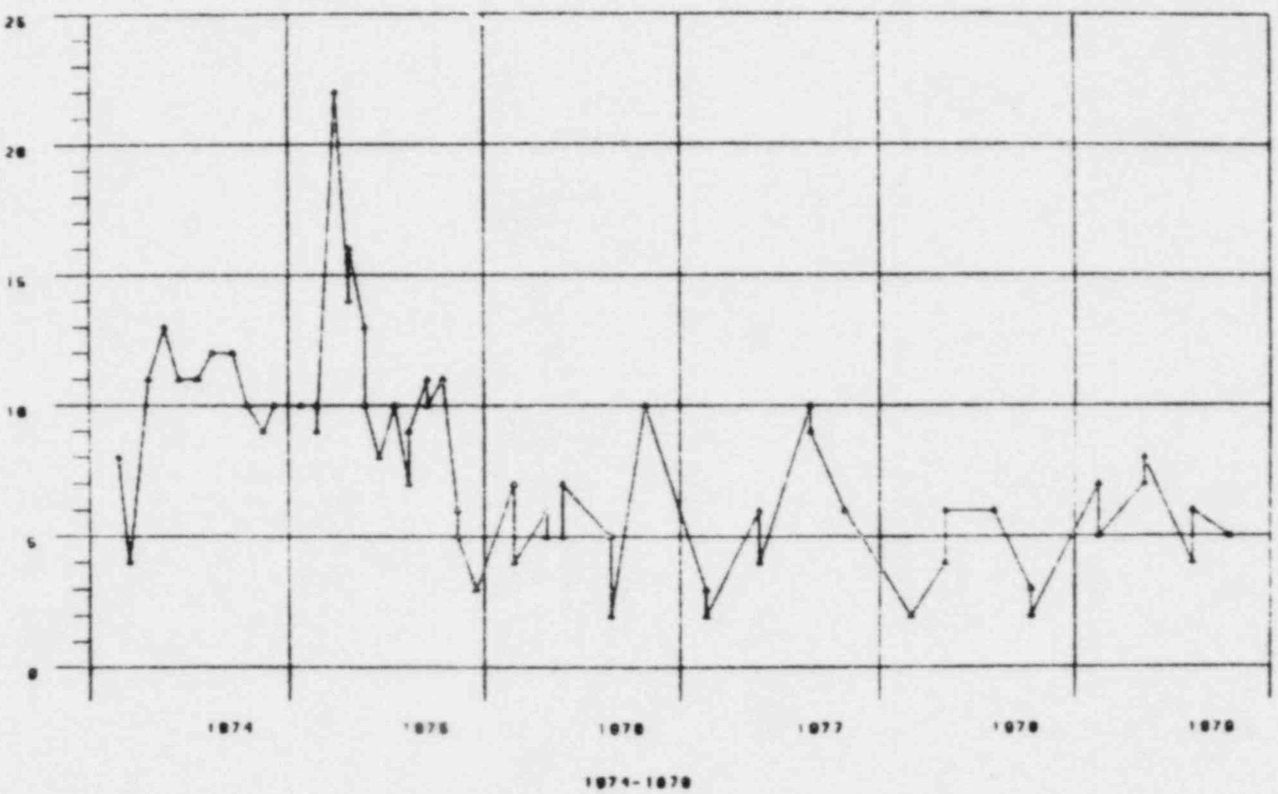


FIGURE C.11

STORET System

```
 000846            0001
36 10 00 0 000 00 00 0  4

47     TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 204 5
131TVAC                          /TYPA/AMBNT/STREAM
                  DEPTH     0
 INDEX 1021500  087720  01148
 MILES  053 00   50 50 204 50
```

	PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
605	ORG N	W	MG/L	35	0.143	1.486	0.018	74/02/21	78/10/17

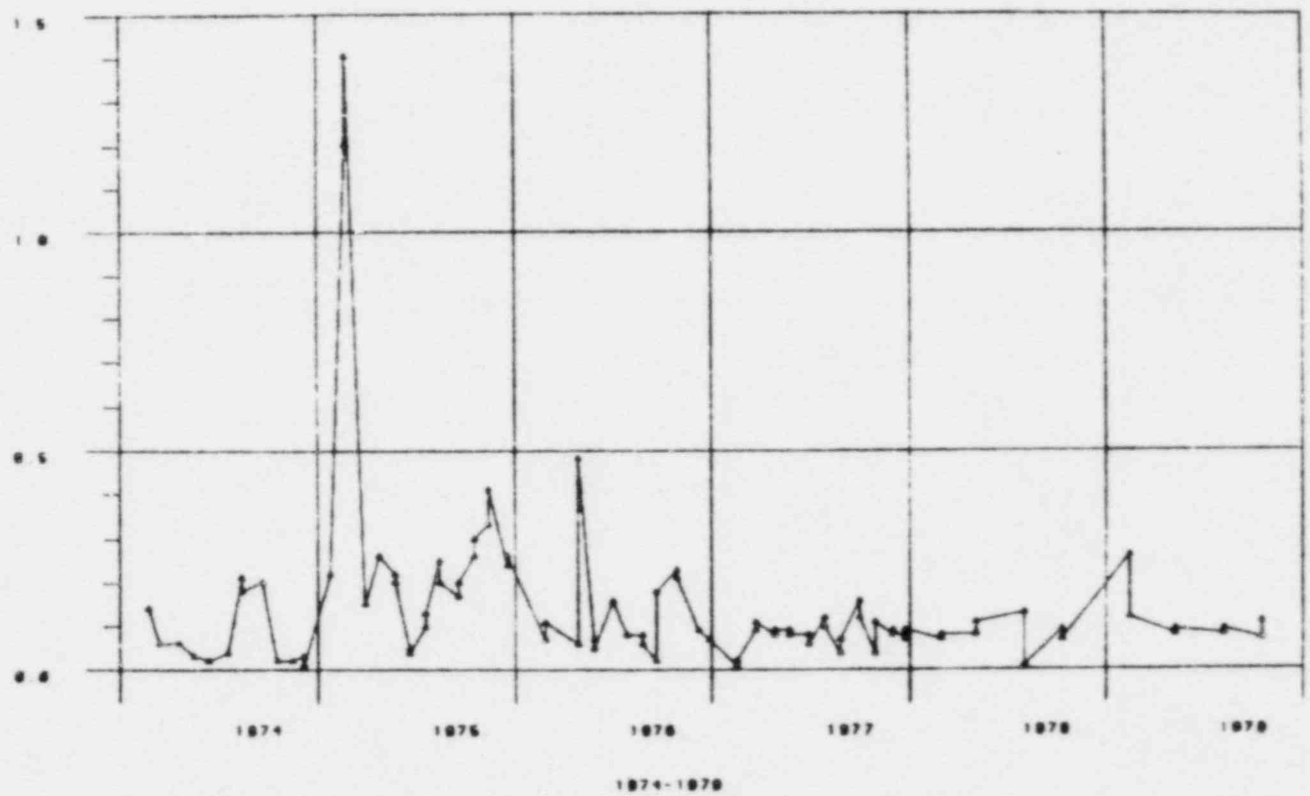


FIGURE C.18

STORET System

```
000946              0001
16 10 00 0 006 00 00 0   4

47     TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 204.5
131TVAC                                  /TYPA/AMBNT/STREAM
                          DEPTH    0
 INDEX 1021500  507720  01140
 MILES  053 00   50 30 204.50

             PARAMETER                        NOBS     AVE      MAX       MIN  BEG-DATE   END-DATE
       927 MGNSIUM   MG,TOT       MG/L         60      4.3      6.0       2.7  75/01/25   78/10/17
```

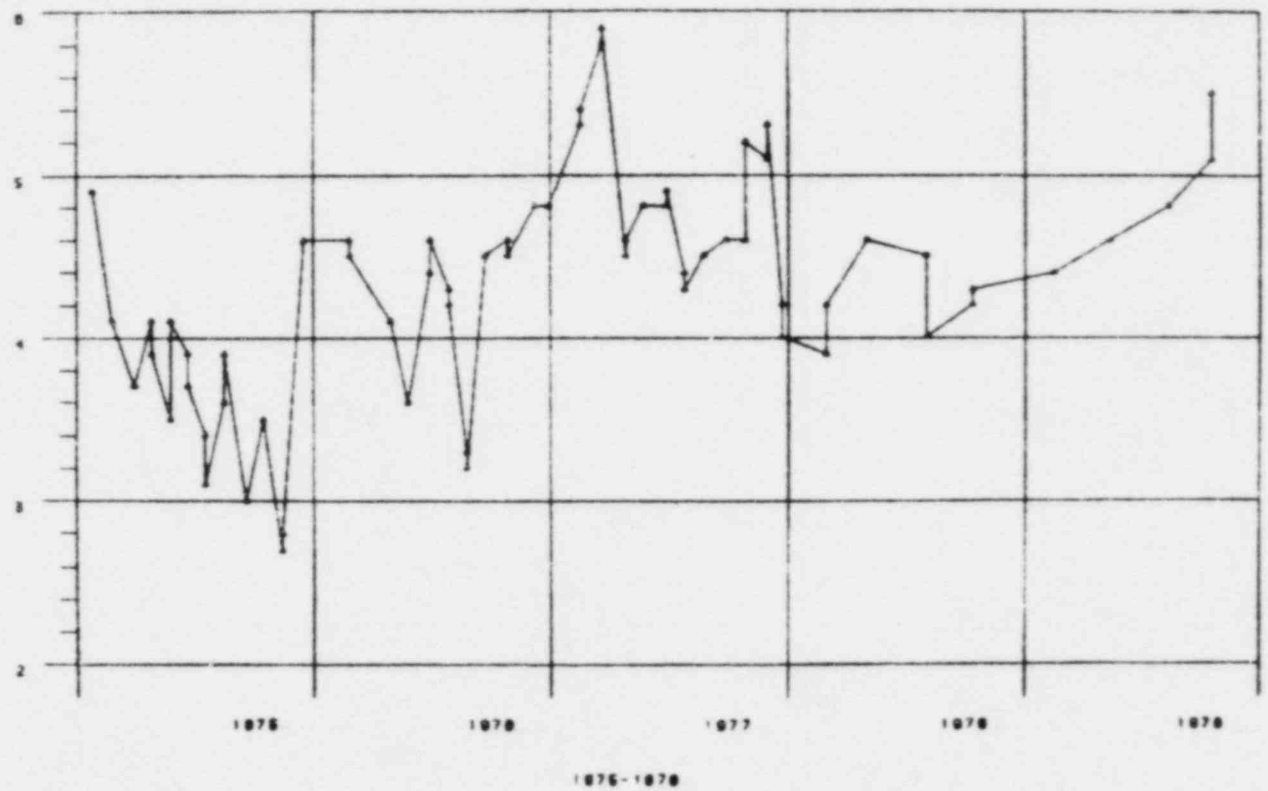


FIGURE C.13

STORET System

```
008948          6601
AC 10 00 0 000 06 00 0  4

47      TENNESSEE
CUMBERLAND RIVER BASIN    652000
CUMBERLAND RIVER 204.0
231TVAC                              /TYPA/AMBNT/STREAM
                      DEPTH     0
 INDEX 1021500  007720  01140
 MILES  053 00   56 38 204 50

          PARAMETER                          NOBS    AVE     MAX       MIN  BEG-DATE   END-DATE
    630 NO2&NO3   N-TOTAL      MG/L          63     0.34    0.91      0.04  74/02/21   79/10/17
```

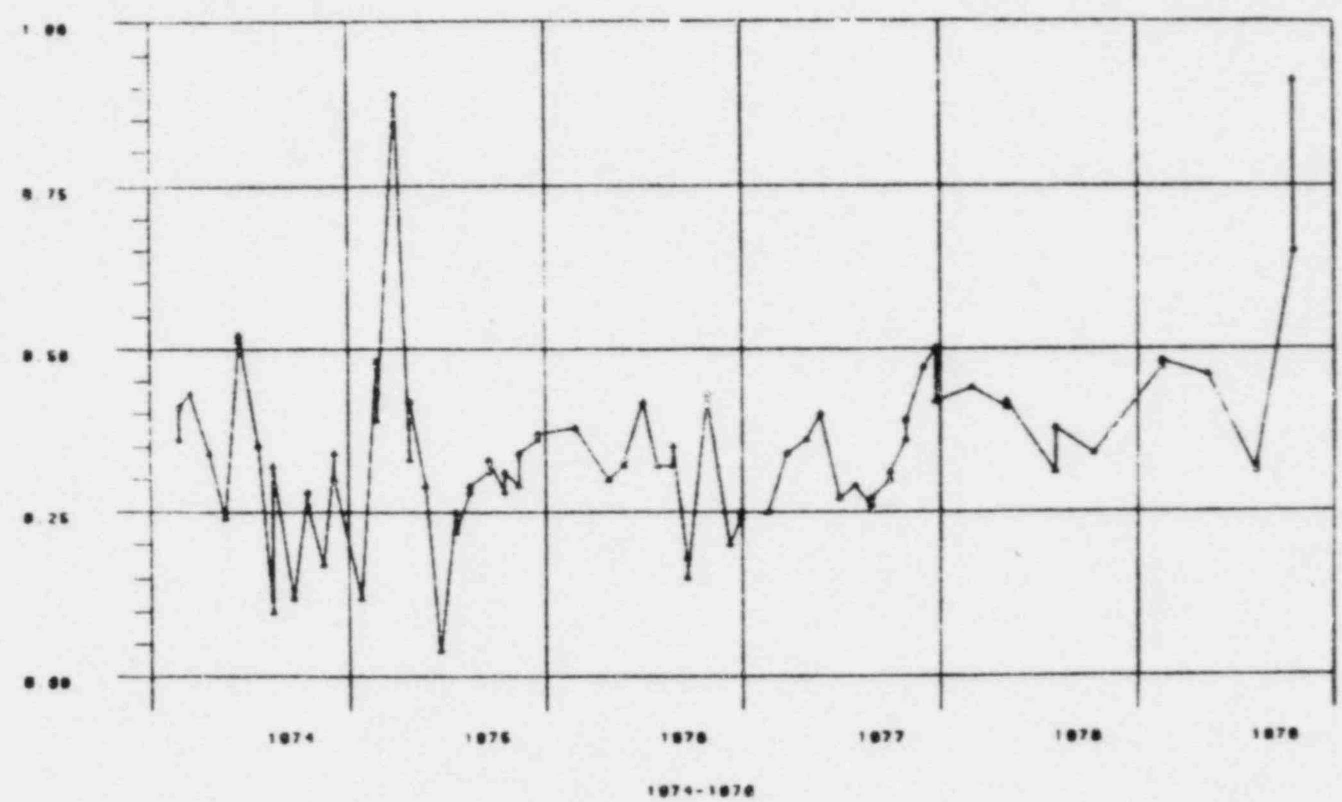


FIGURE C.20

STORET System

```
000848          0001
36 12 00 0 086 00 08 0  4
47    TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 284 5
131TVAC                    /TYPA/AMBNT/STREAM
              DEPTH     0
INDEX 1021500  027720  01140
MILES  955 00   58 38 284 60

       PARAMETER                        NOBS    AVE     MAX     MIN   BEG-DATE   END-DATE
W29 SODIUM    NA,TOT      MG/L           78     2.51    4.08    1.18  74/02/21   78/10/17
```

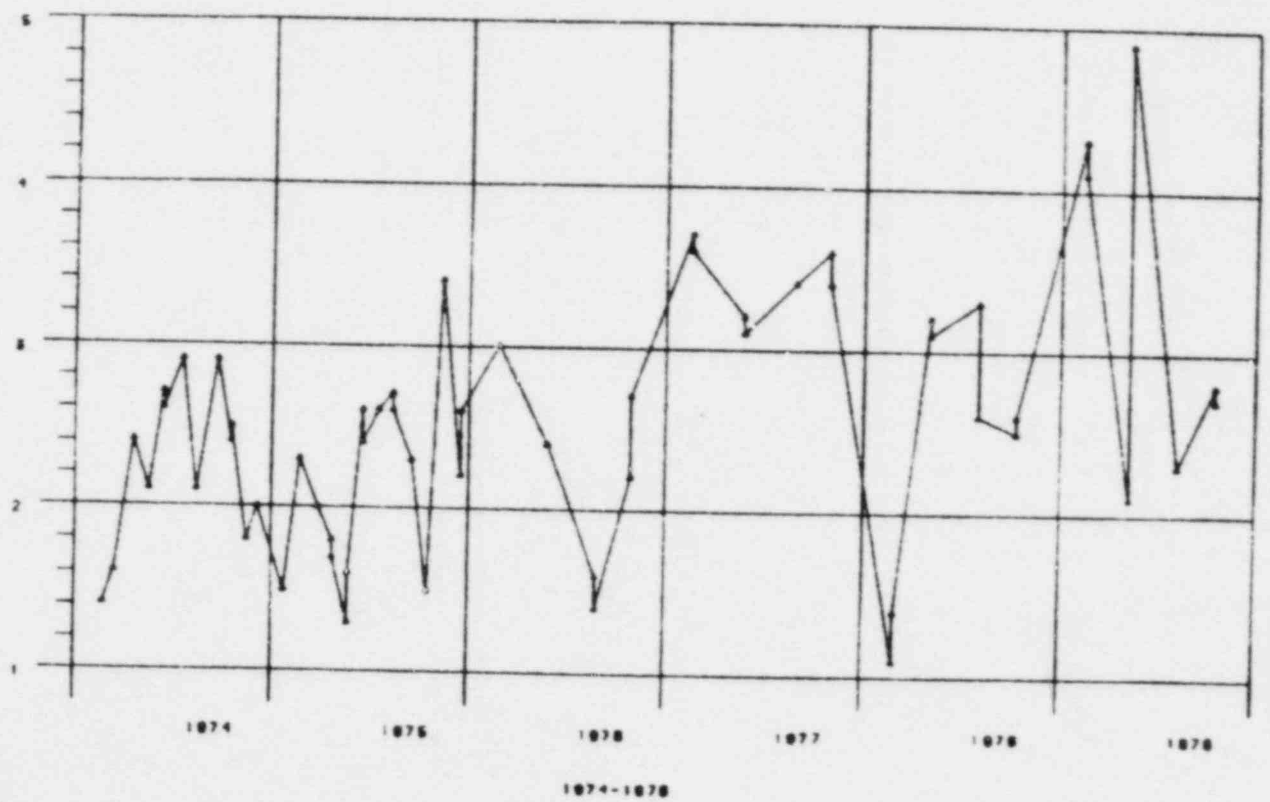


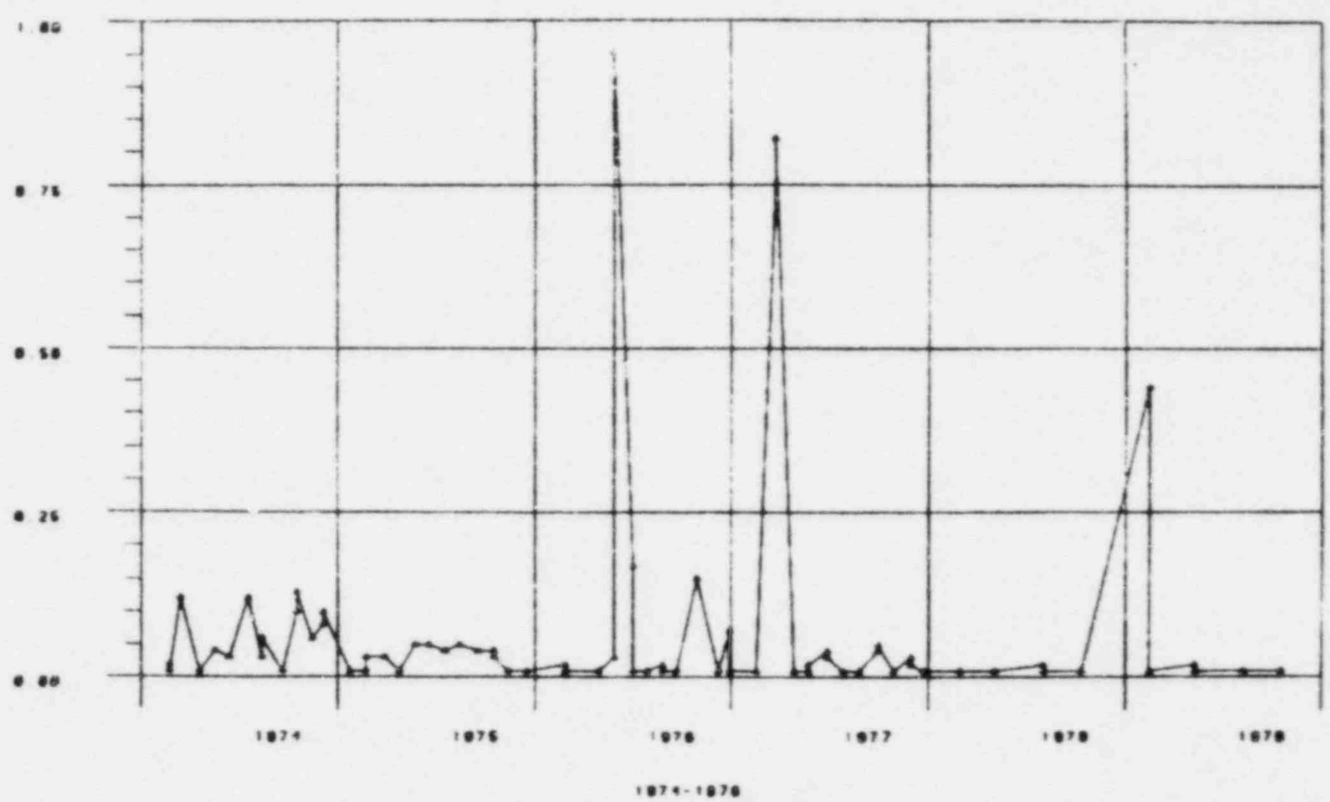
FIGURE C.15

STORET System

000845 0601
36 10 00 0 086 02 00 0 4

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 284 5
1811VAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 087720 01140
MILES 963.00 50 30 284 60

PARAMETER		NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
666 PHOS-DIS	MG/L P	26	0.081	0.050	0.010	74/02/21	78/10/17



003040 0001
36 10 00 0 086 00 00 0 4

FIGURE C.22

STORET System

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 284.5
1ELTVAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 007720 01140
MILES 053.90 50 60 284.60

PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
940 CHLORIDE	CL	MG/L	58	4	8	2	75/01/26	79/10/17

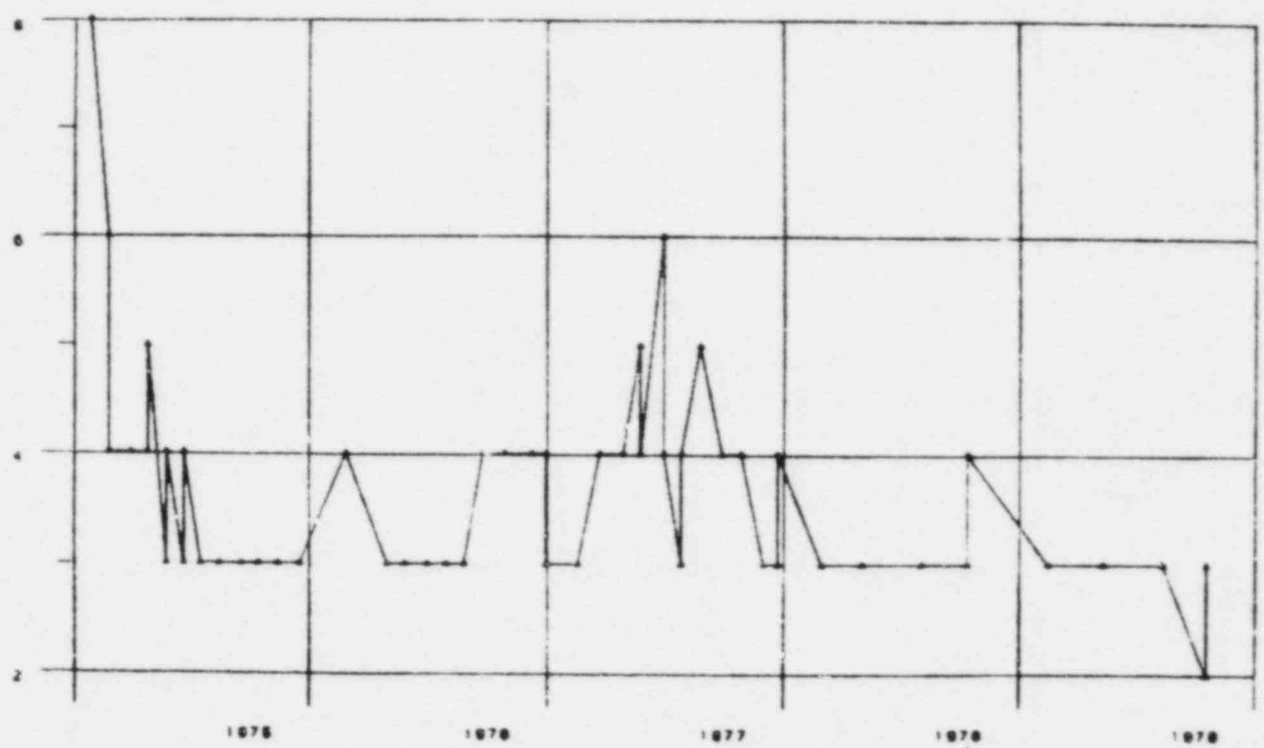


FIGURE C.17

STORET System

```
088045          0001
36 10 00 0 088 00 00 0   4

47     TENNESSEE
CUMBERLAND RIVER BASIN    062000
CUMBERLAND RIVER 284 5
131TVAC                          /TYPA/AMBNT/STREAM
                      DEPTH    0
 INDEX 1021400  307720  01140
 MILES  953.40   50 40 284 60

              PARAMETER                      NOBS     AVE      MAX      MIN  BEG-DATE   END-DATE
          910 CALCIUM     CA-TOT     MG/L     02      22 4     50.0     0.0  74/12/05   79/10/17
```

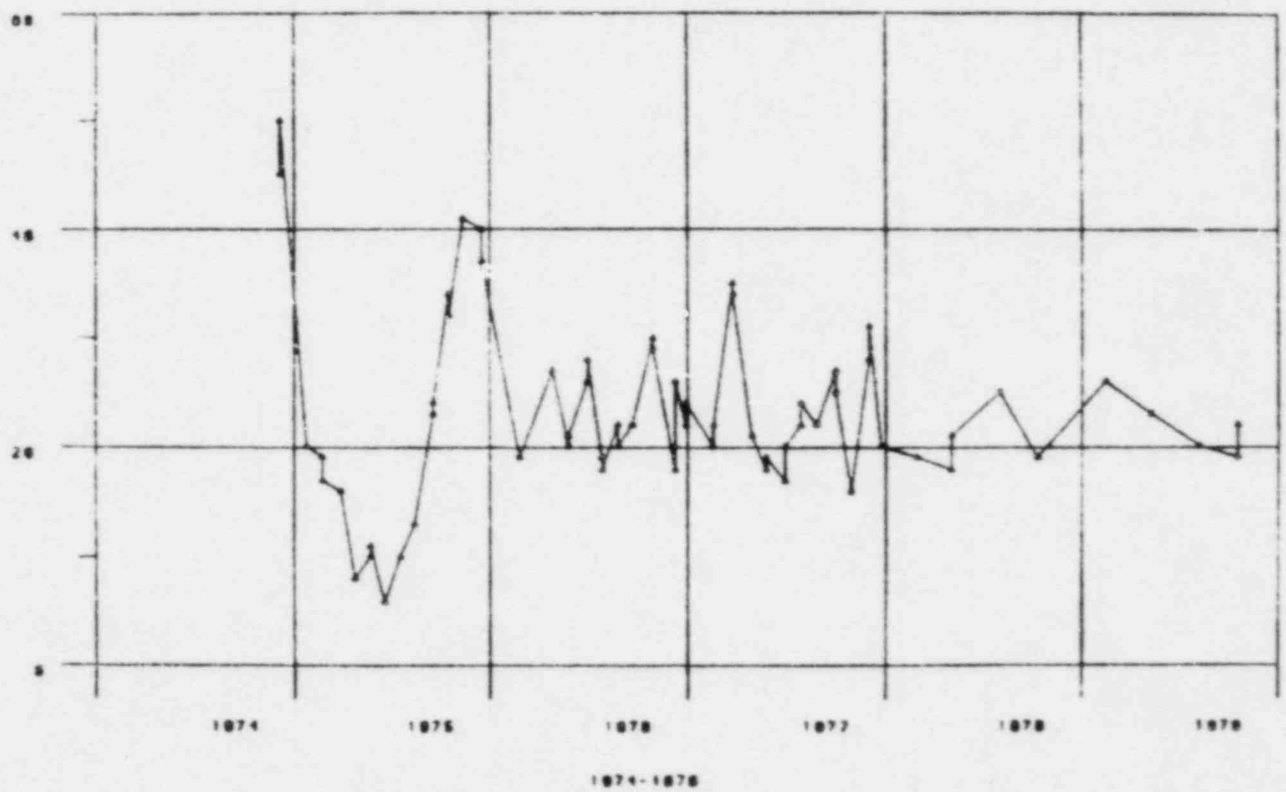
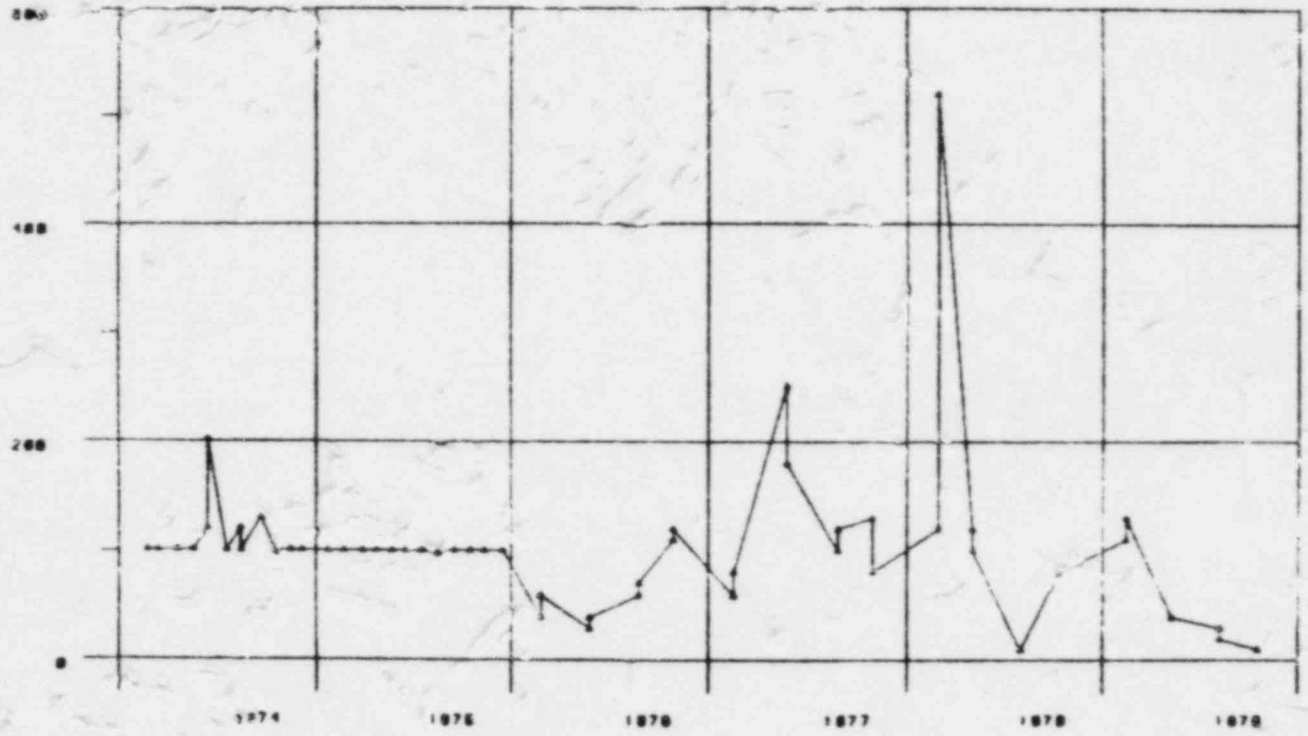


FIGURE C.24

STORET System

47 TENNESSEE
CUMBERLAND RIVER BASIN 862688
CUMBERLAND RIVER 284.5
/TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1821580 887728 811148
MILES 853.00 48.38 284.50

PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
1022 BORON	B,TOT	UG/L	59	89	426	10	74/02/21	78/10/17



1974-1978

FIGURE C.19

STORET System

```
380846          0001
36 19 00.0 086 00 00.0  4

47     TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 284 S
1ISITVAC                        /TYPA/AMBNT/STREAM
                          DEPTH     0
 INDEX 1021500  097720  01140
 MILES  353 00   50 30 284 50

            PARAMETER                          NOBS      AVE      MAX       MIN  BEG-DATE   END-DATE
      40570 CAL HARD    CA MG       MG/L         90       72      120        38  75/01/26   79/10/17
```

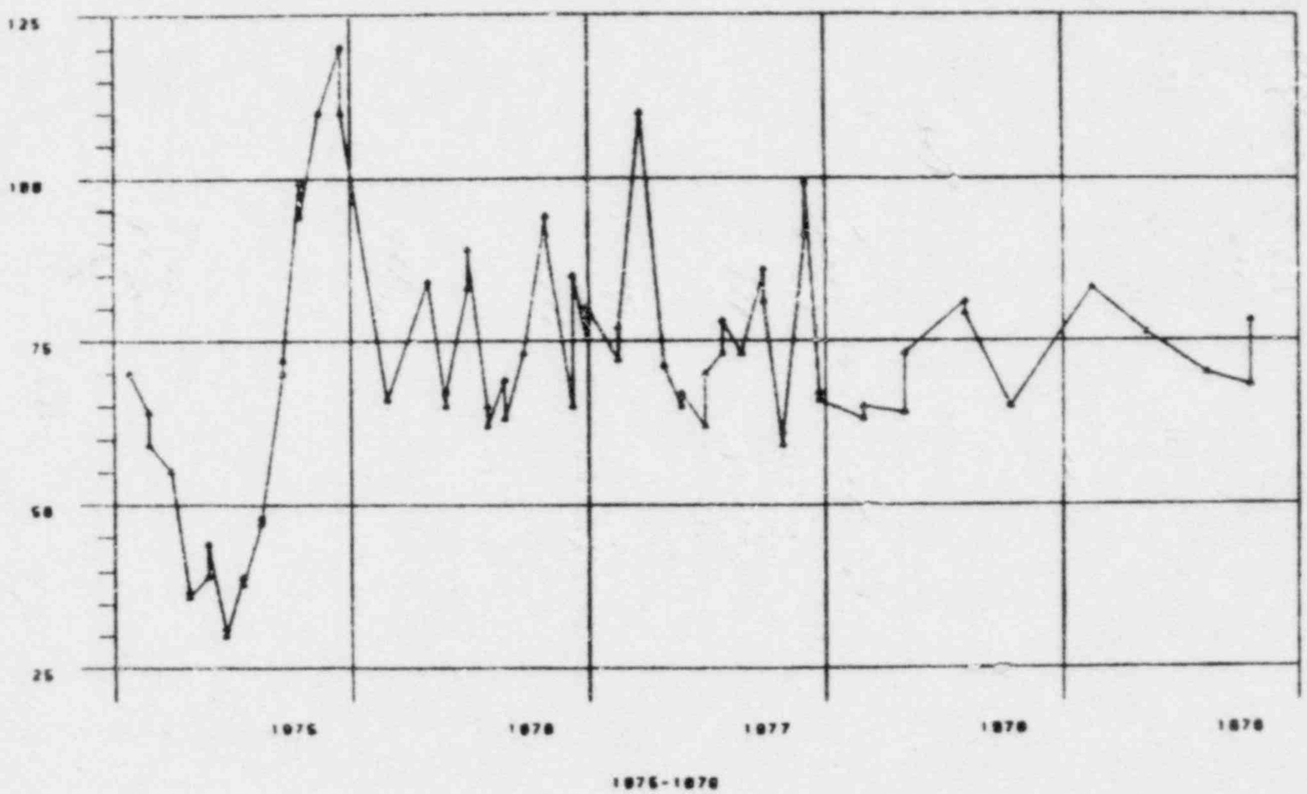


FIGURE C.26

STORET System

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 204.6
1$ITVAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 007720 01148
MILES 953 00 58 30 204.60

PARAMETER		KOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
1034 CHROMIUM CR,TOT	UG/L	73	6	18	6	74/02/21	78/10/17

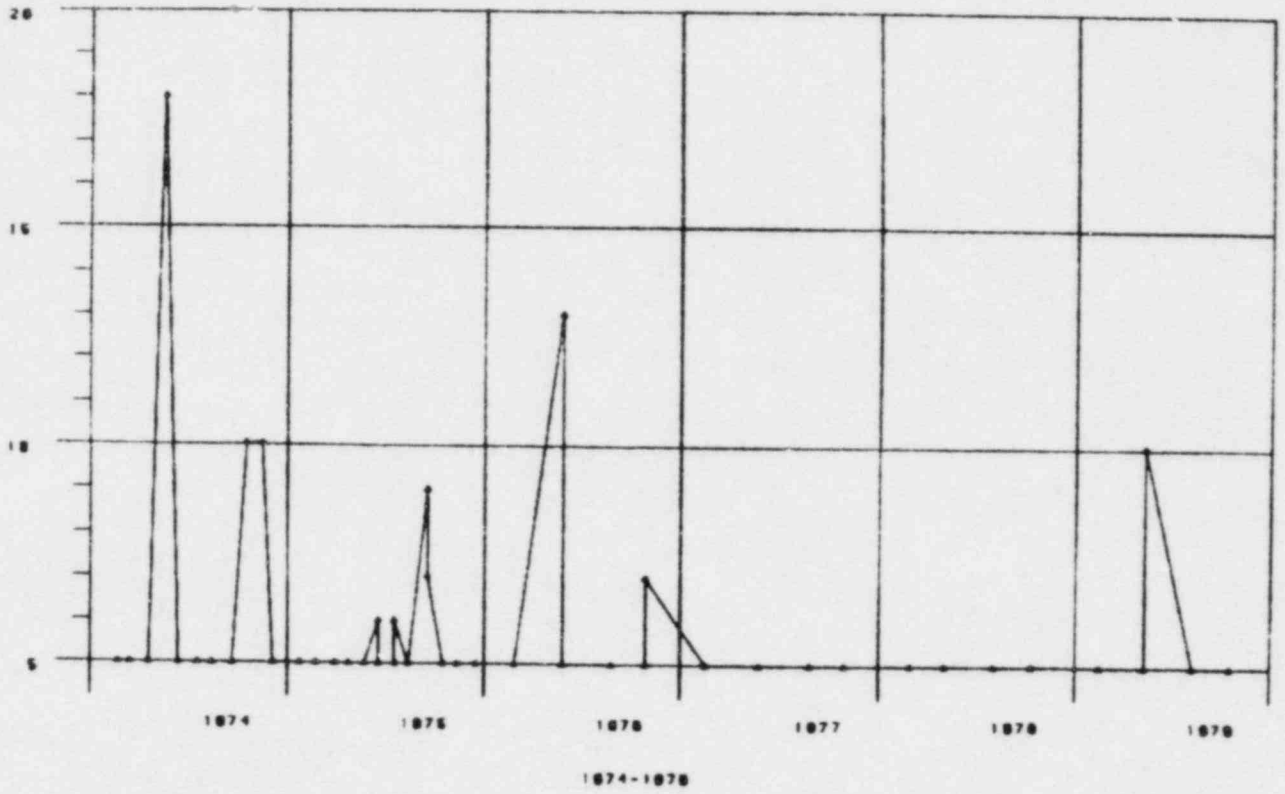


FIGURE C.21

```
080010          0001                                                    STORET System
36 10 00.0 036 50 00.0  4

47     TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 204.5
1S1TVAC                             /TYPA/AMBNT/STREAM
                        DEPTH     0
 INDEX 1021500  027720  01140
 MILES  655.00   50.30 204.50
```

PARAMETER		NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
937 PTSSIUM K,TOT	MG/L	53	1.20	2.80	0.00	74/12/05	78/10/17

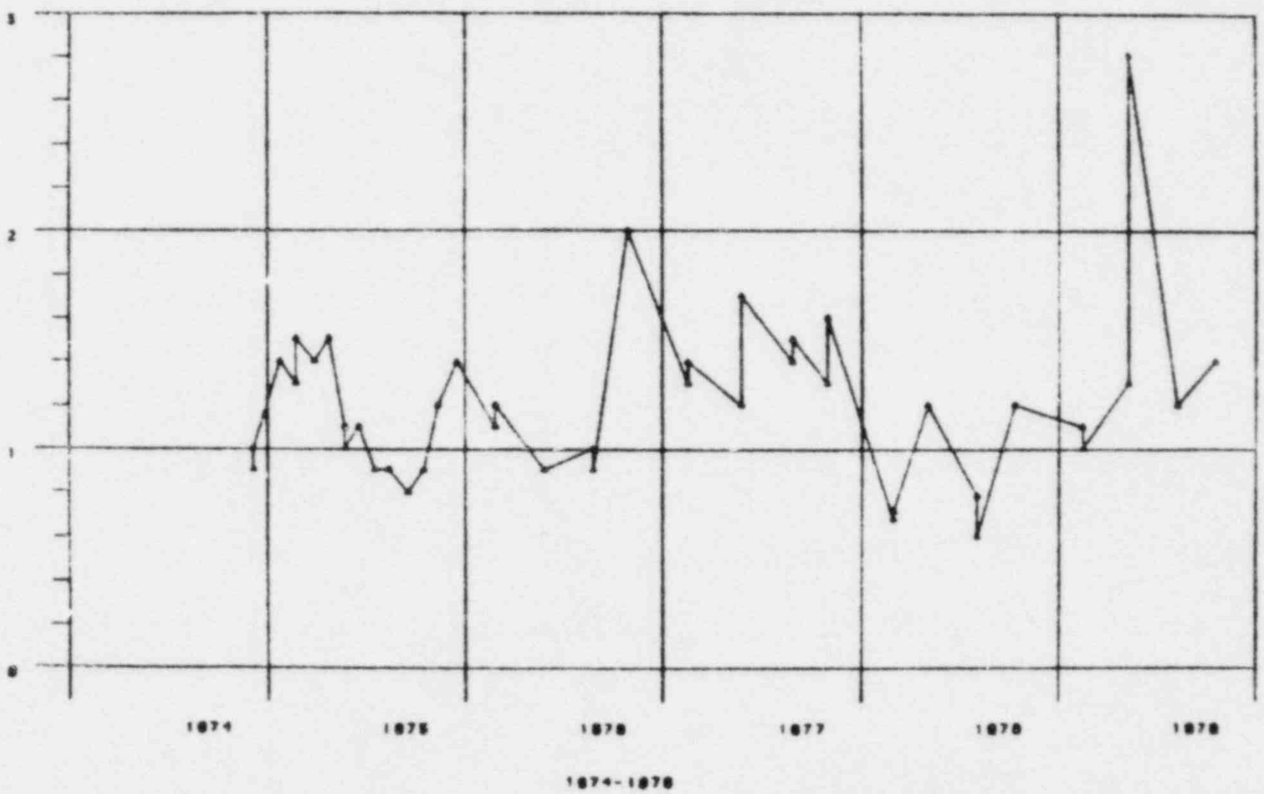


FIGURE C.28

STORET System

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 284.5
131TYAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 86/720 01148
MILES 953.00 50 30 284.50

	PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
1045	IRON	FE,TOT	UG/L	38	668	18000	110	75/01/25	78/10/17

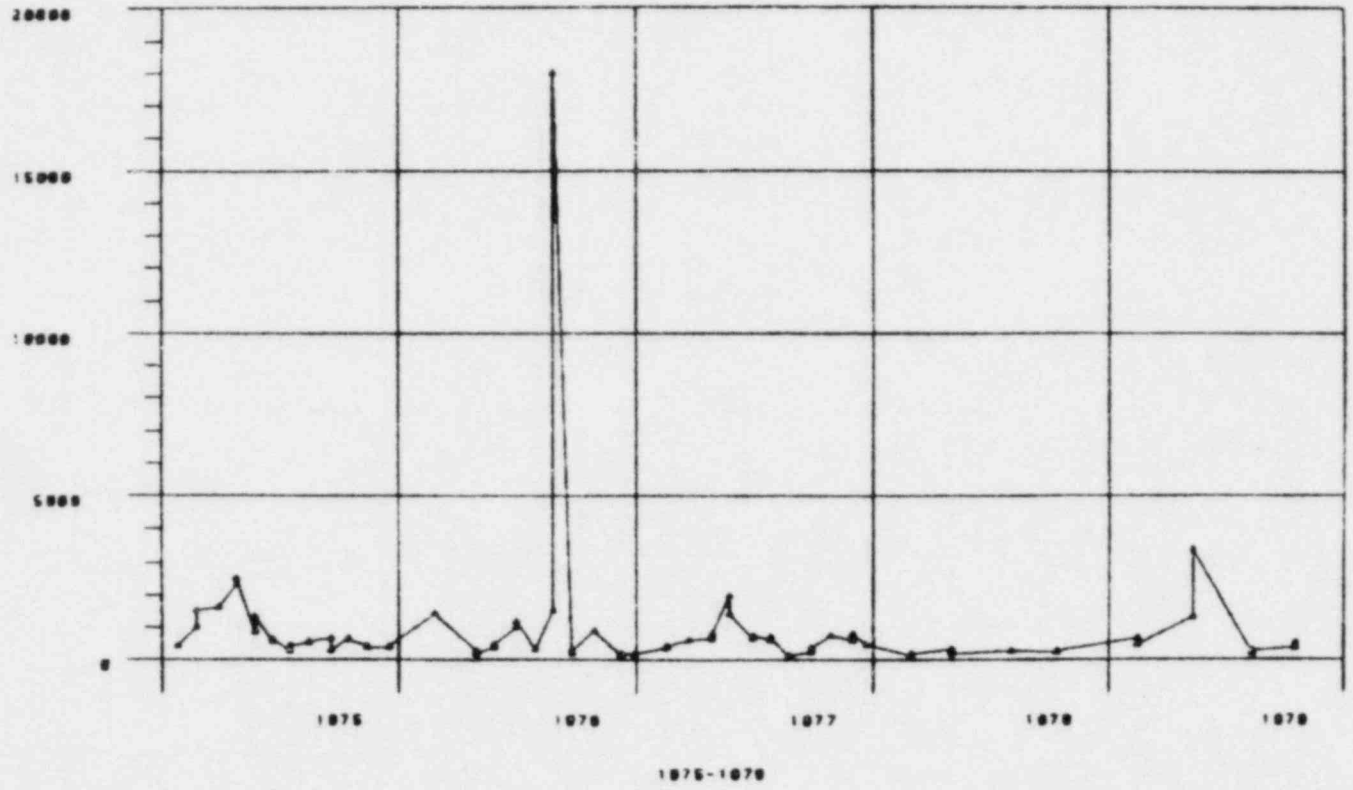


FIGURE C.23

STORET System

```
G80048            0001
60 10 80 0 000 00 00 0   4

47     TENNESSEE
CUMBERLAND RIVER BASIN    052000
CUMBERLAND RIVER 284 5
1E1TVAC                                    /TYPA/AMBNT/STREAM
                         DEPTH     0
 INDEX 1021600  6A7720  41140
 MILES  053 05   60 30 284 50
```

PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
945 SULFATE	SO4-TOT	MG/L	181	19	30	10	74/02/21	78/10/17

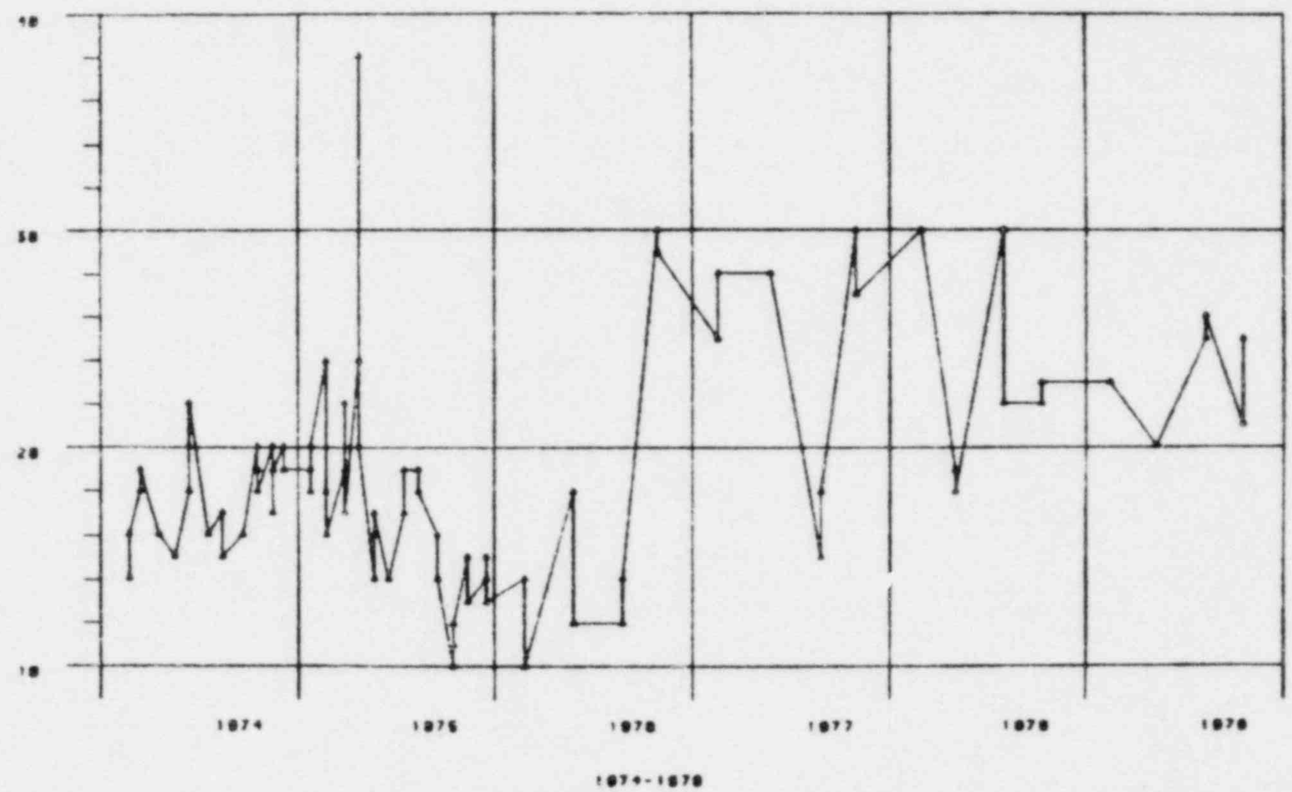


FIGURE C.30

STORET System

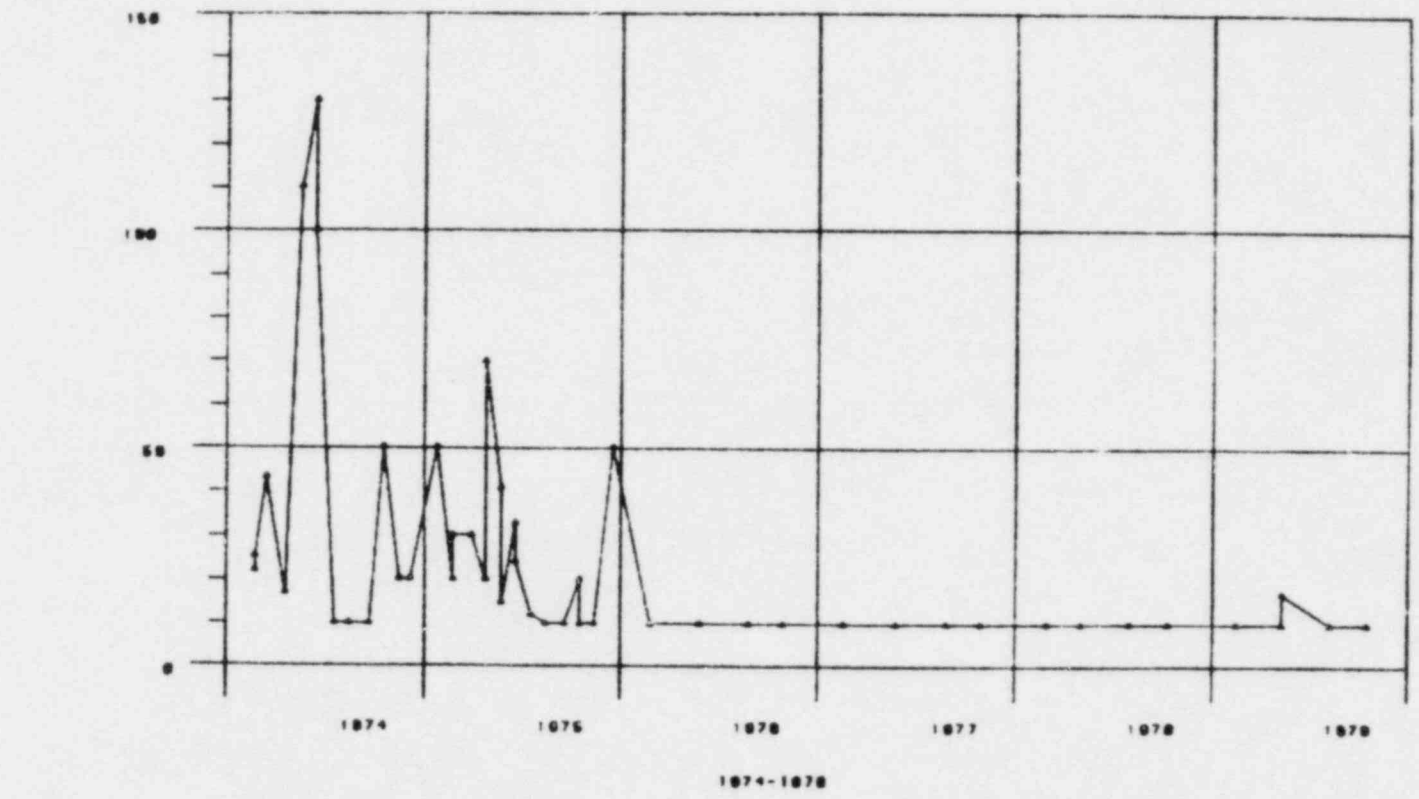


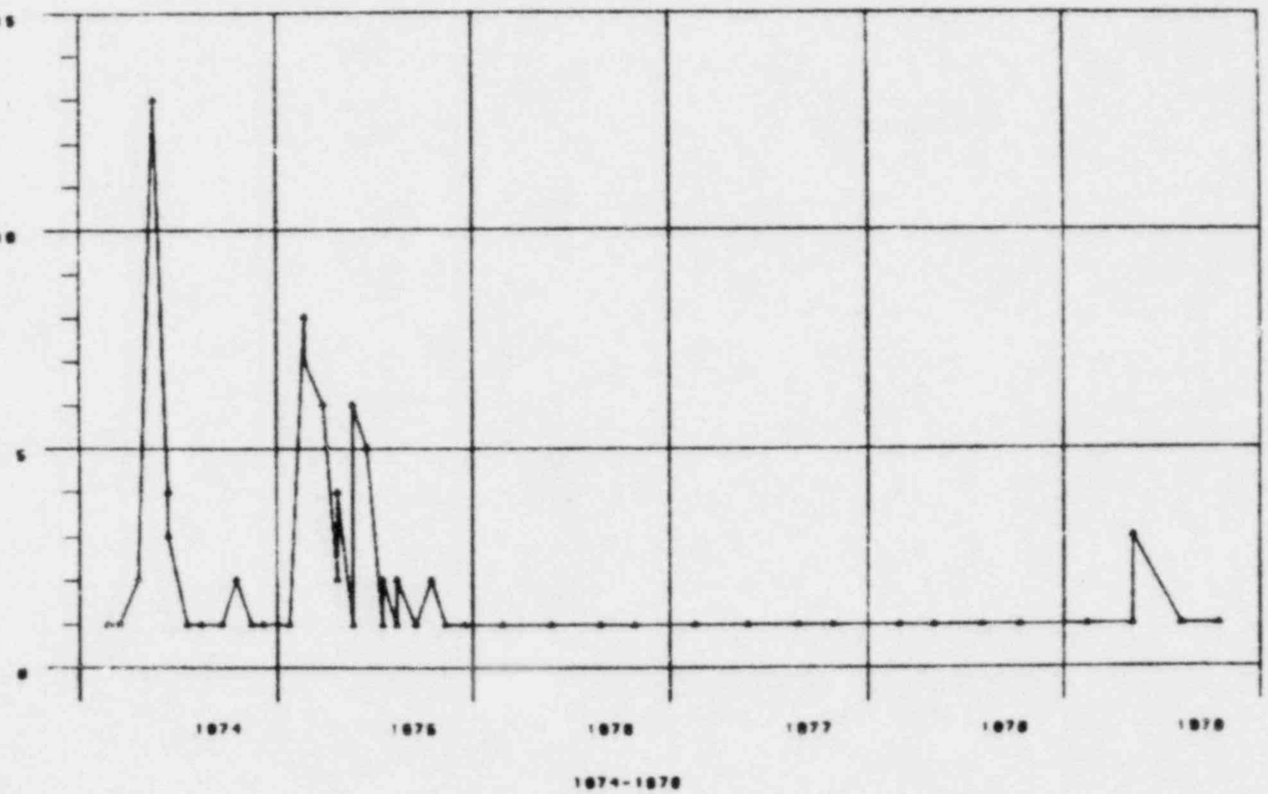
FIGURE C.25

STORET System

000040 0001
36 14 00.0 088 00 00 2 4

17 TENNESSEE
CUMBERLAND RIVER BASIN 062068
CUMBERLAND RIVER 284.5
/TYPA/AMBNT/STREAM
DEPTH 0
067728 01140
60 38 284 60

PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
1027 CADMIUM	CD,TOT	UG/L	69	2	13	1	74/02/21	79/10/17



000040 0001
36 19 00.0 086 56 05.0 4

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 204.5
131TVAC
/TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 007720 01140
MILES 053.60 50.30 204.50

FIGURE C.32

STORET System

PARAMETER		NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
1056 MANGNESE MN.DISS	UG/L	50	18.5	150.0	10.0	75/01/26	79/10/17

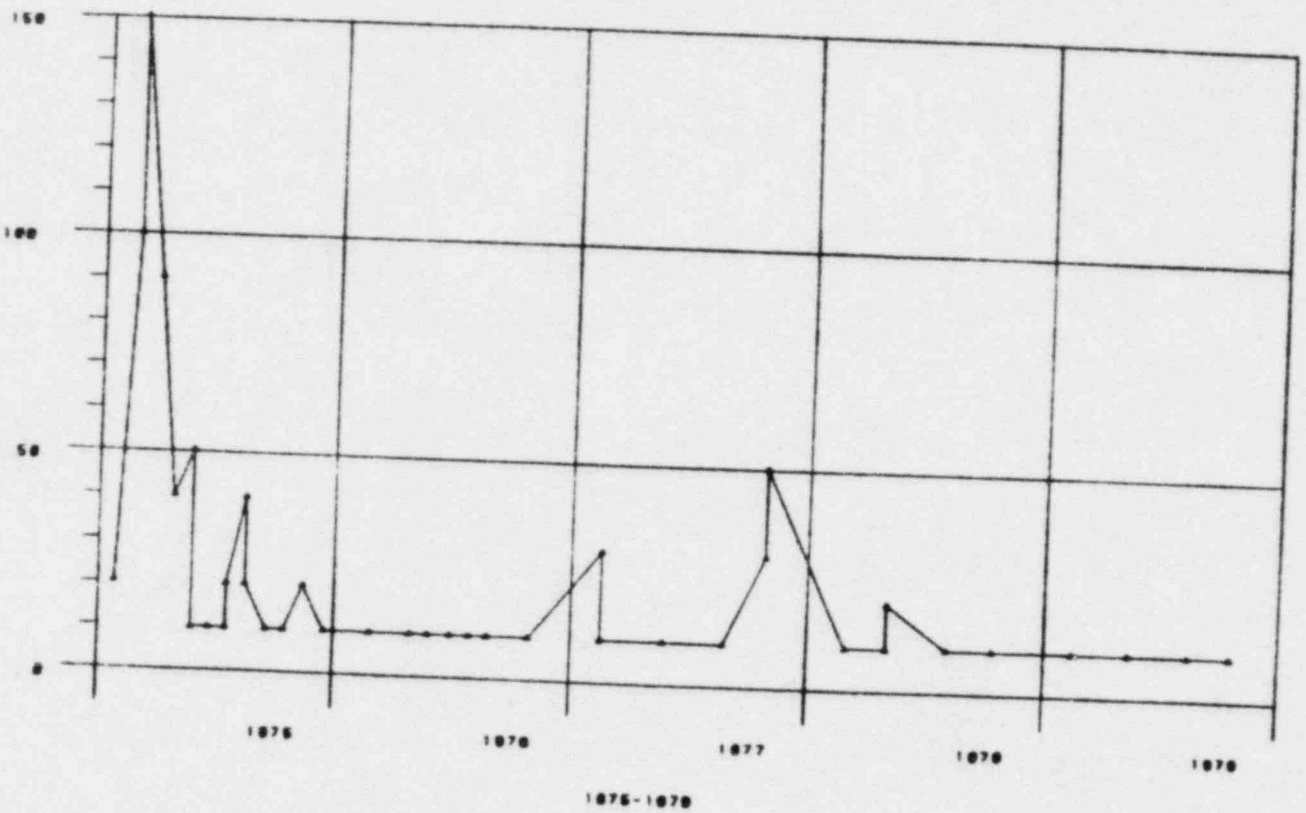


FIGURE C.27

STORET System

```
680040                 0001
36 10 30.0 085 00 00.0  4
17     TENNESSEE
CUMBERLAND RIVER BASIN    052090
CUMBERLAND RIVER 284.6
1311TVAC                         /TYPA/AMBNT/STREAM
                   DEPTH     0
INDEX 1021500  687720  01140
MILES  963.80    56.30 284.60
```

PARAMETER			NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
1042 COPPER	CU,TOT	UG/L	76	42	150	10	74/02/21	79/10/17

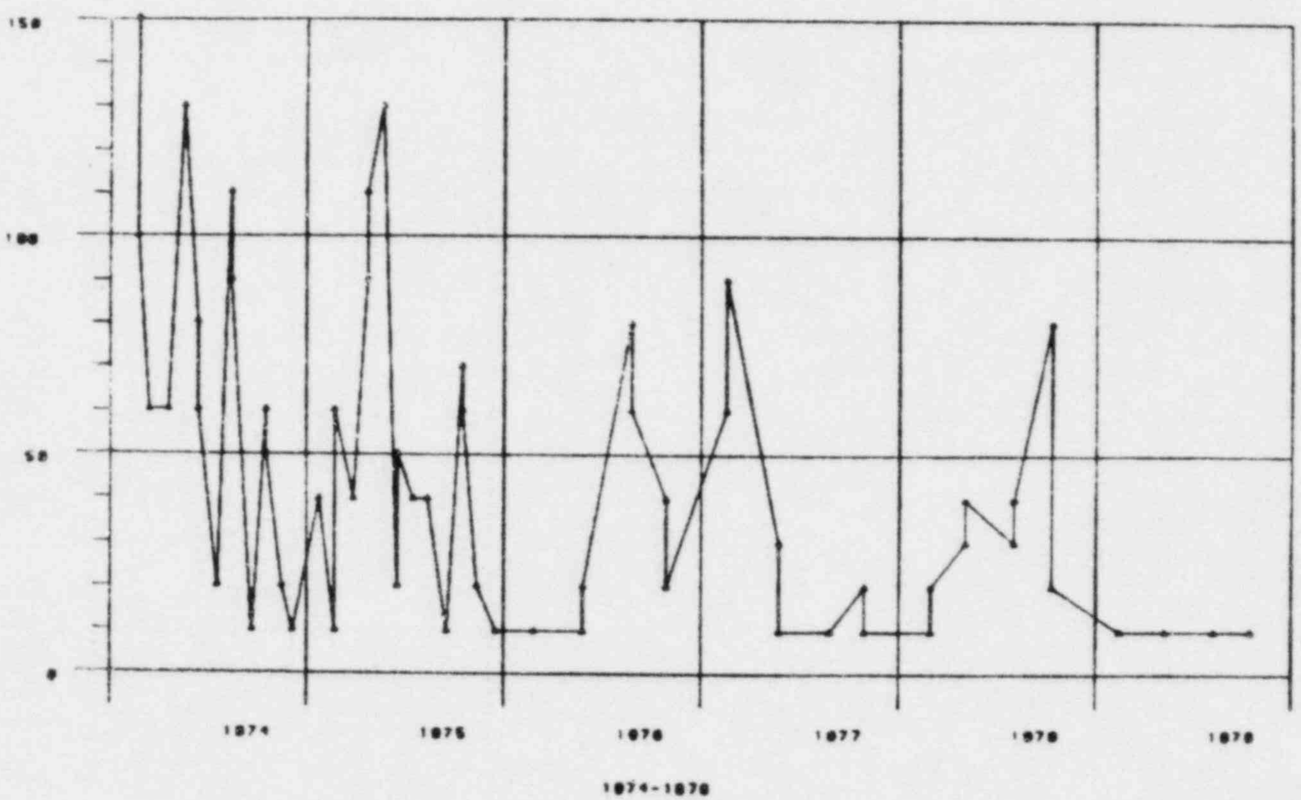


FIGURE C.36

000040 0001
36 10 00.0 086 08 00.0 4

STORET System

47 TENNESSEE
CUMBERLAND RIVER BASIN 052000
CUMBERLAND RIVER 284 5
1311VAC /TYPA/AMBNT/STREAM
DEPTH 0
INDEX 1021500 007720 01140
MILES 053.00 50.30 284.50

PARAMETER	NOBS	AVE	MAX	MIN	BEG-DATE	END-DATE
31616 FEC COLI MFM-FCBR /100ML	36	80	1330	1	74/03/14	79/10/17