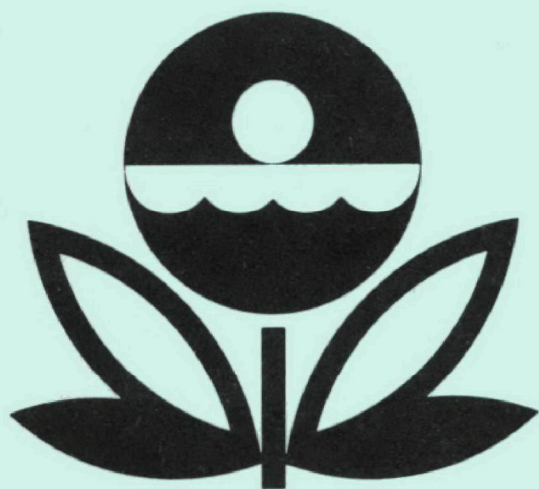


**U.S. ENVIRONMENTAL PROTECTION AGENCY
NATIONAL EUTROPHICATION SURVEY**

WORKING PAPER SERIES



REPORT

ON

BEAVER, TABLE ROCK, AND BULL SHOALS
RESERVOIRS, ARKANSAS AND TANEYCOMO

RESERVOIR, MISSOURI

BENTON, CARROLL, BOONE, MARION AND
BAXTER COUNTIES, ARKANSAS AND BARRY,
STONE, TANEY, AND OZARK COUNTIES,

MISSOURI

EPA REGION VI AND VII

WORKING PAPER NO. 480

**CORVALLIS ENVIRONMENTAL RESEARCH LABORATORY - CORVALLIS, OREGON
and
ENVIRONMENTAL MONITORING & SUPPORT LABORATORY - LAS VEGAS, NEVADA**

REPORT
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BEAVER, TABLE ROCK, AND BULL SHOALS
RESERVOIRS, ARKANSAS AND TANEYCOMO
RESERVOIR, MISSOURI
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BAXTER COUNTIES, ARKANSAS AND BARRY,
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MISSOURI
EPA REGION VI AND VII
WORKING PAPER NO. 480

WITH THE COOPERATION OF THE
ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY
AND THE
MISSOURI DEPARTMENT OF NATURAL RESOURCES
AND THE
ARKANSAS AND MISSOURI NATIONAL GUARD
FEBRUARY, 1977

REPORT ON BEAVER, TABLE ROCK, AND BULL SHOALS RESERVOIRS,
ARKANSAS AND TANEYCOMO RESERVOIR, MISSOURI
BENTON, CARROLL, BOONE, MARION AND BAXTER COUNTIES,
ARKANSAS AND BARRY, STONE, TANEY, AND OZARK COUNTIES, MISSOURI
EPA REGION VI AND VII

by

National Eutrophication Survey

Water and Land Monitoring Branch
Monitoring Applications Laboratory
Environmental Monitoring & Support Laboratory
Las Vegas, Nevada

and

Eutrophication Survey Branch
Corvallis Environmental Research Laboratory
Corvallis, Oregon

Working Paper No. 480

OFFICE OF RESEARCH AND DEVELOPMENT
U.S. ENVIRONMENTAL PROTECTION AGENCY

February 1977

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FOREWORD

The National Eutrophication Survey was initiated in 1972 in response to an Administration commitment to investigate the nationwide threat of accelerated eutrophication to freshwater lakes and reservoirs.

OBJECTIVES

The Survey was designed to develop, in conjunction with state environmental agencies, information on nutrient sources, concentrations, and impact on selected freshwater lakes as a basis for formulating comprehensive and coordinated national, regional, and state management practices relating to point source discharge reduction and nonpoint source pollution abatement in lake watersheds.

ANALYTIC APPROACH

The mathematical and statistical procedures selected for the Survey's eutrophication analysis are based on related concepts that:

- a. A generalized representation or model relating sources, concentrations, and impacts can be constructed.
- b. By applying measurements of relevant parameters associated with lake degradation, the generalized model can be transformed into an operational representation of a lake, its drainage basin, and related nutrients.
- c. With such a transformation, an assessment of the potential for eutrophication control can be made.

LAKE ANALYSIS

In this report, the first stage of evaluation of lake and watershed data collected from the study lake and its drainage basin is documented. The report is formatted to provide state environmental agencies with specific information for basin planning [§303(e)], water quality criteria/standards review [§303(c)], clean lakes [§314(a,b)], and water quality monitoring [§106 and §305(b)] activities mandated by the Federal Water Pollution Control Act Amendments of 1972.

Beyond the single lake analysis, broader based correlations between nutrient concentrations (and loading) and trophic condition are being made to advance the rationale and data base for refinement of nutrient water quality criteria for the Nation's freshwater lakes. Likewise, multivariate evaluations for the relationships between land use, nutrient export, and trophic condition, by lake class or use, are being developed to assist in the formulation of planning guidelines and policies by the U.S. Environmental Protection Agency and to augment plans implementation by the states.

ACKNOWLEDGMENTS

The staff of the National Eutrophication Survey (Office of Research and Development, U.S. Environmental Protection Agency) expresses sincere appreciation to the Arkansas Department of Pollution Control and Ecology and the Missouri Department of Natural Resources for professional involvement, to the Arkansas and Missouri National Guards for conducting the tributary sampling phase of the Survey, and to those Arkansas and Missouri wastewater treatment plant operators who provided effluent samples and flow data.

The staff of the Water Division of the Arkansas Department of Pollution Control and Ecology; and the staff of the Missouri Department of Natural Resources, James Wilson, Director; the Division of Environmental Quality, Ken Karch, Director; the Water Quality Program, James Odendahl, Director, provided invaluable lake documentation and counsel during the Survey, reviewed the preliminary reports and provided critiques most useful in the preparation of the Working Paper series.

Major General Thomas C. Armstrong, the Adjutant General of Arkansas, Project Officer Colonel Lavaun M. James, who directed the volunteer efforts of the Arkansas National Guardsmen, Major General Charles M. Kiefner, the Adjutant General of Missouri, and Project Officer Captain Donald L. Wellen, who directed the volunteer efforts of the Missouri National Guardsmen, are also gratefully acknowledged for their assistance to the Survey.

NATIONAL EUTROPHICATION SURVEY

STUDY LAKES

STATE OF ARKANSAS

<u>LAKE NAME</u>	<u>COUNTY</u>
Beaver	Benton, Carroll, Washington
Blackfish	Crittenden, St. Francis
Blue Mountain	Logan, Yell
Bull Shoals	Baxter, Boone, Marion (Taney, Ozark in MO)
Catherine	Garland, Hot Spring
Chicot	Chicot
DeGray	Clark, Hot Spring
Erling	Lafayette
Grand	Chicot
Greer's Ferry	Van Buren, Cleburne
Hamilton	Garland
Millwood	Hempstead, Howard, Little River, Sevier
Nimrod	Perry, Yell
Norfork	Baxter, Fulton (Ozark in MO)
Ouachita	Garland, Montgomery
Table Rock	Boone, Carroll (Barry, Taney in MO)

NATIONAL EUTROPHICATION SURVEY

STUDY LAKES

STATE OF MISSOURI

LAKE NAME

COUNTY

Clearwater Lake

Reynolds

Pomme de Terre Reservoir

Polk, Hickory

Stockton Reservoir

Dade, Polk, Cedar

Lake Taneycomo

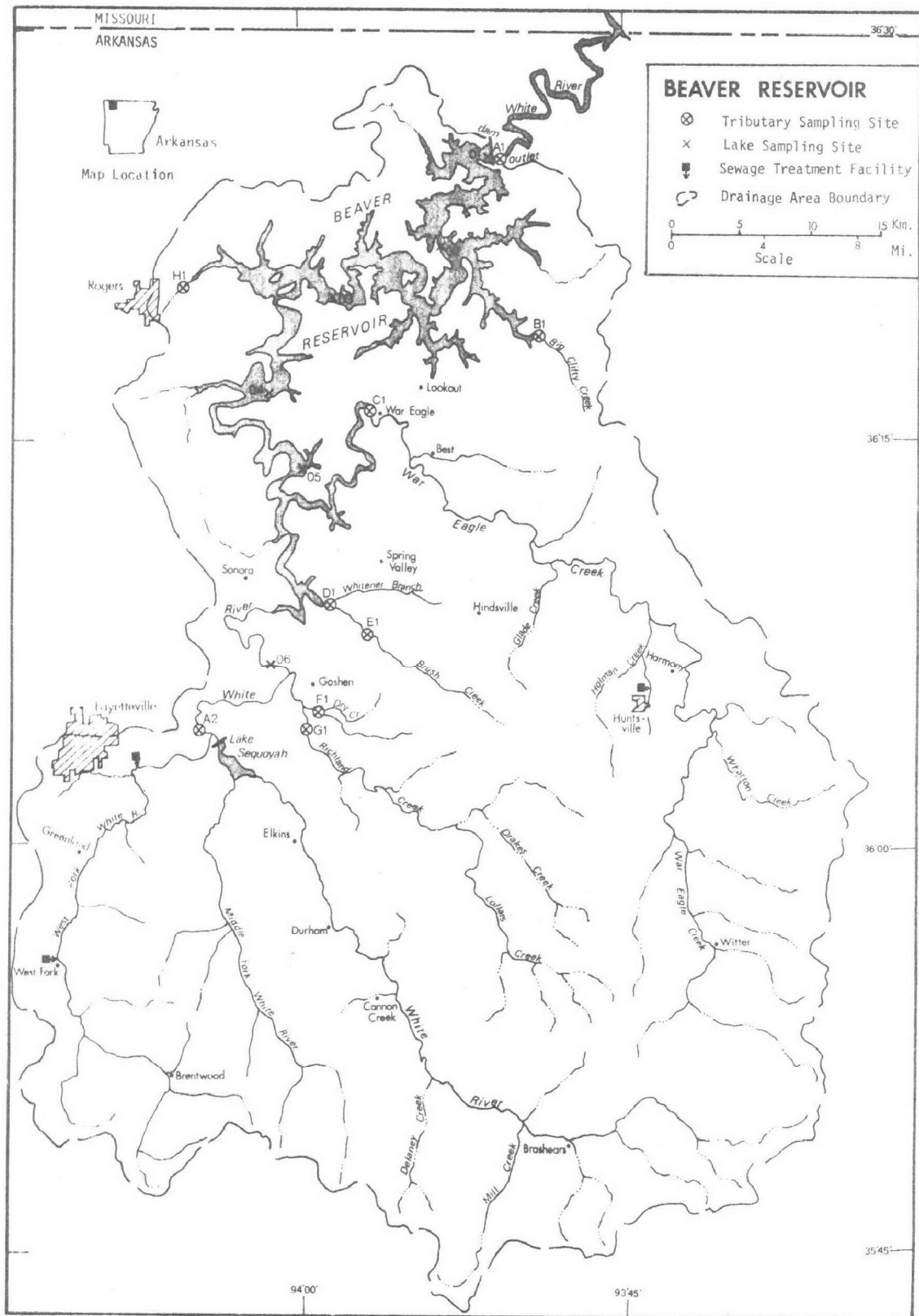
Taney

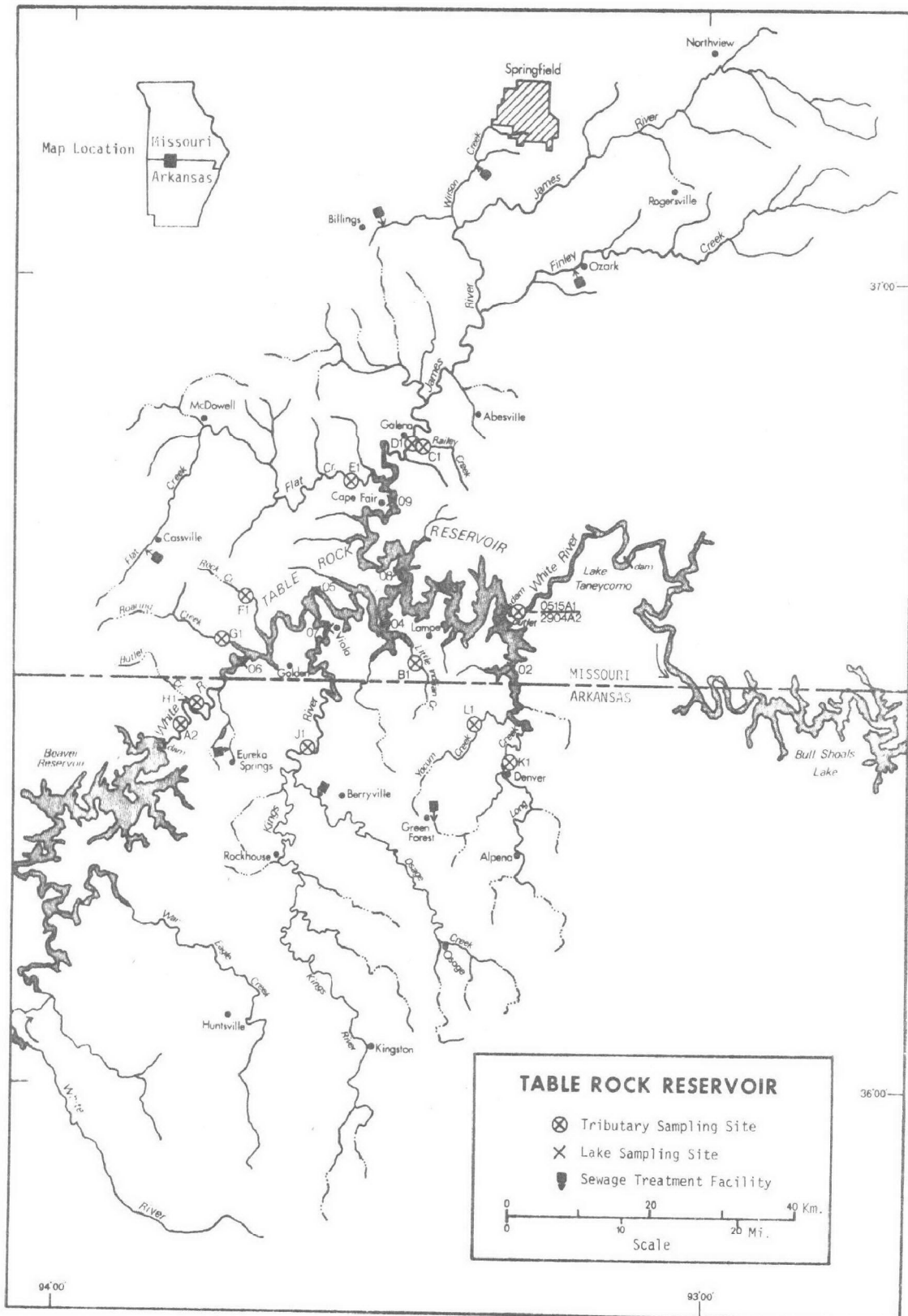
Thomas Hill Reservoir

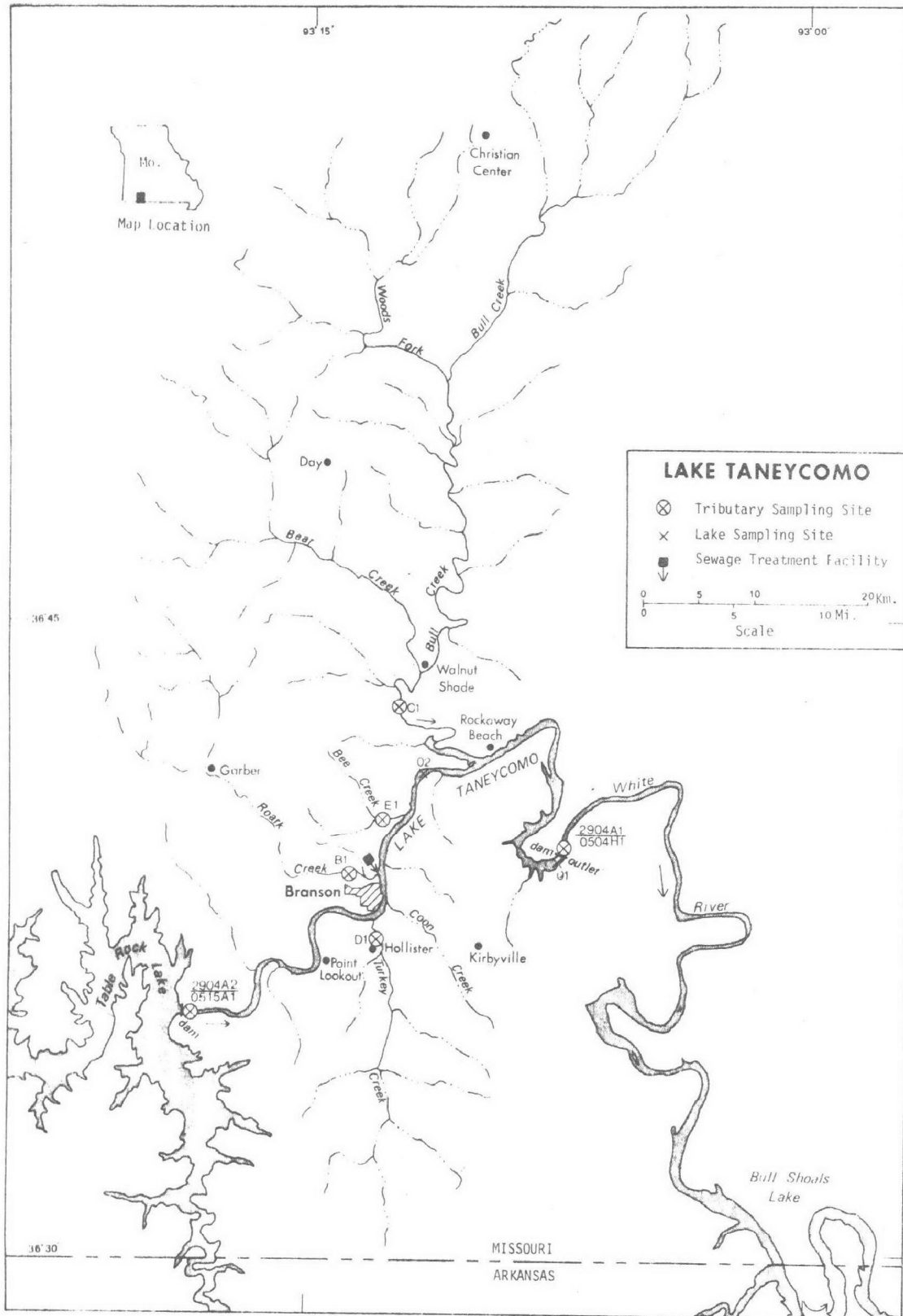
Macon, Randolph

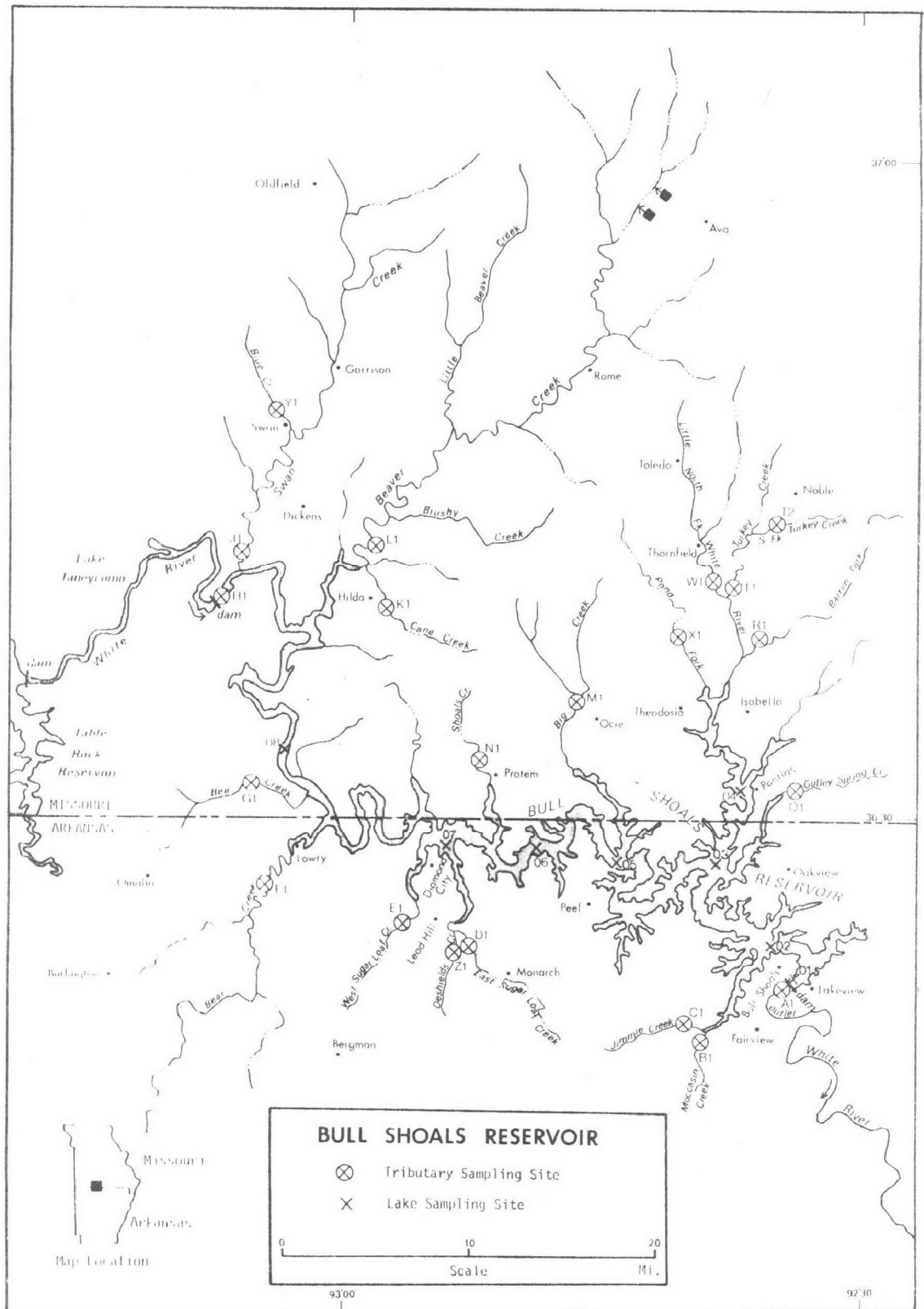
Lake Wappapello

Wayne, Butler









PRELIMINARY REPORT ON
BEAVER, TABLE ROCK, AND BULL SHOALS RESERVOIRS, ARKANSAS
AND TANEYCOMO RESERVOIR, MISSOURI
STORET NOS. 0501, 0515, 0504, and 2904

I. CONCLUSIONS

A. Trophic Condition:*

On the basis of Survey data and field observations, Beaver, Table Rock, and Bull Shoals Reservoirs are considered mesotrophic. Mean total phosphorus values ranged from 0.015 mg/l - 0.022 mg/l for the three reservoirs, mean orthophosphorus levels ranged from 0.004 mg/l - 0.007 mg/l and mean total inorganic nitrogen ranged from 0.330 mg/l - 0.380 mg/l. Mean chlorophyll a values were 3.9 µg/l and 4.0 µg/l for Beaver and Bull Shoals Reservoirs, respectively. Mean chlorophyll a for Table Rock Reservoir was 9.1 µg/l, ranging from 1.5 µg/l in June to 30.9 µg/l in October. Survey limnologists reported no problem conditions in any of these three deep reservoirs.

Taneycomo Reservoir is considered eutrophic, i.e., nutrient rich and highly productive. Whether such nutrient enrichment is to be considered beneficial or deleterious is determined by its actual or potential impact upon designated beneficial uses of the lake.

*See Appendix F.

Of the six Missouri lakes sampled in 1974, three had higher total phosphorus levels than Taneycomo Reservoir (0.023 mg/l), two had higher mean inorganic nitrogen levels (0.530 mg/l), and two had higher mean orthophosphorus levels than Taneycomo Reservoir. Chlorophyll a values ranged from 0.3 µg/l in June to 36.8 µg/l in October. Survey limnologists reported floating and submerged aquatic plants heavily distributed along both shores of the reservoir and in the open water between Stations 01 and 02. An algal bloom was observed in October.

B. Rate-Limiting Nutrient:

Algal assay results indicate that all four White River impoundments are limited in primary production by available phosphorus levels. Mean inorganic nitrogen to orthophosphorus (N/P) ratios in the reservoirs were also generally indicative of phosphorus limitation.

C. Nutrient Controllability:

1. Point sources -

Point sources were estimated to be 55.9% of the total phosphorus load to Beaver Reservoir. The city of Fayetteville contributed 53.1% of the total, and the cities of West Fork and Huntsville contributed the remaining 2.8%.

Phosphorus loading ($0.72 \text{ g/m}^2/\text{yr}$) to Beaver Reservoir was slightly greater than the eutrophic loading proposed by Vollenweider (1975) for lakes with such volume and retention time. Elimination of the known point sources to this reservoir would reduce phosphorus loading to below Vollenweider's oligotrophic loading. It would be desirable to reduce these point source contributions to the greatest practicable extent in order to maintain the existing good trophic condition of Beaver Reservoir.

Point sources were estimated to be 82.5% of the total phosphorus load to Table Rock Reservoir. The Springfield Southwest plant contributed 74.6% of this total, and the cities of Berryville and Green Forest contributed 4.0% and 1.8%, respectively. The remaining 2.1% was contributed from five smaller municipal plants.

There are also a number of additional municipal plants which did not participate in the Survey and are not included in the nutrient budget for the lake. These include: Kampgrounds of America (Eureka Springs), Big Bay Public Use Area, Campbell Point Public Use area, Baxter Public Use Area, Highway 13 Public Use Area, Table Rock Powerhouse STP, Couchlight Mobile Home Park, Cove Motel and Lounge, Kimberly City (a complex of 20 small shops and restaurants, and one motel), Mountain Jack Restaurant, and Shellknob Estates Subdivision (U.S. EPA, 1975). Although these plants do impact Table Rock Reservoir to some degree, background tributary loadings (page 36) to the reservoir are very low and reflect no significant water quality problems. It appears that present usage of these plants does not contribute substantially to the nutrient budget of the lake, although future increased usage potentially could affect the trophic condition of the reservoir.

The phosphorus loading $1.49 \text{ g/m}^2/\text{yr}$ to Table Rock Reservoir was almost twice the proposed Vollenweider eutrophic level. Removal of 90% of the phosphorus at these point sources would reduce the loading to $0.38 \text{ g/m}^2/\text{yr}$, which is less than Vollenweider's oligotrophic level. This

reduction should result in further improvement of the water quality in Table Rock Reservoir once a new phosphorus equilibrium becomes established.

Point sources were calculated to be 6.9% of the total phosphorus load to Taneycomo Reservoir. The city of Branson contributed this entire point source load. The Shepherd of the Hills Fish Hatchery discharges to the White River at Table Rock Reservoir Dam; however, nutrient contributions from this source are not known.

The present Taneycomo phosphorus loading of $6.07 \text{ g/m}^2/\text{yr}$ is approximately twice that proposed by Vollenweider. However, Vollenweider's model may not be applicable to lakes with short hydraulic retention times (seven days for Taneycomo Reservoir). Although reduction of loading from the Branson plant would not in itself be expected to result in water quality improvement in the reservoir, phosphorus control of the point sources directly impacting the two upstream White River impoundments would likely improve trophic conditions in Lake Taneycomo.

Point sources directly contributed only 1.4% of the total phosphorus load from Bull Shoals Reservoir. The city of Ava contributed this entire load. Phosphorus

loading from the reservoir is slightly greater than the proposed Vollenweider oligotrophic level, but less than his eutrophic level.

2. Nonpoint sources -

Nonpoint sources were calculated to contribute 44.1% and 17.5% of the total phosphorus loads to Beaver and Table Rock Reservoirs, respectively, and 93.1% and 98.6% of the respective totals to Taneycomo and Bull Shoals Reservoirs. Ungaged drainage areas ranged from 0.4% to 8.8% of all reservoir total phosphorus loads.

The total nonpoint loading values for the White River are misleading, since point source contributions in each reservoir are contained in the White River "non-point" loadings for the reservoirs downstream. Substantial reductions in the point sources impacting all four White River impoundments are needed if future deterioration of existing reservoir trophic states is to be prevented.

The nonpoint phosphorus exports of the tributaries other than the White River impacting these reservoirs were generally low (page 36), ranging from 9-15 kg/km²/yr for Beaver Reservoir, and from 1-4 kg/km²/yr for Table Rock, Taneycomo, and Bull Shoals Reservoirs. These

exports are all comparable to tributary exports from nearby Norfolk Lake (range of 1-6 kg/km²/yr) (NES Working Paper No. 491).

II. LAKE AND DRAINAGE BASIN CHARACTERISTICS

Lake and drainage basin characteristics are itemized below. Lake morphometry was provided by the Arkansas Department of Pollution Control and Ecology and by the Missouri Cleanwater Commission. Tributary flow data were provided by the Arkansas and Missouri District Offices of the U.S. Geological Survey (USGS). Outlet drainage areas include the lakes surface areas. Mean hydraulic retention times were obtained by dividing the lake volumes by mean flows of the outlets. Precipitation values are estimated by methods as outlined in the National Eutrophication Survey (NES) Working Paper No. 175. A table of metric/English conversions is included as Appendix A.

A. Lake Morphometry:

	<u>Beaver</u>	<u>Table Rock</u>	
1. Surface area:	114.20	174.42	km ² .
2. Mean depth:	17.8	19.1	meters.
3. Maximum depth:	62.8	67.1	meters.
4. Volume:	2,037.726	3,332.890	x 10 ⁶ m ³ .
5. Mean hydraulic retention time:	556 (1.5 yr)	330	days.
	<u>Taneycomo</u>	<u>Bull Shoals</u>	
1. Surface area:	12.22	183.89	km ² .
2. Mean depth:	5.8	20.4	meters.
3. Maximum depth:	17.4	62.2	meters.
4. Volume:	70.876	3,759.678	x 10 ⁶ m ³ .
5. Mean hydraulic retention time:	7	259	days.

B. Tributary and Outlet (see Appendix B for flow data):

1. Tributaries

Beaver Reservoir		
<u>Name</u>	<u>Drainage area (km²)</u>	<u>Mean flow (m³/sec)</u>
A-2 White River	1,036.0	14.75
C-1 War Eagle Creek	802.9	10.88
D-1 Whitener Branch	39.9	0.52
E-1 Brush Creek	51.8	0.68
G-1 Richland Creek	318.6	4.27
Minor tributaries and immediate drainage -	<u>723.9</u>	<u>11.35</u>
Total	2,973.1	42.45
2. Outlet - A-1 White River	3,087.3	42.35

C. Precipitation:

1. Year of sampling: 148.1 cm.
2. Mean annual: 147.1 cm.

Table Rock Reservoir		
<u>Name</u>	<u>Drainage area (km²)</u>	<u>Mean flow (m³/sec)</u>
A-2 White River	3,071.7	42.36
B-1 Little Indian Creek	49.2	0.27
C-1 Railey Creek	36.3	0.19
D-1 James River	2,556.3	25.99
E-1 Flat Creek	740.7	5.77
F-1 Rock Creek	77.7	0.45
G-1 Roaring River	155.4	0.99
H-1 Butler Creek	62.2	0.35
J-1 Kings River	1,377.9	15.79
K-1 Long Creek	440.3	3.22
L-1 Yokum Creek	165.8	1.05
Minor tributaries and immediate drainage -	<u>1,503.9</u>	<u>18.37</u>
Total	10,237.4	114.80
Outlet - A-1 White River	10,411.8	116.98

- Year of sampling: 128.9 cm.
Mean annual: 106.1 cm.

B. Tributary and Outlet (see Appendix B for flow data) (continued)

1. Tributaries -

Taneycomo Reservoir		
<u>Name</u>	<u>Drainage area (km²)</u>	<u>Mean flow (m³/sec)</u>
A-2 White River	10,417.0	116.98
B-1 Roark Creek	98.4	0.58
C-1 Bull Creek	523.2	3.88
D-1 Turkey Creek	88.1	0.51
Minor tributaries and immediate drainage -	<u>158.7</u>	<u>1.86</u>
Total	11,285.4	123.81

Bull Shoals Reservoir		
<u>Name</u>	<u>Drainage area (km²)</u>	<u>Mean flow (m³/sec)</u>
D-1 East Sugar Loaf Creek	77.2	0.71
E-1 West Sugar Loaf Creek	68.9	0.64
F-1 Bear Creek	344.5	3.23
G-1 Bee Creek	76.7	0.69
H-1 Lake Taneycomo (White River)	11,297.6	123.52
J-1 Swan Creek	440.3	4.97
L-1 Beaver Creek	924.6	8.25
M-1 Big Creek	113.4	1.07
Q-1 Gully Spring Creek	29.8	0.24
R-1 Barren Fork	111.4	1.05
T-1 Turkey Creek	93.3	0.87
W-1 North Fork White River	161.4	1.60
X-1 Pond Fork	83.7	0.76
Minor tributaries and immediate drainage -	<u>1,665.1</u>	<u>17.44</u>
Total	15,488.4	165.04

2. Outlet - A-1 White River 11,297.6 123.49

Outlet - A-1 White River 15,672.1 168.02

C. Precipitation:

1. Year of sampling: 129.7 cm.
2. Mean annual: 106.8 cm.

Year of sampling: 150.9 cm.
Mean annual: 148.8 cm.

III. LAKE WATER QUALITY SUMMARY

Beaver, Table Rock, Taneycomo, and Bull Shoals Reservoirs were sampled four times during the open-water season of 1974 by means of a pontoon-equipped Huey helicopter. Each time, samples for physical and chemical parameters were collected from the six, nine, two, and eight stations, respectively, on the lakes and from a number of depths at each station (see maps, pages vi-ix). During each visit, depth-integrated samples were collected from each station for chlorophyll a analysis and phtoplankton identification and enumeration. During the first and last visits, 18.9-liter depth-integrated samples were composited for algal assays. Maximum depths sampled were:

<u>Beaver</u>		<u>Table Rock</u>		<u>Taneycomo</u>		<u>Bull Shoals</u>	
<u>Station Number</u>	<u>Depth</u>	<u>Station Number</u>	<u>Depth</u>	<u>Station Number</u>	<u>Depth</u>	<u>Station Number</u>	<u>Depth</u>
01	61.0 m	01	61.0 m	01	12.8 m	01	57.9 m
02	49.1 m	02	33.8 m	02	10.4 m	02	56.7 m
03	36.9 m	03	53.3 m			03	49.1 m
04	29.3 m	04	39.6 m			04	32.6 m
05	19.2 m	05	32.3 m			05	48.8 m
06	14.6 m	06	18.0 m			06	45.7 m
		07	24.4 m			07	29.9 m
		08	43.0 m			08	20.1 m
		09	15.2 m				

For a more detailed explanation of NES methods, see NES Working Paper No. 175.

The results obtained are presented in full in Appendix C and are summarized in III-A for waters at the surface and at the maximum

depth for each site. Results of the phytoplankton counts and chlorophyll a determinations are included in III-B. Results of the limiting nutrient study are presented in III-C.

Temperature profiles reproduced from the graphic records are presented in Appendix D. Depths of physical grab samples are represented by the dots on the profiles. The vertical lines crossing the profiles are to aid in centering the temperature scale for each profile.

Note that in the three layer reservoirs a thermocline was present at the deeper sites on every sampling round. Also, temperatures in Lake Taneycomo generally correspond to temperatures below the epilimnion of Table Rock. Surface temperatures at the uppermost Station (#08) in Bull Shoals are much higher than those in Lake Taneycomo, suggesting the strong influence of Swan and Little Beaver Creeks, and the sluggish nature of flow between Taneycomo Dam and Station 08.

PHYSICAL AND CHEMICAL CHARACTERISTICS

(4/5/74)												(6/18/74)											
S*** = 5												S*** = 5											
MAX DEPTH RANGE (METERS)												MAX DEPTH RANGE (METERS)											
PARAMETER	N*	RANGE	MEDIAN									N*	RANGE	MEDIAN									
TEMPERATURE (DEG CENT)																							
0.-1.5 M DEPTH	12	10.5- 13.1	11.4	0.0- 1.5	12	23.2- 25.1	24.5	0.0- 1.5	8	25.7- 26.3	25.9	0.0- 1.5	8	25.7- 26.3	25.9	0.0- 1.5	8	25.7- 26.3	25.9	0.0- 1.5	8	25.7- 26.3	25.9
MAX DEPTH**	6	7.2- 11.1	7.5	12.2- 61.0	6	8.5- 18.2	10.3	14.6- 52.1	6	9.2- 21.9	12.3	10.7- 51.8	6	9.2- 21.9	12.3	10.7- 51.8	6	9.2- 21.9	12.3	10.7- 51.8	6	9.2- 21.9	12.3
DISSOLVED OXYGEN (MG/L)																							
0.-1.5 M DEPTH	6	9.0- 10.2	10.0	1.5- 1.5	6	3.2- 10.0	9.1	1.5- 1.5	8	5.0- 7.6	5.8	0.0- 1.5	8	5.0- 7.6	5.8	0.0- 1.5	8	5.0- 7.6	5.8	0.0- 1.5	8	5.0- 7.6	5.8
MAX DEPTH**	6	7.2- 9.0	8.5	12.2- 61.0	6	2.6- 5.4	4.0	14.6- 52.1	6	0.1- 0.6	0.3	10.7- 51.8	6	0.1- 0.6	0.3	10.7- 51.8	6	0.1- 0.6	0.3	10.7- 51.8	6	0.1- 0.6	0.3
CONDUCTIVITY (UMHOS)																							
0.-1.5 M DEPTH	12	86.- 95.	91.	0.0- 1.5	12	73.- 123.	119.	0.0- 1.5	8	124.- 151.	128.	0.0- 1.5	8	124.- 151.	128.	0.0- 1.5	8	124.- 151.	128.	0.0- 1.5	8	124.- 151.	128.
MAX DEPTH**	6	71.- 99.	90.	12.2- 61.0	6	72.- 201.	89.	14.6- 52.1	6	83.- 242.	126.	10.7- 51.8	6	83.- 242.	126.	10.7- 51.8	6	83.- 242.	126.	10.7- 51.8	6	83.- 242.	126.
PH (STANDARD UNITS)																							
0.-1.5 M DEPTH	12	7.1- 7.6	7.4	0.0- 1.5	12	7.1- 8.7	8.6	0.0- 1.5	8	7.4- 8.4	7.7	0.0- 1.5	8	7.4- 8.4	7.7	0.0- 1.5	8	7.4- 8.4	7.7	0.0- 1.5	8	7.4- 8.4	7.7
MAX DEPTH**	6	6.7- 7.0	6.9	12.2- 61.0	6	6.6- 7.4	7.1	14.6- 52.1	6	7.1- 7.3	7.1	10.7- 51.8	6	7.1- 7.3	7.1	10.7- 51.8	6	7.1- 7.3	7.1	10.7- 51.8	6	7.1- 7.3	7.1
TOTAL ALKALINITY (MG/L)																							
0.-1.5 M DEPTH	12	33.- 54.	43.	0.0- 1.5	12	18.- 48.	34.	0.0- 1.5	8	56.- 67.	60.	0.0- 1.5	8	56.- 67.	60.	0.0- 1.5	8	56.- 67.	60.	0.0- 1.5	8	56.- 67.	60.
MAX DEPTH**	6	29.- 46.	38.	12.2- 61.0	6	31.- 55.	40.	14.6- 52.1	6	60.- 116.	79.	10.7- 51.8	6	60.- 116.	79.	10.7- 51.8	6	60.- 116.	79.	10.7- 51.8	6	60.- 116.	79.
TOTAL P. (MG/L)																							
0.-1.5 M DEPTH	12	0.009-0.068	0.038	0.0- 1.5	12	0.008-0.097	0.019	0.0- 1.5	8	0.013-0.055	0.027	0.0- 1.5	8	0.013-0.055	0.027	0.0- 1.5	8	0.013-0.055	0.027	0.0- 1.5	8	0.013-0.055	0.027
MAX DEPTH**	6	0.049-0.100	0.062	12.2- 61.0	6	0.018-0.122	0.041	14.6- 52.1	6	0.017-0.211	0.108	10.7- 51.8	6	0.017-0.211	0.108	10.7- 51.8	6	0.017-0.211	0.108	10.7- 51.8	6	0.017-0.211	0.108
DISSOLVED ORTHO P (MG/L)																							
0.-1.5 M DEPTH	12	0.004-0.040	0.014	0.0- 1.5	12	0.002-0.012	0.004	0.0- 1.5	8	0.002-0.006	0.004	0.0- 1.5	8	0.002-0.006	0.004	0.0- 1.5	8	0.002-0.006	0.004	0.0- 1.5	8	0.002-0.006	0.004
MAX DEPTH**	6	0.010-0.029	0.019	12.2- 61.0	6	0.008-0.028	0.013	14.6- 52.1	6	0.005-0.020	0.007	10.7- 51.8	6	0.005-0.020	0.007	10.7- 51.8	6	0.005-0.020	0.007	10.7- 51.8	6	0.005-0.020	0.007
NO2+NO3 (MG/L)																							
0.-1.5 M DEPTH	12	0.210-0.600	0.450	0.0- 1.5	12	0.060-0.210	0.130	0.0- 1.5	8	0.020-0.040	0.035	0.0- 1.5	8	0.020-0.040	0.035	0.0- 1.5	8	0.020-0.040	0.035	0.0- 1.5	8	0.020-0.040	0.035
MAX DEPTH**	6	0.290-0.740	0.495	12.2- 61.0	6	0.360-0.650	0.500	14.6- 52.1	6	0.040-0.460	0.145	10.7- 51.8	6	0.040-0.460	0.145	10.7- 51.8	6	0.040-0.460	0.145	10.7- 51.8	6	0.040-0.460	0.145
AMMONIA (MG/L)																							
0.-1.5 M DEPTH	12	0.030-0.140	0.050	0.0- 1.5	12	0.020-0.070	0.040	0.0- 1.5	8	0.030-0.110	0.035	0.0- 1.5	8	0.030-0.110	0.035	0.0- 1.5	8	0.030-0.110	0.035	0.0- 1.5	8	0.030-0.110	0.035
MAX DEPTH**	6	0.050-0.130	0.060	12.2- 61.0	6	0.020-0.160	0.060	14.6- 52.1	6	0.100-1.390	0.575	10.7- 51.8	6	0.100-1.390	0.575	10.7- 51.8	6	0.100-1.390	0.575	10.7- 51.8	6	0.100-1.390	0.575
KJELDAHL N (MG/L)																							
0.-1.5 M DEPTH	12	0.200-0.700	0.250	0.0- 1.5	12	0.200-1.000	0.350	0.0- 1.5	8	0.300-0.800	0.500	0.0- 1.5	8	0.300-0.800	0.500	0.0- 1.5	8	0.300-0.800	0.500	0.0- 1.5	8	0.300-0.800	0.500
MAX DEPTH**	6	0.200-0.400	0.250	12.2- 61.0	6	0.200-0.400	0.250	14.6- 52.1	6	0.300-1.800	0.900	10.7- 51.8	6	0.300-1.800	0.900	10.7- 51.8	6	0.300-1.800	0.900	10.7- 51.8	6	0.300-1.800	0.900
SECCHI DISC (METERS)																							
	5	0.6- 2.3	0.9		5	0.3- 4.1	2.4		5	1.1- 5.0	2.7		5	1.1- 5.0	2.7		5	1.1- 5.0	2.7		5	1.1- 5.0	2.7

* N = NO. OF SAMPLES

** MAXIMUM DEPTH SAMPLED AT EACH SITE

*** S = NO. OF SITES SAMPLED ON THIS DATE

(10/ 9/74)

S*** = 4

MAX
DEPTH
RANGE
(METERS)

PARAMETER	N*	RANGE	MEDIAN	(METERS)
TEMPERATURE (DEG CENT)				
0.-1.5 M DEPTH	12	17.8- 19.7	19.5	0.0- 1.5
MAX DEPTH**	6	9.5- 18.3	15.6	11.9- 53.3
DISSOLVED OXYGEN (MG/L)				
0.-1.5 M DEPTH	12	5.6- 9.2	7.1	0.0- 1.5
MAX DEPTH**	6	0.2- 6.2	0.4	11.9- 53.3
CONDUCTIVITY (UMHOS)				
0.-1.5 M DEPTH	12	85.- 108.	102.	0.0- 1.5
MAX DEPTH**	6	79.- 160.	100.	11.9- 53.3
PH (STANDARD UNITS)				
0.-1.5 M DEPTH	12	6.8- 7.3	7.1	0.0- 1.5
MAX DEPTH**	6	6.6- 6.9	6.8	11.9- 53.3
TOTAL ALKALINITY (MG/L)				
0.-1.5 M DEPTH	12	43.- 64.	56.	0.0- 1.5
MAX DEPTH**	6	45.- 91.	65.	11.9- 53.3
TOTAL P (MG/L)				
0.-1.5 M DEPTH	12	0.010-0.047	0.018	0.0- 1.5
MAX DEPTH**	6	0.024-0.212	0.082	11.9- 53.3
DISSOLVED ORTHO P (MG/L)				
0.-1.5 M DEPTH	12	0.003-0.009	0.005	0.0- 1.5
MAX DEPTH**	6	0.007-0.009	0.008	11.9- 53.3
NO2+NO3 (MG/L)				
0.-1.5 M DEPTH	12	0.040-0.380	0.110	0.0- 1.5
MAX DEPTH**	6	0.030-0.400	0.185	11.9- 53.3
AMMONIA (MG/L)				
0.-1.5 M DEPTH	12	0.020-0.160	0.055	0.0- 1.5
MAX DEPTH**	6	0.140-1.270	0.255	11.9- 53.3
KJELDAHL N (MG/L)				
0.-1.5 M DEPTH	12	0.200-0.700	0.350	0.0- 1.5
MAX DEPTH**	6	0.400-1.700	0.500	11.9- 53.3
SECCHI DISC (METERS)				
	6	0.9- 5.5	1.7	

* N = NO. OF SAMPLES

** MAXIMUM DEPTH SAMPLED AT EACH SITE

*** S = NO. OF SITES SAMPLED ON THIS DATE

PHYSICAL AND CHEMICAL CHARACTERISTICS

PARAMETER	(4/5/74)				(6/19/74)				(9/4/74)			
	N#	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)	N#	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)	N#	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)
TEMPERATURE (DEG CENT)												
0.-1.5 M DEPTH	18	10.3- 14.0	11.1	0.0- 1.5	18	23.8- 26.6	25.8	0.0- 1.5	22	14.5- 24.6	23.5	0.0- 1.5
MAX DEPTH**	9	6.5- 13.6	7.5	11.9- 61.0	9	9.7- 18.1	12.0	15.2- 53.3	9	11.6- 17.4	14.8	12.8- 51.8
DISSOLVED OXYGEN (MG/L)												
0.-1.5 M DEPTH	9	9.0- 12.0	10.6	1.5- 1.5	9	9.6- 13.4	11.2	1.5- 1.5	22	4.6- 11.6	7.0	0.0- 1.5
MAX DEPTH**	9	8.0- 10.4	8.6	11.9- 61.0	9	0.4- 7.8	2.6	15.2- 53.3	9	0.2- 8.2	0.6	12.8- 51.8
CONDUCTIVITY (UMHOS)												
0.-1.5 M DEPTH	18	100.- 240.	150.	0.0- 1.5	18	182.- 247.	192.	0.0- 1.5	22	171.- 259.	193.	0.0- 1.5
MAX DEPTH**	9	93.- 240.	144.	11.9- 61.0	9	100.- 249.	150.	15.2- 53.3	9	111.- 303.	157.	12.8- 51.8
PH (STANDARD UNITS)												
0.-1.5 M DEPTH	18	7.5- 8.6	8.1	0.0- 1.5	18	8.5- 9.1	8.9	0.0- 1.5	22	7.7- 8.6	8.0	0.0- 1.5
MAX DEPTH**	9	7.2- 8.0	7.6	11.9- 61.0	9	7.3- 7.7	7.5	15.2- 53.3	9	6.9- 7.9	7.5	12.8- 51.8
TOTAL ALKALINITY (MG/L)												
0.-1.5 M DEPTH	18	55.- 130.	92.	0.0- 1.5	17	65.- 104.	93.	0.0- 1.5	22	97.- 140.	104.	0.0- 1.5
MAX DEPTH**	9	51.- 132.	92.	11.9- 61.0	9	41.- 135.	98.	15.2- 53.3	9	79.- 167.	106.	12.8- 51.8
TOTAL P (MG/L)												
0.-1.5 M DEPTH	18	0.012-0.111	0.026	0.0- 1.5	18	0.015-0.086	0.025	0.0- 1.5	22	0.013-0.123	0.019	0.0- 1.5
MAX DEPTH**	9	0.018-0.120	0.034	11.9- 61.0	9	0.010-0.073	0.021	15.2- 53.3	9	0.035-0.240	0.068	12.8- 51.8
DISSOLVED ORTHO P (MG/L)												
0.-1.5 M DEPTH	18	0.002-0.087	0.007	0.0- 1.5	17	0.002-0.019	0.006	0.0- 1.5	22	0.002-0.064	0.005	0.0- 1.5
MAX DEPTH**	9	0.004-0.073	0.012	11.9- 61.0	9	0.003-0.052	0.015	15.2- 53.3	9	0.004-0.152	0.011	12.8- 51.8
NO2+NO3 (MG/L)												
0.-1.5 M DEPTH	18	0.230-1.870	0.430	0.0- 1.5	17	0.030-0.600	0.110	0.0- 1.5	22	0.020-0.600	0.055	0.0- 1.5
MAX DEPTH**	9	0.250-1.870	0.570	11.9- 61.0	9	0.280-1.430	0.570	15.2- 53.3	9	0.020-1.200	0.240	12.8- 51.8
AMMONIA (MG/L)												
0.-1.5 M DEPTH	18	0.020-0.060	0.050	0.0- 1.5	17	0.020-0.050	0.040	0.0- 1.5	22	0.030-0.210	0.040	0.0- 1.5
MAX DEPTH**	9	0.030-0.170	0.060	11.9- 61.0	9	0.020-0.190	0.040	15.2- 53.3	9	0.060-0.750	0.220	12.8- 51.8
KJELDAHL N (MG/L)												
0.-1.5 M DEPTH	18	0.200-0.400	0.200	0.0- 1.5	18	0.300-0.900	0.500	0.0- 1.5	22	0.200-1.200	0.500	0.0- 1.5
MAX DEPTH**	9	0.200-0.300	0.200	11.9- 61.0	9	0.200-0.400	0.200	15.2- 53.3	9	0.300-0.900	0.700	12.8- 51.8
SECCHI DISC (METERS)												
	9	0.9- 2.3	1.8		9	1.1- 3.0	1.9		13	1.0- 4.0	2.7	

* N = NO. OF SAMPLES

** MAXIMUM DEPTH SAMPLED AT EACH SITE

*** S = NO. OF SITES SAMPLED ON THIS DATE

(10/11/74)

S*** = 5 MAX
DEPTH
RANGE
(METERS)

PARAMETER	N*	RANGE	MEDIAN	(METERS)
TEMPERATURE (DEG CENT)				
0.-1.5 M DEPTH	10	19.1- 19.9	19.5	0.0- 1.5
MAX DEPTH**	5	12.0- 15.6	14.3	32.0- 52.1
DISSOLVED OXYGEN (MG/L)				
0.-1.5 M DEPTH	10	6.0- 9.8	7.4	0.0- 1.5
MAX DEPTH**	5	0.0- 0.2	0.0	32.0- 52.1
CONDUCTIVITY (UMHOS)				
0.-1.5 M DEPTH	10	171.- 201.	178.	0.0- 1.5
MAX DEPTH**	5	99.- 229.	161.	32.0- 52.1
PH (STANDARD UNITS)				
0.-1.5 M DEPTH	10	7.7- 8.4	7.8	0.0- 1.5
MAX DEPTH**	5	6.8- 7.2	7.1	32.0- 52.1
TOTAL ALKALINITY (MG/L)				
0.-1.5 M DEPTH	10	93.- 122.	102.	0.0- 1.5
MAX DEPTH**	5	46.- 135.	109.	32.0- 52.1
TOTAL P (MG/L)				
0.-1.5 M DEPTH	10	0.011-0.024	0.016	0.0- 1.5
MAX DEPTH**	5	0.019-0.360	0.191	32.0- 52.1
DISSOLVED ORTHO P (MG/L)				
0.-1.5 M DEPTH	10	0.004-0.011	0.007	0.0- 1.5
MAX DEPTH**	5	0.005-0.037	0.011	32.0- 52.1
NO2+NO3 (MG/L)				
0.-1.5 M DEPTH	10	0.020-0.090	0.030	0.0- 1.5
MAX DEPTH**	5	0.020-0.290	0.090	32.0- 52.1
AMMONIA (MG/L)				
0.-1.5 M DEPTH	10	0.020-0.070	0.040	0.0- 1.5
MAX DEPTH**	5	0.060-1.020	1.000	32.0- 52.1
KJELDAHL N (MG/L)				
0.-1.5 M DEPTH	10	0.200-1.000	0.350	0.0- 1.5
MAX DEPTH**	5	0.200-1.800	1.200	32.0- 52.1
SECCHI DISC (METERS)				
	5	1.3- 3.7	3.6	

* N = NO. OF SAMPLES

** MAXIMUM DEPTH SAMPLED AT EACH SITE

*** S = NO. OF SITES SAMPLED ON THIS DATE

PHYSICAL AND CHEMICAL CHARACTERISTICS

(4/10/74)					(6/19/74)					(8/30/74)				
PARAMETER	N#	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)	N#	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)	N#	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)		
TEMPERATURE (DEG CENT)														
0.-1.5 M DEPTH	4	8.7- 9.4	9.0	0.0- 1.5	4	13.9- 15.3	14.3	0.0- 1.5	2	14.8- 17.0	15.9	0.0- 0.0		
MAX DEPTH**	2	8.7- 9.3	9.0	9.1- 12.2	2	13.9- 14.1	14.0	10.4- 12.8	2	14.7- 15.9	15.3	8.8- 12.2		
DISSOLVED OXYGEN (MG/L)														
0.-1.5 M DEPTH	2	10.0- 10.6	10.3	1.5- 1.5	2	7.2- 7.6	7.4	1.5- 1.5	2	3.8- 5.4	4.6	0.0- 0.0		
MAX DEPTH**	2	10.4- 10.4	10.4	9.1- 12.2	2	6.8- 7.2	7.0	10.4- 12.8	2	5.0- 5.6	5.3	8.8- 12.2		
CONDUCTIVITY (UMHOS)														
0.-1.5 M DEPTH	4	149.- 155.	152.	0.0- 1.5	4	157.- 173.	162.	0.0- 1.5	2	139.- 139.	139.	0.0- 0.0		
MAX DEPTH**	2	149.- 155.	152.	9.1- 12.2	2	161.- 167.	164.	10.4- 12.8	2	133.- 139.	136.	8.8- 12.2		
PH (STANDARD UNITS)														
0.-1.5 M DEPTH	4	7.9- 8.1	8.0	0.0- 1.5	4	7.9- 8.0	7.9	0.0- 1.5	2	7.5- 7.5	7.5	0.0- 0.0		
MAX DEPTH**	2	8.0- 8.0	8.0	9.1- 12.2	2	7.9- 8.0	7.9	10.4- 12.8	2	7.4- 7.5	7.4	8.8- 12.2		
TOTAL ALKALINITY (MG/L)														
0.-1.5 M DEPTH	4	93.- 98.	95.	0.0- 1.5	4	99.- 101.	100.	0.0- 1.5	2	90.- 100.	95.	0.0- 0.0		
MAX DEPTH**	2	95.- 95.	95.	9.1- 12.2	2	96.- 103.	100.	10.4- 12.8	2	94.- 99.	97.	8.8- 12.2		
TOTAL P (MG/L)														
0.-1.5 M DEPTH	4	0.017-0.024	0.018	0.0- 1.5	4	0.017-0.021	0.020	0.0- 1.5	2	0.034-0.068	0.051	0.0- 0.0		
MAX DEPTH**	2	0.019-0.022	0.020	9.1- 12.2	2	0.019-0.023	0.021	10.4- 12.8	2	0.031-0.042	0.036	8.8- 12.2		
DISSOLVED ORTHO P (MG/L)														
0.-1.5 M DEPTH	4	0.003-0.008	0.004	0.0- 1.5	4	0.004-0.013	0.007	0.0- 1.5	2	0.018-0.018	0.018	0.0- 0.0		
MAX DEPTH**	2	0.005-0.005	0.005	9.1- 12.2	2	0.004-0.006	0.005	10.4- 12.8	2	0.013-0.022	0.017	8.8- 12.2		
NO2+NO3 (MG/L)														
0.-1.5 M DEPTH	4	0.500-0.520	0.510	0.0- 1.5	4	0.590-0.670	0.605	0.0- 1.5	2	0.410-0.510	0.460	0.0- 0.0		
MAX DEPTH**	2	0.510-0.510	0.510	9.1- 12.2	2	0.600-0.600	0.600	10.4- 12.8	2	0.460-0.500	0.480	8.8- 12.2		
AMMONIA (MG/L)														
0.-1.5 M DEPTH	4	0.020-0.030	0.025	0.0- 1.5	4	0.050-0.060	0.055	0.0- 1.5	2	0.030-0.150	0.090	0.0- 0.0		
MAX DEPTH**	2	0.020-0.020	0.020	9.1- 12.2	2	0.040-0.050	0.045	10.4- 12.8	2	0.020-0.050	0.035	8.8- 12.2		
KJELDAHL N (MG/L)														
0.-1.5 M DEPTH	4	0.200-0.600	0.200	0.0- 1.5	4	0.200-0.400	0.250	0.0- 1.5	2	0.300-0.400	0.350	0.0- 0.0		
MAX DEPTH**	2	0.200-0.200	0.200	9.1- 12.2	2	0.200-0.200	0.200	10.4- 12.8	2	0.200-0.200	0.200	8.8- 12.2		
SECCHI DISC (METERS)														
	2	2.3- 2.7	2.5		2	1.8- 2.4	2.1		2	1.6- 2.1	1.9			

* N = NO. OF SAMPLES

** MAXIMUM DEPTH SAMPLED AT EACH SITE

*** S = NO. OF SITES SAMPLED ON THIS DATE

PHYSICAL AND CHEMICAL CHARACTERISTICS

(10/ 4/74)				
S = 2				
PARAMETER	N*	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)
TEMPERATURE (DEG CENT)				
0.-1.5 M DEPTH	4	15.8- 16.0	15.9	0.0- 1.5
MAX DEPTH**	2	15.3- 15.3	15.3	9.4- 12.2
DISSOLVED OXYGEN (MG/L)				
0.-1.5 M DEPTH	4	6.2- 7.2	6.4	0.0- 1.5
MAX DEPTH**	2	5.2- 5.8	5.5	9.4- 12.2
CONDUCTIVITY (UMHOS)				
0.-1.5 M DEPTH	4	153.- 159.	157.	0.0- 1.5
MAX DEPTH**	2	151.- 153.	152.	9.4- 12.2
PH (STANDARD UNITS)				
0.-1.5 M DEPTH	4	7.2- 7.3	7.2	0.0- 1.5
MAX DEPTH**	2	7.1- 7.2	7.1	9.4- 12.2
TOTAL ALKALINITY (MG/L)				
0.-1.5 M DEPTH	4	94.- 103.	97.	0.0- 1.5
MAX DEPTH**	2	93.- 97.	95.	9.4- 12.2
TOTAL P (MG/L)				
0.-1.5 M DEPTH	4	0.019-0.051	0.029	0.0- 1.5
MAX DEPTH**	2	0.034-0.038	0.036	9.4- 12.2
DISSOLVED ORTHO P (MG/L)				
0.-1.5 M DEPTH	4	0.005-0.018	0.008	0.0- 1.5
MAX DEPTH**	2	0.010-0.011	0.010	9.4- 12.2
NO2+NO3 (MG/L)				
0.-1.5 M DEPTH	4	0.310-0.380	0.340	0.0- 1.5
MAX DEPTH**	2	0.310-0.370	0.340	9.4- 12.2
AMMONIA (MG/L)				
0.-1.5 M DEPTH	4	0.020-0.090	0.040	0.0- 1.5
MAX DEPTH**	2	0.040-0.050	0.045	9.4- 12.2
KJELDAHL N (MG/L)				
0.-1.5 M DEPTH	4	0.200-1.200	0.450	0.0- 1.5
MAX DEPTH**	2	0.300-0.400	0.350	9.4- 12.2
SECCHI DISC (METERS)				
	2	1.3- 1.8	1.6	

* N = NO. OF SAMPLES

** MAXIMUM DEPTH SAMPLED AT EACH SITE

*** S = NO. OF SITES SAMPLED ON THIS DATE

PHYSICAL AND CHEMICAL CHARACTERISTICS

(4/ 6/74)					(6/20/74)					(9/ 4/74)				
PARAMETER	N*	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)	N*	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)	N*	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)		
TEMPERATURE (DEG. CENT)														
0.-1.5 M DEPTH	16	9.7- 11.7	11.0	0.0- 1.5	16	24.4- 27.7	26.2	0.0- 1.5	15	19.2- 25.0	24.1	0.0- 1.5		
MAX DEPTH**	8	7.1- 9.6	7.8	16.8- 57.9	8	9.2- 14.7	9.8	16.2- 48.8	8	9.3- 17.0	14.6	17.4- 56.7		
DISSOLVED OXYGEN (MG/L)														
0.-1.5 M DEPTH	8	10.2- 11.6	10.6	1.5- 1.5	16	8.2- 10.8	8.8	0.0- 1.5	15	6.4- 8.4	7.8	0.0- 1.5		
MAX DEPTH**	8	8.6- 11.6	9.4	16.8- 57.9	8	0.2- 9.4	4.3	16.2- 48.8	8	0.0- 4.4	0.4	17.4- 56.7		
CONDUCTIVITY (UMHOS)														
0.-1.5 M DEPTH	13	8.- 55.	23.	0.0- 1.5	16	240.- 270.	251.	0.0- 1.5	15	196.- 275.	223.	0.0- 1.5		
MAX DEPTH**	8	143.- 265.	197.	16.8- 57.9	8	170.- 208.	182.	16.2- 48.8	8	180.- 259.	197.	17.4- 56.7		
PH (STANDARD UNITS)														
0.-1.5 M DEPTH	16	8.1- 8.5	8.2	0.0- 1.5	16	8.4- 8.8	8.6	0.0- 1.5	15	8.1- 8.5	8.3	0.0- 1.5		
MAX DEPTH**	8	7.6- 8.5	7.7	16.8- 57.9	8	7.5- 8.5	7.9	16.2- 48.8	8	7.4- 7.7	7.5	17.4- 56.7		
TOTAL ALKALINITY (MG/L)														
0.-1.5 M DEPTH	16	98.- 127.	120.	0.0- 1.5	16	123.- 136.	128.	0.0- 1.5	15	118.- 160.	127.	0.0- 1.5		
MAX DEPTH**	8	96.- 150.	117.	16.8- 57.9	7	105.- 147.	126.	16.2- 48.8	8	124.- 166.	134.	17.4- 56.7		
TOTAL P (MG/L)														
0.-1.5 M DEPTH	16	0.012-0.025	0.016	0.0- 1.5	16	0.007-0.043	0.010	0.0- 1.5	15	0.013-0.026	0.018	0.0- 1.5		
MAX DEPTH**	8	0.009-0.036	0.016	16.8- 57.9	8	0.009-0.025	0.012	16.2- 48.8	8	0.022-0.104	0.039	17.4- 56.7		
DISSOLVED ORTHO P (MG/L)														
0.-1.5 M DEPTH	16	0.004-0.009	0.005	0.0- 1.5	16	0.002-0.015	0.002	0.0- 1.5	15	0.002-0.010	0.004	0.0- 1.5		
MAX DEPTH**	8	0.003-0.009	0.004	16.8- 57.9	7	0.002-0.008	0.006	16.2- 48.8	8	0.002-0.023	0.009	17.4- 56.7		
NO2+NO3 (MG/L)														
0.-1.5 M DEPTH	16	0.280-0.650	0.335	0.0- 1.5	16	0.060-0.230	0.165	0.0- 1.5	15	0.020-0.090	0.050	0.0- 1.5		
MAX DEPTH**	8	0.350-0.430	0.390	16.8- 57.9	7	0.420-0.600	0.500	16.2- 48.8	8	0.090-0.570	0.220	17.4- 56.7		
AMMONIA (MG/L)														
0.-1.5 M DEPTH	16	0.030-0.060	0.040	0.0- 1.5	16	0.020-0.140	0.040	0.0- 1.5	15	0.020-0.060	0.040	0.0- 1.5		
MAX DEPTH**	8	0.020-0.060	0.040	16.8- 57.9	7	0.020-0.080	0.040	16.2- 48.8	8	0.030-0.560	0.245	17.4- 56.7		
KJELDAHL N (MG/L)														
0.-1.5 M DEPTH	16	0.200-0.600	0.300	0.0- 1.5	16	0.200-1.600	0.400	0.0- 1.5	15	0.200-0.800	0.300	0.0- 1.5		
MAX DEPTH**	8	0.200-0.300	0.200	16.8- 57.9	8	0.200-0.300	0.200	16.2- 48.8	8	0.200-0.900	0.450	17.4- 56.7		
SECCHI DISC (METERS)														
	8	1.5- 3.9	3.6		8	3.3- 7.5	6.6		11	2.1- 4.0	3.4			

* N = NO. OF SAMPLES

** MAXIMUM DEPTH SAMPLED AT EACH SITE

*** S = NO. OF SITES SAMPLED ON THIS DATE

(10/15/74)				
*** = 5				
PARAMETER	N*	RANGE	MEDIAN	MAX DEPTH RANGE (METERS)
TEMPERATURE (DEG CENT)				
0.-1.5 M DEPTH	10	19.3- 19.7	19.5	0.0- 1.5
MAX DEPTH**	5	10.4- 16.6	12.3	27.1- 53.6
DISSOLVED OXYGEN (MG/L)				
0.-1.5 M DEPTH	10	6.4- 8.0	7.5	0.0- 1.5
MAX DEPTH**	5	0.6- 0.8	0.8	27.1- 53.6
CONDUCTIVITY (UMHOS)				
0.-1.5 M DEPTH	10	213.- 253.	219.	0.0- 1.5
MAX DEPTH**	5	191.- 233.	195.	27.1- 53.6
PH (STANDARD UNITS)				
0.-1.5 M DEPTH	10	8.0- 8.1	8.0	0.0- 1.5
MAX DEPTH**	5	7.1- 7.3	7.2	27.1- 53.6
TOTAL ALKALINITY (MG/L)				
0.-1.5 M DEPTH	10	122.- 147.	133.	0.0- 1.5
MAX DEPTH**	5	129.- 163.	145.	27.1- 53.6
TOTAL P (MG/L)				
0.-1.5 M DEPTH	10	0.009-0.027	0.014	0.0- 1.5
MAX DEPTH**	5	0.043-0.151	0.098	27.1- 53.6
DISSOLVED ORTHO P (MG/L)				
0.-1.5 M DEPTH	10	0.002-0.008	0.004	0.0- 1.5
MAX DEPTH**	5	0.003-0.042	0.013	27.1- 53.6
NO2+NO3 (MG/L)				
0.-1.5 M DEPTH	10	0.020-0.080	0.060	0.0- 1.5
MAX DEPTH**	5	0.020-0.080	0.020	27.1- 53.6
AMMONIA (MG/L)				
0.-1.5 M DEPTH	10	0.020-0.060	0.040	0.0- 1.5
MAX DEPTH**	5	0.410-0.870	0.570	27.1- 53.6
KJELDAHL N (MG/L)				
0.-1.5 M DEPTH	10	0.200-0.800	0.300	0.0- 1.5
MAX DEPTH**	5	0.600-1.000	0.700	27.1- 53.6
SECCHI DISC (METERS)	5	3.0- 4.0	3.8	

* N = NO. OF SAMPLES

** MAXIMUM DEPTH SAMPLED AT EACH SITE

*** S = NO. OF SITES SAMPLED ON THIS DATE

5. Biological Characteristics:

1. Phytoplankton -

Beaver		
Sampling Date	Dominant Genera	Algal Units per ml
04/05/74	1. <u>Cryptomonas</u>	475
	2. <u>Melosira</u>	412
	3. <u>Chroomonas</u>	380
	4. <u>Stephanodiscus</u>	190
	5. <u>Dactylococcopsis</u>	95
	Other genera	128
	Total	1,680
06/18/74	Missing	
08/30/74	1. <u>Lyngbya</u>	549
	2. <u>Synedra</u>	549
	3. <u>Chroomonas</u>	335
	4. <u>Nitzschia</u>	335
	5. <u>Melosira</u>	244
	Other genera	913
	Total	2,925
10/09/74	1. Centric diatom	172
	2. <u>Melosira</u>	172
	3. <u>Skeletonema</u>	103
	4. <u>Cryptomonas</u>	69
	5. <u>Tetraedron</u>	69
	Other genera	137
	Total	722

Table Rock		
Sampling Date	Dominant Genera	Algal Units per ml
04/05/74	1. <u>Melosira</u>	992
	2. <u>Fragilaria</u>	771
	3. <u>Stephanodiscus</u>	661
	4. Centric diatom	257
	5. <u>Chroomonas</u>	220
	Other genera	405
	Total	3,306
06/19/74	1. <u>Chroomonas</u>	264
	2. <u>Mougeotia</u>	231
	3. <u>Tetraedron</u>	231
	4. <u>Cryptomonas</u>	198
	5. <u>Ankistrodesmus</u>	132
	Other genera	530
	Total	1,586
09/04/74	1. <u>Achnanthes</u>	17,906
	2. <u>Raphidiopsis</u>	1,601
	3. Centric diatom	679
	4. Pennate diatom	582
	5. <u>Chroomonas</u>	388
	Other genera	1,165
	Total	22,321
10/11/74	1. <u>Achnanthes</u>	13,893
	2. <u>Dactylococcopsis</u>	1,393
	3. <u>Tetraedron</u>	503
	4. <u>Cryptomonas</u>	232
	5. <u>Chroomonas</u>	193
	Other genera	427
	Total	16,641

B. Biological Characteristics (continued):

1. Phytoplankton -

Taneycono			Bull Shoals		
Sampling Date	Dominant Genera	Algal Units per ml	Sampling Date	Dominant Genera	Algal Units per ml
04/10/74	1. <u>Stephanodiscus</u>	625	04/06/74	1. <u>Melosira</u>	680
	2. <u>Melosira</u>	459		2. <u>Chroomonas</u>	375
	3. <u>Cryptomonas</u>	125		3. <u>Stephanodiscus</u>	357
	4. <u>Synedra</u>	125		4. <u>Cryptomonas</u>	285
	5. <u>Diatoma</u>	42		5. <u>Synedra</u>	210
	Other genera	83		Other genera	285
	Total	1,459		Total	2,192
06/19/74	1. <u>Chroomonas</u>	127	06/20/74	1. <u>Fragilaria</u>	927
	2. <u>Cyclotella</u>	85		2. <u>Chroomonas</u>	232
	3. <u>Dinobryon</u>	85		3. <u>Cryptomonas</u>	165
	4. <u>Nitzschia</u>	85		4. <u>Aphanizomenon</u>	132
	5. <u>Tetraedron</u>	85		5. <u>Aphanothece</u>	66
	Other genera	170		Other genera	166
	Total	637		Total	1,688
08/30/74	1. <u>Dinobryon</u>	179	09/04/74	1. <u>Chroomonas</u>	181
	2. <u>Kirchneriella</u>	179		2. <u>Mougeotia</u>	109
	3. <u>Melosira</u>	135		3. <u>Cryptomonas</u>	72
	4. <u>Achnanthes</u>	134		4. <u>Anabaena</u>	36
	5. <u>Cryptomonas</u>	90		5. <u>Aphanizomenon</u>	36
	Other genera	178		Other genera	36
	Total	895		Total	470
10/04/74	1. <u>Achnanthes</u>	2,486	10/15/74	1. <u>Chroomonas</u>	252
	2. <u>Cryptomonas</u>	163		2. <u>Melosira</u>	189
	3. <u>Chroomonas</u>	122		3. <u>Cryptomonas</u>	126
	4. <u>Melosira</u>	82		4. <u>Fragilaria</u>	126
	5. <u>Cosmarium</u>	41		5. <u>Tetraedron</u>	94
	Other genera	82		Other genera	125
	Total	2,976		Total	912

2. Chlorophyll a -

Beaver Reservoir		
Sampling Date	Station Number	Chlorophyll <u>a</u> ($\mu\text{g/l}$)
04/05/74	01	1.7
	02	3.4
	03	6.5
	04	6.0
	05	7.6
	06	2.9
06/18/74	01	3.3
	02	1.6
	03	1.0
	04	2.2
	05	1.6
	06	2.3
08/30/74	01	2.4
	02	2.8
	03	3.0
	04	3.9
	05	6.2
	06	12.4
10/09/74	01	3.5
	02	2.7
	03	3.9
	04	2.8
	05	6.6
	06	3.8

Table Rock Reservoir		
Sampling Date	Station Number	Chlorophyll <u>a</u> ($\mu\text{g/l}$)
04/05/74	01	12.4
	02	6.8
	03	7.0
	04	2.8
	05	2.9
	06	4.6
	07	28.9
	08	8.1
	09	6.3
06/19/74	01	5.7
	02	4.1
	03	7.0
	04	3.2
	05	1.5
	06	2.4
	07	7.6
	08	9.3
	09	16.4
09/04/74	01	8.7
	02	11.4
	03	9.5
	04	6.6
	05	6.0
	06	15.2
	07	3.6
	08	9.0
	09	13.4
10/11/74	01	22.6
	02	30.9
	03	2.4
	04	5.2
	05	5.8
	06	3.2
	07	7.7
	08	2.7
	09	26.8

2. Chlorophyll a (continued):

Taneycomo Reservoir		
Sampling Date	Station Number	Chlorophyll <u>a</u> ($\mu\text{g/l}$)
04/10/74	01	8.2
	02	8.8
06/19/74	01	0.6
	02	0.3
08/30/74	01	1.4
	02	0.7
10/04/74	01	21.8
	02	36.8

Bull Shoals Reservoir		
Sampling Date	Station Number	Chlorophyll <u>a</u> ($\mu\text{g/l}$)
04/06/74	01	2.4
	02	1.8
	03	1.8
	04	1.7
	05	5.0
	06	10.6
	07	12.7
	08	7.5
06/20/74	01	1.1
	02	2.8
	03	1.5
	04	2.1
	05	1.0
	06	2.2
	07	5.6
	08	10.0
09/04/74	01	3.4
	02	3.4
	03	2.9
	04	3.2
	05	3.5
	06	4.7
	07	3.4
	08	5.4
10/15/74	01	2.4
	02	3.1
	03	3.2
	04	3.3
	05	3.4
	06	4.0
	07	3.6
	08	5.1

C. Limiting Nutrient Study:

1. Autoclaved, filtered, and nutrient spiked -

<u>Beaver Reservoir</u>			
<u>Spike(mg/l)</u>	<u>Ortho P Conc.(mg/l)</u>	<u>Inorganic N Conc.(mg/l)</u>	<u>Maximum Yield (mg/l-dry wt.)</u>
04/05/74 - Stations 01-03			
Control	0.005	0.400	3.6
0.05 P	0.055	0.400	12.8
0.05 P + 1.0 N	0.055	1.400	23.5
1.00 N	0.005	1.400	3.1
04/05/74 - Stations 04-06			
Control	0.020	0.539	0.1
0.05 P	0.070	0.539	10.3
0.05 P + 1.0 N	0.070	1.539	22.3
1.00 N	0.020	1.539	0.1
04/05/74 - Stations 07-09			
Control			
0.05 P			
0.05 P + 1.0 N			
1.00 N			

<u>Table Rock Reservoir</u>		
<u>Ortho P Conc.(mg/l)</u>	<u>Inorganic N Conc.(mg/l)</u>	<u>Maximum Yield (mg/l-dry wt.)</u>
04/05/74 - Stations 01-03		
0.015	0.579	5.4
0.065	0.579	14.1
0.065	1.579	21.2
0.015	1.579	5.0
04/05/74 - Stations 04-06		
0.005	0.269	0.1
0.055	0.269	8.3
0.055	1.269	17.4
0.005	1.269	0.1
04/05/74 - Stations 07-09		
0.020	0.925	4.7
0.070	0.925	8.2
0.070	1.925	21.7
0.020	1.925	5.2

C. Limiting Nutrient Study (continued):

1. Autoclaved, filtered, and nutrient spiked -

Taneycomo Reservoir				Bull Shoals Reservoir		
<u>Spike(mg/l)</u>	<u>Ortho P Conc.(mg/l)</u>	<u>Inorganic N Conc.(mg/l)</u>	<u>Maximum Yield (mg/l-dry wt.)</u>	<u>Ortho P Conc.(mg/l)</u>	<u>Inorganic N Conc.(mg/l)</u>	<u>Maximum Yield (mg/l-dry wt.)</u>
04/10/74				04/06/74 - Stations 01-03		
Control	0.005	0.500	0.1	0.005	0.316	0.1
0.05 P	0.055	0.500	12.0	0.055	0.316	8.1
0.05 P + 1.0 N	0.055	1.500	11.1	0.055	1.316	18.5
1.00 N	0.005	1.500	0.1	0.005	1.316	0.1
10/04/74				04/06/74 - Stations 04-06		
Control	0.010	0.410	1.0	<0.005	0.330	0.1
0.05 P	0.060	0.410	10.6	<0.055	0.330	8.0
0.05 P + 1.0 N	0.060	1.410	15.8	<0.055	1.330	16.4
1.00 N	0.010	1.410	0.9	<0.005	1.330	0.1
				04/06/74 - Stations 07-09		
Control				<0.005	0.430	0.1
0.05 P				<0.055	0.430	10.4
0.05 P + 1.0 N				<0.055	1.430	17.6
1.00 N				<0.005	1.430	0.1

2. Discussion -

The control yields of the assay alga, Selenastrum capricornutum, indicate that the potential for primary production was high in Beaver Reservoir around Lake Stations 01 to 03, and low for Stations 04 to 06 in the spring. In Table Rock Reservoir, the potential for primary production as measured by algal assay control yield was high for Stations 01 to 03, which are impacted by one STP, and for Stations 07 to 09, which are influenced by the heavily loaded James and Kings Rivers. Potential production for Stations 04 to 06 was low in the spring. Neither of the above two reservoirs have autumn assay data available.

Potentials for primary production in the spring were low for both Taneycomo and Bull Shoals Reservoirs. Assay yields were moderately high in Taneycomo in the autumn, but fall assays were not available for Bull Shoals.

In all four reservoirs, phosphorus limitation was indicated by the increases in assay yields with the addition of phosphorus. Maximum growth yield generally accompanied the simultaneous addition of both phosphorus and nitrogen.

Mean N/P ratios in Beaver, Taneycomo, and Bull Shoals Reservoirs were all greater than 29/1 in the lake data, indicating primary limitation by phosphorus. N/P ratios for

Table Rock Reservoir were greater than 16/1 on all sampling occasions, also indicating phosphorus limitation (an N/P ratio of 14/1 or greater generally reflects phosphorus limitation).

IV. NUTRIENT LOADINGS (See Appendix E for data)

For the determination of nutrient loadings, the Arkansas and Missouri National Guard collected monthly near-surface grab samples from each of the tributary sites indicated on the maps (pages vi - ix) except for the high runoff months of March and April when two samples were collected. Sampling was begun in June 1974, and was completed in May 1975.

Through an interagency agreement, stream flow estimates for the year of sampling and a "normalized" or average year were provided by the Arkansas and Missouri District Offices of the USGS for the tributary sites nearest the lake.

In this report, nutrient loads for sampled tributaries except for the White River (Beaver), and the James River and Long Creek (Table Rock Reservoir) were determined by using a modification of a USGS computer program for calculating stream loadings. Nutrient loads indicated for tributaries are those measured minus known point source loads, if any.

Nutrient loadings for Beaver Reservoir for unsampled "minor tributaries and immediate drainage" ("ZZ" of USGS) and the White River (A-2) were estimated by using the mean annual nutrient loads, in $\text{kg}/\text{km}^2/\text{yr}$, at Stations E-1 and G-1 and multiplying the means by the ZZ area in km^2 .

Loadings for the James River, Long Creek, and minor tributaries to Table Rock Reservoir were estimated by using the mean

annual nutrient loads, in $\text{kg}/\text{km}^2/\text{yr}$, at Stations B-1, C-1, F-1, G-1, H-1, and L-1, and multiplying the means by the ZZ area in km^2 .

ZZ loadings for Taneycomo Reservoir were estimated by using the mean annual nutrient loads, at Stations B-1, C-1, and D-1, and multiplying the means by the ZZ area. Inlet loadings for Taneycomo Reservoir (White River, A-2) equal the outlet loadings for Table Rock Reservoir.

Nutrient loadings for Bull Shoals Reservoir from the ZZ's were estimated by using the mean annual nutrient loads at Stations D-1, E-1, F-1, G-1, J-1, M-1, Q-1, R-1, T-1, W-1, and X-1, and multiplying the means by the ZZ area. Nutrient loadings for the White River, H-1, equal the outlet loads for Taneycomo Reservoir.

The operators of the Fayetteville, Springfield Southwest, Eureka Springs, Green Forest, Berryville, and Branson wastewater treatment plants provided monthly effluent samples and corresponding flow data. The Huntsville sewage treatment plant provided monthly chemistry data, and flow data were estimated in order to calculate annual nutrient loadings. Nutrient loads for the West Fork, Cassville, Billings, Ozark, Republic (Lagoon A), and Ava (2 plants) wastewater treatment plants were estimated at 1.134 kg P and 3.401 kg N/Capita/yr.

A. Waste Sources:

1. Known municipal -

<u>Name</u>	<u>Population Served*</u>	<u>Treatment*</u>	<u>Mean Flow (m³/d x 10³)</u>	<u>Receiving Water*</u>
Beaver Reservoir				
Fayetteville ¹	40,000	Activated sludge	26.413	White River
West Fork	810	Activated sludge	0.307**	West Fork White River
Huntsville	1,287	Trickling filter	0.487**	Holman Creek/ War Eagle Creek
Table Rock Reservoir				
Springfield Southwest ²	100,000	Activated sludge	96.631	Wilson Creek/ James River
Eureka Springs	1,700	Trickling filter	0.897	Leatherwood Cree
Green Forest ¹	1,300	Trickling filter	3.361	Dry Creek/Long C
Berryville ³	2,684	Trickling filter	4.236	Osage Creek/ Kings River
Cassville	1,350	Stabilization pond	0.511**	Flat Creek
Billings	500	Stabilization pond	0.189**	James River
Ozark	1,500	Trickling filter	0.568**	Finley Creek/ James River
Republic Lagoon A	500	Stabilization pond	0.189**	Wilson Creek/ James River
Taneycomo Reservoir				
Branson	20,000	Trickling filter	1.781	Lake Taneycomo
Bull Shoals Reservoir				
Ava (South)	100	Stabilization pond	0.038**	Cowskin Creek/ Beaver Creek
Ava (West)	1,200	Stabilization pond	0.454**	Cowskin Creek/ Beaver Creek

2. Known industrial -

Table Rock Reservoir - See footnotes ¹, ², and ³.

*Plant information provided by the Arkansas Department of Pollution Control and Ecology (1975), treatment plant questionnaires, and/or U.S. EPA (1971).

**Estimated at 0.3785 m³/capita/day.

¹More than 25% of the total waste loads to Fayetteville and Green Forest plants were contributed by poultry processing industrial wastes.

²More than 25% of the total waste load of this plant contributed by industry: fluid milk, cheese and whey processing, and pharmaceuticals.

³More than 25% of the total waste load of this plant contributed by poultry and milk processing.

B. Annual Total Phosphorus Loading - Average Year:

1. Inputs -

Beaver Reservoir		
Source	kg P/yr	% of total
a. Tributaries (nonpoint load) -		
A-2 White River	10,360	12.6
C-1 War Eagle Creek	12,065	14.7
D-1 Whitener Branch	450	0.6
E-1 Brush Creek	465	0.6
G-1 Richland Creek	3,570	4.4
b. Minor tributaries and immediate drainage (nonpoint load) -	7,230	8.8
c. Known municipal STP's -		
Fayetteville	43,545	53.1
West Fork	920	1.1
Huntsville	1,395	1.7
d. Septic tanks* -	10	<0.1
e. Known industrial - None		
f. Direct precipitation** -	2,000	2.4
Totals	82,010	100.0

Table Rock Reservoir		
Source	kg P/yr	% of total
a. Tributaries (nonpoint load) -		
A-2 White River	19,515	7.5
B-1 Little Indian Creek	80	<0.1
C-1 Railey Creek	70	<0.1
D-1 James River	7,670	3.0
E-1 Flat Creek	2,760	1.1
F-1 Rock Creek	160	0.1
G-1 Roaring River	530	0.2
H-1 Butler Creek	120	0.1
J-1 Kings River	4,885	1.9
K-1 Long Creek	1,320	0.5
L-1 Yokum Creek	620	0.2
b. Minor tributaries and immediate drainage (nonpoint load) -	4,510	1.7
c. Known municipal STP's -		
Springfield Southwest	193,530	74.6
Eureka Springs	1,150	0.4
Green Forest	4,745	1.8
Berryville	10,310	4.0
Cassville	1,530	0.6
Billings	565	0.2
Ozark	1,700	0.7
Republic	565	0.2
d. Septic tanks* -	35	<0.1
e. Known industrial - See p. 29, foot- notes 1, 2, & 3.		
f. Direct precipitation** -	3,050	1.2
Totals	259,420	100.0

2. Output - A-1 White River 18,580

Output - A-1 White River 66,555

3. Net annual P accumulation - 63,430

Net annual P accumulation - 192,865

*Estimate for Beaver Reservoir based on 11 parks.

Estimate for Table Rock Reservoir based on 94 lakeside residences, 2 parks, and 2 resorts.

**Estimated (see NES Working Paper No. 175).

B. Annual Total Phosphorus Loading - Average Year (continued):

1. Inputs -

Taneycomo Reservoir			Bull Shoals Reservoir		
Source	kg P/yr	% of total	Source	kg P/yr	% of total
a. Tributaries (nonpoint load) -			a. Tributaries (nonpoint load) -		
A-2 White River	66,555	89.8	D-1 East Sugar Loaf Creek	225	0.2
B-1 Roark Creek	185	0.2	E-1 West Sugar Loaf Creek	200	0.2
C-1 Bull Creek	1,550	2.1	F-1 Bear Creek	1,175	1.1
D-1 Turkey Creek	190	0.3	G-1 Bee Creek	215	0.2
			H-1 Lake Taneycomo (White River)	87,280	84.6
			J-1 Swan Creek	1,225	1.2
			L-1 Beaver Creek	1,205	1.2
			M-1 Big Creek	435	0.4
			Q-1 Gully Spring Creek	85	0.1
			R-1 Barren Fork	355	0.3
			T-1 Turkey Creek	330	0.3
			W-1 North Fork White River	465	0.5
			X-1 Pond Fork	260	0.3
b. Minor tributaries and immediate drainage (nonpoint load) -	315	0.4	b. Minor tributaries and immediate drainage (nonpoint load) -	4,995	4.8
c. Known municipal STP's -			c. Known municipal STP's -		
Branson	5,125	6.9	Ava (South)	115	0.1
			Ava (West)	1,360	1.3
d. Septic tanks* -	10	<0.1	d. Septic tanks* -	35	<0.1
e. Known industrial - None			e. Known industrial - None		
f. Direct precipitation** -	215	0.3	f. Direct precipitation** -	3,220	3.1
Totals	74,145	100.0	Totals	103,180	100.0
2. Output - A-1 White River	87,280		Output - A-1 White River	64,915	
3. Net annual P export*** -	13,135		Net annual P accumulation -	38,265	

*Estimate for Taneycomo Reservoir based on 39 lakeside residences.

Estimate for Bull Shoals Reservoir based on 115 lakeside residences.

**Estimated (see NES Working Paper No. 175).

***Export probably due to unknown sources and/or sampling error.

C. Annual Total Nitrogen Loading - Average Year:

1. Inputs

Beaver Reservoir			Table Rock Reservoir		
Source	kg N/yr	% of total	Source	kg N/yr	% of total
a. Tributaries (nonpoint load) -			a. Tributaries (nonpoint load) -		
A-2 White River	443,410	27.6	A-2 White River	1,408,170	28.9
C-1 War Eagle Creek	390,825	24.3	B-1 Little Indian Creek	13,240	0.3
D-1 Whitener Branch	41,565	2.6	C-1 Railey Creek	12,385	0.3
E-1 Brush Creek	25,930	1.6	D-1 James River	787,340	16.2
G-1 Richland Creek	113,485	7.0	E-1 Flat Creek	492,035	10.1
			F-1 Rock Creek	13,650	0.3
			G-1 Roaring River	61,085	1.3
			H-1 Butler Creek	10,135	0.2
			J-1 Kings River	692,075	14.2
			K-1 Long Creek	135,610	2.8
			L-1 Yokum Creek	83,625	1.7
b. Minor tributaries and immediate drainage (nonpoint load) -	309,830	19.3	b. Minor tributaries and immediate drainage (nonpoint load) -	463,200	9.5
c. Known municipal STP's -			c. Known municipal STP's -		
Fayetteville	154,805	9.6	Springfield Southwest	445,800	9.2
West Fork	2,755	0.2	Eureka Springs	3,550	0.1
Huntsville	2,225	0.1	Green Forest	20,060	0.4
			Berryville	21,620	0.4
			Cassville	4,590	0.1
			Billings	1,700	<0.1
			Ozark	5,100	0.1
			Republic	1,700	<0.1
d. Septic tanks* -	385	<0.1	d. Septic tanks* -	1,285	<0.1
e. Known industrial - None			e. Known industrial - See p. 29, foot- notes 1, 2, & 3.		
f. Direct precipitation** -	123,290	7.7	f. Direct precipitation** -	188,305	3.9
Totals	1,608,505	100.0	Totals	4,866,260	100.0
2. Output - A-1 White River	1,110,180		Output - A-1 White River	6,008,260	
3. Net annual N accumulation -	498,325		Net annual N export*** -	1,142,000	

*Estimate for Beaver Reservoir based on 11 parks.

Estimate for Table Rock Reservoir based on 94 lakeside residences, 2 parks, and 2 resorts.

**Estimated (see NES Working Paper No. 175).

***Export probably due to unknown sources and/or sampling error.

C. Annual Total Nitrogen Loading - Average Year (continued):

1. Inputs -

Taneycomo Reservoir			Bull Shoals Reservoir		
Source	kg N/yr	% of total	Source	kg N/yr	% of total
a. Tributaries (nonpoint load) -			a. Tributaries (nonpoint load) -		
A-2 White River	6,008,260	96.2	D-1 East Sugar Loaf Creek	10,285	0.1
B-1 Roark Creek	12,435	0.2	E-1 West Sugar Loaf Creek	12,050	0.2
C-1 Bull Creek	153,475	2.5	F-1 Bear Creek	61,220	0.9
D-1 Turkey Creek	15,330	0.2	G-1 Bee Creek	5,385	0.1
			H-1 Lake Taneycomo (White River)	6,038,630	86.9
			J-1 Swan Creek	83,565	1.2
			L-1 Beaver Creek	148,500	2.1
			M-1 Big Creek	20,375	0.3
			Q-1 Gully Spring Creek	3,655	<0.1
			R-1 Barren Fork	14,830	0.2
			T-1 Turkey Creek	19,010	0.3
			W-1 North Fork White River	34,085	0.5
			X-1 Pond Fork	19,415	0.3
b. Minor tributaries and immediate drainage (nonpoint load) -	31,425	0.5	b. Minor tributaries and immediate drainage (nonpoint load) -	276,405	4.0
c. Known municipal STP's -			c. Known municipal STP's -		
Branson	9,555	0.2	Ava (South)	340	<0.1
			Ava (West)	4,080	0.1
d. Septic tanks* -	415	<0.1	d. Septic tanks* -	1,225	<0.1
e. Known industrial - None			e. Known industrial - None		
f. Direct precipitation** -	13,195	0.2	f. Direct precipitation** -	198,530	2.9
Totals	6,244,090	100.0	Totals	6,951,585	100.0
2. Output - A-1 White River	6,038,630		Output - A-1 White River	3,777,390	
3. Net annual N accumulation -	205,460		Net annual N accumulation -	3,174,195	

*Estimate for Taneycomo Reservoir based on 39 lakeside residences.

Estimate for Bull Shoals Reservoir based on 115 lakeside residences.

**Estimated (see NES Working Paper No. 175).

D. Mean Annual Nonpoint Nutrient Export by Subdrainage Area:

<u>Tributary</u>	<u>kg P/km²/yr</u>	<u>kg N/km²/yr</u>
<u>Beaver Reservoir</u>		
White River	10	428
War Eagle Creek	15	487
Whitener Branch	11	1,042
Brush Creek	9	501
Richland Creek	11	356
<u>Table Rock Reservoir</u>		
White River	6	458
Little Indian Creek	2	269
Railey Creek	2	341
James River	3	308
Flat Creek	4	664
Rock Creek	2	176
Roaring Creek	3	393
Butler Creek	2	163
Kings River	4	502
Long Creek	3	308
Yokum Creek	4	504
<u>Taneycomo Reservoir</u>		
White River	6	577
Roark Creek	2	126
Bull Creek	3	293
Turkey Creek	2	174
<u>Bull Shoals Reservoir</u>		
East Sugar Loaf Creek	3	133
West Sugar Loaf Creek	3	175
Bear Creek	3	178
Bee Creek	3	70
White River	8	534
Swan Creek	3	190
Beaver Creek	1	161
Big Creek	4	180
Gully Spring Creek	3	123
Barren Fork	3	133
Turkey Creek	4	203
North Fork White River	3	211
Pond Fork	3	232

E. Mean Nutrient Concentrations in Ungaged Streams:

<u>Tributary</u>	<u>Mean Total P (mg/l)</u>	<u>Mean Total N (mg/l)</u>
<u>Beaver Reservoir</u>		
B-1 Big Clifty Creek	0.027	0.677
F-1 Dry Creek	0.038	1.243
H-1 Prairie Creek	0.021	2.147
<u>Taneycomo Reservoir</u>		
E-1 Bee Creek	0.017	0.923
<u>Bull Shoals Reservoir</u>		
B-1 Moccasin Creek	0.013	0.377
C-1 Jimmie Creek	0.009	0.385
K-1 Cane Creek	0.016	0.819
N-1 Shoal Creek	0.013	0.524
Y-1 Blue Creek	0.013	0.868
Z-1 Deshields Creek	0.017	0.726

Nutrient levels in the ungaged streams for all three reservoirs are in line with the unimpacted gaged tributaries entering those reservoirs.

F. Yearly Loadings:

In the following table, the existing phosphorus annual loading is compared to the relationship proposed by Vollenweider (1975). Essentially, his eutrophic loading is that at which the receiving waters would become eutrophic or remain eutrophic; his oligotrophic loading is that which would result in the receiving water remaining oligotrophic or becoming oligotrophic if morphometry permitted. A mesotrophic loading would be considered one between eutrophic and oligotrophic.

Note that Vollenweider's model may not apply to lakes with short hydraulic retention times or in which light penetration is severely restricted by high concentrations of suspended solids in the surface waters.

	Total Yearly Phosphorus Loading (g/m ² /yr)	
	<u>Beaver</u>	<u>Table Rock</u>
Estimated loadings for	0.72	1.49
Vollenweider's eutrophic loading	0.67	0.88
Vollenweider's oligotrophic loading	0.33	0.44
	<u>Taneycomo</u>	<u>Bull Shoals</u>
Estimated loadings for	6.07	0.56
Vollenweider's eutrophic loading	3.24	1.04
Vollenweider's oligotrophic loading	1.62	0.52

V. LITERATURE REVIEWED

- Arkansas Department of Pollution Control and Ecology. 1975. "Section 303(e) Basin Plan Grand (Neosha) and Upper White River Basins."
- U.S. Environmental Protection Agency. 1971. The 1968 Inventory of Municipal Waste Facilities. EPA Publication No. OWP-1. U.S. Government Printing Office, Washington, D.C.
- U.S. Environmental Protection Agency. 1975. National Eutrophication Survey Methods 1973-1976. Working Paper No. 175. National Environmental Research Center, Las Vegas, Nevada, and Pacific Northwest Environmental Research Laboratory, Corvallis, Oregon.
- U.S. Environmental Protection Agency. 1975. Report of Field Activities of Recreational Area Sewage Treatment Plants in the Vicinity of Table Rock Reservoir. Region VII, Surveillance and Analysis Division.
- Vollenweider, R. A. 1975. Input-Output Models With Special Reference to the Phosphorus Loading Concept in Limnology. Schweiz. Z. Hydrol. 37:53-84.

VI. APPENDICES

APPENDIX A

CONVERSION FACTORS

CONVERSION FACTORS

Hectares x 2.471 = acres

Kilometers x 0.6214 = miles

Meters x 3.281 = feet

Cubic meters x 8.107×10^{-4} = acre/feet

Square kilometers x 0.3861 = square miles

Cubic meters/sec x 35.315 = cubic feet/sec

Centimeters x 0.3937 = inches

Kilograms x 2.205 = pounds

Kilograms/square kilometer x 5.711 = lbs/square mile

APPENDIX B
TRIBUTARY FLOW DATA

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0501 BEAVER RESERVOIR

TOTAL DRAINAGE AREA OF LAKE (SQ KM) 3087.3

TRIBUTARY	SUR-DRAINAGE AREA (SQ KM)	NORMALIZED FLOWS (CMS)												MEAN
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
0501A1	3087.3	56.35	59.30	47.71	48.87	36.44	36.67	49.27	48.20	33.33	22.03	34.55	36.56	42.35
0501A2	1036.0	12.35	19.79	24.66	31.23	39.08	11.67	6.94	4.70	2.33	4.87	9.51	13.25	14.75
0501C1	802.9	9.09	14.61	18.18	23.02	28.80	8.61	5.13	3.45	1.72	3.60	7.02	7.56	10.88
0501D1	39.9	0.439	0.705	0.875	1.110	1.388	0.413	0.246	0.167	0.082	0.173	0.337	0.362	0.524
0501E1	51.8	0.57	0.92	1.14	1.44	1.81	0.54	0.32	0.22	0.11	0.22	0.44	0.47	0.68
0501G1	318.6	3.57	5.75	7.14	9.06	11.33	3.37	2.01	1.36	0.68	1.41	2.76	2.97	4.27
0501Z2	838.1	9.49	15.23	18.97	24.04	30.07	8.98	5.35	3.62	1.80	3.74	7.31	7.87	11.35

SUMMARY

 TOTAL DRAINAGE AREA OF LAKE = 3087.3
 SUM OF SUB-DRAINAGE AREAS = 3087.3

 TOTAL FLOW IN = 510.54
 TOTAL FLOW OUT = 509.28

MEAN MONTHLY FLOWS AND DAILY FLOWS (CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0501A1	6	74	122.046	22	52.669				
	7	74	76.739	20	95.145				
	8	74	49.838	17	18.010				
	9	74	28.175	21	1.331				
	10	74	8.750	19	1.331				
	11	74	94.861	23	75.889				
	12	74	68.527	21	44.457				
	1	75	53.236	19	1.501				
	2	75	91.747	28	84.951				
	3	75	103.356	13	143.000	27	153.194		
	4	75	68.244	5	91.463	20	1.444		
	5	75	76.739	18	0.566				
	6	74	61.731	22	6.513				
	7	74	0.680	20	0.340				
0501A2	8	74	1.368	17	1.784				
	9	74	38.228	21	131.956				
	10	74	12.544	20	5.862				
	11	74	57.483	24	8.863				
	12	74	14.810	21	8.665				
	1	75	18.066	19	11.582				
	2	75	46.298	28	44.174				
	3	75	51.112	13	63.147	23	31.149		
	4	75	20.643	6	15.433	20	9.345		
	5	75	10.874	11	23.333				

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0501 BEAVER RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS (CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0501C1	6	74	41.343	22	3.313				
	7	74	1.540	20	1.359				
	8	74	2.367	17	5.663				
	9	74	10.789	21	62.297				
	10	74	4.649	19	3.964				
	11	74	38.228	23	4.814				
	12	74	8.863	21	4.531				
	1	75	8.722	19	6.513				
	2	75	31.432	28	32.281				
	3	75	34.547	13	46.156	22	26.618		
	4	75	11.157	4	13.451	19	13.451	20	6.513
	5	75	5.918	11	1.119	19	12.941		
0501D1	6	74	2.061	22	0.003				
	7	74	0.076	20	0.003				
	8	74	0.119	18	0.003				
	9	74	0.535	21	0.0				
	10	74	0.201	20	0.003				
	11	74	1.906	24	0.003				
	12	74	0.439	21	0.003				
	1	75	0.433	19	0.006				
	2	75	1.569	28	0.028				
	3	75	1.719	13	0.057	23	0.934		
	4	75	0.555	6	0.595	19	0.006		
	5	75	0.294	11	0.028				
0501E1	6	74	2.676	22	0.212				
	7	74	0.099	20	0.045				
	8	74	0.153	18	0.368				
	9	74	0.697	21	3.964				
	10	74	0.261	20	0.255				
	11	74	2.475	24	0.311				
	12	74	0.572						
	1	75	0.564	19	0.425				
	2	75	2.036	28	2.067				
	3	75	2.234	13	2.832	23	1.303		
	4	75	0.719	6	0.773	19	0.425		
	5	75	0.382	11	0.074				
0501G1	6	74	16.452	22	2.265				
	7	74	0.612	20	0.453				
	8	74	0.940						
	9	74	4.276	21	15.291				
	10	74	1.608	20	1.529				
	11	74	15.206	24	1.416				
	12	74	3.511	21	1.841				
	1	75	3.455	19	2.549				
	2	75	12.516	28	12.743				
	3	75	13.734	13	18.406	23	7.929		
	4	75	4.417	6	4.757	20	2.407		
	5	75	2.353	11	0.445				

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0501

BEAVER RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS(CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0501ZZ	6	74	43.325	22	3.455				
	7	74	1.608	20	1.416				
	8	74	2.472	17	5.947	18	5.947		
	9	74	11.270	21	65.129				
	10	74	4.248	19	4.248	20	4.248		
	11	74	39.927	23	4.814	24	4.814		
	12	74	9.231	21	4.814				
	1	75	9.118	19	6.796				
	2	75	32.848	28	33.980				
	3	75	36.104	13	48.139	22	28.317	23	21.238
	4	75	11.638	6	12.459	20	6.796		
	5	75	6.201	11	1.169	18	13.507	19	13.507

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0515 TABLE ROCK RESERVOIR

TOTAL DRAINAGE AREA OF LAKE(SQ KM) 10411.8

TRIBUTARY	SUB-DRAINAGE AREA(SQ KM)	JAN	FEB	MAR	APR	MAY	NORMALIZED FLOWS(CMS)			SEP	OCT	NOV	DEC	MEAN
							JUN	JUL	AUG					
0515A1	10411.8	105.34	124.59	125.16	151.21	209.54	140.73	112.98	104.49	83.82	65.98	90.90	89.76	116.98
0515A2	3071.7	56.35	59.18	47.57	48.99	36.53	36.81	49.27	48.14	33.41	22.09	34.55	36.53	42.36
0515B1	49.2	0.159	0.311	0.510	0.453	0.623	0.283	0.311	0.071	0.170	0.150	0.091	0.102	0.269
0515C1	45.9	0.108	0.215	0.368	0.311	0.425	0.201	0.238	0.048	0.127	0.108	0.062	0.071	0.190
0515D1	2556.3	22.82	28.32	36.53	49.84	47.57	37.10	-18.41	13.37	9.63	13.82	16.17	18.80	25.99
0515E1	740.7	4.76	6.74	9.43	10.51	11.47	7.36	4.87	2.12	2.86	3.23	3.17	2.83	5.77
0515F1	77.7	0.28	0.51	0.85	0.79	1.02	0.51	0.51	0.12	0.27	0.25	0.17	0.18	0.45
0515G1	155.4	0.68	1.13	1.76	1.73	2.15	1.13	1.02	0.28	0.57	0.54	0.42	0.42	0.99
0515H1	62.2	0.210	0.396	0.651	0.595	0.793	0.396	0.396	0.091	0.215	0.193	0.122	0.136	0.349
0515J1	1377.9	13.82	21.78	26.08	33.41	40.49	14.61	7.25	4.16	3.09	4.64	10.17	10.45	15.79
0515K1	440.3	2.46	3.77	5.44	5.86	6.63	3.96	2.89	1.10	1.67	1.78	1.59	1.50	3.22
0515L1	165.8	0.71	1.22	1.87	1.87	2.27	1.25	1.08	0.31	0.59	0.59	0.40	0.45	1.05
0515ZZ	1678.3	19.51	23.56	24.98	29.45	28.60	19.71	16.42	13.31	10.00	9.00	12.74	13.62	18.37

SUMMARY

TOTAL DRAINAGE AREA OF LAKE = 10411.8
SUM OF SUB-DRAINAGE AREAS = 10421.4

TOTAL FLOW IN = 1380.22
TOTAL FLOW OUT = 1404.51

MEAN MONTHLY FLOWS AND DAILY FLOWS(CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0515A1	9	74	74.473	14	1.161				
	10	74	13.649	6	1.189				
	11	74	371.234	3	1.274				
	12	74	200.625	8	164.238				
	1	75	176.131	5	85.517				
	2	75	231.915	9	167.919				
	3	75	392.471	2	305.822				
	4	75	270.143	6	421.921	19	81.269		
	5	75	149.796	4	1.161	8	328.475	18	26.363
	6	75	72.774	8	16.990				
	7	75	89.481	1	51.820				
	8	75	121.762	17	180.661				
0515A2	9	74	65.695	14	46.723				
	10	74	22.908	6	6.513				
	11	74	155.459	3	861.682				
	12	74	37.378						
	1	75	40.493	5	37.378				
	2	75	126.859	9	51.537				
	3	75	139.602	2	82.685				
	4	75	48.988	6	45.873	19	26.759		
	5	75	26.759	3	52.952	8	33.980	18	35.962
	6	75	24.154	8	29.166	21	20.162		
	7	75	7.504						
	8	75	10.732	17	30.865				

TRIBUTARY FLOW INFORMATION FOR ARKANSAS.

02/02/77

LAKE CODE 0515

TABLE ROCK RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS(CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0515B1	9	74	0.275	14	0.170				
	10	74	0.099	6	0.142				
	11	74	0.538	3	0.850				
	12	74	0.139	8	0.340				
	1	75	0.280	5	0.566				
	2	75	0.850	9	0.510				
	3	75	1.444	2	1.274				
	4	75	0.368	6	0.510	19	0.283		
	5	75	0.396	4	0.651	8	0.396	18	0.340
	6	75	0.224	8	0.283				
	7	75	0.133	1	0.227				
	8	75	0.025	17	0.113				
0515C1	9	74	0.207	15	0.085				
	10	74	0.071	5	0.057				
	11	74	0.368	2	0.283				
	12	74	0.096	7	0.142				
	1	75	0.190	4	0.425				
	2	75	0.595	8	0.311				
	3	75	1.048	8	0.595				
	4	75	0.249	5	0.311	19	0.142		
	5	75	0.278	3	0.538	17	0.198		
	6	75	0.159	7	0.142				
	7	75	0.102	13	0.085				
	8	75	0.017	9	0.023				
0515D1	9	74	15.631	15	7.929				
	10	74	9.175	5	6.570				
	11	74	94.295	2	46.440				
	12	74	25.513	7	22.965				
	1	75	40.493	4	63.996				
	2	75	76.455	8	43.891				
	3	75	103.923	8	64.562				
	4	75	40.210	5	48.705	19	20.473		
	5	75	31.432	3	61.448	17	15.744		
	6	75	29.450	7	19.935				
	7	75	8.014	13	7.872				
	8	75	4.899	9	3.879				
0515E1	9	74	3.908	15	2.832				
	10	74	2.662	5	1.841				
	11	74	19.822	2	7.929				
	12	74	5.947	7	6.230				
	1	75	9.628	4	9.911				
	2	75	19.822	8	7.646				
	3	75	33.980	8	15.574				
	4	75	14.158	5	14.725	19	8.353		
	5	75	7.929	3	13.592	17	5.663		
	6	75	5.380	7	5.663				
	7	75	2.832	13	2.690				
	8	75	1.189	9	1.274				

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0515

TABLE ROCK RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS (CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0515F1	9	74	0.425	14	0.170				
	10	74	0.167	6	0.113				
	11	74	0.963	3	1.189				
	12	74	0.244	8	0.340				
	1	75	0.481	5	0.680				
	2	75	1.388	9	0.453				
	3	75	2.407	2	2.407				
	4	75	0.623	6	0.708	19	0.311		
	5	75	0.651	4	1.076	18	0.311		
	6	75	0.396	8	0.269				
	7	75	0.227	13	0.212				
	8	75	0.057	17	0.042				
0515G1	9	74	0.906	14	1.274				
	10	74	0.340	6	0.623				
	11	74	2.464	3	7.079				
	12	74	0.566	8	2.690				
	1	75	1.189	5	3.964				
	2	75	3.058	9	3.115				
	3	75	4.984	2	7.362				
	4	75	1.388	6	3.313	19	1.841		
	5	75	1.416	4	3.964	18	1.416		
	6	75	0.906	8	1.642	26	1.557		
	7	75	0.708						
	8	75	0.340	17	0.510				
0515H1	9	74	0.340	14	0.028				
	10	74	0.127	6	0.088				
	11	74	0.708	3	0.850				
	12	74	0.184	8	0.0				
	1	75	0.368	5	0.425				
	2	75	1.076	9	0.283				
	3	75	1.841	2	1.699				
	4	75	0.481	6	0.425	19	0.241		
	5	75	0.510	3	0.991	18	0.283		
	6	75	0.311	8	0.212	26	0.198		
	7	75	0.227						
	8	75	0.034	17	0.0				
0515J1	9	74	11.072	14	12.743				
	10	74	4.842	5	3.341				
	11	74	65.978	3	328.475				
	12	74	15.688	8	45.307				
	1	75	17.330	5	22.908				
	2	75	53.519	9	30.582				
	3	75	60.315	2	38.511				
	4	75	17.415	7	21.153	19	11.497		
	5	75	9.883	4	15.659	18	6.881		
	6	75	4.644	8	2.662				
	7	75	3.115	7	1.048				
	8	75	1.557	17	1.501				

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0515

TABLE ROCK RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS(CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0515K1	9	74	2.690	14	0.850				
	10	74	1.133	6	0.708				
	11	74	9.203	3	14.158				
	12	74	1.982	8	4.248				
	1	75	4.389	5	8.495				
	2	75	10.194	9	4.672				
	3	75	15.574	2	16.990				
	4	75	4.672	7	5.380	19	2.549		
	5	75	4.248	4	7.929	8	5.097	18	2.039
	6	75	2.265						
	7	75	1.274	7	1.274				
	8	75	0.396	17	0.425				
0515L1	9	74	0.991	14	0.708				
	10	74	0.425	6	0.340				
	11	74	2.265	3	4.248				
	12	74	0.566	8	1.416				
	1	75	1.274	5	2.549				
	2	75	3.398	9	2.124				
	3	75	5.239	2	5.663				
	4	75	1.557	7	2.124	19	1.076		
	5	75	1.416	4	2.690	8	1.699	18	1.133
	6	75	0.850						
	7	75	0.566	7	0.623				
	8	75	0.113	17	0.283				
0515Z2	9	74	19.454						
	10	74	7.985						
	11	74	67.111						
	12	74	16.820						
	1	75	22.115						
	2	75	56.634						
	3	75	70.509						
	4	75	24.777						
	5	75	16.141						
	6	75	13.026						
	7	75	4.672						
	8	75	2.747						

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0504 BULL SHOALS RESERVOIR

TOTAL DRAINAGE AREA OF LAKE(SQ KM) 15672.1

TRIBUTARY	SUB-DRAINAGE AREA(SQ KM)	NORMALIZED FLOWS(CMS)												MEAN
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
0504A1	15672.1	155.97	155.20	165.85	199.95	221.13	204.02	215.21	181.65	136.69	120.43	116.30	142.15	168.02
0504D1	77.2	0.85	1.16	1.31	1.48	1.59	0.63	0.21	0.14	0.13	0.19	0.40	0.52	0.71
0504E1	68.9	0.76	1.03	1.17	1.32	1.42	0.56	0.19	0.12	0.12	0.17	0.37	0.46	0.64
0504F1	344.5	3.85	5.24	5.95	6.68	7.19	2.83	0.95	0.61	0.59	0.87	1.85	2.36	3.23
0504G1	76.7	0.64	0.82	1.01	1.27	1.28	0.88	0.55	0.36	0.27	0.33	0.44	0.46	0.69
0504H1	11297.6	110.52	132.04	135.24	162.31	222.51	148.78	119.24	107.63	87.16	69.80	94.66	93.08	123.52
0504J1	440.3	4.62	5.89	7.25	9.15	9.20	6.34	3.99	2.58	1.94	2.40	3.14	3.28	4.97
0504L1	924.6	7.67	9.80	12.03	15.15	15.23	10.53	6.60	4.28	3.20	3.99	5.21	5.44	8.25
0504M1	113.4	1.00	1.27	1.57	1.97	1.99	1.37	0.86	0.56	0.42	0.52	0.68	0.71	1.07
0504Q1	29.8	0.221	0.283	0.348	0.436	0.439	0.303	0.190	0.125	0.093	0.113	0.150	0.156	0.238
0504R1	111.4	0.98	1.25	1.54	1.93	1.95	1.35	0.84	0.55	0.41	0.51	0.67	0.69	1.05
0504T1	93.8	0.81	1.03	1.27	1.59	1.60	1.11	0.69	0.45	0.34	0.42	0.55	0.57	0.87
0504W1	161.4	1.49	1.90	2.34	2.94	2.94	2.04	1.28	0.83	0.62	0.77	1.01	1.05	1.60
0504X1	83.7	0.71	0.90	1.11	1.40	1.41	0.97	0.61	0.39	0.30	0.37	0.48	0.50	0.76
0504ZZ	1849.0	20.98	25.77	32.42	36.50	39.28	15.46	5.18	3.31	3.23	4.79	10.08	12.88	17.44

SUMMARY

TOTAL DRAINAGE AREA OF LAKE = 15672.1
SUM OF SUB-DRAINAGE AREAS = 15672.1

TOTAL FLOW IN = 1982.55
TOTAL FLOW OUT = 2014.54

MEAN MONTHLY FLOWS AND DAILY FLOWS(CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0504A1	6	74	100.525	23	19.029				
	7	74	297.893	20	342.634				
	8	74	319.697	17	245.224				
	9	74	296.760	7	225.685				
	10	74	247.206	12	218.040				
	11	74	178.396	23	254.852				
	12	74	402.099	22	444.574				
	1	75	423.337	18	433.248				
	2	75	288.549	15	362.456				
	3	75	352.261	8	470.060	15	339.802		
	4	75	554.161	6	671.109	19	484.218		
	5	75	289.398	3	630.899	4	625.802		
0504D1	6	74	3.285	23	0.991				
	7	74	0.125	20	0.255				
	8	74	0.074	17	0.708				
	9	74	0.184	7	0.708				
	10	74	0.311	12	0.113				
	11	74	4.078	24	0.566				
	12	74	0.793	21	0.878				
	1	75	1.388	19	2.124				
	2	75	2.294	16	0.793				
	3	75	3.681	8	0.623	16	3.398		
	4	75	1.246	5	1.416	20	1.303		
	5	75	0.620	4	0.504				

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0504 BULL SHOALS RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS (CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0504E1	6	74	2.945	23	0.340				
	7	74	0.110	20	0.085				
	8	74	0.065	17	0.566				
	9	74	0.164	7	0.566				
	10	74	0.255	12	0.113				
	11	74	3.625	24	0.425				
	12	74	0.708	21	0.765				
	1	75	1.246	19	1.897				
	2	75	2.039	16	0.708				
	3	75	3.285	8	0.566	16	3.002		
	4	75	1.110	5	1.246	20	1.161		
	5	75	0.555	4	0.450				
0504F1	6	74	14.668	23	2.124				
	7	74	0.558	20	0.765				
	8	74	0.326	17	3.398				
	9	74	0.824	7	3.398				
	10	74	1.331	12	0.566				
	11	74	18.179	24	2.549				
	12	74	3.540	21	3.964				
	1	75	6.258	19	9.345				
	2	75	10.222	16	3.540				
	3	75	16.480	8	2.803	16	15.008		
	4	75	5.550	5	6.230	20	5.663		
	5	75	2.772	4	2.237				
0504G1	6	74	3.256	23	0.108				
	7	74	0.125	20	0.051				
	8	74	0.074	17	0.708				
	9	74	0.184	7	0.708				
	10	74	0.311	12	0.042				
	11	74	4.049	24	0.425				
	12	74	0.793	21	0.850				
	1	75	1.388	19	2.095				
	2	75	2.265	16	0.793				
	3	75	3.681	8	0.623	16	3.398		
	4	75	1.237	5	1.388	20	1.529		
	5	75	0.617	4	0.498				
0504H1	6	74	325.644	23	402.666				
	7	74	157.725	20	141.018				
	8	74	163.671	17	129.408				
	9	74	75.889	7	2.549				
	10	74	14.923	12	2.549				
	11	74	373.216	24	420.222				
	12	74	201.899	21	149.796				
	1	75	177.547	19	86.366				
	2	75	233.048	16	329.325				
	3	75	393.887	8	423.620	16	421.071		
	4	75	271.842	5	422.487	20	48.422		
	5	75	151.099	4	2.549				

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0504 BULL SHOALS RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS(CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW - DAY	FLOW
0504J1	6	74	18.774	23	1.586			
	7	74	0.714	20	0.510			
	8	74	0.416	17	4.248			
	9	74	1.051	7	4.248			
	10	74	1.699	12	0.340			
	11	74	23.220	24	2.549			
	12	74	4.531					
	1	75	7.985	19	12.035			
	2	75	13.082	16	4.531			
	3	75	21.068	8	3.568	16	19.255	
	4	75	7.108	20	7.362			
	5	75	3.540	4	2.832			
0504L1	6	74	39.360	23	5.522			
	7	74	1.495	20	2.152			
	8	74	0.875	17	8.495			
	9	74	2.209	7	8.495			
	10	74	3.596	12	1.699			
	11	74	48.705	24	5.663			
	12	74	9.543	21	10.477			
	1	75	16.764	19	25.202			
	2	75	27.439	16	9.543			
	3	75	44.174	8	7.504	16	40.210	
	4	75	14.923	5	16.849			
	5	75	7.447	4	6.031			
0504M1	6	74	4.842	23	0.388			
	7	74	0.184					
	8	74	0.108	17	1.133			
	9	74	0.272	7	1.133			
	10	74	0.453					
	11	74	5.975					
	12	74	1.161					
	1	75	2.067	18	3.115			
	2	75	3.370	15	1.218			
	3	75	5.437	8	0.906	15	4.389	
	4	75	1.829	6	1.982			
	5	75	0.912	3	3.823			
0504Q1	6	74	1.274	23	0.088			
	7	74	0.048	20	0.040			
	8	74	0.028	17	0.003			
	9	74	0.071	21	0.0			
	10	74	0.113	12	0.003			
	11	74	1.557	24	0.212			
	12	74	0.311	22	0.088			
	1	75	0.538	18	0.821			
	2	75	0.878	15	0.311			
	3	75	1.416	8	0.241	15	1.133	
	4	75	0.481	6	0.566	19	0.595	
	5	75	0.241	3	1.005			

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0504 BJLL SHOALS RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS(CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
0504R1	6	74	4.757	23	0.496				
	7	74	0.181	20	0.099				
	8	74	0.105	17	1.133				
	9	74	0.266	7	1.133				
	10	74	0.425	12	0.057				
	11	74	5.862	24	0.651				
	12	74	1.161	23	0.850				
	1	75	2.010	18	3.115				
	2	75	3.313	15	1.189				
	3	75	5.324	8	0.906	15	4.248		
	4	75	1.795	6	1.982	19	2.209		
	5	75	0.895	3	3.766				
0504T1	6	74	3.993	23	1.133				
	7	74	0.153	20	0.453				
	8	74	0.088	17	0.991				
	9	74	0.224	7	0.991				
	10	74	0.368	12	0.340				
	11	74	4.955	24	0.793				
	12	74	0.963	22	0.272				
	1	75	1.699	18	2.549				
	2	75	2.775	15	0.991				
	3	75	4.474	8	0.765	15	3.540		
	4	75	1.512	6	1.699	19	1.869		
	5	75	0.753	3	3.171				
0504W1	6	74	6.881	23	1.756				
	7	74	0.261	20	0.566				
	8	74	0.153	17	1.416				
	9	74	0.385	7	1.416				
	10	74	0.626	12	0.368				
	11	74	8.523	24	1.076				
	12	74	1.665	22	0.481				
	1	75	2.917	18	4.389				
	2	75	4.786	15	1.699				
	3	75	7.730	8	1.303	15	6.230		
	4	75	2.602	6	2.832	19	3.256		
	5	75	1.300	3	5.437	7	5.663		
0504X1	6	74	3.568	23	1.416				
	7	74	0.136	20	0.099				
	8	74	0.079	17	0.708				
	9	74	0.201	7	0.708				
	10	74	0.326	12	0.042				
	11	74	4.417	24	0.453				
	12	74	0.864	22	0.244				
	1	75	1.518	18	1.897				
	2	75	2.483	15	0.906				
	3	75	3.993	8	0.680	15	3.256		
	4	75	1.348	6	1.416	20	1.416		
	5	75	0.674	3	2.823				

TRIBUTARY FLOW INFORMATION FOR ARKANSAS

02/02/77

LAKE CODE 0504 BULL SHOALS RESERVOIR

MEAN MONTHLY FLOWS AND DAILY FLOWS (CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
050422	6	74	78.721	23	11.044				
	7	74	3.002	20	4.248				
	8	74	1.747	17	16.990				
	9	74	4.417	7	16.990				
	10	74	7.192	12	3.398				
	11	74	97.410	23	14.158	24	14.158		
	12	74	19.086	21	20.813	22	5.663	23	5.663
	1	75	33.414	18	42.475	19	50.970		
	2	75	54.935	15	19.822	16	18.972		
	3	75	88.632	8	15.008	15	70.792	16	80.703
	4	75	29.874	6	33.980	19	36.812	19	36.812
	5	75	14.866	3	62.297	4	12.035		

TRIBUTARY FLOW INFORMATION FOR MISSOURI

02/24/77

LAKE CODE 2904 LAKE TANEYCOMO

TOTAL DRAINAGE AREA OF LAKE(SQ KM) 11297.6

TRIBUTARY	SUB-DRAINAGE AREA(SQ KM)	NORMALIZED FLOWS(CMS)												MEAN
		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
2904A1	11297.6	110.44	131.96	135.35	162.26	222.57	148.66	119.24	107.60	87.22	69.66	94.58	93.16	123.49
2904A2	10417.0	105.34	124.59	125.16	151.21	209.54	140.73	112.98	104.49	83.82	65.98	90.90	89.76	116.98
2904B1	98.4	0.37	0.65	1.05	1.02	1.27	0.65	0.62	0.17	0.34	0.31	0.23	0.24	0.58
2904C1	523.2	3.06	4.59	6.48	7.19	7.90	4.93	3.45	1.39	1.59	2.21	1.98	1.87	3.88
2904D1	88.1	0.31	0.59	0.93	0.91	1.13	0.57	0.57	0.14	0.31	0.28	0.19	0.21	0.51
2904ZZ	170.9	1.67	1.98	2.04	2.44	3.34	2.24	1.78	1.61	1.30	1.05	1.42	1.42	1.86

SUMMARY

TOTAL DRAINAGE AREA OF LAKE = 11297.6
SUM OF SUB-DRAINAGE AREAS = 11297.6

TOTAL FLOW IN = 1486.50
TOTAL FLOW OUT = 1482.70

MEAN MONTHLY FLOWS AND DAILY FLOWS(CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
2904A1	9	74	132.523	14	3.653				
	10	74	15.688	5	2.605				
	11	74	390.772	2	21.238				
	12	74	206.713	7	164.521				
	1	75	185.475	4	165.654				
	2	75	251.170	8	181.228				
	3	75	421.921	8	444.574				
	4	75	281.639	5	438.911	19	86.650		
	5	75	158.574	3	21.804	17	11.185		
	6	75	78.721	7	62.014				
	7	75	92.879	13	3.794				
	8	75	124.311	9	79.854				
2904A2	9	74	74.473	14	1.133				
	10	74	13.649	5	1.189				
	11	74	371.234	2	1.274				
	12	74	201.050	7	158.291				
	1	75	176.131	4	145.832				
	2	75	231.915	8	171.317				
	3	75	392.471	8	421.921				
	4	75	270.143	5	421.921	19	81.269		
	5	75	149.796	3	1.133	17	7.674		
	6	75	72.774	7	57.483				
	7	75	89.481	13	1.133				
	8	75	121.762	9	77.871				

TRIBUTARY FLOW INFORMATION FOR MISSOURI

02/24/77

LAKE CODE 2904 LAKE TANEYCOMO

MEAN MONTHLY FLOWS AND DAILY FLOWS (CMS)

TRIBUTARY	MONTH	YEAR	MEAN FLOW	DAY	FLOW	DAY	FLOW	DAY	FLOW
2904B1	9	74	0.539	14	0.198				
	10	74	0.198	5	0.113				
	11	74	1.331	2	0.708				
	12	74	0.311	7	0.425				
	1	75	0.651	4	1.416				
	2	75	1.756	8	0.850				
	3	75	2.973	8	2.124				
	4	75	0.821	5	1.274	19	0.510		
	5	75	0.821	3	1.841	17	0.425		
	6	75	0.510	7	0.425				
	7	75	0.269	13	0.170				
	8	75	0.071	9	0.028				
2904C1	9	74	2.549	14	1.557				
	10	74	1.416	5	0.991				
	11	74	11.610	2	7.079				
	12	74	2.549	7	2.549				
	1	75	5.380	4	11.327				
	2	75	12.318	8	5.663				
	3	75	18.406	8	14.158				
	4	75	5.663	5	8.495	19	3.115		
	5	75	5.097	3	11.327				
	6	75	3.823	7	2.690				
	7	75	1.416	13	1.133				
	8	75	0.510	9	0.340				
2904D1	9	74	0.510	14	0.170				
	10	74	0.184	5	0.085				
	11	74	1.133	2	0.850				
	12	74	0.283	7	0.340				
	1	75	0.566	4	1.416				
	2	75	1.557	8	0.708				
	3	75	2.690	8	1.841				
	4	75	0.708	5	1.133	19	0.425		
	5	75	0.708	3	1.841				
	6	75	0.425	7	0.340				
	7	75	0.255	13	0.227				
	8	75	0.057	9	0.028				
2904ZZ	9	74	1.189						
	10	74	0.235						
	11	74	5.862						
	12	74	3.115						
	1	75	2.775						
	2	75	3.766						
	3	75	6.343						
	4	75	4.219						
	5	75	2.379						
	6	75	1.189						
	7	75	1.388						
	8	75	1.869						

APPENDIX C
PHYSICAL AND CHEMICAL DATA

STORET RETRIEVAL DATE 77/02/02

050101
36 25 15.0 093 51 05.0 3
BEAVER LAKE
05015 ARKANSAS

100591

/TYPE/AMBNT/LAKE

11EPALES 04001002
0200 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CAC03 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KjEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/05	09 45	0000	11.7		90	93	7.55	54	0.060	0.200K	0.240	0.004
	09 45	0005	11.6	10.0		92	7.60	50	0.030	0.200	0.210	0.006
	09 45	0015	11.6	10.0		92	7.70	50	0.040	0.200K	0.220	0.010
	09 45	0050	11.5	10.0		106	7.70	48	0.060	0.200K	0.240	0.009
	09 45	0100	8.4	9.6		100	7.30	48	0.050	0.200K	0.250	0.007
	09 45	0150	7.5	8.8		99	7.10	45	0.060	0.200K	0.280	0.008
	09 45	0200	7.3	8.4		99	6.90	43	0.060	0.400	0.290	0.010
74/06/18	09 40	0000	24.5		156	122	8.70	42	0.030	0.300	0.110	0.002
	09 40	0005	24.4	9.0		120	8.70	43	0.020	0.200K	0.080	0.002
	09 40	0015	24.2	9.0		118	8.50	42	0.030	0.200K	0.080	0.005
	09 40	0025	21.9	7.8		113	8.20	45	0.060	0.200	0.140	0.009
	09 40	0040	20.4	5.8		108	7.60	44	0.030	0.200K	0.190	0.004
	09 40	0055	16.5	6.4		95	7.50	46	0.020	0.200K	0.230	0.002
	09 40	0090	12.6	7.8		84	7.60	45	0.020K	0.200K	0.270	0.002K
	09 40	0130	10.8	7.6		80	7.50	45	0.020K	0.200K	0.280	0.004
74/08/30	09 40	0171	8.5	5.4		72	7.30	42	0.020	0.200K	0.360	0.013
	14 30	0000	26.3	7.6	198	131	8.40	57	0.040	0.400	0.040	0.002
	14 30	0010	26.3	7.5		130	8.60	57	0.040	0.200	0.020	0.003
	14 30	0020	26.3	7.8		131	8.60	58	0.030	0.400	0.020	0.002
	14 30	0038	20.4	0.4		113	7.70	56	0.130	0.200	0.230	0.003
	14 30	0060	17.6	1.0		106	7.35	54	0.040	0.200	0.370	0.002
	14 30	0090	13.3	4.2		91	7.35	56	0.030	0.300	0.440	0.003
	14 30	0120	11.3	4.4		83	7.30	54	0.060	0.200	0.500	0.004
74/10/09	14 30	0145	10.1	2.0		81	7.20	54	0.020K	0.200	0.540	0.004
	14 30	0170	9.2	0.6		83	7.15	60	0.100	0.300	0.460	0.006
	10 20	0000	19.6	7.6	216	105	7.15	64	0.040	0.400	0.070	0.007
	10 20	0005	19.6	7.2		106	7.30	61	0.020	0.200K	0.060	0.004
	10 20	0015	19.6	7.0		110	7.28	62	0.030	0.200	0.060	0.004
	10 20	0030	19.6	5.0		105	7.22	62	0.030	0.200K	0.060	0.005
	10 20	0045	19.6	7.2		103	7.17	61	0.020	0.200K	0.060	0.004
	10 20	0060	19.6	6.4		98	7.03	60	0.020K	0.200K	0.060	0.003
	10 20	0090	14.5	1.8		83	6.52	59	0.020K	0.200K	0.420	0.002
	10 20	0120	11.8	2.8		75	6.56	56	0.020K	0.200K	0.520	0.003
	10 20	0150	10.4	0.2		75	6.59	60	0.080	0.200	0.420	0.005
	10 20	0175	9.5	0.4		79	6.70	68	0.270	0.400	0.210	0.009

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/02

050101
36 25 15.0 093 51 05.0 3
BEAVER LAKE
05015 ARKANSAS

100591

/TYP/AMBNT/LAKE

11EPALES 04001002
0200 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLORPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/05	09 45	0000	0.009	1.7	
	09 45	0005	0.009		
	09 45	0015	0.016		
	09 45	0050	0.010		
	09 45	0100	0.011		
	09 45	0150	0.012		
	09 45	0200	0.100		
74/06/18	09 40	0000	0.010	3.3	
	09 40	0002			50.0
	09 40	0005	0.009		
	09 40	0015	0.008		
	09 40	0025	0.013		
	09 40	0027			1.0
	09 40	0040	0.009		
	09 40	0055	0.007		
	09 40	0090	0.010		
	09 40	0130	0.012		
	09 40	0171	0.022		
74/08/30	14 30	0000	0.014	2.4	
	14 30	0003			50.0
	14 30	0010	0.012		
	14 30	0020	0.012		
	14 30	0038	0.012		1.0
	14 30	0060	0.011		
	14 30	0090	0.009		
	14 30	0120	0.011		
	14 30	0145	0.012		
	14 30	0170	0.017		
	74/10/09	10 20	0000		0.016
10 20		0005	0.010		
10 20		0015	0.010		
10 20		0020		1.0	
10 20		0030	0.010		
10 20		0045	0.012		
10 20		0060	0.010		
10 20		0090	0.008		
10 20		0120	0.010		
10 20		0150	0.016		
10 20		0175	0.024		

STORET RETRIEVAL DATE 77/02/02

050102
36 22 12.0 093 53 18.0 3
BEAVER LAKE
05007 ARKANSAS

100591

/TYPE/AMNT/LAKE

11EPALES 04001002
0165 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CACU3 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/05	10 25	0000	10.5		41	91	7.60	45	0.050	0.700	0.290	0.009
	10 25	0005	10.5	10.2		91	7.50	44	0.030	0.200	0.270	0.008
	10 25	0015	10.5	10.4		91	7.30	43	0.050	0.200	0.300	0.006
	10 25	0050	10.2	9.8		86	7.30	38	0.040	0.200	0.340	0.009
	10 25	0100	7.7	9.0		83	7.10	40	0.050	0.200	0.340	0.010
	10 25	0160	7.2	8.6		90	7.00	43	0.060	0.300	0.390	0.018
74/06/18	10 25	0000	24.6		160	123	8.60	45	0.020	0.200	0.150	0.004
	10 25	0005	24.6	9.2		122	8.60	48	0.020	0.200K	0.110	0.002K
	10 25	0015	23.5	9.2		116	8.60	49	0.030	0.200	0.120	0.002
	10 25	0025	21.7	6.8		108	7.70	47	0.040	0.200	0.160	0.003
	10 25	0040	19.6	5.0		102	7.30			0.200		
	10 25	0055	16.0	5.8		92	7.30	47	0.030	0.200K	0.350	0.007
	10 25	0075	13.3	7.4		84	7.30	47	0.020	0.200K	0.350	0.002
	10 25	0110	11.0	7.4		74	7.20	42	0.040	0.200K	0.510	0.008
	10 25	0140	8.9	5.0		71	7.10	39	0.030	0.200K	0.540	0.010
	10 25	0161	8.7	4.6		76	7.00	38	0.030	0.300	0.580	0.014
74/08/30	13 45	0000	25.9	7.2	144	129	8.30	60	0.030	0.400	0.040	0.005
	13 45	0010	25.8	7.0		128	8.30	60	0.030	0.300	0.030	0.003
	13 45	0020	25.8	7.2		129	8.30	61	0.020	0.300	0.030	0.002
	13 45	0036	22.3	4.0		112	7.70	58	0.030	0.300	0.150	0.002
	13 45	0050	18.3	0.2		89	7.50	49	0.030	0.300	0.370	0.002
	13 45	0085	13.6	3.5		92	7.40	56	0.020	0.300	0.500	0.003
	13 45	0120	11.0	1.4		85	7.20	54	0.040	0.200	0.570	0.004
	13 45	0150	9.9	0.3		94	7.20	65	0.220	0.500	0.370	0.007
74/10/09	13 45	0000	19.6	6.8	144	106	7.30	63	0.040	0.200	0.060	0.006
	13 45	0005	19.5	7.0		103	7.19	62	0.020	0.200	0.040	0.003
	13 45	0015	19.5	7.0		104	7.19	64	0.030	0.200K	0.050	0.002
	13 45	0030	19.5	7.0		105	7.14	62	0.020	0.200K	0.040	0.002
	13 45	0045	19.5	7.2		99	7.08	63	0.030	0.200	0.040	0.002K
	13 45	0060	19.4	6.2		88	6.72	61	0.030	0.300	0.060	0.002
	13 45	0090	14.6	1.2		87	6.57	60	0.020	0.200K	0.460	0.003
	13 45	0120	11.8	0.2		83	6.68	52	0.110	0.300	0.410	0.005
	13 45	0152	10.7	0.2		98	6.89	70	0.430	0.500	0.100	0.007

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/02

050103
36 20 32.0 093 58 26.0 3
BEAVER LAKE
05007 ARKANSAS

1005+1

/TYP/AMNT/LAKE

11EPALES 04001002
0120 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/05	11 15	0000	0.040	6.5	
	11 15	0005	0.036		
	11 15	0015	0.035		
	11 15	0050	0.036		
	11 15	0080	0.053		
	11 15	0115	0.049		
74/06/18	11 15	0000	0.015	1.0	
	11 15	0005	0.016		
	11 15	0015	0.023		
	11 15	0035	0.048		
	11 15	0055	0.051		
	11 15	0070	0.018		
	11 15	0100	0.019		
	11 15	0121	0.018		
74/08/30	13 05	0000	0.022	3.0	
	13 05	0002			50.0
	13 05	0010	0.015		
	13 05	0027	0.015		1.0
	13 05	0060	0.019		
	13 05	0075	0.024		
	13 05	0110	0.036		
74/10/09	14 30	0000	0.016	3.9	
	14 30	0005	0.011		
	14 30	0015	0.011		
	14 30	0017			1.0
	14 30	0030	0.011		
	14 30	0045	0.012		
	14 30	0060	0.017		
	14 30	0075	0.053		
	14 30	0084	0.136		

STORET RETRIEVAL DATE 77/02/02

050104
36 16 37.0 094 01 32.0 3
BEAVER LAKE
05007 ARKANSAS

100593

/TYPE/AMOUNT/LAKE

11EPALES 04001002
0100 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CACO3 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/05	14 20	0000	11.3		24	91	7.35	33	0.060	0.300	0.570	0.015
	14 20	0005	11.3	10.0		91	7.30	33	0.050	0.200	0.560	0.014
	14 20	0015	11.1	9.4		91	7.30	31	0.070	0.200K	0.580	0.016
	14 20	0040	11.0	9.6		90	7.30	31	0.060	0.200K	0.580	0.015
	14 20	0075	8.3	8.6		81	6.90	28	0.060	0.200K	0.710	0.019
	14 20	0095	7.7	7.2		81	6.80	29	0.060	0.200K	0.740	0.015
74/06/17	11 35	0000	24.8		65	119	8.60	29	0.060	0.500	0.140	0.006
	11 35	0005	24.5	8.6		118	8.10	29	0.070	0.300	0.120	0.004
	11 35	0010	24.2	7.4		114	8.30	29	0.060	0.300	0.110	0.004
	11 35	0015	21.5	6.0		105	7.30	29	0.080	0.300	0.190	0.005
	11 35	0025	19.4	5.0		71	7.30	22	0.100	0.400	0.220	0.021
	11 35	0040	18.9	5.2		70	7.50	22	0.100	0.300	0.230	0.023
	11 35	0055	18.4	4.6		88	7.50	25	0.100	0.300	0.270	0.023
	11 35	0065	13.7	4.0		94	7.50	34	0.030	0.200	0.390	0.013
	11 35	0075	12.2	4.2		92	7.50	33	0.060	0.200	0.490	0.009
	11 35	0096	11.0	2.8		93	7.40	35	0.050	0.200	0.500	0.008
74/08/30	10 10	0000	26.0	6.2	104	124	7.80	60	0.040	0.700	0.030	0.004
	10 10	0010	25.9	6.0		124	7.80	58	0.040	0.400	0.020	0.004
	10 10	0023	25.3	3.0		124	7.40	59	0.040	0.400	0.020K	0.004
	10 10	0032	22.4	0.4		140	7.20	69	0.180	0.500	0.040	0.005
	10 10	0050	18.1	0.4		96	7.20	51	0.140	0.400	0.240	0.008
	10 10	0085	13.3	0.2		139	7.10	82	0.780	1.200	0.080	0.011
74/10/10	09 40	0000	19.5	6.6	48	95	6.77	54	0.100	0.700	0.150	0.007
	09 40	0005	19.4	5.6		100	6.87	53	0.160	0.300	0.170	0.005
	09 40	0015	19.4	5.4		98	6.84	51	0.110	0.300	0.170	0.005
	09 40	0030	19.4	5.4		97	6.79	52	0.110	0.300	0.170	0.005
	09 40	0045	19.3	5.4		102	6.78	53	0.100	0.300	0.150	0.005
	09 40	0065	18.4	1.4		84	6.45	49	0.240	0.400	0.330	0.006
	09 40	0092	15.2	0.2		160	6.91	91	1.270	1.700	0.030	0.009

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/02

050104
36 16 37.0 094 01 32.0 3
BEAVER LAKE
05007 ARKANSAS

100593

/TTPA/AMBNT/LAKE

11EPALES 04001002
0100 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/05	14 20	0000	0.041	6.0	
	14 20	0005	0.037		
	14 20	0015	0.036		
	14 20	0040	0.038		
	14 20	0075	0.056		
	14 20	0095	0.091		
74/06/17	11 35	0000	0.042	2.2	
	11 35	0005	0.022		
	11 35	0010	0.021		
	11 35	0015	0.032		
	11 35	0025	0.066		
	11 35	0040	0.075		
	11 35	0055	0.090		
	11 35	0065	0.031		
	11 35	0075	0.023		
	11 35	0096	0.021		
74/08/30	10 10	0000	0.021	3.9	
	10 10	0010	0.021		
	10 10	0023	0.020		1.0
	10 10	0032	0.030		
	10 10	0050	0.058		
	10 10	0085	0.211		
74/10/10	09 40	0000	0.031	2.8	
	09 40	0005	0.020		
	09 40	0007			1.0
	09 40	0015	0.021		
	09 40	0030	0.022		
	09 40	0045	0.022		
	09 40	0065	0.042		
	09 40	0092	0.212		

STORET RETRIEVAL DATE 77/02/02

050105
36.13 49.0 093 59 49.0 3
BEAVER LAKE
05143 ARKANSAS

100591

/TYP/AMBNT/LAKE

11EPALES 04001002
0065 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CAC03 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KjEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/03	15 40	0000	13.1		30	95	7.30	50	0.040	0.300	0.480	0.018
	15 40	0005	13.1	9.0		94	7.30	47	0.040	0.400	0.470	0.027
	15 40	0015	13.1	9.0		92	7.25	46	0.040	0.400	0.470	0.013
	15 40	0030	12.9	9.0		93	7.20	44	0.040	0.300	0.450	0.020
	15 40	0045	9.7	8.0		92	6.90	43	0.050	0.300	0.490	0.034
	15 40	0060	9.5	8.2		91	6.90	46	0.050	0.300	0.560	0.029
74/06/17	10 50	0000	23.8		10	85	7.70	21	0.060	0.800	0.150	0.009
	10 50	0005	23.2	3.2		78	7.10	20	0.060	0.400	0.140	0.009
	10 50	0010	27.6	4.2		73	6.50	20	0.090		0.150	0.013
	10 50	0015	20.0	5.4		61	6.90	16	0.080	0.400	0.160	0.018
	10 50	0020	19.5	5.4		71	6.30	19	0.070	0.300	0.190	0.020
	10 50	0045	19.0	4.0		74	7.10	18	0.150	0.600	0.240	0.023
	10 50	0063	18.2	3.6		115	7.20	31	0.160	0.400	0.430	0.028
74/08/30	10 45	0000	25.9	5.2	72	127	7.65	56	0.040	0.500	0.030	0.004
	10 45	0005	25.9	5.4		126	7.60	56	0.110	0.300	0.020	0.006
	10 45	0017	25.5	3.4		133	7.50	59	0.040	0.400	0.020K	0.007
	10 45	0030	23.4	0.2		188	7.15	86	0.540	0.800	0.060	0.007
	10 45	0045	19.1	0.1		182	7.10	91	1.320	1.400	0.040	0.020
74/10/10	10 55	0000	18.8	7.6	48	92	7.09	49	0.090	0.700	0.190	0.005
	10 55	0005	18.6	6.8		94	7.01	51	0.100	0.400	0.190	0.004
	10 55	0015	18.5	6.0		93	6.93	50	0.120	0.300	0.200	0.005
	10 55	0030	18.5	6.0		92	6.91	49	0.120	0.400	0.210	0.006
	10 55	0040	18.3	5.4		84	6.77	46	0.180	0.400	0.250	0.006
	10 55	0053	18.3	4.8		84	6.73	45	0.240	0.500	0.280	0.007

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/02

050102
36 22 12.0 093 53 18.0 3
BEAVER LAKE
05037 ARKANSAS

100591

/TYP/AMBNT/LAKE

11EPALES 04001002
0165 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLORPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/05	10 25	0000	0.018	3.4	
	10 25	0005	0.016		
	10 25	0015	0.015		
	10 25	0050	0.018		
	10 25	0100	0.014		
	10 25	0160	0.053		
74/06/18	10 25	0000	0.009	1.6	
	10 25	0002			50.0
	10 25	0005	0.008		
	10 25	0015	0.009		
	10 25	0025	0.013		
	10 25	0030			1.0
	10 25	0040	0.012		
	10 25	0055	0.009		
	10 25	0075	0.010		
	10 25	0110	0.021		
	10 25	0140	0.027		
	10 25	0161	0.065		
74/08/30	13 45	0000	0.013	2.8	
	13 45	0010	0.010		
	13 45	0020	0.012		
	13 45	0036	0.013		1.0
	13 45	0050	0.013		
	13 45	0085	0.011		
	13 45	0120	0.017		
	13 45	0150	0.018		
74/10/09	13 45	0000	0.014	2.7	
	13 45	0001			50.0
	13 45	0005	0.010		
	13 45	0015	0.011		
	13 45	0020			1.0
	13 45	0030	0.010		
	13 45	0045	0.013		
	13 45	0060	0.010		
	13 45	0090	0.004		
	13 45	0120	0.006		
	13 45	0152	0.035		

STORET RETRIEVAL DATE 77/02/02

050103
36 20 32.0 093-58 26.0 3
BEAVER LAKE
05007 ARKANSAS

100591

/TYP/AMBNT/LAKE

11EPALES 04001002
0120 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY. FIELD MICROMHO	00400 PH SU	00410 T ALK CACO3 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KjEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/05	11 15	0000	10.8		40	87	7.50	40	0.060	0.400	0.600	0.015
	11 15	0005	10.7	10.2		86	7.50	41	0.050	0.200	0.600	0.011
	11 15	0015	10.7	10.0		84	7.50	40	0.040	0.200	0.590	0.014
	11 15	0050	10.7	10.0		80	7.30	38	0.050	0.200K	0.600	0.014
	11 15	0080	8.1	9.8		71	7.10	32	0.050	0.200	0.630	0.019
	11 15	0115	7.3	9.0		71	6.70	30	0.060	0.200	0.670	0.020
74/06/18	11 15	0000	25.1		125	121	8.60	42	0.030	0.500	0.210	0.003
	11 15	0005	25.0	9.4		117	8.60	38	0.040	0.300	0.160	0.004
	11 15	0015	23.5	8.8		111	8.40	41	0.030	0.300	0.180	0.003
	11 15	0035	19.5	5.0		87	7.20	32	0.080	0.300	0.370	0.015
	11 15	0055	18.1	4.2		91	7.20	34	0.060	0.300	0.460	0.025
	11 15	0070	13.0	5.8		89	7.10	38	0.040	0.200K	0.620	0.021
	11 15	0100	10.7	4.8		82	7.00	39	0.090	0.200K	0.650	0.008
	11 15	0121	9.7	2.6		85	7.00	41	0.070	0.200K	0.650	0.008
74/08/30	13 05	0000	26.1	7.2	108	126	8.00	60	0.030	0.500	0.020K	0.003
	13 05	0010	26.1	6.8		127	8.00	60	0.040	0.300	0.020	0.004
	13 05	0027	25.8	4.4		122	7.80	61	0.040	0.300	0.020	0.003
	13 05	0060	19.5	0.2		90	7.60	50	0.030	0.300	0.180	0.003
	13 05	0075	14.9	0.4		96	7.40	56	0.040	0.300	0.460	0.006
	13 05	0110	11.3	0.6		112	7.30	75	0.370	0.600	0.210	0.007
74/10/09	14 30	0000	19.7	8.0	84	108	7.24	57	0.050	0.600	0.040	0.004
	14 30	0005	19.4	6.8		107	7.13	58	0.050	0.300	0.040	0.004
	14 30	0015	19.4	6.8		107	7.13	59	0.040	0.200	0.030	0.002
	14 30	0030	19.4	6.8		106	7.09	60	0.050	0.200	0.040	0.003
	14 30	0045	19.4	6.6		105	7.02	58	0.050	0.300	0.040	0.005
	14 30	0060	19.3	6.0		100	6.77	56	0.060	0.300	0.040	0.004
	14 30	0075	16.9	0.2		92	6.51	55	0.130	0.600	0.160	0.006
	14 30	0084	16.0	0.4		102	6.56	56	0.160	0.800	0.160	0.007

K VALUE KNOWN TO BE
LESS THAN INDICATED

STOPET RETRIEVAL DATE 77/02/02

050105
36 13 49.0 093 59 49.0 3
BEAVER LAKE
05143 ARKANSAS

100591

/TYP/AMBT/LAKE

11EPALES 04001002
0065 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/03	15 40	0000	0.046	7.6	
	15 40	0005	0.053		
	15 40	0015	0.046		
	15 40	0030	0.048		
	15 40	0045	0.051		
	15 40	0060	0.060		
74/06/17	10 50	0000	0.088	1.6	
	10 50	0005	0.074		
	10 50	0015	0.098		
	10 50	0020	0.090		
	10 50	0045	0.143		
	10 50	0063	0.122		
74/08/30	10 45	0000	0.040	6.2	
	10 45	0005	0.033		
	10 45	0017	0.043		1.0
	10 45	0030	0.117		
	10 45	0045	0.182		
74/10/10	10 55	0000	0.046	6.6	
	10 55	0005	0.040		
	10 55	0015	0.029		
	10 55	0030	0.035		
	10 55	0040	0.057		
	10 55	0053	0.075		

STORET RETRIEVAL DATE 77/02/02

050106
36 96 42.0 094 01 33.0 3
BEAVER LAKE
05143 ARKANSAS

100592

/TYP/AMBNT/LAKE

11EPALES 04001002
0045 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CACO3 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/05	13 40	0000	12.8		25	92	7.20	35	0.140	0.400	0.430	0.040
	13 40	0005	12.8	9.2		91	7.10	34	0.120	0.200	0.420	0.039
	13 40	0015	12.7	8.8		92	7.00	35	0.130	0.200	0.420	0.037
	13 40	0030	12.5	9.0		93	7.10	34	0.120	0.200	0.420	0.035
	13 40	0040	11.1	9.0		89	6.90	32	0.130	0.200	0.430	0.027
74/06/17	10 35	0000	24.3		14	77	8.30	18	0.040	1.000	0.060	0.012
	10 35	0005	23.6	10.0		73	8.50	18	0.040	0.400	0.080	0.008
	10 35	0015	20.0	6.0		73	7.30	19	0.050	0.200	0.180	0.013
	10 35	0025	18.8	4.4		171	7.00	41	0.070	0.300	0.350	0.016
	10 35	0048	18.2	4.4		201	6.60	55	0.120	0.300	0.500	0.017
74/08/30	11 25	0000	25.7	5.2	42	150	7.45	67	0.030	0.800	0.040	0.005
	11 25	0005	25.7	5.0		151	7.45	67	0.030	0.700	0.040	0.005
	11 25	0015	25.5	4.2		148	7.40	66	0.090	0.500	0.030	0.005
	11 25	0025	24.6	0.8		190	7.25	89	0.260	0.700	0.120	0.009
	11 25	0035	21.9	0.4		242	7.10	116	1.390	1.800	0.040	0.005
74/10/10	11 30	0000	18.5	9.2	36	85	7.33	43	0.060	0.600	0.330	0.005
	11 30	0005	17.8	7.4		88	6.94	43	0.090	0.300	0.380	0.009
	11 30	0015	17.7	6.4		87	6.85	46	0.130	0.300	0.420	0.028
	11 30	0030	17.6	6.8		92	6.92	50	0.120	0.300	0.420	0.014
	11 30	0039	17.5	6.2		110	6.90	62	0.140	0.400	0.400	0.009

STORET RETRIEVAL DATE 77/02/02

050105
36 13 49.0 093 59 49.0 3
BEAVER LAKE
05143 ARKANSAS

100591

/TYPE/AMNT/LAKE

11EPALES 04001002
0065 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/03	15 40	0000	0.046	7.6	
	15 40	0005	0.053		
	15 40	0015	0.046		
	15 40	0030	0.048		
	15 40	0045	0.051		
	15 40	0060	0.060		
74/06/17	10 50	0000	0.088	1.6	
	10 50	0005	0.074		
	10 50	0015	0.098		
	10 50	0020	0.090		
	10 50	0045	0.143		
	10 50	0063	0.122		
74/08/30	10 45	0000	0.040	6.2	
	10 45	0005	0.033		
	10 45	0017	0.043		1.0
	10 45	0030	0.117		
	10 45	0045	0.182		
74/10/10	10 55	0000	0.046	6.6	
	10 55	0005	0.040		
	10 55	0015	0.029		
	10 55	0030	0.035		
	10 55	0040	0.057		
	10 55	0053	0.075		

STORET RETRIEVAL DATE 77/02/02

050106
36 06 42.0 094 01 33.0 3
BEAVER LAKE
05143 ARKANSAS

100592

/TYP/AMBNT/LAKE

11EPALES 04001002
0045 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CACO3 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KjEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/05	13 40	0000	12.8		25	92	7.20	35	0.140	0.400	0.430	0.040
	13 40	0005	12.8	9.2		91	7.10	34	0.120	0.200	0.420	0.039
	13 40	0015	12.7	8.8		92	7.00	35	0.130	0.200	0.420	0.037
	13 40	0030	12.5	9.0		93	7.10	34	0.120	0.200	0.420	0.035
	13 40	0040	11.1	9.0		89	6.90	32	0.130	0.200	0.430	0.027
74/06/17	10 35	0000	24.3		14	77	8.30	18	0.040	1.000	0.060	0.012
	10 35	0005	23.6	10.0		73	8.50	18	0.040	0.400	0.080	0.008
	10 35	0015	20.0	6.0		73	7.30	19	0.050	0.200	0.180	0.013
	10 35	0025	18.8	4.4		171	7.00	41	0.070	0.300	0.350	0.016
	10 35	0048	18.2	4.4		201	6.60	55	0.120	0.300	0.500	0.017
74/08/30	11 25	0000	25.7	5.2	42	150	7.45	67	0.030	0.800	0.040	0.005
	11 25	0005	25.7	5.0		151	7.45	67	0.030	0.700	0.040	0.005
	11 25	0015	25.5	4.2		148	7.40	66	0.090	0.500	0.030	0.005
	11 25	0025	24.6	0.8		190	7.25	89	0.260	0.700	0.120	0.009
	11 25	0035	21.9	0.4		242	7.10	116	1.390	1.800	0.040	0.005
74/10/10	11 30	0000	18.5	9.2	36	85	7.33	43	0.060	0.600	0.330	0.005
	11 30	0005	17.8	7.4		88	6.94	43	0.090	0.300	0.380	0.009
	11 30	0015	17.7	6.4		87	6.85	46	0.130	0.300	0.420	0.028
	11 30	0030	17.6	6.8		92	6.92	50	0.120	0.300	0.420	0.014
	11 30	0039	17.5	6.2		110	6.90	62	0.140	0.400	0.400	0.009

STORET RETRIEVAL DATE 77/02/02

050106
36 06 42.0.094 01 33.0 3
BEAVER LAKE
05143 ARKANSAS

100592

/TYP/AMBNT/LAKE

11EPALES 04001002
0045 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/05	13 40	0000	0.066	2.9	
	13 40	0005	0.068		
	13 40	0015	0.069		
	13 40	0030	0.065		
	13 40	0040	0.064		
74/06/17	10 35	0000	0.097	2.3	
	10 35	0005	0.057		
	10 35	0015	0.063		
	10 35	0025	0.060		
	10 35	0048	0.061		
74/08/30	11 25	0000	0.055	12.4	
	11 25	0005	0.044		
	11 25	0008			1.0
	11 25	0015	0.041		
	11 25	0025	0.069		
	11 25	0035	0.180		
74/10/10	11 30	0000	0.047	3.8	
	11 30	0005	0.039		
	11 30	0015	0.060		
	11 30	0030	0.049		
	11 30	0039	0.089		

STATION INFORMATION 7/11/12
 NAME OF THE STATION: 1000
 ELEVATION: 1000

051501
 30 35 44.1 043 10 44.0
 TANK ROCK LANE
 00 2484545

110-445 21112.2
 3 0200 FEET DEPTH

DATE	TIME	DEPTH	TEMP	COND	TEMP	COND	COND	COND	COND	COND	COND	COND
FR	TO	FEET	TEMP	COND	TEMP	COND	COND	COND	COND	COND	COND	COND
TO	FEET	TEMP	COND	COND	COND	COND	COND	COND	COND	COND	COND	COND
74/04/05	15 20 0000	11.0		150	4.50	42	0.050	0.400	0.430	0.000		
	15 20 0005	11.0	11.4	150	4.40	42	0.050	0.300	0.440	0.000		
	15 20 0010	11.1	11.5	150	4.30	49	0.050	0.300	0.430	0.013		
	15 20 0015	11.1	11.0	151	4.30	90	0.050	0.300	0.420	0.010		
	15 20 0100	10.0	11.0	154	4.00	93	0.040	0.200	0.400	0.010		
	15 20 0130	8.1	10.0	150	7.60	92	0.050	0.200	0.510	0.011		
	15 20 0205	5.5	9.1	146	7.30	84	0.060	0.200	0.810	0.021		
74/05/10	04 30 0000	23.1		147	4.90	98	0.050	0.400	0.180	0.007		
	04 30 0005	23.0	11.4	146	4.90	97	0.040	0.500	0.150	0.002		
	04 30 0020	24.3	10.0	162	4.80	97	0.040	0.400	0.170	0.002K		
	04 30 0040	17.1	9.5	175	7.90	108	0.040	0.200	0.510	0.002K		
	09 30 0030	15.3	9.8	138	7.90	94	0.050	0.200	0.460	0.002K		
	09 30 0120	12.3	9.4	145	7.90	91	0.050	0.200	0.540	0.002K		
	09 30 0175	9.3	9.5	150	7.70	96	0.040	0.200	0.440	0.020		
74/09/04	10 25 0000	23.3	7.0	187	7.90	102	0.070	0.600	0.090	0.003		
	10 25 0010	23.3	6.6	187	8.00	93	0.050	0.300	0.060	0.002		
	10 25 0023	23.4	6.6	188	8.00	93	0.040	0.300	0.050	0.002		
	10 25 0045	18.7	6.4	213	7.60	117	0.090	0.300	0.310	0.002		
	10 25 0055	14.9	6.4	164	7.55	97	0.050	0.200	0.540	0.004		
	10 25 0125	13.4	6.4	122	7.50	78	0.050	0.200	0.460	0.010		
	10 25 0170	11.6	6.8	166	7.40	107	0.210	0.400	0.510	0.037		
74/10/11	12 00 0000	19.2	8.2	177	8.33	108	0.040	0.700	0.030	0.004		
	12 00 0005	19.1	7.6	177	8.29	100	0.070	0.400	0.030	0.011		
	12 00 0020	19.1	8.2	177	8.25	102	0.020	0.300	0.020K	0.008		
	12 00 0040	19.1	7.6	177	8.21	102	0.030	0.200	0.020K	0.008		
	12 00 0055	14.9	6.8	147	7.69	106	0.030	0.300	0.110	0.007		
	12 00 0075	15.7	6.2	173	7.05	105	0.020K	0.200	0.400	0.007		
	12 00 0090	15.0	6.2	159	7.01	95	0.020K	0.200	0.440	0.008		
	12 00 0120	14.5	6.4	127	6.93	86	0.030	0.200	0.430	0.012		
	12 00 0145	13.2	6.4	127	6.95	85	0.040	0.200	0.420	0.022		
	12 00 0171	12.0	6.0	161	7.17	109	0.370	0.600	0.180	0.037		

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

[illegible]

041501
 041501
 041501
 041501

1100-ALCS 2111ZCZ
J 0700 FEET 160TH

[illegible]

1-1-00
 40 31 30.0 047 1- '3.0
 TALE - JCA LANE
 15 2004.1545

[illegible]

K VALUE KNOWN TO BE LESS THAN
INDICATED

ST -ET SET 10000 10000 10000
 WAT -E 10000 10000 10000
 F24-145 10000

001-00
 30 31 30.0 17.1 03.9
 TABLE THICK LAKES
 00 00000000

110000 211100
 0 0115 FEET DEPTH

DATE	TIME	DEPTH	WATER	TEMP	WIND	WAVE	WAVE	WAVE
FROM								
TO								
74/04/05	14 35	0000	0.025	0.0				
	14 05	0010	0.026					
	16 05	0020	0.027					
	17 05	0040	0.028					
	16 05	0070	0.028					
	16 05	0110	0.033					
74/05/19	10 00	0000	0.026	4.1				
	10 00	0001						0.0
	10 00	0005	0.020					
	10 00	0010	0.019					
	10 00	0015						1.0
	10 00	0020	0.014					
	10 00	0030	0.016					
	10 00	0045	0.024					
	10 00	0055	0.011					
	10 00	0070	0.011					
	10 00	0110	0.013					
74/09/04	11 00	0000	0.014	11.4				
	11 00	0005	0.015					
	11 00	0020	0.013					1.0
	11 00	0030	0.013					
	11 00	0047	0.018					
	11 00	0070	0.019					
	11 00	0100	0.060					
74/10/11	12 35	0000	0.021	30.9				
	12 35	0001						0.0
	12 35	0005	0.012					
	12 35	0011						1.0
	12 35	0030	0.015					
	12 35	0050	0.017					
	12 35	0070	0.027					
	12 35	0090	0.047					
	12 35	0110	0.101					

STREET DEPARTMENT 7-70/11
 DATE 7-70/11
 FRA-445 (134)

051-03
 3/ 24.0 45 27 07.0
 TANK - 100 LANE
 05 2-44545

1111202
 01-00 FEET DEPTH

DATE	TIME	DEPTH	TEMP	COND	TRACER	CONDUCTIVITY	00400	00410	00510	00520	00630	00671
TIME	DAY	FEET	TEMP	COND	TRACER	FIELD	PH	ALKAL	NH3-N	TOTAL	N-TOTAL	PHOS-DIS
TIME	DAY	FEET	TEMP	COND	TRACER	FIELD	PH	MG/L	MG/L	MG/L	MG/L	MG/L P
74/04/06	09	35	000	10.4	70	144	7.00	43	0.040	0.300	0.410	0.011
	09	35	005	10.3		144	7.00	41	0.020	0.200	0.490	0.012
	09	35	010	10.3		145	7.00	40	0.040	0.200	0.420	0.017
	09	35	005	10.3		145	7.00	41	0.040	0.200	0.450	0.016
	09	35	015	10.2		145	7.90	42	0.040	0.200	0.420	0.011
	09	35	0130	10.4		143	7.00	45	0.030	0.300	0.450	0.024
	09	45	010	10.4		144	7.00	45	0.050	0.200	0.490	0.026
74/06/19	10	45	000	10.4	70	147	7.00	45	0.040	0.500	0.140	0.006
	10	45	005	10.4		144	7.00	44	0.040	0.400	0.110	0.006
	10	45	0010	10.4		141	7.00	44	0.040	0.400	0.110	0.006
	10	45	0030	10.3		113	7.90	112	0.040	0.200	0.450	0.003
	10	45	0050	10.8		143	7.20	77	0.030	0.200	0.370	0.003
	10	45	0075	10.7		117	7.70	77	0.040	0.200K	0.360	0.004
	10	45	0100	10.4		123	7.70	43	0.030	0.200K	0.370	0.004
	10	45	0140	10.9		152	7.70	105	0.030	0.200K	0.790	0.017
	10	45	0175	10.7		149	7.50	103	0.040	0.200K	0.740	0.017
74/09/04	04	35	000	10.0	126	143	7.00	103	0.040	0.600	0.090	0.006
	04	35	0010	10.6		143	7.00	101	0.050	0.300	0.060	0.003
	04	35	0025	10.6		194	7.00	102	0.050	0.200	0.070	0.005
	04	35	0045	10.7		198	7.60	116	0.040	0.200	0.230	0.004
	04	35	0050	10.5		118	7.70	76	0.040	0.200	0.400	0.005
	04	35	0120	10.5		126	7.60	45	0.030	0.200	0.500	0.017
	04	35	0150	10.2		154	7.50	106	0.440	0.700	0.240	0.038
74/10/11	11	10	0000	10.5	143	174	7.81	45	0.020	0.300	0.030	0.004
	11	10	0005	10.5		177	7.67	101	0.020K	0.200	0.020K	0.007
	11	10	0030	10.4		141	7.45	102	0.020K	0.200K	0.020	0.004
	11	10	0050	10.1		171	7.25	102	0.020K	0.200K	0.030	0.010
	11	10	0080	10.3		125	6.75	41	0.030	0.200K	0.350	0.014
	11	10	0110	10.0		104	6.75	72	0.040	0.200K	0.350	0.020
	11	10	0130	10.0		135	6.45	74	0.220	0.300	0.190	0.034
	11	10	0150	10.1		149	7.01	88	0.640	0.300	0.030	0.052
	11	10	0170	10.2		165	7.11	44	1.020	1.200	0.020	0.011

K VALUE KNOWN TO BE LESS THAN
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DATE	TIME	DEPTH	TEMPERATURE	WIND-SPEED	WIND-DIR	WAVE-HEIGHT	WAVE-DIR
FOOT	OF	FEET	DEGREES	PER HOUR	DEGREES	FEET	DEGREES
74/14/08	08 32	0100	0.029	7.0			
	08 33	0100	0.034				
	08 35	0015	0.029				
	08 36	0050	0.031				
	08 38	0040	0.030				
	08 39	0130	0.031				
	08 39	0145	0.034				
74/15/10	10 45	0000	0.025	7.0			
	10 45	0001					10.0
	10 45	0000	0.028				
	10 45	0010	0.030				
	10 45	0017					1.0
	10 45	0030	0.015				
	10 45	0050	0.060				
	10 45	0075	0.011				
	10 45	0100	0.010				
	10 45	0140	0.020				
	10 45	0175	0.021				
74/09/04	09 35	0000	0.021	9.5			
	09 35	0010	0.014				
	09 35	0023	0.014				1.0
	09 35	0045	0.014				
	09 35	0050	0.012				
	09 35	0120	0.023				
	09 35	0145	0.002				
74/10/11	11 10	0000	0.011	2.4			
	11 10	0001					10.0
	11 10	0005	0.014				
	11 10	0021					1.0
	11 10	0030	0.015				
	11 10	0050	0.016				
	11 10	0050	0.018				
	11 10	0110	0.027				
	11 10	0150	0.025				
	11 10	0150	0.124				
	11 10	0171	0.272				

751-04
34 36 29.5 7-3 30 28.0
F=LE -JCA LKAC
Gm ... A 1543

DATE	TIME	DEPTH	WATER	TEMP	THICK	CONDUCTIVITY	PH	TOTAL	WATER	TOTAL	WATER	WATER
FROM	OF	FEET	TEMP	WATER	THICK	FIELD	SI	WATER	WATER	WATER	WATER	WATER
TO	OF	FEET	TEMP	WATER	THICK	FIELD	SI	WATER	WATER	WATER	WATER	WATER
74/04/05	10 30	0090	11.1		90	129	7.90	75	0.040	0.200	0.290	0.004
	10 30	0095	11.1	10.0		129	7.90	74	0.040	0.200	0.280	0.007
	10 30	0100	11.1	10.2		130	7.80	74	0.040	0.200	0.290	0.009
	10 30	0105	11.2	10.0		129	7.70	74	0.040	0.200	0.360	0.004
	10 30	0070	11.1	10.0		127	7.50	72	0.040	0.200K	0.440	0.008
	10 30	0095	11.7	10.0		128	7.30	77	0.050	0.200	0.700	0.017
	10 30	0120	11.1	10.0		135	7.70	80	0.030	0.300	0.570	0.012
74/05/10	13 20	0090	11.1		70	129	8.80			0.100		
	13 20	0095	11.1	10.0		129	8.80	102	0.040	0.300	0.060	0.005
	13 20	0100	11.1	10.0		127	7.70	95	0.040	0.200	0.270	0.007
	13 20	0105	11.1	10.0		127	7.60	91	0.030	0.200K	0.300	0.006
	13 20	0110	11.1	10.0		137	7.60	92	0.050	0.200K	0.310	0.015
	13 20	0115	11.1	10.0		135	7.50	95	0.040	0.200K	0.380	0.005
	13 20	0120	11.1	10.0		145	7.50	94	0.020	0.200K	0.420	0.003
74/09/04	13 30	0000	11.1	7.0	138	196	8.00	101	0.070	0.600	0.080	0.004
	13 30	0005	11.1	6.0		194	8.10	100	0.050	0.400	0.050	0.005
	13 30	0010	11.1	6.0		195	8.10	99	0.050	0.400	0.060	0.002
	13 30	0015	11.1	6.0		196	8.00	101	0.050	0.400	0.040	0.003
	13 30	0020	11.1	6.0		141	7.80	97	0.050	0.400	0.200	0.002
	13 30	0025	11.1	6.0		111	7.70	70	0.050	0.400	0.430	0.006
	13 30	0130	11.0	0.6		128	7.50	89	0.310	0.500	0.170	0.010
74/10/11	10 20	0000	11.1	7.2	147	171	7.75	94	0.050	0.600	0.030	0.004
	10 20	0005	11.1	6.5		171	7.71	93	0.030	0.300	0.020	0.006
	10 20	0010	11.1	6.0		167	7.51	93	0.020	0.200K	0.020K	0.005
	10 20	0015	11.1	6.0		165	7.11	94	0.030	0.700	0.020K	0.005
	10 20	0020	11.1	6.0		113	6.85	92	0.020	0.200	0.020	0.005
	10 20	0025	11.1	6.0		111	6.73	52	0.040	0.200K	0.270	0.005
	10 20	0105	11.1	6.0		113	6.81	46	0.050	0.200K	0.290	0.005

K VALUE KNOWN TO BE LESS THAN
INDICATED

STREET ADDRESS: 1000 17th St. N.
CITY: ST. CLOUD, MN 56301
PHONE: 326-1111

01714
 35 34 24. 143 30 20.0
 14-LE - JACK LANE
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DATE	TIME	DEPTH	WAVELENGTH	CHLOROPHYL	INCOUL LF
FOOT	OF	FEET	METER	PER	PER
74/04/08	10 30	0000	0.014	2.5	
	10 30	0005	0.017		
	10 30	0010	0.015		
	10 30	0015	0.015		
	10 30	0020	0.018		
	10 30	0025	0.021		
	10 30	0030	0.024		
74/06/10	13 25	0030	0.023	3.0	
	13 25	0035	0.015		
	13 25	0040	0.014		
	13 25	0045	0.020		
	13 25	0050	0.017		
	13 25	0055	0.018		
	13 25	0100	0.010		
74/09/04	13 30	0000	0.016	6.6	
	13 30	0005	0.014		
	13 30	0010	0.014		1.0
	13 30	0015	0.012		
	13 30	0020	0.012		
	13 30	0025	0.013		
	13 30	0030	0.035		
74/10/11	10 20	0000	0.024	5.2	
	10 20	0001			50.0
	10 20	0005	0.017		
	10 20	0010			1.0
	10 20	0015	0.014		
	10 20	0020	0.014		
	10 20	0025	0.012		
	10 20	0030	0.014		
	10 20	0105	0.014		

STATION RETRIEVAL 7/2/01
 NATL EUTROPHICATION CENTER
 EPA-645-01-001

001500
 35.34 35.00 093.34 44.0
 TABLE ROCK LAKE
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 0107 FEET DEPTH

DATE	TIME	DEPTH	WATER	TEMP	COND	COND	COND	COND	COND	COND	COND	COND	COND
FROM	OF	FEET	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP
T)	AT	FEET	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP
74/04/05	11 10 0000	11.0											
	11 10 0005	11.5											
	11 10 0010	12.0											
	11 10 0015	12.5											
	11 10 0020	13.0											
	11 10 0025	13.5											
	11 10 0030	14.0											
	11 10 0035	14.5											
	11 10 0040	15.0											
74/06/10	12 45 0000	12.0											
	12 45 0005	12.5											
	12 45 0010	13.0											
	12 45 0015	13.5											
	12 45 0020	14.0											
	12 45 0025	14.5											
	12 45 0030	15.0											
	12 45 0035	15.5											
	12 45 0040	16.0											
	12 45 0045	16.5											
	12 45 0050	17.0											
	12 45 0055	17.5											
	12 45 0100	18.0											
74/09/05	09 30 0000	12.0											
	09 30 0005	12.5											
	09 30 0010	13.0											
	09 30 0015	13.5											
	09 30 0020	14.0											
	09 30 0025	14.5											
	09 30 0030	15.0											
	09 30 0035	15.5											
	09 30 0040	16.0											
	09 30 0045	16.5											
	09 30 0050	17.0											
	09 30 0055	17.5											
	09 30 0100	18.0											
74/10/10	16 00 0000	12.0											
	16 00 0005	12.5											
	16 00 0010	13.0											
	16 00 0015	13.5											
	16 00 0020	14.0											
	16 00 0025	14.5											
	16 00 0030	15.0											
	16 00 0035	15.5											
	16 00 0040	16.0											
	16 00 0045	16.5											
	16 00 0050	17.0											
	16 00 0055	17.5											
	16 00 0100	18.0											

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STREET DATA
 NATL EUTM - 10/10/73
 EPA-LAS 10/10/73

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 TABLE ROCK LAKE
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DATE	TIME	DEPTH	WIND	WAVE	WAVE	WAVE
FROM	TO	FEET	WAVE	WAVE	WAVE	WAVE
74/04/04	11 10 0000	0.012				
	11 10 0035	0.015				
	11 10 0060	0.013				
	11 10 0095	0.010				
	11 10 0130	0.014				
	11 10 0165	0.015				
	11 10 0200	0.013				
74/05/18	14 45 0000	0.027				
	14 45 0035	0.014				
	14 45 0070	0.021				
	14 45 0105	0.034				
	14 45 0140	0.030				
	14 45 0175	0.017				
	14 45 0210	0.016				
	14 45 0245	0.015				
	14 45 0280	0.014				
74/09/05	09 30 0000	0.016				
	09 30 0035	0.014				
	09 30 0070	0.014				
	09 30 0105	0.013				
	09 30 0140	0.020				
	09 30 0175	0.035				
74/10/10	15 00 0000	0.017				
	15 00 0035	0.018				
	15 00 0070					
	15 00 0105	0.014				
	15 00 0140	0.024				
	15 00 0175	0.014				
	15 00 0210	0.018				
	15 00 0245	0.047				

STATION DATA
 NAME
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DATE	TIME	DEPTH	TEMP	COND	SECCHI	CHLOROPHYLL	PH	00410 CALCUL	00510 TOTAL	00625 TOTAL	00630 TOTAL	00671 PHOS-DIS
TIME	DATE	DEPTH	TEMP	COND	SECCHI	CHLOROPHYLL	PH	00410 CALCUL	00510 TOTAL	00625 TOTAL	00630 TOTAL	00671 PHOS-DIS
74/04/16	13 50	0000	10.0		70	101	7.50	56	0.060	0.2000	0.230	0.002
	13 50	0010	10.0	10.0		100	7.50	55	0.060	0.2000	0.230	0.004
	13 50	0020	10.0	10.0		99	7.70	56	0.060	0.2000	0.240	0.003
	13 50	0030	10.1	10.0		92	7.66	60	0.050	0.2000	0.250	0.003
	13 50	0040	10.7	10.0		93	7.60	51	0.060	0.2000	0.250	0.004
74/06/18	14 00	0030	20.0		84	203	8.00	87	0.040	0.300	0.130	0.007
	14 00	0040	20.0	7.0		122	7.50	67	0.030	0.300	0.090	0.004
	14 00	0050	10.4	7.7		115	7.70	50	0.040	0.300	0.140	0.007
	14 00	0100	10.3	7.0		97	7.40	40	0.020	0.200	0.250	0.003
	14 00	0110	10.9	7.0		97	7.30	40	0.030	0.200	0.270	0.002
	14 00	0120	10.7	7.8		101	7.30	41	0.020	0.200	0.290	0.003
74/07/05	10 40	0030	20.0	7.0	72	180	8.30	101	0.040	0.300	0.020	0.008
	10 40	0040	20.0	7.0		189	8.35	101	0.040	0.300	0.030	0.004
	10 40	0050	20.0	7.4		184	8.40	101	0.030	0.300	0.020	0.003
	10 40	0100	20.0	7.2		188	8.35	101	0.030	0.300	0.020	0.002
	10 40	0110	20.4	5.0		163	7.90	92	0.040	0.200	0.150	0.003
	10 40	0120	10.3	3.4		113	7.65	72	0.060	0.300	0.340	0.003
74/10/10	14 30	0040	10.8	8.2	120	179	8.07	105	0.050	0.500	0.600	0.007
	14 30	0050	10.0	7.4		175	8.05	105	0.030	0.300	0.040	0.004
	14 30	0100	10.3	7.2		175	7.93	100	0.040	0.200	0.040	0.004
	14 30	0110	10.3	7.2		171	7.87	101	0.040	0.200	0.040	0.003
	14 30	0120	10.0	5.6		137	7.33	85	0.070	0.200	0.170	0.003
	14 30	0130	10.9	4.8		127	7.19	80	0.090	0.300	0.220	0.004

K VALUE KNOWN TO BE LESS THAN
 INDICATED

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11E-242-5 2111212
3 0004 FEET DEPTH

DATE	TIME	DEPTH	WIND	WAVE	WIND DIR	WAVE DIR
FROM	OF	FEET	MPH	SECS	DEG	DEG
74/04/05	13 50	0000	0.015	4.5		
	13 50	0004	0.015			
	13 50	0017	0.015			
	13 50	0030	0.015			
	13 50	0050	0.015			
74/06/18	14 00	0000	0.025	2.4		
	14 00	0005	0.025			
	14 00	0020	0.021			
	14 00	0035	0.015			
	14 00	0045	0.015			
	14 00	0054	0.015			
74/04/05	10 40	0000	0.021	15.2		
	10 40	0005	0.020			
	10 40	0016	0.018			1.0
	10 40	0026	0.018			
	10 40	0040	0.027			
	10 40	0057	0.032			
74/10/10	14 30	0000	0.028	3.2		
	14 30	0005	0.025			
	14 30	0013				1.0
	14 30	0015	0.021			
	14 30	0030	0.022			
	14 30	0045	0.025			
	14 30	0057	0.032			

STATION REPORT
DATE: 04/04/05
SP46LAS 0505

051501
35 33 30.0 0-3 35 30.0
TABLE ROCK LAKE
AR ARKANSAS

11E4LES 2Y11202
3 0072 FEET DEPTH

DATE FROM TO	TIME OF DAY	DEPTH FEET	000001 STEADY STATE	000002 DO	000007 TRAVEL SECCHI	000004 CONDUCTIVITY FIELD MICROHMO	000000 PH	000410 TALK CACUS MG/L	000610 M43-N TOTAL MG/L	000625 TOT N-JEL N MG/L	000630 NO2&NO3 N-TOTAL MG/L	000671 PHOS-DIS ORTHO MG/L P
74/04/05	14 25	14	12.7		40	160	8.50	94	0.060	0.300	0.310	0.004
	14 25	0000	12.7	11.6		159	8.50	95	0.050	0.400	0.310	0.005
	14 25	0015	12.7	11.6		159	8.50	95	0.050	0.400	0.300	0.004
	14 25	0030	12.0	10.7		158	8.30	96	0.050	0.200	0.300	0.003
	14 25	0045	8.2	5.0		144	7.50	92	0.060	0.200K	0.450	0.004
74/06/18	13 15	0000	25.6		80	212	8.40	101	0.030	0.500	0.060	0.008
	13 15	0015	26.0	12.4		207	8.40	104	0.020	0.400	0.030	0.008
	13 15	0030	22.0	10.7		178	8.40	100	0.030	0.400	0.030	0.008
	13 15	0045	17.1	5.0		127	7.40	75	0.050	0.200	0.380	0.013
	13 15	0045	17.1	5.2		143	7.40	87	0.050	0.200	0.290	0.021
	13 15	0050	15.6	6.6		137	7.50	80	0.040	0.200	0.290	0.013
	13 15	0055	15.0	6.4		135	7.40	84	0.030	0.200	0.300	0.010
	13 15	0076	14.4	2.6		154	7.30	90	0.040	0.200	0.380	0.015
74/09/05	10 00	0000	23.7	5.0	74	213	7.80	110	0.040	0.200	0.020	0.002
	10 00	0005	23.8	4.8		213	7.80	111	0.040	0.200	0.020K	0.002
	10 00	0015	23.6	4.6		213	7.80	110	0.030	0.200	0.020K	0.004
	10 00	0025	23.7	5.7		214	7.70	111	0.030	0.200	0.020K	0.004
	10 00	0035	23.7	1.0		250	7.40	124	0.020	0.200	0.020K	0.002
	10 00	0050	16.0	0.2		180	7.25	111	0.150	0.300	0.020	0.009
	10 00	0055	16.2	0.2		186	7.25	112	0.700	0.800	0.020K	0.023
74/10/10	15 10	0000	20.2	8.0	37	193	7.85	109	0.030	0.300	0.050	0.003
	15 10	0005	19.8	7.8		189	7.85	111	0.030	0.200	0.050	0.003
	15 10	0015	19.7	7.4		189	7.73	111	0.020	0.200	0.040	0.003
	15 10	0030	19.7	6.4		189	7.51	112	0.040	0.200K	0.060	0.003
	15 10	0045	14.1	5.2		209	7.11	128	0.140	0.400	0.120	0.005
	15 10	0055	12.5	0.0		153	6.43	103	0.480	0.700	0.020K	0.007
	15 10	0050	12.7	0.2		157	6.45	104	0.700	0.400	0.020K	0.011

K VALUE KNOWN TO BE LESS THAN INDICATED

STATION 100+00
 DATE 10/10/74
 EPR-LES 1/10/75

051567
 35 33 50.0 043 30.0
 FAL-LE -UCK LANE
 05 2474345

1112-4LES
 2111272-
 0072 FEEL DE-111.

DATE	TIME	DEPTH	CHLOROPHYL	INCL. LI
FROM	OF			
ID	DAY	FEET	MGAL	PERCENT
74/04/14	14	25	0.00	0.027
	14	25	0.005	0.034
	14	25	0.015	0.033
	14	25	0.040	0.029
	14	25	0.060	0.024
74/06/18	13	15	0.000	0.041
	13	15	0.005	0.044
	13	15	0.015	0.034
	13	15	0.025	0.033
	13	15	0.040	0.030
	13	15	0.050	0.034
	13	15	0.055	0.031
74/09/05	13	15	0.070	0.026
	10	00	0.000	0.017
	10	00	0.005	0.019
	10	00	0.011	
	10	00	0.015	0.021
	10	00	0.025	0.017
	10	00	0.035	0.025
74/10/10	10	00	0.050	0.036
	10	00	0.055	0.074
	15	10	0.000	0.019
	15	10	0.005	0.020
	15	10	0.014	
	15	10	0.015	0.021
	15	10	0.030	0.017
	15	10	0.050	0.026
	15	10	0.055	0.034
	15	10	0.050	0.021

001-00
 00 30 33.00 0.43 2-14.01
 TAPLE-000 L-00
 00 00 00.00 0.00 0.00

1 2111200

0142 FLEET WE-10

DATE FROM TO	TIME	DEPTH FEET	WAVE PER	WIND MPH	TEMP DEGREES	SEA INCHES	CONDUCTIVITY FIELD 4ICR0N-0	PH SM	TALK CAC03 45/L	00610 NH3-N TOTAL MG/L	00625 TOI KJEL N MG/L	00630 NUPAN03 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/06	15 05	0001	12.3			60	180	8.50	102	0.050	0.400	1.160	0.025
	15 05	0005	12.1	12.0			176	8.50	99	0.060	0.300	1.180	0.027
	15 05	0015	11.7	10.8			178	8.40	99	0.060	0.300	1.210	0.025
	15 05	0025	11.4	10.4			171	8.30	96	0.050	0.300	1.130	0.025
	15 05	0035	9.1	9.8			155		94	0.070	0.200	0.940	0.030
	15 05	0040	7.7	9.0			172	7.70	108	0.100	0.300	1.210	0.039
	15 05	0135	7.5	8.0			182	7.70	115	0.170	0.300	1.330	0.041
74/06/14	14 00	0000	25.1			75	192	9.00	100	0.040	0.600	0.100	0.013
	14 00	0005	25.5	12.4			190	9.00	102	0.040	0.400	0.090	0.008
	14 00	0010	24.0	12.4			190	8.90	102	0.030	0.500	0.080	0.007
	14 00	0020	22.4	6.2			211	7.80	118	0.060	0.400	0.320	0.007
	14 00	0030	19.8	4.4			212	7.60	98	0.070	0.300	0.940	0.066
	14 00	0045	17.2	4.2			185	7.70	114	0.040	0.200K	0.950	0.051
	14 00	0055	15.4	3.0			202	7.70	115	0.030	0.200K	0.980	0.051
	14 00	0080	13.4	4.8			161	7.70	97	0.040	0.200K	0.810	0.020
74/09/04	14 00	0141	11.5	0.4			223	7.60	135	0.190	0.300	1.140	0.044
	14 14	0000	24.0	5.0		105	206	8.10	140	0.040	0.300	0.040	0.004
	14 10	0010	23.8	6.4			207	8.10	106	0.050	0.200K	0.050	0.003
	14 10	0020	23.7	5.4			206	8.10	103	0.050	0.200K	0.050	0.004
	14 10	0040	19.0	0.3			198	7.70	115	0.050	0.200K	0.160	0.002
	14 10	0075	16.1	0.8			155	7.60	99	0.070	0.200K	0.520	0.009
	14 10	0100	14.6	0.8			157	7.60	101	0.090	0.200	0.490	0.033
	14 10	0130	13.5	0.6			202	7.50	133	0.750	0.800	0.130	0.067
74/10/11	09 25	0000	14.5	7.4		144	201	7.85	112	0.070	0.700	0.090	0.007
	09 25	0025	14.6	7.0			199	7.81	122	0.050	0.300	0.090	0.008
	09 25	0030	14.4	6.0			201	7.61	111	0.050	0.200	0.090	0.011
	09 25	0055	16.2	0.2			185	7.01	114	0.050	0.200	0.370	0.010
	09 25	0075	16.5	0.5			159	6.95	95	0.020	0.200K	0.470	0.021
	09 25	0095	16.2	0.4			107	6.97	95	0.070	0.200	0.440	0.048
	09 25	0110	15.4	0.4			163	7.09	102	0.140	0.300	0.360	0.040
	09 25	0130	14.3	0.0			99	7.05	135	1.000	1.800	0.090	0.036

K VALUE KNOWN TO BE LESS THAN
INDICATED

STOWER - FIVE-LEVEL - 15' 7" 1/2"
 NATL. BUREAU OF OCEANOGRAPHY
 EDA-135 OF 135

051090
 36 38 33.0 043 27 14.0
 TABLE - OCEAN LANE
 05 27 14.0 33.0

118-135

2111272
 0142 FEET DEPTH

DATE	TIME	DEPTH	CHL-PHYL	INCLUT	PERCENT
FROM	OF	FEET	1974	1974	PERCENT
74/04/06	15 05	0000	0.055	0.1	
	15 05	0005	0.064		
	15 05	0015	0.070		
	15 05	0035	0.078		
	15 05	0055	0.043		
	15 05	0057	0.048		
	15 05	0135	0.052		
74/05/10	14 00	0000	0.024	0.3	
	14 00	0001			50.0
	14 00	0005	0.025		
	14 00	0010	0.025		
	14 00	0015			1.0
	14 00	0020	0.030		
	14 00	0030	0.035		
	14 00	0045	0.066		
	14 00	0065	0.050		
	14 00	0080	0.025		
	14 00	0141	0.058		
74/09/04	14 10	0000	0.017	0.0	
	14 10	0010	0.017		
	14 10	0023	0.017		1.0
	14 10	0040	0.014		
	14 10	0075	0.018		
	14 10	0100	0.071		
	14 10	0130	0.134		
74/10/11	09 25	0000	0.019	0.7	
	09 25	0001			50.0
	09 25	0005	0.024		
	09 25	0015			1.0
	09 25	0030	0.022		
	09 25	0055	0.030		
	09 25	0075	0.036		
	09 25	0095	0.050		
	09 25	0110	0.058		
	09 25	0130	0.050		

051504
36 43 40.0 043 30 00.0
TABLE ROCK LAKE
05 ARKANSAS

2111202
0044 FET DEATH

DATE FROM TO	TIME OF DAY	DEPTH FEET	00065 PHOS-TOT MG/L P	32217 CHLOROPHYL A UG/L	00031 INCLT LT W/FINING PERCENT
74/04/06	15 45	0000	0.111	6.3	
	15 45	0005	0.101		
	15 45	0015	0.103		
	15 45	0030	0.104		
	15 45	0035	0.120		
74/04/10	14 40	0000	0.056	15.4	
	14 40	0005	0.056		
	14 40	0010	0.048		
	14 40	0020	0.053		
	14 40	0035	0.073		
74/09/04	14 50	0000	0.123	13.4	
	14 50	0005	0.106		
	14 50	0007			
	14 50	0015	0.104		
	14 50	0027	0.151		
74/10/10	10 45	0001	0.417	25.8	
	10 45	0000	0.102		
	10 45	0105	0.051		
	10 45	0007			
	10 45	0015	-0.053		
	10 45	0030	0.057		
	10 45	0042	0.240		

STORET RETRIEVAL DATE 77/02/02

050401
36 22 03.0 092 34 20.0 3
BULL SHOALS LAKE
05005 ARKANSAS

100591

/TYRA/AMBNT/LAKE

11EPALES 04001002
0210 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CAC03 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/06	14 00	0000	11.2		152	39	8.20	118	0.050	0.600	0.290	0.009
	14 00	0005	11.1	10.4		55	8.20	116	0.040	0.200K	0.280	0.006
	14 00	0015	10.7	10.0		130	8.20	114	0.040	0.200K	0.270	0.006
	14 00	0040	10.6	10.2		146	8.10	114	0.050	0.200K	0.280	0.006
	14 00	0080	10.6	10.2		180	8.10	125	0.050	0.200K	0.290	0.006
	14 00	0135	7.5	9.4		196	7.70	128	0.030	0.200K	0.340	0.004
	14 00	0160	7.2	9.4		203	7.70	125	0.040	0.200K	0.370	0.007
	14 00	0190	7.2	9.2		265	7.60	123	0.040	0.200K	0.370	0.008
74/06/20	15 05	0000	24.6	8.8	300	246	8.60	123	0.070	0.400	0.220	0.002K
	15 05	0005	24.4	8.8		249	8.40	123	0.040	0.300	0.180	0.002K
	15 05	0025	21.3	8.4		230	8.40	123	0.050	0.300	0.200	0.002K
	15 05	0045	15.9	6.0		203	8.40	120	0.060	0.200	0.340	0.002K
	15 05	0070	13.8	6.8		192	8.20	122	0.040	0.200	0.380	0.002K
	15 05	0100	12.3	7.2		184	7.50	123	0.030	0.200	0.380	0.002K
	15 05	0130	11.1	7.4		181	8.60	122	0.040	0.200K	0.410	0.002K
	15 05	0160	9.3	6.2		179	7.80	125	0.040	0.200K	0.460	0.002K
74/09/04	13 30	0000	24.8	8.4	144	251	8.50	130	0.050	0.700	0.040	0.010
	13 30	0015	24.5	8.4		241	8.50	129	0.060	0.500	0.030	0.006
	13 30	0036	23.9	8.0		239	8.40	131	0.030	0.500	0.040	0.005
	13 30	0042	19.2	1.4		233	7.90	140	0.060	0.500	0.310	0.005
	13 30	0060	17.2	1.2		212	7.80	132	0.050	0.500	0.480	0.005
	13 30	0080	15.8	4.0		199	7.80	126	0.040	0.400	0.530	0.004
	13 30	0100	15.0	5.0		189	7.80	115	0.040	0.300	0.580	0.004
	13 30	0120	14.4	4.2		191	7.70	124	0.050	0.400	0.570	0.005
	13 30	0140	12.8	3.6		191	7.70	127	0.040	0.400	0.520	0.005
	13 30	0160	11.3	0.6		187	7.60	130	0.060	0.400	0.480	0.010
	13 30	0185	9.3	0.2		183	7.60	137	0.200	0.500	0.320	0.023
74/10/15	11 00	0000	19.3	6.8	156	219	8.01	133	0.050	0.400	0.080	0.004
	11 00	0005	19.3	7.4		219	8.01	136	0.020	0.300	0.070	0.002
	11 00	0020	19.3	7.0		219	8.01	136	0.020	0.300	0.070	0.002
	11 00	0050	19.3	7.2		219	7.93	137	0.020	0.200	0.070	0.002
	11 00	0070	19.3	6.8		215	7.83	138	0.020K	0.300	0.080	0.002
	11 00	0075	19.3	5.2		213	7.75	125	0.040	0.300	0.100	0.002
	11 00	0090	16.8	1.6		183	7.05	114	0.020	0.200	0.430	0.003
	11 00	0110	15.9	2.0		185	7.07	120	0.020	0.200	0.490	0.004
	11 00	0130	14.7	2.2		185	7.05	122	0.020	0.200	0.530	0.005

K VALUE KNOWN TO BE
LESS THAN INDICATED

STOPET RETRIEVAL DATE 77/02/02

050401
36 22 03.0 092 34 20.0 3
BULL SHOAL LAKE
05005 ARKANSAS

100591

/1TYP/AMBNT/LAKE

11EPALES -04001002
0210 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CACO3 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/10/15	11 00	0150	13.0	0.6		189	7.09	133	0.210	0.400	0.290	0.012
	11 00	0176	10.9	0.6		191	7.19	146	0.410	0.600	0.080	0.022

STORET RETRIEVAL DATE 77/02/02

050401
36 22 03.0 092 34 20.0 3
BULL SHOAL LAKE
05005, ARKANSAS

100591

/TYP/AMBNT/LAKE

11EPALES . 04001002
0210 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLORPHYL UG/L	00031 INCH LT REMNING PERCENT
74/04/06	14 00	0000	0.023	2.4	
	14 00	0005	0.013		
	14 00	0015	0.019		
	14 00	0040	0.017		
	14 00	0020	0.020		
	14 00	0135	0.016		
	14 00	0160	0.015		
	14 00	0190	0.017		
74/06/20	15 05	0000	0.008	1.1	
	15 05	0005	0.010		
	15 05	0025	0.008		
	15 05	0045	0.008		1.0
	15 05	0070	0.008		
	15 05	0100	0.008		
	15 05	0130	0.010		
	15 05	0160	0.011		
74/09/04	13 30	0000	0.017	3.4	
	13 30	0015	0.012		
	13 30	0028			5.0
	13 30	0036	0.016		
	13 30	0042	0.014		1.0
	13 30	0060	0.017		
	13 30	0080	0.010		
	13 30	0100	0.010		
	13 30	0120	0.010		
	13 30	0140	0.012		
	13 30	0160	0.019		
	13 30	0185	0.039		
74/10/15	11 00	0000	0.011	2.4	
	11 00	0001			50.0
	11 00	0005	0.010		
	11 00	0020	0.010		
	11 00	0024			1.0
	11 00	0050	0.009		
	11 00	0070	0.008		
	11 00	0075	0.009		

STRET RETRIEVAL DATE 77/02/02

050401
36 22 03.0 092 34 20.0.3
BULL SHOAL LAKE
05000, ARKANSAS
100591

/TYPE/AMBT/LAKE

11EPALES, 04001002
0210 FEET DEPTH CLASS 00

DATE	TIME	DEPTH	PHOS-TOT	CHLPPHYL	INCDT LT
FROM	OF			A	REMNING
TO	DAY	FEET	MG/L P	UG/L	PERCENT
74/10/15	11 00	0090	0.009		
	11 00	0110	0.008		
	11 00	0130	0.010		
	11 00	0150	0.018		
	11 00	0176	0.049		

STORET RETRIEVAL DATE 77/02/82

050402
36 24 05.0 092 35 32.0 3
BULL SHOALS LAKE
05089 ARKANSAS

100591

/TYP/AMBNT/LAKE

11EPALES 04001002
0142 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CAC03 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PhOS-DIS ORTHO MG/L P
74/04/06	14 35	0000	11.0		150		8.10	125	0.040	0.500	0.280	0.006
	14 35	0005	10.9	10.6		21	8.10	125	0.040	0.200	0.290	0.008
	14 35	0015	10.8	10.4		114	8.10	123	0.020	0.300	0.260	0.004
	14 35	0030	10.5	10.4		122	8.10	119	0.060	0.200	0.300	0.002
	14 35	0070	10.4	10.4		163	8.00	118	0.060	0.200K	0.300	0.002
	14 35	0120	8.6	9.4		205	7.70	115	0.030	0.200K	0.350	0.006
	14 35	0185	7.2	9.6		265	7.70	112	0.040	0.200	0.350	0.009
74/06/21	10 50	0000	26.4	8.4	260	250	8.70	130	0.040	0.300	0.230	0.004
	10 50	0005	26.3	8.4		254	8.50	129	0.020K	0.200	0.170	0.002K
	10 50	0015	23.7	9.2		237	8.70	129	0.030	0.200	0.170	0.002K
	10 50	0040	17.2	5.0		204	8.00	130	0.050	0.300	0.430	0.002
	10 50	0080	13.2	6.6		182	7.80	128	0.030	0.200	0.430	0.002K
	10 50	0120	11.4	7.6		174	8.40	129	0.050	0.300	0.450	0.004
	10 50	0160	9.2	5.4		170	7.50	131	0.060	0.200	0.500	0.006
74/09/04	14 35	0000	25.0	8.0	156	247	8.40	127	0.040	0.700	0.050	0.006
	14 35	0015	24.4	7.8		241	8.40	126	0.030	0.600	0.030	0.005
	14 35	0035	23.7	5.2		243	8.10	131	0.030	0.500	0.050	0.005
	14 35	0040	20.5	1.6		241	7.90	134	0.620	0.600	0.080	0.008
	14 35	0050	17.8	1.0		213	7.80	129	0.060	0.400	0.400	0.006
	14 35	0060	16.9	2.0		207	7.75	129	0.050	0.200K	0.480	0.006
	14 35	0070	16.4	5.0		203	7.75	126	0.050	0.200K	0.490	0.008
	14 35	0090	15.2	5.0		191	7.75	121	0.040	0.200K	0.570	0.007
	14 35	0110	14.6	5.0		189	7.70	115	0.050	0.200K	0.580	0.009
	14 35	0130	13.0	3.4		191	7.70	136	0.060	0.200K	0.520	0.006
	14 35	0150	11.8	0.3		189	7.65	138	0.090	0.200	0.480	0.009
	14 35	0165	11.1	0.3		191	7.60	142	0.180	0.400	0.370	0.013
	14 35	0186	9.8	0.0		236	7.60	151	0.430	0.900	0.240	0.020
74/10/15	12 00	0000	19.4	6.4	150	219	8.07	133	0.050	0.400	0.060	0.003
	12 00	0005	19.4	7.4		219	8.05	132	0.030	0.300	0.060	0.004
	12 00	0020	19.3	7.8		217	8.03	131	0.030	0.300	0.050	0.004
	12 00	0040	19.3	7.2		217	7.93	127	0.030	0.200K	0.050	0.008
	12 00	0070	18.2	1.0		205	7.19	122	0.020	0.200K	0.280	0.005
	12 00	0100	16.6	0.8		195	7.07	120	0.020K	0.200K	0.430	0.005
	12 00	0130	14.6	1.4		187	7.03	119	0.030	0.200K	0.500	0.009
	12 00	0155	12.8	0.6		195	7.15	135	0.350	0.400	0.140	0.018
	12 00	0176	10.4	0.8		193	7.31	145	0.570	0.700	0.020K	0.042

K VALUE KNOWN TO BE
LESS THAN INDICATED

SECRET RETRIEVAL DATE 77/02/02

-050402
36 24 05.0 092 35 32.0 3
BULL SHOAL LAKE
05039 ARKANSAS

100591

/TYP/AMBNT/LAKE

11EPALES 04001002
0192 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/06	14 35	0000	0.012	1.8	
	14 35	0005	0.025		
	14 35	0015	0.023		
	14 35	0030	0.019		
	14 35	0070	0.017		
	14 35	0120	0.016		
	14 35	0125	0.036		
74/06/21	10 50	0000	0.007	2.8	
	10 50	0005	0.007		
	10 50	0015	0.007		
	10 50	0040	0.008		
	10 50	0080	0.005		
	10 50	0120	0.012		
	10 50	0160	0.010		
74/09/04	14 35	0000	0.016	3.4	
	14 35	0015	0.016		
	14 35	0026			5.0
	14 35	0035	0.012		
	14 35	0038			1.0
	14 35	0040	0.019		
	14 35	0050	0.013		
	14 35	0060	0.011		
	14 35	0070	0.011		
	14 35	0090	0.010		
	14 35	0110	0.018		
	14 35	0130	0.013		
	14 35	0150	0.020		
	14 35	0165	0.030		
	14 35	0186	0.104		
74/10/15	12 00	0000	0.009	3.1	
	12 00	0005	0.011		
	12 00	0019			1.0
	12 00	0020	0.016		
	12 00	0040	0.022		
	12 00	0070	0.017		
	12 00	0100	0.013		
	12 00	0130	0.017		
	12 00	0155	0.035		
	12 00	0176	0.098		

STORE1 RETRIEVAL DATE 77/02/02

050403
36 27 50.0 092 38 40.0 3
JULL SHOALS LAKE
05089 ARKANSAS

100591

/TYP4/AMNT/LAKE

11EPALES 04001002
0151 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CAC03 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT. KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/06	15 20	0000	11.6		138	14	8.20	116	0.060	0.300	0.310	0.004
	15 20	0005	11.5	10.4		36	8.20	116	0.040	0.200	0.290	0.005
	15 20	0015	11.5	10.2		91	8.20	114	0.060	0.200	0.310	0.004
	15 20	0030	11.2	10.4		140	8.20	118	0.040	0.200	0.310	0.010
	15 20	0070	10.0	10.0		164	8.00	123	0.040	0.200	0.310	0.002
	15 20	0110	7.2	9.2		193	7.70	119	0.040	0.200K	0.360	0.007
	15 20	0140	7.1	9.6		195	7.70	119	0.060	0.200	0.380	0.005
74/06/21	10 15	0000	26.2	8.2	260	249	8.80	130	0.060	1.000	0.220	0.004
	10 15	0005	26.3	8.2		252	8.60	131	0.030	0.300	0.160	0.002
	10 15	0015	25.6	8.6		242	8.40	131	0.020K	0.300	0.170	0.002K
	10 15	0040	15.5	5.4		191	7.90	130	0.020K	0.200	0.500	0.002K
	10 15	0080	12.8	6.8		178	7.60	126	0.020	0.200K	0.470	0.002K
	10 15	0120	11.3	7.4		176	8.00	129	0.020	0.200K	0.450	0.002
	10 15	0160	9.3	3.8		178	8.00	132	0.020K	0.200	0.510	0.004
74/09/05	10 15	0000	24.1	6.4	146	251	8.20	132	0.030	0.200	0.040	0.002K
	10 15	0015	24.1	0.6		251	8.25	131	0.040	0.200K	0.030	0.002K
	10 15	0031	23.8	3.6		245	8.10	128	0.030	0.200K	0.040	0.002K
	10 15	0045	18.5	7.4		219	7.70	128	0.030	0.200K	0.320	0.002K
	10 15	0060	16.9	2.6		191	7.70	113	0.020	0.200K	0.430	0.002K
	10 15	0075	16.2	2.4		203	7.65	123	0.030	0.400	0.500	0.002K
	10 15	0090	15.3	4.0		195	7.65	121	0.020	0.200K	0.560	0.002K
	10 15	0110	14.5	4.2		200	7.60	124	0.030	0.200K	0.570	0.002
74/10/15	12 45	0000	19.5	8.0	150	225	8.03	132	0.040	0.300	0.040	0.005
	12 45	0005	19.5	7.4		225	8.03	131	0.040	0.200K	0.040	0.005
	12 45	0015	19.5	7.6		225	8.00	130	0.020	0.200K	0.040	0.004
	12 45	0030	19.5	7.6		223	7.93	130	0.020	0.200K	0.040	0.004
	12 45	0055	19.3	6.6		219	7.85	127	0.030	0.200K	0.050	0.004
	12 45	0070	17.3	2.0		179	7.03	107	0.020K	0.200K	0.410	0.004
	12 45	0100	16.0	1.8		173	7.07	110	0.020	0.200K	0.490	0.005
	12 45	0130	14.4	0.4		179	7.05	114	0.060	0.200K	0.450	0.008
	12 45	0161	12.3	0.8		205	7.21	136	0.700	0.900	0.030	0.013

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/02

050403.
36 27.50.0 092 38 40.0 3
BULL SHOALS LAKE
05029 ARKANSAS

100591

/TYPA/AMBNT/LAKE

11EPALES 04001002
0151 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/06	15 20	0000	0.017	1.8	
	15 20	0005	0.016		
	15 20	0015	0.018		
	15 20	0030	0.020		
	15 20	0070	0.018		
	15 20	0110	0.018		
	15 20	0140	0.016		
74/06/21	10 15	0000	0.010	1.5	
	10 15	0005	0.009		
	10 15	0015	0.008		
	10 15	0040	0.006		
	10 15	0080	0.006		
	10 15	0120	0.007		
	10 15	0160	0.009		
74/09/05	10 15	0000	0.014	2.9	
	10 15	0015	0.012		
	10 15	0023			5.0
	10 15	0031	0.012		
	10 15	0035			1.0
	10 15	0045	0.012		
	10 15	0060	0.010		
	10 15	0075	0.009		
	10 15	0090	0.015		
	10 15	0110	0.032		
74/10/15	12 45	0000	0.014	3.2	
	12 45	0001			50.0
	12 45	0005	0.015		
	12 45	0015	0.015		
	12 45	0019			1.0
	12 45	0030	0.017		
	12 45	0055	0.014		
	12 45	0070	0.011		
	12 45	0100	0.012		
	12 45	0130	0.019		
	12 45	0161	0.140		

STORED RETRIEVAL DATE 77/02/02

050405
36 27 35.0 092 44 18.0 3
BULL SHOALS LAKE
05089 ARKANSAS

100591

/TYP/AMNT/LAKE

11EPALES 04001002
Q150 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CAC03 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/09	12 30	0000	11.6		150	18	8.20	122	0.060	0.600	0.360	0.006
	12 30	0005	11.6	10.6		23	8.20	127	0.040	0.300	0.360	0.004
	12 30	0015	11.0	10.4		98	8.20	125	0.040	0.300	0.380	0.004
	12 30	0030	10.5	9.8		115	7.80	122	0.030	0.300	0.390	0.003
	12 30	0080	7.7	9.0		155	7.70	120	0.030	0.300	0.390	0.003
	12 30	0140	7.4	9.0		215	7.70	120	0.020	0.300	0.350	0.003
74/06/21	11 25	0000	26.8	8.8	260	251	8.60	132	0.050	0.400	0.190	0.002
	11 25	0005	26.6	8.8		252	8.50	131	0.030	0.300	0.150	0.002
	11 25	0015	24.2	9.2		241	8.80	125	0.040	0.400	0.140	0.002
	11 25	0040	16.7	6.2		190	8.10	120	0.040	0.200	0.440	0.008
	11 25	0080	13.1	6.6		177	7.90	120	0.040	0.200	0.550	0.006
	11 25	0120	11.0	5.8		173	7.80	119	0.030	0.200	0.500	0.006
	11 25	0160	9.6	1.4		194	8.50			0.200		
74/09/05	10 55	0000	24.4	7.4	135	239	8.30	123	0.030	0.500	0.070	0.002K
	10 55	0015	24.2	7.8		237	8.30	124	0.030	0.200	0.030	0.002
	10 55	0032	24.0	6.6		235	8.20	124	0.030	0.200	0.040	0.003
	10 55	0038	19.7	0.8		223	7.80	118	0.040	0.200K	0.320	0.003
	10 55	0045	17.6	2.2		197	7.70	114	0.030	0.200K	0.380	0.002
	10 55	0055	16.9	3.4		177	7.70	106	0.020	0.200K	0.440	0.002
	10 55	0065	16.4	3.4		175	7.60	106	0.030	0.200K	0.490	0.003
	10 55	0080	15.8	3.6		181	7.60	117	0.050	0.200K	0.550	0.006
	10 55	0095	15.0	4.2		185	7.60	119	0.040	0.200K	0.590	0.004
	10 55	0110	14.3	5.2		185	7.60	122	0.030	0.200K	0.600	0.004
	10 55	0125	13.5	0.4		179	7.50	122	0.100	0.300	0.600	0.007
	10 55	0140	12.7	0.4		193	7.50	134	0.230	0.400	0.360	0.009
74/10/15	16 05	0000	19.6	8.0	134	215	8.07	123	0.040	0.500	0.060	0.002
	16 05	0005	19.6	7.8		213	8.06	122	0.040	0.200	0.060	0.004
	16 05	0020	19.6	8.0		213	8.03	121	0.030	0.200K	0.060	0.005
	16 05	0040	19.6	7.6		211	7.99	121	0.030	0.300	0.060	0.005
	16 05	0065	18.6	7.0		209	7.37	117	0.020	0.200	0.270	0.005
	16 05	0095	16.1	0.6		171	6.99	104	0.020K	0.200K	0.470	0.009
	16 05	0120	15.0	0.4		181	7.07	113	0.290	0.400	0.230	0.011
	16 05	0146	13.6	0.6		195	7.13	129	0.870	1.000	0.020	0.009

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 17/02/02

050405
36 27 35.0 092 44 18.0 3
BULL SHOALS LAKE
05059 ARKANSAS
100591

/TTPA/AMBN/LAKE

11EPALES 04001002
0150 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/09	12 30	0000	0.016	5.0	
	12 30	0005	0.013		
	12 30	0015	0.011		
	12 30	0030	0.009		
	12 30	0080	0.009		
	12 30	0140	0.009		
74/06/21	11 25	0000	0.008	1.0	
	11 25	0005	0.009		
	11 25	0015	0.011		
	11 25	0040	0.015		
	11 25	0080	0.009		
	11 25	0120	0.010		
	11 25	0160	0.013		
74/09/05	10 55	0000	0.017	3.5	
	10 55	0006			50.0
	10 55	0015	0.014		
	10 55	0024			5.0
	10 55	0032	0.031		
	10 55	0035			1.0
	10 55	0038	0.014		
	10 55	0045	0.012		
	10 55	0055	0.010		
	10 55	0065	0.013		
	10 55	0080	0.012		
	10 55	0095	0.010		
	10 55	0110	0.012		
	10 55	0125	0.016		
	10 55	0140	0.048		
74/10/15	16 05	0000	0.016	3.4	
	16 05	0005	0.018		
	16 05	0017			1.0
	16 05	0020	0.020		
	16 05	0040	0.032		
	16 05	0065	0.017		
	16 05	0095	0.018		
	16 05	0120	0.058		
	16 05	0146	0.151		

STORET RETRIEVAL DATE 77/02/02

050406
36 28 39.0 092 49 14.0 3
BULL SHOALS LAKE
05089 ARKANSAS

100591

/TTPA/AMBNT/LAKE

11EPALES 04001002
0096 FEET DEPTH CLASS J0

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CAC03 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/09	13 15	0000	10.8		114	25	8.50	124	0.050	0.400	0.430	0.005
	13 15	0005	10.1	11.8		32	8.50	123	0.040	0.300	0.430	0.004
	13 15	0025	10.1	10.8		106	7.90	120	0.030	0.200	0.400	0.003
	13 15	0090	8.3	9.2		168	7.80	113	0.050	0.200	0.400	0.004
74/06/21	15 30	0000	27.0	8.8	260	249	8.80	125	0.050	0.900	0.180	0.004
	15 30	0005	26.9	8.8		251	8.80	125	0.030	0.300	0.130	0.002
	15 30	0015	25.8	8.8		241	8.70	125	0.030	0.200	0.130	0.002
	15 30	0040	16.5	6.6		190	8.10	122	0.030	0.200	0.440	0.006
	15 30	0080	13.1	7.8		180	7.80	121	0.020	0.200K	0.560	0.006
	15 30	0120	11.1	3.6		175	7.80	122	0.030	0.200	0.510	0.005
	15 30	0150	10.1	0.2		180	7.60	126	0.080	0.200	0.480	0.006
74/09/05	14 05	0000	24.9	7.8	138	238	8.30	129	0.040	0.200	0.030	0.003
	14 05	0015	24.6	7.6		238	8.30	131	0.040	0.200	0.030	0.007
	14 05	0030	23.7	5.0		236	8.00	130	0.030	0.200	0.050	0.004
	14 05	0040	18.7	4.0		195	7.80	114	0.020	0.200K	0.380	0.002
	14 05	0055	16.7	4.2		176	7.70	98	0.020	0.200K	0.430	0.003
	14 05	0070	16.1	3.6		173	7.70	101	0.020	0.200K	0.490	0.006
	14 05	0085	15.1	3.6		182	7.65	108	0.020	0.000K	0.560	0.004
	14 05	0100	14.4	2.6		187	7.60	112	0.020	0.200K	0.570	0.004
74/10/10	14 55	0000	20.5	8.0	132	203	8.35	125	0.020	0.300	0.090	0.004
	14 55	0005	19.9	7.8		200	8.35	126	0.020K	0.300	0.080	0.004
	14 55	0030	19.8	7.6		199	8.25	125	0.020K	0.300	0.070	0.003
	14 55	0050	19.4	6.2		199	8.00	125	0.020K	0.300	0.120	0.003
	14 55	0065	17.5	1.2		179	7.50	117	0.020K	0.200K	0.440	0.006
	14 55	0085	16.3	0.4		166	7.40	109	0.070	0.200	0.400	0.009
	14 55	0100	15.7	0.4		168	7.40	113	0.190	0.400	0.320	0.010
	14 55	0120	14.7	0.4		180	7.40	125	0.560	0.800	0.100	0.009

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/02

050406
36 28 39.0 092 49 14.0 3
SUELL SHOAL LAKE
05089 ARKANSAS

100591

/TYPA/AMBNT/LAKE

11EPALES 04001002
0096 FEET . DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/09	13 15	0000	0.014	10.6	
	13 15	0005	0.019		
	13 15	0025	0.013		
	13 15	0090	0.013		
74/06/21	15 30	0000	0.013	2.2	
	15 30	0005	0.009		
	15 30	0015	0.009		
	15 30	0040	0.015		
	15 30	0080	0.011		
	15 30	0120	0.013		
	15 30	0150	0.021		
74/09/05	14 05	0000	0.013	4.7	
	14 05	0005			50.0
	14 05	0015	0.017		
	14 05	0021			5.0
	14 05	0030	0.014		
	14 05	0034			1.0
	14 05	0040	0.014		
	14 05	0055	0.015		
	14 05	0070	0.014		
	14 05	0085	0.014		
	14 05	0100	0.017		
74/10/10	14 55	0000	0.017	4.0	
	14 55	0003			50.0
	14 55	0005	0.020		
	14 55	0016			5.0
	14 55	0030	0.015		
	14 55	0033			1.0
	14 55	0050	0.014		
	14 55	0065	0.013		
	14 55	0085	0.022		
	14 55	0100	0.034		
	14 55	0120	0.079		

STORET RETRIEVAL DATE 77/02/02

050407
35 28 23.0 092 54 07.0 3
HULL SHOALS LAKE
05009 ARKANSAS

100591

/TYPE/AMNT/LAKE

11EPALES 04001002
0073 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CACO3 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/09	14 00	0000	10.5		84		8.50	112	0.040	0.300	0.460	0.005
	14 00	0005	10.3	11.8		20	8.50	112	0.030	0.300	0.460	0.004
	14 00	0020	10.2	10.8		105	8.20	118	0.050	0.200	0.450	0.003
	14 00	0065	9.6	11.6		165	8.50	115	0.040	0.300	0.430	0.004
74/06/21	16 05	0000	26.1	10.0	170	246	8.50	127	0.040	0.400	0.140	0.003
	16 05	0005	25.3	10.2		240	8.60	126	0.030	0.200	0.150	0.003
	16 05	0015	23.2	9.6		225	8.40	126	0.030	0.300	0.200	0.003
	16 05	0030	17.4	6.8		197	7.40	123	0.040	0.200	0.400	0.003
	16 05	0050	15.4	8.6		132	7.50	118	0.040	0.200K	0.540	0.006
	16 05	0075	15.0	8.2		182	7.80	118	0.050	0.200K	0.600	0.009
	16 05	0098	12.4	4.8		184	7.90	124	0.040	0.200K	0.600	0.008
74/09/05	13 35	0000	24.7	7.6	129	245	8.30	125	0.050	0.800	0.050	0.006
	13 35	0015	24.5	7.4		234	8.30	124	0.030	0.500	0.030	0.003
	13 35	0030	24.1	5.6		242	8.10	126	0.040	0.500	0.020	0.003
	13 35	0040	17.7	3.8		186	7.90	112	0.030	0.200K	0.380	0.002
	13 35	0050	16.9	4.4		175	7.80	108	0.030	0.200K	0.450	0.003
	13 35	0057	16.5	4.4		173	7.75	109	0.040	0.200K	0.470	0.006
74/10/10	15 10	0000	20.5	8.4	120	206	8.30	127	0.040	0.200K	0.090	0.004
	15 10	0005	19.7	7.6		203	8.30	127	0.020K	0.200K	0.080	0.003
	15 10	0010	19.7	7.6		203	8.30	128	0.020K	0.200K	0.080	0.002
	15 10	0030	19.6	7.6		203	8.20	127	0.020	0.200K	0.080	0.002
	15 10	0049	19.5	6.4		202	8.10	127	0.020K	0.200K	0.100	0.003
	15 10	0065	17.2	2.6		193	7.55	125	0.020K	0.200K	0.410	0.005
	15 10	0080	16.6	2.0		185	7.50	123	0.100	0.200K	0.370	0.007
	15 10	0095	16.4	0.6		187	7.40	126	0.330	0.500	0.180	0.006

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/02

050407
36 25 23.0 092 54 07.0 3
BULL SHOALS LAKE
05009 ARKANSAS

100591

/TYP/AMONT/LAKE

11EPALES 04001002
0073 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/09	14 00	0000	0.015	12.7	
	14 00	0005	0.015		
	14 00	0020	0.013		
	14 00	0065	0.015		
74/06/21	16 05	0000	0.012	5.6	
	16 05	0005	0.015		
	16 05	0015	0.017		
	16 05	0030	0.015		
	16 05	0050	0.016		
	16 05	0075	0.016		
	16 05	0098	0.015		
74/09/05	13 35	0000	0.023	3.4	50.0
	13 35	0006			
	13 35	0015	0.018		
	13 35	0019			5.0
	13 35	0030	0.018		
	13 35	0031			1.0
	13 35	0040	0.015		
	13 35	0050	0.014		
	13 35	0057	0.021		
74/10/10	15 10	0000	0.016	3.6	
	15 10	0005	0.015		
	15 10	0007			50.0
	15 10	0010	0.015		
	15 10	0019			5.0
	15 10	0029			1.0
	15 10	0030	0.014		
	15 10	0049	0.014		
	15 10	0065	0.016		
	15 10	0080	0.020		
	15 10	0095	0.040		

STAFF - ET-15-11 7/1/81
DATE FORWARDED TO: 7/1/81
EPA-LAB 06045

050-94
34 32 50.0 023 05 44.0
HILL 540ALS LAKE
05 AKKAYSA5

111120Z
0065 FEET DEPT

DATE	TIME	DEPTH	WATER	TEMP	DO	TRANS	CONDUCTIV	PH	TALK	NH3-N	TOT KJEL	NH2ANO3	PHOS-DIS
FROM	OF	FEET	TEMP			SECCHI	FIELD		CACU3	TOTAL	N	N-TOTAL	ORTHO
TO	DATE		CENT	MG/L		INDEX	MICROMHO	50	MG/L	MG/L	MG/L	MG/L	MG/L P
74/04/04	14 40	0001	19.3			60		8.30	100	0.040	0.400	0.650	0.005
	14 40	0005	9.7	11.8			21	8.30	98	0.040	0.400	0.470	0.009
	14 40	0015	9.6	11.8			88	8.30	98	0.040	0.300	0.480	0.005
	14 40	0055	9.6	11.5			143	8.30	96	0.020	0.300	0.430	0.003
74/06/21	15 50	0000	27.7	9.6	130		270	8.70	127	0.140	1.500	0.100	0.015
	15 50	0005	25.9	10.8			269	8.80	125	0.050	0.600	0.060	0.009
	15 50	0010	23.9	10.2			254	9.10	125	0.050	0.500	0.070	0.008
	15 50	0015	22.1	11.4			240	8.70	122	0.050	0.500	0.140	0.008
	15 50	0020	20.3	11.0			226	8.60	116	0.030	0.400	0.240	0.007
	15 50	0025	15.3	9.6			191	8.20	104	0.030	0.400	0.480	0.006
	15 50	0035	14.7	9.8			185	7.90	102	0.040	0.300	0.540	0.006
	15 50	0053	14.7	9.4			187	8.20	105	0.040	0.300	0.560	0.006
74/09/05	13 05	0000	24.2	8.0	90		223	8.25	119	0.040	0.400	0.050	0.006
	13 05	0005	24.1	7.6			222	8.30	118	0.020	0.300	0.020	0.002
	13 05	0014	24.0	7.6			223	8.30	118	0.020	0.200	0.020	0.004
	13 05	0026	24.0	7.6			223	8.25	118	0.030	0.200	0.020	0.005
	13 05	0040	18.4	4.2			190	7.80	112	0.070	0.200	0.320	0.007
	13 05	0065	16.4	2.6			169	7.70	102	0.100	0.300	0.410	0.013
74/10/10	14 25	0000	20.0	8.4	84		198	8.40	128	0.060	0.200	0.030	0.005
	14 25	0005	19.2	8.0			196	8.40	128	0.040	0.200	0.030	0.004
	14 25	0020	19.1	7.2			196	8.35	125	0.030	0.200	0.030	0.004
	14 25	0040	18.7	6.8			197	8.10	127	0.050	0.200	0.070	0.006
	14 25	0046	17.7	5.8			197	7.90	129	0.080	0.200	0.140	0.009
	14 25	0057	17.0	4.4			200	7.70	134	0.150	0.200	0.200	0.009

K VALUE KNOWN TO BE LESS THAN
INDICATED

$\Delta T = T - T_0$
 $\Delta T = 25 - 0 = 25$
 $\Delta T = 25$

050400
FM 3-56.1 105 17 00.0
FULL SIGNALS LAKE
TO ARKANSAS

11274425
5

211127Z
0000 FEET 0000

DATE	TIME	DEPTH	WAVE	TOT	CHLOROPHYL	INCOG	LT
FORM	OF				A	PERCENT	
TO	DAY	FEET	LENGTH		13/L		
74/04/04	14	20	0000	0.013	7.5		
	14	40	0005	0.015			
	14	40	0015	0.014			
	14	40	0025	0.022			
74/06/21	15	50	0000	0.043	10.0		
	15	50	0002				1.0
	15	50	0005	0.027			
	15	50	0010	0.032			
	15	50	0015	0.035			
	15	50	0020	0.033			
	15	50	0025	0.023			
	15	50	0035	0.023			
	15	50	0053	0.025			
74/09/05	13	05	0000	0.026	5.4		
	13	05	0005	0.022			
	13	05	0015	0.022			1.0
	13	05	0025	0.021			
	13	05	0040	0.024			
	13	05	0055	0.032			
74/10/10	14	25	0000	0.026	5.1		
	14	25	0003				50.0
	14	25	0005	0.022			
	14	25	0011				5.0
	14	25	0020	0.012			1.0
	14	25	0045	0.021			
	14	25	0045	0.025			
	14	25	0057	0.034			

STREET RETRIEVAL DATE 77/02/24

240401
36 39 28.0 093 07 29.0 3
LAKE TANEYCOMO
29213 MISSOURI

100591

/TYPE/AMBNT/LAKE

11EPALES 04001002
0048 FEET DEPT- CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CACO3 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KJEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/10	09 50	0030	9.4		92	155	8.10	98	0.030	0.600	0.500	0.008
	09 50	0005	9.4	10.6		155	8.10	96	0.020K	0.200	0.500	0.004
	09 50	0020	9.3	10.2		154	8.00	96	0.030	0.200	0.510	0.005
	09 50	0040	9.3	10.4		155	8.00	95	0.020	0.200K	0.510	0.005
74/06/19	15 30	0000	15.3		72	173	8.00	99	0.060	0.300	0.570	0.007
	15 30	0005	14.6	7.2		164	7.90	100	0.050	0.200	0.620	0.004
	15 30	0015	14.4	7.0		165	7.90	101	0.040	0.200	0.600	0.004
	15 30	0025	14.2	7.0		167	7.90	101	0.040	0.200	0.590	0.004
	15 30	0042	14.1	7.2		167	8.00	103	0.050	0.200	0.600	0.004
74/08/30	14 20	0000	17.0	5.4	63	139	7.55	90	0.150	0.400	0.410	0.018
	14 20	0015	16.0	5.0		133	7.50	88	0.060	0.200	0.450	0.017
	14 20	0025	16.0	5.0		133	7.50	92	0.030	0.200	0.420	0.015
	14 20	0040	15.9	5.0		133	7.50	94	0.050	0.200	0.460	0.022
74/10/04	16 25	0000	16.0	7.2	72	153	7.25	95	0.030	0.400	0.320	0.007
	16 25	0005	15.9	6.4		155	7.23	94	0.020	0.200	0.310	0.005
	16 25	0015	15.4	5.2		155	7.13	96	0.060	0.300	0.340	0.006
	16 25	0025	15.4	4.6		153	7.09	94	0.030	0.300	0.330	0.008
	16 25	0040	15.3	5.2		153	7.11	93	0.040	0.400	0.310	0.010

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/24

290401
36 39 29.0 093 07 29.0 3
LAKE TANEYCOMO
29213 MISSOURI

100591

/TYP4/AMBNT/LAKE

11EPALES 04001002
0048 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/10	09 50	0000	0.024	8.2	
	09 50	0005	0.018		
	09 50	0020	0.022		
	09 50	0040	0.022		
74/06/19	15 30	0000	0.021	0.6	
	15 30	0005	0.020		
	15 30	0015	0.020		
	15 30	0025	0.021		
	15 30	0042	0.019		
74/08/30	14 20	0000	0.068	1.4	
	14 20	0015	0.035		
	14 20	0025	0.036		
	14 20	0040	0.042		
74/10/04	16 25	0000	0.021	21.8	
	16 25	0004			1.0
	16 25	0005	0.019		
	16 25	0015	0.023		
	16 25	0025	0.023		
	16 25	0040	0.038		

STORET RETRIEVAL DATE 77/02/24

290402
36 41 28.0 093 11 41.0 3
LAKE TANEYCOMO
29213 MISSOURI

100591

/TYPE/AMNT/LAKE

11EPALES 04001002
0036 FEET DEPTH CLASS 00

DATE FROM TO	TIME OF DAY	DEPTH FEET	00010 WATER TEMP CENT	00300 DO MG/L	00077 TRANSP SECCHI INCHES	00094 CONDUCTVY FIELD MICROMHO	00400 PH SU	00410 T ALK CAC03 MG/L	00610 NH3-N TOTAL MG/L	00625 TOT KjEL N MG/L	00630 NO2&NO3 N-TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P
74/04/10	10 35	0000	8.7		108	149	7.90	93	0.020	0.200	0.520	0.003
	10 35	0005	8.7	10.0		149	7.90	93	0.030	0.200K	0.520	0.005
	10 35	0025	8.7	9.8		149	7.90	93	0.030	0.200	0.530	0.005
	10 35	0030	8.7	10.4		149	8.00	95	0.020	0.200K	0.510	0.005
74/06/19	15 50	0000	13.9		95	160	8.00	100	0.060	0.400	0.590	0.013
	15 50	0005	14.0	7.6		157	7.90	101	0.050	0.200	0.590	0.007
	15 50	0015	14.0	6.8		158	7.90	95	0.040	0.200K	0.530	0.005
	15 50	0025	13.9	7.2		159	7.90	94	0.040	0.200K	0.580	0.005
	15 50	0034	13.9	6.8		161	7.90	96	0.040	0.200K	0.600	0.006
74/08/30	14 50	0000	14.8	3.8	84	139	7.50	100	0.030	0.300	0.510	0.018
	14 50	0015	14.7	4.0		139	7.40	99	0.020	0.200K	0.510	0.013
	14 50	0029	14.7	5.6		139	7.40	99	0.020	0.200K	0.500	0.013
74/10/04	15 15	0000	15.9	6.2	52	159	7.25	103	0.090	1.200	0.380	0.018
	15 15	0005	15.8	6.4		159	7.19	98	0.050	0.500	0.360	0.010
	15 15	0020	15.3	5.8		157	7.19	94	0.030	0.300	0.350	0.013
	15 15	0031	15.3	5.8		151	7.19	97	0.050	0.300	0.370	0.011

K VALUE KNOWN TO BE
LESS THAN INDICATED

STGRET RETPIEVAL DATE 77/02/24

290402
36 41.28.0 993 11 41.0 3
LAKE TANEYCOMO
29213 MISSOURI

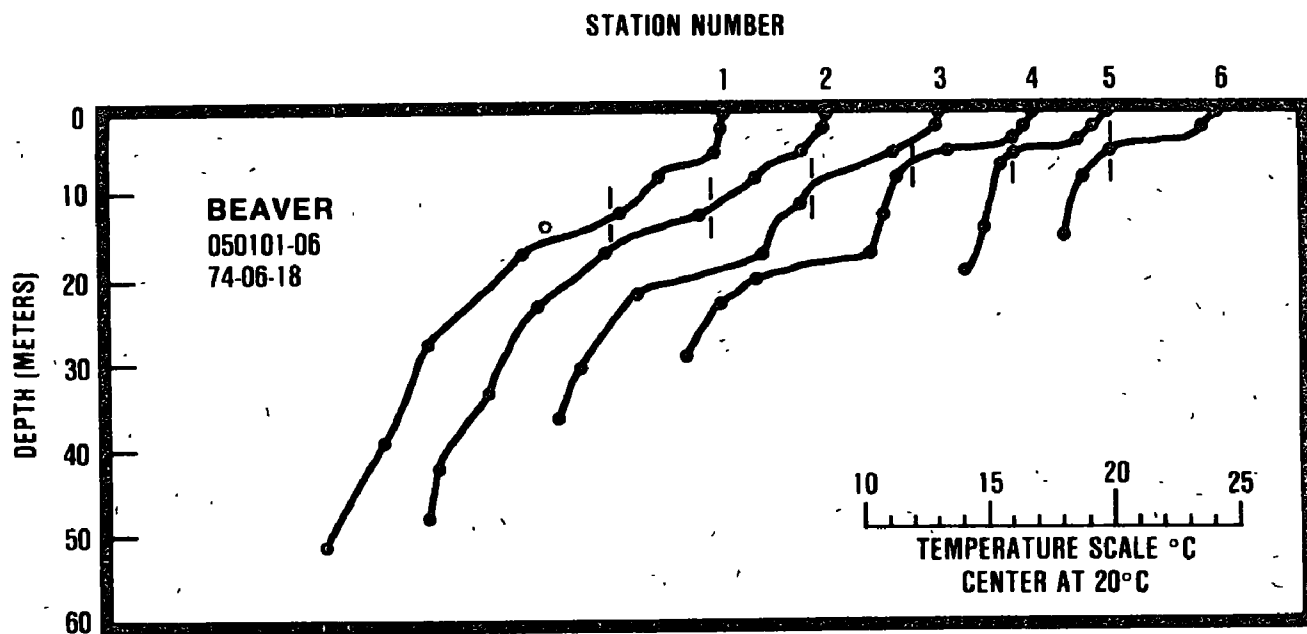
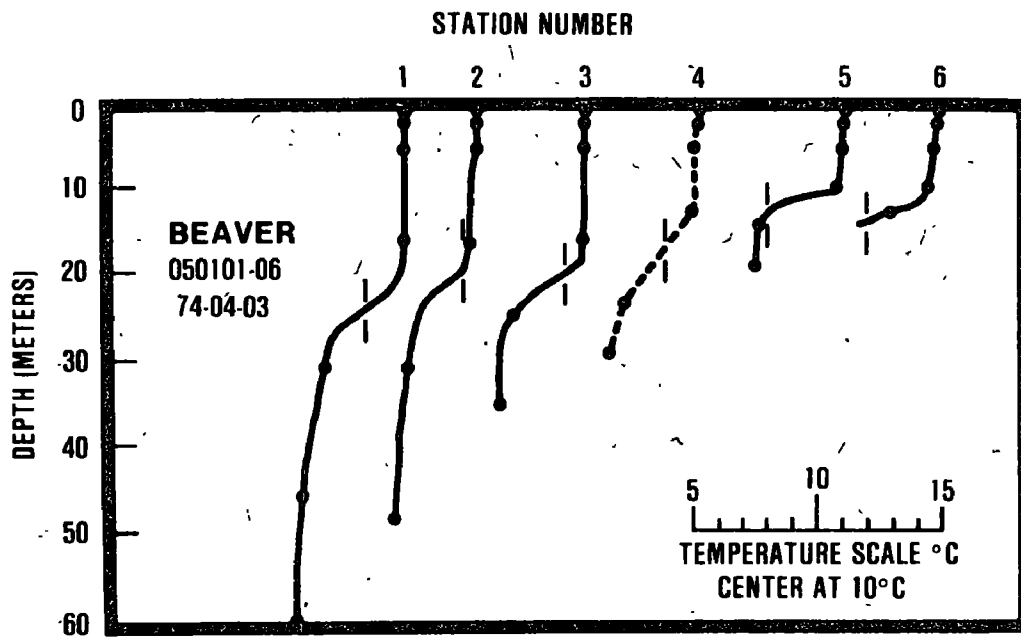
100591

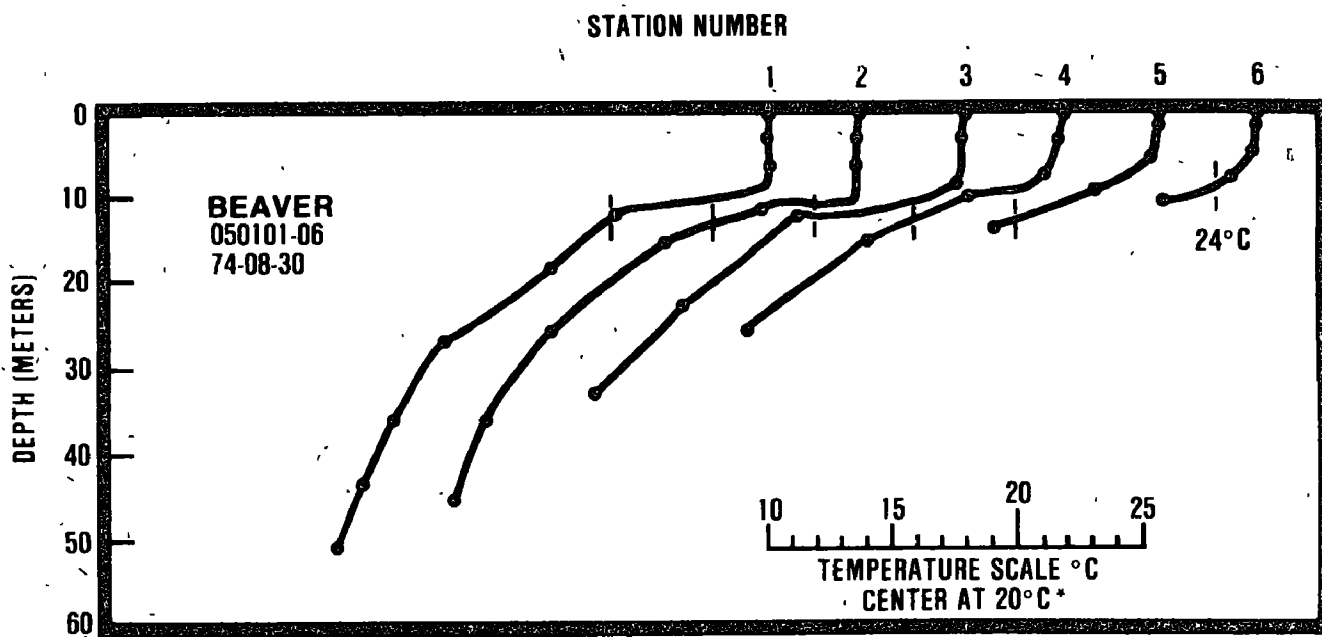
/TYPA/AMBN/LAKE

11EPALES 04001002
0033 FEET DEPTH CLASS 00

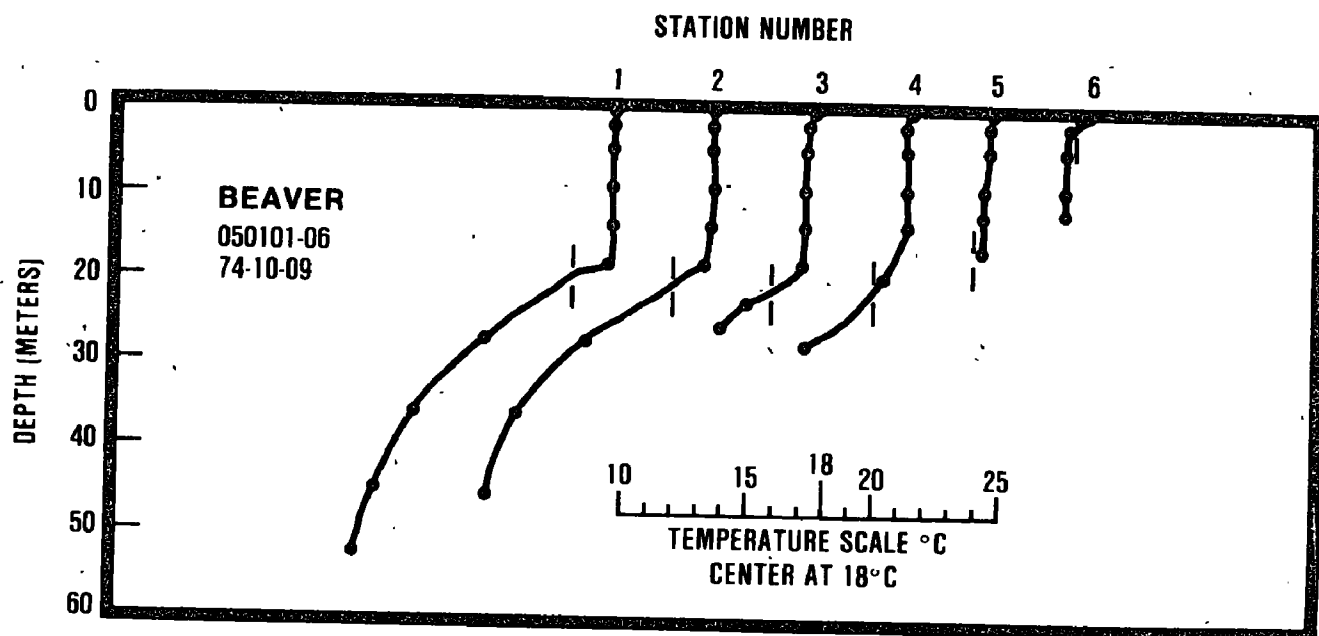
DATE FROM TO	TIME OF DAY	DEPTH FEET	00665 PHOS-TOT MG/L P	32217 CHLRPHYL A UG/L	00031 INCDT LT REMNING PERCENT
74/04/10	10 35	0000	0.017	8.8	
	10 35	0005	0.018		
	10 35	0025	0.018		
	10 35	0030	0.019		
74/06/19	15 50	0000	0.021	0.3	
	15 50	0005	0.017		
	15 50	0015	0.023		
	15 50	0025	0.023		
	15 50	0034	0.023		
74/08/30	14 50	0000	0.034	0.7	
	14 50	0015	0.032		
	14 50	0029	0.031		
74/10/04	15 15	0000	0.051	36.8	
	15 15	0005	0.038		
	15 15	0008			1.0
	15 15	0020	0.032		
	15 15	0031	0.034		

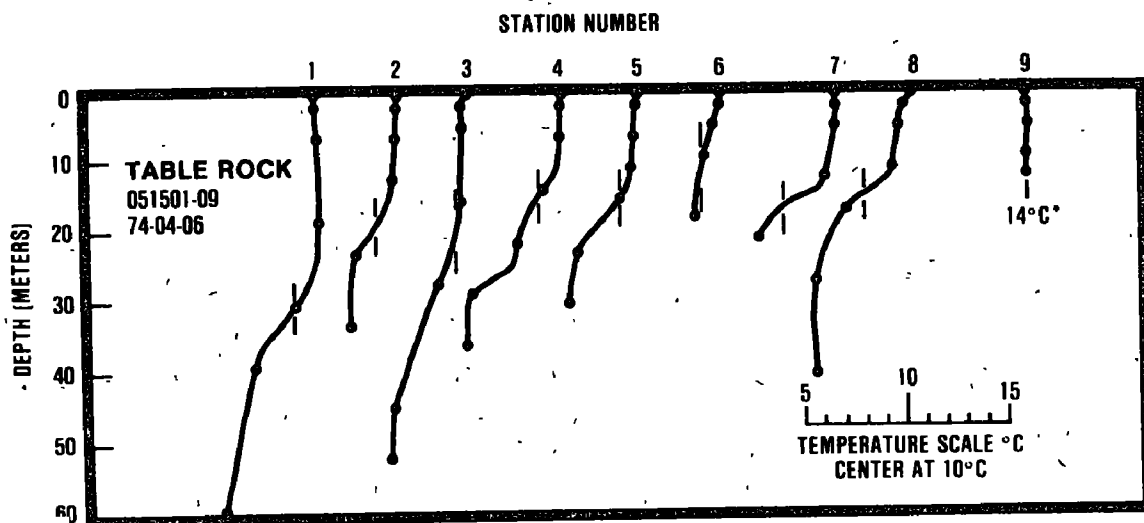
APPENDIX D
TEMPERATURE PROFILES



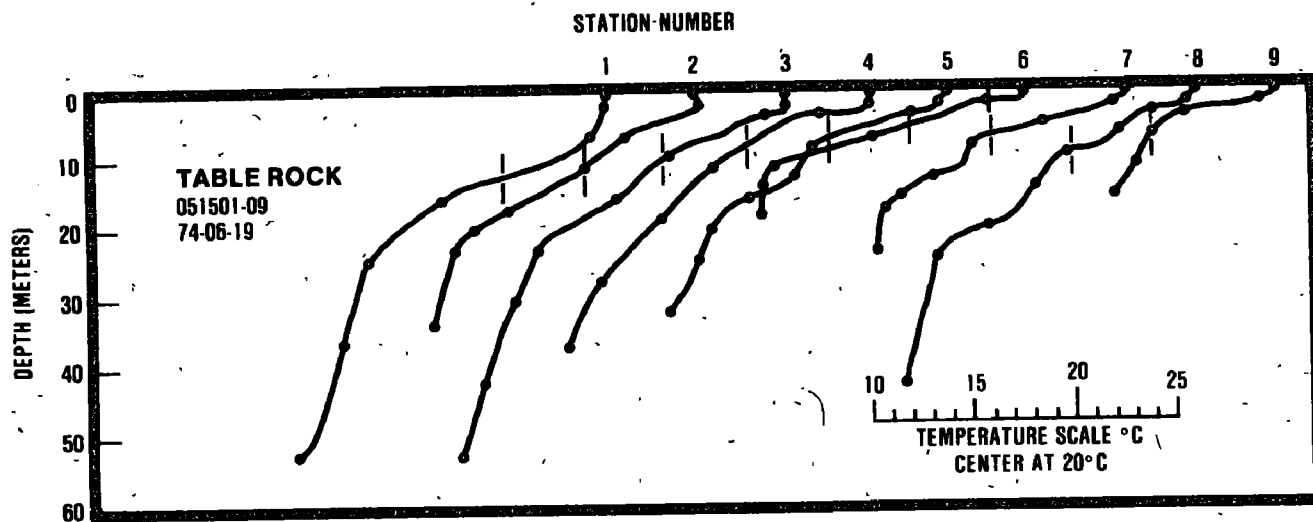


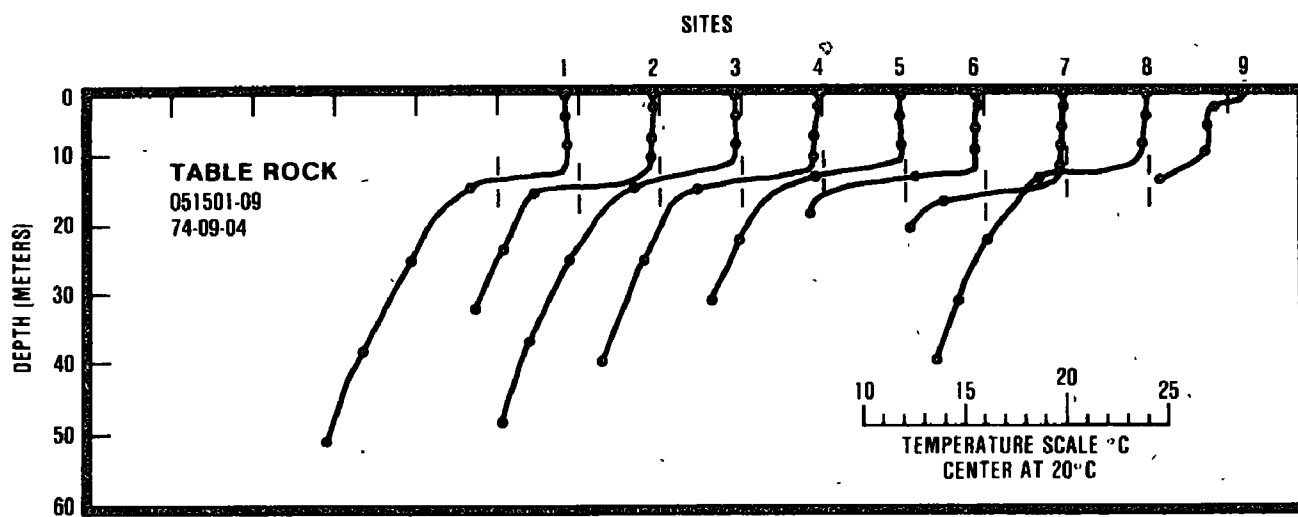
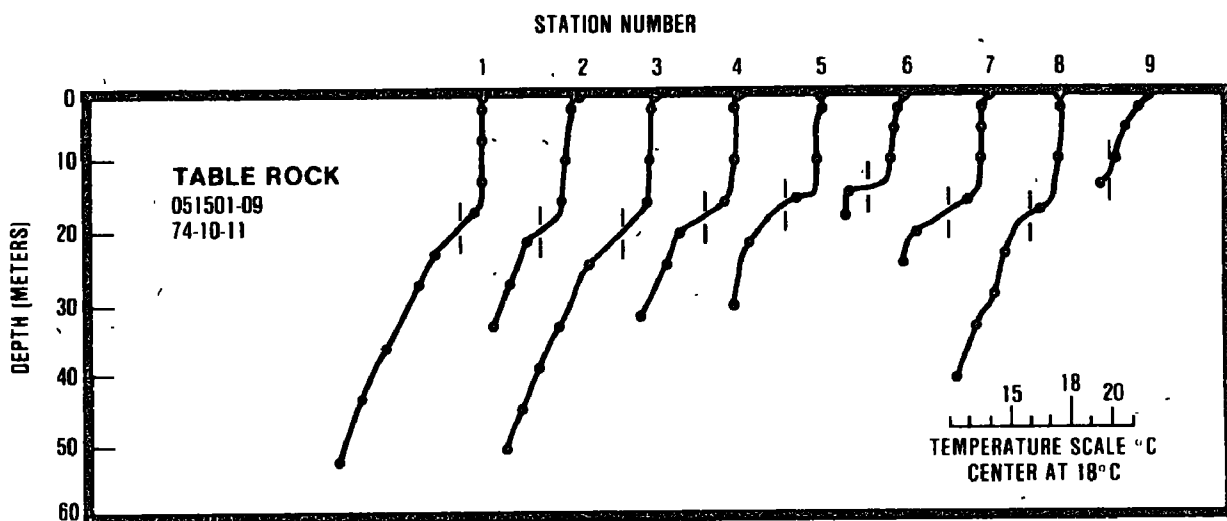
*Note: Station 6 Center Mark at 24°C





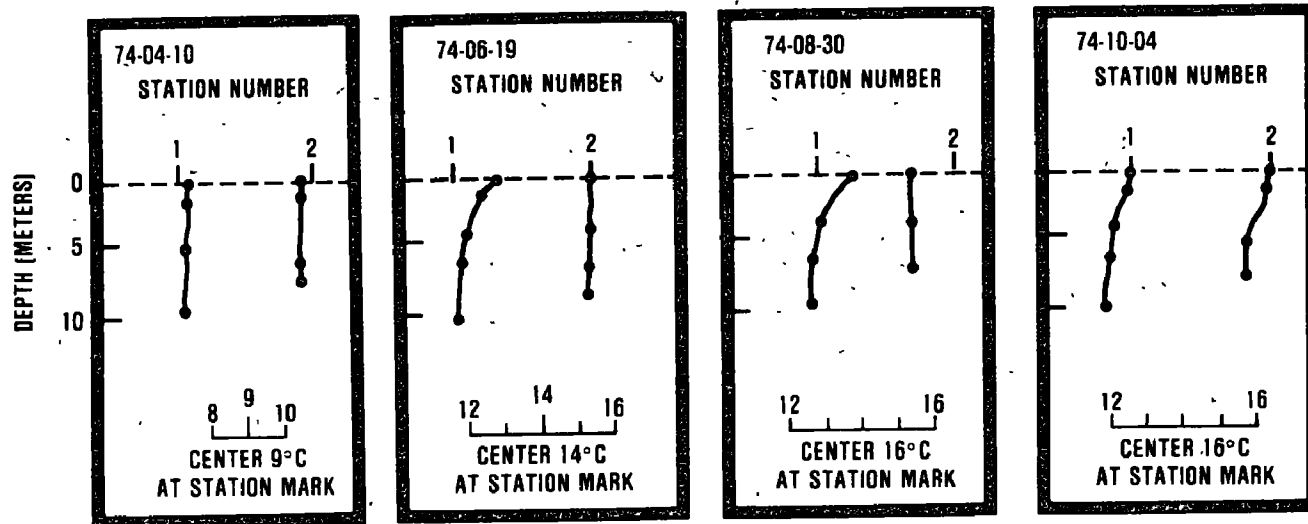
*Note: Site 9 Approx 14°C



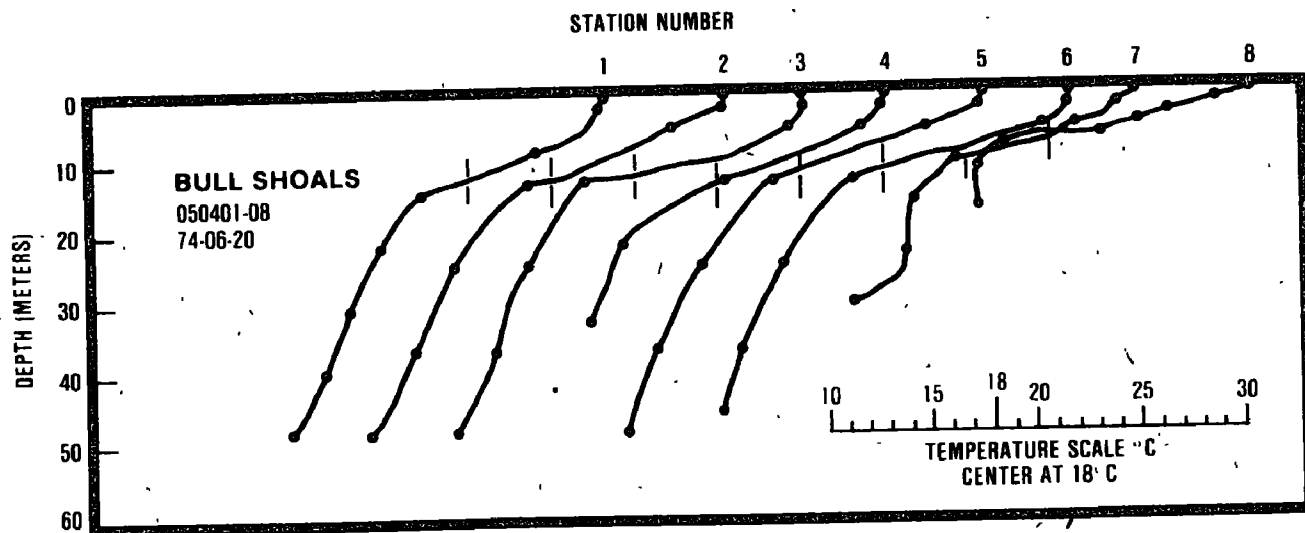
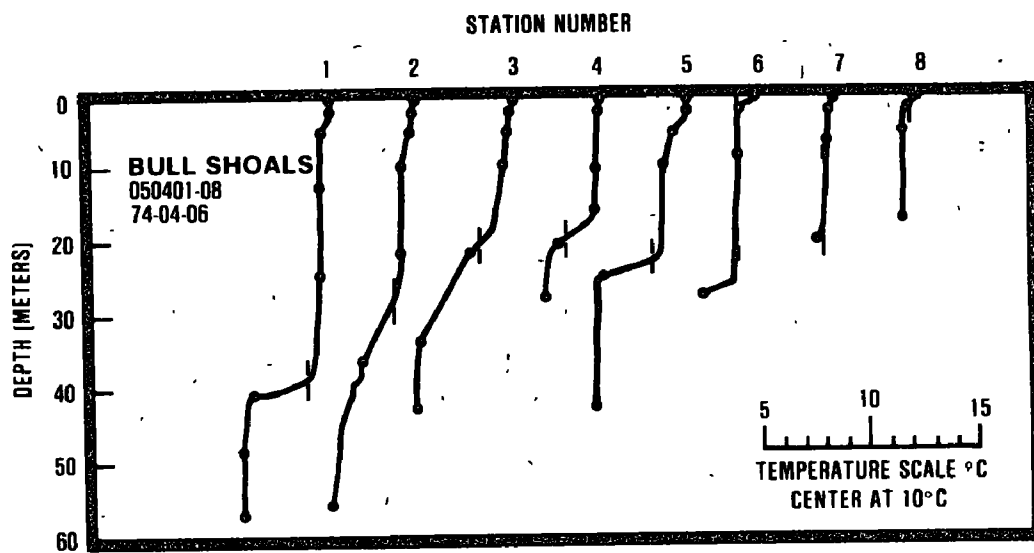


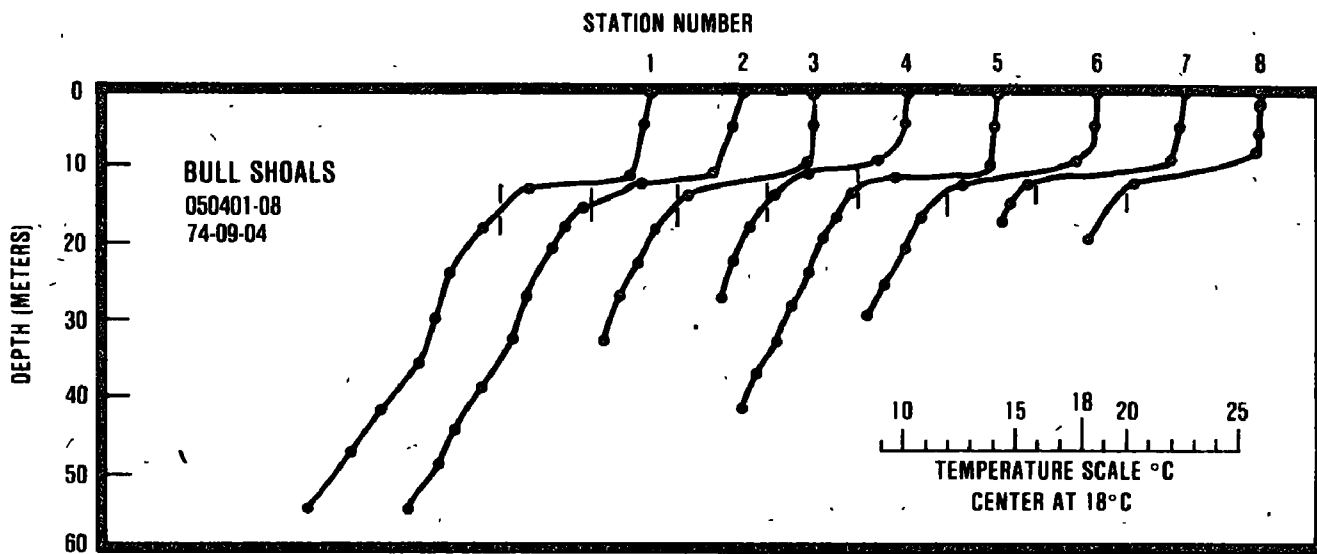
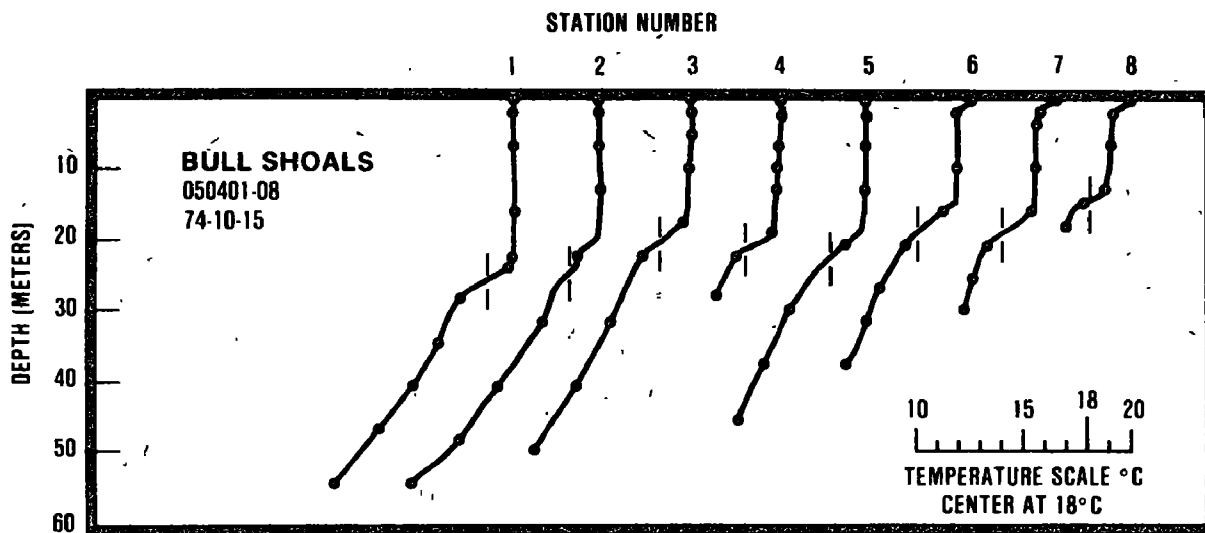
TANEYCOMO

290401-02



TEMPERATURE SCALE °C





APPENDIX E
TRIBUTARY AND WASTEWATER
TREATMENT PLANT DATA

STORE RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS-

0501A1
 36 25 15.0 093 50 50.0
 WHITE RIVER
 J5 7.5 BEAVER
 J/BEAVER RESERVOIR
 BEAVER DAM POWERHOUSE TURBINE DISCH
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE FROM TO	TIME OF DAY	DEPTH FEET	00630 NH3-N MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
74/06/22	12 45		0.390	0.200	0.010	0.005K	0.015
74/07/20	11 30		0.680	1.700	0.010	0.005	0.005
74/08/17	14 00		0.780	0.200	0.020	0.005K	0.020
74/09/21	15 00		1.240	0.200	0.005	0.010	0.010
74/10/19	12 20		0.480	0.300	0.025	0.005	0.020
74/12/21	13 30		0.136	0.300	0.025	0.005K	0.020
75/01/19	14 00		0.152	0.700	0.024	0.005K	0.010K
75/02/28	15 15		0.152	0.300	0.024	0.008K	0.010
75/03/13	13 20		0.152	0.600	0.040	0.008K	0.030
75/03/27	16 00		0.160	0.250	0.009	0.005K	0.010K
75/04/05	13 00		0.180	0.150	0.010	0.005K	0.020
75/04/20	13 20		0.210	0.500	0.030	0.005	0.010
75/05/18	15 00		0.200	0.150	0.035		0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STORED RETRIEVAL DATE 75/11/20
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0501A2
 36 04 25.0 094 04 53.0
 WHITE RIVER
 05 7.5 ELKINS
 T/BEAVER RESERVOIR
 2NDRY RD BRDG 2.1 MI W OF AR HWY 16 JCT
 112PALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NH3-N MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
74/06/22	12 00		0.080	0.200	0.015	0.005K	0.030
74/07/20	11 00		0.112	0.100K	0.010	0.010	0.025
74/08/17	14 45		0.108	2.200	0.035		0.105
74/09/21	10 30		0.384	0.600	0.025	0.020	0.115
74/10/20	00 45		0.126	0.200	0.020	0.005K	0.020
74/11/24	10 05		0.256	0.400	0.032	0.016	0.030
74/12/21	11 30		0.200	0.100	0.020	0.005K	0.030
75/01/19	10 10		0.184	0.400	0.016	0.005	0.025
75/02/28	09 15		0.280	0.400	0.040	0.008	0.040
75/03/13	13 15		0.212	0.400	0.028	0.008	0.070
75/03/23	10 00		0.182	0.500	0.023	0.007	0.040
75/04/05	10 00		0.175	0.700	0.025	0.005K	0.040
75/04/29	10 00		0.080	0.450	0.035	0.005K	0.020
75/05/11	09 10		0.105	0.600	0.065	0.010	0.060

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

STORED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050131
 36 18 50.0 093 48 45.0
 BIG CLIFTY CREEK
 05 7.5 MUNDELL
 T/BEAVER RESERVOIR
 BANK OFF 2NDRY RD 3 MI W AP HWY 23 JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2-NH3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/06/22	11 40		0.056	1.300	0.065	0.075K	0.020
74/07/20	11 30		0.068	0.400	0.020	0.010	0.020
74/08/17	12 00		0.036	0.400	0.010	0.031	0.035
74/09/21	12 00		0.044	0.500	0.012	0.017	0.035
74/10/19	11 00		0.024	0.800	0.030	0.010	0.030
74/12/21	11 21		0.086	0.200	0.020	0.005K	0.020
75/01/19	13 00		0.104	0.600	0.024	0.005K	0.010K
75/02/28	16 45		0.160	2.100	0.316	0.088	
75/03/13	11 40		0.144	0.100K	0.015	0.008K	0.035
75/03/22	18 00		0.133	0.200	0.009	0.004	0.010K
75/04/05	11 00		0.080	0.250	0.050	0.010	0.030
75/04/20	11 15		0.080	0.250	0.020	0.005	0.020
75/05/18	13 30		0.200	0.050	0.020	0.020	0.020

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

STORED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050101
 36 15'05.0 093 56 40.0
 WAR EAGLE CREEK
 05 7.5 WAR EAGLE
 TA BEAVER RESERVOIR
 BRDG AT WAR EAGLE
 11EPALES
 2111204
 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2S-N N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS DEPTH MG/L P	00665 PHOS-TOT MG/L P
FROM	OF	FEET					
TO	DAY						
74/06/22	10 00		0.504	0.500	0.030	0.005K	0.010
74/07/20	10 30		0.490	0.200	0.010	0.005	0.020
74/08/17	10 00		0.380	0.200	0.010	0.010	0.020
74/09/21	11 00		0.410	0.900	0.035	0.045	0.160
74/10/19	10 04		0.232	2.100	0.060	0.005	0.020
74/12/21	10 00		0.432	0.300	0.015	0.005K	0.015
75/01/19	11 00		0.480	0.200	0.032	0.005	0.010K
75/02/28	17 23		0.624	0.300	0.088	0.016	0.030
75/03/13	10 45		0.408	0.400	0.016	0.025	0.090
75/03/22	19 00		0.546	0.100	0.006	0.008	0.030
75/04/04	10 00		0.525		0.005	0.005	0.020
75/04/19	09 40		0.290	0.950	0.055	0.007	0.020
75/05/11	12 00		0.380	0.500	0.030	0.005	0.050
75/05/19	15 35		0.200	2.800	0.430	0.037	

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STORY RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050101
 36 08 55.0 093 58 27.0
 WHITENEY CREEK
 05 7.5 SPRING VALLY.
 T/BEAVER RESERVOIR
 150 FT S OF 2NDARY RD 4 MI SW SPPNG VLLY
 11EPALES 2111204
 4 0000 FEET, DEPTH

DATE	TIME	DEPTH	00630 NO2GN03 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/06/22	15	30	1.040	0.100K	0.005	0.020	0.030
74/11/24	09	00	1.100L	0.300	0.016	0.024	0.050
75/01/19	08	50	0.790	0.300	0.008K	0.005	0.010K
75/02/28	08	30	1.600	0.200	0.024	0.032	0.032
75/03/13	10	00	1.420	0.900	0.028	0.024	0.060
75/03/23	09	15	1.445	0.900	0.024	0.015	0.020
75/04/06	09	00	1.350	0.975	0.015	0.025	0.040
75/04/19	09	30	0.030	1.950	0.045		0.010

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

STORET RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0501E1
 36 09 00.0 094 58 30.0
 BRUSH CREEK
 05 7.5 SPRING VALLY
 T/BEAVER RESERVOIR
 AR HWY 45 BRDG 0.3 MI SW OF MAYFIELD
 11EPALES 2111204
 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KjEL N MG/L	00610 NH2-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00655 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/06/22	15	30	0.870	0.100K	0.005	0.005	0.015
74/07/20	09	00	0.890	1.000	0.055	0.015	0.015
74/08/18	12	30	0.740	0.100K	0.010	0.015	0.015
74/09/21	09	30	0.540	0.900	0.165	0.060	0.085
74/10/20	09	00	0.464	0.400	0.020	0.010	0.010
74/11/24	09	15	0.920	0.100K	0.016	0.008	0.010K
75/01/19	09	10	0.704	0.150	0.008K	0.010	0.010
75/02/28	08	45	0.800	0.500	0.016	0.016	0.030
75/03/13	10	15	0.530	0.800	0.032	0.016	0.040
75/03/23	09	30	0.655	0.400	0.015	0.010	0.010
75/04/06	09	15	0.720	0.850	0.030	0.010	0.020
75/04/19	09	15	0.490	0.250	0.015	0.010	0.010
75/05/11	08	45	0.640	0.550	0.020	0.015	0.035

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

STORE RETRIEVAL DATE 75/11/26
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0501F1
 36 05 00.0 094 59 05.0
 DRY CREEK
 05 7.5 GOSHEN
 T/BEAVER RESERVOIR
 2NDRY RD BRDG 1.5 MI S OF AR HWY 45 JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS DEPTH MG/L P	00665 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/09/21	09 45		0.900	0.800	0.025	0.035	0.050
74/12/21	09 30		0.576	0.200	0.010	0.010	0.020
75/02/28	08 49		0.704	0.500	0.056	0.016	0.040
75/03/13	11 00		0.750	0.400	0.012	0.024	0.050
75/03/23	09 45		0.640	0.600	0.015	0.018	0.030
75/04/06	09 45		0.190	1.200	0.045	0.010	0.040

STREET ATTRIBUTAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050161
 36 34 25.0 094 59 30.0
 RICHLAND CREEK
 05 7.5 GOSHEN
 T/SEASER RESERVOIR
 RD KING 2.6 MI S OF GOSHEN
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NH3-N MG/L	00625 TOT KjEL MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
74/06/22	16	30	0.540	0.100K	0.010	0.005K	0.020
74/07/20	09	15	0.420	0.500	0.030	0.005	0.025
74/09/21	10	00	0.640	0.700	0.030	0.025	0.060
74/10/20	09	20	0.416	0.300	0.015	0.010	0.010
74/11/24	09	40	0.624	0.100K	0.016	0.008	0.020
74/12/21	10	06	0.464	0.200	0.025	0.010	0.020
75/01/19	09	35	0.320	0.200	0.008K	0.005	0.010K
75/02/28	09	00	0.520	0.300	0.016	0.015	0.030
75/03/13	11	30	0.368	0.300	0.008	0.008	0.050
75/03/23	09	55	0.340	0.500	0.022	0.009	0.020
75/04/06	09	30	0.320	0.700	0.015	0.005	0.030
75/04/20	09	30	0.220	0.550	0.035	0.025	0.020
75/05/11	09	10	0.260	0.650	0.015	0.010	0.040

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STORED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0501H1
 36 20 45.0 054 05 10.7
 PRAIRIE CREEK
 05 7.5 ROGERS
 T/BEAVER RESERVOIR
 2NDRY RD 2000 FT S OF AP HWY 12 JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO26NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/06/22	09 10		1.430	0.600	0.030	0.005	0.025
74/07/20	09 30		1.760	0.200	0.015	0.010	0.015
74/08/18	09 00		1.440	0.100	0.005	0.012	0.015
74/09/21	09 00		1.440	0.500	0.020	0.010	0.015
74/10/19	09 30		1.680	0.300	0.025	0.010	0.010
74/12/21	09 30		2.240	0.400	0.020	0.005K	0.010K
75/01/19	10 00		2.400	0.600	0.016	0.005	0.010K
75/02/28	18 00		2.320	0.100	0.024	0.008	0.020
75/03/13	10 25		2.000	0.200	0.012	0.008	0.050
75/03/22	20 00		2.000	0.250	0.005	0.007	0.020
75/04/05	09 00		2.100	0.600	0.035	0.010	0.020
75/04/20	09 15		2.100	0.700	0.030	0.009	0.010K
75/05/18	11 00		0.200	0.250	0.050		0.020

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STOPPED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0501YA TF0501YA P001287
 36 06 00.0 093 43 45.0
 HUNTSVILLE
 05 MADISON CO.
 T/BEAVER LAKE
 HOLMAN CREEK TO WAR EAGLE
 11EPALES 2141204
 4 0000 FEET DEPTH

DATE FROM TO	TIME OF DAY	DEPTH FEET	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KjEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P	50051 FLOW RATE INST MGD	50053 CONDUIT FLOW-MGD MONTHLY
75/01/29	09 45		9.750	3.400	0.365	8.600	10.500		0.250
75/02/26	13 30		1.920	9.000	0.080K	1.780	3.600		0.250
75/03/31	13 30		5.400		0.340	2.400			0.250
75/04/16	09 30		8.200	1.700	0.250		9.100		0.250
75/04/29	17 30		7.800	2.900	0.280	8.900	9.400		0.250
75/05/15	11 30		14.000		0.210	11.000			0.250
75/06/03	14 00		5.900	4.600	0.190	5.800	7.100		
75/06/16	10 45		5.900	10.000	1.250	7.900	9.200		
75/07/01	10 40		5.250	6.900	0.890	7.300	8.500		
75/07/31	13 30		5.600	10.000	2.880	4.400	5.200		

STORET RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0515A1
 36 35 40.0 093 18 35.0
 WHITE PIER
 05 7.5 TABLE ROCK D
 J/TABLE ROCK RFS
 TBL ROCK DAM SPILLWAY 6 MI SW OF BRANSON
 LIEPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/09/14	19	30	0.440	0.300	0.015	0.015	0.015
74/10/06	10	50	1.760	1.490	0.040	0.015	0.020
74/11/03	12	15	0.416	0.900	0.070	0.020	0.020
74/12/08	11	05	0.212	1.000	0.055	0.007	0.010K
75/01/05	11	15	0.451	0.400	0.021	0.017	0.020
75/02/09	13	00	0.432	1.100	0.032	0.016	0.016
75/03/02	11	00	0.416	0.900	0.028	0.005	0.020
75/04/06	11	00	0.450	0.525	0.005	0.010	0.015
75/04/19	11	30	0.520	1.500	0.035	0.012	0.020
75/05/04	12	20	0.510	1.000	0.035	0.010	0.020
75/05/08	12	00	0.810	1.250	0.075	0.022	
75/05/18	12	45	0.750	1.850	0.040	0.020	0.020
75/07/01	13	54			0.050	0.020	
75/08/17	12	55	0.790	0.650	0.025	0.015	0.030

STOAGET RETRIEVAL DATE 75/11/23
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

051542
 36 26 55.0 093 49 20.0
 WHITE RIVER
 05 7.5 BEAVER
 T/TABLE ROCK RES
 BRDG US FT 62 2.5 MI NE BEAVER LAKE DAM
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
FROM	TO	DAY	FEET				
74/09/14	13 15		0.410	1.100	0.025	0.005K	0.040
74/10/06	11 30		0.464	0.800	0.025	0.005K	0.010
74/11/03	13 00		0.240	0.700	0.080	0.010	0.010
75/01/05	13 30		0.130	0.700	0.290	0.008	0.010K
75/02/09	12 00		0.168	2.200	0.048	0.008K	0.010K
75/03/02	12 30		0.152	1.100	0.028	0.008K	0.010
75/04/06			0.190	0.950	0.080	0.005K	0.030
75/05/03	11 30		0.190	0.700	0.010	0.005K	0.010K
75/05/18	16 20		0.175	0.350	0.020	0.005K	0.010K
75/06/08	13 00		0.220	0.300	0.060	0.005K	0.010K
75/06/21	09 30		0.310		0.015	0.005	
75/08/17	14 00		0.280	0.750	0.040	0.005K	0.010

STORET RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

051581
 36 31 55.0 093 27 45.0
 LT INDIAN CREEK
 05 STONE COUNTY
 T/TABLE ROCK RES
 BRDG STATE HWY 86 2.5 MI W STATE HWY 13
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KjEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/09/14	18	15	0.700	0.850	0.005K	0.005	
74/10/06	09	47	0.790	0.800	0.045	0.005	0.005
74/11/03	10	35	0.448	0.800	0.025	0.030	0.035
74/12/08	10	12	0.432	1.100	0.035	0.010	0.010
75/01/05	10	17	0.533	0.400	0.033	0.010	0.010
75/02/09	11	25	0.610	0.550	0.024	0.008K	0.010K
75/03/02	10	05	0.540	0.450	0.020	0.005	0.010
75/04/06	10	00	0.630	0.650	0.060	0.010	0.010
75/04/19	10	35	0.620	1.600	0.025	0.010	0.010
75/05/04	11	20	0.510	1.950	0.015	0.010	0.010
75/05/08	14	00	1.600	1.200	0.055	0.021	
75/05/18	11	50	0.900	1.150	0.020	0.010	0.010
75/07/01	13	02			0.060	0.005	
75/08/17	12	06	0.820	0.400	0.020	0.010	0.015

STORET RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0515C1
 36 47 40.0 093 25 20.0
 RAILEY CREEK
 05 7.5 GALENA MO
 T/TABLE ROCK RES
 2NDRY RD 35 DG 2 MI N HWY 13-JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	70630	00625	00610	00671	00665
FROM	OF		NO2&NO3	TOT KJEL	NH3-N	PHOS-DIS	PHOS-TOT
TO	DAY	FEET	N-TOTAL	N	TOTAL	TRTD	
			MG/L	MG/L	MG/L	MG/L P	MG/L P
74/09/15	10	30	1.160	0.900	0.015	0.015	0.015
74/10/05	09	50	1.240	0.500	0.155	0.005	0.005
74/11/02	10	00	2.360	0.550	0.035	0.005	0.012
74/12/07	10	25	1.170	1.600	0.020	0.010	0.010
75/01/04	10	10	1.060	3.400	0.032	0.025	0.060
75/02/08	10	00	1.000	0.200	0.040	0.008K	0.010
75/03/08	10	45	0.945	0.550	0.030	0.005	0.010K
75/04/05	09	15	0.860	0.050	0.015	0.010	0.010
75/04/19	09	30	0.760	1.800	0.015	0.010	0.010
	12	00	1.350	0.750	0.010	0.015	0.030
75/05/03	09	25	0.550	1.700	0.025	0.010	0.010
75/05/17	09	25	0.560	0.500	0.050	0.009	0.010K
75/06/07	09	20	0.770	0.925	0.020	0.010	0.020
75/07/13	08	55	0.600		0.015	0.005	
75/08/09	10	10	0.760	0.500	0.040	0.010	0.020

STORE RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

051501
 35 48 20.0 093 27 35.0
 JAMES PT ES
 05 7.5 CALENA MC
 T/TABLE ROCK RFS
 BRDG ON HWY 44 .1 MI W HWY 13 JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO26NO3 N-TOTAL MG/L	00625 TBT KJFL IN MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOD MG/L P	00665 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/09/15	11	00	1.820	0.700	0.010	0.420	0.420
74/10/05	10	10	1.920	1.500	0.045	0.375	0.390
74/11/02	10	15	1.920	1.100	0.138	0.260	0.260
74/12/07	10	35	2.330	2.200	0.080	0.210	0.235
75/01/24	10	17	2.000	5.400	0.400	0.080	0.096
75/02/08	10	15	1.450	0.400	0.064	0.104	0.110
75/03/08	11	10	2.200	1.100	0.175	0.105	0.140
75/04/05	09	30	2.000	1.900	0.085	0.080	0.080
75/04/19	09	45	1.900	1.550	0.050	0.165	0.170
75/05/03	09	40	1.350	0.450	0.085	0.090	0.090
75/05/17	09	35	1.570	1.250	0.230	0.220	0.230
75/06/07	09	35	2.000	1.750	0.055	0.290	0.320
75/07/13	09	05			0.025	0.460	
75/08/09	10	25	1.285	0.950	0.035	0.490	0.520

STORED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

3515E1
 36 45 30.0 093 34 15.0
 FLAT CREEK
 05 15 AUPORA
 T/TABLE ROCK RES
 FIRST BRIDGE OF BARRY
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE FROM TO	TIME OF DAY	DEPTH FEET	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/09/15	12 00		1.010	1.200	0.020	0.010	0.015
74/10/05	10 45		1.080	2.500	0.030	0.010	0.010
74/11/02	11 00		1.000	1.300	0.035	0.015	0.015
74/12/07	11 05		0.990	1.900	0.070	0.010	0.010
75/01/04	10 45		1.160	2.900	0.248	0.015	0.100
75/02/08	12 25		2.100	1.100	0.032	0.016	0.016
75/03/08	11 45		1.200	0.950	0.045	0.015	0.015
75/04/05	10 40		1.050	2.300	0.360	0.015	0.020
75/04/19	11 00		1.000	1.650	0.030	0.010	0.010
75/05/03	11 35		0.850	1.650	0.025	0.017	0.030
75/05/17	10 15		0.790	1.200	0.060	0.010	0.010
75/06/07	11 15		1.000	0.850	0.040	0.020	0.030
75/07/13	10 30			1.800	0.020	0.010	
75/08/09	11 45		0.640	0.450	0.085	0.015	0.015

STORET RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

-0515F1
 36 36 10.0 093 42 05.0
 ROCK CREEK
 05 15 SHELL KNOS MC
 T/TABLE ROCK RES
 8NK 3.2 'I FROM BRDG ON HWY 39 DOWNSTREA
 11EPALFS 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00629 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORIME MG/L P	00665 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/09/14	11	45	0.184	0.900	0.005	0.005K	0.055
74/10/06	13	15	0.040	0.800	0.040	0.005K	0.005K
74/11/03	16	30	0.112	1.000	0.045	0.015	0.030
74/12/06	09	25	0.048	1.000	0.020	0.005K	0.010K
75/01/05	09	20	0.043	0.400	0.015	0.005	0.010K
75/02/09	10	30	0.032	1.100	0.032	0.008K	0.010K
75/03/02	09	45	0.055	0.750	0.025	0.005K	0.010K
75/04/06	09	20	0.020	0.400	0.005		0.010K
75/04/19	09	45	0.015	0.550	0.195	0.005	0.010K
75/05/04	10	20	0.005	2.400	0.015	0.005K	0.010K
75/05/18	11	05	0.010	1.900	0.025	0.005K	0.010K
75/06/08	10	29	0.020	0.400	0.020	0.005K	0.010K
75/07/13	12	16		0.550	0.145	0.005	
75/08/17	11	22	0.075	0.400	0.025	0.005	0.017

STORET RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

J515G1
 36 33 05.0 093 45 29.0
 ROARING RIVER
 05. 15 CASSVILLE
 T/TABLE ROCK RES
 BRDG ON HWY 86 1 MI S HWY E JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO26NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/09/14	11	00	1.160	1.000	0.020	0.010	0.035
74/10/06	09	30	1.280	1.100	0.025	0.010	0.015
74/11/03	10	00	0.304	1.600	0.050	0.075	0.120
74/12/08	10	30	1.040	0.900	0.010	0.005	
75/01/05	11	00	0.949	0.600	0.012	0.015	0.020
75/02/09	09	50	1.010	0.400	0.024	0.008	0.010K
75/03/02	13	30	0.835	0.500	0.012	0.008	0.020
75/04/06	11	00	1.150	1.350	0.005	0.015	0.015
75/04/19	12	00	0.200	1.050	0.025	0.005K	0.010K
75/05/04	10	40	0.660	1.850	0.020	0.010	0.010
75/05/18	15	00	0.980	1.800	0.080	0.011	0.011
75/06/08	12	00	1.400	1.200	0.035	0.015	0.020
75/06/26	08	00		0.500	0.080	0.015	
75/08/17	13	00	1.640	0.250	0.020	0.015	0.017

STORED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0515H1
 36 28 35.0 093 47 40.0
 BUTLER CREEK
 05 7.5 BEAVER
 T/TABLE ROCK RES
 BNK 50 FT W OF BRDG 3.4 MI W OF BEAVER
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KjEL N MG/L	00610 NH3-N- TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TJT MG/L P
FROM	OF						
TO	DAY	FEET					
74/09/14	14	15	1.040	0.200	0.010	0.005K	0.015
74/10/06	13	00	0.384	1.600	0.025	0.005K	0.005
74/11/03	13	30	0.208	1.600	0.085	0.015	
75/01/05	14	00	0.156	0.300	0.017	0.008	0.010K
75/02/09	14	30	0.288	0.200	0.096	0.008K	0.010K
75/03/02	11	30	0.208	0.400	0.012	0.008K	0.010K
75/04/06	13	00	0.155	0.800	0.271	0.010	0.010
75/04/19	14	30	0.075	0.450	0.035	0.020	0.020
75/05/03	11	30	0.070	0.950	0.035	0.005	0.010K
75/05/18	16	30	0.100	0.550	0.025	0.005	0.010K
75/06/08	13	30	0.160	0.600	0.010	0.005	0.010K
75/06/26	10	00			0.015	0.005	

STORE RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY -
 EPA- LAS VEGAS

J515J1
 36 25 37.0 093 37 20.0
 KINGS RIVER
 05 0.5 GRANDVIEW
 T/TABLE ROCK FES
 BRDG HWY 143 3 MI N HWY 62 JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
FROM TO	OF DAY	FEET					
74/09/14	15 15		0.260	0.300	0.020	0.035	0.050
74/11/03	09 15		0.368	2.500	0.065	0.060	
74/12/38	10 00		0.304	1.200	0.020	0.010	0.020
75/01/05	10 20		0.316	0.650	0.081	0.012	0.015
75/02/09	09 30		0.448	1.000	0.024	0.016	0.016
75/03/02	10 15		0.504	1.200	0.031	0.008	0.020
75/04/07	16 00		0.360	0.750	0.035		0.020
75/04/19	09 25		0.175	0.800	0.150	0.025	0.040
75/05/04	10 30		0.095	2.700	0.045	0.015	0.030
75/05/18	10 45		0.135	0.750	0.025	0.020	0.035
75/06/08	13 15		0.230	1.250	0.035	0.065	0.100
75/07/07	11 30		0.060	0.500	0.037	0.052	0.102
75/08/17	09 55		0.245	0.600	0.045	0.270	0.355

STORET RETRIEVAL DATE 75/11/29
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0515K1
 36 24 27.0 093 18 22.0
 LONG CREEK
 05 7.5 DENVER
 T/TABLE ROCK RES
 2NDRY RD BRDG 1.75 MI SE HWY 311 JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KjFL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00605 PHOS-TOT MG/L P
FROM	OF						
TO	DAY	FEET					
74/09/14	16	20	0.940	0.300	0.020	0.005	0.040
74/10/06	12	15	1.160	0.300	0.017	0.005K	0.010
74/11/03	11	30	0.820	2.000	0.110	0.030	
74/12/08	11	30	0.830	0.500	0.020	0.015	0.040
75/01/05	11	40	0.995	0.450	0.038	0.016	0.016
75/02/09	10	45	1.150	0.600	0.024	0.016	0.016
75/03/02	11	35	1.150	0.600	0.025	0.016	0.020
75/04/07	14	35	0.730	1.500	0.130	0.015	0.040
75/04/19	11	50	0.650	0.450	0.160	0.010	0.040
75/05/04	12	30	0.410	0.750	0.010	0.005	0.010
75/05/18	14	30	0.175	1.500	0.035	0.010	0.020
			0.300	1.750	0.035	0.005	0.010
75/07/07	12	45	0.030		0.035	0.005	
75/08/17	11	10	0.010	1.125	0.045	0.005	0.040

STORE RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0515L1
 36 27.40.0 093 21 25.0
 YDCJM CPLEK
 05 7.5 DENVER
 T/TABLE ROCK RES
 AT CONCRETE FORD LT DTY RD 4 M NW DENVER
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
FROM	OFF						
TO	DAY	FEET					
74/09/14	16	30	1.760	0.100	0.010	0.015	0.020
74/10/06	11	30	1.760	1.200	0.030	0.020	0.020
74/11/03	10	30	0.040	0.800	0.045	0.040	
74/12/08	11	00	1.520	0.900	0.045	0.015	0.015
75/01/05	11	10	1.515	0.900		0.010	0.015
75/02/09	10	25	1.720	0.700	0.024	0.016	0.016
75/03/02	11	20	1.820	0.300	0.015	0.019	0.020
75/04/07	12	25	1.650	0.900	0.035	0.020	0.020
75/04/19	13	30	1.570	1.050	0.020	0.015	0.015
75/05/04	11	15	1.300	1.700	0.025	0.010	0.010
75/05/18	10	31	1.500	1.950	0.035	0.015	0.015
75/07/07	12	00			0.020	0.015	
75/08/17	10	35	1.350	0.312	0.020	0.020	0.030

STOPPED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0515ZA TF0515ZA P003000*
 36 22 05.0 093 35 00.0
 BERRYVILLE
 05 CARPOL CO MAP
 T/TABLE ROCK RESERVOIR
 OSAGE CREEK TO KINGS RIVER
 11EPALES 2141204
 4 0000 FEET DEPTH

DATE / TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P	50051 FLOW RATE INST MGD	50053 CONDUIT FLOW-MGD MONTHLY
FROM TO	OF DAY FEET							
74/11/06	11 00							
CP(T)-		3.680	3.600	0.170	2.500	2.500	1.000	0.800
74/11/06	16 00							
75/01/09	11 00							
CP(T)-		3.360	15.000	0.530	4.300	4.300	1.300	1.110
75/01/09	16 00							
75/02/11	11 00							
CP(T)-		2.400	1.000K	1.280	4.500	4.500	1.000	1.040
75/02/11	16 00							
75/03/13	11 00							
CP(T)-		1.120	8.550	0.050K	2.080	2.850	2.000	1.500
75/03/13	15 00							
75/04/15	11 00							
CP(T)-		2.300	8.400	0.310	6.400	6.400	1.000	1.500
75/04/15	15 00							
75/05/02	11 00							
CP(T)-		5.000	6.800	0.140	5.400	5.900	1.300	1.250
75/05/02	15 00							
75/05/16	11 00							
CP(T)-		2.500	22.000	4.000	8.000	8.700	1.000	1.200
75/05/16	15 00							
75/06/02	11 00							
CP(T)-		4.700	8.500	0.200	11.000	11.000	1.200	1.060
75/06/02	15 00							
75/06/16	11 00							
CP(T)-		4.100	11.000	1.900	2.100	9.700	1.100	1.000
75/06/16	15 00							
75/07/01	11 00							
CP(T)-		5.800	8.600	0.275	7.500	7.700	0.900	1.030
75/07/01	15 00							
75/07/14	11 00							
CP(T)-		5.800	8.100	0.075	8.900	8.900	1.000	1.040
75/07/14	16 00							
75/07/31	11 00							
CP(T)-		5.400	23.000	7.150	10.500	11.000	1.050	0.900
75/07/31	15 00							

STORET RETRIEVAL DATE: 77/02/24

2904A1
36 39 31.0 093 07 22.0 4
WHITE RIVER
29 7.5 FORSYTH
O/LAKE TANEYCOMO 100591
BANK SAMPLE BELOW UZARK BEACH DAM
11EPALES 04001004
0000 FEET DEPTH CLASS 00

/TYPE/AMOUNT/STREAM

DATE - FROM TO	TIME OF DAY	DEPTH FEET	00630 NO2&NO3- N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/09/14	11 00		0.294	1.400	0.025	0.005K	0.030
74/10/05	14 00		0.336	1.000	0.045	0.005K	0.015
74/11/02	11 40		0.224	2.000	0.240	0.005K	0.010K
74/12/07	10 52		0.192	1.000	0.050	0.005	0.020
75/01/04	12 30		0.368	1.300	0.032	0.012	0.020
75/02/08	12 30		0.416	1.100	0.024	0.008	0.010
75/03/08	12 30		0.384	0.300	0.032	0.008K	0.020
75/04/05	13 00		0.390	1.450	0.155	0.005K	0.030
75/04/19	11 30		0.490	0.600	0.375	0.010	0.020
75/05/03	13 00		0.520	0.900	0.025	0.005	0.020
75/06/07	11 00		0.500	1.250	0.055	0.015	0.030
	11 30		0.520	0.450	0.025	0.005	0.010
75/07/13	11 30		0.390	0.850	0.030	0.005	0.030
75/08/09	11 30		0.370	1.000	0.055	0.005	0.050

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORE RETRIEVAL DATE 77/02/24

290412
36 35 43.0 093 18 33.0 4
WHITE RIVER
29 7.5 TABLE ROCK D
T/LAKE TANEYCOMO 100591
BANK SAMPLE BELOW TABLE ROCK DAM
11EPALES 04001004
0000 FEET DEPTH CLASS 00

/TYPA/AMBNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS URTHO MG/L P	00665 PHOS-TOT MG/L P
74/09/14	14 12		0.450	0.900	0.020	0.015	0.025
74/10/05	13 30		0.432	1.700	0.050	3.015	0.025
74/11/02	12 30		0.304	0.500	0.060	0.020	0.020
74/12/07	10 45		0.224	1.700	0.055	0.010	0.020
75/01/04	11 00		0.408	1.500	0.032	0.012	0.020
75/02/08	11 46		0.416	0.500	0.008	0.008	0.010
75/03/08	12 38		0.416	1.000	0.032	0.008K	0.020
75/04/05	12 31		0.420	0.500	0.020	0.005K	0.020
75/04/19	12 27		0.525	0.300	0.040	0.010	0.020
75/05/03	12 35		0.610	0.050	0.015	0.010	0.020
75/05/17	13 15		0.700	0.450	0.025	0.015	0.020
75/06/07	12 30		0.840	0.750	0.020	0.020	0.020
75/07/13	12 25		0.780	0.750	0.020	0.015	0.020
75/08/09	13 05		0.810	0.700	0.040	0.015	0.040

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/24

2904B1
36 39 03.0 093 14 05.0 4
ROAD CREEK
29 7.5 BRANSON
T/LAKE TANEYCOMO 100591
BRDG ON LGHT DTY RD .5 MI NW OF BRANSON
11EPALES 04001004
0000 FEET DEPTH CLASS 00

/TYPA/AMBT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/09/14	13 00		0.076	0.400	0.005	0.005K	0.010
74/10/05	14 10		0.072	0.900	0.030	0.005K	0.005K
74/11/02	13 15		0.168	0.200	0.010	0.005K	0.010K
74/12/07	11 35		0.272	1.400	0.015	0.005	0.010K
75/01/04	12 00		0.200	1.300	0.276	0.005K	0.010K
75/02/08	12 00		0.176	0.500	0.040	0.008K	0.010K
75/03/08	13 06		0.192	0.150	0.024	0.008K	0.010K
75/04/05	12 45		0.175	0.550	0.012	0.005K	0.010
75/04/19	13 10		0.070	0.275	0.015	0.005	0.010
75/05/03	13 17		0.040	0.250	0.010	0.005K	0.010
75/05/17	15 40		0.045	0.600	0.020	0.005K	0.010K
75/06/07	13 00		0.135	0.250	0.030	0.005	0.010K
75/07/13	13 00		0.220	0.650	0.015	0.005	0.010K
75/08/09	13 35		0.190	0.100	0.025	0.005K	0.020

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/24

2904C1
36 43 05.0 093 12 22.0 4
BULL CREEK
29 7.5 BRANSON
T/ LAKE TANEYCOMO 100591
BRDG ON HWY F 5.6 MI N OF BRANSON
11EPALES 04001004.
0000 FEET DEPTH CLASS 00

/TPA/AMNT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH / FEET	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/09/14	11	30	0.550	0.500	0.010	0.005K	0.005K
74/10/05	13	20	0.448	0.700	0.095	0.005K	0.005K
74/11/02	10	30	0.672	0.400	0.020	0.005K	0.010K
74/12/07	11	45	0.520	0.950	0.010	0.005	0.010K
75/01/04	11	15	0.630	2.800	0.044	0.010	0.010
75/02/08	10	15	0.624	0.900	0.016	0.008K	0.010K
75/03/08	10	15	0.840	0.600	0.120	0.008K	0.010K
75/04/05	10	45	0.630	0.500	0.025	0.005K	0.010
75/04/19	10	15	0.430	0.500	0.015	0.010	0.010
75/05/03	10	30	0.420	0.750	0.065	0.005K	0.020
75/06/07	10	15	0.490	1.150	0.025	0.005K	0.010
75/07/13	10	30	0.145	0.850	0.015	0.005K	0.030
75/08/09	11	00	0.110	1.000	0.125	0.005	0.030

K VALUE KNOWN TO BE
LESS THAN INDICATED

STOPET RETRIEVAL DATE: 77/02/24

.290401
 36 37 27.0 093 12 55.0 4
 TURKEY CREEK
 29 7.5 HOLLISTER
 T/ LAKE TANEYCOMO 100591
 LT DTY RD BRDG IN TOWN OF HOLLISTER
 11EPALES 04001004
 .0000 FEET DEPTH CLASS 00

/TYP/AMBT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/09/14	13 30		0.200	0.300	0.005	0.005K	0.005K
74/10/05	13 00		0.072	1.400	0.045	0.005K	0.005K
74/11/02	13 00		0.200	0.800	0.110	0.005K	0.005K
74/12/07	10 10		0.368	0.800	0.030	0.005	0.010K
75/01/04	10 15		0.280	1.600	0.100	0.005K	0.010K
75/02/08	11 31		0.320	0.400	0.024	0.008K	0.010K
75/03/08	12 04		0.272	0.150	0.024	0.008K	0.010K
75/04/05	12 01		0.220	1.400	0.015	0.005	0.010
75/04/19	12 01		0.160	0.250	0.050	0.005	0.020
75/05/03	12 03		0.045	0.625	0.180	0.005K	0.030
75/06/07	11 40		0.150	0.825	0.090	0.005	0.020
75/07/13	11 50		0.060	0.300	0.085	0.005	0.010K
75/08/09	12 30		0.065	0.850	0.375	0.070	0.110

K VALUE KNOWN TO BE
 LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/24

2904E1
36.40 20.0 093 12 45.0 4
BEE CREEK
29 7.5 BRANSON
T/LAKE TANEYCOMO 100591
BNK 50 FT N OF SEC RD. 5 M E HWY F JCT
11EPALES 04001004
0000 FEET DEPTH CLASS 00

/TYP/AMENT/STREAM

DATE FROM TO	TIME OF DAY	DEPTH FEET	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/09/14	11 55		0.040	0.400	0.005K	0.005K	0.005K
74/10/05	13 00		0.056	2.300	0.025	0.005K	0.005K
74/11/02	10 00		0.048	1.400	0.025	0.005K	0.010K
74/12/07	12 50		0.088	1.100	0.015	0.005	0.010K
75/01/04	11 00		0.056	0.800	0.112	0.005	0.010K
75/02/08	10 00		0.056	0.600	0.032	0.008K	0.010K
75/03/08	10 00		0.032	0.300	0.024	0.006	0.010K
75/04/05	10 30		0.025	0.750	0.045	0.005K	0.020
75/04/19	10 00		0.020	0.800	0.170	0.005	0.010
75/05/03	10 00		0.005	0.350	0.035	0.005K	0.020

K VALUE KNOWN TO BE
LESS THAN INDICATED

STORET RETRIEVAL DATE 77/02/24

2904DA 1F2904DA P020000
 36 39 00.0 093 13 15.0 4
 BRANSON
 29213 7.5 BRANSON
 D/LAKE TANEYCOMO 100591

/AMBNT/STREAM

11EPALES 00001004
 0000 FEET DEPTH CLASS 00

DATE FROM TO	TIME-DEPTH OF DAY FEET	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS URTHO MG/L P	00665 PHOS-TOT MG/L P	50051 FLOW RATE INST MGD	50053 CONDUIT FLOW-MGD MONTHLY
74/11/22 08 00								
CP(T) -		0.560	11.000	0.240	6.100	6.800	0.640	0.800
74/11/22 17 00								
74/12/24 10 00		0.400	15.000	0.770	5.700	6.300	0.740	0.700
75/03/04 14 00		0.080	18.000	0.080		7.900	0.390	0.440
75/04/17 10 00		0.050	15.000	0.470	4.900	6.000	0.350	0.300
75/06/25		0.200	20.000		6.500	7.400	0.550	0.450
75/07/25 10 50		7.350	2.100	0.110	7.450	7.700	0.290	0.300
75/08/29 14 00		4.700	10.500		6.200	7.100	0.550	0.580
75/09/30 10 05		2.400	9.700	0.093	6.400	7.200	0.312	0.400
75/10/27 13 30		0.050	10.000	0.270	9.200	9.900	0.385	0.450
75/12/01 10 00		3.025	13.000	0.250	9.150	9.400	0.576	0.500
75/12/29 15 30		0.050	17.000	1.700	8.100	10.000	0.350	0.325
76/01/28 15 45		0.150	17.000	0.595	7.700	10.500	0.412	0.400
76/02/24 15 00		0.125	19.000	0.800	7.200	10.500	0.360	0.375

SYNOPSIS RETRIEVAL DATE 75/11/28
 NATE EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050441
 36 21 52.0 092 34 30.0
 WHITE RIVER
 05 7.5 COTTER
 BULL SHOALS RES
 FROM SPILLWAY AT BULL SHOALS DAM
 MEPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2-N MG/L	00625 TDT-KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
74/06/23	10	25	0.370	0.100K	0.005	0.005	0.010
74/07/20	10	00	0.384	0.800	0.040	0.005K	0.005K
74/08/17	09	45	0.450	0.300	0.005	0.010	0.010
74/09/07			0.504	0.100	0.005K	0.005K	0.010
74/10/12	10	15	0.490	0.100K	0.020	0.005K	0.010
74/12/22			0.144	0.400	0.057	0.005K	0.010
75/01/18			0.232	0.300	0.016	0.005	0.020
75/02/15			0.256	0.200	0.008	0.008	0.010K
75/03/08			0.256	0.300	0.009	0.008K	0.020
75/04/06			0.025	0.550	0.015	0.005K	0.020
75/04/19			0.280	0.350	0.010	0.005K	0.010
75/05/03			0.575	0.900	0.020	0.005	0.010K
75/05/04			0.590	0.700	0.025	0.005K	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STC-RT RETRIEVAL DATE 75/11/28
 NUTR EUTROPHICATION SURVEY
 EPA- LAS VEGAS

057401
 36 20 14.0 092 40 28.0
 JIMMY CREEK
 05 7.5 COTTER SW
 T/B JLL SHOALS RES
 QUARRY MTD RD BRDG 6.5 MI NW HWY 202 JCT
 11EPALES 2111204
 4' 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NH3-N MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/06/23	09 20		0.012	0.100K	0.005	0.005K	0.005K
74/07/20	09 15		0.016	0.400	0.020	0.005K	0.005K
74/08/17	08 30		0.016	0.400	0.005	0.005	0.010
74/09/07			0.200	0.300	0.090	0.005K	0.005
74/10/12			0.160	0.100	0.020	0.005K	0.010K
74/12/22			0.024	0.100	0.025	0.005K	0.010K
75/01/19			0.040	0.100K	0.016	0.010K	0.010
75/02/15			0.016	0.100K	0.008K	0.008K	0.010K
75/03/08			0.032	0.050K	0.016	0.008K	0.010
75/04/06			0.020	0.100	0.002	0.002	0.010K
75/04/10			0.015	0.050	0.005K	0.005K	0.010K
75/05/03			0.575	0.600	0.015	0.005	0.010K

— K VALUE KNOWN TO BE LESS THAN
 INDICATED —

STREET RETRIEVAL DATE 75/11/23
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050431
 36°19'24.0" 092°39'40.0"
 MCCAS: CREEK
 05 7.5 COTTER SW
 T/BUJL SHEDS RES
 QUARRY RTM RD BRDG 4 MI W OF HWY 202 JCT
 NEPALES 2111204
 + 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2-NH3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00663 PHOS-TOT MG/L P
74/06/23	09 40		0.044	0.100K	0.005	0.005K	0.010
74/07/20	09 30		0.032	0.500	0.020	0.005K	0.005K
74/08/17	12 10		0.108	0.100	0.005K	0.012	0.015
74/12/22			0.096	0.300	0.135	0.005	0.010K
75/01/18			0.088	0.300	0.016	0.005K	0.020
75/02/15			0.032	0.100K	0.008K	0.008K	0.010K
75/03/18			0.031	0.050K	0.016	0.005	0.015
75/03/15			0.030	0.150	0.005	0.010	0.010
75/04/06			0.010	0.550	0.040	0.005	0.010
75/04/19			0.010	0.050K	0.005K	0.005K	0.010K
75/05/03				0.700			0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STOPP/RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050402-
 36 24 00.0 092 52 42.0
 EAST SUTP LODE CREEK
 05 7.5 DIAMOND CITY
 T/BULL SHOALS RES
 BNK 100 YDS W OF HWY 14 2.2 M'SE LEAD HL
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO26N03 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS DEPTH MG/L P	00605 PHOS-TOT MG/L P
74/06/23	08 50		0.160	0.100K	0.005K	0.005K	0.005K
74/07/20	08 45		0.134	0.200	0.010	0.005K	0.005K
74/08/17	08 05		0.228	0.100K	0.005K	0.005	0.010
74/09/07			0.022	0.200	0.005K	0.005K	0.005K
74/10/12			0.165	0.100K	0.025	0.005K	0.010
74/11/24			0.490	0.200	0.016	0.016	0.016
74/12/21			0.504	0.100	0.010	0.005	0.010
75/01/19			0.400	0.100K	0.008K	0.005K	0.010K
75/02/16			0.480	0.300	0.016	0.008K	0.010K
75/03/08			0.376	0.050	0.008	0.008K	0.020
75/03/16			0.408	0.350	0.015	0.004	0.010
75/04/05			0.230	0.100	0.010	0.005K	0.010K
75/04/20			0.230	0.050	0.010		0.010K
75/05/04			0.330	0.200	0.020	0.006	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STOPPED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 SP4- LAS VEGAS

050421
 36 25 00.0 092 57 00.0
 W SUGAR CREEK
 05 7.5 DIAMOND CITY
 T/300L SHOALS-RES
 CLVRT AT SEC RD XING 2 MI E OF LEAD HILL
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&N3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00605 PHOS-TOT MG/L P
74/06/23	09 45		0.144	0.100K	0.005K	0.005K	0.005K
74/07/20	09 00		0.228	0.100	0.010	0.005K	0.005K
74/08/17	08 30		0.152	0.100K	0.010	0.010	0.010
74/09/07			0.012	0.300	0.005	0.005K	0.010
74/10/12			0.248	0.100	0.100	0.005K	0.010
74/11/24			0.504	0.100K	0.008	0.008K	0.010K
74/12/21			0.504	0.100	0.007	0.005K	0.010K
75/01/19			0.320	0.100	0.008K		0.010K
75/02/16			0.352	0.500	0.032	0.008K	0.010K
75/03/08			0.440	0.350	0.016	0.008K	0.020
75/03/16			0.306	0.400	0.009	0.005K	0.010K
75/04/05			0.200	0.500	0.020	0.005K	0.010
75/04/20			0.200	0.600	0.175	0.005K	0.010K
75/05/04			0.340	0.900	0.030	0.005K	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

SYNCHRONIZED RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0504=1
 32 26 59.0 093 04 30.0
 BEAR CREEK
 05 7.5 QMA42 NE,
 T/BUJL SHCALS RES
 HWY 14 BRDG 3.5 MI NW OF HWY 281 JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630	00625	00610	00671	00665
FROM	OF		NO2&NO3	TOT KJEL	NH3-N	PHOS-DIS	PHOS-TOT
TOT	DAY	FEET	N-TOTAL	N	TOTAL	ORTHO	
			MG/L	MG/L	MG/L	MG/L P	MG/L P
74/06/23	10	15	0.160	0.100K	0.005K	0.005K	0.005K
74/07/20	09	30	0.175	0.300	0.017	0.005	0.005
74/08/17	08	45	3.720	0.200	0.005	0.005	0.020
74/09/07			0.224	0.100	0.005K	0.005K	0.010
74/10/12			0.152	0.100K	0.025	0.005K	0.005K
74/11/24			0.528	0.100K	0.032	0.005K	0.010K
74/12/21			0.504	0.100	0.005K	0.005K	0.020
75/01/19			0.384	0.500	0.016	0.005K	0.010K
75/02/16			0.490	0.400	0.072	0.008K	0.010K
75/03/08			0.296	0.200	0.024	0.008K	0.068
75/03/16			0.462	0.200	0.005K	0.005K	0.010K
75/04/05			0.290	0.250	0.017	0.005K	0.010K
75/04/20			0.290	0.250	0.040	0.005	0.010K
75/05/04			0.120	0.050K	0.020	0.005K	0.015

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STATION RETRIEVAL DATE 75/11/23
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050401
 36 31 20.0 093 05 20.0
 BEE CREEK
 05 7.5 MINCY
 T/3 JLL SHOALS RES
 BANK AT FORD .1 MI W OF BEE CRK CEMETERY
 11EPAL'S 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2+NO3 N-TOTAL MG/L	00625 TOT N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
74/06/23	11:00		0.010	0.100K	0.005K	0.005K	0.005K
74/07/20	10:00		0.044	0.400	0.015	0.005K	0.005K
74/08/17	09:30		0.068	0.200	0.005K	0.005K	0.015
74/09/07			0.012	0.200	0.005K	0.005K	0.010
74/10/12			0.490	0.100K	0.015	0.005K	0.005
74/11/24			0.015	0.100K	0.008	0.008K	0.010K
74/12/21			0.015	0.100K	0.005K	0.005K	0.010K
75/01/19			0.080	0.100K	0.008	0.005K	0.010K
75/02/16			0.029	0.100	0.040	0.008K	0.010K
75/03/08			0.048	0.100	0.016	0.008K	0.010
75/03/16			0.045	0.150	0.005K	0.005K	0.010K
75/04/05			0.290	0.175	0.010	0.005K	0.010K
75/05/04			0.120	0.100	0.015	0.005K	0.010K

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

STOP AT RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0504M1
 36 39 33.0 093 07 25.0
 LAKE TANTYLOGO
 J5 7.5 FOSYTH
 T/BULL SHOALS PFS
 OZARK BEACH DAM SPILLWAY OFF HWY Y
 11EPAL-5 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2AND3 N-TOTAL MG/L	00625 TOT KJFL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS GRIND MG/L P	00665 PHOS-TJT MG/L P
74/06/23	12 10		0.540	0.200	0.010	0.005K	0.005K
74/07/20	16 00		1.200	0.100K	0.035	0.012	0.021
74/09/17	11 30		2.300	0.100	0.010	0.015	0.020
74/09/07			0.300	0.200	0.020	0.015	0.020
74/10/12			0.504	0.100K	0.015	0.005K	0.005K
74/11/24			0.128	0.300	0.064	0.008K	0.030
74/12/21			0.128	0.500	0.065	0.010	0.020
75/01/19			0.336	0.500	0.016	0.010	0.010
75/02/16			0.400	0.300	0.040	0.008	0.020
75/03/08			0.376	0.300	0.016	0.008K	0.030
75/03/16			0.395	0.300	0.005	0.007	0.024
75/04/05			0.410	0.350	0.010	0.005K	0.010K
75/04/20			0.410	0.250	0.030	0.010	0.020
75/05/04			0.115	0.050K	0.005K	0.005K	0.010K

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

STREET RETRIEVAL DATE 75/11/23
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0504J1
 36 43 10.0 093 06 00.0
 SWAY CRFTK
 05 7.5 FORSYTH
 T/8 JLL SHGALS RES
 BNK AT 1ST TRNOUT N OF FORK IN CASEY RD
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO26-N N-TOTAL MG/L	00625 TOT KJFL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/06/23	13 00		0.184	0.100K	0.015	0.005K	0.005K
74/07/20	14 30		0.044	0.500	0.025	0.005K	0.005K
74/08/17	12 10		0.040	1.600	0.105	0.005	0.005
74/09/07			0.192	0.100K	0.005K	0.005K	0.005
74/10/12			0.072	0.300	0.020	0.005K	0.010
74/11/24			0.400	0.250	0.056	0.007	0.010K
75/01/19			0.216	0.100K	0.008K	0.005K	0.010K
75/02/16			0.024	0.200	0.016	0.008K	0.010K
75/05/04			0.115	0.350	0.005	0.013	0.013

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STATION RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0504K1
 36 39 12.0 093 57 37.0
 CANE CREEK
 05 7.5 HILDA
 T/BULL SHOALS RES
 2NDRY RD BRDG 1.5 MI NE US 160 JCT
 11EPALFS 2111204
 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NH4-NH3 TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS DEPTH MG/L P	00665 PHOS-TOT MG/L P
74/06/23	12 00		0.120	0.100K	0.005K	0.005K	0.005K
74/07/20	12 30		0.088	0.100K	0.020	0.005K	0.005K
74/08/17	13 45		0.690	0.300	0.020	0.020	0.030
74/09/07			0.024	0.600	0.035	0.005K	0.025
74/10/12			0.245	0.100	0.025	0.005K	0.010
74/11/24			0.970	0.400	0.032	0.016	0.016
74/12/21			0.980	0.150	0.015	0.010	0.010
75/01/19			0.394	0.400	0.016	0.005K	0.010K
75/02/16			0.384	0.100K	0.008K	0.008K	0.010K
75/03/08			0.376	0.200	0.032	0.008K	0.010
75/03/16			0.395	0.400	0.005	0.005K	0.010K
75/04/05			0.400	0.850	0.020	0.005K	0.010K
75/04/20			0.420	0.300	0.015	0.005K	0.010
75/05/04			0.170	0.250	0.060	0.005K	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STATION RETRIEVAL DATE 75/11/28
 NATL EUTROPHICATION SURVEY
 SDA- LAS VEGAS

050+L1
 36 42 12.0 093 58 27.0
 BEAVER CREEK
 05 7.5 MILD
 T/BJLL SHOALS RES
 BANK 300 OFF 2NDRY RD 4 MI S HWY FF
 1124LES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NH3-N MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS DEPTH MG/L P	00605 PHOS-TOT MG/L P
74/06/23	11 00		0.310	0.100K	0.020	0.005K	0.005
74/07/20	13 30		0.197	0.200	0.020	0.005K	0.005
74/08/17	13 25		1.340	0.300	0.015	0.015	0.025
74/09/07			0.352	0.200	0.005K	0.005K	0.005
74/10/12			0.264	0.200	0.045	0.005K	0.010
74/11/24			0.384	0.400	0.040	0.005	0.010K
74/12/21			0.384	0.100K	0.005K	0.005K	0.010K
75/01/19			0.216	0.100K	0.008K	0.005K	0.010K
75/02/16			0.064	0.100K	0.016	0.008K	0.010K
75/03/16			0.568	0.250	0.010	0.005K	0.010K
75/04/05			0.960	0.100	0.015	0.015	0.015
75/05/04			0.165	0.100	0.045	0.005	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STATION RETRIEVAL DATA 75/11/28
 NATE EUTROPHICATION SURVEY
 SPA- LAS VEGAS

050441
 36 35 00.0 092 46 40.0
 BIG CREEK
 05 7.5 PROTEM
 T/3 JUL SHOALS RES
 CULVERT DOWNSTREAM OF NEW BRDG ON HWY 160
 116PALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO25-N33 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00665 PHOS-TOT MG/L P
74/06/23	12 30		0.320	0.600	0.015	0.005K	0.005K
74/09/07			0.024	1.000	0.060	0.005K	0.015
75/01/18			0.240	0.100K	0.008	0.010	0.040
75/02/15			0.200	0.100	0.016	0.008K	0.010K
75/03/08			0.328	0.350	0.012	0.005	0.010K
75/03/15			0.332	0.150	0.010	0.010	0.010
75/04/06			0.010	0.060	0.015	0.005K	0.020
75/05/03			0.330	0.550	0.035	0.005K	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

SYO-11 RETRIEVAL DATE 75/11/23
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050441
 36 32 32.0 092 52 25.0
 SHOALS C EFF.
 05 7.5 PROTEM
 176 JLL SHOALS RES
 2NDRY AD RADG 1.5 MI NW OF PROTEM
 LIEPALES 2111204
 4 2000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJFL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS DEPTH MG/L P	00665 PHOS-TOT MG/L P
74/06/23	13 15		0.480	0.100K	0.010	0.005K	0.005K
74/07/20	13 50		0.024	0.500	0.025	0.005K	0.010
74/10/12			0.160	0.100K	0.045	0.015	0.015

K VALUE KNOWN TO BE LESS THAN
 INDICATED

START RETRIEVAL DATE 75/11/23
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

350421
 36 38 04.0 092 36 12.0
 BARREN FORK
 05 1.5 WILLHOUT
 T/8JLL SHOALS RES
 2NDRY RD BRDG 4 MI NW HWY 160 JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KjEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00605 PHOS-TOT MG/L P
74/06/23	13 00		0.108	0.100K	0.005	0.005K	0.005K
74/07/20	12 00		0.192	0.100K	0.020	0.005K	0.005K
74/09/07			0.012	1.000	0.007	0.005K	0.010
74/10/12			0.152	0.100K	0.020	0.005K	0.005K
74/11/24			0.204	0.300	0.024	0.005K	0.010K
74/12/23			0.216	0.125	0.020	0.005K	0.010K
75/01/18			0.400	0.100	0.008K	0.005K	0.020
75/02/15			0.200	0.100K	0.008	0.008K	0.010K
75/03/08			0.120	0.550	0.018	0.008K	0.020
75/03/15			0.120	0.600	0.018	0.010	0.010
75/04/06			0.035	0.100	0.030	0.005	0.010K
75/04/19			0.050	0.050K	0.005K	0.005K	0.010K
75/05/03			0.080	0.600	0.035	0.005K	0.010K

K. VALUE KNOWN TO BE LESS THAN
 INDICATED

STOPPOT RETRIEVAL DATE 75/11/23
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

050421
 36 36 30.0 092 33 30.0
 GULLEY SPRING CREEK
 05 1.5 ISABELLA
 T/BJLL SHOALS RES
 2NDRY RD BRDG 1.5 MI S HWY W JCT
 11EPALTS 2111204
 + 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO28NG3 A-TOTAL MG/L	00625 TOT KJEL 4 MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHOP MG/L P	00665 PHOS-TOT MG/L P
74/06/23	11 45		0.036	0.500	0.010	0.005K	0.005K
74/07/20	10 37		0.044	0.100	0.015	0.005K	0.005K
74/10/12			0.490	0.100K	0.015	0.005K	0.005K
74/11/24			0.216	1.000	0.032	0.005K	0.010K
74/12/22			0.208	0.100K	0.025	0.005K	0.010K
75/01/18			0.400	0.100K	0.008K	0.005K	0.030
75/02/15			0.192	0.100K	0.008K	0.008K	0.010K
75/03/08			0.168	0.750	0.040	0.008K	0.020
75/03/15			0.166	0.100	0.009	0.005	0.010K
75/04/06			0.135	0.050K	0.015	0.005K	0.010K
75/04/19			0.160	0.050K	0.005K	0.005K	0.010K
75/05/03			0.580	0.100	0.015	0.005K	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STREET RETRIEVAL DATE 75/11/23
 NTL BUTACON-ICATON SURVEY
 204- LAS VEGAS

050441
 36 40 32.0 092 38 44.0
 N FORK WHITE RIVER
 05 7.5 THOMPSONFIELD
 T/BJLL SHOALS RES
 2NDRY RD BRDC 1.5 W" S HWY D JCT
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO2&NO3 N-TOTAL MG/L	00625 TOT KJFC N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHO MG/L P	00605 PHOS-TOT MG/L P
74/06/23			0.264	0.100K	0.005K	0.005K	0.045
74/07/20	13	45	0.300	0.100K	0.020	0.005K	0.005K
74/09/17	12	35	0.112	0.100K	0.010	0.005	0.005
74/09/07			0.352	0.300	0.005K	0.005K	0.005K
74/10/12	11	00	0.490	0.100K	0.015	0.005K	0.005K
74/11/24			0.184	0.400	0.040	0.005K	0.010K
74/12/22			0.184	0.200	0.020	0.005K	0.010K
75/01/18			0.352	0.100K	0.016	0.005K	
75/02/15			0.256	0.200	0.008K	0.008K	0.010K
75/03/08			0.320	0.400	0.024	0.008	0.020
75/03/15			0.333	0.250	0.025	0.005	0.010K
75/04/06			0.030	0.150	0.025	0.005K	0.010K
75/04/19				0.100	0.005K	0.005	0.010K
75/05/03			0.090	1.950	0.035	0.005K	0.010K
75/05/07			0.085	2.300	0.035	0.005K	0.010

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STOP-1 RETRIEVAL STA- 75711/23
 NATE AUTOMATION SURVEY
 SPA- LAS VEGAS

050411
 36 40 22.0 092 37 57.0
 TURKEY CREEK
 05 7.5 THORNFIELD
 T/BULLSHOALS RES.
 2NDRY RD BRDG 3 MI SE HWY D JCT
 ALLEPALES 2111204
 4 1000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO26453 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS DEPTH MG/L P	00665 PHOS-TOT MG/L P
74/06/23	14 10		0.390	0.100K	0.010	0.005K	0.005K
74/07/20	14 10		0.276	0.100K	0.025	0.005K	0.005K
74/08/17	12 30		0.300	0.300	0.015	0.015	0.015
74/09/07			0.224	0.400	0.005K	0.005K	0.005
74/10/12			0.248	0.200	0.025	0.005	0.015
74/11/24			0.504	1.100	0.032	0.005K	0.010K
74/12/22			0.520	0.500	0.020	0.005K	0.010K
75/01/18			0.248	0.100	0.008K	0.005K	0.025
75/02/15			0.400	0.100	0.008	0.008K	0.010K
75/03/08			0.120	0.100	0.008	0.008K	0.030
75/03/15			0.129	0.500	0.015	0.010	0.010
75/04/06			0.060	0.100	0.020	0.005K	0.010K
75/04/19			0.375	0.050K	0.005K	0.005K	0.010K
75/05/03			0.090	2.950	0.050	0.005	0.010K

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

STREET ADDRESS 75/11/24
 NATL EUTROPHICATION SURVEY
 EPA- LAS VEGAS

0504X1
 36 38 10.0 092 41 15.0
 POND FRY
 05 .5 THORNFIELD
 T/2 JLL SHOALS RES
 2NDRY RD BRDG 3.5 MI SE HWY 95 JCT
 115 PALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 AC25N03 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS DEPTH MG/L P	00605 PHOS-TOT MG/L P
74/06/23	13 40		0.300	0.200	0.005	0.005K	0.005K
74/07/20	11 00		0.240	0.100	0.020	0.005K	0.005K
	11 50		0.060	0.100K	0.010	0.005K	0.005K
74/08/17	12 50		0.160	0.100	0.005K	0.005K	0.005
74/09/07			0.370	0.600	0.070	0.005K	0.010
74/10/12			0.064	0.200	0.015	0.005K	0.010
74/11/24			0.312	0.100K	0.016	0.005K	0.010K
74/12/22			0.432	2.600	0.080	0.005K	0.010K
75/01/18			0.368	0.300	0.032	0.005	0.030
75/02/15				0.100K	0.016	0.008K	0.010K
75/03/09			0.325	0.400	0.024	0.008K	0.020
75/03/15			0.338	0.450	0.025	0.005K	0.010K
75/04/06			0.005	0.050K	0.010	0.005K	0.010K
75/04/19			0.375	0.100	0.005	0.005K	0.010K
75/05/03			0.090	1.900	0.030	0.005	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STOPPED RETRIEVAL DATE 75/11/28
 NATL CONTAMINATION SURVEY
 SPA- LAS VEGAS

0504Y1
 36 48 20.0 093 04 27.0
 BLUE CREEK
 05 7.5 GARRISON MC
 T/BULL SHOALS RES
 BRDG ON HWY 1A 1 MI NW SWAN
 11EPALCS 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630 NO23NO3 N-TOTAL MG/L	00625 TOT KJEL N MG/L	00610 NH3-N TOTAL MG/L	00671 PHOS-DIS ORTHG MG/L P	00665 PHOS-TOT MG/L P
74/06/23	10 30		0.018	0.100K	0.005K	0.005K	0.005K
74/09/17	12 45		0.116	0.300	0.035	0.005	0.010
74/09/07			0.384	0.100K	0.005K	0.005K	0.005
74/10/12			0.056	0.200	0.020	0.011	0.016
74/11/24			0.940	0.200	0.016	0.010	0.010
74/12/21			1.120	0.100K	0.020	0.015	0.020
75/01/19			0.960	0.100K	0.008	0.010	0.010
75/02/16			0.064	0.100K	0.008K	0.008K	0.010K
75/03/08			0.448	0.300	0.016	0.008K	0.020
75/03/16			0.444	0.300	0.010	0.005K	0.010K
75/04/05			0.970	0.100	0.015	0.015	0.015
75/04/20			0.950	0.750	0.055	0.009	0.010
75/05/04			0.115	0.050K	0.010	0.005K	0.010K

K VALUE KNOWN TO BE LESS THAN
 INDICATED

STORE RETRIEVAL DATE: 12/11/23
 NTL FERTILIZATION SURVEY
 EPA- LAS VEGAS

050421
 30 24 09.0 092 56 25.0
 DESHIELDS CREEK
 05 7.5 DIAMOND CITY
 T/BULL SHOALS RESERVOIR
 CULVERT/BROG 0.7 MI. E OF SOUTH LEAD HILL
 11EPALES 2111204
 4 0000 FEET DEPTH

DATE	TIME	DEPTH	00630	00625	00610	00671	00665
FROM	OF		NO2&NO3	TOT KJEL	NH3-N	PHOS-DIS	PHOS-TOT
TO	DAY	FEET	N-TOTAL	N	TOTAL	ORTHO	
			MG/L	MG/L	MG/L	MG/L P	MG/L P
74/06/23	09 05		0.350	0.200	0.005K	0.005K	0.020
74/07/20	08 30		0.250	0.200	0.025	0.005K	0.005K
74/08/17	08 00		0.208	0.100K	0.010	0.005K	0.010
74/09/07			0.300	0.400	0.025	0.010	0.015
74/10/12			0.144	0.100K	0.020	0.005K	0.005K
74/11/24			0.490	0.100K	0.008K	0.005K	0.010K
74/12/21			0.504	0.100K	0.005K	0.005	0.010K
75/01/19			0.480	0.200	0.032		0.010K
75/02/16			0.480	0.200	0.016	0.008K	0.010K
75/03/08			0.400	0.150	0.008	0.008K	0.030
75/03/16			0.400	0.050K	0.020	0.005K	0.010K
75/04/05			0.345	1.150	0.050	0.005K	0.010
75/04/20			0.345	0.250	0.025	0.005K	0.010K
75/05/04			0.330	0.500	0.015	0.005	0.010K

— K VALUE KNOWN TO BE LESS THAN —
 INDICATED

APPENDIX F

**PARAMETRIC RANKINGS OF LAKES
SAMPLED BY NES IN 1974**

STATES OF ARKANSAS AND MISSOURI

LAKE DATA TO BE USED IN RANKINGS - ARKANSAS

LAKE CODE	LAKE NAME	MEDIAN TOTAL P	MEDIAN INORG N	500- MEAN SEC	MEAN CHLOROP	15- MIN DO	MEDIAN DISS O2/HQ P
0501	BEAVER LAKE	0.022	0.330	415.667	3.421	14.900	0.006
0502	BLACKFISH LAKE	0.424	1.470	496.125	19.775	12.000	0.040
0503	BLUE MOUNTAIN LAKE	0.054	0.160	444.000	8.983	14.600	0.010
0504	BULL SHOALS LAKE	0.015	0.340	343.969	3.995	15.000	0.004
0505	LAKE CATHERINE	0.029	0.180	451.667	14.042	11.800	0.006
0506	LAKE CHICOT	0.162	0.450	486.000	13.722	14.800	0.089
0507	DEGRAY RESERVOIR	0.019	0.130	419.050	12.300	15.000	0.004
0508	LAKE EPLING	0.054	0.120	454.667	13.389	14.600	0.020
0509	GRAND LAKE	0.101	0.090	479.667	62.867	8.400	0.021
0510	LAKE HAMILTON	0.024	0.130	428.111	10.889	14.400	0.006
0511	MILLWOOD LAKE	0.040	0.120	466.778	14.967	9.800	0.008
0512	NIMROD LAKE	0.039	0.160	469.000	15.833	8.800	0.006
0513	NORFOLK LAKE	0.015	0.320	356.321	3.441	15.000	0.005
0514	LAKE OUACHITA	0.015	0.155	389.144	4.344	15.000	0.006
0515	TABLE ROCK LAKE	0.022	0.350	410.778	9.103	15.000	0.007
0516	GREER'S LAKE	0.012	0.140	370.875	3.762	15.000	0.004

PERCENT OF LAKES WITH HIGHER VALUES (NUMBER OF LAKES WITH HIGHER VALUES) - ARKANSAS

LAKE CODE	LAKE NAME	MEDIAN TOTAL P	MEDIAN INORG N	500- MEAN SEC	MEAN CHLOROP	15- MIN DO	MEDIAN DISS ORTHO P
0501	BEAVER LAKE	63 (9)	27 (4)	47 (10)	87 (13)	40 (6)	63 (8)
0502	BLACKFISH LAKE	40 (0)	0 (0)	0 (0)	7 (1)	73 (11)	0 (0)
0503	BLUE MOUNTAIN LAKE	20 (3)	47 (7)	13 (2)	67 (10)	57 (8)	27 (4)
0504	BULL SHOALS LAKE	90 (13)	13 (2)	100 (15)	80 (12)	17 (0)	93 (13)
0505	LAKE CATHERINE	47 (7)	40 (6)	47 (7)	27 (4)	80 (12)	63 (8)
0506	LAKE CHICOT	7 (1)	7 (1)	7 (1)	33 (5)	47 (7)	7 (1)
0507	DEGRAY RESERVOIR	73 (11)	77 (11)	60 (9)	47 (7)	17 (0)	93 (13)
0508	LAKE EWING	27 (4)	90 (13)	40 (6)	40 (6)	57 (8)	20 (3)
0509	GRAND LAKE	13 (2)	100 (15)	20 (3)	0 (0)	100 (15)	13 (2)
0510	LAKE HAMILTON	53 (8)	77 (11)	53 (8)	53 (8)	67 (10)	63 (8)
0511	MILLWOOD LAKE	33 (5)	90 (13)	33 (5)	20 (3)	87 (13)	33 (5)
0512	NIMROD LAKE	40 (6)	53 (8)	27 (4)	13 (2)	93 (14)	47 (7)
0513	NORFOLK LAKE	80 (12)	33 (5)	93 (14)	100 (15)	17 (0)	80 (12)
0514	LAKE OUACHITA	90 (13)	60 (9)	80 (12)	73 (11)	17 (0)	63 (8)
0515	TABLE ROCK LAKE	63 (9)	20 (3)	73 (11)	60 (9)	17 (0)	40 (6)
0516	GREER'S LAKE	100 (15)	67 (10)	87 (13)	93 (14)	17 (0)	93 (13)

LAKE DATA TO BE USED IN RANKINGS - MISSOURI

LAKE CODE	LAKE NAME	MEDIAN TOTAL P	MEDIAN INORG N	500- MEAN SEC	MEAN CHLORA	15- MIN DO	MEDIAN DISS O-THO P
2901	CLEARWATER LAKE	0.017	0.150	445.000	3.567	10.400	0.004
2902	POMME DE TERRE RESERVOIR	0.043	0.275	449.924	9.443	14.800	0.008
2903	STOCKTON RESERVOIR	0.022	0.670	428.800	8.973	15.000	0.006
2904	LAKE TANEYCOMO	0.023	0.530	420.250	9.825	11.200	0.007
2905	THOMAS HILL RESERVOIR	0.042	1.040	487.889	5.787	11.200	0.011
2906	WAPPAPELLO RESERVOIR	0.033	0.105	459.667	9.642	11.000	0.004

PERCENT OF LAKES WITH HIGHER VALUES (NUMBER OF LAKES WITH HIGHER VALUES) - MISSOURI

LAKE CODE	LAKE NAME	MEDIAN TOTAL P	MEDIAN INORG N	500- MEAN SEC	MEAN CHLOR-A	15- MIN DO	MEDIAN DISS ORTHO P
2901	CLEARWATER LAKE	100 (5)	80 (4)	60 (3)	100 (5)	100 (5)	90 (4)
2902	POMME DE TERRE RESERVOIR	20 (1)	60 (3)	40 (2)	40 (2)	20 (1)	20 (1)
2903	STOCKTON RESERVOIR	80 (4)	20 (1)	80 (4)	60 (3)	0 (0)	60 (3)
2904	LAKE TANEYCOMO	60 (3)	40 (2)	100 (5)	0 (0)	50 (2)	40 (2)
2905	THOMAS HILL RESERVOIR	10 (0)	0 (0)	0 (0)	80 (4)	50 (2)	0 (0)
2906	WAPPAPELLO RESERVOIR	40 (2)	100 (5)	20 (1)	20 (1)	80 (4)	90 (4)