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Report 290

# WATER QUALITY OF LAKE WHITNEY NORTH-CENTRAL TEXAS

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TEXAS DEPARTMENT OF WATER RESOURCES

December 1984





## **TEXAS DEPARTMENT OF WATER RESOURCES**

**REPORT 290**

**WATER QUALITY OF LAKE WHITNEY**

**NORTH-CENTRAL TEXAS**

**By**

**Jeffrey L. Strause and Freeman L. Andrews  
U.S. Geological Survey**

This report was prepared by the U.S. Geological Survey under cooperative agreement with the Texas Department of Water Resources, the U.S. Army Corps of Engineers, and the Brazos River Authority

December 1984

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## **ABSTRACT**

The volume-weighted average concentrations of the major dissolved constituents in Lake Whitney on the Brazos River in north-central Texas usually were less than 1,300 milligrams per liter of dissolved solids, 500 milligrams per liter of chloride, and 300 milligrams per liter of sulfate during the 1970-80 water years. The water was very hard (hardness greater than 180 milligrams per liter as calcium carbonate). The concentrations of principal dissolved constituents varied in relation to releases from Lake Granbury and in relation to runoff from the intervening drainage area. Releases from upstream reservoirs associated with heavy rainfall during August 1978 showed a marked increase in concentrations of all dissolved constituents.

Thermal stratification in Lake Whitney usually begins during April and persists until October. Stratification causes significant seasonal and areal variations in the concentration of dissolved oxygen, which cause variations in the concentrations of dissolved iron, dissolved manganese, total inorganic nitrogen, and total phosphorus. Oxygen utilized in the decay of organic matter and bottom material is not replenished during periods of summer stagnation, and water below depths of 40 to 50 feet (12 to 15 meters) usually contains less than 2.0 milligrams per liter of dissolved oxygen.

During summer stagnation, reducing conditions result in the dissolution of iron and manganese from the bottom deposits in the lake. At site Ac, a deep site near Whitney Dam, dissolved iron concentrations in water near the bottom during summer stagnation ranged from 90 to 400 micrograms per liter and averaged about 195 micrograms per liter. Dissolved manganese concentrations ranged from 240 to 2,100 micrograms per liter and averaged about 1,400 micrograms per liter. During winter circulation and in water near the surface during summer stagnation, both iron and manganese concentrations averaged less than 40 micrograms per liter.

The concentrations of total inorganic nitrogen and total phosphorus are greatest during summer stagnation in water near the bottom at deep sites. At site Ac during the summer, the concentration of total inorganic nitrogen near the bottom averaged 1.3 milligrams per liter and the concentration of total phosphorus near the bottom averaged 0.28 milligram per liter. During the entire year, the concentration of both these constituents in water near the surface averaged less than 0.05 milligram per liter, with the exception of site P12.

Seasonal temperature variations and variations in the concentration of dissolved oxygen result in dissolved iron, dissolved manganese, total inorganic nitrogen, and total phosphorus being recycled within the lake; however, no significant accumulations of these constituents were detected.



## TABLE OF CONTENTS

	<b>Page</b>
<b>ABSTRACT</b> .....	iii
<b>INTRODUCTION</b> .....	1
Purpose of This Report.....	1
Description of Lake Whitney.....	1
Metric Conversions .....	3
<b>ANALYSIS OF WATER-QUALITY DATA</b> .....	3
Sources of Inflow.....	3
Quality of Inflow .....	4
Water Quality of Lake Whitney .....	4
Thermal Stratification .....	4
Dissolved Oxygen .....	6
Dissolved Iron and Dissolved Manganese .....	7
Total Inorganic Nitrogen and Total Phosphorus .....	9
Dissolved Solids, Dissolved Chloride, Dissolved Sulfate, and Hardness .....	11
<b>CONCLUSIONS</b> .....	13
<b>SELECTED REFERENCES</b> .....	16

## TABLES

1. Statistical Summary of Selected Water-Quality Constituents  
for Nolan River at Blum.....

17

## TABLE OF CONTENTS—Continued

	Page
2-31. Chemical-Quality Surveys of Lake Whitney:	
2. September 23, 1970.....	18
3. February 10 and 17, 1971 .....	24
4. May 25, 1971.....	31
5. September 16, 1971.....	36
6. February 29 - March 1, 1972 .....	41
7. May 22, 1972.....	46
8. September 28-29, 1972 .....	52
9. January 19, 1973 .....	58
10. May 24, 1973.....	64
11. September 13, 1973.....	70
12. January 20, 1974 .....	76
13. May 12, 1974.....	82
14. September 10, 1974.....	87
15. January 27, 1975 .....	92
16. June 2, 1975 .....	97
17. September 6, 1975.....	102
18. January 27, 1976 .....	107
19. May 9, 1976 .....	112
20. August 28, 1976 .....	117
21. February 2, 1977.....	122
22. May 6, 1977 .....	127

## TABLE OF CONTENTS—Continued

	<b>Page</b>
23. September 2, 1977 .....	132
24. March 15, 1978 .....	137
25. June 23, 1978 .....	141
26. September 5-6, 1978 .....	146
27. February 22, 1979 .....	151
28. June 11-12, 1979 .....	156
29. August 10, 1979 .....	161
30. January 23, 1980 .....	166
31. May 6, 1980 .....	169

## FIGURES

1. Map Showing Location of Water-Quality Data-Collection Sites on Lake Whitney .....	2
2-14. Graphs Showing:	
2. Variations in Air and Water Temperature at Selected Sites, September 1970-May 1980 .....	6
3. Seasonal Variations in Water Temperature and Concentration of Dissolved Oxygen at Site Ac, 1973 Water Year .....	7
4. Variations in Average Concentrations of Dissolved Oxygen During Summer and Winter Surveys, September 1970- May 1980 .....	7
5. Seasonal Variations in Concentrations of Dissolved Oxygen, Dissolved Iron, and Dissolved Manganese at Site Ac, 1973 Water Year .....	8
6. Variations in Average Concentrations of Dissolved Iron During Summer and Winter Surveys .....	9
7. Variations in Average Concentrations of Dissolved Manganese During Summer and Winter Surveys .....	9

## TABLE OF CONTENTS—Continued

	Page
8. Variations in Concentrations of Dissolved Iron and Dissolved Manganese at Site Ac, September 1970-September 1980 .....	10
9. Seasonal Variations in Water Temperature and Concentrations of Total Inorganic Nitrogen and Total Phosphorus at Site Ac, 1977 Water Year .....	11
10. Variations in Average Concentrations of Total Inorganic Nitrogen During Summer and Winter Surveys .....	11
11. Variations in Average Concentrations of Total Phosphorus During Summer and Winter Surveys.....	12
12. Variations in Concentrations of Total Inorganic Nitrogen and Total Phosphorus at Site Ac, February 1971-May 1980 .....	12
13. Variations in Volume-Weighted Average Concentrations of Dissolved Solids, Dissolved Chloride, Dissolved Sulfate, and Hardness for Lake Whitney, September 1970-May 1980 .....	13
14. Variations in Average Concentrations of Dissolved Solids During Summer and Winter Surveys, September 1970-May 1980 .....	14
15. Longitudinal and Vertical Profiles of Specific Conductance During Surveys of September 1972 and September 1978 .....	15

# **WATER QUALITY OF LAKE WHITNEY**

## **NORTH-CENTRAL TEXAS**

By

Jeffrey L. Strause and Freeman L. Andrews  
U.S. Geological Survey

### **INTRODUCTION**

The U.S. Geological Survey has periodically made comprehensive water-quality surveys of selected reservoirs in Texas since October 1961 as part of a continuing program with State, Federal, and local agencies to inventory the surface-water resources of Texas. Periodic water-quality surveys have been conducted on Lake Whitney from November 1961 to November 1964 and from the 1970 water year to the present in cooperation with the Texas Department of Water Resources, the U.S. Army Corps of Engineers, and the Brazos River Authority. Data collection includes measurements of dissolved oxygen, specific conductance, pH, and water temperature at selected sites. Water samples also are collected and analyzed for selected dissolved chemical constituents, nutrients, and minor elements.

### **Purpose of This Report**

The purpose of this report is to summarize the water-quality records and to explain the variations of selected chemical constituents and characteristics of the water in Lake Whitney during the 1970-80 water years. Other reports containing results of water-quality surveys for Lake Whitney are cited in the section "Selected References."

### **Description of Lake Whitney**

Lake Whitney, which is impounded by Whitney Dam, is on the Brazos River 7 miles (11 km) southwest of Whitney, Texas (Figure 1). The surrounding basin consists of mostly pasture and cultivated land and the area is moderately populated. The lake extends about 30 miles (48 km) upstream along the Bosque and Hill County line and is owned and operated by the U.S. Army Corps of Engineers.

Construction of Whitney Dam began on May 12, 1947, and was completed on April 18, 1951. Impoundment began on December 10, 1951, and reservoir-content records have been collected since then. The reservoir capacity between an elevation of 533.0 and 571.0 feet (162.5 and 174.0

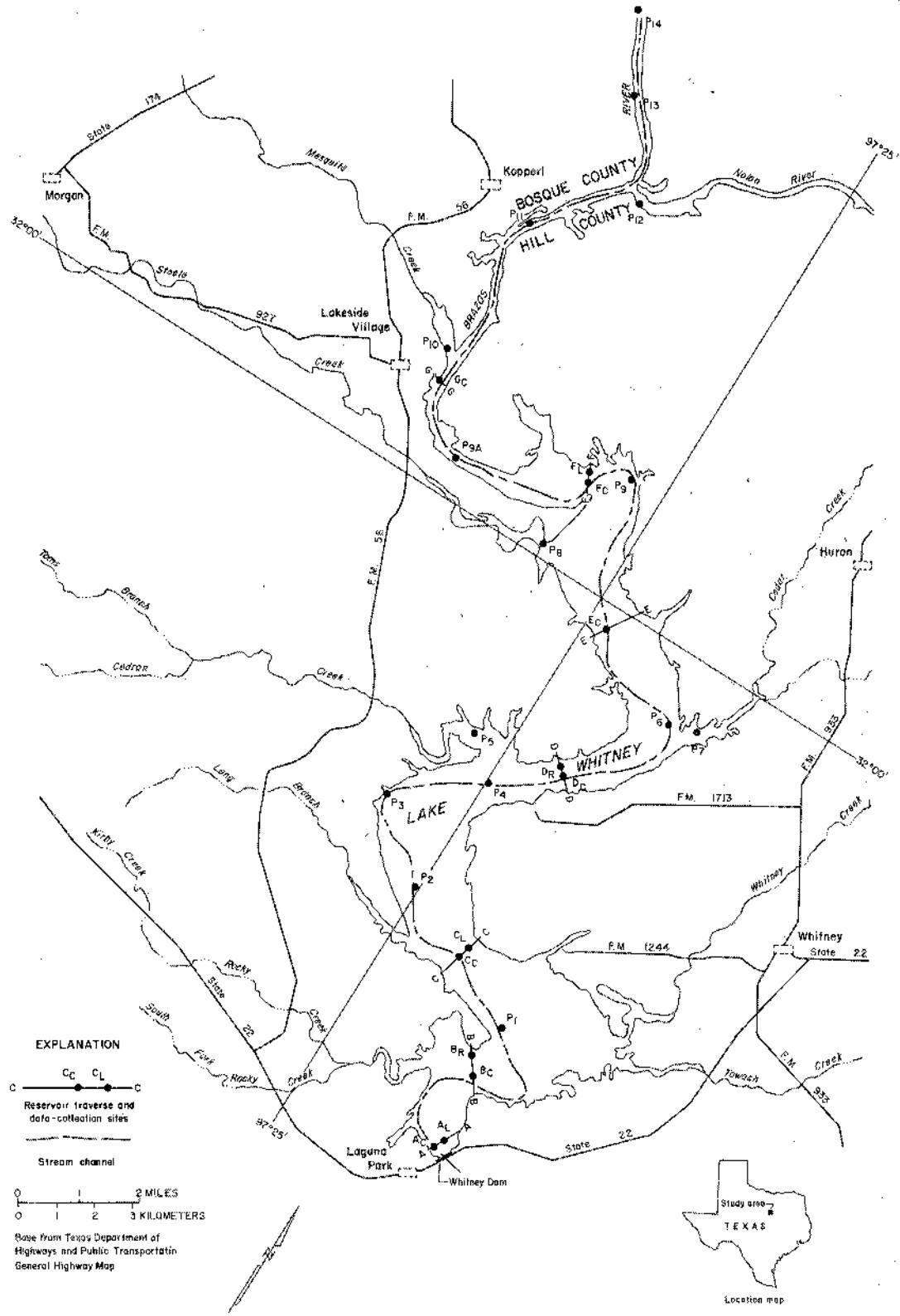


Figure 1  
Location of Water Quality Data-Collection Sites on Lake Whitney

m) is reserved for flood-control storage. Storage data compiled by Dowell and Petty (1973) and in a reservoir resurvey in 1959 by the Corps of Engineers are given in the following table:

<u>Feature</u>	<u>Elevation (feet above NGVD of 1929)</u>	<u>Capacity (acre-feet)</u>	<u>Area (acres)</u>
Top of dam	584.0	—	—
Top of flood-control pool	571.0	1,999,500	49,820
Crest of spillway	533.0	627,100	23,560
Invert of penstocks	476.0	39,570	—
Invert of lowest intake	448.83	4,270	475
Streambed	425.0	—	—

### Metric Conversions

Factors for converting inch-pound units to metric equivalents are given in the following table:

<u>From</u>	<u>Multiply by</u>	<u>To obtain</u>
acre	4,047	square meter ( $m^2$ )
acre-foot	0.001233	cubic hectometer ( $hm^3$ )
cubic foot per second	0.02832	cubic meter per second ( $m^3/s$ )
foot	0.3048	meter (m)
mile	1.609	kilometer (km)
square mile	2.590	square kilometer ( $km^2$ )

*National Geodetic Vertical Datum of 1929 (NGVD of 1929):* A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly called mean sea level.

## ANALYSIS OF WATER-QUALITY DATA

### Sources of Inflow

A daily streamflow station has been operated on the Brazos River near Glen Rose (station 08091000) since 1923. This station is approximately 69 river miles (111 km) upstream from

Whitney Dam and 31 miles (50 km) downstream from DeCordova Bend Dam on Lake Granbury. The drainage area upstream from this station is 25,818 square miles (66,869 km<sup>2</sup>) and represents about 95 percent of the drainage area upstream from Lake Whitney. Two other daily streamflow stations are located on tributaries flowing into Lake Whitney: Nolan River at Blum (station 08092000) and Squaw Creek near Glen Rose (station 08091750). In terms of average streamflow for 26 years (ending with the 1980 water year), the Brazos River has provided almost 94 percent of the total inflow to Lake Whitney with Nolan River contributing about 6 percent and Squaw Creek contributing less than 1 percent (U.S. Geological Survey, 1979).

## Quality of Inflow

Water-quality data are not available for the Brazos River between Lake Granbury and Lake Whitney. Comprehensive water-quality surveys have been conducted on Lake Granbury since 1970 (Andrews and Strause, 1983). Although intervening runoff and ground-water inflow of less mineralized water between Lake Granbury and Lake Whitney may alter the concentrations of water-quality constituents, water-quality data from the Lake Granbury surveys may be used to show the general types of water entering Lake Whitney. The volume-weighted average concentration of dissolved constituents in Lake Granbury usually averages less than 1,600 mg/l (milligrams per liter) of dissolved solids, less than 700 mg/l of chloride, and less than 350 mg/l of sulfate. Concentrations of total inorganic nitrogen at site A on Lake Granbury during the summer averaged 2.37 mg/l and concentrations of total phosphorus averaged 0.19 mg/l. The concentrations of these constituents near the surface during the summer and throughout the water column during the winter averaged 0.07 mg/l or less (Andrews and Strause, 1983).

Samples for the determination of water-quality constituents have been collected bimonthly since 1968 from the station Nolan River at Blum, and selected constituents are summarized in Table 1. Although its contribution in terms of streamflow is relatively small, the Nolan River does contribute a significant amount of nutrients to Lake Whitney (U.S. Environmental Protection Agency, 1977). Concentrations of total inorganic nitrogen ranged from 0.65 to 8.5 mg/l and averaged 2.0 mg/l. Concentrations of total phosphorus ranged from 0.02 to 7.8 mg/l and averaged 1.5 mg/l.

## Water Quality of Lake Whitney

### Thermal Stratification

When natural waters are stored or impounded in a reservoir, noticeable changes in water quality may occur which affect the chemical and physical characteristics of the water. One of the most significant changes is the seasonal water temperature variation. Seasonal water temperature variations cause thermal stratification or layering of the water during the warm summer because of temperature-induced density variations.

Pure water is unique in that it reaches its greatest density at 4 °C (Celsius) rather than at freezing. At temperatures above or below 4 °C the density of water decreases as shown in the following table (Weast, 1975, p. F-5):

<u>Temperature (degrees Celsius)</u>	<u>Density (grams per millimeter)</u>
0.0	0.999868
4.0	1.000000
5.0	.999992
10.0	.999728
15.0	.999129
20.0	.998234
25.0	.997075
30.0	.995678

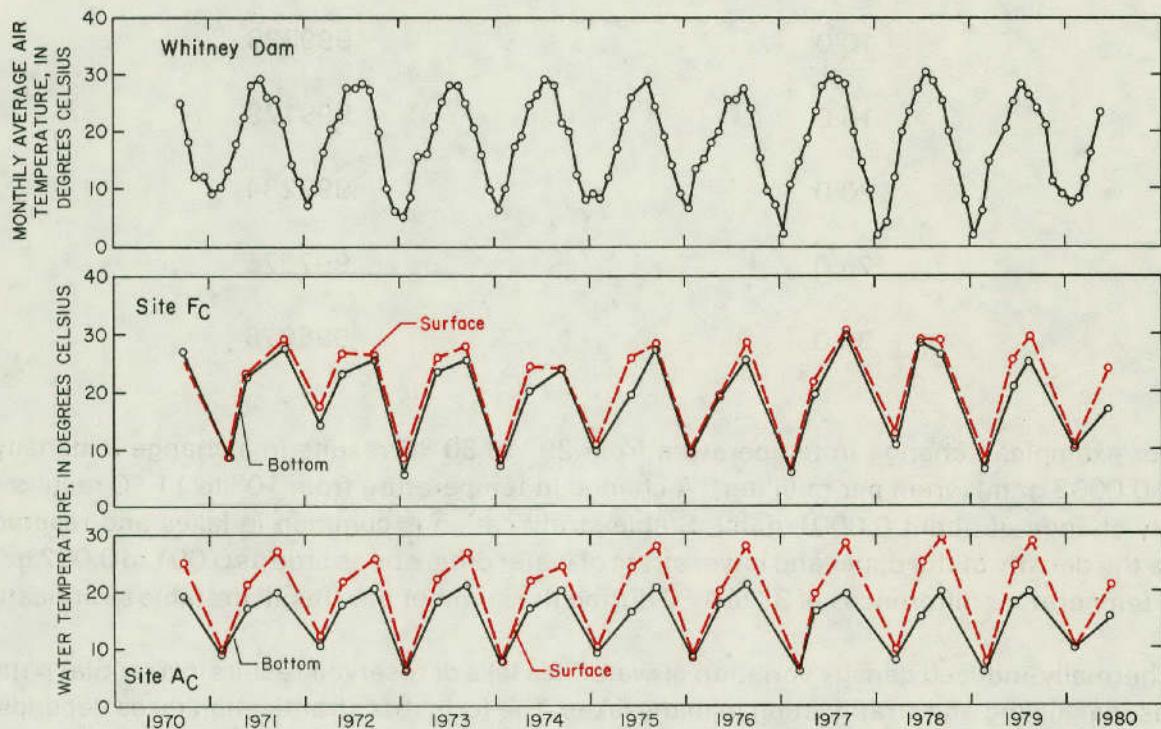
For example, a change in temperature from 29° to 30 °C results in a change in density of about 0.0003 g/ml (gram per milliliter). A change in temperature from 10° to 11 °C results in a density change of about 0.0001 g/ml. Stable stratification is common in lakes and reservoirs where the density of the upper and lower strata of water differs by as little as 0.001 to 0.002 g/ml. Thus, temperature differences of 3° to 4 °C during the summer may result in stable stratification.

Thermally-induced density variation of water in a lake or reservoir results in a regular pattern of seasonal mixing and stratification in many lakes. The form that stratification takes depends on location, climate, depth, surface area, and shape of the lake or reservoir. During the winter, many deep lakes or reservoirs in the temperate zone are characteristically isothermal; the water has a uniform temperature and density and circulates freely. With the onset of spring, solar heating warms the incoming water and the water at the lake or reservoir surface, causing a decrease in density. This warm surface water overlies the colder and denser water. As the surface water becomes progressively warmer, the density gradient increases and the depth to which wind can mix the water is decreased. Thus, water in the lake or reservoir often is separated into three fairly distinct strata:

- (1) the epilimnion—a warm, freely circulating surface layer,
- (2) the metalimnion—a middle layer characterized by a rapid decrease in temperature with increase in depth, and
- (3) the hypolimnion—a cold, stagnant lower layer.

Thermal stratification in deep lakes or reservoirs usually persists until fall, when a decrease in atmospheric temperature cools both the surface water in the reservoir and the inflow from streams. When the temperatures and densities of the epilimnion and metalimnion approach those of the hypolimnion, the resistance to mixing is reduced and complete mixing or overturn of the water occurs.

Lake Whitney shows this stratification pattern in its deepest areas along the old (drowned) Brazos River channel. In the upstream reaches of the lake and in areas away from the old channel where depths are shallower, the pattern is often less pronounced. Water-temperature data for Lake Whitney at the times of surveys are shown in Figure 2 and in Tables 2-31, along with air-temperature data for Whitney Dam. These data indicate that the fall overturn usually occurs during October or November. The water in the lake is nearly isothermal from November through March. During April and May, warming takes place resulting in a gradual change in temperature throughout the lake. Between June and September, the surface waters of the lake usually are warm enough to produce three distinct layers in deep areas of the lake.

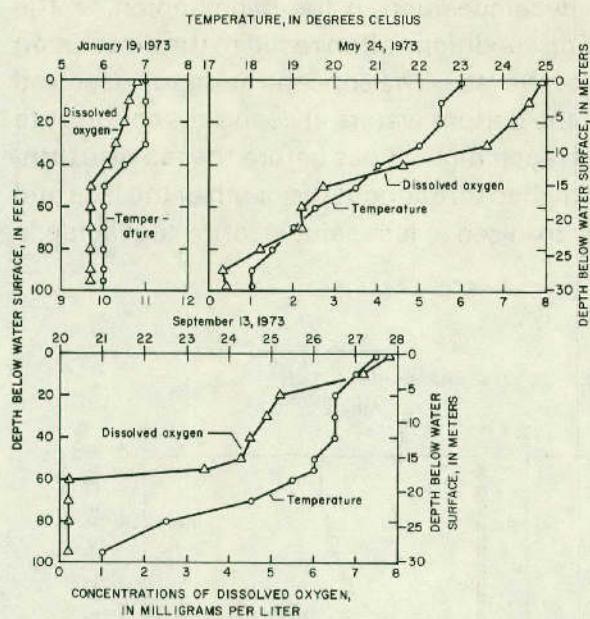


**Figure 2.—Variations in Air and Water Temperature at Selected Sites,  
September 1970-May 1980**

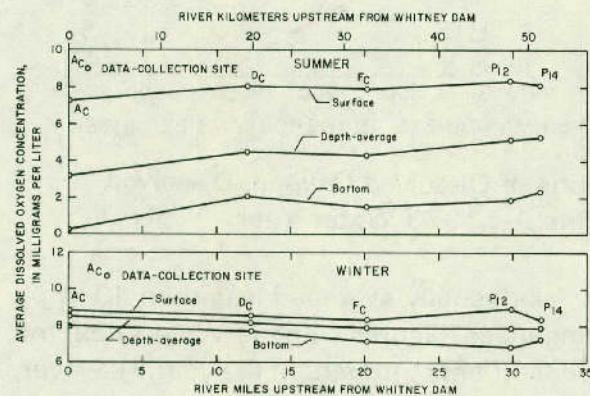
### Dissolved Oxygen

Dissolved-oxygen concentrations are of primary importance in any aquatic ecosystem. Fish and other aquatic life require adequate levels of dissolved oxygen for egg and larvae development and for normal growth and activity. There is no dissolved-oxygen concentration that is favorable to all aquatic species and ecosystems; however, low dissolved-oxygen concentrations are unfavorable to almost all aquatic organisms. Dissolved-oxygen concentrations also are related to the variations in the concentrations of some of the chemical constituents dissolved in water and are one of the most important factors that affect the quality of water in a reservoir.

Oxygen dissolves in water at a rate determined by temperature, atmospheric pressure, and salinity. Much of the oxygen in a lake enters at the air-water interface by adsorption from the atmosphere. A significant amount of oxygen in a lake also may be produced as a byproduct of photosynthesis. Water entering a reservoir contains organic material from natural sources and from man's activities. Bacterial stabilization of this organic material requires oxygen. An oxygen demand is exerted by decaying vegetation and oxidizable material within inundated areas of a lake as well as by decaying algae and other organic material produced within the lake.



**Figure 3.—Seasonal Variations in Water Temperature and Concentration of Dissolved Oxygen at Site Ac, 1973 Water Year**



**Figure 4.—Variations in Average Concentrations of Dissolved Oxygen During Summer and Winter Surveys, September 1970-May 1980**

during winter circulation. Oxygen concentrations remain uniform from the headwaters through the lower part of the lake. However, oxygen used in the stabilization of unoxidized material from upstream sources, decaying algae, and organic material along the bottom of the reservoir is not replaced during summer stagnation; and water below depths of about 40 to 50 feet (12 to 15 m) usually contains less than 2.0 mg/l dissolved oxygen.

### Dissolved Iron and Dissolved Manganese

The occurrence and distribution of dissolved iron and dissolved manganese in Lake Whitney is closely related to dissolved-oxygen concentrations (Figure 5). Summer stratification prevents

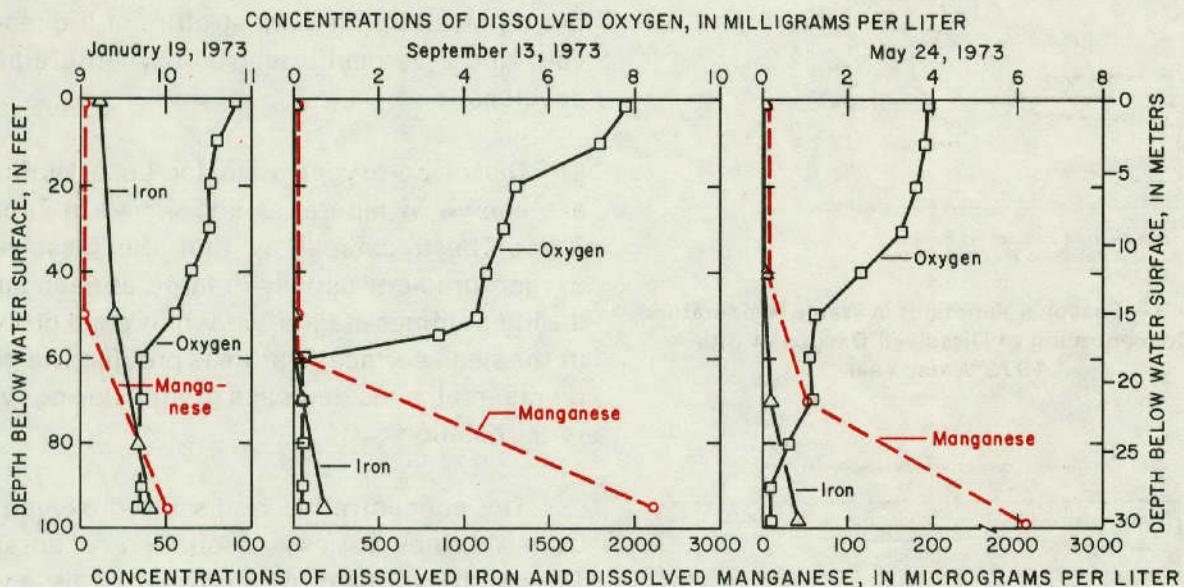
The distribution of dissolved oxygen in a reservoir is related to thermal stratification. During winter circulation, water throughout the lake is exposed to the atmosphere repeatedly, and dissolved oxygen utilized in the decomposition of organic matter is replenished. However, during spring and summer, thermal stratification results in a decrease of vertical circulation of the water. Oxygen utilized in the decomposition of organic material is not replaced in the deep stratum of the reservoir, and a vertical dissolved-oxygen gradient develops.

Dissolved-oxygen data for Lake Whitney are shown in Figures 3 and 4 and in Tables 2-31. These data show that the dissolved-oxygen gradient usually is large at deep sites during summer stagnation when algal growth in the near-surface stratum is prolific. The gradients at all sites decrease greatly during winter circulation.

The concentration of dissolved oxygen in Lake Whitney varies seasonally and areally. The depth-averaged concentration of dissolved oxygen at most sites in the downstream one-half of the lake averaged about 4.0 mg/l during summer stagnation and about 10.2 mg/l during winter circulation. The depth-averaged concentration of dissolved oxygen at sites in the headwaters of the lake averaged about 4.8 mg/l during the summer and about 9.9 mg/l during the winter.

The depth-averaged concentration of dissolved oxygen indicates that there is little problem with oxygen-demanding wastes in the lake

replenishment of dissolved oxygen used in organic decomposition in the hypolimnion. In the period of anaerobic decomposition that follows, reducing conditions often result in the dissolution of iron and manganese from sediments at the bottom of the lake. The concentrations of dissolved iron and dissolved manganese with oxygen deficits in the bottom waters at deep sites continue to increase throughout the summer stagnation and may reach high values before the fall overturn. After circulation begins during the fall, oxygen is replenished throughout the depth of the lake and most of the dissolved iron and dissolved manganese is oxidized to less soluble forms that settle to the bottom of the lake.



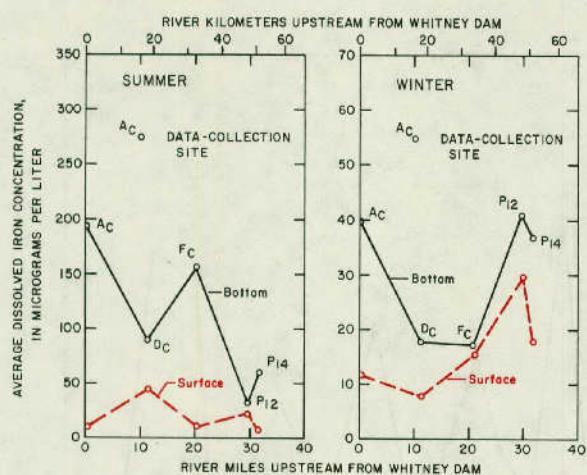
**Figure 5.—Seasonal Variations in Concentrations of Dissolved Oxygen, Dissolved Iron, and Dissolved Manganese at Site Ac, 1973 Water Year**

During winter circulation, water throughout the lake usually averaged less than  $40 \mu\text{g/l}$  (micrograms per liter) dissolved iron and dissolved manganese (Figures 6 and 7). Waters near the surface usually averaged less than  $30 \mu\text{g/l}$  of both constituents throughout the year. However, during summer stagnation, the concentrations of both constituents in the hypolimnion increased downstream in response to decreased dissolved-oxygen concentrations and the resulting increase in solubility.

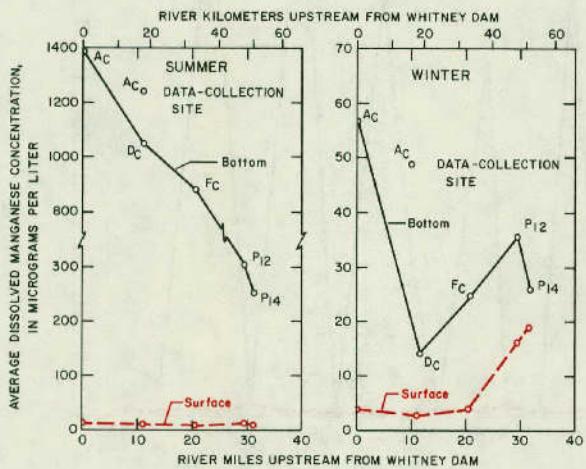
Dissolved iron concentrations near the bottom at site P14, a shallow site in the headwaters of the lake, ranged from 0 to  $190 \mu\text{g/l}$  during the summer and averaged about  $60 \mu\text{g/l}$ . Dissolved manganese concentrations near the bottom at this site during the summer ranged from 0 to  $440 \mu\text{g/l}$  and averaged about  $250 \mu\text{g/l}$ .

At site Ac, a deep site near Whitney Dam, the concentrations of dissolved iron in water near the bottom during the summer ranged from  $90$  to  $400 \mu\text{g/l}$  and averaged about  $195 \mu\text{g/l}$ . The concentrations of dissolved manganese ranged from  $240$  to  $2,100 \mu\text{g/l}$  and averaged about  $1,400 \mu\text{g/l}$ . The concentrations of both constituents did not increase significantly during the period of record, but alternated seasonally between the insoluble phase in the sediments during winter circulation and the soluble phase in the hypolimnial waters during summer stagnation (Figure 8). The concentrations of dissolved manganese generally increased significantly by late

spring when stratification had just begun, while the concentrations of dissolved iron generally did not increase until summer when stratification was more complete. Manganese is more easily reduced and dissolves sooner than iron (Hutchinson, 1957, p. 808).



**Figure 6.—Variations in Average Concentrations of Dissolved Iron During Summer and Winter Surveys**



**Figure 7.—Variations in Average Concentrations of Dissolved Manganese During Summer and Winter Surveys**

bottom sediments reduce the concentration of dissolved oxygen and release nitrogen and phosphorus to the hypolimnion. They remain there until the fall overturn, at which time they are recirculated.

The concentrations of total inorganic nitrogen (summation of total ammonia, nitrite, and nitrate nitrogen) and total phosphorus in Lake Whitney varied seasonally and areally (Figures 9-11). During winter circulation, the concentrations of these constituents were relatively uniform throughout the lake. Site Ac, the deepest and closest to Whitney Dam, showed a slight exception to this general trend of well mixed waters. At times the water at this location remained slightly

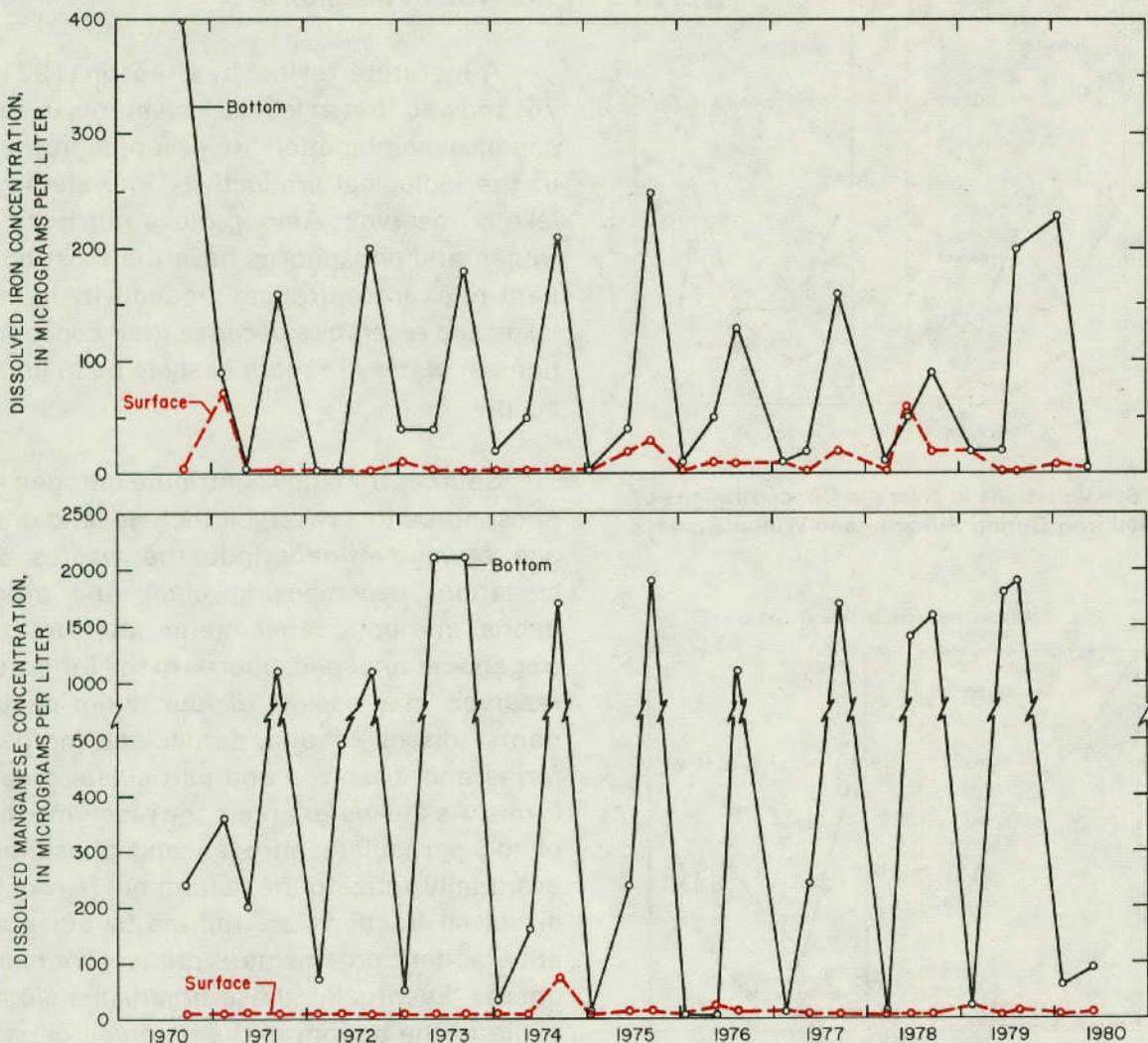
### Total Inorganic Nitrogen and Total Phosphorus

A literature review by Greeson (1971, p. 75) showed that at least 21 elements in some chemical combination are essential nutrients in the biological productivity in waters of a lake or reservoir. Among these nutrients, nitrogen and phosphorus have the most dominant roles in controlling productivity in most lakes and reservoirs because their concentrations in water are more likely to be in limited supply.

Sources that may contribute nitrogen and phosphorus to a reservoir include land drainage, sewage effluent, industrial wastes, precipitation, decomposing plant and animal debris, and bottom sediments. Both total nitrogen and total phosphorus in the inflow to a reservoir may consist of four major components, dissolved and particulate inorganic forms and dissolved and particulate organic forms. As the water enters the reservoir, most of the particulate nitrogen and phosphorus eventually settle to the bottom but part of the dissolved fractions are utilized by algae and other aquatic organisms as primary sources of energy. Eventually, these organisms die and settle to the bottom of the reservoir carrying their cellular nitrogen and phosphorus with them.

During summer stagnation, decay of aquatic organisms and chemical reduction of

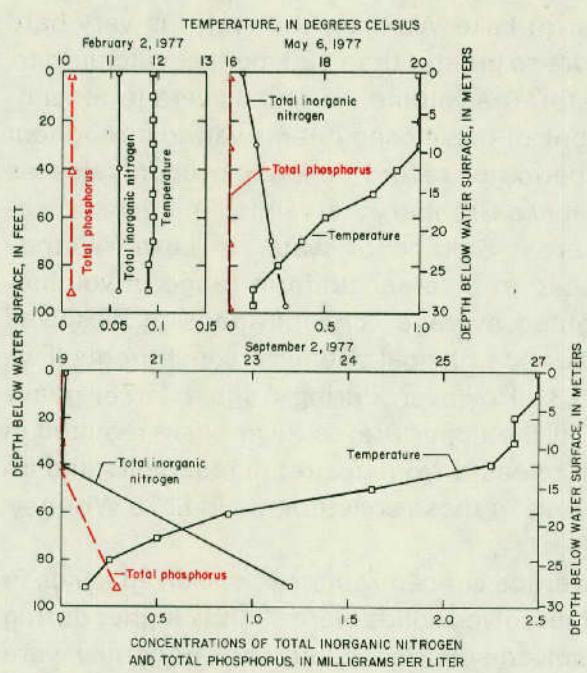
stratified throughout the winter (Figure 9). Concentrations of total inorganic nitrogen near the bottom at this site during the winter averaged 0.13 mg/l, while concentrations of total inorganic nitrogen at the surface averaged 0.08 mg/l. Concentrations of total phosphorus throughout the lake averaged about 0.04 mg/l during winter circulation.



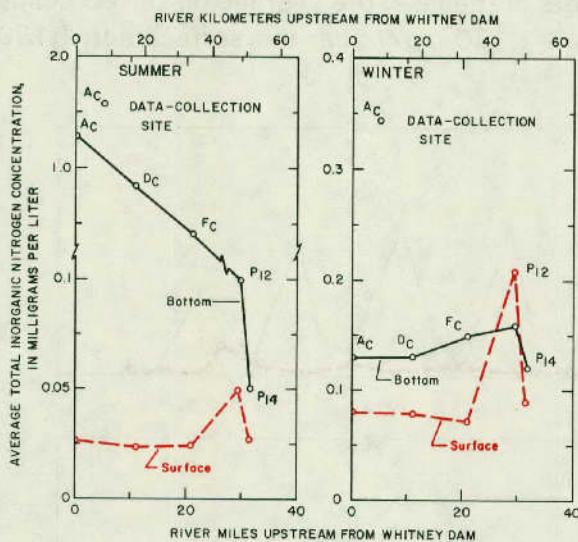
**Figure 8.—Variations in Concentrations of Dissolved Iron and Dissolved Manganese at Site Ac, September 1970-September 1980**

When more complete stratification occurred during the summer there was a trend in the downstream direction of the lake, with increasing depth, for concentrations of total inorganic nitrogen and total phosphorus to increase in the hypolimnion, while concentrations in the epilimnion remained relatively constant (Figures 10 and 11). For example, concentrations of total inorganic nitrogen in the hypolimnion at the headwaters site P<sub>14</sub> averaged 0.05 mg/l and concentrations of total phosphorus averaged 0.07 mg/l while at site Ac, concentrations of total inorganic nitrogen averaged 1.3 mg/l and total phosphorus averaged 0.28 mg/l. Concentrations of total inorganic nitrogen and total phosphorus in the epilimnia waters during periods of stratification averaged less than 0.05 mg/l with the exception of site P<sub>12</sub>, which receives inflow from Nolan River. Concentrations of total inorganic nitrogen and total phosphorus in the epilimnion at site P<sub>12</sub> were significantly higher than the rest of the lake because of the large amount of

nutrient inflow from a sewage treatment plant upstream on Nolan River (Dave Gill, Texas Department of Water Resources, oral commun., April 1981).



**Figure 9.—Seasonal Variations in Water Temperature and Concentrations of Total Inorganic Nitrogen and Total Phosphorus at Site Ac, 1977 Water Year**



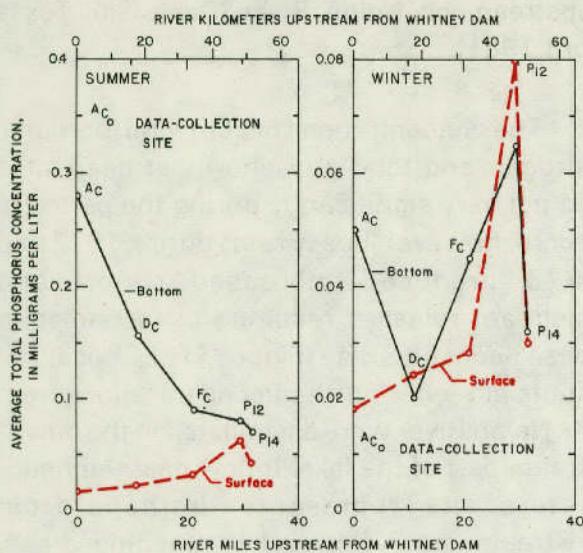
**Figure 10.—Variations in Average Concentrations of Total Inorganic Nitrogen During Summer and Winter Surveys**

compute volume-weighted average concentrations of selected dissolved constituents within the reservoir (Figure 13).

The concentrations of both total inorganic nitrogen and total phosphorus at deep sites did not vary significantly during the period of record; however, heavy rains during 1972 and 1973 produced increased runoff and upstream releases resulting in increases in these constituents (Figure 12). Localized inputs of higher nutrient concentrations from the Nolan River were assimilated in the downstream part of the lake. Inflow past the headwaters site represents drainage from upstream reservoirs and intervening areas, which do not contribute sufficient amounts of nutrients to cause accumulation. This factor, coupled with the chronological increase of both nutrients in the hypolimnion at deep sites during summer stagnation (Figure 12), indicate that nutrients are being recycled and accumulation is prevented.

#### Dissolved Solids, Dissolved Chloride, Dissolved Sulfate, and Hardness

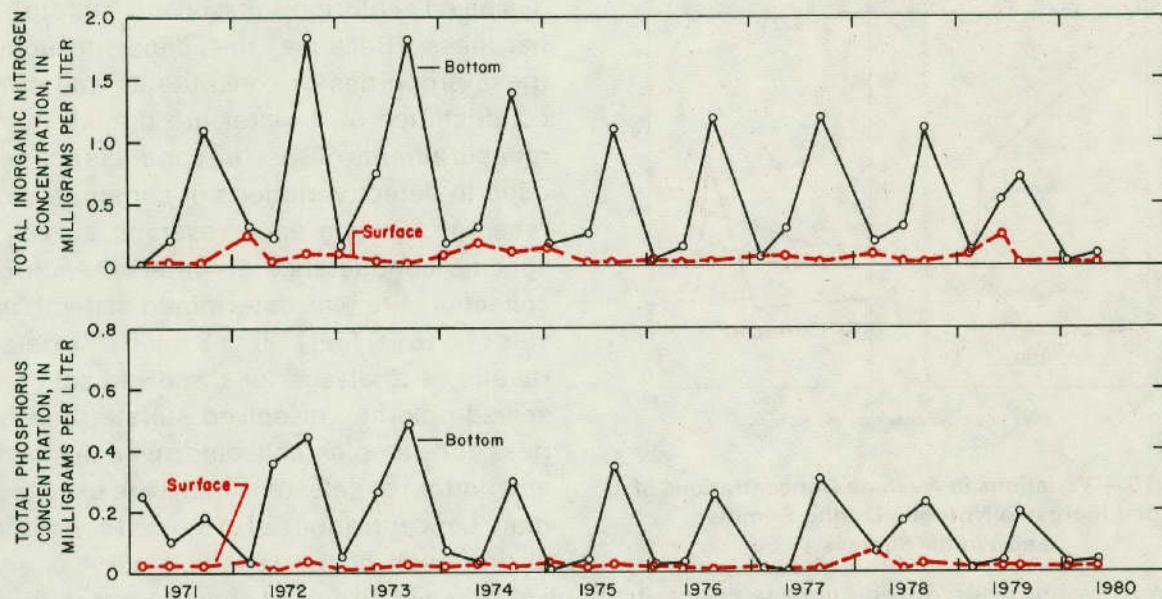
Some of the more important properties or constituents that affect the utility of a reservoir as a water supply include dissolved solids, dissolved chloride, dissolved sulfate, and hardness. Because the concentrations of these properties or constituents and specific conductance of a water are directly related, measurements of specific conductance can be used to detect variations of constituents in a reservoir. During each reservoir survey, the specific conductance of water at each data-collection site was determined at depth intervals of 5 to 10 feet (1.5 to 3 m). These data and results of analyses for dissolved solids, dissolved chloride, dissolved sulfate, and hardness for samples collected near the surface and bottom at selected sites were used to estimate concentrations of dissolved constituents during each of the reservoir surveys and to



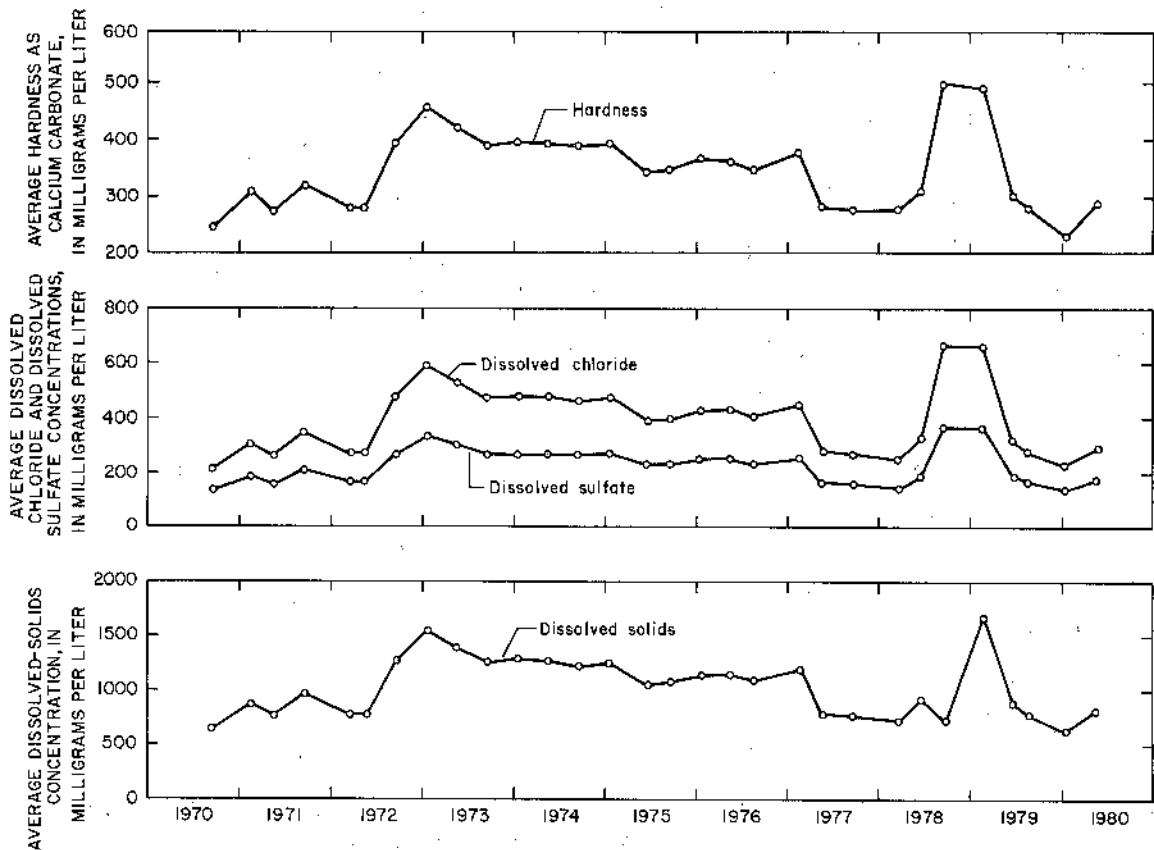
**Figure 11.—Variations in Average Concentrations of Total Phosphorus During Summer and Winter Surveys**

Data in Figure 13 show that volume-weighted average concentrations usually are less than 1,300 mg/l for dissolved solids, 500 mg/l for chloride, and 300 mg/l for sulfate in water in Lake Whitney; the water is very hard (hardness greater than 180 mg/l as calcium carbonate). The volume-weighted average concentrations of these constituents varied throughout the period of record depending upon releases from Lake Granbury and rainfall in the intervening area. Storage of water in Lake Whitney resulted in a rather uniform range in volume-weighted average concentrations of dissolved solids and principal chemical constituents (Figure 13). However, during August 1978, heavy rain in the upper Brazos River basin resulted in large releases from upstream reservoirs and an increase in these constituents in Lake Whitney.

Seasonal and areal variations occurred in the average concentrations of dissolved solids in Lake Whitney (Figure 14). Average concentrations of dissolved solids were slightly higher during the winter than during the summer and average dissolved-solids concentrations generally were higher near the bottom of the reservoir than near the surface. Average concentrations of dissolved solids also were slightly higher near the headwaters of the lake than near the dam. For example, during the summer, the average concentration of dissolved solids at site Ac was approximately 915 mg/l near the surface and 985 mg/l near the bottom. During the winter, the average concentration of dissolved solids at site Ac was 1,010 mg/l near the surface and 1,025 mg/l near the bottom. At site P14 near the headwaters of the lake, the average dissolved-solids concentration during the summer was approximately 1,130 mg/l near the surface and 1,130



**Figure 12.—Variations in Concentrations of Total Inorganic Nitrogen and Total Phosphorus at Site Ac, February 1971-May 1980**



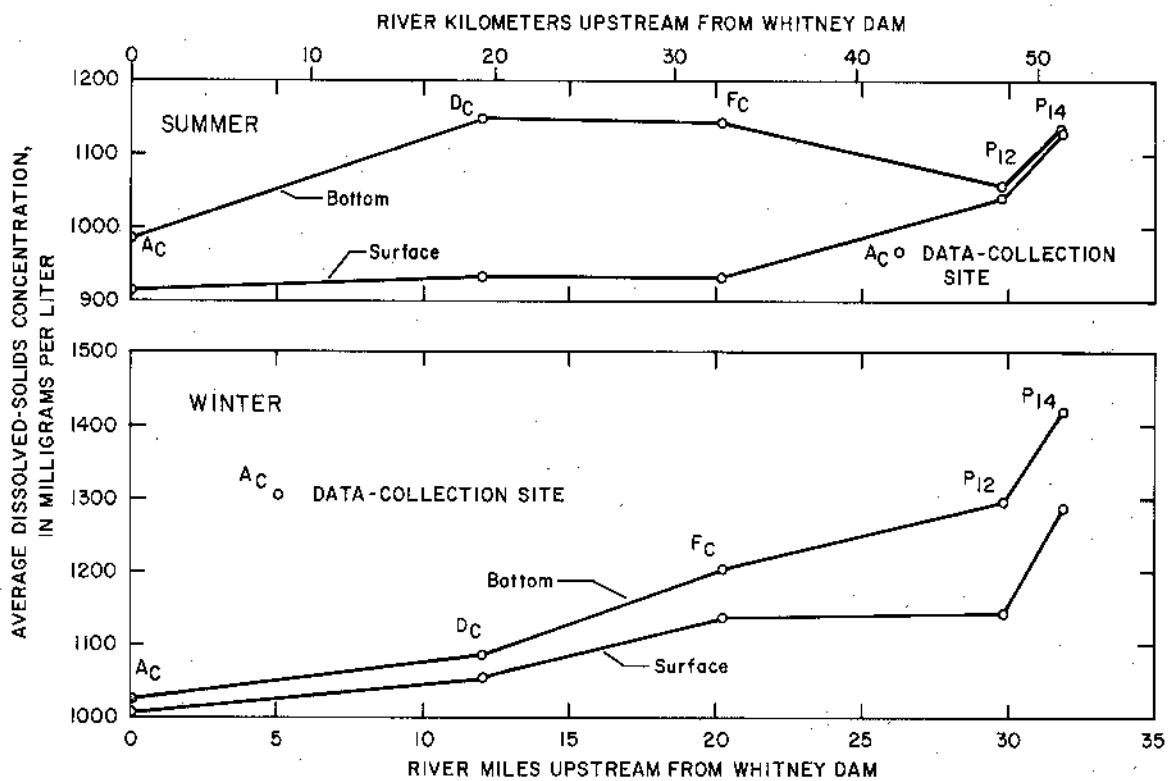
**Figure 13.—Variations in Volume-Weighted Average Concentrations of Dissolved Solids, Dissolved Chloride, Dissolved Sulfate, and Hardness for Lake Whitney, September 1970-May 1980**

mg/l near the bottom. During the winter, average dissolved-solids concentrations were approximately 1,280 mg/l near the surface and 1,410 mg/l near the bottom.

The most significant difference in concentrations of dissolved solids between the surface and bottom occurred during the summer at sites Dc and Fc. Profiles of specific conductance during two summer surveys (Figure 15) showed that denser water (water with a higher specific conductance) accumulates in the middle of the lake because the water is more stagnant in the middle. Inflow to the lake keeps the headwaters of the lake fairly well mixed and the withdrawal of water from the lake creates circulation patterns near the penstock depth (approximately 60 feet or 18 m). This circulation of water near the penstock prevents the accumulation of denser water below this depth (Wunderlich, 1971, and Steiner and others, 1972).

## CONCLUSIONS

Thermal stratification in Lake Whitney, which usually begins to develop during April and persists until October, results in three distinct layers in the deeper waters: (1) the epilimnion, a warm, freely circulating surface layer; (2) the metalimnion, a middle layer characterized by a rapid decrease in temperature with increase in depth; and (3) the hypolimnion, a cold stagnant lower layer. The concentrations of dissolved oxygen, dissolved iron, dissolved manganese, total inorganic nitrogen, and total phosphorus are related to this pattern of thermal stratification.

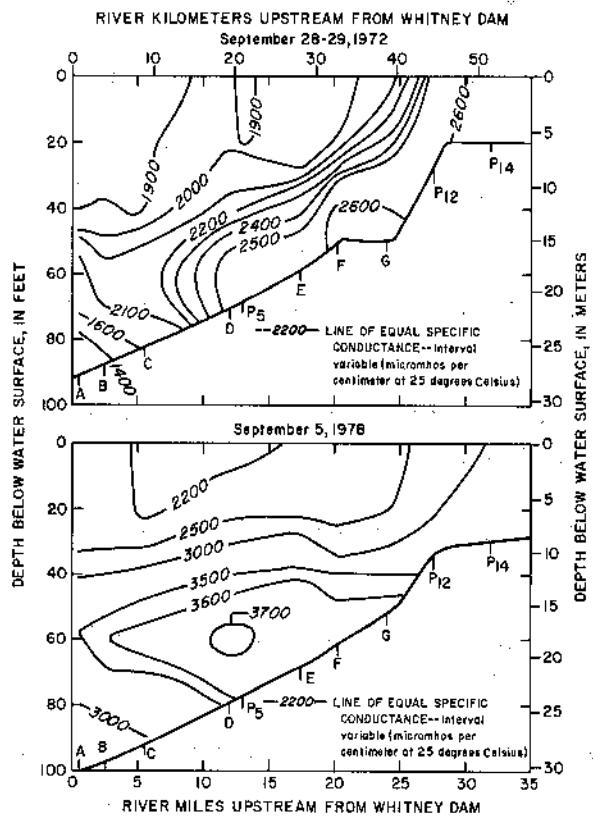


**Figure 14.—Variations in Average Concentrations of Dissolved Solids During Summer and Winter Surveys, September 1970-May 1980**

The depth-averaged concentration of dissolved oxygen at most sites in the downstream one-half of the lake averaged about 4.0 mg/l during summer stratification and about 10.2 mg/l during winter circulation. In the headwaters, the depth-averaged concentration of dissolved oxygen averaged about 4.8 mg/l during the summer and about 9.9 mg/l during the winter. Below depths of 40 to 50 feet (12 to 15 m), the concentration of dissolved oxygen usually was less than 2.0 mg/l during the summer.

The occurrence and distribution of dissolved iron and manganese are closely related to the dissolved-oxygen concentration. Water throughout the lake during winter circulation and near the surface during summer stagnation usually contained less than 40  $\mu\text{g}/\text{l}$  of each constituent. At site P14, a shallow headwaters site, dissolved iron concentrations near the bottom during the summer ranged from 0 to 190  $\mu\text{g}/\text{l}$  and averaged about 60  $\mu\text{g}/\text{l}$ . Dissolved manganese concentrations near the bottom at this site ranged from 0 to 440  $\mu\text{g}/\text{l}$  and averaged 250  $\mu\text{g}/\text{l}$ . At site Ac, a deep-water site near Whitney Dam, dissolved iron concentrations near the bottom in the summer ranged from 90 to 400  $\mu\text{g}/\text{l}$  and averaged about 195  $\mu\text{g}/\text{l}$ . Dissolved manganese concentrations ranged from 240 to 2,100  $\mu\text{g}/\text{l}$  and averaged about 1,400  $\mu\text{g}/\text{l}$ .

The total inorganic nitrogen and total phosphorus concentrations in Lake Whitney varied seasonally and areally. Concentrations were highest in the hypolimnion during summer stagnation when the decay of aquatic organisms and the chemical reduction of bottom sediments create an oxygen deficit releasing nutrients to the water column. The concentrations of total inorganic



**Figure 15.—Longitudinal and Vertical Profiles of Specific Conductance During Surveys of September 1972 and September 1978**

these constituents commonly were less than 1,300 mg/l of dissolved chloride, and 300 mg/l of dissolved sulfate. The water was very hard (hardness greater than 180 mg/l as calcium carbonate). Storage of water in Lake Whitney has resulted in seasonal and areal variations of dissolved solids. Average concentrations of dissolved solids are slightly higher during the winter than during the summer and commonly are higher near the bottom of the lake than near the surface. Average concentrations of dissolved solids also are slightly higher near the headwaters of the lake than near the dam.

nitrogen and total phosphorus near the bottom at site Ac during summer stagnation averaged 1.30 mg/l of total inorganic nitrogen and 0.28 mg/l of total phosphorus. The concentrations of both these nutrients in water near the surface during the summer averaged 0.05 mg/l or less throughout the lake. During winter circulation, the concentrations of total inorganic nitrogen at site Ac averaged from 0.13 mg/l near the bottom to 0.08 mg/l near the surface. The concentration of total phosphorus averaged 0.04 mg/l throughout the lake during the winter. Seasonal variations in temperature and dissolved oxygen resulted in significant quantities of dissolved iron, dissolved manganese, total inorganic nitrogen, and total phosphorus being released to the hypolimnion each summer, but no significant accumulation of these constituents has occurred since impoundment.

The concentrations of dissolved solids, dissolved chloride, dissolved sulfate, and hardness varied areally and seasonally depending upon releases from Lake Granbury and runoff from the intervening drainage area.

The volume-weighted average concentrations of 1,300 mg/l of dissolved solids, 500 mg/l of

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Table 1.--Statistical Summary of Selected Water-Quality Constituents for Nolan River at Blum  
(mg/l = milligrams per liter)

Constituent	Sample size	Summary of data collected at periodic intervals				Percentage of samples in which values were less than or equal to those shown				
		Maxi- mum	Mini- mum	Mean	Standard deviation	95	75	50	25	5
Dissolved solids (mg/l)	60	470	141	319	73	424	375	324	265	179
Chloride, dissolved (mg/l as Cl)	60	82	82	34	14	66	42	32	23	13
Sulfate, dissolved (mg/l as SO <sub>4</sub> )	60	99	11	45	17	77	57	41	32	18
Nitrogen, total inorganic (mg/l as N)	37	8.5	0.65	2.0	1.8	8.1	1.7	1.4	1.2	0.71
Phosphorus, total (mg/l as P)	59	7.8	0.02	1.5	1.8	5.8	2.1	0.83	0.38	0.11
Oxygen, dissolved (mg/l)	60	20.0	6.0	12.1	3.7	19.9	15.2	11.4	9.2	6.3
Biochemical oxygen demand, 5-day (mg/l)	60	22.0	0.4	3.4	3.5	8.2	4.4	2.3	1.4	0.6

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 23, 1970

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SPE-	OXYGEN,						MAGNE-	SODIUM,		
		CIFIC	DUCT-	TEMPER-	OXYGEN,	DIS-	HARD-	HARD-				
SAMP-	ANCE	PH	ATURE,	(PER-	SOLVED	SOLVED	NESS	NONCAR-	CALCIUM	SOLVED	DIS-	
DEPTH	(MICRO-	WATER	DIS-	SATUR-	AS	AS	CENT	BONATE	(MG/L)	SOLVED	DIS-	
(FT)	MHOS)	(UNITS)	(DEG C)	ATION)	(MG/L)	(MG/L)	(MG/L)	CACO3)	AS CA)	(MG/L)	(MG/L)	
SEP												
23...	0830	1.0	1010	7.4	26.0	7.2	88	222	106	66	14	121
23...	0832	10	1010	7.4	26.0	6.9	84	--	--	--	--	--
23...	0834	20	1010	7.4	26.0	6.9	84	--	--	--	--	--
23...	0836	30	1010	7.3	26.0	6.7	82	--	--	--	--	--
23...	0838	40	1010	7.3	26.0	6.4	78	--	--	--	--	--
23...	0840	50	1010	7.3	26.0	6.3	77	--	--	--	--	--
23...	0842	60	1010	7.2	26.0	6.3	77	--	--	--	--	--
23...	0844	70	1100	6.5	20.0	.2	2	--	--	--	--	--
23...	0846	80	1210	6.5	19.0	.2	2	--	--	--	--	--
23...	0848	83	1210	6.4	19.0	.2	2	267	110	84	14	136

DATE	SODIUM	AD-	BICAR-	SULFATE	CHLO-	FLUO-	SILICA	SOLIDIS-	NITRO-	NITRO-	PHOS-	IRON,
	SORP-	SORP-	BONATE	DIS-	RIDE,	RIDE,	DIS-	CONSTITUENTS,	GEN.	GEN.	PHORUS,	DIS-
	RATIO	AS	AS	SOLVED	DIS-	SOLVED	SOLVED	(MG/L)	NO2+NO3	AMMONIA	TOTAL	SOLVED
		HCO3)	AS	AS SO4)	AS	CL)	AS F)	SiO2)	AS N)	AS N)	(MG/L)	(UG/L)
SEP												
23...	3.5	142	102	185	.3	3.7	562	.00	.00	.030	0	0
23...	--	--	--	182	--	--	--	--	--	--	0	0
23...	--	--	--	180	--	--	--	--	--	--	0	0
23...	--	--	--	175	--	--	--	--	--	--	0	0
23...	--	--	--	178	--	--	--	--	--	--	0	0
23...	--	--	--	178	--	--	--	--	--	--	0	0
23...	--	--	--	180	--	--	--	--	102	.00	.020	10
23...	--	--	--	185	--	--	--	--	--	--	--	0
23...	--	--	--	210	--	--	--	--	--	--	--	200
23...	3.6	191	103	215	.3	9.5	659	.00	1.6	.190	400	220

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SPE-	OXYGEN,						OXYGEN,
		CIFIC	DUCT-	TEMPER-	OXYGEN,	DIS-	SOLVED	SATUR-	
SAMP-	ANCE	PH	ATURE,	(PER-	SOLVED	SOLVED	SATUR-	ATION)	
DEPTH	(MICRO-	WATER	DIS-	SATUR-	AS	AS	CENT		
(FT)	MHOS)	(UNITS)	(DEG C)	ATION)	(MG/L)	(MG/L)	(MG/L)		
SEP									
23...	0900	1.0	1010	7.5	26.5	7.3	89		
23...	0902	10	1010	7.4	26.0	7.2	88		
23...	0904	20	1010	7.3	26.0	6.8	83		
23...	0906	34	1010	7.3	26.0	6.8	83		

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SPE-	OXYGEN,						OXYGEN,
		CIFIC	DUCT-	TEMPER-	OXYGEN,	DIS-	SOLVED	SATUR-	
SAMP-	ANCE	PH	ATURE,	(PER-	SOLVED	SOLVED	SATUR-	ATION)	
DEPTH	(MICRO-	WATER	DIS-	SATUR-	AS	AS	CENT		
(FT)	MHOS)	(UNITS)	(DEG C)	ATION)	(MG/L)	(MG/L)	(MG/L)		
SEP									
23...	0930	1.0	1010	7.5	26.5	7.4	90		
23...	0932	10	1010	7.3	26.0	6.8	83		
23...	0934	20	1010	7.3	26.0	6.6	80		
23...	0936	30	1010	7.3	26.0	6.6	80		
23...	0938	40	1010	7.3	26.0	6.5	79		
23...	0940	50	1010	7.1	26.0	5.4	66		
23...	0942	60	1090	6.7	25.0	.2	2		
23...	0944	70	1090	6.5	22.0	.2	2		
23...	0946	80	1200	6.4	19.0	.2	2		

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 23, 1970--Continued

315357097223901 LAKE WHITNEY SITE P1

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	CHLO-
		LING	ANCE		ATURE,	DIS-	(PER-	RIDE,
		DEPTH	(MICRO-	WATER	SOLVED	CENT	DIS-	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(MG/L)	AS CL)
SEP								
23...	1000	1.0	1030	7.4	26.5	7.2	88	--
23...	1002	10	1030	7.3	26.0	6.8	83	--
23...	1004	20	1030	7.3	26.0	6.7	82	--
23...	1006	30	1040	7.3	26.0	6.5	79	--
23...	1008	40	1040	7.3	26.0	6.5	79	--
23...	1010	50	1040	7.2	26.0	5.7	70	--
23...	1012	60	1080	6.7	25.0	1.2	14	--
23...	1014	76	1140	6.4	20.0	.2	2	198

315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	CHLO-
		LING	ANCE		ATURE,	DIS-	(PER-	RIDE,
		DEPTH	(MICRO-	WATER	SOLVED	CENT	DIS-	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(MG/L)	AS CL)
SEP								
23...	1030	1.0	1080	7.5	26.0	7.9	96	--
23...	1032	10	1080	7.4	26.0	7.2	88	--
23...	1034	20	1080	7.4	26.0	7.0	85	--
23...	1036	30	1080	7.4	26.0	7.0	85	--
23...	1038	40	1080	7.4	26.0	6.9	84	--
23...	1040	50	1080	7.4	26.0	7.1	87	--
23...	1042	60	1080	7.3	25.5	7.1	86	--
23...	1044	65	1080	6.7	24.0	.2	2	--
23...	1046	74	1120	6.4	21.0	.2	2	--

315501097250201 LAKE WHITNEY SITE P2

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	CHLO-
		LING	ANCE		ATURE,	DIS-	(PER-	RIDE,
		DEPTH	(MICRO-	WATER	SOLVED	CENT	DIS-	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(MG/L)	AS CL)
SEP								
23...	1115	1.0	1090	7.5	26.5	7.1	87	198
23...	1117	10	1090	7.4	26.5	7.0	85	--
23...	1119	20	1090	7.3	26.0	6.6	80	--
23...	1121	30	1090	7.3	26.0	6.6	80	--
23...	1123	40	1090	7.3	26.0	6.4	78	--
23...	1125	50	1090	7.2	26.0	6.1	74	--
23...	1127	60	1110	6.6	23.0	.9	10	--
23...	1130	71	1110	6.5	21.5	.2	2	--

315600097261801 LAKE WHITNEY SITE P3

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	CHLO-
		LING	ANCE		ATURE,	DIS-	(PER-	RIDE,
		DEPTH	(MICRO-	WATER	SOLVED	CENT	DIS-	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(MG/L)	AS CL)
SEP								
23...	1145	1.0	1080	7.5	27.0	7.6	94	--
23...	1147	10	1080	7.5	27.0	7.4	91	--
23...	1149	20	1080	7.4	26.5	7.0	85	--
23...	1151	30	1080	7.4	26.5	6.9	84	--
23...	1153	40	1090	7.3	26.5	6.6	80	--
23...	1155	50	1090	7.2	26.0	5.8	71	--
23...	1157	57	1100	6.6	25.0	.2	2	--
23...	1159	66	1100	6.6	24.0	.2	2	--

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 23, 1970--Continued

315650097245901 LAKE WHITNEY SITE P4

		SPE-CIFIC CON-	DIS-	OXYGEN,				
		SAMP-DUCT-	DUCT-	SOLVED				
	TIME	LING ANCE	ANCE	(PER-				
DATE		DEPTH (FT)	(MICRO-MHOS)	(UNITS)	PH	TEMPERATURE, WATER	OXYGEN, SOLVED (MG/L)	(PERCENT SATURATION)
SEP								
23...	1230	1.0	1100	7.5	26.5	7.6	93	
23...	1232	10	1110	7.4	26.5	7.1	87	
23...	1234	20	1140	7.4	26.0	6.8	83	
23...	1236	30	1140	7.4	26.0	6.8	83	
23...	1238	40	1140	7.4	26.0	6.8	83	
23...	1240	50	1140	7.4	26.0	6.8	83	
23...	1242	64	1110	7.4	26.0	7.1	87	

315722097240201 LAKE WHITNEY SITE DC

		SPE-CIFIC CON-	DIS-	OXYGEN,	HARD-	MAGNE-	
		SAMP-DUCT-	DUCT-	SOLVED	NESS,	SIUM,	
	TIME	LING ANCE	ANCE	(PER-	NONCAR-	DIS-	
DATE		DEPTH (FT)	(MICRO-MHOS)	(UNITS)	(MG/L)	SOLVED	SOLVED
SEP							
23...	1345	1.0	1120	7.4	27.0	7.2	89
23...	1347	10	1120	7.4	27.0	7.0	86
23...	1349	20	1110	7.4	26.5	6.8	83
23...	1351	30	1110	7.4	26.0	6.8	83
23...	1353	40	1110	7.4	26.0	6.9	84
23...	1355	50	1110	7.5	26.0	7.0	85
23...	1357	63	1110	7.5	26.0	6.8	83

		SODIUM AD-	BICAR-	SULFATE	CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	MANGA-
		SORP-	BONATE	DIS-	RIDE,	RIDE,	DIS-	SUM OF CONSTITUENTS,	GEN., NO2+NO3	AMMONIA	IRON,
		TION	RATIO	SOLVED	DIS-	SOLVED	SOLVED	(MG/L)	TOTAL	TOTAL	DIS-
DATE		HC03)	AS	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	SOLVED
SEP											
23...	4.0	137	118	215	.3	4.1	629	.00	.00	.020	260
23...	--	--	--	212	--	--	--	--	--	--	0
23...	--	--	--	208	--	--	--	--	--	--	0
23...	--	--	--	208	--	--	--	.00	.00	.020	0
23...	--	--	--	210	--	--	--	--	--	--	40
23...	--	--	--	208	--	--	--	--	--	--	0
23...	3.8	138	117	205	.3	4.7	612	.00	.00	.040	10

315729097253701 LAKE WHITNEY SITE P5

		SPE-CIFIC CON-	DIS-	OXYGEN,	CHLO-	MANGA-	
		SAMP-DUCT-	DUCT-	SOLVED	RIDE,	NESE,	
	TIME	LING ANCE	ANCE	(PER-	DIS-	DIS-	
DATE		DEPTH (FT)	(MICRO-MHOS)	(UNITS)	PH	WATER	SOLVED (UG/L)
SEP							
23...	1300	1.0	1050	7.6	27.0	7.9	98
23...	1302	10	1050	7.5	26.0	7.9	96
23...	1304	20	1040	7.4	25.0	7.2	86

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 23, 1970--Continued

## 315906097225001 LAKE WHITNEY SITE P6

DATE	TIME	SAMP-	SPE-	OXYGEN,			DIS-
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	
		ANCE	PH	ATURE,	WATER	(PER-	CENT
		(MICRO-	(MHOS)	(UNITS)	(DEG C)	(MG/L)	SATUR-
							ATION)
SEP							
23...	1430	1.0	1140	7.5	26.0	7.4	90
23...	1432	10	1140	7.4	26.0	7.2	88
23...	1434	20	1140	7.4	26.0	7.2	88
23...	1436	30	1140	7.4	26.0	7.2	88
23...	1438	40	1140	7.4	26.0	7.2	88
23...	1440	50	1140	7.4	26.0	7.2	88
23...	1442	58	1140	7.4	26.0	7.2	88

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP-	SPE-	OXYGEN,			CHLO-	IRON,	MANGA-	
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,				(PER-
		ANCE	PH	ATURE,	WATER	DIS-	SOLVED	SOLVED	DIS-	
		(MICRO-	(MHOS)	(UNITS)	(DEG C)	SOLVED	SATUR-	(MG/L)	SOLVED	
						ATION)	ATION)			
SEP										
23...	1500	1.0	1110	7.5	27.0	7.2	89	205	0	0
23...	1502	10	1110	7.3	27.0	6.8	84	--	--	--
23...	1504	20	1110	7.4	27.0	6.9	85	--	--	--
23...	1506	28	1110	7.3	27.0	6.6	81	205	0	0

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP-	SPE-	OXYGEN,			DIS-
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	
		ANCE	PH	ATURE,	WATER	(PER-	
		(MICRO-	(MHOS)	(UNITS)	(DEG C)	CENT	
						SATUR-	
						ATION)	
SEP							
23...	1600	1.0	1180	7.5	26.0	7.5	91
23...	1602	10	1180	7.4	26.0	7.4	90
23...	1604	20	1180	7.4	26.0	7.4	90
23...	1606	30	1180	7.4	26.0	7.4	90
23...	1608	40	1180	7.4	26.0	7.4	90
23...	1610	52	1180	7.4	25.5	7.2	87

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	OXYGEN,			DIS-
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	
		ANCE	PH	ATURE,	WATER	(PER-	
		(MICRO-	(MHOS)	(UNITS)	(DEG C)	CENT	
						SATUR-	
						ATION)	
SEP							
23...	1630	1.0	1130	7.3	26.0	6.8	83
23...	1632	10	1140	7.4	26.0	6.8	83
23...	1634	18	1140	7.2	26.0	6.2	76

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 23, 1970--Continued

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	DEPTH	SPE-	CIFIC	OXYGEN,			HARD-	CALCIUM	MAGNE-	SODIUM,	
			SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	SOLVED	NESS,	DIS-	SOLVED	DIS-
LING	ANCE	(MICRO-	WATER	ATURE,	DIS-	(PER-	BONATE	BONATE	DIS-	SOLVED	SOLVED	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	SATUR-	AS	CACO3)	(MG/L)	(MG/L)	(MG/L)
SEP 23...	1730	1.0	1220	7.5	27.0	7.1	88	244	136	70	17	150
23...	1732	10	1280	7.3	27.0	6.3	78	--	--	--	--	--
23...	1734	20	1290	7.2	27.0	5.9	73	--	--	--	--	--
23...	1736	30	1490	6.9	27.0	4.2	52	--	--	--	--	--
23...	1738	43	1510	6.8	27.0	3.2	40	296	182	84	21	204

DATE	SODIUM	AD-	BICAR-	SULFATE	CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	MANGA-
	SORP-	TION:	BONATE	DIS-	DUCT-	RIDE,	RIDE,	SUM OF	GEN,	AMMONIA	PHORUS,	IRON,
	RATIO	(MG/L)	AS	SOLVED	(MG/L)	DIS-	SOLVED	CONSTITUENTS,	NO2-NO3	TOTAL	TOTAL	DIS-
					(MG/L)	(MG/L)	(MG/L)	(MG/L)		(MG/L)	(MG/L)	SOLVED
					AS CL)	AS F)	SiO2)	AS N)	AS N)	AS N)	AS P)	(UG/L
												AS MN)
SEP 23...	SODIUM	AD-	BICAR-	SULFATE	CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	MANGA-
23...	AD-	SORP-	BONATE	DIS-	DUCT-	RIDE,	RIDE,	SUM OF	GEN,	AMMONIA	PHORUS,	IRON,
23...	23...	23...	23...	23...	23...	23...	23...	CONSTITUENTS,	NO2-NO3	TOTAL	TOTAL	DIS-
23...	23...	23...	23...	23...	23...	23...	23...	(MG/L)	(MG/L)	(MG/L)	(MG/L)	SOLVED
23...	23...	23...	23...	23...	23...	23...	23...	AS N)	AS N)	AS N)	AS P)	(UG/L
23...	23...	23...	23...	23...	23...	23...	23...					AS MN)
23...	5.2	140	165	320	320	320	320	320	320	320	320	320

## 320142097253201 LAKE WHITNEY SITE P9

DATE	SPE-	CIFIC	OXYGEN,			OXYGEN,	
	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	DIS-	
	TIME	DEPTH	(MICRO-	ATURE,	DIS-	SOLVED	
			(FT)	WATER	SOLVED	SATUR-	
			MHOS)	(UNITS)	(MG/L)	ATION)	
SEP 23...	1700	1.0	1180	7.5	27.0	7.5	93
23...	1702	10	1180	7.5	26.0	7.4	90
23...	1704	20	1180	7.5	26.0	7.4	90
23...	1706	30	1180	7.4	26.0	7.1	87
23...	1708	40	1180	7.5	26.0	7.1	87
23...	1710	51	1180	7.4	26.0	7.0	85

## 320148097292101 LAKE WHITNEY SITE P10

DATE	SPE-	CIFIC	OXYGEN,			OXYGEN,	
	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	DIS-	
	TIME	DEPTH	(MICRO-	ATURE,	DIS-	SOLVED	
			(FT)	WATER	SOLVED	SATUR-	
			MHOS)	(UNITS)	(MG/L)	ATION)	
SEP 23...	1830	1.0	1640	7.6	25.5	7.3	88
23...	1832	5.0	1630	7.6	25.0	7.3	87
23...	1834	10	1640	7.3	25.0	5.6	67

## 320401097291301 LAKE WHITNEY SITE P11

DATE	SPE-	CIFIC	OXYGEN,			OXYGEN,	
	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	DIS-	
	TIME	DEPTH	(MICRO-	ATURE,	DIS-	SOLVED	
			(FT)	WATER	SOLVED	SATUR-	
			MHOS)	(UNITS)	(MG/L)	ATION)	
SEP 23...	1900	1.0	1900	7.3	26.5	6.6	80
23...	1902	10	1900	7.3	26.5	6.4	78
23...	1904	16	1900	7.1	26.0	4.6	56

TABLE 2--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 23, 1970--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SPECIFIC CON-		PH	TEMPER- ATURE, WATER	OXYGEN,	OXYGEN,	CHLO-	MANGA-	
		SAMP-	DUCT-			(MICRO-	(PER-	RIDE,	NESE,	
LING	ANCE	MHOS)	(UNITS)	(DEG C)	SOLVED	SATUR-	SOLVED	DIS-	DIS-	
AS CL)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	SOLVED	SOLVED	
SEP 23...	1920	1.0	1510	7.2	26.0	6.3	77	315	0	0
23...	1922	10	1510	7.2	25.5	6.0	72	--	--	--
23...	1924	15	1510	7.2	25.0	6.6	79	310	0	0

## 320619097285201 LAKE WHITNEY SITE P13

DATE	TIME	SPECIFIC CON-		PH	TEMPER- ATURE, WATER	OXYGEN,	OXYGEN,	CHLO-	
		SAMP-	DUCT-			(MICRO-	(PER-	RIDE,	
LING	ANCE	MHOS)	(UNITS)	(DEG C)	SOLVED	SATUR-	SOLVED	DIS-	
AS CL)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	SOLVED	
SEP 23...	1945	1.0	1970	7.5	26.5	6.5	79	438	--
23...	1947	10	1970	7.4	26.5	6.5	79	--	--
23...	1949	20	1970	7.4	26.5	6.4	78	--	--
23...	1951	24	1970	7.3	26.5	6.2	76	--	--

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SPECIFIC CON-		PH	TEMPER- ATURE, WATER	OXYGEN,	OXYGEN,	HARD-	HARD-	MAGNE-
		SAMP-	DUCT-			(MICRO-	(PER-	NESS,	CALCIUM	SODIUM,
LING	ANCE	MHOS)	(UNITS)	(DEG C)	SOLVED	SATUR-	NONCAR-	DIS-	DIS-	DIS-
AS CL)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	SOLVED	SOLVED	SOLVED
SEP 23...	2030	1.0	1950	7.1	27.0	6.4	79	--	--	--
23...	2032	10	1950	7.1	27.0	6.3	78	--	--	--
23...	2034	18	1950	7.1	26.5	6.2	76	348	230	98
									25	279

DATE	SODIUM AD- SORP- TION RATIO	BICAR- BONATE AS HCO3)	SULFATE AS SO4)	CHLO-	FLUO-	SILICA,	SUM OF CONSTITUENTS,	NITRO- GEN, NO2+NO3	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, DIS- SOLVED
				DIS-	DIS-	SOLVED	SOLVED	(MG/L AS F)	(MG/L AS N)	TOTAL (MG/L AS N)	(MG/L AS P)
SEP 23...	--	--	--	430	--	--	--	.00	.00	.040	0
23...	--	--	--	430	--	--	--	.00	.00	.040	0
23...	6.5	144	216	432	.3	5.2	1130	.00	.00	.190	0

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 10 AND 17, 1971

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	SPECIFIC CON-	PH	TEMPER-	OXYGEN,	OXYGEN,	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM,	
								SOLVED				SOLVED	SOLVED	SOLVED
		LING	ANCE	(MICRO-	(UNITS)	WATER	DIS-	SOLVED	SATUR-	CENT	BONATE	(MG/L AS CACO3)	(MG/L AS CACO3)	(MG/L AS CA)
<b>FEB</b>														
17...	0830			1.0	1240	8.0	10.5	10.4	93	260	140	78	17	150
17...	0832			5.0	1240	8.0	10.5	10.5	94	--	--	--	--	--
17...	0834			15	1240	8.0	10.0	10.4	92	--	--	--	--	--
17...	0836			25	1240	8.0	10.0	10.4	92	--	--	--	--	--
17...	0840			35	1260	8.0	10.0	10.3	91	--	--	--	--	--
17...	0842			45	1260	8.0	9.5	10.3	90	--	--	--	--	--
17...	0844			55	1260	8.0	9.5	10.3	90	--	--	--	--	--
17...	0846			65	1260	8.0	9.5	10.3	90	--	--	--	--	--
17...	0848			75	1240	8.0	9.5	9.8	86	--	--	--	--	--
17...	0850			86	1260	7.9	9.0	8.9	77	270	140	79	17	150

DATE	ADSORPTION RATIO	SODIUM	BICARBONATE	SULFATE	CHLORIDE, DIS-	FLUORIDE, DIS-	SILICA, DIS-	SOLIDS, SUM OF CONSTITUENTS,	NITROGEN, NO <sub>2</sub> +NO <sub>3</sub>	NITROGEN, NO <sub>2</sub> +NO <sub>3</sub>	NITROPHOSPHORUS, AMMONIA	IRON, DIS-	MANGANESE, DIS-	
		(MG/L AS HCO <sub>3</sub> )	(MG/L AS SO <sub>4</sub> )	(MG/L AS CL)	(MG/L AS F)	(MG/L AS CL)	(MG/L AS F)	(MG/L AS SiO <sub>2</sub> )	(MG/L AS SiO <sub>2</sub> )	(MG/L AS N)	(MG/L AS N)	TOTAL (MG/L AS P)	SOLVED (UG/L AS FE)	SOLVED (UG/L AS MN)
<b>FEB</b>														
17...	4.0	146	130	230	3	4.8	682	.00	.00	.020	70	0	90	0
17...	--	--	--	230	--	--	--	--	--	--	40	0	10	0
17...	--	--	--	230	--	--	--	--	--	--	0	0	140	0
17...	--	--	--	230	--	--	--	--	--	--	0	0	40	0
17...	--	--	--	240	--	--	--	--	--	--	0	0	0	0
17...	--	--	--	230	--	--	--	--	--	--	0	0	40	0
17...	--	--	--	230	--	--	--	--	--	--	0	0	0	0
17...	4.0	152	140	230	.3	7.0	699	.00	.00	.250	90	360		

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	SPECIFIC CON-	PH	TEMPER-	OXYGEN,	OXYGEN,	NITRO-	NITRO-	PHOS-	IRON,	
								SOLVED				SOLVED	
		LING	ANCE	(MICRO-	(UNITS)	WATER	DIS-	SOLVED	(PER-	GEN,	AMMONIA	TOTAL	
<b>FEB</b>													
17...	0900			1.0	1240	8.0	10.5	10.3	92	.00	.00	.010	
17...	0902			5.0	1260	8.0	10.5	10.5	94	--	--	--	
17...	0904			15	1260	8.0	10.0	10.4	92	--	--	--	
17...	0906			25	1260	8.0	10.0	10.4	92	--	--	--	
17...	0908			35	1240	7.9	10.0	10.4	92	.00	.00	.020	

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	DUCT-	SPECIFIC CON-	PH	TEMPER-	OXYGEN,	OXYGEN,	NITRO-	NITRO-	PHOS-	IRON,
								SOLVED				SOLVED
		LING	ANCE	(MICRO-	(UNITS)	WATER	DIS-	SOLVED	(PER-	GEN,	AMMONIA	TOTAL
<b>FEB</b>												
17...	0930			1.0	1260	8.0	10.5	10.5	94			
17...	0932			10	1260	8.0	10.5	10.4	93			
17...	0934			20	1260	8.0	10.0	10.4	92			
17...	0936			30	1260	8.0	10.0	10.4	92			
17...	0938			40	1260	7.9	10.0	10.3	91			
17...	0940			50	1280	7.9	10.0	10.2	90			
17...	0942			60	1280	7.9	10.0	10.0	88			
17...	0944			70	1280	7.9	9.5	9.9	87			
17...	0946			81	1280	7.8	9.5	9.4	82			

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 10 AND 17, 1971--Continued

## 315357097223901 LAKE WHITNEY SITE P1

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	OXYGEN,	OXYGEN,
			LING	CIFIC		CON-	ATURE,
			DUCT-	PH	WATER	SOLVED	(PER-
			ANCE	(MICRO-	(DEG C)	(MG/L)	CENT
			MHOS)	UNITS)			SATUR-
FEB							ATION)
17...	1000	1.0	1280	8.0	11.0	10.6	95
17...	1002	10	1280	8.0	11.0	10.5	95
17...	1004	20	1300	8.0	10.5	10.4	93
17...	1006	30	1320	8.0	10.0	10.2	90
17...	1008	40	1320	8.0	9.5	10.1	89
17...	1010	50	1320	8.0	9.5	10.1	89
17...	1012	60	1320	8.0	9.0	10.0	86
17...	1014	70	1320	8.0	9.0	9.9	85
17...	1016	78	1280	7.9	9.0	9.8	84

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	OXYGEN,	OXYGEN,
			LING	CIFIC		CON-	ATURE,
			DUCT-	PH	WATER	SOLVED	(PER-
			ANCE	(MICRO-	(DEG C)	(MG/L)	CENT
			MHOS)	UNITS)			SATUR-
FEB							ATION)
17...	1030	1.0	1260	8.0	11.0	10.6	95
17...	1032	5.0	1260	8.0	11.0	10.6	95
17...	1034	15	1260	8.0	10.5	10.6	95
17...	1036	25	1260	8.0	10.0	10.5	93
17...	1038	35	1300	7.9	9.5	10.1	89
17...	1040	45	1300	7.9	9.5	10.1	89
17...	1042	55	1300	7.9	9.5	10.1	89
17...	1044	65	1300	7.9	9.5	9.9	87
17...	1046	75	1300	7.9	9.5	9.8	86

## 315501097250201 LAKE WHITNEY SITE P2

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	OXYGEN,	OXYGEN,
			LING	CIFIC		CON-	ATURE,
			DUCT-	PH	WATER	SOLVED	(PER-
			ANCE	(MICRO-	(DEG C)	(MG/L)	CENT
			MHOS)	UNITS)			SATUR-
FEB							ATION)
17...	1115	1.0	1180	8.0	11.5	10.6	96
17...	1117	10	1200	8.0	11.0	10.7	96
17...	1119	20	1220	8.0	11.0	10.7	96
17...	1121	30	1220	8.0	10.0	10.3	91
17...	1123	40	1220	7.9	10.0	10.2	90
17...	1125	50	1240	7.9	10.0	10.1	89
17...	1127	60	1240	7.9	9.5	12.0	88
17...	1129	70	1260	7.9	9.0	9.9	85

## 315600097261801 LAKE WHITNEY SITE P3

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	OXYGEN,	OXYGEN,
			LING	CIFIC		CON-	ATURE,
			DUCT-	PH	WATER	SOLVED	(PER-
			ANCE	(MICRO-	(DEG C)	(MG/L)	CENT
			MHOS)	UNITS)			SATUR-
FEB							ATION)
17...	1145	1.0	1300	8.1	11.0	10.6	95
17...	1147	10	1300	8.1	11.0	10.8	97
17...	1149	20	1300	8.1	11.0	10.6	95
17...	1151	30	1300	8.0	10.5	10.6	95
17...	1153	40	1340	8.0	10.0	10.3	91
17...	1155	50	1300	8.0	10.0	10.2	90
17...	1157	60	1300	7.9	10.0	10.1	89
17...	1159	70	1300	7.8	9.5	10.1	89

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 10 AND 17, 1971--Continued

## 315650097245901 LAKE WHITNEY SITE P4

		SPE-	CIFIC		OXYGEN,	DIS-	SOLVED
		SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	(PER-
	TIME	LING	ANCE		ATURE,	DIS-	CENT
			(MICRO-		WATER	SOLVED	SATUR-
	DATE		MHOS)	(UNITS)	(DEG C)	(MG/L)	ATION)
FEB							
17...	1230	1.0	1300	8.0	11.5	10.8	98
17...	1232	5.0	1300	8.0	11.0	10.7	96
17...	1234	15	1300	8.0	11.0	10.7	96
17...	1236	25	1300	7.9	10.5	10.5	94
17...	1238	35	1360	7.9	10.0	10.2	90
17...	1240	45	1380	7.9	10.0	10.1	89
17...	1242	55	1380	7.9	10.0	9.9	88
17...	1244	64	1380	7.8	10.0	10.1	89

## 315722097240201 LAKE WHITNEY SITE DC

		SPE-	CIFIC		OXYGEN,	DIS-	HARD-	MAGNE-	SODIUM,
		SAMP-	DUCT-	PH	OXYGEN,	SOLVED	HARD-	CALCIUM	DIS-
	TIME	LING	ANCE		ATURE,	DIS-	NESS,	NONCAR-	DIS-
			(MICRO-		WATER	SOLVED	SATUR-	BONCAR-	SOLVED
	DATE		MHOS)	(UNITS)	(DEG C)	(MG/L)	ATION)	(CACO3)	(MG/L)
FEB									
17...	1345	1.0	1300	8.0	12.0	10.2	94	--	--
17...	1347	10	1300	8.0	11.5	10.4	95	--	--
17...	1349	20	1320	7.9	11.0	10.4	94	--	--
17...	1351	30	1380	7.9	10.5	10.1	90	--	--
17...	1353	40	1400	7.9	10.0	10.0	88	--	--
17...	1355	50	1440	7.8	10.0	10.7	95	--	--
17...	1357	62	1480	7.8	10.0	9.5	84	280	150
								78	20
									190

	SODIUM	BICAR-	SULFATE	CHLO-	FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	MANGA-
AD-	SORP-	DIS-	DIS-	RIDE,	RIDE,	DIS-	CONSTI-	GEN,	GEN,	NESE,
RATIO	RATIO	AS	SOLVED	SOLVED	SOLVED	SOLVED	TUENTS,	NO2+NO3	AMMONIA	DIS-
DATE		HCO3)	AS SO4)	AS CL)	AS F)	AS SIO2)	(MG/L	DIS-	TOTAL	SOLVED
FEB										
17...	--	--	--	240	--	--	--	--	.00	.00
17...	--	--	--	--	--	--	--	--	--	--
17...	--	--	--	250	--	--	--	--	--	0
17...	--	--	--	240	--	--	--	--	--	0
17...	--	--	--	260	--	--	--	--	--	0
17...	--	--	--	280	--	--	--	--	--	0
17...	5.0	154	160	280	.3	5.4	810	.10	.00	.010
								.00	.11	.030
									0	0

## 315729097253701 LAKE WHITNEY SITE P5

		SPE-	CIFIC		OXYGEN,	DIS-	SOLVED
		SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	(PER-
	TIME	LING	ANCE		ATURE,	DIS-	CENT
			(MICRO-		WATER	SOLVED	SATUR-
	DATE		MHOS)	(UNITS)	(DEG C)	(MG/L)	ATION)
FEB							
17...	1300	1.0	1280	8.0	12.5	10.4	97
17...	1302	5.0	1280	8.0	12.0	10.4	96
17...	1304	13	1280	7.9	12.0	10.3	95

	CHLO-	NITRO-	NITRO-	IRON,	MANGA-
	RIDE,	GEN,	GEN,	PHOS-	NESE,
	DIS-	NO2+NO3	AMMONIA	PHORUS,	DIS-
	SOLVED	TOTAL	TOTAL	TOTAL	SOLVED
	(MG/L	(MG/L	(MG/L	(MG/L	(UG/L
	AS CL)	AS N)	AS N)	AS P)	AS FE)
					AS MN)

FEB	--	.00	.00	.020	0	0
17...	--	--	--	--	--	--
17...	240	.00	.00	.090	30	0

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 10 AND 17, 1971--Continued

## 315906097225001 LAKE WHITNEY SITE P6

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	
		LING	ANCE		ATURE,	DIS-	DIS-	
		DEPTH	(MICRO-	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED
			MHOS)			(MG/L)	(PER-	(PER-
							CENT	CENT
							SATUR-	SATUR-
							ATION)	ATION)
FEB								
17...	1430	1.0	1300	7.9	12.0	10.6	98	
17...	1432	10	1300	7.9	12.0	10.6	98	
17...	1434	20	1300	7.9	12.0	10.6	98	
17...	1436	30	1340	7.9	11.0	10.3	93	
17...	1438	40	1400	7.8	10.5	10.2	91	
17...	1440	50	1420	7.8	10.0	10.0	88	
17...	1442	59	1500	7.6	10.0	9.6	85	

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	
		LING	ANCE		ATURE,	DIS-	DIS-	
		DEPTH	(MICRO-	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED
			MHOS)			(MG/L)	(PER-	(PER-
							CENT	CENT
							SATUR-	SATUR-
							ATION)	ATION)
FEB								
17...	1500	1.0	1300	7.9	13.0	10.6	100	
17...	1502	10	1300	7.9	12.0	10.6	98	
17...	1504	15	1300	7.8	12.0	10.3	95	
17...	1506	20	1300	7.8	12.0	10.5	97	
17...	1508	25	1340	7.8	11.0	8.3	75	
17...	1510	36	1360	7.6	10.5	8.8	79	

DATE	CHLO-	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	GEN,	GEN,		DIS-	DIS-
	DIS-	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	PHORUS,	SOLVED	SE,
	SOLVED	TOTAL	TOTAL	TOTAL	SOLVED	SOLVED
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(UG/L)
	AS CL)	AS N)	AS N)	AS P)	AS FE)	AS MN)
FEB						
17...	--	.00	.00	.020	0	0
17...	--	--	--	--	--	--
17...	--	--	--	--	--	--
17...	--	.00	.00	.020	0	0
17...	--	--	--	--	--	--
17...	250	.00	.00	.040	0	10

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	
		LING	ANCE		ATURE,	DIS-	DIS-	
		DEPTH	(MICRO-	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED
			MHOS)			(MG/L)	(PER-	(PER-
							CENT	CENT
							SATUR-	SATUR-
							ATION)	ATION)
FEB								
10...	0800	1.0	1350	8.3	8.0	11.1	93	
10...	0802	10	1350	8.1	8.0	11.1	93	
10...	0804	20	1350	7.9	8.0	11.1	93	
10...	0806	30	1350	7.8	7.5	11.1	92	
10...	0808	40	1320	7.9	7.5	11.1	92	
10...	0810	51	1320	7.9	7.5	11.1	92	
17...	1600	1.0	1300	8.1	12.0	10.6	98	
17...	1602	5.0	1300	8.1	12.0	10.7	99	
17...	1604	15	1340	8.1	11.0	10.7	96	
17...	1606	25	1380	8.1	11.0	10.6	95	
17...	1608	35	1400	8.1	10.5	10.6	95	
17...	1610	45	1420	8.0	10.0	10.2	90	
17...	1612	53	1500	7.9	10.0	9.8	87	

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 10 AND 17, 1971--Continued

## 320011097262201 LAKE WHITNEY SITE P8

		SPE- CIFIC CON- DUCT- ANCE	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DATE	TIME	SAMP- LING DEPTH (FT)	PH (MICRO- MHOS)	(UNITS)	
FEB					
10...	0830	1.0	1300	7.9	7.0
10...	0832	10	1340	7.9	7.0
10...	0834	19	1360	7.9	7.0

## 320122097260901 LAKE WHITNEY SITE FC

		SPE- CIFIC CON- DUCT- ANCE	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)
DATE	TIME	SAMP- LING DEPTH (FT)	PH (MICRO- MHOS)	(UNITS)	(DEG C)				
FEB									
10...	0930	1.0	1480	7.8	9.0	10.6	91	--	--
10...	0932	10	1440	7.7	8.5	10.6	90	--	--
10...	0934	20	1440	7.9	8.5	10.6	90	--	--
10...	0936	30	1440	7.9	8.5	10.5	89	--	--
10...	0938	42	1490	7.8	8.5	10.1	86	310	180
								90	20
									180

		SODIUM AD- SORP- TION RATIO	BICAR- BONATE AS HCO3)	SULFATE DIS- SOLVED AS SO4)	CHLO- RIDE, DIS- SOLVED AS CL)	FLUO- RIDE, DIS- SOLVED AS F)	SILICA, DIS- SOLVED (MG/L AS SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS SI02)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS P)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DATE													
FEB													
10...	--	--	--	--	280	--	--	--	.00	.00	.040	50	0
10...	--	--	--	--	280	--	--	--	--	--	--	0	0
10...	--	--	--	--	280	--	--	--	--	--	--	0	0
10...	--	--	--	--	280	--	--	--	--	--	--	0	0
10...	4.5	156	160	290	.3	5.0	822	.00	.11	.060	0	0	0

## 320124097291101 LAKE WHITNEY SITE GC

		SPE- CIFIC CON- DUCT- ANCE	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DATE	TIME	SAMP- LING DEPTH (FT)	PH (MICRO- MHOS)	(UNITS)	
<b>FEB</b>					
10...	1000	1.0	1750	7.7	9.0
10...	1002	5.0	1750	7.7	9.0
10...	1004	15	1700	7.6	8.5
10...	1006	25	1750	7.7	8.5
10...	1008	34	1750	7.6	8.5

## 320142097253201 LAKE WHITNEY SITE P9

		SPE- CIFIC CON- DUCT- ANCE	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
DATE	TIME	SAMP- LING DEPTH (FT)	PH (MICRO- MHOS)	(UNITS)	
<b>FEB</b>					
10...	0900	1.0	1400	8.4	8.0
10...	0902	10	1400	8.5	8.0
10...	0904	20	1400	8.4	8.0
10...	0906	30	1400	8.4	8.0
10...	0908	40	1400	8.5	8.0
10...	0910	50	1400	8.2	8.0

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 10 AND 17, 1971--Continued

## 320148097292101 LAKE WHITNEY SITE P10

DATE	TIME	SAMP-	SPE-	OXYGEN,	DIS-	CHLO-		
		LING	CIFIC	DUCT-	PH	TEMPER-	OXYGEN,	SOLVED
		DEPTH	CON-	ANCE	ATURE,	DIS-	(PER-	RIDE,
		(FT)	MICRO-	(MICRO-	WATER	SOLVED	CENT	DIS-
			MHOS)	MHOS)	(UNITS)	(MG/L)	SATUR-	SOLVED
					(DEG C)	(MG/L)	ATION)	(MG/L)
FEB								
10...	1030	1.0		1560	7.8	8.0	11.7	98
10...	1032	10		1560	7.8	8.0	12.0	101
								320

## 320401097291301 LAKE WHITNEY SITE P11

DATE	TIME	SAMP-	SPE-	OXYGEN,	DIS-	CHLO-		
		LING	CIFIC	DUCT-	PH	TEMPER-	OXYGEN,	SOLVED
		DEPTH	CON-	ANCE	ATURE,	DIS-	(PER-	RIDE,
		(FT)	MICRO-	(MICRO-	WATER	SOLVED	CENT	DIS-
			MHOS)	MHOS)	(UNITS)	(MG/L)	SATUR-	SOLVED
					(DEG C)	(MG/L)	ATION)	(MG/L)
FEB								
10...	1100	1.0		1940	8.0	8.5	11.2	95
10...	1102	10		1940	8.0	8.5	11.2	95
10...	1104	18		1920	8.0	8.5	11.4	97
								390

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP-	SPE-	OXYGEN,	DIS-	HARD-	CALCIUM	MAGNE-
		LING	CIFIC	DUCT-	PH	TEMPER-		SODIUM,
		DEPTH	CON-	ANCE	ATURE,	DIS-	(PER-	DIS-
		(FT)	MICRO-	(MICRO-	WATER	SOLVED	CENT	SOLVED
			MHOS)	MHOS)	(UNITS)	(MG/L)	SATUR-	(MG/L)
					(DEG C)	(MG/L)	ATION)	AS NA)
FEB								
10...	1120	1.0		1940	7.9	9.0	11.8	102
10...	1122	10		1980	8.0	8.5	11.3	96
10...	1124	16		1980	8.0	8.0	11.3	95
							390	230
							120	120
							26	240
SODIUM	AD-	BICAR-	SULFATE	CHLO-	FLUO-	SILICA,	SUM OF	NITRO-
ADSORP-	SORP-	BONATE	DIS-	RISE,	DIS-	CONSTI-	NONCAR-	GEN,
TION	TION	DIS-	SOLVED	DIS-	SOLVED	TUENTS,	BONATE	AMMONIA
RATIO	RATIO	AS	AS SO4)	AS CL)	SOLVED	(MG/L	(MG/L	TOTAL
DATE	HCO3)			AS F)	(MG/L	AS SIO2)	AS CACO3)	(MG/L
					AS P)		CACO3)	AS CA)
FEB								
10...	--	--	--	390	--	--	--	.00
10...	--	--	--	--	--	--	--	.00
10...	5.2	196	200	390	.3	4.6	1080	.00
								.080
								120
								0

## 320619097285201 LAKE WHITNEY SITE P13

DATE	TIME	SAMP-	SPE-	OXYGEN,	DIS-	
		DUCT-	PH	TEMPER-	OXYGEN,	SOLVED
		DEPTH	CON-	ATURE,	DIS-	(PER-
		(FT)	MICRO-	(DEG C)	SOLVED	CENT
			MHOS)	(MG/L)	(MG/L)	SATUR-
						ATION)
FEB						
10...	1145	1.0		2020	7.9	9.0
10...	1147	5.0		2040	7.9	9.0
10...	1149	15		2000	7.8	8.5
10...	1151	25		2000	7.8	8.5
						10.3
						93
						93
						90
						87

TABLE 3--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 10 AND 17, 1971--Continued

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SPECIFIC CONDUCTANCE		PH	TEMPERATURE, WATER	OXYGEN, SOLVED		OXYGEN, DIS-SOLVED	HARDNESS, (PERCENT SATURATED)	HARDNESS, NONCARBONATE AS CACO <sub>3</sub>	CALCIUM, SOLVED	MAGNESIUM, DIS-SOLVED	SODIUM, DIS-SOLVED	
		SAMPLING DEPTH (FT)	DUCT-DEPTH (MICRO-MHOS)			(UNITS)	(DEG C)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	
<b>FEB</b>														
10...	1230	1.0	1840	7.7	9.0	11.0	95	380	220	110	28	230		
10...	1232	10	1890	7.6	8.5	10.9	92	--	--	--	--	--		
10...	1234	17	2000	7.5	9.0	10.2	88	440	280	130	29	230		
<b>JAN</b>														
DATE	SODIUM ADSORPTION RATIO	BICARBONATE AS HCO <sub>3</sub> )	SULFATE AS SO <sub>4</sub> )	CHLORIDE, DIS-SOLVED	FLUORIDE, DIS-SOLVED	SILICA, AS SiO <sub>2</sub> )	SUM OF SILICA, AS SiO <sub>2</sub> )	SOLIDS, AS N)	NITROGEN, NO <sub>2</sub> +NO <sub>3</sub>	NITROGEN, TOTAL AS N)	AMMONIA, AS N)	PHOSPHORUS, TOTAL AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGANESE, DIS-SOLVED (UG/L AS MN)
10...	5.1	191	190	360	.3	5.1	1020	.00	.00	.00	.030	90	0	
10...	--	--	--	370	--	--	--	--	--	--	--	90	0	
10...	4.8	196	200	400	.3	5.2	1090	.00	.15	.040	200		0	

TABLE 4--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 25, 1971

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	CON-	PH	TEMPER-	OXYGEN,		HARD-	CALCIUM	MAGNE-	SODIUM,
							DIS-	SOLVED	HARD-	NESS,	DIS-	DIS-
		DEPTH	(MICRO-	(UNITS)	WATER	DIS-	SOLVED	(PER-	NONCAR-	SOLVED	SOLVED	DIS-
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(MG/L)	CENT	BONATE	(MG/L	(MG/L	SOLVED
MAY												
25...	0830	1.0	1290	8.1	22.0	8.4	95	270	150	77	18	170
25...	0832	5.0	1290	8.1	22.0	8.4	95	--	--	--	--	--
25...	0834	15	1290	8.0	21.5	7.6	85	--	--	--	--	--
25...	0836	25	1290	7.9	21.0	7.2	80	--	--	--	--	--
25...	0838	35	1290	7.8	21.0	7.0	78	--	--	--	--	--
25...	0840	45	1290	7.8	21.0	6.5	72	--	--	--	--	--
25...	0842	55	1280	7.6	20.0	5.0	54	--	--	--	--	--
25...	0844	65	1300	7.3	19.0	2.4	26	--	--	--	--	--
25...	0846	75	1300	7.2	18.0	1.6	17	--	--	--	--	--
25...	0848	84	1300	7.2	17.0	1.0	10	260	140	74	18	170

DATE	SODIUM AD- SORP- TION RATIO	BICAR- BONATE AS HCO3)	SULFATE DIS- SOLVED AS SO4)	CHLO- RIDE, DIS- SOLVED AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO2)	SOLIDS,		NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
							DIS- SOLVED (MG/L AS SO4)	CON- STITUENTS, DIS- SOLVED (MG/L AS SiO2)					
MAY													
25...	4.5	147	150	260	.3	4.2	752	.00	.00	.020	0	0	
25...	--	--	--	--	--	--	--	--	--	--	--	--	
25...	--	--	--	--	--	--	--	--	--	--	10	0	
25...	--	--	--	--	--	--	--	--	--	--	0	0	
25...	--	--	--	--	--	--	--	--	--	--	0	0	
25...	--	--	--	--	--	--	--	--	--	--	0	0	
25...	--	--	--	--	--	--	--	--	--	--	540	0	
25...	--	--	--	--	--	--	--	--	--	--	0	10	
25...	4.6	142	150	260	.3	2.2	745	.20	.00	.100	0	200	

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	CON-	PH	TEMPER-	OXYGEN,		HARD-	CALCIUM	MAGNE-	SODIUM,
							DIS-	SOLVED				
		DEPTH	(MICRO-	(UNITS)	WATER	DIS-	SOLVED	(PER-	NONCAR-	SOLVED	SOLVED	DIS-
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(MG/L)	CENT	BONATE	(MG/L	(MG/L	DIS-
MAY												
25...	0900	1.0	1290	8.1	23.0	8.5	98					
25...	0902	10	1290	8.1	22.0	8.1	92					
25...	0904	20	1290	7.9	21.0	7.4	82					
25...	0906	30	1290	7.9	21.0	7.2	80					
25...	0908	39	1290	7.9	21.0	7.0	78					

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	DUCT-	CON-	PH	TEMPER-	OXYGEN,		HARD-	CALCIUM	MAGNE-	SODIUM,
							DIS-	SOLVED				
		DEPTH	(MICRO-	(UNITS)	WATER	DIS-	SOLVED	(PER-	NONCAR-	SOLVED	SOLVED	DIS-
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(MG/L)	CENT	BONATE	(MG/L	(MG/L	DIS-
MAY												
25...	0930	1.0	1280	8.1	23.0	8.6	99					
25...	0932	10	1280	8.0	22.0	8.3	94					
25...	0934	20	1300	8.0	22.0	7.8	89					
25...	0936	30	1300	7.9	21.5	7.4	83					
25...	0938	40	1300	7.8	21.0	7.1	79					
25...	0940	50	1300	7.7	21.0	6.2	69					
25...	0942	60	1300	7.4	19.5	3.6	39					
25...	0944	70	1300	7.3	18.0	1.6	17					
25...	0946	81	1300	7.2	17.5	.8	8					

TABLE 4--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 25, 1971--Continued

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC DUCT- ANCE (MICRO- MHOS)	CON- PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>							
25...	1015.	1.0	1290	8.1	23.0	8.6	99
25...	1017	5.0	1290	8.1	22.5	8.6	98
25...	1019	15	1290	8.1	22.0	8.0	91
25...	1020	25	1290	8.0	22.0	7.9	90
25...	1022	35	1290	7.9	21.5	7.2	81
25...	1024	45	1300	7.8	21.0	6.7	74
25...	1026	55	1300	7.5	20.0	4.4	48
25...	1028	65	1300	7.4	19.0	2.3	24
25...	1030	75	1300	7.3	18.0	.6	6

## 315600097261801 LAKE WHITNEY SITE P3

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC DUCT- ANCE (MICRO- MHOS)	CON- PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>							
25...	1230	1.0	1280	8.2	24.0	8.5	100
25...	1232	10	1280	8.1	22.5	8.1	92
25...	1234	20	1280	8.0	22.0	7.7	88
25...	1236	30	1280	8.0	22.0	7.2	82
25...	1238	40	1280	7.9	22.0	6.8	77
25...	1240	50	1290	7.6	21.0	4.7	52
25...	1242	60	1290	7.2	18.5	1.3	14
25...	1244	70	1280	7.2	18.5	1.1	12

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS, NONCAR- BONATE (MG/L)	CALCIUM BONATE (MG/L)	MAGNE- SIUM, DIS- SOLVED (MG/L)	SODIUM, DIS- SOLVED (MG/L)
<b>MAY</b>											
25...	1350	1.0	1280	8.2	24.0	8.5	100	--	--	--	--
25...	1354	5.0	1280	8.2	23.5	8.5	99	--	--	--	--
25...	1356	15	1280	8.1	22.5	7.8	89	--	--	--	--
25...	1358	25	1280	8.0	22.0	7.1	81	--	--	--	--
25...	1400	35	1300	7.9	22.0	7.0	80	--	--	--	--
25...	1402	45	1300	7.8	22.0	6.3	72	--	--	--	--
25...	1404	50	1300	7.6	21.5	5.1	57	--	--	--	--
25...	1406	55	1300	7.3	20.0	2.5	27	--	--	--	--
25...	1408	63	1290	7.2	20.0	2.3	25	270	150	79	18
											170

DATE	SODIUM AD- SORP- TION RATIO	BICAR- BONATE AS HCO3)	SULFATE DIS- SOLVED AS SO4)	CHLO- RIDE, DIS- SOLVED AS CL)	FLUO- RIDE, DIS- SOLVED AS F)	SILICA, DIS- SOLVED AS SiO2)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
<b>MAY</b>												
25...	--	--	--	--	--	--	--	.00	.00	.020	0	0
25...	--	--	--	--	--	--	--	--	--	--	0	0
25...	--	--	--	--	--	--	--	--	--	--	0	0
25...	--	--	--	--	--	--	--	--	--	--	0	0
25...	--	--	--	--	--	--	--	--	--	--	0	0
25...	--	--	--	--	--	--	--	--	--	--	0	30
25...	--	--	--	--	--	--	--	--	--	--	0	80
25...	4.5	152	150	260	.3	4.7	757	.10	.00	.080	0	

TABLE 4--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 25, 1971--Continued

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
25...	1315	1.0	1240	8.0	25.0	7.4	88
25...	1316	5.0	1280	8.0	22.5	7.3	83
25...	1318	10	1280	7.9	22.5	7.0	80
25...	1320	14	1280	7.8	22.5	6.5	74

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
25...	1440	1.0	1240	8.0	24.0	7.9	93
25...	1442	10	1220	7.9	22.5	6.9	78
25...	1444	20	1200	7.9	22.5	6.8	77
25...	1446	30	1220	7.8	22.5	6.3	72
25...	1448	37	1240	7.7	22.5	4.9	56

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	NITRO- GEN, NO <sub>2</sub> -NO <sub>3</sub> TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAY						
25...	--	.00	.00	.020	10	0
25...	--	--	--	--	--	--
25...	--	--	--	--	--	--
25...	--	--	--	--	--	--
25...	260	.00	.21	.180	50	200

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
25...	1520	1.0	1260	8.1	24.0	8.5	100
25...	1522	10	1260	8.0	23.0	7.7	89
25...	1524	20	1260	8.0	22.5	7.3	83
25...	1526	30	1260	7.8	22.5	6.7	76
25...	1528	40	1260	7.9	22.5	7.1	81
25...	1530	51	1260	7.8	22.5	6.5	74

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAY							
25...	1545	1.0	950	7.9	25.5	7.6	92
25...	1547	5.0	950	7.9	25.0	7.5	89
25...	1549	10	1100	7.7	23.0	5.6	64
25...	1551	15	940	7.5	22.5	3.9	44
25...	1553	20	990	7.3	23.0	3.2	37

TABLE 4--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 25, 1971--Continued

## 320011097262201 LAKE WHITNEY SITE P8--Continued

		HARD-NESS (MG/L AS CACO <sub>3</sub> )	HARD-NESS NONCARBONATE (MG/L AS CACO <sub>3</sub> )	CALCIUM SOLVED (MG/L AS CA)	MAGNE-SIUM, BICAR-BONATE (MG/L AS MG)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL)
<b>MAY</b>						
25...		220	98	68	12	148
25...		--	--	--	--	170
25...		--	--	--	--	--
25...		--	--	--	--	--
25...		--	--	--	--	--

## 320122097260901 LAKE WHITNEY SITE FC

		SPE-CIFIC CON-		OXYGEN, DIS-		HARD-NESS,	HARD-NESS,	MAGNE-SIUM,	SODIUM,			
		DUCT-ANCE	TIME	TEMPER-ATURE, WATER	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	(MG/L AS CACO <sub>3</sub> )	(MG/L AS CACO <sub>3</sub> )	DIS-SOLVED (MG/L AS CA)	DIS-SOLVED (MG/L AS NA)			
DATE	DEPTH (FT)	(MICRO-MHOS)	(UNITS)	(DEG C)	(MG/L)							
<b>MAY</b>												
25...	1610	1.0	1220	8.1	24.0	8.5	100	260	140			
25...	1612	10	1260	7.9	23.0	7.0	80	--	--			
25...	1614	20	1260	7.9	22.5	6.6	75	--	--			
25...	1616	30	1220	7.8	22.5	6.3	72	--	--			
25...	1618	42	1240	7.4	22.5	5.0	57	--	--			
SODIUM ADSORPTION RATIO												
		BICARBONATE (MG/L AS HC <sub>03</sub> )	SULFATE (MG/L AS SO <sub>4</sub> )	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO <sub>2</sub> )	SOLIDS SUM OF CONSTITUENTS NO <sub>2</sub> -NO <sub>3</sub>	NITRO- GEN, TOTAL NO <sub>2</sub> -NO <sub>3</sub>	NITRO- GEN, TOTAL AMMONIA	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGANESE, DIS- SOLVED (UG/L AS MN)
DATE	TIME	DEPTH (FT)	(MICRO-MHOS)	(UNITS)	PH	TEMPER-ATURE, WATER	OXYGEN, DIS-SOLVED (MG/L)	(PER-CENT SATUR-ATION)	(MG/L AS N)	(MG/L AS N)		
<b>MAY</b>										.00	.00	.030
25...	4.6	147	140	250	.3	3.4	729	.00	.00	0	0	0
25...	--	--	--	--	--	--	--	--	--	--	0	0
25...	--	--	--	--	--	--	--	--	--	--	0	1.0
25...	--	--	--	--	--	--	--	.10	.00	.460	0	270

## 320148097292101 LAKE WHITNEY SITE P10

		SPE-CIFIC CON-		OXYGEN, DIS-		CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
		DUCT-ANCE	TIME	TEMPER-ATURE, WATER	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	
DATE	DEPTH (FT)	(MICRO-MHOS)	(UNITS)	(DEG C)	(MG/L)	
<b>MAY</b>						
25...	1700	1.0	1040	8.4	24.0	7.8
25...	1702	5.0	1020	8.3	23.5	7.4
25...	1705	10	940	8.0	22.0	5.3
						92
						86
						60
						160

## 320401097291301 LAKE WHITNEY SITE P11

		SPE-CIFIC CON-		OXYGEN, DIS-		OXYGEN,
		DUCT-ANCE	TIME	TEMPER-ATURE, WATER	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION)	DIS- SOLVED (MG/L AS CL)
DATE	DEPTH (FT)	(MICRO-MHOS)	(UNITS)	(DEG C)	(MG/L)	
<b>MAY</b>						
25...	1730	1.0	1210	8.1	25.0	6.9
25...	1732	5.0	1230	8.0	23.5	6.0
25...	1734	10	1250	8.0	23.5	6.1
25...	1736	15	1250	8.0	23.0	6.0
25...	1738	18	1250	7.8	23.0	5.0
						82
						70
						71
						69
						57

TABLE 4--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 25, 1971--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP-	DUCT-	CON-	SPECIFIC	OXYGEN,	OXYGEN,		HARD-	CALCIUM	MAGNE-	SIUM,	SODIUM,	DIS-	DIS-	
							LING	PH	TEMPER-	OXYGEN,	SOLVED	HARD-	NESS,	BONATE	SOLVED	SOLVED
		DEPTH	(MICRO-	(UNITS)	ATURE,	DIS-	(MG/L	SOLVED	SATUR-	(PER-	CENT	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L
		(FT)	MICROS	(UNITS)	DEG C	WATER	(MG/L)	SOLVED	SATURATION	(%	CACO3)	AS CACO3)	AS CACO3)	AS CA)	AS MG)	AS NA)
MAY																
25...	1810	1.0	1100	8.1	24.5	7.5		89	--	--	--	--	--	--	--	--
25...	1812	5.0	1150	7.9	24.0	5.7		67	--	--	--	--	--	--	--	--
25...	1814	10	1250	7.9	23.5	5.5		64	--	--	--	--	--	--	--	--
25...	1816	16	1230	7.6	23.5	3.9		45	270	130	78	18	18	170	170	170

DATE	AD-	BICAR-	SODIUM	SORP-	TION	RATIO	CHLO-	FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
							DIS-	DIS-	DIS-	CONSTITUENTS,	NO2+NO3	AMMONIA	PHORUS,	SOLVED	DIS-	
	SORPTION	RATIO	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	TOTAL	TOTAL	TOTAL	(UG/L	(UG/L	
	AS	AS	HCO3)	AS	SO4)	AS	CL)	AS	F)	SIO2)	(MG/L	(MG/L	(MG/L	AS	AS	
MAY																
25...	--	--	--	--	--	--	--	--	--	--	.02	.20	.100	10	10	10
25...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	4.5	164	140	250	.3	2.8	740	.04	.55	.240	20	310	310	310	310	310

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SAMP-	DUCT-	CON-	SPECIFIC	OXYGEN,	OXYGEN,		HARD-	CALCIUM	MAGNE-	SIUM,	SODIUM,	DIS-	DIS-	
							LING	PH	TEMPER-	OXYGEN,	SOLVED	HARD-	NESS,	NONCAR-	SOLVED	SOLVED
		DEPTH	(MICRO-	(UNITS)	ATURE,	DIS-	(PER-	CENT	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L
		(FT)	MICROS	(UNITS)	DEG C	WATER	SOLVED	SATUR-	(%)	CACO3)	AS CACO3)	AS CACO3)	AS CA)	AS MG)	AS NA)	
MAY																
25...	1900	1.0	1650	8.2	24.0	7.8		92	310	190	87	23	230	230	230	230
25...	1902	5.0	1610	8.1	23.0	7.6		87	--	--	--	--	--	--	--	--
25...	1904	10	1610	8.0	23.0	6.2		71	--	--	--	--	--	--	--	--
25...	1906	15	1620	8.0	24.0	6.3		74	--	--	--	--	--	--	--	--
25...	1908	17	1630	7.9	23.5	6.1		71	310	180	86	23	230	230	230	230

DATE	AD-	BICAR-	SODIUM	SORP-	TION	RATIO	CHLO-	FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
							DIS-	DIS-	DIS-	SOLVED						
	SORPTION	RATIO	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	TOTAL	TOTAL	TOTAL	(UG/L	(UG/L	
	AS	AS	HCO3)	AS	SO4)	AS	CL)	AS	F)	SIO2)	(MG/L	(MG/L	(MG/L	AS	AS	
MAY																
25...	5.7	150	190	350	.3	.5	955	.00	.00	.040	0	0	0	0	0	0
25...	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
25...	--	--	--	--	--	--	--	--	--	--	--	--	100	20	20	20
25...	5.7	154	190	340	.3	2.0	947	.00	.00	.100	60	30	30	30	30	30

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 16, 1971

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP- LING (FT)	DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO		
<b>SEP</b>												
16...	0830	1.0	1330	28.0	10.2	129	250	150	72	18	180	4.9
16...	0832	10	1330	27.5	9.5	119	--	--	--	--	--	--
16...	0834	20	1330	27.5	8.6	108	--	--	--	--	--	--
16...	0836	30	1330	27.0	5.7	70	--	--	--	--	--	--
16...	0838	40	1340	26.5	3.8	46	--	--	--	--	--	--
16...	0840	45	1360	25.5	.2	2	--	--	--	--	--	--
16...	0842	50	1360	25.0	.2	2	--	--	--	--	--	--
16...	0844	60	1330	24.0	.2	2	--	--	--	--	--	--
16...	0846	70	1280	22.0	.2	2	--	--	--	--	--	--
16...	0848	80	1290	20.5	.3	3	--	--	--	--	--	--
16...	0850	88	1300	20.0	.6	7	270	130	80	18	160	4.2

DATE	BICAR- BONATE (MG/L AS HCO3)	SULFATE (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED	FLUO- RIDE, DIS- SOLVED	SILICA, DIS- SOLVED (MG/L AS F)	SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL DIS- SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL DIS- SOLVED (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
										IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
<b>SEP</b>											
16...	126	140	270	.3	5.9	748	.00	.00	.020	0	0
16...	--	--	--	--	--	--	--	--	--	0	0
16...	--	--	--	--	--	--	--	--	--	0	0
16...	--	--	--	--	--	--	--	--	--	30	
16...	--	--	--	--	--	--	--	--	--	40	
16...	--	--	--	--	--	--	--	--	.020	80	110
16...	--	--	--	--	--	--	--	--	--	200	830
16...	--	--	--	--	--	--	--	--	--	200	1100
16...	--	--	--	--	--	--	--	--	--	240	1000
16...	--	--	--	--	--	--	--	--	--	210	860
16...	177	120	250	.3	10	727	.00	1.1	.180	160	1100

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP- LING (FT)	DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- SOLVED
							OXYGEN, DIS- SOLVED (MG/L)
<b>SEP</b>							
16...	0900	1.0	1330	28.0	10.6	134	
16...	0902	10	1330	27.5	10.5	131	
16...	0904	20	1330	27.5	9.2	115	
16...	0906	30	1330	27.0	6.8	84	
16...	0908	37	1340	27.0	5.4	67	

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP- LING (FT)	DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	SPE- CIFIC CON- SOLVED
							OXYGEN, DIS- SOLVED (MG/L)
<b>SEP</b>							
16...	0930	1.0	1340	28.0	10.2	129	
16...	0932	10	1340	27.5	10.0	125	
16...	0934	20	1340	27.0	8.4	104	
16...	0936	30	1340	27.0	6.6	81	
16...	0938	40	1350	26.5	2.2	27	
16...	0940	45	1500	26.0	.2	2	
16...	0942	50	1450	25.0	.2	2	
16...	0944	60	1400	24.0	.2	2	
16...	0946	70	1300	22.0	.4	5	
16...	0948	85	1300	20.0	.4	4	

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 16, 1971--Continued

## 315432097234601 LAKE WHITNEY SITE CC

		SPE-		OXYGEN,	
		CIFIC		DIS-	
		CON-		SOLVED	
		SAMP-	DUCT-	TEMPER-	OXYGEN,
		LING	ANCE	PH	(PER-
	DATE	TIME	DEPTH	(MICRO-	CENT
			(FT)	MHOS)	SATUR-
				(UNITS)	ATION)
SEP					
16...	1015		1.0	1350	--
16...	1017		10	1350	--
16...	1019		20	1400	--
16...	1021		30	1500	--
16...	1023		40	1550	--
16...	1025		45	1650	--
16...	1027		50	1500	--
16...	1029		60	1450	--
16...	1031		70	1350	.4
16...	1033		78	1350	--
				(DEG C)	28.5 27.5 27.0 27.0 26.5 25.5 24.0 21.0 20.5
					10.9 10.8 9.8 7.2 .3 .3 .3 .4 .8
					140 135 122 89 52 4 4 4 9

## 315600097261801 LAKE WHITNEY SITE P3

		SPE-		OXYGEN,	
		CIFIC		DIS-	
		CON-		SOLVED	
		SAMP-	DUCT-	TEMPER-	OXYGEN,
		LING	ANCE	ATURE,	(PER-
	DATE	TIME	DEPTH	(MICRO-	CENT
			(FT)	MHOS)	WATER
					SOLVED
					(MG/L)
					SATUR-
					ATION)
SEP					
16...	1230		1.0	1370	29.0
16...	1232		10	1370	28.0
16...	1234		20	1370	27.5
16...	1236		30	1550	27.5
16...	1238		40	1800	27.0
16...	1240		45	1800	27.0
16...	1242		50	1800	26.5
16...	1244		60	1700	25.0
16...	1246		72	1360	22.0
					11.0 .1 .1 .4 .2 .2 .3 .4
					141 141 130 86 40 20 2 5

## 315722097240201 LAKE WHITNEY SITE DC

		SPE-		OXYGEN,								
		CIFIC		DIS-		HARD-		CALCIUM	MAGNE-	SODIUM.	AD-	
		CON-		SOLVED		NESS,		NONCAR-	SUMIUM,	SODIUM.	SORP-	
		SAMP-	DUCT-	TEMPER-	(PER-	HARD-		DIS-	SUMIUM,	SODIUM.	SORP-	
		LING	ANCE	ATURE,	(CENT	NESS,		SOLVED	SUMIUM,	SODIUM.	SORP-	
	DATE	TIME	DEPTH	(MICRO-	(DEG C)	OXYGEN,		SOLVED	SUMIUM,	SODIUM.	SORP-	
			(FT)	MHOS)	(MG/L)	(MG/L)		(MG/L)	SUMIUM,	SODIUM.	SORP-	
									AS MG)	AS NA)	ATION)	
SEP												
16...	1350		1.0	1470	28.5	11.5	147	--	--	--	--	--
16...	1352		10	1410	27.5	11.8	148	--	--	--	--	--
16...	1354		20	1610	27.0	9.2	114	--	--	--	--	--
16...	1356		30	1890	27.0	6.3	78	--	--	--	--	--
16...	1358		40	1980	27.0	4.1	51	--	--	--	--	--
16...	1400		45	2010	27.0	2.5	31	360	240	100	26	280
16...	1402		50	2020	27.0	1.0	12	--	--	--	--	--
16...	1404		65	1700	24.5	.6	7	--	--	--	--	--

		CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
		SULFATE	RIDE,	DIS-	SUM OF	GEN.	GEN.	PHORUS,	DIS-	NESE,	
		BONATE	DIS-	SOLVED	CONSTITU-	NO2+NO3	AMMONIA	TOTAL	SOLVED	DIS-	
		(MG/L	DIS-	SOLVED	(MG/L	(NO2+NO3	AMMONIA	TOTAL	SOLVED	SOLVED	
		AS	DIS-	(MG/L	AS	(NO2+NO3	AS	(MG/L	(UG/L	(UG/L	
		HCO3)	AS SO4)	AS CL)	SIO2)	AS N)	AS N)	AS P)	AS FE)	AS MN)	
SEP											
16...	--	--	--	--	--	--	.00	.00	.030	0	0
16...	--	--	--	--	--	--	--	--	--	0	0
16...	--	--	--	--	--	--	--	--	--	0	0
16...	--	--	--	--	--	--	--	--	--	0	30
16...	--	--	--	--	--	--	--	--	--	0	60
16...	137	220	440	.3	5.3	1140	.02	.00	.020	0	110
16...	--	--	--	--	--	--	--	--	--	0	290
16...	--	--	--	--	--	--	.00	1.2	.100	60	1300

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 16, 1971--Continued

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT NO <sub>2</sub> +NO <sub>3</sub> )	NITRO- GEN, TOTAL AMMONIA (MG/L)	NITRO- GEN, TOTAL (MG/L)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DISS- SOLVED (UG/L AS MN)
						SATUR- ATION)	AS N)	AS N)	AS P)		
<b>SEP</b>											
16...	1315	1.0	1450	29.5	11.5	149	--	--	--	0	0
16...	1317	5.0	1450	29.0	11.6	149	--	--	--	--	--
16...	1319	10	1450	28.5	10.9	140	--	--	--	--	--
16...	1321	15	1450	28.0	9.0	114	--	--	--	--	--
16...	1323	18	1440	28.0	8.0	101	.00	.00	.060	0	30

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT NO <sub>2</sub> +NO <sub>3</sub> )	SATUR- ATION)
						SATUR- ATION)	
<b>SEP</b>							
16...	1440	1.0	1630	29.5	11.5	149	
16...	1442	10	1680	27.5	8.7	109	
16...	1444	20	1780	27.5	6.7	84	
16...	1446	30	1790	27.5	4.6	58	
16...	1448	40	1790	27.0	.6	7	

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT NO <sub>2</sub> +NO <sub>3</sub> )	SATUR- ATION)
						SATUR- ATION)	
<b>SEP</b>							
16...	1520	1.0	1570	29.0	11.6	149	
16...	1522	10	1600	27.5	10.8	135	
16...	1524	20	1700	27.5	9.0	112	
16...	1526	30	2100	27.5	2.8	35	
16...	1528	40	2340	27.5	1.9	24	
16...	1530	53	2340	27.5	1.5	19	

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT NO <sub>2</sub> +NO <sub>3</sub> )	SATUR- ATION)
						SATUR- ATION)	
<b>SEP</b>							
16...	1545	1.0	1770	31.0	11.3	151	
16...	1547	5.0	1770	29.0	10.9	140	
16...	1549	10	1770	28.0	9.3	118	
16...	1551	15	1770	28.0	5.8	73	
16...	1553	20	1770	27.5	.5	6	
16...	1555	23	1800	27.5	.5	6	

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 16, 1971--Continued.

320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON-	OXYGEN, DIS- SOLVED	HARD- NESS	HARD- NESS	MAGNE- SIUM,	SODIUM,	AD-			
			SAMP- LING	DUCT- ANCE	TEMPER- ATURE, WATER	OXYGEN, DIS- SOLVED	(PER- CENT SATUR- ATION)	(MG/L BONATE CACO3)	(MG/L SOLVED AS CA)	SORP- TION RATIO		
SEP 16...	1615	1.0	1800	30.0	12.1	159	320	220	89	24	250	6.1
16...	1617	10	1800	28.0	10.3	130	--	--	--	--	--	--
16...	1619	20	2190	28.0	4.0	51	--	--	--	--	--	--
16...	1621	30	2290	27.5	2.4	30	--	--	--	--	--	--
16...	1623	35	2380	27.5	2.3	29	--	--	--	--	--	--
16...	1625	44	2400	27.5	1.7	21	--	--	--	--	--	--

DATE	BICAR-	SULFATE	CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	MANGA-		
	BONATE (MG/L AS HCO3)	DIS- SOLVED AS SO4)	DIS- SOLVED AS CL)	DIS- SOLVED AS F)	DIS- SOLVED AS SiO2)	SUM OF TUENTS, (MG/L AS SiO2)	NO2+NO3 AMMONIA	GEN, TOTAL (MG/L AS N)	PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	NESE, DIS- SOLVED (UG/L AS MN)
SEP 16...	127	190	390	.3	4.8	1010	.00	.00	.050	0	0
16...	--	--	--	--	--	--	--	--	--	0	0
16...	--	--	--	--	--	--	--	--	--	0	0
16...	--	--	--	--	--	--	--	--	--	40	40
16...	--	--	--	--	--	--	--	--	--	0	170
16...	--	--	--	--	--	--	.00	.00	.060	0	250

320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON-	OXYGEN, DIS- SOLVED	HARD- NESS	OXYGEN, DIS- SOLVED		
			SAMP- LING	DUCT- ANCE	TEMPER- ATURE, WATER	(DEG C)	(MG/L)	SATUR- ATION)
SEP 16...	1745	1.0	1930	30.0	12.7	167		
16...	1747	10	1950	28.0	11.7	148		
16...	1749	20	2200	28.0	8.3	105		
16...	1751	30	2400	27.5	4.0	50		
16...	1753	38	2510	27.5	2.0	25		

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON-	OXYGEN, DIS- SOLVED	HARD- NESS	HARD- NESS	MAGNE- SIUM,	SODIUM,	SODIUM		
			SAMP- LING	DUCT- ANCE	TEMPER- ATURE, WATER	(DEG C)	(MG/L)	NONCAR- BONATE CACO3)	(MG/L BONATE CACO3)	AD- SORP- TION RATIO	
SEP 16...	1845	1.0	2300	30.0	13.6	179	--	--	--	--	--
16...	1847	5.0	2300	28.0	12.9	163	--	--	--	--	--
16...	1849	10	2400	27.0	4.0	49	--	--	--	--	--
16...	1851	18	2510	27.0	1.4	18	450	340	130	32	360
											7.3

DATE	BICAR-	SULFATE	CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	MANGA-		
	BONATE (MG/L AS HCO3)	DIS- SOLVED AS SO4)	DIS- SOLVED AS CL)	DIS- SOLVED AS F)	DIS- SOLVED AS SiO2)	SUM OF TUENTS, (MG/L AS SiO2)	NO2+NO3 AMMONIA	GEN, TOTAL (MG/L AS N)	PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	NESE, DIS- SOLVED (UG/L AS MN)
SEP 16...	--	--	--	--	--	--	--	--	--	60	10
16...	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	--
16...	135	290	580	.4	5.5	1470	.10	.00	.080	10	420

TABLE 5--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 16, 1971--Continued

320721097293301 LAKE WHITNEY SITE P14

		SPE- CIFIC CON- DUCT- LING	TEMPER- ATURE, WATER DEPTH (FT)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT) SATUR- ATION	HARD- NESS, NONCAR- BONATE (MG/L)	HARD- NESS, BONATE (MG/L)	MAGNE- SIUM, DIS- SOLVED (MG/L)	SODIUM, DIS- SOLVED (MG/L)	SODIUM, AD- SORP- TION RATIO
DATE	TIME	(MICRO- MHOS)	(DEG C)	(MG/L)	CACO <sub>3</sub> )	CACO <sub>3</sub> )	(MG/L AS CACO <sub>3</sub> )	(MG/L AS CA))	(MG/L AS MG))	(MG/L AS NA))
<b>SEP</b>										
16...	1930	1.0	2560	30.0	13.4	179	--	--	--	--
16...	1932	5.0	2540	28.5	12.6	162	--	--	--	--
16...	1934	10	2540	28.0	10.1	129	--	--	--	--
16...	1936	15	2590	27.0	8.0	100	--	--	--	--
16...	1938	18	2590	26.5	5.2	64	460	350	130	33
										370
										7.5

		BICAR- BONATE (MG/L AS HCO <sub>3</sub> )	SULFATE AS SO <sub>4</sub> )	CHLO- RIDE, SOLVED AS CL)	FLUO- RIDE, SOLVED AS F)	SILICA, DIS- SOLVED AS SiO <sub>2</sub> )	SUM OF CONSTITUENTS: (MG/L AS SiO <sub>2</sub> )	NITRO- GEN, NO <sub>2</sub> -NO <sub>3</sub> (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, SOLVED (UG/L AS MN)
DATE												
<b>SEP</b>												
16...	--	--	--	--	--	--	--	.00	.00	.040	0	10
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	--	--	--	--	--	--	--	--	--	--	0	10
16...	--	--	--	--	--	--	--	--	--	--	--	--
16...	128	300	600	.4	5.3	1500	.00	.00	.00	.050	10	130

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 29 - MARCH 1, 1972

FT. = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	DIS-	
		LING	CIFIC		CON-		
		DUCT-	PH	TEMPER-	PAR-	SOLVED	
		ANCE	(UNITS)	ATURE, (DEG C)	(SECCHI DISK)	(PER- CENT SOLVED (MG/L))	
		(MICRO- MHOS)		(WATER (M))	(M)	SATUR- ATION)	
FEB							
29...	0800	1.0	1310	8.1	13.0	1.60	10.5
29...	0802	10	1310	8.1	12.5	--	10.4
29...	0804	20	1310	8.1	12.5	--	10.4
29...	0806	30	1310	8.1	12.0	--	10.3
29...	0808	40	1310	8.0	12.0	--	10.3
29...	0810	50	1310	8.0	12.0	--	10.2
29...	0812	60	1310	7.9	11.5	--	9.8
29...	0814	70	1310	7.8	10.5	--	9.3
29...	0816	80	1320	7.6	10.5	--	9.3
29...	0818	90	1320	7.0	10.5	--	8.3
							74
HARD-NESS	HARD-NESS	CALCIUM	MAGNE- S IUM,	SODIUM	SODIUM	BICAR-	CHLO-
(MG/L AS CACO3)	(MG/L CACO3)	(MG/L AS CA)	NONCAR- BONATE	DIS- SOLVED	DIS- SOLVED	BONATE (MG/L AS HCO3)	RIDE, DIS- SOLVED (MG/L AS SO4)
DATE							
FEB							
29...	270	150	84	15	160	4.2	149
29...	--	--	--	--	--	--	140
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	280	150	84	16	160	4.2	148
							140
							250
FLUO- RIDE,	SILICA,	SUM OF CONSTITUENTS,	NITRO- GEN, NO2+NO3	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, (UG/L AS FE)	MANGA- NESE,
DIS- SOLVED (MG/L AS F)	DIS- SOLVED (SiO2)	DIS- SOLVED (MG/L)	TOTAL (AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS P)	SOLVED (UG/L AS MN)	DIS- SOLVED (UG/L AS MN)
DATE							
FEB							
29...	.3	6.2	729	.10	.14	.030	0
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--
29...	.3	7.0	730	.10	.22	.030	0
							70

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	SPE-	OXYGEN,	OXYGEN,
		LING	CIFIC	CON-	DIS-
		DUCT-	PH	TEMPER-	OXYGEN,
		ANCE	(UNITS)	ATURE, (DEG C)	DIS- SOLVED (MG/L))
		(MICRO- MHOS)		(WATER (M))	SATUR- ATION)
FEB					
29...	0900	1.0	1310	8.1	13.0
29...	0902	10	1310	8.0	12.5
29...	0904	20	1310	8.0	12.5
29...	0906	30	1310	8.0	12.5
29...	0908	40	1310	8.0	12.0
					10.4
					96

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 29 - MARCH 1, 1972--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	SPE-	OXYGEN,	OXYGEN,		
		LING	CIFIC	DUCT-	DIS-	SOLVED	
		DEPTH	CON-	PH	TEMPER-	OXYGEN,	(PER-
		(FT)	(MICRO-		ATURE,	DIS-	CENT
			MHOS)	(UNITS)	(DEG C)	SOLVED	SATUR-
<b>FEB</b>							
29...	0930	1.0	1310	8.1	13.5	10.5	100
29...	0932	10	1310	8.1	13.0	10.5	99
29...	0934	20	1310	8.1	12.5	10.4	97
29...	0936	30	1310	8.0	12.5	10.3	96
29...	0938	40	1310	8.0	12.0	10.0	93
29...	0940	50	1310	7.9	11.5	9.6	87
29...	0942	60	1310	7.9	11.5	9.5	86
29...	0944	70	1310	7.7	10.5	9.0	80
29...	0946	85	1310	7.8	10.5	8.4	75

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	SPE-	OXYGEN,	OXYGEN,		
		LING	CIFIC	DUCT-	DIS-	SOLVED	
		DEPTH	CON-	PH	TEMPER-	OXYGEN,	(PER-
		(FT)	(MICRO-		ATURE,	DIS-	CENT
			MHOS)	(UNITS)	(DEG C)	SOLVED	SATUR-
<b>FEB</b>							
29...	1015	1.0	1310	8.1	14.0	10.7	103
29...	1017	10	1310	8.1	14.0	10.7	103
29...	1019	20	1310	8.1	13.5	10.5	100
29...	1021	30	1310	8.0	12.5	10.2	95
29...	1023	40	1310	8.0	12.5	10.1	94
29...	1025	50	1310	8.0	12.0	9.9	92
29...	1027	60	1310	8.0	11.5	9.6	87
29...	1029	70	1310	8.0	11.0	9.2	83
29...	1031	80	1310	7.9	11.0	8.6	77

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	SPE-	OXYGEN,	OXYGEN,	HARD-	HARD-	MAGNE-
		LING	DUCT-	PH	TEMPER-	SOLVED	(PER-	SUMIUM,
		DEPTH	(MICRO-		ATURE,	OXYGEN,	CENT	DIS-
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(MG/L)	DIS-
<b>MAR</b>								
01...	1345	1.0	1220	8.6	15.0	10.0	98	140
01...	1347	10	1250	8.5	15.0	10.2	100	--
01...	1349	20	1250	8.5	14.5	10.0	97	--
01...	1351	30	1220	8.5	14.0	9.2	88	--
01...	1353	40	1220	8.4	13.0	8.7	82	--
01...	1355	50	1220	8.4	12.5	8.4	79	--
01...	1357	60	1220	8.3	12.5	8.2	77	--
01...	1359	68	1220	8.3	12.5	8.1	76	280
								140
								88
								15
								140

DATE	SODIUM	AD-	BICAR-	SULFATE	CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	AD-	SORP-	BONATE	DIS-	RIDE,	RIDE,	DIS-	SUM OF	GEN.	GEN.	PHORUS,	DIS-	NESE,
	RATIO	RATIO	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	CONSTITUENTS,	NO2+NO3	TOTAL	TOTAL	(UG/L	DIS-
			AS	AS	AS	AS	AS	(MG/L	(MG/L	(MG/L	(MG/L	AS	SOLVED
			HCO3)	SO4)	CL)	P)	SIO2)	AS N)	AS N)	AS N)	AS P)	FE)	(UG/L
<b>MAR</b>													
01...	3.6	170	130	220	.3	6.2	682	.20	.06	.020	0	0	0
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	0	20
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--	--	--	--	--
01...	3.6	172	130	220	.3	5.3	683	.21	.18	.040	0	50	

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 29 - MARCH 1, 1972--Continued

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,		
		LING	CIFIC				
		DEPTH	PH	DUCT-	CON-	PAR-	DIS-
		(FT)	(MICRO-	(UNITS)	(DEG C)	(SECCHI	SOLVED
			MHOS)			DISK)	(MG/L)
FEB 29...	1300	1.0	1100	8.2	15.0	.30	9.5
29...	1302	5.0	1230	7.9	14.5	--	9.4
29...	1304	10	1230	7.9	14.0	--	9.0
29...	1306	16	1230	7.8	13.5	--	7.6

DATE	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, AMMONIA	PHOS- PHORUS	IRON, DIS- SOLVED	MANGA- NESE, DIS- SOLVED
	(MG/L AS N)	(MG/L AS N)	(MG/L AS P)	(MG/L AS P)	(UG/L AS FE)	(UG/L AS MN)
FEB 29...						
29...	93	.10	.10	.020	0	0
29...	91	--	--	--	--	--
29...	87	--	--	--	--	--
29...	72	.11	.18	.045	0	40

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
		LING	DUCT-				
		DEPTH	(MICRO-	(UNITS)	(DEG C)		
		(FT)	MHOS)				
MAR 01...	1545	1.0	1060	8.5	17.5	9.2	96
01...	1547	5.0	1060	8.5	17.0	9.3	96
01...	1549	10	1060	8.4	16.0	9.3	93
01...	1551	15	1060	8.3	16.0	8.9	89
01...	1553	21	1080	8.2	14.5	5.4	52

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
		LING	DUCT-				
		DEPTH	(MICRO-	(UNITS)	(DEG C)		
		(FT)	MHOS)				
MAR 01...	1615	1.0	1190	8.7	18.0	.61	9.4
01...	1617	10	1180	8.7	17.0	--	9.3
01...	1619	20	1180	8.6	16.5	--	9.3
01...	1621	30	1210	8.5	16.0	--	9.0
01...	1623	40	1280	8.3	14.5	--	7.8
01...	1625	48	1280	8.2	14.0	--	6.4

DATE	HARD- NESS, (MG/L AS CACO <sub>3</sub> )	HARD- NESS, NONCAR- BONATE (MG/L AS CACO <sub>3</sub> )	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L AS HCO <sub>3</sub> )	SULFATE DIS- SOLVED (MG/L AS SO <sub>4</sub> )	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
MAR 01...									
01...	290	130	93	15	130	3.3	194	130	200
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	320	150	100	16	140	3.4	198	140	220

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 29 - MARCH 1, 1972--Continued

## 320122097260901 LAKE WHITNEY SITE FC--Continued

		SOLIDS		NITRO-	NITRO-	PHOS-	IRON,	MANGA-
		FLUO-	SILICA,	SUM OF	GEN,	GEN,	DIS-	NESE,
		RIDE,	DIS-	CONSTIT-	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	PHORUS,	DIS-
		DIS-	SOLVED	TUENTS,	TOTAL	TOTAL	TOTAL	SOLVED
		SOLVED	(MG/L)	DIS-	(MG/L)	(MG/L)	(MG/L)	(UG/L)
DATE		(MG/L)	AS	SOLVED	AS N)	AS N)	AS P)	AS FE)
		DATE	AS P)	SIO <sub>2</sub> )	(MG/L)	AS N)	AS P)	AS MN)
MAR								
01...	.3	5.3		669	.10	.14	.030	0
01...	--	--		--	--	--	--	--
01...	--	--		--	--	--	--	--
01...	--	--		--	--	--	--	0
01...	--	--		--	--	--	--	10
01...	.4	8.3		722	.21	.22	.120	0
								80

## 320124097291101 LAKE WHITNEY SITE GC

		SPE-		TRANS-	
		CIFI	CON-	PAR-	OXYGEN,
		SAMP-	DUCT-	ENCY	DIS-
	TIME	SAMP-	DUCT-	PH	OXYGEN,
DATE	DEPTH	LING	ANCE	TEMPER-	DIS-
	(FT)	(MICRO-	(MHOS)	ATURE,	SOLVED
		(UNITS)	(UNITS)	(DEG C)	(MG/L)
MAR					
01...	1745	1.0	1260	8.5	16.5
01...	1747	10	1280	8.4	16.0
01...	1749	20	1300	8.3	16.0
01...	1751	30	1310	8.0	15.0
01...	1753	41	1280	7.8	13.5

		OXYGEN,		NITRO-	NITRO-	PHOS-	IRON,	MANGA-
		DIS-	SOLVED	GEN,	GEN,	PHORUS,	DIS-	NESE,
		(PER-	(PER-	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	SOLVED	SOLVED
		CENT	CENT	TOTAL	TOTAL	TOTAL	(UG/L	(UG/L
DATE	SATUR-	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	AS FE)	AS MN)
	ATION)	AS N)	AS N)	AS N)	AS P)	AS P)		
MAR								
01...	94	.11		.12	.020		0	0
01...	88	--		--	--		--	--
01...	84	--		--	--		0	0
01...	71	--		--	--		0	30
01...	57	.21		.28	.040		0	90

## 320509097275901 LAKE WHITNEY SITE P12

		SPE-		TRANS-		OXYGEN,
		CIFI	CON-	PAR-	OXYGEN,	DIS-
		SAMP-	DUCT-	ENCY	DIS-	SOLVED
	TIME	SAMP-	DUCT-	PH	OXYGEN,	DIS-
DATE	DEPTH	LING	ANCE	TEMPER-	DIS-	SOLVED
	(FT)	(MICRO-	(MHOS)	ATURE,	SOLVED	SATUR-
		(UNITS)	(UNITS)	(DEG C)	(MG/L)	ATION)
MAR						
01...	1845	1.0	1290	8.5	18.0	.49
01...	1847	5.0	1290	8.5	17.5	--
01...	1849	10	1290	8.4	17.0	--
01...	1851	15	1290	8.1	16.0	--
01...	1853	19	1310	8.0	16.0	--

		HARD-	HARD-	MAGNE-	SODIUM	SODIUM	CHLO-	
		NESS,	NONCAR-	CALCIUM	SILUM,	AD-	RIDE,	
		(MG/L	(MG/L	DIS-	DIS-	SORP-	DIS-	
		AS	AS	SOLVED	SOLVED	TION	SOLVED	
DATE	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CA)	(MG/L	(MG/L	(MG/L	(MG/L	
				AS MG)	AS NA)	RATIO	AS SO <sub>4</sub> )	AS CL)
MAR								
01...	320	150	100	17	140	3.4	209	150
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--

TABLE 6--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 29 - MARCH 1, 1972--Continued

## 320509097275901 LAKE WHITNEY SITE P12--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS,		NITRO- GEN, NO2+NO3 (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	AMMONIA PHORUS, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
			SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS N)	TOTAL (MG/L AS N)						
MAR 01...	.4	4.4	735	.07	.18	.050	0	20		
01...	--	--	--	--	--	--	--	--	--	
01...	--	--	--	--	--	--	--	--	--	
01...	--	--	--	--	--	--	--	--	--	
01...	--	--	--	.11	.30	.100	0	100		

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	(M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
								SPEC- IFIC CON- DUC- TIV- ITY	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
MAR 01...	1930	1.0	1400	8.6	19.0	.61		8.0	85	
01...	1932	5.0	1420	8.5	18.5	--		8.4	89	
01...	1934	10	1400	8.4	18.0	--		8.1	85	
01...	1936	15	1390	8.3	18.0	--		7.9	83	
01...	1938	19	1410	8.2	17.0	--		6.5	67	

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM, DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MC)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
								SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS S)	NATURAL DIS- SOLVED (MG/L AS S)
MAR 01...	340	170	100	20	160	3.8	208	160	250
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--
01...	--	--	--	--	--	--	--	--	--

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS,		NITRO- GEN, NO2+NO3 (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	AMMONIA PHORUS, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
			SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS N)	TOTAL (MG/L AS N)						
MAR 01...	.3	5.1	798	.03	.20	.030	0	20		
01...	--	--	--	--	--	--	--	--	--	
01...	--	--	--	--	--	--	--	--	--	
01...	--	--	--	--	--	--	--	--	0	30
01...	--	--	--	.08	.22	.030	0	60		

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 22, 1972

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				DUCT- ANCE (MICRO- MHOS)				(M)	
<b>MAY</b>									
22...	0830	1.0	1230	8.0	22.5	3.4	--	6.6	75
22...	0832	5.0	1230	8.0	22.5	--	--	6.6	75
22...	0834	10	1250	8.0	22.5	--	--	6.4	73
22...	0836	20	1250	7.9	22.0	--	--	5.4	61
22...	0838	30	1250	7.7	21.5	--	--	4.2	47
22...	0840	40	1250	7.6	21.5	--	--	3.1	35
22...	0842	50	1260	7.5	21.0	--	--	1.5	17
22...	0844	60	1270	7.4	19.0	--	--	.2	2
22...	0846	70	1270	7.4	19.0	--	--	.3	3
22...	0848	80	1280	7.4	18.5	--	--	.3	3
22...	0850	86	1290	7.4	17.5	--	--	.3	3
 <b>HARDNESS</b>									
DATE	HARD- NESS (MG/L AS CACO <sub>3</sub> )	NONCAR- BONATE (MG/L AS CACO <sub>3</sub> )	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L AS HC0 <sub>3</sub> )	SULFATE DIS- SOLVED (MG/L AS SO <sub>4</sub> )	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
<b>MAY</b>									
22...	280	150	84	16	150	3.9	156	140	230
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	300	160	92	16	150	3.8	171	140	240
 <b>FLUORIDE</b>									
DATE	SILICA, DIS- SOLVED (MG/L AS F)	SOLID <sub>S</sub> , DIS- SOLVED (MG/L AS SIO <sub>2</sub> )	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, TOTAL (MG/L AS N)	AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
<b>MAY</b>									
22...	.3	4.9	695	.00	.00	.000	0	0	
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	0	0	
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	.00	.00	.008	0	0
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	40	250
22...	.3	7.5	726	.05	.16	.350	0	490	

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				DUCT- ANCE (MICRO- MHOS)				(M)
<b>MAY</b>								
22...	0900	1.0	1260	8.0	22.5	7.0	--	80
22...	0902	10	1260	8.0	22.5	7.0	--	80
22...	0904	20	1260	7.9	22.0	6.0	--	68
22...	0906	32	1260	7.7	22.0	4.2	--	48

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 22, 1972--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	OXYGEN,	OXYGEN,
			LING	CIFIC		PH	DIS-
			ANCE	DUCT-	WATER	SOLVED	SOLVED
			(MICRO-	(UNITS)	(DEG C)	(MG/L)	(PER-
			MHOS)				CENT
MAY							SATUR-
22...	0930	1.0	1240	8.0	23.5	8.3	ATION)
22...	0932	10	1240	8.0	23.5	8.5	99
22...	0934	20	1250	7.9	22.5	6.8	68
22...	0936	23	1250	7.8	22.5	6.0	77
22...	0938	25	1250	7.6	22.5	4.9	56
22...	0940	30	1260	7.5	22.0	3.6	41
22...	0942	40	1260	7.5	22.0	3.3	38
22...	0944	50	1270	7.3	21.5	1.5	17
22...	0946	60	1270	7.3	20.5	.5	5
22...	0948	70	1280	7.3	18.5	.3	3
22...	0950	80	1290	7.3	18.5	.3	3
22...	0952	85	1290	7.3	18.5	.3	3

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	OXYGEN,	OXYGEN,
			LING	CIFIC		PH	DIS-
			ANCE	DUCT-	WATER	SOLVED	SOLVED
			(MICRO-	(UNITS)	(DEG C)	(MG/L)	(PER-
			MHOS)				CENT
MAY							SATUR-
22...	1025	1.0	1260	8.1	24.5	8.0	ATION)
22...	1027	10	1260	8.1	23.5	8.3	97
22...	1029	20	1260	7.9	23.0	6.6	76
22...	1031	25	1260	7.5	22.5	3.6	41
22...	1033	30	1270	7.5	22.0	3.2	36
22...	1035	40	1270	7.4	22.0	2.5	28
22...	1037	50	1270	7.3	21.5	1.5	17
22...	1039	60	1280	7.3	20.5	.3	3
22...	1041	70	1280	7.3	20.0	.3	3
22...	1043	79	1280	7.3	19.5	.3	3

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	TRANS-	OXYGEN,
			LING	CIFIC		PAR-	DIS-
			ANCE	DUCT-	ENCY	(SECCHI	SOLVED
			(MICRO-	(UNITS)	(DEG C)	(M)	(MG/L)
			MHOS)				SATUR-
MAY							ATION)
22...	1355	1.0	1260	8.2	26.0	1.62	7.9
22...	1357	10	1260	8.1	25.5	--	8.0
22...	1359	20	1260	8.0	25.0	--	6.5
22...	1401	25	1270	7.4	24.0	--	2.9
22...	1403	30	1270	7.4	23.0	--	1.3
22...	1405	40	1270	7.4	22.5	--	1.4
22...	1407	50	1270	7.4	22.0	--	1.4
22...	1409	60	1270	7.4	21.5	--	.9
22...	1411	72	1270	7.4	21.5	--	.4

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS	NONCAR-	DIS-	SIUM,	SODIUM,	AD-	BONATE	DIS-	RIDE,
	(MG/L	BONATE	SOLVED	DIS-	SOLVED	SORP-	(MG/L	SOLVED	SOLVED
	AS	(CACO3)	AS CACO3)	AS CA)	AS MG)	ATION	AS HCO3)	AS SO4)	(MG/L
MAY									AS CL)
22...	270	150	82	16	150	4.0	148	140	240
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	290	150	88	16	150	3.9	168	130	230

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 22, 1972--Continued

315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SOLIDS,	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
			(MG/L)	AS N)	(MG/L)	TOTAL TOTAL (MG/L)	AS P)	AS FE)
<b>MAY</b>								
22...	.3	4.8	699	.00	.00	.000	0	10
22...	--	--	--	--	--	--	--	--
22...	--	--	--	.00	.00	.010	0	10
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	.3	4.8	703	.40	.18	.120	30	630

315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP-	SPE- CIFIC CON-	TRANS-			OXYGEN, DIS- SOLVED (MG/L)
		LING	DUCT- ANCE	PH	TEMPER- ATURE, WATER	ENCY (SECCHI DISK)	
<b>MAY</b>							
22...	1320	1.0	1260	8.1	26.5	.55	7.5
22...	1322	5.0	1260	8.1	26.0	--	7.5
22...	1324	10	1260	8.1	26.0	--	7.3
22...	1326	18	1260	7.7	25.5	--	5.3
<b>OXYGEN.</b>							
DATE	DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)	
DATE	AS N)	AS N)	AS P)	AS FE)	AS MN)		
<b>MAY</b>							
22...	91	.00	.00	.027	0	30	
22...	91	--	--	--	--	--	
22...	89	--	--	--	--	--	
22...	64	.00	.00	.058	10	100	

315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP-	SPE- CIFIC CON-	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		
		DUCT- ANCE	PH	TEMPER- ATURE, WATER	SOLVED (MG/L)	
<b>MAY</b>						
22...	1445	1.0	1250	8.2	26.5	8.0
22...	1447	10	1250	8.2	26.0	8.0
22...	1449	20	1250	8.1	26.0	7.6
22...	1451	25	1250	7.7	25.0	4.8
22...	1453	30	1250	7.4	23.5	1.8
22...	1455	39	1250	7.4	23.0	.6

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 22, 1972--Continued

315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>							
22...	1525	1.0	1280	8.2	26.5	7.8	95
22...	1527	10	1280	8.1	26.0	7.7	94
22...	1529	20	1380	7.5	25.0	4.2	50
22...	1531	25	1410	7.3	24.0	1.3	15
22...	1533	30	1410	7.3	24.0	1.2	14
22...	1535	40	1410	7.3	23.5	.8	9
22...	1537	55	1360	7.3	23.5	.5	6

320011097262201 LAKE WHITNEY SITE F8

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>							
22...	1550	1.0	1280	8.2	27.5	7.9	99
22...	1552	5.0	1280	8.1	27.0	7.8	96
22...	1554	10	1280	8.0	26.5	7.5	91
22...	1556	15	1280	7.8	26.0	6.4	78
22...	1558	20	1280	7.5	25.0	3.3	39
22...	1600	31	1280	7.3	24.0	.5	6

320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>								
22...	1625	1.0	1290	8.2	27.5	.76	8.0	100
22...	1627	10	1290	8.1	27.0	--	7.9	98
22...	1629	15	1300	8.0	26.5	--	7.1	87
22...	1631	20	1340	7.5	25.5	--	4.4	53
22...	1633	25	1450	7.3	25.5	--	2.5	30
22...	1635	30	1580	7.3	24.5	--	1.1	13
22...	1637	44	1460	7.3	23.0	--	.3	3

DATE	HARD- NESS (MG/L AS CACO <sub>3</sub> )	HARD- NESS NONCAR- BONATE (MG/L AS CACO <sub>3</sub> )	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L HCO <sub>3</sub> )	SULFATE DIS- SOLVED (MG/L AS SO <sub>4</sub> )	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
<b>MAY</b>									
22...	280	160	83	17	160	4.2	145	150	240
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	320	180	94	20	170	4.2	163	170	270

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 22, 1972--Continued

320122097260901 LAKE WHITNEY SITE FC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, SI02)	SUM OF DIS- SOLVED (MG/L AS)	SOLIDS,	NITRO- GEN, NO2+NO3	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, DIS- SOLVED (MG/L AS P)	MANGA- NESE, DIS- SOLVED (UG/L AS FE)
				TUENTS, AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS P)	AS MN)	
<b>MAY</b>									
22...	.3	4.4	724	.00	.00	.030	0	0	
22...	--	--	--	--	--	--	--	--	
22...	--	--	--	.00	.00	.030	0	10	
22...	--	--	--	--	--	--	--	--	
22...	--	--	--	--	--	--	--	--	
22...	--	--	--	--	--	--	.40	420	
22...	.3	6.4	814	.00	.39	.080	10	970	

320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER	OXYGEN, DIS- SOLVED (DEG C)	OXYGEN, (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED
				CIPIC		PH	SOLVED (MG/L)	SATUR- ATION)	
<b>MAY</b>									
22...	1800	1.0	1350	8.1	27.0	8.9	110		
22...	1802	10	1370	8.1	27.0	8.7	107		
22...	1804	20	1400	7.7	26.5	6.6	80		
22...	1806	25	1550	7.4	26.0	3.3	40		
22...	1808	30	1780	7.3	25.5	1.7	20		
22...	1810	37	1790	7.3	25.0	1.0	12		

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, (PER- CENT SATUR- ATION)
				CIFIC		PH	(SECCHI DISK)	(MG/L)	SATUR- ATION)
<b>MAY</b>									
22...	1850	1.0	1310	8.4	28.5	.49	9.0	115	
22...	1852	5.0	1320	8.2	27.5	--	8.6	108	
22...	1854	10	1320	7.6	26.5	--	5.0	61	
22...	1856	15	730	7.3	25.5	--	1.5	18	
22...	1858	19	723	7.2	24.5	--	.4	5	

DATE	HARD- NESS, NONCAR- (MG/L AS CACO3)	CALCIUM NONCAR- BONATE (MG/L AS CACO3)	HARD- NESS, DIS- SOLVED (MG/L AS CA)	SUM OF DIS- SOLVED (MG/L AS MG)	MAGNE- SIUM, SOLVED (MG/L AS MG)	SODIUM, SOLVED (MG/L AS NA)	AD- SORP- TION RATIO	SODIUM BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
				DIS- SOLVED (MG/L AS CACO3)	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	DIS- SOLVED (MG/L AS P)	DIS- SOLVED (MG/L AS SO4)	DIS- SOLVED (MG/L AS CL)	
<b>MAY</b>										
22...	280	160	82	18	160	4.2	140	.160	240	
22...	--	--	--	--	--	--	--	--	--	
22...	--	--	--	--	--	--	--	--	--	
22...	--	--	--	--	--	--	--	--	--	
22...	210	56	70	9.6	63	1.9	193	.62	92	

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, SI02)	SUM OF DIS- SOLVED (MG/L AS)	SOLIDS,	NITRO- GEN, NO2+NO3	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, DIS- SOLVED (MG/L AS P)	MANGA- NESE, DIS- SOLVED (UG/L AS FE)
				TUENTS, AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS P)	AS MN)	
<b>MAY</b>									
22...	.3	4.4	735	.00	.00	.070	0	140	
22...	--	--	--	--	--	--	--	--	
22...	--	--	--	--	--	--	--	--	
22...	--	--	--	--	--	--	--	--	
22...	.3	--	402	.00	.60	.860	120	670	

TABLE 7--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 22, 1972--Continued

320721097293301 LAKE WHITNEY SITE P14

		SPE- CIFIC CON-		TRANS- PAR- ENCY	OXYGEN, (PER- CENT SOLVED)	OXYGEN, DIS- CENT SOLVED)		
DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	(SECCHI DISK) (M)	SOLVED (MG/L)	SATUR- ATION)
<b>MAY</b>								
22...	1940	1.0	1880	8.2	28.5	.46	7.4	95
22...	1942	10	1880	8.1	28.0	--	7.3	92
22...	1944	15	1880	7.9	27.5	--	5.6	70
22...	1946	19	1880	7.9	27.5	--	5.3	66
		HARD- NESS (MG/L)	HARD- NESS NONCAR- BONATE (MG/L)	CALCIUM SOLVED (MG/L)	MAGNE- SIUM, DIS- SOLVED (MG/L)	SODIUM, DIS- SOLVED (MG/L)	SODIUM AD- SORP- TION RATIO	CHLO- RIDE, DIS- SOLVED (MG/L)
DATE		CACO <sub>3</sub>	CACO <sub>3</sub>	AS CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	AS CL)
<b>MAY</b>								
22...	380	260	110	24	250	5.6	145	260
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
		FLUO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SOLIDS, DIS- SOLVED (MG/L)	SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> TOTAL (MG/L)	NITRO- GEN, AMMONIA TOTAL (MG/L)	IRON, PHOS- PHORUS, TOTAL (MG/L)
DATE		AS F)	SIO <sub>2</sub> )	(MG/L)	(MG/L)	AS N)	AS N)	AS P)
<b>MAY</b>								
22...	.3	4.0	1100	.00	.00	.020	0	20
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	.00	.00	.040	0	30

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 28-29, 1972

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, OXYGEN, (PER- CENT SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				DUCT- ANCE				(M)	(MG/L)
<b>SEP</b>									
28...	0830	1.0	1900	7.9	26.5	1.89		4.5	55
28...	0832	10	1900	7.9	26.5	--		4.4	54
28...	0834	20	1900	7.8	26.5	--		4.3	52
28...	0836	30	1900	7.8	26.5	--		4.3	58
28...	0838	40	1900	7.8	26.5	--		4.0	49
28...	0840	45	2030	7.6	26.5	--		2.0	24
28...	0842	50	2160	7.5	26.0	--		.1	1
28...	0844	60	2030	7.4	25.5	--		.1	1
28...	0846	70	1650	7.3	23.5	--		.1	1
28...	0848	80	1330	7.2	21.5	--		.1	1
28...	0850	90	1280	7.0	20.5	--		.1	1

DATE	HARD- NESS (MG/L AS CACO <sub>3</sub> )	HARD- NESS NONCAR- BONATE (MG/L AS CACO <sub>3</sub> )	CALCIUM DIS- SOLVED (MG/L AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS Mg)	SODIUM, DIS- SOLVED (MG/L AS Na)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L AS HCO <sub>3</sub> )	SULFATE DIS- SOLVED (MG/L AS SO <sub>4</sub> )	CHLO- RIDE, DIS- SOLVED (MG/L AS Cl)
				AS CACO <sub>3</sub> )	AS Ca)	AS Mg)	AS Na)		
<b>SEP</b>									
28...	350	250	100	24	250	5.8	128	230	400
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	380	270	110	26	310	6.9	132	270	460
28...	--	--	--	--	--	--	--	--	--
28...	310	180	92	20	--	--	160	180	320
28...	--	--	--	--	--	--	--	--	--
28...	280	120	84	16	150	3.9	194	110	240

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SiO <sub>2</sub> )	SOLIDS,	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, IRON, TOTAL (MG/L AS P)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
			(MG/L AS SiO <sub>2</sub> )	(MG/L)	(MG/L AS N)	(MG/L AS N)	(MG/L AS P)	(UG/L AS FE)
<b>SEP</b>								
28...	.4	4.6	1080	.08	.00	.030	0	0
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	0	0
28...	--	--	--	--	--	--	--	--
28...	--	--	--	.05	.00	.050	20	120
28...	--	--	--	--	--	--	--	--
28...	.4	6.4	1250	.10	.25	.060	100	1200
28...	--	--	--	--	--	--	--	--
28...	.3	8.4	--	--	--	--	390	1300
28...	--	--	--	--	--	--	--	--
28...	.3	12	714	.05	1.8	.440	200	1100

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				DUCT- ANCE				(MG/L)
<b>SEP</b>								
28...	0900	1.0	1900	7.9	26.5	4.6	56	
28...	0902	10	1900	7.9	26.5	4.4	54	
28...	0904	20	1900	7.9	26.5	4.4	54	
28...	0906	30	1900	7.9	26.5	4.4	54	
28...	0908	37	1900	7.9	26.5	4.4	54	

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 28-29, 1972--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	CON-	DIS-	SOLVED
		DEPTH	(MICRO-	PH	TEMPER-	OXYGEN,	
		(FT)	MHOS)	(UNITS)	ATURE,	(PER-	
					WATER	CENT	
					(DEG C)	SATUR-	
						ATION)	
SEP							
28...	0930	1.0	1900	7.9	26.5	5.5	67
28...	0932	10	1900	7.9	26.5	5.4	66
28...	0934	20	1900	7.8	26.5	5.3	65
28...	0936	30	1900	7.8	26.5	5.2	63
28...	0938	40	1920	7.8	26.5	4.8	59
28...	0940	50	2010	7.7	26.5	1.9	23
28...	0942	60	2170	7.6	26.5	.1	1
28...	0944	70	2110	7.5	24.5	.1	1
28...	0946	80	1380	7.3	22.5	.1	1
28...	0948	86	1350	7.3	21.5	.1	1

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	CON-	DIS-	SOLVED
		DEPTH	(MICRO-	PH	TEMPER-	OXYGEN,	
		(FT)	MHOS)	(UNITS)	ATURE,	(PER-	
					WATER	CENT	
					(DEG C)	SATUR-	
						ATION)	
SEP							
28...	1025	1.0	1900	7.9	26.5	6.3	77
28...	1027	10	1900	7.9	26.5	6.2	76
28...	1029	20	1900	7.9	26.5	6.0	73
28...	1031	30	1900	7.9	26.5	5.8	71
28...	1033	40	1900	7.8	26.5	5.4	66
28...	1035	50	2090	7.6	26.5	3.5	43
28...	1037	60	2170	7.6	26.5	3.0	37
28...	1039	70	2140	7.3	25.5	.1	1
28...	1041	81	1600	7.2	23.5	.1	1

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,	
		LING	CIFIC	DUCT-	CON-	PAR-	DIS-	SOLVED
		DEPTH	(MICRO-	PH	TEMPER-	(SECCHI	OXYGEN,	
		(FT)	MHOS)	(UNITS)	ATURE,	DIS-	(PER-	
					WATER	DIS-	CENT	
					(DEG C)	SOLED	SATUR-	
						(MG/L)	ATION)	
SEP								
28...	1350	1.0	1910	7.8	27.0	1.16	7.4	91
28...	1352	10	1930	7.8	27.0	--	7.1	88
28...	1354	20	2000	7.8	26.5	--	6.6	80
28...	1356	30	2040	7.6	26.5	--	5.2	63
28...	1358	40	2140	7.6	26.5	--	4.8	59
28...	1400	50	2490	7.4	26.0	--	3.9	48
28...	1402	60	2540	7.3	26.0	--	3.5	43
28...	1404	69	2550	7.3	26.0	--	3.3	40

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	SULFATE	CHLO-	
	NESS	NONCAR-	BONATE	SILIC.	SODIUM,	AD-	BICAR-	RIDE,	
	(MG/L	(MG/L	DIS-	DIS-	SORP-	BONATE	DIS-	DIS-	
	AS	(MG/L	SOLVED	SOLVED	TION	(MG/L	SOLVED	SOLVED	
	CACO <sub>3</sub> )	AS CACO <sub>3</sub> )	AS CA)	AS MG)	(MG/L	AS NA)	(MG/L	(MG/L	
SEP									
28...	350	240	100	24	260	6.1	130	240	400
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	490	370	140	32	360	7.1	152	350	560

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 28-29, 1972--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	SOLIDS,		(MG/L AS F)	SILICA, SIO <sub>2</sub> )	SUM OF DIS-SOLVED (MG/L AS	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO-GEN, AMMONIA	PHOS-PHORUS,	IRON, (MG/L AS P)	MANCA-NESE, (UG/L AS FE)	DIS-SOLVED (UG/L AS MN)
	DIS-	SOLVED (MG/L AS N)									
SEP 28...	.4	5.5	1090		.03	.00	.044		0	0	
28...	--	--	--		--	--	--		--	--	
28...	--	--	--		--	--	--		0	0	
28...	--	--	--		--	--	--		--	--	
28...	--	--	--		.03	.00	.080		20	0	
28...	--	--	--		--	--	--		--	--	
28...	--	--	--		--	--	--		--	--	
28...	.4	7.7	1520		.02	.00	.083		20	80	

## 315729097253701 LAKE WHITNEY SITE PS

DATE	TIME	SPE-CIFIC CON-		PH	TEMPER-ATURE, WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK)		OXYGEN, (DIS-SOLVED MG/L)
		SAMP-LING	DUCT-ANCE			(MICRO-MHOS)	(UNITS)	
SEP 28...	1320	1.0	1860	8.0	27.0	.94	7.7	
28...	1322	10	1860	8.0	27.0	--	7.6	
28...	1324	19	1860	7.8	26.5	--	6.8	
DATE	SATUR-ATION)	DIS-SOLVED (PER-CENT)	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO-GEN, AMMONIA	PHOS-PHORUS,	IRON, (MG/L AS P)	MANGANESE, (UG/L AS FE)	DIS-SOLVED (UG/L AS MN)
SEP 28...	95	.03	.00	.064		30	0	
28...	94	--	--	--		--	--	
28...	83	.01	.00	.060		60	10	

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SPE-CIFIC CON-		PH	TEMPER-ATURE, WATER (DEG C)	OXYGEN, (DIS-SOLVED MG/L)		OXYGEN, (PER-CENT SATUR-ATION)
		SAMP-LING	DUCT-ANCE			(MICRO-MHOS)	(UNITS)	
SEP 28...	1440	1.0	1990	8.0	27.5	7.7	96	
28...	1442	10	1990	7.9	27.5	7.3	91	
28...	1444	20	1990	7.7	27.0	6.5	80	
28...	1446	30	2140	7.3	27.0	3.0	37	
28...	1448	40	2310	7.2	27.0	1.5	19	

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 28-29, 1972--Continued

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	CON-	DIS-	SOLVED
		ANCE	PH	TEMPER-	OXYGEN,	(PER-	
		(MICRO-		ATURE,	DIS-	CENT	
		MHOS)	(UNITS)	WATER	SOLVED	SATUR-	
				(DEG C)	(MG/L)	ATION)	
SEP							
29...	0830	1.0	1960	8.0	26.5	7.6	93
29...	0832	10	1960	8.0	26.5	7.5	91
29...	0834	20	1960	7.9	26.5	7.3	89
29...	0836	30	2010	7.6	26.5	6.5	79
29...	0838	35	2280	7.4	26.5	5.1	62
29...	0840	40	2360	7.3	26.0	4.6	56
29...	0842	50	2560	7.1	25.5	3.7	45
29...	0844	57	2560	7.0	25.5	3.7	45

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	CON-	DIS-	SOLVED
		ANCE	PH	TEMPER-	OXYGEN,	(PER-	
		(MICRO-		ATURE,	DIS-	CENT	
		MHOS)	(UNITS)	WATER	SOLVED	SATUR-	
				(DEG C)	(MG/L)	ATION)	
SEP							
29...	0900	1.0	1970	8.1	26.5	7.8	95
29...	0902	10	1970	8.0	26.5	7.6	93
29...	0904	20	1930	8.0	26.5	6.9	84
29...	0906	31	1930	7.9	26.0	5.6	68

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,	
		LING	CIFIC	DUCT-	CON-	PAR-	DIS-	SOLVED
		ANCE	PH	TEMPER-	ENCY	(SECCHI	(PER-	
		(MICRO-		ATURE,	(SECCHI	DISK)	CENT	
		MHOS)	(UNITS)	WATER	(M)	SOLVED	SATUR-	
				(DEG C)		(MG/L)	ATION)	
SEP								
29...	0930	1.0	1970	8.1	27.0	.94	7.7	95
29...	0932	10	1970	8.1	27.0	--	7.6	94
29...	0934	20	2020	7.9	26.5	--	6.6	80
29...	0936	25	2280	7.7	26.5	--	5.4	66
29...	0938	30	2500	7.6	26.0	--	4.9	60
29...	0940	35	2550	7.6	26.0	--	4.6	56
29...	0942	40	2610	7.4	25.5	--	3.4	41
29...	0944	47	2610	7.4	25.5	--	3.4	41

DATE	HARD-	HARD-	CALCIUM	MAINE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS	NONCAR-	DIS-	SUIM,	SODIUM.	AD-	BONATE	DIS-	RIDE,
	(MG/L	AS	SOLVED	DIS-	SORP-	(MG/L	SOLVED	SOLVED	DIS-
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CA)	SOLVED	TION	AS NA)	AS	(MG/L	SOLVED
				(MG/L	RATIO		HCO <sub>3</sub> )	AS SO <sub>4</sub> )	(MG/L
				AS MG)					AS CL)
SEP									
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	--	--	--	--	--	--	--	--	--
29...	480	370	140	32	370	7.3	128	350	570

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 28-29, 1972--Continued

## 320122097260901 LAKE WHITNEY SITE FC--Continued

DATE			SOLIDS,		NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	FLUO-	SILICA,	SUM OF	GEN.,	GEN.	TOTAL		DIS-	NESE,
RIDE,	DIS-	CONSTI-	NO <sub>2</sub> +NO <sub>3</sub>	TOTAL	TOTAL	TOTAL	PHORUS,	SOLVED	DIS-
DIS-	SOLVED	TUENTS,	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)
SOLVED	(MG/L)	AS	SOLVED	AS N)	AS N)	AS P)	AS FE)	AS MN)	
DATE	AS F)	SIO <sub>2</sub> )	(MG/L)	AS N)	AS N)	AS P)	AS FE)	AS MN)	
SEP									
29...	--	--	--	.02	.00	.040	0	0	
29...	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	--	
29...	--	--	--	.04	.00	.060	0	10	
29...	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	--	
29...	.4	6.1	1530	.04	.00	.090	40	120	

## 320124097291101 LAKE WHITNEY SITE GC

DATE			SPE-		OXYGEN,		DIS-
	CIFIC	CON-	DUCT-	TEMPER-	OXYGEN,	(PER-	
TIME	SAMP-	LING	ANCE	PH	ATURE,	DIS-	CENT
DEPTH	(MICRO-	(FT)	MICRO-	(MHOS)	(DEG C)	SOLVED	SATUR-
DATE	(MG/L)	(MHOS)	(UNITS)	(UNITS)	(DEG C)	(MG/L)	ATION)
SEP							
29...	1045	1.0	2070	8.1	27.0	7.7	95
29...	1047	10	2110	8.1	26.5	7.3	89
29...	1049	20	2350	8.0	26.5	6.6	80
29...	1051	30	2590	7.6	26.0	4.4	54
29...	1053	49	2610	7.5	26.0	3.0	37

## 320509097275901 LAKE WHITNEY SITE P12

DATE			SPE-		TRANS-		OXYGEN,	DIS-
	CIFIC	CON-	DUCT-	PH	TEMPER-	PAR-	SOLVED	
TIME	SAMP-	LING	ANCE	(MICRO-	ATURE,	ENCY	OXYGEN,	(PER-
DEPTH	(FT)	(FT)	(MICRO-	(MHOS)	(DEG C)	(SECCHI	(MG/L)	CENT
DATE	(MG/L)	(MG/L)	(UNITS)	(UNITS)	(DEG C)	(DISK)	(MG/L)	SATUR-
SEP								
29...	1130	1.0	2570	8.2	26.5	.76	8.0	98
29...	1132	10	2570	8.1	26.5	--	7.3	89
29...	1134	15	2550	7.8	26.5	--	5.3	65
29...	1136	19	2540	7.3	26.0	--	1.1	13

DATE			HARD-		MACNE-		SODIUM	BICAR-	SULFATE	CHLO-
	HARD-	NESS,	CALCIUM	SIUM,	SODIUM,	DIS-	SORP-	BONATE	DIS-	RIDE,
(MG/L)	NONCAR-	DIS-	DIS-	SOLVED	SOLVED	SOLVED	TION	(MG/L)	SOLVED	DIS-
AS	(MG/L)	(MG/L)	(MG/L)	AS CA)	AS MG)	AS NA)	(MG/L)	AS	(MG/L)	(MG/L)
DATE	CACO <sub>3</sub> )	CACO <sub>3</sub> )	(AS CA)	AS MG)	AS NA)	AS P)	HCO <sub>3</sub> )	AS SO <sub>4</sub> )	AS SO <sub>4</sub> )	AS CL)
SEP										
29...	460	360	130	31	360	7.4	122	350	560	
29...	--	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	--	--	

DATE			SOLIDS,		NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	FLUO-	SILICA,	SUM OF	GEN.,	GEN.	TOTAL		DIS-	NESE,
RIDE,	DIS-	CONSTI-	NO <sub>2</sub> +NO <sub>3</sub>	TOTAL	TOTAL	TOTAL	PHORUS,	SOLVED	DIS-
DIS-	SOLVED	TUENTS,	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(UG/L)	(UG/L)
SOLVED	(MG/L)	AS	SOLVED	AS N)	AS N)	AS P)	AS FE)	AS MN)	
DATE	AS F)	SIO <sub>2</sub> )	(MG/L)	AS N)	AS N)	AS P)	AS FE)	AS MN)	
SEP									
29...	.4	5.7	1500	.04	.00	.086	0	0	
29...	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	--	
29...	--	--	--	.05	.00	.110	20	240	

TABLE 8--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 28-29, 1972--Continued

320721097293301 LAKE WHITNEY SITE P14

		SPE-	CIFIC	TRANS-	OXYGEN,					
		SAMP-	DUCT-	PAR-	DIS-					
		LING	ANCE	ENCY	SOLVED					
DATE	TIME	DEPTH (FT)	(MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	(SECCHI DISK)	OXYGEN, (PER- CENT SOLVED (MG/L))			
SEP 29...	1240	1.0	2660	8.2	27.5	.67	8.2	102		
29...	1242	10	2660	8.1	27.0	--	7.6	95		
29...	1244	20	2660	7.7	26.5	--	4.4	54		
		HARD- NESS (MG/L)	HARD- NESS NONCAR- BONATE (MG/L)	CALCIUM DIS- SOLVED (MG/L)	MAGNE- SIUM DIS- SOLVED (MG/L)	SODIUM DIS- SOLVED (MG/L)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L) AS HCO3)	SULFATE DIS- SOLVED (MG/L) AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL)
DATE	CACO3	CACO3	AS CACO3)	AS CA)	AS MG)	AS NA)				
SEP 29...	480	380	140	33	380	7.5	116	360	580	
29...	--	--	--	--	--	--	--	--	--	
29...	--	--	--	--	--	--	--	--	--	
		FLUO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (AS F)	SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	SOLID, NO2+NO3 DIS- SOLVED (MG/L)	NITRO- GEN, TOTAL (MG/L)	NITRO- GEN, TOTAL (MG/L)	PHOS- PHORUS, TOTAL (MG/L) AS P)	IRON, DIS- SOLVED (UG/L) AS FE)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN)
DATE		AS	SIO2)	(MG/L)	AS N)	AS N)				
SEP 29...	.4	5.1	1550	.02	.00	.070	0	0		
29...	--	--	--	--	--	--	--	--		
29...	--	--	--	.01	.00	.070	20	240		

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 19, 1973

FT. = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	
							DIS-	SOLVED
		DEPTH	(MICRO-	(UNITS)	WATER	ENCY	OXYGEN,	(PER-
		(FT)	MHOS)		(DEG C)	(SECCHI	DIS-	CENT
						DISK)	SOLVED	SATUR-
						(M)	(MG/L)	ATION)
<b>JAN</b>								
19...	0830	1.0	2300	8.2	7.0	2.93	10.8	89
19...	0832	10	2310	8.2	7.0	--	10.6	88
19...	0834	20	2310	8.2	7.0	--	10.5	87
19...	0836	30	2310	8.2	7.0	--	10.5	87
19...	0838	40	2310	8.2	6.5	--	10.3	84
19...	0840	50	2360	8.1	6.0	--	10.1	81
19...	0842	60	2430	8.0	6.0	--	9.7	78
19...	0844	70	2490	8.0	6.0	--	9.7	78
19...	0846	80	2490	8.0	6.0	--	9.7	78
19...	0848	90	2490	7.9	6.0	--	9.7	78
19...	0850	95	2490	7.8	6.0	--	9.7	78
 <b>HARD-</b>								
NESS,	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
(MG/L	NESS,	NONCAR-	SOLVED	DIS-	DIS-	BONATE	DIS-	RIDE,
AS	CACO <sub>3</sub> )	(CACO <sub>3</sub> )	SOLVED	SOLVED	SOLVED	(MG/L	SOLVED	DIS-
		(MG/L	(MG/L	(MG/L	(MG/L	AS	(MG/L	SOLVED
DATE	CACO <sub>3</sub> )	AS CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	HCO <sub>3</sub> )	AS SO <sub>4</sub> )	(MG/L
								AS CL)
<b>JAN</b>								
19...	430	310	130	28	330	6.8	156	300
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	470	340	140	29	360	7.2	158	340
 <b>FLUO-</b>								
RIDE,	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
DIS-	DIS-	CONSTI-	GEN-	GEN-	PHORUS,	DIS-	NESE,	
SOLVED	SOLVED	TUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	SOLVED	SOLVED	
(MG/L	(MG/L	DIS-	DIS-	TOTAL	(MG/L	(UG/L	DIS-	
AS	AS	SOLVED	SOLVED	(MG/L	AS N)	AS FE)	SOLVED	
DATE	AS F)	SIO <sub>2</sub> )	(MG/L)	AS N)	AS P)	(UG/L	SOLVED	
								AS MN)
<b>JAN</b>								
19...	.3	5.4	1370	.00	.07	.000	10	0
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	20	0
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	.3	5.9	1480	.00	.15	.048	40	50

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	
							DIS-	SOLVED
		DEPTH	(MICRO-	(UNITS)	WATER	ENCY	OXYGEN,	(PER-
		(FT)	MHOS)		(DEG C)	(SECCHI	DIS-	CENT
						DISK)	SOLVED	SATUR-
						(M)	(MG/L)	ATION)
<b>JAN</b>								
19...	0915	1.0	2310	8.2	7.0	--	10.5	87
19...	0917	10	2310	8.2	7.0	--	10.5	87
19...	0919	20	2310	8.2	7.0	--	10.5	87
19...	0921	30	2310	8.2	7.0	--	10.4	86
19...	0923	40	2310	8.2	6.5	--	10.3	84
19...	0925	50	2360	8.2	6.0	--	10.1	81

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 19, 1973--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	WATER,	DIS-
		(MICRO-	(MHOS)	(UNITS)	(DEG C)	SOLVED	SOLVED
<b>JAN</b>							
19...	1000	1.0	2250	8.2	7.0	10.9	89
19...	1002	10	2250	8.2	7.0	10.6	87
19...	1004	20	2250	8.2	7.0	10.5	86
19...	1006	30	2250	8.2	6.5	10.4	84
19...	1008	40	2250	8.1	6.5	10.2	82
19...	1010	50	2300	8.1	6.0	9.9	79
19...	1012	60	2400	8.1	6.0	9.8	79
19...	1014	70	2500	8.0	5.5	9.7	78
19...	1016	80	2500	7.9	5.5	9.7	78
19...	1018	93	2580	7.9	5.5	9.7	78

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	WATER,	DIS-
		(MICRO-	(MHOS)	(UNITS)	(DEG C)	SOLVED	SOLVED
<b>JAN</b>							
19...	1035	1.0	2250	8.2	7.0	10.9	89
19...	1037	10	2250	8.2	7.0	10.6	87
19...	1039	20	2250	8.2	7.0	10.5	86
19...	1041	30	2250	8.2	6.5	10.4	84
19...	1043	40	2250	8.1	6.5	10.2	82
19...	1045	50	2300	8.1	6.0	9.9	79
19...	1047	60	2400	8.1	6.0	9.8	79
19...	1049	70	2500	8.0	5.5	9.7	78
19...	1051	80	2500	7.9	5.5	9.7	78
19...	1053	87	2580	7.9	5.5	9.7	78

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	OXYGEN;
		LING	ANCE		ATURE,	PAR-	OXYGEN,	DIS-
		(MICRO-	(MHOS)	(UNITS)	(DEG C)	ENCY	(SECCHI	SOLVED
<b>JAN</b>								
19...	1140	1.0	2310	8.3	8.5	2.32	11.1	95
19...	1142	10	2320	8.3	8.5	--	10.9	93
19...	1144	20	2360	8.3	8.0	--	10.8	92
19...	1146	30	2360	8.3	7.5	--	10.5	88
19...	1148	40	2510	8.2	7.0	--	10.1	83
19...	1150	50	2670	8.1	6.5	--	10.0	81
19...	1152	60	2830	8.1	6.0	--	9.9	80
19...	1154	70	2910	8.1	5.5	--	9.8	78
19...	1156	75	2920	8.1	5.5	--	9.8	78

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS,	NONCAR-	DIS-	SIUM,	SODIUM,	AD-	BONATE	DIS-	RIDE,
	(MG/L	AS	SOLVED	DIS-	SOLVED	SORP-	SOLVED	BONATE	DIS-
	AS	(MG/L	(MG/L	(MG/L	(MG/L	TION	(MG/L	SOLVED	SOLVED
	CACO3)	CACO3)	AS CA)	AS MC)	AS NA)	RATIO	AS	(MG/L	(MG/L
							HCO3)	AS SO4)	AS CL)
<b>JAN</b>									
19...	430	300	130	27	330	6.9	156	310	500
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	530	390	160	30	440	8.4	166	410	660

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 19, 1973--Continued

## 315722097240201 LAKE WHITNEY SITE DG--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS)	SUM OF CONSTI- TUENTS, (MG/L AS)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	NITRO- PHOS- PHORUS, (MG/L AS P)	IRON, DIS- SOLVED (MG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
<b>JAN</b>								
19...	.3	5.4	1370	.00	.10	.008	20	0
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	20	0
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	.3	6.1	1800	.03	.12	.018	100	30

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- DUC- TANCE (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)
<b>JAN</b>								
19...	1115	1.0	2320	8.3	8.5	2.04	10.9	
19...	1117	10	2320	8.3	8.0	--	10.7	
19...	1119	20	2320	8.2	7.5	--	9.9	
19...	1121	32	2560	7.9	6.5	--	9.5	
<b>OXYGEN,</b>								
DATE	ATION)	DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> (TOTAL TOTAL (MG/L AS N))	NITRO- GEN, AMMONIA (MG/L AS N)	NITRO- PHOS- PHORUS, (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
19...	93	.00	.00	.000	.000	20	0	
19...	91	--	--	--	--	--	--	
19...	83	--	--	--	--	--	--	
19...	77	.00	.13	.018	.018	20	40	

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- DUC- TANCE (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
<b>JAN</b>								
19...	1225	1.0	2320	8.2	9.0	10.9	95	
19...	1227	10	2320	8.2	8.5	10.7	91	
19...	1229	20	2350	8.2	8.0	10.5	89	
19...	1231	30	2350	8.2	8.0	10.3	87	
19...	1233	40	2400	8.2	8.0	9.5	81	
19...	1235	47	2450	7.9	7.5	9.5	80	

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 19, 1973--Continued

315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	DIS-
		DEPTH	CON-	ANCE	ATURE,	DIS-	SOLVED
		(FT)	(MICRO-	(MHOS)	(DEG C)	(MG/L)	(PER-
			MHOS)	(UNITS)			CENT
JAN							SATUR-
19...	1300	1.0	2400	8.5	8.5	11.1	ATION)
19...	1302	10	2400	8.5	8.5	10.9	
19...	1304	20	2500	8.5	8.5	10.7	
19...	1306	30	2600	8.4	8.0	10.3	
19...	1308	40	2800	8.3	7.0	10.1	
19...	1310	50	3000	8.3	6.0	10.1	
19...	1312	64	3100	8.2	5.5	10.1	

320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	DIS-
		DEPTH	CON-	ANCE	ATURE,	DIS-	SOLVED
		(FT)	(MICRO-	(MHOS)	(DEG C)	(MG/L)	(PER-
			MHOS)	(UNITS)			CENT
JAN							SATUR-
19...	1335	1.0	2300	8.3	9.0	10.8	ATION)
19...	1337	10	2400	8.3	8.0	10.1	
19...	1339	20	2400	8.3	7.5	9.7	
19...	1341	26	2490	8.1	7.5	9.4	

320122097260901 LAKE WHITNEY SITE PC

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,
		LING	CIFIC	DUCT-	PH	TEMPER-	DIS-
		DEPTH	CON-	ANCE	ATURE,	(SECCHI	SOLVED
		(FT)	(MICRO-	(MHOS)	(DEG C)	(DISK)	(PER-
			MHOS)	(UNITS)		(M)	CENT
JAN							SATUR-
19...	1400	1.0	2460	8.4	9.0	2.29	ATION)
19...	1402	10	2460	8.4	8.5	--	
19...	1404	20	2560	8.4	8.0	--	
19...	1406	30	2670	8.3	7.5	--	
19...	1408	40	2920	8.3	6.0	--	
19...	1410	51	3210	8.1	5.5	--	

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS,	NESS,	DIS-	SILIUM	SODIUM,	AD-	BONATE	DIS-	RIDE,
	NONCAR-	BONATE	SOLVED	DIS-	SOLVED	SOLVED	SOLVED	SOLVED	DIS-
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
	AS	AS	AS	AS CA)	AS MC)	AS NA)	AS HC03)	AS SO4)	AS CL)
	CACO3)	CACO3)	AS CACO3)	AS CA)	AS MC)	AS NA)			
JAN									
19...	460	330	140	28	350	7.1	160	330	530
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	580	450	180	34	480	8.6	162	460	720

DATE	FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	DIS-	DIS-	CONSTI-	GEN,	GEN,	PHORUS,	DIS-	NESE,
	SOLVED	SOLVED	TUENTS,	NO2+NO3	AMMONIA	TOTAL	SOLVED	DIS-
	(MG/L)	(MG/L)	DIS-	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)
	AS	AS	SOLVED	AS N)	AS N)	AS P)	AS FE)	AS MN)
	AS F)	SIO2)	(MG/L)					
JAN								
19...	.3	5.6	1460	.00	.08	.010	10	0
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	30	0
19...	--	--	--	--	--	--	--	--
19...	.3	6.5	1950	.00	.15	.010	30	20

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 19, 1973--Continued

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	DIS-	DIS-
		DEPTH	(MICRO-	(UNITS)	WATER	SOLVED	SOLVED
		(FT)	MHOS)		(DEG C)	(MG/L)	(PER-
JAN							SATUR-
19...	1430	1.0	2640	8.3	9.0	10.7	ATION)
19...	1432	10	2640	8.3	9.0	10.6	92
19...	1434	20	2700	8.3	7.5	10.5	88
19...	1436	30	2800	8.2	7.0	10.5	87
19...	1438	40	2900	8.2	6.5	10.5	85
19...	1440	45	3100	8.1	6.5	10.5	85

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,
		LING	ANCE		ATURE,	PAR-	DIS-
		DEPTH	(MICRO-	(UNITS)	WATER	ENCY	SOLVED
		(FT)	MHOS)		(DEG C)	(SECCHI	(PER-
JAN						DISK)	SATUR-
19...	1455	1.0	2470	8.2	11.0	(M)	ATION)
19...	1457	10	2700	8.2	8.5	--	10.5
19...	1459	24	3070	8.1	7.5	--	9.9
							83
HARD-	HARD-	CALCIUM	MAGNE-		SODIUM		CHLO-
NESS,	NESS,	NONCAR-	SIUM,	SODIUM,	AD-	BICAR-	RIDE,
(MG/L)	(MG/L)	DIS-	DIS-	DIS-	SORP-	BONATE	DIS-
AS	AS	BONATE	SOLVED	SOLVED	TION	(MC/L	SOLVED
(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	RATIO	AS	(MG/L
DATE	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	HC03)	(MC/L
						AS SO <sub>4</sub> )	AS CL)
JAN							
19...	480	320	150	26	350	6.9	188
19...	--	--	--	--	--	--	330
19...	--	--	--	--	--	--	520
FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
RIDE,	DIS-	CONSTI-	GEN,	GEN,	PHORUS,	DIS-	NESE,
DIS-	SOLVED	TUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	TOTAL	TOTAL	SOLVED	DIS-
SOLVED	(MG/L	DIS-	(MG/L	(MG/L	(MG/L	(UG/L	SOLVED
(MG/L)	AS F)	AS SIO <sub>2</sub> )	AS N)	AS N)	AS P)	AS FE)	(UG/L
DATE							AS MN)
JAN							
19...	.3	5.7	1470	.41	.21	.100	20
19...	--	--	--	--	--	--	--
19...	--	--	--	.02	.10	.020	20
							30

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,
		LING	ANCE		ATURE,	PAR-	DIS-
		DEPTH	(MICRO-	(UNITS)	WATER	ENCY	SOLVED
		(FT)	MHOS)		(DEG C)	(SECCHI	(PER-
JAN						DISK)	SATUR-
19...	1520	1.0	3020	8.3	8.5	1.65	ATION)
19...	1522	5.0	3020	8.3	8.5	--	11.1
19...	1524	10	3020	8.3	8.5	--	95
19...	1526	15	3050	8.2	8.5	--	11.1
19...	1528	20	3120	8.2	8.0	--	95
19...	1530	25	3230	8.2	7.0	--	93
							91

TABLE 9--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 19, 1973--Continued

320721097293301 LAKE WHITNEY SITE P14--Continued

DATE	HARD-NESS (MG/L) AS CACO <sub>3</sub> )	HARD-NESS, NONCAR-BONATE (MG/L) AS CACO <sub>3</sub> )	CALCIUM (MG/L) AS CA)	MAGNE-SIUM, DIS-SOLVED (MG/L) AS MG)	SODIUM, DIS-SOLVED (MG/L) AS NA)	SODIUM ADSORP-TION (MG/L) RATIO	BICAR-BONATE SOLVED AS HCO <sub>3</sub> )	SULFATE DIS-SOLVED (MG/L) AS SO <sub>4</sub> )	CHLO-RIDE, DIS-SOLVED (MG/L) AS CL)
JAN 19...	550	420	170	33	440	8.1	166	420	670
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--	--
19...	580	450	180	34	480	8.6	164	450	730

DATE	FLUO-RIDE, DIS-SOLVED (MG/L) AS AS F)	SILICA, SOLVED (MG/L) AS SiO <sub>2</sub> )	SUM OF CONSTITUENTS, SOLVED (MG/L) AS SiO <sub>2</sub> )	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub> TOTAL (MG/L) AS N)	NITRO-GEN, AMMONIA TOTAL (MG/L) AS N)	PHOS-PHORUS, TOTAL (MG/L) AS P)	IRON, DIS-SOLVED (UG/L) AS FE)	MANGANESE, DIS-SOLVED (UG/L) AS MN)
JAN 19...	.3	5.9	1820	.05	.03	.030	20	20
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	--	--	--	--	--	--	--	--
19...	.4	6.2	1970	.02	.01	.010	20	20

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 24, 1973

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	SPE-	TRANS-	OXYGEN,	DIS-
				CIFIC			
LING	ANCE	(MICRO-	(UNITS)	PH	TEMPER-	PAR-	SOLVED
		(FT)	(MHOS)		ATURE,	ENCY	(PER-
MAY							
24...	0915	1.0	2180	8.2	23.0	1.92	7.9
24...	0917	10	2180	8.2	22.5	--	7.6
24...	0919	20	2180	8.1	22.5	--	7.2
24...	0921	30	2180	8.0	22.0	--	6.6
24...	0923	40	2230	7.7	21.0	--	4.6
24...	0925	50	2280	7.4	20.5	--	2.7
24...	0927	60	2310	7.3	19.5	--	2.2
24...	0929	70	2350	7.3	19.0	--	2.2
24...	0931	80	2410	7.2	18.5	--	1.2
24...	0933	90	2440	7.2	18.0	--	.3
24...	0935	98	2460	7.2	18.0	--	.4

DATE	HARD-NESS (MG/L AS CACO <sub>3</sub> )	HARD-NESS, NONCAR-BONATE (MG/L CACO <sub>3</sub> )	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-	SODIUM, DIS-SOLVED (MG/L AS MG)	SODIUM AD-SORP-TION RATIO	BICAR-BONATE (MG/L AS HCO <sub>3</sub> )	SULFATE DIS-SOLVED (MG/L AS SO <sub>4</sub> )	CHLO- RIDE, DIS-SOLVED (MG/L AS CL)
				SUIM,	SODIUM, DIS-SOLVED (MG/L AS NA)				
MAY									
24...	410	290	120	25	300	6.5	148	270	460
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	420	300	130	26	300	6.3	146	280	480
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	500	370	140	35	320	6.3	156	320	520

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO <sub>2</sub> )	SOLIDS,	NITRO-GEN, NO <sub>2</sub> -NO <sub>3</sub> DIS-	NITRO-GEN, AMMONIA TOTAL	PHOS-PHORUS, TOTAL (MG/L AS N)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
			SUM OF CONSTITUENTS, DIS-SOLVED (MG/L AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS P)			
<b>MAY</b>								
24...	.2	3.7	1260	.02	.00	.010	0	0
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	.3	4.4	1290	.00	.00	.010	0	0
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	10	50
24...	--	--	--	--	--	--	--	--
24...	.3	7.4	1430	.56	.19	.260	40	2100

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	SPE-	TRANS-	OXYGEN,	DIS-
				CIFIC			
LING	ANCE	(MICRO-	(UNITS)	PH	TEMPER-	OXYGEN,	SOLVED
		(FT)	(MHOS)		ATURE,	DIS-	(PER-
MAY							
24...	1000	1.0	2180	8.2	23.0	8.0	92
24...	1002	10	2180	8.2	23.0	7.8	90
24...	1004	20	2180	8.2	22.5	7.7	88
24...	1006	30	2180	8.1	22.5	6.8	77
24...	1008	36	2200	8.0	22.0	6.3	72

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 24, 1973--Continued.

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SPE-	CIFIC	PH	TEMPER-	OXYGEN,	OXYGEN,
		SAMP-	DUCT-			(PER-	DIS-
LING	ANCE	WATER	SOLVED			SATUR-	SOLVED
DEPTH	(MICRO-	(UNITS)	(DEG C)	(MG/L)		ATION)	
(FT)	MHOS)						
<b>MAY</b>							
24...	1045	1.0	2160	8.2	23.5	8.3	97
24...	1047	10	2160	8.2	23.0	7.9	91
24...	1049	20	2160	8.0	22.5	7.4	84
24...	1051	30	2200	7.8	22.0	5.6	64
24...	1053	40	2230	7.4	21.0	3.6	40
24...	1055	50	2280	7.2	20.0	1.7	18
24...	1057	60	2290	7.1	20.0	1.3	14
24...	1059	70	2360	7.1	19.0	.7	7
24...	1101	80	2370	7.1	19.0	.4	4
24...	1103	92	2480	7.1	18.5	.2	2

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SPE-	CIFIC	PH	TEMPER-	OXYGEN,	OXYGEN,
		SAMP-	DUCT-			(PER-	DIS-
LING	ANCE	WATER	SOLVED			SATUR-	SOLVED
DEPTH	(MICRO-	(UNITS)	(DEG C)	(MG/L)		ATION)	
(FT)	MHOS)						
<b>MAY</b>							
24...	1120	1.0	2160	8.2	24.0	8.3	98
24...	1122	10	2160	8.2	23.5	8.0	93
24...	1124	20	2160	8.1	23.0	6.4	74
24...	1126	30	2190	7.6	21.5	4.2	47
24...	1128	40	2240	7.4	21.0	2.8	31
24...	1130	50	2280	7.2	20.5	1.6	18
24...	1132	60	2300	7.1	20.0	1.2	13
24...	1134	70	2380	7.1	19.5	.4	4
24...	1136	80	2470	7.1	19.0	.4	4
24...	1138	90	2470	7.1	19.0	.4	4

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SPE-	CIFIC	PH	TEMPER-	TRANS-	OXYGEN,
		SAMP-	DUCT-			ENCY	(PER-
LING	ANCE	WATER	(SECCHI			ENCY	SOLVED
DEPTH	(MICRO-	(UNITS)	(DEG C)	(MG/L)		(M)	(MG/L)
(FT)	MHOS)						
<b>MAY</b>							
24...	1225	1.0	2080	8.2	25.0	1.65	8.0
24...	1227	10	2080	8.1	24.5	--	7.2
24...	1229	20	2080	8.1	24.0	--	6.5
24...	1231	25	2080	7.9	24.0	--	5.6
24...	1233	30	2310	7.2	22.5	--	1.3
24...	1235	40	2320	7.1	21.5	--	.3
24...	1237	50	2320	7.1	21.0	--	.2
24...	1239	60	2320	7.1	20.5	--	.2
24...	1241	70	2350	7.1	20.5	--	.2
24...	1243	77	2400	7.1	20.0	--	.4

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS	NESS	NONCAR-	DIS-	SIUM	AD-	SORP-	BONATE	DIS-
(MG/L)	(MG/L)	(MG/L)	BONATE	SOLVED	DIS-	SORP-	TION	(MG/L)	SOLVED
AS	AS	(CACO3)	(CACO3)	AS CA)	AS MG)	(MG/L)	(MG/L)	AS	(MG/L)
	CACO3)			AS	AS	RATIO	HC03)	AS	AS CL)
<b>MAY</b>									
24...	390	280	120	24	280	6.1	140	260	440
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	460	320	140	28	330	6.7	164	300	510

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 24, 1973--Continued

315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	FLUO-RIDE, DIS-SOLVED SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS,		NITRO-GEN, NO2+NO3 (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
			DIS- SOLVED (MG/L AS)	CONSTI-TUENTS, DIS-SOLVED (MG/L AS N)	AMMONIA (MG/L AS N)	TOTAL (MG/L AS N)	DIS-SOLVED (UG/L AS P)	DIS-SOLVED (UG/L AS FE)	DIS-SOLVED (UG/L AS MN)
<b>MAY</b>									
24...	.2	2.9	1200		.01	.00	.018	0	0
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	.03	.00	.020	0	10
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	120	420
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	.2	6.8	1390		.20	.36	.110	20	1300

315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP-LING DEPTH (FT)	DUCT-ANCE (MICRO-MHOS)	SPE-CIFIC CON-	PH	TEMPER-ATURE, WATER (DEG C)	TRANS-PAR-ENCY (SECCHI DISK)	OXYGEN, DIS-SOLVED (PER- CENT SOLVED (MG/L))	OXYGEN, DIS-SOLVED (PER- CENT SOLVED (MG/L))
				ANCE (MG/L MMOS)			(SECCHI DISK) (M)	(MG/L)	(MG/L)
<b>MAY</b>									
24...	1200	1.0	1960	8.2	25.0	1.83	8.0	95	
24...	1202	10	2070	8.1	24.5	--	6.0	71	
24...	1204	20	2000	7.8	24.5	--	4.4	52	
24...	1206	28	2050	7.3	23.5	--	1.3	15	
HARD-NESS, (MG/L AS CACO3)	HARD-NESS, (MG/L AS CACO3)	CALCIUM NONCAR-BONATE (MG/L AS CACO3)	MAGNE-SIUM, DIS-SOLVED (MG/L AS CA)	SODIUM, SOLVED (MG/L AS MG)	AD-DIS-SORPTION RATIO (MG/L AS NA)	SODIUM BICAR-BONATE RATIO (MG/L AS HCO3)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS-SOLVED (MG/L AS CL)	
24...	370	250	110	22	260	5.9	148	240	400
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--

DATE	FLUO-RIDE, DIS-SOLVED SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SIO2)	SOLIDS,		NITRO-GEN, NO2+NO3 (MG/L AS N)	NITRO-GEN, TOTAL (MG/L AS N)	PHOS-PHORUS, TOTAL (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS FE)	MANGA-NESE, DIS-SOLVED (UG/L AS MN)
			DIS- SOLVED (MG/L AS)	CONSTI-TUENTS, DIS-SOLVED (MG/L AS N)	AMMONIA (MG/L AS N)	TOTAL (MG/L AS N)	DIS-SOLVED (UG/L AS P)	DIS-SOLVED (UG/L AS FE)	DIS-SOLVED (UG/L AS MN)
<b>MAY</b>									
24...	.2	3.2	1110		.01	.00	.022	0	40
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	.04	.18	.042	0	600

315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP-LING DEPTH (FT)	DUCT-ANCE (MICRO-MHOS)	SPE-CIFIC CON-	PH	TEMPER-ATURE, WATER (DEG C)	OXYGEN, DIS-SOLVED (PER- CENT SOLVED (MG/L))	OXYGEN, DIS-SOLVED (PER- CENT SOLVED (MG/L))
				ANCE (MG/L MMOS)			(SECCHI DISK) (M)	(MG/L)
<b>MAY</b>								
24...	1315	1.0	1980	8.3	26.0	8.3	101	
24...	1317	10	2000	8.2	25.0	7.8	93	
24...	1319	20	2000	8.1	24.5	6.5	77	
24...	1321	25	2000	8.0	24.0	5.6	66	
24...	1323	30	2000	7.5	22.5	2.5	28	
24...	1325	40	2190	7.2	22.0	.7	8	
24...	1327	50	2420	7.2	22.0	.4	5	

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 24, 1973--Continued.

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	WATER	DIS-
		(MICRO-	(UNITS)		(DEG C)	SOLVED	SOLVED
		(FT)	MHOS)			(MG/L)	(PER-
							CENT
<b>MAY</b>							
24...	1340	1.0	1950	8.4	25.5	8.0	96
24...	1342	10	1970	8.3	25.0	7.0	83
24...	1344	20	2020	8.2	24.5	6.3	69
24...	1346	25	2030	8.2	24.5	5.8	75
24...	1348	30	2290	7.5	23.5	1.7	20
24...	1350	40	2350	7.4	23.0	.7	8
24...	1352	50	2360	7.3	22.0	.2	2
24...	1354	66	2380	7.3	21.5	.3	3

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	WATER	DIS-
		(MICRO-	(UNITS)		(DEG C)	SOLVED	SOLVED
		(FT)	MHOS)			(MG/L)	(PER-
							CENT
<b>MAY</b>							
24...	1415	1.0	1930	8.3	25.0	7.5	89
24...	1417	10	1930	8.3	25.0	7.2	86
24...	1419	20	1900	8.1	24.5	5.3	63
24...	1421	25	1770	7.6	24.0	2.8	33
24...	1423	30	1770	7.3	23.0	.9	10
24...	1425	41	2040	7.3	22.5	.3	3

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,
		CON-	ANCE		ATURE,	PAR-	DIS-
		(MICRO-	(UNITS)		WATER	SECCHI	SOLVED
		(FT)	MHOS)		(DEG C)	DIS-	(PER-
						DISK)	CENT
<b>MAY</b>							
24...	1440	1.0	1870	8.5	26.5	1.59	8.4
24...	1442	10	1870	8.3	25.0	--	7.3
24...	1444	20	1870	7.9	24.5	--	5.2
24...	1446	30	2280	7.5	24.0	--	2.8
24...	1448	40	2710	7.4	23.5	--	1.6
24...	1450	54	2860	7.4	23.5	--	1.4

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS	NESS	DIS-	SIUM,	DIS-	SORP-	BONATE	DIS-	RIDE,
	(MG/L)	(MG/L)	SOLVED	DIS-	SOLVED	TION	(MG/L)	SOLVED	DIS-
	AS	AS	(MG/L)	AS CA)	AS MG)	AS NA)	AS HCO3)	AS SO4)	AS CL)
<b>MAY</b>									
24...	360	230	110	22	250	5.7	152	220	380
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--	--
24...	510	360	150	35	410	7.8	176	330	640

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 24, 1973--Continued

## 320122097260901 LAKE WHITNEY SITE FC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS DATE AS F)	SILICA, DIS- SOLVED (MG/L AS AS F) SIO2)	SOLIDS,		NITRO- GEN, NO2+NO3 (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	PHOS- PHORUS, (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
			DIS- SOLVED (MG/L AS AS N)	TUENTS, DIS- SOLVED (MG/L AS N)		TOTAL TOTAL (MG/L AS N)			
<b>MAY</b>									
24...	.2	1.4	1050	.03	.00	.010	0	0	
24...	--	--	--	--	--	--	--	--	
24...	--	--	--	--	--	--	--	--	
24...	--	--	--	.03	.00	.028	0	100	
24...	--	--	--	--	--	--	--	--	
24...	.2	5.7	1660	.05	.51	.072	20	830	

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS.)	SPECI- FIC CON- CENTRATION (UNITS)	PH	TEMPER- ATURE, WATER (DEG C.)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
								TRAN- SPAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
<b>MAY</b>									
24...	1510	1.0	1900	8.4	26.5	8.5	104		
24...	1512	10	1960	7.9	25.5	5.3	64		
24...	1514	20	2050	7.6	25.0	3.7	44		
24...	1516	25	2210	7.6	24.5	3.4	40		
24...	1518	30	2260	7.5	24.0	2.1	25		
24...	1520	40	2710	7.4	23.5	1.4	16		
24...	1522	49	2770	7.3	23.5	.6	7		

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS.)	SPECI- FIC CON- CENTRATION (UNITS)	PH	TEMPER- ATURE, WATER (DEG C.)	TRANS- SPAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
								TRAN- SPAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)
<b>MAY</b>									
24...	1545	1.0	1870	8.3	27.5	1.04	9.1	114	
24...	1547	10	1800	7.8	26.5	--	5.6	68	
24...	1549	20	1600	7.3	24.5	--	1.8	21	
24...	1551	29	1310	7.1	22.5	--	.2	2	

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CACO3)	MAGNE- SIUM, DIS- SOLVED (MG/L AS CACO3)	SODIUM, DIS- SOLVED (MG/L AS CACO3)	AD- SORP- TION RATIO	SODIUM BICAR- BONATE AS (HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)		CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
								NITRO- GEN, NO2+NO3 (MG/L AS NA)	NITRO- GEN, AMMONIA (MG/L AS NA)	
<b>MAY</b>										
24...	--	--	--	--	--	--	--	--	--	
24...	--	--	--	--	--	--	--	--	--	
24...	300	130	94	15	150	3.8	206	120	230	

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS,		NITRO- GEN, NO2+NO3 (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	PHOS- PHORUS, (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
			DIS- SOLVED (MG/L AS SIO2)	TUENTS, DIS- SOLVED (MG/L AS N)					
<b>MAY</b>									
24...	--	--	--	--	.03	.00	.050	10	0
24...	--	--	--	--	--	--	--	--	
24...	--	--	--	--	--	--	--	--	
24...	.3	5.4	723	.09	.59	.220	100	820	

TABLE 10--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 24, 1973--Continued

320721097293301 LAKE WHITNEY SITE P14

		SPE- CIFIC CON- DUCT- ANCE	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT)	OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION)		
DATE	TIME	SAMP- LING DEPTH (FT)	PH (MICRO- MHOS)	TEMPER- ATURE (DEG C)	WATER (M)			
<b>MAY</b>								
24...	1615	1.0	2120	8.2	28.0	.85		
24...	1617	10	2170	8.1	27.0	--		
24...	1619	20	2370	7.8	26.5	--		
24...	1621	29	2950	7.4	24.5	--		
						7.8    99		
						7.2    89		
						5.1    68		
						2.1    24		
 <b>HARD- NESS,</b>								
NESS	NONCAR- (MG/L)	CALCIUM NONCAR- (MG/L)	MAGNE- SIUM, DIS- SOLVED (MG/L)	SODIUM, DIS- SOLVED (MG/L)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L)	SULFATE DIS- SOLVED (MG/L)	CHLO- RIDE, DIS- SOLVED (MG/L)
DATE	CACO <sub>3</sub>	CACO <sub>3</sub>	AS CA)	AS MG)	AS NA)	HC03)	AS SO <sub>4</sub> )	AS CL)
 <b>MAY</b>								
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	530	380	150	37	420	8.0	176	350
								660
 <b>FLUO- RIDE,</b>								
DIS- SOLVED	SILICA, (MG/L)	SUM OF DIS- SOLVED (AS F)	SOLID, CONSTITUENTS, DIS- SOLVED (AS SIO <sub>2</sub> )	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> (MG/L)	NITRO- GEN, AMMONIA (MG/L)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
DATE	AS F)	AS SIO <sub>2</sub> )	AS N)	AS N)	AS P)	AS P)	AS FE)	AS MN)
 <b>MAY</b>								
24...	--	--	--	.01	.00	.026	0	10
24...	--	--	--	--	--	--	--	--
24...	--	--	--	--	--	--	--	--
24...	.3	5.2	1710	.03	.38	.070	10	480

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 13, 1973

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPECI- FIC CON- DUCT- ANCE (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
									(M)
<b>SEP</b>									
13...	0745	1.0	1950	8.2	27.5	1.71	7.8	.98	
13...	0747	10	1950	8.1	27.0	--	7.2	.89	
13...	0749	20	1950	7.6	26.5	--	5.2	.63	
13...	0751	30	1950	7.6	26.5	--	4.9	.60	
13...	0753	40	1950	7.5	26.5	--	4.5	.55	
13...	0755	50	1960	7.5	26.0	--	4.3	.52	
13...	0757	55	1970	7.4	26.0	--	3.4	.41	
13...	0759	60	1970	7.2	25.5	--	2.2	.2	
13...	0801	70	1970	7.1	24.5	--	2.2	.2	
13...	0803	80	2120	7.1	22.5	--	2.2	.2	
13...	0805	95	2280	7.0	21.0	--	2.2	.2	

DATE	HARD- NESS (MG/L) AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L) AS CACO3)	CALCIUM DIS- SOLVED (MG/L) AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG)	SODIUM, DIS- SOLVED (MG/L) AS NA)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L) AS HCO3)	SULFATE DIS- SOLVED (MG/L) AS SO4)	OCHLO- RIDE, DIS- SOLVED (MG/L) AS CL)
									(MG/L)
<b>SEP</b>									
13...	350	230	100	23	280	6.6	144	220	420
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	440	270	130	26	310	6.5	204	250	490

DATE	FLUO- RIDE, DIS- SOLVED (MG/L) AS AS F)	SILICA, DIS- SOLVED (MG/L) AS SiO2)	SOLIDS, SUM OF CONSTI- TUENTS, NO2+NO3 DIS- SOLVED (MG/L) AS N)	NITRO- GEN, TOTAL DIS- SOLVED (MG/L) AS N)	NITRO- GEN, TOTAL (MG/L) AS N)	AMMONIA PHOS- PHORUS, TOTAL (MG/L) AS P)	IRON, TOTAL (MG/L) AS P)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN)
								(UG/L)
<b>SEP</b>								
13...	.3	4.4	1120	.00	.00	.016	0	0
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
13...	--	--	--	.00	.00	.020	0	0
13...	--	--	--	.01	.21	.034	10	20
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
13...	.3	10	1320	.04	1.8	.480	180	2100

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPECI- CIFIC CON- DUCT- ANCE (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
								(M)
<b>SEP</b>								
13...	0830	1.0	1950	8.2	27.0	7.8	.96	
13...	0832	10	1950	8.1	27.0	7.2	.89	
13...	0834	20	1950	7.6	26.5	5.1	.62	
13...	0836	30	1950	7.6	26.0	4.8	.59	
13...	0838	40	1950	7.5	26.0	4.6	.56	

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 13, 1973--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	DEPTH (FT)	SPE-	CIFIC	PH	TEMPER-	OXYGEN,	OXYGEN,
			SAMP-	DUCT-			DIS-	DIS-
			LING	ANCE	WATER	SOLVED	SOLVED	SOLVED
			(MICRO-	(UNITS)	(DEG C)	(MG/L)	(PER-	(PER-
			MHOS)				CENT	CENT
SEP							SATUR-	SATUR-
13...	0915	1.0	1960	8.2	27.0	7.6	94	
13...	0917	10	1960	8.1	27.0	6.8	84	
13...	0919	20	1960	7.6	26.5	4.8	59	
13...	0921	30	1960	7.6	26.5	4.6	56	
13...	0923	40	1960	7.5	26.0	4.1	50	
13...	0925	50	1960	7.5	26.0	3.6	44	
13...	0927	60	1960	7.2	25.5	.2	2	
13...	0929	70	1990	7.1	24.0	.2	2	
13...	0931	80	2100	7.1	23.0	.2	2	
13...	0933	93	2230	7.0	21.5	.2	2	

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	DEPTH (FT)	SPE-	CIFIC	PH	TEMPER-	OXYGEN,	OXYGEN,
			SAMP-	DUCT-			DIS-	DIS-
			LING	ANCE	WATER	SOLVED	SOLVED	SOLVED
			(MICRO-	(UNITS)	(DEG C)	(MG/L)	(PER-	(PER-
			MHOS)				CENT	CENT
SEP							SATUR-	SATUR-
13...	1025	1.0	1960	8.2	27.5	7.4	92	
13...	1027	10	1960	8.1	27.0	6.5	80	
13...	1029	20	1960	7.7	26.5	4.8	59	
13...	1031	30	1960	7.5	26.5	3.9	48	
13...	1033	40	1960	7.5	26.0	3.4	41	
13...	1035	50	1960	7.4	26.0	3.0	37	
13...	1037	60	1960	7.2	25.5	.2	2	
13...	1039	70	1960	7.1	24.5	.2	2	
13...	1041	80	2040	7.0	23.0	.2	2	
13...	1043	88	2110	7.0	22.5	.2	2	

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	DEPTH (FT)	SPE-	CIFIC	PH	TEMPER-	TRANS-	OXYGEN,
			SAMP-	DUCT-			PAR-	DIS-
			LING	ANCE	WATER	(SECCHI	OXYGEN,	SOLVED
			(MICRO-	(UNITS)	(DEG C)	DISK)	(MG/L)	(PER-
			MHOS)			(M)		CENT
SEP							SATUR-	SATUR-
13...	1130	1.0	1990	8.3	28.0	1.74	8.2	104
13...	1132	10	1990	8.2	27.5	--	7.6	95
13...	1134	20	1990	7.7	27.0	--	4.7	58
13...	1136	30	1990	7.5	26.5	--	4.4	54
13...	1138	40	1990	7.4	26.5	--	3.2	39
13...	1140	50	1990	7.4	26.5	--	2.6	32
13...	1142	55	1990	7.3	26.5	--	2.0	24
13...	1144	60	2030	7.2	26.0	--	.2	2
13...	1146	74	2090	7.1	25.0	--	.2	2

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS,	NESS,	NONCAR-	SUIM,	SODIUM,	AD-	BONATE	DIS-	RIDE,
	(MG/L)	(MG/L)	DIS-	DIS-	SORP-	BONATE	DIS-	DIS-	DIS-
	AS	AS	BONATE	SOLVED	SOLVED	RATIO	(MG/L)	SOLVED	SOLVED
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	(MG/L)	(MG/L)	(MG/L)	AS NA)	AS HCO <sub>3</sub> )	(MG/L)	(MG/L)
SEP									
13...	350	240	100	24	280	6.5	136	220	430
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	370	230	110	24	280	6.3	172	220	440

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 13, 1973--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS)	SOLIDS,		NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
			DIS- SOLVED (MG/L AS)	TUENTS, DIS- SOLVED (MG/L AS)					
SEP 13...	.3	5.1	1130	.01	.00	.024	0	0	
13...	--	--	--	--	--	--	--	--	
13...	--	--	--	--	--	--	0	0	
13...	--	--	--	--	--	--	--	--	
13...	--	--	--	--	.01	.06	.030	10	10
13...	--	--	--	--	--	--	--	--	
13...	--	--	--	--	--	--	--	--	
13...	.3	8.1	1170	.03	1.6	.230	90	2000	

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	SPECI- CIFIC DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED		NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> (PER- CENT SATUR- ATION)	NITRO- GEN, TOTAL (MG/L AS N)	AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
						OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION						
SEP 13...	1105	1.0	1980	8.2	28.0	7.8	99	.02	.00	.028	0	0	
13...	1107	10	1980	8.1	27.5	7.3	91	--	--	--	--	--	
13...	1109	20	1980	7.6	27.0	4.1	51	--	--	--	--	--	
13...	1111	26	1980	7.4	26.0	2.8	34	.04	.00	.040	10	120	

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	SPECI- CIFIC DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED		(PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)
						OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION		
SEP 13...	1215	1.0	2000	8.4	28.0	8.4	106		
13...	1217	10	2000	8.3	28.0	7.8	99		
13...	1219	20	2000	7.9	27.0	5.4	67		
13...	1221	30	2000	7.6	27.0	4.1	51		
13...	1223	43	2020	7.4	27.0	2.8	35		

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPECI- CIFIC DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED		(PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (MG/L)
						OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION		
SEP 13...	1240	1.0	1950	8.3	28.0	8.1	103		
13...	1242	10	1950	8.1	27.0	6.8	84		
13...	1244	20	1950	7.7	27.0	4.3	53		
13...	1246	30	1950	7.6	26.5	3.4	41		
13...	1248	40	1950	7.6	26.5	3.3	40		
13...	1250	50	1950	7.5	26.5	2.4	29		
13...	1252	62	2050	7.4	26.5	.2	2		

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 13, 1973--Continued

320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	DIS-
		DEPTH	CON-	PH	ATURE,	DIS-	SOLVED
		(FT)	(MICRO-	(UNITS)	(DEG C)	(MG/L)	(PER-
			MHOS)				CENT
SEP							SATUR-
13...	1315	1.0	1990	8.3	28.5	8.2	105
13...	1317	10	1990	8.3	28.0	7.2	91
13...	1319	20	1990	7.5	27.0	2.4	30
13...	1321	30	1990	7.4	26.5	1.2	15
13...	1323	37	1990	7.4	26.5	.2	2

320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,
		LING	CIFIC	DUCT-	PH	TEMPER-	PAR-
		DEPTH	CON-	ANCE	WATER	(SECCHI	ENCY
		(FT)	(MICRO-	(UNITS)	(DEG C)	DISK)	(M)
SEP							SATUR-
13...	1345	1.0	2000	8.2	28.5	1.49	105
13...	1347	10	2000	8.0	27.5	--	7.0
13...	1349	20	2000	7.4	26.5	--	3.5
13...	1351	30	2000	7.4	26.5	--	3.4
13...	1353	40	2050	7.4	26.5	--	2.1
13...	1355	45	2050	7.4	26.5	--	1.2
13...	1357	51	2050	7.3	26.5	--	.2

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS,	NESS,	NONCAR-	DIS-	SUIM,	SODIUM,	AD-	BONATE	RIDE,
	(MG/L	(MG/L	BONATE	SOLVED	DIS-	SOLVED	SORP-	(MG/L	SOLVED
	AS	AS	(MG/L	(MG/L	(MG/L	(MG/L	RATIO	AS	(MG/L
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)		HCO <sub>3</sub> )	AS SO <sub>4</sub> )
SEP									
13...	350	240	100	23	280	6.6	138	230	440
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	370	240	110	25	290	6.5	158	230	440

DATE	FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	DIS-	DIS-	CONSTITUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	GEN.	AMMONIA	PHORUS,	DIS-
	SOLVED	(MG/L	DIS-	TOTAL	TOTAL	TOTAL	(UG/L	SOLVED
	(MG/L	AS	SOLVED	(MG/L	(MG/L	(MG/L	AS FE)	(UG/L
	AS F)	SIO <sub>2</sub> )	(MG/L	AS N)	AS N)	AS P)	AS MN)	AS MN)
SEP								
13...	.3	5.2	1150	.02	.02	.030	0	0
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	0	10
13...	--	--	--	.02	.11	.030	10	70
13...	--	--	--	--	--	--	--	--
13...	.3	6.4	1180	.06	.29	.072	50	880

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 13, 1973--Continued

320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	DEPTH (FT)	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
			LING	ANCE		ATURE,	WATER	(PER-
		(MICRO-	MHOS)	(UNITS)	(DEG C)	SOLVED	SOLVED	DIS-
SEP								SOLVED
13...	1415	1.0	2030	8.1	29.5	7.6	.99	
13...	1417	10	2030	8.0	28.0	7.0	.89	
13...	1419	20	2060	7.4	27.0	2.8	.35	
13...	1421	30	2060	7.4	26.5	2.1	.26	
13...	1423	43	2060	7.2	26.5	.2	.2	

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH (FT)	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,
			LING	ANCE		ATURE,	ENCY	(SECCHI
		(MICRO-	MHOS)	(UNITS)	(DEG C)	DISK)	(M)	OXYGEN,
SEP								SOLVED
13...	1450	1.0	2130	8.1	29.5	.88	7.9	103
13...	1452	10	2130	7.3	27.5	--	3.1	39
13...	1454	15	2080	7.1	27.0	--	.2	.2
13...	1456	20	2020	7.1	26.5	--	.2	.2
13...	1458	25	2020	7.0	26.5	--	.2	.2

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS	NONCAR-	DIS-	SOLVED	DIS-	AD-	BONATE	DIS-	RIDE,
	(MG/L	(MG/L	(MG/L	(MG/L	SOLVED	SORP-	BONATE	SOLVED	DIS-
	AS	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CA)	AS MG)	ATION	(MG/L	AS SO <sub>4</sub> )	SOLVED
						RATIO	AS HCO <sub>3</sub> )		(MG/L
									AS CL)
SEP									
13...	360	250	100	26	300	6.9	142	240	470
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--	--

DATE	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	DIS-	SUM OF	GEN,	GEN.	PHORUS,	DIS-	NESE,
	DIS-	SOLVED	CONSTI-	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	TOTAL	SOLVED
	(MG/L	(MG/L	DIS-	SOLVED	(MG/L	(MG/L	(MG/L	(UG/L
	AS F)	SIO <sub>2</sub> )	(MG/L)	AS N)	AS N)	AS N)	AS P)	AS MN)
SEP								
13...	.3	6.4	1220	.04	.00	.060	0	0
13...	--	--	--	--	--	--	20	0
13...	--	--	--	--	--	--	--	--
13...	--	--	--	--	--	--	--	--
13...	--	--	--	.05	.25	.074	20	660

320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	DEPTH (FT)	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,
			LING	ANCE		ATURE,	PAR-	SOLVED
		(MHOS)	(UNITS)	(DEG C)	ENCY	(SECCHI	(M)	(PER-
SEP								
13...	1525	1.0	2280	8.2	29.0	1.04	8.0	103
13...	1527	10	2260	7.3	27.5	--	4.0	50
13...	1529	15	2160	7.1	27.0	--	.6	.7
13...	1531	20	2160	7.1	27.0	--	.2	.2
13...	1533	27	2160	7.1	27.0	--	.2	.2

TABLE 11--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 13, 1973--Continued

## 320721097293301 LAKE WHITNEY SITE P14--Continued

	HARD-NESS (MG/L AS CACO <sub>3</sub> )	CALCIUM NONCAR- BONATE (MG/L AS CACO <sub>3</sub> )	MAGNE- SIUM, DIS- SOLVED (MG/L AS AS MG)	SODIUM, DIS- SOLVED (MG/L AS AS NA)	SODIUM, SORP- TION (MG/L AS AS NA)	AD- BICAR- BONATE (MG/L AS HCO <sub>3</sub> )	SULFATE DIS- SOLVED (MG/L AS AS SO <sub>4</sub> )	CHLO- RIDE, DIS- SOLVED (MG/L AS AS CL)		
DATE	SEP 13... 13... 13... 13... 13...	400 -- -- -- --	270 -- -- -- --	110 -- -- -- --	29 -- -- -- --	330 -- -- -- --	7.2 -- -- -- --	152 -- -- -- --	250 -- -- -- --	510 -- -- -- --
SEP 13... 13... 13... 13... 13...	400 -- -- -- --	270 -- -- -- --	110 -- -- -- --	29 -- -- -- --	330 -- -- -- --	7.2 -- -- -- --	152 -- -- -- --	250 -- -- -- --	510 -- -- -- --	
	FLUO- RIDE, DIS- SOLVED (MG/L AS AS F)	SILICA, DIS- SOLVED (MG/L AS SiO <sub>2</sub> )	SUM OF CONSTITUENTS (MG/L AS SiO <sub>2</sub> )	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, IRON, DIS- SOLVED (UG/L AS MN)		
DATE	SEP 13... 13... 13... 13... 13...	.3 -- -- -- --	6.5 -- -- -- --	1310 -- -- -- --	.04 -- -- -- --	.00 -- -- -- --	.044 -- -- -- --	0 0 -- -- 120	0 0 -- -- 410	
SEP 13... 13... 13... 13... 13...	.3 -- -- -- --	6.5 -- -- -- --	1310 -- -- -- --	.04 -- -- -- --	.00 -- -- -- --	.044 -- -- -- --	0 0 -- -- 120	0 0 -- -- 410		

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 20, 1974

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	DIS-		
			CIFIC				SOLVED	
		LING	DUCT-	PH	TEMPER-	ENCY	(PER-	
			ANCE	(MICRO-	ATURE,	(SECCHI	DIS-	
				MHOS)	WATER	DISK)	SOLVED	
				(UNITS)	(DEG C)	(M)	(MG/L)	
<b>JAN</b>								
20...	0915	1.0	2010	8.2	8.0	2.35	11.2	94
20...	0917	10	2010	8.2	8.0	--	11.2	94
20...	0919	20	2010	8.2	8.0	--	11.2	94
20...	0921	30	2010	8.1	8.0	--	11.2	94
20...	0923	40	2010	8.1	8.0	--	11.1	93
20...	0925	50	2010	8.1	8.0	--	11.0	92
20...	0927	60	2010	8.0	8.0	--	10.9	92
20...	0929	70	2010	8.0	7.5	--	10.8	90
20...	0931	80	2010	7.9	7.5	--	10.8	90
20...	0933	90	2010	7.9	7.5	--	10.6	88
20...	0935	96	2010	7.9	7.5	--	10.4	87
 <b>HARDNESS</b>								
		HARD-NESS, (MG/L AS CACO <sub>3</sub> )	HARD-NESS, NONCAR-BONATE (MG/L AS CACO <sub>3</sub> )	CALCIUM DIS-SOLVED (MG/L AS Ca)	MAGNE-SIUM, DIS-SOLVED (MG/L AS Mg)	SODIUM, DIS-SOLVED (MG/L AS Na)	SODIUM ADSORPTION RATIO	BICAR-BONATE (MG/L AS HCO <sub>3</sub> )
								SULFATE DIS-SOLVED (MG/L AS SO <sub>4</sub> )
								CHLO- RIDE, DIS-SOLVED (MG/L AS CL)
<b>JAN</b>								
20...	360	230	100	24	280	6.5	150	220
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	350	230	100	23	280	6.6	148	220
 <b>SOLIDS</b>								
		FLUO-RIDE, DIS-SOLVED (MG/L AS F)	SILICA, DIS-SOLVED (MG/L AS SiO <sub>2</sub> )	SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L AS SiO <sub>2</sub> )	NITRO-GEN. NO <sub>2</sub> +NO <sub>3</sub> DIS-SOLVED (MG/L AS N)	NITRO-GEN. TOTAL AMMONIA (MG/L AS N)	PHOS-PHORUS, TOTAL AMMONIA (MG/L AS P)	IRON, DIS-SOLVED (UG/L AS Fe)
								MANGA- NESE, DIS-SOLVED (UG/L AS Mn)
<b>JAN</b>								
20...	.4	4.0	1140	.06	.00	.010	0	0
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	.4	4.3	1140	.03	.14	.070	20	30

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SPE-	TRANS-	OXYGEN,	DIS-			
		CIFIC				SOLVED		
		DUCT-	PH	ATURE,	OXYGEN,	(PER-		
		CON-	ANCE	WATER	SOLVED	CENT		
						SATUR-		
						ATION)		
<b>JAN</b>								
20...	1000	1.0	2010	8.2	8.0	11.2	94	
20...	1002	10	2010	8.2	8.0	11.2	94	
20...	1004	20	2010	8.1	8.0	11.2	94	
20...	1006	35	2010	8.1	8.0	11.2	94	

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 20, 1974--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	DEPTH (FT)	SPE-	TEMPER-	OXYGEN,	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
			CIFIC CON-		PH (UNITS)	
<b>JAN</b>						
20...	1045	1.0	2010	8.2	8.5	11.3 96
20...	1047	10	2010	8.2	8.0	11.3 95
20...	1049	20	2010	8.2	8.0	11.3 95
20...	1051	30	2010	8.2	8.0	11.2 94
20...	1053	40	2010	8.2	8.0	11.2 94
20...	1055	50	2010	8.1	8.0	11.1 93
20...	1057	60	2010	8.1	8.0	11.0 92
20...	1059	70	2010	8.1	8.0	10.9 92
20...	1101	80	2010	8.1	7.5	10.7 89
20...	1103	93	2010	8.0	7.5	10.4 87

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	DEPTH (FT)	SPE-	TEMPER-	OXYGEN,	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
			CIFIC CON-		PH (UNITS)	
<b>JAN</b>						
20...	1125	1.0	2010	8.2	9.0	11.4 98
20...	1127	10	2010	8.2	9.0	11.4 98
20...	1129	20	2010	8.2	8.5	11.3 96
20...	1131	30	2010	8.2	8.5	11.3 96
20...	1133	40	2010	8.1	8.5	11.2 95
20...	1135	50	2010	8.1	8.0	10.9 92
20...	1137	60	2010	8.1	8.0	10.8 91
20...	1139	70	2010	8.1	7.5	10.8 90
20...	1141	85	2010	8.1	7.5	10.7 89

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	DEPTH (FT)	SPE-	TEMPER-	TRANS-	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
			CIFIC CON-		PH (UNITS)	
<b>JAN</b>						
20...	1230	1.0	2010	8.2	8.5	2.13 11.4 97
20...	1232	10	2010	8.2	8.5	-- 11.4 97
20...	1234	20	2010	8.2	8.0	-- 11.4 96
20...	1236	30	2010	8.1	8.0	-- 11.4 96
20...	1238	40	2010	8.1	8.0	-- 11.2 94
20...	1240	50	2010	8.1	7.5	-- 10.9 91
20...	1242	60	2010	8.0	7.0	-- 10.7 88
20...	1244	74	2060	7.9	7.0	-- 10.4 85

DATE	HARD- NESS, (MG/L)	NONCAR- BONATE (MG/L)	CALCIUM DIS- SOLVED (MG/L)	MAGNE- SIUM, DIS- SOLVED (MG/L)	SODIUM, DIS- SOLVED (MG/L)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L)	SULFATE DIS- SOLVED (MG/L)	CHLO- RIDE, DIS- SOLVED (MG/L)
	NESS, AS CACO3)	NONCAR- BONATE (MG/L)	CALCIUM DIS- SOLVED (MG/L)	MAGNE- SIUM, DIS- SOLVED (MG/L)	SODIUM, DIS- SOLVED (MG/L)	SODIUM AD- SORP- TION RATIO	BICAR- BONATE (MG/L)	SULFATE DIS- SOLVED (MG/L)	CHLO- RIDE, DIS- SOLVED (MG/L)
<b>JAN</b>									
20...	360	230	100	24	280	6.5	152	230	430
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	370	240	110	25	290	6.5	160	230	450

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 20, 1974--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L)	SILICA, SIO2) AS F)	SUM OF CONSTITU- ENTS. (MG/L)	NITRO- GEN, NO2+NO3 AS N)	NITRO- GEN, TOTAL (MG/L)	AMMONIA TOTAL (MG/L)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L) AS FE)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN)
				AS	AS	AS	AS P)	AS	AS
<b>JAN</b>									
20...	.4	3.8	1150	.02	.00	.030	.00	0	0
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	.03	.00	.030	.00	0	0
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	.4	4.0	1180	.01	.13	.040	.10	10	10

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	DEPTH (FT)	SPE- CIFIC COND-	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT)	OXYGEN, DIS- SOLVED (PER- CENT)
			SAMP- LING DUCT- ANCE (MICRO- MHOS)			(M)	(MG/L)	(MG/L)
<b>JAN</b>								
20...	1205	1.0	2010	8.1	9.0	1.71	11.1	96
20...	1207	10	2010	8.1	8.5	--	11.0	93
20...	1209	20	2010	8.1	8.5	--	10.9	92
20...	1211	26	2010	8.0	8.5	--	10.8	92

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	DEPTH (FT)	SPE- CIFIC COND-	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT)	OXYGEN, DIS- SOLVED (PER- CENT)
			SAMP- LING DUCT- ANCE (MICRO- MHOS)			(MG/L)	(MG/L)
<b>JAN</b>							
20...	1320	1.0	2010	8.1	9.5	11.3	99
20...	1322	10	2010	8.1	9.5	11.3	99
20...	1324	20	2010	8.1	9.0	11.3	97
20...	1326	30	2010	8.1	9.0	11.2	97
20...	1328	46	2010	7.9	9.0	10.2	88

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	DEPTH (FT)	SPE- CIFIC COND-	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT)	OXYGEN, DIS- SOLVED (PER- CENT)
			SAMP- LING DUCT- ANCE (MICRO- MHOS)			(MG/L)	(MG/L)
<b>JAN</b>							
20...	1350	1.0	2010	8.1	8.5	11.5	97
20...	1352	10	2010	8.1	8.5	11.4	97
20...	1354	20	2010	8.1	8.5	11.4	97
20...	1356	30	2010	8.1	8.5	11.4	97
20...	1358	40	2010	8.1	8.5	11.3	96
20...	1400	50	2050	8.0	7.5	10.8	90
20...	1402	63	2080	8.0	7.5	10.7	89

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 20, 1974--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	DIS-
		LING	ANCE		ATURE,	ENCY	OXYGEN,	SOLVED
		DEPTH	(MICRO-	(UNITS)	WATER	(SECCHI	(PER-	CENT
		(FT)	MHOS)		(DEG C)	DISK)	(MG/L)	SATUR-
						(M)		ATION)
JAN 20...	1425	1.0	2010	8.1	8.5	1.71	11.3	96
20...	1427	10	2010	8.1	8.5	--	11.3	96
20...	1429	20	2010	8.0	8.5	--	11.3	96
20...	1431	30	2010	8.0	8.5	--	11.2	95
20...	1433	39	2010	7.9	8.5	--	10.2	86

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	DIS-
		LING	ANCE		ATURE,	ENCY	OXYGEN,	SOLVED
		DEPTH	(MICRO-	(UNITS)	WATER	(SECCHI	(PER-	CENT
		(FT)	MHOS)		(DEG C)	DISK)	(MG/L)	SATUR-
						(M)		ATION)
JAN 20...	1500	1.0	2060	8.0	8.5	1.83	11.5	97
20...	1502	10	2060	8.0	8.5	--	11.5	97
20...	1504	20	2060	8.0	8.5	--	11.5	97
20...	1506	30	2080	8.0	8.0	--	11.4	96
20...	1508	40	2080	7.9	7.0	--	11.0	90
20...	1510	49	2110	7.9	7.0	--	11.0	90

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-
	NESS	NONCAR-	DIS-	SOLVED	DIS-	SOLVED	SORP-	BONATE	DIS-
	(MG/L	AS	(MG/L	(MG/L	(MG/L	(MG/L	RATIO	(MG/L	SOLVED
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)		AS HCO <sub>3</sub> )	(MG/L
								AS SO <sub>4</sub> )	AS CL)
JAN 20...	370	240	110	25	290	6.5	160	230	440
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--	--
20...	380	240	110	26	300	6.7	164	240	460

DATE	FLUO-	SILICA	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	DIS-	CONSTITU-	GEN,	GEN,	PHORUS,	DIS-	NESE,
	DIS-	SOLVED	TUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	SOLVED	DIS-
	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(UG/L	SOLVED
	AS F)	AS SIO <sub>2</sub> )	DIS-	AS N)	AS N)	AS P)	AS FE)	(UG/L
			SOLVED					AS MN)
JAN 20...	.4	3.7	1170	.02	.00	.020	0	0
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	--	--	--	.04	.00	.020	0	0
20...	--	--	--	--	--	--	--	--
20...	.4	3.6	1220	.01	.07	.040	0	0

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 20, 1974--Continued

320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	DIS-	DIS-
		DEPTH	(MICRO-	WATER	SOLVED	SOLVED	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(PER-
							CENT
JAN							SATUR-
20...	1530	1.0	2130	8.0	9.0	11.4	98
20...	1532	10	2130	8.0	9.0	11.4	98
20...	1534	20	2130	8.0	8.5	11.3	96
20...	1536	30	2130	8.0	8.5	11.1	94
20...	1538	46	2130	7.8	7.0	10.6	87

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,
		LING	ANCE		ATURE,	PAR-	DIS-
		DEPTH	(MICRO-	WATER	ENCY	OXYGEN,	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(SECCHI	(PER-
						DISK)	CENT
JAN							SATUR-
20...	1605	1.0	1540	8.0	10.5	.43	98
20...	1607	10	1620	8.0	10.0	--	10.5
20...	1609	20	2100	7.8	8.5	--	8.8
20...	1611	25	2150	7.6	8.0	--	7.8

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	BICAR-	SULFATE	CHLO-
	NESS,	NONCAR-	DIS-	SIUM,	SODIUM,	AD-	BONATE	RIDE,
	(MC/L	(MC/L	SOLVED	DIS-	DIS-	SORP-	DIS-	DIS-
	AS	AS	(MG/L	SOLVED	SOLVED	TION	(MG/L	SOLVED
	CACO <sub>3</sub>	CACO <sub>3</sub>	AS CACO <sub>3</sub>	AS MG	AS NA	RATIO	AS	(MG/L
						HCO <sub>3</sub> )	AS SO <sub>4</sub> )	AS CL)
JAN								
20...	300	160	90	19	200	5.0	168	170
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	390	250	110	27	300	6.6	166	250

DATE	FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE.	DIS-	CONSTI-	GEN.	GEN.	PHORUS,	DIS-	NESE,
	DIS-	SOLVED	TUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	TOTAL	SOLVED
	SOLVED	(MG/L	DIS-	TOTAL	TOTAL	(MG/L	(MG/L	SOLVED
	(MG/L	AS	SOLVED	(MG/L	(MG/L	AS	(UG/L	(UG/L
	AS F)	AS	SI0 <sub>2</sub> )	AS N)	AS N)	P)	AS FE)	AS MN)
JAN								
20...	.4	3.5	868	,18	.33	.190	50	0
20...	--	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--	--
20...	.4	4.2	1240	.12	.15	.180	30	50

320721097293301 LAKE WHITNEY SITE P14

DATE	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	
	LING	ANCE		ATURE,	PAR-	DIS-	
	DEPTH	(MICRO-	WATER	ENCY	OXYGEN,	SOLVED	
	(FT)	MHOS)	(UNITS)	(DEG C)	(SECCHI	(PER-	
					DISK)	CENT	
JAN							
20...	1635	1.0	2090	7.8	9.0	.91	11.0
20...	1637	10	2090	7.8	9.0	--	10.9
20...	1639	20	2160	7.8	8.5	--	10.4
20...	1641	27	2200	7.6	8.5	--	9.4

TABLE 12--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 20, 1974--Continued

320721097293301 LAKE WHITNEY SITE P14--Continued

DATE	HARD-	HARD-	MAGNE-	SODIUM	BICAR-	SULFATE	CHLO-
	NESS	NESS	CALCIUM	SUM, SODIUM,	AD- SORP-	BONATE	RIDE,
	NONCAR-	DIS-	DIS-	TION	(MG/L)	DIS-	DIS-
	(MG/L)	(MG/L)	SOLVED	SOLVED	(MG/L)	SOLVED	SOLVED
	AS	AS	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	HC03)	AS SO <sub>4</sub> )
JAN 20...		380	240	110	27	300	6.6
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...		390	270	110	29	310	6.8
	FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	MANGA-
	RIDE,	DIS-	CONSTITUENTS,	GEN,	GEN,	IRON;	NESE,
	DIS-	SOLVED	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	PHORUS,	DIS-	DIS-
	SOLVED	(MG/L)	DIS-	TOTAL	TOTAL	SOLVED	SOLVED
	(MG/L)	AS	SOLVED	(MG/L)	(MG/L)	(UG/L)	(UG/L)
	DATE	AS F)	SIO <sub>2</sub> )	(MG/L)	AS N)	AS P)	AS MN)
JAN 20...		.4	3.6	1200	.11	.00	.040
20...	--	--	--	--	--	--	--
20...	--	--	--	--	--	--	--
20...		.4	3.6	1250	.09	.00	.050

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 12, 1974

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	SPE-	TRANS-	PAR-	OXYGEN,	DIS-	
				CIFIC			SOLVED		
		LING	ANCE	PH	ATURE,	(SECCHI	OXYGEN,	DIS-	
		DEPTH	(MICRO-	(UNITS)	WATER	DISK)	SOLVED	(PER-	
		(FT)	MHOS)		(DEG C)	(M)	(MG/L)	CENT	
<b>MAY</b>									
12...	0945	1.0	2010	8.2	22.5	2.90	8.8	100	
12...	0947	10	2010	8.1	22.0	--	8.8	100	
12...	0949	20	2010	8.1	22.0	--	8.7	99	
12...	0951	30	2010	8.1	20.5	--	8.4	92	
12...	0953	40	2010	7.9	19.5	--	6.8	73	
12...	0955	50	2010	7.7	18.5	--	5.8	62	
12...	0957	60	2010	7.6	18.0	--	5.6	59	
12...	0959	70	2010	7.6	17.5	--	4.8	50	
12...	1001	80	2010	7.5	17.5	--	4.0	42	
12...	1003	92	2020	7.4	17.0	--	3.0	31	
DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	SULFATE	
	NESS	NESS	NONCAR-	SOLVED	SOLVED	AD-	SUM,	BICAR-	
	(MG/L	AS	BONATE	(MG/L	(MG/L	SORP-	SOLVED	BONATE	DIS-
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	(CACO <sub>3</sub> )	AS CA)	AS MG)	TION	(MG/L	(MG/L	SOLVED
						RATIO	AS K)	AS HCO <sub>3</sub> )	(MG/L
									AS SO <sub>4</sub> )
<b>MAY</b>									
12...	370	250	110	24	270	6.1	5.8	155	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	--	--	--	--	--	
12...	370	250	110	24	280	6.3	5.8	154	
DATE	CHLO-	SOLIDS,			NITRO-	NITRO-	IRON,	MANGA-	
	RIDE.	SILICA,	SUM OF	GEN,	CEN,	PHOS-	DIS-	NESE,	
	DIS-	DIS-	CONSTI-	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	PHORUS,	SOLVED	DIS-	
	SOLVED	SOLVED	TUENTS,	DIS-	TOTAL	TOTAL	SOLVED	SOLVED	
	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(UG/L	(UG/L	
	AS CL)	SIO <sub>2</sub> )	AS N)	AS N)	AS N)	AS P)	AS FE)	AS MN)	
<b>MAY</b>									
12...	430	3.8	1140	.01	.16	.020	0	0	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	.03	.15	.020	10	0	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	.04	.17	.020	20	10	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	--	--	--	--	--	
12...	--	--	--	--	--	--	--	--	
12...	430	4.6	1160	.12	.19	.030	50	160	

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	SPE-	TRANS-	PAR-	OXYGEN,	DIS-
				CIFIC			SOLVED	
		LING	ANCE	PH	ATURE,	(SECCHI	OXYGEN,	DIS-
		DEPTH	(MICRO-	(UNITS)	WATER	(M)	SOLVED	(PER-
		(FT)	MHOS)		(DEG C)		(MG/L)	CENT
<b>MAY</b>								
12...	1030	1.0	2010	8.0	22.5	8.8	100	
12...	1032	10	2010	8.0	22.5	8.8	100	
12...	1034	20	2010	8.0	22.0	8.8	100	
12...	1036	30	2010	8.0	21.5	8.5	93	
12...	1038	38	2010	7.8	20.5	6.9	76	

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 12, 1974--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>							
12...	1115	1.0	2010	8.0	23.0	8.8	101
12...	1117	10	2010	8.0	22.0	8.8	100
12...	1119	20	2010	8.0	21.5	8.7	98
12...	1121	30	2010	7.9	21.0	8.0	89
12...	1123	40	2010	7.6	19.0	6.1	65
12...	1125	50	2010	7.5	18.5	4.9	52
12...	1127	60	2010	7.4	18.0	4.7	49
12...	1129	70	2010	7.3	17.5	3.5	36
12...	1131	80	2010	7.2	17.5	3.2	33
12...	1133	90	2010	7.1	17.5	1.7	18

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>							
12...	1200	1.0	2010	8.0	23.5	8.8	102
12...	1202	10	2010	8.0	22.5	8.8	100
12...	1204	20	2010	7.9	21.5	7.9	89
12...	1206	30	2010	7.7	20.5	6.2	68
12...	1208	40	2010	7.6	19.5	5.9	63
12...	1210	50	2010	7.5	19.0	5.1	54
12...	1212	60	2010	7.4	18.5	4.2	45
12...	1214	70	2010	7.3	18.0	3.0	32
12...	1216	80	2010	7.2	17.5	1.8	19
12...	1218	88	2010	7.2	17.5	1.8	19

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>								
12...	1305	1.0	2010	8.0	23.0	1.95	8.6	99
12...	1307	10	2010	7.9	22.5	--	8.6	98
12...	1309	20	2010	7.9	21.5	--	7.9	89
12...	1311	30	2010	7.5	20.5	--	5.2	57
12...	1313	40	2010	7.3	19.0	--	4.4	47
12...	1315	50	2010	7.2	18.5	--	3.5	37
12...	1317	60	2010	7.2	18.5	--	3.0	32
12...	1319	73	2010	7.1	18.5	--	2.1	22

HARD- NESS (MG/L)	CALCIUM NONCAR- BONATE (MG/L)	MAGNE- SIUM, SOLVED (MG/L)	SODIUM, SOLVED (MG/L)	SODIUM AD- SORP- TION (MG/L)	POTAS- SIUM, SOLVED (MG/L)	BICAR- BONATE (MG/L)	SULFATE DIS- SOLVED (MG/L)	
DATE	CACO3	CACO3	AS CA	AS MG	AS NA	AS K	AS HCO3	AS SO4
<b>MAY</b>								
12...	370	240	110	24	270	6.1	5.7	157
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--
12...	370	240	110	24	280	6.3	5.8	157
								220

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 12, 1974--Continued.

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED SOLVED (MG/L (AS CL)	SILICA, DIS- SOLVED SOLVED (MG/L (AS CL)	SOLIDS,		NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> (MG/L (AS N)	NITRO- CEN, AMMONIA (MG/L (AS N)	PHOS- PHORUS, TOTAL (MG/L (AS P)	IRON, DIS- SOLVED (UG/L (AS FE)	MANA- NESE, DIS- SOLVED (UG/L (AS MN)	
			DIS- CONSTITU- ENTS, DIS- SOLVED (MG/L (AS N)	TOTAL (MG/L (AS N)						
<b>MAY</b>										
12...	430	3.8	1150	.00	.13	.020	10	0		
12...	--	--	--	--	--	--	--	--		
12...	--	--	--	.00	.12	.020	10	0		
12...	--	--	--	--	--	--	--	--		
12...	--	--	--	.08	.20	.020	10	0		
12...	--	--	--	--	--	--	--	--		
12...	--	--	--	--	--	--	--	--		
12...	430	4.7	1150	.09	.35	.050	10	120		

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	(SECCHI DISK)	TRANS- PAR- ENCY			OXYGEN, DIS- SOLVED
							PH	ATURE, WATER (DEG C)	(SECCHI DISK)	OXYGEN, (PER- CENT DIS- SOLVED (MG/L)
<b>MAY</b>										
12...	1240	1.0	2010	7.9	24.5	1.98	8.5	101		
12...	1242	10	2010	7.8	23.0	--	7.6	87		
12...	1244	22	2010	7.6	23.0	--	5.6	64		

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	(SECCHI DISK)	TRANS- PAR- ENCY			OXYGEN, DIS- SOLVED
							PH	ATURE, WATER (DEG C)	(SECCHI DISK)	OXYGEN, (PER- CENT DIS- SOLVED (MG/L)
<b>MAY</b>										
12...	1355	1.0	2010	8.0	23.0	8.2	8.2	94		
12...	1357	10	2010	8.0	23.0	8.0	8.0	92		
12...	1359	20	2010	7.8	22.5	7.0	7.0	80		
12...	1401	30	2010	7.5	21.0	4.5	4.5	50		
12...	1403	42	2010	7.2	20.0	1.6	1.6	17		

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	(SECCHI DISK)	TRANS- PAR- ENCY			OXYGEN, DIS- SOLVED
							PH	ATURE, WATER (DEG C)	(SECCHI DISK)	OXYGEN, (PER- CENT DIS- SOLVED (MG/L)
<b>MAY</b>										
12...	1425	1.0	2010	8.0	24.5	8.7	8.7	104		
12...	1427	10	2010	8.0	23.0	8.5	8.5	98		
12...	1429	20	2010	7.8	22.0	6.5	6.5	74		
12...	1431	30	2010	7.5	21.0	4.4	4.4	49		
12...	1433	40	2010	7.3	20.0	2.7	2.7	29		
12...	1435	50	2010	7.2	19.0	2.0	2.0	21		
12...	1437	61	2010	7.2	19.0	2.0	2.0	21		

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 12, 1974--Continued

320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	(PER-		
		LING	CIFIC	PAR-	OXYGEN,			
		DUCT-	ENCY	OXYGEN,	SOLVED	CENT		
		ANCE	(SECCHI	(DEG C)	(MG/L)	SATUR-		
		(MICRO-	WATER	DISK)		ATION)		
		MHOS)	(UNITS)	(M)				
MAY								
12...	1500	1.0	2010	8.0	24.5	1.37	9.0	107
12...	1502	10	2010	7.9	23.5	--	7.9	92
12...	1504	20	2010	7.6	22.5	--	5.2	59
12...	1506	30	2010	7.1	21.5	--	1.0	11
12...	1508	36	2010	7.1	21.0	--	.7	8

320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	(PER-		
		LING	CIFIC	PAR-	OXYGEN,			
		DUCT-	ENCY	OXYGEN,	SOLVED	CENT		
		ANCE	(SECCHI	(DEG C)	(MG/L)	SATUR-		
		(MICRO-	WATER	DISK)		ATION)		
		MHOS)	(UNITS)	(M)				
MAY								
12...	1530	1.0	1900	8.0	25.0	1.19	9.7	115
12...	1532	10	1950	7.7	23.0	--	6.7	77
12...	1534	20	2010	7.5	22.5	--	4.9	56
12...	1536	30	2010	7.3	21.5	--	2.9	33
12...	1538	40	2010	7.1	20.0	--	1.2	13
12...	1540	50	2010	7.1	20.0	--	1.1	12

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM,	SODIUM	POTAS-	BICAR-	SULFATE
	NESS	NONCAR-	DIS-	SUIM,	DIS-	AD-	SUIM,	DIS-	DIS-
	(MG/L	BONATE	SOLVED	DIS-	SOLVED	SORP-	BONATE	BONATE	SOLVED
	AS	CACO <sub>3</sub> )	AS CACO <sub>3</sub> )	AS GA)	AS MG)	RATIO	(MG/L	AS	(MG/L
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS	AS	AS NA)	AS K)	HCO <sub>3</sub> )	AS	AS SO <sub>4</sub> )
MAY									
12...	370	230	110	24	250	5.6	5.6	173	210
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	370	240	110	24	270	6.1	5.7	164	220

DATE	CHLO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	DIS-	CONSTITUENTS,	GEN.	GEN.	PHORUS,	DIS-	NESE,
	DIS-	SOLVED	DIS-	NO <sub>2</sub> +NO <sub>3</sub>	TOTAL	TOTAL	SOLVED	DIS-
	(MG/L	(MG/L	DIS-	(MG/L	(MG/L	(MG/L	(UG/L	(UG/L
	AS CL)	AS CL)	SIO <sub>2</sub> )	AS	AS N)	AS N)	AS FE)	AS MN)
MAY								
12...	400	3.2	1090	.01	.03	.040	.10	0
12...	--	--	--	.00	.14	.030	.10	10
12...	--	--	--	--	--	--	--	--
12...	--	--	--	.03	.15	.020	.10	50
12...	420	4.6	1140	.08	.32	.030	.20	370

320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	(PER-	
		DUCT-	CIFIC	PAR-	OXYGEN,		
		ANCE	(SECCHI	OXYGEN,	SOLVED	CENT	
		(MICRO-	WATER	(DEG C)	(MG/L)	SATUR-	
		MHOS)	(UNITS)	(M)		ATION)	
MAY							
12...	1600	1.0	1870	8.0	24.5	9.8	117
12...	1602	10	1870	7.7	23.5	7.1	82
12...	1604	20	1870	7.3	22.5	3.4	39
12...	1606	30	2010	7.2	21.5	1.5	17
12...	1608	43	2010	7.1	20.5	.4	4

TABLE 13--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 12, 1974--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SPECIFIC CONDUCTANCE			TRANSPARENCY			OXYGEN, DISSOLVED		
		SAMPLING DEPTH (FT)	DUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	(SECCHI DISK)	(M)	OXYGEN, DIS-SOLVED (MG/L)	(PER-CENT SATUR-ATION)	
<b>MAY</b>										
12...	1635	1.0	1340	8.1	26.0	.61	11.6	141		
12...	1637	10	1340	7.2	23.0	--	3.7	43		
12...	1639	22	1420	7.0	22.5	--	1.1	12		
DATE	HARDNESS (MG/L AS CACO <sub>3</sub> )	NONCARBONATE (MG/L AS CACO <sub>3</sub> )	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO <sub>3</sub> )	SULFATE (MG/L AS SO <sub>4</sub> )	
MAY										
12...	280	120	82	18	160	4.2	4.9	192	140	
12...	--	--	--	--	--	--	--	--	--	
12...	280	130	80	20	170	4.4	4.9	186	150	
DATE	CHLORIDE (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO <sub>2</sub> )	SOLIDS, SUM OF CONSTL-TUENTS,	NITROGEN, NO <sub>2</sub> +NO <sub>3</sub>	NITROGEN, AMMONIA	PHOSPHORUS, TOTAL	IRON, TOTAL	MANGANESE, DIS-SOLVED (UG/L AS FE)		
MAY										
12...	250	4.7	754	.00	.17	.110	20	0		
12...	--	--	--	.02	.24	.060	40	0		
12...	260	5.3	782	.08	.38	.100	30	.230		

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SPECIFIC CONDUCTANCE			TRANSPARENCY			OXYGEN, DISSOLVED		
		SAMPLING DEPTH (FT)	DUCTANCE (MICRO-MHOS)	PH (UNITS)	TEMPERATURE, WATER (DEG C)	(SECCHI DISK)	(M)	OXYGEN, DIS-SOLVED (MG/L)	(PER-CENT SATUR-ATION)	
<b>MAY</b>										
12...	1700	1.0	1460	7.8	25.0	.61	8.6	102		
12...	1702	10	1460	7.5	24.0	--	6.0	71		
12...	1704	24	1830	7.1	23.0	--	1.8	.21		
DATE	HARDNESS (MG/L AS CACO <sub>3</sub> )	NONCARBONATE (MG/L AS CACO <sub>3</sub> )	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNESIUM DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTASSIUM, DIS-SOLVED (MG/L AS K)	BICARBONATE (MG/L AS HCO <sub>3</sub> )	SULFATE (MG/L AS SO <sub>4</sub> )	
MAY										
12...	310	150	85	24	180	4.4	4.7	201	150	
12...	--	--	--	--	--	--	--	--	--	
12...	330	210	93	24	240	5.7	5.5	149	210	
DATE	CHLORIDE (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO <sub>2</sub> )	SOLIDS, SUM OF CONSTL-TUENTS,	NITROGEN, NO <sub>2</sub> +NO <sub>3</sub>	NITROGEN, AMMONIA	PHOSPHORUS, TOTAL	IRON, TOTAL	MANGANESE, DIS-SOLVED (UG/L AS FE)		
MAY										
12...	280	5.0	828	.05	.20	.050	20	0		
12...	--	--	--	.03	.15	.040	10	0		
12...	380	4.6	1030	.03	.33	.040	0	.250		

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 10, 1974

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

315203097222601 LAKE WHITNEY SITE AC

		SPE-		TRANS-	OXYGEN,	DIS-
		CIFIC		PART	SOLVED	SOLVED
		CON-		(SECCHI	OXYGEN,	(PER-
SAMP-	DUCT-			DISK)	DIS-	SOLVED
TIME	DEPTH	(MICRO-	PH	ATURE,	SOLVED	CENT
DATE	(FT)	MHOS)	(UNITS)	WATER	(MG/L)	SATUR-
SEP						
10...	0930	1.0	2030	7.9	25.0	81
10...	0932	10	2030	7.9	25.0	81
10...	0934	20	2030	7.9	25.0	81
10...	0936	30	2030	7.9	25.0	81
10...	0938	40	2030	7.9	25.0	80
10...	0940	50	2030	7.9	24.5	73
10...	0942	60	2030	7.8	24.5	68
10...	0944	65	2080	7.4	24.0	27
10...	0946	70	2030	7.4	23.0	2
10...	0948	80	2030	7.3	20.0	2
10...	0950	84	2020	7.3	20.0	2

	HARD-NESS, NESS	CALCIUM NONCAR- BONATE (MG/L AS)	MAGNE- SIUM, DIS- SOLVED (MG/L)	SODIUM, DIS- SOLVED (MG/L)	SODIUM AD- SORP- TION (MG/L)	POTAS- SIUM, DIS- SOLVED (MG/L)	BICAR- BONATE (MG/L AS)	SULFATE DIS- SOLVED (MG/L AS SO4)
DATE	CACO3)	CACO3)	AS CA)	AS MC)	AS NA)	AS K)	HCO3)	
<b>SEP</b>								
10...	340	240	92	27	280	6.6	6.6	132 220
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	320	160	87	25	270	6.6	6.4	190 190

31521409722001 LAKE WHITNEY SITE AL

		SPE-	CIFIC	CON-		OXYGEN,	DIS-	SOLVED
	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	(PER-	
DATE		LING	ANCE		ATURE,	DIS-	CENT	
			(MICRO-		WATER	SOLVED	SATUR-	
			MHOS)	(UNITS)	(DEG C)	(MC/L)	ATION)	
SEP								
10...	1015	1.0	2030	7.9	25.0	7.0	83	
10...	1017	10	2030	7.9	25.0	6.9	82	
10...	1019	20	2030	7.9	25.0	6.8	81	
10...	1021	30	2030	7.9	25.0	6.8	81	
10...	1023	34	2030	7.9	25.0	6.8	81	

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 10, 1974--Continued

315308097222801 LAKE WHITNEY SITE BC

			SPE- CIFIC CON-			OXYGEN, DIS- SOLVED	
		SAMP- LING TIME DATE	DUCT- ANCE DEPTH (FT)	PH (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	(PER- CENT SATUR- ATION)
<b>SEP</b>							
10...	1100	1.0	2030	7.9	24.5	7.0	83
10...	1102	10	2030	7.9	24.5	6.8	81
10...	1104	20	2030	7.9	24.5	6.8	81
10...	1106	30	2030	7.9	24.5	6.8	81
10...	1108	40	2030	7.9	24.5	6.8	81
10...	1110	50	2030	7.9	24.5	6.8	81
10...	1112	60	2030	7.9	24.5	6.8	81
10...	1114	70	2030	7.5	24.0	5.6	66
10...	1116	82	2030	7.0	21.0	.2	2

315432097234601 LAKE WHITNEY SITE CC

			SPE- CIFIC CON-			OXYGEN, DIS- SOLVED	
		SAMP- LING TIME DATE	DUCT- ANCE DEPTH (FT)	PH (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	(PER- CENT SATUR- ATION)
<b>SEP</b>							
10...	1145	1.0	2030	7.9	24.5	7.1	85
10...	1147	10	2030	7.9	24.5	7.0	83
10...	1149	20	2030	7.9	24.5	7.0	83
10...	1151	30	2030	7.9	24.5	7.0	83
10...	1153	40	2030	7.9	24.5	6.8	81
10...	1155	50	2030	7.8	24.5	6.6	79
10...	1157	61	2030	7.8	24.5	6.0	71

315722097240201 LAKE WHITNEY SITE DC

			SPE- CIFIC CON-			OXYGEN, DIS- SOLVED	HARD- NESS, NONCAR- BONATE (MG/L)	MACNE- SIUM, DIS- SOLVED	SODIUM, DIS- SOLVED			
		SAMP- LING TIME DATE	DUCT- ANCE DEPTH (FT)	PH (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION)	CALCIUM (MG/L) CACO3	DIS- SOLVED (MG/L) AS CA)	(MG/L) AS MG)		
<b>SEP</b>												
10...	1245	1.0	2040	7.9	24.5	7.3	87	350	240	92		
10...	1247	10	2040	7.9	24.5	7.3	87	--	--	--		
10...	1249	20	2040	7.9	24.0	7.3	86	--	--	--		
10...	1251	30	2040	7.9	24.0	7.2	85	--	--	--		
10...	1253	40	2040	7.9	24.0	7.2	85	--	--	--		
10...	1255	50	2040	7.9	24.0	7.2	85	--	--	--		
10...	1257	60	2040	7.9	24.0	7.2	85	--	--	--		
10...	1259	66	2050	7.9	24.0	7.1	84	360	260	98		
SODIUM AD- SORP- TION RATIO	POTAS- SIUM DIS- SOLVED (MG/L) AS K)	BICAR- BONATE AS HCO3)	SULFATE DIS- SOLVED (MG/L) AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL.)	SILICA, DIS- SOLVED (MG/L) AS SIO2)	SOLID, SUM OF CONSTITUENTS, NO2+NO3 DIS- SOLVED (MG/L) AS N)	NITRO- GEN, TOTAL NO2+NO3 DIS- SOLVED (MG/L) AS N)	NITRO- GEN, TOTAL NO2+NO3 DIS- SOLVED (MG/L) AS N)	PHOS- PHORUS, TOTAL NO2+NO3 DIS- SOLVED (UG/L) AS P)	IRON, DIS- SOLVED (UG/L) AS FE)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN)	
SEP	6.5	6.9	130	210	430	4.7	1120	.01	.07	.020	20	10
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	.00	.08	.020	20	10
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--	--	--	--
10...	6.2	6.8	128	210	420	4.6	1110	.00	.09	.020	30	60

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 10, 1974--Continued

315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>SEP</b>							
10...	1330	1.0	2040	8.0	24.0	7.0	82
10...	1332	10	2040	7.9	24.0	6.6	78
10...	1334	20	2040	7.9	24.0	6.6	78
10...	1336	30	2040	7.8	24.0	6.3	74
10...	1338	38	2040	7.8	24.0	5.4	64

315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>SEP</b>							
10...	1400	1.0	2040	8.1	24.0	7.9	93
10...	1402	10	2040	8.1	24.0	7.4	87
10...	1404	20	2040	8.1	24.0	7.2	85
10...	1406	30	2040	7.9	24.0	7.1	84
10...	1408	40	2040	7.9	24.0	6.9	81
10...	1410	53	2040	7.9	24.0	6.3	74

320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>SEP</b>							
10...	1435	1.0	2000	8.2	24.5	7.8	93
10...	1437	10	2000	8.1	24.0	7.2	85
10...	1439	20	2000	8.1	24.0	7.0	82
10...	1441	29	2000	8.0	24.0	6.3	74

320122097260901 LAKE WHITNEY SITE PC

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>SEP</b>								
10...	1500	1.0	1820	8.3	24.5	1.04	7.7	92
10...	1502	10	1990	8.1	24.0	--	6.6	78
10...	1504	20	2020	8.0	24.0	--	6.4	75
10...	1506	30	2020	7.9	24.0	--	6.2	73
10...	1508	41	2020	7.9	24.0	--	5.8	68
<b>HARD- NESS</b>								
(MG/L)	CACO <sub>3</sub>	CACO <sub>3</sub>	CALCIUM NONCAR- BONATE AS CACO <sub>3</sub> )	AS CA)	MAGNE- SIUM, SOLVED AS MG)	SODIUM, DIS- SOLVED AS NA)	AD- SORP- TION RATIO AS NA)	POTAS- SIUM, BICAR- BONATE AS HCO <sub>3</sub> )
(MG/L)								SULFATE DIS- SOLVED AS SO <sub>4</sub> )
DATE								
<b>SEP</b>								
10...	320	220	86	25	240	5.9	6.5	116
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	360	250	95	29	280	6.5	6.9	125
								210

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 10, 1974--Continued

## 320122097260901 LAKE WHITNEY SITE FC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS DATE AS CL)	SILICA, DIS- SOLVED (MG/L AS DATE AS CL)	SOLIDS, SUM OF CONSTITUENTS, NO2+NO3 (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
			(MG/L AS DATE AS CL)	(MG/L AS DATE AS CL)	(MG/L AS N)	(MG/L AS P)	(UG/L AS FE)	(UG/L AS MN)
<b>SEP</b>								
10...	390	5.3	1000	.00	.11	.030	20	10
10...	--	--	--	--	--	--	--	--
10...	--	--	--	.00	.09	.020	20	0
10...	--	--	--	--	--	--	--	--
10...	420	4.9	1110	.00	.17	.020	40	40

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
		DEPTH (FT)	PH (MICRO- MHOS)	DIS- SOLVED (MG/L)
<b>SEP</b>				
10...	1530	1.0	1660	8.3 25.0 9.0 107
10...	1532	10	1660	7.8 24.5 6.1 73
10...	1534	20	1660	7.8 24.5 6.0 71
10...	1536	30	1660	7.5 24.5 4.4 52

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
		DEPTH (FT)	PH (MICRO- MHOS)	(UNITS)	(MG/L)
<b>SEP</b>					
10...	1600	1.0	1180	8.0 24.5 .55 7.9 94	
10...	1602	10	1400	7.5 24.5 -- 5.1 61	
10...	1604	18	1420	7.3 24.5 -- 3.2 38	

DATE	HARD- NESS, (MG/L AS DATE CACO3)	CALCIUM NONCAR- BONATE (MG/L AS CACO3)	MAGNE- SIUM, DIS- SOLVED (MG/L AS CACO3)	SODIUM, DIS- SOLVED (MG/L AS MG)	SODIUM AD- SORP- TION (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE (MG/L AS SO4)
	(MG/L AS CACO3)	(MG/L AS CACO3)	(MG/L AS CACO3)	(MG/L AS MG)	(MG/L AS NA)	RATIO (MG/L AS NA)	(MG/L AS K)	(MG/L AS HCO3)
<b>SEP</b>								
10...	220	110	62	15	140	4.1	5.7	128 120
10...	--	--	--	--	--	--	--	--
10...	240	140	69	17	180	5.0	6.1	124 140

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS DATE AS CL)	SILICA, DIS- SOLVED (MG/L AS DATE AS CL)	SOLIDS, SUM OF CONSTITUENTS, NO2+NO3 (MG/L AS DATE AS CL)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
	(MG/L AS DATE AS CL)	(MG/L AS DATE AS CL)	(MG/L AS DATE AS CL)	(MG/L AS DATE AS CL)	(MG/L AS N)	(MG/L AS P)	(UG/L AS FE)	(UG/L AS MN)
<b>SEP</b>								
10...	220	6.6	632	.00	.28	.090	80	0
10...	--	--	--	.01	.20	.030	20	30
10...	280	6.4	760	.00	.30	.060	70	240

TABLE 14--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 10, 1974--Continued

## 320721097293301 LAKE WHITNEY SITE P14

		SPE-	CIFIC		TRANS-		OXYGEN,	DIS-
		CON-	DUCT-	PH	TEMPER-	PAR-	SOLVED	SOLVED
		SAMP-	LING	ANCE	ATURE,	ENCY	OXYGEN,	(PER-
		DEPTH	(MICRO-	(UNITS)	WATER	(SECCHI	DIS-	CENT
DATE	TIME	(FT)	MHOS)		(DEG C)	DISK)	SOLVED	SATUR-
						(M)	(MG/L)	ATION)
SEP								
10...	1630	1.0	1470	7.9	25.0	.67	7.0	83
10...	1632	10	1490	7.5	24.5	--	4.8	57
10...	1634	18	1490	7.4	24.5	--	3.2	38
		HARD-	HARD-	MAGNE-	SODIUM	SODIUM	POTAS-	SULFATE
		NESS,	NONCAR-	CALCIUM	SIUM,	AD-	SIUM,	BICAR-
		(MG/L	BONATE	DIS-	DIS-	SORP-	DIS-	BONATE
		AS.	(MG/L	SOLVED	SOLVED	TION	SOLVED	(MG/L
DATE	CACO3)	CACO3)	AS CA)	(MG/L	AS MG)	RATIO	(MG/L	AS
						AS NA)	AS K)	AS SO4)
SEP								
10...	270	170	70	22	200	5.3	5.8	117
10...	--	--	--	--	--	--	--	--
10...	270	170	73	21	200	5.3	6.1	124
								150
		CHLO-	SILICA,	SOLIDS,	NITRO-	NITRO-	IRON,	MANGA-
		RIDE,	DIS-	SUM OF	GEN,	CEN,	PHOS-	NESE,
		DIS-	SOLVED	CONSTITUENTS,	NO2+NO3	AMMONIA	PHORUS,	DIS-
		SOLVED	(MG/L	DIS-	TOTAL	TOTAL	TOTAL	SOLVED
		(MG/L	AS	SOLVED	(MG/L	(MG/L	(MG/L	SOLVED
DATE	AS CL)	SI02)	(MG/L	AS N)	AS N)	AS N)	AS P)	(UG/L
								(UG/L
								AS MN)
SEP								
10...	310	6.0	822	.00	.15	.050	20	30
10...	--	--	--	.00	.16	.030	20	20
10...	300	6.2	818	.02	.33	.110	30	200

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1975  
 FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
 MG/L = milligrams per liter; UG/L = micrograms per liter

315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	(PER-	HARD-
		LING	CIFIC	PAR-	DIS-		
		DUCT-	ENCY.	OXYGEN,	SOLVED		
		ANCE	(SECCHI	(WATER	(MG/L)		
		(MICRO-	DISK)	DEG C)			
		MHOS)	(UNITS)	(DEG C)			
JAN							
27...	0935	1.0	1970	8.1	10.5	2.41	8.6
27...	0937	10	1970	8.1	10.5	--	8.1
27...	0939	20	1970	8.0	10.0	--	7.9
27...	0941	30	1970	8.0	10.0	--	7.8
27...	0943	40	1970	8.0	10.0	--	7.7
27...	0945	50	1970	8.0	9.5	--	7.6
27...	0947	60	1970	7.9	9.5	--	7.6
27...	0949	70	1970	7.9	9.0	--	7.6
27...	0951	80	1970	7.9	9.0	--	7.6
27...	0953	90	1970	7.9	9.0	--	7.6
27...	0955	96	1970	7.9	9.0	--	7.6
							66
							350
HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	CHLO-
NESS,	NONCAR-	SOLVED	SOLVED	AD-	SIUM,	BONATE	RIDE,
NONCAR-	BONATE	SOLVED	SOLVED	SORP-	DIS-	DIS-	DIS-
(MG/L)	(MG/L)	(MG/L)	(MG/L)	TION	SOLVED	(MG/L)	SOLVED
DATE	CACO <sub>3</sub>	AS CA)	AS MG)	(MG/L AS NA)	(MG/L AS K)	AS HCO <sub>3</sub> )	(MG/L AS SO <sub>4</sub> )
JAN							
27...	230	98	24	260	6.1	6.2	135
27...	--	--	--	--	--	--	220
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	240	100	24	260	6.1	6.0	136
							220
							420
FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANA-
RIDE,	DIS-	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,
DIS-	SOLVED	CONSTITUENTS.	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	SOLVED	DIS-
SOLVED	(MG/L	DIS-	TOTAL	TOTAL	(MG/L	(MG/L	SOLVED
DATE	AS F)	SIO <sub>2</sub> )	(MG/L)	(AS N)	AS N)	(UG/L	(UG/L
					AS P)	AS FE)	AS MN)
JAN							
27...	.3	4.7	1100	.08	.06	.020	0
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	.08	.05	.020	10
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	.3	5.1	1100	.08	.09	.010	0
							10

315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	(PER-	HARD-
		DEPTH	CIFIC	PAR-	DIS-		
		DUCT-	ENCY.	OXYGEN,	SOLVED		
		ANCE	(SECCHI	(WATER	(MG/L)		
		(MICRO-	DISK)	DEG C)			
		MHOS)	(UNITS)	(DEG C)			
JAN							
27...	1105	1.0	1970	8.3	10.5	8.4	75
27...	1107	10	1970	8.2	10.5	8.4	75
27...	1109	20	1970	8.2	10.0	8.3	73
27...	1111	30	1970	8.2	10.0	8.0	71
27...	1113	40	1970	8.2	10.0	8.0	71
27...	1115	50	1970	8.3	9.5	7.8	68
27...	1117	60	1970	8.3	9.5	7.8	68
27...	1119	70	1970	8.3	9.5	7.8	68
27...	1121	80	1970	8.3	9.0	7.6	66
27...	1123	93	1970	8.2	9.0	7.4	64

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1975--Continued

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	DEPTH (FT)	SPE-	CIFIC	TEMPER-	OXYGEN,	OXYGEN, (PER- CENT SATUR- ATION)
			SAMP-	DUCT-		DIS-	
		(MICRO- MHOS)	(UNITS)	(SECCHI DISK)	(M)	(MG/L)	
JAN							
27...	1145	10	1970	8.3	10.5	8.6	77
27...	1147	10	1970	8.2	10.5	8.6	77
27...	1149	20	1970	8.2	10.0	8.5	75
27...	1151	30	1970	8.2	10.0	8.4	74
27...	1153	40	1970	8.2	10.0	8.4	74
27...	1155	50	1970	8.2	9.5	8.2	72
27...	1157	60	1970	8.2	9.5	7.8	68
27...	1159	70	1970	8.2	9.5	7.6	67
27...	1201	80	1970	8.3	9.0	7.4	64
27...	1203	88	1970	8.2	9.0	7.4	64

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	DEPTH (FT)	SPE-	CIFIC	TRANS-	OXYGEN,	OXYGEN, (PER- CENT SATUR- ATION)	HARD- NESS (MG/L CACO3)
			SAMP-	DUCT-		PAR- ENCY		
		(MICRO- MHOS)	(UNITS)	(SECCHI DISK)	(M)	OXYGEN, DIS- SOLVED (MG/L)		
JAN								
27...	1255	10	1950	8.2	11.0	2.04	8.8	79
27...	1257	10	1950	8.2	10.5	--	8.6	77
27...	1259	20	1950	8.2	10.5	--	8.6	77
27...	1301	30	1950	8.2	10.0	--	8.2	73
27...	1303	40	1970	8.1	9.5	--	7.8	68
27...	1305	50	1970	8.0	9.5	--	7.8	68
27...	1307	60	2000	8.0	9.5	--	7.4	65
27...	1309	70	2080	7.9	9.0	--	7.2	62
27...	1311	75	2080	7.9	9.0	--	7.2	62
								410

DATE	HARD- NESS (MG/L CACO3)	CALCIUM (MG/L AS CA)	MAGNE- SIUM, (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, (MG/L AS K)	BICAR- BONATE HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
JAN									
27...	230	100	24	250	5.8	5.8	142	220	400
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	270	120	27	270	5.8	5.8	168	240	430

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA; DIS- SOLVED (MG/L AS SIO2)	SOLIDs, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN								
27...	.3	4.8	1080	.08	.04	.010	10	0
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	--	--	--	.08	.04	.020	10	0
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	.3	4.7	1180	.03	.12	.020	10	0

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1975--Continued

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SPECIFIC CON-		PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) * (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		HARD- NESS (MG/L AS CACO3)
		SAMP- LING	DUCT- ANCE					(SECCHI DISK) * (M)	(MG/L)	
<b>JAN</b>										
27...	1225	1.0	1870	8.1	11.0	2.01	8.5	77	340	
27...	1227	10	1870	8.1	10.5	--	8.4	75	--	
27...	1229	20	1920	8.1	10.5	--	8.4	75	--	
27...	1231	26	1920	8.0	10.0	--	8.2	73	350	
DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MC)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	
<b>JAN</b>										
27...	230	100	23	240	5.6	5.6	145	210	400	
27...	--	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	--	
27...	240	100	25	260	6.0	5.5	142	220	400	
DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, TOTAL (MG/L AS PE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
<b>JAN</b>										
27...	.2	4.8	1060	.08	.08	.08	.010	10	0	
27...	--	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	--	
27...	.2	4.8	1090	.09	.04	.04	.020	50	0	

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SPECIFIC CON-		PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		(HARDNESS AS CACO3)
		SAMP- LING	DUCT- ANCE				(SECCHI DISK) * (M)	(MG/L)	
<b>JAN</b>									
27...	1345	1.0	1890	8.1	11.5	8.1	74		
27...	1347	10	1890	8.1	11.0	8.3	75		
27...	1349	20	1890	8.0	10.5	7.8	70		
27...	1351	30	1920	7.9	10.0	7.2	64		
27...	1353	40	1920	7.8	10.0	7.0	62		
27...	1355	46	1920	7.8	10.0	7.0	62		

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SPECIFIC CON-		PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)		(HARDNESS AS CACO3)
		SAMP- LING	DUCT- ANCE				(SECCHI DISK) * (M)	(MG/L)	
<b>JAN</b>									
27...	1415	1.0	1920	8.3	10.5	8.6	77		
27...	1417	10	1920	8.2	10.5	8.6	77		
27...	1419	20	1920	8.2	10.0	8.4	74		
27...	1421	30	1990	8.2	10.0	7.9	70		
27...	1423	40	2060	8.2	9.5	7.7	68		
27...	1425	50	2160	8.2	9.5	7.5	66		
27...	1427	64	2160	8.1	9.0	7.3	63		

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1975--Continued

320011097262201 LAKE WHITNEY SITE P8

		SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DIS-			
		DEPTH	CON-	SOLVED			
	DATE	(FT)	(MICRO-	PH	TEMPER-	OXYGEN,	(PER-
			MHOS)	(UNITS)	ATURE,	DIS-	CENT
					WATER	SOLVED	SATUR-
					(DEG C)	(MG/L)	ATION)
JAN							
27...	1445	1.0	1890	8.3	10.5	8.6	77
27...	1447	10	1900	8.3	10.0	8.3	73
27...	1449	20	1900	8.3	10.0	7.9	70
27...	1451	30	1920	8.2	9.5	7.8	68
27...	1453	38	1980	8.0	9.5	7.0	61

320122097260901 LAKE WHITNEY SITE FC

		SAMP-	SPE-	TRANS-	OXYGEN,		
		LING	CIFIC	PAR-	DIS-		
		DEPTH	CON-	ENCY	SOLVED		
	DATE	(FT)	(MICRO-	PH	WATER	(SECCHI	HARD-
			MHOS)	(UNITS)	(DEG C)	DIS-	NESS
					DIS-	SATUR-	(MG/L
					DIS-	ATION)	AS
					DIS-		CACO3)
JAN							
27...	1510	1.0	1990	8.2	11.0	1.92	8.7
27...	1512	10	1990	8.2	10.5	--	8.4
27...	1514	20	2010	8.1	10.0	--	8.0
27...	1516	30	2130	8.1	9.5	--	7.9
27...	1518	40	2220	8.0	9.5	--	7.6
27...	1520	53	2220	8.0	9.5	--	7.4

	HARD-	CALCIUM	MAGNE-	SODIUM	POTAS-	BICAR-	CHLO-
	NESS,	DIS-	SIUM.	AD-	SIUM,	BONATE	RIDE,
	NONCAR-	SOLVED	DIS-	SORP-	DIS-	DIS-	DIS-
	BONATE	(MG/L	SOLVED	(MG/L	SOLVED	(MG/L	SOLVED
	(MG/L	AS CACO3)	AS CA)	AS MG)	AS NA)	AS K)	AS SO4)
JAN							
27...	250	110	26	250	5.6	5.4	161
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	280	120	29	290	6.2	5.9	172
							260
							460

	FLUO-	SILICA,	SOLID,	NITRO-	NITRO-	IRON,	MANGA-
	RIDE,	DIS-	SUM OF	GEN-	GEN-	DIS-	NESE,
	DIS-	SOLVED	CONSTI-	GEN	TOTAL	SOLVED	DIS-
	SOLVED	(MG/L	TUENTS,	NO2+NO3	(MG/L	(UG/L	SOLVED
	(MG/L	AS F)	DIS-	DIS-	AS N)	AS FE)	(UG/L
	AS	SIO2)	SOLVED	SOLVED	AS N)	AS MN)	AS
JAN							
27...	.3	4.4	1130	.03	.03	.020	10
27...	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--
27...	--	--	--	.00	.07	.010	10
27...	--	--	--	--	--	--	--
27...	.3	4.7	1250	.00	.09	.020	10
							0

320124097291101 WHITNEY LAKE SITE GC

		SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DIS-			
		DEPTH	CON-	SOLVED			
	DATE	(FT)	(MICRO-	PH	TEMPER-	OXYGEN,	(PER-
			MHOS)	(UNITS)	ATURE,	DIS-	CENT
					WATER	SOLVED	SATUR-
					(DEG C)	(MG/L)	ATION)
JAN							
27...	1540	1.0	2070	8.2	11.0	8.5	77
27...	1542	10	2110	8.2	10.5	8.3	74
27...	1544	20	2240	8.1	10.0	8.0	71
27...	1546	30	2270	8.1	10.0	7.8	69
27...	1548	46	2440	7.9	10.0	7.4	65

TABLE 15--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1975--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT (MG/L	OXYGEN, DIS- SOLVED (PER- CENT (MG/L	HARD- NESS (MG/L AS CACO3)
			SAMP- LING (MICRO- MHOS)			(M)	(MG/L)	SATUR- ATION)	
<b>JAN</b>									
27...	1615	1.0	2030	8.6	11.0	1.46	10.4	.94	410
27...	1617	10	2240	8.2	10.0	--	8.3	73	--
27...	1619	20	2380	8.0	9.5	--	7.0	61	--
27...	1621	27	2510	7.9	10.0	--	6.2	54	460
<b>HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)</b>									
<b>CALCIUM DIS- SOLVED (MG/L AS CA)</b>									
<b>MAGNE- SIUM DIS- SOLVED (MG/L AS MG)</b>									
<b>SODIUM DIS- SOLVED (MG/L AS NA)</b>									
<b>POTAS- SIUM, DIS- SOLVED (MG/L AS K)</b>									
<b>BICAR- BONATE (MG/L AS HCO3)</b>									
<b>SULFATE DIS- SOLVED (MG/L AS SO4)</b>									
<b>CHLO- RIDE, DIS- SOLVED (MG/L AS CL)</b>									
<b>JAN</b>									
27...	260	120	26	260	5.6	5.9	180	230	420
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	330	130	32	340	6.9	6.5	155	310	550
<b>SOLIDS,</b>									
<b>FLUO- RIDE, DIS- SOLVED (MG/L AS F)</b>									
<b>SILICA, DIS- SOLVED (MG/L AS SIO2)</b>									
<b>SUM OF CONSTITUENTS, NO2+NO3</b>									
<b>NITRO- GEN, AMMONIA</b>									
<b>NITRO- GEN, PHORUS</b>									
<b>IRON, DIS- SOLVED (UG/L AS FE)</b>									
<b>MANGA- NESE, DIS- SOLVED (UG/L AS MN)</b>									
<b>JAN</b>									
27...	.3	3.8	1150	.00	.03	.060	10	0	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	.02	.06	.030	10	0	
27...	.3	5.1	1450	.05	.06	.030	20	20	

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT (MG/L	OXYGEN, DIS- SOLVED (PER- CENT (MG/L	HARD- NESS (MG/L AS CACO3)
			SAMP- LING (MICRO- MHOS)			(M)	(MG/L)	SATUR- ATION)	
<b>JAN</b>									
27...	1645	1.0	2270	8.4	11.5	10.3	.94	420	
27...	1647	10	2290	8.3	11.0	9.9	89	--	
27...	1649	20	2380	8.2	10.5	9.2	82	--	
27...	1651	28	2510	8.0	10.0	7.6	67	460	
<b>HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)</b>									
<b>CALCIUM DIS- SOLVED (MG/L AS CA)</b>									
<b>MAGNE- SIUM DIS- SOLVED (MG/L AS MG)</b>									
<b>SODIUM DIS- SOLVED (MG/L AS NA)</b>									
<b>POTAS- SIUM, DIS- SOLVED (MG/L AS K)</b>									
<b>BICAR- BONATE (MG/L AS HCO3)</b>									
<b>SULFATE DIS- SOLVED (MG/L AS SO4)</b>									
<b>CHLO- RIDE, DIS- SOLVED (MG/L AS CL)</b>									
<b>JAN</b>									
27...	280	120	29	300	6.4	5.9	167	270	470
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	330	130	33	340	6.9	6.5	155	310	550
<b>SOLIDS,</b>									
<b>FLUO- RIDE, DIS- SOLVED (MG/L AS F)</b>									
<b>SILICA, DIS- SOLVED (MG/L AS SIO2)</b>									
<b>SUM OF CONSTITUENTS, NO2+NO3</b>									
<b>NITRO- GEN, AMMONIA</b>									
<b>NITRO- GEN, PHORUS</b>									
<b>IRON, DIS- SOLVED (UG/L AS FE)</b>									
<b>MANGA- NESE, DIS- SOLVED (UG/L AS MN)</b>									
<b>JAN</b>									
27...	.3	4.3	1280	.00	.03	.020	10	0	
27...	--	--	--	.00	.03	.020	10	0	
27...	--	--	--	--	--	--	--	--	
27...	.3	5.2	1450	.04	.04	.020	50	0	

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 2, 1975

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,		
							DIS-	SOLVED	HARD-
		DEPTH	MHOS)	(UNITS)	WATER	(SECCHI	OXYGEN,	(PER-	NESS
		(FT)			(DEG C)	DISK)	DIS-	CENT	(MG/L
						(M)	SOLVED	SATUR-	AS CACO3)
<b>JUN</b>									
02...	0815	1.0	1670	8.0	25.0	2.74	8.2	98	320
02...	0817	10	1670	8.0	24.0	--	8.0	94	--
02...	0819	20	1670	7.9	24.0	--	7.6	89	--
02...	0821	30	1670	7.8	23.5	--	7.1	83	--
02...	0823	40	1670	7.5	22.5	--	5.2	59	--
02...	0825	50	1750	7.2	20.0	--	2.0	22	--
02...	0827	55	1820	7.2	19.0	--	1.2	13	--
02...	0829	60	1820	7.2	19.0	--	1.2	13	--
02...	0831	70	1820	7.2	18.0	--	.2	2	--
02...	0833	80	1820	7.2	17.0	--	.2	2	--
02...	0835	90	1820	7.2	16.5	--	.2	2	--
02...	0837	95	1820	7.2	16.5	--	.2	2	330
<b>HARD-NESS,</b>									
NONCAR-	CALCIUM	MAGNE-	SODIUM,	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-	
BONATE	DIS-	SILUM,	SOLVED	AD-	SUM,	DIS-	DIS-	RIDE,	
(MG/L	SOLVED	DIS-	SOLVED	SORP-	SOLVED	BONATE	SOLVED	DIS-	
CACO3)	(MG/L	(MG/L	(MG/L	TION	(MG/L	(MG/L	(MG/L	SOLVED	
DATE	AS CA)	AS MG)	AS NA)	RATIO	AS K)	AS K)	AS HCO3)	AS SO4)	AS CL)
<b>JUN</b>									
02...	190	95	20	210	5.1	5.1	160	190	330
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	200	99	21	230	5.5	5.8	160	210	360
<b>FLUO-</b>									
DIS-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-		
SOLVED	DIS-	CONSTI-	GEN.	GEN.	PHORUS,	DIS-	NESE,		
(MG/L	SOLVED	TUENTS,	NO2+NO3	AMMONIA	TOTAL	SOLVED	SOLVED		
DATE	AS F)	SI02)	DIS-	TOTAL	(MG/L	(UG/L	(UG/L		
			AS N)	AS N)	AS N)	AS P)	AS FE)	AS MN)	
<b>JUN</b>									
02...	.3	4.2	934	.01	.00	.010	20	10	
02...	--	--	--	--	--	--	--	--	
02...	--	--	--	--	--	--	--	--	
02...	--	--	--	.02	.00	.010	20	10	
02...	--	--	--	--	--	--	--	--	
02...	--	--	--	--	--	--	--	--	
02...	--	--	--	--	--	--	--	--	
02...	--	--	--	.16	.00	.000	20	30	
02...	--	--	--	--	--	--	--	--	
02...	.3	5.1	1010	.25	.00	.040	40	240	

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,		
							DIS-	SOLVED	HARD-
		DEPTH	MHOS)	(UNITS)	WATER	(SECCHI	OXYGEN,	(PER-	NESS
		(FT)			(DEG C)	(M)	DIS-	CENT	(MG/L
							SOLVED	SATUR-	AS CACO3)
<b>JUN</b>									
02...	0900	1.0	1670	8.1	25.0	8.3	99		
02...	0902	10	1670	8.1	24.0	8.2	96		
02...	0904	20	1670	8.0	24.0	7.3	86		
02...	0906	30	1670	8.0	23.5	7.0	81		
02...	0908	40	1670	7.8	23.0	5.6	64		
02...	0910	51	1750	7.2	20.0	1.8	20		

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 2, 1975--Continued

315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	
		LING	ANCE		ATURE,	DIS-	DIS-	
		(FT)	MHOS)	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED
<b>JUN</b>								
02...	0945	1.0	1670	7.7	26.0	8.4	102	
02...	0947	10	1670	7.7	24.5	8.4	100	
02...	0949	20	1670	7.7	24.0	7.4	87	
02...	0951	30	1670	7.6	23.5	6.9	80	
02...	0953	40	1670	7.6	23.0	6.0	69	
02...	0955	50	1770	7.2	19.5	1.6	17	
02...	0957	60	1820	7.1	18.5	1.0	11	
02...	0959	70	1820	7.1	18.0	.2	2	
02...	1001	80	1820	7.2	17.5	.2	2	
02...	1003	95	1820	7.2	16.5	.2	2	

315432097234601 LAKE WHITNEY SITE CG

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	
		LING	ANCE		ATURE,	DIS-	DIS-	
		(FT)	MHOS)	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED
<b>JUN</b>								
02...	1025	1.0	1640	8.3	26.0	8.4	102	
02...	1027	10	1640	8.3	24.5	8.0	95	
02...	1029	20	1670	8.1	24.0	7.2	85	
02...	1031	30	1670	8.1	23.5	7.1	83	
02...	1033	40	1690	7.8	22.5	4.8	55	
02...	1035	50	1770	7.4	19.0	1.3	14	
02...	1037	60	1780	7.3	18.5	.2	2	
02...	1039	70	1820	7.3	18.0	.2	2	
02...	1041	80	1820	7.3	18.0	.2	2	
02...	1043	89	1820	7.3	17.5	.2	2	

315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	OXYGEN,			
		LING	ANCE		ATURE,	PAR-	(SECCHI	DIS-	SOLVED	(PER-	
		(FT)	MHOS)	(UNITS)	(DEG C)	WATER	DISK)	(M)	(MG/L)	GENT	
<b>JUN</b>											
02...	1135	1.0	1600	7.6	25.0	2.13	8.5	101	310		
02...	1137	10	1600	7.6	24.0	--	8.1	95	--		
02...	1139	20	1650	7.5	23.5	--	6.6	77	--		
02...	1141	30	1650	7.4	23.0	--	5.1	59	--		
02...	1143	35	1690	7.3	22.5	--	4.4	50	--		
02...	1145	40	1690	7.5	21.5	--	2.9	33	--		
02...	1147	50	1760	7.3	19.0	--	.2	2	--		
02...	1149	60	1760	7.3	18.5	--	.2	2	--		
02...	1151	70	1760	7.3	18.0	--	.2	2	--		
02...	1153	76	1760	7.3	18.0	--	.2	2	330		

DATE	HARD-	CALCIUM	MAGNE-	SODIUM,	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-
	NESS,	DIS-	SUIM,	SODIUM,	AD-	SUIM,	BONATE	DIS-	RIDE,
	NONCAR-	SOLVED	DIS-	SORP-	DIS-	BONATE	DIS-	SOLVED	DIS-
	BONATE	(MG/L)	(MG/L)	SOLVED	SOLVED	SOLVED	(MG/L)	SOLVED	SOLVED
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
	CACO3)	AS Ca)	AS Mg)	AS Na)	Ratio	(AS K)	AS HCO3)	AS SO4)	AS Cl)
<b>JUN</b>									
02...	170	91	20	200	4.9	5.2	168	180	300
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	200	99	21	230	5.5	5.4	167	190	350

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 2, 1975--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SOLINS, SUM OF CONSTITU- ENTS (MG/L)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> AS N)	NITRO- GEN, AMMONIA AS N)	PHOS- PHORUS, TOTAL (MG/L)	IRON, TOTAL (MG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
	AS F)	SIO <sub>2</sub> )	DIS- SOLVED (MG/L)	AS N)	AS P)	AS P)	AS FE)	AS MN)
<b>JUN</b>								
02...	.3	4.2	884	.00	.00	.010	10	0
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	.01	.00	.010	10	20
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	.16	.00	.010	20	290
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	.3	5.3	984	.18	.00	.030	190	530

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT)	
		DEPTH (FT)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION)
<b>JUN</b>						
02...	1110	1.0	1530	7.6	26.0	2.13
02...	1112	10	1530	7.6	25.0	--
02...	1114	22	1360	7.3	24.0	--
02...	1116	28	1280	7.3	23.5	--
						3.0
						35

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT)	
		DEPTH (FT)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION)
<b>JUN</b>						
02...	1225	1.0	1480	8.3	26.0	9.4
02...	1227	10	1510	7.9	24.5	5.8
02...	1229	20	1550	7.9	24.0	5.7
02...	1231	30	1550	7.8	23.5	5.0
02...	1233	40	1580	7.5	22.5	1.8
02...	1235	48	1670	7.4	20.5	.2

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT)	
		DEPTH (FT)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	SATUR- ATION)
<b>JUN</b>						
02...	1300	1.0	1550	8.2	26.0	8.6
02...	1302	10	1550	8.2	25.0	8.4
02...	1304	20	1560	7.9	24.5	6.0
02...	1306	30	1590	7.7	23.5	4.3
02...	1308	40	1670	7.4	21.0	.2
02...	1310	50	1760	7.4	19.5	.2
02...	1312	65	1760	7.4	19.0	.2

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 2, 1975--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	
		LING	ANCE		(MICRO-	ATURE,	DIS-	DIS-
		(FT)	MHOS)	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED
JUN								
02...	1335	1.0	1550	8.2	26.5	9.0	110	
02...	1337	10	1550	8.2	25.0	8.6	102	
02...	1339	20	1550	8.0	24.5	6.6	79	
02...	1341	30	1550	7.5	23.5	2.5	29	
02...	1343	41	1680	7.3	21.5	.2	2	

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	OXYGEN,	
		LING	ANCE		(MICRO-	ATURE,	PAR-	OXYGEN,	DIS-
		(FT)	MHOS)	(UNITS)	(DEG C)	(SECCHI	DIS-	SOLVED	NESS
						DISK)	(M)	SOLVED	(PER-
									CENT
									(MG/L)
JUN									
02...	1400	1.0	1540	8.2	26.5	1.59	9.2	112	310
02...	1402	10	1540	8.0	25.5	--	7.4	.89	--
02...	1404	20	1650	7.6	25.0	--	4.6	.55	--
02...	1406	30	1730	7.4	24.0	--	3.0	.35	--
02...	1408	35	1730	7.4	23.0	--	1.3	.15	--
02...	1410	40	1730	7.4	21.5	--	.2	.2	--
02...	1412	52	1730	7.4	19.5	--	.2	.2	340

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM	MAGNE- SIUM,	SODIUM	SODIUM	POTAS- SIUM,	BICAR-	SULFATE	CHLO-
		DIS- SOLVED (MG/L AS CACO3)	DIS- SOLVED (MG/L AS CA)	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	SORP- TION	DIS- SOLVED (MG/L AS K)	BONATE (MG/L AS HCO3)	DIS- SOLVED (MG/L AS SO4)
JUN									
02...	170	89	21	190	4.7	4.9	173	170	290
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	200	99	22	220	5.2	5.0	174	190	320

DATE	SOLIDS,			NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS N)	NO2+NO3	AMMONIA	PHORUS, TOTAL (MG/L AS N)	TOTAL (MG/L AS P)	DIS- SOLVED (UG/L AS FE)	DIS- SOLVED (UG/L AS MN)
JUN									
02...	.3	4.2	855	.00	.00	.020	40	20	
02...	--	--	--	--	--	--	--	--	
02...	--	--	--	--	--	--	--	--	
02...	--	--	--	.04	.03	.010	20	310	
02...	--	--	--	--	--	--	--	--	
02...	--	--	--	.07	.08	.020	20	990	
02...	.3	5.4	949	.08	.13	.050	250	1200	

## 320124097291101 WHITNEY LAKE SITE GC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	
		LING	ANCE		(MICRO-	ATURE,	DIS-	DIS-
		(FT)	MHOS)	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED
JUN								
02...	1435	1.0	1670	8.3	26.5	9.4	115	
02...	1437	10	1680	8.0	25.5	7.4	89	
02...	1439	20	1850	7.9	24.5	6.4	76	
02...	1441	30	2080	7.8	24.5	6.2	74	
02...	1443	40	2080	7.8	24.0	6.1	72	
02...	1445	48	1770	7.5	21.5	.2	2	

TABLE 16--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 2, 1975--Continued

## 320509097275901 LAKE WHITNEY SITE P12

TIME	DATE	SAMP-	DUCT-	TEMPER-	TRANS-	OXYGEN,	(PER-	HARD-		
		LING	ANCE	PR	ATURE,	ENCY	OXYGEN,	NESS		
		DEPTH	(MICRO-	WATER	(SECCHI	DIS-	SOLVED	(MG/L		
		(FT)	MHOS)	(UNITS)	(DEG C)	(M)	(MG/L)	AS		
JUN	02...	1510	1.0	541	8.7	26.5	.49	13.0	159	150
	02...	1512	5.0	1350	7.7	24.5	--	6.2	74	--
	02...	1514	10	2040	7.9	25.0	--	6.8	81	--
	02...	1516	20	2090	7.9	24.5	--	6.7	80	--
	02...	1518	28	2090	7.7	24.0	--	5.0	59	390

TIME	DATE	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-
		NESS,	NONCAR-	DUCT-	DIS-	DIS-	AD-	SORP-	DIS-	RIDE,
		NONCAR-	NONCAR-	NONCAR-	SOLVED	SOLVED	SOLVED	BONATE	SOLVED	DIS-
		(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L
		CACO3)	AS CA)	AS MG)	AS MG)	AS NA)	AS K)	HCO3)	AS SO4)	AS CL)
JUN	02...	21	51	5.0	44	1.6	4.4	154	40	58
	02...	--	--	--	--	--	--	--	--	--
	02...	--	--	--	--	--	--	--	--	--
	02...	--	--	--	--	--	--	--	--	--
	02...	260	110	28	280	6.2	5.8	160	240	430

TIME	DATE	SOLIDS,			NITRO-	NITRO-	IRON,	MANA-	
		FLUO-	SILICA,	SUM OF	GEN,	PHOS-		NESE,	
		RIDE,	DIS-	CONSTITUENTS,	NO2+NO3	AMMONIA	DIS-	DIS-	
		SOLVED	SOLVED	TUENTS,	TOTAL	TOTAL	SOLVED	SOLVED	
		(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(UG/L	(UG/L	
		AS F)	AS F)	SOLVED	AS N)	AS N)	AS FE)	AS MN)	
		SIO2)	SIO2)	(MG/L)	AS N)	AS P)	AS FE)	AS MN)	
JUN	02...	.3	7.0	286	.08	.00	.110	10	10
	02...	--	--	--	--	--	--	--	--
	02...	--	--	--	--	--	--	--	--
	02...	--	--	--	.01	.00	.010	10	30
	02...	.3	4.0	1180	.02	.06	.040	60	160

## 320721097293301 LAKE WHITNEY SITE P14

TIME	DATE	SPECIFIC	DUCT-	TEMPER-	TRANS-	OXYGEN,	(PER-	HARD-		
		COND-	DUCT-	PH	PAR-	ENCY	OXYGEN,	NESS		
		SAMP-	DEPTH	(MICRO-	WATER	(SECCHI	DIS-	SATUR-		
		(FT)	MHOS)	(UNITS)	(DEG C)	(M)	(MG/L)	AS		
JUN	02...	1540	1.0	2100	8.0	25.0	.61	7.6	90	390
	02...	1542	10	2100	7.9	24.5	--	7.3	87	--
	02...	1544	20	2100	7.9	24.5	--	7.2	86	--
	02...	1546	30	2100	7.9	24.5	--	7.2	86	380

TIME	DATE	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-
		NESS,	NONCAR-	DUCT-	DIS-	SOLVED	SOLVED	BONATE	DIS-	DIS-
		NONCAR-	NONCAR-	NONCAR-	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED
		(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L
		CACO3)	AS CA)	AS MG)	AS MG)	AS NA)	AS K)	HCO3)	AS SO4)	AS CL)
JUN	02...	260	110	27	280	6.2	6.1	156	240	440
	02...	--	--	--	--	--	--	--	--	--
	02...	--	--	--	--	--	--	--	--	--
	02...	250	110	26	280	6.2	5.9	156	240	440

TIME	DATE	SOLIDS,			NITRO-	NITRO-	IRON,	MANA-	
		FLUO-	SILICA,	SUM OF	GEN,	PHOS-		NESE,	
		RIDE,	DIS-	CONSTITUENTS,	NO2+NO3	AMMONIA	SOLVED	DIS-	
		SOLVED	SOLVED	TUENTS,	TOTAL	TOTAL	(UG/L	(UG/L	
		(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	AS P)	AS MN)	
		AS F)	AS F)	SOLVED	AS N)	AS N)	AS FE)	AS MN)	
		SIO2)	SIO2)	(MG/L)	AS N)	AS P)	AS FE)	AS MN)	
JUN	02...	.3	3.6	1180	.02	.00	.030	20	10
	02...	--	--	--	.02	.00	.020	30	10
	02...	--	--	--	--	--	--	--	--
	02...	.3	3.6	1180	.01	.00	.030	110	20

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 6, 1975

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,		HARD-	
							ANCE	(SECCHI	SOLVED	NESS
		DEPTH	MICRO-	(UNITS)	WATER	(DEG C)	(DISK)	OXYGEN,	(PER-	(MG/L
<b>SEP</b>										
06...	0900	1.0	1670	8.3	28.5	2.29	8.0	103	310	
06...	0902	10	1670	8.3	28.0	--	8.0	101	--	
06...	0904	20	1670	8.2	28.0	--	7.6	96	--	
06...	0906	30	1670	8.0	28.0	--	6.2	78	--	
06...	0908	40	1670	7.7	27.5	--	4.5	56	--	
06...	0910	50	1750	7.3	27.0	--	2.7	33	--	
06...	0912	55	1750	7.3	27.0	--	.2	2	--	
06...	0914	60	1750	7.3	25.5	--	.2	2	--	
06...	0916	70	1750	7.3	24.0	--	.2	2	--	
06...	0918	80	1750	7.2	22.0	--	.2	2	--	
06...	0920	93	1750	7.2	20.5	--	.2	2	330	
<b>HARD-</b>										
<b>NESS,</b>		CALCIUM	MAGNE-	SODIUM	SODIUM	BICAR-	SULFATE	CHLO-	<b>RIDE,</b>	
NONCAR-		DIS-	STUIM,	DIS-	AD-	BONATE	DIS-	DIS-	DIS-	
BONATE		SOLVED	DIS-	SOLVED	SORP-	DIS-	SOLVED	SOLVED	SOLVED	
(MG/L		(MG/L	(MG/L	(MG/L	TION	SOLVED	(MG/L	(MG/L	(MG/L	
CACO <sub>3</sub> )		AS CA)	AS MG)	AS NA)	RATIO	(MG/L	AS K)	HCO <sub>3</sub> )	AS SO <sub>4</sub> )	AS CL)
<b>DATE</b>										
06...	190	86	23	220	5.4	5.4	142	190	350	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	160	95	22	230	5.5	5.3	200	180	340	
<b>SOLIDS,</b>										
<b>FLUO-</b>		SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	<b>NESE,</b>	
RIDE,		DIS-	CONSTITUENTS,	GEN,	GEN,	PHORUS,	DIS-	DIS-	DIS-	
DIS-		SOLVED	DIS-	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	SOLVED	SOLVED	SOLVED	
(MG/L		(MG/L	SOLVED	(MG/L	TOTAL	(MG/L	(UG/L	(UG/L	(UG/L	
AS F)		AS SIO <sub>2</sub> )	(AS N)	AS N)	AS N)	AS P)	AS FE)	AS MN)	AS MN)	
<b>DATE</b>										
06...	.3	5.3	950	.01	.00	.020	30	10		
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	.3	8.2	982	.01	1.1	.340	250	1900		

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,		HARD-	
							ANCE	(SECCHI	SOLVED	NESS
		DEPTH	MICRO-	(UNITS)	WATER	(DEG C)	(DISK)	OXYGEN,	(PER-	(MG/L
<b>SEP</b>										
06...	0945	1.0	1670	8.3	28.5	8.0	103			
06...	0947	10	1670	8.3	28.0	8.0	101			
06...	0949	20	1670	8.3	28.0	7.8	99			
06...	0951	30	1670	8.0	28.0	6.6	84			
06...	0953	40	1670	7.8	28.0	4.6	58			
06...	0955	44	1670	7.7	28.0	4.0	51			

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 6, 1975--Continued

315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	OXYGEN,	OXYGEN, (PER- CENT SATUR- ATION)
			LING	CIFIC		DIS- SOLVED (MG/L)	
<b>SEP</b>							
06...	1030	1.0	1670	8.3	28.5	7.9	101
06...	1032	10	1670	8.2	28.5	7.8	100
06...	1034	20	1670	8.1	28.0	6.8	86
06...	1036	30	1670	7.9	28.0	5.6	71
06...	1038	40	1670	7.6	27.5	3.6	45
06...	1040	50	1670	7.4	27.0	1.0	12
06...	1042	60	1670	7.3	25.5	.2	2
06...	1044	70	1750	7.2	24.0	.2	2
06...	1046	80	1750	7.2	22.0	.2	2
06...	1048	94	1750	7.2	21.5	.2	2

315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TEMPER-	OXYGEN,	OXYGEN, (PER- CENT SATUR- ATION)
			LING	CIFIC		DIS- SOLVED (MG/L)	
<b>SEP</b>							
06...	1115	1.0	1670	8.3	28.5	7.9	101
06...	1117	10	1670	8.3	28.5	7.9	101
06...	1119	20	1670	8.2	28.5	7.6	97
06...	1121	30	1670	7.6	27.5	3.6	45
06...	1123	40	1670	7.6	27.5	2.5	31
06...	1125	50	1670	7.3	27.0	.6	7
06...	1127	60	1670	7.3	25.5	.2	2
06...	1129	70	1750	7.2	24.0	.2	2
06...	1131	86	1750	7.2	21.5	.2	2

315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TRANS-	OXYGEN,	HARD-		
			LING	DUCT-	CON-	PH	TEMPER-	PAR-	SOLVED
<b>SEP</b>									
06...	1225	1.0	1680	8.2	29.0	1.59	7.8	100	310
06...	1227	10	1680	8.2	29.0	--	7.7	99	--
06...	1229	20	1680	7.9	29.0	--	6.1	78	--
06...	1231	30	1730	7.3	28.5	--	.8	10	--
06...	1233	35	1730	7.3	28.5	--	.2	3	--
06...	1235	40	1650	7.3	27.5	--	.2	2	--
06...	1237	45	1650	7.3	27.5	--	.2	2	--
06...	1239	50	1650	7.3	26.5	--	.2	2	--
06...	1241	55	1650	7.3	26.0	--	.2	2	--
06...	1243	60	1650	7.2	25.5	--	.2	2	--
06...	1245	70	1710	7.1	23.5	--	.2	2	--
06...	1247	74	1710	7.1	23.5	--	.2	2	330
<b>HARDNESS</b>									
<b>NONCARBONATE</b>									
DATE		CALCIUM (MG/L) CACO3)	MACRO- SIUM DIS- SOLVED (MG/L) AS CA)	SODIUM DIS- SOLVED (MG/L) AS MG)	SODIUM DIS- SOLVED (MG/L) AS NA)	POTAS- SIUM DIS- SOLVED (MG/L) AS K)	BICAR- BONATE DIS- SOLVED (MG/L) AS HCO3)	SULFATE DIS- SOLVED (MG/L) AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L) AS CL)
06...	190	87	22	220	5.5	5.6	138	190	350
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	140	97	22	220	5.2	5.4	236	160	340

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 6, 1975--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SOLIDS,		NITRO- GEN, NO2+NO3 (MG/L)	NITRO- GEN, TOTAL (MG/L)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
			AS F)	SIO2)	SUM OF CONSTITUENTS, AS N)	AS N)	AS P)	AS PE)	AS MN)
<b>SEP</b>									
06...	.3	5.4	948		.05	.03	.020	.20	10
06...	--	--	--		--	--	--	--	--
06...	--	--	--		.02	.00	.030	.30	150
06...	--	--	--		--	--	--	--	--
06...	--	--	--		--	--	--	--	--
06...	--	--	--		--	--	--	--	--
06...	--	--	--		--	--	--	--	--
06...	--	--	--		.01	.00	.040	.110	2000
06...	--	--	--		--	--	--	--	--
06...	--	--	--		--	--	--	--	--
06...	.3	9.8	973		.01	1.2	.420	.100	1900

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	SPECI- FIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
							OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>SEP</b>								
06...	1200	1.0	1650	8.1	29.5	7.5	97	
06...	1202	10	1650	8.1	29.5	6.9	90	
06...	1204	20	1650	7.5	29.0	2.4	21	
06...	1206	24	1650	7.4	29.0	1.4	18	

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	SPECI- FIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
							OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>SEP</b>								
06...	1315	1.0	1720	8.3	29.5	8.6	112	
06...	1317	10	1720	8.2	29.5	8.4	109	
06...	1319	20	1720	7.6	29.0	3.7	47	
06...	1321	30	1720	7.4	28.5	.2	3	
06...	1323	40	1720	7.4	28.0	.2	3	
06...	1325	46	1720	7.4	27.5	.2	2	

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPECI- FIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
							OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>SEP</b>								
06...	1345	1.0	1720	8.3	29.5	8.0	104	
06...	1347	10	1720	8.2	29.5	8.0	104	
06...	1349	20	1720	8.1	29.0	7.5	96	
06...	1351	30	1750	7.7	28.5	4.4	56	
06...	1353	40	1800	7.4	28.5	.2	3	
06...	1355	50	1720	7.4	27.0	.2	2	
06...	1357	60	1720	7.2	26.0	.2	2	

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 6, 1975--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	DIS-
		DEPTH	CON-	PH	ATURE,	DIS-	SOLVED
		(FT)	(MICRO-	(UNITS)	(DEG C)	(MG/L)	(PER-
			MHOS)				CENT
SEP							SATUR-
06...	1420	1.0	1720	8.2	29.5	8.0	ATION)
06...	1422	10	1720	8.2	29.5	7.9	104
06...	1424	20	1720	7.7	29.0	4.4	103
06...	1426	30	1720	7.3	28.5	.2	56
06...	1428	37	1720	7.2	28.5	.2	3

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,	DIS-	
		LING	CIFIC	DUCT-	PH	TEMPER-	ENCY	SOLVED	HARD-
		DEPTH	CON-	ANCE	WATER	(SECCHI	DIS-	CENT	NESS
		(FT)	(MICRO-	(UNITS)	(DEG C)	DISK)	(M)	(MG/L)	(MG/L)
SEP									HARD-
06...	1445	1.0	1720	8.2	29.0	1.22	7.5	96	NESS
06...	1447	10	1720	8.1	29.0	--	7.2	92	(CACO3)
06...	1449	15	1780	8.0	29.0	--	5.2	67	--
06...	1451	20	1970	7.3	29.0	--	.2	3	--
06...	1453	30	1970	7.3	28.5	--	.2	3	--
06...	1455	40	1950	7.3	28.5	--	.2	3	--
06...	1457	50	1800	7.3	27.5	--	.2	2	330

DATE	HARD-NESS	NONCAR-BONATE	CALCIUM	MAGNE-SIUM,	SODIUM,	SODIUM	POTAS-SIUM,	BICAR-BONATE	SULFATE	CHLO-RIDE,
			DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	SORP-TION	DIS-SOLVED	(MG/L)	SOLVED	(MG/L)
	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	RATIO	(MG/L)	(MG/L)	AS	AS CL)
	CACO3)	AS CA)	AS MG)	AS NA)			AS K)	HCO3)	AS SO4)	
SEP										
06...	200	86	23	230	5.7	5.7	136	190	360	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	180	93	23	240	5.8	6.2	184	170	380	

DATE	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	DIS-	SUM OF	GEN,	AMMONIA	PHORUS,	DIS-	NESE,
	DIS-	SOLVED	CONSTI-	NO2+NO3	TOTAL	TOTAL	SOLVED	DIS-
	(MG/L)	(MG/L)	(MG/L)	(AS N)	(MG/L)	(MG/L)	(MC/L)	(UG/L)
	AS F)	SIO2)	(MG/L)	AS N)	AS N)	AS P)	AS FE)	AS MN)
SEP								
06...	.3	5.8	968	.02	.00	.030	40	10
06...	--	--	--	.01	.00	.030	20	30
06...	--	--	--	--	--	--	--	--
06...	--	--	--	.17	.00	.040	20	130
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	.3	8.3	1010	.01	.36	.220	170	2600

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,	DIS-
		LING	CIFIC	DUCT-	PH	TEMPER-	ENCY	SOLVED
		DEPTH	CON-	ANCE	WATER	(SECCHI	DIS-	
		(FT)	(MICRO-	(UNITS)	(DEG C)	DISK)	(M)	(MG/L)
SEP								
06...	1515	1.0	1780	8.3	30.0	.49	8.6	113
06...	1517	10	1780	8.2	29.5	--	7.8	101
06...	1519	20	1780	7.7	29.5	--	4.6	60
06...	1521	30	1980	7.2	29.0	--	.2	3
06...	1523	40	2020	7.2	29.0	--	.2	3
06...	1525	43	2020	7.2	30.0	--	.2	3

TABLE 17--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 6, 1975--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPECI- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT (MG/L))	HARD- NESS (MG/L CACO3)	OXYGEN, DIS- SOLVED (PER- CENT (MG/L))	
									SATUR- ATION)	CACO3)
<b>SEP</b>										
06...	1545	1.0	1940	8.2	30.5	8.2	108	340		
06...	1547	10	2030	7.7	29.5	6.0	78	--		
06...	1549	20	1920	7.5	29.0	3.6	46	--		
06...	1551	24	1860	7.2	29.0	.7	9	330		
<b>HARD- NESS, NONCAR- BONATE (MG/L CACO3)</b>										
DATE	CALCIUM AS CA)	MACNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)		
<b>SEP</b>										
06...	220	93	25	270	6.4	6.5	138	200	420	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	210	92	24	250	6.0	6.3	146	200	410	
<b>SOLIDS,</b>										
DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, S1O2)	SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)		
<b>SEP</b>										
06...	.3	6.9	1090	.01	.00	.070	0	20		
06...	--	--	--	.02	.00	.040	0	30		
06...	--	--	--	--	--	--	--	--		
06...	.3	8.1	1060	.01	.03	.080	60	350		

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPECI- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	TRAN- SPAR- ENCY (SECCHI DISK)	(M)	OXYGEN, DIS- SOLVED (PER- CENT (MG/L))	HARD- NESS (MG/L CACO3)
<b>SEP</b>										
06...	1620	1.0	2190	8.2	30.5	.82	9.0	118	370	
06...	1622	10	2190	8.0	30.0	--	7.8	103	--	
06...	1624	20	2340	7.3	29.5	--	2.9	38	--	
06...	1626	26	2340	7.2	29.5	--	.2	3	400	
<b>HARD- NESS, NONCAR- BONATE (MG/L CACO3)</b>										
DATE	CALCIUM AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)		
<b>SEP</b>										
06...	260	100	29	300	6.8	6.3	138	220	490	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	280	110	31	330	7.2	6.9	146	240	520	
<b>SOLIDS,</b>										
DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, S1O2)	SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)		
<b>SEP</b>										
06...	.3	6.9	1220	.02	.00	.050	0	10		
06...	--	--	--	--	--	--	--	--		
06...	--	--	--	.01	.00	.040	10	140		
06...	.3	7.2	1320	.00	.00	.070	190	440		

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1976

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	SPECIFIC	TRANS-	OXYGEN,		HARD-
						CON-	SOLVED	NESS
		DEPTH	ANCE	PH	TEMPER-	OXYGEN,	(PER-	(MG/L
		(FT)	(MICRO-	(UNITS)	ATURE,	(SECCHI	CENT	AS
			MHOS)		WATER	DIS-	SATUR-	CACO3)
JAN								
27...	0930	1.0	1780	8.1	9.0	1.98	10.8	93
27...	0932	10	1780	8.1	8.5	--	10.8	92
27...	0934	20	1780	8.1	8.5	--	10.8	92
27...	0936	30	1780	8.1	8.5	--	10.6	90
27...	0938	40	1780	8.1	8.0	--	10.6	89
27...	0940	50	1780	8.1	8.0	--	10.6	89
27...	0942	60	1780	8.1	8.0	--	10.6	89
27...	0944	70	1780	8.1	8.0	--	10.6	89
27...	0946	80	1780	8.1	8.0	--	10.6	89
27...	0948	90	1780	8.0	8.0	--	10.6	89
								340

DATE	HARD-NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
JAN									
27...	210	96	24	240	5.7	5.3	152	190	380
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	210	96	24	240	5.7	5.3	156	190	380

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANA- SE, DIS- SOLVED (UG/L AS MN)	
JAN									
27...	.3	4.9	1020	.01	.03	.010	0	0	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	.01	.02	.020	0	0	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	
27...	.3	4.9	1020	.01	.04	.020	10	0	

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	SPECIFIC	TRANS-	OXYGEN,		HARD-
						CON-	SOLVED	NESS
		DEPTH	(MICRO-	PH	TEMPER-	OXYGEN,	(PER-	(MG/L
		(FT)	MHOS)	(UNITS)	ATURE,	(SECCHI	CENT	AS
					WATER	DIS-	SATUR-	CACO3)
JAN								
27...	1015	1.0	1780	8.1	9.5	10.7	94	
27...	1017	10	1780	8.1	9.0	10.7	92	
27...	1019	20	1780	8.1	8.5	10.6	90	
27...	1021	30	1780	8.1	8.5	10.6	90	
27...	1023	40	1780	8.1	8.5	10.6	90	
27...	1025	48	1780	8.1	8.5	10.6	90	

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1976--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	
		ANCE	CON-	(MICRO-	ATURE,	(PER-	
		MHOS)	UNITS)	MHOS)	WATER	SOLVED	
					(DEG C)	(MG/L)	
JAN							
27...	1100	1.0	1780	8.1	9.5	10.8	95
27...	1102	10	1780	8.1	9.0	10.6	91
27...	1104	20	1780	8.1	8.5	10.5	89
27...	1106	30	1780	8.1	8.5	10.5	89
27...	1108	40	1780	8.1	8.5	10.5	89
27...	1110	50	1780	8.1	8.5	10.5	89
27...	1112	60	1780	8.1	8.5	10.5	89
27...	1114	70	1780	8.1	8.5	10.5	89
27...	1116	80	1780	8.1	8.5	10.4	88
27...	1118	88	1780	8.1	8.5	10.4	88

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DUCT-	TEMPER-	OXYGEN,	
		ANCE	CON-	ANCE	ATURE,	(PER-	
		MHOS)	UNITS)	(MICRO-	WATER	SOLVED	
		MHOS)		MHOS)	(DEG C)	(MG/L)	
JAN							
27...	1140	1.0	1780	8.1	9.5	10.9	96
27...	1142	10	1780	8.1	9.0	10.9	94
27...	1144	20	1780	8.1	8.5	10.8	92
27...	1146	30	1780	8.1	8.5	10.8	92
27...	1148	40	1780	8.1	8.5	10.8	92
27...	1150	50	1780	8.1	8.5	10.7	91
27...	1152	60	1780	8.1	8.5	10.7	91
27...	1154	70	1780	8.1	8.5	10.7	91
27...	1156	82	1780	8.1	8.5	10.6	90

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,	
		LING	DUCT-	PH	TEMPER-	PAR-	DIS-	
		ANCE	ANCE	ATURE.	WATER	(SECCHI	SOLVED	
		MHOS)	(MICRO-	(UNITS)	(DEG C)	(DISK)	(MG/L)	
		MHOS)	MHOS)			(M)		
JAN								
27...	1245	1.0	1860	8.1	9.5	1.49	10.7	94
27...	1247	10	1860	8.1	9.0	--	10.5	91
27...	1249	20	1860	8.1	9.0	--	10.5	91
27...	1251	30	1860	8.1	8.5	--	10.4	88
27...	1253	40	1860	8.1	8.5	--	10.4	88
27...	1255	50	1860	8.1	8.5	--	10.4	88
27...	1257	60	1860	8.1	8.5	--	10.4	88
27...	1259	70	1860	8.1	8.5	--	10.3	87
								350
HARD-	CALCIUM	MAGNE-	SODIUM,	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-
NESS,	DIS-	SIUM,	DIS-	AD-	SIUM,	BONATE	DIS-	RIDE,
NONCAR-	SOLVED	DIS-	SOLVED	SORP-	DIS-	(MG/L	SOLVED	DIS-
BONATE	(MG/L	SOLVED	(MG/L	TION	SOLVED	AS K)	(MG/L	SOLVED
(MG/L	AS CA)	(MG/L	AS MG)	RATIO	(MG/L	HCO3)	AS SO4)	(MG/L
CACO3)								AS CL)
JAN								
27...	220	98	24	250	5.9	5.3	156	200
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	220	98	25	240	5.6	5.3	156	200
								390

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1976--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS F)	SUM OF CONSTITUENTS (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 TOTAL SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS Mn)
<b>JAN</b>								
27...	.3	4.7	1050	.01	.03	.010	0	0
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	--	--	--	.01	.02	.020	0	0
27...	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--
27...	.7	4.7	1040	.01	.03	.030	0	0

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT WATER SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				(UNITS)				
<b>JAN</b>								
27...	1220	1.0	1780	8.1	8.5	10.5	89	
27...	1222	10	1780	8.1	8.0	10.3	87	
27...	1224	20	1780	8.0	8.0	10.2	86	

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT WATER SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				(UNITS)				
<b>JAN</b>								
27...	1335	1.0	1860	8.1	10.0	10.7	95	
27...	1337	10	1860	8.1	9.0	10.4	90	
27...	1339	20	1860	8.1	9.0	10.4	90	
27...	1341	30	1860	8.1	9.0	10.4	90	
27...	1343	40	1860	8.1	9.0	10.3	89	

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT WATER SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				(UNITS)				
<b>JAN</b>								
27...	1405	1.0	1880	8.1	9.0	10.8	93	
27...	1407	10	1880	8.1	8.5	10.6	90	
27...	1409	20	1880	8.1	8.5	10.5	89	
27...	1411	30	1880	8.1	8.5	10.4	88	
27...	1413	40	1880	8.1	8.5	10.4	88	
27...	1415	50	1880	8.1	8.5	10.3	87	
27...	1417	58	1880	8.1	8.5	10.3	87	

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1976--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	DUCT-	SPECIFIC	CON-	PH	TEMPER-	OXYGEN,	OXYGEN,
									DIS-
		DEPTH	MHOS)	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED	SOLVED
<b>JAN</b>									
27...	1440	1.0	1860	8.1	9.0	10.6	91		
27...	1442	10	1860	8.1	8.5	10.3	87		
27...	1444	20	1860	8.1	8.5	10.2	86		
27...	1446	31	1860	8.1	8.5	10.1	86		

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	DUCT-	SPECIFIC	CON-	PH	TEMPER-	TRANS-	OXYGEN,
									DIS-
		DEPTH	MHOS)	(UNITS)	(DEG C)	WATER	(SECCHI	OXYGEN,	SOLVED
<b>JAN</b>									
27...	1510	1.0	1960	8.0	10.0	1.34	10.4	92	360
27...	1512	10	1960	8.0	9.0	--	10.1	87	--
27...	1514	20	1960	7.9	9.0	--	9.8	84	--
27...	1516	30	1960	7.9	9.0	--	9.6	83	--
27...	1518	40	1960	7.9	8.5	--	9.6	81	--
27...	1520	45	2060	7.8	9.0	--	8.9	77	390

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM AS CACO3)	MAGNE- SIUM, AS CA)	SODIUM, AS MG)	SODIUM ADSORPTION RATIO	POTAS- SIUM, AS NA)	BICAR- BONATE (MG/L HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
									DIS-
<b>JAN</b>									
27...	230	100	26	260	6.0	5.4	160	210	410
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	--	--	--	--	--	--	--	--	--
27...	250	110	28	270	6.0	5.5	172	210	420

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, SIO2)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL AMMONIA (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS N)	IRON, IRON, DIS- SOLVED (UG/L AS FE)	MANA- SE, DIS- SOLVED (UG/L AS MN)	
									DIS-
<b>JAN</b>									
27...	.4	4.1	1090	.01	.05	.020	0	0	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	--	--	--	--	--	
27...	--	--	--	.00	.08	.020	0	10	
27...	--	--	--	--	--	--	--	--	
27...	.4	4.1	1130	.02	.11	.030	0	0	

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	DUCT-	SPECIFIC	CON-	PH	TEMPER-	OXYGEN,	OXYGEN,
									DIS-
		DEPTH	MHOS)	(UNITS)	(DEG C)	WATER	SOLVED	SOLVED	SOLVED
<b>JAN</b>									
27...	1545	1.0	2090	8.0	9.5	10.6	93		
27...	1547	10	2090	8.0	8.5	10.2	86		
27...	1549	20	2090	8.0	8.5	10.1	86		
27...	1551	30	2090	8.0	8.5	10.0	85		
27...	1553	40	2090	7.9	8.5	9.6	81		

TABLE 18--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 27, 1976--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH (FT)	SPE-	CIFIC	TRANS-	OXYGEN,	DIS-	HARD-	
			SAMP-	DUCT-		PAR-			
LING	ANCE	PH	ATURE,	ENCY	OXYGEN,	(PER-	(MG/L		
			(MICRO-	WATER	(SECCHI	DIS-	SATUR-	AS	
			MHOS)	DEG C)	DISK)	SOLVED	ATION)	CACO3)	
JAN									
27...	1625	1.0	2210	8.0	10.0	.79	11.2	99	430
27...	1627	10	2210	7.8	9.0	--	10.0	86	--
27...	1629	20	2330	7.8	9.0	--	9.8	84	440

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE-	SODIUM,	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-
			SIUM,	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	AD- SORP- TION RATIO	DIS- SOLVED (MG/L AS K)	DIS- BONATE (MG/L AS HCO3)	DIS- SOLVED (MG/L AS CL)
JAN									
27...	270	120	32	300	6.3	5.5	196	220	470
27...	--	--	--	--	--	--	--	--	--
27...	290	120	34	320	6.6	5.6	188	240	500

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, SIO2)	SOLIDS,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
			DIS- SOLVED (MG/L AS SIO2)	CONSTITUENTS,	NO2+NO3	AMMONIA	PHORUS,	TOTAL	DIS- SOLVED (UG/L AS P)
JAN									
27...	.4	4.0	1250	.01	.09	.060	10	0	
27...	--	--	--	--	--	--	--	--	--
27...	.3	3.7	1320	.09	.06	.020	20	10	

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	DEPTH (FT)	SPE-	CIFIC	TRANS-	OXYGEN,	DIS-	HARD-	
			SAMP-	DUCT-		PAR-			
LING	ANCE	PH	ATURE,	ENCY	OXYGEN,	(PER-	(MG/L		
			(MICRO-	WATER	(SECCHI	DIS-	SATUR-	AS	
			MHOS)	DEG C)	DISK)	SOLVED	ATION)	CACO3)	
JAN									
27...	1700	1.0	2620	7.7	10.0	1.19	10.2	90	470
27...	1702	10	2620	7.7	9.0	--	9.8	84	--
27...	1704	20	2620	7.7	9.0	--	9.6	83	470

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE-	SODIUM,	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-
			SIUM,	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	AD- SORP- TION RATIO	DIS- SOLVED (MG/L AS K)	DIS- BONATE (MG/L AS HCO3)	DIS- SOLVED (MG/L AS CL)
JAN									
27...	340	130	36	360	7.2	6.2	164	280	570
27...	--	--	--	--	--	--	--	--	--
27...	340	130	36	360	7.2	6.1	164	280	570

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, SIO2)	SOLIDS,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
			DIS- SOLVED (MG/L AS SIO2)	CONSTITUENTS,	NO2+NO3	AMMONIA	PHORUS,	TOTAL	DIS- SOLVED (UG/L AS P)
JAN									
27...	.3	3.4	1470	.09	.06	.010	10	30	
27...	--	--	--	--	--	--	--	--	--
27...	.3	3.4	1470	.08	.08	.020	10	30	

TABLE 19--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 9, 1976

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	SPE-	TRANS-	OXYGEN,		HARD-	
				CIFIC		DIS-	SOLVED		
		LING	ANCE	(MICRO-	PH	TEMPER-	ENCY	(PER-	NESS
		(FT)	(MHOS)	(UNITS)		ATURE,	(SECCHI	SATUR-	
						WATER	DIS-	ATION)	(MG/L
						(DEG C)	DIS-		AS CACO <sub>3</sub> )
<b>MAY</b>									
09...	0845	1.0	1850	8.3	20.5	1.55	9.1	100	350
09...	0847	10	1850	8.3	20.0	--	9.0	98	--
09...	0849	20	1850	8.3	20.0	--	8.8	96	--
09...	0851	30	1850	8.2	19.5	--	8.1	87	--
09...	0853	40	1850	8.2	19.5	--	7.9	85	--
09...	0855	50	1850	8.2	19.5	--	7.8	84	--
09...	0857	60	1850	7.9	18.5	--	5.2	55	--
09...	0859	70	1850	7.6	18.0	--	3.6	38	--
09...	0901	80	1850	7.5	17.5	--	3.0	31	--
09...	0903	88	1880	7.4	17.5	--	2.1	22	340
 <b>HARD-NESS, NONCAR-BONATE</b>									
		CALCIUM	MAGNE-SIUM,	SODIUM,	SODIUM	POTAS-SIUM,	BICAR-BONATE	SULFATE	CHLO-RIDE,
DATE		DIS-SOLVED	DIS-SOLVED	DIS-SOLVED	AD-SORP-TION	DIS-SOLVED	DIS-BONATE	DIS-SOLVED	DIS-SOLVED
		(MG/L CACO <sub>3</sub> )	(MG/L AS CA)	(MG/L AS MG)	(MG/L AS NA)	RATIO	(MG/L AS K)	(MG/L AS HCO <sub>3</sub> )	(MG/L AS SO <sub>4</sub> )
 <b>MAY</b>									
09...	220	100	24	250	5.8	5.5	156	190	400
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	210	98	24	250	5.9	5.5	158	190	400
 <b>FLUO-RIDE, DIS-SOLVED</b>									
		SILICA, AS F)	SUM OF SIO <sub>2</sub> )	SOLIDS, CONSTITUENTS,	NITRO-GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO-GEN, AMMONIA	PHOS-PHORUS,	IRON, TOTAL (MC/L AS N)	MANA-NESE, DIS-SOLVED
DATE		(MG/L AS	(MG/L)	DIS-SOLVED (MG/L AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS P)	(UG/L AS FE)	(UG/L AS MN)
 <b>MAY</b>									
09...	.4	4.6	1050	.01	.00	.010	10	20	
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	.01	.00	.010	20	0
09...	--	--	--	--	.04	.01	.010	10	0
09...	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--
09...	.4	5.6	1050	.14	.01	.030	50	0	

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	SPE-	TRANS-	OXYGEN,		HARD-	
		LING	ANCE	CON-		DIS-	SOLVED		
		(FT)	(MHOS)	(MICRO-	PH	ATURE,	ENCY	(PER-	NESS
				(UNITS)		WATER	(SECCHI	SATUR-	
						(DEG C)	DIS-	ATION)	(MG/L
							DIS-		AS CACO <sub>3</sub> )
 <b>MAY</b>									
09...	0930	1.0	1850	8.3	20.5	9.1	100		
09...	0932	10	1850	8.3	20.0	8.9	97		
09...	0934	20	1850	8.3	20.0	8.8	96		
09...	0936	30	1850	8.3	19.5	8.1	87		
09...	0938	45	1850	8.2	19.5	7.7	83		

TABLE 19--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 9, 1976--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	SPE-	TEMPER-		OXYGEN,	OXYGEN,
		LING	CIFIC	DUCT-	PH	ATURE,	DIS-
		DEPTH	CON-	(MICRO-	WATER	SOLVED	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(PER-
							CENT
<b>MAY</b>							
09...	1015	1.0	1850	8.3	20.0	9.1	99
09...	1017	10	1850	8.3	20.0	8.9	97
09...	1019	20	1850	8.3	19.5	8.4	90
09...	1021	30	1850	8.3	19.5	8.2	88
09...	1023	40	1850	8.2	19.5	7.8	84
09...	1025	50	1850	8.2	19.0	7.7	82
09...	1027	60	1850	8.1	19.0	7.0	74
09...	1029	70	1850	7.8	18.5	5.2	55
09...	1031	80	1850	7.5	18.0	2.3	24
09...	1033	85	1880	7.5	17.5	2.1	22

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	SPE-	TEMPER-		OXYGEN,	OXYGEN,
		LING	CIFIC	DUCT-	PH	ATURE,	DIS-
		DEPTH	CON-	(MICRO-	WATER	SOLVED	SOLVED
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(PER-
							CENT
<b>MAY</b>							
09...	1055	1.0	1850	8.3	20.0	9.1	99
09...	1057	10	1850	8.3	20.0	8.7	95
09...	1059	20	1850	8.3	19.5	8.4	90
09...	1101	30	1850	8.2	19.5	8.0	86
09...	1103	40	1850	8.2	19.5	7.9	85
09...	1105	50	1850	8.2	19.0	7.6	81
09...	1107	60	1850	8.0	19.0	6.1	65
09...	1109	70	1880	7.7	18.5	4.1	44
09...	1111	80	1880	7.5	17.5	1.1	11

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	SPE-	TEMPER-		TRANS-	OXYGEN,	OXYGEN,
		LING	CIFIC	DUCT-	PH	ATURE.	DIS-	SOLVED
		DEPTH	CON-	(MICRO-	WATER	(SECCHI	SOLVED	(PER-
		(FT)	MHOS)	(UNITS)	(DEG C)	(M)	(MG/L)	CENT
								(MG/L
<b>MAY</b>								
09...	1330	1.0	1830	8.3	20.0	1.22	8.6	93
09...	1332	10	1830	8.3	19.5	--	8.1	87
09...	1334	20	1830	8.3	19.5	--	8.0	86
09...	1336	30	1830	8.2	19.5	--	7.6	82
09...	1338	40	1830	8.1	19.5	--	7.2	77
09...	1340	50	1830	7.9	19.0	--	5.6	60
09...	1342	60	1830	7.7	18.5	--	3.9	41
09...	1344	68	1880	7.6	18.5	--	3.0	32
								350

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO3)	CALCIUM DIS-SOLVED (MG/L AS CA)	MAGNE-	SUMIUM, DIS-SOLVED (MG/L AS MG)	SODIUM, DIS-SOLVED (MG/L AS NA)	SODIUM ADSORPTION RATIO	POTAS- SIUM, DIS-SOLVED (MG/L AS K)	BICAR- BONATE AS HCO3)	SULFATE, DIS-SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS-SOLVED (MG/L AS CL)
<b>MAY</b>										
09...	210	97	24	240	5.7	6.0	154	190	400	
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--	--	--
09...	220	99	24	250	5.8	5.5	156	190	410	

TABLE 19--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 9, 1976--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	FLUO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SOLIDS,	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, DIS-	MANGA- NESE, DIS-
			AS F) SI02)	DIS- SOLVED (MG/L)	TOTAL AS N)	TOTAL (MG/L AS N)	TOTAL (MG/L AS P)	SOLVED (MG/L AS MN)
<b>MAY</b>								
09...	.3	4.4	1040	.00	.01	.020	0	0
09...	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--
09...	--	--	--	.01	.01	.010	0	0
09...	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--
09...	.4	5.3	1060	.08	.04	.040	10	40

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP-	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER	OXYGEN, DIS-	OXYGEN, DIS-		
		LING	DUCT- ANCE			(MICRO- MHOS)	(UNITS)	(DEG C)	SOLVED
<b>MAY</b>									
09...	1135	1.0	1440	8.3	20.5	9.2	101		
09...	1137	10	1680	8.2	20.0	7.7	84		
09...	1139	20	1680	7.6	19.5	4.4	47		

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP-	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER	OXYGEN, DIS-	OXYGEN, DIS-		
		LING	DUCT- ANCE			(MICRO- MHOS)	(UNITS)	(DEG C)	SOLVED
<b>MAY</b>									
09...	1245	1.0	1820	8.2	20.0	7.6	83		
09...	1247	10	1820	8.1	19.5	6.9	74		
09...	1249	20	1820	8.1	19.5	6.6	71		
09...	1251	30	1820	7.8	19.5	5.2	56		
09...	1253	38	1840	7.6	19.5	4.2	45		

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP-	SPE- CIFIC CON-	PH	TEMPER- ATURE, WATER	OXYGEN, DIS-	OXYGEN, DIS-		
		LING	DUCT- ANCE			(MICRO- MHOS)	(UNITS)	(DEG C)	SOLVED
<b>MAY</b>									
09...	1425	1.0	1760	8.5	20.5	9.2	101		
09...	1427	10	1760	8.3	20.0	8.4	91		
09...	1429	20	1760	8.2	19.5	6.7	72		
09...	1431	30	1840	8.0	19.5	5.5	59		
09...	1433	40	1840	8.0	19.5	5.2	56		
09...	1435	50	1840	7.9	19.0	4.5	48		
09...	1437	58	1840	7.9	19.0	4.3	46		

TABLE 19--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 9, 1976--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	OXYGEN,	OXYGEN,		
			LING	CIFIC	DUCT-	PH	TEMPER-	DIS-
			ANCE	CON-	ATURE,	WATER	SOLVED	SOLVED
			(MICRO-		(DEG C)	(MG/L)	(PER-	(PER-
			MHOS)				CENT	CENT
							SATUR-	SATUR-
							ATION	ATION
MAY								
09...	1500	1.0	1610		8.5	21.0	8.9	99
09...	1502	10	1560		8.2	20.0	7.3	79
09...	1504	20	1670		8.1	19.5	6.2	67
09...	1506	32	1700		8.1	19.5	5.9	63

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TRANS-	OXYGEN,	OXYGEN,	HARD-
			LING	CIFIC	DUCT-	PH	ATURE,	DIS-
			ANCE	CON-	ANCE	(SECCHI	(DIS-	SOLVED
			(MICRO-		(MHOS)	DIS-	DIS-	NESS
			MHOS)		(UNITS)	DIS-	SOLVED	(MG/L
					(DEG C)	DIS-	SATUR-	AS
						DIS-	ATION	CACO3
MAY								
09...	1530	1.0	1580		8.4	20.0	.73	8.8
09...	1532	10	1640		8.3	20.0	--	8.4
09...	1534	20	1770		8.2	19.5	--	6.9
09...	1536	30	1810		8.1	19.0	--	6.7
09...	1538	40	1810		8.0	19.0	--	6.0
09...	1540	47	1810		7.8	19.0	--	3.6
								38
								340
HARD-	CALCIUM	MAGNE-	SODIUM,	SODIUM	SODIUM	POTAS-	BICAR-	CHLO-
NESS,	NONCAR-	DIS-	DIS-	AD-	SORP-	SIUM,	SULFATE	RIDE,
NONCAR-	BONATE	SOLVED	SOLVED	SOLVED	TION	DIS-	DIS-	DIS-
(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	SOLVED	BONATE	SOLVED	SOLVED
						(MG/L	(MG/L	(MG/L
						AS K)	AS SO4)	AS CL)
MAY								
09...	180	85	22	200	5.0	5.0	144	160
09...	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--
09...	--	--	--	--	--	--	--	--
09...	210	96	25	240	5.6	5.5	156	190
								390

DATE	TIME	DEPTH (FT)	SOLIDS,		NITRO-	NITRO-	IRON,	MANGA-
			FLUO-	SILICA,	SUM OF	GEN,	PHOS-	NESE,
			DIS-	DIS-	CONSTITUENTS,	NO2+NO3	AMMONIA	DIS-
			SOLVED	(MG/L	DIS-	TOTAL	TOTAL	SOLVED
			(MG/L	AS	SOLVED	(MG/L	(MG/L	SOLVED
						AS N)	AS P)	(UG/L
								AS MN)
MAY								
09...	.4	3.5	887		.01	.00	.030	40
09...	--	--	--		--	--	--	--
09...	--	--	--		--	--	--	--
09...	--	--	--		.01	.01	.020	10
09...	--	--	--		--	--	--	0
09...	.4	4.8	1030		.01	.08	.050	10
								230

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	OXYGEN,	OXYGEN,	OXYGEN,	
			LING	CIFIC	DUCT-	PH	TEMPER-	DIS-
			ANCE	CON-	ATURE,	WATER	SOLVED	SOLVED
			(MICRO-		(DEG C)	(MG/L)	(PER-	(PER-
			MHOS)				CENT	CENT
							SATUR-	SATUR-
							ATION	ATION
MAY								
09...	1600	1.0	1520		8.6	21.0	10.7	119
09...	1602	10	1580		8.2	20.5	8.5	93
09...	1604	20	1610		8.0	19.5	7.0	75
09...	1606	30	1550		7.8	19.5	5.6	60
09...	1608	39	1550		7.8	19.5	5.2	56

TABLE 19--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 9, 1976--Continued

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPECI- FIC CON- DUCT- ANCE (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L))	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L))	HARD- NESS (MG/L CACO3)
								(SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L AS MG/L)	SATUR- ATION AS CACO3)
<b>MAY</b>										
09...	1635	1.0	1010	7.9	20.5	.49	7.4	81	230	
09...	1637	5.0	1570	7.9	20.5	--	7.0	77	--	
09...	1639	10	1980	7.9	20.0	--	6.4	70	--	
09...	1641	19	2120	7.7	20.0	--	5.2	57	400	
<b>HARD- NESS, NONCAR- BONATE (MG/L CACO3)</b>										
<b>CALCIUM DIS- SOLVED (MG/L AS CA)</b>										
<b>MAGNE- SIUM DIS- SOLVED (MG/L AS MG)</b>										
<b>SODIUM DIS- SOLVED (MG/L AS NA)</b>										
<b>POTAS- SIUM, DIS- SOLVED (MG/L AS K)</b>										
<b>BICAR- BONATE (MG/L HCO3)</b>										
<b>SULFATE DIS- SOLVED (MG/L AS SO4)</b>										
<b>CHLO- RIDE, DIS- SOLVED (MG/L AS CL)</b>										
<b>MAY</b>										
09...	100	72	13	120	3.4	4.5	160	98	190	
09...	--	--	--	--	--	--	--	--	--	
09...	--	--	--	--	--	--	--	--	--	
09...	270	110	30	290	6.3	6.0	156	230	480	
<b>SOLIDs, FLUO- RIDE, DIS- SOLVED (MG/L AS F)</b>										
<b>SILICA, DIS- SOLVED (MG/L AS SIO2)</b>										
<b>SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS N)</b>										
<b>NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)</b>										
<b>NITRO- GEN, AMMONIA TOTAL (MG/L AS N)</b>										
<b>PHOS- PHORUS, TOTAL (MG/L AS P)</b>										
<b>IRON, DIS- SOLVED (UG/L AS FE)</b>										
<b>MANGA- NESE, DIS- SOLVED (UG/L AS MN)</b>										
<b>MAY</b>										
09...	.3	4.8	582	.22	.09	.180	50	10		
09...	--	--	--	--	--	--	--	--	--	
09...	--	--	--	--	--	--	--	--	--	
09...	.4	4.2	1230	.01	.08	.050	30	60		

320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPECI- FIC CON- DUCT- ANCE (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L))	OXYGEN, DIS- SOLVED (PER- CENT SOLVED (MG/L))	HARD- NESS (MG/L CACO3)
								(SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L AS MG/L)	SATUR- ATION AS CACO3)
<b>MAY</b>										
09...	1700	1.0	2060	7.9	21.0	.58	6.9	77	390	
09...	1702	10	2060	7.9	20.5	--	6.8	75	--	
09...	1704	20	1990	7.8	20.0	--	5.0	54	390	
<b>HARD- NESS, NONCAR- BONATE (MG/L CACO3)</b>										
<b>CALCIUM DIS- SOLVED (MG/L AS CA)</b>										
<b>MAGNE- SIUM DIS- SOLVED (MG/L AS MG)</b>										
<b>SODIUM DIS- SOLVED (MG/L AS NA)</b>										
<b>POTAS- SIUM, DIS- SOLVED (MG/L AS K)</b>										
<b>BICAR- BONATE (MG/L HCO3)</b>										
<b>SULFATE DIS- SOLVED (MG/L AS SO4)</b>										
<b>CHLO- RIDE, DIS- SOLVED (MG/L AS CL)</b>										
<b>MAY</b>										
09...	260	110	29	290	6.4	6.0	164	240	470	
09...	--	--	--	--	--	--	--	--	--	
09...	260	110	29	280	6.1	5.6	164	230	460	
<b>SOLIDs, FLUO- RIDE, DIS- SOLVED (MG/L AS F)</b>										
<b>SILICA, DIS- SOLVED (MG/L AS SIO2)</b>										
<b>SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS N)</b>										
<b>NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)</b>										
<b>NITRO- GEN, AMMONIA TOTAL (MG/L AS N)</b>										
<b>PHOS- PHORUS, TOTAL (MG/L AS P)</b>										
<b>IRON, DIS- SOLVED (UG/L AS FE)</b>										
<b>MANGA- NESE, DIS- SOLVED (UG/L AS MN)</b>										
<b>MAY</b>										
09...	.4	3.7	1230	.00	.03	.020	0	20		
09...	--	--	--	--	--	--	--	--	--	
09...	.4	4.2	1200	.01	.07	.040	0	10		

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 28, 1976

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,		
							SOLVED	(PER-	NESS
		DEPTH	(MICRO-	(UNITS)	WATER	ENCY	OXYGEN,	CENT	(MG/L
			MMHOS)			(SECCHI	DIS-	SATUR-	AS
					(DEG C)	DISK)	SOLVED	ATION)	CACO3)
AUG									
28...	0900	1.0	1720	8.1	28.5	2.56	6.2	81	310
28...	0902	10	1720	8.1	28.0	--	6.0	77	--
28...	0904	20	1720	8.0	28.0	--	5.6	72	--
28...	0906	30	1720	8.0	27.5	--	5.6	72	--
28...	0908	35	1720	8.0	27.5	--	5.4	69	--
28...	0910	40	1740	7.2	26.5	--	.2	3	--
28...	0912	50	1780	7.2	24.0	--	.2	2	--
28...	0914	60	1810	7.2	23.0	--	.2	2	--
28...	0916	70	1850	7.2	22.0	--	.2	2	--
28...	0918	80	1850	7.2	21.5	--	.2	2	--
28...	0920	89	1850	7.2	21.0	--	.2	2	340

DATE	HARD-NESS (MG/L CACO3)	CALCIUM (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)
AUG									
28...	200	85	23	240	6.0	5.5	132	180	380
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	180	96	25	240	5.6	5.8	200	180	400

DATE	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, NO2+NO3 DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL DIS- SOLVED (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
AUG								
28...	.4	5.0	984	.01	.01	.000	10	10
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	.00	.01	.010	20	70
28...	--	--	--	--	--	--	--	--
28...	--	--	--	.00	.01	.010	70	240
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--
28...	.4	9.2	1060	.00	1.2	.250	130	1100

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,		
							SOLVED	(PER-	(PER-
		DEPTH	(MICRO-	(UNITS)	WATER	ENCY	(MG/L	CENT	CENT
			MMHOS)			(SECCHI		SATUR-	SATUR-
					(DEG C)	DISK)	(MG/L	ATION)	ATION)
AUG									
28...	0945	1.0	1720	8.1	28.0	5.9	76		
28...	0947	10	1720	8.0	28.0	5.8	74		
28...	0949	20	1720	8.0	28.0	5.6	72		
28...	0951	30	1720	8.0	28.0	5.4	69		
28...	0953	40	1720	7.3	27.0	.2	3		
28...	0955	50	1720	7.2	25.5	.2	2		

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 28, 1976--Continued

315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	OXYGEN,		
			LING	CIFIC	DUCT-	CON-	DIS-
			(MICRO-	PH	TEMPER-	OXYGEN.	SOLVED
			MHOS)	(UNITS)	ATURE, WATER (DEG C)	(MG/L)	(PER- CENT SATUR- ATION)
AUG							
28...	1030	1.0	1720	8.2	28.0	7.0	90
28...	1032	10	1720	8.2	28.0	6.9	88
28...	1034	20	1720	8.2	28.0	6.6	85
28...	1036	30	1720	8.1	27.5	6.2	79
28...	1038	40	1720	7.2	26.0	.2	2
28...	1040	50	1770	7.2	24.0	.2	2
28...	1042	60	1820	7.2	23.0	.2	2
28...	1044	70	1820	7.2	22.5	.2	2
28...	1046	80	1820	7.2	21.5	.2	2
28...	1048	89	1820	7.1	21.0	.2	2

315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	OXYGEN,		
			LING	CIFIC	DUCT-	CON-	DIS-
			(MICRO-	PH	TEMPER-	OXYGEN.	SOLVED
			MHOS)	(UNITS)	ATURE, WATER (DEG C)	(MG/L)	(PER- CENT SATUR- ATION)
AUG							
28...	1115	1.0	1720	8.2	28.5	6.6	86
28...	1117	10	1720	8.2	28.5	6.4	83
28...	1119	20	1720	8.1	28.0	5.8	74
28...	1121	30	1720	7.9	28.0	4.9	63
28...	1123	40	1740	7.2	26.0	.2	2
28...	1125	50	1770	7.2	24.5	.2	2
28...	1127	60	1820	7.2	23.5	.2	2
28...	1129	70	1820	7.2	22.5	.2	2
28...	1131	83	1820	7.1	21.5	.2	2

315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	DEPTH (FT)	SAMP-	SPE-	TRANS-		OXYGEN,		
			LING	CIFIC	DUCT-	CON-	ENCY	(SECCHI DISK)	OXYGEN.
			(MICRO-	PH	TEMPER-	WATER (DEG C)	(M)	(PER- CENT DIS- SOLVED	SOLVED
			MHOS)	(UNITS)	ATURE, WATER (DEG C)	(MG/L)	(M)	(MG/L)	(MG/L)
AUG									
28...	1225	1.0	1740	8.3	29.0	2.10	7.1	93	
28...	1227	10	1740	8.3	28.5	--	7.0	91	
28...	1229	20	1740	8.2	28.5	--	6.6	86	
28...	1231	30	1740	8.0	28.0	--	4.8	62	
28...	1233	35	1740	7.9	28.0	--	4.3	55	
28...	1235	40	1740	7.3	27.0	--	.2	3	
28...	1237	50	1780	7.2	24.5	--	.2	2	
28...	1239	60	1810	7.2	23.5	--	.2	2	
28...	1241	70	1810	7.1	23.0	--	.2	2	

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM,	SODIUM	POTAS-	BICAR-	SULFATE
	NESS,	NESS,	DIS-	SUIM,	SODIUM,	AD-	SUIM,	BONATE	DIS-
	(MG/L)	NONCAR-	SOLVED	DIS-	SODIUM,	SORP-	SORP-	SOLVED	SOLVED
	AS (MG/L)	AS (MG/L)	AS (MG/L)	AS (MG/L)	AS (MG/L)	RATIO	SOLVED	(MG/L)	(MG/L)
	CACO3)	CACO3)	AS CA)	AS MG)	AS NA)		(MG/L)	AS K)	AS SO4)
AUG									
28...	310	200	85	23	240	6.0	5.6	130	180
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	340	170	95	24	250	5.9	5.8	200	170

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 28, 1976--Continued

315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SOLIDS,		NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub>	NITRO- GEN, AMMONIA	PHOS- PHORUS, (MG/L)	IRON, DIS- SOLVED (MG/L)	MANGA- NESE, DIS- SOLVED (UG/L)	
			SUM OF CONSTITUENTS, AS	TOTAL AS N)						
<b>AUG</b>										
28...	380	5.1	983	.00	.01	.010	0	20		
28...	--	--	--	--	--	--	--	--		
28...	--	--	--	--	--	--	--	--		
28...	--	--	--	.00	.01	.010	30	100		
28...	--	--	--	--	--	--	--	--		
28...	--	--	--	.01	.04	.020	50	780		
28...	--	--	--	--	--	--	--	--		
28...	--	--	--	--	--	--	--	--		
28...	390	8.8	1040	.01	1.3	.190	130	1200		

315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
							SPE- CIFIC CON-	
<b>AUG</b>								
28...	1200	1.0	1740	8.3	29.5	7.3	96	
28...	1202	10	1740	8.2	29.0	6.8	89	
28...	1204	20	1740	8.1	29.0	6.4	84	

315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
							SPE- CIFIC CON-	
<b>AUG</b>								
28...	1315	1.0	1740	8.3	29.0	7.4	97	
28...	1317	10	1740	8.2	29.0	7.2	95	
28...	1319	20	1740	7.6	28.5	3.2	42	
28...	1321	30	1740	7.5	28.0	2.0	26	
28...	1323	41	1740	7.2	27.0	.2	3	

315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
							SPE- CIFIC CON-	
<b>AUG</b>								
28...	1345	1.0	1710	8.2	29.0	6.3	83	
28...	1347	10	1710	8.2	28.5	6.1	79	
28...	1349	20	1710	8.1	28.5	5.9	77	
28...	1351	30	1710	8.1	28.5	5.2	68	
28...	1353	40	1710	7.5	28.0	2.5	32	
28...	1355	50	1770	7.2	25.0	.2	2	
28...	1357	57	1770	7.1	24.5	.2	2	

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 28, 1976--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	DIS-	DIS-
		(MICRO-	(MICRO-		WATER	SOLVED	SOLVED
		MHOS)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(PER-
							CENT
AUG							SATUR-
28...	1425	1.0	1710	8.3	29.0	7.1	93
28...	1427	10	1710	8.3	29.0	6.9	91
28...	1429	20	1710	8.3	29.0	6.7	88
28...	1431	34	1710	7.9	28.5	4.8	62

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,
		LING	ANCE		ATURE,	PAR-	DIS-
		(MICRO-	(MICRO-		WATER	(SECCHI	SOLVED
		MHOS)	MHOS)	(UNITS)	(DEG C)	DIS-	(PER-
						DIS-	CENT
AUG						DIS-	SATUR-
28...	1455	1.0	1710	8.2	29.0	1.40	83
28...	1457	10	1710	8.1	29.0	--	82
28...	1459	20	1710	7.5	28.5	--	29
28...	1501	25	1710	7.4	28.5	--	22
28...	1503	30	1710	7.3	28.0	--	3
28...	1505	40	1720	7.3	27.5	--	3
28...	1507	47	1760	7.1	25.5	--	2

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE
	NESS,	NONCAR-	DIS-	SUM,	SODIUM,	AD-	SUM,	BONATE	DIS-
	(MG/L	(MG/L	SOLVED	DIS-	SOLVED	SORP-	SOLVED	(MC/L	SOLVED
	AS	CACO <sub>3</sub> )	CACO <sub>3</sub> )	(MG/L	(MG/L	RATIO	(MG/L	AS	(MG/L
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	AS K)	AS HCO <sub>3</sub> )	AS SO <sub>4</sub> )	AS SO <sub>4</sub> )
AUG									
28...	300	190	85	22	240	6.0	5.6	136	180
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	320	150	91	22	240	5.9	5.6	206	160

DATE	CHLO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	DIS-	SUM OF	GEN.,	GEN.,	PHORUS,	DIS-	NESE,
	DIS-	SOLVED	CONSTI-	NO2+NO3	AMMONIA	TOTAL	SOLVED	DIS-
	(MG/L	(MG/L	TUENTS,	(MG/L	(MG/L	(MG/L	(UG/L	(UG/L
	AS CL)	SIO <sub>2</sub> )	(MG/L	AS N)	AS N)	AS N)	AS FE)	AS MN)
AUG								
28...	380	5.4	985	.00	.01	.010	10	20
28...	--	--	--	--	--	--	--	--
28...	--	--	--	.00	.03	.020	10	40
28...	--	--	--	--	--	--	--	--
28...	--	--	--	.01	.06	.030	40	210
28...	--	--	--	--	--	--	--	--
28...	380	8.8	1010	.00	1.5	.180	180	2100

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	DIS-	DIS-
		(MICRO-	(MICRO-		WATER	SOLVED	SOLVED
		MHOS)	MHOS)	(UNITS)	(DEG C)	(MG/L)	(PER-
							CENT
AUG							
28...	1525	1.0	1680	7.8	29.0	5.4	71
28...	1527	10	1680	7.8	29.0	5.2	68
28...	1529	20	1680	7.6	28.5	4.0	52
28...	1531	30	1680	7.4	28.5	2.4	31
28...	1533	40	1680	7.3	28.5	.7	9

TABLE 20--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 28, 1976--Continued

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	SPECI- FIC CON- CENTRA- TION (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG 28...	1600	1.0	1710	8.1	29.5	.73	7.1	93	
28...	1602	10	1680	7.9	29.5	--	5.8	76	
28...	1604	20	1680	7.4	29.0	--	2.8	37	
HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	
AUG 28...	300	190	84	23	230	5.7	6.8	142	170
28...	--	--	--	--	--	--	--	--	--
28...	300	180	84	22	230	5.8	6.0	144	170
CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)		
AUG 28...	370	5.6	959	.00	.01	.040	30	10	
28...	--	--	--	--	--	--	--	--	--
28...	360	6.1	949	.00	.07	.090	10	210	

320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	SPECI- FIC CON- CENTRA- TION (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
AUG 28...	1635	1.0	1770	7.9	29.5	.70	6.2	82	
28...	1637	10	1770	7.9	29.5	--	5.9	78	
28...	1639	15	1770	7.6	29.0	--	4.4	58	
28...	1641	21	1730	7.2	29.0	--	.8	11	
HARD- NESS (MG/L AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	
AUG 28...	310	200	87	23	230	5.7	7.0	136	180
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	310	190	86	22	230	5.7	6.5	140	180
CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)		
AUG 28...	390	4.6	989	.00	.01	.030	10	20	
28...	--	--	--	--	--	--	--	--	--
28...	--	--	--	--	--	--	--	--	--
28...	370	4.4	968	.00	.03	.040	10	230	

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 2, 1977

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
 MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, OXYGEN, (PER- CENT SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L CACO3)
<b>FEB</b>									
02...	0915	1.0	1870	8.3	6.0	2.38	11.9	99	340
02...	0917	10	1870	8.3	6.0	--	11.9	99	--
02...	0919	20	1870	8.3	6.0	--	11.9	99	--
02...	0921	30	1870	8.3	6.0	--	11.9	99	--
02...	0923	40	1870	8.3	6.0	--	11.9	99	--
02...	0925	50	1870	8.3	6.0	--	11.9	99	--
02...	0927	60	1870	8.3	6.0	--	11.9	99	--
02...	0929	70	1870	8.3	6.0	--	11.9	99	--
02...	0931	80	1870	8.3	6.0	--	11.8	98	--
02...	0933	91	1870	8.3	6.0	--	11.8	98	330
<b>HARD- NESS, NONCAR- BONATE (MG/L CACO3)</b>									
<b>CALCIUM DIS- SOLVED (MG/L AS CA)</b>									
<b>MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)</b>									
<b>SODIUM, DIS- SOLVED (MG/L AS NA)</b>									
<b>SODIUM AD- SORP- TION RATIO</b>									
<b>POTAS- SIUM, DIS- SOLVED (MG/L AS K)</b>									
<b>BICAR- BONATE HCO3)</b>									
<b>SULFATE DIS- SOLVED (MG/L AS SO4)</b>									
<b>CHLO- RIDE, DIS- SOLVED (MG/L AS CL)</b>									
<b>FEB</b>									
02...	220	93	25	240	5.7	7.0	144	190	400
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	210	91	25	250	6.0	6.6	144	200	400
<b>SOLIDS.</b>									
<b>FLUO- RIDE, DIS- SOLVED (MG/L AS F)</b>									
<b>SILICA, DIS- SOLVED (MG/L AS SIO2)</b>									
<b>SUM OF CONSTITUENTS DIS- SOLVED (MG/L AS SIO2)</b>									
<b>NITRO- GEN, NO2+NO3 TOTAL DIS- SOLVED (MG/L AS N)</b>									
<b>NITRO- GEN, AMMONIA TOTAL (MG/L AS N)</b>									
<b>PHOS- PHORUS, TOTAL (MG/L AS P)</b>									
<b>IRON, DIS- SOLVED (UG/L AS FE)</b>									
<b>MANGA- NESE, DIS- SOLVED (UG/L AS MN)</b>									
<b>FEB</b>									
02...	.4	4.3	1030	.03	.03	.010	10	10	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	.03	.03	.010	20	10	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	.3	4.3	1050	.03	.03	.010	10	10	--

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, OXYGEN, (PER- CENT SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>FEB</b>							
02...	1000	1.0	1870	8.3	6.0	11.6	97
02...	1002	10	1870	8.3	6.0	11.6	97
02...	1004	20	1870	8.3	6.0	11.6	97
02...	1006	30	1870	8.3	6.0	11.6	97
02...	1008	40	1870	8.3	6.0	11.6	97
02...	1010	47	1870	8.3	6.0	11.6	97

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 2, 1977--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	DUCT-	SPE-	PH	TEMPER-	OXYGEN,	OXYGEN,
				CIFIC			DIS-	DIS-
		LING	ANCE	(MICRO-	(UNITS)	WATER	SOLVED	SOLVED
<b>FEB</b>								
02...	1045	1.0	1870	8.3	6.0	11.5	96	
02...	1047	10	1870	8.3	6.0	11.5	96	
02...	1049	20	1870	8.3	6.0	11.4	95	
02...	1051	30	1870	8.3	6.0	11.4	95	
02...	1053	40	1870	8.3	6.0	11.4	95	
02...	1055	50	1870	8.3	6.0	11.3	94	
02...	1057	60	1870	8.3	6.0	11.3	94	
02...	1059	70	1870	8.3	6.0	11.3	94	
02...	1101	80	1870	8.3	6.0	11.2	93	
02...	1103	92	1870	8.3	6.0	11.2	93	

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	DUCT-	SPE-	PH	TEMPER-	OXYGEN,	OXYGEN,
				CIFIC			DIS-	DIS-
		LING	ANCE	(MICRO-	(UNITS)	WATER	SOLVED	SOLVED
<b>FEB</b>								
02...	1130	1.0	1870	8.3	6.0	11.4	95	
02...	1132	10	1870	8.3	6.0	11.4	95	
02...	1134	20	1870	8.3	6.0	11.3	94	
02...	1136	30	1870	8.3	6.0	11.3	94	
02...	1138	40	1870	8.3	6.0	11.3	94	
02...	1140	50	1870	8.3	6.0	11.3	94	
02...	1142	60	1870	8.3	6.0	11.3	94	
02...	1144	70	1870	8.3	6.0	11.3	94	
02...	1146	88	1870	8.3	6.0	11.3	94	

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	DUCT-	SPE-	PH	TEMPER-	TRANS-	OXYGEN,
				CIFIC			PAR-	DIS-
		LING	ANCE	(MICRO-	(UNITS)	WATER	ENCY	SOLVED
<b>FEB</b>							(SECCHI	(PER-
02...	1235	1.0	1900	8.3	6.0	2.01	DISK)	CENT
02...	1237	10	1900	8.3	6.0	--	(M)	SATUR-
02...	1239	20	1930	8.3	6.0	--		ATION)
02...	1241	30	1930	8.3	6.0	--		
02...	1243	40	1930	8.3	6.0	--		
02...	1245	50	1930	8.2	6.0	--		
02...	1247	60	1930	8.2	6.0	--		
02...	1249	76	1930	8.2	6.0	--		
HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE
NESS	NESS	DIS-	SIUM,	DIS-	AD-	SIUM,	BONATE	DIS-
NONCAR-	NONCAR-	SOLVED	DIS-	SOLVED	SORP-	BONATE	DIS-	SOLVED
(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	TION	(MG/L)	(MG/L)	(MG/L)
AS	AS	AS CACO3)	AS CA)	AS MG)	RATIO	AS K)	HC03)	AS SO4)
DATE								
<b>FEB</b>								
02...	340	220	94	25	260	6.2	6.8	146
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	360	240	100	26	270	6.2	6.4	146
								220

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 2, 1977--Continued

315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SUM OF CONSTITU- ENTS, (MG/L)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> AS N)	NITRO- GEN, AMMONIA AS N)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
<b>FEB</b>								
02...	420	4.2	1090	.02	.03	.020	10	10
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	.02	.03	.010	10	0
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	440	3.9	1140	.02	.05	.010	20	10

315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT WATER) (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>FEB</b>							
02...	1210	1.0	1870	8.3	6.0	11.4	95
02...	1212	10	1870	8.3	6.0	11.4	95
02...	1214	26	1870	8.3	6.0	11.3	94

315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT WATER) (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>FEB</b>							
02...	1325	1.0	1900	8.3	6.0	11.0	92
02...	1327	10	1900	8.3	6.0	11.0	92
02...	1329	20	1900	8.3	6.0	10.9	91
02...	1331	30	1930	8.2	6.0	10.9	91
02...	1333	40	1930	8.2	6.0	10.7	89
02...	1335	46	1930	8.2	6.0	10.6	88

315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	DEPTH (FT)	SAMP- LING DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT WATER) (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>FEB</b>							
02...	1355	1.0	1970	8.3	6.0	11.1	92
02...	1357	10	1970	8.3	6.0	11.1	92
02...	1359	20	1970	8.3	6.0	11.0	92
02...	1401	30	1970	8.3	6.0	11.0	92
02...	1403	40	1970	8.3	6.0	11.0	92
02...	1405	50	1970	8.3	6.0	10.9	91
02...	1407	63	1970	8.3	6.0	10.9	91

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 2, 1977--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	CON-	DUCT-	TEMPER-	OXYGEN,
		DEPTH	ANCE	PH	ATURE,	DIS-	DIS-
		(FT)	(MICRO-	(UNITS)	WATER	SOLVED	SOLVED
			MHOS)		(DEG C)	(MG/L)	(PER-
							CENT
FEB							
02...	1430	1.0	1960	8.3	6.0	11.0	92
02...	1432	10	1960	8.3	6.0	10.9	91
02...	1434	20	1960	8.3	6.0	10.9	91
02...	1436	30	1960	8.3	5.5	10.7	88
02...	1438	39	1960	8.3	5.5	10.7	88

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	OXYGEN,				
		LING	CIFIC	CON-	DUCT-	TRANS-	DIS-	
		DEPTH	ANCE	PH	ATURE,	PAR-	SOLVED	
		(FT)	(MICRO-	(UNITS)	WATER	(SECCHI	(PER-	
			MHOS)		(DEG C)	DIS-	CENT	
						DIS-	SATUR-	
FEB								
02...	1455	1.0	2040	8.3	6.0	1.83	10.9	91
02...	1457	10	2040	8.3	6.0	--	10.9	91
02...	1459	20	2040	8.3	6.0	--	10.9	91
02...	1501	30	2040	8.3	6.0	--	10.8	90
02...	1503	40	2090	8.3	6.0	--	10.5	88
02...	1505	53	2130	8.3	6.0	--	10.5	88

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE	
	NESS	NONCAR-	DIS-	SUM	SODIUM,	SORP-	SIUM,	DIS-	BONATE	DIS-
	(MG/L	BONATE	SOLVED	SOLVED	TION	DIS-	SOLVED	(MG/L	SOLVED	SOLVED
	AS	(MG/L	(MG/L	(MG/L	RATIO	(MG/L	(MG/L	AS	(MG/L	(MG/L
	CACO <sub>3</sub> )	CACO <sub>3</sub> )	AS CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	AS K)	HCO <sub>3</sub> )	AS SO <sub>4</sub> )	AS SO <sub>4</sub> )
FEB										
02...	360	230	100	27	260	6.0	7.0	154	220	
02...	--	--	--	--	--	--	--	--	--	
02...	--	--	--	--	--	--	--	--	--	
02...	--	--	--	--	--	--	--	--	--	
02...	390	260	110	28	280	6.2	6.6	164	240	

DATE	CHLO-	SILICA,	SOLIDS.	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	DIS-	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,
	DIS-	SOLVED	CONSTI-	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	SOLVED	DIS-
	SOLVED	(MG/L	TUENTS,	DIS-	TOTAL	(MG/L	(UG/L	SOLVED
	(MG/L	AS CL)	SI <sub>2</sub> O <sub>2</sub> )	SOLVED	(MG/L	AS N)	AS FE)	(UG/L
	AS			(MG/L	AS N)		AS MN)	AS MN)
FEB								
02...	440	3.5	1130	.01	.03	.010	10	10
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	.00	.02	.010	10	0
02...	--	--	--	--	--	--	--	--
02...	460	3.3	1210	.00	.06	.010	10	0

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	CON-	DUCT-	TEMPER-	OXYGEN,
		DEPTH	ANCE	PH	ATURE,	DIS-	DIS-
		(FT)	(MICRO-	(UNITS)	WATER	SOLVED	SOLVED
			MHOS)		(DEG C)	(MG/L)	(PER-
							CENT
FEB							
02...	1525	1.0	2080	8.3	6.5	10.9	92
02...	1527	10	2080	8.3	6.0	10.9	91
02...	1529	20	2100	8.3	6.0	10.9	91
02...	1531	30	2100	8.3	6.0	10.9	91
02...	1533	45	2160	8.3	6.0	10.9	91

TABLE 21--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 2, 1977--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE	PH (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, OXYGEN, DIS- SOLVED (PER- CENT)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (MG/L)
			SAMP- LING			(M)	SOLVED	SATUR- ATION)	
<b>FEB</b>									
02...	1600	1.0	2060	8.5	6.5	1.37	12.1	103	
02...	1602	10	2230	8.3	6.5	--	11.1	94	
02...	1604	20	2230	8.3	6.5	--	11.0	93	
02...	1606	26	2370	8.3	6.5	--	10.6	90	

DATE	HARD- NESS (MG/L) AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L) AS CACO3)	CALCIUM DIS- SOLVED (MG/L) AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG)	SODIUM, DIS- SOLVED (MG/L) AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L) AS K)	BICAR- BONATE (MG/L) AS HCO3)	SULFATE DIS- SOLVED (MG/L) AS SO4)
<b>FEB</b>									
02...	390	250	110	27	280	6.2	6.2	170	250
02...	--	--	--	--	--	--	--	--	--
02...	430	300	120	31	320	6.7	7.0	158	290

DATE	CHLO- RIDE, DIS- SOLVED (MG/L) AS AS CL)	SILICA, DIS- SOLVED (MG/L) SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, NO2+NO3 DIS- SOLVED (MG/L) AS N)	NITRO- GEN, NO2+NO3 TOTAL DIS- SOLVED (MG/L) AS N)	NITRO- GEN, AMMONIA TOTAL DIS- SOLVED (MG/L) AS N)	PHOS- PHORUS, TOTAL (MG/L) AS P)	IRON, DIS- SOLVED (MG/L) AS FE)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN)
<b>FEB</b>								
02...	450	2.3	1210	.00	.06	.050	10	0
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	530	3.1	1380	.01	.05	.010	10	10

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE	PH (MICRO- MHOS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, OXYGEN, DIS- SOLVED (PER- CENT)	OXYGEN, DIS- SOLVED (MG/L)
			SAMP- LING			(M)	SOLVED	SATUR- ATION)
<b>FEB</b>								
02...	1630	1.0	2360	8.3	7.0	2.07	10.5	90
02...	1632	10	2360	8.3	7.0	--	10.4	89
02...	1634	20	2370	8.3	7.0	--	10.3	88
02...	1636	28	2370	8.3	7.0	--	10.2	87

DATE	HARD- NESS (MG/L) AS CACO3)	HARD- NESS, NONCAR- BONATE (MG/L) AS CACO3)	CALCIUM DIS- SOLVED (MG/L) AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L) AS MG)	SODIUM, DIS- SOLVED (MG/L) AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L) AS K)	BICAR- BONATE (MG/L) AS HCO3)	SULFATE DIS- SOLVED (MG/L) AS SO4)
<b>FEB</b>									
02...	430	300	120	31	320	6.7	7.8	160	260
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	430	300	120	32	320	6.7	6.8	158	260

DATE	CHLO- RIDE, DIS- SOLVED (MG/L) AS AS CL)	SILICA, DIS- SOLVED (MG/L) SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, NO2+NO3 DIS- SOLVED (MG/L) AS N)	NITRO- GEN, NO2+NO3 TOTAL DIS- SOLVED (MG/L) AS N)	NITRO- GEN, AMMONIA TOTAL DIS- SOLVED (MG/L) AS N)	PHOS- PHORUS, TOTAL (MG/L) AS P)	IRON, DIS- SOLVED (MG/L) AS FE)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN)
<b>FEB</b>								
02...	520	2.8	1340	.03	.02	.010	20	10
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	530	2.7	1350	.03	.02	.010	30	10

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1977

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	(SECCHI	TRANS-		OXYGEN,	
							LING	ANCE	DISK)	OXYGEN,
		DEPTH	(MICRO-	(UNITS)	WATER	(DEG C)	(M)	SOLVED	(PER-	HARD-
		(FT)	MHOS)					MG/L)	CENT	NESS
									AS	(MG/L
									CACO3)	
<b>MAY</b>										
06...	0830	1.0	1520	8.2	20.0	1.55	7.0	80	300	
06...	0832	10	1530	8.1	20.0	--	6.9	78	--	
06...	0834	20	1540	8.1	20.0	--	6.8	77	--	
06...	0836	30	1550	8.0	20.0	--	6.6	75	--	
06...	0838	40	1550	7.9	19.5	--	5.5	62	--	
06...	0840	50	1610	7.8	19.0	--	5.1	57	--	
06...	0842	60	1680	7.7	18.0	--	3.8	42	--	
06...	0844	70	1750	7.5	17.5	--	2.7	29	--	
06...	0846	80	1770	7.4	17.0	--	2.0	22	--	
06...	0848	90	1800	7.4	16.5	--	1.0	11	--	
06...	0850	97	1800	7.3	16.5	--	.8	9	330	
<b>HARD-NESS,</b>										
NONCAR-	CALCIUM	MAGNE-	SODIUM,	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-	
BONATE	DIS-	SUM	DIS-	AD-	AD-	SUM,	BONATE	DIS-	RIDE,	
(MG/L	SOLVED	SOLVED	SOLVED	SORP-	SORP-	DIS-	SOLVED	SOLVED	DIS-	
CACO3)	(MG/L	(MG/L	(MG/L	TION	TION	BONATE	(MG/L	(MG/L	(MG/L	
DATE	AS CA)	AS MG)	AS NA)	RATIO	RATIO	AS K)	AS HCO3)	AS SO4)	AS CL)	
<b>MAY</b>										
06...	170	88	19	190	4.8	4.9	150	150	300	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	210	96	23	240	5.7	5.5	150	190	370	
<b>SOLIDS,</b>										
FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	NITRO-	PHOS-	IRON,	MANGA-		
RIDE,	DIS-	CONSTI-	GEN,	GEN,	GEN,	PHORUS,	DIS-	NESE,		
DIS-	SOLVED	TUENTS,	NO2+NO3	AMMONIA	TOTAL	TOTAL	SOLVED	DIS-		
SOLVED	(MG/L	(MG/L	DIS-	(MG/L	(MG/L	(MG/L	(UG/L	SOLVED		
DATE	AS F)	SiO2)	SOLVED	AS N)	AS N)	AS P)	AS FE)	(UG/L		
								AS MN)		
<b>MAY</b>										
06...	.3	4.5	832	.07	.00	.000	0	0		
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	.11	.03	.000	0	0		
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	.19	.03	.000	0	30		
06...	--	--	--	--	--	--	--	--	--	
06...	.3	5.0	1010	.28	.02	.000	20	240		

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	(SECCHI	TRANS-		OXYGEN,	
							LING	ANCE	DIS-	SOLVED
		DEPTH	(MICRO-	(UNITS)	WATER	(DEG C)	(M)	SOLVED	(PER-	NESS
		(FT)	MHOS)					MG/L)	CENT	(MG/L
									AS	
									CACO3)	
<b>MAY</b>										
06...	0915	1.0	1520	8.2	20.0	6.9			78	
06...	0917	10	1530	8.1	20.0	6.9			78	
06...	0919	20	1540	8.1	20.0	6.9			78	
06...	0921	30	1540	8.1	20.0	6.9			78	
06...	0923	37	1540	8.0	20.0	6.8			77	

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1977--Continued

315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	DEPTH (FT)	SAMP- LING	DUCT- ANCE	SPE- CIFIC CON- CENTRATION (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT) (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT) (MG/L)
<b>MAY</b>									
06...	1000	1.0			1470	8.3	21.0	7.4	85
06...	1002	10			1480	8.3	21.0	7.4	85
06...	1004	20			1490	8.2	20.5	6.7	76
06...	1006	30			1550	8.1	20.0	6.7	76
06...	1008	40			1600	7.9	19.5	5.6	63
06...	1010	50			1640	7.8	19.0	4.3	48
06...	1012	60			1690	7.6	18.5	3.7	41
06...	1014	70			1750	7.5	18.0	2.7	30
06...	1016	80			1760	7.4	17.5	1.8	20
06...	1018	94			1800	7.3	17.0	.8	9

315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	DEPTH (FT)	SAMP- LING	DUCT- ANCE	SPE- CIFIC CON- CENTRATION (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT) (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT) (MG/L)
<b>MAY</b>									
06...	1045	1.0			1370	8.4	22.0	7.6	89
06...	1047	10			1370	8.4	22.0	7.6	89
06...	1049	20			1380	8.4	21.5	7.5	87
06...	1051	30			1400	8.3	21.0	6.9	79
06...	1053	40			1520	7.7	19.5	3.8	43
06...	1055	50			1660	7.6	18.5	3.2	35
06...	1057	60			1730	7.5	18.0	2.5	27
06...	1059	70			1740	7.5	18.0	1.8	20
06...	1101	80			1770	7.4	17.5	1.0	11
06...	1103	88			1770	7.4	17.5	1.0	11

315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	DEPTH (FT)	SAMP- LING	DUCT- ANCE	SPE- CIFIC CON- CENTRATION (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT) (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT) (MG/L)
<b>MAY</b>										
06...	1155	1.0			1130	8.3	21.5	.85	7.2	84
06...	1157	10			1170	8.3	21.5	--	7.2	84
06...	1159	20			1180	8.3	21.5	--	7.2	84
06...	1201	30			1070	8.2	21.5	--	6.5	76
06...	1203	40			970	7.7	20.5	--	4.0	45
06...	1205	50			1160	7.4	19.5	--	1.4	16
06...	1207	60			1480	7.4	18.5	--	.4	4
06...	1209	70			1580	7.4	18.5	--	.4	4
06...	1211	77			1580	7.4	18.5	--	.4	4

DATE	HARD- NESS, NESS (MG/L)	CALCIUM BONATE SOLVED AS (CACO3)	HARD- NESS, NONCAR- BONATE SOLVED AS (CACO3)	MAGNE- SIUM, DIS- SOLVED AS (Ca)	SODIUM, DIS- SOLVED AS (MG/L)	SODIUM, DIS- SOLVED AS (MG/L)	RATIO (MG/L AS Na)	POTAS- SIUM, BICAR- BONATE SOLVED AS (K)	BICAR- BONATE SOLVED AS (HCO3)	SULFATE DIS- SOLVED AS (SO4)
<b>MAY</b>										
06...	250	120	76	14	130	3.6	4.3	150	110	
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--	--
06...	310	180	91	20	200	4.9	5.0	160	160	

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1977--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SUM OF CONSTITU- ENTS. (MG/L)	NITRO- GEN, NO2+NO3 (MG/L)	NITRO- GEN, TOTAL (MG/L)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
	AS CL	SIO2	AS	AS N	AS N	AS P	AS FE	AS MN
<b>MAY</b>								
06...	210	5.1	624	.11	.02	.020	10	0
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	.19	.04	.000	10	0
06...	--	--	--	.45	.04	.030	10	100
06...	--	--	--	.41	.01	.000	10	330
06...	--	--	--	--	--	--	--	--
06...	310	5.8	869	.38	.01	.000	20	520

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>						
06...	1130	1.0	1050	8.2	22.5	7.0 82
06...	1132	10	1050	8.2	22.5	7.0 82
06...	1134	20	1070	8.2	22.0	7.0 82
06...	1136	27	1160	8.2	22.0	7.0 82

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>						
06...	1250	1.0	1040	8.3	22.5	7.6 89
06...	1252	10	1040	8.3	22.5	7.3 86
06...	1254	20	1070	8.3	22.0	7.0 82
06...	1256	30	1070	8.2	22.0	6.8 80
06...	1258	40	1090	8.1	21.5	6.2 72
06...	1300	47	1090	8.0	21.5	5.7 66

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>MAY</b>						
06...	1315	1.0	828	8.1	22.0	6.8 80
06...	1317	10	840	8.1	22.0	6.7 79
06...	1319	20	860	8.1	22.0	6.7 79
06...	1321	30	880	7.9	21.5	6.0 70
06...	1323	40	820	7.5	20.5	3.1 35
06...	1325	50	879	7.4	20.0	1.8 20
06...	1327	60	1360	7.4	19.0	.6 7
06...	1329	66	1440	7.4	19.0	.6 7

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1977--Continued

320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	DEPTH (FT)	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
			LING	ANCE		ATURE, WATER	DIS-	DIS-
		(MICRO- MHOS)	(UNITS)	(DEG C)	SOLVED (MG/L)	SOLVED (MG/L)	SOLVED (PER- CENT)	
MAY								
06...	1355	10	772	8.1	22.5	7.1	84	
06...	1357	10	764	8.1	22.5	7.0	82	
06...	1359	20	756	8.1	22.5	6.7	79	
06...	1401	30	675	7.8	21.5	5.0	58	
06...	1403	41	546	7.5	20.5	2.1	24	

320122097260901 LAKE WHITNEY SITE PC

DATE	TIME	DEPTH (FT)	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,
			LING	ANCE		ATURE, WATER	PAR-	ENCY (SECCHI)
		(MICRO- MHOS)	(UNITS)	(DEG C)	(DISK)	(MG/L)	SOLVED (MG/L)	SOLVED (PER- CENT)
MAY								
06...	1425	10	652	7.8	22.5	.40	6.2	73
06...	1427	10	652	7.8	22.5	--	6.1	72
06...	1429	20	655	7.8	22.0	--	6.0	71
06...	1431	30	655	7.8	22.0	--	5.9	69
06...	1433	40	665	7.6	21.5	--	4.5	52
06...	1435	50	738	7.5	20.5	--	2.5	28
06...	1437	55	1310	7.4	19.5	--	.7	8

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE
	NESS	NESS	NONCAR-	SOLVED	SOLVED	SOLVED	AD-	SUIM,	SOLVED
	(MG/L)	(MG/L)	BONATE	SOLVED	SOLVED	SOLVED	SORP-	BONATE	SOLVED
	AS	AS	(MG/L)	(MG/L)	(MG/L)	(MG/L)	RATIO	(MG/L)	(MG/L)
	CACO <sub>3</sub>	CACO <sub>3</sub>	AS CACO <sub>3</sub>	AS CA	AS MC	AS NA	AS K	AS HCO <sub>3</sub>	AS SO <sub>4</sub>
MAY									
06...	190	52	59	9.6	54	1.7	3.6	160	56
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	280	140	84	17	150	3.9	4.3	170	120

DATE	CHLO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	DIS-	SUM OF CONSTITUENTS	GEN, NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	PHORUS,	SOLVED	NESE,
	DIS-	SOLVED	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	DIS-
	(MG/L)	AS CL)	SIO <sub>2</sub> )	(AS N)	AS N)	AS P)	AS FE)	AS MN)
MAY								
06...	86	6.4	355	.20	.09	.000	20	0
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	.23	.09	.000	10	10
06...	--	--	--	.25	.06	.000	30	160
06...	240	7.0	708	.22	.28	.000	60	1000

320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	DEPTH (FT)	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
			LING	ANCE		ATURE, WATER	DIS-	DIS-
		(MICRO- MHOS)	(UNITS)	(DEG C)	SOLVED (MG/L)	SOLVED (MG/L)	SOLVED (PER- CENT)	
MAY								
06...	1455	10	649	7.9	23.0	6.2	74	
06...	1457	10	654	7.9	23.0	5.9	70	
06...	1459	20	654	7.8	22.5	5.5	65	
06...	1501	30	673	7.6	21.5	3.7	43	
06...	1503	40	716	7.5	21.0	3.6	41	
06...	1505	49	810	7.4	20.5	1.8	20	

TABLE 22--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1977--Continued

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	
		LING	ANCE		ATURE,	PAR-	DIS-	
		DEPTH	(MICRO-	(UNITS)	WATER	ENCY	SOLVED	SOLVED
		(FT)	MICROS)		(DEG C)	(SECCHI	(MG/L)	(MG/L)
MAY 06...	1530	1.0	725	8.0	23.0	.27	6.8	81
06...	1532	10	765	7.9	23.0	--	6.2	74
06...	1534	20	616	7.7	22.5	--	4.4	52
06...	1536	27	532	7.4	22.0	--	1.7	20
HARD-		HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	OXYGEN,
NESS	NONCAR-	NESS,	SOLVED	SIUM,	SODIUM,	AD-	SIUM,	DIS-
(MG/L)	BONATE	(MG/L)	(MG/L)	DIS-	DIS-	SORP-	BONATE	SOLVED
AS	CACO3)	AS CACO3)	AS CA)	SOLVED	SOLVED	TION	(MG/L)	(PER-
DATE				(MG/L)	(MG/L)	RATIO	AS K)	CENT
				AS MG)	AS NA)			SATUR-
								ATION)
MAY 06...	200	62	62	11	67	2.1	3.8	170
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	190	30	65	7.3	31	1.0	3.3	200
CHLO-		SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
RIDE,	DIS-	SOLVED	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,
DIS-	SOLVED	(MG/L)	CONSTITUENTS,	NO2+NO3	TOTAL	AMMONIA	SOLVED	DIS-
SOLVED	(MG/L)	AS	DIS-	DIS-	(MG/L)	TOTAL	(UG/L)	SOLVED
(MG/L)	AS	AS CL)	SIO2)	SOLVED	AS N)	(MG/L)	AS FE)	(UG/L)
DATE						AS N)		AS MN)
MAY 06...	100	6.3	397	.28	.04	.000	20	0
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	41	8.3	293	.24	.23	.010	10	260

320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	
		LING	ANCE		ATURE,	PAR-	DIS-	
		DEPTH	(MICRO-	(UNITS)	WATER	ENCY	SOLVED	SOLVED
		(FT)	MICROS)		(DEG C)	(SECCHI	(MG/L)	(MG/L)
MAY 06...	1600	1.0	1020	8.0	23.0	.24	7.0	83
06...	1602	10	1070	8.0	23.0	--	7.0	83
06...	1604	20	1110	8.0	23.0	--	7.0	83
06...	1606	29	1110	8.0	23.0	--	7.0	83
HARD-		HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	OXYGEN,
NESS	NONCAR-	NESS,	SOLVED	SIUM,	SOLVED	AD-	SIUM,	DIS-
(MG/L)	BONATE	(MG/L)	(MG/L)	DIS-	SOLVED	SORP-	BONATE	SOLVED
AS	CACO3)	AS CACO3)	AS CA)	AS MG)	AS NA)	TION	(MG/L)	(MG/L)
DATE						RATIO	AS K)	AS SO4)
MAY 06...	250	110	74	15	110	3.0	4.2	170
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	260	120	76	16	120	3.3	4.3	170
CHLO-		SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
RIDE,	DIS-	SOLVED	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,
DIS-	SOLVED	(MG/L)	CONSTITUENTS,	NO2+NO3	AMMONIA	TOTAL	SOLVED	DIS-
SOLVED	(MG/L)	AS	DIS-	DIS-	(MG/L)	TOTAL	(UG/L)	SOLVED
(MG/L)	AS	AS CL)	SIO2)	SOLVED	AS N)	(MG/L)	AS FE)	(UG/L)
DATE						AS N)		AS MN)
MAY 06...	170	6.3	571	.20	.00	.000	10	10
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	190	6.3	604	.28	.01	.000	20	10

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 2, 1977

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	CON-	SPECIFIC	TRANS-	OXYGEN,		HARD-
							SOLVED	DIS-	
		DEPTH	(MICRO-	(UNITS)	PH	TEMPER-	ENCY	OXYGEN,	NESS
		(FT)	MHOS)			ATURE,	(SECCHI	DIS-	(MG/L
						WATER	DIS-	SOLVED	AS
						(DEG C)	DIS-	(MG/L)	CACO3)
SEP									
02...	0900	1.0	1220		8.2	29.0	1.98	7.3	96
02...	0902	10	1220		8.2	29.0	--	7.1	93
02...	0904	20	1220		8.0	28.5	--	5.7	74
02...	0906	30	1220		7.8	28.5	--	4.6	60
02...	0908	40	1220		7.5	28.0	--	1.8	23
02...	0910	50	1260		7.4	25.5	--	.2	2
02...	0912	60	1380		7.3	22.5	--	.2	2
02...	0914	70	1400		7.3	21.0	--	.2	2
02...	0916	80	1520		7.3	20.0	--	.2	2
02...	0918	91	1610		7.3	19.5	--	.2	2
									310
HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE	CHLO-	
NESS,	DIS-	SIUM,	AD-	SORP-	SIUM,	BONATE	DIS-	RIDE,	
NONCAR-	SOLVED	DIS-	SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	DIS-	
BONATE	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	SOLVED	
	CACO3)	AS CA)	AS MG)	AS NA)	RATIO	AS K)	HC03)	AS SO4)	AS CL)
SEP									
02...	140	76	16	150	4.1	4.6	140	120	230
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	150	91	19	210	5.2	5.2	190	150	320
FLUO-	SILICA,	SOLID,	NITRO-	NITRO-	PHOS-	IRON,	MANA-		
RIDE,	DIS-	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,		
DIS-	SOLVED	CONSTITUENTS,	NO2+NO3	AMMONIA	TOTAL	SOLVED	DIS-		
SOLVED	(MG/L	DIS-	DIS-	TOTAL	(MG/L	SOLVED	SOLVED		
	(MG/L	AS F)	SIO2)	SOLVED	(MG/L	(MG/L	(UG/L		
	AS	AS	(MG/L)	AS N)	AS N)	AS P)	AS FE)	(UG/L)	
							AS MN)		
SEP									
02...	.3	6.3	672	.02	.00	.000	20	0	
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	.00	.00	.000	10	0	
02...	--	--	--	.00	.00	.000	10	30	
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	.3	9.8	901	.00	1.2	.300	160	1700	

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	CON-	SPECIFIC	TRANS-	OXYGEN,		HARD-
							SOLVED	DIS-	
		DEPTH	(MICRO-	(UNITS)	PH	TEMPER-	ENCY	OXYGEN,	NESS
		(FT)	MHOS)			ATURE,	(SECCHI	DIS-	(MG/L
						WATER	DIS-	SOLVED	AS
						(DEG C)	DIS-	(MG/L)	CACO3)
SEP									
02...	0945	1.0	1220		8.3	29.0	7.7	101	
02...	0947	10	1220		8.3	29.0	7.7	101	
02...	0949	20	1220		8.2	29.0	6.8	89	
02...	0951	30	1220		7.9	28.5	4.9	64	
02...	0953	36	1220		7.8	28.5	4.4	57	

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 2, 1977--Continued

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	SPE-	OXYGEN,							
		LING	CIFIC	DUCT-	CON-	DIS-	SOLVED				
		DEPTH	(MICRO-	ANCE	PH	TEMPER-	ATURE,	WATER	DIS-	SOLVED	(PER-
		(FT)	MHOS)	(UNITS)		(DEG C)					CENT
SEP											SATUR-
02...	1030	1.0	1220	8.4	29.5				8.0		ATION)
02...	1032	10	1220	8.3	29.0				7.8		103
02...	1034	20	1220	8.2	29.0				7.2		95
02...	1036	30	1220	7.8	28.5				4.5		58
02...	1038	40	1220	7.6	28.0				2.6		33
02...	1040	50	1270	7.3	25.5				.2		2
02...	1042	60	1370	7.2	23.0				.2		2
02...	1044	70	1410	7.2	21.5				.2		2
02...	1045	80	1510	7.2	20.5				.2		2
02...	1047	90	1600	7.2	20.0				.2		2

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	SPE-	OXYGEN,							
		LING	CIFIC	DUCT-	CON-	DIS-	SOLVED				
		DEPTH	(MICRO-	ANCE	PH	TEMPER-	ATURE,	WATER	DIS-	SOLVED	(PER-
		(FT)	MHOS)	(UNITS)		(DEG C)					CENT
SEP											SATUR-
02...	1110	1.0	1220	8.3	29.5				7.8		103
02...	1112	10	1220	8.3	29.5				7.5		99
02...	1114	20	1220	8.3	29.5				7.3		96
02...	1116	30	1220	8.3	29.0				7.2		95
02...	1118	40	1220	7.6	28.5				2.6		34
02...	1120	50	1280	7.3	25.5				.2		2
02...	1122	60	1380	7.2	23.0				.2		2
02...	1124	70	1470	7.2	21.5				.2		2
02...	1126	81	1510	7.2	21.0				.2		2

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	SPE-	TRANS-		OXYGEN,			
		LING	DUCT-	CON-	PH	TEMPER-	PAR-	DIS-	SOLVED
		DEPTH	(MICRO-	ANCE	PH	ATURE,	(SECCHI	OXYGEN,	(PER-
		(FT)	MHOS)	(UNITS)		(DEG C)	DISK)	(M)	CENT
SEP									SATUR-
02...	1225	1.0	1220	8.4	29.0		1.65	8.1	107
02...	1227	10	1220	8.4	29.0		--	8.0	105
02...	1229	20	1220	8.3	29.0		--	7.2	95
02...	1231	30	1230	8.2	28.5		--	6.7	87
02...	1233	40	1230	8.0	28.5		--	5.2	68
02...	1235	50	1330	7.3	25.0		--	.2	2
02...	1237	60	1410	7.2	23.0		--	.2	2
02...	1239	74	1420	7.1	22.5		--	.2	2

DATE	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE
	NESS,	NESS,	DIS-	SUM,	DIS-	AD-	SUM,	BONATE	DIS-
	NONCAR-	BONATE	SOLVED	SOLVED	SORP-	SORP-	DIS-	SOLVED	SOLVED
	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	RATIO	SOLVED	(MG/L	(MG/L
	AS	AS	AS	AS	AS		(M/G/L	AS	AS
	CACO3)	CACO3)	CA	CA	MG)	NA)	AS K)	HCO3)	SO4)
SEP									
02...	260	140	76	16	150	4.1	4.7	140	120
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	300	120	89	18	170	4.3	4.9	210	130

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 2, 1977--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L)	SILICA, SI02)	SUM OF DIS- SOLVED (MG/L)	SOLIDS,		NITRO- GEN, NO2+NO3 (MG/L)	NITRO- AMMONIA (MG/L)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
				CONSTITU- ENTS, AS N)	DIS- TOTAL AS N)					
<b>SEP</b>										
02...	230		6.5		672	.00	.00	.000	10	20
02...	--		--		--	--	--	--	--	--
02...	--		--		--	--	--	--	--	--
02...	--		--		--	--	--	--	--	--
02...	--		--		--	.01	.00	.000	20	70
02...	--		--		--	.00	.85	.070	100	2500
02...	--		--		--	--	--	--	--	--
02...	270		10		797	.00	1.7	.210	130	1700

## 315729097253701 LAKE WHITNEY SITE PS

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-		TEMPER- ATURE, PH	OXYGEN, WATER (DEC C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- CENT SATUR- ATION)
				PH	(UNITS)				
<b>SEP</b>									
02...	1155	1.0	1220	8.4		30.5		8.1	108
02...	1157	10	1220	8.2		30.5		7.3	97
02...	1159	21	1220	8.2		30.0		7.2	96

## 3159070972222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-		TEMPER- ATURE, PH	OXYGEN, WATER (DEC C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- CENT SATUR- ATION)
				PH	(UNITS)				
<b>SEP</b>									
02...	1315	1.0	1230	8.1		29.5		6.4	84
02...	1317	10	1230	8.0		29.0		5.5	72
02...	1319	20	1230	8.0		29.0		5.5	72
02...	1321	30	1230	8.0		29.0		5.4	71
02...	1323	42	1230	8.0		29.0		5.4	71

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON-		TEMPER- ATURE, PH	OXYGEN, WATER (DEC C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- CENT SATUR- ATION)
				PH	(UNITS)				
<b>SEP</b>									
02...	1345	1.0	1230	8.3		30.0		7.2	96
02...	1347	10	1230	8.1		29.5		6.3	83
02...	1349	20	1230	8.1		29.5		6.2	82
02...	1351	30	1230	8.0		29.5		5.0	66
02...	1353	40	1230	8.0		29.0		5.9	78
02...	1355	50	1270	7.4		28.0		1.2	3
02...	1357	59	1350	7.4		25.5		1.2	2

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 2, 1977--Continued

320011097262201 LAKE WHITNEY SITE P8

		SAMP-	SPE-	OXYGEN,			
		LING	CIFIC	DIS-			
		DEPTH	CON-	SOLVED			
DATE	TIME	(FT)	DUCT-	PH	TEMPER-	OXYGEN,	(PER-
			ANCE		ATURE,	DIS-	CENT
			(MICRO-	(UNITS)	WATER	SOLVED	SATUR-
			MHOS)		(DEG C)	(MG/L)	ATION)
SEP							
02...	1420	1.0	1230	8.2	30.5	7.1	95
02...	1422	10	1230	8.2	30.0	6.6	88
02...	1424	20	1230	8.2	30.0	6.4	85
02...	1426	36	1230	7.9	30.0	4.7	63

320122097260901 LAKE WHITNEY SITE FC

		SAMP-	SPE-	TRANS-	OXYGEN,			
		LING	CIFIC	PAR-	DIS-			
		DEPTH	CON-	ENCY	SOLVED			
DATE	TIME	(FT)	DUCT-	(SECCHI	(MG/L)			
			ANCE	DIS-	SOLVED			
			(MICRO-	DIS-	(MG/L)			
			MHOS)	(UNITS)	(DEG C)			
SEP								
02...	1450	1.0	1250	8.2	31.0	.91	7.0	95
02...	1452	10	1250	8.1	30.0	--	6.4	85
02...	1454	20	1250	8.1	30.0	--	6.4	85
02...	1456	30	1250	8.0	30.0	--	5.6	75
02...	1458	40	1290	7.5	30.0	--	2.0	27
02...	1500	50	1290	7.5	30.0	--	1.1	15

	HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	POTAS-	BICAR-	SULFATE	
	NESS	NONCAR-	DIS-	SIUM,	SODIUM,	SIUM,	DIS-	DIS-	
	(MG/L	BONATE	SOLVED	DIS-	DIS-	DIS-	BONATE	SOLVED	
DATE	(Caco <sub>3</sub> )	(Caco <sub>3</sub> )	(MG/L AS Caco <sub>3</sub> )	(MG/L AS CA)	(MG/L AS MG)	(MG/L AS NA)	(MG/L AS K)	(MG/L AS SO <sub>4</sub> )	
SEP									
02...	260	140	75	17	150	4.1	4.8	140	120
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--	--
02...	260	140	76	17	160	4.3	5.0	150	130

	CRLO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
	RIDE,	DIS-	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,
	DIS-	SOLVED	CONSTI-	NO <sub>2</sub> +NO <sub>3</sub>	TOTAL	TOTAL	SOLVED	DIS-
DATE	(MG/L	(MG/L	DIS-	(MG/L	(MG/L	(MG/L	(UG/L	(UG/L
	AS CL)	AS SIO <sub>2</sub> )	SOLVED	AS N)	AS N)	AS P)	AS FE)	AS MN)
SEP								
02...	240	7.3	683	.01	.00	.010	10	0
02...	--	--	--	--	--	--	--	--
02...	--	--	--	--	--	--	--	--
02...	--	--	--	.01	.00	.020	10	10
02...	--	--	--	.01	.02	.030	10	60
02...	250	8.2	720	.00	.07	.030	10	160

320124097291101 LAKE WHITNEY SITE GC

	SAMP-	SPE-	OXYGEN,				
	LING	CIFIC	DIS-				
	DEPTH	CON-	SOLVED				
DATE	TIME	(FT)	(MICRO-	PH	TEMPER-	OXYGEN,	(PER-
			MHOS)		ATURE,	DIS-	CENT
					WATER	SOLVED	SATUR-
					(DEG C)	(MG/L)	ATION)
SEP							
02...	1525	1.0	1280	8.2	30.5	8.2	109
02...	1527	10	1280	7.9	30.0	5.7	76
02...	1529	20	1290	7.7	30.0	4.8	64
02...	1531	30	1320	7.4	30.0	2.2	29
02...	1533	41	1320	7.3	30.0	1.8	24

TABLE 23--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 2, 1977--Continued.

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	DEPTH	SPE-	CIFIC	TRANS-	OXYGEN,	DIS-	SOLVED
			SAMP-	DUCT-		DIS-		
	LING	ANCE	(MICRO-	ATURE,	(SECCHI	SOLVED	(PER-	SATUR-
	(FT)	(MHOS)	(UNITS)	(DEG C)	DISK)	(MG/L)	CENT	ATION)
SEP								
02...	1600	1.0	1390	8.3	31.5	.55	9.4	127
02...	1602	10	1390	7.6	30.5	--	4.4	59
02...	1604	21	1390	7.3	30.5	--	1.6	21
HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE
NESS	NONCAR-	DIS-	SIUM,	SODIUM,	AD-	SIUM,	BONATE	DIS-
(MG/L	BONATE	SOLVED	DIS-	DIS-	SORP-	BIS-	(MG/L	SOLVED
AS	(MG/L	AS CACO3)	AS CA)	SOLVED	TION	SOLVED	AS	(MG/L
DATE	CACO3)		(MG/L)	(MG/L)	RATIO	(MG/L)	HCO3)	AS SO4)
SEP								
02...	280	150	80	20	170	4.4	5.2	160
02...	--	--	--	--	--	--	--	--
02...	270	140	78	19	180	4.7	5.2	160
								130
CHLO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
RIDE,	DIS-	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,	
DIS-	SOLVED	CONSTITUENTS,	NO2+NO3	AMMONIA	TOTAL	SOLVED	DIS-	
SOLVED	(MG/L	DIS-	DIS-	TOTAL	(MG/L	SOLVED	SOLVED	
(MG/L	AS	SOLVED	SOLVED	(MG/L	(MG/L	(UG/L	(UG/L	
DATE	AS CL)	SIO2)	(MG/L)	AS N)	AS N)	AS P)	AS FE)	AS MN)
SEP								
02...	270	9.6	754	.00	.00	.050	10	0
02...	--	--	--	--	--	--	--	--
02...	280	9.9	781	.00	.00	.050	10	170

320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	DEPTH	SPE-	CIFIC	TRANS-	OXYGEN,	DIS-	SOLVED
			SAMP-	DUCT-		DIS-		
	LING	ANCE	(MICRO-	ATURE,	(SECCHI	SOLVED	(PER-	SATUR-
	(FT)	(MHOS)	(UNITS)	(DEG C)	DISK)	(MG/L)	CENT	ATION)
SEP								
02...	1635	1.0	1510	8.1	31.5	.64	9.3	126
02...	1637	10	1510	7.7	30.5	--	5.7	76
02...	1639	24	1610	7.2	30.5	--	.2	3
HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE
NESS	NONCAR-	DIS-	SIUM,	SODIUM,	AD-	SIUM,	BONATE	DIS-
(MG/L	BONATE	SOLVED	DIS-	SOLVED	SORP-	DIS-	(MG/L	SOLVED
AS	(MG/L	AS CACO3)	AS CA)	AS MG)	TION	SOLVED	AS	(MG/L
DATE	CACO3)	CACO3)		(MG/L)	RATIO	(MG/L)	HCO3)	AS SO4)
SEP								
02...	300	160	83	23	190	4.8	5.4	170
02...	--	--	--	--	--	--	--	--
02...	340	190	94	26	190	4.5	5.5	180
								150
CHLO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
RIDE,	DIS-	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,	
DIS-	SOLVED	CONSTITUENTS,	NO2+NO3	AMMONIA	TOTAL	SOLVED	DIS-	
SOLVED	(MG/L	DIS-	DIS-	SOLVED	(MG/L	(UG/L	SOLVED	
(MG/L	AS	SOLVED	SOLVED	(MG/L	(MG/L	AS FE)	(UG/L	
DATE	AS CL)	SIO2)	(MG/L)	AS N)	AS N)	AS P)	AS MN)	
SEP								
02...	300	10	845	.00	.00	.030	10	0
02...	--	--	--	--	--	--	--	--
02...	320	12	887	.01	.00	.060	80	420

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MARCH 15, 1978

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,		HARD-
							SOLVED.	NESS	
		(MICRO-	(UNITS)	WATER	(SECCHI	OXYGEN.	(PER-	(MG/L	
		MHOS)		DISK)	(M)	DIS-	CENT	AS	CACO <sub>3</sub> )
<b>MAR</b>									
15...	0945	1.0	1330	8.3	10.0	1.80	10.8	99	280
15...	0947	10	1330	8.3	10.0	--	10.8	99	--
15...	0949	20	1330	8.3	10.0	--	10.8	99	--
15...	0951	30	1330	8.3	10.0	--	10.8	99	--
15...	0953	40	1330	8.3	9.0	--	10.8	96	--
15...	0955	50	1330	8.2	8.5	--	10.5	93	--
15...	0957	60	1330	8.2	8.5	--	10.5	93	--
15...	0959	70	1330	8.1	8.0	--	10.4	90	--
15...	1002	80	1330	8.1	8.0	--	10.2	89	--
15...	1004	92	1330	8.0	8.0	--	9.7	84	280
<b>HARD-</b>									
<b>NESS,</b>		<b>CALCIUM</b>	<b>MAGNE-</b>	<b>SODIUM</b>	<b>SODIUM</b>	<b>POTAS-</b>	<b>BICAR-</b>	<b>SULFATE</b>	
NONCAR-	NONCAR-	DIS-	DIS-	DIS-	AD-	SUIM.	DIS-	CAR-	DIS-
BONATE	BONATE	SOLVED	SOLVED	SOLVED	SCRP-	SUIM.	BONATE	BONATE	SOLVED
(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	TION	SOLVED	(MG/L	(MG/L	(MG/L
DATE	CACO <sub>3</sub> )	AS CL)	AS CA)	AS MG)	RATIO	(MG/L	AS	AS	AS
				AS NA)		AS K)	HCO <sub>3</sub> )	CO <sub>3</sub> )	SO <sub>4</sub> )
<b>MAR</b>									
15...	160	82	19	170	4.4	5.3	150	0	130
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	160	82	18	170	4.4	5.2	150	0	130
<b>CHLO-</b>									
RIDE,	FLUO-	SILICA,	SOLIDIS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
DIS-	RIDE,	DIS-	SUM OF	GEN-	AMMONIA	PHORUS,	DIS-	NESE,	DIS-
SOLVED	SOLVED	SOLVED	CONSTITUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	TOTAL	TOTAL	SOLVED	SOLVED	SOLVED
(MG/L	(MG/L	(MG/L	DIS-	(MG/L	(MG/L	(MG/L	(UG/L	(UG/L	(UG/L
DATE	AS CL)	AS F)	SIO <sub>2</sub> )	SOLVED	AS N)	AS N)	AS P)	AS FE)	AS MN)
<b>MAR</b>									
15...	280	.3	5.9	766	.07	.01	.060	0	0
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	.03	.01	.080	10	0
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--	--
15...	280	.3	5.9	765	.08	.10	.060	10	10

## 315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,		HARD-
							SOLVED.	NESS	
		(MICRO-	(UNITS)	WATER	(SECCHI	OXYGEN.	(PER-	(MG/L	
		MHOS)		DISK)	(M)	DIS-	CENT	AS	CACO <sub>3</sub> )
<b>MAR</b>									
15...	1045	1.0	1330	8.2	10.5	1.80	10.8	100	
15...	1049	20	1330	8.2	10.5	--	10.8	100	
15...	1051	30	1330	8.2	10.0	--	10.6	97	
15...	1053	40	1330	8.2	9.5	--	10.6	95	
15...	1055	50	1330	8.2	9.0	--	10.4	93	
15...	1057	60	1330	8.1	8.5	--	10.2	90	
15...	1059	70	1330	8.1	8.5	--	10.0	88	
15...	1102	80	1330	8.1	8.5	--	10.0	88	
15...	1105	90	1330	8.0	8.5	--	9.0	80	

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MARCH 15, 1978--Continued

315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	DIS-	HARD-	
		LING	CIFIC		PAR-			
		DEPTH	DUCT-	PH	TEMPER-	ENCY	OXYGEN,	(PER-
		(FT)	(MICRO-		ATURE,	(SECCHI	DIS-	CENT
			MHOS)	(UNITS)	WATER	DISK)	SOLVED	SATUR-
					(DEG C)	(M)	(MG/L)	ATION)
MAR								
15...	1200	1.0	1330	8.2	11.0	1.50	10.3	96
15...	1202	10	1330	8.2	11.0	--	10.3	96
15...	1204	20	1330	8.2	10.5	--	10.3	95
15...	1206	30	1330	8.2	10.5	--	10.3	95
15...	1208	40	1330	8.1	10.0	--	9.9	91
15...	1210	50	1330	8.1	9.0	--	9.8	88
15...	1215	68	1330	8.1	9.0	--	9.5	85
								270
HARD-			MAGNE-		SODIUM	POTAS-		
NESS,			SIUM	SODIUM,	AD-	SIUM,	BICAR-	SULFATE
NONCAR-			DIS-	DIS-	SORP-	DIS-	BONATE	DIS-
BONATE			SOLVED	SOLVED	TION	SOLVED	(MG/L	SOLVED
(MG/L			(MG/L	(MG/L	RATIO	(MG/L	AS	(MG/L
CACO3)			AS CA)	AS MG)	AS NA)	AS K)	HCO3)	AS CO3)
								AS SO4)
MAR								
15...	160	80	19	170	4.4	5.3	140	0
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	150	77	19	170	4.5	5.2	150	0
								140
			SOLIDs,					
CHLO-			SILICA,	SUM OF	NITRO-	NITRO-		
RIDE,			DIS-	CONSTI-	GEN.	GEN.	PHOS-	MANGA-
DIS-			SOLVED	TUENTS.	NO2+NO3	AMMONIA	PHORUS,	NESE,
SOLVED			(MG/L	DIS-	TOTAL	TOTAL	TOTAL	DIS-
(MG/L			AS	SOLVED	(MG/L	(MG/L	(MG/L	SOLVED
CACO3)			SI02)	(MG/L)	AS N)	AS N)	AS P)	(UG/L
								AS MN)
MAR								
15...	270	5.7	759	.07	.01	.080	10	0
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	--	--	--	.05	.01	.060	10	0
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	260	5.8	751	.07	.06	.080	10	20

320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	DIS-	HARD-	
		LING	CIFIC		PAR-			
		DEPTH	DUCT-	PH	TEMPER-	ENCY	OXYGEN,	(PER-
		(FT)	(MICRO-		ATURE,	(SECCHI	DIS-	CENT
			MHOS)	(UNITS)	WATER	DISK)	SOLVED	SATUR-
					(DEG C)	(M)	(MG/L)	ATION)
MAR								
15...	1330	1.0	1440	8.3	13.0	.60	9.6	94
15...	1332	10	1440	8.3	13.0	--	9.6	94
15...	1335	20	1490	8.2	11.5	--	9.5	90
15...	1337	30	1490	8.1	11.0	--	9.2	86
15...	1340	42	1570	8.0	10.5	--	7.5	69
								330
HARD-			MAGNE-		SODIUM	POTAS-		
NESS,			SIUM	SODIUM,	AD-	SIUM,	BICAR-	SULFATE
NONCAR-			DIS-	DIS-	SORP-	DIS-	BONATE	DIS-
BONATE			SOLVED	SOLVED	TION	SOLVED	(MG/L	SOLVED
(MG/L			(MG/L	(MG/L	RATIO	(MG/L	AS	(MG/L
CACO3)			AS CA)	AS MG)	AS NA)	AS K)	HCO3)	AS CO3)
								AS SO4)
MAR								
15...	190	92	21	190	4.7	5.5	160	0
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	--	--	--	--	--	--	--	--
15...	190	95	23	210	5.0	5.5	170	0
								160

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MARCH 15, 1978--Continued

## 320122097260901 LAKE WHITNEY SITE FC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTITUENTS, (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 (MG/E AS N)	NITRO- GEN, TOTAL (MG/L AS N)	AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
MAR 15...	340	4.9	882	.08	.05	.080	.40	10	
15...	--	--	--	--	--	--	--	--	
15...	--	--	--	.05	.08	.090	.10	20	
15...	--	--	--	--	--	--	--	--	
15...	360	5.0	942	.05	.18	.080	.20	90	

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- DUC-	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)
MAR 15...	1435	1.0	1970	8.5	14.0	.30	9.5	96	400	
15...	1437	10	1970	8.5	14.0	--	9.6	96	--	
15...	1439	17	1970	8.4	14.0	--	9.3	94	390	
DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	
MAR 15...	250	110	30	270	5.9	6.3	180	0	220	
15...	--	--	--	--	--	--	--	--	--	
15...	250	110	29	260	5.7	6.3	180	0	210	
DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTITUENTS, (MG/L AS SiO2)	NITRO- GEN, NO2+NO3 (MG/E AS N)	NITRO- GEN, TOTAL (MG/L AS N)	AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
MAR 15...	440	3.1	1170	.11	.13	.120	.30	40		
15...	--	--	--	--	--	--	--	--		
15...	440	3.2	1150	.12	.13	.130	.150	50		

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- DUC-	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)
MAR 15...	1515	1.0	2110	8.2	13.5	.30	9.1	91	410	
15...	1520	18	2110	8.2	13.5	--	8.9	89	380	
DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)	
MAR 15...	260	110	32	270	5.8	6.0	180	0	250	
15...	230	100	32	290	6.5	5.9	180	0	230	

TABLE 24--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MARCH 15, 1978--Continued

320721097293301 LAKE WHITNEY SITE P14--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L AS DATE	SILICA, DIS- SOLVED (MG/L AS AS CL)	SOLIDS,		NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (MG/L AS FE)	MANA- NESE, DIS- SOLVED (UG/L AS MN)	
			DIS- CONSTL- TUENTS, DIS- SOLVED (MG/L AS SIO <sub>2</sub> )	SUM OF AS SOLVED (MG/L AS N)						
<b>MAR</b>										
15...	450		2.5	1210	.04	.09	.090	10	20	
15...	450		2.5	1200	.05	.11	.090	10	20	

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 23, 1978

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	CON-	SPE-	TRANS-	OXYGEN,			HARD-
							ENCY	OXYGEN,	DIS-	
		(FT)	(MICRO-	(UNITS)	(DEG C)	WATER	(SECCHI	DIS-	(PER-	NESS
			MHOS)				DISK)	SOLVED	CENT	(MG/L
							(M)	(MG/L)	SATUR-	AS
									ATION)	CACO3)
<b>JUN</b>										
23...	0752	1.0	1410	8.1	26.5	3.5	6.8	88	280	
23...	0755	10	1410	8.1	26.5	--	6.7	87	--	
23...	0758	20	1410	8.0	26.5	--	5.4	70	--	
23...	0801	30	1410	7.6	25.5	--	2.4	31	--	
23...	0804	40	1410	7.4	23.0	--	.2	2	--	
23...	0807	50	1400	7.4	20.5	--	.2	2	--	
23...	0810	60	1400	7.4	19.5	--	.2	2	--	
23...	0813	70	1390	7.4	18.5	--	.2	2	--	
23...	0816	80	1380	7.4	17.5	--	.2	2	--	
23...	0819	89	1370	7.4	16.5	--	.2	2	280	
<b>HARD-</b>										
<b>NESS,</b>		<b>CALCIUM</b>	<b>MAGNE-</b>	<b>SODIUM,</b>	<b>SODIUM</b>	<b>SODIUM</b>	<b>POTAS-</b>	<b>BICAR-</b>	<b>SULFATE</b>	
<b>NONCAR-</b>		<b>DTS-</b>	<b>DIS-</b>	<b>DIS-</b>	<b>DIS-</b>	<b>AD-</b>	<b>SUIM,</b>	<b>BONATE</b>	<b>CAR-</b>	<b>DIS-</b>
<b>BONATE</b>		<b>SOLVED</b>	<b>SOLVED</b>	<b>SOLVED</b>	<b>SOLVED</b>	<b>SORP-</b>	<b>DIS-</b>	<b>BONATE</b>	<b>BONATE</b>	<b>SOLVED</b>
<b>(MG/L</b>		<b>(MG/L</b>	<b>(MG/L</b>	<b>(MG/L</b>	<b>(MG/L</b>	<b>TION-</b>	<b>SOLVED</b>	<b>(MG/L</b>	<b>(MG/L</b>	<b>(MG/L</b>
<b>DATE</b>		<b>CACO3)</b>	<b>AS CA)</b>	<b>AS MG)</b>	<b>AS NA)</b>	<b>RATIO</b>	<b>(MG/L</b>	<b>AS K)</b>	<b>AS HCO3)</b>	<b>AS CO3)</b>
<b>SOLVED</b>										
<b>JUN</b>										
23...	150	78	20	180	4.7	5.2	150	0	140	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	140	79	19	170	4.5	4.9	170	0	120	
<b>SOLIDS,</b>										
<b>CHLO-</b>		<b>FLUO-</b>	<b>SILICA,</b>	<b>SUM OF</b>	<b>NITRO-</b>	<b>NITRO-</b>	<b>PHOS-</b>	<b>IRON,</b>	<b>MANGA-</b>	
<b>RIDE,</b>		<b>RIDE,</b>	<b>DIS-</b>	<b>CONSTITUENTS,</b>	<b>GEN-</b>	<b>GEN-</b>	<b>PHORUS,</b>	<b>DIS-</b>	<b>NESE,</b>	<b>DIS-</b>
<b>DIS-</b>		<b>SOLVED</b>	<b>SOLVED</b>	<b>NO2+NO3</b>	<b>NO2+NO3</b>	<b>AMMONIA</b>	<b>TOTAL</b>	<b>TOTAL</b>	<b>SOLVED</b>	<b>SOLVED</b>
<b>SOLVED</b>		<b>(MG/L</b>	<b>(MG/L</b>	<b>DIS-</b>	<b>TOTAL</b>	<b>(MG/L</b>	<b>(MG/L</b>	<b>(MG/L</b>	<b>(UG/L</b>	<b>(UG/L</b>
<b>DATE</b>		<b>AS CL)</b>	<b>AS F)</b>	<b>SIO2)</b>	<b>(MG/L</b>	<b>AS N)</b>	<b>AS N)</b>	<b>AS P)</b>	<b>AS FE)</b>	<b>AS MN)</b>
<b>SOLVED</b>										
<b>JUN</b>										
23...	290	.3	6.7	794	.02	.00	.000	60	0	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	.05	.03	.010	40	10	
23...	--	--	--	--	.06	.01	.010	40	40	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	270	.3	9.5	758	.04	.27	.160	50	1400	

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	CON-	SPE-	TRANS-	OXYGEN,			HARD-
							ENCY	OXYGEN,	DIS-	
		(FT)	(MICRO-	(UNITS)	(DEG C)	WATER	(SECCHI	DIS-	(PER-	NESS
			MHOS)				DISK)	SOLVED	CENT	(MG/L
							(M)	(MG/L)	SATUR-	AS
									ATION)	CACO3)
<b>JUN</b>										
23...	0740	1.0	1410	8.0	26.5	6.3	82			
23...	0742	10	1410	8.0	26.5	6.3	82			
23...	0744	20	1410	8.0	26.5	5.9	77			
23...	0746	34	1410	7.4	25.0	1.0	13			

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 23, 1978--Continued

315308097222801 LAKE WHITNEY SITE BC

			SPE-	CIFIC	CON-	TEMPER-	OXYGEN,	OXYGEN,	
			SAMP-	DUCT-	ANCE	PH	ATURE,	DIS-	DIS-
			LING	DEPTH	(MICRO-	(UNITS)	WATER	SOLVED	SOLVED
DATE	TIME						(DEG C)	(MG/L)	(PER-
									CENT
JUN									SATUR-
23...	0826	1.0	1450		8.2	27.5	6.8		ATION)
23...	0828	10	1450		8.3	27.0	6.8		89
23...	0830	20	1480		8.0	27.0	5.2		88
23...	0833	30	1460		7.9	26.5	4.5		58
23...	0835	40	1410		7.4	23.0	.2		2
23...	0837	50	1400		7.4	21.0	.2		2
23...	0840	60	1390		7.4	20.0	.2		2
23...	0843	70	1390		7.4	19.0	.2		2
23...	0845	80	1380		7.4	18.5	.2		2
23...	0848	85	1370		7.4	17.5	.2		2

315432097234601 LAKE WHITNEY SITE CC

			SPE-	CIFIC	CON-	TEMPER-	OXYGEN,	OXYGEN,	
			SAMP-	DUCT-	ANCE	PH	ATURE,	DIS-	DIS-
			LING	DEPTH	(MICRO-	(UNITS)	WATER	SOLVED	SOLVED
DATE	TIME						(DEG C)	(MG/L)	(PER-
									CENT
JUN									SATUR-
23...	0858	1.0	1460		8.2	28.0	6.8		ATION)
23...	0900	10	1460		8.3	28.0	6.8		91
23...	0902	20	1460		8.2	28.0	6.7		88
23...	0905	30	1460		8.2	27.5	6.6		87
23...	0907	35	1570		7.5	26.0	1.9		24
23...	0910	40	1520		7.5	25.0	1.3		17
23...	0912	50	1390		7.4	21.5	.2		2
23...	0915	60	1380		7.4	20.0	.2		2
23...	0917	70	1370		7.4	19.0	.2		2
23...	0920	78	1360		7.4	19.0	.2		2

315722097240201 LAKE WHITNEY SITE DC

			SPE-	CIFIC	CON-	TEMPER-	OXYGEN,	OXYGEN,	
			SAMP-	DUCT-	ANCE	PH	ATURE,	DIS-	DIS-
			LING	DEPTH	(MICRO-	(UNITS)	WATER	SOLVED	SOLVED
DATE	TIME						(DEG C)	(MG/L)	(PER-
									CENT
JUN									SATUR-
23...	0937	1.0	1470		8.2	28.5	6.8		ATION)
23...	0942	10	1470		8.3	28.5	6.8		--
23...	0945	20	1480		8.3	28.5	6.7		--
23...	0948	30	1510		8.2	28.5	6.3		--
23...	0951	40	1660		7.6	27.5	2.8		--
23...	0954	50	1500		7.4	22.5	.1		--
23...	0957	60	1440		7.4	21.0	.1		--
23...	1000	66	1430		7.4	21.0	.1		280
	HARD-	CALCIUM	MAGNE-	SODIUM,	SODIUM	SODIUM	POTAS-		SULFATE
	NESS,	NONCAR-	BONATE	DIS-	DIS-	AD-	SIUM,	BICAR-	DIS-
	DIS-	BONATE	SOLVED	SOLVED	SOLVED	SORP-	DIS-	BONATE	SOLVED
DATE	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	TION	SOLVED	(MG/L	(MG/L
	CACO3)	AS CA)	AS MG)	AS NA)	AS K)	RATIO	(MG/L	AS	(MG/L
							AS HCO3)	AS CO3)	AS SO4)
JUN									
23...	160	77	21	190	5.0	5.3	140	0	140
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	140	80	20	180	4.7	5.0	170	0	130

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 23, 1978--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (AS CL) SI02)	SOLIDS, SUM OF CONSTITUENTS, DIS- SOLVED (MG/L)	NITRO- GEN, NO2+NO3 (MG/L)	NITRO- GEN. TOTAL (MG/L)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
	AS	AS	AS	AS N)	AS N)	AS P)	AS FE)	AS MN)
<b>JUN</b>								
23...	300	6.6	809	.01	.01	.000	30	0
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	.01	.01	.010	40	140
23...	--	--	--	.01	.08	.020	.70	540
23...	--	--	--	--	--	--	--	--
23...	280	8.8	789	.01	.16	.060	140	1300

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC DUCT- ANCE (MICRO- MHOS)	CON- PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>JUN</b>							
23...	1442	1.0	1450	8.4	29.5	7.2	97
23...	1444	10	1450	8.3	29.5	7.2	97
23...	1447	16	1450	8.2	29.0	5.7	77

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC DUCT- ANCE (MICRO- MHOS)	CON- PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>JUN</b>							
23...	1415	1.0	1480	8.3	30.0	7.1	96
23...	1417	10	1480	8.3	29.5	6.9	93
23...	1420	20	1480	8.2	29.5	6.7	91
23...	1422	30	1480	7.9	29.0	4.2	57
23...	1425	36	1480	7.5	28.5	1.3	17

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC DUCT- ANCE (MICRO- MHOS)	CON- PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>JUN</b>							
23...	1022	1.0	1510	8.1	29.0	6.7	91
23...	1025	10	1510	8.2	29.0	6.7	91
23...	1027	20	1510	8.2	29.0	6.7	91
23...	1030	30	1510	8.2	29.0	6.7	91
23...	1032	40	1540	8.1	28.0	5.9	79
23...	1035	45	1740	7.6	28.0	2.6	35
23...	1037	50	1470	7.4	23.5	.2	2
23...	1040	54	1450	7.4	22.5	.2	2

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 23, 1978--Continued

320011097262201 LAKE WHITNEY SITE P8

		SAMP-	SPE- CIFIC CON- DUCT- ANCE	TEMPER- ATURE, WATER	OXYGEN, (PER- CENT SOLVED)	OXYGEN, DIS- SOLVED	
DATE	TIME	LING DEPTH (FT)	(MICRO- MHOS)	PH (UNITS)	(DEG C)	(MG/L)	SATUR- ATION)
<b>JUN</b>							
23...	1105	1.0	1510	8.2	29.0	6.9	93
23...	1107	10	1510	8.3	29.0	6.9	93
23...	1109	20	1510	8.2	29.0	6.8	92
23...	1111	30	1510	8.2	28.5	6.4	85

320122097260901 LAKE WHITNEY SITE FC

		SAMP-	SPE- CIFIC CON- DUCT- ANCE	TRANS- PAR- ENCY	OXYGEN, (PER- CENT SOLVED)	OXYGEN, DIS- SOLVED	HARD- NESS (MG/L AS CACO3)
DATE	TIME	LING DEPTH (FT)	(MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	(SECCHI DISK) (M)	(MG/L)
<b>JUN</b>							
23...	1129	1.0	1510	8.2	29.5	1.20	6.9
23...	1132	10	1510	8.2	29.5	--	6.9
23...	1135	20	1510	8.2	29.0	--	6.8
23...	1138	30	1510	8.2	29.0	--	6.7
23...	1141	40	1510	8.2	28.5	--	6.7
23...	1144	46	1510	8.2	28.5	--	6.4

	HARD- NESS, NONCAR- BONATE (MG/L AS CACO3)	CALCIUM DIS- SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
DATE									
<b>JUN</b>									
23...	170	78	21	200	5.2	5.4	140	0	150
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	170	79	21	200	5.2	5.5	140	0	150

	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	FLUO- RIDE, DIS- SOLVED (MG/L AS F)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLIDS, SUM OF CONSTI- TUENTS, NO2+N03 DIS- SOLVED (MG/L AS N)	NITRO- GEN, TOTAL AMMONIA (MG/L AS N)	NITRO- GEN, TOTAL PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
DATE								
<b>JUN</b>								
23...	310	--	6.4	840	.03	.03	.010	30
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--
23...	310	--	6.6	841	.03	.01	--	40
								30

320124097291101 LAKE WHITNEY SITE GC

		SAMP-	SPE- CIFIC CON- DUCT- ANCE	TEMPER- ATURE, WATER	OXYGEN, (PER- CENT SOLVED)	OXYGEN, DIS- SOLVED
DATE	TIME	LING DEPTH (FT)	(MICRO- MHOS)	PH (UNITS)	(DEG C)	(MG/L)
<b>JUN</b>						
23...	1205	1.0	1580	8.2	29.0	6.6
23...	1207	10	1610	8.0	29.0	5.4
23...	1209	20	1640	8.0	28.5	5.3
23...	1211	30	1730	7.8	28.5	4.2
23...	1213	41	2000	7.4	28.5	1.6

TABLE 25--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 23, 1978--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	(SECCHI	OXYGEN,			HARD-			
							ANCE	(MICRO-	ATURE,	ENCY	OXYGEN,	NESS	
		DEPTH	(FT)	MHOS)	(UNITS)	(DEG C)	WATER	DISK)	(MG/L)	SATUR-	(MG/L)	CACO3)	
JUN													
23...	1321		1.0		2490		8.4	31.0	.60	8.4	115	410	
23...	1324		10		2480		8.1	29.5	--	5.6	76	--	
23...	1327		16		2430		7.7	29.5	--	3.7	50	380	
		HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	AD-	POTAS-	BICAR-	CAR-	SULFATE		
		NESS,	DIS-	SIUM	SODIUM,	SOLVED	SORP-	SIUM.	BONATE	BONATE	DIS-		
		NONCAR-	SOLVED	DIS-	SOLVED	SOLVED	TION	SOLVED	(MG/L	(MG/L	SOLVED		
		BONATE	(MG/L	AS CA)	(MG/L	AS MG)	RATIO	(MG/L	AS K)	AS HCO3)	AS CO3)	(MG/L	
DATE		(CACO3)											
JUN													
23...	300		110		33		350	7.5	7.4	130	0	270	
23...	--		--		--		--	--	--	--	--	--	
23...	270		100		32		340	7.6	7.3	130	0	270	
		SOLIDs,											
		CHLO-	SILICA,	SUM OF	NITRO-	NITRO-							
		RIDE,	DIS-	CONSTI-	GEN,	GEN,							
		DIS-	SOLVED	TUENTS,	NO2+NO3	AMMONIA							
		SOLVED	(MG/L	DIS-	TOTAL	PHORUS,							
		(MG/L	AS CL)	SOLVED	(MC/L	TOTAL	TOTAL						
DATE													
JUN													
23...	560		5.4		1400		.03	.03	.03	.050	40	0	
23...	--		--		--		--	--	--	--	--	--	
23...	550		6.0		1370		.00	.01	.130	.80	80	120	

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	(SECCHI	OXYGEN,			HARD-			
							ANCE	(MICRO-	ATURE,	ENCY	OXYGEN,	NESS	
		DEPTH	(FT)	MHOS)	(UNITS)	(DEG C)	WATER	DISK)	(MG/L)	SATUR-	(MG/L)	CACO3)	
JUN													
23...	1301		1.0		2650		8.3	30.5	.50	7.4	100	420	
23...	1304		10		2720		8.2	30.0	--	6.3	85	--	
23...	1307		20		2770		8.0	29.5	--	5.5	74	--	
23...	1310		27		2770		7.9	29.5	--	5.0	68	450	
		HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	AD-	POTAS-	BICAR-	CAR-	SULFATE		
		NESS,	DIS-	SIUM.	DIS-	SOLVED	SORP-	SIUM.	BONATE	BONATE	DIS-		
		NONCAR-	SOLVED	SOLVED	SOLVED	SOLVED	TION	SOLVED	(MG/L	(MG/L	SOLVED		
		BONATE	(MG/L	AS CA)	AS MG)	AS NA)	RATIO	(MG/L	AS K)	AS HCO3)	AS CO3)	(MG/L	
DATE		(CACO3)											
JUN													
23...	310		110		35		380	8.1	7.7	130	0	270	
23...	--		--		--		--	--	--	--	--	--	
23...	330		120		36		400	8.2	7.8	140	0	290	
		SOLIDs,											
		CHLO-	SILICA,	SUM OF	NITRO-	NITRO-							
		RIDE,	DIS-	CONSTI-	GEN,	GEN,							
		DIS-	SOLVED	TUENTS,	NO2+NO3	AMMONIA							
		SOLVED	(MG/L	DIS-	TOTAL	PHORUS,							
		(MG/L	AS CL)	SOLVED	(MC/L	TOTAL	TOTAL						
DATE													
JUN													
23...	620		5.1		1490		.03	.03	.03	.040	40	0	
23...	--		--		--		--	--	--	--	--	--	
23...	650		5.2		1580		.01	.00	.050	.60	60	60	

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 5-6, 1978

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
 MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	DIS-	OXYGEN,	HARD-	
			CIFIC		PAR-		SOLVED	NESS.	
		LING	ANCE	(MICRO-	ATURE,	ENCY	OXYGEN,	(PER-	
		DEPTH	(MICRO-	PH	WATER,	(SECCHI	DIS-	CENT	
		(FT)	MHOS)	(UNITS)	(DEG C)	DISK)	SOLVED	SATUR-	
					(M)	(M)	(MG/L)	ATION)	
SEP									
05...	1450	1.0	2240	8.3	30.0	1.60	7.8	105	
05...	1452	10	2240	8.3	29.0	--	7.8	103	
05...	1454	20	2240	8.2	29.0	--	7.4	97	
05...	1456	30	2290	7.6	28.0	--	4.0	53	
05...	1458	40	2950	7.2	28.0	--	.3	4	
05...	1500	50	3490	7.1	26.5	--	.3	4	
05...	1502	60	3500	7.1	25.5	--	.3	4	
05...	1504	70	3320	7.1	25.5	--	.3	4	
05...	1505	80	3060	7.1	24.0	--	.4	5	
05...	1508	90	2360	7.1	21.0	--	.4	5	
05...	1510	101	2240	7.1	20.0	--	.6	7	
								390	
HARD-		CALCIUM	MAGNE-		SODIUM	POTAS-		SULFATE	
NESS,		DIS-	SIUM,	SODIUM,	AD-	SIUM,	BICAR-	DIS-	
NONCAR-		SOLVED	DIS-	DIS-	SORP-	DIS-	BONATE	SOLVED	
BONATE		(MG/L	SOLVED	SOLVED	TION	SOLVED	(MG/L	(MG/L	
		AS CACO3)	AS CA)	(MG/L	(MG/L	(MG/L	AS K)	AS CO3)	AS SO4)
				AS MG)	AS NA)	RATIO	HCO3)		
DATE									
SEP									
05...	270	99	29	310	7.0	7.1	120	0	260
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	240	110	28	300	6.6	6.6	180	0	240
CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
RIDE,	RIDE,	DIS-	SUM OF	GEN,	GEN,	PHORUS,	DIS-	NESE,	
DIS-	DIS-	SOLVED	CONSTI-	NO2+NO3	AMMONIA	TOTAL	SOLVED	DIS-	
SOLVED	SOLVED	(MG/L	TUENTS,	TOTAL	TOTAL	TOTAL	SOLVED	SOLVED	
		(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(UG/L	(UG/L	
DATE	AS CL)	AS F)	AS SIO2)	AS N)	AS N)	AS P)	AS FE)	AS MN)	
SEP									
05...	490	.3	6.0	1260	.01	.01	.020	20	0
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	.01	.03	.020	20	0
05...	--	--	--	--	.01	.05	.020	170	200
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	480	--	8.8	1260	.01	1.1	.220	90	1600

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SPE-	TRANS-	OXYGEN,	DIS-			
		CIFIC	DUCT-	PH	TEMPER-	OXYGEN,	SOLVED	
		LING	ANCE	(MICRO-	ATURE,	DIS-	(PER-	
		DEPTH	(MICRO-	PH	WATER,	SOLVED	CENT	
		(FT)	MHOS)	(UNITS)	(DEG C)	(MG/L)	SATUR-	
					(M)	(MG/L)	ATION)	
SEP								
05...	1548	1.0	2240	8.3	30.0	7.9	105	
05...	1550	10	2240	8.3	29.5	7.9	105	
05...	1552	20	2240	8.2	29.0	7.3	96	
05...	1554	30	2240	7.8	28.0	5.3	69	
05...	1556	42	3130	7.2	28.0	.5	6	

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 5-6, 1978--Continued

315308097222801 LAKE WHITNEY SITE BC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
			PH (UNITS)			OXYGEN, DIS- SOLVED (MG/L)
<b>SEP</b>						
05...	1608	1.0	2220	8.3	29.5	7.8 100
05...	1610	10	2220	8.3	29.0	7.6 100
05...	1612	20	2220	8.2	28.5	6.7 87
05...	1614	30	2270	7.7	28.0	4.4 57
05...	1616	40	3210	7.2	27.5	.2 3
05...	1618	50	3520	7.1	26.5	.2 3
05...	1620	60	3600	7.1	26.0	.3 4
05...	1622	70	3500	7.1	25.5	.3 4
05...	1624	80	3190	7.1	24.0	.3 4
05...	1626	90	2640	7.1	21.5	.4 5
05...	1628	96	2470	7.1	21.0	.5 6

315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
			PH (UNITS)			OXYGEN, DIS- SOLVED (MG/L)
<b>SEP</b>						
05...	1640	1.0	2200	8.3	29.5	7.7 101
05...	1642	10	2200	8.3	28.5	7.2 94
05...	1644	20	2200	8.1	28.5	6.2 81
05...	1646	30	2260	7.8	28.0	4.9 63
05...	1648	40	3240	7.2	27.5	.2 3
05...	1650	50	3560	7.1	26.5	.3 4
05...	1652	60	3580	7.1	26.0	.3 4
05...	1654	70	3520	7.1	25.5	.3 4
05...	1656	80	3300	7.1	24.5	.3 4
05...	1658	90	3000	7.1	22.5	.5 6

315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L CACO <sub>3</sub> )
			PH (UNITS)			TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L CACO <sub>3</sub> )
<b>SEP</b>									
05...	1805	1.0	2180	8.4	29.5	1.20	7.9	107	370
05...	1807	10	2210	8.2	28.5	--	6.4	86	--
05...	1809	20	2280	7.6	28.0	--	3.6	48	--
05...	1811	30	2930	7.2	28.0	--	.2	3	--
05...	1813	40	3510	7.2	27.0	--	.3	4	--
05...	1815	50	3670	7.1	26.5	--	.3	4	--
05...	1817	60	3720	7.1	26.0	--	.3	4	--
05...	1819	70	3680	7.1	25.5	--	.3	4	--
05...	1821	76	3660	7.1	25.5	--	.4	5	580
<b>HARD- NESS (MG/L CACO<sub>3</sub>)</b>									
<b>CALCIUM DIS- SOLVED (MG/L AS CA)</b>									
<b>MAGNE- SIUM. DIS- SOLVED (MG/L AS MG)</b>									
<b>SODIUM DIS- SOLVED (MG/L AS NA)</b>									
<b>POTAS- SIUM, DIS- SOLVED (MG/L AS K)</b>									
<b>BICAR- BONATE (MG/L HCO<sub>3</sub>)</b>									
<b>CAR- BONATE (MG/L AS CO<sub>3</sub>)</b>									
<b>SULFATE DIS- SOLVED (MG/L AS SO<sub>4</sub>)</b>									
05...	280	97	30	310	7.1	7.1	93	5	260
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	--	--	--	--	--	--	--	--	--
05...	470	160	44	560	10	9.4	140	0	410

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 5-6, 1978--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SOLIDS,		NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> AS N)	NITRO- GEN, TOTAL AS N)	PHOS- PHORUS, TOTAL AS P)	IRON, DIS- SOLVED (MG/L) AS FE)	MANCA- NESE, DIS- SOLVED (UG/L) AS MN)
			SUM OF CONSTITU- ENTS (MG/L)	DIS- SOLVED (MG/L)					
SEP 05...	490	6.1	1250	.01	.01	.020	.170	.20	
05...	--	--	--	--	--	--	--	--	
05...	--	--	--	.01	.03	.020	.20	.30	
05...	--	--	--	.01	.06	.030	.110	.420	
05...	--	--	--	--	--	--	--	--	
05...	--	--	--	--	--	--	--	--	
05...	--	--	--	--	--	--	--	--	
05...	--	--	--	--	--	--	--	--	
05...	890	7.6	2150	.02	.96	.140	.50	.760	

## 315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE PH		TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
					CON-	DUCT- ANCE (MICRO- MHOS)			
SEP 05...	1745	1.0	2120	8.0	29.5	7.0	.92		
05...	1747	10	2240	7.8	28.5	5.3	.69		
05...	1749	20	2280	7.6	28.5	4.0	.52		
05...	1751	27	2360	7.2	28.5	.8	.10		

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE PH		TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
					CON-	DUCT- ANCE (MICRO- MHOS)			
SEP 05...	1845	1.0	2200	8.3	29.5	7.7	.105		
05...	1847	10	2210	7.8	28.5	4.8	.64		
05...	1849	20	2270	7.4	28.0	2.9	.39		
05...	1851	30	3260	7.2	28.0	.2	.3		
05...	1853	40	3480	7.1	27.0	.3	.4		
05...	1855	49	3620	7.1	27.0	.4	.5		

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	SPE- CIFIC CON- DUCT- ANCE PH		TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
					CON-	DUCT- ANCE (MICRO- MHOS)			
SEP 05...	1910	1.0	2210	8.3	29.0	7.5	.99		
05...	1912	10	2220	8.1	28.5	6.5	.86		
05...	1914	20	2230	7.9	28.5	5.2	.69		
05...	1916	30	3290	7.2	28.0	.2	.3		
05...	1918	40	3590	7.1	27.0	.2	.3		
05...	1920	50	3680	7.1	26.5	.2	.3		
05...	1922	60	3680	7.1	26.0	.3	.4		
05...	1924	67	3680	7.1	26.0	.5	.6		

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 5-6, 1978--Continued

## 320011097262201 LAKE WHITNEY SITE P8

		SAMP-	SPE-	OXYGEN,	OXYGEN,		
		LING	CIFIC	DIS-	DIS-		
		DEPTH	CON-	SOLVED	SOLVED		
DATE	TIME	(FT)	(MICRO-	PH	TEMPER-	OXYGEN,	(PER-
			MHOS)	(UNITS)	ATURE,	DIS-	CENT
					WATER	SOLVED	SATUR-
					(DEG C)	(MG/L)	ATION)
SEP							
06...	0934	1.0	2200	8.2	29.0	7.2	95
06...	0936	10	2200	8.1	28.5	6.8	87
06...	0938	20	2210	7.4	28.0	2.8	37
06...	0940	30	3050	7.1	28.0	.4	5
06...	0942	42	3470	7.0	27.0	.5	6

## 320122097260901 LAKE WHITNEY SITE FC

		SAMP-	SPE-	TRANS-	OXYGEN,	OXYGEN,	HARD-
		LING	CIFIC	PAR-	DIS-	DIS-	NESS
		DEPTH	DUCT-	ENCY	SOLVED	SOLVED	(MG/L
DATE	TIME	(FT)	(MICRO-	(SECCHI	(MG/L)	(MG/L)	AS
			MHOS)	DISK)	(M)	(M)	CACO <sub>3</sub> )
SEP							
06...	1000	1.0	2220	8.2	29.5	1.50	6.7
06...	1002	10	2240	7.9	29.0	--	5.5
06...	1004	20	2360	7.3	28.5	--	2.5
06...	1006	30	2640	7.1	28.0	--	.2
06...	1008	40	3540	7.1	27.0	--	.2
06...	1010	55	3650	7.0	26.5	--	.3
							580

		HARD-	CALCIUM	MAGNE-	SODIUM	POTAS-	BICAR-	SULFATE
		NESS,	NONCAR-	SIUM,	SODIUM,	SIUM,	BONATE	DIS-
		NONCAR-	BONATE	DIS-	DIS-	DIS-	DIS-	SOLVED
DATE		(MG/L	AS CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	(MG/L AS K)	(MG/L AS SO <sub>4</sub> )
SEP								
06...	260	97	28	310	7.1	7.3	120	0
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	470	160	44	530	9.6	9.6	140	0
								430

		CHLO-	SILICA,	SUM OF	NITRO-	NITRO-	IRON,	MANGA-
		RIDE,	DIS-	CONSTI-	CEN,	GEN,	DIS-	NESE,
		DIS-	SOLVED	TUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	PHORUS,	DIS-
DATE		(MG/L	AS CL)	SI <sub>2</sub> O <sub>2</sub> )	DIS-	TOTAL	(MG/L AS P)	SOLVED
				(MG/L)	(MG/L AS N)	(MG/L AS N)	(UG/L AS FE)	(UG/L AS MN)
SEP								
06...	500	6.3	1270	.02	.01	.020	20	30
06...	--	--	--	--	--	--	--	--
06...	--	--	--	.01	.03	.030	30	60
06...	--	--	--	.01	.05	.030	60	250
06...	--	--	--	--	--	--	--	--
06...	860	7.8	2110	.02	.93	.100	340	620

## 320124097291101 LAKE WHITNEY SITE GC

		SAMP-	SPE-	OXYGEN,	OXYGEN,		
		LING	CIFIC	DIS-	DIS-		
		DEPTH	DUCT-	SOLVED	SOLVED		
DATE	TIME	(FT)	(MICRO-	PH	ATURE,	DIS-	SATUR-
			MHOS)	(UNITS)	WATER	SOLVED	ATION)
					(DEG C)	(MG/L)	
SEP							
06...	1030	1.0	2290	7.8	29.0	6.0	79
06...	1032	10	2320	7.7	29.0	5.6	74
06...	1034	20	2480	7.2	28.5	1.7	22
06...	1036	30	2870	7.1	28.5	.2	3
06...	1038	40	3490	7.1	27.5	.2	3
06...	1040	50	3660	7.0	27.5	.4	5

TABLE 26--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY SEPTEMBER 5-6, 1978--Continued

320509097275901 LAKE WHITNEY SITE P12

		SPE- CIFIC CON-			TRANS- PAR- ENCY	OXYGEN , DIS- SOLVED (PER- CENT SATUR- ATION)	OXYGEN , DIS- SOLVED (MG/L AS CACO3)	HARD- NESS
	SAMP- LING	DUCT- ANCE	PH	TEMPER- ATURE, WATER (DEG C)	(SECCHI DISK)	OXYGEN , DIS- SOLVED (MG/L)		
DATE	TIME	DEPTH (FT)	(MICRO- MHOS)	(UNITS)	(M)			
SEP								
06...	1100	1.0	2740	7.8	30.0	1.20	6.1	82
06...	1102	10	2740	7.6	29.5	--	4.5	61
06...	1104	20	2980	7.1	29.0	--	.2	3
06...	1106	27	3050	7.0	29.0	--	.3	4
								510
HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM DIS- SOLVED (MG/L AS CACO3)	MAGNE- SIUM DIS- SOLVED (MG/L AS CA)	SODIUM, DIS- SOLVED (MG/L AS MG)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS NA)	BICAR- BONATE (MG/L AS K)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)
SEP								
06...	350	130	33	390	7.9	8.8	130	0
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	390	140	38	480	9.3	10	140	0
								350
CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SOLID S SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
SEP								
06...	640	7.6	1570	.01	.00	.040	20	30
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	730	7.9	1830	.02	.04	.120	70	170

320721097293301 LAKE WHITNEY SITE P14

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 22, 1979

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)
<b>FEB</b>									
22...	1004	1.0	2650	8.4	7.5	2.70	11.5	101	460
22...	1006	10	2650	8.4	7.0	--	11.4	99	--
22...	1008	20	2650	8.4	7.0	--	11.4	99	--
22...	1010	30	2650	8.4	7.0	--	11.4	99	--
22...	1012	40	2650	8.4	6.5	--	11.4	97	--
22...	1014	50	2650	8.3	6.5	--	11.4	97	--
22...	1016	60	2650	8.3	6.5	--	11.4	97	--
22...	1018	70	2650	8.3	6.5	--	11.4	97	--
22...	1020	80	2650	8.3	6.0	--	11.3	96	--
22...	1022	92	2650	8.3	6.0	--	11.2	95	460
 <b>HARD- NESS,</b> <b>CALCIUM</b> <b>MACNE-</b> <b>SODIUM</b> <b>SODIUM</b> <b>POTAS-</b> <b>BICAR-</b> <b>SULFATE</b>									
NONCAR- BONATE (MG/L CACO3)	DIS- SOLVED (MG/L AS CA)	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	AD- SORP- TION RATIO	DIS- SOLVED (MG/L AS K)	DIS- SOLVED (MG/L AS HCO3)	BONATE (MG/L AS CO3)	CAR- BONATE (MG/L AS CO3)	DIS- SOLVED (MG/L AS SO4)
<b>FEB</b>									
22...	350	130	33	380	7.7	9.4	140	0	300
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	340	130	32	390	7.9	9.4	140	0	300
 <b>CHLO- RIDE,</b> <b>FLUO- RIDE,</b> <b>SILICA,</b> <b>SOLIDS,</b> <b>NITRO- DIS- SOLVED (MG/L AS CLY)</b> <b>DIS- SOLVED (MG/L AS F)</b> <b>DIS- SOLVED (MG/L AS SIO2)</b> <b>SUM OF CONSTITUENTS,</b> <b>NO2+NO3</b> <b>NITRO- GEN, TOTAL (MG/L AS N)</b> <b>NITRO- GEN, TOTAL (MG/L AS N)</b> <b>PHOS- PHORUS, TOTAL (MG/L AS P)</b> <b>IRON, DIS- SOLVED (UG/L AS FE)</b> <b>MANGA- NESE,</b>									
DATE									
<b>FEB</b>									
22...	630	.3	5.6	1560	.06	.02	.010	20	20
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	.06	.02	.010	10	10
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--
22...	630	--	5.3	1570	.08	.02	.010	20	20

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	DEPTH (FT)	SPE- CIFIC CON- DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
<b>FEB</b>							
22...	0947	1.0	2650	8.3	7.5	11.6	102
22...	0949	10	2650	8.3	7.0	11.5	100
22...	0951	20	2650	8.3	7.0	11.4	99
22...	0953	30	2650	8.3	7.0	11.3	98
22...	0956	40	2650	8.3	7.0	11.1	97

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 22, 1979--Continued

315308097222801 LAKE WHITNEY SITE BC

		SAMP-	SPE-	OXYGEN,	OXYGEN,		
		LING	CIFIC	DIS-	DIS-		
		DEPTH	CON-	SOLVED	SOLVED		
DATE	TIME	(FT)	(MICRO-	PH	TEMPER-		
			MHOS)	(UNITS)	ATURE,		
					WATER		
					(DEG C)		
					DIS-		
					SOLVED		
					(MG/L)		
					SATUR-		
					ATION)		
FEB							
22...	1028	1.0	2650	8.4	7.0	11.4	99
22...	1030	10	2650	8.4	7.0	11.4	99
22...	1032	20	2650	8.4	7.0	11.4	99
22...	1034	30	2650	8.4	6.5	11.5	98
22...	1035	40	2650	8.4	6.5	11.5	98
22...	1037	50	2650	8.4	6.5	11.5	98
22...	1039	60	2650	8.4	6.5	11.4	97
22...	1041	70	2650	8.4	6.5	11.4	97
22...	1043	80	2650	8.4	6.5	11.3	97
22...	1045	88	2650	8.3	6.0	11.1	94

315432097234601 LAKE WHITNEY SITE CC

		SAMP-	SPE-	OXYGEN,	OXYGEN,		
		LING	CIFIC	DIS-	DIS-		
		DEPTH	CON-	SOLVED	SOLVED		
DATE	TIME	(FT)	(MICRO-	PH	TEMPER-		
			MHOS)	(UNITS)	ATURE,		
					WATER		
					(DEG C)		
					DIS-		
					SOLVED		
					(MG/L)		
					SATUR-		
					ATION)		
FEB							
22...	1055	1.0	2650	8.4	7.5	11.6	102
22...	1056	10	2650	8.4	7.5	11.6	102
22...	1058	20	2650	8.4	7.5	11.5	101
22...	1059	30	2650	8.4	7.0	11.4	99
22...	1100	40	2650	8.4	7.0	11.4	99
22...	1102	50	2650	8.4	6.5	11.5	98
22...	1103	60	2650	8.4	6.5	11.3	97
22...	1105	70	2650	8.4	6.5	11.3	97
22...	1107	81	2650	8.3	6.5	11.2	96

315722097240201 LAKE WHITNEY SITE DC

		SAMP-	SPE-	TRANS-	OXYGEN,	OXYGEN,	
		LING	CIFIC	PAR-	DIS-	DIS-	
		DEPTH	DUCT-	ENCY	SOLVED	SOLVED	
DATE	TIME	(FT)	(MICRO-	(SECCHI	(PER-	HARD-	
			MHOS)	(DISK)	CENT	NESS	
				(M)	(MG/L)	(MG/L)	
					SATUR-	AS	
					ATION)	CACO3)	
FEB							
22...	1142	1.0	2650	8.4	8.0	11.6	103
22...	1143	10	2650	8.4	8.0	--	103
22...	1148	20	2650	8.4	7.5	11.6	102
22...	1150	30	2650	8.4	7.5	--	100
22...	1152	40	2650	8.4	7.0	--	98
22...	1154	50	2650	8.4	7.0	--	--
22...	1157	60	2650	8.4	7.0	--	97
22...	1200	70	2650	8.4	7.0	--	95
							460

	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	SULFATE
	NESS,	DIS-	SUM,	SODIUM,	AD-	SUM,	BONATE	DIS-
	NONCAR-	SOLVED	DIS-	DIS-	SORP-	DIS-	BONATE	SOLVED
DATE	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)
	CACO3)	AS CA)	AS MC)	AS NA)	RATIO	AS K)	HC03)	AS SO4)
FEB								
22...	340	130	32	380	7.7	9.3	140	0
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--
22...	340	130	33	380	7.7	9.3	150	0
								300

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 22, 1979--Continued

315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L)	SILICA, DIS- SOLVED (MG/L)	SOLIDS,		NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> (MG/L)	NITRO- GEN, TOTAL (MG/L)	PHOS- PHORUS, TOTAL (MG/L)	IRON, DIS- SOLVED (UG/L)	MANGA- NESE, DIS- SOLVED (UG/L)	
			CONSTITUENTS AS N)	AS N)						
<b>FEB</b>										
22...	630	5.1	1560	.05	.01	.010	10	20		
22...	--	--	--	--	--	--	--	--		
22...	--	--	--	--	--	--	--	--		
22...	--	--	--	.04	.01	.020	10	0		
22...	--	--	--	--	--	--	--	--		
22...	--	--	--	--	--	--	--	--		
22...	--	--	--	--	--	--	--	--		
22...	630	4.8	1560	.02	.01	.010	20	20		

315729097253701 LAKE WHITNEY SITE P5

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPE- CIFIC CON-		TEMPER- ATURE, (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED	
				DUCT- ANCE	PH (UNITS)			WATER	SATUR- ATION)
<b>FEB</b>									
22...	1125	1.0	2650	8.4	8.0	11.6	103		
22...	1127	10	2650	8.3	8.0	11.5	102		
22...	1130	20	2650	8.3	8.0	11.0	97		

315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPE- CIFIC CON-		TEMPER- ATURE, (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED	
				DUCT- ANCE	PH (UNITS)			WATER	SATUR- ATION)
<b>FEB</b>									
22...	1210	1.0	2650	8.4	8.5	11.5	104		
22...	1212	10	2650	8.4	8.0	11.4	101		
22...	1214	20	2650	8.4	7.5	11.0	96		
22...	1216	30	2650	8.3	7.5	10.9	96		
22...	1218	44	2650	8.3	7.5	10.5	92		

315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	DEPTH (FT)	SAMP- LING (MICRO- MHOS)	SPE- CIFIC CON-		TEMPER- ATURE, (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED	
				DUCT- ANCE	PH (UNITS)			WATER	SATUR- ATION)
<b>FEB</b>									
22...	1228	1.0	2630	8.5	7.5	11.4	100		
22...	1230	10	2630	8.5	7.5	11.4	100		
22...	1231	20	2630	8.4	7.0	11.0	96		
22...	1232	30	2630	8.4	7.0	10.9	95		
22...	1234	40	2630	8.4	7.0	10.8	94		
22...	1235	50	2630	8.4	7.0	10.7	93		
22...	1237	59	2630	8.3	7.0	10.7	93		

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 22, 1979--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
							SOLVED (MG/L)	SATUR- ATION)
<b>FEB</b>								
22...	1250	1.0	2630	8.4	8.0	11.2	99	
22...	1252	10	2630	8.4	8.0	11.1	98	
22...	1254	20	2630	8.4	8.0	11.1	98	
22...	1257	28	2630	8.3	8.0	10.4	92	

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L CACO3)
							(M)	SOLVED (MG/L AS K)	(MG/L AS CO3)	
<b>FEB</b>										
22...	1309	1.0	2620	8.5	8.0	1.20	11.5	102	430	--
22...	1312	10	2620	8.5	7.5	--	11.5	102	--	--
22...	1315	20	2620	8.5	7.5	--	11.5	102	--	--
22...	1318	30	2620	8.5	7.5	--	11.4	100	--	--
22...	1322	40	2620	8.4	6.5	--	10.9	93	--	--
22...	1326	53	2620	8.3	6.5	--	10.6	91	460	
HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM SOLVED (MG/L AS CA)	MAGNE- SIUM, SOLVED (MG/L AS MG)	SODIUM, SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, SOLVED (MG/L AS K)	BICAR- BONATE (MG/L AS HCO3)	CAR- BONATE (MG/L AS CO3)	SULFATE DIS- SOLVED (MG/L AS SO4)		
22...	310	120	32	380	8.0	9.2	150	0	300	
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	330	130	32	380	7.7	9.1	150	0	300	

DATE	AS CL)	CHLO- RIDE DIS- SOLVED (MG/L AS	SILICA, SIO2)	SOLIDS, SUM OF DIS- TUENTS, SOLVED (MG/L AS	NITRO- GEN, NO2+NO3 SOLVED (MG/L AS	NITRO- GEN, AMMONIA TOTAL SOLVED (MG/L AS N)	PHOS- PHORUS, TOTAL SOLVED (MG/L AS N)	IRON, DIS- SOLVED (MG/L AS P)	MANGA- NESE, DIS- SOLVED (UG/L AS FE)	
				(MG/L AS SIO2)	(MG/L AS N)	(MG/L AS N)	(MG/L AS P)	(MG/L AS MN)	(MG/L AS MN)	
<b>FEB</b>										
22...	620	3.9	1540	.02	.02	.02	.020	0	20	
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	--	--	--	--	--	--	--
22...	--	--	--	.02	.01	.020	0	0	0	
22...	630	3.9	1560	.02	.03	.020	20	30		

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- (UNITS)	PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
							SOLVED (MG/L AS	
<b>FEB</b>								
22...	1342	1.0	2450	8.4	8.0	11.4	101	
22...	1345	10	2450	8.4	7.5	11.2	98	
22...	1348	20	2540	8.2	6.5	9.9	85	
22...	1351	30	2610	8.3	6.0	9.8	83	
22...	1355	40	2610	8.2	6.0	9.2	78	

TABLE 27--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY FEBRUARY 22, 1979--Continued

320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE			PH	TEMPER- ATURE, WATER	(SECCHI DISK)	(M)	TRANS- PAR- ENCY	OXYGEN, DIS- SOLVED	(PER- CENT SOLVED)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L)	
		SAMP- LING (FT)	DEPTH (MICRO- MHOS)	(UNITS)										
<b>FEB</b>														
22...	1412	1.0	2220	8.5	9.0	.70	12.8	116					390	
22...	1418	10	2320	8.3	8.0	--	11.0	97					--	
22...	1423	20	2400	8.1	7.5	--	10.3	90					420	
<b>HARD- NESS, NONCAR- BONATE (MG/L CACO3)</b>														
DATE	TIME	CALCIUM	MAGNE- SIUM,	SODIUM,	SODIUM	POTAS- SIUM,	BICAR- BONATE	CAR- BONATE	SULFATE					
		DIS- SOLVED (MG/L AS CA)	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	AD- SORP- TION RATIO	DIS- SOLVED (MG/L AS K)	(MC/L AS HCO3)	(MC/L AS CO3)	(MC/L AS SO4)					
<b>FEB</b>														
22...	260	110	27	310	6.9	8.3	150	0	250					
22...	--	--	--	--	--	--	--	--	--					
22...	300	120	30	340	7.2	8.5	150	0	270					
<b>SOLIDS,</b>														
DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS MG)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)					
<b>FEB</b>														
22...	490	3.7	1270	.06	.04	.040	10	60						
22...	--	--	--	--	--	--	--	--	--					
22...	560	3.8	1410	.03	.05	.020	0	60						

320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SPE- CIFIC CON- DUCT- ANCE			PH	TEMPER- ATURE, WATER	(SECCHI DISK)	(M)	TRANS- PAR- ENCY	OXYGEN, DIS- SOLVED	(PER- CENT SOLVED)	OXYGEN, DIS- SOLVED (MG/L)	HARD- NESS (MG/L)	
		SAMP- LING (FT)	DEPTH (MICRO- MHOS)	(UNITS)										
<b>FEB</b>														
22...	1433	1.0	2410	8.3	9.0	.90	11.7	106					420	
22...	1438	10	2450	8.3	9.0	--	11.4	104					--	
22...	1444	20	2560	8.1	8.5	--	10.5	95					460	
<b>HARD- NESS, NONCAR- BONATE (MG/L CACO3)</b>														
DATE	TIME	CALCIUM	MAGNE- SIUM,	SODIUM,	SODIUM	POTAS- SIUM,	BICAR- BONATE	CAR- BONATE	SULFATE					
		DIS- SOLVED (MG/L AS CA)	DIS- SOLVED (MG/L AS MG)	DIS- SOLVED (MG/L AS NA)	AD- SORP- TION RATIO	DIS- SOLVED (MG/L AS K)	(MC/L AS HCO3)	(MC/L AS CO3)	(MC/L AS SO4)					
<b>FEB</b>														
22...	290	120	30	340	7.2	8.6	160	0	300					
22...	--	--	--	--	--	--	--	--	--					
22...	320	130	33	360	7.3	8.7	170	0	290					
<b>SOLIDS,</b>														
DATE	TIME	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS MG)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)					
<b>FEB</b>														
22...	520	3.8	1400	.05	.02	.040	10	50						
22...	--	--	--	--	--	--	--	--	--					
22...	610	4.4	1520	.05	.01	.020	10	60						

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 11-12, 1979

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SPE-	CIFIC	TRANS-	OXYGEN,	HARD-	HARD-	
		SAMP-	DUCT-	PH	TEMPER-	ENCY	DIS-	SOLVED
	LING	ANCE	(MICRO-	ATURE,	(SECCHI	OXYGEN,	(PER-	NESS,
	DEPTH	MHOS)	(UNITS)	WATER	(DEG C)	DIS-	CENT	NONCAR-
	(FT)			(M)	DIS-	SOLVED	SATUR-	BONATE
				(M)	DIS-	(MG/L)	ATION)	(MG/L)
					DIS-			CACO <sub>3</sub> )
<b>JUN</b>								
11...	1515	1.0	1460	8.3	25.5	1.60	7.9	.96
11...	1517	10	1460	8.3	25.0	--	8.0	.98
11...	1519	20	1460	8.3	25.0	--	7.9	.96
11...	1521	30	1460	8.2	24.5	--	7.2	.87
11...	1523	40	1460	8.2	24.5	--	7.1	.86
11...	1525	50	1460	8.2	24.0	--	7.1	.85
11...	1527	60	1830	7.6	21.5	--	2.8	.32
11...	1529	70	1970	7.5	21.0	--	1.6	.18
11...	1531	80	2090	7.4	20.5	--	1.2	.13
11...	1532	90	2140	7.4	20.0	--	.2	.2
11...	1535	101	2340	7.5	18.0	--	.2	2
								390
								250
<b>SODIUM+</b>								
CALCIUM	MAGNE-	SODIUM,	SODIUM,	SODIUM	POTAS-	BICAR-	CAR-	SULFATE
DIS-	DIS-	DIS-	DIS-	AD-	SORP-	DIS-	BONATE	DIS-
SOLVED	SOLVED	SOLVED	SOLVED	SOLVED	TION	SOLVED	(MG/L	SOLVED
(MG/L)	(MG/L)	(MG/L)	(MG/L)	(MG/L)	RATIO	(MG/L	AS	(MG/L)
DATE	AS CA)	AS MG)	AS NA)	AS NA)	AS K)	AS K)	HC03)	AS CO3)
								AS SO4)
<b>JUN</b>								
11...	90	19	180	190	4.5	5.5	140	0
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	110	28	330	340	7.3	7.3	170	0
								260
<b>SOLIDS,</b>								
CHLO-	FLUO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-
RIDE,	RIDE,	DIS-	CONSTITUENTS,	GEN,	GEN,	PHORUS,	DIS-	NESE,
DIS-	DIS-	SOLVED	NO <sub>2</sub> +NO <sub>3</sub>	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	SOLVED	DIS-
SOLVED	SOLVED	(MG/L	DIS-	TOTAL	(MG/L	TOTAL	(UG/L	SOLVED
(MG/L)	(MG/L)	AS	SOLVED	(MG/L)	AS N)	(MG/L	AS P)	(UG/L)
DATE	AS CL)	AS F)	SIO <sub>2</sub> )	(MG/L)	AS N)	AS N)	AS FE)	AS MN)
<b>JUN</b>								
11...	300	.3	5.0	829	.20	.04	.010	<1
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	.38	.03	.020	10
11...	--	--	--	--	.21	.04	.020	10
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	500	--	7.2	1330	.08	.45	.030	20
								1800

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SPE-	CIFIC	TRANS-	OXYGEN,	OXYGEN,	
		SAMP-	DUCT-	PH	TEMPER-	DIS-	DIS-
	LING	ANCE	(MICRO-	ATURE,	(SECCHI	SOLVED	SOLVED
	DEPTH	MHOS)	(UNITS)	WATER	(DEG C)	(PER-	SOLVED
	(FT)			(M)	DIS-	CENT	
				(M)	DIS-	SATUR-	
					DIS-	ATION)	
					DIS-		
					SOLVED		
<b>JUN</b>							
11...	1500	1.0	1460	8.2	25.0	7.7	.94
11...	1502	10	1460	8.2	25.0	7.7	.94
11...	1504	20	1460	8.2	24.5	7.5	.90
11...	1506	30	1460	8.1	24.5	7.3	.88
11...	1508	40	1460	8.1	24.5	7.2	.86
11...	1510	46	1460	8.0	24.5	6.9	.83

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 11-12, 1979--Continued

## 320011097262201 LAKE WHITNEY SITE PS

DATE	TIME	SAMP-	SPE-	OXYGEN,	(PER-	DIS-		
		LING	CIFIC	DUCT-	PH	TEMPER-	OXYGEN,	SOLVED
		DEPTH	CON-	ANCE	(MICRO-	ATURE,	WATER	DIS-
		(FT)	MHOS)	(UNITS)	(MG/C)	(DEG C)	(MG/L)	SATUR-
JUN								
12...	1015	1.0	960	8.1	26.0	7.7	95	
12...	1017	10	970	8.0	25.5	7.2	88	
12...	1019	20	980	7.9	25.5	6.8	83	
12...	1021	30	1370	7.3	22.5	1.5	17	
12...	1023	42	1570	7.2	21.5	.3	3	

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	OXYGEN,	(PER-	DIS-	HARD-		
		LING	CIFIC	DUCT-	PH	TEMPER-	TRANS-	SOLVED	NESS
		DEPTH	CON-	ANCE	(MICRO-	ATURE,	PAR-	(MG/L)	
		(FT)	MHOS)	(UNITS)	(MG/C)	(DEG C)	(SECCHI	(MG/L)	
JUN									
12...	1035	1.0	887	8.2	26.0	.50	8.6	106	210
12...	1037	10	900	7.9	25.5	--	6.3	77	--
12...	1039	20	960	7.7	24.5	--	5.0	60	--
12...	1041	30	1120	7.3	23.0	--	1.4	16	--
12...	1043	40	1580	7.2	21.5	--	.7	8	--
12...	1045	50	1690	7.2	21.0	--	.2	2	--
12...	1047	57	1690	7.2	21.0	--	.2	2	310

DATE	HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM AS Ca)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM+ POTAS- SIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION (MG/L AS NA)	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L HC03)	CAR- BONATE (MG/L AS CO3)
JUN									
12...	85	65	11	96	100	2.9	4.6	150	0
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	190	94	18	220	230	5.4	6.5	150	0

DATE	SULFATE DIS- SOLVED (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SOLIDs,	NITRO- GEN, NO2+NO3	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
			SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTITUENTS, DIS- SOLVED (MG/L AS N)	TOTAL NO2+NO3 AMMONIA (MG/L AS N)	TOTAL PHOSPHORUS (MG/L AS P)	TOTAL IRON (MG/L AS P)	
JUN								
12...	76	160	5.8	492	.09	.05	.020	10
12...	--	--	--	--	--	--	--	--
12...	--	--	--	--	.28	.06	.020	30
12...	--	--	--	--	.44	.03	.030	30
12...	--	--	--	--	--	--	--	40
12...	190	350	5.9	959	.41	.06	.040	10
								420

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	SPE-	OXYGEN,	(PER-	DIS-		
		LING	CIFIC	DUCT-	PH	TEMPER-	OXYGEN,	SOLVED
		DEPTH	CON-	ANCE	(MICRO-	ATURE,	DIS-	(CENT
		(FT)	MHOS)	(UNITS)	(MG/C)	(DEG C)	(MG/L)	
JUN								
12...	1115	1.0	880	8.4	26.5	10.7	134	
12...	1117	10	880	7.9	25.0	6.5	79	
12...	1119	20	880	7.7	25.0	5.2	63	
12...	1121	30	1210	7.2	22.0	.6	7	
12...	1123	40	1520	7.2	21.0	.1	1	
12...	1125	50	1610	7.2	21.5	.2	2	

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 11-12, 1979--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- RIDE, DIS- SOLVED (MG/L) AS SO4)	SILICA, DIS- SOLVED (MG/L) AS CL)	SOLID, SUM OF CONSTITU- TUENTS, (MG/L) AS SiO2)	NITRO- GEN, NO2+NO3 (MG/L) AS N)	NITRO- GEN, TOTAL (MG/L) AS N)	PHOS- PHORUS, TOTAL (MG/L) AS P)	IRON, DIS- SOLVED (UG/L) AS FE)	MANGA- NESE, DIS- SOLVED (UG/L) AS MN)
				DIS- SOLVED (MG/L) AS AS)	DIS- SOLVED (MG/L) AS AS)	DIS- SOLVED (MG/L) AS AS)	DIS- SOLVED (MG/L) AS AS)	DIS- SOLVED (MG/L) AS AS)
<b>JUN</b>								
11...	120	210	5.5	629	.22	.04	.020	<0
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	.23	.05	.020	10
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	.34	.04	.000	10
11...	--	--	--	--	--	--	--	30
11...	--	--	--	--	--	--	--	--
11...	220	420	6.6	1130	.40	.06	.030	0
								480

## 315729097253701 LAKE WHITNEY SITE PS

DATE	TIME	DEPTH (FT)	SAMP- LING	SPE- CIFIC CON- DUCT- ANCE	PH	TEMPER- ATURE, WATER	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
			(MICRO- MHOS)	(UNITS)	(DEG C)	(MG/L)		
<b>JUN</b>								
11...	1730	1.0	1090	8.4	26.0	8.4	104	
11...	1732	10	1030	8.2	25.5	7.7	94	
11...	1734	20	840	7.8	24.5	5.6	67	
11...	1736	29	660	7.6	24.0	4.0	48	

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	DEPTH (FT)	SAMP- LING	SPE- CIFIC CON- DUCT- ANCE	PH	TEMPER- ATURE, WATER	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
			(MICRO- MHOS)	(UNITS)	(DEG C)	(MG/L)		
<b>JUN</b>								
11...	1845	1.0	1140	8.3	26.0	7.8	96	
11...	1847	10	1140	8.1	25.0	6.3	77	
11...	1849	20	1160	7.7	24.0	4.1	49	
11...	1851	30	1200	7.4	22.5	1.7	20	
11...	1853	40	1400	7.3	22.0	.8	9	
11...	1855	50	1570	7.3	21.0	.2	2	

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	DEPTH (FT)	SAMP- LING	SPE- CIFIC CON- DUCT- ANCE	PH	TEMPER- ATURE, WATER	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
			(MICRO- MHOS)	(UNITS)	(DEG C)	(MG/L)		
<b>JUN</b>								
12...	0945	1.0	991	8.1	25.5	7.8	78	
12...	0947	10	991	8.1	25.0	7.2	88	
12...	0949	20	1080	8.0	24.5	6.9	83	
12...	0951	30	1350	7.5	23.0	3.5	41	
12...	0953	40	1560	7.4	22.5	3.0	34	
12...	0955	50	1660	7.2	21.5	1.2	14	
12...	0957	60	1800	7.2	20.5	.5	6	
12...	0959	67	1810	7.2	20.5	.1	1	

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 11-12 1979--Continued

## 315308097222801 LAKE WHITNEY SITE BC

	SAMP-	SPE-	OXYGEN,				
	LING	CIFIC	DIS-				
	TIME	DUCT-	SOLVED				
DATE	DEPTH	(MICRO-	(PER-				
	(FT)	MHOS)	CENT				
		(UNITS)	SATUR-				
			ATION)				
JUN							
11...	1615	1.0	1460	8.4	25.0	8.1	99
11...	1617	10	1460	8.3	25.0	7.9	96
11...	1619	20	1460	8.2	24.0	7.3	87
11...	1621	30	1460	8.2	24.0	7.0	83
11...	1623	40	1460	8.2	24.0	7.2	86
11...	1625	50	1610	7.9	23.0	5.2	61
11...	1627	60	1790	7.6	21.5	2.8	31
11...	1629	70	2010	7.4	20.5	1.0	11
11...	1631	80	2080	7.4	20.0	.3	3
11...	1633	90	2160	7.4	19.0	.2	2
11...	1635	97	2280	7.6	18.0	.6	6

## 315432097234601 LAKE WHITNEY SITE CC

	SAMP-	SPE-	OXYGEN,				
	LING	CIFIC	DIS-				
	TIME	DUCT-	SOLVED				
DATE	DEPTH	(MICRO-	(PER-				
	(FT)	MHOS)	CENT				
		(UNITS)	SATUR-				
			ATION)				
JUN							
11...	1645	1.0	1360	8.4	25.0	8.0	98
11...	1647	10	1360	8.3	25.0	7.9	96
11...	1649	20	1360	8.2	24.5	7.1	86
11...	1651	30	1390	8.2	24.0	7.0	83
11...	1653	40	1440	8.1	24.0	6.5	77
11...	1655	50	1670	7.7	22.0	3.8	44
11...	1657	60	1780	7.6	21.5	2.9	36
11...	1659	70	1930	7.4	20.5	1.2	13
11...	1701	80	1990	7.4	20.0	.6	7
11...	1703	91	2070	7.4	20.0	.2	2

## 315722097246201 LAKE WHITNEY SITE DC

	SAMP-	SPE-	TRANS-	OXYGEN,			
	LING	CIFIC	PAR-	DIS-			
	TIME	DUCT-	ENCY	SOLVED			
DATE	DEPTH	(MICRO-	(SECCHI	(PER-			
	(FT)	MHOS)	WATER	DISK)	CENT		
		(UNITS)	(DEG C)	(M)	(MG/L)		
					HARD-		
					NESS		
JUN							
11...	1800	1.0	1100	8.3	25.5	1.00	7.8
11...	1802	10	1120	8.3	25.5	--	7.7
11...	1804	20	1270	8.2	24.5	--	6.9
11...	1806	30	1330	8.1	24.5	--	6.4
11...	1808	40	1610	7.6	22.5	--	3.5
11...	1810	50	1710	7.5	21.5	--	2.3
11...	1812	60	1860	7.4	20.5	--	.9
11...	1814	70	1950	7.3	20.5	--	.4
11...	1816	80	1960	7.3	20.5	--	.2
							340

	HARD-	CALCIUM	MAGNE-	SODIUM+	POTAS-	SODIUM	POTAS-	BICAR-
	NESS,	DIS-	SUM,	SODIUM,	DIS-	AD-	SUM,	BONATE
	NONCAR-	SOLVED	DIS-	SOLVED	SOLVED	SORP-	DIS-	CAR-
DATE	NESS	(MG/L)	(MG/L)	(MG/L)	(MG/L)	RATIO	SOLVED	(MG/L)
	NONCAR-	AS CA)	AS MG)	AS NA)	AS NA)	(AS K)	(MG/L AS	AS CO3)
JUN								
11...	110	72	13	130	130	3.7	4.8	150
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	--	--	--	--	--	--	--	--
11...	220	100	23	280	290	6.6	6.5	150

TABLE 28--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JUNE 11-12, 1979--Continued

## 320509097275901 LAKE WHITNEY SITE P12

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	DIS-	HARD-
		LING	ANCE	(UNITS)	ATURE,	PAR-	OXYGEN,		
DEPTH	(MICRO-			WATER	ENCY	DIS-	(PER-	(MG/L	
					(SECCHI	DIS-	CENT		
					DISK)	SOLVED	SATUR-	AS	
						(MG/L)	ATION)	CACO <sub>3</sub> )	
JUN									
12...	1150	1.0	667	7.9	27.0	.50	7.1	89	160
12...	1152	10	940	7.9	27.0	--	7.1	89	--
12...	1154	20	940	7.6	26.0	--	4.9	60	--
12...	1156	28	924	7.4	26.0	--	3.3	41	210
HARD-									
NESS	CALCIUM	MAGNE-	SODIUM+	POTAS-	SODIUM	POTAS-			
NONCAR-	DIS-	SIUM,	SODIUM,	SIUM,	AD-	SIUM,	BICAR-		
BONATE	SOLVED	DIS-	SOLVED	DIS-	SORP-	DIS-	BONATE		
(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	TION	SOLVED	(MG/L		
CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	AS NA)	RATIO	(MG/L)	AS K)		
DATE									
JUN									
12...	41	53	7.7	61	65	2.1	4.2	150	0
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	91	66	12	100	100	3.0	4.6	150	0
SOLID									
SULFATE	CHLO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
DIS-	RIDE,	DIS-	CONSTITUENTS,	GEN,	GEN,	PHORUS,	DIS-	NESE,	
SOLVED	SOLVED	SOLVED	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	TOTAL	SOLVED	DIS-	
(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	SOLVED	
DATE	AS SO <sub>4</sub> )	AS CL)	SiO <sub>2</sub> )	AS N)	AS N)	AS P)	AS FE)	(UG/L	
JUN									
12...	54	100	7.0	361	.34	.06	.050	<0	1
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	83	160	6.6	504	.23	.20	.050	<0	60

## 320721097293301 LAKE WHITNEY SITE P14

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	DIS-	HARD-
		LING	ANCE	(UNITS)	ATURE,	PAR-	OXYGEN,		
DEPTH	(MICRO-			WATER	ENCY	DIS-	(PER-	(MG/L	
					(SECCHI	SOLVED	CENT		
					DISK)	(MG/L)	SATUR-	AS	
							ATION)	CACO <sub>3</sub> )	
JUN									
12...	1220	1.0	1130	7.9	27.5	.80	7.1	91	240
12...	1222	10	1130	7.8	27.0	--	6.3	80	--
12...	1224	20	1130	7.8	27.0	--	6.2	78	--
12...	1226	33	1090	7.4	26.5	--	2.9	36	240
HARD-									
NESS	CALCIUM	MAGNE-	SODIUM+	POTAS-	SODIUM	POTAS-			
NONCAR-	DIS-	SIUM,	SODIUM,	SIUM,	AD-	SIUM,	BICAR-		
BONATE	SOLVED	DIS-	SOLVED	DIS-	SORP-	DIS-	BONATE		
(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	TION	SOLVED	(MG/L		
CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	AS NA)	RATIO	(MG/L)	AS K)		
DATE									
JUN									
12...	120	72	15	130	140	3.6	5.0	150	0
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	110	72	14	130	130	3.7	4.8	150	0
SOLID									
SULFATE	CHLO-	SILICA,	SUM OF	NITRO-	NITRO-	PHOS-	IRON,	MANGA-	
DIS-	RIDE,	DIS-	CONSTITUENTS,	GEN,	GEN,	PHORUS,	DIS-	NESE,	
SOLVED	SOLVED	SOLVED	NO <sub>2</sub> +NO <sub>3</sub>	AMMONIA	TOTAL	TOTAL	SOLVED	DIS-	
(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	SOLVED	
DATE	AS SO <sub>4</sub> )	AS CL)	SiO <sub>2</sub> )	AS N)	AS N)	AS P)	AS FE)	(UG/L	
JUN									
12...	110	210	6.1	622	.15	.05	.010	0	3
12...	--	--	--	--	--	--	--	--	--
12...	--	--	--	--	--	--	--	--	--
12...	110	200	6.7	612	.21	.16	.050	<0	90

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 10, 1979

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UG/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SPE-	CIFIC	TRANS-	OXYGEN,	DIS-	SOLVED	HARD-
		SAMP-	DUCT-	CON-	PAR-	(PER-	NESS,	NONCAR-
LING	ANCE	PH	TEMPER-	ENCY	OXYGEN,	CENT	NESS,	BONATE
DEPTH	(MICRO-	(UNITS)	WATER	(SECCHI	DIS-	SATUR-	(MG/L	(MG/L
	MHOS)		(DEG C)	DISK)	(M)	ATION)	CACO3)	CACO3)
AUG								
10...	1015	1.0	1250	7.9	29.0	2.70	6.3	83
10...	1017	10	1250	7.9	28.5	--	6.1	79
10...	1019	20	1250	7.7	28.5	--	5.1	66
10...	1021	30	1250	7.7	28.5	--	4.8	62
10...	1023	40	1330	7.2	27.5	--	.1	--
10...	1025	50	1460	7.2	24.5	--	.1	--
10...	1027	60	1540	7.2	23.5	--	.1	--
10...	1029	70	1660	7.2	22.5	--	.1	--
10...	1031	80	1770	7.3	21.5	--	.1	--
10...	1033	90	2180	7.3	20.5	--	.1	--
10...	1035	96	2180	7.3	20.0	--	.1	390
								240

DATE	CALCIUM	MAGNE-	SODIUM+	SODIUM	POTAS-	POTAS-	BICAR-	SULFATE
	DIS-	SODIUM	SODIUM	AD-	SUM	SUM	BONATE	CAR-
SOLVED	DIS-	SOLVED	SOLVED	SORP-	DIS-	SOLVED	(MG/L	SOLVED
(MG/L	(MG/L	(MG/L	(MG/L	RATIO	(MG/L	(MG/L	AS K)	(MG/L
AS CA)	AS MG)	AS NA)	AS NA)		AS HC03)	AS HC03)	AS CO3)	AS SO4)
AUG								
10...	71	17	160	160	4.4	4.8	130	0
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	110	28	300	310	6.6	6.6	180	0
								240

DATE	CHLO-	FLUO-	SILICA,	SOLIDS,	NITRO-	NITRO-	PHOS-	MANGA-
	RIDE,	RIDE,	DIS-	SUM OF	GEN-	GEN-	PHORUS,	NESE,
SOLVED	SOLVED	SOLVED	DIS-	CONSTI-	NO2+NO3	AMMONIA	TOTAL	DIS-
(MG/L	(MG/L	(MG/L	AS	TUENTS,	DIS-	TOTAL	(MG/L	SOLVED
AS CL)	AS F)	AS SIO2)	SOLVED	SOLVED	(MG/L	(MG/L	AS P)	(UG/L
AUG								
10...	250	.3	4.4	722	.00	.02	.010	0
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	.00	.01	.020	0
10...	--	--	--	--	--	--	--	20
10...	--	--	--	--	.00	.04	.010	0
10...	--	--	--	--	--	--	--	50
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	470	--	9.1	1250	.00	.72	.190	200
								1900

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SPE-	CIFIC	TRANS-	OXYGEN,	DIS-		
		SAMP-	DUCT-	CON-	PAR-	(PER-	SOLVED	
LING	ANCE	PH	TEMPER-	ENCY	OXYGEN,	CENT		
DEPTH	(MICRO-	(UNITS)	WATER	(SECCHI	DIS-	SATUR-		
	MHOS)		(DEG C)	DISK)	(M)	ATION)		
AUG								
10...	1105	1.0	1250	7.9	29.0	6.4	84	
10...	1107	10	1250	7.9	28.5	6.1	79	
10...	1109	20	1250	7.8	28.5	5.4	70	
10...	1111	30	1250	7.7	28.5	5.1	66	
10...	1113	41	1280	7.3	28.0	1.6	21	

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 10, 1979--Continued

315308097222801 LAKE WHITNEY SITE BC

		SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
	TIME	LING	ANCE	(MICRO-	ATURE,	DIS-	DIS-
DATE		DEPTH	(MHOS)	(UNITS)	WATER	SOLVED	SOLVED
AUG							
10...	1130	1.0	1250	8.1	29.5	7.2	95
10...	1132	10	1250	8.1	29.0	7.1	93
10...	1134	20	1250	8.1	29.0	6.8	89
10...	1136	30	1250	7.7	28.5	4.9	64
10...	1138	40	1280	7.2	27.5	.1	1
10...	1140	50	1370	7.2	25.0	.1	1
10...	1142	60	1470	7.2	23.5	.1	1
10...	1144	70	1570	7.2	22.5	.1	1
10...	1146	80	1730	7.3	21.5	.1	1
10...	1148	94	1810	7.2	20.5	.1	1

315432097234601 LAKE WHITNEY SITE CC

		SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
	TIME	LING	ANCE	(MICRO-	ATURE,	DIS-	DIS-
DATE		DEPTH	(MHOS)	(UNITS)	WATER	SOLVED	SOLVED
AUG							
10...	1240	1.0	1250	8.1	30.5	6.8	91
10...	1242	10	1250	8.1	29.5	6.9	91
10...	1244	20	1250	7.8	29.0	5.4	71
10...	1246	30	1250	7.5	29.0	3.5	46
10...	1248	40	1290	7.3	28.0	2.0	26
10...	1250	50	1380	7.2	25.5	1.0	12
10...	1252	60	1390	7.2	24.0	1.0	12
10...	1254	70	1520	7.2	23.5	1.0	12
10...	1256	80	1710	7.2	22.5	1.0	12
10...	1258	88	1710	7.2	21.5	1.0	11

315722097240201 LAKE WHITNEY SITE DC

		SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	OXYGEN,
	TIME	LING	ANCE	(MICRO-	ATURE,	PAR-	SOLVED	SOLVED
DATE		DEPTH	(MHOS)	(UNITS)	WATER	ENCY	(PER-	HARD-
AUG								
10...	1415	1.0	1230	8.3	30.0	1.50	8.1	108
10...	1417	10	1230	8.2	29.5	--	7.7	102
10...	1419	20	1230	8.0	29.5	--	6.9	91
10...	1421	30	1230	7.3	28.5	--	2.4	31
10...	1423	40	1260	7.3	28.0	--	1.4	18
10...	1425	50	1360	7.2	25.0	--	1.0	12
10...	1427	60	1480	7.2	23.5	--	1.0	12
10...	1429	70	1570	7.2	22.5	--	1.1	13
10...	1431	76	1710	7.2	22.5	--	1.2	14

	HARD-	CALCIUM	MAGNE-	SODIUM+	POTAS-	SODIUM	POTAS-	
	NESS,	DIS-	SUM,	SODIUM,	SUM,	AD-	SUM,	HARD-
	NONCAR-	SOLVED	DIS-	DIS-	DIS-	SORP-	DIS-	BONATE
DATE	NESS, CACO3)	CACO3 AS CA)	AS MG)	AS NA)	AS NA)	RATIO	AS K)	AS HCO3)
AUG								
10...	120	65	15	140	140	4.1	4.7	130
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--
10...	170	92	23	220	230	5.3	5.7	190

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 10, 1979--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	CHLO- SULFATE AS SO4)	SILICA, RIDE, DIS- DIS- SOLVED (MG/L)	SUM OF DIS- SOLVED (MG/L)	SOLIDS,	NITRO- GEN, NO2+NO3	NITRO- GEN, AMMONIA	PHOS- PHORUS,	IRON, DIS- SOLVED (MG/L)	MANGA- NESE, DIS- SOLVED (UG/L)
				CONSTI- TUENTS, AS	TOTAL DIS- SOLVED (MG/L)	TOTAL AS N)	(MG/L AS N)	AS P)	AS FE)
<b>AUG</b>									
10...	130	240	4.4	663	.00	.01	.010	<10	6
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	.01	.00	.010	0	40
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	.00	.06	.020	0	100
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	--	--	--	--	--	--	--	--	--
10...	180	350	9.1	975	.00	.62	.160	280	1500

## 315729097253701 LAKE WHITNEY SITE PS

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- DUCT- ANCE PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				(UNITS)	(DEG C)	(MG/L)	(PER- CENT SATUR- ATION)
<b>AUG</b>							
10...	1355	1.0	1250	8.2	31.5	8.0	109
10...	1357	10	1250	8.0	30.5	6.5	87
10...	1359	20	1250	7.8	30.0	6.0	80
10...	1401	25	1250	7.4	30.0	3.3	44

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- DUCT- ANCE PH	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK) (M)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)
				(UNITS)	(DEG C)	(M)	(MG/L)	(PER- CENT SATUR- ATION)
<b>AUG</b>								
10...	1455	1.0	1220	8.3	31.5	1.40	9.2	125
10...	1457	10	1220	8.3	30.5	--	9.5	128
10...	1459	20	1200	8.1	30.5	--	8.2	110
10...	1501	30	1180	7.4	29.5	--	2.9	38
10...	1503	40	1180	7.2	28.5	--	1.0	13
10...	1505	47	1180	7.2	28.5	--	1.0	13

## 315943097244101 LAKE WHITNEY SITE EC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	SPE- CIFIC CON- DUCT- ANCE PH	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	
				(UNITS)	(DEG C)	(M)	(MG/L)	(PER- CENT SATUR- ATION)
<b>AUG</b>								
10...	1800	1.0	1230	8.2	30.0	8.0	107	
10...	1802	10	1230	8.2	29.5	7.6	101	
10...	1804	20	1230	8.0	29.0	6.5	86	
10...	1806	30	1250	7.3	29.0	2.2	29	
10...	1808	40	1280	7.2	28.0	.8	10	
10...	1810	50	1290	7.2	25.5	.8	10	
10...	1812	63	1470	7.2	23.5	.9	11	

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 10, 1979--Continued

## 320011097262201 LAKE WHITNEY SITE P8

DATE	TIME	SAMP-	SPE-	OXYGEN,	DIS-		
		LING	CIFIC	CON-	SOLVED		
		DEPTH	DUCT-	PH	TEMPER-	OXYGEN,	(PER-
		(FT)	ANCE	(MICRO-	ATURE,	DIS-	CENT
			MHOS)	(UNITS)	WATER	SOLVED	SATUR-
					(DEG C)	(MG/L)	ATION)
AUG							
10...	1740	1.0	1220	8.2	30.0	8.5	113
10...	1742	10	1220	8.1	29.5	7.7	102
10...	1744	20	1220	8.0	29.5	7.0	93
10...	1746	30	1160	7.8	29.0	5.9	78
10...	1748	40	1020	7.1	28.0	.5	6

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	TRANS-	OXYGEN,	DIS-	
		LING	CIFIC	PAR-	SOLVED	SOLVED	
		DEPTH	DUCT-	ENCY	(PER-	HARD-	
		(FT)	(MICRO-	(SECCHI	CENT	NESS	
			MHOS)	DISK)	(MG/L)	(MG/L)	
				(M)		AS	
						CACO <sub>3</sub> )	
AUG							
10...	1540	1.0	1170	8.2	31.0	.90	8.2
10...	1542	10	1170	8.0	30.0	--	7.0
10...	1544	20	1170	7.9	29.5	--	6.5
10...	1546	30	1170	7.3	29.5	--	3.3
10...	1548	40	1170	7.2	29.0	--	.8
10...	1550	50	1170	7.2	26.0	--	.8
10...	1552	54	1380	7.2	25.5	--	.8
							10
							250

DATE	HARD-NESS, NONCAR-BONATE (MG/L CACO <sub>3</sub> )	CALCIUM	MAGNE-SIUM, DIS-SOLVED (MG/L AS CA)	SODIUM, DIS-SOLVED (MG/L AS MG)	SODIUM+, DIS-SOLVED (MG/L AS NA)	POTAS-SIUM, DIS-SOLVED (MG/L AS NA)	SODIUM AD-SORP-TION RATIO	POTAS-SIUM, DIS-SOLVED (MG/L AS K)	BICAR-BONATE (MG/L AS HCO <sub>3</sub> )	CAR-BONATE (MG/L AS CO <sub>3</sub> )
AUG										
10...	110	63	14	140	140	4.2	4.6	130	0	
10...	--	--	--	--	--	--	--	--	--	
10...	--	--	--	--	--	--	--	--	--	
10...	--	--	--	--	--	--	--	--	--	
10...	--	--	--	--	--	--	--	--	--	
10...	--	--	--	--	--	--	--	--	--	
10...	78	74	16	160	160	4.4	4.8	210	0	

DATE	SULFATE DIS-SOLVED (MG/L AS SO <sub>4</sub> )	CHLO- RIDE, DIS-SOLVED (MG/L AS CL)	SILICA, DIS-SOLVED (MG/L AS SIO <sub>2</sub> )	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L AS N)	NITRO- GEN, NO <sub>2</sub> +NO <sub>3</sub> TOTAL (MG/L AS N)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
AUG									
10...	130	230	4.7	650	.00	.01	.020	<10	5
10...	--	--	--	--	--	--	--	--	
10...	--	--	--	--	.01	.01	.010	0	20
10...	--	--	--	--	--	--	--	--	
10...	--	--	--	--	.00	.04	.040	30	220
10...	--	--	--	--	--	--	--	--	
10...	130	270	9.0	770	.00	.79	.090	620	2400

## 320124097291101 LAKE WHITNEY SITE GC

DATE	TIME	SAMP-	SPE-	OXYGEN,	DIS-		
		LING	CIFIC	CON-	SOLVED		
		DEPTH	DUCT-	PH	TEMPER-	OXYGEN,	(PER-
		(FT)	ANCE	(MICRO-	ATURE,	DIS-	CENT
			MHOS)	(UNITS)	WATER	SOLVED	SATUR-
					(DEG C)	(MG/L)	ATION)
AUG							
10...	1620	1.0	1140	7.8	30.0	6.7	89
10...	1622	10	1140	7.5	29.5	4.6	61
10...	1624	20	1140	7.2	29.5	1.5	20
10...	1626	30	1140	7.1	29.0	.4	5
10...	1628	45	1090	7.2	28.5	.5	6

TABLE 29--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY AUGUST 10, 1979--Continued

320509097275901 LAKE WHITNEY SITE P12

320721097293301 LAKE WHITNEY SITE P14

TABLE 30--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 23, 1980

FT = feet; MICROMHOS = micromhos per centimeter at 25° Celsius; °C = degrees Celsius;  
MG/L = milligrams per liter; UC/L = micrograms per liter

## 315203097222601 LAKE WHITNEY SITE AC

DATE	TIME	SAMP-	DUCT-	SPECI-	TRANS-	OXYGEN,		HARD-	NONCAR-
				CON-	ATURE,	(SECCHI	OXYGEN,	(PER-	BONATE
		(FT)	(MICRO-	ANCE	WATER	DISK)	DIS-	SATUR-	(MG/L
<b>JAN</b>									
23...	1015	1.0	1290	8.0	10.0	1.20	10.2	91	240
23...	1016	2.0	--	--	--	--	--	--	--
23...	1017	10	1290	8.0	10.0	--	10.1	90	--
23...	1019	20	1290	8.0	10.0	--	10.1	90	--
23...	1021	30	1290	8.0	10.0	--	10.1	90	--
23...	1023	40	1290	8.0	10.0	--	10.1	90	--
23...	1025	50	1290	8.0	10.0	--	10.1	90	--
23...	1027	60	1290	8.0	10.0	--	10.1	90	--
23...	1029	70	1290	8.0	10.0	--	10.1	90	--
23...	1031	80	1290	8.0	10.0	--	10.1	90	--
23...	1033	90	1290	7.9	10.0	--	10.1	90	240
<b>SODIUM+</b>									
CALCIUM	MACNE-	SILUM.	SODIUM.	POTAS-	SODIUM	POTAS-	BICAR-	CAR-	SULFATE
DIS-	SOLVED	DIS-	DIS-	SORP-	AD-	SUM;	DIS-	BONATE	DIS-
SOLVED	SOLVED	SOLVED	SOLVED	RATIO	DIS-	SOLVED	(MG/L	BONATE	SOLVED
(MG/L)	(MG/L)	(MG/L)	(MG/L)		(MG/L)	(MG/L)	AS K)	AS CO <sub>3</sub> )	(MG/L)
DATE	AS CA)	AS MG)	AS NA)	AS NA)				AS CO <sub>3</sub> )	AS SO <sub>4</sub> )
<b>JAN</b>									
23...	70	16	160	170	4.5	5.3	150	0	110
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	71	16	150	160	4.2	5.3	140	0	120
<b>SOLIDS,</b>									
CHLO-	FLUO-	SILICA,	SUM OF	NITRO-	PHOS-	IRON,	MANGA-	PHYTO-	
RIDE,	RIDE,	DIS-	CONSTI-	GEN,	PHORUS,	DIS-	NESE,	PLANK-	
DIS-	DIS-	SOLVED	TUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	TOTAL	SOLVED	DIS-	TON,	
SOLVED	SOLVED	(MG/L)	DIS-	(MG/L)	TOTAL	(UG/L)	SOLVED	TOTAL	
(MG/L)	(MG/L)	AS CL)	AS F)	AS N)	(MG/L)	AS FE)	(UG/L)	(CELLS	
DATE	AS CL)	AS F)	SIO <sub>2</sub> )	(MG/L)	AS P)	AS MN)	AS MN)	PER ML)	
<b>JAN</b>									
23...	250	--	4.9	690	.02	.010	<10	<1	--
23...	--	--	--	--	--	--	--	--	33000
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	.02	.000	10	0	--
23...	--	--	--	--	--	--	--	--	--
23...	--	--	--	--	--	--	--	--	--
23...	260	--	5.5	697	.02	.020	230	60	--

## 315214097222001 LAKE WHITNEY SITE AL

DATE	TIME	SAMP-	DUCT-	SPECI-	TRANS-	OXYGEN,		HARD-
						CON-	DIS-	
		(FT)	(MICRO-	ANCE	ATURE,	DIS-	SOLVED	NESS,
<b>JAN</b>								
23...	1100	1.0	1290	8.0	10.0	10.2	91	
23...	1102	10	1290	8.0	10.0	10.1	90	
23...	1104	20	1290	8.0	10.0	10.1	90	
23...	1106	35	1290	8.0	10.0	10.1	90	

TABLE 30--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 23, 1980--Continued.

## 315500097204001 LAKE WHITNEY SITE P15

DATE	TIME	SAMP- LING DEPTH (FT)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	OXYGEN, DIS- SOLVED (MG/L)	NITRO- GEN, (PER- CENT NO2+NO3)	PHOS- PHORUS, TOTAL (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN 23...	1130	1.0	7.9	9.5	9.9	.88	.19	.07	.21	40
23...	1132	10	7.9	9.5	9.8	.87	--	--	--	--
23...	1134	18	8.0	9.5	9.8	.87	.04	.04	.12	10
										10

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP- LING DEPTH (FT)	SPECI- CIFIC CON- DUCT- ANCE (MICRO- MROS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (MG/L AS M)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	HARD- NESS (MG/L AS CACO3)	MANGA- NESE, DIS- SOLVED (UG/L AS CACO3)
JAN 23...	1200	1.0	1320	8.0	10.5	.90	9.9	90	250	
23...	1202	10	1320	8.0	10.5	--	9.9	90	--	
23...	1204	20	1320	8.0	10.0	--	9.8	88	--	
23...	1206	30	1320	8.0	10.0	--	9.8	88	--	
23...	1208	40	1320	8.0	10.0	--	9.8	88	--	
23...	1210	50	1320	8.0	10.0	--	9.8	88	--	
23...	1212	60	1320	8.0	10.0	--	9.8	88	--	
23...	1214	69	1320	8.0	10.0	--	9.8	88	250	
HARD- NESS, NONCAR- BONATE (MG/L CACO3)	CALCIUM SOLVED (MG/L AS CA)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM, DIS- SOLVED (MG/L AS NA)	SODIUM+ POTAS- SIUM, DIS- SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	POTAS- SIUM, DIS- SOLVED (MG/L AS K)	BICAR- BONATE (MG/L HCO3)	CAR- BONATE (MG/L AS QO3)	
JAN 23...	130	72	18	170	180	4.6	5.3	150	0	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	120	71	17	160	170	4.4	5.3	150	0	

DATE	TIME	SAMP- LING DEPTH (FT)	CHLO- RIDE, DIS- SOLVED (MG/L AS SO4)	SILICA, DIS- SOLVED (MG/L AS CL)	SUM OF CONSTITU- ENTS, DIS- SOLVED (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)	
JAN 23...	130	260	4.7	734	.04	.030	<10	<1		
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	.04	.010	40	10	
23...	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	
23...	120	270	4.9	722	.04	.010	<10	5		

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	SPECI- CIFIC CON- DUCT- ANCE (MICRO- MROS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT NO2+NO3)	NITRO- GEN, NO2+NO3 (PER- CENT AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANGA- NESE, DIS- SOLVED (UG/L AS MN)
JAN 23...	1235	1.0	750	7.8	9.5	.20	9.5	84	.69	100
23...	1238	10	1000	7.8	9.5	--	9.3	82	--	--
23...	1240	15	1150	7.8	10.0	--	9.2	82	--	--
23...	1242	20	1310	7.8	10.0	--	9.1	81	--	--
23...	1244	30	1310	7.8	10.0	--	9.1	81	--	--
23...	1246	39	1310	7.7	10.0	--	8.2	73	.04	.020

TABLE 30--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY JANUARY 23, 1980--Continued

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,	(PER-	NITRO-	IRON,	MANGA-	
		LING	CIFIC	DUCT-	TEMPER-	ENCY	OXYGEN,				NESE,	
		DEPTH	CON-	ANCE	PH	ATURE,	(SECCHI	DIS-	(NO2+NO3	PHORUS,	SOLVED	DIS-
		(FT)	(MICRO-	(UNITS)	(DEG C)	WATER	DISK)	SOLVED	CENT	TOTAL	(UG/L	SOLVED
			MHOS)				(M)	(MG/L)	(MG/L)	(MG/L)	(UG/L)	(AS MN)
JAN												
23...	1315	1.0	1390	7.9	11.0	.60	9.9	91	.05	.030	40	0
23...	1318	10	1390	7.9	11.0	--	9.9	91	--	--	--	--
23...	1320	20	1390	7.9	10.5	--	9.4	85	.06	.010	50	10
23...	1322	30	1390	7.8	10.0	--	9.4	84	--	--	--	--
23...	1324	44	1390	7.8	10.0	--	9.4	84	.05	.060	80	30

## 320401097291301 LAKE WHITNEY SITE P11

DATE	TIME	SAMP-	SPE-	TRANS-			OXYGEN,	(PER-	NITRO-	IRON,	HARD-
		LING	CIFIC	DUCT-	TEMPER-	ENCY	OXYGEN,				NESS
		DEPTH	CON-	ANCE	PH	ATURE,	(SECCHI	DIS-	(CENT	(MG/L	
		(FT)	(MICRO-	(UNITS)	(DEG C)	WATER	DISK)	SOLVED	(MG/L)	SATUR-	AS
			MHOS)				(M)	(MG/L)	ATION)	CACO <sub>3</sub> )	
JAN											
23...	1350	1.0	1630	7.8	11.0	.80	9.8	90	310		
23...	1351	1.3	--	--	--	--	--	--	--	--	--
23...	1352	10	1630	7.8	11.0	--	9.8	90	--	--	--
23...	1354	17	1630	7.7	11.0	--	8.9	82	300		
DATE	HARD-	CATION	MAGNE-	SODIUM+	SODIUM	POTAS-	POTAS-	BIGAR-	CAR-		
			NESS,	CALCIUM	SIUM,	SODIUM.	POTAS-	SUM	SUM,	BONATE	BONATE
	NONCAR-	DIS-	DIS-	DIS-	DIS-	AD-	DIS-	DIS-	DIS-	(MG/L	
	BONATE	SOLVED	SOLVED	SOLVED	SOLVED	SORP-	SOLVED	SOLVED	SOLVED	AS CO <sub>3</sub> )	
	(MG/L	(MG/L	(MG/L	(MG/L	(MG/L	RATIO	(MG/L	(MG/L	(MG/L	AS CO <sub>3</sub> )	
	CACO <sub>3</sub> )	AS CA)	AS MG)	AS NA)	AS NA)		AS K)	AS HCO <sub>3</sub> )	AS HCO <sub>3</sub> )		
JAN											
23...	160	87	22	220	200	5.5	5.8	180	0		
23...	--	--	--	--	--	--	--	--	--	--	
23...	--	--	--	--	--	--	--	--	--	--	
23...	140	84	21	220	230	5.6	5.8	190	0		
DATE	SULFATE	CHLO-	SILICA,	SUM OF	NITRO-	IRON,	MANGA-	PHYTO-	PLANK-		
		DIS-	RIDE,	DIS-	CONSTI-	GEN,	DIS-	NESE,	TON,	TOTAL	
	DIS-	SOLVED	SOLVED	TUENTS,	NO <sub>2</sub> +NO <sub>3</sub>	SOLVED	DIS-	SOLVED	SOLVED		
	SOLVED	(MG/L	(MG/L	DIS-	TOTAL	(MG/L	SOLVED	(UG/L	(UG/L		
	(MG/L	AS	AS	SOLVED	(MG/L	AS	(MG/L	AS	AS		
	AS SO <sub>4</sub> )	AS CL)	SO <sub>2</sub> )	(MG/L)	AS N)	AS P)	AS FE)	AS MN)	PER ML)		
JAN											
23...	150	330	4.3	908	.06	.020	<10	40	--		
23...	--	--	--	--	--	--	--	--	12000		
23...	--	--	--	--	.06	.030	40	40	--		
23...	140	330	4.3	899	.06	.030	<10	60	--		

TABLE 31--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1980

## 315203097222601 LAKE WHITNEY SITE AC

TIME	DATE	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	DIS-	HARD-
		LING	ANCE	ATURE,	ENCY	OXYGEN,	DIS-	(PER-	
		DEPTH (FT)	(MICRO- MHOS)	(UNITS)	(DEC C)	(SECCHI WATER DISK)	DIS-	CENT	NESS (MG/L CACO3)
<b>MAY</b>									
06...	1040	1.0	1310	8.4	21.0	2.00	9.4	107	260
06...	1041	3.3	--	--	--	--	--	--	--
06...	1042	10	1310	8.4	20.0	--	9.0	100	--
06...	1044	20	1310	8.3	19.0	--	8.2	90	--
06...	1046	30	1310	8.0	17.5	--	6.7	71	--
06...	1048	40	1310	8.0	17.5	--	6.4	68	--
06...	1050	50	1310	8.0	16.5	--	6.1	64	--
06...	1052	60	1310	7.9	16.0	--	5.6	58	--
06...	1054	70	1310	7.8	15.5	--	5.2	53	--
06...	1056	80	1310	7.8	15.5	--	4.8	49	--
06...	1058	91	1310	7.6	15.5	--	3.7	38	260
<b>HARD- NESS, NONCAR- BONATE (MG/L CACO3)</b>									
<b>CALCIUM DIS- SOLVED (MG/L AS CA)</b>									
<b>MAGNE- SIUM, DIS- SOLVED (MG/L AS MG)</b>									
<b>SODIUM, DIS- SOLVED (MG/L AS NA)</b>									
<b>AD- SORP- TION RATIO</b>									
<b>POTAS- SIUM, DIS- SOLVED (MG/L AS K)</b>									
<b>BICAR- BONATE (MG/L AS HCO3)</b>									
<b>CAR- BONATE (MG/L AS CO3)</b>									
<b>SULFATE DIS- SOLVED (MG/L AS SO4)</b>									
<b>MAY</b>									
06...	140	77	17	160	4.3	5.4	150	0	130
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	140	78	17	160	4.3	5.4	150	0	130
<b>CHLO- RIDE, DIS- SOLVED (MG/L AS CL)</b>									
<b>FLUO- RIDE, DIS- SOLVED (MG/L AS F)</b>									
<b>SILICA, DIS- SOLVED (MG/L AS SIO2)</b>									
<b>SOLIDS, SUM OF CONSTITUENTS, NO2+NO3</b>									
<b>NITRO- GEN, NO2+NO3</b>									
<b>PHOS- PHORUS, TOTAL</b>									
<b>IRON, DIS- SOLVED (UG/L AS FE)</b>									
<b>MANGA- NESE, DIS- SOLVED (UG/L AS MN)</b>									
<b>PHYTO- PLANK- TON, TOTAL (CELLS PER ML)</b>									
<b>MAY</b>									
06...	270	.3	3.7	737	.01	.010	<10	<3	--
06...	--	--	--	--	--	--	--	--	1300
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	.02	.010	10	10	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	270	--	4.4	739	.09	.030	<10	90	--

## 315214097222001 LAKE WHITNEY SITE AL

TIME	DATE	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	DIS-
		LING	ANCE	ATURE,	ATURE,	DIS-	SOLVED	
		DEPTH (FT)	(MICRO- MHOS)	(UNITS)	(DEC C)	(MG/L)	(PER- CENT)	SATUR- ATION)
<b>MAY</b>								
06...	1115	1.0	1310	8.4	21.0	9.4	107	
06...	1117	10	1310	8.4	20.0	9.1	101	
06...	1119	20	1310	8.2	19.0	8.1	89	
06...	1121	30	1310	8.0	17.5	7.0	74	
06...	1123	41	1310	7.9	17.5	6.0	64	

TABLE 31--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1980--Continued

## 315432097234601 LAKE WHITNEY SITE CC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,
		LING	ANCE		ATURE,	WATER	(PER-
		(FT)	MHOS)	(UNITS)	(DEG C)	SOLVED	SOLVED
MAY							
06...	1545	1.0	1310	8.3	23.5	8.8	105
06...	1547	10	1310	8.4	21.0	9.5	108
06...	1549	20	1310	8.2	19.5	7.9	88
06...	1551	30	1310	8.0	18.0	6.2	67
06...	1553	40	1310	7.9	17.5	5.6	60
06...	1555	50	1310	7.8	17.0	5.0	53
06...	1557	60	1310	7.6	16.5	3.7	39
06...	1559	70	1310	7.6	16.5	3.3	34
06...	1601	84	1310	7.5	16.0	1.4	14

## 315500097204001 LAKE WHITNEY SITE P15

DATE	TIME	SPE-	DUCT-	PH	TEMPER-	OXYGEN,	OXYGEN,	NITRO-	IRON,	MANGA-	
		CIFIC	CON-		ATURE,	WATER	SOLVED	(PER-		NESE.	
		SAMP-	DUCT-	(MICRO-	(UNITS)	(DEG C)	(MG/L)	NO2+NO3	PHORUS,	DIS-	
		LING	ANCE	MHOS)				TOTAL	TOTAL	SOLVED	
MAY											
06...	1150	1.0	1310	8.3	23.0	9.0	106	.01	.020	20	10
06...	1152	10	1310	8.3	22.0	8.3	97	--	--	--	--
06...	1154	23	1310	7.7	19.5	4.9	54	.02	.030	30	10

## 315722097240201 LAKE WHITNEY SITE DC

DATE	TIME	SAMP-	DUCT-	PH	TEMPER-	TRANS-	OXYGEN,	
		LING	ANCE		ATURE.	PAR-	DIS-	
		(FT)	MHOS)	(UNITS)	(DEG C)	ENCY	OXYGEN,	(PER-
MAY						(SECCHI	(PER-	
06...	1245	1.0	1330	8.3	23.0	1.65	8.9	105
06...	1247	10	1330	8.4	20.5	--	9.1	102
06...	1249	20	1330	8.0	19.0	--	6.4	70
06...	1251	30	1330	7.9	18.0	--	5.9	63
06...	1253	40	1330	7.8	17.5	--	5.4	57
06...	1255	50	1330	7.7	17.0	--	4.3	45
06...	1257	60	1330	7.6	16.5	--	4.0	42
06...	1259	72	1330	7.6	16.5	--	3.1	22
HARD-	HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	
NESS	NESS	NONCAR-	SILUM,	SODIUM,	AD-	SIUM,	BONATE	
(MG/L)	(MG/L)	BONATE	DIS-	DIS-	SORP-	DIS-	(MG/L)	
DATE	DATE	AS CACO <sub>3</sub> )	AS CACO <sub>3</sub> )	AS CA)	SOLVED	SOLVED	SOLVED	AS HCO <sub>3</sub> )
					(MG/L)	(MG/L)	(MG/L)	AS CO <sub>3</sub> )
MAY								
06...	270	150	79	18	160	4.2	5.4	150
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	270	150	79	18	160	4.2	5.4	150

TABLE 31--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1980--Continued

## 315722097240201 LAKE WHITNEY SITE DC--Continued

DATE	AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS DATE AS SO4)	SILICA, DIS- SOLVED (MG/L AS AS CL)	SUM OF CONSTITUENTS, (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANA- NESE, DIS- SOLVED (UG/L AS MN)
<b>MAY</b>								
06...	130	280	3.4	750	.02	.060	<10	<3
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	.02	.020	20	10
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--
06...	130	280	4.3	751	.04	.030	<10	90

## 315907097222801 LAKE WHITNEY SITE P7

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	NITRO- GEN, NO2+NO3 (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANA- NESE, DIS- SOLVED (UG/L AS MN)
<b>MAY</b>											
06...	1510	1.0	1320	8.3	23.5	1.50	9.1	108	.01	.020	10
06...	1512	10	1320	8.3	21.0	--	9.0	102	--	--	--
06...	1514	20	1330	8.0	19.0	--	6.3	69	--	--	--
06...	1516	30	1330	7.8	18.0	--	5.2	56	--	--	--
06...	1518	40	1340	7.6	17.5	--	3.6	38	--	--	--
06...	1520	48	1350	7.5	17.5	--	2.3	24	.03	.030	10
											210

## 320122097260901 LAKE WHITNEY SITE FC

DATE	TIME	SAMP- LING DEPTH (FT)	DUCT- ANCE (MICRO- MHOS)	PH (UNITS)	TEMPER- ATURE, WATER (DEG C)	TRANS- PAR- ENCY (SECCHI DISK)	(M)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	(MG/L AS P)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION)	(MG/L AS MN)
<b>MAY</b>											
06...	1430	1.0	1410	8.3	24.0	.90	.90	8.7	105		
06...	1432	10	1400	8.3	21.5	--	--	8.6	99		
06...	1434	20	1380	7.8	19.0	--	--	5.5	60		
06...	1436	30	1380	7.6	17.5	--	--	3.2	34		
06...	1438	40	1380	7.5	17.0	--	--	1.9	20		
06...	1440	45	1380	7.5	17.0	--	--	1.9	20		

DATE	HARD- NESS (MG/L AS CACO3)	HARD- NESS NONCAR- BONATE (MG/L CACO3)	CALCIUM SOLVED (MG/L AS CA)	MAGNE- SIUM, SOLVED (MG/L AS MG)	SODIUM, SOLVED (MG/L AS NA)	SODIUM AD- SORP- TION RATIO	(M)	POTAS- SIUM, SOLVED (MG/L AS K)	BICAR- BONATE (MG/L HCO3)	CAR- BONATE (MG/L AS CO3)
<b>MAY</b>										
06...	270	150	77	19	180	4.8	6.6	150	0	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	--	--	--	--	--	--	--	--	--	
06...	270	140	77	18	170	4.5	5.4	160	0	

DATE	SULFATE (MG/L AS SO4)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL)	SILICA, DIS- SOLVED (MG/L AS SIO2)	SUM OF CONSTITUENTS, (MG/L AS SIO2)	NITRO- GEN, NO2+NO3 (MG/L AS N)	PHOS- PHORUS, TOTAL (MG/L AS P)	IRON, DIS- SOLVED (UG/L AS FE)	MANA- NESE, DIS- SOLVED (UG/L AS MN)
<b>MAY</b>								
06...	140	300	3.0	800	.01	.030	<10	<3
06...	--	--	--	--	--	--	--	--
06...	--	--	--	--	.02	.020	90	30
06...	--	--	--	--	--	--	--	--
06...	130	290	4.1	774	.02	.040	<10	250

TABLE 31--CHEMICAL-QUALITY SURVEY OF LAKE WHITNEY MAY 6, 1980--Continued

320401097291301 LAKE WHITNEY SITE P11

TIME	DATE	SAMP-	SPE-	TRANS-	OXYGEN,	DIS-	HARD-		
		LING	CIFIC		PAR-				
DEPTH	(FT)	ANCE	CON-	PH	ATURE,	ENCY	OXYGEN,	(PER-	
(MICRO-	MHOS)	(UNITS)	(SECCHI)	WATER	(DEG C)	DISK)	DIS-	CENT	
(MG/L)				(M)		(M)	(MG/L)	(MG/L)	
MAY									
06...	1400	1.0	1420	8.2	25.0	.60	9.1	111	300
06...	1401	1.0	--	--	--	--	--	--	--
06...	1402	10	1460	7.7	22.0	--	5.1	59	--
06...	1404	19	1490	7.4	20.5	--	2.3	26	300
HARD-	CALCIUM	MAGNE-	SODIUM	SODIUM	POTAS-	BICAR-	CAR-	SULFATE	
NESS,	DIS-	SIUM,	DIS-	AD-	SIUM,	BONATE	BONATE	DIS-	
NONCAR-	SOLVED	DIS-	SOLVED	SORP-	DIS-	(MG/L	(MG/L	SOLVED	
BONATE	(MG/L	(MG/L	(MG/L	TION	SOLVED	AS K)	AS CO3)	(MG/L	
DATE	CACO3)	AS CA)	AS MG)	RATIO	(NG/L	AS HCO3)	AS CO3)	AS SO4)	
MAY									
06...	170	83	22	170	4.3	5.5	160	0	140
06...	--	--	--	--	--	--	--	--	--
06...	--	--	--	--	--	--	--	--	--
06...	170	85	21	180	4.5	5.6	160	0	140
CHLO-	SILICA,	SOLIDS,	NITRO-	IRON,	MANGA-	PHYTO-			
RIDE,	DIS-	SUM OF	GEN,	PHOS-	NESE,	PLANK-			
DIS-	SOLVED	CONSTITUENTS,	NO2+NO3	PHORUS,	DIS-	TON,			
SOLVED	(MG/L	DIS-	TOTAL	TOTAL	SOLVED	TOTAL			
DATE	AS CL)	SIC2)	(MG/L	(MG/L	(MG/L	(UG/L			
			AS N)	AS P)	AS FE)	(UG/L			
					AS MN)	(CELLS			
						PER ML)			
MAY									
06...	300	2.1	801	.01	.040	<10	<3	--	
06...	--	--	--	--	--	--	--	8300	
06...	--	--	--	.02	.050	10	40	--	
06...	300	3.4	814	.01	.040	<10	200	--	







